Wood Buffalo Environmental Association

ANNUAL REPORT – VOLUME 2

Integrated Monitoring

March 2017

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

INTEGRATED MONITORING PROGRAM
ANNUAL REPORT

DATA SUMMARY
2016

March 2017

SAMPLE COLLECTION AND DATA COMPILATION BY:

Wood Buffalo Environmental Association
Fort McMurray, Alberta

LABORATORY ANALYSIS BY:

Passive Measurements:	Maxxam Analytics Ltd Edmonton, Alberta
VOCs and RSCs:	InnoTech Alberta, Inc. Vegreville, Alberta
Particulate Matter:	Atmospheric Research & Analysis, Inc. Morrisville, NC
PAHs:	Airzone One Ltd Mississauga, Ontario
Precipitation:	InnoTech Alberta, Inc. Vegreville, Alberta

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Integrated Monitoring Summaries

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

INTEGRATED MONITORING PROGRAM
ANNUAL REPORT

HNO_3, NH_3, NO_2, O_3 AND SO_2 PASSIVE MEASUREMENTS DATA SUMMARY 2016

March 2017

SAMPLE COLLECTION AND DATA COMPILATION BY:

Wood Buffalo Environmental Association
Fort McMurray, Alberta

LABORATORY ANALYSIS BY:

Passive measurements: Maxxam Analytics Ltd
Edmonton, Alberta

FILE CONTENTS DESCRIPTION	Passive Measurements of SO_2, NO_2, O_3, NH_3 and HNO_3	
SAMPLING INTERVAL	Bimonthly	
SAMPLING FREQUENCY OF DATA	Bimonthly	
EXPLANATION OF ZERO VALUES	Zero values are contained in this file and should be treated as values below Method Detection Limit (MDL)	
UNITS	ppbv or $\mu g/m^3$	
OBSERVATION TYPE	Gas	
FIELD SAMPLING OR MEASUREMENT PRINCIPLE	Diffusion	
MEDIUM	Filter	
ANALYTICALMETHODS	IONS by Ion Chromatography (IC)	
SAMPLE PREPARATION	DI water extraction	
ANALYTICAL LABORATORY	MAXXAM Analytics Inc	
USER NOTE 1	Data are not blank corrected	
USER NOTE 2	Concentrations are calculated by equations developed by lab	
SAMPLING INSTRUMENT TYPE	SO_2	all-season SO_2 passive sampling system
	NO_2	all-season NO_2 passive sampling system
	O_3	all-season O_3 passive sampling system
	NH_3	Ogawa passive sampler
	HNO_3	Ogawa passive sampler
FLAGS USED		
M1	Missing value because no value is available	
M2	Missing value because invalidated by Data Originator	

Air Monitoring Station Passive Average [ppb]

Date	Site Name	Sulphur Dioxide [SO_2]	
	Old	AMS 1	AMS 2
	New	Bertha Ganter-Fort McKay	Mildred Lake
	Approximate Exposure days		
Dec 2015 - Jan 2016	60	1.0	3.8
Feb 2016 - Mar 2016	60	1.7	3.8
Apr 2016 - May 2016	60	1.2	2.5
Jun 2016 - Jul 2016	60	1.1	2.7
Aug 2016 - Sep 2016	60	1.1	2.4
Oct 2016 - Nov 2016	60	0.8	3.7

Air Monitoring Station Passive Average [ppb]

Date	Site Name	Nitogen Dioxide [NO_2]	
	Old	AMS 1	AMS 2
	New	Bertha Ganter-Fort McKay	Mildred Lake
	Approximate Exposure days		
Dec 2015 - Jan 2016	60	10.2	10.7
Feb 2016 - Mar 2016	60	4.7	6.1
Apr 2016 - May 2016	60	0.9	1.4
Jun 2016 - Jul 2016	60	0.6	1.5
Aug 2016 - Sep 2016	60	1.8	2.8
Oct 2016 - Nov 2016	60	3.5	5.7

Air Monitoring Station Passive Average [ppb]

Date	Site Name	Ammonia [NH_3]	
	Old	AMS 1	AMS 2
	New	Bertha Ganter-Fort McKay	Mildred Lake
	Approximate Exposure days		
Dec 2015 - Jan 2016	60	0.6	2.2
Feb 2016 - Mar 2016	60	0.7	1.2
Apr 2016 - May 2016	60	3.2	9.0
Jun 2016 - Jul 2016	60	1.8	3.8
Aug 2016 - Sep 2016	60	1.2	4.1
Oct 2016 - Nov 2016	60	0.6	2.4

Air Monitoring Station Passive Average [ppb]

Date	Site Name	Ozone [O_3]	
	Old	AMS 1	AMS 2
	New	Bertha Ganter-Fort McKay	Mildred Lake
	Approximate Exposure days		
Dec 2015 - Jan 2016	60	11.7	16.3
Feb 2016 - Mar 2016	60	24.3	28.8
Apr 2016 - May 2016	60	27.9	28.4
Jun 2016 - Jul 2016	60	26.4	24.8
Aug 2016 - Sep 2016	60	16.8	18.0
Oct 2016 - Nov 2016	60	13.1	15.3

Air Monitoring Station Passive Average [$\mu g/m^3$]

Date	Site Name	Nitric Acid [HNO_3]	
	Old	AMS 1	AMS 2
	New	Bertha Ganter-Fort McKay	Mildred Lake
	Approximate Exposure days		
Dec 2015 - Jan 2016	60	0.3	0.3
Feb 2016 - Mar 2016	60	0.6	0.4
Apr 2016 - May 2016	60	0.3	0.3
Jun 2016 - Jul 2016	60	0.4	0.5
Aug 2016 - Sep 2016	60	0.4	0.3
Oct 2016 - Nov 2016	60	1.2	0.3

Forest Passive Average [ppb] Sulphur Dioxide [SO_2]

start month		Dec-15	Feb-16	Apr-16	Jun-16	Aug-16	Oct-16
end month		Jan-16	Mar-16	May-16	Jul-16	Sep-16	Nov-16
Site Name		Approximate Exposure days					
Old	New	60	60	60	60	60	60
AH3	**AS103**	1.0	0.9	0.4	0.7	0.5	0.2
AH7	**AS107**	1.1	2.2	0.7	1.7	1.2	1.0
BM7	**BM7**	0.7	0.3	0.1	<0.1	0.2	0.2
BM10	**BM10**	1.2	0.4	0.2	<0.1	M1	0.2
BM11	**BM11**	0.8	0.5	0.3	<0.1	0.3	0.3
JE306	**JE306**	1.3	0.5	M1	0.2	M1	0.5
JE308	**JE308**	0.5	0.6	<0.1	<0.1	0.3	0.1
JE312	**JE312**	0.4	0.4	0.2	0.1	0.4	0.2
JE316	**JE316**	0.6	0.3	0.2	0.1	0.3	<0.1
JE323	**JE323**	0.4	0.7	0.7	1.0	M1	0.4
JP101	**JP101**	1.4	1.2	0.3	0.4	0.6	0.5
JP102	**JP102**	0.9	2.6	0.9	2.4	1.8	0.8
JP104	**JP104**	1.5	1.5	0.8	1.5	2.3	1.3
JP107	**JP107**	1.5	0.7	0.4	0.3	0.6	1.1
JP108	**JP108**	0.3	0.3	0.2	0.3	0.3	0.1
JP201	**JP201**	0.6	0.6	0.1	<0.1	0.1	0.1
JP205	**JP205**	1.0	0.4	0.2	0.1	0.6	0.7
JP210	**JP210**	0.8	0.4	0.3	0.1	0.2	0.2
JP212	**JP212**	0.6	0.7	0.8	1.1	2.3	0.5
JP213	**JP213**	0.9	0.4	0.2	0.1	0.3	0.6
AH8R	**JP309**	0.9	1.2	0.6	0.4	0.7	0.3
JP311	**JP311**	1.5	1.4	0.4	1.0	0.4	1.1
JP316	**JP316**	0.7	0.5	0.3	0.1	0.3	0.2
NE7	**NE7**	1.5	0.9	0.5	0.6	M1	1.5
NE10	**NE10**	0.4	0.4	0.2	0.1	0.4	<0.1
NE11	**NE11**	1.2	0.8	0.3	0.6	0.9	0.7
R2	**R2**	1.1	1.3	0.6	1.6	2.2	1.0
SM7	**SM7**	0.5	0.4	0.1	0.2	M1	0.2
SM8	**SM8**	0.6	0.5	M1	0.2	0.3	0.4
WF04	**WF4**	0.8	0.9	0.7	1.8	1.1	0.2

Forest Passive Average [ppb] Nitrogen Dioxide [NO_2]

start month		Dec-15	Feb-16	Apr-16	Jun-16	Aug-16	Oct-16
end month		Jan-16	Mar-16	May-16	Jul-16	Sep-16	Nov-16
Site Name		Approximate Exposure days					
Old	New	60	60	60	60	60	60
AH3	**AS103**	2.4	1.3	0.5	0.4	0.5	1.3
AH7	**AS107**	4.7	2.3	1.2	0.6	0.9	1.8
BM7	**BM7**	0.5	0.1	<0.1	<0.1	0.2	0.3
BM10	**BM10**	1.1	0.2	0.1	<0.1	M1	0.5
BM11	**BM11**	0.6	0.1	M1	<0.1	0.2	0.7
JE306	**JE306**	2.9	0.2	M1	0.5	1.6	1.6
JE308	**JE308**	1.5	0.4	<0.1	<0.1	0.2	0.3
JE312	**JE312**	0.6	0.1	1.2	0.1	0.3	0.5
JE316	**JE316**	0.8	<0.1	0.2	<0.1	0.2	0.8
JE323	**JE323**	1.7	0.6	0.5	0.4	M1	0.6
JP101	**JP101**	2.1	1.1	0.1	0.2	0.5	0.9
JP102	**JP102**	4.9	3.3	1.1	0.9	1.1	2.0
JP104	**JP104**	13.7	4.9	1.2	1.0	2.4	4.2
JP107	**JP107**	4.8	1.0	0.3	0.2	0.7	2.5
JP108	**JP108**	0.6	0.3	0.2	<0.1	0.3	0.5
JP201	**JP201**	1.1	0.7	0.1	<0.1	0.1	0.5
JP205	**JP205**	1.9	0.2	0.1	0.1	0.4	1.4
JP210	**JP210**	1.9	0.6	0.9	0.1	0.3	0.7
JP212	**JP212**	8.1	1.9	1.2	0.9	3.4	3.9
JP213	**JP213**	0.9	0.2	0.2	<0.1	0.2	0.6
AH8R	**JP309**	2.9	2.5	0.4	0.2	0.5	1.5
JP311	**JP311**	2.6	1.3	0.2	0.3	0.4	1.2
JP316	**JP316**	1.2	0.5	0.3	0.1	0.3	0.5
NE7	**NE7**	1.7	0.3	0.4	0.4	0.8	0.8
NE10	**NE10**	0.8	<0.1	0.7	0.1	0.3	0.1
NE11	**NE11**	2.9	1.0	0.5	0.5	1.4	1.7
R2	**R2**	10.3	1.8	1.1	1.0	1.7	3.2
SM7	**SM7**	1.1	0.1	0.2	0.2	0.6	0.6
SM8	**SM8**	1.1	0.2	0.2	0.1	0.2	0.4
WF04	**WF4**	2.3	0.8	0.5	0.2	0.5	1.6

Forest Passive Average [ppb] Ammonia [NH_3]

start month		Dec-15	Feb-16	Apr-16	Jun-16	Aug-16	Oct-16
end month		Jan-16	Mar-16	May-16	Jul-16	Sep-16	Nov-16
Site Name		Approximate Exposure days					
Old	New	60	60	60	60	60	60
AH3	**AS103**	0.4	0.6	35.5	2.1	0.8	0.4
AH7	**AS107**	0.4	0.6	16.5	2.6	1.1	0.7
BM7	**BM7**	0.4	0.8	0.9	0.8	1.0	0.2
BM10	**BM10**	0.4	0.6	1.0	1.1	M1	M1
BM11	**BM11**	0.4	0.5	0.9	0.7	1.0	0.2
JE306	**JE306**	0.4	0.6	1.0	1.1	M1	0.3
JE308	**JE308**	0.3	0.6	1.2	0.8	1.0	0.4
JE312	**JE312**	0.4	0.8	13.0	2.1	1.2	0.2
JE316	**JE316**	0.4	1.1	4.4	1.1	1.0	0.3
JE323	**JE323**	0.4	0.5	9.5	1.9	M1	0.3
JP101	**JP101**	0.3	0.5	1.5	0.8	1.4	0.4
JP102	**JP102**	0.6	1.5	38.5	2.2	1.2	1.4
JP104	**JP104**	1.0	0.6	6.2	1.6	1.1	0.8
JP107	**JP107**	0.5	0.6	2.1	1.0	0.7	0.3
JP108	**JP108**	0.5	0.5	3.9	1.4	0.6	0.2
JP201	**JP201**	0.4	0.5	0.9	1.0	0.6	1.3
JP205	**JP205**	0.7	0.5	2.2	0.8	0.6	0.3
JP210	**JP210**	0.4	0.5	20.5	1.3	0.6	0.4
JP212	**JP212**	M1	1.2	5.2	2.6	1.4	1.3
JP213	**JP213**	0.4	0.8	5.4	1.5	0.5	0.9
AH8R	**JP309**	0.3	0.5	1.5	1.2	0.6	0.3
JP311	**JP311**	0.4	0.6	8.2	1.2	0.7	0.9
JP316	**JP316**	0.5	0.7	9.7	1.5	0.7	0.9
NE7	**NE7**	0.4	0.5	0.1	M1	M1	0.3
NE10	**NE10**	0.3	0.7	13.0	2.7	1.1	M1
NE11	**NE11**	0.4	0.7	1.7	1.5	0.7	0.5
R2	**R2**	0.6	0.8	4.1	1.5	0.9	0.4
SM7	**SM7**	0.5	0.8	1.4	1.0	M1	0.5
SM8	**SM8**	0.4	0.5	2.6	1.0	0.8	0.4
WF04	**WF4**	0.4	0.5	0.9	1.1	0.5	0.3

Forest Passive Average [ppb] Ozone [O_3]

start month		Dec-15	Feb-16	Apr-16	Jun-16	Aug-16	Oct-16
end month		Jan-16	Mar-16	May-16	Jul-16	Sep-16	Nov-16
Site Name		Approximate Exposure days					
Old	New	60	60	60	60	60	60
AH3	**AS103**	29.3	41.7	28.3	32.8	26.5	22.8
AH7	**AS107**	22.5	35.4	29.5	28.1	24.8	22.6
BM7	**BM7**	33.3	45.5	27.3	24.8	24.9	27.4
BM10	**BM10**	21.3	35.4	19.7	19.4	M1	16.7
BM11	**BM11**	25.7	40.1	M1	21.9	15.7	24.0
JE306	**JE306**	21.4	38.3	M1	24.9	M1	16.2
JE308	**JE308**	44.5	35.2	23.7	21.3	18.5	18.2
JE312	**JE312**	22.2	35.8	32.4	25.9	24.4	22.5
JE316	**JE316**	23.5	40.3	32.4	21.5	21.1	21.8
JE323	**JE323**	21.4	32.4	21.6	18.8	M1	15.5
JP101	**JP101**	25.9	33.1	34.2	28.4	23.6	17.8
JP102	**JP102**	22.7	32.3	29.3	29.0	21.8	20.5
JP104	**JP104**	18.5	34.2	28.7	28.6	21.6	17.7
JP107	**JP107**	22.4	37.5	32.6	30.8	23.4	22.9
JP108	**JP108**	21.7	36.2	33.8	20.7	16.9	14.4
JP201	**JP201**	27.6	38.4	36.0	25.5	22.0	22.0
JP205	**JP205**	26.9	45.1	31.6	28.7	25.1	21.9
JP210	**JP210**	25.9	36.8	28.1	24.6	21.7	19.8
JP212	**JP212**	14.9	28.5	23.6	15.0	13.6	12.1
JP213	**JP213**	29.2	41.2	31.2	29.7	23.5	27.2
AH8R	**JP309**	21.7	33.3	30.4	26.4	21.0	17.4
JP311	**JP311**	26.3	35.4	32.1	28.3	24.0	21.8
JP316	**JP316**	24.9	42.9	31.6	31.7	27.7	21.9
NE7	**NE7**	24.1	39.9	26.0	17.3	M1	18.3
NE10	**NE10**	24.0	34.2	24.5	21.6	17.2	M1
NE11	**NE11**	16.2	33.2	20.7	15.3	13.9	15.2
R2	**R2**	16.4	31.5	20.1	20.4	14.9	12.9
SM7	**SM7**	25.6	46.9	30.7	23.3	M1	23.9
SM8	**SM8**	24.1	42.5	28.7	20.2	20.3	22.3
WF04	**WF4**	17.1	32.1	21.1	17.4	13.1	10.5

Forest Passive Average [μg/m^3] Nitric Acid [HNO_3]

start month		Dec-15	Feb-16	Apr-16	Jun-16	Aug-16	Oct-16
end month		Jan-16	Mar-16	May-16	Jul-16	Sep-16	Nov-16
Site Name		Approximate Exposure days					
Old	New	60	60	60	60	60	60
AH3	**AS103**	0.4	0.7	0.3	0.4	0.3	0.4
AH7	**AS107**	0.5	0.4	0.3	0.4	0.2	0.6
BM7	**BM7**	0.3	0.3	0.2	0.2	0.1	M2
BM10	**BM10**	0.3	0.3	0.2	0.3	M1	M1
BM11	**BM11**	0.4	0.3	0.3	0.2	0.1	0.2
JE306	**JE306**	0.7	0.8	0.2	0.3	M1	M2
JE308	**JE308**	0.5	0.3	0.2	0.2	0.2	0.2
JE312	**JE312**	0.6	0.2	0.3	0.3	0.2	0.2
JE316	**JE316**	0.7	0.3	0.3	0.3	0.2	0.1
JE323	**JE323**	1.0	0.3	0.3	0.3	M1	0.2
JP101	**JP101**	0.4	0.4	0.2	0.4	0.2	0.3
JP102	**JP102**	0.7	0.5	0.4	0.6	0.3	0.8
JP104	**JP104**	0.6	0.4	0.3	0.4	0.2	0.6
JP107	**JP107**	0.6	0.4	0.4	0.4	0.1	0.6
JP108	**JP108**	0.4	0.2	0.3	0.3	0.1	0.2
JP201	**JP201**	0.4	0.3	0.2	0.3	0.1	0.3
JP205	**JP205**	0.4	0.3	0.3	0.4	0.1	0.2
JP210	**JP210**	0.6	0.2	0.4	0.3	0.1	0.2
JP212	**JP212**	0.5	0.6	0.3	0.4	0.2	0.2
JP213	**JP213**	0.4	0.3	0.3	0.2	0.1	0.3
AH8R	**JP309**	0.4	0.2	0.4	0.3	0.1	0.2
JP311	**JP311**	0.5	0.3	0.3	0.4	0.1	0.2
JP316	**JP316**	0.5	0.5	0.4	0.4	0.1	0.2
NE7	**NE7**	0.5	0.3	0.2	M1	M1	0.1
NE10	**NE10**	0.3	0.3	0.3	0.3	0.1	M1
NE11	**NE11**	0.7	0.2	0.2	0.2	0.1	M1
R2	**R2**	0.8	0.3	0.3	0.4	0.1	0.2
SM7	**SM7**	0.6	0.4	0.2	0.3	0.1	0.2
SM8	**SM8**	0.7	0.3	0.3	0.4	0.1	M2
WF04	**WF4**	0.7	0.3	0.2	0.3	0.1	0.3

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

INTEGRATED MONITORING PROGRAM
ANNUAL REPORT

VOLATILE ORGANIC COMPOUNDS
DATA SUMMARY
2016

March 2017

SAMPLE COLLECTION AND DATA COMPILATION BY:

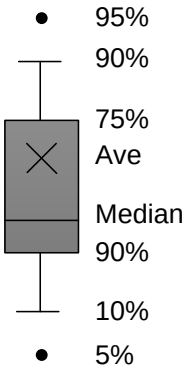
Wood Buffalo Environmental Association
Fort McMurray, Alberta

LABORATORY ANALYSIS BY:

VOCs: InnoTech Alberta, Inc.
Vegreville, Alberta

FILE CONTENTS DESCRIPTION	VOC - Speciated Volatile Organic Compounds and RSC - Reduced Sulphur Compounds
SAMPLING INTERVAL	24 hour
SAMPLING FREQUENCY OF DATA	Once every 6 days
EXPLANATION OF ZERO VALUES	Zero values are contained in this file and should be treated as values below detection - Method Detection values (MDL) are provided with each observation
UNITS	ppbv (parts per billion volume)
OBSERVATION TYPE	Gas
FIELD SAMPLING OR MEASUREMENT PRINCIPLE	Evacuated canister
ANALYTICAL METHODS	GC/MS - Gas chromatography/mass spectrometer for VOC compounds GC/SCD - Gas chromatography/sulfur chemiluminescence detector for RSC compounds
ANALYTICAL LABORATORY	Alberta Innovates Technology Futures (now InnoTech Alberta Inc)
USER NOTE 1	Data are not blank corrected
USER NOTE 2	isobutylene and methyl vinyl ketone were added on Sep 9, 2015
SAMPLING INSTRUMENT TYPE	Tisch TE123
FLOW RATE	10.0 cc/min (cubic centimeters per minute)
FLAGS USED	
V0	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
V4	Valid value despite failing to meet some QC or statistical criteria
V5	Valid value but qualified because of possible contamination
V6	Valid value but qualified due to non-standard sampling conditions
M1	Missing value because no value is available
M2	Missing value because invalidated by Data Originator

Legend description



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	01-Jan		01-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.09	V0	0.03	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.02	V0	0.01	V0
2,2-Dimethylbutane	0.01	0.01	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.03	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.04	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	< 0.02	V1
3-Methylpentane	0.01	0.03	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.9	V0	1.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.12	V0	0.1	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.02	V0	< 0.02	V1
Cyclopentane	0.01	0.01	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.6	V0	< 0.3	V1
Ethylbenzene	0.01	0.01	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.28	V0	0.26	V0
Isopentane	0.03	0.23	V0	0.16	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	< 3	V1	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.05	V0	0.01	V0
Methylcyclopentane	0.02	0.02	V0	< 0.02	V1
n-Butane	0.03	0.62	V0	0.47	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	< 0.01	V1
n-Hexane	0.01	0.04	V0	0.04	V0
n-Nonane	0.01	0.02	V0	< 0.01	V1
n-Octane	0.02	0.04	V0	< 0.02	V1
n-Pentane	0.1	0.2	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.07	V0	0.05	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**01-Jan**		**01-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.12	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.06	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	0.03	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	< 0.01	V1
2-Methylhexane	0.01	0.03	V0	< 0.01	V1
2-Methylpentane	0.01	0.09	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.04	V0	< 0.02	V1
3-Methylpentane	0.01	0.05	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.3	V0	1.4	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.25	V0	0.12	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.02	V0	< 0.02	V1
Cyclopentane	0.01	0.01	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	5	V0	< 0.3	V1
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.77	V0	0.25	V0
Isopentane	0.03	0.38	V0	0.17	V0
Isoprene	0.01	0.01	V0	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.06	V0	< 0.03	V1
Methanol	3	26	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	0.01	V0
Methylcyclopentane	0.02	0.04	V0	< 0.02	V1
n-Butane	0.03	1.36	V0	0.55	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	< 0.01	V1
n-Hexane	0.01	0.07	V0	0.03	V0
n-Nonane	0.01	0.01	V0	0.01	V0
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.4	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.18	V0	0.07	V0
trans-2-Butene	0.01	0.02	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	01-Jan		01-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.06	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.04	V0	0.04	V0
2,3-Dimethylpentane	0.02	0.02	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.09	V0	0.03	V0
2-Methylhexane	0.01	0.02	V0	< 0.01	V1
2-Methylpentane	0.01	0.05	V0	0.06	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	< 0.02	V1
3-Methylhexane	0.02	0.04	V0	< 0.02	V1
3-Methylpentane	0.01	0.03	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.3	V0	0.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.13	V0	0.12	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.03	V0
Cyclopentane	0.01	0.01	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.5	V0	0.4	V0
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.33	V0	0.33	V0
Isopentane	0.03	0.18	V0	0.21	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	< 0.03	V1
Methanol	3	5	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.11	V0	0.05	V0
Methylcyclopentane	0.02	0.04	V0	0.03	V0
n-Butane	0.03	0.6	V0	0.65	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.1	V0	< 0.01	V1
n-Hexane	0.01	0.05	V0	0.04	V0
n-Nonane	0.01	0.04	V0	0.02	V0
n-Octane	0.02	0.1	V0	< 0.02	V1
n-Pentane	0.1	0.2	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.13	V0	0.06	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**01-Jan**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.04	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.06	V0
2,3-Dimethylpentane	0.02	0.05	V0
2,4-Dimethylpentane	0.01	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.06	V0
2-Methylhexane	0.01	0.03	V0
2-Methylpentane	0.01	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.07	V0
3-Methylpentane	0.01	0.09	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	0.8	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.11	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.12	V0
Cyclopentane	0.01	0.03	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.3	V0
Ethylbenzene	0.01	0.01	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.6	V0
Isopentane	0.03	0.48	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	< 3	V1
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.12	V0
Methylcyclopentane	0.02	0.06	V0
n-Butane	0.03	0.59	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.15	V0
n-Hexane	0.01	0.04	V0
n-Nonane	0.01	0.03	V0
n-Octane	0.02	0.07	V0
n-Pentane	0.1	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.08	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		07-Jan		07-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.04	V0	0.06	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	0.01	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.04	V0
2-Methylhexane	0.01	0.01	V0	0.03	V0
2-Methylpentane	0.01	0.04	V0	0.11	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	0.05	V0
3-Methylpentane	0.01	0.03	V0	0.08	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.7	V0	0.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.1	V0	0.12	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.06	V0
Cyclopentane	0.01	0.01	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	< 0.3	V1	< 0.3	V1
Ethylbenzene	0.01	0.02	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.27	V0	0.31	V0
Isopentane	0.03	0.17	V0	0.32	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.03	V0	0.04	V0
Methanol	3	< 3	V1	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	0.07	V0
Methylcyclopentane	0.02	0.02	V0	0.05	V0
n-Butane	0.03	0.37	V0	0.44	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.11	V0
n-Hexane	0.01	0.04	V0	0.11	V0
n-Nonane	0.01	0.01	V0	0.03	V0
n-Octane	0.02	0.04	V0	0.07	V0
n-Pentane	0.1	0.2	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.06	V0	0.09	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Athabasca Valley		Anzac	
Station #	AMS 7		AMS 14	
Sample Date	07-Jan		07-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.05	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0	0.04	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.05	V0	0.06	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	0.01	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.03	V0	0.04	V0
2-Methylhexane	0.01	0.02	V0	0.03	V0
2-Methylpentane	0.01	0.09	V0	0.18	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.04	V0	0.05	V0
3-Methylpentane	0.01	0.05	V0	0.09	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.8	V0	0.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.12	V0	0.13	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.04	V0
Cyclopentane	0.01	0.02	V0	0.04	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.3	V0	< 0.3	V1
Ethylbenzene	0.01	0.02	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.28	V0	0.29	V0
Isopentane	0.03	0.31	V0	0.41	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.03	V0	< 0.03	V1
Methanol	3	7	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.06	V0
Methylcyclopentane	0.02	0.04	V0	0.04	V0
n-Butane	0.03	0.47	V0	0.48	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.07	V0	0.1	V0
n-Hexane	0.01	0.08	V0	0.12	V0
n-Nonane	0.01	0.02	V0	0.02	V0
n-Octane	0.02	0.04	V0	0.05	V0
n-Pentane	0.1	0.4	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.09	V0	0.09	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	07-Jan		07-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.04	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.05	V0	0.04	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.07	V0	0.06	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	0.01	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.02	V0
2-Methylhexane	0.01	0.01	V0	0.01	V0
2-Methylpentane	0.01	0.16	V0	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	0.02	V0
3-Methylpentane	0.01	0.09	V0	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.8	V0	0.6	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.12	V0	0.11	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.05	V0
Cyclopentane	0.01	0.04	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	< 0.3	V1	< 0.3	V1
Ethylbenzene	0.01	0.01	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.28	V0	0.3	V0
Isopentane	0.03	0.31	V0	0.25	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	< 3	V1	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.05	V0
Methylcyclopentane	0.02	0.03	V0	0.03	V0
n-Butane	0.03	0.38	V0	0.38	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.04	V0	0.04	V0
n-Hexane	0.01	0.07	V0	0.06	V0
n-Nonane	0.01	0.02	V0	0.02	V0
n-Octane	0.02	0.03	V0	0.03	V0
n-Pentane	0.1	0.4	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.06	V0	0.07	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**07-Jan**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	< 0.02	V1
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.07	V0
2,3-Dimethylpentane	0.02	< 0.02	V1
2,4-Dimethylpentane	0.01	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.02	V0
2-Methylhexane	0.01	0.01	V0
2-Methylpentane	0.01	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.02	V0
3-Methylpentane	0.01	0.11	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	0.5	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.1	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.12	V0
Cyclopentane	0.01	0.04	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	< 0.3	V1
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.52	V0
Isopentane	0.03	0.47	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	< 3	V1
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.09	V0
Methylcyclopentane	0.02	0.06	V0
n-Butane	0.03	0.43	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.05	V0
n-Hexane	0.01	0.04	V0
n-Nonane	0.01	0.01	V0
n-Octane	0.02	0.03	V0
n-Pentane	0.1	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.05	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		13-Jan		13-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.13	V0	0.11	V0
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.05	V0
2,2-Dimethylbutane	0.01	0.1	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	0.03	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.17	V0	0.05	V0
2,3-Dimethylpentane	0.02	0.07	V0	0.04	V0
2,4-Dimethylpentane	0.01	0.04	V0	0.03	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.13	V0	0.02	V0
2-Methylhexane	0.01	0.08	V0	0.05	V0
2-Methylpentane	0.01	0.25	V0	0.12	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.04	V0	< 0.02	V1
3-Methylhexane	0.02	0.13	V0	0.05	V0
3-Methylpentane	0.01	0.15	V0	0.09	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.8	V0	0.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.25	V0	0.21	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.1	V0	0.05	V0
Cyclopentane	0.01	0.06	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	4.5	V0	0.7	V0
Ethylbenzene	0.01	0.04	V0	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.54	V0	0.73	V0
Isopentane	0.03	0.74	V0	0.47	V0
Isoprene	0.01	0.01	V0	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.1	V0	0.07	V0
Methanol	3	< 3	V1	12	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.18	V0	0.06	V0
Methylcyclopentane	0.02	0.11	V0	0.07	V0
n-Butane	0.03	1.03	V0	1.63	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.25	V0	0.06	V0
n-Hexane	0.01	0.28	V0	0.15	V0
n-Nonane	0.01	0.07	V0	0.01	V0
n-Octane	0.02	0.16	V0	0.03	V0
n-Pentane	0.1	0.9	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.24	V0	0.16	V0
trans-2-Butene	0.01	< 0.01	V1	0.04	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**13-Jan**		**13-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.04	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.44	V0	0.08	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.04	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.05	V0	0.04	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	0.02	V0
2,4-Dimethylpentane	0.01	0.03	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.02	V0
2-Methylhexane	0.01	0.07	V0	0.05	V0
2-Methylpentane	0.01	0.13	V0	0.16	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.13	V0	0.05	V0
3-Methylpentane	0.01	0.08	V0	0.1	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.9	V0	0.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.72	V0	0.2	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.08	V0	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	0.06	V0
Cyclopentane	0.01	0.03	V0	0.04	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.6	V0	< 0.3	V1
Ethylbenzene	0.01	0.05	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.59	V0	0.44	V0
Isopentane	0.03	0.5	V0	0.62	V0
Isoprene	0.01	0.05	V0	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.12	V0	0.04	V0
Methanol	3	22	V0	< 3	V1
Methylethylketone	0.3	0.3	V0	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.07	V0	0.08	V0
Methylcyclopentane	0.02	0.06	V0	0.06	V0
n-Butane	0.03	1.19	V0	0.85	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.13	V0	0.06	V0
n-Hexane	0.01	0.16	V0	0.16	V0
n-Nonane	0.01	0.03	V0	0.01	V0
n-Octane	0.02	0.05	V0	0.02	V0
n-Pentane	0.1	0.6	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.06	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.46	V0	0.14	V0
trans-2-Butene	0.01	0.12	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.03	V0	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	13-Jan		13-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.16	V0	0.12	V0
1-Pentene	0.01	0.02	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.25	V0	0.18	V0
2,3,4-Trimethylpentane	0.01	0.03	V0	0.03	V0
2,3-Dimethylbutane	0.02	0.31	V0	0.32	V0
2,3-Dimethylpentane	0.02	0.07	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.05	V0	0.05	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.12	V0	0.15	V0
2-Methylhexane	0.01	0.12	V0	0.07	V0
2-Methylpentane	0.01	0.97	V0	0.6	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.05	V0	0.05	V0
3-Methylhexane	0.02	0.15	V0	0.12	V0
3-Methylpentane	0.01	0.55	V0	0.34	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.9	V0	0.6	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.31	V0	0.27	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.11	V0	0.11	V0
Cyclopentane	0.01	0.27	V0	0.16	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.5	V0	< 0.3	V1
Ethylbenzene	0.01	0.04	V0	0.04	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.56	V0	0.09	V0
Isopentane	0.03	1.44	V0	1.18	V0
Isoprene	0.01	< 0.01	V1	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.09	V0	0.09	V0
Methanol	3	4	V0	3	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.17	V0	0.21	V0
Methylcyclopentane	0.02	0.15	V0	0.13	V0
n-Butane	0.03	0.94	V0	1.13	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.28	V0	0.23	V0
n-Hexane	0.01	0.47	V0	0.36	V0
n-Nonane	0.01	0.07	V0	0.07	V0
n-Octane	0.02	0.17	V0	0.17	V0
n-Pentane	0.1	2	V0	1.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.04	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.21	V0	0.25	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**13-Jan**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.1	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.11	V0
2,3,4-Trimethylpentane	0.01	0.03	V0
2,3-Dimethylbutane	0.02	0.21	V0
2,3-Dimethylpentane	0.02	0.1	V0
2,4-Dimethylpentane	0.01	0.05	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.14	V0
2-Methylhexane	0.01	0.07	V0
2-Methylpentane	0.01	0.18	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.04	V0
3-Methylhexane	0.02	0.12	V0
3-Methylpentane	0.01	0.22	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	0.7	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.24	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.21	V0
Cyclopentane	0.01	0.07	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	< 0.3	V1
Ethylbenzene	0.01	0.04	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.89	V0
Isopentane	0.03	1.03	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.09	V0
Methanol	3	< 3	V1
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.27	V0
Methylcyclopentane	0.02	0.16	V0
n-Butane	0.03	1.35	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.24	V0
n-Hexane	0.01	0.22	V0
n-Nonane	0.01	0.07	V0
n-Octane	0.02	0.16	V0
n-Pentane	0.1	0.7	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.04	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.22	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	19-Jan		19-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.03	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.13	V0	0.12	V0
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.1	V0	0.06	V0
2,3,4-Trimethylpentane	0.01	0.03	V0	0.03	V0
2,3-Dimethylbutane	0.02	0.17	V0	0.12	V0
2,3-Dimethylpentane	0.02	0.06	V0	0.08	V0
2,4-Dimethylpentane	0.01	0.04	V0	0.04	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.13	V0	0.15	V0
2-Methylhexane	0.01	0.07	V0	0.1	V0
2-Methylpentane	0.01	0.24	V0	0.24	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.05	V0	0.06	V0
3-Methylhexane	0.02	0.11	V0	0.13	V0
3-Methylpentane	0.01	0.19	V0	0.17	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.9	V0	1.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.15	V0	0.17	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.14	V0	0.13	V0
Cyclopentane	0.01	0.07	V0	0.07	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.3	V0	0.7	V0
Ethylbenzene	0.01	0.04	V0	0.05	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.61	V0	0.65	V0
Isopentane	0.03	0.55	V0	0.67	V0
Isoprene	0.01	0.01	V0	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.08	V0	0.13	V0
Methanol	3	4	V0	5	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.21	V0	0.22	V0
Methylcyclopentane	0.02	0.11	V0	0.13	V0
n-Butane	0.03	0.61	V0	0.96	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.21	V0	0.25	V0
n-Hexane	0.01	0.21	V0	0.24	V0
n-Nonane	0.01	0.06	V0	0.07	V0
n-Octane	0.02	0.18	V0	0.2	V0
n-Pentane	0.1	0.5	V0	0.7	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.05	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.89	V0	0.23	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**19-Jan**		**19-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.03	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.15	V0	0.09	V0
1-Pentene	0.01	0.01	V0	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0	0.05	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.06	V0	0.09	V0
2,3-Dimethylpentane	0.02	0.07	V0	0.05	V0
2,4-Dimethylpentane	0.01	0.04	V0	0.04	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.11	V0	0.11	V0
2-Methylhexane	0.01	0.11	V0	0.08	V0
2-Methylpentane	0.01	0.15	V0	0.24	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.05	V0	0.04	V0
3-Methylhexane	0.02	0.15	V0	0.1	V0
3-Methylpentane	0.01	0.11	V0	0.15	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.9	V0	0.9	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.19	V0	0.15	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.02	V0	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.08	V0	0.13	V0
Cyclopentane	0.01	0.03	V0	0.08	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1	V0	0.3	V0
Ethylbenzene	0.01	0.04	V0	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.51	V0	0.74	V0
Isopentane	0.03	0.48	V0	0.69	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.11	V0	0.07	V0
Methanol	3	15	V0	3	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.14	V0	0.21	V0
Methylcyclopentane	0.02	0.1	V0	0.11	V0
n-Butane	0.03	0.84	V0	1.19	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.25	V0	0.18	V0
n-Hexane	0.01	0.21	V0	0.23	V0
n-Nonane	0.01	0.05	V0	0.04	V0
n-Octane	0.02	0.14	V0	0.15	V0
n-Pentane	0.1	0.4	V0	0.8	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.05	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.21	V0	0.17	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	19-Jan		20-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.05	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.09	V0	0.13	V0
1-Pentene	0.01	< 0.01	V1	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.2	V0	0.12	V0
2,3,4-Trimethylpentane	0.01	0.03	V0	0.05	V0
2,3-Dimethylbutane	0.02	0.26	V0	0.23	V0
2,3-Dimethylpentane	0.02	0.06	V0	0.14	V0
2,4-Dimethylpentane	0.01	0.04	V0	0.06	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.14	V0	0.77	V0
2-Methylhexane	0.01	0.09	V0	0.21	V0
2-Methylpentane	0.01	0.65	V0	0.32	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.05	V0	0.29	V0
3-Methylhexane	0.02	0.12	V0	0.33	V0
3-Methylpentane	0.01	0.41	V0	0.19	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.7	V0	0.6	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.18	V0	0.21	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.14	V0	0.18	V0
Cyclopentane	0.01	0.17	V0	0.07	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.3	V0	< 0.3	V1
Ethylbenzene	0.01	0.04	V0	0.22	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.61	V0	0.45	V0
Isopentane	0.03	1.05	V0	0.51	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	0.03	V0
m,p-Xylene	0.03	0.09	V0	0.48	V0
Methanol	3	< 3	V1	3	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.21	V0	0.62	V0
Methylcyclopentane	0.02	0.12	V0	0.18	V0
n-Butane	0.03	0.67	V0	0.72	V0
n-Decane	0.06	< 0.06	V1	0.07	V0
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.24	V0	0.85	V0
n-Hexane	0.01	0.29	V0	0.4	V0
n-Nonane	0.01	0.07	V0	0.42	V0
n-Octane	0.02	0.18	V0	1.17	V4
n-Pentane	0.1	0.9	V0	0.7	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.2	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.18	V0	0.61	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**19-Jan**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.05	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0
2,3,4-Trimethylpentane	0.01	0.02	V0
2,3-Dimethylbutane	0.02	0.08	V0
2,3-Dimethylpentane	0.02	0.05	V0
2,4-Dimethylpentane	0.01	0.03	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.1	V0
2-Methylhexane	0.01	0.06	V0
2-Methylpentane	0.01	0.09	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.04	V0
3-Methylhexane	0.02	0.09	V0
3-Methylpentane	0.01	0.13	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	0.7	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.11	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.14	V0
Cyclopentane	0.01	0.05	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	< 0.3	V1
Ethylbenzene	0.01	0.03	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.6	V0
Isopentane	0.03	0.5	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.05	V0
Methanol	3	< 3	V1
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.19	V0
Methylcyclopentane	0.02	0.09	V0
n-Butane	0.03	0.59	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.17	V0
n-Hexane	0.01	0.08	V0
n-Nonane	0.01	0.03	V0
n-Octane	0.02	0.11	V0
n-Pentane	0.1	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.02	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.14	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	25-Jan		25-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.07	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.11	V0	0.24	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.06	V0	0.43	V0
2,2-Dimethylbutane	0.01	0.05	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	0.03	V0	0.13	V0
2,3-Dimethylbutane	0.02	0.1	V0	0.11	V0
2,3-Dimethylpentane	0.02	0.07	V0	0.29	V0
2,4-Dimethylpentane	0.01	0.04	V0	0.14	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.07	V0	0.06	V0
2-Methylhexane	0.01	0.08	V0	0.12	V0
2-Methylpentane	0.01	0.22	V0	0.29	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	0.04	V0
3-Methylhexane	0.02	0.09	V0	0.14	V0
3-Methylpentane	0.01	0.13	V0	0.17	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.8	V0	0.6	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.18	V0	0.27	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.08	V0	0.07	V0
Cyclopentane	0.01	0.04	V0	0.05	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.6	V0	1.1	V0
Ethylbenzene	0.01	0.02	V0	0.05	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.81	V0	1.13	V0
Isopentane	0.03	0.68	V0	0.96	V0
Isoprene	0.01	< 0.01	V1	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.11	V0	0.25	V0
Methanol	3	5	V0	19	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.13	V0	0.11	V0
Methylcyclopentane	0.02	0.1	V0	0.17	V0
n-Butane	0.03	1.69	V0	2.61	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.11	V0	0.16	V0
n-Hexane	0.01	0.17	V0	0.24	V0
n-Nonane	0.01	0.04	V0	0.03	V0
n-Octane	0.02	0.08	V0	0.07	V0
n-Pentane	0.1	0.5	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.09	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.22	V0	0.45	V0
trans-2-Butene	0.01	< 0.01	V1	0.05	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	0.02	V0
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**25-Jan**		**25-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.05	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.11	V0	0.16	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.05	V0	0.22	V0
2,2-Dimethylbutane	0.01	0.03	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	0.05	V0
2,3-Dimethylbutane	0.02	0.06	V0	0.08	V0
2,3-Dimethylpentane	0.02	0.05	V0	0.14	V0
2,4-Dimethylpentane	0.01	0.03	V0	0.09	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.04	V0	0.05	V0
2-Methylhexane	0.01	0.07	V0	0.11	V0
2-Methylpentane	0.01	0.2	V0	0.29	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.03	V0
3-Methylhexane	0.02	0.08	V0	0.14	V0
3-Methylpentane	0.01	0.12	V0	0.24	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.9	V0	2.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.18	V0	0.2	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	0.08	V0
Cyclopentane	0.01	0.04	V0	0.06	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.1	V0	2.2	V0
Ethylbenzene	0.01	0.01	V0	0.08	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.13	V0	0.92	V0
Isopentane	0.03	0.8	V0	1.21	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.07	V0	0.18	V0
Methanol	3	59	V0	162	V4
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.08	V0	0.09	V0
Methylcyclopentane	0.02	0.1	V0	0.21	V0
n-Butane	0.03	1.86	V0	1.98	V0
n-Decane	0.06	< 0.06	V1	0.22	V0
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.1	V0	0.14	V0
n-Hexane	0.01	0.26	V0	0.63	V0
n-Nonane	0.01	0.02	V0	0.09	V0
n-Octane	0.02	0.04	V0	0.07	V0
n-Pentane	0.1	0.7	V0	1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.07	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.17	V0	0.39	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	25-Jan		25-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.09	V0	0.06	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.05	V0	0.05	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	0.01	V0
2,3-Dimethylbutane	0.02	0.09	V0	0.09	V0
2,3-Dimethylpentane	0.02	0.04	V0	0.04	V0
2,4-Dimethylpentane	0.01	0.03	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.07	V0	0.08	V0
2-Methylhexane	0.01	0.07	V0	0.04	V0
2-Methylpentane	0.01	0.19	V0	0.13	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.02	V0	0.02	V0
3-Methylhexane	0.02	0.09	V0	0.06	V0
3-Methylpentane	0.01	0.16	V0	0.09	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.7	V0	0.5	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.13	V0	0.13	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.09	V0	0.08	V0
Cyclopentane	0.01	0.04	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.4	V0	< 0.3	V1
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.73	V0	0.71	V0
Isopentane	0.03	0.54	V0	0.47	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	0.04	V0
Methanol	3	32	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.13	V0	0.13	V0
Methylcyclopentane	0.02	0.14	V0	0.06	V0
n-Butane	0.03	1.43	V0	1.33	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.15	V0	0.09	V0
n-Hexane	0.01	0.32	V0	0.12	V0
n-Nonane	0.01	0.05	V0	0.06	V0
n-Octane	0.02	0.09	V0	0.09	V0
n-Pentane	0.1	0.5	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.11	V0	0.09	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**25-Jan**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.05	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.05	V0
2,3-Dimethylpentane	0.02	0.02	V0
2,4-Dimethylpentane	0.01	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.02	V0
2-Methylhexane	0.01	0.02	V0
2-Methylpentane	0.01	0.15	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.03	V0
3-Methylpentane	0.01	0.12	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	0.6	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.16	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.08	V0
Cyclopentane	0.01	0.05	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.3	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.77	V0
Isopentane	0.03	0.66	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	< 3	V1
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.09	V0
Methylcyclopentane	0.02	0.06	V0
n-Butane	0.03	1.31	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.04	V0
n-Hexane	0.01	0.13	V0
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	0.02	V0
n-Pentane	0.1	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.07	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	31-Jan		31-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.07	V0	0.07	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,2-Dimethylbutane	0.01	0.04	V0	0.04	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.06	V0	0.04	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.01	V0
2-Methylhexane	0.01	< 0.01	V1	0.02	V0
2-Methylpentane	0.01	0.07	V0	0.07	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	0.03	V0
3-Methylpentane	0.01	0.04	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.8	V0	0.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.12	V0	0.13	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.02	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.3	V0	0.7	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.34	V0	0.4	V0
Isopentane	0.03	0.27	V0	0.36	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	< 3	V1	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	0.03	V0
Methylcyclopentane	0.02	< 0.02	V1	0.03	V0
n-Butane	0.03	0.53	V0	0.67	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	0.03	V0
n-Hexane	0.01	0.05	V0	0.08	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.2	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.04	V0	0.07	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**31-Jan**		**31-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.05	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.05	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	< 0.02	V1
3-Methylpentane	0.01	0.04	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.8	V0	0.9	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.11	V0	0.12	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.01	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.5	V0	< 0.3	V1
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.34	V0	0.33	V0
Isopentane	0.03	0.31	V0	0.56	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	7	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.02	V0
Methylcyclopentane	0.02	0.03	V0	< 0.02	V1
n-Butane	0.03	0.57	V0	0.59	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	< 0.01	V1
n-Hexane	0.01	0.08	V0	0.05	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.3	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.04	V0	0.04	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	31-Jan		31-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.05	V0	0.07	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.13	V0	0.06	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.17	V0	0.09	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	0.02	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.01	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.43	V0	0.22	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	0.02	V0
3-Methylpentane	0.01	0.25	V0	0.11	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.8	V0	0.9	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.15	V0	0.14	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.02	V0
Cyclopentane	0.01	0.11	V0	0.06	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.5	V0	0.4	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.39	V0	0.35	V0
Isopentane	0.03	0.84	V0	0.53	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	14	V0	11	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.04	V0
Methylcyclopentane	0.02	0.07	V0	0.03	V0
n-Butane	0.03	0.62	V0	0.61	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.01	V0	0.03	V0
n-Hexane	0.01	0.18	V0	0.11	V0
n-Nonane	0.01	0.02	V0	0.01	V0
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.8	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.06	V0	0.06	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**31-Jan**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.02	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1
3-Methylpentane	0.01	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	0.7	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.11	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.4	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.33	V0
Isopentane	0.03	0.25	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	< 3	V1
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.01	V0
Methylcyclopentane	0.02	< 0.02	V1
n-Butane	0.03	0.61	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	< 0.01	V1
n-Hexane	0.01	0.04	V0
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.03	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		06-Feb		06-Feb	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.45	V0	0.15	V0
1-Pentene	0.01	< 0.01	V1	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.05	V0
2,2-Dimethylbutane	0.01	0.27	V0	0.05	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.39	V0	0.1	V0
2,3-Dimethylpentane	0.02	0.07	V0	0.05	V0
2,4-Dimethylpentane	0.01	0.05	V0	0.03	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.09	V0	0.06	V0
2-Methylhexane	0.01	0.1	V0	0.07	V0
2-Methylpentane	0.01	1.23	V4	0.25	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	0.02	V0
3-Methylhexane	0.02	0.13	V0	0.1	V0
3-Methylpentane	0.01	0.59	V0	0.14	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.1	V0	1.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.33	V0	0.26	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.05	V0	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.13	V0	0.09	V0
Cyclopentane	0.01	0.3	V0	0.07	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	< 0.3	V1	< 0.3	V1
Ethylbenzene	0.01	0.03	V0	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.29	V0	1.22	V0
Isopentane	0.03	2.4	V0	1.14	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.09	V0	0.09	V0
Methanol	3	18	V0	12	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.17	V0	0.12	V0
Methylcyclopentane	0.02	0.18	V0	0.1	V0
n-Butane	0.03	2.42	V0	2.22	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.21	V0	0.13	V0
n-Hexane	0.01	0.61	V0	0.22	V0
n-Nonane	0.01	0.04	V0	0.02	V0
n-Octane	0.02	0.1	V0	0.06	V0
n-Pentane	0.1	2.8	V4	0.7	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.04	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.24	V0	0.21	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.03	V0	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**06-Feb**		**06-Feb**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.15	V0	0.07	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.06	V0	0.02	V0
2,2-Dimethylbutane	0.01	0.04	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.12	V0	0.06	V0
2,3-Dimethylpentane	0.02	0.06	V0	0.03	V0
2,4-Dimethylpentane	0.01	0.05	V0	0.03	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.02	V0
2-Methylhexane	0.01	0.09	V0	0.05	V0
2-Methylpentane	0.01	0.29	V0	0.19	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.12	V0	0.06	V0
3-Methylpentane	0.01	0.16	V0	0.11	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.5	V0	1.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.24	V0	0.2	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.06	V0	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.08	V0	0.07	V0
Cyclopentane	0.01	0.07	V0	0.05	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	< 0.3	V1	< 0.3	V1
Ethylbenzene	0.01	0.02	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	3.57	V4	1.04	V0
Isopentane	0.03	2.25	V0	0.95	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	0.06	V0
Methanol	3	24	V0	14	V0
Methylethylketone	0.3	0.5	V0	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.1	V0	0.08	V0
Methylcyclopentane	0.02	0.11	V0	0.08	V0
n-Butane	0.03	9.55	V4	1.83	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.07	V0	0.07	V0
n-Hexane	0.01	0.21	V0	0.19	V0
n-Nonane	0.01	0.01	V0	0.01	V0
n-Octane	0.02	0.03	V0	0.03	V0
n-Pentane	0.1	1	V0	0.7	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.17	V0	0.16	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.04	V0	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	06-Feb		06-Feb	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.29	V0	0.27	V0
1-Pentene	0.01	< 0.01	V1	0.03	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.3	V0	0.16	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.41	V0	0.25	V0
2,3-Dimethylpentane	0.02	0.07	V0	0.07	V0
2,4-Dimethylpentane	0.01	0.05	V0	0.04	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.11	V0	0.13	V0
2-Methylhexane	0.01	0.1	V0	0.09	V0
2-Methylpentane	0.01	1.37	V4	0.61	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	0.04	V0
3-Methylhexane	0.02	0.13	V0	0.13	V0
3-Methylpentane	0.01	0.65	V0	0.31	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.9	V0	0.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.34	V0	0.28	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.03	V0	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.13	V0	0.12	V0
Cyclopentane	0.01	0.35	V0	0.17	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	< 0.3	V1	< 0.3	V1
Ethylbenzene	0.01	0.03	V0	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.17	V0	1.17	V0
Isopentane	0.03	2.58	V0	1.43	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	0.7	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.09	V0	0.08	V0
Methanol	3	63	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.18	V0	0.19	V0
Methylcyclopentane	0.02	0.19	V0	0.15	V0
n-Butane	0.03	2.15	V0	2.17	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.2	V0	0.23	V0
n-Hexane	0.01	0.64	V0	0.4	V0
n-Nonane	0.01	0.05	V0	0.05	V0
n-Octane	0.02	0.1	V0	0.13	V0
n-Pentane	0.1	3	V4	1.5	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.23	V0	0.21	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.02	V0	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	0.7	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**06-Feb**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.12	V0
1-Pentene	0.01	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.1	V0
2,3,4-Trimethylpentane	0.01	0.03	V0
2,3-Dimethylbutane	0.02	0.22	V0
2,3-Dimethylpentane	0.02	0.09	V0
2,4-Dimethylpentane	0.01	0.05	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.19	V0
2-Methylhexane	0.01	0.1	V0
2-Methylpentane	0.01	0.21	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.06	V0
3-Methylhexane	0.02	0.15	V0
3-Methylpentane	0.01	0.14	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	0.8	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.21	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.13	V0
Cyclopentane	0.01	0.06	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	< 0.3	V1
Ethylbenzene	0.01	0.04	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	1.19	V0
Isopentane	0.03	0.87	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.09	V0
Methanol	3	3	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.26	V0
Methylcyclopentane	0.02	0.13	V0
n-Butane	0.03	2.15	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.29	V0
n-Hexane	0.01	0.29	V0
n-Nonane	0.01	0.06	V0
n-Octane	0.02	0.18	V0
n-Pentane	0.1	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.04	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.21	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	12-Feb		12-Feb	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.2	V0	0.08	V0
1-Pentene	0.01	0.02	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.03	V0
2,2-Dimethylbutane	0.01	0.03	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.04	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.02	V0	0.02	V0
2,4-Dimethylpentane	0.01	0.01	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	< 0.01	V1
2-Methylhexane	0.01	0.02	V0	0.02	V0
2-Methylpentane	0.01	0.06	V0	0.07	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	0.03	V0
3-Methylpentane	0.01	0.06	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.9	V0	0.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.17	V0	0.17	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	< 0.02	V1
Cyclopentane	0.01	0.02	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.6	V0	0.7	V0
Ethylbenzene	0.01	0.01	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.47	V0	0.46	V0
Isopentane	0.03	0.43	V0	0.34	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.04	V0
Methanol	3	< 3	V1	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.02	V0
Methylcyclopentane	0.02	0.04	V0	0.03	V0
n-Butane	0.03	0.88	V0	0.85	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.04	V0	0.03	V0
n-Hexane	0.01	0.09	V0	0.06	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.2	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.09	V0	0.09	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**12-Feb**		**14-Feb**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.09	V0	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.04	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.02	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	< 0.01	V1
2-Methylhexane	0.01	0.02	V0	< 0.01	V1
2-Methylpentane	0.01	0.1	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	< 0.02	V1
3-Methylpentane	0.01	0.06	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.9	V0	1.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.18	V0	0.13	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.02	V0	< 0.02	V1
Cyclopentane	0.01	0.02	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1	V0	0.4	V0
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.5	V0	0.34	V0
Isopentane	0.03	0.49	V0	0.3	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	< 0.03	V1
Methanol	3	7	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	< 0.01	V1
Methylcyclopentane	0.02	0.04	V0	< 0.02	V1
n-Butane	0.03	1.06	V0	0.74	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	< 0.01	V1
n-Hexane	0.01	0.08	V0	0.05	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	0.02	V0	< 0.02	V1
n-Pentane	0.1	0.3	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.12	V0	0.03	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	12-Feb		12-Feb	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.16	V0	0.2	V0
1-Pentene	0.01	0.02	V0	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.06	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.07	V0	0.03	V0
2,3-Dimethylpentane	0.02	0.03	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.01	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.02	V0
2-Methylhexane	0.01	0.02	V0	0.02	V0
2-Methylpentane	0.01	0.09	V0	0.06	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	0.03	V0
3-Methylpentane	0.01	0.08	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.9	V0	0.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.18	V0	0.18	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	0.03	V0
Cyclopentane	0.01	0.03	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.4	V0	< 0.3	V1
Ethylbenzene	0.01	0.01	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.49	V0	0.39	V0
Isopentane	0.03	0.5	V0	0.29	V0
Isoprene	0.01	0.01	V0	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	< 3	V1	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.05	V0	0.03	V0
Methylcyclopentane	0.02	0.04	V0	0.04	V0
n-Butane	0.03	0.63	V0	0.81	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.06	V0
n-Hexane	0.01	0.06	V0	0.1	V0
n-Nonane	0.01	0.02	V0	0.01	V0
n-Octane	0.02	< 0.02	V1	0.02	V0
n-Pentane	0.1	0.3	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.07	V0	0.08	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**12-Feb**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.19	V0
1-Pentene	0.01	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.21	V0
2,3,4-Trimethylpentane	0.01	0.05	V0
2,3-Dimethylbutane	0.02	0.44	V0
2,3-Dimethylpentane	0.02	0.22	V0
2,4-Dimethylpentane	0.01	0.11	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.22	V0
2-Methylhexane	0.01	0.07	V0
2-Methylpentane	0.01	0.14	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.05	V0
3-Methylhexane	0.02	0.16	V0
3-Methylpentane	0.01	0.53	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	0.7	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.2	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.63	V0
Cyclopentane	0.01	0.15	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.5	V0
Ethylbenzene	0.01	0.04	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	3.36	V4
Isopentane	0.03	3.24	V0
Isoprene	0.01	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.07	V0
Methanol	3	< 3	V1
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.58	V0
Methylcyclopentane	0.02	0.36	V0
n-Butane	0.03	1.4	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.28	V0
n-Hexane	0.01	0.13	V0
n-Nonane	0.01	0.06	V0
n-Octane	0.02	0.2	V0
n-Pentane	0.1	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.03	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.21	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		18-Feb		18-Feb	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.05	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.09	V0	0.06	V0
1-Pentene	0.01	< 0.01	V1	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.06	V0	0.07	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	0.03	V0
2,3-Dimethylbutane	0.02	0.09	V0	0.12	V0
2,3-Dimethylpentane	0.02	0.04	V0	0.09	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.04	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	0.11	V0
2-Methylhexane	0.01	0.01	V0	0.08	V0
2-Methylpentane	0.01	0.14	V0	0.22	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.04	V0
3-Methylhexane	0.02	0.02	V0	0.13	V0
3-Methylpentane	0.01	0.15	V0	0.11	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.9	V0	0.9	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.16	V0	0.2	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.11	V0	0.08	V0
Cyclopentane	0.01	0.06	V0	0.04	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.5	V0	0.8	V0
Ethylbenzene	0.01	0.01	V0	0.05	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.62	V0	0.34	V0
Isopentane	0.03	0.88	V0	0.53	V0
Isoprene	0.01	0.02	V0	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.13	V0
Methanol	3	< 3	V1	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.11	V0	0.12	V0
Methylcyclopentane	0.02	0.07	V0	0.14	V0
n-Butane	0.03	0.68	V0	0.59	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	0.24	V0
n-Hexane	0.01	0.07	V0	0.21	V0
n-Nonane	0.01	< 0.01	V1	0.05	V0
n-Octane	0.02	< 0.02	V1	0.13	V0
n-Pentane	0.1	0.4	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	0.8	V0
o-Xylene	0.01	< 0.01	V1	0.06	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.06	V0	0.24	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**18-Feb**		**18-Feb**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.18	V0	0.03	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.1	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.14	V0	0.04	V0
2,3-Dimethylpentane	0.02	0.06	V0	0.03	V0
2,4-Dimethylpentane	0.01	0.04	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.1	V0	0.03	V0
2-Methylhexane	0.01	0.09	V0	0.03	V0
2-Methylpentane	0.01	0.18	V0	0.16	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.04	V0	< 0.02	V1
3-Methylhexane	0.02	0.13	V0	0.06	V0
3-Methylpentane	0.01	0.11	V0	0.08	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1	V0	1.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.19	V0	0.17	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.02	V0	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	0.07	V0
Cyclopentane	0.01	0.03	V0	0.04	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1	V0	< 0.3	V1
Ethylbenzene	0.01	0.03	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.81	V0	0.49	V0
Isopentane	0.03	0.7	V0	0.42	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.09	V0	0.03	V0
Methanol	3	24	V0	12	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.12	V0	0.06	V0
Methylcyclopentane	0.02	0.11	V0	0.08	V0
n-Butane	0.03	1.45	V0	0.86	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	1.2	V4
n-Heptane	0.01	0.25	V0	0.08	V0
n-Hexane	0.01	0.26	V0	0.17	V0
n-Nonane	0.01	0.04	V0	< 0.01	V1
n-Octane	0.02	0.1	V0	0.02	V0
n-Pentane	0.1	0.5	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.23	V0	0.11	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**		**Fort McKay South**	
Station #	**AMS 9**		**AMS 13**	
Sample Date	**18-Feb**		**18-Feb**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	0.07	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.17	V0	0.09	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	0.01	V0
2,3-Dimethylbutane	0.02	0.22	V0	0.22	V0
2,3-Dimethylpentane	0.02	0.04	V0	0.11	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.06	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	0.04	V0
2-Methylhexane	0.01	0.02	V0	0.05	V0
2-Methylpentane	0.01	0.59	V0	0.11	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	0.09	V0
3-Methylpentane	0.01	0.35	V0	0.33	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.7	V0	1.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.22	V0	0.14	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.09	V0	0.32	V0
Cyclopentane	0.01	0.22	V0	0.1	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	< 0.3	V1	1	V0
Ethylbenzene	0.01	0.01	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.26	V0	1.69	V0
Isopentane	0.03	1.17	V0	1.96	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	< 3	V1	12	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.06	V0	0.29	V0
Methylcyclopentane	0.02	0.1	V0	0.19	V0
n-Butane	0.03	0.28	V0	1.14	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.03	V0	0.1	V0
n-Hexane	0.01	0.17	V0	0.06	V0
n-Nonane	0.01	< 0.01	V1	0.02	V0
n-Octane	0.02	< 0.02	V1	0.04	V0
n-Pentane	0.1	1.2	V0	0.5	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	3.5	V4	< 0.5	V1
o-Xylene	0.01	0.01	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.07	V0	0.07	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**18-Feb**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.09	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.08	V0
2,3,4-Trimethylpentane	0.01	0.01	V0
2,3-Dimethylbutane	0.02	0.12	V0
2,3-Dimethylpentane	0.02	0.04	V0
2,4-Dimethylpentane	0.01	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.01	V0
2-Methylhexane	0.01	0.02	V0
2-Methylpentane	0.01	0.21	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.03	V0
3-Methylpentane	0.01	0.18	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	0.9	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.17	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.11	V0
Cyclopentane	0.01	0.08	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	5.7	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.65	V0
Isopentane	0.03	1.38	V0
Isoprene	0.01	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	4	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.11	V0
Methylcyclopentane	0.02	0.08	V0
n-Butane	0.03	0.77	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.04	V0
n-Hexane	0.01	0.08	V0
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.07	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	24-Feb		24-Feb	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.09	V0	0.04	V0
1,3,5-Trimethylbenzene	0.02	0.03	V0	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.05	V0	< 0.02	V1
1-Pentene	0.01	0.02	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.04	V0
2,2-Dimethylbutane	0.01	0.09	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	0.06	V0	0.01	V0
2,3-Dimethylbutane	0.02	0.19	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.26	V0	0.03	V0
2,4-Dimethylpentane	0.01	0.05	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	1.02	V4	< 0.01	V1
2-Methylhexane	0.01	0.36	V0	0.02	V0
2-Methylpentane	0.01	0.32	V0	0.08	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.38	V0	< 0.02	V1
3-Methylhexane	0.02	0.56	V0	0.04	V0
3-Methylpentane	0.01	0.18	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1	V0	0.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.24	V0	0.16	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.26	V0	< 0.02	V1
Cyclopentane	0.01	0.04	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.8	V0	0.9	V0
Ethylbenzene	0.01	0.27	V0	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.24	V0	0.19	V0
Isopentane	0.03	0.37	V0	0.21	V0
Isoprene	0.01	0.02	V0	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	0.04	V0	< 0.01	V1
m,p-Xylene	0.03	0.56	V0	0.07	V0
Methanol	3	< 3	V1	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.75	V0	0.02	V0
Methylcyclopentane	0.02	0.39	V0	0.03	V0
n-Butane	0.03	0.4	V0	0.31	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	1.42	V4	0.03	V0
n-Hexane	0.01	0.59	V0	0.04	V0
n-Nonane	0.01	0.46	V0	< 0.01	V1
n-Octane	0.02	1.34	V4	< 0.02	V1
n-Pentane	0.1	0.2	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	0.5	V0	< 0.5	V1
o-Xylene	0.01	0.26	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	1	V0	0.13	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**24-Feb**		**24-Feb**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.09	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	0.03	V0	< 0.02	V1
1,3-Butadiene	0.02	0.03	V0	< 0.02	V1
1-Butene	0.02	0.09	V0	< 0.02	V1
1-Pentene	0.01	0.03	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.16	V0	0.03	V0
2,2-Dimethylbutane	0.01	0.03	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	0.05	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.07	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.15	V0	0.02	V0
2,4-Dimethylpentane	0.01	0.06	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.04	V0	< 0.01	V1
2-Methylhexane	0.01	0.1	V0	0.01	V0
2-Methylpentane	0.01	0.27	V0	0.07	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	< 0.02	V1
3-Methylhexane	0.02	0.12	V0	0.02	V0
3-Methylpentane	0.01	0.14	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.9	V0	0.9	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.28	V0	0.14	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.02	V0	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	< 0.02	V1
Cyclopentane	0.01	0.04	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2	V0	0.5	V0
Ethylbenzene	0.01	0.07	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.56	V0	0.16	V0
Isopentane	0.03	0.52	V0	0.19	V0
Isoprene	0.01	0.02	V0	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.22	V0	< 0.03	V1
Methanol	3	< 3	V1	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.06	V0	0.01	V0
Methylcyclopentane	0.02	0.14	V0	0.02	V0
n-Butane	0.03	1.08	V0	0.29	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.12	V0	0.02	V0
n-Hexane	0.01	0.22	V0	0.04	V0
n-Nonane	0.01	0.02	V0	< 0.01	V1
n-Octane	0.02	0.04	V0	< 0.02	V1
n-Pentane	0.1	0.4	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	0.7	V0	< 0.5	V1
o-Xylene	0.01	0.1	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.38	V0	0.08	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.03	V0	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	24-Feb		24-Feb	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.05	V0	0.06	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.03	V0
1-Pentene	0.01	0.02	V0	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.08	V0	0.11	V0
2,3,4-Trimethylpentane	0.01	0.04	V0	0.06	V0
2,3-Dimethylbutane	0.02	0.15	V0	0.24	V0
2,3-Dimethylpentane	0.02	0.2	V0	0.22	V0
2,4-Dimethylpentane	0.01	0.04	V0	0.04	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.75	V0	0.9	V0
2-Methylhexane	0.01	0.32	V0	0.24	V0
2-Methylpentane	0.01	0.32	V0	0.2	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.26	V0	0.3	V0
3-Methylhexane	0.02	0.47	V0	0.39	V0
3-Methylpentane	0.01	0.18	V0	0.11	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.8	V0	0.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.21	V0	0.19	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.19	V0	0.21	V0
Cyclopentane	0.01	0.06	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.4	V0	0.4	V0
Ethylbenzene	0.01	0.16	V0	0.2	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.23	V0	0.19	V0
Isopentane	0.03	0.39	V0	0.26	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	0.02	V0	0.03	V0
m,p-Xylene	0.03	0.33	V0	0.4	V0
Methanol	3	< 3	V1	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.55	V0	0.67	V0
Methylcyclopentane	0.02	0.33	V0	0.25	V0
n-Butane	0.03	0.34	V0	0.32	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	1.5	V4
n-Heptane	0.01	1.17	V4	1.04	V4
n-Hexane	0.01	0.54	V0	0.29	V0
n-Nonane	0.01	0.3	V0	0.35	V0
n-Octane	0.02	0.89	V0	1.03	V4
n-Pentane	0.1	0.4	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.14	V0	0.18	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.65	V0	0.85	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**24-Feb**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	< 0.02	V1
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.18	V0
2,3,4-Trimethylpentane	0.01	0.05	V0
2,3-Dimethylbutane	0.02	0.45	V0
2,3-Dimethylpentane	0.02	0.28	V0
2,4-Dimethylpentane	0.01	0.08	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.19	V0
2-Methylhexane	0.01	0.07	V0
2-Methylpentane	0.01	0.09	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.04	V0
3-Methylhexane	0.02	0.16	V0
3-Methylpentane	0.01	0.53	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	1.6	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.14	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.73	V0
Cyclopentane	0.01	0.18	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	< 0.3	V1
Ethylbenzene	0.01	0.03	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	1.16	V0
Isopentane	0.03	0.97	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.05	V0
Methanol	3	< 3	V1
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.45	V0
Methylcyclopentane	0.02	0.5	V0
n-Butane	0.03	0.33	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.27	V0
n-Hexane	0.01	0.05	V0
n-Nonane	0.01	0.05	V0
n-Octane	0.02	0.13	V0
n-Pentane	0.1	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	0.6	V0
o-Xylene	0.01	0.03	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.14	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		01-Mar		01-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.19	V0	0.19	V0
1,3,5-Trimethylbenzene	0.02	0.16	V0	0.15	V0
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.08	V0	0.06	V0
1-Pentene	0.01	0.12	V0	0.12	V0
2,2,4-Trimethylpentane	0.01	0.14	V0	0.18	V0
2,2-Dimethylbutane	0.01	0.31	V0	0.13	V0
2,3,4-Trimethylpentane	0.01	0.16	V0	0.14	V0
2,3-Dimethylbutane	0.02	0.4	V0	0.16	V0
2,3-Dimethylpentane	0.02	0.21	V0	0.17	V0
2,4-Dimethylpentane	0.01	0.16	V0	0.14	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.3	V0	0.14	V0
2-Methylhexane	0.01	0.25	V0	0.16	V0
2-Methylpentane	0.01	0.77	V0	0.28	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.2	V0	0.14	V0
3-Methylhexane	0.02	0.3	V0	0.19	V0
3-Methylpentane	0.01	0.46	V0	0.19	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.2	V0	1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.38	V0	0.33	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.07	V0	0.08	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	0.11	V0	0.11	V0
Cyclohexane	0.02	0.25	V0	0.16	V0
Cyclopentane	0.01	0.31	V0	0.14	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.6	V0	1.4	V0
Ethylbenzene	0.01	0.2	V0	0.18	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.45	V0	0.56	V0
Isopentane	0.03	1.05	V0	0.58	V0
Isoprene	0.01	0.1	V0	0.1	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	0.15	V0	0.14	V0
m,p-Xylene	0.03	0.28	V0	0.26	V0
Methanol	3	< 3	V1	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.32	V0	0.18	V0
Methylcyclopentane	0.02	0.33	V0	0.2	V0
n-Butane	0.03	0.73	V0	0.95	V0
n-Decane	0.06	0.17	V0	0.13	V0
n-Dodecane	0.4	0.6	V0	0.5	V0
n-Heptane	0.01	0.5	V0	0.21	V0
n-Hexane	0.01	0.5	V0	0.22	V0
n-Nonane	0.01	0.26	V0	0.15	V0
n-Octane	0.02	0.39	V0	0.16	V0
n-Pentane	0.1	1.4	V0	0.4	V0
n-Propylbenzene	0.05	0.16	V0	0.15	V0
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.21	V0	0.2	V0
Styrene	0.04	0.13	V0	0.13	V0
Toluene	0.01	0.4	V0	0.34	V0
trans-2-Butene	0.01	0.08	V0	0.08	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.11	V0	0.11	V0
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**01-Mar**		**01-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.17	V0	0.11	V0
1,3,5-Trimethylbenzene	0.02	0.15	V0	0.11	V0
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.05	V0	< 0.02	V1
1-Pentene	0.01	0.11	V0	0.1	V0
2,2,4-Trimethylpentane	0.01	0.15	V0	0.12	V0
2,2-Dimethylbutane	0.01	0.12	V0	0.11	V0
2,3,4-Trimethylpentane	0.01	0.14	V0	0.12	V0
2,3-Dimethylbutane	0.02	0.15	V0	0.13	V0
2,3-Dimethylpentane	0.02	0.14	V0	0.11	V0
2,4-Dimethylpentane	0.01	0.14	V0	0.12	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.13	V0	0.11	V0
2-Methylhexane	0.01	0.16	V0	0.12	V0
2-Methylpentane	0.01	0.26	V0	0.23	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.14	V0	0.12	V0
3-Methylhexane	0.02	0.18	V0	0.13	V0
3-Methylpentane	0.01	0.18	V0	0.15	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.2	V0	0.6	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.3	V0	0.25	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.08	V0	0.07	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	0.11	V0	0.1	V0
Cyclohexane	0.02	0.15	V0	0.14	V0
Cyclopentane	0.01	0.14	V0	0.13	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.2	V0	< 0.3	V1
Ethylbenzene	0.01	0.17	V0	0.13	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.93	V0	0.43	V0
Isopentane	0.03	0.68	V0	0.25	V0
Isoprene	0.01	0.1	V0	0.09	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	0.14	V0	0.12	V0
m,p-Xylene	0.03	0.22	V0	0.13	V0
Methanol	3	< 3	V1	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.16	V0	0.15	V0
Methylcyclopentane	0.02	0.19	V0	0.16	V0
n-Butane	0.03	1.38	V0	0.73	V0
n-Decane	0.06	0.13	V0	0.09	V0
n-Dodecane	0.4	0.5	V0	< 0.4	V1
n-Heptane	0.01	0.18	V0	0.15	V0
n-Hexane	0.01	0.22	V0	0.19	V0
n-Nonane	0.01	0.15	V0	0.13	V0
n-Octane	0.02	0.15	V0	0.13	V0
n-Pentane	0.1	0.5	V0	0.5	V0
n-Propylbenzene	0.05	0.15	V0	0.12	V0
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.18	V0	0.13	V0
Styrene	0.04	0.13	V0	0.1	V0
Toluene	0.01	0.28	V0	0.19	V0
trans-2-Butene	0.01	0.08	V0	0.07	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.11	V0	0.09	V0
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**		**Fort McKay South**	
Station #	**AMS 9**		**AMS 13**	
Sample Date	**01-Mar**		**01-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.19	V0	0.18	V0
1,3,5-Trimethylbenzene	0.02	0.16	V0	0.15	V0
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.07	V0	0.07	V0
1-Pentene	0.01	0.13	V0	0.12	V0
2,2,4-Trimethylpentane	0.01	0.14	V0	0.14	V0
2,2-Dimethylbutane	0.01	0.52	V0	0.26	V0
2,3,4-Trimethylpentane	0.01	0.16	V0	0.16	V0
2,3-Dimethylbutane	0.02	0.61	V0	0.35	V0
2,3-Dimethylpentane	0.02	0.23	V0	0.23	V0
2,4-Dimethylpentane	0.01	0.16	V0	0.15	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.31	V0	0.37	V0
2-Methylhexane	0.01	0.3	V0	0.26	V0
2-Methylpentane	0.01	1.6	V4	0.55	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.2	V0	0.22	V0
3-Methylhexane	0.02	0.36	V0	0.35	V0
3-Methylpentane	0.01	0.93	V0	0.35	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.5	V0	0.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.51	V0	0.33	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.08	V0	0.12	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	0.11	V0	0.11	V0
Cyclohexane	0.02	0.28	V0	0.26	V0
Cyclopentane	0.01	0.57	V0	0.24	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.8	V0	0.3	V0
Ethylbenzene	0.01	0.21	V0	0.22	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.48	V0	0.43	V0
Isopentane	0.03	2.56	V0	0.84	V0
Isoprene	0.01	0.11	V0	0.11	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	0.15	V0	0.15	V0
m,p-Xylene	0.03	0.32	V0	0.31	V0
Methanol	3	< 3	V1	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.39	V0	0.39	V0
Methylcyclopentane	0.02	0.42	V0	0.34	V0
n-Butane	0.03	0.82	V0	0.72	V0
n-Decane	0.06	0.17	V0	0.16	V0
n-Dodecane	0.4	0.5	V0	0.5	V0
n-Heptane	0.01	0.59	V0	0.64	V0
n-Hexane	0.01	0.8	V0	0.52	V0
n-Nonane	0.01	0.27	V0	0.29	V0
n-Octane	0.02	0.4	V0	0.49	V0
n-Pentane	0.1	2.8	V4	0.9	V0
n-Propylbenzene	0.05	0.16	V0	0.16	V0
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.22	V0	0.22	V0
Styrene	0.04	0.13	V0	0.12	V0
Toluene	0.01	0.62	V0	0.44	V0
trans-2-Butene	0.01	0.08	V0	0.08	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.11	V0	0.11	V0
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**01-Mar**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.17	V0
1,3,5-Trimethylbenzene	0.02	0.15	V0
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.03	V0
1-Pentene	0.01	0.11	V0
2,2,4-Trimethylpentane	0.01	0.13	V0
2,2-Dimethylbutane	0.01	0.23	V0
2,3,4-Trimethylpentane	0.01	0.15	V0
2,3-Dimethylbutane	0.02	0.37	V0
2,3-Dimethylpentane	0.02	0.23	V0
2,4-Dimethylpentane	0.01	0.15	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.23	V0
2-Methylhexane	0.01	0.2	V0
2-Methylpentane	0.01	0.28	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.16	V0
3-Methylhexane	0.02	0.21	V0
3-Methylpentane	0.01	0.4	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	1.6	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.26	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	0.08	V0
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	0.1	V0
Cyclohexane	0.02	0.41	V0
Cyclopentane	0.01	0.22	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.5	V0
Ethylbenzene	0.01	0.17	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.91	V0
Isopentane	0.03	1.21	V0
Isoprene	0.01	0.1	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	0.15	V0
m,p-Xylene	0.03	0.2	V0
Methanol	3	< 3	V1
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.37	V0
Methylcyclopentane	0.02	0.37	V0
n-Butane	0.03	0.64	V0
n-Decane	0.06	0.14	V0
n-Dodecane	0.4	0.5	V0
n-Heptane	0.01	0.32	V0
n-Hexane	0.01	0.24	V0
n-Nonane	0.01	0.21	V0
n-Octane	0.02	0.27	V0
n-Pentane	0.1	0.5	V0
n-Propylbenzene	0.05	0.15	V0
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.17	V0
Styrene	0.04	0.12	V0
Toluene	0.01	0.27	V0
trans-2-Butene	0.01	0.08	V0
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	0.1	V0
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	07-Mar		07-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.05	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.05	V0	0.06	V0
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.08	V0	0.06	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.13	V0	0.09	V0
2,3-Dimethylpentane	0.02	0.07	V0	0.08	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.07	V0	0.13	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.21	V0	0.24	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.02	V0	0.05	V0
3-Methylhexane	0.02	0.06	V0	0.14	V0
3-Methylpentane	0.01	0.19	V0	0.15	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.4	V0	1.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.16	V0	0.17	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.14	V0	0.07	V0
Cyclopentane	0.01	0.1	V0	0.07	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.5	V0	1.2	V0
Ethylbenzene	0.01	0.02	V0	0.05	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.65	V0	0.79	V0
Isopentane	0.03	< 0.03	V1	< 0.03	V1
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	0.14	V0
Methanol	3	3	V0	7	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.14	V0	0.14	V0
Methylcyclopentane	0.02	0.13	V0	0.15	V0
n-Butane	0.03	0.47	V0	0.98	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.11	V0	0.37	V0
n-Hexane	0.01	0.08	V0	0.27	V0
n-Nonane	0.01	0.03	V0	0.08	V0
n-Octane	0.02	0.08	V0	0.17	V0
n-Pentane	0.1	0.6	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.06	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.09	V0	0.26	V0
trans-2-Butene	0.01	< 0.01	V1	0.01	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**07-Mar**		**07-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.07	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.17	V0	0.02	V0
1-Pentene	0.01	0.02	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.11	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	0.03	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.14	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.1	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.03	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.19	V0	0.01	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.34	V0	0.07	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.07	V0	< 0.02	V1
3-Methylhexane	0.02	0.21	V0	0.03	V0
3-Methylpentane	0.01	0.21	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.7	V0	1.4	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.21	V0	0.13	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.12	V0	0.03	V0
Cyclopentane	0.01	0.1	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.8	V0	0.8	V0
Ethylbenzene	0.01	0.06	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.6	V0	0.54	V0
Isopentane	0.03	< 0.03	V1	< 0.03	V1
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	0.5	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.18	V0	< 0.03	V1
Methanol	3	13	V0	3	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.2	V0	0.03	V0
Methylcyclopentane	0.02	0.21	V0	0.04	V0
n-Butane	0.03	0.7	V0	0.53	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	0.7	V0	< 0.4	V1
n-Heptane	0.01	0.38	V0	0.03	V0
n-Hexane	0.01	0.37	V0	0.06	V0
n-Nonane	0.01	0.1	V0	0.01	V0
n-Octane	0.02	0.25	V0	0.02	V0
n-Pentane	0.1	0.8	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.08	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.33	V0	0.06	V0
trans-2-Butene	0.01	0.01	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	07-Mar		07-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.1	V0	0.07	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.12	V0	0.11	V0
2,3-Dimethylpentane	0.02	0.05	V0	0.06	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.04	V0	0.1	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.26	V0	0.16	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.03	V0
3-Methylhexane	0.02	0.06	V0	0.07	V0
3-Methylpentane	0.01	0.2	V0	0.14	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.3	V0	1.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.18	V0	0.15	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.12	V0	0.12	V0
Cyclopentane	0.01	0.11	V0	0.07	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.6	V0	0.6	V0
Ethylbenzene	0.01	0.01	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.59	V0	0.61	V0
Isopentane	0.03	< 0.03	V1	< 0.03	V1
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.04	V0
Methanol	3	4	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.11	V0	0.14	V0
Methylcyclopentane	0.02	0.11	V0	0.11	V0
n-Butane	0.03	0.43	V0	0.44	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	0.5	V0
n-Heptane	0.01	0.09	V0	0.13	V0
n-Hexane	0.01	0.09	V0	0.08	V0
n-Nonane	0.01	0.03	V0	0.04	V0
n-Octane	0.02	0.05	V0	0.1	V0
n-Pentane	0.1	0.7	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.07	V0	0.08	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**07-Mar**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.03	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.07	V0
2,3,4-Trimethylpentane	0.01	0.02	V0
2,3-Dimethylbutane	0.02	0.16	V0
2,3-Dimethylpentane	0.02	0.1	V0
2,4-Dimethylpentane	0.01	0.03	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.05	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.02	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.06	V0
3-Methylpentane	0.01	0.25	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	1.7	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.12	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.29	V0
Cyclopentane	0.01	0.08	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.6	V0
Ethylbenzene	0.01	0.01	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.84	V0
Isopentane	0.03	< 0.03	V1
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	3	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.27	V0
Methylcyclopentane	0.02	0.25	V0
n-Butane	0.03	0.42	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	0.6	V0
n-Heptane	0.01	0.1	V0
n-Hexane	0.01	0.03	V0
n-Nonane	0.01	0.03	V0
n-Octane	0.02	0.04	V0
n-Pentane	0.1	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.01	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.07	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		13-Mar		13-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.04	V0	0.07	V0
1-Pentene	0.01	< 0.01	V1	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	0.05	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,3-Dimethylbutane	0.02	0.02	V0	0.08	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	0.06	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.08	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.12	V0	0.19	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.02	V0
3-Methylhexane	0.02	< 0.02	V1	0.07	V0
3-Methylpentane	0.01	0.04	V0	0.09	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	4	V0	< 3	V1
Acetone	0.4	2	V0	2.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.08	V0	0.13	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	0.04	V0
Cyclopentane	0.01	0.02	V0	0.04	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.3	V0	1.4	V0
Ethylbenzene	0.01	< 0.01	V1	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.58	V0	0.66	V0
Isopentane	0.03	0.45	V0	0.58	V0
Isoprene	0.01	< 0.01	V1	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.05	V0
Methanol	3	5	V0	7	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	0.08	V0
Methylcyclopentane	0.02	< 0.02	V1	0.07	V0
n-Butane	0.03	0.68	V0	0.93	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	0.11	V0
n-Hexane	0.01	0.03	V0	0.11	V0
n-Nonane	0.01	< 0.01	V1	0.03	V0
n-Octane	0.02	< 0.02	V1	0.06	V0
n-Pentane	0.1	0.3	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.02	V0	0.12	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**13-Mar**		**13-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.07	V0	0.05	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.02	V0
2,2-Dimethylbutane	0.01	0.04	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.05	V0	0.03	V0
2,3-Dimethylpentane	0.02	0.04	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.04	V0	0.02	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.25	V0	0.17	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.07	V0	0.04	V0
3-Methylpentane	0.01	0.1	V0	0.05	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	4	V0
Acetone	0.4	2.7	V0	2.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.12	V0	0.09	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.02	V0	< 0.02	V1
Cyclopentane	0.01	0.05	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.4	V0	1.5	V0
Ethylbenzene	0.01	0.01	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	4	V0
Isobutane	0.02	0.74	V0	0.68	V0
Isopentane	0.03	0.68	V0	0.48	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	0.7	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	21	V0	6	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.02	V0
Methylcyclopentane	0.02	0.05	V0	0.03	V0
n-Butane	0.03	0.99	V0	0.8	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.09	V0	0.04	V0
n-Hexane	0.01	0.12	V0	0.07	V0
n-Nonane	0.01	0.02	V0	< 0.01	V1
n-Octane	0.02	0.03	V0	< 0.02	V1
n-Pentane	0.1	0.5	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.08	V0	0.04	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	13-Mar		13-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.08	V0
1-Pentene	0.01	0.01	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.04	V0	0.04	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	0.01	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	< 0.01	V1	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	0.03	V0
3-Methylpentane	0.01	0.04	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	4	V0	< 3	V1
Acetone	0.4	2.4	V0	1.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.09	V0	0.08	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.03	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	6.8	V0	0.7	V0
Ethylbenzene	0.01	0.02	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.57	V0	0.51	V0
Isopentane	0.03	0.42	V0	0.27	V0
Isoprene	0.01	< 0.01	V1	0.02	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	0.01	V0	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	5	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.01	V0	0.02	V0
Methylcyclopentane	0.02	< 0.02	V1	0.02	V0
n-Butane	0.03	0.62	V0	0.66	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.03	V0
n-Hexane	0.01	0.04	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.3	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.03	V0	0.05	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**13-Mar**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.06	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.05	V0
2,3-Dimethylpentane	0.02	0.04	V0
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.01	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.14	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.04	V0
3-Methylpentane	0.01	0.08	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	2.6	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.08	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.07	V0
Cyclopentane	0.01	0.03	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1.3	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.82	V0
Isopentane	0.03	0.75	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	7	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.05	V0
Methylcyclopentane	0.02	0.06	V0
n-Butane	0.03	1.63	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.03	V0
n-Hexane	0.01	0.05	V0
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.05	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		19-Mar		19-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	0.02	V0
1-Butene	0.02	0.04	V0	0.11	V0
1-Pentene	0.01	< 0.01	V1	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	0.05	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.03	V0
2,3-Dimethylbutane	0.02	0.03	V0	0.09	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	0.1	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.03	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.08	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	< 0.01	V1	0.18	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.03	V0
3-Methylhexane	0.02	< 0.02	V1	0.1	V0
3-Methylpentane	0.01	0.02	V0	0.1	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.2	V0	1.9	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.07	V0	0.14	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	0.04	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	0.05	V0
Cyclopentane	0.01	< 0.01	V1	0.04	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.6	V0	1.4	V0
Ethylbenzene	0.01	< 0.01	V1	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.27	V0	0.72	V0
Isopentane	0.03	0.51	V0	0.87	V0
Isoprene	0.01	< 0.01	V1	0.01	V0
Isopropylalcohol	0.4	0.8	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	0.01	V0
m,p-Xylene	0.03	< 0.03	V1	0.07	V0
Methanol	3	4	V0	13	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	0.1	V0
Methylcyclopentane	0.02	< 0.02	V1	0.08	V0
n-Butane	0.03	0.38	V0	1.1	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	0.15	V0
n-Hexane	0.01	0.01	V0	0.12	V0
n-Nonane	0.01	< 0.01	V1	0.03	V0
n-Octane	0.02	< 0.02	V1	0.06	V0
n-Pentane	0.1	0.4	V0	0.5	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.02	V0	0.17	V0
trans-2-Butene	0.01	< 0.01	V1	0.03	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**19-Mar**		**19-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.03	V0	< 0.02	V1
1-Butene	0.02	0.14	V0	0.03	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,2-Dimethylbutane	0.01	0.03	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.04	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.06	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.02	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.04	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.16	V0	< 0.01	V1
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.1	V0	< 0.02	V1
3-Methylpentane	0.01	0.14	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.9	V0	1.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.14	V0	0.08	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.02	V0	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	< 0.02	V1
Cyclopentane	0.01	0.02	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.7	V0	0.7	V0
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.71	V0	0.68	V0
Isopentane	0.03	0.7	V0	0.39	V0
Isoprene	0.01	0.01	V0	< 0.01	V1
Isopropylalcohol	0.4	1.3	V4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.06	V0	< 0.03	V1
Methanol	3	71	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.05	V0	< 0.01	V1
Methylcyclopentane	0.02	0.2	V0	< 0.02	V1
n-Butane	0.03	1.25	V0	0.98	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.14	V0	0.01	V0
n-Hexane	0.01	0.29	V0	0.03	V0
n-Nonane	0.01	0.02	V0	< 0.01	V1
n-Octane	0.02	0.04	V0	< 0.02	V1
n-Pentane	0.1	0.4	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.21	V0	0.03	V0
trans-2-Butene	0.01	0.01	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	19-Mar		19-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.03	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.05	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.07	V0	0.04	V0
2,3-Dimethylpentane	0.02	0.02	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.11	V0	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.03	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.7	V0	1.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.07	V0	0.08	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.02	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.2	V0	0.4	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.34	V0	0.27	V0
Isopentane	0.03	0.55	V0	0.5	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	4	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	< 0.02	V1	< 0.02	V1
n-Butane	0.03	0.38	V0	0.4	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	0.01	V0
n-Hexane	0.01	0.02	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.5	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.01	V0	0.02	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**19-Mar**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.04	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	< 0.01	V1
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1
3-Methylpentane	0.01	0.01	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	2.5	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.07	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1.3	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.37	V0
Isopentane	0.03	0.25	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	5	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1
Methylcyclopentane	0.02	< 0.02	V1
n-Butane	0.03	0.33	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	< 0.01	V1
n-Hexane	0.01	< 0.01	V1
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.01	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	25-Mar		25-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.03	V0	< 0.02	V1
1-Butene	0.02	0.18	V0	0.07	V0
1-Pentene	0.01	0.02	V0	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.14	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.2	V0	0.03	V0
2,3-Dimethylpentane	0.02	0.09	V0	0.04	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.12	V0	0.03	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.84	V0	0.15	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.04	V0	< 0.02	V1
3-Methylhexane	0.02	0.14	V0	0.07	V0
3-Methylpentane	0.01	0.4	V0	0.07	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.1	V0	2.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.2	V0	0.21	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.07	V0	< 0.02	V1
Cyclopentane	0.01	0.19	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1	V0	1.8	V0
Ethylbenzene	0.01	0.04	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.68	V0	0.66	V0
Isopentane	0.03	1.63	V0	0.53	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.08	V0	0.04	V0
Methanol	3	5	V0	7	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.12	V0	0.03	V0
Methylcyclopentane	0.02	0.15	V0	0.06	V0
n-Butane	0.03	0.92	V0	1.14	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.28	V0	0.1	V0
n-Hexane	0.01	0.38	V0	0.13	V0
n-Nonane	0.01	0.07	V0	0.01	V0
n-Octane	0.02	0.14	V0	0.04	V0
n-Pentane	0.1	1.6	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.2	V0	0.11	V0
trans-2-Butene	0.01	0.01	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**25-Mar**		**25-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.05	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	0.02	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.17	V0	< 0.01	V1
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.05	V0	< 0.02	V1
3-Methylpentane	0.01	0.06	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.5	V0	3.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.13	V0	0.09	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.03	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.7	V0	0.7	V0
Ethylbenzene	0.01	0.01	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.2	V0	0.4	V0
Isopentane	0.03	0.92	V0	0.46	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	11	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.01	V0
Methylcyclopentane	0.02	0.04	V0	0.02	V0
n-Butane	0.03	1.66	V0	0.92	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.01	V0
n-Hexane	0.01	0.09	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.4	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.08	V0	0.05	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		**Barge Landing**		**Fort McKay South**	
Station #		**AMS 9**		**AMS 13**	
Sample Date		**25-Mar**		**25-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.03	V0	< 0.02	V1
1-Butene	0.02	0.14	V0	0.12	V0
1-Pentene	0.01	0.02	V0	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.32	V0	0.06	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.44	V0	0.09	V0
2,3-Dimethylpentane	0.02	0.07	V0	0.11	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.08	V0	0.37	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	2.34	V4	0.2	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.02	V0	0.09	V0
3-Methylhexane	0.02	0.13	V0	0.19	V0
3-Methylpentane	0.01	0.96	V0	0.12	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.2	V0	2.4	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.32	V0	0.14	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.07	V0	0.1	V0
Cyclopentane	0.01	0.44	V0	0.04	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.2	V0	0.9	V0
Ethylbenzene	0.01	0.03	V0	0.08	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.67	V0	0.71	V0
Isopentane	0.03	3.16	V0	0.7	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	0.01	V0
m,p-Xylene	0.03	0.06	V0	0.17	V0
Methanol	3	6	V0	5	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.09	V0	0.23	V0
Methylcyclopentane	0.02	0.21	V0	0.14	V0
n-Butane	0.03	0.98	V0	0.78	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.22	V0	0.46	V0
n-Hexane	0.01	0.71	V0	0.22	V0
n-Nonane	0.01	0.04	V0	0.21	V0
n-Octane	0.02	0.07	V0	0.4	V0
n-Pentane	0.1	4.5	V4	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	0.08	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.15	V0	0.39	V0
trans-2-Butene	0.01	0.01	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**25-Mar**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.09	V0
1-Pentene	0.01	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.1	V0
2,3,4-Trimethylpentane	0.01	0.03	V0
2,3-Dimethylbutane	0.02	0.22	V0
2,3-Dimethylpentane	0.02	0.21	V0
2,4-Dimethylpentane	0.01	0.04	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.33	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.14	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.08	V0
3-Methylhexane	0.02	0.28	V0
3-Methylpentane	0.01	0.35	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	2.3	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.17	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.42	V0
Cyclopentane	0.01	0.09	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.7	V0
Ethylbenzene	0.01	0.04	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.21	V0
Isopentane	0.03	1.63	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.11	V0
Methanol	3	9	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.56	V0
Methylcyclopentane	0.02	0.34	V0
n-Butane	0.03	0.96	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.6	V0
n-Hexane	0.01	0.15	V0
n-Nonane	0.01	0.1	V0
n-Octane	0.02	0.3	V0
n-Pentane	0.1	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.05	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.33	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	31-Mar		31-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	0.02	V0
1-Butene	0.02	0.03	V0	0.08	V0
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	0.03	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.04	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	< 0.01	V1	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	0.06	V0
3-Methylpentane	0.01	0.01	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.9	V0	2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.05	V0	0.1	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	0.02	V0
Cyclopentane	0.01	< 0.01	V1	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.7	V0	1.4	V0
Ethylbenzene	0.01	< 0.01	V1	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.18	V0	0.35	V0
Isopentane	0.03	0.1	V0	0.35	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.04	V0
Methanol	3	6	V0	6	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	0.04	V0
Methylcyclopentane	0.02	< 0.02	V1	0.05	V0
n-Butane	0.03	0.3	V0	0.62	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.1	V0
n-Hexane	0.01	0.02	V0	0.08	V0
n-Nonane	0.01	< 0.01	V1	0.02	V0
n-Octane	0.02	< 0.02	V1	0.04	V0
n-Pentane	0.1	< 0.1	V1	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.02	V0	0.1	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**31-Mar**		**31-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.11	V0
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.01	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.02	V0	0.06	V0
2,3-Dimethylpentane	0.02	0.02	V0	0.06	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.15	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.07	V0	0.14	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.04	V0
3-Methylhexane	0.02	0.03	V0	0.12	V0
3-Methylpentane	0.01	0.02	V0	0.07	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.9	V0	2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.08	V0	0.09	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	0.04	V0
Cyclopentane	0.01	0.01	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.3	V0	0.9	V0
Ethylbenzene	0.01	< 0.01	V1	0.04	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.32	V0	0.39	V0
Isopentane	0.03	0.24	V0	0.42	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.09	V0
Methanol	3	6	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	0.12	V0
Methylcyclopentane	0.02	0.03	V0	0.08	V0
n-Butane	0.03	0.56	V0	0.61	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.28	V0
n-Hexane	0.01	0.04	V0	0.14	V0
n-Nonane	0.01	< 0.01	V1	0.08	V0
n-Octane	0.02	0.02	V0	0.16	V0
n-Pentane	0.1	< 0.1	V1	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.04	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.06	V0	0.19	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	31-Mar		31-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.07	V0	0.09	V0
1-Pentene	0.01	0.01	V0	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.05	V0	0.06	V0
2,3-Dimethylpentane	0.02	0.03	V0	0.07	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.06	V0	0.15	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.23	V0	0.12	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.04	V0
3-Methylhexane	0.02	0.07	V0	0.13	V0
3-Methylpentane	0.01	0.1	V0	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.7	V0	2.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.09	V0	0.08	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.05	V0
Cyclopentane	0.01	0.05	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.8	V0	0.8	V0
Ethylbenzene	0.01	0.02	V0	0.04	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.29	V0	0.39	V0
Isopentane	0.03	0.48	V0	0.38	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.03	V0	0.09	V0
Methanol	3	4	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.06	V0	0.11	V0
Methylcyclopentane	0.02	0.06	V0	0.08	V0
n-Butane	0.03	0.45	V0	0.56	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.13	V0	0.26	V0
n-Hexane	0.01	0.12	V0	0.13	V0
n-Nonane	0.01	0.04	V0	0.09	V0
n-Octane	0.02	0.06	V0	0.16	V0
n-Pentane	0.1	0.4	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.04	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.09	V0	0.17	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**31-Mar**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.08	V0
1-Pentene	0.01	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.06	V0
2,3-Dimethylpentane	0.02	0.05	V0
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.08	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.08	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.02	V0
3-Methylhexane	0.02	0.07	V0
3-Methylpentane	0.01	0.05	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	2.5	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.07	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.05	V0
Cyclopentane	0.01	0.02	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.9	V0
Ethylbenzene	0.01	0.02	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.4	V0
Isopentane	0.03	0.38	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.04	V0
Methanol	3	5	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.08	V0
Methylcyclopentane	0.02	0.06	V0
n-Butane	0.03	0.49	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.12	V0
n-Hexane	0.01	0.06	V0
n-Nonane	0.01	0.04	V0
n-Octane	0.02	0.07	V0
n-Pentane	0.1	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.02	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.11	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		06-Apr		06-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.08	V0	0.04	V0
1-Pentene	0.01	0.01	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.05	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.08	V0	0.02	V0
2,3-Dimethylpentane	0.02	0.05	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.03	V0	0.02	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.17	V0	0.08	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.05	V0	0.03	V0
3-Methylpentane	0.01	0.12	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.1	V0	2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.09	V0	0.07	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	0.02	V0
Cyclopentane	0.01	0.05	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.4	V0	0.6	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.78	V0	0.39	V0
Isopentane	0.03	0.87	V0	0.3	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	3	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.07	V0	0.03	V0
Methylcyclopentane	0.02	0.08	V0	0.03	V0
n-Butane	0.03	0.53	V0	0.43	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.08	V0	0.05	V0
n-Hexane	0.01	0.09	V0	0.04	V0
n-Nonane	0.01	0.02	V0	< 0.01	V1
n-Octane	0.02	0.03	V0	0.02	V0
n-Pentane	0.1	0.3	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.06	V0	0.04	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**06-Apr**		**06-Apr**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.05	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.02	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.11	V0	< 0.01	V1
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	< 0.02	V1
3-Methylpentane	0.01	0.04	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.5	V0	2.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.07	V0	0.06	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.02	V0	< 0.02	V1
Cyclopentane	0.01	0.02	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.9	V0	0.4	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.39	V0	0.33	V0
Isopentane	0.03	0.37	V0	0.39	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	6	V0	3	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	0.02	V0
Methylcyclopentane	0.02	0.03	V0	< 0.02	V1
n-Butane	0.03	0.51	V0	0.38	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.04	V0	0.02	V0
n-Hexane	0.01	0.04	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.1	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.03	V0	0.03	V0
trans-2-Butene	0.01	< 0.01	V1	0.01	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	06-Apr		06-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.1	V0
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.09	V0	0.07	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,3-Dimethylbutane	0.02	0.11	V0	0.11	V0
2,3-Dimethylpentane	0.02	0.03	V0	0.07	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.04	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.44	V0	0.25	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.04	V0	0.08	V0
3-Methylpentane	0.01	0.2	V0	0.2	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.4	V0	2.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.12	V0	0.1	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.11	V0
Cyclopentane	0.01	0.1	V0	0.09	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.6	V0	0.4	V0
Ethylbenzene	0.01	< 0.01	V1	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.38	V0	0.96	V0
Isopentane	0.03	1.05	V0	1.19	V0
Isoprene	0.01	< 0.01	V1	0.02	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.04	V0
Methanol	3	6	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.11	V0
Methylcyclopentane	0.02	0.06	V0	0.13	V0
n-Butane	0.03	0.46	V0	0.57	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.06	V0	0.12	V0
n-Hexane	0.01	0.12	V0	0.14	V0
n-Nonane	0.01	0.01	V0	0.03	V0
n-Octane	0.02	< 0.02	V1	0.05	V0
n-Pentane	0.1	0.7	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.05	V0	0.13	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**06-Apr**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.07	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.07	V0
2,3-Dimethylpentane	0.02	0.07	V0
2,4-Dimethylpentane	0.01	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.03	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.07	V0
3-Methylpentane	0.01	0.13	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	2	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.08	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.11	V0
Cyclopentane	0.01	0.04	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.7	V0
Ethylbenzene	0.01	0.02	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.88	V0
Isopentane	0.03	0.85	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.04	V0
Methanol	3	8	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.11	V0
Methylcyclopentane	0.02	0.11	V0
n-Butane	0.03	0.5	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.1	V0
n-Hexane	0.01	0.08	V0
n-Nonane	0.01	0.02	V0
n-Octane	0.02	0.04	V0
n-Pentane	0.1	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.02	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.08	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	12-Apr		12-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.06	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.07	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.08	V0	0.03	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	0.11	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.27	V0
2-Methylhexane	0.01	< 0.01	V1	0.25	V0
2-Methylpentane	0.01	0.33	V0	0.21	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.09	V0
3-Methylhexane	0.02	< 0.02	V1	0.32	V0
3-Methylpentane	0.01	0.15	V0	0.11	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.3	V0	2.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.09	V0	0.11	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	0.09	V0
Cyclopentane	0.01	0.09	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.3	V0	1.6	V0
Ethylbenzene	0.01	< 0.01	V1	0.05	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.24	V0	0.5	V0
Isopentane	0.03	0.62	V0	0.63	V0
Isoprene	0.01	0.01	V0	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.15	V0
Methanol	3	4	V0	5	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.01	V0	0.26	V0
Methylcyclopentane	0.02	0.03	V0	0.19	V0
n-Butane	0.03	0.29	V0	0.74	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.79	V0
n-Hexane	0.01	0.08	V0	0.38	V0
n-Nonane	0.01	< 0.01	V1	0.15	V0
n-Octane	0.02	< 0.02	V1	0.37	V0
n-Pentane	0.1	0.6	V0	0.5	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.06	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.02	V0	0.36	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**12-Apr**		**12-Apr**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.02	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.04	V0	0.03	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	< 0.01	V1	0.11	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.06	V0	0.04	V0
3-Methylpentane	0.01	0.03	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	3.1	V0	2.6	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.06	V0	0.05	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	0.02	V0
Cyclopentane	0.01	< 0.01	V1	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.3	V0	2.1	V0
Ethylbenzene	0.01	0.01	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.37	V0	0.37	V0
Isopentane	0.03	0.57	V0	0.47	V0
Isoprene	0.01	< 0.01	V1	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	7	V0	18	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.04	V0
Methylcyclopentane	0.02	0.04	V0	0.04	V0
n-Butane	0.03	0.55	V0	0.63	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.1	V0	0.07	V0
n-Hexane	0.01	0.08	V0	0.08	V0
n-Nonane	0.01	0.02	V0	0.02	V0
n-Octane	0.02	0.04	V0	0.04	V0
n-Pentane	0.1	0.5	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.07	V0	0.05	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		12-Apr		12-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.02	V0	0.05	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.28	V0	0.11	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.39	V0	0.15	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	2.27	V4	0.7	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	0.02	V0
3-Methylpentane	0.01	0.93	V0	0.3	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.7	V0	2.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.22	V0	0.12	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.03	V0
Cyclopentane	0.01	0.43	V0	0.16	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.9	V0	0.6	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.22	V0	0.33	V0
Isopentane	0.03	2.65	V0	1.09	V0
Isoprene	0.01	< 0.01	V1	0.02	V0
Isopropylalcohol	0.4	0.4	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	11	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.01	V0	0.02	V0
Methylcyclopentane	0.02	0.1	V0	0.05	V0
n-Butane	0.03	0.27	V0	0.32	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.01	V0	0.03	V0
n-Hexane	0.01	0.46	V0	0.17	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	4.1	V4	1.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.04	V0	0.08	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**12-Apr**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.04	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	< 0.01	V1
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1
3-Methylpentane	0.01	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	3	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.04	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.02	V0
Cyclopentane	0.01	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1.1	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.33	V0
Isopentane	0.03	0.31	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	6	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.01	V0
Methylcyclopentane	0.02	< 0.02	V1
n-Butane	0.03	0.36	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.01	V0
n-Hexane	0.01	0.01	V0
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.01	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	18-Apr		18-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.03	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	0.02	V0
1-Butene	0.02	0.15	V0	0.11	V0
1-Pentene	0.01	0.02	V0	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.05	V0
2,2-Dimethylbutane	0.01	0.07	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.02	V0	0.01	V0
2,3-Dimethylbutane	0.02	0.1	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.1	V0	0.06	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.23	V0	0.01	V0
2-Methylhexane	0.01	0.18	V0	< 0.01	V1
2-Methylpentane	0.01	0.14	V0	0.11	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.06	V0	< 0.02	V1
3-Methylhexane	0.02	0.19	V0	0.05	V0
3-Methylpentane	0.01	0.08	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	4.3	V0	4.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.12	V0	0.11	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.08	V0	< 0.02	V1
Cyclopentane	0.01	0.02	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.6	V0	3.4	V0
Ethylbenzene	0.01	0.07	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.59	V0	0.83	V0
Isopentane	0.03	0.48	V0	0.69	V0
Isoprene	0.01	0.03	V0	0.04	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.18	V0	0.07	V0
Methanol	3	7	V0	12	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.24	V0	0.01	V0
Methylcyclopentane	0.02	0.14	V0	0.04	V0
n-Butane	0.03	0.89	V0	1.58	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.39	V0	0.03	V0
n-Hexane	0.01	0.21	V0	0.05	V0
n-Nonane	0.01	0.11	V0	< 0.01	V1
n-Octane	0.02	0.24	V0	< 0.02	V1
n-Pentane	0.1	0.2	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.09	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.39	V0	0.14	V0
trans-2-Butene	0.01	< 0.01	V1	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**18-Apr**		**18-Apr**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.05	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.02	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	0.01	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.12	V0	< 0.01	V1
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	< 0.02	V1
3-Methylpentane	0.01	0.06	V0	< 0.01	V1
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	4.2	V0	3.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.05	V0	0.03	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.02	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.6	V0	1	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.84	V0	0.23	V0
Isopentane	0.03	1.54	V0	0.22	V0
Isoprene	0.01	0.02	V0	0.02	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	18	V0	5	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	0.04	V0	< 0.02	V1
n-Butane	0.03	2.95	V0	0.49	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	< 0.01	V1
n-Hexane	0.01	0.06	V0	0.01	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.4	V0	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.06	V0	0.02	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	18-Apr		18-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.07	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	0.03	V0
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.1	V0	0.17	V0
1-Pentene	0.01	0.02	V0	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.06	V0	0.05	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.04	V0
2,3-Dimethylbutane	0.02	0.08	V0	0.1	V0
2,3-Dimethylpentane	0.02	0.05	V0	0.19	V0
2,4-Dimethylpentane	0.01	0.01	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.05	V0	0.88	V0
2-Methylhexane	0.01	< 0.01	V1	0.29	V0
2-Methylpentane	0.01	0.23	V0	0.16	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.19	V0
3-Methylhexane	0.02	0.08	V0	0.4	V0
3-Methylpentane	0.01	0.08	V0	0.1	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	4	V0	3.6	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.08	V0	0.14	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.17	V0
Cyclopentane	0.01	0.03	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.5	V0	1.2	V0
Ethylbenzene	0.01	0.02	V0	0.19	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.44	V0	0.5	V0
Isopentane	0.03	0.45	V0	0.41	V0
Isoprene	0.01	0.03	V0	0.07	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	0.02	V0
m,p-Xylene	0.03	0.05	V0	0.59	V0
Methanol	3	8	V0	15	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.07	V0	0.71	V0
Methylcyclopentane	0.02	0.07	V0	0.25	V0
n-Butane	0.03	0.7	V0	0.77	V0
n-Decane	0.06	< 0.06	V1	0.09	V0
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.13	V0	1.03	V4
n-Hexane	0.01	0.13	V0	0.32	V0
n-Nonane	0.01	0.03	V0	0.38	V0
n-Octane	0.02	0.05	V0	0.96	V0
n-Pentane	0.1	0.2	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.24	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.14	V0	0.98	V0
trans-2-Butene	0.01	0.01	V0	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**18-Apr**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.07	V0
1-Pentene	0.01	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.06	V0
2,3-Dimethylpentane	0.02	0.05	V0
2,4-Dimethylpentane	0.01	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.06	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	< 0.01	V1
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.06	V0
3-Methylpentane	0.01	0.08	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	7	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.04	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.08	V0
Cyclopentane	0.01	0.03	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1.2	V0
Ethylbenzene	0.01	0.02	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.59	V0
Isopentane	0.03	0.65	V0
Isoprene	0.01	0.04	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.04	V0
Methanol	3	9	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.09	V0
Methylcyclopentane	0.02	0.08	V0
n-Butane	0.03	0.4	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.08	V0
n-Hexane	0.01	0.04	V0
n-Nonane	0.01	0.02	V0
n-Octane	0.02	0.06	V0
n-Pentane	0.1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.02	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.09	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	24-Apr		24-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.03	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.01	V0	0.01	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.01	V0	< 0.01	V1
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.4	V0	2.6	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.04	V0	0.04	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1	V0	1.3	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.19	V0	0.27	V0
Isopentane	0.03	0.19	V0	0.21	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	7	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	< 0.01	V1
Methylcyclopentane	0.02	< 0.02	V1	< 0.02	V1
n-Butane	0.03	0.3	V0	0.4	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	< 0.01	V1
n-Hexane	0.01	0.02	V0	0.01	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	< 0.1	V1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.03	V0	0.02	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**24-Apr**		**24-Apr**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.02	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.03	V0	0.02	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.02	V0	0.01	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.8	V0	2.5	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.04	V0	0.07	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.2	V0	0.8	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.96	V0	0.26	V0
Isopentane	0.03	0.57	V0	0.2	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	10	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	< 0.02	V1	< 0.02	V1
n-Butane	0.03	1.1	V0	0.51	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	< 0.01	V1
n-Hexane	0.01	0.03	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.1	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.02	V0	< 0.01	V1
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	24-Apr		24-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.1	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	0.03	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.02	V0	0.05	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	0.05	V0
3-Methylpentane	0.01	0.01	V0	0.07	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.5	V0	3.5	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.05	V0	0.07	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.9	V0	2.3	V0
Ethylbenzene	0.01	< 0.01	V1	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.15	V0	0.69	V0
Isopentane	0.03	0.17	V0	0.41	V0
Isoprene	0.01	0.01	V0	0.03	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.06	V0
Methanol	3	6	V0	83	V0
Methylethylketone	0.3	< 0.3	V1	0.3	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.04	V0
Methylcyclopentane	0.02	< 0.02	V1	0.11	V0
n-Butane	0.03	0.22	V0	0.52	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.06	V0
n-Hexane	0.01	0.03	V0	0.26	V0
n-Nonane	0.01	< 0.01	V1	0.02	V0
n-Octane	0.02	< 0.02	V1	0.03	V0
n-Pentane	0.1	< 0.1	V1	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	1.3	V0
o-Xylene	0.01	< 0.01	V1	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.02	V0	0.12	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**24-Apr**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.05	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.06	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.06	V0
2,3-Dimethylpentane	0.02	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.01	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.26	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1
3-Methylpentane	0.01	0.15	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	3.3	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.07	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1
Cyclopentane	0.01	0.08	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1.2	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.14	V0
Isopentane	0.03	0.65	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	6	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0
Methylcyclopentane	0.02	0.03	V0
n-Butane	0.03	0.24	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.02	V0
n-Hexane	0.01	0.1	V0
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	0.7	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.03	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	30-Apr		30-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.11	V0	0.07	V0
1-Pentene	0.01	0.02	V0	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.12	V0	0.11	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.16	V0	0.14	V0
2,3-Dimethylpentane	0.02	0.05	V0	0.04	V0
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.08	V0	0.06	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.71	V0	0.75	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	0.02	V0
3-Methylhexane	0.02	0.13	V0	0.09	V0
3-Methylpentane	0.01	0.41	V0	0.39	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	3.6	V0	3.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.12	V0	0.1	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	0.05	V0
Cyclopentane	0.01	0.18	V0	0.14	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.2	V0	1.4	V0
Ethylbenzene	0.01	0.03	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.86	V0	0.68	V0
Isopentane	0.03	1.3	V0	1.21	V0
Isoprene	0.01	0.03	V0	0.05	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.09	V0	0.07	V0
Methanol	3	35	V0	26	V0
Methylethylketone	0.3	0.4	V0	0.3	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.13	V0	0.09	V0
Methylcyclopentane	0.02	0.2	V0	0.15	V0
n-Butane	0.03	0.79	V0	0.62	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.2	V0	0.14	V0
n-Hexane	0.01	0.54	V0	0.47	V0
n-Nonane	0.01	0.04	V0	0.04	V0
n-Octane	0.02	0.09	V0	0.07	V0
n-Pentane	0.1	1.6	V0	1.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.18	V0	0.12	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**30-Apr**		**30-Apr**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.05	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.04	V0	0.02	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.03	V0	0.01	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	3.6	V0	4.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.08	V0	0.02	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.01	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3	V0	1.6	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.54	V0	0.38	V0
Isopentane	0.03	0.37	V0	0.32	V0
Isoprene	0.01	0.02	V0	0.04	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	12	V0	8	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.01	V0	< 0.01	V1
Methylcyclopentane	0.02	< 0.02	V1	< 0.02	V1
n-Butane	0.03	1.01	V0	0.75	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.01	V0	< 0.01	V1
n-Hexane	0.01	0.04	V0	0.01	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.2	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.05	V0	0.02	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	30-Apr		30-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.07	V0
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	0.03	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	0.04	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	0.07	V0
2,3-Dimethylpentane	0.02	0.03	V0	0.06	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.14	V0
2-Methylhexane	0.01	< 0.01	V1	0.14	V0
2-Methylpentane	0.01	0.04	V0	0.19	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.04	V0
3-Methylhexane	0.02	0.02	V0	0.14	V0
3-Methylpentane	0.01	0.03	V0	0.12	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.6	V0	3.6	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.05	V0	0.05	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	0.06	V0
Cyclopentane	0.01	< 0.01	V1	0.05	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.8	V0	1.3	V0
Ethylbenzene	0.01	< 0.01	V1	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.51	V0	0.29	V0
Isopentane	0.03	0.29	V0	0.54	V0
Isoprene	0.01	0.01	V0	0.08	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.09	V0
Methanol	3	6	V0	8	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	0.15	V0
Methylcyclopentane	0.02	< 0.02	V1	0.11	V0
n-Butane	0.03	0.69	V0	0.56	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.01	V0	0.29	V0
n-Hexane	0.01	0.04	V0	0.2	V0
n-Nonane	0.01	< 0.01	V1	0.06	V0
n-Octane	0.02	< 0.02	V1	0.15	V0
n-Pentane	0.1	0.1	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	0.6	V0
o-Xylene	0.01	0.01	V0	0.04	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.06	V0	0.17	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**30-Apr**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.06	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0
2,3-Dimethylpentane	0.02	0.02	V0
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.02	V0
2-Methylhexane	0.01	0.06	V0
2-Methylpentane	0.01	0.02	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.04	V0
3-Methylpentane	0.01	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	4.5	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.04	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.04	V0
Cyclopentane	0.01	0.01	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1.5	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.42	V0
Isopentane	0.03	0.47	V0
Isoprene	0.01	0.03	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	9	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0
Methylcyclopentane	0.02	0.04	V0
n-Butane	0.03	0.42	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.04	V0
n-Hexane	0.01	0.04	V0
n-Nonane	0.01	0.01	V0
n-Octane	0.02	0.03	V0
n-Pentane	0.1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.04	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Patricia McInnes**
Station #	**AMS 6**
Sample Date	**06-May**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.13	V0
1,3,5-Trimethylbenzene	0.02	0.04	V0
1,3-Butadiene	0.02	1.1	V4
1-Butene	0.02	4.42	V4
1-Pentene	0.01	0.47	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.02	V0
2,3-Dimethylbutane	0.02	< 0.02	V1
2,3-Dimethylpentane	0.02	0.11	V0
2,4-Dimethylpentane	0.01	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.41	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.15	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.13	V0
3-Methylhexane	0.02	0.34	V0
3-Methylpentane	0.01	0.07	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	17	V0
Acetone	0.4	11.1	V0
alpha-Pinene	0.3	0.7	V0
Benzene	0.01	6.6	V4
beta-Pinene	0.3	0.4	V0
cis-2-Butene	0.02	0.59	V0
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	0.09	V0
Cyclohexane	0.02	0.11	V0
Cyclopentane	0.01	0.03	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	2.8	V0
Ethylbenzene	0.01	0.28	V0
Formaldehyde	3	7	V0
Isobutane	0.02	1.81	V0
Isopentane	0.03	0.73	V0
Isoprene	0.01	0.42	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	0.01	V0
m,p-Xylene	0.03	0.56	V0
Methanol	3	43	V0
Methylethylketone	0.3	2.3	V4
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.45	V0
Methylcyclopentane	0.02	0.2	V0
n-Butane	0.03	2.29	V0
n-Decane	0.06	0.07	V0
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	1.28	V4
n-Hexane	0.01	0.67	V0
n-Nonane	0.01	0.22	V0
n-Octane	0.02	0.66	V0
n-Pentane	0.1	0.8	V0
n-Propylbenzene	0.05	0.05	V0
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	1.8	V0
o-Xylene	0.01	0.25	V0
Styrene	0.04	0.23	V0
Toluene	0.01	3.19	V4
trans-2-Butene	0.01	0.75	V0
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	0.15	V0
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	0.8	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**06-May**		**06-May**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.15	V0	0.07	V0
1,3,5-Trimethylbenzene	0.02	0.04	V0	0.04	V0
1,3-Butadiene	0.02	1.56	V4	0.44	V0
1-Butene	0.02	6.63	V4	2.47	V4
1-Pentene	0.01	0.79	V0	0.23	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.11	V0
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.02	V1
2,3,4-Trimethylpentane	0.01	0.02	V0	0.02	V0
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.03	V1
2,3-Dimethylpentane	0.02	0.16	V0	0.11	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.04	V0
2-Methyl-1-pentene	0.3	0.4	V0	< 0.5	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.5	V1
2-Methylheptane	0.01	0.62	V0	< 0.02	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.02	V1
2-Methylpentane	0.01	0.24	V0	0.08	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.5	V1
3-Methylheptane	0.02	0.18	V0	< 0.03	V1
3-Methylhexane	0.02	0.48	V0	0.06	V0
3-Methylpentane	0.01	0.1	V0	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.5	V1
Acetaldehyde	3	27	V0	13	V0
Acetone	0.4	15.2	V4	9.3	V0
alpha-Pinene	0.3	0.7	V0	0.7	V0
Benzene	0.01	8.73	V4	2.43	V4
beta-Pinene	0.3	0.3	V0	< 0.5	V1
cis-2-Butene	0.02	0.79	V0	0.31	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.5	V1
cis-2-Pentene	0.02	0.12	V0	0.04	V0
Cyclohexane	0.02	0.16	V0	< 0.03	V1
Cyclopentane	0.01	0.05	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.5	V1
Ethanol	0.3	3.2	V0	6.8	V0
Ethylbenzene	0.01	0.39	V0	0.13	V0
Formaldehyde	3	9	V0	7	V0
Isobutane	0.02	2.76	V0	1.61	V0
Isopentane	0.03	1.19	V0	0.72	V0
Isoprene	0.01	0.58	V0	0.33	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.7	V1
Isopropylbenzene	0.01	0.03	V0	0.02	V0
m,p-Xylene	0.03	0.83	V0	0.21	V0
Methanol	3	82	V0	49	V0
Methylethylketone	0.3	3.3	V4	1	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.7	V1
Methylcyclohexane	0.01	0.66	V0	< 0.02	V1
Methylcyclopentane	0.02	0.3	V0	0.08	V0
n-Butane	0.03	3.64	V4	1.81	V0
n-Decane	0.06	0.1	V0	< 0.10	V1
n-Dodecane	0.4	< 0.4	V1	< 0.7	V1
n-Heptane	0.01	1.77	V4	0.09	V0
n-Hexane	0.01	0.94	V0	0.29	V0
n-Nonane	0.01	0.33	V0	0.05	V0
n-Octane	0.02	0.98	V0	0.05	V0
n-Pentane	0.1	1.3	V0	0.4	V0
n-Propylbenzene	0.05	0.07	V0	< 0.09	V1
n-Undecane	0.5	< 0.5	V1	< 0.9	V1
Naphthalene	0.5	1.9	V0	< 0.9	V1
o-Xylene	0.01	0.34	V0	0.12	V0
Styrene	0.04	0.28	V0	0.09	V0
Toluene	0.01	4.6	V4	0.96	V0
trans-2-Butene	0.01	0.99	V0	0.41	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.5	V1
trans-2-Pentene	0.02	0.23	V0	0.06	V0
Isobutylene	0.3	< 0.3	V1	< 0.5	V1
Methylvinylketone	0.3	1	V0	< 0.5	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	06-May		06-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.29	V0	0.14	V0
1-Butene	0.02	0.86	V0	0.43	V0
1-Pentene	0.01	0.12	V0	0.05	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.13	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.09	V0	0.07	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.05	V0
3-Methylhexane	0.02	0.04	V0	0.13	V0
3-Methylpentane	0.01	0.07	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	5	V0	< 3	V1
Acetone	0.4	4.4	V0	3.4	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.88	V0	0.56	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.08	V0	0.04	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.04	V0
Cyclopentane	0.01	0.03	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1	V0	0.9	V0
Ethylbenzene	0.01	0.03	V0	0.05	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.67	V0	0.3	V0
Isopentane	0.03	0.5	V0	0.27	V0
Isoprene	0.01	0.34	V0	0.56	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.06	V0	0.12	V0
Methanol	3	13	V0	7	V0
Methylethylketone	0.3	0.5	V0	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	0.12	V0
Methylcyclopentane	0.02	0.04	V0	0.06	V0
n-Butane	0.03	0.43	V0	0.24	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.29	V0
n-Hexane	0.01	0.08	V0	0.14	V0
n-Nonane	0.01	0.02	V0	0.15	V0
n-Octane	0.02	0.03	V0	0.25	V0
n-Pentane	0.1	0.2	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	0.05	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.35	V0	0.32	V0
trans-2-Butene	0.01	0.1	V0	0.05	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.02	V0	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**06-May**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	0.03	V0
1-Butene	0.02	0.11	V0
1-Pentene	0.01	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.05	V0
2,3,4-Trimethylpentane	0.01	0.01	V0
2,3-Dimethylbutane	0.02	0.1	V0
2,3-Dimethylpentane	0.02	0.07	V0
2,4-Dimethylpentane	0.01	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.06	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.02	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.07	V0
3-Methylpentane	0.01	0.12	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	3	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.14	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.19	V0
Cyclopentane	0.01	0.05	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.9	V0
Ethylbenzene	0.01	0.02	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.99	V0
Isopentane	0.03	1.1	V0
Isoprene	0.01	0.11	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.04	V0
Methanol	3	6	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.11	V0
Methylcyclopentane	0.02	0.11	V0
n-Butane	0.03	0.22	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.1	V0
n-Hexane	0.01	0.02	V0
n-Nonane	0.01	0.03	V0
n-Octane	0.02	0.07	V0
n-Pentane	0.1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.02	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.12	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		12-May		12-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	0.13	V0
1-Butene	0.02	0.11	V0	1.02	V4
1-Pentene	0.01	0.01	V0	0.15	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.02	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.08	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	0.03	V0
3-Methylpentane	0.01	0.06	V0	0.01	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	7	V0
Acetone	0.4	2.9	V0	5.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.05	V0	1.61	V4
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	0.16	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.03	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.5	V0	3.3	V0
Ethylbenzene	0.01	< 0.01	V1	0.04	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.37	V0	0.66	V0
Isopentane	0.03	0.34	V0	0.45	V0
Isoprene	0.01	0.16	V0	0.1	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.06	V0
Methanol	3	8	V0	14	V0
Methylethylketone	0.3	< 0.3	V1	0.5	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.01	V0	0.01	V0
Methylcyclopentane	0.02	0.03	V0	0.02	V0
n-Butane	0.03	0.17	V0	0.76	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.01	V0	0.06	V0
n-Hexane	0.01	0.05	V0	0.11	V0
n-Nonane	0.01	< 0.01	V1	0.03	V0
n-Octane	0.02	< 0.02	V1	0.04	V0
n-Pentane	0.1	0.2	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.04	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.04	V0	0.42	V0
trans-2-Butene	0.01	< 0.01	V1	0.18	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	0.04	V0
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**
Station #	**AMS 7**
Sample Date	**12-May**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.08	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	0.57	V0
1-Butene	0.02	4.2	V4
1-Pentene	0.01	0.42	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.05	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.12	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.05	V0
3-Methylpentane	0.01	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	19	V0
Acetone	0.4	12	V0
alpha-Pinene	0.3	0.4	V0
Benzene	0.01	5.56	V4
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	0.5	V0
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	0.06	V0
Cyclohexane	0.02	0.02	V0
Cyclopentane	0.01	0.04	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	6.1	V0
Ethylbenzene	0.01	0.14	V0
Formaldehyde	3	4	V0
Isobutane	0.02	2.08	V0
Isopentane	0.03	0.97	V0
Isoprene	0.01	0.29	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.27	V0
Methanol	3	47	V0
Methylethylketone	0.3	1.7	V4
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0
Methylcyclopentane	0.02	0.06	V0
n-Butane	0.03	2.62	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.24	V0
n-Hexane	0.01	0.36	V0
n-Nonane	0.01	0.08	V0
n-Octane	0.02	0.12	V0
n-Pentane	0.1	0.9	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	1.5	V0
o-Xylene	0.01	0.13	V0
Styrene	0.04	0.11	V0
Toluene	0.01	2.24	V4
trans-2-Butene	0.01	0.67	V0
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	0.12	V0
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	0.4	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		**Barge Landing**		**Fort McKay South**	
Station #		**AMS 9**		**AMS 13**	
Sample Date		**12-May**		**12-May**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.37	V0	0.05	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.54	V0	0.06	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	3.05	V4	0.27	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	< 0.02	V1
3-Methylpentane	0.01	1.34	V4	0.15	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	3.2	V0	2.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.43	V0	0.03	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	< 0.02	V1
Cyclopentane	0.01	0.7	V0	0.07	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.9	V0	1.1	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.25	V0	0.12	V0
Isopentane	0.03	3.54	V0	0.5	V0
Isoprene	0.01	0.06	V0	0.1	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	6	V0	5	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	< 0.01	V1
Methylcyclopentane	0.02	0.18	V0	0.03	V0
n-Butane	0.03	0.17	V0	0.1	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	< 0.01	V1
n-Hexane	0.01	0.69	V0	0.09	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	5.4	V4	0.5	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.05	V0	0.03	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**12-May**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.04	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.06	V0
2,3-Dimethylpentane	0.02	0.04	V0
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.02	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.01	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.04	V0
3-Methylpentane	0.01	0.09	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	2.7	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.01	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.09	V0
Cyclopentane	0.01	0.02	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.66	V0
Isopentane	0.03	0.61	V0
Isoprene	0.01	0.03	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	5	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.06	V0
Methylcyclopentane	0.02	0.06	V0
n-Butane	0.03	0.16	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.04	V0
n-Hexane	0.01	< 0.01	V1
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.02	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	18-May		18-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	0.36	V0
1-Butene	0.02	0.12	V0	1.77	V4
1-Pentene	0.01	0.01	V0	0.22	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.01	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.01	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.03	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.04	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	5	V0	14	V0
Acetone	0.4	5	V0	7.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.11	V0	2.49	V4
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	0.24	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	0.03	V0
Cyclohexane	0.02	0.03	V0	< 0.02	V1
Cyclopentane	0.01	0.02	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.5	V0	3.2	V0
Ethylbenzene	0.01	< 0.01	V1	0.06	V0
Formaldehyde	3	3	V0	5	V0
Isobutane	0.02	0.68	V0	1.23	V0
Isopentane	0.03	0.51	V0	0.61	V0
Isoprene	0.01	0.69	V0	0.32	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.11	V0
Methanol	3	14	V0	27	V0
Methylethylketone	0.3	< 0.3	V1	1.1	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	< 0.01	V1
Methylcyclopentane	0.02	0.04	V0	< 0.02	V1
n-Butane	0.03	0.42	V0	1.1	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	0.07	V0
n-Hexane	0.01	0.04	V0	0.15	V0
n-Nonane	0.01	< 0.01	V1	0.03	V0
n-Octane	0.02	< 0.02	V1	0.04	V0
n-Pentane	0.1	0.1	V0	0.5	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	0.9	V0
o-Xylene	0.01	< 0.01	V1	0.06	V0
Styrene	0.04	< 0.04	V1	0.06	V0
Toluene	0.01	0.07	V0	0.86	V0
trans-2-Butene	0.01	< 0.01	V1	0.29	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	0.06	V0
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	0.3	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**18-May**		**18-May**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.31	V0	0.15	V0
1-Butene	0.02	1.41	V4	1.11	V4
1-Pentene	0.01	0.15	V0	0.11	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.04	V0	0.05	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	0.03	V0
3-Methylpentane	0.01	0.01	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	11	V0	8	V0
Acetone	0.4	8.9	V0	7.1	V0
alpha-Pinene	0.3	< 0.3	V1	0.9	V0
Benzene	0.01	1.9	V4	1.46	V4
beta-Pinene	0.3	< 0.3	V1	0.5	V0
cis-2-Butene	0.02	0.15	V0	0.12	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.01	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3.8	V0	10.1	V0
Ethylbenzene	0.01	0.05	V0	0.04	V0
Formaldehyde	3	4	V0	3	V0
Isobutane	0.02	1.02	V0	0.96	V0
Isopentane	0.03	0.58	V0	0.46	V0
Isoprene	0.01	0.27	V0	0.38	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.09	V0	0.07	V0
Methanol	3	29	V0	18	V0
Methylethylketone	0.3	1	V0	0.6	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	< 0.02	V1	< 0.02	V1
n-Butane	0.03	0.97	V0	1.09	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.04	V0
n-Hexane	0.01	0.11	V0	0.09	V0
n-Nonane	0.01	0.02	V0	0.02	V0
n-Octane	0.02	0.03	V0	0.02	V0
n-Pentane	0.1	0.4	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	0.9	V0	0.5	V0
o-Xylene	0.01	0.04	V0	0.04	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.76	V0	0.47	V0
trans-2-Butene	0.01	0.14	V0	0.14	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.03	V0	0.03	V0
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.3	V0	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	18-May		18-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.05	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.08	V0	0.17	V0
1-Pentene	0.01	< 0.01	V1	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.12	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.22	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.63	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	0.04	V0
3-Methylpentane	0.01	0.38	V0	0.05	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	6	V0	4	V0
Acetone	0.4	3.8	V0	6.4	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.18	V0	0.15	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	0.02	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.03	V0
Cyclopentane	0.01	0.19	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.5	V0	2.3	V0
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.4	V0	0.59	V0
Isopentane	0.03	0.72	V0	0.61	V0
Isoprene	0.01	0.79	V0	1.41	V0
Isopropylalcohol	0.4	0.9	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.08	V0	< 0.03	V1
Methanol	3	15	V0	17	V0
Methylethylketone	0.3	0.3	V0	0.5	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.03	V0
Methylcyclopentane	0.02	0.1	V0	0.05	V0
n-Butane	0.03	0.17	V0	0.47	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.03	V0	0.02	V0
n-Hexane	0.01	0.27	V0	0.09	V0
n-Nonane	0.01	0.01	V0	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	1	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	2.3	V0	< 0.5	V1
o-Xylene	0.01	0.03	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.14	V0	0.13	V0
trans-2-Butene	0.01	0.01	V0	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**18-May**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.1	V0
1-Pentene	0.01	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0
2,3-Dimethylpentane	0.02	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.01	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.02	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.04	V0
3-Methylpentane	0.01	0.07	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	4	V0
Acetone	0.4	6	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.11	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.07	V0
Cyclopentane	0.01	0.02	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	2.7	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	3	V0
Isobutane	0.02	0.72	V0
Isopentane	0.03	0.74	V0
Isoprene	0.01	0.6	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	19	V0
Methylethylketone	0.3	0.3	V0
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0
Methylcyclopentane	0.02	0.06	V0
n-Butane	0.03	0.3	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.03	V0
n-Hexane	0.01	0.03	V0
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.08	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	24-May		24-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.05	V0	0.06	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.07	V0	0.06	V0
1-Butene	0.02	0.36	V0	0.43	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.03	V0
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.04	V0	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.14	V0	0.01	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.07	V0	0.05	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.05	V0	< 0.02	V1
3-Methylhexane	0.02	0.09	V0	< 0.02	V1
3-Methylpentane	0.01	0.04	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	6	V0	5	V0
Acetone	0.4	4.3	V0	4.3	V0
alpha-Pinene	0.3	0.4	V0	0.3	V0
Benzene	0.01	0.66	V0	0.69	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	< 0.02	V1
Cyclopentane	0.01	0.02	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.7	V0	4.1	V0
Ethylbenzene	0.01	0.06	V0	0.06	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.42	V0	0.44	V0
Isopentane	0.03	0.25	V0	0.27	V0
Isoprene	0.01	0.48	V0	0.24	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.15	V0	0.11	V0
Methanol	3	14	V0	13	V0
Methylethylketone	0.3	0.4	V0	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.12	V0	< 0.01	V1
Methylcyclopentane	0.02	0.08	V0	0.03	V0
n-Butane	0.03	0.54	V0	0.66	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.22	V0	0.05	V0
n-Hexane	0.01	0.15	V0	0.08	V0
n-Nonane	0.01	0.1	V0	0.02	V0
n-Octane	0.02	0.2	V0	0.04	V0
n-Pentane	0.1	0.2	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	2.7	V4	3.3	V4
o-Xylene	0.01	0.07	V0	0.06	V0
Styrene	0.04	< 0.04	V1	0.06	V0
Toluene	0.01	0.42	V0	0.45	V0
trans-2-Butene	0.01	0.02	V0	0.03	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**24-May**		**24-May**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.07	V0	0.06	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.18	V0	0.15	V0
1-Butene	0.02	1.44	V4	0.97	V0
1-Pentene	0.01	0.18	V0	0.11	V0
2,2,4-Trimethylpentane	0.01	0.02	V0	0.04	V0
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.02	V0
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	0.05	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.06	V0	0.08	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	0.11	V0
3-Methylpentane	0.01	0.03	V0	0.09	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	14	V0	12	V0
Acetone	0.4	7.6	V0	6.8	V0
alpha-Pinene	0.3	0.5	V0	0.7	V0
Benzene	0.01	2.41	V4	1.49	V4
beta-Pinene	0.3	0.3	V0	< 0.3	V1
cis-2-Butene	0.02	0.17	V0	0.14	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	0.03	V0	0.03	V0
Cyclohexane	0.02	< 0.02	V1	0.07	V0
Cyclopentane	0.01	0.03	V0	0.04	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	8.9	V0	7	V0
Ethylbenzene	0.01	0.15	V0	0.11	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.06	V0	0.92	V0
Isopentane	0.03	0.5	V0	0.51	V0
Isoprene	0.01	0.23	V0	0.23	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	0.01	V0	< 0.01	V1
m,p-Xylene	0.03	0.24	V0	0.21	V0
Methanol	3	31	V0	37	V0
Methylethylketone	0.3	1	V0	0.9	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.04	V0
Methylcyclopentane	0.02	0.04	V0	0.13	V0
n-Butane	0.03	1.27	V0	0.99	V0
n-Decane	0.06	0.06	V0	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.15	V0	0.22	V0
n-Hexane	0.01	0.21	V0	0.38	V0
n-Nonane	0.01	0.07	V0	0.05	V0
n-Octane	0.02	0.11	V0	0.09	V0
n-Pentane	0.1	0.4	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	5	V4	3.7	V4
o-Xylene	0.01	0.12	V0	0.1	V0
Styrene	0.04	0.11	V0	0.07	V0
Toluene	0.01	1.4	V4	1	V0
trans-2-Butene	0.01	0.2	V0	0.17	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.06	V0	0.05	V0
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Fort McKay South**		**CNRL Horizon**	
Station #	**AMS 13**		**AMS 15**	
Sample Date	**24-May**		**24-May**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.04	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.06	V0	0.05	V0
1-Butene	0.02	0.31	V0	0.18	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.01	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.05	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.26	V0	0.04	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.07	V0	0.06	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.09	V0	< 0.02	V1
3-Methylhexane	0.02	0.13	V0	< 0.02	V1
3-Methylpentane	0.01	0.04	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	6	V0	4	V0
Acetone	0.4	4.6	V0	4.2	V0
alpha-Pinene	0.3	0.3	V0	< 0.3	V1
Benzene	0.01	0.62	V0	0.32	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.07	V0	< 0.02	V1
Cyclopentane	0.01	0.02	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2	V0	2.2	V0
Ethylbenzene	0.01	0.07	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.49	V0	0.29	V0
Isopentane	0.03	0.25	V0	0.2	V0
Isoprene	0.01	0.65	V0	0.42	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	0.01	V0	< 0.01	V1
m,p-Xylene	0.03	0.16	V0	0.05	V0
Methanol	3	13	V0	13	V0
Methylethylketone	0.3	0.4	V0	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.24	V0	0.03	V0
Methylcyclopentane	0.02	0.09	V0	0.02	V0
n-Butane	0.03	0.6	V0	0.18	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.29	V0	0.05	V0
n-Hexane	0.01	0.13	V0	0.05	V0
n-Nonane	0.01	0.14	V0	0.03	V0
n-Octane	0.02	0.32	V0	0.05	V0
n-Pentane	0.1	0.2	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	2.5	V0	2.5	V0
o-Xylene	0.01	0.08	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.47	V0	0.22	V0
trans-2-Butene	0.01	0.02	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		30-May		30-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.03	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.06	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.1	V0	0.08	V0
2,3,4-Trimethylpentane	0.01	0.03	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.23	V0	0.13	V0
2,3-Dimethylpentane	0.02	0.12	V0	0.07	V0
2,4-Dimethylpentane	0.01	0.04	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.09	V0	0.12	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.03	V0	0.24	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	0.04	V0
3-Methylhexane	0.02	0.12	V0	0.11	V0
3-Methylpentane	0.01	0.34	V0	0.25	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	5	V0	7	V0
Acetone	0.4	2.9	V0	4.2	V0
alpha-Pinene	0.3	0.9	V0	< 0.3	V1
Benzene	0.01	0.02	V0	0.12	V0
beta-Pinene	0.3	0.4	V0	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.49	V0	0.23	V0
Cyclopentane	0.01	0.09	V0	0.11	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.2	V0	6.8	V0
Ethylbenzene	0.01	0.02	V0	0.04	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.53	V0	0.84	V0
Isopentane	0.03	1.58	V0	0.93	V0
Isoprene	0.01	0.3	V0	0.1	V0
Isopropylalcohol	0.4	< 0.4	V1	2.1	V4
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	0.11	V0
Methanol	3	10	V0	15	V0
Methylethylketone	0.3	< 0.3	V1	0.3	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.26	V0	0.2	V0
Methylcyclopentane	0.02	0.32	V0	0.2	V0
n-Butane	0.03	0.26	V0	0.32	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	1.06	V4	1.29	V4
n-Heptane	0.01	0.24	V0	0.25	V0
n-Hexane	0.01	0.02	V0	0.16	V0
n-Nonane	0.01	0.03	V0	0.07	V0
n-Octane	0.02	0.1	V0	0.16	V0
n-Pentane	0.1	< 0.1	V1	0.5	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	1.9	V0	2.2	V0
o-Xylene	0.01	0.02	V0	0.05	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.11	V0	0.22	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**30-May**		**30-May**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.05	V0	0.03	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.07	V0	0.13	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.08	V0	0.04	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.16	V0	0.07	V0
2,3-Dimethylpentane	0.02	0.1	V0	0.05	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.25	V0	0.09	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.3	V0	0.2	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.09	V0	0.03	V0
3-Methylhexane	0.02	0.23	V0	0.09	V0
3-Methylpentane	0.01	0.29	V0	0.14	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	6	V0	8	V0
Acetone	0.4	3.4	V0	4.2	V0
alpha-Pinene	0.3	< 0.3	V1	1.1	V0
Benzene	0.01	0.18	V0	0.29	V0
beta-Pinene	0.3	< 0.3	V1	0.5	V0
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.27	V0	0.1	V0
Cyclopentane	0.01	0.12	V0	0.06	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	4.9	V0	9.1	V0
Ethylbenzene	0.01	0.09	V0	0.05	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.86	V0	0.65	V0
Isopentane	0.03	1.04	V0	0.59	V0
Isoprene	0.01	0.14	V0	0.14	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	0.01	V0	< 0.01	V1
m,p-Xylene	0.03	0.24	V0	0.11	V0
Methanol	3	15	V0	16	V0
Methylethylketone	0.3	0.4	V0	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.35	V0	0.12	V0
Methylcyclopentane	0.02	0.3	V0	0.11	V0
n-Butane	0.03	0.33	V0	0.3	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	1.73	V4	1.13	V4
n-Heptane	0.01	0.56	V0	0.22	V0
n-Hexane	0.01	0.33	V0	0.16	V0
n-Nonane	0.01	0.16	V0	0.07	V0
n-Octane	0.02	0.36	V0	0.13	V0
n-Pentane	0.1	0.6	V0	0.5	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	2.7	V4	3.1	V4
o-Xylene	0.01	0.11	V0	0.05	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.45	V0	0.35	V0
trans-2-Butene	0.01	0.01	V0	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	30-May		30-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.03	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.05	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.06	V0	0.1	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	0.03	V0
2,3-Dimethylbutane	0.02	0.12	V0	0.2	V0
2,3-Dimethylpentane	0.02	0.03	V0	0.1	V0
2,4-Dimethylpentane	0.01	0.01	V0	0.03	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.08	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.25	V0	0.07	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.03	V0
3-Methylhexane	0.02	0.02	V0	0.11	V0
3-Methylpentane	0.01	0.2	V0	0.33	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	4	V0	6	V0
Acetone	0.4	2.9	V0	3.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.06	V0	0.03	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.11	V0	0.43	V0
Cyclopentane	0.01	0.08	V0	0.1	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.3	V0	2.1	V0
Ethylbenzene	0.01	< 0.01	V1	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.48	V0	1.44	V0
Isopentane	0.03	0.57	V0	1.48	V0
Isoprene	0.01	0.3	V0	0.21	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	13	V0	11	V0
Methylethylketone	0.3	< 0.3	V1	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.05	V0	0.21	V0
Methylcyclopentane	0.02	0.09	V0	0.28	V0
n-Butane	0.03	0.11	V0	0.26	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	0.95	V0	1.2	V4
n-Heptane	0.01	0.04	V0	0.2	V0
n-Hexane	0.01	0.08	V0	0.03	V0
n-Nonane	0.01	0.01	V0	0.03	V0
n-Octane	0.02	0.02	V0	0.08	V0
n-Pentane	0.1	0.4	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	2.2	V0	1.6	V0
o-Xylene	0.01	0.01	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.08	V0	0.14	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**30-May**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.03	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.06	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.32	V0
2,3,4-Trimethylpentane	0.01	0.09	V0
2,3-Dimethylbutane	0.02	0.76	V0
2,3-Dimethylpentane	0.02	0.32	V0
2,4-Dimethylpentane	0.01	0.11	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.2	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.06	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.05	V0
3-Methylhexane	0.02	0.24	V0
3-Methylpentane	0.01	1.07	V4
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	5	V0
Acetone	0.4	2.1	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.02	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	1.49	V4
Cyclopentane	0.01	0.38	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	2.4	V0
Ethylbenzene	0.01	0.02	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	4.06	V4
Isopentane	0.03	4.79	V4
Isoprene	0.01	0.19	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.05	V0
Methanol	3	16	V0
Methylethylketone	0.3	0.3	V0
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.62	V0
Methylcyclopentane	0.02	0.97	V0
n-Butane	0.03	0.73	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	1.91	V4
n-Heptane	0.01	0.45	V0
n-Hexane	0.01	0.04	V0
n-Nonane	0.01	0.06	V0
n-Octane	0.02	0.14	V0
n-Pentane	0.1	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	2.4	V0
o-Xylene	0.01	0.03	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.13	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	05-Jun		05-Jun	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.08	V0	< 0.02	V1
1-Pentene	0.01	0.01	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.08	V0
2,2-Dimethylbutane	0.01	0.16	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.02	V0
2,3-Dimethylbutane	0.02	0.23	V0	0.02	V0
2,3-Dimethylpentane	0.02	0.03	V0	0.06	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.03	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	< 0.01	V1
2-Methylhexane	0.01	0.02	V0	0.02	V0
2-Methylpentane	0.01	0.9	V0	0.05	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.05	V0	< 0.02	V1
3-Methylpentane	0.01	0.58	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	6	V0	5	V0
Acetone	0.4	4.3	V0	3.3	V0
alpha-Pinene	0.3	0.6	V0	< 0.3	V1
Benzene	0.01	0.09	V0	0.02	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.14	V0	< 0.02	V1
Cyclopentane	0.01	0.24	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2	V0	8.6	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.27	V0	0.05	V0
Isopentane	0.03	1.34	V0	0.19	V0
Isoprene	0.01	0.7	V0	0.08	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.03	V0	< 0.03	V1
Methanol	3	19	V0	19	V0
Methylethylketone	0.3	0.4	V0	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.06	V0	< 0.01	V1
Methylcyclopentane	0.02	0.27	V0	0.02	V0
n-Butane	0.03	0.1	V0	0.34	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.02	V0
n-Hexane	0.01	0.37	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	1.5	V0	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.07	V0	0.06	V0
trans-2-Butene	0.01	0.02	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**05-Jun**		**05-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.07	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	0.03	V0	< 0.02	V1
1,3-Butadiene	0.02	0.06	V0	< 0.02	V1
1-Butene	0.02	0.14	V0	0.05	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.02	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.03	V0	< 0.01	V1
2-Methylhexane	0.01	0.03	V0	< 0.01	V1
2-Methylpentane	0.01	0.06	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.07	V0	< 0.02	V1
3-Methylpentane	0.01	0.06	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	6	V0	7	V0
Acetone	0.4	4.1	V0	4.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.09	V0	0.04	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	< 0.02	V1
Cyclopentane	0.01	0.02	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	10	V0	8.3	V0
Ethylbenzene	0.01	0.06	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.1	V0	0.03	V0
Isopentane	0.03	0.32	V0	0.1	V0
Isoprene	0.01	0.28	V0	0.18	V0
Isopropylalcohol	0.4	< 0.5	V1	< 0.4	V1
Isopropylbenzene	0.01	0.02	V0	< 0.01	V1
m,p-Xylene	0.03	0.15	V0	< 0.03	V1
Methanol	3	29	V0	30	V0
Methylethylketone	0.3	0.4	V0	0.4	V0
Methylisobutylketone	0.4	< 0.5	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	< 0.01	V1
Methylcyclopentane	0.02	0.07	V0	0.05	V0
n-Butane	0.03	0.32	V0	0.1	V0
n-Decane	0.06	< 0.07	V1	< 0.06	V1
n-Dodecane	0.4	< 0.5	V1	< 0.4	V1
n-Heptane	0.01	0.07	V0	0.01	V0
n-Hexane	0.01	0.14	V0	0.11	V0
n-Nonane	0.01	0.02	V0	< 0.01	V1
n-Octane	0.02	0.04	V0	< 0.02	V1
n-Pentane	0.1	0.2	V0	0.1	V0
n-Propylbenzene	0.05	< 0.06	V1	< 0.05	V1
n-Undecane	0.5	< 0.6	V1	< 0.5	V1
Naphthalene	0.5	< 0.6	V1	< 0.5	V1
o-Xylene	0.01	0.08	V0	< 0.01	V1
Styrene	0.04	< 0.05	V1	< 0.04	V1
Toluene	0.01	0.15	V0	0.13	V0
trans-2-Butene	0.01	0.02	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	05-Jun		05-Jun	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.03	V0
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0	0.03	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.01	V0
2-Methylhexane	0.01	< 0.01	V1	0.02	V0
2-Methylpentane	0.01	0.09	V0	0.07	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	0.03	V0
3-Methylpentane	0.01	0.04	V0	0.07	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	7	V0	5	V0
Acetone	0.4	4.3	V0	3.3	V0
alpha-Pinene	0.3	< 0.3	V1	0.3	V0
Benzene	0.01	0.02	V0	0.03	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.02	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3.9	V0	2.3	V0
Ethylbenzene	0.01	< 0.01	V1	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.04	V0	0.08	V0
Isopentane	0.03	0.22	V0	0.2	V0
Isoprene	0.01	0.38	V0	0.37	V0
Isopropylalcohol	0.4	1.7	V4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.03	V0
Methanol	3	19	V0	15	V0
Methylethylketone	0.3	0.3	V0	0.3	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	0.03	V0
Methylcyclopentane	0.02	< 0.02	V1	0.04	V0
n-Butane	0.03	0.06	V0	0.06	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.04	V0
n-Hexane	0.01	0.03	V0	0.04	V0
n-Nonane	0.01	< 0.01	V1	0.01	V0
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.4	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.03	V0	0.07	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**05-Jun**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.03	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.11	V0
2,3,4-Trimethylpentane	0.01	0.02	V0
2,3-Dimethylbutane	0.02	0.19	V0
2,3-Dimethylpentane	0.02	0.09	V0
2,4-Dimethylpentane	0.01	0.03	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.04	V0
2-Methylhexane	0.01	0.02	V0
2-Methylpentane	0.01	0.02	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.06	V0
3-Methylpentane	0.01	0.3	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	5	V0
Acetone	0.4	3.9	V0
alpha-Pinene	0.3	2.4	V4
Benzene	0.01	< 0.01	V1
beta-Pinene	0.3	0.3	V0
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.49	V0
Cyclopentane	0.01	0.1	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	2	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.95	V0
Isopentane	0.03	1.52	V0
Isoprene	0.01	0.26	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	18	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.17	V0
Methylcyclopentane	0.02	0.24	V0
n-Butane	0.03	0.13	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.08	V0
n-Hexane	0.01	< 0.01	V1
n-Nonane	0.01	0.02	V0
n-Octane	0.02	0.03	V0
n-Pentane	0.1	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.05	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		11-Jun		11-Jun	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.04	V0	0.1	V0
1-Pentene	0.01	0.01	V0	0.03	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.03	V0
2,2-Dimethylbutane	0.01	0.07	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.07	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	0.02	V0	0.02	V0
2-Methylpentane	0.01	0.29	V0	0.05	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.05	V0	0.03	V0
3-Methylpentane	0.01	0.15	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	7	V0	6	V0
Acetone	0.4	3.7	V0	4.2	V0
alpha-Pinene	0.3	0.5	V0	0.3	V0
Benzene	0.01	0.06	V0	0.22	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.09	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	5.8	V0	40.3	V4
Ethylbenzene	0.01	< 0.01	V1	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.24	V0	0.17	V0
Isopentane	0.03	0.53	V0	0.39	V0
Isoprene	0.01	0.21	V0	0.21	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.07	V0
Methanol	3	15	V0	32	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.01	V0	< 0.01	V1
Methylcyclopentane	0.02	0.04	V0	0.03	V0
n-Butane	0.03	0.14	V0	0.46	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.04	V0
n-Hexane	0.01	0.1	V0	0.05	V0
n-Nonane	0.01	< 0.01	V1	0.01	V0
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.6	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.05	V0	0.17	V0
trans-2-Butene	0.01	< 0.01	V1	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**11-Jun**		**11-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.09	V0	0.16	V0
1-Pentene	0.01	0.02	V0	0.02	V0
2,2,4-Trimethylpentane	0.01	0.01	V0	0.01	V0
2,2-Dimethylbutane	0.01	< 0.01	V1	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.02	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	0.03	V0	0.02	V0
2-Methylpentane	0.01	0.07	V0	0.08	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.06	V0	< 0.02	V1
3-Methylpentane	0.01	0.05	V0	0.05	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	11	V0	17	V0
Acetone	0.4	5.2	V0	4.9	V0
alpha-Pinene	0.3	< 0.3	V1	0.9	V0
Benzene	0.01	0.1	V0	0.16	V0
beta-Pinene	0.3	< 0.3	V1	0.6	V0
cis-2-Butene	0.02	< 0.02	V1	0.02	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.01	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	43.1	V4	114	V4
Ethylbenzene	0.01	0.02	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.9	V0	< 0.02	V1
Isopentane	0.03	0.5	V0	0.53	V0
Isoprene	0.01	0.18	V0	0.38	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	0.06	V0
Methanol	3	37	V0	58	V0
Methylethylketone	0.3	0.4	V0	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	0.02	V0
Methylcyclopentane	0.02	0.03	V0	0.05	V0
n-Butane	0.03	0.59	V0	0.26	V0
n-Decane	0.06	0.08	V0	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.04	V0
n-Hexane	0.01	0.07	V0	0.12	V0
n-Nonane	0.01	0.08	V0	0.01	V0
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.3	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.13	V0	0.21	V0
trans-2-Butene	0.01	< 0.01	V1	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Fort McKay South		CNRL Horizon	
Station #	AMS 13		AMS 15	
Sample Date	11-Jun		11-Jun	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.04	V0	0.06	V0
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0	0.07	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0	0.14	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	0.06	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	< 0.01	V1
2-Methylhexane	0.01	0.01	V0	0.02	V0
2-Methylpentane	0.01	0.08	V0	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	0.06	V0
3-Methylpentane	0.01	0.05	V0	0.19	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	6	V0	6	V0
Acetone	0.4	3	V0	4	V0
alpha-Pinene	0.3	0.4	V0	0.7	V0
Benzene	0.01	0.02	V0	0.02	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	0.23	V0
Cyclopentane	0.01	0.03	V0	0.07	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	6.7	V0	6.3	V0
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.06	V0	< 0.02	V1
Isopentane	0.03	0.29	V0	1.02	V0
Isoprene	0.01	0.21	V0	0.53	V0
Isopropylalcohol	0.4	< 0.4	V1	1	V0
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	< 0.03	V1
Methanol	3	16	V0	19	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.01	V0	0.11	V0
Methylcyclopentane	0.02	< 0.02	V1	0.15	V0
n-Butane	0.03	0.12	V0	0.37	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.04	V0	0.05	V0
n-Hexane	0.01	0.04	V0	0.06	V0
n-Nonane	0.01	0.01	V0	0.01	V0
n-Octane	0.02	0.03	V0	0.02	V0
n-Pentane	0.1	0.2	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.1	V0	0.07	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		17-Jun		17-Jun	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.02	V0	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.02	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	< 0.01	V1
2-Methylhexane	0.01	0.01	V0	< 0.01	V1
2-Methylpentane	0.01	0.04	V0	< 0.01	V1
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.04	V0	< 0.02	V1
3-Methylpentane	0.01	0.04	V0	< 0.01	V1
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	4	V0	4	V0
Acetone	0.4	2.7	V0	3.4	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	< 0.01	V1	< 0.01	V1
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	< 0.02	V1
Cyclopentane	0.01	0.02	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.3	V0	4.4	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.21	V0	0.21	V0
Isopentane	0.03	0.15	V0	< 0.03	V1
Isoprene	0.01	0.19	V0	0.06	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	7	V0	8	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	< 0.01	V1
Methylcyclopentane	0.02	0.03	V0	< 0.02	V1
n-Butane	0.03	0.06	V0	0.08	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.01	V0	< 0.01	V1
n-Hexane	0.01	< 0.01	V1	0.01	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	< 0.1	V1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.02	V0	< 0.01	V1
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**17-Jun**		**17-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	0.03	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	0.02	V0	< 0.01	V1
2-Methylpentane	0.01	0.02	V0	0.01	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.04	V0	< 0.02	V1
3-Methylpentane	0.01	0.01	V0	< 0.01	V1
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	4	V0	9	V0
Acetone	0.4	2	V0	3.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	< 0.01	V1	< 0.01	V1
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.3	V0	2.5	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.16	V0	0.51	V0
Isopentane	0.03	0.03	V0	< 0.03	V1
Isoprene	0.01	0.14	V0	0.12	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	10	V0	9	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	0.02	V0	< 0.02	V1
n-Butane	0.03	0.14	V0	0.14	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.03	V0	0.01	V0
n-Hexane	0.01	0.04	V0	< 0.01	V1
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	< 0.1	V1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.06	V0	0.07	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**		**CNRL Horizon**	
Station #	**AMS 9**		**AMS 15**	
Sample Date	**17-Jun**		**17-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	0.06	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,3-Dimethylbutane	0.02	0.03	V0	0.13	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	0.09	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.07	V0
2-Methylhexane	0.01	0.01	V0	0.06	V0
2-Methylpentane	0.01	0.09	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	0.14	V0
3-Methylpentane	0.01	0.06	V0	0.21	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	5	V0	5	V0
Acetone	0.4	3.1	V0	2.9	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	< 0.01	V1	< 0.01	V1
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.28	V0
Cyclopentane	0.01	0.03	V0	0.08	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.2	V0	1.1	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.35	V0	0.71	V0
Isopentane	0.03	0.14	V0	0.96	V0
Isoprene	0.01	0.13	V0	0.15	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	8	V0	14	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.24	V0
Methylcyclopentane	0.02	0.02	V0	0.17	V0
n-Butane	0.03	0.06	V0	0.16	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.24	V0
n-Hexane	0.01	0.01	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	0.02	V0
n-Octane	0.02	< 0.02	V1	0.05	V0
n-Pentane	0.1	< 0.1	V1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	< 0.01	V1	0.07	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		23-Jun		23-Jun	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.03	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.05	V0	0.05	V0
1-Pentene	0.01	0.02	V0	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.31	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,3-Dimethylbutane	0.02	0.39	V0	0.03	V0
2,3-Dimethylpentane	0.02	0.05	V0	0.06	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.16	V0
2-Methylhexane	0.01	0.03	V0	0.05	V0
2-Methylpentane	0.01	2.07	V4	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.05	V0
3-Methylhexane	0.02	< 0.02	V1	0.11	V0
3-Methylpentane	0.01	1.05	V4	0.07	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	16	V0	13	V0
Acetone	0.4	4.9	V0	6.6	V0
alpha-Pinene	0.3	0.5	V0	0.3	V0
Benzene	0.01	0.28	V0	0.06	V0
beta-Pinene	0.3	0.3	V0	< 0.3	V1
cis-2-Butene	0.02	0.03	V0	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.12	V0	0.05	V0
Cyclopentane	0.01	0.54	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	5.9	V0	12	V0
Ethylbenzene	0.01	0.02	V0	0.07	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.64	V0	0.53	V0
Isopentane	0.03	3.03	V0	0.59	V0
Isoprene	0.01	0.81	V0	0.38	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	0.14	V0
Methanol	3	34	V0	39	V0
Methylethylketone	0.3	0.9	V0	0.5	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.08	V0	0.13	V0
Methylcyclopentane	0.02	0.21	V0	0.06	V0
n-Butane	0.03	0.19	V0	0.33	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.06	V0	0.21	V0
n-Hexane	0.01	0.55	V0	0.09	V0
n-Nonane	0.01	0.01	V0	0.11	V0
n-Octane	0.02	0.02	V0	0.24	V0
n-Pentane	0.1	3	V4	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.06	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.1	V0	0.26	V0
trans-2-Butene	0.01	0.05	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.8	V0	0.5	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**24-Jun**		**23-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.03	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.04	V0	0.09	V0
1-Pentene	0.01	0.01	V0	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.03	V0
2,2-Dimethylbutane	0.01	0.02	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.04	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.04	V0	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.09	V0	0.01	V0
2-Methylhexane	0.01	0.06	V0	0.01	V0
2-Methylpentane	0.01	0.09	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	< 0.02	V1
3-Methylhexane	0.02	0.12	V0	< 0.02	V1
3-Methylpentane	0.01	0.06	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	32	V0	20	V0
Acetone	0.4	6.5	V0	9.1	V0
alpha-Pinene	0.3	< 0.3	V1	1.3	V0
Benzene	0.01	0.05	V0	0.08	V0
beta-Pinene	0.3	< 0.3	V1	0.6	V0
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	< 0.02	V1
Cyclopentane	0.01	0.02	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	4.9	V0	17	V4
Ethylbenzene	0.01	0.03	V0	0.02	V0
Formaldehyde	3	< 3	V1	3	V0
Isobutane	0.02	0.06	V0	0.76	V0
Isopentane	0.03	0.44	V0	0.44	V0
Isoprene	0.01	0.19	V0	0.43	V0
Isopropylalcohol	0.4	< 0.4	V1	2	V4
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.06	V0	< 0.03	V1
Methanol	3	26	V0	34	V0
Methylethylketone	0.3	0.6	V0	0.7	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.1	V0	0.01	V0
Methylcyclopentane	0.02	0.07	V0	< 0.02	V1
n-Butane	0.03	0.14	V0	0.33	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.2	V0	0.02	V0
n-Hexane	0.01	0.11	V0	0.04	V0
n-Nonane	0.01	0.04	V0	0.01	V0
n-Octane	0.02	0.12	V0	< 0.02	V1
n-Pentane	0.1	0.5	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.12	V0	0.15	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	0.4	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	23-Jun		23-Jun	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.27	V0
1-Pentene	0.01	0.01	V0	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,2-Dimethylbutane	0.01	0.34	V0	0.15	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.21	V0	0.21	V0
2,3-Dimethylpentane	0.02	0.04	V0	0.04	V0
2,4-Dimethylpentane	0.01	0.01	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	0.05	V0
2-Methylhexane	0.01	0.04	V0	0.03	V0
2-Methylpentane	0.01	2	V4	0.92	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.08	V0	< 0.02	V1
3-Methylpentane	0.01	0.99	V0	0.5	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	8	V0	9	V0
Acetone	0.4	3.1	V0	5.2	V0
alpha-Pinene	0.3	< 0.3	V1	0.6	V0
Benzene	0.01	0.32	V0	0.17	V0
beta-Pinene	0.3	< 0.3	V1	0.4	V0
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.1	V0	0.08	V0
Cyclopentane	0.01	0.47	V0	0.24	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.3	V0	1.3	V0
Ethylbenzene	0.01	0.02	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.43	V0	0.41	V0
Isopentane	0.03	3.09	V0	1.24	V0
Isoprene	0.01	1.41	V0	1.37	V0
Isopropylalcohol	0.4	< 0.4	V1	0.7	V0
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.03	V0	0.06	V0
Methanol	3	22	V0	26	V0
Methylethylketone	0.3	0.5	V0	0.8	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.06	V0	0.05	V0
Methylcyclopentane	0.02	0.21	V0	0.11	V0
n-Butane	0.03	0.17	V0	0.11	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.08	V0	0.06	V0
n-Hexane	0.01	0.63	V0	0.25	V0
n-Nonane	0.01	0.02	V0	0.04	V0
n-Octane	0.02	0.02	V0	0.06	V0
n-Pentane	0.1	4.1	V4	1.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.08	V0	0.12	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.4	V0	0.5	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**23-Jun**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.07	V0
1-Pentene	0.01	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.14	V0
2,3,4-Trimethylpentane	0.01	0.04	V0
2,3-Dimethylbutane	0.02	0.23	V0
2,3-Dimethylpentane	0.02	0.18	V0
2,4-Dimethylpentane	0.01	0.05	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.08	V0
2-Methylhexane	0.01	0.06	V0
2-Methylpentane	0.01	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.02	V0
3-Methylhexane	0.02	0.15	V0
3-Methylpentane	0.01	0.47	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	13	V0
Acetone	0.4	7.1	V0
alpha-Pinene	0.3	0.9	V0
Benzene	0.01	0.02	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.65	V0
Cyclopentane	0.01	0.13	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	3	V0
Ethylbenzene	0.01	0.02	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.32	V0
Isopentane	0.03	2.88	V0
Isoprene	0.01	0.73	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.04	V0
Methanol	3	34	V0
Methylethylketone	0.3	0.6	V0
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.31	V0
Methylcyclopentane	0.02	0.44	V0
n-Butane	0.03	0.32	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.18	V0
n-Hexane	0.01	0.03	V0
n-Nonane	0.01	0.03	V0
n-Octane	0.02	0.07	V0
n-Pentane	0.1	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.02	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.08	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	0.6	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		29-Jun		29-Jun	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.04	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.13	V0	0.04	V0
1-Pentene	0.01	0.02	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.02	V0	0.03	V0
2,2-Dimethylbutane	0.01	0.47	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.58	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.02	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.03	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	3.59	V4	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	< 0.02	V1
3-Methylpentane	0.01	1.68	V4	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	9	V0	9	V0
Acetone	0.4	3.5	V0	2.6	V0
alpha-Pinene	0.3	1.9	V4	< 0.3	V1
Benzene	0.01	0.36	V0	0.04	V0
beta-Pinene	0.3	0.9	V0	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.08	V0	< 0.02	V1
Cyclopentane	0.01	0.8	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.7	V0	5.7	V0
Ethylbenzene	0.01	0.02	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.39	V0	0.43	V0
Isopentane	0.03	2.68	V0	0.26	V0
Isoprene	0.01	2.43	V0	0.24	V0
Isopropylalcohol	0.4	1	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.06	V0	0.03	V0
Methanol	3	19	V0	21	V0
Methylethylketone	0.3	0.6	V0	0.3	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	< 0.01	V1
Methylcyclopentane	0.02	0.26	V0	< 0.02	V1
n-Butane	0.03	0.21	V0	0.34	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.04	V0	< 0.01	V1
n-Hexane	0.01	1.01	V0	0.02	V0
n-Nonane	0.01	0.01	V0	< 0.01	V1
n-Octane	0.02	0.02	V0	< 0.02	V1
n-Pentane	0.1	6.1	V4	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.14	V0	0.11	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.6	V0	0.3	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**29-Jun**		**29-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	0.05	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.05	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.02	V0	< 0.01	V1
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	9	V0	12	V0
Acetone	0.4	4.1	V0	4.6	V0
alpha-Pinene	0.3	< 0.3	V1	0.7	V0
Benzene	0.01	0.03	V0	0.05	V0
beta-Pinene	0.3	< 0.3	V1	0.3	V0
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	7.2	V0	8.1	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.45	V0	0.63	V0
Isopentane	0.03	0.35	V0	0.19	V0
Isoprene	0.01	0.19	V0	0.24	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	31	V0	33	V0
Methylethylketone	0.3	0.4	V0	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	< 0.02	V1	< 0.02	V1
n-Butane	0.03	0.3	V0	0.21	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	< 0.01	V1
n-Hexane	0.01	0.02	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	< 0.1	V1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.05	V0	0.32	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.3	V0	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	29-Jun		29-Jun	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.03	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.07	V0	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.54	V0	0.22	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.88	V0	0.29	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.03	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	4.03	V4	1.48	V4
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	0.03	V0
3-Methylpentane	0.01	1.81	V4	0.7	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	9	V0	8	V0
Acetone	0.4	3.4	V0	4.1	V0
alpha-Pinene	0.3	< 0.3	V1	0.5	V0
Benzene	0.01	0.43	V0	0.19	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.07	V0	0.05	V0
Cyclopentane	0.01	0.81	V0	0.36	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3.5	V0	3.2	V0
Ethylbenzene	0.01	< 0.01	V1	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.35	V0	0.3	V0
Isopentane	0.03	4.33	V4	1.89	V0
Isoprene	0.01	0.67	V0	1.83	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.05	V0
Methanol	3	24	V0	22	V0
Methylethylketone	0.3	0.7	V0	0.7	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.02	V0
Methylcyclopentane	0.02	0.25	V0	0.1	V0
n-Butane	0.03	0.1	V0	0.07	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.04	V0
n-Hexane	0.01	1.06	V4	0.4	V0
n-Nonane	0.01	< 0.01	V1	0.02	V0
n-Octane	0.02	< 0.02	V1	0.03	V0
n-Pentane	0.1	6	V4	2.7	V4
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.09	V0	0.15	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	1.1	V0	0.9	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**29-Jun**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.02	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1
2,3-Dimethylpentane	0.02	0.02	V0
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.02	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.11	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1
3-Methylpentane	0.01	0.09	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	10	V0
Acetone	0.4	3	V0
alpha-Pinene	0.3	0.7	V0
Benzene	0.01	0.01	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.08	V0
Cyclopentane	0.01	0.03	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	3.1	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.61	V0
Isopentane	0.03	0.49	V0
Isoprene	0.01	0.64	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	24	V0
Methylethylketone	0.3	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0
Methylcyclopentane	0.02	0.05	V0
n-Butane	0.03	0.09	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.03	V0
n-Hexane	0.01	0.04	V0
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.05	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	0.6	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	05-Jul		05-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.06	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	0.02	V0
1,3-Butadiene	0.02	< 0.02	V1	0.02	V0
1-Butene	0.02	0.06	V0	0.03	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.05	V0	0.07	V0
2,3-Dimethylpentane	0.02	0.05	V0	0.05	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.09	V0	0.14	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.21	V0	0.15	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	0.04	V0
3-Methylhexane	0.02	0.14	V0	0.13	V0
3-Methylpentane	0.01	0.13	V0	0.09	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	10	V0	7	V0
Acetone	0.4	2	V0	3.4	V0
alpha-Pinene	0.3	0.5	V0	< 0.3	V1
Benzene	0.01	0.1	V0	0.18	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.08	V0	0.06	V0
Cyclopentane	0.01	0.06	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3.1	V0	30.9	V4
Ethylbenzene	0.01	0.02	V0	0.06	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.45	V0	0.33	V0
Isopentane	0.03	0.32	V0	0.38	V0
Isoprene	0.01	0.55	V0	0.63	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	0.15	V0
Methanol	3	20	V0	19	V0
Methylethylketone	0.3	0.5	V0	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.11	V0	0.15	V0
Methylcyclopentane	0.02	0.07	V0	0.11	V0
n-Butane	0.03	0.17	V0	0.27	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.25	V0	0.29	V0
n-Hexane	0.01	0.11	V0	0.22	V0
n-Nonane	0.01	0.04	V0	0.09	V0
n-Octane	0.02	0.09	V0	0.19	V0
n-Pentane	0.1	0.2	V0	0.5	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	12	V4
o-Xylene	0.01	0.02	V0	0.07	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.18	V0	0.28	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.3	V0	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**05-Jul**		**05-Jul**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.04	V0	< 0.02	V1
1-Butene	0.02	0.18	V0	0.1	V0
1-Pentene	0.01	< 0.01	V1	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.1	V0
2,2-Dimethylbutane	0.01	0.03	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.02	V0
2,3-Dimethylbutane	0.02	0.05	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.04	V0	0.09	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.03	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.11	V0	0.03	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.15	V0	0.22	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	< 0.02	V1
3-Methylhexane	0.02	0.1	V0	0.06	V0
3-Methylpentane	0.01	0.08	V0	0.13	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	19	V0	23	V0
Acetone	0.4	2.7	V0	6.7	V0
alpha-Pinene	0.3	0.3	V0	0.5	V0
Benzene	0.01	0.11	V0	0.08	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.03	V0	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.02	V0
Cyclopentane	0.01	0.03	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	35.6	V4	47.3	V4
Ethylbenzene	0.01	0.03	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.81	V0	0.91	V0
Isopentane	0.03	0.4	V0	1	V0
Isoprene	0.01	0.43	V0	0.44	V0
Isopropylalcohol	0.4	< 0.4	V1	1.1	V4
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.08	V0	0.06	V0
Methanol	3	50	V0	45	V0
Methylethylketone	0.3	0.6	V0	0.7	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.1	V0	0.03	V0
Methylcyclopentane	0.02	0.08	V0	0.08	V0
n-Butane	0.03	0.53	V0	0.58	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.21	V0	0.04	V0
n-Hexane	0.01	0.16	V0	0.18	V0
n-Nonane	0.01	0.06	V0	< 0.01	V1
n-Octane	0.02	0.12	V0	< 0.02	V1
n-Pentane	0.1	0.5	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.21	V0	0.81	V0
trans-2-Butene	0.01	0.03	V0	0.04	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	0.03	V0
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.4	V0	0.3	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	05-Jul		05-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.13	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.09	V0	0.05	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.11	V0	0.06	V0
2,3-Dimethylpentane	0.02	0.05	V0	0.05	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.06	V0	0.09	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.64	V0	0.21	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.02	V0
3-Methylhexane	0.02	0.13	V0	0.17	V0
3-Methylpentane	0.01	0.36	V0	0.16	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	25	V0	14	V0
Acetone	0.4	4.9	V0	8.2	V0
alpha-Pinene	0.3	< 0.3	V1	0.5	V0
Benzene	0.01	0.13	V0	0.14	V0
beta-Pinene	0.3	< 0.3	V1	0.3	V0
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.08	V0	0.09	V0
Cyclopentane	0.01	0.14	V0	0.05	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	5.1	V0	2.1	V0
Ethylbenzene	0.01	0.02	V0	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.03	V0	0.7	V0
Isopentane	0.03	1	V0	0.63	V0
Isoprene	0.01	0.5	V0	1.18	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	0.07	V0
Methanol	3	32	V0	24	V0
Methylethylketone	0.3	0.7	V0	0.7	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.06	V0	0.15	V0
Methylcyclopentane	0.02	0.15	V0	0.08	V0
n-Butane	0.03	0.15	V0	0.13	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.14	V0	0.27	V0
n-Hexane	0.01	0.39	V0	0.19	V0
n-Nonane	0.01	0.03	V0	0.05	V0
n-Octane	0.02	0.06	V0	0.11	V0
n-Pentane	0.1	1.1	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	2	V0
o-Xylene	0.01	0.02	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.17	V0	0.2	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.4	V0	0.4	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**05-Jul**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.04	V0
1,3,5-Trimethylbenzene	0.02	0.02	V0
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.08	V0
1-Pentene	0.01	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.06	V0
2,3,4-Trimethylpentane	0.01	0.05	V0
2,3-Dimethylbutane	0.02	0.22	V0
2,3-Dimethylpentane	0.02	0.43	V0
2,4-Dimethylpentane	0.01	0.08	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.3	V0
2-Methylhexane	0.01	0.58	V0
2-Methylpentane	0.01	0.33	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.12	V0
3-Methylhexane	0.02	0.75	V0
3-Methylpentane	0.01	0.4	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	24	V0
Acetone	0.4	5	V0
alpha-Pinene	0.3	0.6	V0
Benzene	0.01	0.14	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	0.02	V0
Cyclohexane	0.02	0.49	V0
Cyclopentane	0.01	0.1	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	7.7	V0
Ethylbenzene	0.01	0.07	V0
Formaldehyde	3	8	V0
Isobutane	0.02	1.58	V0
Isopentane	0.03	1.87	V0
Isoprene	0.01	0.52	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.19	V0
Methanol	3	47	V0
Methylethylketone	0.3	0.6	V0
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.55	V0
Methylcyclopentane	0.02	0.39	V0
n-Butane	0.03	0.73	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	1.47	V4
n-Hexane	0.01	0.32	V0
n-Nonane	0.01	0.13	V0
n-Octane	0.02	0.37	V0
n-Pentane	0.1	0.5	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.07	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.53	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	0.05	V0
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	0.4	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		11-Jul		11-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.03	V0	0.04	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.17	V0	0.07	V0
1-Pentene	0.01	< 0.01	V1	0.05	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.31	V0
2,2-Dimethylbutane	0.01	0.02	V0	0.06	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.07	V0
2,3-Dimethylbutane	0.02	0.03	V0	0.17	V0
2,3-Dimethylpentane	0.02	0.03	V0	0.3	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.11	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.12	V0
2-Methylhexane	0.01	< 0.01	V1	0.32	V0
2-Methylpentane	0.01	0.04	V0	0.88	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.06	V0
3-Methylhexane	0.02	0.02	V0	0.26	V0
3-Methylpentane	0.01	0.06	V0	0.49	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	8	V0	6	V0
Acetone	0.4	3.5	V0	7.1	V0
alpha-Pinene	0.3	0.5	V0	< 0.3	V1
Benzene	0.01	0.02	V0	0.23	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	0.07	V0
Cyclohexane	0.02	0.05	V0	0.1	V0
Cyclopentane	0.01	0.02	V0	0.13	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.5	V0	8.8	V0
Ethylbenzene	0.01	0.02	V0	0.07	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	2.29	V0	0.46	V0
Isopentane	0.03	0.39	V0	2.54	V0
Isoprene	0.01	1.28	V0	0.54	V0
Isopropylalcohol	0.4	0.5	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.2	V0
Methanol	3	15	V0	28	V0
Methylethylketone	0.3	0.4	V0	0.6	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.13	V0
Methylcyclopentane	0.02	0.03	V0	0.38	V0
n-Butane	0.03	0.28	V0	1.15	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.04	V0	0.27	V0
n-Hexane	0.01	0.02	V0	0.65	V0
n-Nonane	0.01	< 0.01	V1	0.05	V0
n-Octane	0.02	< 0.02	V1	0.11	V0
n-Pentane	0.1	< 0.1	V1	1.7	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	0.07	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.04	V0	0.64	V0
trans-2-Butene	0.01	0.03	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	0.13	V0
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.6	V0	0.4	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**11-Jul**		**11-Jul**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.05	V0	0.04	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.27	V0	0.2	V0
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.02	V0
2,2-Dimethylbutane	0.01	0.05	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.05	V0	0.04	V0
2,3-Dimethylpentane	0.02	0.04	V0	0.02	V0
2,4-Dimethylpentane	0.01	0.01	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.08	V0	0.03	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.25	V0	0.09	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	< 0.02	V1
3-Methylhexane	0.02	0.09	V0	0.03	V0
3-Methylpentane	0.01	0.13	V0	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	12	V0	23	V0
Acetone	0.4	5.2	V0	6.3	V0
alpha-Pinene	0.3	< 0.3	V1	0.4	V0
Benzene	0.01	0.06	V0	0.04	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	0.02	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	< 0.02	V1
Cyclopentane	0.01	0.05	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	5.1	V0	7.4	V0
Ethylbenzene	0.01	0.03	V0	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	2.49	V0	3.42	V4
Isopentane	0.03	0.54	V0	0.7	V0
Isoprene	0.01	0.74	V0	0.34	V0
Isopropylalcohol	0.4	0.6	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.07	V0	0.03	V0
Methanol	3	25	V0	17	V0
Methylethylketone	0.3	0.5	V0	0.7	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.08	V0	0.02	V0
Methylcyclopentane	0.02	0.08	V0	0.03	V0
n-Butane	0.03	0.48	V0	0.51	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.18	V0	0.05	V0
n-Hexane	0.01	0.17	V0	0.07	V0
n-Nonane	0.01	0.06	V0	0.02	V0
n-Octane	0.02	0.11	V0	0.03	V0
n-Pentane	0.1	0.4	V0	0.5	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.12	V0	0.64	V0
trans-2-Butene	0.01	0.02	V0	0.04	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.5	V0	0.4	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	11-Jul		11-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	0.21	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.05	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.06	V0	0.06	V0
2,3-Dimethylpentane	0.02	0.03	V0	0.02	V0
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.02	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.19	V0	0.12	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	0.03	V0
3-Methylpentane	0.01	0.15	V0	0.08	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	4	V0	8	V0
Acetone	0.4	4.1	V0	4.9	V0
alpha-Pinene	0.3	< 0.3	V1	0.3	V0
Benzene	0.01	0.03	V0	0.02	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	0.03	V0
Cyclopentane	0.01	0.05	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2	V0	3.2	V0
Ethylbenzene	0.01	0.01	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.93	V0	2.24	V0
Isopentane	0.03	0.66	V0	0.45	V0
Isoprene	0.01	1.78	V0	0.91	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	20	V0	22	V0
Methylethylketone	0.3	0.3	V0	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.03	V0
Methylcyclopentane	0.02	0.06	V0	0.04	V0
n-Butane	0.03	< 0.03	V1	0.31	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.04	V0
n-Hexane	0.01	0.06	V0	0.06	V0
n-Nonane	0.01	0.01	V0	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.3	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.02	V0	0.05	V0
trans-2-Butene	0.01	< 0.01	V1	0.04	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.5	V0	0.6	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**11-Jul**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.11	V0
1-Pentene	0.01	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0
2,3,4-Trimethylpentane	0.01	0.01	V0
2,3-Dimethylbutane	0.02	0.03	V0
2,3-Dimethylpentane	0.02	0.07	V0
2,4-Dimethylpentane	0.01	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.08	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.02	V0
3-Methylhexane	0.02	0.14	V0
3-Methylpentane	0.01	0.07	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	10	V0
Acetone	0.4	4.9	V0
alpha-Pinene	0.3	0.4	V0
Benzene	0.01	0.01	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.11	V0
Cyclopentane	0.01	0.01	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	5.1	V0
Ethylbenzene	0.01	0.02	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	2.59	V0
Isopentane	0.03	0.56	V0
Isoprene	0.01	0.93	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	25	V0
Methylethylketone	0.3	0.5	V0
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.1	V0
Methylcyclopentane	0.02	0.06	V0
n-Butane	0.03	0.4	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.26	V0
n-Hexane	0.01	0.03	V0
n-Nonane	0.01	0.02	V0
n-Octane	0.02	0.05	V0
n-Pentane	0.1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.06	V0
trans-2-Butene	0.01	0.01	V0
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	0.6	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		17-Jul		17-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.04	V0	0.04	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.19	V0	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	0.02	V0
2,2,4-Trimethylpentane	0.01	0.02	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	0.07	V0	0.06	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,3-Dimethylbutane	0.02	0.05	V0	0.07	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	0.05	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	0.08	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.43	V0	0.33	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.03	V0
3-Methylhexane	0.02	< 0.02	V1	0.08	V0
3-Methylpentane	0.01	0.22	V0	0.17	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	6	V0	< 3	V1
Acetone	0.4	5.7	V0	2.6	V0
alpha-Pinene	0.3	0.5	V0	< 0.3	V1
Benzene	0.01	0.15	V0	0.16	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.02	V0	0.03	V0
Cyclopentane	0.01	0.1	V0	0.08	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.1	V0	1.5	V0
Ethylbenzene	0.01	0.03	V0	0.04	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.7	V0	0.83	V0
Isopentane	0.03	0.8	V0	0.48	V0
Isoprene	0.01	0.78	V0	0.32	V0
Isopropylalcohol	0.4	0.4	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	0.07	V0
Methanol	3	11	V0	9	V0
Methylethylketone	0.3	0.4	V0	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.01	V0	0.08	V0
Methylcyclopentane	0.02	0.05	V0	0.08	V0
n-Butane	0.03	0.34	V0	< 0.03	V1
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.14	V0
n-Hexane	0.01	0.15	V0	0.18	V0
n-Nonane	0.01	< 0.01	V1	0.04	V0
n-Octane	0.02	< 0.02	V1	0.1	V0
n-Pentane	0.1	0.9	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.04	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.1	V0	0.14	V0
trans-2-Butene	0.01	0.03	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.4	V0	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**17-Jul**		**17-Jul**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.04	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.2	V0	0.1	V0
1-Pentene	0.01	0.01	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,2-Dimethylbutane	0.01	0.06	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.05	V0	0.04	V0
2,3-Dimethylpentane	0.02	0.03	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.05	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.27	V0	0.17	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.08	V0	< 0.02	V1
3-Methylpentane	0.01	0.14	V0	0.09	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	3	V0	3	V0
Acetone	0.4	3.4	V0	2.9	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.13	V0	0.07	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	< 0.02	V1
Cyclopentane	0.01	0.05	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2	V0	1.9	V0
Ethylbenzene	0.01	0.03	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.64	V0	1.19	V0
Isopentane	0.03	0.55	V0	0.41	V0
Isoprene	0.01	0.44	V0	0.41	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	< 0.03	V1
Methanol	3	13	V0	9	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.06	V0	0.01	V0
Methylcyclopentane	0.02	0.06	V0	0.02	V0
n-Butane	0.03	0.57	V0	0.22	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.1	V0	0.01	V0
n-Hexane	0.01	0.14	V0	0.06	V0
n-Nonane	0.01	0.04	V0	< 0.01	V1
n-Octane	0.02	0.06	V0	< 0.02	V1
n-Pentane	0.1	0.5	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.1	V0	0.63	V0
trans-2-Butene	0.01	0.02	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.3	V0	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	17-Jul		17-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.1	V0	0.1	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.14	V0	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.08	V0	0.08	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.7	V0	3.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.14	V0	0.11	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	0.03	V0
Cyclopentane	0.01	0.03	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1	V0	0.8	V0
Ethylbenzene	0.01	0.01	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.02	V0	1.53	V0
Isopentane	0.03	0.3	V0	0.46	V0
Isoprene	0.01	0.7	V0	0.89	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	10	V0	10	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	0.02	V0
Methylcyclopentane	0.02	< 0.02	V1	0.05	V0
n-Butane	0.03	0.13	V0	0.23	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	0.01	V0
n-Hexane	0.01	0.06	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.3	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.05	V0	0.08	V0
trans-2-Butene	0.01	0.01	V0	0.03	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	0.5	V0

Station Name	CNRL Horizon	
Station #	AMS 15	
Sample Date	17-Jul	

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.16	V0
1-Pentene	0.01	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.01	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	< 0.01	V1
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1
3-Methylpentane	0.01	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	4	V0
Acetone	0.4	3.3	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.14	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.02	V0
Cyclopentane	0.01	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1.1	V0
Ethylbenzene	0.01	0.02	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	1.32	V0
Isopentane	0.03	0.17	V0
Isoprene	0.01	0.61	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	15	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0
Methylcyclopentane	0.02	< 0.02	V1
n-Butane	0.03	0.25	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.02	V0
n-Hexane	0.01	0.01	V0
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.06	V0
trans-2-Butene	0.01	0.03	V0
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	0.3	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		23-Jul		23-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.19	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.01	V0	0.03	V0
2,2-Dimethylbutane	0.01	0.07	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.07	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	0.02	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.01	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.43	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.13	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	14	V0	7	V0
Acetone	0.4	6.6	V0	4	V0
alpha-Pinene	0.3	2.2	V4	< 0.3	V1
Benzene	0.01	0.13	V0	0.04	V0
beta-Pinene	0.3	0.6	V0	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.12	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	7.7	V0	5.5	V0
Ethylbenzene	0.01	0.01	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.87	V0	0.3	V0
Isopentane	0.03	0.77	V0	0.25	V0
Isoprene	0.01	1.45	V0	0.36	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	0.04	V0
Methanol	3	23	V0	14	V0
Methylethylketone	0.3	0.6	V0	0.3	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	0.01	V0
Methylcyclopentane	0.02	0.04	V0	< 0.02	V1
n-Butane	0.03	0.96	V0	0.44	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.03	V0
n-Hexane	0.01	0.11	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.8	V0	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.07	V0	0.05	V0
trans-2-Butene	0.01	< 0.01	V1	0.03	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.5	V0	0.4	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**23-Jul**		**23-Jul**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.02	V0	0.02	V0
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.02	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.02	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	5	V0	7	V0
Acetone	0.4	3.6	V0	3.5	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.05	V0	0.03	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	7.5	V0	3.9	V0
Ethylbenzene	0.01	0.01	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.27	V0	0.26	V0
Isopentane	0.03	0.22	V0	0.17	V0
Isoprene	0.01	0.29	V0	0.29	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.03	V0	< 0.03	V1
Methanol	3	19	V0	14	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.01	V0	< 0.01	V1
Methylcyclopentane	0.02	< 0.02	V1	< 0.02	V1
n-Butane	0.03	0.37	V0	0.19	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	< 0.01	V1
n-Hexane	0.01	0.04	V0	0.04	V0
n-Nonane	0.01	0.01	V0	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	< 0.1	V1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.05	V0	0.26	V0
trans-2-Butene	0.01	< 0.01	V1	0.05	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	0.4	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**		**Fort McKay South**	
Station #	**AMS 9**		**AMS 13**	
Sample Date	**23-Jul**		**23-Jul**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.07	V0	0.09	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.07	V0	0.06	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.07	V0	0.06	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.39	V0	0.31	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.2	V0	0.11	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	4	V0	7	V0
Acetone	0.4	3.1	V0	4.6	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.14	V0	0.07	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	0.06	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.02	V0	< 0.02	V1
Cyclopentane	0.01	0.09	V0	0.09	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.7	V0	4.4	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.35	V0	0.77	V0
Isopentane	0.03	0.72	V0	0.56	V0
Isoprene	0.01	0.98	V0	1.01	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	16	V0	14	V0
Methylethylketone	0.3	< 0.3	V1	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	0.05	V0	0.02	V0
n-Butane	0.03	0.8	V0	0.85	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.01	V0	0.01	V0
n-Hexane	0.01	0.15	V0	0.08	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.7	V0	0.5	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.02	V0	0.05	V0
trans-2-Butene	0.01	0.03	V0	0.06	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	0.6	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**23-Jul**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.14	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.01	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	< 0.01	V1
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1
3-Methylpentane	0.01	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	9	V0
Acetone	0.4	4	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.02	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	0.02	V0
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.05	V0
Cyclopentane	0.01	0.01	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	2.5	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.45	V0
Isopentane	0.03	0.38	V0
Isoprene	0.01	0.73	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	31	V0
Methylethylketone	0.3	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0
Methylcyclopentane	0.02	0.03	V0
n-Butane	0.03	0.16	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.03	V0
n-Hexane	0.01	0.02	V0
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.05	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	0.4	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		29-Jul		29-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.04	V0	0.05	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	16.6	V4	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.04	V0
2,2-Dimethylbutane	0.01	0.06	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.02	V0	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.05	V0	0.02	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.41	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.02	V0	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	0.03	V0
3-Methylpentane	0.01	0.34	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	7	V0	6	V0
Acetone	0.4	2	V0	1.8	V0
alpha-Pinene	0.3	3.4	V4	0.3	V0
Benzene	0.01	0.11	V0	0.04	V0
beta-Pinene	0.3	1	V4	< 0.3	V1
cis-2-Butene	0.02	2.58	V4	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.02	V0
Cyclopentane	0.01	0.1	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.3	V0	1.7	V0
Ethylbenzene	0.01	0.01	V0	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.29	V0	0.29	V0
Isopentane	0.03	0.56	V0	0.18	V0
Isoprene	0.01	2.06	V0	0.59	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	0.08	V0
Methanol	3	8	V0	5	V0
Methylethylketone	0.3	0.5	V0	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.01	V0
Methylcyclopentane	0.02	0.08	V0	0.03	V0
n-Butane	0.03	0.47	V0	0.14	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.07	V0	0.04	V0
n-Hexane	0.01	0.22	V0	0.05	V0
n-Nonane	0.01	0.03	V0	0.01	V0
n-Octane	0.02	0.06	V0	< 0.02	V1
n-Pentane	0.1	0.6	V0	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.04	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.19	V0	0.12	V0
trans-2-Butene	0.01	3.68	V4	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.9	V0	0.6	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**29-Jul**		**29-Jul**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.04	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	< 0.02	V1
1-Pentene	0.01	0.02	V0	0.01	V0
2,2,4-Trimethylpentane	0.01	0.15	V0	0.02	V0
2,2-Dimethylbutane	0.01	0.02	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.02	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.11	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.05	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.21	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.05	V0	< 0.02	V1
3-Methylpentane	0.01	0.11	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	7	V0	4	V0
Acetone	0.4	3.8	V0	2.2	V0
alpha-Pinene	0.3	< 0.3	V1	0.6	V0
Benzene	0.01	0.05	V0	0.05	V0
beta-Pinene	0.3	< 0.3	V1	0.3	V0
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	< 0.02	V1
Cyclopentane	0.01	0.02	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	7.2	V0	1.6	V0
Ethylbenzene	0.01	0.03	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.79	V0	0.26	V0
Isopentane	0.03	1.67	V0	0.2	V0
Isoprene	0.01	0.99	V0	1.86	V0
Isopropylalcohol	0.4	< 0.4	V1	0.9	V0
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.07	V0	0.04	V0
Methanol	3	11	V0	6	V0
Methylethylketone	0.3	0.6	V0	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.02	V0
Methylcyclopentane	0.02	0.09	V0	0.03	V0
n-Butane	0.03	0.9	V0	0.1	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.04	V0	0.02	V0
n-Hexane	0.01	0.12	V0	0.05	V0
n-Nonane	0.01	0.01	V0	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.5	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.09	V0	0.72	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	1.2	V0	0.9	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		**Barge Landing**		**Fort McKay South**	
Station #		**AMS 9**		**AMS 13**	
Sample Date		**29-Jul**		**29-Jul**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.03	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	< 0.02	V1
1-Pentene	0.01	0.01	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.11	V0	0.11	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	0.02	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	0.06	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.59	V0	0.53	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.02	V0
3-Methylhexane	0.02	< 0.02	V1	0.04	V0
3-Methylpentane	0.01	0.3	V0	0.28	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	9	V0	6	V0
Acetone	0.4	3.5	V0	2.4	V0
alpha-Pinene	0.3	< 0.3	V1	0.8	V0
Benzene	0.01	0.09	V0	0.09	V0
beta-Pinene	0.3	< 0.3	V1	0.5	V0
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.05	V0
Cyclopentane	0.01	0.14	V0	0.15	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.5	V0	2.2	V0
Ethylbenzene	0.01	0.01	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.38	V0	0.3	V0
Isopentane	0.03	0.98	V0	0.45	V0
Isoprene	0.01	2.22	V0	3.44	V4
Isopropylalcohol	0.4	< 0.4	V1	2.2	V4
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.05	V0
Methanol	3	9	V0	14	V0
Methylethylketone	0.3	0.5	V0	0.6	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	0.06	V0
Methylcyclopentane	0.02	0.07	V0	0.07	V0
n-Butane	0.03	0.06	V0	0.08	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.04	V0	0.08	V0
n-Hexane	0.01	0.19	V0	0.17	V0
n-Nonane	0.01	0.02	V0	0.03	V0
n-Octane	0.02	0.03	V0	0.07	V0
n-Pentane	0.1	1.1	V0	0.9	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.04	V0	0.14	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	1.8	V4	1.7	V4

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**29-Jul**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.03	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.04	V0
1-Pentene	0.01	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1
2,3-Dimethylpentane	0.02	0.02	V0
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.06	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.09	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.03	V0
3-Methylhexane	0.02	0.03	V0
3-Methylpentane	0.01	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	8	V0
Acetone	0.4	4.1	V0
alpha-Pinene	0.3	0.4	V0
Benzene	0.01	0.04	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.04	V0
Cyclopentane	0.01	0.02	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	3.1	V0
Ethylbenzene	0.01	0.05	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.27	V0
Isopentane	0.03	0.4	V0
Isoprene	0.01	2.96	V4
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.1	V0
Methanol	3	21	V0
Methylethylketone	0.3	0.5	V0
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.05	V0
Methylcyclopentane	0.02	0.04	V0
n-Butane	0.03	< 0.03	V1
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.08	V0
n-Hexane	0.01	0.06	V0
n-Nonane	0.01	0.02	V0
n-Octane	0.02	0.09	V0
n-Pentane	0.1	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.01	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.22	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	1.6	V4

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	04-Aug		04-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.03	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.04	V0	< 0.02	V1
1-Pentene	0.01	0.01	V0	0.01	V0
2,2,4-Trimethylpentane	0.01	0.01	V0	0.02	V0
2,2-Dimethylbutane	0.01	0.03	V0	0.04	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.07	V0	0.06	V0
2,3-Dimethylpentane	0.02	0.03	V0	0.05	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.11	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.08	V0	0.14	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.04	V0
3-Methylhexane	0.02	0.03	V0	0.09	V0
3-Methylpentane	0.01	0.07	V0	0.08	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	11	V0	10	V0
Acetone	0.4	8.1	V0	5.1	V0
alpha-Pinene	0.3	4	V4	< 0.3	V1
Benzene	0.01	0.05	V0	0.14	V0
beta-Pinene	0.3	1.1	V4	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	0.05	V0
Cyclopentane	0.01	0.02	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.1	V0	4.7	V0
Ethylbenzene	0.01	0.03	V0	0.05	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.38	V0	0.33	V0
Isopentane	0.03	0.35	V0	0.34	V0
Isoprene	0.01	1.24	V0	0.06	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.06	V0	0.08	V0
Methanol	3	10	V0	10	V0
Methylethylketone	0.3	0.4	V0	0.5	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	0.14	V0
Methylcyclopentane	0.02	0.05	V0	0.09	V0
n-Butane	0.03	0.1	V0	0.17	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.18	V0
n-Hexane	0.01	0.06	V0	0.14	V0
n-Nonane	0.01	0.02	V0	0.05	V0
n-Octane	0.02	0.03	V0	0.13	V0
n-Pentane	0.1	0.3	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	0.7	V0	< 0.5	V1
o-Xylene	0.01	0.03	V0	0.04	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.19	V0	0.18	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.5	V0	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**04-Aug**		**04-Aug**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.03	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.05	V0	0.24	V0
1-Pentene	0.01	0.02	V0	0.02	V0
2,2,4-Trimethylpentane	0.01	0.01	V0	0.03	V0
2,2-Dimethylbutane	0.01	0.04	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.03	V0	0.02	V0
2,3-Dimethylpentane	0.02	0.04	V0	0.02	V0
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.07	V0	0.03	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.19	V0	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.02	V0	< 0.02	V1
3-Methylhexane	0.02	0.07	V0	< 0.02	V1
3-Methylpentane	0.01	0.1	V0	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	9	V0	7	V0
Acetone	0.4	3.5	V0	4.5	V0
alpha-Pinene	0.3	< 0.3	V1	0.9	V0
Benzene	0.01	0.08	V0	0.06	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.02	V0
Cyclopentane	0.01	0.03	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	4.9	V0	4.2	V0
Ethylbenzene	0.01	0.04	V0	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.42	V0	0.32	V0
Isopentane	0.03	0.36	V0	0.31	V0
Isoprene	0.01	0.28	V0	0.43	V0
Isopropylalcohol	0.4	< 0.4	V1	1.1	V4
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.08	V0	0.05	V0
Methanol	3	14	V0	11	V0
Methylethylketone	0.3	0.5	V0	0.3	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.08	V0	0.03	V0
Methylcyclopentane	0.02	0.07	V0	0.04	V0
n-Butane	0.03	0.3	V0	0.21	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.14	V0	0.05	V0
n-Hexane	0.01	0.16	V0	0.08	V0
n-Nonane	0.01	0.03	V0	0.01	V0
n-Octane	0.02	0.08	V0	0.03	V0
n-Pentane	0.1	0.4	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	0.6	V0	1.1	V0
o-Xylene	0.01	0.04	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.15	V0	1.35	V4
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.4	V0	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	04-Aug		04-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.1	V0	0.06	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.13	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	0.02	V0
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	0.02	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.64	V0	0.26	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	0.02	V0
3-Methylpentane	0.01	0.3	V0	0.15	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	8	V0	9	V0
Acetone	0.4	3.1	V0	3.9	V0
alpha-Pinene	0.3	< 0.3	V1	0.3	V0
Benzene	0.01	0.11	V0	0.05	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.05	V0
Cyclopentane	0.01	0.13	V0	0.07	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3.6	V0	4	V0
Ethylbenzene	0.01	0.02	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.29	V0	0.35	V0
Isopentane	0.03	0.83	V0	0.59	V0
Isoprene	0.01	0.67	V0	1.24	V0
Isopropylalcohol	0.4	0.6	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	13	V0	24	V0
Methylethylketone	0.3	0.4	V0	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.03	V0
Methylcyclopentane	0.02	0.06	V0	0.05	V0
n-Butane	0.03	0.07	V0	0.07	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.03	V0	0.04	V0
n-Hexane	0.01	0.17	V0	0.09	V0
n-Nonane	0.01	0.02	V0	0.01	V0
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	1.2	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	0.5	V0	0.6	V0
o-Xylene	0.01	0.01	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.07	V0	0.12	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.6	V0	0.7	V0

Station Name	CNRL Horizon
Station #	AMS 15
Sample Date	04-Aug

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.02	V0
1-Pentene	0.01	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.07	V0
2,3,4-Trimethylpentane	0.01	0.04	V0
2,3-Dimethylbutane	0.02	0.11	V0
2,3-Dimethylpentane	0.02	0.07	V0
2,4-Dimethylpentane	0.01	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.04	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.05	V0
3-Methylpentane	0.01	0.19	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	25	V0
Acetone	0.4	3.7	V0
alpha-Pinene	0.3	0.6	V0
Benzene	0.01	0.03	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.29	V0
Cyclopentane	0.01	0.06	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	5	V0
Ethylbenzene	0.01	0.02	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	1.17	V0
Isopentane	0.03	0.87	V0
Isoprene	0.01	0.71	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	22	V0
Methylethylketone	0.3	0.6	V0
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.11	V0
Methylcyclopentane	0.02	0.16	V0
n-Butane	0.03	0.19	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.08	V0
n-Hexane	0.01	0.04	V0
n-Nonane	0.01	0.02	V0
n-Octane	0.02	0.02	V0
n-Pentane	0.1	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	0.8	V0
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.05	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	0.3	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	10-Aug		10-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	< 0.02	V1
1-Pentene	0.01	0.01	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.01	V0	0.02	V0
2,2-Dimethylbutane	0.01	0.02	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.02	V0	0.01	V0
2,3-Dimethylbutane	0.02	0.02	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	0.02	V0
2,4-Dimethylpentane	0.01	0.01	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.08	V0	0.01	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.06	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	< 0.02	V1
3-Methylhexane	0.02	0.07	V0	0.02	V0
3-Methylpentane	0.01	0.03	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	10	V0	14	V0
Acetone	0.4	4.4	V0	3.8	V0
alpha-Pinene	0.3	3.6	V4	< 0.3	V1
Benzene	0.01	0.05	V0	0.04	V0
beta-Pinene	0.3	1	V4	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3.3	V0	3.3	V0
Ethylbenzene	0.01	0.04	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.36	V0	0.49	V0
Isopentane	0.03	0.18	V0	0.29	V0
Isoprene	0.01	1.05	V0	0.29	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.09	V0	0.04	V0
Methanol	3	14	V0	10	V0
Methylethylketone	0.3	0.4	V0	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.08	V0	0.01	V0
Methylcyclopentane	0.02	0.05	V0	0.02	V0
n-Butane	0.03	0.14	V0	0.21	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.14	V0	0.02	V0
n-Hexane	0.01	0.09	V0	0.04	V0
n-Nonane	0.01	0.04	V0	< 0.01	V1
n-Octane	0.02	0.12	V0	< 0.02	V1
n-Pentane	0.1	0.1	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	0.6	V0	< 0.5	V1
o-Xylene	0.01	0.05	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.23	V0	0.08	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.4	V0	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**10-Aug**		**10-Aug**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.03	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	0.03	V0
1-Pentene	0.01	0.01	V0	0.01	V0
2,2,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	0.02	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	0.01	V0
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	0.04	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	0.15	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.05	V0	0.07	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.06	V0
3-Methylhexane	0.02	< 0.02	V1	0.1	V0
3-Methylpentane	0.01	0.03	V0	0.05	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	16	V0	4	V0
Acetone	0.4	3.8	V0	3.9	V0
alpha-Pinene	0.3	< 0.3	V1	0.9	V0
Benzene	0.01	0.04	V0	0.07	V0
beta-Pinene	0.3	< 0.3	V1	0.4	V0
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	0.04	V0
Cyclopentane	0.01	< 0.01	V1	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3.9	V0	1.2	V0
Ethylbenzene	0.01	0.02	V0	0.06	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.57	V0	0.18	V0
Isopentane	0.03	0.27	V0	0.14	V0
Isoprene	0.01	0.39	V0	1.67	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	0.11	V0
Methanol	3	11	V0	17	V0
Methylethylketone	0.3	0.4	V0	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	0.14	V0
Methylcyclopentane	0.02	0.02	V0	0.1	V0
n-Butane	0.03	0.23	V0	0.12	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.24	V0
n-Hexane	0.01	0.04	V0	0.15	V0
n-Nonane	0.01	< 0.01	V1	0.06	V0
n-Octane	0.02	< 0.02	V1	0.19	V0
n-Pentane	0.1	0.2	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.05	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.07	V0	0.35	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.4	V0	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		10-Aug		10-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	< 0.02	V1
1-Pentene	0.01	0.01	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.01	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.03	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.09	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.1	V0	0.02	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	< 0.02	V1
3-Methylhexane	0.02	0.07	V0	< 0.02	V1
3-Methylpentane	0.01	0.06	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	9	V0	7	V0
Acetone	0.4	4.5	V0	3.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.06	V0	0.05	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.02	V0	< 0.02	V1
Cyclopentane	0.01	0.01	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.8	V0	3.3	V0
Ethylbenzene	0.01	0.04	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.32	V0	0.26	V0
Isopentane	0.03	0.19	V0	0.2	V0
Isoprene	0.01	1.36	V0	0.52	V0
Isopropylalcohol	0.4	0.7	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.07	V0	< 0.03	V1
Methanol	3	16	V0	9	V0
Methylethylketone	0.3	0.4	V0	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.09	V0	< 0.01	V1
Methylcyclopentane	0.02	0.06	V0	< 0.02	V1
n-Butane	0.03	0.09	V0	0.13	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.13	V0	0.01	V0
n-Hexane	0.01	0.12	V0	0.04	V0
n-Nonane	0.01	0.05	V0	< 0.01	V1
n-Octane	0.02	0.11	V0	< 0.02	V1
n-Pentane	0.1	0.3	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.15	V0	0.41	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.6	V0	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**10-Aug**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	< 0.02	V1
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.05	V0
2,3,4-Trimethylpentane	0.01	0.02	V0
2,3-Dimethylbutane	0.02	0.05	V0
2,3-Dimethylpentane	0.02	0.05	V0
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.08	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.13	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.03	V0
3-Methylhexane	0.02	0.07	V0
3-Methylpentane	0.01	0.1	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	5	V0
Acetone	0.4	3.5	V0
alpha-Pinene	0.3	0.8	V0
Benzene	0.01	0.04	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.09	V0
Cyclopentane	0.01	0.04	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	3.5	V0
Ethylbenzene	0.01	0.03	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.3	V0
Isopentane	0.03	0.37	V0
Isoprene	0.01	0.99	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.04	V0
Methanol	3	16	V0
Methylethylketone	0.3	0.3	V0
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.1	V0
Methylcyclopentane	0.02	0.08	V0
n-Butane	0.03	0.1	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.15	V0
n-Hexane	0.01	0.09	V0
n-Nonane	0.01	0.03	V0
n-Octane	0.02	0.08	V0
n-Pentane	0.1	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.02	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.1	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	0.5	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		16-Aug		16-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.09	V0	0.04	V0
1-Pentene	0.01	0.01	V0	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,2-Dimethylbutane	0.01	0.01	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.02	V0	0.02	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.03	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.03	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	0.03	V0
3-Methylpentane	0.01	0.03	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	196	V4	68	V4
Acetone	0.4	5.1	V0	3.8	V0
alpha-Pinene	0.3	0.5	V0	0.4	V0
Benzene	0.01	0.03	V0	0.02	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	6.1	V0	3.7	V0
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	24	V4	< 3	V1
Isobutane	0.02	1.53	V0	0.64	V0
Isopentane	0.03	0.39	V0	0.25	V0
Isoprene	0.01	1.58	V0	1.25	V0
Isopropylalcohol	0.4	0.4	V0	1.7	V4
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	0.03	V0
Methanol	3	61	V0	44	V0
Methylethylketone	0.3	1	V0	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	< 0.01	V1
Methylcyclopentane	0.02	0.03	V0	< 0.02	V1
n-Butane	0.03	0.17	V0	0.25	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.03	V0	0.02	V0
n-Hexane	0.01	0.04	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	< 0.1	V1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.13	V0	0.05	V0
trans-2-Butene	0.01	0.01	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	1.5	V4	1	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**16-Aug**		**16-Aug**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.12	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	0.03	V0	0.02	V0
1,3-Butadiene	0.02	< 0.02	V1	0.03	V0
1-Butene	0.02	0.06	V0	0.07	V0
1-Pentene	0.01	0.02	V0	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.02	V0
2,2-Dimethylbutane	0.01	< 0.01	V1	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	0.02	V0
2,4-Dimethylpentane	0.01	0.01	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	0.01	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.07	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	< 0.02	V1
3-Methylpentane	0.01	0.04	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	31	V0	24	V0
Acetone	0.4	3.4	V0	4.4	V0
alpha-Pinene	0.3	0.4	V0	< 0.3	V1
Benzene	0.01	0.08	V0	0.05	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	0.02	V0
Cyclohexane	0.02	< 0.02	V1	0.02	V0
Cyclopentane	0.01	< 0.01	V1	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	4.8	V0	2.2	V0
Ethylbenzene	0.01	0.03	V0	0.03	V0
Formaldehyde	3	8	V0	7	V0
Isobutane	0.02	0.46	V0	0.25	V0
Isopentane	0.03	0.43	V0	0.21	V0
Isoprene	0.01	1.57	V0	1.5	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	0.01	V0
m,p-Xylene	0.03	0.1	V0	0.06	V0
Methanol	3	46	V0	35	V0
Methylethylketone	0.3	0.5	V0	0.3	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.02	V0
Methylcyclopentane	0.02	0.04	V0	0.02	V0
n-Butane	0.03	0.44	V0	0.22	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.03	V0	0.04	V0
n-Hexane	0.01	0.06	V0	0.05	V0
n-Nonane	0.01	0.01	V0	0.01	V0
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.2	V0	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.05	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.16	V0	0.42	V0
trans-2-Butene	0.01	0.01	V0	0.03	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	0.9	V0	0.7	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		16-Aug		16-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.06	V0
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.04	V0	0.02	V0
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.12	V0	0.02	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.05	V0	0.01	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	< 0.02	V1
3-Methylhexane	0.02	0.06	V0	< 0.02	V1
3-Methylpentane	0.01	0.04	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	57	V4	32	V0
Acetone	0.4	6.6	V0	12.9	V0
alpha-Pinene	0.3	< 0.3	V1	0.4	V0
Benzene	0.01	0.05	V0	0.04	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3.9	V0	1.7	V0
Ethylbenzene	0.01	0.04	V0	0.01	V0
Formaldehyde	3	9	V0	< 3	V1
Isobutane	0.02	0.51	V0	0.31	V0
Isopentane	0.03	0.25	V0	0.23	V0
Isoprene	0.01	1.24	V0	3.43	V4
Isopropylalcohol	0.4	1.1	V4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.1	V0	< 0.03	V1
Methanol	3	59	V0	73	V0
Methylethylketone	0.3	0.5	V0	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.1	V0	0.03	V0
Methylcyclopentane	0.02	0.04	V0	< 0.02	V1
n-Butane	0.03	0.15	V0	0.12	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.11	V0	0.02	V0
n-Hexane	0.01	0.05	V0	0.03	V0
n-Nonane	0.01	0.06	V0	< 0.01	V1
n-Octane	0.02	0.13	V0	< 0.02	V1
n-Pentane	0.1	< 0.1	V1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	0.8	V0
o-Xylene	0.01	0.05	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.16	V0	0.09	V0
trans-2-Butene	0.01	< 0.01	V1	0.01	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	1.1	V0	0.6	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**16-Aug**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.07	V0
1-Pentene	0.01	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0
2,3,4-Trimethylpentane	0.01	0.01	V0
2,3-Dimethylbutane	0.02	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.01	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.05	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1
3-Methylpentane	0.01	0.13	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	41	V0
Acetone	0.4	5.3	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.02	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.12	V0
Cyclopentane	0.01	0.03	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	5	V0
Ethylbenzene	0.01	0.02	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.36	V0
Isopentane	0.03	0.65	V0
Isoprene	0.01	2.34	V0
Isopropylalcohol	0.4	1.4	V4
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.04	V0
Methanol	3	86	V0
Methylethylketone	0.3	0.5	V0
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0
Methylcyclopentane	0.02	0.12	V0
n-Butane	0.03	0.14	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.01	V0
n-Hexane	0.01	0.11	V0
n-Nonane	0.01	0.01	V0
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.02	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.26	V0
trans-2-Butene	0.01	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	0.8	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	22-Aug		22-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.03	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.05	V0	0.08	V0
1-Pentene	0.01	< 0.01	V1	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.02	V0
2,2-Dimethylbutane	0.01	0.11	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.14	V0	0.03	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	0.08	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.15	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.54	V0	0.19	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.05	V0
3-Methylhexane	0.02	< 0.02	V1	0.23	V0
3-Methylpentane	0.01	0.26	V0	0.11	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	54	V4	41	V0
Acetone	0.4	2.8	V0	2.7	V0
alpha-Pinene	0.3	0.5	V0	< 0.3	V1
Benzene	0.01	0.08	V0	0.06	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	0.07	V0
Cyclopentane	0.01	0.14	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	4.2	V0	3.6	V0
Ethylbenzene	0.01	0.01	V0	0.06	V0
Formaldehyde	3	9	V0	6	V0
Isobutane	0.02	0.45	V0	0.49	V0
Isopentane	0.03	0.85	V0	0.74	V0
Isoprene	0.01	0.37	V0	0.12	V0
Isopropylalcohol	0.4	1.5	V4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.03	V0	0.14	V0
Methanol	3	44	V0	40	V0
Methylethylketone	0.3	0.5	V0	0.5	V0
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	0.15	V0
Methylcyclopentane	0.02	0.05	V0	0.17	V0
n-Butane	0.03	0.06	V0	0.52	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.01	V0	0.46	V0
n-Hexane	0.01	0.16	V0	0.33	V0
n-Nonane	0.01	< 0.01	V1	0.08	V0
n-Octane	0.02	< 0.02	V1	0.19	V0
n-Pentane	0.1	1	V0	0.7	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	0.07	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.1	V0	0.23	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**22-Aug**		**22-Aug**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.05	V0	0.03	V0
1-Pentene	0.01	0.02	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.04	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.04	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.06	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.07	V0	0.02	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.07	V0	< 0.02	V1
3-Methylpentane	0.01	0.05	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	40	V0	25	V0
Acetone	0.4	2.4	V0	3.6	V0
alpha-Pinene	0.3	< 0.3	V1	0.4	V0
Benzene	0.01	0.03	V0	< 0.01	V1
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	< 0.02	V1
Cyclopentane	0.01	0.01	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3.2	V0	2.6	V0
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	8	V0	8	V0
Isobutane	0.02	0.41	V0	0.22	V0
Isopentane	0.03	0.78	V0	0.17	V0
Isoprene	0.01	0.17	V0	0.24	V0
Isopropylalcohol	0.4	< 0.4	V1	1.2	V4
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.06	V0	< 0.03	V1
Methanol	3	43	V0	30	V0
Methylethylketone	0.3	0.4	V0	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.06	V0	< 0.01	V1
Methylcyclopentane	0.02	0.07	V0	0.03	V0
n-Butane	0.03	0.26	V0	0.07	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.14	V0	0.02	V0
n-Hexane	0.01	0.12	V0	0.04	V0
n-Nonane	0.01	0.03	V0	< 0.01	V1
n-Octane	0.02	0.07	V0	< 0.02	V1
n-Pentane	0.1	0.8	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.1	V0	0.37	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**		**Fort McKay South**	
Station #	**AMS 9**		**AMS 13**	
Sample Date	**22-Aug**		**22-Aug**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.02	V0	0.03	V0
1-Pentene	0.01	0.02	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.82	V0	0.09	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	0.01	V0
2,3-Dimethylbutane	0.02	0.94	V0	0.11	V0
2,3-Dimethylpentane	0.02	0.04	V0	0.02	V0
2,4-Dimethylpentane	0.01	0.02	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	4.58	V4	0.32	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	< 0.02	V1
3-Methylpentane	0.01	2.2	V4	0.18	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	33	V0	32	V0
Acetone	0.4	2	V0	1.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.52	V0	0.05	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.09	V0	0.03	V0
Cyclopentane	0.01	1.26	V4	0.1	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.8	V0	1.7	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	8	V0	7	V0
Isobutane	0.02	0.32	V0	0.34	V0
Isopentane	0.03	5.21	V4	0.61	V0
Isoprene	0.01	0.38	V0	0.49	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	45	V0	46	V0
Methylethylketone	0.3	0.3	V0	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.02	V0
Methylcyclopentane	0.02	0.35	V0	0.05	V0
n-Butane	0.03	0.07	V0	0.07	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.02	V0
n-Hexane	0.01	1.28	V4	0.1	V0
n-Nonane	0.01	0.01	V0	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	7.8	V4	0.7	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.04	V0	0.08	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.02	V0	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**22-Aug**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.03	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.02	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.01	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1
3-Methylpentane	0.01	0.01	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	37	V0
Acetone	0.4	1.9	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	< 0.01	V1
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	3.3	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	8	V0
Isobutane	0.02	0.32	V0
Isopentane	0.03	0.16	V0
Isoprene	0.01	0.21	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	57	V0
Methylethylketone	0.3	0.3	V0
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1
Methylcyclopentane	0.02	< 0.02	V1
n-Butane	0.03	0.05	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.02	V0
n-Hexane	0.01	< 0.01	V1
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.02	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		28-Aug		28-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.04	V0	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.06	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.04	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.04	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	< 0.01	V1	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.05	V0	< 0.02	V1
3-Methylpentane	0.01	0.09	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	5	V0	15	V0
Acetone	0.4	2.4	V0	2.5	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	< 0.01	V1	0.01	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.14	V0	< 0.02	V1
Cyclopentane	0.01	0.03	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.6	V0	2.1	V0
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	5	V0
Isobutane	0.02	0.44	V0	0.12	V0
Isopentane	0.03	0.46	V0	0.14	V0
Isoprene	0.01	0.16	V0	0.14	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	< 0.03	V1
Methanol	3	7	V0	13	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.07	V0	0.01	V0
Methylcyclopentane	0.02	0.1	V0	0.04	V0
n-Butane	0.03	0.06	V0	< 0.03	V1
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.09	V0	0.02	V0
n-Hexane	0.01	< 0.01	V1	0.08	V0
n-Nonane	0.01	0.01	V0	< 0.01	V1
n-Octane	0.02	0.04	V0	< 0.02	V1
n-Pentane	0.1	< 0.1	V1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.09	V0	0.01	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**28-Aug**		**28-Aug**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.02	V0	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.03	V0	0.02	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.03	V0	0.01	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	8	V0	15	V0
Acetone	0.4	1.5	V0	2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.02	V0	< 0.01	V1
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.01	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.7	V0	2.7	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	11	V4
Isobutane	0.02	0.29	V0	0.14	V0
Isopentane	0.03	0.2	V0	0.12	V0
Isoprene	0.01	0.07	V0	0.09	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	9	V0	19	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	0.02	V0	< 0.02	V1
n-Butane	0.03	0.17	V0	0.06	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.01	V0
n-Hexane	0.01	0.04	V0	< 0.01	V1
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	< 0.1	V1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.02	V0	0.31	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	28-Aug		28-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.21	V0	0.03	V0
2,3-Dimethylpentane	0.02	0.05	V0	0.03	V0
2,4-Dimethylpentane	0.01	0.08	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.04	V0	0.05	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	1.59	V4	< 0.01	V1
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.02	V0	0.02	V0
3-Methylhexane	0.02	0.06	V0	0.08	V0
3-Methylpentane	0.01	3.94	V4	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	20	V0	4	V0
Acetone	0.4	7.3	V0	2.5	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	< 0.01	V1	< 0.01	V1
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.37	V0	0.07	V0
Cyclopentane	0.01	0.05	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.4	V0	1.5	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	7	V0	< 3	V1
Isobutane	0.02	0.57	V0	0.26	V0
Isopentane	0.03	0.65	V0	0.25	V0
Isoprene	0.01	0.16	V0	0.15	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	29	V0	10	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.09	V0	0.07	V0
Methylcyclopentane	0.02	7.15	V4	0.05	V0
n-Butane	0.03	0.28	V0	0.04	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.04	V0	0.15	V0
n-Hexane	0.01	15	V4	0.01	V0
n-Nonane	0.01	0.01	V0	0.02	V0
n-Octane	0.02	0.03	V0	0.06	V0
n-Pentane	0.1	0.2	V0	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.19	V0	0.05	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**28-Aug**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.04	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.27	V0
2,3,4-Trimethylpentane	0.01	0.07	V0
2,3-Dimethylbutane	0.02	0.6	V0
2,3-Dimethylpentane	0.02	0.26	V0
2,4-Dimethylpentane	0.01	0.08	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.14	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.04	V0
3-Methylhexane	0.02	0.17	V0
3-Methylpentane	0.01	0.75	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	6	V0
Acetone	0.4	3.3	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.02	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	1.33	V4
Cyclopentane	0.01	0.31	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1.7	V0
Ethylbenzene	0.01	0.01	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	2.51	V0
Isopentane	0.03	3.73	V0
Isoprene	0.01	0.08	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.03	V0
Methanol	3	10	V0
Methylethylketone	0.3	0.3	V0
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.56	V0
Methylcyclopentane	0.02	0.91	V0
n-Butane	0.03	0.36	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.3	V0
n-Hexane	0.01	0.02	V0
n-Nonane	0.01	0.04	V0
n-Octane	0.02	0.12	V0
n-Pentane	0.1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.02	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.07	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		03-Sep		03-Sep	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.03	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	0.02	V0	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.08	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.06	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.06	V0	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.01	V0	0.01	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	< 0.02	V1
3-Methylhexane	0.02	0.09	V0	< 0.02	V1
3-Methylpentane	0.01	0.11	V0	< 0.01	V1
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	8	V0	14	V0
Acetone	0.4	2.2	V0	2.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	< 0.01	V1	< 0.01	V1
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.17	V0	< 0.02	V1
Cyclopentane	0.01	0.05	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2	V0	3.2	V0
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.66	V0	0.35	V0
Isopentane	0.03	0.67	V0	0.12	V0
Isoprene	0.01	0.09	V0	0.05	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	< 0.03	V1
Methanol	3	10	V0	8	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.11	V0	< 0.01	V1
Methylcyclopentane	0.02	0.12	V0	< 0.02	V1
n-Butane	0.03	0.14	V0	0.05	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.17	V0	< 0.01	V1
n-Hexane	0.01	0.02	V0	0.01	V0
n-Nonane	0.01	0.03	V0	< 0.01	V1
n-Octane	0.02	0.07	V0	< 0.02	V1
n-Pentane	0.1	< 0.1	V1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.12	V0	0.02	V0
trans-2-Butene	0.01	0.01	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**03-Sep**		**03-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.01	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.02	V0	0.12	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	0.03	V0
3-Methylpentane	0.01	0.01	V0	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	7	V0	7	V0
Acetone	0.4	1.8	V0	2.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	< 0.01	V1	0.1	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	0.04	V0
Cyclopentane	0.01	< 0.01	V1	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3.1	V0	3.3	V0
Ethylbenzene	0.01	< 0.01	V1	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.27	V0	0.23	V0
Isopentane	0.03	0.17	V0	0.41	V0
Isoprene	0.01	0.1	V0	0.16	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	9	V0	7	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	0.03	V0
Methylcyclopentane	0.02	< 0.02	V1	0.05	V0
n-Butane	0.03	0.22	V0	0.12	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.04	V0
n-Hexane	0.01	0.02	V0	0.13	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	< 0.1	V1	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	2.1	V4
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.02	V0	0.25	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	03-Sep		03-Sep	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.06	V0	0.04	V0
2,3-Dimethylpentane	0.02	0.04	V0	0.04	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.03	V0	0.04	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.02	V0	0.02	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.04	V0	0.08	V0
3-Methylpentane	0.01	0.07	V0	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	12	V0	9	V0
Acetone	0.4	2.2	V0	2.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	< 0.01	V1	< 0.01	V1
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.12	V0	0.1	V0
Cyclopentane	0.01	0.04	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.5	V0	4.5	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.56	V0	0.39	V0
Isopentane	0.03	0.51	V0	0.39	V0
Isoprene	0.01	0.1	V0	0.12	V0
Isopropylalcohol	0.4	0.7	V0	0.6	V0
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	12	V0	12	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.06	V0	0.06	V0
Methylcyclopentane	0.02	0.09	V0	0.07	V0
n-Butane	0.03	0.1	V0	0.07	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.09	V0	0.13	V0
n-Hexane	0.01	0.04	V0	0.01	V0
n-Nonane	0.01	0.02	V0	0.02	V0
n-Octane	0.02	0.04	V0	0.05	V0
n-Pentane	0.1	< 0.1	V1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.04	V0	0.04	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**03-Sep**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.02	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.34	V0
2,3,4-Trimethylpentane	0.01	0.09	V0
2,3-Dimethylbutane	0.02	0.76	V0
2,3-Dimethylpentane	0.02	0.3	V0
2,4-Dimethylpentane	0.01	0.1	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.13	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.04	V0
3-Methylhexane	0.02	0.14	V0
3-Methylpentane	0.01	0.9	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	6	V0
Acetone	0.4	2.4	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	< 0.01	V1
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	1.68	V4
Cyclopentane	0.01	0.42	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1.9	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	3.55	V0
Isopentane	0.03	4.9	V0
Isoprene	0.01	0.08	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.03	V0
Methanol	3	11	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.52	V0
Methylcyclopentane	0.02	1.13	V4
n-Butane	0.03	0.47	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.22	V0
n-Hexane	0.01	0.01	V0
n-Nonane	0.01	0.04	V0
n-Octane	0.02	0.08	V0
n-Pentane	0.1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.01	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.06	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		09-Sep		09-Sep	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.02	V0
2,2-Dimethylbutane	0.01	0.05	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.1	V0	0.04	V0
2,3-Dimethylpentane	0.02	0.07	V0	0.02	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.07	V0	0.03	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.03	V0	0.12	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	< 0.02	V1
3-Methylhexane	0.02	0.1	V0	0.05	V0
3-Methylpentane	0.01	0.13	V0	0.07	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	5	V0	4	V0
Acetone	0.4	1.9	V0	2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	< 0.01	V1	0.03	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.21	V0	< 0.02	V1
Cyclopentane	0.01	0.06	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.1	V0	1.7	V0
Ethylbenzene	0.01	0.02	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.81	V0	0.37	V0
Isopentane	0.03	0.78	V0	0.31	V0
Isoprene	0.01	0.11	V0	0.06	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	0.05	V0
Methanol	3	6	V0	6	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.13	V0	0.03	V0
Methylcyclopentane	0.02	0.14	V0	0.03	V0
n-Butane	0.03	0.16	V0	0.45	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.2	V0	0.06	V0
n-Hexane	0.01	0.04	V0	0.08	V0
n-Nonane	0.01	0.03	V0	0.02	V0
n-Octane	0.02	0.09	V0	0.04	V0
n-Pentane	0.1	< 0.1	V1	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.1	V0	0.08	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**09-Sep**		**09-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.04	V0	0.02	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.02	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.04	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.03	V0	0.01	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.13	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.05	V0	< 0.02	V1
3-Methylpentane	0.01	0.07	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	4	V0	5	V0
Acetone	0.4	1.6	V0	2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.04	V0	0.01	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.02	V0	< 0.02	V1
Cyclopentane	0.01	0.04	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.7	V0	0.8	V0
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	6	V4	< 3	V1
Isobutane	0.02	0.18	V0	0.05	V0
Isopentane	0.03	0.32	V0	0.14	V0
Isoprene	0.01	0.05	V0	0.07	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.06	V0	< 0.03	V1
Methanol	3	6	V0	5	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	0.01	V0
Methylcyclopentane	0.02	0.04	V0	< 0.02	V1
n-Butane	0.03	0.35	V0	0.1	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.08	V0	0.03	V0
n-Hexane	0.01	0.07	V0	0.03	V0
n-Nonane	0.01	0.03	V0	< 0.01	V1
n-Octane	0.02	0.05	V0	< 0.02	V1
n-Pentane	0.1	0.2	V0	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.08	V0	0.21	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		09-Sep		09-Sep	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	0.03	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0	0.04	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.06	V0	0.06	V0
2,3-Dimethylpentane	0.02	0.02	V0	0.04	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.03	V0	0.05	V0
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.05	V0	0.12	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.04	V0	0.07	V0
3-Methylpentane	0.01	0.06	V0	0.09	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	3	V0	5	V0
Acetone	0.4	1.5	V0	1.6	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.01	V0	0.02	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	0.06	V0
Cyclopentane	0.01	0.03	V0	0.04	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1	V0	2	V0
Ethylbenzene	0.01	< 0.01	V1	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.27	V0	0.3	V0
Isopentane	0.03	0.28	V0	0.33	V0
Isoprene	0.01	0.08	V0	0.1	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.03	V0
Methanol	3	6	V0	7	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.07	V0
Methylcyclopentane	0.02	0.05	V0	0.07	V0
n-Butane	0.03	0.09	V0	0.11	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.13	V0
n-Hexane	0.01	0.04	V0	0.09	V0
n-Nonane	0.01	0.02	V0	0.03	V0
n-Octane	0.02	0.03	V0	0.06	V0
n-Pentane	0.1	< 0.1	V1	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.03	V0	0.06	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**09-Sep**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	< 0.02	V1
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.05	V0
2,3,4-Trimethylpentane	0.01	0.02	V0
2,3-Dimethylbutane	0.02	0.11	V0
2,3-Dimethylpentane	0.02	0.05	V0
2,4-Dimethylpentane	0.01	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.03	V0
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.05	V0
3-Methylpentane	0.01	0.15	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	3	V0
Acetone	0.4	1.6	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.01	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.22	V0
Cyclopentane	0.01	0.06	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.8	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.78	V0
Isopentane	0.03	0.89	V0
Isoprene	0.01	0.1	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	8	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.1	V0
Methylcyclopentane	0.02	0.16	V0
n-Butane	0.03	0.13	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.07	V0
n-Hexane	0.01	0.03	V0
n-Nonane	0.01	0.01	V0
n-Octane	0.02	0.03	V0
n-Pentane	0.1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.03	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		15-Sep		15-Sep	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.05	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	0.02	V0
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.06	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.01	V0	0.04	V0
2,2-Dimethylbutane	0.01	0.12	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.14	V0	0.04	V0
2,3-Dimethylpentane	0.02	0.03	V0	0.04	V0
2,4-Dimethylpentane	0.01	0.01	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.03	V0
2-Methylhexane	0.01	< 0.01	V1	0.07	V0
2-Methylpentane	0.01	0.66	V0	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.02	V0
3-Methylhexane	0.02	0.04	V0	0.06	V0
3-Methylpentane	0.01	0.31	V0	0.07	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	11	V0	5	V0
Acetone	0.4	2.7	V0	3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.09	V0	0.06	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.04	V0
Cyclopentane	0.01	0.16	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.8	V0	2.6	V0
Ethylbenzene	0.01	0.02	V0	0.04	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.38	V0	0.34	V0
Isopentane	0.03	0.85	V0	0.39	V0
Isoprene	0.01	0.19	V0	0.11	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	0.09	V0
Methanol	3	9	V0	9	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.05	V0
Methylcyclopentane	0.02	0.07	V0	0.06	V0
n-Butane	0.03	0.16	V0	0.34	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.03	V0	0.08	V0
n-Hexane	0.01	0.2	V0	0.09	V0
n-Nonane	0.01	0.01	V0	0.03	V0
n-Octane	0.02	< 0.02	V1	0.05	V0
n-Pentane	0.1	1.3	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.04	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.1	V0	0.12	V0
trans-2-Butene	0.01	< 0.01	V1	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**15-Sep**		**15-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.04	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.05	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.07	V0	0.02	V0
2,3-Dimethylpentane	0.02	0.05	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.02	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.04	V0	0.02	V0
2-Methylhexane	0.01	0.08	V0	< 0.01	V1
2-Methylpentane	0.01	0.18	V0	0.06	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.02	V0	< 0.02	V1
3-Methylhexane	0.02	0.06	V0	0.04	V0
3-Methylpentane	0.01	0.13	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	6	V0	6	V0
Acetone	0.4	2.6	V0	2.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.05	V0	0.03	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	0.03	V0
Cyclopentane	0.01	0.06	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3.9	V0	2.3	V0
Ethylbenzene	0.01	0.03	V0	0.01	V0
Formaldehyde	3	< 3	V1	3	V4
Isobutane	0.02	0.64	V0	0.3	V0
Isopentane	0.03	0.56	V0	0.24	V0
Isoprene	0.01	0.12	V0	0.13	V0
Isopropylalcohol	0.4	< 0.4	V1	0.4	V0
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.09	V0	< 0.03	V1
Methanol	3	9	V0	10	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.07	V0	0.03	V0
Methylcyclopentane	0.02	0.09	V0	0.04	V0
n-Butane	0.03	0.4	V0	0.14	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.1	V0	0.04	V0
n-Hexane	0.01	0.12	V0	0.05	V0
n-Nonane	0.01	0.03	V0	0.01	V0
n-Octane	0.02	0.06	V0	0.02	V0
n-Pentane	0.1	0.4	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.11	V0	0.24	V0
trans-2-Butene	0.01	0.01	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	15-Sep		15-Sep	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.04	V0	0.06	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.15	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.19	V0	0.03	V0
2,3-Dimethylpentane	0.02	0.02	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.03	V0
2-Methylhexane	0.01	< 0.01	V1	0.05	V0
2-Methylpentane	0.01	0.75	V0	0.15	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	0.05	V0
3-Methylpentane	0.01	0.4	V0	0.08	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	4	V0	6	V0
Acetone	0.4	2.4	V0	2.2	V0
alpha-Pinene	0.3	< 0.3	V1	0.4	V0
Benzene	0.01	0.09	V0	0.04	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.05	V0	0.02	V0
Cyclopentane	0.01	0.21	V0	0.04	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.4	V0	1.2	V0
Ethylbenzene	0.01	< 0.01	V1	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.35	V0	0.22	V0
Isopentane	0.03	1.04	V0	0.25	V0
Isoprene	0.01	0.12	V0	0.35	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.04	V0
Methanol	3	9	V0	8	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	0.03	V0
Methylcyclopentane	0.02	0.08	V0	0.04	V0
n-Butane	0.03	0.07	V0	0.1	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.03	V0	0.08	V0
n-Hexane	0.01	0.19	V0	0.1	V0
n-Nonane	0.01	0.01	V0	0.02	V0
n-Octane	0.02	< 0.02	V1	0.04	V0
n-Pentane	0.1	1.5	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.03	V0	0.07	V0
trans-2-Butene	0.01	< 0.01	V1	0.01	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**15-Sep**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	0.02	V0
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.03	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.29	V0
2,3,4-Trimethylpentane	0.01	0.05	V0
2,3-Dimethylbutane	0.02	0.49	V0
2,3-Dimethylpentane	0.02	0.24	V0
2,4-Dimethylpentane	0.01	0.05	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.26	V0
2-Methylhexane	0.01	0.28	V0
2-Methylpentane	0.01	0.94	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.09	V0
3-Methylhexane	0.02	0.36	V0
3-Methylpentane	0.01	0.86	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	6	V0
Acetone	0.4	2.7	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.1	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.68	V0
Cyclopentane	0.01	0.37	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1.8	V0
Ethylbenzene	0.01	0.03	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	1.81	V0
Isopentane	0.03	2.76	V0
Isoprene	0.01	0.13	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.07	V0
Methanol	3	10	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.43	V0
Methylcyclopentane	0.02	0.43	V0
n-Butane	0.03	0.31	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.8	V0
n-Hexane	0.01	0.27	V0
n-Nonane	0.01	0.1	V0
n-Octane	0.02	0.3	V0
n-Pentane	0.1	1.8	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.03	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.15	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	21-Sep		21-Sep	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.03	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.03	V0
2,2-Dimethylbutane	0.01	0.05	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.07	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.03	V0	0.01	V0
2-Methylhexane	0.01	0.06	V0	0.05	V0
2-Methylpentane	0.01	0.22	V0	0.06	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.04	V0	0.04	V0
3-Methylpentane	0.01	0.16	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	6	V0	3	V0
Acetone	0.4	2.5	V0	2.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.05	V0	0.04	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	< 0.02	V1
Cyclopentane	0.01	0.08	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.8	V0	2.2	V0
Ethylbenzene	0.01	0.01	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.61	V0	0.27	V0
Isopentane	0.03	0.59	V0	0.22	V0
Isoprene	0.01	0.07	V0	0.03	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	0.05	V0
Methanol	3	92	V4	11	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.02	V0
Methylcyclopentane	0.02	0.08	V0	0.03	V0
n-Butane	0.03	0.25	V0	0.29	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.06	V0	0.04	V0
n-Hexane	0.01	0.14	V0	0.05	V0
n-Nonane	0.01	0.01	V0	< 0.01	V1
n-Octane	0.02	0.03	V0	< 0.02	V1
n-Pentane	0.1	0.6	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.11	V0	0.1	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**21-Sep**		**21-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.04	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.08	V0	0.03	V0
1-Pentene	0.01	0.03	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.05	V0	0.02	V0
2,2-Dimethylbutane	0.01	0.01	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.02	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.04	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.06	V0	0.02	V0
2,4-Dimethylpentane	0.01	0.03	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	< 0.01	V1
2-Methylhexane	0.01	0.08	V0	0.04	V0
2-Methylpentane	0.01	0.12	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.05	V0	0.03	V0
3-Methylpentane	0.01	0.08	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	7	V0	3	V0
Acetone	0.4	2.2	V0	2.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.09	V0	0.06	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.03	V0	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.02	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	5.8	V0	1.2	V0
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.92	V0	0.18	V0
Isopentane	0.03	0.75	V0	0.15	V0
Isoprene	0.01	0.05	V0	0.02	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.08	V0	< 0.03	V1
Methanol	3	5	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	< 0.01	V1
Methylcyclopentane	0.02	0.06	V0	< 0.02	V1
n-Butane	0.03	1.99	V4	0.15	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.01	V0
n-Hexane	0.01	0.1	V0	0.02	V0
n-Nonane	0.01	0.01	V0	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.3	V0	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.15	V0	0.12	V0
trans-2-Butene	0.01	0.02	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.04	V0	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		**Barge Landing**		**Fort McKay South**	
Station #		**AMS 9**		**AMS 13**	
Sample Date		**21-Sep**		**21-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.03	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.06	V0	0.03	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0	0.04	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.05	V0	0.06	V0
2,3-Dimethylpentane	0.02	0.03	V0	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.06	V0	0.06	V0
2-Methylhexane	0.01	0.05	V0	0.05	V0
2-Methylpentane	0.01	0.1	V0	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.02	V0	< 0.02	V1
3-Methylhexane	0.02	0.05	V0	0.05	V0
3-Methylpentane	0.01	0.1	V0	0.09	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	4	V0	5	V0
Acetone	0.4	1.7	V0	1.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.03	V0	0.02	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	0.06	V0
Cyclopentane	0.01	0.04	V0	0.04	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1	V0	1.4	V0
Ethylbenzene	0.01	0.01	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.44	V0	0.56	V0
Isopentane	0.03	0.34	V0	0.34	V0
Isoprene	0.01	0.09	V0	0.11	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	< 0.03	V1
Methanol	3	7	V0	9	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.08	V0	0.07	V0
Methylcyclopentane	0.02	0.09	V0	0.06	V0
n-Butane	0.03	0.22	V0	0.2	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.08	V0	0.06	V0
n-Hexane	0.01	0.12	V0	0.05	V0
n-Nonane	0.01	0.03	V0	0.02	V0
n-Octane	0.02	0.06	V0	0.05	V0
n-Pentane	0.1	0.2	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.07	V0	0.06	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**21-Sep**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	< 0.02	V1
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.06	V0
2,3-Dimethylpentane	0.02	0.04	V0
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.02	V0
2-Methylhexane	0.01	0.05	V0
2-Methylpentane	0.01	0.07	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.05	V0
3-Methylpentane	0.01	0.11	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	5	V0
Acetone	0.4	2	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.01	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.1	V0
Cyclopentane	0.01	0.04	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1.9	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.7	V0
Isopentane	0.03	0.58	V0
Isoprene	0.01	0.06	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	6	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.07	V0
Methylcyclopentane	0.02	0.08	V0
n-Butane	0.03	0.21	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.06	V0
n-Hexane	0.01	0.04	V0
n-Nonane	0.01	0.02	V0
n-Octane	0.02	0.03	V0
n-Pentane	0.1	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.04	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	27-Sep		27-Sep	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.05	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.05	V0	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,2-Dimethylbutane	0.01	0.03	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.04	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.14	V0	< 0.01	V1
2-Methylhexane	0.01	0.09	V0	0.04	V0
2-Methylpentane	0.01	0.06	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.06	V0	< 0.02	V1
3-Methylhexane	0.02	0.1	V0	< 0.02	V1
3-Methylpentane	0.01	0.04	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	4	V0	4	V0
Acetone	0.4	3.5	V0	2.1	V0
alpha-Pinene	0.3	0.4	V0	< 0.3	V1
Benzene	0.01	0.04	V0	0.02	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.05	V0	< 0.02	V1
Cyclopentane	0.01	0.02	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2	V0	1.7	V0
Ethylbenzene	0.01	0.04	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.21	V0	0.23	V0
Isopentane	0.03	0.2	V0	0.17	V0
Isoprene	0.01	0.09	V0	0.02	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	0.01	V0	< 0.01	V1
m,p-Xylene	0.03	0.1	V0	< 0.03	V1
Methanol	3	4	V0	5	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.14	V0	< 0.01	V1
Methylcyclopentane	0.02	0.07	V0	< 0.02	V1
n-Butane	0.03	0.22	V0	0.24	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.24	V0	0.01	V0
n-Hexane	0.01	0.12	V0	0.03	V0
n-Nonane	0.01	0.07	V0	< 0.01	V1
n-Octane	0.02	0.22	V0	< 0.02	V1
n-Pentane	0.1	0.1	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.06	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.21	V0	0.05	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**27-Sep**		**27-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.02	V0	0.03	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	0.03	V0	< 0.01	V1
2-Methylpentane	0.01	0.03	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.02	V0	0.01	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	3	V0	3	V0
Acetone	0.4	2	V0	2.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.02	V0	0.02	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.1	V0	1.6	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.27	V0	0.17	V0
Isopentane	0.03	0.19	V0	0.14	V0
Isoprene	0.01	0.03	V0	0.03	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	6	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	0.02	V0	< 0.02	V1
n-Butane	0.03	0.35	V0	0.18	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	0.01	V0
n-Hexane	0.01	0.03	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.1	V0	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.04	V0	0.11	V0
trans-2-Butene	0.01	0.01	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**		**Fort McKay South**	
Station #	**AMS 9**		**AMS 13**	
Sample Date	**27-Sep**		**27-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.04	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.04	V0	0.04	V0
1-Pentene	0.01	0.01	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.01	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	0.03	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	0.05	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.04	V0	0.18	V0
2-Methylhexane	0.01	< 0.01	V1	0.15	V0
2-Methylpentane	0.01	0.05	V0	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.07	V0
3-Methylhexane	0.02	0.05	V0	0.16	V0
3-Methylpentane	0.01	0.03	V0	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	3	V0
Acetone	0.4	2.1	V0	2.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.02	V0	0.04	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.07	V0
Cyclopentane	0.01	0.01	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.1	V0	1.4	V0
Ethylbenzene	0.01	0.01	V0	0.05	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.16	V0	0.27	V0
Isopentane	0.03	0.18	V0	0.19	V0
Isoprene	0.01	0.04	V0	0.05	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	0.01	V0
m,p-Xylene	0.03	0.03	V0	0.13	V0
Methanol	3	5	V0	5	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.17	V0
Methylcyclopentane	0.02	0.04	V0	0.11	V0
n-Butane	0.03	0.21	V0	0.22	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.08	V0	0.38	V0
n-Hexane	0.01	0.09	V0	0.22	V0
n-Nonane	0.01	0.02	V0	0.11	V0
n-Octane	0.02	0.05	V0	0.29	V0
n-Pentane	0.1	0.1	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.07	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.05	V0	0.23	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**27-Sep**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.03	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0
2,3,4-Trimethylpentane	0.01	0.02	V0
2,3-Dimethylbutane	0.02	0.08	V0
2,3-Dimethylpentane	0.02	0.06	V0
2,4-Dimethylpentane	0.01	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.09	V0
2-Methylhexane	0.01	0.09	V0
2-Methylpentane	0.01	0.06	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.03	V0
3-Methylhexane	0.02	0.09	V0
3-Methylpentane	0.01	0.12	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	4	V0
Acetone	0.4	2.4	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.02	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.11	V0
Cyclopentane	0.01	0.03	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1.7	V0
Ethylbenzene	0.01	0.02	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.64	V0
Isopentane	0.03	0.47	V0
Isoprene	0.01	0.04	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.06	V0
Methanol	3	11	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.12	V0
Methylcyclopentane	0.02	0.18	V0
n-Butane	0.03	0.16	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.18	V0
n-Hexane	0.01	0.29	V0
n-Nonane	0.01	0.05	V0
n-Octane	0.02	0.12	V0
n-Pentane	0.1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.03	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.13	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	03-Oct		03-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.04	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.02	V0	0.07	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.03	V0
2,2-Dimethylbutane	0.01	0.02	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	0.02	V0
2-Methylpentane	0.01	0.07	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	0.03	V0
3-Methylpentane	0.01	0.04	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.3	V0	1.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.03	V0	0.07	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	0.02	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.02	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.9	V0	1.6	V0
Ethylbenzene	0.01	< 0.01	V1	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.14	V0	0.31	V0
Isopentane	0.03	0.1	V0	0.2	V0
Isoprene	0.01	0.02	V0	0.02	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.07	V0
Methanol	3	< 3	V1	6	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	0.02	V0
Methylcyclopentane	0.02	0.06	V0	0.03	V0
n-Butane	0.03	0.16	V0	0.42	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.01	V0	0.03	V0
n-Hexane	0.01	0.13	V0	0.05	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.1	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.06	V0	0.1	V0
trans-2-Butene	0.01	< 0.01	V1	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**03-Oct**		**03-Oct**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.02	V0	< 0.02	V1
1-Butene	0.02	0.05	V0	0.03	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.01	V0	0.01	V0
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	0.02	V0	0.01	V0
2-Methylpentane	0.01	0.05	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	< 0.02	V1
3-Methylpentane	0.01	0.03	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	4	V0	< 3	V1
Acetone	0.4	1.5	V0	1.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.06	V0	0.05	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.01	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.1	V0	1.2	V0
Ethylbenzene	0.01	0.01	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.36	V0	0.33	V0
Isopentane	0.03	0.2	V0	0.15	V0
Isoprene	0.01	0.02	V0	0.02	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.03	V0	< 0.03	V1
Methanol	3	5	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	< 0.01	V1
Methylcyclopentane	0.02	0.02	V0	< 0.02	V1
n-Butane	0.03	0.44	V0	0.26	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.01	V0
n-Hexane	0.01	0.04	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.2	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.07	V0	0.1	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**		**Fort McKay South**	
Station #	**AMS 9**		**AMS 13**	
Sample Date	**03-Oct**		**03-Oct**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.04	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.04	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.01	V0
2-Methylhexane	0.01	0.02	V0	< 0.01	V1
2-Methylpentane	0.01	0.19	V0	0.02	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.09	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.3	V0	1.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.06	V0	0.03	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.06	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.5	V0	0.5	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.17	V0	0.26	V0
Isopentane	0.03	0.26	V0	0.08	V0
Isoprene	0.01	0.03	V0	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	< 3	V1	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	0.02	V0
Methylcyclopentane	0.02	< 0.02	V1	< 0.02	V1
n-Butane	0.03	0.18	V0	0.22	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.01	V0	0.02	V0
n-Hexane	0.01	0.05	V0	0.02	V0
n-Nonane	0.01	0.01	V0	0.01	V0
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.4	V0	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.03	V0	0.05	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**03-Oct**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	< 0.02	V1
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1
2-Methylhexane	0.01	0.02	V0
2-Methylpentane	0.01	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1
3-Methylpentane	0.01	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	1.5	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.02	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1
Cyclopentane	0.01	0.02	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.16	V0
Isopentane	0.03	0.12	V0
Isoprene	0.01	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	< 3	V1
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0
Methylcyclopentane	0.02	< 0.02	V1
n-Butane	0.03	0.37	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.01	V0
n-Hexane	0.01	0.04	V0
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.02	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		09-Oct		09-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	0.02	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,2-Dimethylbutane	0.01	0.15	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.17	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	0.01	V0
2-Methylpentane	0.01	0.67	V0	0.02	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.34	V0	0.01	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.4	V0	1.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.13	V0	0.04	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.21	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.4	V0	0.9	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.11	V0	0.17	V0
Isopentane	0.03	1.06	V0	0.14	V0
Isoprene	0.01	< 0.01	V1	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	< 3	V1	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	0.05	V0	< 0.02	V1
n-Butane	0.03	0.11	V0	0.28	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	0.01	V0
n-Hexane	0.01	0.17	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	1.8	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.05	V0	0.05	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Athabasca Valley		Anzac	
Station #	AMS 7		AMS 14	
Sample Date	10-Oct		09-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	< 0.02	V1	0.02	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	0.01	V0	< 0.01	V1
2-Methylpentane	0.01	0.02	V0	0.02	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.01	V0	0.01	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.5	V0	1.4	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.02	V0	0.01	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.7	V0	0.7	V0
Ethylbenzene	0.01	< 0.01	V1	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.12	V0	0.2	V0
Isopentane	0.03	0.13	V0	0.16	V0
Isoprene	0.01	0.01	V0	< 0.01	V1
Isopropylalcohol	0.4	0.5	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	< 3	V1	6	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	< 0.02	V1	< 0.02	V1
n-Butane	0.03	0.13	V0	0.17	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	< 0.01	V1
n-Hexane	0.01	0.02	V0	0.02	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.1	V0	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.03	V0	0.07	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**		**Fort McKay South**	
Station #	**AMS 9**		**AMS 13**	
Sample Date	**09-Oct**		**09-Oct**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.17	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.2	V0	0.03	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.91	V0	0.09	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.43	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.6	V0	2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.28	V0	0.03	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.29	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1	V0	0.5	V0
Ethylbenzene	0.01	0.01	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.34	V0	0.22	V0
Isopentane	0.03	1.67	V0	0.67	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	6	V0	6	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	0.07	V0	< 0.02	V1
n-Butane	0.03	0.2	V0	0.19	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.01	V0	< 0.01	V1
n-Hexane	0.01	0.21	V0	0.03	V0
n-Nonane	0.01	0.01	V0	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	2.5	V0	0.9	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.04	V0	0.04	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**09-Oct**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.04	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0
2,3-Dimethylpentane	0.02	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.07	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1
3-Methylpentane	0.01	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	3	V0
Acetone	0.4	1.8	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.04	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1
Cyclopentane	0.01	0.02	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.9	V0
Ethylbenzene	0.01	0.01	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.31	V0
Isopentane	0.03	0.27	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	0.01	V0
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	7	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1
Methylcyclopentane	0.02	< 0.02	V1
n-Butane	0.03	0.19	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	< 0.01	V1
n-Hexane	0.01	0.03	V0
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.02	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.03	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	15-Oct		15-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.02	V0
2,2-Dimethylbutane	0.01	0.06	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.08	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	0.03	V0
2-Methylpentane	0.01	0.21	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	0.02	V0
3-Methylpentane	0.01	0.13	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.2	V0	1.4	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.03	V0	0.05	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.05	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.6	V0	2.3	V0
Ethylbenzene	0.01	0.01	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.22	V0	0.19	V0
Isopentane	0.03	0.48	V0	0.16	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	4	V0	7	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	0.08	V0	< 0.02	V1
n-Butane	0.03	0.12	V0	0.27	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.01	V0	0.01	V0
n-Hexane	0.01	0.25	V0	0.03	V0
n-Nonane	0.01	0.01	V0	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.6	V0	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.06	V0	0.05	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**15-Oct**		**15-Oct**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.05	V0	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.01	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	0.01	V0	< 0.01	V1
2-Methylpentane	0.01	0.04	V0	0.01	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	< 0.02	V1
3-Methylpentane	0.01	0.02	V0	< 0.01	V1
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.1	V0	1.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.04	V0	0.02	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.4	V0	0.7	V0
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.46	V0	0.11	V0
Isopentane	0.03	0.23	V0	0.09	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.03	V0	< 0.03	V1
Methanol	3	9	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	< 0.02	V1	< 0.02	V1
n-Butane	0.03	0.74	V0	0.15	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.01	V0	< 0.01	V1
n-Hexane	0.01	0.03	V0	0.01	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.1	V0	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.06	V0	0.05	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	15-Oct		15-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.05	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.12	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.14	V0	0.04	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1	< 0.01	V1
2-Methylpentane	0.01	0.76	V0	0.15	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	0.03	V0
3-Methylpentane	0.01	0.33	V0	0.16	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.3	V0	1.5	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.07	V0	0.03	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.16	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.5	V0	1.3	V0
Ethylbenzene	0.01	0.01	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.16	V0	0.26	V0
Isopentane	0.03	1.34	V0	0.57	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.03	V0
Methanol	3	7	V0	10	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1	< 0.01	V1
Methylcyclopentane	0.02	0.04	V0	0.24	V0
n-Butane	0.03	0.15	V0	0.22	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	< 0.01	V1	0.02	V0
n-Hexane	0.01	0.17	V0	0.66	V0
n-Nonane	0.01	< 0.01	V1	0.01	V0
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	1.9	V0	0.7	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.02	V0	0.14	V0
trans-2-Butene	0.01	0.02	V0	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**15-Oct**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.03	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.04	V0
2,3-Dimethylpentane	0.02	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1
2-Methylhexane	0.01	< 0.01	V1
2-Methylpentane	0.01	0.17	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1
3-Methylpentane	0.01	0.08	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	11.1	V4
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.04	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1
Cyclopentane	0.01	0.05	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.5	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.1	V0
Isopentane	0.03	0.43	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	4	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	< 0.01	V1
Methylcyclopentane	0.02	< 0.02	V1
n-Butane	0.03	0.09	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	< 0.01	V1
n-Hexane	0.01	0.04	V0
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	< 0.01	V1
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	21-Oct		21-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.06	V0	0.02	V0
1-Butene	0.02	0.1	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.03	V0
2,2-Dimethylbutane	0.01	0.02	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.01	V0	0.01	V0
2,3-Dimethylbutane	0.02	0.05	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.05	V0	0.03	V0
2,4-Dimethylpentane	0.01	0.01	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.14	V0	< 0.01	V1
2-Methylhexane	0.01	0.08	V0	0.04	V0
2-Methylpentane	0.01	0.08	V0	0.07	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.05	V0	< 0.02	V1
3-Methylhexane	0.02	0.08	V0	0.04	V0
3-Methylpentane	0.01	0.05	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.2	V0	1.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.13	V0	0.12	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.06	V0	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	0.03	V0
Cyclopentane	0.01	0.02	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.8	V0	1.7	V0
Ethylbenzene	0.01	0.04	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.66	V0	0.7	V0
Isopentane	0.03	0.37	V0	0.4	V0
Isoprene	0.01	0.03	V0	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.09	V0	< 0.03	V1
Methanol	3	4	V0	6	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.13	V0	0.04	V0
Methylcyclopentane	0.02	0.08	V0	0.05	V0
n-Butane	0.03	0.9	V0	1.15	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.18	V0	0.02	V0
n-Hexane	0.01	0.11	V0	0.07	V0
n-Nonane	0.01	0.05	V0	< 0.01	V1
n-Octane	0.02	0.18	V0	< 0.02	V1
n-Pentane	0.1	0.2	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.2	V0	0.09	V0
trans-2-Butene	0.01	0.05	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**21-Oct**		**21-Oct**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.03	V0	0.03	V0
1-Butene	0.02	0.07	V0	0.05	V0
1-Pentene	0.01	0.02	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.02	V0	0.01	V0
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.04	V0	0.02	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	0.04	V0	0.03	V0
2-Methylpentane	0.01	0.1	V0	0.06	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.04	V0	0.02	V0
3-Methylpentane	0.01	0.06	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.4	V0	1.4	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.13	V0	0.13	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.03	V0
Cyclopentane	0.01	0.02	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.2	V0	0.9	V0
Ethylbenzene	0.01	0.02	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.97	V0	0.71	V0
Isopentane	0.03	0.55	V0	0.56	V0
Isoprene	0.01	0.02	V0	0.02	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	< 0.03	V1
Methanol	3	15	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.05	V0	0.03	V0
Methylcyclopentane	0.02	0.06	V0	0.03	V0
n-Butane	0.03	1.54	V0	0.95	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.03	V0	0.02	V0
n-Hexane	0.01	0.09	V0	0.07	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.3	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.11	V0	0.12	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**		**Fort McKay South**	
Station #	**AMS 9**		**AMS 13**	
Sample Date	**21-Oct**		**21-Oct**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.02	V0	0.04	V0
1-Butene	0.02	0.05	V0	0.18	V0
1-Pentene	0.01	0.01	V0	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	0.05	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.02	V0
2,3-Dimethylbutane	0.02	0.04	V0	0.09	V0
2,3-Dimethylpentane	0.02	0.04	V0	0.08	V0
2,4-Dimethylpentane	0.01	0.01	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.06	V0	0.22	V0
2-Methylhexane	0.01	0.08	V0	0.1	V0
2-Methylpentane	0.01	0.11	V0	0.08	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.02	V0	0.08	V0
3-Methylhexane	0.02	0.07	V0	0.13	V0
3-Methylpentane	0.01	0.06	V0	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.4	V0	1.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.14	V0	0.12	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	0.02	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.08	V0
Cyclopentane	0.01	0.02	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.9	V0	0.5	V0
Ethylbenzene	0.01	0.02	V0	0.06	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.64	V0	0.66	V0
Isopentane	0.03	0.43	V0	0.42	V0
Isoprene	0.01	0.02	V0	0.06	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.06	V0	0.13	V0
Methanol	3	8	V0	5	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.07	V0	0.21	V0
Methylcyclopentane	0.02	0.07	V0	0.1	V0
n-Butane	0.03	0.95	V0	0.82	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.11	V0	0.28	V0
n-Hexane	0.01	0.11	V0	0.14	V0
n-Nonane	0.01	0.03	V0	0.08	V0
n-Octane	0.02	0.07	V0	0.31	V0
n-Pentane	0.1	0.3	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	0.05	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.16	V0	0.28	V0
trans-2-Butene	0.01	< 0.01	V1	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**21-Oct**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.04	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.07	V0
2,3,4-Trimethylpentane	0.01	0.01	V0
2,3-Dimethylbutane	0.02	0.12	V0
2,3-Dimethylpentane	0.02	0.08	V0
2,4-Dimethylpentane	0.01	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.06	V0
2-Methylhexane	0.01	0.09	V0
2-Methylpentane	0.01	0.29	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.02	V0
3-Methylhexane	0.02	0.09	V0
3-Methylpentane	0.01	0.22	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	1.4	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.13	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.14	V0
Cyclopentane	0.01	0.1	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.8	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	1.05	V0
Isopentane	0.03	1.1	V0
Isoprene	0.01	0.03	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	4	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.15	V0
Methylcyclopentane	0.02	0.12	V0
n-Butane	0.03	0.74	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.16	V0
n-Hexane	0.01	0.11	V0
n-Nonane	0.01	0.02	V0
n-Octane	0.02	0.06	V0
n-Pentane	0.1	0.7	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.07	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	27-Oct		27-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.05	V0	0.04	V0
1-Pentene	0.01	0.01	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,2-Dimethylbutane	0.01	0.07	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.07	V0	0.02	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	0.02	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	0.01	V0
2-Methylhexane	0.01	0.03	V0	0.02	V0
2-Methylpentane	0.01	0.25	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	0.03	V0
3-Methylpentane	0.01	0.13	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.3	V0	1.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.09	V0	0.09	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.02	V0
Cyclopentane	0.01	0.06	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.2	V0	1.3	V0
Ethylbenzene	0.01	< 0.01	V1	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.49	V0	0.45	V0
Isopentane	0.03	0.57	V0	0.27	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.03	V0
Methanol	3	7	V0	6	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.02	V0
Methylcyclopentane	0.02	0.05	V0	0.02	V0
n-Butane	0.03	0.26	V0	0.54	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.03	V0	0.03	V0
n-Hexane	0.01	0.09	V0	0.04	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.5	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.09	V0	0.07	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**27-Oct**		**27-Oct**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.03	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.02	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.02	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	0.01	V0
2-Methylhexane	0.01	0.03	V0	< 0.01	V1
2-Methylpentane	0.01	0.04	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	0.02	V0
3-Methylpentane	0.01	0.03	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1	V0	1.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.08	V0	0.07	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.02	V0	< 0.02	V1
Cyclopentane	0.01	0.01	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1	V0	0.9	V0
Ethylbenzene	0.01	0.01	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.44	V0	0.38	V0
Isopentane	0.03	0.27	V0	0.22	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	6	V0	3	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.02	V0
Methylcyclopentane	0.02	0.03	V0	0.02	V0
n-Butane	0.03	0.53	V0	0.43	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.03	V0	0.02	V0
n-Hexane	0.01	0.03	V0	0.04	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.2	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.06	V0	0.09	V0
trans-2-Butene	0.01	0.01	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	27-Oct		27-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.04	V0	0.02	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.09	V0	0.06	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.09	V0	0.07	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	< 0.01	V1
2-Methylhexane	0.01	0.03	V0	< 0.01	V1
2-Methylpentane	0.01	0.35	V0	0.22	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	< 0.02	V1
3-Methylpentane	0.01	0.17	V0	0.11	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1	V0	1.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.11	V0	0.08	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.03	V0
Cyclopentane	0.01	0.08	V0	0.06	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.6	V0	0.8	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.39	V0	0.49	V0
Isopentane	0.03	0.7	V0	0.54	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	< 0.03	V1
Methanol	3	6	V0	5	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.02	V0
Methylcyclopentane	0.02	0.04	V0	0.04	V0
n-Butane	0.03	0.27	V0	0.32	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.03	V0
n-Hexane	0.01	0.12	V0	0.07	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.8	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.05	V0	0.06	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**27-Oct**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.05	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.03	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.06	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.1	V0
2,3-Dimethylpentane	0.02	0.06	V0
2,4-Dimethylpentane	0.01	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.03	V0
2-Methylhexane	0.01	0.05	V0
2-Methylpentane	0.01	0.13	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.05	V0
3-Methylpentane	0.01	0.17	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	1.2	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.05	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.15	V0
Cyclopentane	0.01	0.07	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.7	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	1.28	V0
Isopentane	0.03	0.95	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	4	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.11	V0
Methylcyclopentane	0.02	0.11	V0
n-Butane	0.03	0.3	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.09	V0
n-Hexane	0.01	0.04	V0
n-Nonane	0.01	0.02	V0
n-Octane	0.02	0.03	V0
n-Pentane	0.1	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.04	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	02-Nov		02-Nov	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.12	V0	0.09	V0
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	0.02	V0	0.03	V0
2,2-Dimethylbutane	0.01	0.02	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,3-Dimethylbutane	0.02	0.04	V0	0.04	V0
2,3-Dimethylpentane	0.02	0.04	V0	0.05	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.04	V0	0.01	V0
2-Methylhexane	0.01	0.06	V0	0.03	V0
2-Methylpentane	0.01	0.23	V0	0.16	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.07	V0	0.05	V0
3-Methylpentane	0.01	0.39	V0	0.1	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.9	V0	1.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.09	V0	0.13	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.05	V0	0.02	V0
Cyclopentane	0.01	0.03	V0	0.04	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.7	V0	1.7	V0
Ethylbenzene	0.01	0.03	V0	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.5	V0	0.67	V0
Isopentane	0.03	0.32	V0	0.58	V0
Isoprene	0.01	0.01	V0	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.07	V0	0.07	V0
Methanol	3	10	V0	15	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.03	V0
Methylcyclopentane	0.02	0.9	V0	0.05	V0
n-Butane	0.03	0.64	V0	1.26	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.1	V0	0.03	V0
n-Hexane	0.01	2.34	V0	0.1	V0
n-Nonane	0.01	0.02	V0	< 0.01	V1
n-Octane	0.02	0.04	V0	< 0.02	V1
n-Pentane	0.1	0.3	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.34	V0	0.15	V0
trans-2-Butene	0.01	< 0.01	V1	0.03	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**02-Nov**		**02-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.04	V0	0.02	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.02	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.02	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	0.03	V0	< 0.01	V1
2-Methylpentane	0.01	0.14	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	< 0.02	V1
3-Methylpentane	0.01	0.07	V0	0.01	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1	V0	1.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.11	V0	0.06	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	< 0.02	V1
Cyclopentane	0.01	0.03	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.5	V0	0.6	V0
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.56	V0	0.3	V0
Isopentane	0.03	0.44	V0	0.19	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	< 0.03	V1
Methanol	3	8	V0	3	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.01	V0
Methylcyclopentane	0.02	0.04	V0	< 0.02	V1
n-Butane	0.03	0.92	V0	0.39	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	< 0.01	V1
n-Hexane	0.01	0.09	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.4	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.1	V0	0.06	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	02-Nov		02-Nov	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.09	V0	0.1	V0
1-Pentene	0.01	0.01	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	0.03	V0
2,3-Dimethylpentane	0.02	0.03	V0	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.03	V0	0.07	V0
2-Methylhexane	0.01	0.05	V0	0.05	V0
2-Methylpentane	0.01	0.08	V0	0.06	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.03	V0
3-Methylhexane	0.02	0.06	V0	0.05	V0
3-Methylpentane	0.01	0.04	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.9	V0	0.9	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.07	V0	0.06	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.02	V0	0.03	V0
Cyclopentane	0.01	0.01	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.5	V0	0.6	V0
Ethylbenzene	0.01	0.02	V0	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.29	V0	0.33	V0
Isopentane	0.03	0.19	V0	0.2	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	0.06	V0
Methanol	3	4	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.07	V0
Methylcyclopentane	0.02	0.05	V0	0.05	V0
n-Butane	0.03	0.38	V0	0.35	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.09	V0	0.11	V0
n-Hexane	0.01	0.1	V0	0.08	V0
n-Nonane	0.01	0.02	V0	0.04	V0
n-Octane	0.02	0.04	V0	0.1	V0
n-Pentane	0.1	0.2	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.1	V0	0.14	V0
trans-2-Butene	0.01	< 0.01	V1	0.01	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**02-Nov**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	< 0.02	V1
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0
2,3-Dimethylpentane	0.02	0.02	V0
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.03	V0
2-Methylhexane	0.01	0.01	V0
2-Methylpentane	0.01	0.05	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.02	V0
3-Methylpentane	0.01	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	0.9	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.04	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1
Cyclopentane	0.01	0.02	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.4	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.24	V0
Isopentane	0.03	0.15	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	4	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0
Methylcyclopentane	0.02	< 0.02	V1
n-Butane	0.03	0.24	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.04	V0
n-Hexane	0.01	0.03	V0
n-Nonane	0.01	0.01	V0
n-Octane	0.02	0.03	V0
n-Pentane	0.1	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.04	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	08-Nov		08-Nov	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.07	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	0.03	V0	< 0.02	V1
1,3-Butadiene	0.02	0.04	V0	0.03	V0
1-Butene	0.02	0.22	V0	0.13	V0
1-Pentene	0.01	0.05	V0	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.06	V0
2,2-Dimethylbutane	0.01	0.12	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	0.05	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.23	V0	0.04	V0
2,3-Dimethylpentane	0.02	0.23	V0	0.07	V0
2,4-Dimethylpentane	0.01	0.05	V0	0.03	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.66	V0	0.02	V0
2-Methylhexane	0.01	0.4	V0	0.07	V0
2-Methylpentane	0.01	0.39	V0	0.15	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.25	V0	< 0.02	V1
3-Methylhexane	0.02	0.53	V0	0.07	V0
3-Methylpentane	0.01	0.24	V0	0.1	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	3	V0
Acetone	0.4	2	V0	2.9	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.26	V0	0.21	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.04	V0	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.23	V0	0.04	V0
Cyclopentane	0.01	0.07	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1	V0	4.4	V0
Ethylbenzene	0.01	0.18	V0	0.04	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.99	V0	1.2	V0
Isopentane	0.03	0.8	V0	0.97	V0
Isoprene	0.01	0.02	V0	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	0.02	V0	< 0.01	V1
m,p-Xylene	0.03	0.54	V0	0.11	V0
Methanol	3	7	V0	25	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.65	V0	0.06	V0
Methylcyclopentane	0.02	0.46	V0	0.1	V0
n-Butane	0.03	1.88	V0	2.27	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	1.42	V0	0.06	V0
n-Hexane	0.01	0.89	V0	0.18	V0
n-Nonane	0.01	0.35	V0	< 0.01	V1
n-Octane	0.02	1.1	V4	< 0.02	V1
n-Pentane	0.1	0.7	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.22	V0	0.05	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.89	V0	0.26	V0
trans-2-Butene	0.01	0.04	V0	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.03	V0	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**08-Nov**		**08-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.09	V0	0.05	V0
1-Pentene	0.01	0.01	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.03	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	0.01	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.02	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.04	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.01	V0
2-Methylhexane	0.01	0.06	V0	0.03	V0
2-Methylpentane	0.01	0.11	V0	0.09	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.06	V0	0.04	V0
3-Methylpentane	0.01	0.07	V0	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	3	V0
Acetone	0.4	1.9	V0	2.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.12	V0	0.1	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.02	V0	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.04	V0
Cyclopentane	0.01	0.02	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3.2	V0	1.6	V0
Ethylbenzene	0.01	0.02	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.02	V0	0.77	V0
Isopentane	0.03	0.82	V0	0.59	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.07	V0	< 0.03	V1
Methanol	3	13	V0	6	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.05	V0	0.04	V0
Methylcyclopentane	0.02	0.06	V0	0.06	V0
n-Butane	0.03	1.86	V0	1.3	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.06	V0	0.04	V0
n-Hexane	0.01	0.11	V0	0.1	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.4	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.14	V0	0.13	V0
trans-2-Butene	0.01	0.02	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	08-Nov		08-Nov	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.05	V0	0.11	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	0.05	V0
1,3-Butadiene	0.02	0.03	V0	0.02	V0
1-Butene	0.02	0.24	V0	0.17	V0
1-Pentene	0.01	0.06	V0	0.03	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.09	V0	0.17	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	0.1	V0
2,3-Dimethylbutane	0.02	0.1	V0	0.36	V0
2,3-Dimethylpentane	0.02	0.13	V0	0.4	V0
2,4-Dimethylpentane	0.01	0.03	V0	0.07	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.24	V0	1.56	V4
2-Methylhexane	0.01	0.27	V0	0.55	V0
2-Methylpentane	0.01	0.38	V0	0.41	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.09	V0	0.5	V0
3-Methylhexane	0.02	0.36	V0	0.87	V0
3-Methylpentane	0.01	0.22	V0	0.27	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	3	V0	< 3	V1
Acetone	0.4	1.9	V0	1.2	V0
alpha-Pinene	0.3	< 0.3	V1	0.3	V0
Benzene	0.01	0.18	V0	0.27	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.05	V0	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.13	V0	0.41	V0
Cyclopentane	0.01	0.06	V0	0.08	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.2	V0	0.4	V0
Ethylbenzene	0.01	0.08	V0	0.32	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.04	V0	0.99	V0
Isopentane	0.03	0.76	V0	0.74	V0
Isoprene	0.01	0.01	V0	0.02	V0
Isopropylalcohol	0.4	0.4	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	0.05	V0
m,p-Xylene	0.03	0.26	V0	1.04	V0
Methanol	3	6	V0	3	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.28	V0	1.36	V4
Methylcyclopentane	0.02	0.37	V0	0.64	V0
n-Butane	0.03	1.88	V0	1.74	V0
n-Decane	0.06	< 0.06	V1	0.08	V0
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.83	V0	2.46	V0
n-Hexane	0.01	0.89	V0	0.99	V0
n-Nonane	0.01	0.15	V0	0.7	V0
n-Octane	0.02	0.36	V0	2.27	V4
n-Pentane	0.1	0.7	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.11	V0	0.43	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.47	V0	2.39	V4
trans-2-Butene	0.01	0.05	V0	0.03	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.03	V0	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**08-Nov**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.06	V0
1-Pentene	0.01	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.09	V0
2,3,4-Trimethylpentane	0.01	0.02	V0
2,3-Dimethylbutane	0.02	0.18	V0
2,3-Dimethylpentane	0.02	0.1	V0
2,4-Dimethylpentane	0.01	0.03	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.08	V0
2-Methylhexane	0.01	0.07	V0
2-Methylpentane	0.01	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.04	V0
3-Methylhexane	0.02	0.1	V0
3-Methylpentane	0.01	0.24	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	1.9	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.09	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.25	V0
Cyclopentane	0.01	0.07	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.9	V0
Ethylbenzene	0.01	0.03	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	2.06	V0
Isopentane	0.03	1.65	V0
Isoprene	0.01	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.06	V0
Methanol	3	7	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.21	V0
Methylcyclopentane	0.02	0.21	V0
n-Butane	0.03	1.3	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.17	V0
n-Hexane	0.01	0.12	V0
n-Nonane	0.01	0.05	V0
n-Octane	0.02	0.12	V0
n-Pentane	0.1	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.03	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.18	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		14-Nov		14-Nov	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.02	V0	< 0.02	V1
1-Butene	0.02	0.11	V0	0.05	V0
1-Pentene	0.01	0.01	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.02	V0
2,2-Dimethylbutane	0.01	0.05	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.07	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.04	V0	0.02	V0
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.06	V0	< 0.01	V1
2-Methylhexane	0.01	0.06	V0	0.02	V0
2-Methylpentane	0.01	0.09	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.02	V0	< 0.02	V1
3-Methylhexane	0.02	0.07	V0	0.02	V0
3-Methylpentane	0.01	0.06	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.3	V0	1.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.1	V0	0.08	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.02	V0	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	< 0.02	V1
Cyclopentane	0.01	0.02	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.1	V0	1.5	V0
Ethylbenzene	0.01	0.03	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.54	V0	0.5	V0
Isopentane	0.03	0.34	V0	0.31	V0
Isoprene	0.01	0.03	V0	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.08	V0	0.04	V0
Methanol	3	3	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.08	V0	0.01	V0
Methylcyclopentane	0.02	0.07	V0	0.02	V0
n-Butane	0.03	0.81	V0	0.8	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.12	V0	0.02	V0
n-Hexane	0.01	0.12	V0	0.04	V0
n-Nonane	0.01	0.03	V0	< 0.01	V1
n-Octane	0.02	0.08	V0	< 0.02	V1
n-Pentane	0.1	0.2	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.16	V0	0.08	V0
trans-2-Butene	0.01	0.02	V0	0.01	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**14-Nov**		**14-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.13	V0	0.07	V0
1-Pentene	0.01	0.01	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.02	V0	0.02	V0
2,2-Dimethylbutane	0.01	0.01	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	0.03	V0
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	0.05	V0	0.05	V0
2-Methylpentane	0.01	0.12	V0	0.06	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.05	V0	0.06	V0
3-Methylpentane	0.01	0.07	V0	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	4	V0
Acetone	0.4	1.8	V0	2.4	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.11	V0	0.08	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.04	V0	0.02	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	0.02	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.9	V0	2.1	V0
Ethylbenzene	0.01	0.02	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.15	V0	0.61	V0
Isopentane	0.03	1.02	V0	0.44	V0
Isoprene	0.01	0.01	V0	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	0.5	V0
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	0.04	V0
Methanol	3	43	V0	61	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	0.02	V0
Methylcyclopentane	0.02	0.07	V0	0.07	V0
n-Butane	0.03	2.19	V0	1	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.06	V0
n-Hexane	0.01	0.16	V0	0.17	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.4	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.17	V0	0.24	V0
trans-2-Butene	0.01	0.04	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	14-Nov		14-Nov	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.09	V0	0.05	V0
1-Pentene	0.01	0.01	V0	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.08	V0	0.04	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.01	V0
2,3-Dimethylbutane	0.02	0.09	V0	0.07	V0
2,3-Dimethylpentane	0.02	0.05	V0	0.06	V0
2,4-Dimethylpentane	0.01	0.01	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.05	V0	0.09	V0
2-Methylhexane	0.01	0.06	V0	0.07	V0
2-Methylpentane	0.01	0.08	V0	0.07	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.02	V0	0.03	V0
3-Methylhexane	0.02	0.08	V0	0.08	V0
3-Methylpentane	0.01	0.06	V0	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.3	V0	1.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.08	V0	0.07	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.02	V0	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.05	V0
Cyclopentane	0.01	0.01	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.9	V0	0.6	V0
Ethylbenzene	0.01	0.02	V0	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.61	V0	0.41	V0
Isopentane	0.03	0.31	V0	0.26	V0
Isoprene	0.01	< 0.01	V1	0.02	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.07	V0	0.09	V0
Methanol	3	8	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.08	V0	0.09	V0
Methylcyclopentane	0.02	0.07	V0	0.08	V0
n-Butane	0.03	0.74	V0	0.54	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.13	V0	0.15	V0
n-Hexane	0.01	0.14	V0	0.12	V0
n-Nonane	0.01	0.03	V0	0.04	V0
n-Octane	0.02	0.08	V0	0.12	V0
n-Pentane	0.1	0.2	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	0.05	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.13	V0	0.18	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**14-Nov**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.05	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0
2,3-Dimethylpentane	0.02	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.03	V0
2-Methylhexane	0.01	0.03	V0
2-Methylpentane	0.01	0.05	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.03	V0
3-Methylpentane	0.01	0.05	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	1.5	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.06	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.04	V0
Cyclopentane	0.01	0.01	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.5	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.5	V0
Isopentane	0.03	0.37	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	3	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.05	V0
Methylcyclopentane	0.02	0.05	V0
n-Butane	0.03	0.53	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.05	V0
n-Hexane	0.01	0.06	V0
n-Nonane	0.01	0.01	V0
n-Octane	0.02	0.03	V0
n-Pentane	0.1	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.01	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.12	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	20-Nov		20-Nov	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	0.02	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.01	V0	< 0.01	V1
2-Methylhexane	0.01	0.02	V0	0.01	V0
2-Methylpentane	0.01	0.04	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	< 0.02	V1
3-Methylpentane	0.01	0.02	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1	V0	1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.06	V0	0.05	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.02	V0	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	< 0.3	V1	0.6	V0
Ethylbenzene	0.01	0.01	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.22	V0	0.23	V0
Isopentane	0.03	0.14	V0	0.17	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.03	V0	< 0.03	V1
Methanol	3	3	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.02	V0	< 0.01	V1
Methylcyclopentane	0.02	0.02	V0	< 0.02	V1
n-Butane	0.03	0.28	V0	0.37	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.04	V0	0.02	V0
n-Hexane	0.01	0.05	V0	0.02	V0
n-Nonane	0.01	0.01	V0	< 0.01	V1
n-Octane	0.02	0.03	V0	< 0.02	V1
n-Pentane	0.1	< 0.1	V1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.07	V0	0.05	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**20-Nov**		**20-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.03	V0	< 0.02	V1
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.02	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.02	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	0.02	V0	< 0.01	V1
2-Methylpentane	0.01	0.04	V0	0.03	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	< 0.02	V1
3-Methylpentane	0.01	0.03	V0	0.02	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.3	V0	1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.07	V0	0.06	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.04	V0	0.04	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.3	V0	< 0.3	V1
Ethylbenzene	0.01	0.01	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.54	V0	0.2	V0
Isopentane	0.03	0.26	V0	0.16	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	0.6	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	< 0.03	V1
Methanol	3	22	V0	3	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.01	V0	0.01	V0
Methylcyclopentane	0.02	0.03	V0	< 0.02	V1
n-Butane	0.03	0.63	V0	0.4	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.01	V0
n-Hexane	0.01	0.07	V0	0.03	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.1	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.09	V0	0.06	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		**Barge Landing**		**Fort McKay South**	
Station #		**AMS 9**		**AMS 13**	
Sample Date		**20-Nov**		**20-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1	< 0.02	V1
1-Butene	0.02	0.02	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	0.02	V0
2,3-Dimethylpentane	0.02	< 0.02	V1	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	0.03	V0
2-Methylhexane	0.01	0.01	V0	0.03	V0
2-Methylpentane	0.01	0.02	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	< 0.02	V1	0.04	V0
3-Methylpentane	0.01	0.02	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.9	V0	1.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.04	V0	0.05	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.02	V0	0.04	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	< 0.02	V1	< 0.02	V1
Cyclopentane	0.01	< 0.01	V1	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	< 0.3	V1	0.4	V0
Ethylbenzene	0.01	< 0.01	V1	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.12	V0	0.28	V0
Isopentane	0.03	0.12	V0	0.16	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1	0.04	V0
Methanol	3	3	V0	11	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.01	V0	0.03	V0
Methylcyclopentane	0.02	< 0.02	V1	0.04	V0
n-Butane	0.03	0.21	V0	0.34	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.02	V0	0.07	V0
n-Hexane	0.01	0.03	V0	0.09	V0
n-Nonane	0.01	< 0.01	V1	0.02	V0
n-Octane	0.02	< 0.02	V1	0.04	V0
n-Pentane	0.1	< 0.1	V1	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	< 0.01	V1	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.03	V0	0.09	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**20-Nov**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.02	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.05	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.09	V0
2,3-Dimethylpentane	0.02	0.04	V0
2,4-Dimethylpentane	0.01	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.03	V0
2-Methylhexane	0.01	0.02	V0
2-Methylpentane	0.01	0.16	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.04	V0
3-Methylpentane	0.01	0.14	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	1.2	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.07	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.08	V0
Cyclopentane	0.01	0.06	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.4	V0
Ethylbenzene	0.01	0.01	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.36	V0
Isopentane	0.03	0.56	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	4	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.08	V0
Methylcyclopentane	0.02	0.08	V0
n-Butane	0.03	0.24	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.06	V0
n-Hexane	0.01	0.09	V0
n-Nonane	0.01	0.02	V0
n-Octane	0.02	0.05	V0
n-Pentane	0.1	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.01	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.09	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		26-Nov		26-Nov	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.03	V0	0.03	V0
1-Butene	0.02	0.1	V0	0.07	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.02	V0
2,2-Dimethylbutane	0.01	0.01	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1	0.02	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.01	V0
2-Methylhexane	0.01	0.03	V0	0.03	V0
2-Methylpentane	0.01	0.06	V0	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	0.03	V0
3-Methylpentane	0.01	0.03	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	3	V0
Acetone	0.4	0.9	V0	1.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.2	V0	0.18	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.02	V0	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.03	V0
Cyclopentane	0.01	0.02	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.3	V0	0.8	V0
Ethylbenzene	0.01	0.02	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.74	V0	0.93	V0
Isopentane	0.03	0.31	V0	0.44	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	0.05	V0
Methanol	3	3	V0	14	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.04	V0
Methylcyclopentane	0.02	0.04	V0	0.04	V0
n-Butane	0.03	1.2	V0	1.52	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.04	V0	0.04	V0
n-Hexane	0.01	0.08	V0	0.1	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	0.03	V0	0.02	V0
n-Pentane	0.1	0.2	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.12	V0	0.11	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**26-Nov**		**26-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.02	V0	0.03	V0
1-Butene	0.02	0.07	V0	0.04	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1	0.01	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	0.04	V0	0.02	V0
2-Methylpentane	0.01	0.08	V0	0.06	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	< 0.02	V1
3-Methylpentane	0.01	0.06	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1	V0	0.9	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.19	V0	0.14	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.03	V0	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.02	V0
Cyclopentane	0.01	0.02	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.8	V0	0.3	V0
Ethylbenzene	0.01	0.02	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.94	V0	0.61	V0
Isopentane	0.03	0.46	V0	0.39	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	< 0.03	V1
Methanol	3	31	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.03	V0
Methylcyclopentane	0.02	0.04	V0	0.03	V0
n-Butane	0.03	1.59	V0	1.24	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.04	V0	0.03	V0
n-Hexane	0.01	0.11	V0	0.08	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.3	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.01	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.13	V0	0.09	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		**Barge Landing**		**Fort McKay South**	
Station #		**AMS 9**		**AMS 13**	
Sample Date		**26-Nov**		**26-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.04	V0	0.04	V0
1-Butene	0.02	0.07	V0	0.07	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.01	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.02	V0	0.02	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.03	V0	0.02	V0
2-Methylhexane	0.01	0.04	V0	0.02	V0
2-Methylpentane	0.01	0.07	V0	0.06	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	0.02	V0
3-Methylpentane	0.01	0.04	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	0.9	V0	0.9	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.23	V0	0.19	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.03	V0	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.02	V0
Cyclopentane	0.01	0.02	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.3	V0	< 0.3	V1
Ethylbenzene	0.01	0.02	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.65	V0	0.67	V0
Isopentane	0.03	0.37	V0	0.32	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.06	V0	0.03	V0
Methanol	3	8	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.06	V0	0.03	V0
Methylcyclopentane	0.02	0.04	V0	0.03	V0
n-Butane	0.03	1.21	V0	1.19	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.07	V0	0.04	V0
n-Hexane	0.01	0.11	V0	0.08	V0
n-Nonane	0.01	0.01	V0	< 0.01	V1
n-Octane	0.02	0.04	V0	0.02	V0
n-Pentane	0.1	0.3	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.16	V0	0.11	V0
trans-2-Butene	0.01	< 0.01	V1	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**26-Nov**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.04	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	< 0.01	V1
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1
2,3-Dimethylpentane	0.02	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1
2-Methylhexane	0.01	0.03	V0
2-Methylpentane	0.01	0.09	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.03	V0
3-Methylpentane	0.01	0.05	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	3	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.09	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.03	V0
Cyclopentane	0.01	0.02	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	1.1	V0
Ethylbenzene	0.01	0.01	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.88	V0
Isopentane	0.03	0.52	V0
Isoprene	0.01	0.2	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.03	V0
Methanol	3	17	V0
Methylethylketone	0.3	0.4	V0
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.07	V0
Methylcyclopentane	0.02	0.04	V0
n-Butane	0.03	1.37	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.03	V0
n-Hexane	0.01	0.1	V0
n-Nonane	0.01	< 0.01	V1
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.01	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.21	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	02-Dec		02-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.03	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.03	V0	0.04	V0
1-Butene	0.02	0.18	V0	0.1	V0
1-Pentene	0.01	0.04	V0	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	0.06	V0
2,2-Dimethylbutane	0.01	0.02	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	0.02	V0
2,3-Dimethylbutane	0.02	0.05	V0	0.03	V0
2,3-Dimethylpentane	0.02	0.1	V0	0.06	V0
2,4-Dimethylpentane	0.01	0.03	V0	0.03	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.22	V0	0.02	V0
2-Methylhexane	0.01	0.24	V0	0.06	V0
2-Methylpentane	0.01	0.27	V0	0.14	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.08	V0	< 0.02	V1
3-Methylhexane	0.02	0.27	V0	0.06	V0
3-Methylpentane	0.01	0.17	V0	0.08	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	3	V0	< 3	V1
Acetone	0.4	1.5	V0	1.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.19	V0	0.2	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.11	V0	0.04	V0
Cyclopentane	0.01	0.05	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.8	V0	2	V0
Ethylbenzene	0.01	0.06	V0	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.16	V0	1.24	V0
Isopentane	0.03	0.64	V0	0.59	V0
Isoprene	0.01	0.01	V0	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.19	V0	0.1	V0
Methanol	3	5	V0	17	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.25	V0	0.05	V0
Methylcyclopentane	0.02	0.27	V0	0.09	V0
n-Butane	0.03	2	V0	2	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.64	V0	0.06	V0
n-Hexane	0.01	0.61	V0	0.13	V0
n-Nonane	0.01	0.1	V0	0.01	V0
n-Octane	0.02	0.31	V0	0.02	V0
n-Pentane	0.1	0.5	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.09	V0	0.05	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.35	V0	0.17	V0
trans-2-Butene	0.01	0.03	V0	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**02-Dec**		**02-Dec**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.04	V0	< 0.02	V1
1-Butene	0.02	0.1	V0	0.04	V0
1-Pentene	0.01	0.02	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.03	V0	0.02	V0
2,2-Dimethylbutane	0.01	0.02	V0	< 0.01	V1
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.04	V0	0.02	V0
2,4-Dimethylpentane	0.01	0.02	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	< 0.01	V1
2-Methylhexane	0.01	0.05	V0	0.02	V0
2-Methylpentane	0.01	0.14	V0	0.08	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.06	V0	0.03	V0
3-Methylpentane	0.01	0.09	V0	0.05	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.3	V0	1.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.19	V0	0.12	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.03	V0
Cyclopentane	0.01	0.03	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3.3	V0	0.6	V0
Ethylbenzene	0.01	0.02	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.38	V0	0.97	V0
Isopentane	0.03	0.68	V0	0.68	V0
Isoprene	0.01	0.01	V0	< 0.01	V1
Isopropylalcohol	0.4	0.4	V0	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.09	V0	0.04	V0
Methanol	3	23	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.05	V0	0.04	V0
Methylcyclopentane	0.02	0.08	V0	0.05	V0
n-Butane	0.03	2.15	V0	1.45	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.05	V0	0.04	V0
n-Hexane	0.01	0.16	V0	0.09	V0
n-Nonane	0.01	0.01	V0	< 0.01	V1
n-Octane	0.02	0.02	V0	< 0.02	V1
n-Pentane	0.1	0.5	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.17	V0	0.08	V0
trans-2-Butene	0.01	0.02	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	02-Dec		02-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	0.03	V0
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	0.03	V0
1,3-Butadiene	0.02	0.03	V0	0.02	V0
1-Butene	0.02	0.15	V0	0.16	V0
1-Pentene	0.01	0.02	V0	0.03	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.03	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.02	V0
2,3-Dimethylbutane	0.02	0.03	V0	0.08	V0
2,3-Dimethylpentane	0.02	0.04	V0	0.2	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.04	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.04	V0	0.5	V0
2-Methylhexane	0.01	0.09	V0	0.48	V0
2-Methylpentane	0.01	0.14	V0	0.47	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	0.18	V0
3-Methylhexane	0.02	0.1	V0	0.68	V0
3-Methylpentane	0.01	0.09	V0	0.29	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.2	V0	1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.15	V0	0.2	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.02	V0	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.05	V0	0.18	V0
Cyclopentane	0.01	0.03	V0	0.07	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.1	V0	0.4	V0
Ethylbenzene	0.01	0.02	V0	0.08	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.34	V0	1.07	V0
Isopentane	0.03	0.6	V0	0.64	V0
Isoprene	0.01	< 0.01	V1	0.02	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.09	V0	0.24	V0
Methanol	3	6	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.09	V0	0.48	V0
Methylcyclopentane	0.02	0.12	V0	0.57	V0
n-Butane	0.03	1.98	V0	2	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.15	V0	1.72	V0
n-Hexane	0.01	0.25	V0	1.33	V0
n-Nonane	0.01	0.03	V0	0.19	V0
n-Octane	0.02	0.06	V0	0.77	V0
n-Pentane	0.1	0.4	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.11	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.17	V0	0.49	V0
trans-2-Butene	0.01	0.03	V0	0.04	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	0.02	V0
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**02-Dec**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	0.02	V0
1,3-Butadiene	0.02	0.03	V0
1-Butene	0.02	0.08	V0
1-Pentene	0.01	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.12	V0
2,3,4-Trimethylpentane	0.01	0.04	V0
2,3-Dimethylbutane	0.02	0.24	V0
2,3-Dimethylpentane	0.02	0.16	V0
2,4-Dimethylpentane	0.01	0.04	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.24	V0
2-Methylhexane	0.01	0.13	V0
2-Methylpentane	0.01	0.12	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.09	V0
3-Methylhexane	0.02	0.17	V0
3-Methylpentane	0.01	0.22	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	1.6	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.14	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.22	V0
Cyclopentane	0.01	0.07	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.7	V0
Ethylbenzene	0.01	0.05	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	2.19	V0
Isopentane	0.03	1.39	V0
Isoprene	0.01	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.13	V0
Methanol	3	5	V0
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.28	V0
Methylcyclopentane	0.02	0.22	V0
n-Butane	0.03	1.5	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.34	V0
n-Hexane	0.01	0.19	V0
n-Nonane	0.01	0.09	V0
n-Octane	0.02	0.34	V0
n-Pentane	0.1	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.06	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.27	V0
trans-2-Butene	0.01	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	08-Dec		08-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	0.02	V0	< 0.02	V1
1,3-Butadiene	0.02	0.03	V0	0.02	V0
1-Butene	0.02	0.07	V0	0.1	V0
1-Pentene	0.01	0.01	V0	0.01	V0
2,2,4-Trimethylpentane	0.01	0.02	V0	0.03	V0
2,2-Dimethylbutane	0.01	0.09	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	0.01	V0
2,3-Dimethylbutane	0.02	0.09	V0	0.04	V0
2,3-Dimethylpentane	0.02	0.04	V0	0.05	V0
2,4-Dimethylpentane	0.01	0.01	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	0.03	V0
2-Methylhexane	0.01	0.04	V0	0.06	V0
2-Methylpentane	0.01	0.3	V0	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.04	V0	0.05	V0
3-Methylpentane	0.01	0.18	V0	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.1	V0	1.1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.14	V0	0.08	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.02	V0
Cyclopentane	0.01	0.07	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.3	V0	0.7	V0
Ethylbenzene	0.01	0.02	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.32	V0	0.45	V0
Isopentane	0.03	0.69	V0	0.46	V0
Isoprene	0.01	0.02	V0	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.08	V0	0.06	V0
Methanol	3	3	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0	0.04	V0
Methylcyclopentane	0.02	0.06	V0	0.06	V0
n-Butane	0.03	0.48	V0	0.68	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.04	V0	0.09	V0
n-Hexane	0.01	0.1	V0	0.13	V0
n-Nonane	0.01	0.01	V0	0.02	V0
n-Octane	0.02	< 0.02	V1	0.04	V0
n-Pentane	0.1	0.5	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.12	V0	0.09	V0
trans-2-Butene	0.01	< 0.01	V1	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**08-Dec**		**08-Dec**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.03	V0	0.03	V0
1-Butene	0.02	0.15	V0	0.12	V0
1-Pentene	0.01	0.02	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.02	V0	0.04	V0
2,2-Dimethylbutane	0.01	0.04	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	0.02	V0
2,3-Dimethylbutane	0.02	0.05	V0	0.02	V0
2,3-Dimethylpentane	0.02	0.04	V0	0.04	V0
2,4-Dimethylpentane	0.01	0.01	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.03	V0	< 0.01	V1
2-Methylhexane	0.01	0.05	V0	0.02	V0
2-Methylpentane	0.01	0.14	V0	0.05	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.06	V0	0.02	V0
3-Methylpentane	0.01	0.08	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1	V0	0.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.11	V0	0.08	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	< 0.02	V1
Cyclopentane	0.01	0.03	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.7	V0	< 0.3	V1
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.51	V0	0.37	V0
Isopentane	0.03	0.61	V0	0.36	V0
Isoprene	0.01	0.01	V0	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.05	V0	< 0.03	V1
Methanol	3	5	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.05	V0	0.02	V0
Methylcyclopentane	0.02	0.06	V0	0.03	V0
n-Butane	0.03	0.82	V0	0.57	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.09	V0	0.03	V0
n-Hexane	0.01	0.13	V0	0.04	V0
n-Nonane	0.01	0.02	V0	< 0.01	V1
n-Octane	0.02	0.05	V0	< 0.02	V1
n-Pentane	0.1	0.6	V0	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.09	V0	0.06	V0
trans-2-Butene	0.01	0.04	V0	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	08-Dec		08-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.05	V0	0.02	V0
1-Butene	0.02	0.12	V0	0.03	V0
1-Pentene	0.01	0.02	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	0.21	V0	0.04	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.23	V0	0.04	V0
2,3-Dimethylpentane	0.02	0.03	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	0.01	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.02	V0	< 0.01	V1
2-Methylhexane	0.01	0.04	V0	0.01	V0
2-Methylpentane	0.01	0.98	V0	0.08	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.03	V0	< 0.02	V1
3-Methylpentane	0.01	0.49	V0	0.05	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.1	V0	0.6	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.13	V0	0.06	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	< 0.02	V1
Cyclopentane	0.01	0.17	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.8	V0	4.7	V0
Ethylbenzene	0.01	< 0.01	V1	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.6	V0	0.24	V0
Isopentane	0.03	1.62	V0	0.29	V0
Isoprene	0.01	0.02	V0	0.01	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.04	V0	< 0.03	V1
Methanol	3	5	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	0.02	V0
Methylcyclopentane	0.02	0.07	V0	< 0.02	V1
n-Butane	0.03	0.6	V0	0.34	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.03	V0	0.02	V0
n-Hexane	0.01	0.23	V0	0.04	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	1.7	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.06	V0	0.03	V0
trans-2-Butene	0.01	0.01	V0	< 0.01	V1
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**08-Dec**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.07	V0
1-Pentene	0.01	0.01	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.14	V0
2,3,4-Trimethylpentane	0.01	0.01	V0
2,3-Dimethylbutane	0.02	0.18	V0
2,3-Dimethylpentane	0.02	0.04	V0
2,4-Dimethylpentane	0.01	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.02	V0
2-Methylhexane	0.01	0.02	V0
2-Methylpentane	0.01	0.54	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.04	V0
3-Methylpentane	0.01	0.33	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	1.6	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.12	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.09	V0
Cyclopentane	0.01	0.15	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.3	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.66	V0
Isopentane	0.03	1.31	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.04	V0
Methanol	3	< 3	V1
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.07	V0
Methylcyclopentane	0.02	0.1	V0
n-Butane	0.03	0.44	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.06	V0
n-Hexane	0.01	0.17	V0
n-Nonane	0.01	0.02	V0
n-Octane	0.02	0.03	V0
n-Pentane	0.1	1.2	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.02	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.08	V0
trans-2-Butene	0.01	0.01	V0
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	14-Dec		14-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	0.04	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.06	V0	0.02	V0
1-Butene	0.02	0.19	V0	0.08	V0
1-Pentene	0.01	0.02	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.04	V0	0.03	V0
2,2-Dimethylbutane	0.01	0.04	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	0.02	V0	0.01	V0
2,3-Dimethylbutane	0.02	0.06	V0	0.02	V0
2,3-Dimethylpentane	0.02	0.07	V0	0.04	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.06	V0	0.04	V0
2-Methylhexane	0.01	0.1	V0	0.05	V0
2-Methylpentane	0.01	0.14	V0	0.08	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.02	V0	0.03	V0
3-Methylhexane	0.02	0.1	V0	0.06	V0
3-Methylpentane	0.01	0.1	V0	0.05	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.8	V0	1.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.22	V0	0.12	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.05	V0	0.04	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.03	V0
Cyclopentane	0.01	0.02	V0	0.01	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	2.2	V0	1.7	V0
Ethylbenzene	0.01	0.05	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.65	V0	0.43	V0
Isopentane	0.03	0.51	V0	0.32	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.14	V0	0.05	V0
Methanol	3	4	V0	3	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.07	V0	0.07	V0
Methylcyclopentane	0.02	0.11	V0	0.07	V0
n-Butane	0.03	0.95	V0	0.66	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.14	V0	0.08	V0
n-Hexane	0.01	0.13	V0	0.1	V0
n-Nonane	0.01	0.03	V0	0.02	V0
n-Octane	0.02	0.06	V0	0.04	V0
n-Pentane	0.1	0.2	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.06	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.25	V0	0.13	V0
trans-2-Butene	0.01	0.06	V0	0.06	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**14-Dec**		**14-Dec**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.06	V0	< 0.02	V1
1-Butene	0.02	0.19	V0	0.06	V0
1-Pentene	0.01	0.02	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.13	V0	0.01	V0
2,2-Dimethylbutane	0.01	0.03	V0	0.01	V0
2,3,4-Trimethylpentane	0.01	0.04	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.05	V0	< 0.02	V1
2,3-Dimethylpentane	0.02	0.16	V0	0.03	V0
2,4-Dimethylpentane	0.01	0.04	V0	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.05	V0	0.01	V0
2-Methylhexane	0.01	0.1	V0	0.03	V0
2-Methylpentane	0.01	0.13	V0	0.04	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	< 0.02	V1
3-Methylhexane	0.02	0.11	V0	0.03	V0
3-Methylpentane	0.01	0.1	V0	0.03	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.6	V0	1.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.26	V0	0.1	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.07	V0	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	< 0.02	V1
Cyclopentane	0.01	0.03	V0	< 0.01	V1
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	3.4	V0	0.6	V0
Ethylbenzene	0.01	0.05	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	1.31	V0	0.24	V0
Isopentane	0.03	0.6	V0	0.23	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.16	V0	< 0.03	V1
Methanol	3	9	V0	6	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.07	V0	0.03	V0
Methylcyclopentane	0.02	0.1	V0	0.03	V0
n-Butane	0.03	2.97	V0	0.5	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.14	V0	0.04	V0
n-Hexane	0.01	0.15	V0	0.05	V0
n-Nonane	0.01	0.02	V0	< 0.01	V1
n-Octane	0.02	0.07	V0	< 0.02	V1
n-Pentane	0.1	0.2	V0	0.1	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.07	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.3	V0	0.1	V0
trans-2-Butene	0.01	0.07	V0	0.04	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**		**Fort McKay South**	
Station #	**AMS 9**		**AMS 13**	
Sample Date	**14-Dec**		**14-Dec**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.05	V0	0.03	V0
1-Butene	0.02	0.14	V0	0.13	V0
1-Pentene	0.01	0.02	V0	0.02	V0
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.1	V0	0.04	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	< 0.01	V1
2,3-Dimethylbutane	0.02	0.12	V0	0.04	V0
2,3-Dimethylpentane	0.02	0.06	V0	0.03	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.06	V0	0.04	V0
2-Methylhexane	0.01	0.07	V0	0.04	V0
2-Methylpentane	0.01	0.31	V0	0.07	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	< 0.02	V1
3-Methylhexane	0.02	0.08	V0	0.06	V0
3-Methylpentane	0.01	0.22	V0	0.06	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	3	V0	< 3	V1
Acetone	0.4	1.7	V0	1.3	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.16	V0	0.13	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.04	V0	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.08	V0	0.04	V0
Cyclopentane	0.01	0.07	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.3	V0	1.9	V0
Ethylbenzene	0.01	0.04	V0	0.03	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.71	V0	0.69	V0
Isopentane	0.03	0.86	V0	0.35	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.06	V0	0.06	V0
Methanol	3	5	V0	3	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.09	V0	0.06	V0
Methylcyclopentane	0.02	0.11	V0	0.07	V0
n-Butane	0.03	0.65	V0	0.86	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.15	V0	0.09	V0
n-Hexane	0.01	0.15	V0	0.11	V0
n-Nonane	0.01	0.04	V0	0.03	V0
n-Octane	0.02	0.08	V0	0.05	V0
n-Pentane	0.1	0.5	V0	0.2	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	0.03	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.14	V0	0.14	V0
trans-2-Butene	0.01	0.05	V0	0.05	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**14-Dec**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	0.03	V0
1-Butene	0.02	0.06	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.14	V0
2,3,4-Trimethylpentane	0.01	0.03	V0
2,3-Dimethylbutane	0.02	0.31	V0
2,3-Dimethylpentane	0.02	0.21	V0
2,4-Dimethylpentane	0.01	0.05	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.1	V0
2-Methylhexane	0.01	0.08	V0
2-Methylpentane	0.01	0.05	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	0.03	V0
3-Methylhexane	0.02	0.15	V0
3-Methylpentane	0.01	0.41	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	2.1	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.09	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.52	V0
Cyclopentane	0.01	0.13	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.5	V0
Ethylbenzene	0.01	0.02	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	3.73	V0
Isopentane	0.03	3.32	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	0.04	V0
Methanol	3	< 3	V1
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.4	V0
Methylcyclopentane	0.02	0.4	V0
n-Butane	0.03	0.84	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.24	V0
n-Hexane	0.01	0.04	V0
n-Nonane	0.01	0.06	V0
n-Octane	0.02	0.12	V0
n-Pentane	0.1	< 0.1	V1
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.02	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.09	V0
trans-2-Butene	0.01	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay		Patricia McInnes	
Station #	AMS 1		AMS 6	
Sample Date	20-Dec		20-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.04	V0	0.04	V0
1-Butene	0.02	0.1	V0	0.11	V0
1-Pentene	0.01	< 0.01	V1	0.01	V0
2,2,4-Trimethylpentane	0.01	0.02	V0	0.05	V0
2,2-Dimethylbutane	0.01	0.06	V0	0.05	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	0.03	V0
2,3-Dimethylbutane	0.02	0.08	V0	0.09	V0
2,3-Dimethylpentane	0.02	0.06	V0	0.1	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.07	V0	0.14	V0
2-Methylhexane	0.01	0.06	V0	0.09	V0
2-Methylpentane	0.01	0.22	V0	0.26	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	0.05	V0
3-Methylhexane	0.02	0.06	V0	0.13	V0
3-Methylpentane	0.01	0.14	V0	0.16	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.4	V0	1.5	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.18	V0	0.2	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.03	V0	0.04	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.05	V0	0.08	V0
Cyclopentane	0.01	0.05	V0	0.06	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.6	V0	2.5	V0
Ethylbenzene	0.01	0.03	V0	0.05	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.69	V0	0.92	V0
Isopentane	0.03	0.65	V0	0.87	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.08	V0	0.13	V0
Methanol	3	4	V0	8	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.1	V0	0.2	V0
Methylcyclopentane	0.02	0.07	V0	0.12	V0
n-Butane	0.03	1.1	V0	1.21	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.1	V0	0.24	V0
n-Hexane	0.01	0.13	V0	0.19	V0
n-Nonane	0.01	0.03	V0	0.05	V0
n-Octane	0.02	0.09	V0	0.17	V0
n-Pentane	0.1	0.5	V0	0.6	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	0.05	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.18	V0	0.26	V0
trans-2-Butene	0.01	0.05	V0	0.06	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**20-Dec**		**20-Dec**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	0.08	V0	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	0.04	V0	< 0.02	V1
1,3-Butadiene	0.02	0.08	V0	0.03	V0
1-Butene	0.02	0.24	V0	0.08	V0
1-Pentene	0.01	0.03	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.14	V0	0.03	V0
2,2-Dimethylbutane	0.01	0.1	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	0.06	V0	0.01	V0
2,3-Dimethylbutane	0.02	0.18	V0	0.05	V0
2,3-Dimethylpentane	0.02	0.25	V0	0.05	V0
2,4-Dimethylpentane	0.01	0.07	V0	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.25	V0	0.06	V0
2-Methylhexane	0.01	0.27	V0	0.05	V0
2-Methylpentane	0.01	0.68	V0	0.13	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.12	V0	0.03	V0
3-Methylhexane	0.02	0.3	V0	0.06	V0
3-Methylpentane	0.01	0.39	V0	0.08	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	2.1	V0	1.7	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.41	V0	0.14	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.07	V0	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.15	V0	0.04	V0
Cyclopentane	0.01	0.13	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	5.4	V0	1.4	V0
Ethylbenzene	0.01	0.11	V0	0.02	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	2.99	V0	0.54	V0
Isopentane	0.03	2.34	V0	0.53	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	0.5	V0	< 0.4	V1
Isopropylbenzene	0.01	0.01	V0	< 0.01	V1
m,p-Xylene	0.03	0.33	V0	0.05	V0
Methanol	3	33	V0	4	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.34	V0	0.09	V0
Methylcyclopentane	0.02	0.28	V0	0.07	V0
n-Butane	0.03	4.33	V0	0.83	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.46	V0	0.11	V0
n-Hexane	0.01	0.46	V0	0.12	V0
n-Nonane	0.01	0.09	V0	0.02	V0
n-Octane	0.02	0.31	V0	0.07	V0
n-Pentane	0.1	1.6	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.12	V0	0.02	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.59	V0	0.15	V0
trans-2-Butene	0.01	0.08	V0	0.03	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	0.03	V0	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	20-Dec		20-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.02	V0	< 0.02	V1
1-Butene	0.02	0.06	V0	0.04	V0
1-Pentene	0.01	0.01	V0	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,2-Dimethylbutane	0.01	0.1	V0	0.03	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	0.12	V0	0.05	V0
2,3-Dimethylpentane	0.02	0.04	V0	0.03	V0
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.08	V0	0.03	V0
2-Methylhexane	0.01	0.03	V0	0.02	V0
2-Methylpentane	0.01	0.43	V0	0.14	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.03	V0	< 0.02	V1
3-Methylhexane	0.02	0.06	V0	0.04	V0
3-Methylpentane	0.01	0.24	V0	0.08	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.4	V0	1	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.14	V0	0.11	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.03	V0	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.04	V0	0.03	V0
Cyclopentane	0.01	0.08	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	0.8	V0	0.6	V0
Ethylbenzene	0.01	0.03	V0	0.01	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.56	V0	0.44	V0
Isopentane	0.03	1.02	V0	0.43	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.06	V0	< 0.03	V1
Methanol	3	4	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.1	V0	0.06	V0
Methylcyclopentane	0.02	0.08	V0	0.04	V0
n-Butane	0.03	0.9	V0	0.78	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.11	V0	0.05	V0
n-Hexane	0.01	0.17	V0	0.09	V0
n-Nonane	0.01	0.04	V0	0.02	V0
n-Octane	0.02	0.1	V0	0.04	V0
n-Pentane	0.1	0.9	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	0.01	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.12	V0	0.08	V0
trans-2-Butene	0.01	0.04	V0	0.02	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**20-Dec**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.07	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.04	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.07	V0
2,3-Dimethylpentane	0.02	0.04	V0
2,4-Dimethylpentane	0.01	0.01	V0
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.03	V0
2-Methylhexane	0.01	0.03	V0
2-Methylpentane	0.01	0.1	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.05	V0
3-Methylpentane	0.01	0.13	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	2.1	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.11	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.09	V0
Cyclopentane	0.01	0.04	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.7	V0
Ethylbenzene	0.01	< 0.01	V1
Formaldehyde	3	< 3	V1
Isobutane	0.02	1.07	V0
Isopentane	0.03	0.92	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	< 3	V1
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.1	V0
Methylcyclopentane	0.02	0.1	V0
n-Butane	0.03	1.14	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.05	V0
n-Hexane	0.01	0.08	V0
n-Nonane	0.01	0.02	V0
n-Octane	0.02	0.03	V0
n-Pentane	0.1	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	< 0.01	V1
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.06	V0
trans-2-Butene	0.01	0.04	V0
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		26-Dec		26-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.03	V0	0.05	V0
1-Butene	0.02	0.12	V0	0.15	V0
1-Pentene	0.01	0.02	V0	0.02	V0
2,2,4-Trimethylpentane	0.01	0.02	V0	0.1	V0
2,2-Dimethylbutane	0.01	0.06	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	0.03	V0
2,3-Dimethylbutane	0.02	0.08	V0	0.04	V0
2,3-Dimethylpentane	0.02	0.08	V0	0.1	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.04	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.15	V0	0.02	V0
2-Methylhexane	0.01	0.15	V0	0.08	V0
2-Methylpentane	0.01	0.2	V0	0.16	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.06	V0	< 0.02	V1
3-Methylhexane	0.02	0.2	V0	0.07	V0
3-Methylpentane	0.01	0.14	V0	0.1	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.6	V0	1.9	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.18	V0	0.25	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.05	V0	0.06	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.09	V0	0.04	V0
Cyclopentane	0.01	0.04	V0	0.03	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.2	V0	4.4	V0
Ethylbenzene	0.01	0.05	V0	0.04	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.69	V0	0.88	V0
Isopentane	0.03	0.63	V0	0.83	V0
Isoprene	0.01	< 0.01	V1	0.02	V0
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.12	V0	0.12	V0
Methanol	3	< 3	V1	10	V0
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.16	V0	0.05	V0
Methylcyclopentane	0.02	0.18	V0	0.1	V0
n-Butane	0.03	1.28	V0	1.9	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.44	V0	0.07	V0
n-Hexane	0.01	0.43	V0	0.16	V0
n-Nonane	0.01	0.08	V0	0.01	V0
n-Octane	0.02	0.21	V0	< 0.02	V1
n-Pentane	0.1	0.4	V0	0.5	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.04	V0	0.05	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.24	V0	0.25	V0
trans-2-Butene	0.01	0.05	V0	0.08	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**26-Dec**		**26-Dec**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.02	V0	< 0.02	V1
1-Butene	0.02	0.06	V0	0.06	V0
1-Pentene	0.01	< 0.01	V1	< 0.01	V1
2,2,4-Trimethylpentane	0.01	0.02	V0	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2,3-Dimethylbutane	0.02	< 0.02	V1	< 0.02	V1
2,3-Dimethylpentane	0.02	0.03	V0	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	< 0.01	V1	< 0.01	V1
2-Methylhexane	0.01	0.03	V0	0.02	V0
2-Methylpentane	0.01	0.08	V0	0.06	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1	< 0.02	V1
3-Methylhexane	0.02	0.02	V0	0.02	V0
3-Methylpentane	0.01	0.04	V0	0.04	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.2	V0	1.8	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.15	V0	0.12	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.04	V0	0.03	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.03	V0	0.02	V0
Cyclopentane	0.01	0.02	V0	0.02	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1.4	V0	0.7	V0
Ethylbenzene	0.01	0.01	V0	< 0.01	V1
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.53	V0	0.48	V0
Isopentane	0.03	0.51	V0	0.55	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	< 0.01	V1
m,p-Xylene	0.03	0.03	V0	< 0.03	V1
Methanol	3	5	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.03	V0	0.04	V0
Methylcyclopentane	0.02	0.04	V0	0.04	V0
n-Butane	0.03	1.32	V0	1.06	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.03	V0	0.02	V0
n-Hexane	0.01	0.07	V0	0.08	V0
n-Nonane	0.01	< 0.01	V1	< 0.01	V1
n-Octane	0.02	< 0.02	V1	< 0.02	V1
n-Pentane	0.1	0.4	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.02	V0	< 0.01	V1
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.09	V0	0.1	V0
trans-2-Butene	0.01	0.04	V0	0.04	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	26-Dec		26-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1	< 0.02	V1
1,3-Butadiene	0.02	0.03	V0	< 0.02	V1
1-Butene	0.02	0.12	V0	0.11	V0
1-Pentene	0.01	0.02	V0	0.02	V0
2,2,4-Trimethylpentane	0.01	0.01	V0	0.02	V0
2,2-Dimethylbutane	0.01	0.05	V0	0.08	V0
2,3,4-Trimethylpentane	0.01	0.01	V0	0.03	V0
2,3-Dimethylbutane	0.02	0.08	V0	0.15	V0
2,3-Dimethylpentane	0.02	0.08	V0	0.15	V0
2,4-Dimethylpentane	0.01	0.02	V0	0.02	V0
2-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1	< 0.3	V1
2-Methylheptane	0.01	0.12	V0	0.47	V0
2-Methylhexane	0.01	0.14	V0	0.2	V0
2-Methylpentane	0.01	0.2	V0	0.19	V0
3-Methyl-1-butene	0.3	< 0.3	V1	< 0.3	V1
3-Methylheptane	0.02	0.05	V0	0.18	V0
3-Methylhexane	0.02	0.17	V0	0.29	V0
3-Methylpentane	0.01	0.11	V0	0.13	V0
4-Methyl-1-pentene	0.3	< 0.3	V1	< 0.3	V1
Acetaldehyde	3	< 3	V1	< 3	V1
Acetone	0.4	1.4	V0	1.2	V0
alpha-Pinene	0.3	< 0.3	V1	< 0.3	V1
Benzene	0.01	0.16	V0	0.19	V0
beta-Pinene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Butene	0.02	0.05	V0	0.04	V0
cis-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Cyclohexane	0.02	0.06	V0	0.17	V0
Cyclopentane	0.01	0.04	V0	0.04	V0
Cyclopentene	0.3	< 0.3	V1	< 0.3	V1
Ethanol	0.3	1	V0	0.7	V0
Ethylbenzene	0.01	0.03	V0	0.1	V0
Formaldehyde	3	< 3	V1	< 3	V1
Isobutane	0.02	0.7	V0	0.6	V0
Isopentane	0.03	0.49	V0	0.53	V0
Isoprene	0.01	< 0.01	V1	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1	0.01	V0
m,p-Xylene	0.03	0.08	V0	0.22	V0
Methanol	3	5	V0	< 3	V1
Methylethylketone	0.3	< 0.3	V1	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1	< 0.4	V1
Methylcyclohexane	0.01	0.14	V0	0.53	V0
Methylcyclopentane	0.02	0.18	V0	0.24	V0
n-Butane	0.03	1.38	V0	1.18	V0
n-Decane	0.06	< 0.06	V1	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1	< 0.4	V1
n-Heptane	0.01	0.36	V0	0.78	V0
n-Hexane	0.01	0.41	V0	0.35	V0
n-Nonane	0.01	0.06	V0	0.18	V0
n-Octane	0.02	0.17	V0	0.76	V0
n-Pentane	0.1	0.4	V0	0.4	V0
n-Propylbenzene	0.05	< 0.05	V1	< 0.05	V1
n-Undecane	0.5	< 0.5	V1	< 0.5	V1
Naphthalene	0.5	< 0.5	V1	< 0.5	V1
o-Xylene	0.01	0.03	V0	0.08	V0
Styrene	0.04	< 0.04	V1	< 0.04	V1
Toluene	0.01	0.18	V0	0.49	V0
trans-2-Butene	0.01	0.05	V0	0.06	V0
trans-2-Hexene	0.3	< 0.3	V1	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1	< 0.02	V1
Isobutylene	0.3	< 0.3	V1	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**26-Dec**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
1,2,4-Trimethylbenzene	0.03	< 0.03	V1
1,3,5-Trimethylbenzene	0.02	< 0.02	V1
1,3-Butadiene	0.02	< 0.02	V1
1-Butene	0.02	0.1	V0
1-Pentene	0.01	< 0.01	V1
2,2,4-Trimethylpentane	0.01	< 0.01	V1
2,2-Dimethylbutane	0.01	0.02	V0
2,3,4-Trimethylpentane	0.01	< 0.01	V1
2,3-Dimethylbutane	0.02	0.03	V0
2,3-Dimethylpentane	0.02	< 0.02	V1
2,4-Dimethylpentane	0.01	< 0.01	V1
2-Methyl-1-pentene	0.3	< 0.3	V1
2-Methyl-2-butene	0.3	< 0.3	V1
2-Methylheptane	0.01	0.01	V0
2-Methylhexane	0.01	0.02	V0
2-Methylpentane	0.01	0.07	V0
3-Methyl-1-butene	0.3	< 0.3	V1
3-Methylheptane	0.02	< 0.02	V1
3-Methylhexane	0.02	0.03	V0
3-Methylpentane	0.01	0.05	V0
4-Methyl-1-pentene	0.3	< 0.3	V1
Acetaldehyde	3	< 3	V1
Acetone	0.4	1.8	V0
alpha-Pinene	0.3	< 0.3	V1
Benzene	0.01	0.12	V0
beta-Pinene	0.3	< 0.3	V1
cis-2-Butene	0.02	< 0.02	V1
cis-2-Hexene	0.3	< 0.3	V1
cis-2-Pentene	0.02	< 0.02	V1
Cyclohexane	0.02	0.03	V0
Cyclopentane	0.01	0.02	V0
Cyclopentene	0.3	< 0.3	V1
Ethanol	0.3	0.7	V0
Ethylbenzene	0.01	0.01	V0
Formaldehyde	3	< 3	V1
Isobutane	0.02	0.38	V0
Isopentane	0.03	0.51	V0
Isoprene	0.01	< 0.01	V1
Isopropylalcohol	0.4	< 0.4	V1
Isopropylbenzene	0.01	< 0.01	V1
m,p-Xylene	0.03	< 0.03	V1
Methanol	3	< 3	V1
Methylethylketone	0.3	< 0.3	V1
Methylisobutylketone	0.4	< 0.4	V1
Methylcyclohexane	0.01	0.04	V0
Methylcyclopentane	0.02	0.04	V0
n-Butane	0.03	0.89	V0
n-Decane	0.06	< 0.06	V1
n-Dodecane	0.4	< 0.4	V1
n-Heptane	0.01	0.03	V0
n-Hexane	0.01	0.08	V0
n-Nonane	0.01	0.01	V0
n-Octane	0.02	< 0.02	V1
n-Pentane	0.1	0.3	V0
n-Propylbenzene	0.05	< 0.05	V1
n-Undecane	0.5	< 0.5	V1
Naphthalene	0.5	< 0.5	V1
o-Xylene	0.01	0.01	V0
Styrene	0.04	< 0.04	V1
Toluene	0.01	0.05	V0
trans-2-Butene	0.01	0.03	V0
trans-2-Hexene	0.3	< 0.3	V1
trans-2-Pentene	0.02	< 0.02	V1
Isobutylene	0.3	< 0.3	V1
Methylvinylketone	0.3	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name Station # Sample Date Compound Name	Bertha Ganter - Fort McKay AMS 1 Jan 01 - Dec 26 Average ppbv	Bertha Ganter - Fort McKay AMS 1 Jan 01 - Dec 26 Std Dev ppbv	Bertha Ganter - Fort McKay AMS 1 Jan 01 - Dec 26 Total Samples (#)	Bertha Ganter - Fort McKay AMS 1 Jan 01 - Dec 26 Total ≥ MDL (#)
1,2,4-Trimethylbenzene	0.0	0.0	61	16
1,3,5-Trimethylbenzene	0.0	0.0	61	6
1,3-Butadiene	0.0	0.0	61	11
1-Butene	0.4	2.1	61	59
1-Pentene	0.0	0.0	61	24
2,2,4-Trimethylpentane	0.0	0.0	61	14
2,2-Dimethylbutane	0.1	0.1	61	57
2,3,4-Trimethylpentane	0.0	0.0	61	31
2,3-Dimethylbutane	0.1	0.1	61	52
2,3-Dimethylpentane	0.0	0.1	61	40
2,4-Dimethylpentane	0.0	0.0	61	33
2-Methyl-1-pentene	0.0	0.0	61	0
2-Methyl-2-butene	0.0	0.0	61	0
2-Methylheptane	0.1	0.3	61	48
2-Methylhexane	0.0	0.1	61	29
2-Methylpentane	0.3	0.5	61	58
3-Methyl-1-butene	0.0	0.0	61	0
3-Methylheptane	0.0	0.1	61	26
3-Methylhexane	0.1	0.1	61	45
3-Methylpentane	0.2	0.3	61	61
4-Methyl-1-pentene	0.0	0.0	61	0
Acetaldehyde	7.0	25.8	61	26
Acetone	2.4	1.6	61	61
alpha-Pinene	0.3	0.9	61	16
Benzene	0.1	0.1	61	57
beta-Pinene	0.1	0.3	61	7
cis-2-Butene	0.0	0.3	61	12
cis-2-Hexene	0.0	0.0	61	0
cis-2-Pentene	0.0	0.0	61	1
Cyclohexane	0.1	0.1	61	46
Cyclopentane	0.1	0.1	61	54
Cyclopentene	0.0	0.0	61	0
Ethanol	1.7	1.6	61	58
Ethylbenzene	0.0	0.1	61	46
Formaldehyde	0.6	3.3	61	3
Isobutane	0.6	0.4	61	61
Isopentane	0.7	0.6	61	60
Isoprene	0.3	0.5	61	40
Isopropylalcohol	0.1	0.3	61	6
Isopropylbenzene	0.0	0.0	61	5
m,p-Xylene	0.1	0.2	61	42
Methanol	10.6	15.3	61	50
Methylethylketone	0.1	0.2	61	15
Methylisobutylketone	0.0	0.0	61	0
Methylcyclohexane	0.1	0.2	61	53
Methylcyclopentane	0.1	0.1	61	56
n-Butane	0.6	0.5	61	61
n-Decane	0.0	0.0	61	2
n-Dodecane	0.0	0.2	61	2
n-Heptane	0.2	0.3	61	54
n-Hexane	0.2	0.3	61	59
n-Nonane	0.1	0.2	61	39
n-Octane	0.2	0.5	61	37
n-Pentane	0.6	1.0	61	50
n-Propylbenzene	0.0	0.0	61	2
n-Undecane	0.0	0.0	61	0
Naphthalene	0.1	0.4	61	5
o-Xylene	0.0	0.1	61	47
Styrene	0.0	0.0	61	1
Toluene	0.2	0.3	61	61
trans-2-Butene	0.1	0.5	61	17
trans-2-Hexene	0.0	0.0	61	0
trans-2-Pentene	0.0	0.0	61	3
Isobutylene	0.0	0.0	61	0
Methylvinylketone	0.1	0.3	61	11

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name Station # Sample Date Compound Name	Patricia McInnes AMS 6 Jan 01 - Dec 26 Average ppbv	Patricia McInnes AMS 6 Jan 01 - Dec 26 Std Dev ppbv	Patricia McInnes AMS 6 Jan 01 - Dec 26 Total Samples (#)	Patricia McInnes AMS 6 Jan 01 - Dec 26 Total ≥ MDL (#)
1,2,4-Trimethylbenzene	0.0	0.0	61	17
1,3,5-Trimethylbenzene	0.0	0.0	61	4
1,3-Butadiene	0.0	0.1	61	16
1-Butene	0.2	0.6	61	50
1-Pentene	0.0	0.1	61	28
2,2,4-Trimethylpentane	0.0	0.1	61	38
2,2-Dimethylbutane	0.0	0.0	61	37
2,3,4-Trimethylpentane	0.0	0.0	61	29
2,3-Dimethylbutane	0.0	0.0	61	34
2,3-Dimethylpentane	0.0	0.1	61	47
2,4-Dimethylpentane	0.0	0.0	61	39
2-Methyl-1-pentene	0.0	0.0	61	0
2-Methyl-2-butene	0.0	0.0	61	0
2-Methylheptane	0.1	0.1	61	43
2-Methylhexane	0.0	0.1	61	33
2-Methylpentane	0.1	0.2	61	60
3-Methyl-1-butene	0.0	0.0	61	0
3-Methylheptane	0.0	0.0	61	21
3-Methylhexane	0.1	0.1	61	48
3-Methylpentane	0.1	0.1	61	58
4-Methyl-1-pentene	0.0	0.0	61	0
Acetaldehyde	4.9	10.6	61	26
Acetone	2.6	1.9	61	61
alpha-Pinene	0.0	0.1	61	6
Benzene	0.3	0.9	61	59
beta-Pinene	0.0	0.1	61	1
cis-2-Butene	0.0	0.1	61	15
cis-2-Hexene	0.0	0.0	61	0
cis-2-Pentene	0.0	0.0	61	4
Cyclohexane	0.0	0.0	61	34
Cyclopentane	0.0	0.0	61	46
Cyclopentene	0.0	0.0	61	0
Ethanol	3.6	6.4	61	58
Ethylbenzene	0.0	0.0	61	49
Formaldehyde	0.4	1.5	61	4
Isobutane	0.6	0.3	61	61
Isopentane	0.5	0.4	61	59
Isoprene	0.1	0.2	61	36
Isopropylalcohol	0.1	0.3	61	2
Isopropylbenzene	0.0	0.0	61	3
m,p-Xylene	0.1	0.1	61	48
Methanol	12.0	10.9	61	53
Methylethylketone	0.1	0.4	61	15
Methylisobutylketone	0.0	0.0	61	0
Methylcyclohexane	0.1	0.1	61	48
Methylcyclopentane	0.1	0.1	61	49
n-Butane	0.8	0.6	61	59
n-Decane	0.0	0.0	61	2
n-Dodecane	0.0	0.2	61	2
n-Heptane	0.1	0.2	61	56
n-Hexane	0.1	0.1	61	61
n-Nonane	0.0	0.0	61	34
n-Octane	0.1	0.1	61	33
n-Pentane	0.3	0.3	61	50
n-Propylbenzene	0.0	0.0	61	2
n-Undecane	0.0	0.0	61	0
Naphthalene	0.3	1.6	61	6
o-Xylene	0.0	0.0	61	53
Styrene	0.0	0.0	61	4
Toluene	0.2	0.4	61	60
trans-2-Butene	0.0	0.1	61	22
trans-2-Hexene	0.0	0.0	61	0
trans-2-Pentene	0.0	0.0	61	6
Isobutylene	0.0	0.0	61	0
Methylvinylketone	0.1	0.2	61	8

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Athabasca Valley	Athabasca Valley	Athabasca Valley	Athabasca Valley
Station #	AMS 7	AMS 7	AMS 7	AMS 7
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	ppbv	ppbv		
1,2,4-Trimethylbenzene	0.0	0.0	61	19
1,3,5-Trimethylbenzene	0.0	0.0	61	6
1,3-Butadiene	0.1	0.2	61	16
1-Butene	0.3	1.0	61	55
1-Pentene	0.0	0.1	61	24
2,2,4-Trimethylpentane	0.0	0.0	61	30
2,2-Dimethylbutane	0.0	0.0	61	39
2,3,4-Trimethylpentane	0.0	0.0	61	21
2,3-Dimethylbutane	0.0	0.0	61	36
2,3-Dimethylpentane	0.0	0.0	61	43
2,4-Dimethylpentane	0.0	0.0	61	28
2-Methyl-1-pentene	0.0	0.1	61	1
2-Methyl-2-butene	0.0	0.0	61	0
2-Methylheptane	0.0	0.1	61	41
2-Methylhexane	0.0	0.0	61	32
2-Methylpentane	0.1	0.1	61	60
3-Methyl-1-butene	0.0	0.0	61	0
3-Methylheptane	0.0	0.0	61	14
3-Methylhexane	0.1	0.1	61	52
3-Methylpentane	0.1	0.1	61	61
4-Methyl-1-pentene	0.0	0.0	61	0
Acetaldehyde	5.2	8.9	61	26
Acetone	2.8	2.6	61	61
alpha-Pinene	0.0	0.1	61	5
Benzene	0.4	1.3	61	59
beta-Pinene	0.0	0.1	61	2
cis-2-Butene	0.0	0.1	61	20
cis-2-Hexene	0.0	0.0	61	0
cis-2-Pentene	0.0	0.0	61	4
Cyclohexane	0.0	0.0	61	37
Cyclopentane	0.0	0.0	61	49
Cyclopentene	0.0	0.0	61	0
Ethanol	4.1	6.9	61	60
Ethylbenzene	0.0	0.1	61	48
Formaldehyde	0.6	2.0	61	6
Isobutane	0.8	0.7	61	61
Isopentane	0.6	0.4	61	60
Isoprene	0.1	0.3	61	38
Isopropylalcohol	0.1	0.2	61	8
Isopropylbenzene	0.0	0.0	61	6
m,p-Xylene	0.1	0.1	61	45
Methanol	19.8	17.2	61	58
Methylethylketone	0.2	0.5	61	18
Methylisobutylketone	0.0	0.0	61	0
Methylcyclohexane	0.1	0.1	61	49
Methylcyclopentane	0.1	0.1	61	53
n-Butane	1.2	1.4	61	61
n-Decane	0.0	0.0	61	4
n-Dodecane	0.0	0.2	61	3
n-Heptane	0.1	0.2	61	56
n-Hexane	0.1	0.1	61	61
n-Nonane	0.0	0.1	61	36
n-Octane	0.1	0.1	61	32
n-Pentane	0.4	0.3	61	55
n-Propylbenzene	0.0	0.0	61	2
n-Undecane	0.0	0.0	61	0
Naphthalene	0.2	0.8	61	7
o-Xylene	0.0	0.1	61	50
Styrene	0.0	0.0	61	4
Toluene	0.3	0.7	61	61
trans-2-Butene	0.0	0.2	61	26
trans-2-Hexene	0.0	0.0	61	0
trans-2-Pentene	0.0	0.0	61	10
Isobutylene	0.0	0.0	61	0
Methylvinylketone	0.1	0.3	61	11

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name	Anzac	Anzac	Anzac	Anzac
Station #	AMS 14	AMS 14	AMS 14	AMS 14
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	ppbv	ppbv		
1,2,4-Trimethylbenzene	0.0	0.0	60	7
1,3,5-Trimethylbenzene	0.0	0.0	60	3
1,3-Butadiene	0.0	0.1	60	8
1-Butene	0.1	0.4	60	52
1-Pentene	0.0	0.0	60	15
2,2,4-Trimethylpentane	0.0	0.0	60	27
2,2-Dimethylbutane	0.0	0.0	60	30
2,3,4-Trimethylpentane	0.0	0.0	60	12
2,3-Dimethylbutane	0.0	0.0	60	16
2,3-Dimethylpentane	0.0	0.0	60	26
2,4-Dimethylpentane	0.0	0.0	60	17
2-Methyl-1-pentene	0.0	0.0	60	0
2-Methyl-2-butene	0.0	0.0	60	0
2-Methylheptane	0.0	0.0	60	25
2-Methylhexane	0.0	0.0	60	21
2-Methylpentane	0.1	0.1	60	56
3-Methyl-1-butene	0.0	0.0	60	0
3-Methylheptane	0.0	0.0	60	7
3-Methylhexane	0.0	0.0	60	31
3-Methylpentane	0.0	0.0	60	56
4-Methyl-1-pentene	0.0	0.0	60	0
Acetaldehyde	4.6	7.0	60	27
Acetone	2.8	2.0	60	60
alpha-Pinene	0.2	0.3	60	13
Benzene	0.2	0.4	60	57
beta-Pinene	0.1	0.2	60	7
cis-2-Butene	0.0	0.0	60	13
cis-2-Hexene	0.0	0.0	60	0
cis-2-Pentene	0.0	0.0	60	4
Cyclohexane	0.0	0.0	60	24
Cyclopentane	0.0	0.0	60	40
Cyclopentene	0.0	0.0	60	0
Ethanol	4.9	15.8	60	51
Ethylbenzene	0.0	0.0	60	33
Formaldehyde	0.8	2.2	60	8
Isobutane	0.5	0.5	60	59
Isopentane	0.4	0.2	60	58
Isoprene	0.2	0.4	60	30
Isopropylalcohol	0.1	0.4	60	7
Isopropylbenzene	0.0	0.0	60	3
m,p-Xylene	0.0	0.1	60	21
Methanol	14.5	24.4	60	48
Methylethylketone	0.1	0.3	60	15
Methylisobutylketone	0.0	0.0	60	0
Methylcyclohexane	0.0	0.0	60	42
Methylcyclopentane	0.0	0.0	60	38
n-Butane	0.6	0.5	60	60
n-Decane	0.0	0.0	60	2
n-Dodecane	0.0	0.2	60	2
n-Heptane	0.0	0.1	60	49
n-Hexane	0.1	0.1	60	58
n-Nonane	0.0	0.0	60	22
n-Octane	0.0	0.0	60	19
n-Pentane	0.3	0.2	60	49
n-Propylbenzene	0.0	0.0	60	1
n-Undecane	0.0	0.0	60	0
Naphthalene	0.2	0.7	60	5
o-Xylene	0.0	0.0	60	31
Styrene	0.0	0.0	60	3
Toluene	0.2	0.3	60	59
trans-2-Butene	0.0	0.1	60	15
trans-2-Hexene	0.0	0.0	60	0
trans-2-Pentene	0.0	0.0	60	5
Isobutylene	0.0	0.0	60	0
Methylvinylketone	0.1	0.2	60	6

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name Station # Sample Date Compound Name	Barge Landing AMS 9 Jan 01 - Dec 26 Average ppbv	Barge Landing AMS 9 Jan 01 - Dec 26 Std Dev ppbv	Barge Landing AMS 9 Jan 01 - Dec 26 Total Samples (#)	Barge Landing AMS 9 Jan 01 - Dec 26 Total ≥ MDL (#)
1,2,4-Trimethylbenzene	0.0	0.0	60	7
1,3,5-Trimethylbenzene	0.0	0.0	60	1
1,3-Butadiene	0.0	0.0	60	10
1-Butene	0.1	0.1	60	51
1-Pentene	0.0	0.0	60	23
2,2,4-Trimethylpentane	0.0	0.0	60	5
2,2-Dimethylbutane	0.1	0.2	60	57
2,3,4-Trimethylpentane	0.0	0.0	60	23
2,3-Dimethylbutane	0.1	0.2	60	50
2,3-Dimethylpentane	0.0	0.0	60	38
2,4-Dimethylpentane	0.0	0.0	60	30
2-Methyl-1-pentene	0.0	0.0	60	0
2-Methyl-2-butene	0.0	0.0	60	0
2-Methylheptane	0.1	0.1	60	45
2-Methylhexane	0.0	0.1	60	26
2-Methylpentane	0.6	0.9	60	58
3-Methyl-1-butene	0.0	0.0	60	0
3-Methylheptane	0.0	0.0	60	18
3-Methylhexane	0.1	0.1	60	47
3-Methylpentane	0.4	0.6	60	59
4-Methyl-1-pentene	0.0	0.0	60	0
Acetaldehyde	4.1	9.3	60	23
Acetone	2.2	1.4	60	59
alpha-Pinene	0.0	0.0	60	0
Benzene	0.2	0.2	60	56
beta-Pinene	0.0	0.0	60	0
cis-2-Butene	0.0	0.0	60	11
cis-2-Hexene	0.0	0.0	60	0
cis-2-Pentene	0.0	0.0	60	1
Cyclohexane	0.1	0.1	60	49
Cyclopentane	0.1	0.2	60	55
Cyclopentene	0.0	0.0	60	0
Ethanol	1.4	1.3	60	55
Ethylbenzene	0.0	0.0	60	37
Formaldehyde	0.4	1.8	60	3
Isobutane	0.5	0.3	60	59
Isopentane	1.0	1.1	60	58
Isoprene	0.2	0.5	60	32
Isopropylalcohol	0.1	0.3	60	9
Isopropylbenzene	0.0	0.0	60	3
m,p-Xylene	0.0	0.1	60	28
Methanol	11.1	12.9	60	52
Methylethylketone	0.1	0.2	60	12
Methylisobutylketone	0.0	0.0	60	0
Methylcyclohexane	0.1	0.1	60	51
Methylcyclopentane	0.2	0.9	60	51
n-Butane	0.5	0.5	60	58
n-Decane	0.0	0.0	60	1
n-Dodecane	0.0	0.1	60	2
n-Heptane	0.1	0.2	60	55
n-Hexane	0.5	1.9	60	59
n-Nonane	0.0	0.1	60	43
n-Octane	0.1	0.1	60	33
n-Pentane	1.1	1.6	60	53
n-Propylbenzene	0.0	0.0	60	1
n-Undecane	0.0	0.0	60	0
Naphthalene	0.1	0.6	60	4
o-Xylene	0.0	0.0	60	39
Styrene	0.0	0.0	60	1
Toluene	0.1	0.1	60	58
trans-2-Butene	0.0	0.0	60	14
trans-2-Hexene	0.0	0.0	60	0
trans-2-Pentene	0.0	0.0	60	5
Isobutylene	0.0	0.0	60	0
Methylvinylketone	0.1	0.3	60	8

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name Station # Sample Date Compound Name	Fort McKay South AMS 13 Jan 01 - Dec 26 Average ppbv	Fort McKay South AMS 13 Jan 01 - Dec 26 Std Dev ppbv	Fort McKay South AMS 13 Jan 01 - Dec 26 Total Samples (#)	Fort McKay South AMS 13 Jan 01 - Dec 26 Total ≥ MDL (#)
1,2,4-Trimethylbenzene	0.0	0.1	61	11
1,3,5-Trimethylbenzene	0.0	0.0	61	5
1,3-Butadiene	0.0	0.0	61	8
1-Butene	0.1	0.1	61	53
1-Pentene	0.0	0.0	61	24
2,2,4-Trimethylpentane	0.0	0.0	61	3
2,2-Dimethylbutane	0.1	0.1	61	59
2,3,4-Trimethylpentane	0.0	0.0	61	22
2,3-Dimethylbutane	0.1	0.1	61	50
2,3-Dimethylpentane	0.1	0.1	61	37
2,4-Dimethylpentane	0.0	0.0	61	23
2-Methyl-1-pentene	0.0	0.0	61	0
2-Methyl-2-butene	0.0	0.0	61	0
2-Methylheptane	0.2	0.7	61	49
2-Methylhexane	0.1	0.1	61	29
2-Methylpentane	0.2	0.2	61	60
3-Methyl-1-butene	0.0	0.0	61	0
3-Methylheptane	0.1	0.2	61	25
3-Methylhexane	0.1	0.2	61	48
3-Methylpentane	0.1	0.1	61	61
4-Methyl-1-pentene	0.0	0.0	61	0
Acetaldehyde	3.2	6.3	61	22
Acetone	2.4	2.1	61	61
alpha-Pinene	0.1	0.2	61	13
Benzene	0.1	0.1	61	59
beta-Pinene	0.0	0.1	61	4
cis-2-Butene	0.0	0.0	61	14
cis-2-Hexene	0.0	0.0	61	0
cis-2-Pentene	0.0	0.0	61	1
Cyclohexane	0.1	0.1	61	47
Cyclopentane	0.1	0.1	61	59
Cyclopentene	0.0	0.0	61	0
Ethanol	1.4	1.4	61	54
Ethylbenzene	0.1	0.2	61	47
Formaldehyde	0.1	0.9	61	1
Isobutane	0.5	0.4	61	61
Isopentane	0.5	0.4	61	60
Isoprene	0.4	0.7	61	40
Isopropylalcohol	0.1	0.3	61	3
Isopropylbenzene	0.0	0.0	61	10
m,p-Xylene	0.1	0.5	61	35
Methanol	10.7	15.1	61	49
Methylethylketone	0.1	0.2	61	15
Methylisobutylketone	0.0	0.0	61	0
Methylcyclohexane	0.2	0.5	61	55
Methylcyclopentane	0.1	0.1	61	54
n-Butane	0.5	0.5	61	61
n-Decane	0.0	0.1	61	5
n-Dodecane	0.1	0.3	61	4
n-Heptane	0.3	0.6	61	58
n-Hexane	0.2	0.2	61	61
n-Nonane	0.1	0.5	61	46
n-Octane	0.3	1.0	61	41
n-Pentane	0.4	0.5	61	57
n-Propylbenzene	0.0	0.0	61	2
n-Undecane	0.0	0.0	61	0
Naphthalene	0.2	0.5	61	7
o-Xylene	0.1	0.2	61	44
Styrene	0.0	0.0	61	1
Toluene	0.3	0.6	61	61
trans-2-Butene	0.0	0.0	61	19
trans-2-Hexene	0.0	0.0	61	0
trans-2-Pentene	0.0	0.0	61	2
Isobutylene	0.0	0.0	61	0
Methylvinylketone	0.1	0.3	61	11

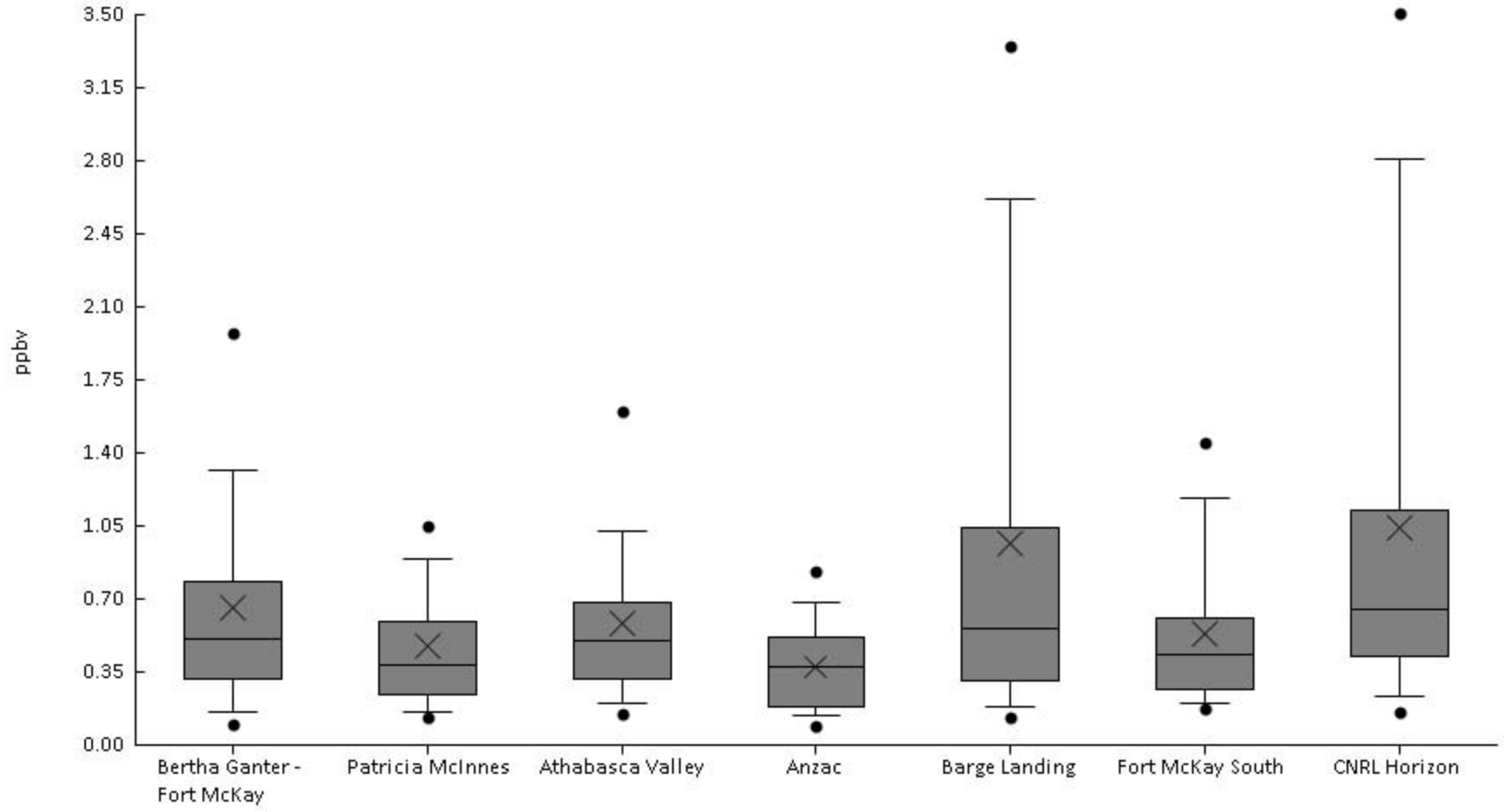
WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Volatile Organic Compounds (VOCs) **Indicated Sites and Dates**

Station Name Station # Sample Date Compound Name	CNRL Horizon AMS 15 Jan 01 - Dec 26 Average ppbv	CNRL Horizon AMS 15 Jan 01 - Dec 26 Std Dev ppbv	CNRL Horizon AMS 15 Jan 01 - Dec 26 Total Samples (#)	CNRL Horizon AMS 15 Jan 01 - Dec 26 Total ≥ MDL (#)
1,2,4-Trimethylbenzene	0.0	0.0	61	5
1,3,5-Trimethylbenzene	0.0	0.0	61	4
1,3-Butadiene	0.0	0.0	61	4
1-Butene	0.1	0.0	61	53
1-Pentene	0.0	0.0	61	19
2,2,4-Trimethylpentane	0.0	0.0	61	1
2,2-Dimethylbutane	0.1	0.1	61	54
2,3,4-Trimethylpentane	0.0	0.0	61	29
2,3-Dimethylbutane	0.1	0.2	61	49
2,3-Dimethylpentane	0.1	0.1	61	47
2,4-Dimethylpentane	0.0	0.0	61	36
2-Methyl-1-pentene	0.0	0.0	61	0
2-Methyl-2-butene	0.0	0.0	61	0
2-Methylheptane	0.1	0.1	61	53
2-Methylhexane	0.0	0.1	61	32
2-Methylpentane	0.1	0.1	61	56
3-Methyl-1-butene	0.0	0.0	61	0
3-Methylheptane	0.0	0.0	61	22
3-Methylhexane	0.1	0.1	61	48
3-Methylpentane	0.2	0.2	61	61
4-Methyl-1-pentene	0.0	0.0	61	0
Acetaldehyde	4.1	8.3	61	24
Acetone	2.7	1.9	61	61
alpha-Pinene	0.1	0.4	61	9
Benzene	0.1	0.1	61	57
beta-Pinene	0.0	0.0	61	1
cis-2-Butene	0.0	0.0	61	5
cis-2-Hexene	0.0	0.0	61	0
cis-2-Pentene	0.0	0.0	61	2
Cyclohexane	0.2	0.3	61	52
Cyclopentane	0.1	0.1	61	56
Cyclopentene	0.0	0.0	61	0
Ethanol	1.6	1.7	61	56
Ethylbenzene	0.0	0.0	61	33
Formaldehyde	0.3	1.5	61	3
Isobutane	1.0	0.9	61	60
Isopentane	1.0	1.1	61	60
Isoprene	0.2	0.5	61	35
Isopropylalcohol	0.0	0.2	61	2
Isopropylbenzene	0.0	0.0	61	2
m,p-Xylene	0.0	0.0	61	27
Methanol	11.1	14.9	61	47
Methylethylketone	0.1	0.2	61	15
Methylisobutylketone	0.0	0.0	61	0
Methylcyclohexane	0.2	0.2	61	57
Methylcyclopentane	0.2	0.2	61	52
n-Butane	0.5	0.5	61	60
n-Decane	0.0	0.0	61	1
n-Dodecane	0.0	0.3	61	3
n-Heptane	0.2	0.2	61	57
n-Hexane	0.1	0.1	61	57
n-Nonane	0.0	0.0	61	44
n-Octane	0.1	0.1	61	43
n-Pentane	0.3	0.3	61	46
n-Propylbenzene	0.0	0.0	61	1
n-Undecane	0.0	0.0	61	0
Naphthalene	0.1	0.5	61	4
o-Xylene	0.0	0.0	61	33
Styrene	0.0	0.0	61	1
Toluene	0.1	0.1	61	60
trans-2-Butene	0.0	0.0	61	8
trans-2-Hexene	0.0	0.0	61	0
trans-2-Pentene	0.0	0.0	61	2
Isobutylene	0.0	0.0	61	0
Methylvinylketone	0.1	0.3	61	10

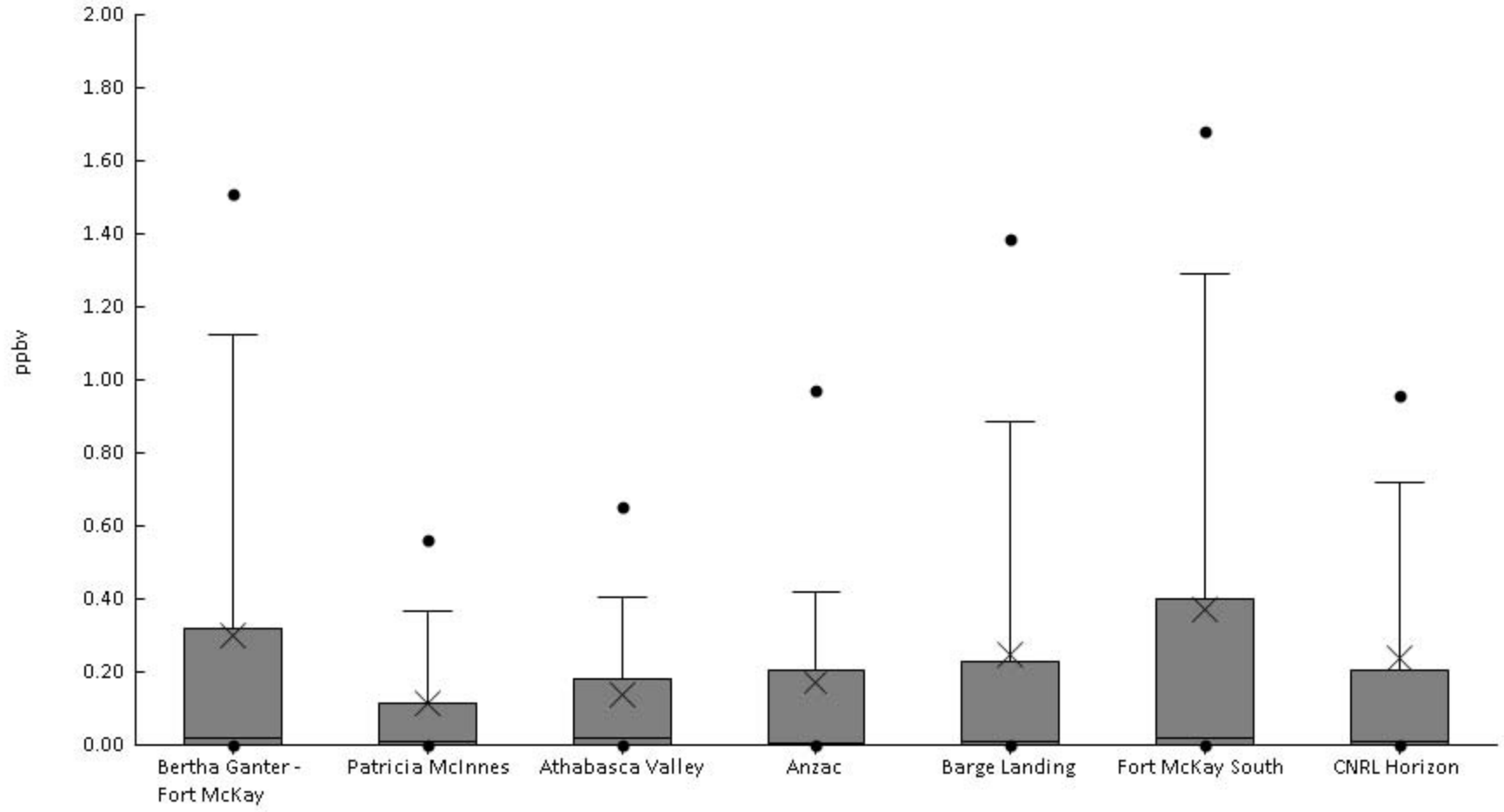
Volatile Organic Compounds - Isopentane (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	98%	0	0.1	0.16	0.32	0.51	0.79	1.3	2	3	0.66	0.59
AMS 6	Patricia McInnes	61	97%	0	0.13	0.16	0.24	0.38	0.6	0.89	1	2.5	0.48	0.38
AMS 7	Athabasca Valley	61	98%	0	0.15	0.2	0.32	0.5	0.69	1	1.6	2.3	0.59	0.45
AMS 14	Anzac	60	97%	0	0.095	0.14	0.18	0.38	0.52	0.69	0.84	1.2	0.37	0.24
AMS 9	Barge Landing	60	97%	0	0.13	0.18	0.31	0.56	1	2.6	3.4	5.2	0.96	1.1
AMS 13	Fort McKay South	61	98%	0	0.18	0.2	0.27	0.43	0.61	1.2	1.5	2	0.54	0.4
AMS 15	CNRL Horizon	61	98%	0	0.16	0.23	0.42	0.65	1.1	2.8	3.5	4.9	1	1.1



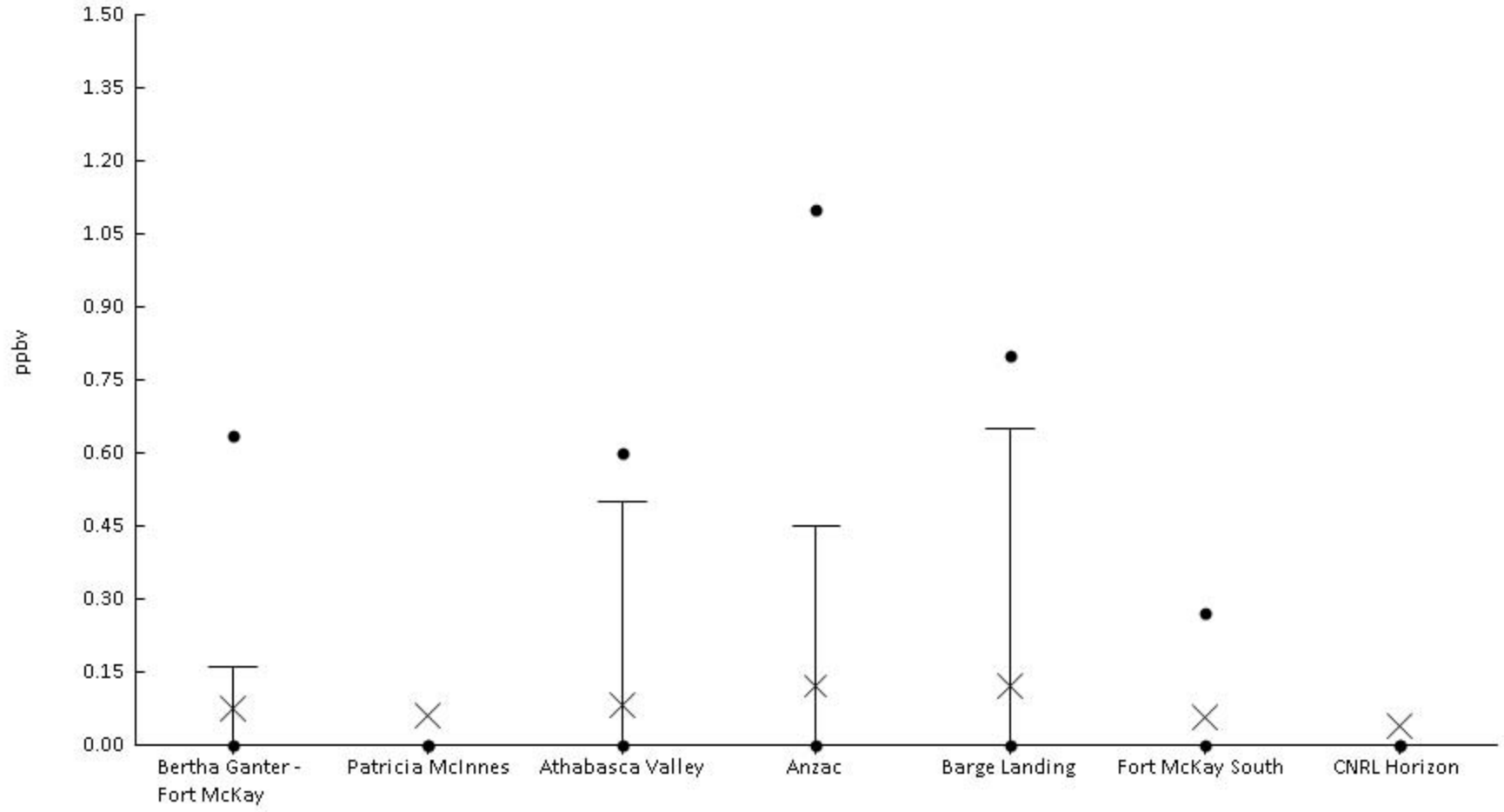
Volatile Organic Compounds - Isoprene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	66%	0	0	0	0	0.02	0.32	1.1	1.5	2.4	0.3	0.54
AMS 6	Patricia McInnes	61	59%	0	0	0	0	0.01	0.11	0.37	0.56	1.3	0.11	0.22
AMS 7	Athabasca Valley	61	62%	0	0	0	0	0.02	0.18	0.41	0.65	1.6	0.14	0.27
AMS 14	Anzac	60	50%	0	0	0	0	5E-3	0.21	0.42	0.97	1.9	0.17	0.38
AMS 9	Barge Landing	60	53%	0	0	0	0	0.01	0.23	0.89	1.4	2.2	0.25	0.48
AMS 13	Fort McKay South	61	66%	0	0	0	0	0.02	0.4	1.3	1.7	3.4	0.37	0.73
AMS 15	CNRL Horizon	61	57%	0	0	0	0	0.01	0.2	0.72	0.96	3	0.24	0.52



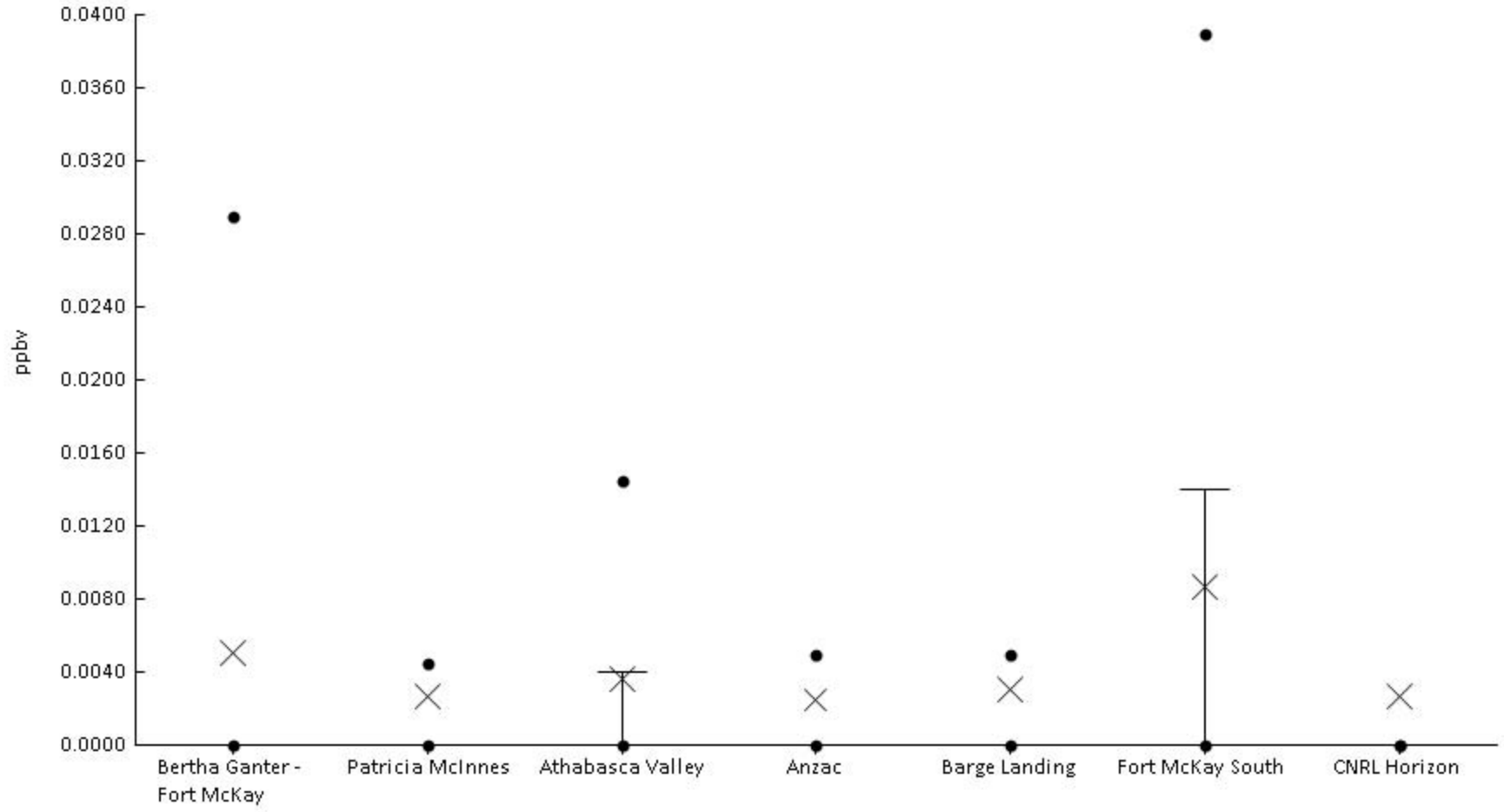
Volatile Organic Compounds - Isopropylalcohol (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	10%	0	0	0	0	0	0	0.16	0.63	1.5	0.075	0.26
AMS 6	Patricia McInnes	61	3%	0	0	0	0	0	0	0	0	2.1	0.062	0.34
AMS 7	Athabasca Valley	61	13%	0	0	0	0	0	0	0.5	0.6	1.3	0.084	0.24
AMS 14	Anzac	60	12%	0	0	0	0	0	0	0.45	1.1	2	0.12	0.37
AMS 9	Barge Landing	60	15%	0	0	0	0	0	0	0.65	0.8	1.7	0.12	0.32
AMS 13	Fort McKay South	61	5%	0	0	0	0	0	0	0	0.27	2.2	0.057	0.3
AMS 15	CNRL Horizon	61	3%	0	0	0	0	0	0	0	0	1.4	0.039	0.22



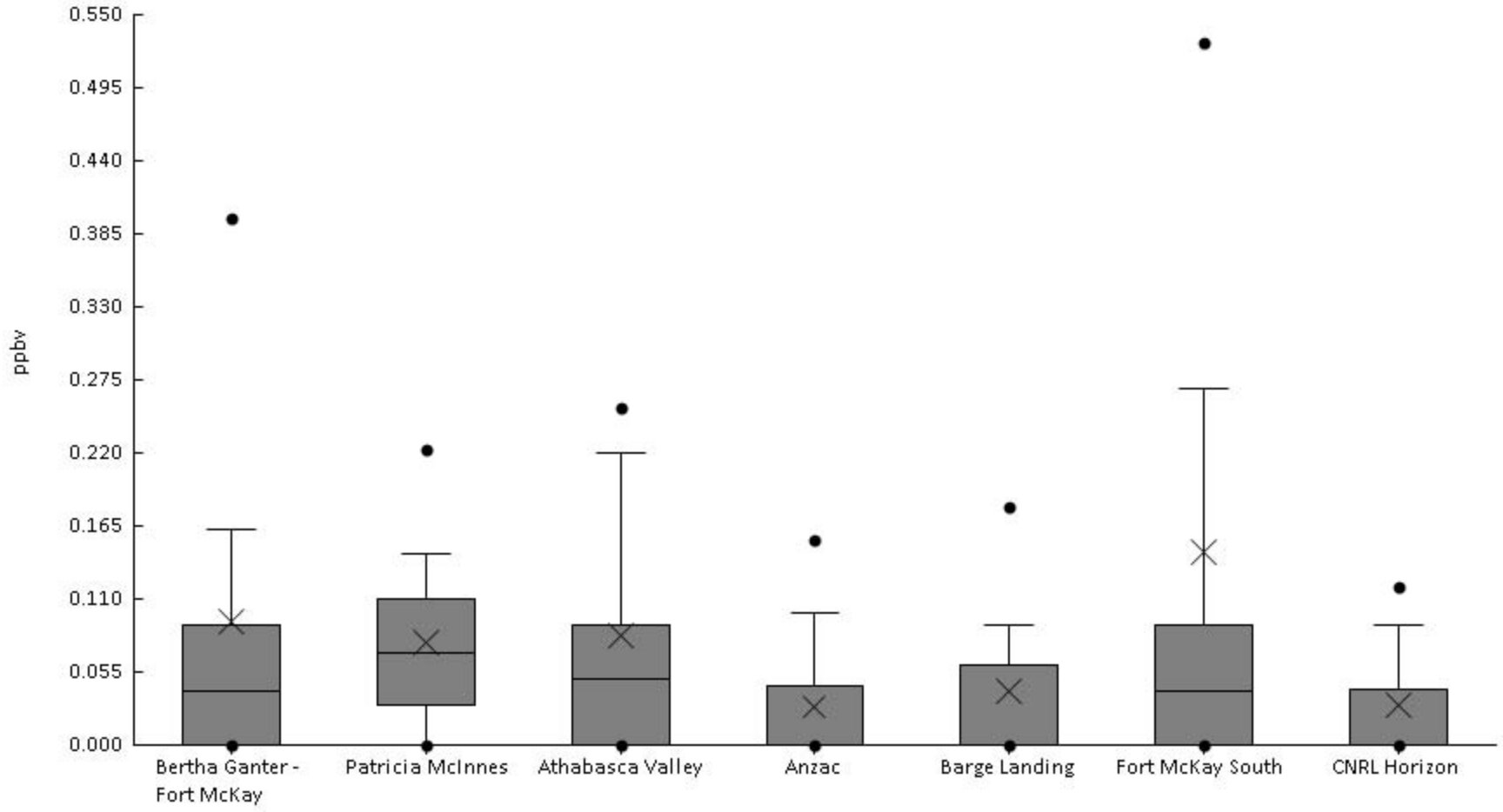
Volatile Organic Compounds - Isopropylbenzene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	8%	0	0	0	0	0	0	0	0.029	0.15	5.1E-3	0.023
AMS 6	Patricia McInnes	61	5%	0	0	0	0	0	0	0	4.5E-3	0.14	2.6E-3	0.018
AMS 7	Athabasca Valley	61	10%	0	0	0	0	0	0	4E-3	0.015	0.14	3.6E-3	0.018
AMS 14	Anzac	60	5%	0	0	0	0	0	0	0	5E-3	0.12	2.5E-3	0.016
AMS 9	Barge Landing	60	5%	0	0	0	0	0	0	0	5E-3	0.15	3E-3	0.02
AMS 13	Fort McKay South	61	16%	0	0	0	0	0	0	0.014	0.039	0.21	8.7E-3	0.033
AMS 15	CNRL Horizon	61	3%	0	0	0	0	0	0	0	0	0.15	2.6E-3	0.019



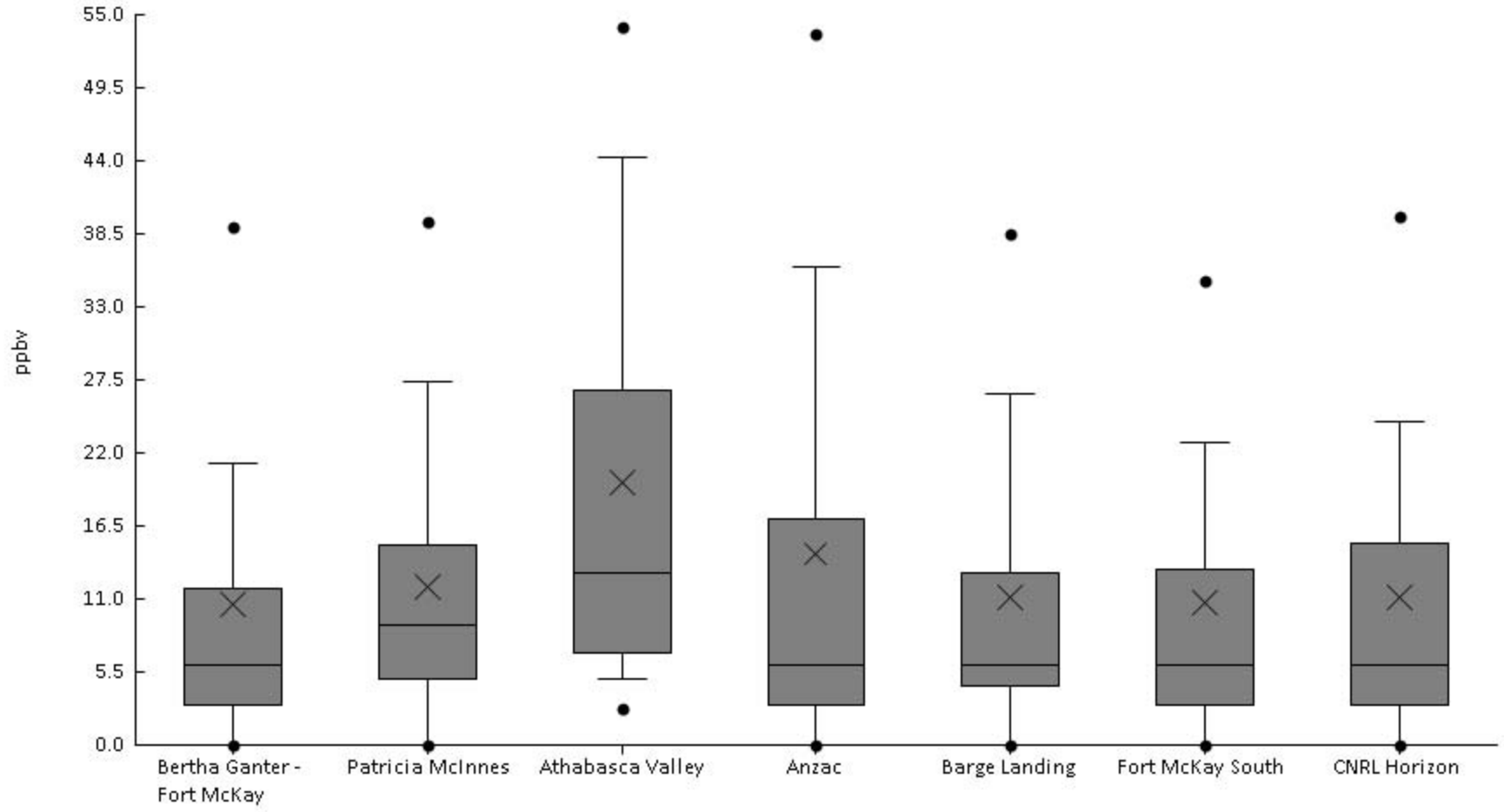
Volatile Organic Compounds - m,p-Xylene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	69%	0	0	0	0	0.04	0.09	0.16	0.4	1.6	0.094	0.22
AMS 6	Patricia McInnes	61	79%	0	0	0	0.03	0.07	0.11	0.14	0.22	0.56	0.078	0.086
AMS 7	Athabasca Valley	61	74%	0	0	0	0	0.05	0.09	0.22	0.25	0.83	0.082	0.12
AMS 14	Anzac	60	35%	0	0	0	0	0	0.045	0.1	0.16	0.21	0.029	0.052
AMS 9	Barge Landing	60	47%	0	0	0	0	0	0.06	0.09	0.18	0.33	0.041	0.069
AMS 13	Fort McKay South	61	57%	0	0	0	0	0.04	0.09	0.27	0.53	3.6	0.14	0.48
AMS 15	CNRL Horizon	61	44%	0	0	0	0	0	0.043	0.09	0.12	0.2	0.03	0.045



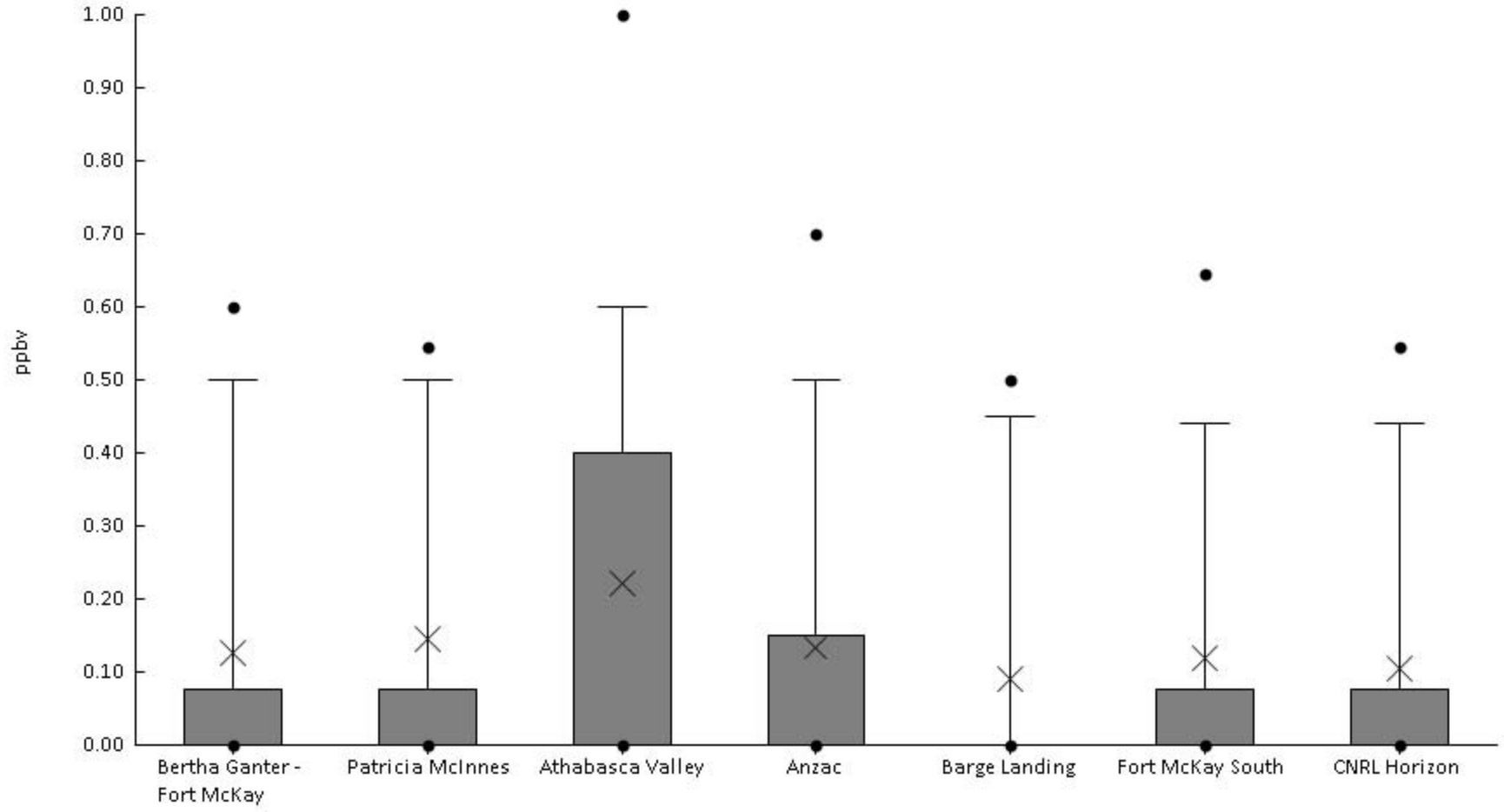
Volatile Organic Compounds - Methanol (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	82%	0	0	0	3	6	12	21	39	92	11	15
AMS 6	Patricia McInnes	61	87%	0	0	0	5	9	15	27	39	44	12	11
AMS 7	Athabasca Valley	61	95%	0	2.8	5	7	13	27	44	54	82	20	17
AMS 14	Anzac	60	80%	0	0	0	3	6	17	36	54	162	14	24
AMS 9	Barge Landing	60	87%	0	0	0	4.5	6	13	27	39	63	11	13
AMS 13	Fort McKay South	61	80%	0	0	0	3	6	13	23	35	83	11	15
AMS 15	CNRL Horizon	61	77%	0	0	0	3	6	15	24	40	86	11	15



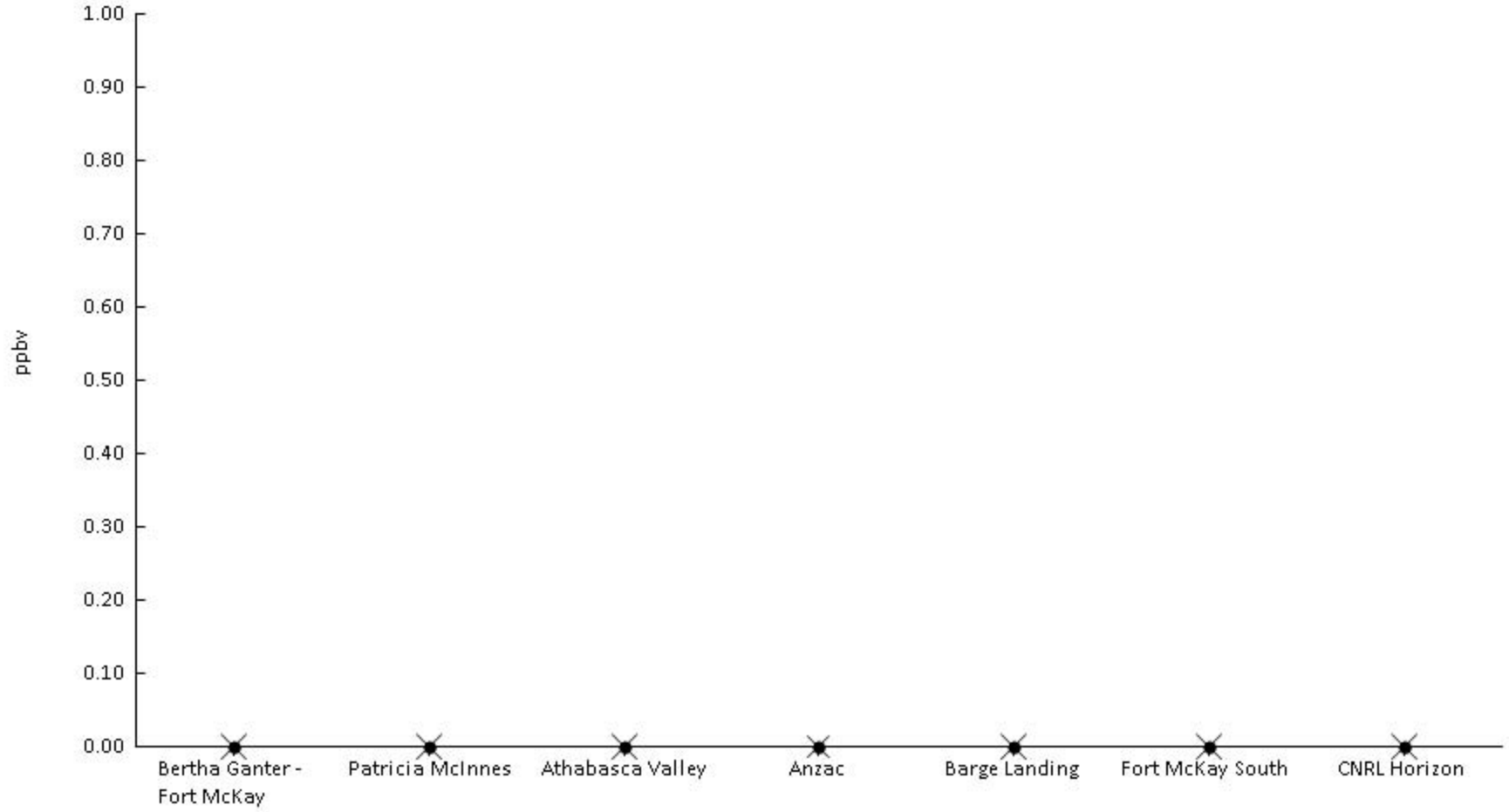
Volatile Organic Compounds - Methylethylketone (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	25%	0	0	0	0	0	0.075	0.5	0.6	1	0.13	0.24
AMS 6	Patricia McInnes	61	25%	0	0	0	0	0	0.075	0.5	0.54	2.3	0.14	0.36
AMS 7	Athabasca Valley	61	30%	0	0	0	0	0	0.4	0.6	1	3.3	0.22	0.52
AMS 14	Anzac	60	25%	0	0	0	0	0	0.15	0.5	0.7	1	0.13	0.26
AMS 9	Barge Landing	60	20%	0	0	0	0	0	0	0.45	0.5	0.7	0.09	0.19
AMS 13	Fort McKay South	61	25%	0	0	0	0	0	0.075	0.44	0.65	0.8	0.12	0.22
AMS 15	CNRL Horizon	61	25%	0	0	0	0	0	0.075	0.44	0.54	0.6	0.1	0.19



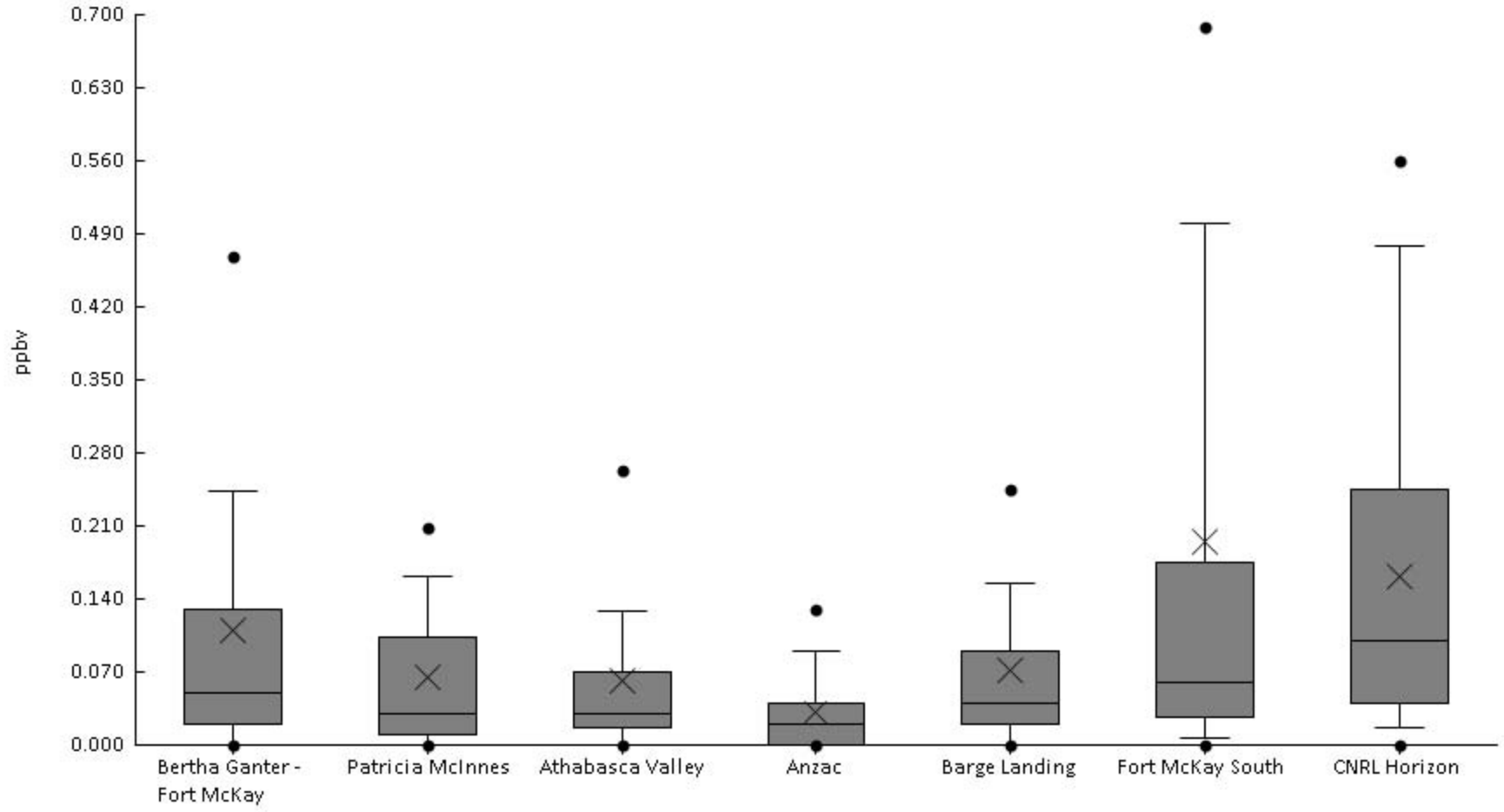
Volatile Organic Compounds - Methylisobutylketone (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0



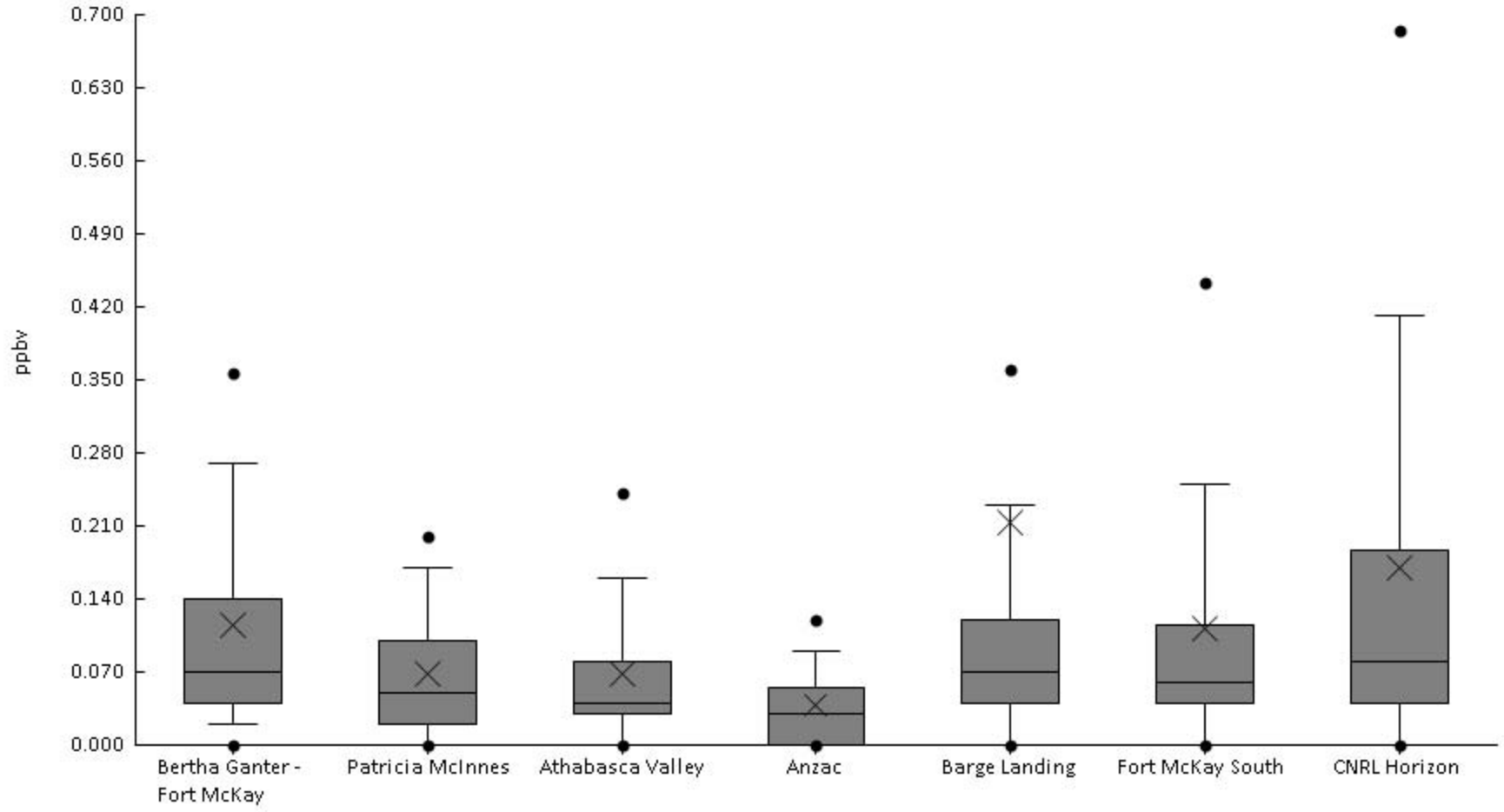
Volatile Organic Compounds - Methylcyclohexane (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	87%	0	0	0	0.02	0.05	0.13	0.24	0.47	0.94	0.11	0.17
AMS 6	Patricia McInnes	61	79%	0	0	0	0.01	0.03	0.1	0.16	0.21	0.45	0.065	0.082
AMS 7	Athabasca Valley	61	80%	0	0	0	0.018	0.03	0.07	0.13	0.26	0.66	0.062	0.1
AMS 14	Anzac	60	70%	0	0	0	0	0.02	0.04	0.09	0.13	0.21	0.032	0.043
AMS 9	Barge Landing	60	85%	0	0	0	0.02	0.04	0.09	0.16	0.25	0.55	0.071	0.094
AMS 13	Fort McKay South	61	90%	0	0	6E-3	0.028	0.06	0.18	0.5	0.69	3.2	0.2	0.46
AMS 15	CNRL Horizon	61	93%	0	0	0.016	0.04	0.1	0.25	0.48	0.56	0.62	0.16	0.17



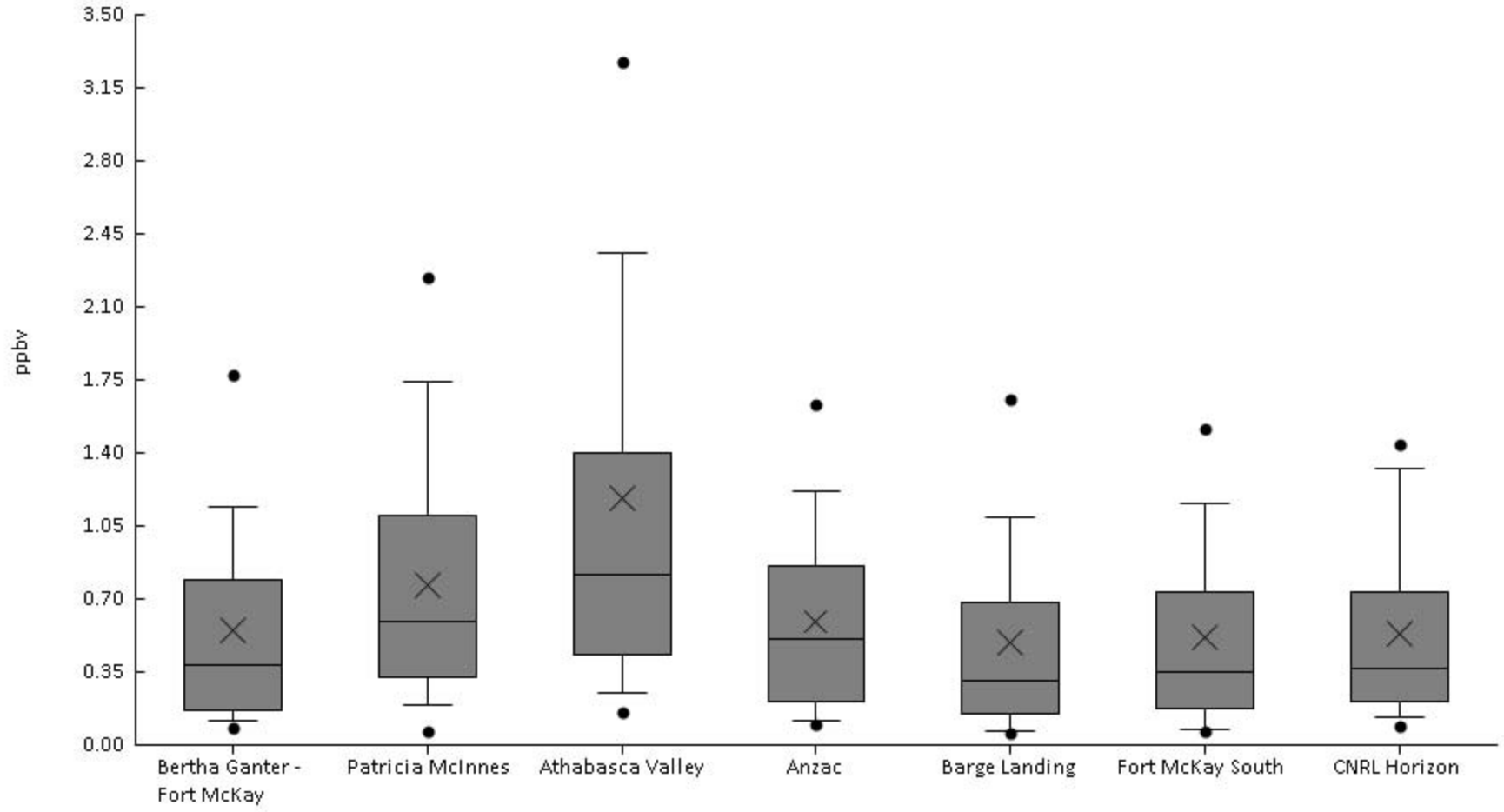
Volatile Organic Compounds - Methylcyclopentane (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	92%	0	0	0.02	0.04	0.07	0.14	0.27	0.36	0.9	0.12	0.14
AMS 6	Patricia McInnes	61	80%	0	0	0	0.02	0.05	0.1	0.17	0.2	0.38	0.068	0.071
AMS 7	Athabasca Valley	61	87%	0	0	0	0.03	0.04	0.08	0.16	0.24	0.3	0.068	0.069
AMS 14	Anzac	60	63%	0	0	0	0	0.03	0.055	0.09	0.12	0.21	0.038	0.044
AMS 9	Barge Landing	60	85%	0	0	0	0.04	0.07	0.12	0.23	0.36	7.2	0.21	0.92
AMS 13	Fort McKay South	61	89%	0	0	0	0.04	0.06	0.12	0.25	0.44	0.69	0.11	0.14
AMS 15	CNRL Horizon	61	85%	0	0	0	0.04	0.08	0.19	0.41	0.68	1.1	0.17	0.23



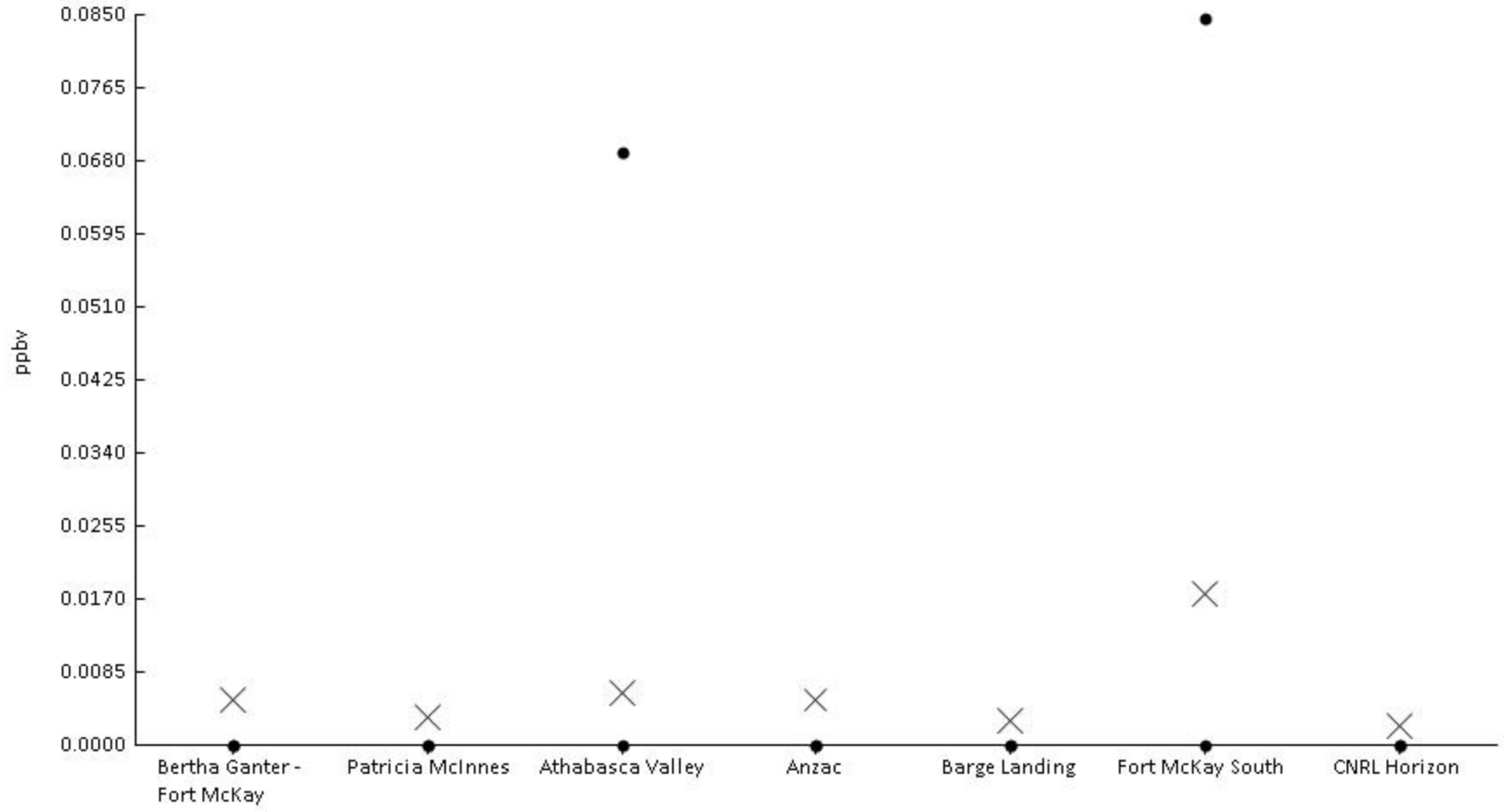
Volatile Organic Compounds - n-Butane (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	0.06	0.082	0.12	0.17	0.38	0.8	1.1	1.8	2.4	0.55	0.51
AMS 6	Patricia McInnes	61	97%	0	0.067	0.19	0.33	0.59	1.1	1.7	2.2	2.6	0.77	0.62
AMS 7	Athabasca Valley	61	100%	0.13	0.16	0.25	0.43	0.82	1.4	2.4	3.3	9.6	1.2	1.4
AMS 14	Anzac	60	100%	0.06	0.1	0.12	0.21	0.51	0.86	1.2	1.6	2	0.59	0.46
AMS 9	Barge Landing	60	97%	0	0.06	0.07	0.15	0.31	0.68	1.1	1.7	2.2	0.49	0.49
AMS 13	Fort McKay South	61	100%	0.04	0.07	0.076	0.18	0.35	0.73	1.2	1.5	2.2	0.52	0.47
AMS 15	CNRL Horizon	61	98%	0	0.09	0.13	0.21	0.37	0.73	1.3	1.4	2.2	0.53	0.46



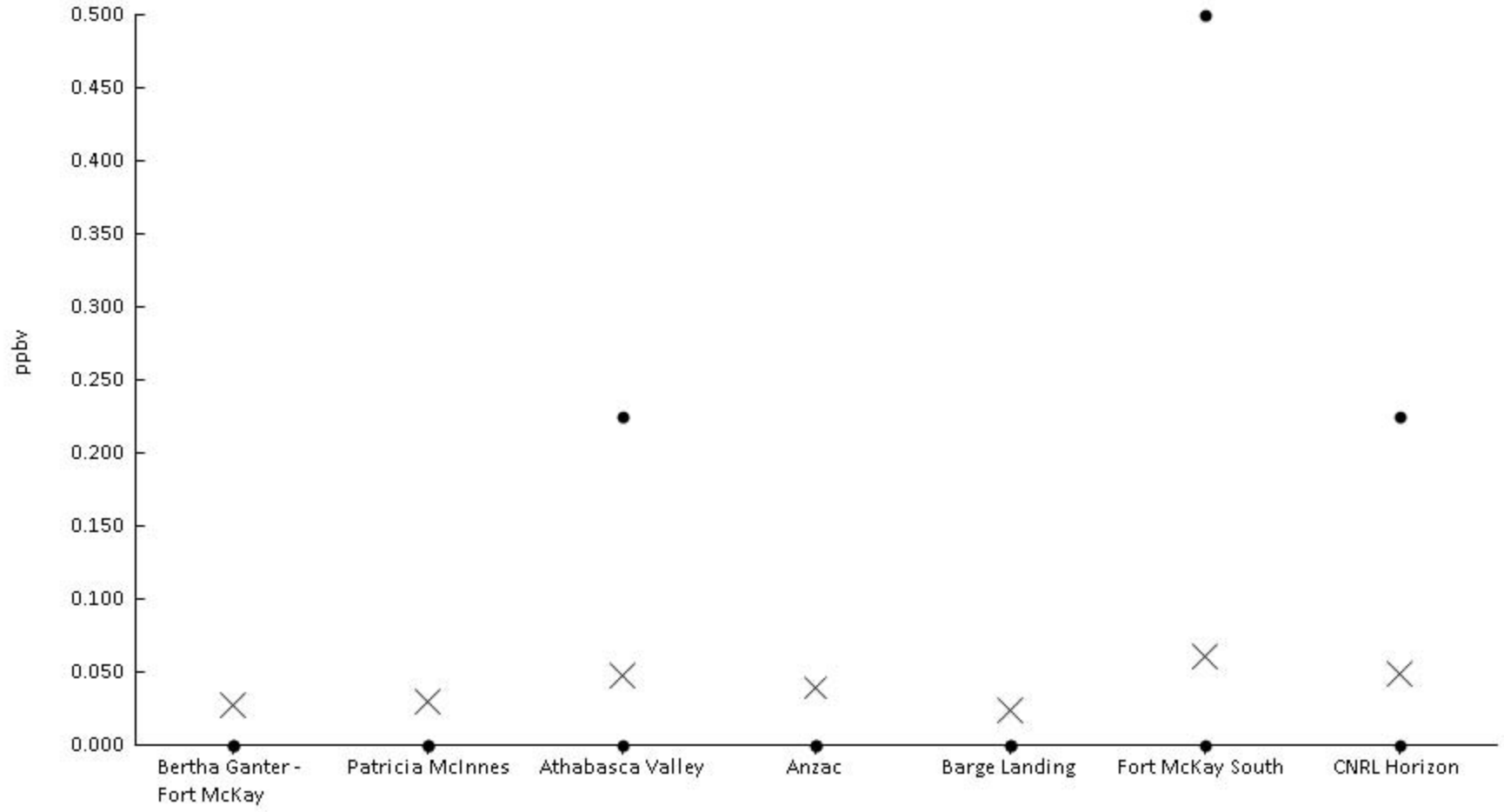
Volatile Organic Compounds - n-Decane (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	3%	0	0	0	0	0	0	0	0	0.17	5.2E-3	0.029
AMS 6	Patricia McInnes	61	3%	0	0	0	0	0	0	0	0	0.13	3.3E-3	0.019
AMS 7	Athabasca Valley	61	7%	0	0	0	0	0	0	0	0.069	0.13	6.1E-3	0.024
AMS 14	Anzac	60	3%	0	0	0	0	0	0	0	0	0.22	5.2E-3	0.031
AMS 9	Barge Landing	60	2%	0	0	0	0	0	0	0	0	0.17	2.8E-3	0.022
AMS 13	Fort McKay South	61	8%	0	0	0	0	0	0	0	0.085	0.68	0.018	0.09
AMS 15	CNRL Horizon	61	2%	0	0	0	0	0	0	0	0	0.14	2.3E-3	0.018



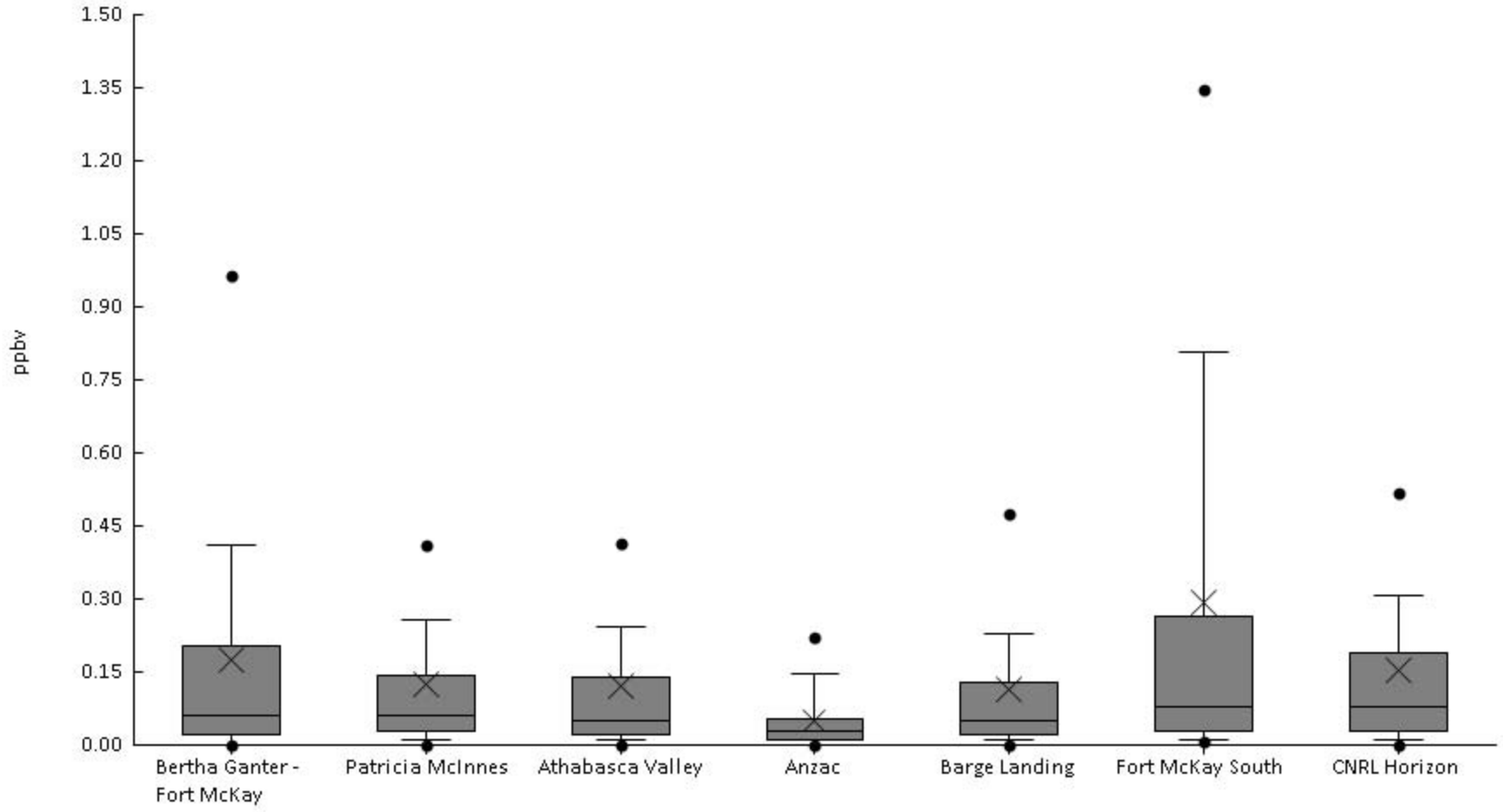
Volatile Organic Compounds - n-Dodecane (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	3%	0	0	0	0	0	0	0	0	1.1	0.027	0.15
AMS 6	Patricia McInnes	61	3%	0	0	0	0	0	0	0	0	1.3	0.029	0.18
AMS 7	Athabasca Valley	61	5%	0	0	0	0	0	0	0	0.22	1.7	0.048	0.24
AMS 14	Anzac	60	3%	0	0	0	0	0	0	0	0	1.2	0.039	0.21
AMS 9	Barge Landing	60	3%	0	0	0	0	0	0	0	0	0.95	0.024	0.14
AMS 13	Fort McKay South	61	7%	0	0	0	0	0	0	0	0.5	1.5	0.061	0.26
AMS 15	CNRL Horizon	61	5%	0	0	0	0	0	0	0	0.22	1.9	0.049	0.26



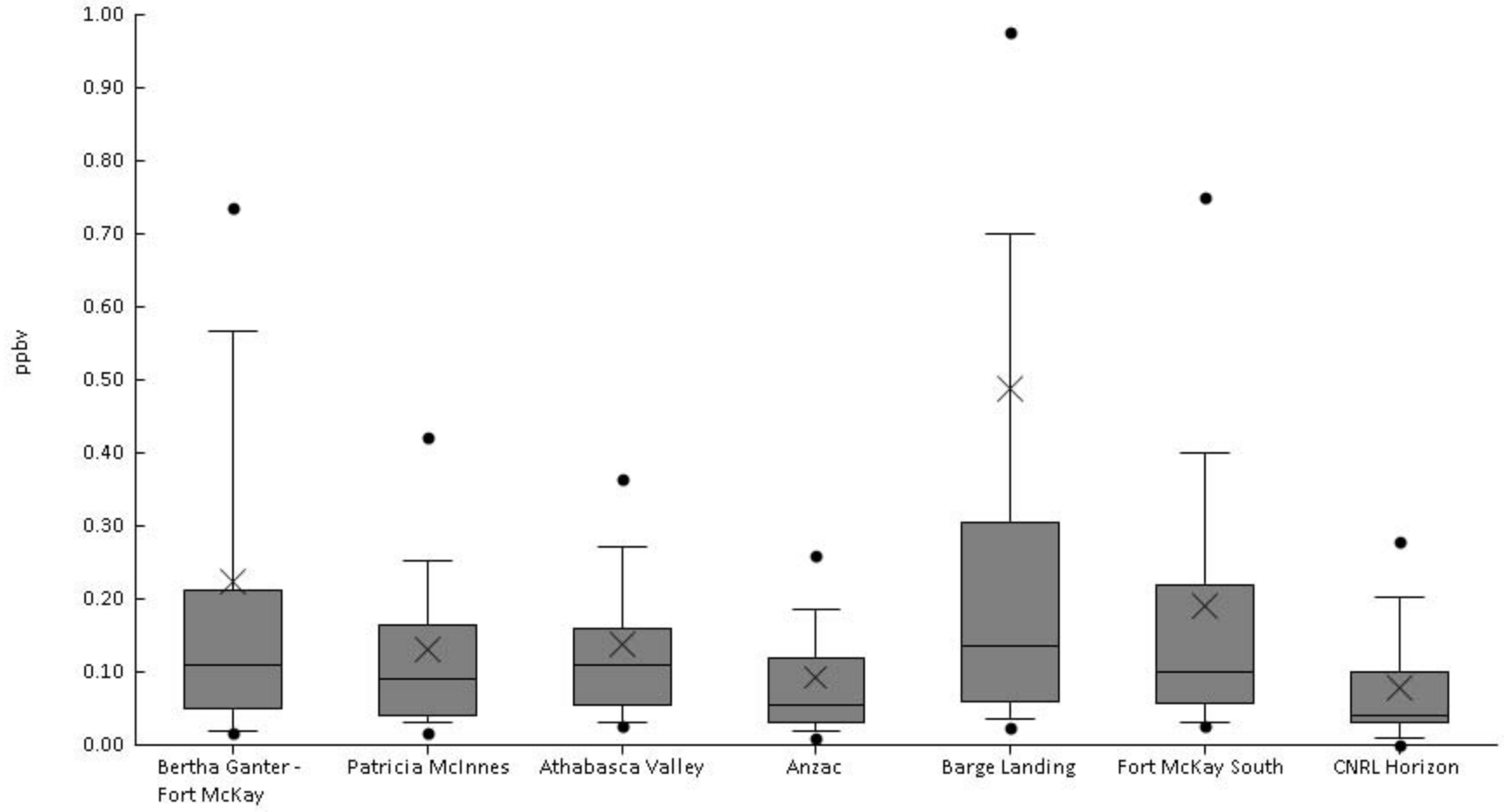
Volatile Organic Compounds - n-Heptane (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	89%	0	0	0	0.02	0.06	0.2	0.41	0.96	1.4	0.18	0.31
AMS 6	Patricia McInnes	61	92%	0	0	0.01	0.028	0.06	0.14	0.26	0.41	1.3	0.12	0.2
AMS 7	Athabasca Valley	61	92%	0	0	0.01	0.02	0.05	0.14	0.24	0.42	1.8	0.12	0.24
AMS 14	Anzac	60	82%	0	0	0	0.01	0.03	0.055	0.15	0.22	0.28	0.049	0.064
AMS 9	Barge Landing	60	92%	0	0	0.01	0.02	0.05	0.13	0.23	0.48	1.2	0.11	0.2
AMS 13	Fort McKay South	61	95%	0	5.5E-3	0.01	0.03	0.08	0.26	0.81	1.3	3.9	0.29	0.63
AMS 15	CNRL Horizon	61	93%	0	0	0.01	0.03	0.08	0.19	0.31	0.52	1.5	0.15	0.23



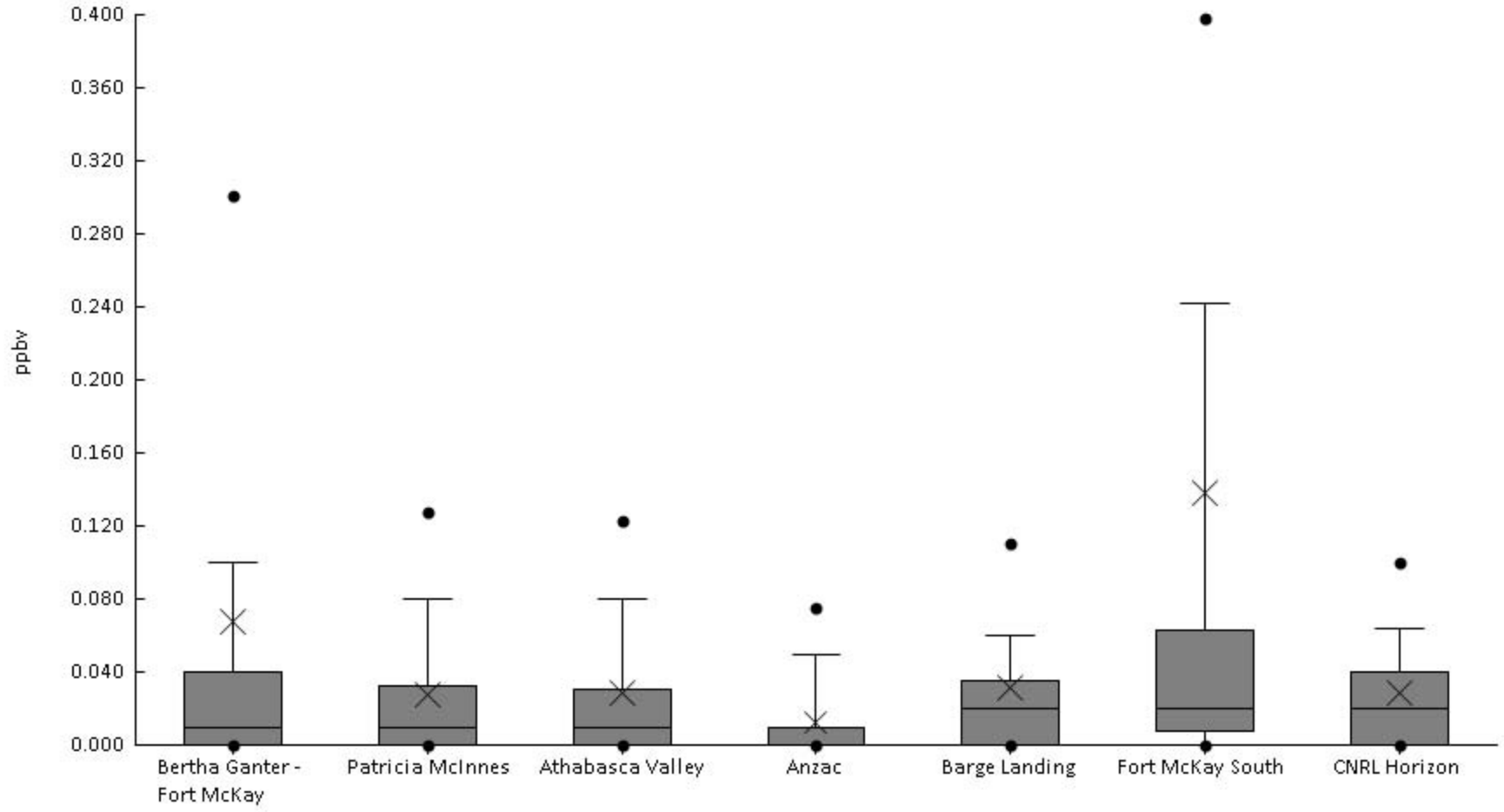
Volatile Organic Compounds - n-Hexane (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	97%	0	0.016	0.02	0.05	0.11	0.21	0.57	0.74	2.3	0.22	0.35
AMS 6	Patricia McInnes	61	100%	0.01	0.016	0.03	0.04	0.09	0.17	0.25	0.42	0.67	0.13	0.14
AMS 7	Athabasca Valley	61	100%	0.02	0.026	0.03	0.055	0.11	0.16	0.27	0.36	0.94	0.14	0.14
AMS 14	Anzac	60	97%	0	0.01	0.02	0.03	0.055	0.12	0.19	0.26	0.63	0.092	0.1
AMS 9	Barge Landing	60	98%	0	0.025	0.035	0.06	0.14	0.31	0.7	0.98	15	0.49	1.9
AMS 13	Fort McKay South	61	100%	0.01	0.026	0.03	0.058	0.1	0.22	0.4	0.75	1.3	0.19	0.24
AMS 15	CNRL Horizon	61	93%	0	0	0.01	0.03	0.04	0.1	0.2	0.28	0.32	0.078	0.077



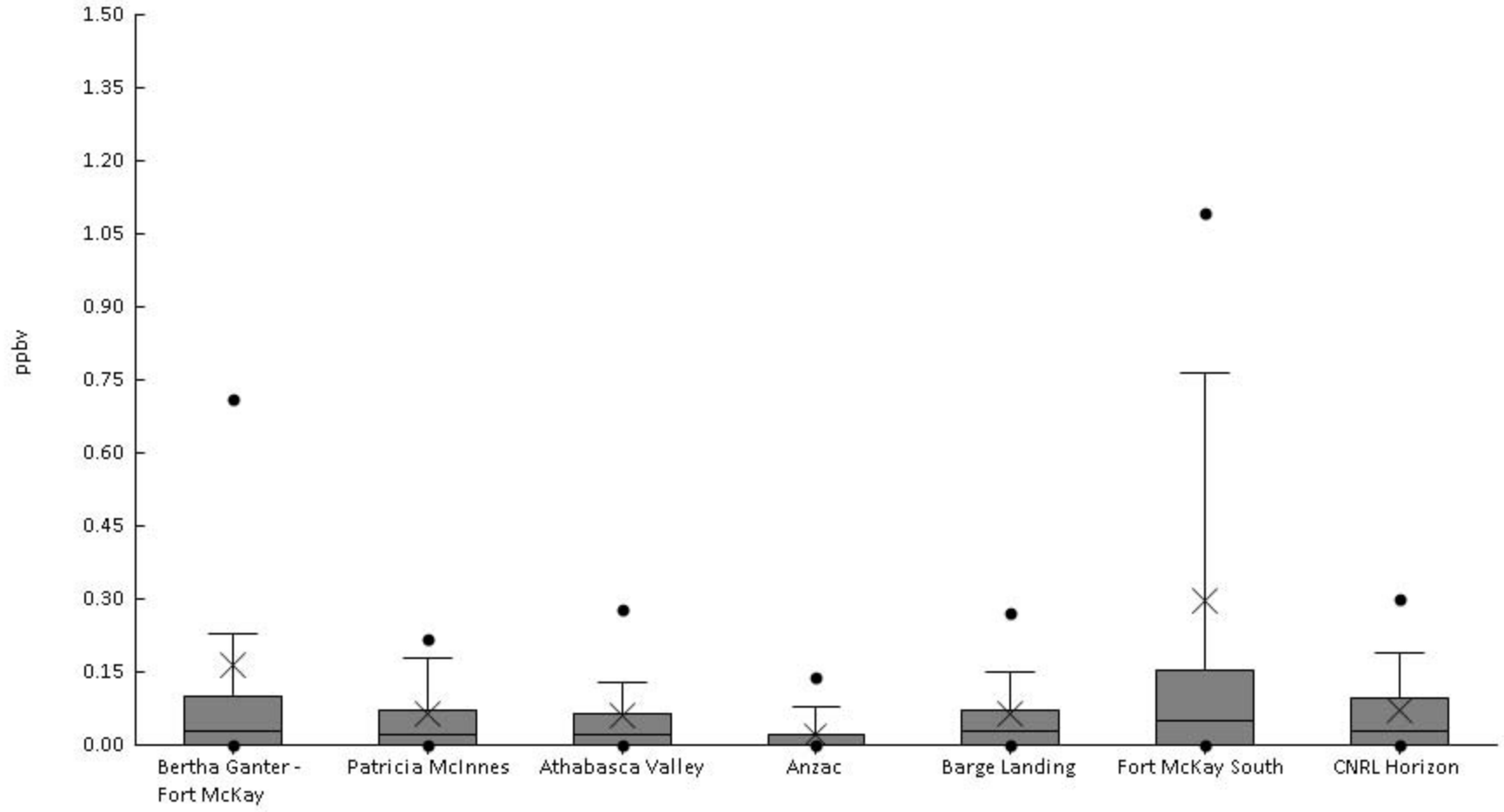
Volatile Organic Compounds - n-Nonane (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	64%	0	0	0	0	0.01	0.04	0.1	0.3	1.8	0.068	0.23
AMS 6	Patricia McInnes	61	56%	0	0	0	0	0.01	0.033	0.08	0.13	0.22	0.028	0.043
AMS 7	Athabasca Valley	61	59%	0	0	0	0	0.01	0.03	0.08	0.12	0.33	0.029	0.052
AMS 14	Anzac	60	37%	0	0	0	0	0	0.01	0.05	0.075	0.13	0.013	0.026
AMS 9	Barge Landing	60	72%	0	0	0	0	0.02	0.035	0.06	0.11	0.3	0.031	0.054
AMS 13	Fort McKay South	61	75%	0	0	0	7.5E-3	0.02	0.063	0.24	0.4	4.3	0.14	0.55
AMS 15	CNRL Horizon	61	72%	0	0	0	0	0.02	0.04	0.064	0.1	0.21	0.029	0.037



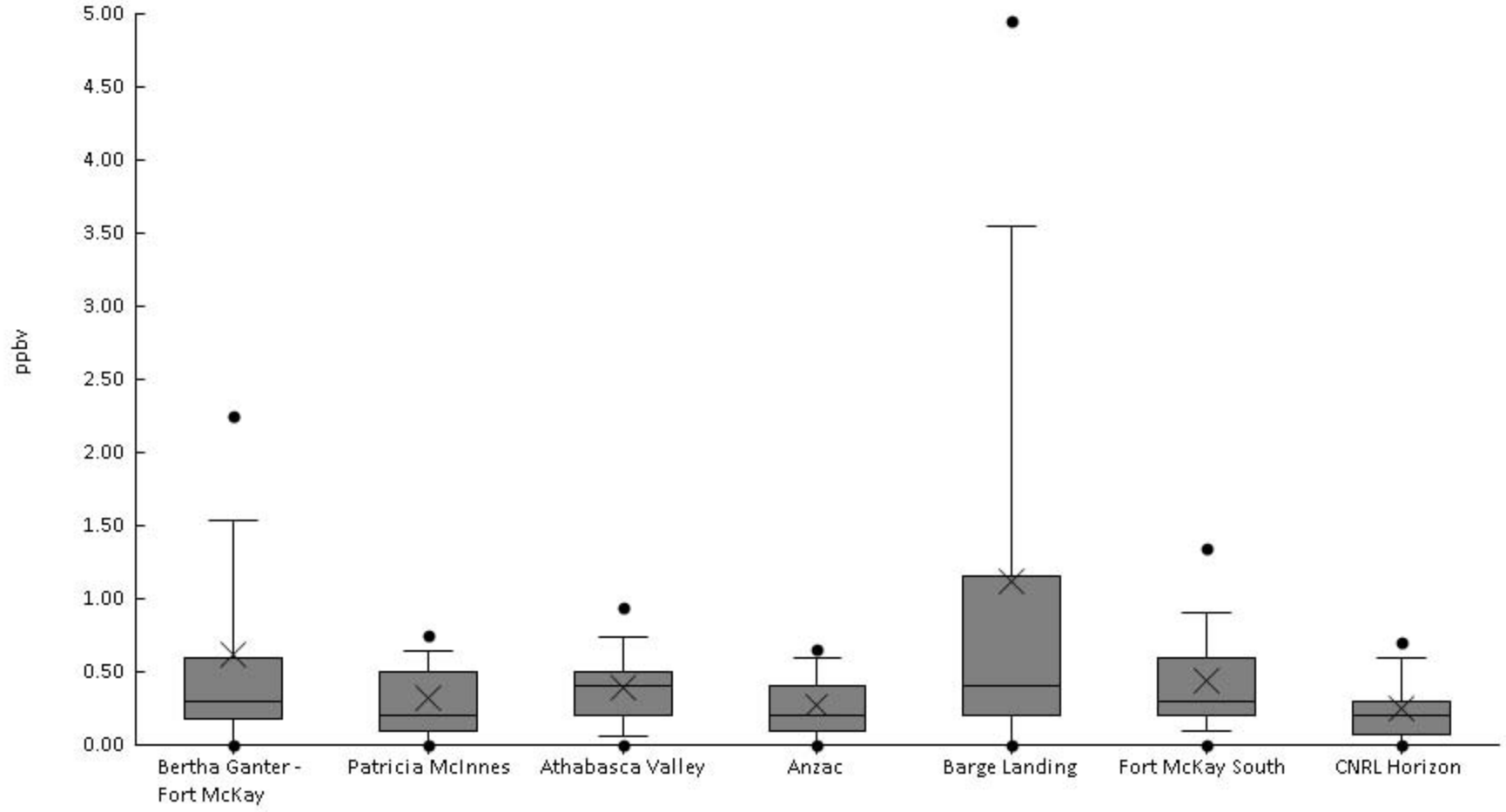
Volatile Organic Compounds - n-Octane (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	61%	0	0	0	0	0.03	0.1	0.23	0.71	3.8	0.16	0.53
AMS 6	Patricia McInnes	61	54%	0	0	0	0	0.02	0.07	0.18	0.22	0.66	0.063	0.11
AMS 7	Athabasca Valley	61	52%	0	0	0	0	0.02	0.063	0.13	0.28	0.98	0.061	0.14
AMS 14	Anzac	60	32%	0	0	0	0	0	0.02	0.08	0.14	0.19	0.022	0.045
AMS 9	Barge Landing	60	55%	0	0	0	0	0.03	0.07	0.15	0.27	0.89	0.063	0.13
AMS 13	Fort McKay South	61	67%	0	0	0	0	0.05	0.15	0.76	1.1	7.2	0.3	0.97
AMS 15	CNRL Horizon	61	70%	0	0	0	0	0.03	0.095	0.19	0.3	0.37	0.07	0.09



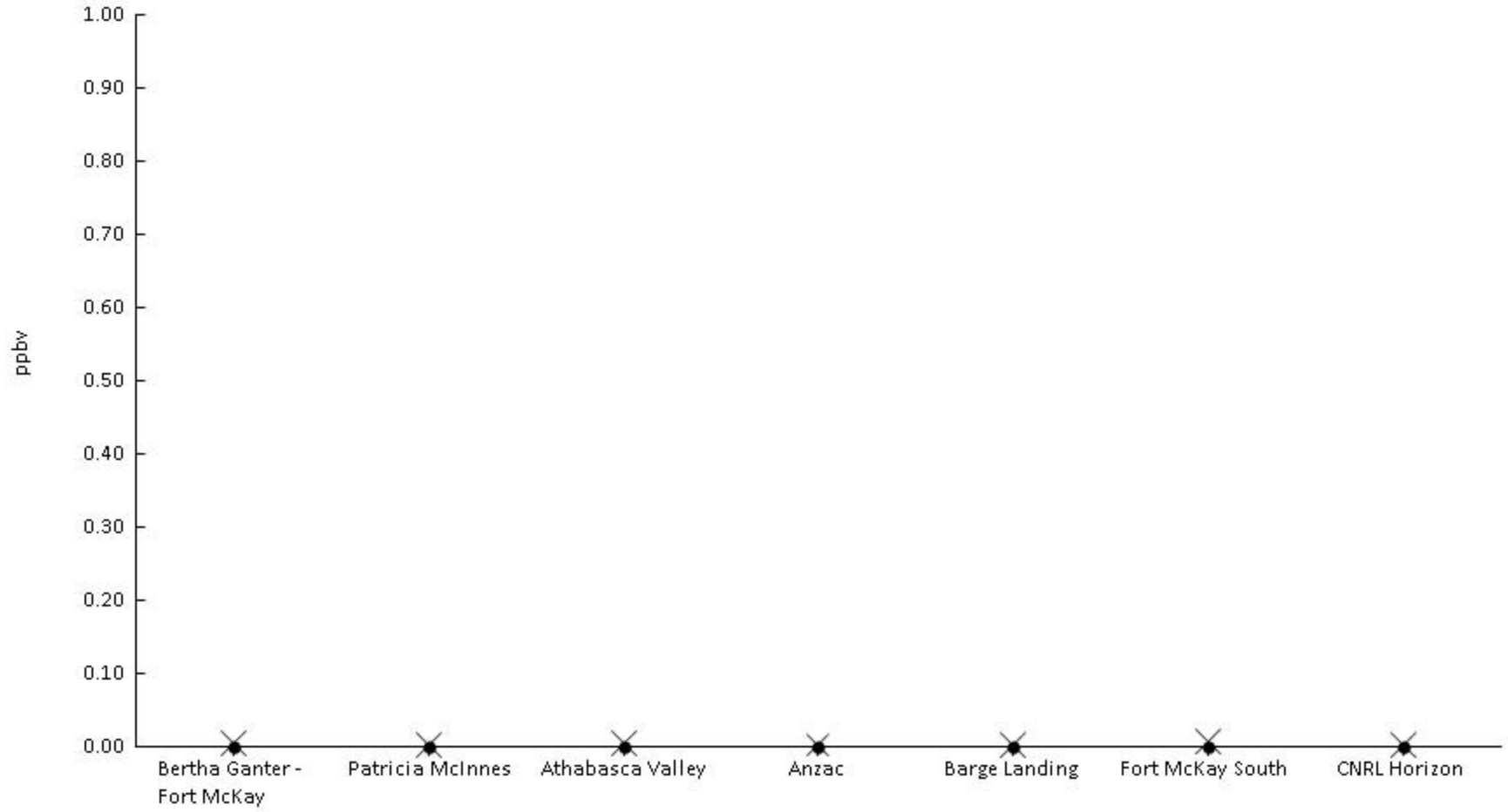
Volatile Organic Compounds - n-Pentane (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	82%	0	0	0	0.18	0.3	0.6	1.5	2.3	6.1	0.61	0.95
AMS 6	Patricia McInnes	61	82%	0	0	0	0.1	0.2	0.5	0.64	0.75	1.7	0.33	0.31
AMS 7	Athabasca Valley	61	90%	0	0	0.06	0.2	0.4	0.5	0.74	0.95	1.6	0.39	0.3
AMS 14	Anzac	60	82%	0	0	0	0.1	0.2	0.4	0.6	0.65	1	0.28	0.23
AMS 9	Barge Landing	60	88%	0	0	0	0.2	0.4	1.2	3.6	5	7.8	1.1	1.6
AMS 13	Fort McKay South	61	93%	0	0	0.1	0.2	0.3	0.6	0.9	1.3	2.7	0.44	0.45
AMS 15	CNRL Horizon	61	75%	0	0	0	0.075	0.2	0.3	0.6	0.7	1.8	0.25	0.31



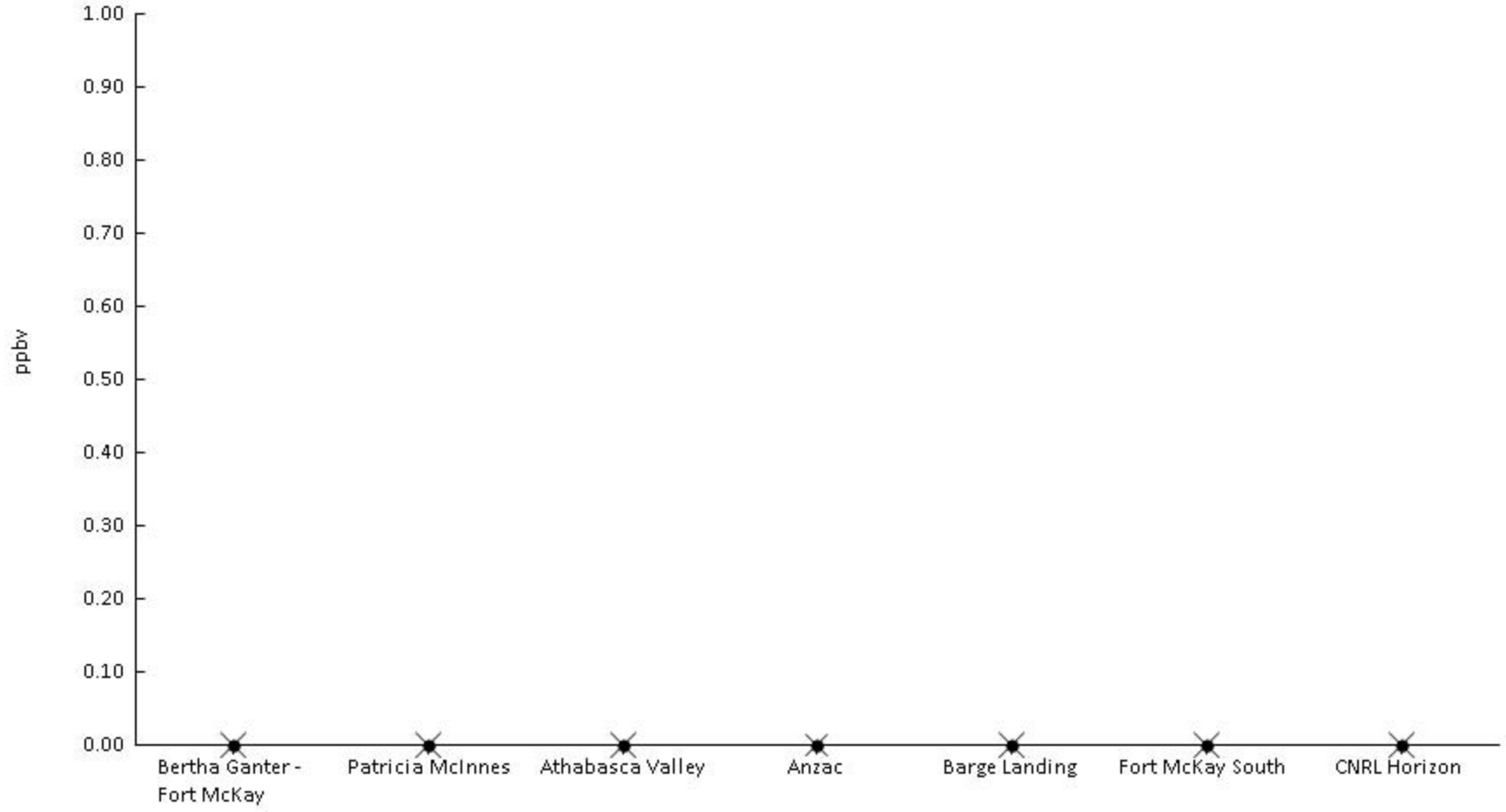
Volatile Organic Compounds - n-Propylbenzene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	3%	0	0	0	0	0	0	0	0	0.16	4.1E-3	0.023
AMS 6	Patricia McInnes	61	3%	0	0	0	0	0	0	0	0	0.15	3.3E-3	0.02
AMS 7	Athabasca Valley	61	3%	0	0	0	0	0	0	0	0	0.15	3.6E-3	0.021
AMS 14	Anzac	60	2%	0	0	0	0	0	0	0	0	0.12	2E-3	0.015
AMS 9	Barge Landing	60	2%	0	0	0	0	0	0	0	0	0.16	2.7E-3	0.021
AMS 13	Fort McKay South	61	3%	0	0	0	0	0	0	0	0	0.29	7.4E-3	0.042
AMS 15	CNRL Horizon	61	2%	0	0	0	0	0	0	0	0	0.15	2.5E-3	0.019



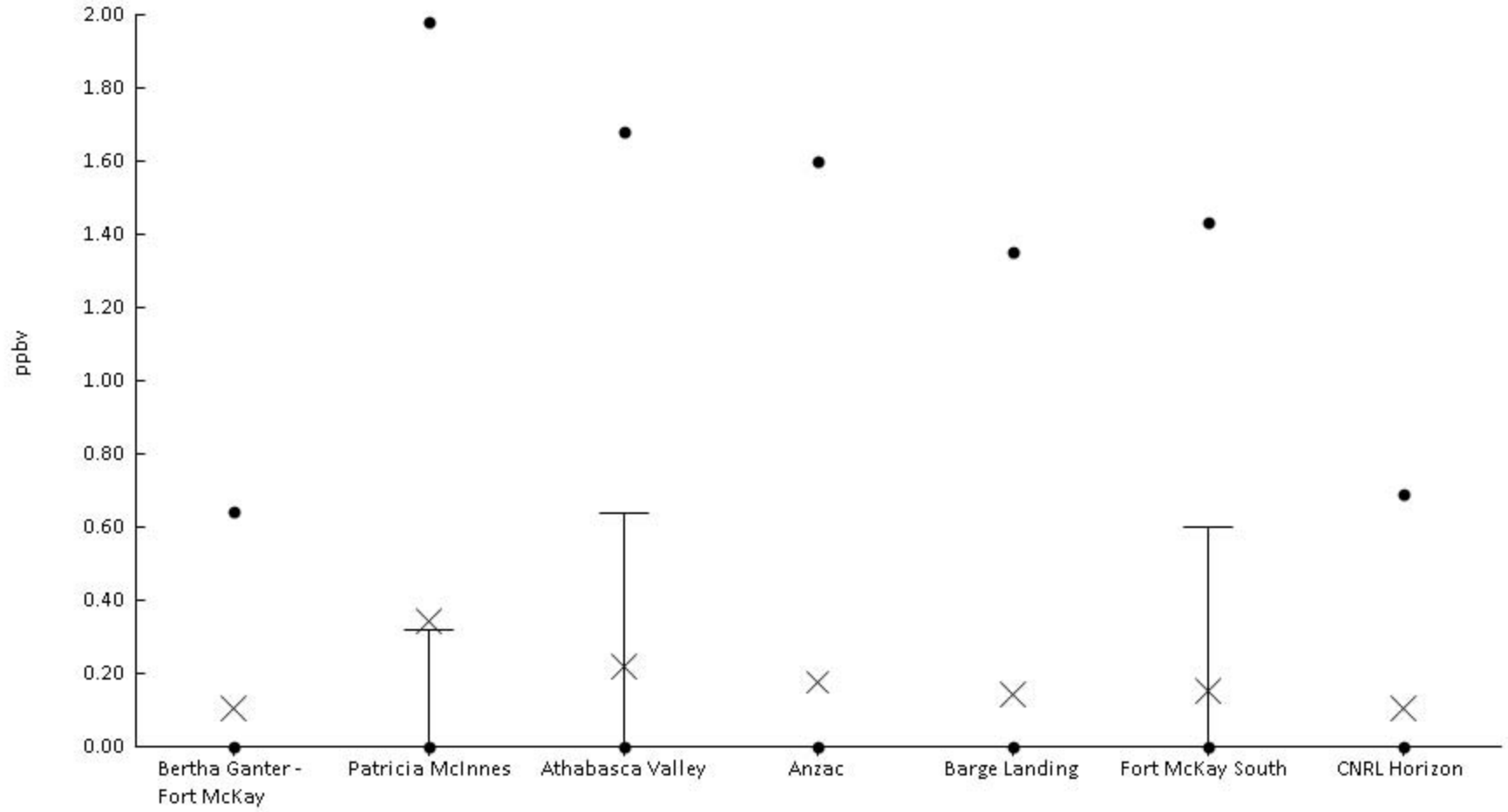
Volatile Organic Compounds - n-Undecane (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0



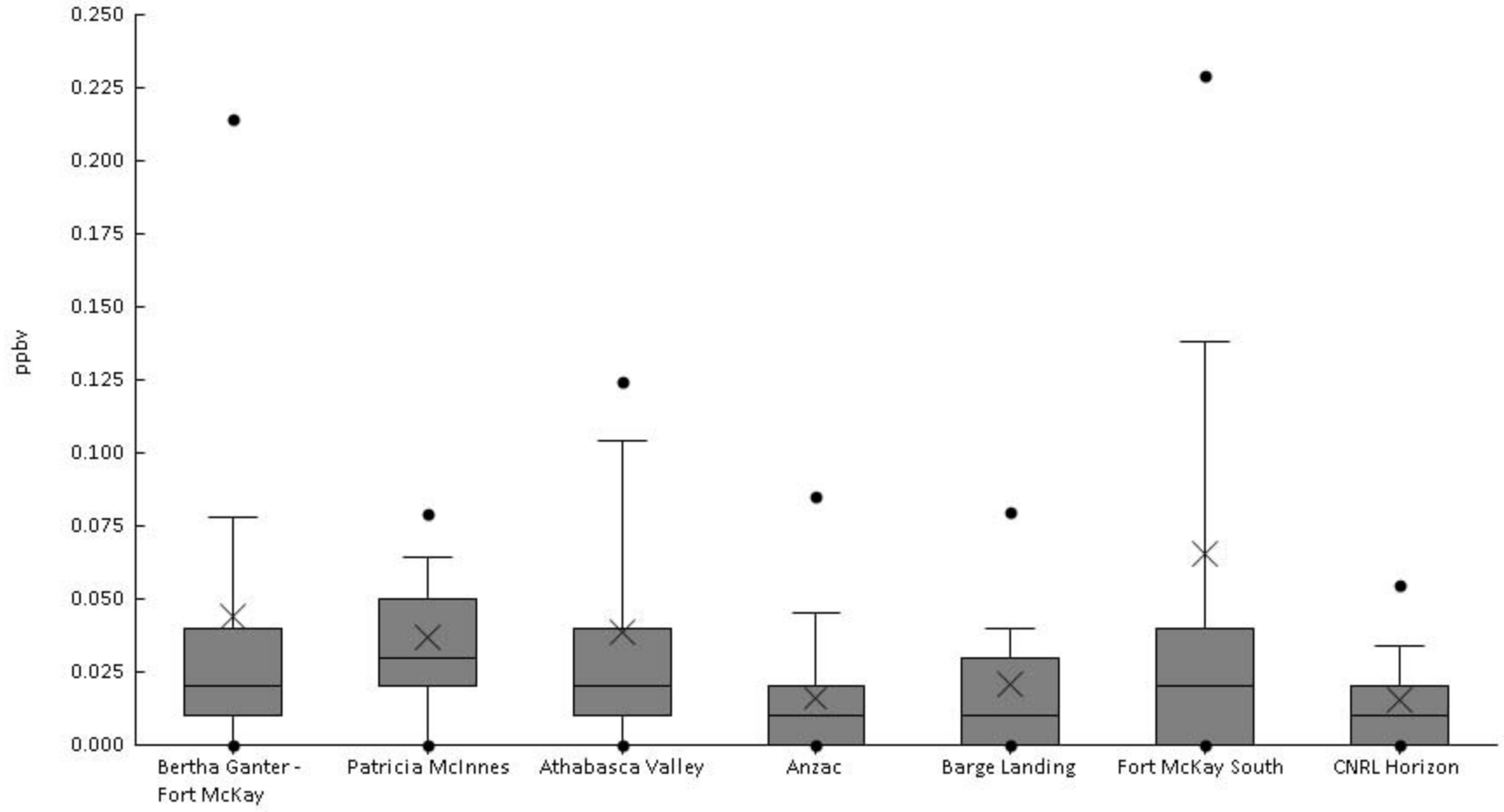
Volatile Organic Compounds - Naphthalene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	8%	0	0	0	0	0	0	0	0.65	2.7	0.1	0.43
AMS 6	Patricia McInnes	61	10%	0	0	0	0	0	0	0.32	2	12	0.34	1.6
AMS 7	Athabasca Valley	61	11%	0	0	0	0	0	0	0.64	1.7	5	0.22	0.78
AMS 14	Anzac	60	8%	0	0	0	0	0	0	0	1.6	3.7	0.18	0.68
AMS 9	Barge Landing	60	7%	0	0	0	0	0	0	0	1.4	3.5	0.14	0.6
AMS 13	Fort McKay South	61	11%	0	0	0	0	0	0	0.6	1.4	2.5	0.15	0.49
AMS 15	CNRL Horizon	61	7%	0	0	0	0	0	0	0	0.69	2.5	0.1	0.45



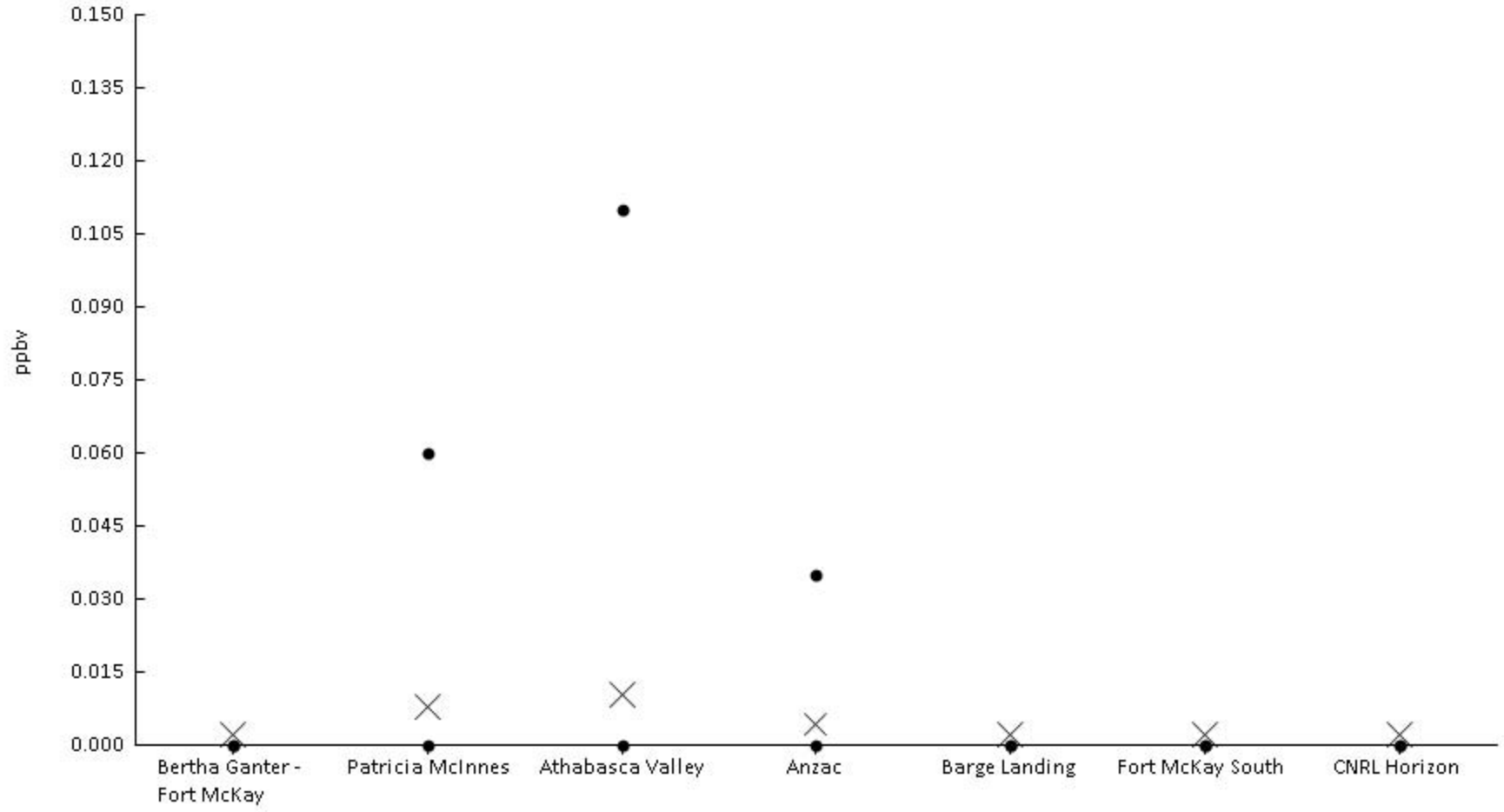
Volatile Organic Compounds - o-Xylene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	77%	0	0	0	0.01	0.02	0.04	0.078	0.21	0.64	0.044	0.092
AMS 6	Patricia McInnes	61	87%	0	0	0	0.02	0.03	0.05	0.064	0.079	0.25	0.037	0.041
AMS 7	Athabasca Valley	61	82%	0	0	0	0.01	0.02	0.04	0.1	0.12	0.34	0.039	0.054
AMS 14	Anzac	60	52%	0	0	0	0	0.01	0.02	0.045	0.085	0.13	0.016	0.028
AMS 9	Barge Landing	60	65%	0	0	0	0	0.01	0.03	0.04	0.08	0.22	0.021	0.036
AMS 13	Fort McKay South	61	72%	0	0	0	0	0.02	0.04	0.14	0.23	1.5	0.065	0.2
AMS 15	CNRL Horizon	61	54%	0	0	0	0	0.01	0.02	0.034	0.055	0.17	0.016	0.026



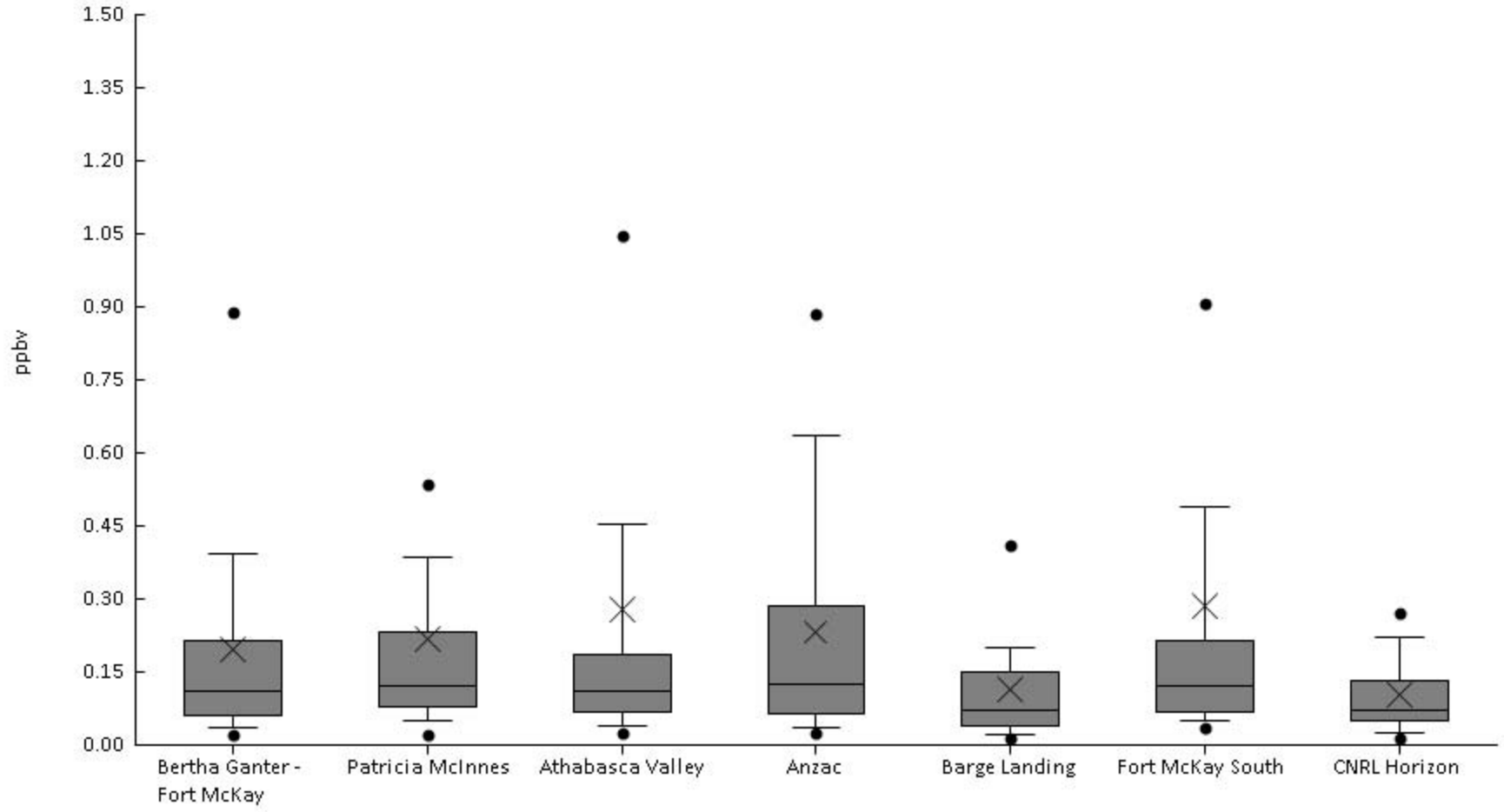
Volatile Organic Compounds - Styrene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	2%	0	0	0	0	0	0	0	0	0.13	2.1E-3	0.017
AMS 6	Patricia McInnes	61	7%	0	0	0	0	0	0	0	0.06	0.23	7.9E-3	0.035
AMS 7	Athabasca Valley	61	7%	0	0	0	0	0	0	0	0.11	0.28	0.01	0.043
AMS 14	Anzac	60	5%	0	0	0	0	0	0	0	0.035	0.1	4.3E-3	0.019
AMS 9	Barge Landing	60	2%	0	0	0	0	0	0	0	0	0.13	2.2E-3	0.017
AMS 13	Fort McKay South	61	2%	0	0	0	0	0	0	0	0	0.12	2E-3	0.015
AMS 15	CNRL Horizon	61	2%	0	0	0	0	0	0	0	0	0.12	2E-3	0.015



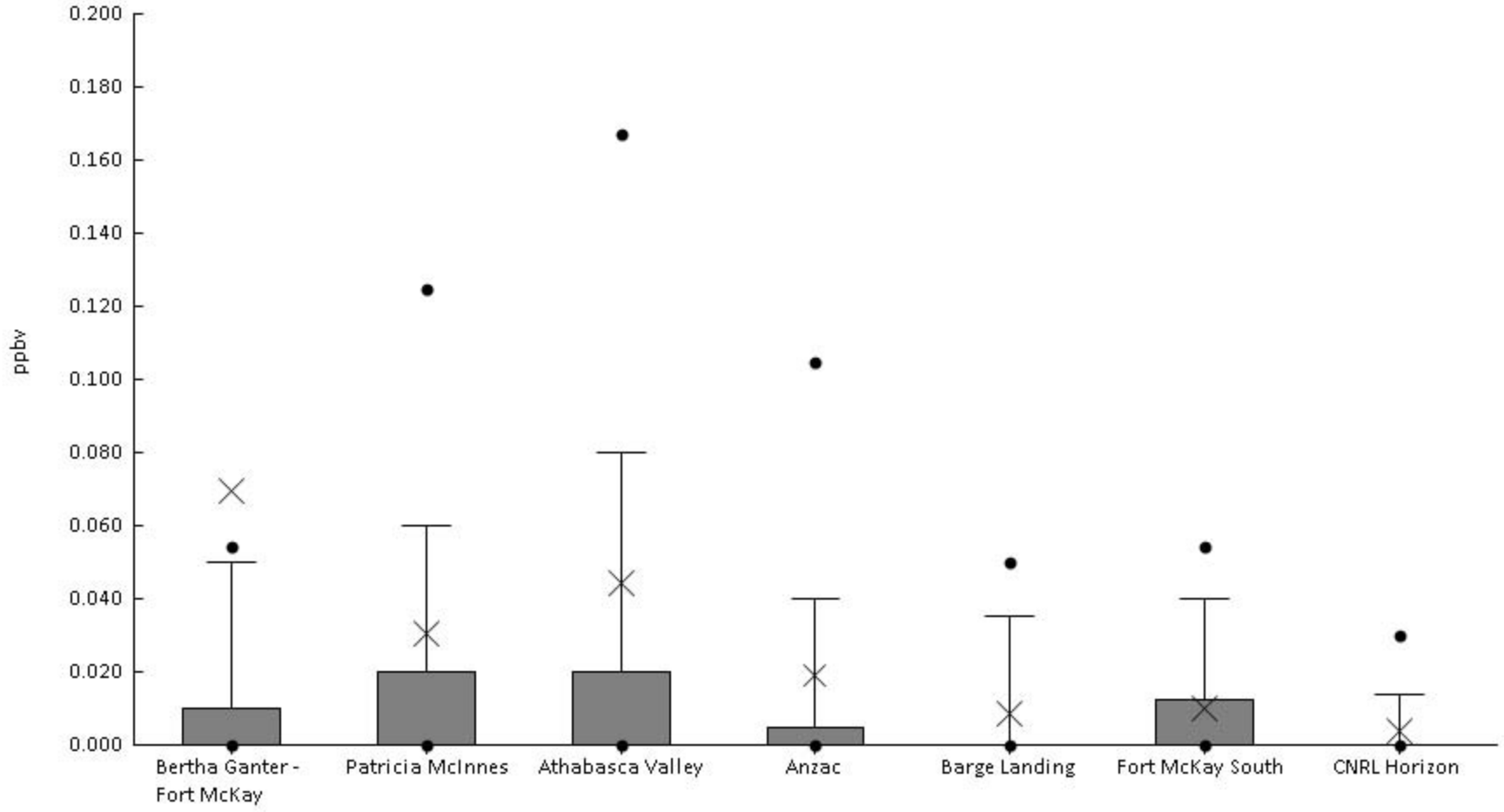
Volatile Organic Compounds - Toluene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	0.02	0.02	0.036	0.06	0.11	0.21	0.39	0.89	1.6	0.2	0.27
AMS 6	Patricia McInnes	61	98%	0	0.02	0.05	0.078	0.12	0.23	0.38	0.54	3.2	0.22	0.42
AMS 7	Athabasca Valley	61	100%	0.02	0.026	0.04	0.068	0.11	0.19	0.45	1	4.6	0.28	0.66
AMS 14	Anzac	60	98%	0	0.025	0.035	0.065	0.13	0.29	0.64	0.89	1.4	0.23	0.27
AMS 9	Barge Landing	60	97%	0	0.015	0.02	0.04	0.07	0.15	0.2	0.41	0.65	0.11	0.13
AMS 13	Fort McKay South	61	100%	0.02	0.036	0.05	0.068	0.12	0.22	0.49	0.91	4.4	0.28	0.64
AMS 15	CNRL Horizon	61	98%	0	0.016	0.026	0.05	0.07	0.13	0.22	0.27	0.53	0.1	0.094



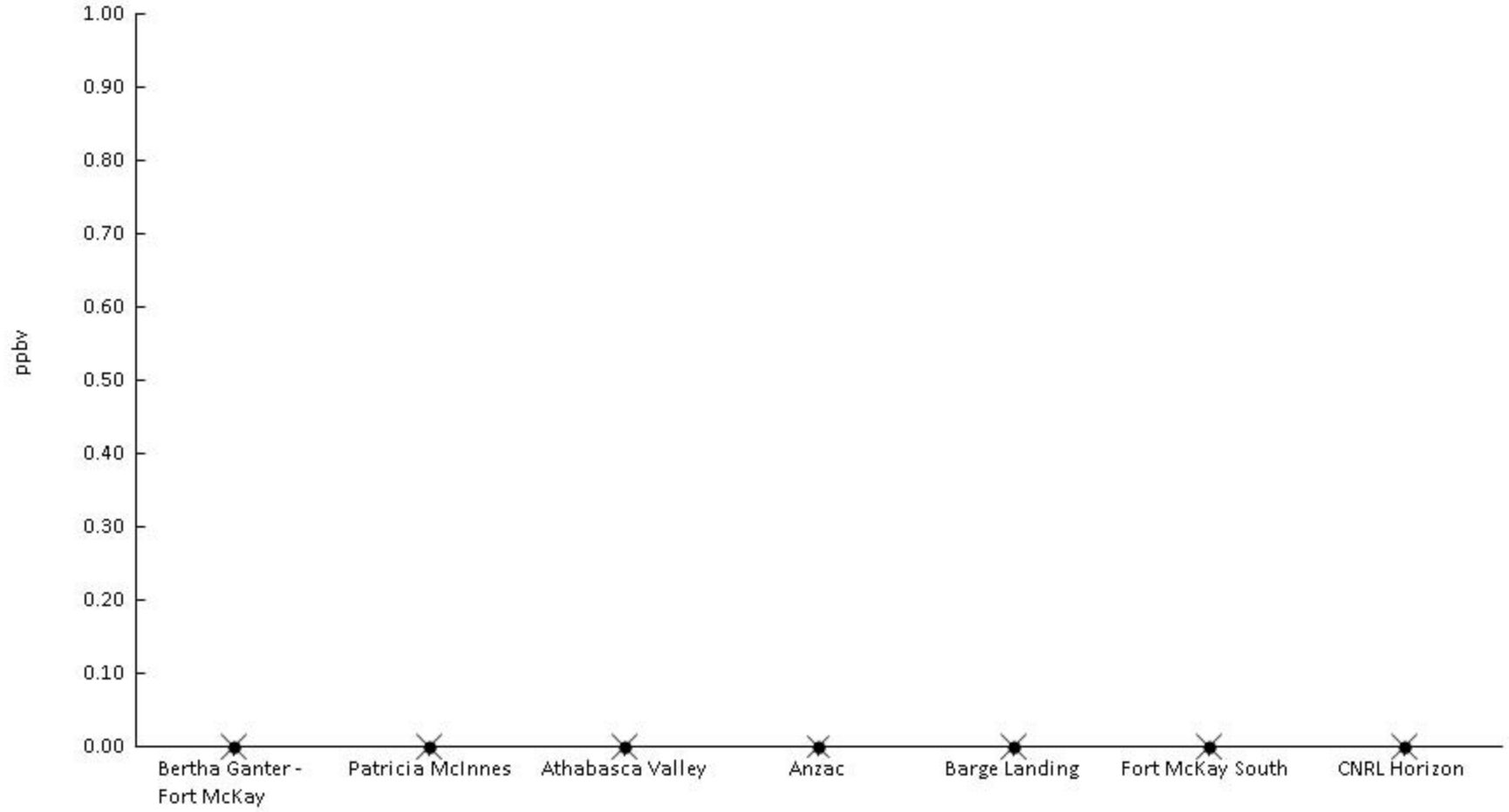
Volatile Organic Compounds - trans-2-Butene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	28%	0	0	0	0	0	0.01	0.05	0.055	3.7	0.07	0.47
AMS 6	Patricia McInnes	61	36%	0	0	0	0	0	0.02	0.06	0.13	0.75	0.031	0.1
AMS 7	Athabasca Valley	61	43%	0	0	0	0	0	0.02	0.08	0.17	0.99	0.044	0.15
AMS 14	Anzac	60	25%	0	0	0	0	0	5E-3	0.04	0.11	0.41	0.019	0.06
AMS 9	Barge Landing	60	23%	0	0	0	0	0	0	0.035	0.05	0.1	8.3E-3	0.02
AMS 13	Fort McKay South	61	31%	0	0	0	0	0	0.013	0.04	0.055	0.08	9.8E-3	0.018
AMS 15	CNRL Horizon	61	13%	0	0	0	0	0	0	0.014	0.03	0.08	3.9E-3	0.013



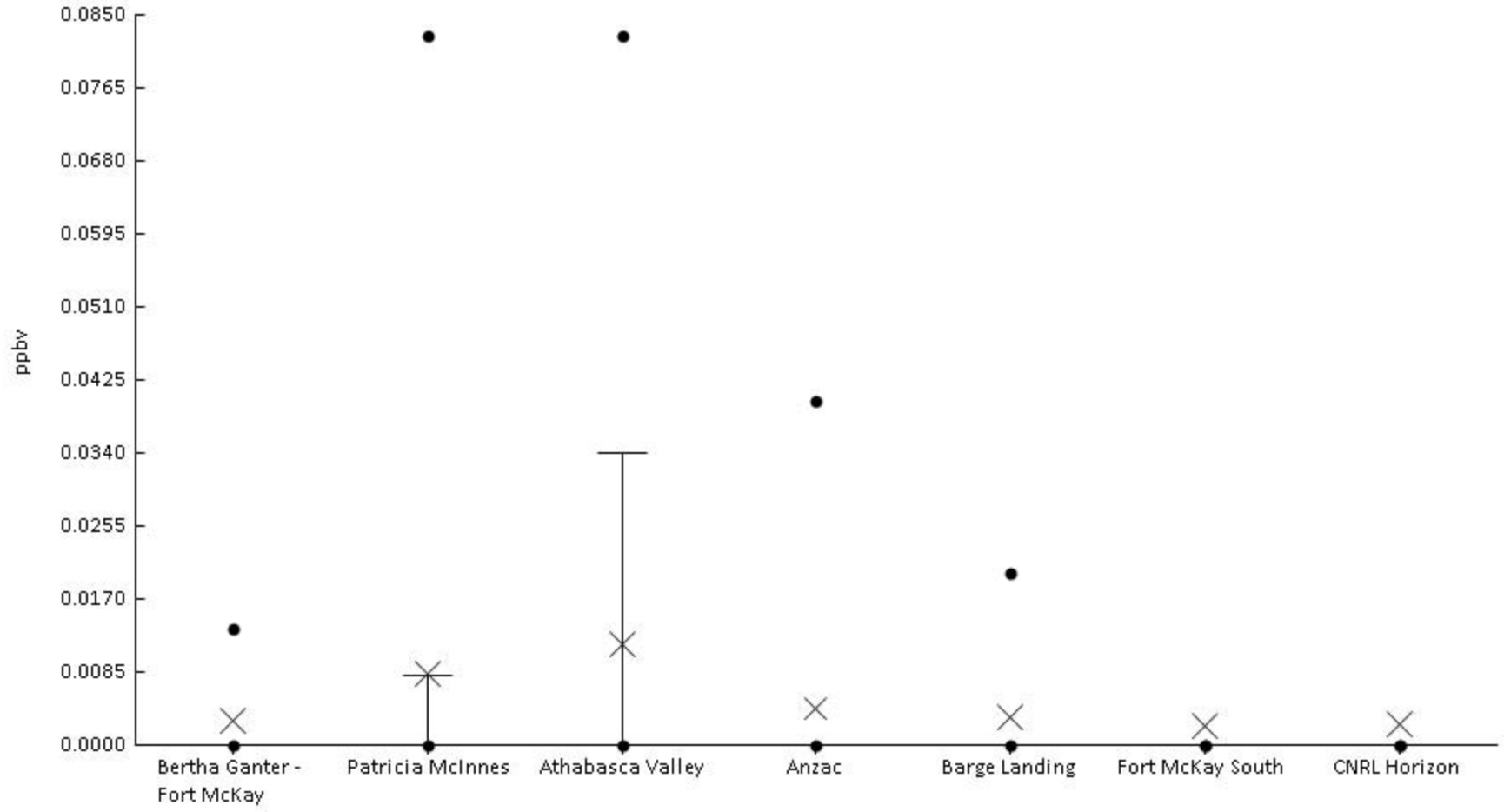
Volatile Organic Compounds - trans-2-Hexene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0



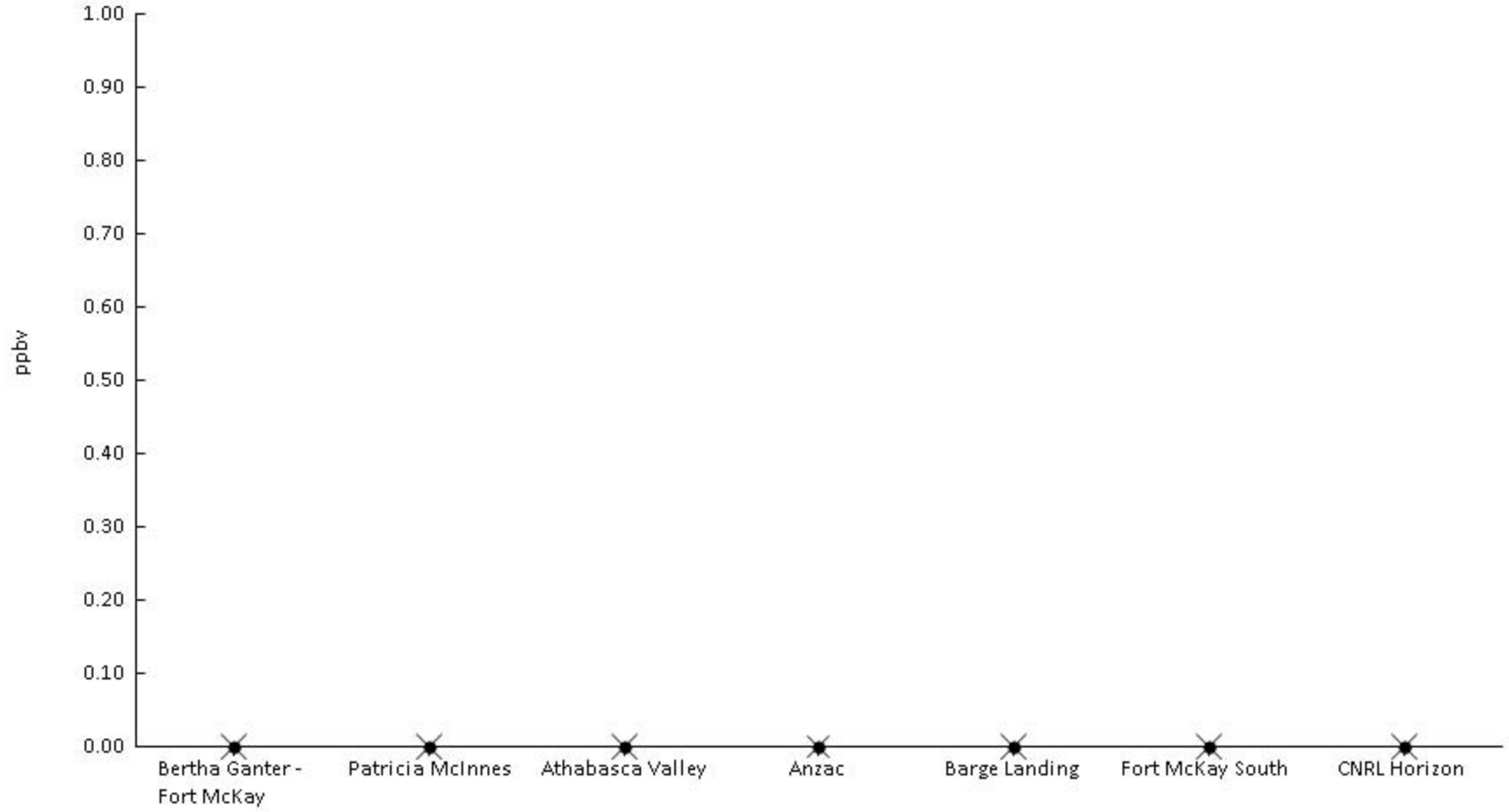
Volatile Organic Compounds - trans-2-Pentene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	5%	0	0	0	0	0	0	0	0.013	0.11	2.8E-3	0.015
AMS 6	Patricia McInnes	61	10%	0	0	0	0	0	0	8E-3	0.082	0.15	8.4E-3	0.03
AMS 7	Athabasca Valley	61	16%	0	0	0	0	0	0	0.034	0.082	0.23	0.012	0.037
AMS 14	Anzac	60	8%	0	0	0	0	0	0	0	0.04	0.09	4.3E-3	0.016
AMS 9	Barge Landing	60	8%	0	0	0	0	0	0	0	0.02	0.11	3.3E-3	0.015
AMS 13	Fort McKay South	61	3%	0	0	0	0	0	0	0	0	0.11	2.1E-3	0.014
AMS 15	CNRL Horizon	61	3%	0	0	0	0	0	0	0	0	0.1	2.5E-3	0.014



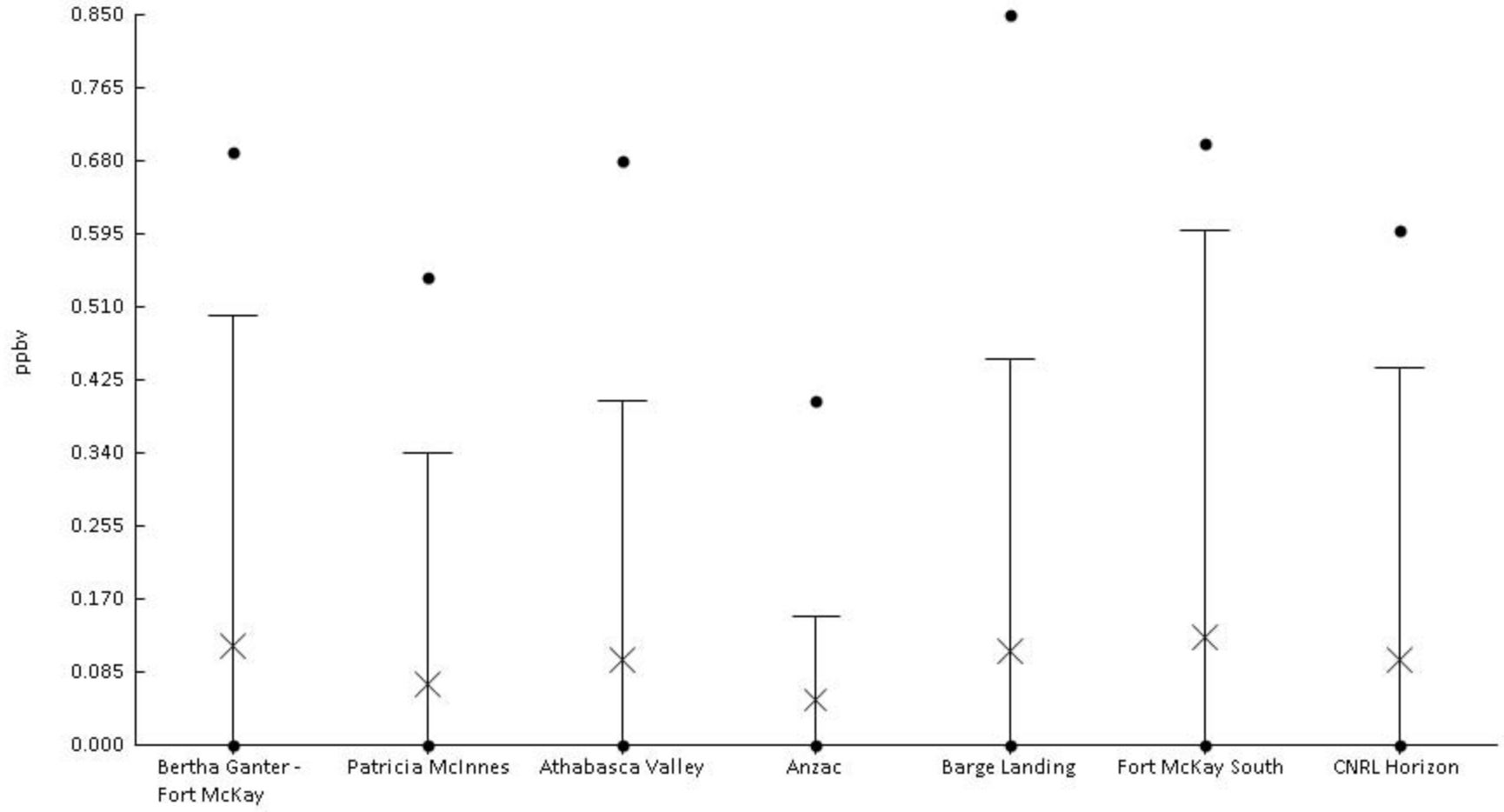
Volatile Organic Compounds - Isobutylene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0



Volatile Organic Compounds - Methylvinylketone (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	18%	0	0	0	0	0	0	0.5	0.69	1.5	0.11	0.28
AMS 6	Patricia McInnes	61	13%	0	0	0	0	0	0	0.34	0.54	1	0.07	0.2
AMS 7	Athabasca Valley	61	18%	0	0	0	0	0	0	0.4	0.68	1.2	0.1	0.25
AMS 14	Anzac	60	10%	0	0	0	0	0	0	0.15	0.4	0.9	0.052	0.17
AMS 9	Barge Landing	60	13%	0	0	0	0	0	0	0.45	0.85	1.8	0.11	0.33
AMS 13	Fort McKay South	61	18%	0	0	0	0	0	0	0.6	0.7	1.7	0.13	0.31
AMS 15	CNRL Horizon	61	16%	0	0	0	0	0	0	0.44	0.6	1.6	0.1	0.27



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

INTEGRATED MONITORING PROGRAM
ANNUAL REPORT

REDUCED SULPHUR COMPOUNDS
DATA SUMMARY
2016

March 2017

SAMPLE COLLECTION AND DATA COMILATION BY:

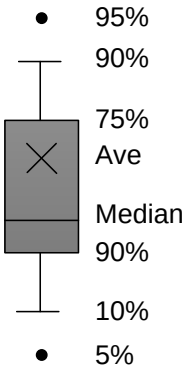
Wood Buffalo Environmental Association
Fort McMurray, Alberta

LABORATORY ANALYSIS BY:

RSCs: InnoTech Alberta, Inc.
Vegreville, Alberta

FILE CONTENTS DESCRIPTION	VOC - Speciated Volatile Organic Compounds and RSC - Reduced Sulphur Compounds
SAMPLING INTERVAL	24 hour
SAMPLING FREQUENCY OF DATA	Once every 6 days
EXPLANATION OF ZERO VALUES	Zero values are contained in this file and should be treated as values below detection - Method Detection values (MDL) are provided with each observation
UNITS	ppbv (parts per billion volume)
OBSERVATION TYPE	Gas
FIELD SAMPLING OR MEASUREMENT PRINCIPLE	Evacuated canister
ANALYTICAL METHODS	GC/MS - Gas chromatography/mass spectrometer for VOC compounds GC/SCD - Gas chromatography/sulfur chemiluminescence detector for RSC compounds
ANALYTICAL LABORATORY	Alberta Innovates Technology Futures (now InnoTech Alberta Inc)
USER NOTE 1	Data are not blank corrected
USER NOTE 2	isobutylene and methyl vinyl ketone were added on Sep 9, 2015
SAMPLING INSTRUMENT TYPE	Tisch TE123
FLOW RATE	10.0 cc/min (cubic centimeters per minute)
FLAGS USED	
V0	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
V4	Valid value despite failing to meet some QC or statistical criteria
V5	Valid value but qualified because of possible contamination
V6	Valid value but qualified due to non-standard sampling conditions
M1	Missing value because no value is available
M2	Missing value because invalidated by Data Originator

Legend description



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**01-Jan**		**01-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**01-Jan**		**01-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		01-Jan		01-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**01-Jan**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**07-Jan**		**07-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**07-Jan**		**07-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Barge Landing			Fort McKay South	
Station #	AMS 9			AMS 13	
Sample Date	07-Jan			07-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**07-Jan**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		13-Jan		13-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**13-Jan**		**13-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		13-Jan		13-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**13-Jan**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**19-Jan**		**19-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.4	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**19-Jan**		**19-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	0.6	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		19-Jan		20-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**19-Jan**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.6	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**25-Jan**		**25-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.6	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**25-Jan**		**25-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		25-Jan		25-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.4	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**25-Jan**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.5	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**31-Jan**		**31-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**31-Jan**		**31-Jan**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	0.5	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		31-Jan		31-Jan	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**31-Jan**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		06-Feb		06-Feb	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.6	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**06-Feb**		**06-Feb**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	0.8	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Barge Landing**		**Fort McKay South**	
Station #		**AMS 9**		**AMS 13**	
Sample Date		**06-Feb**		**06-Feb**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	1.2	V0	0.9	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**06-Feb**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**12-Feb**		**12-Feb**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**12-Feb**		**14-Feb**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		12-Feb		12-Feb	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**12-Feb**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		18-Feb		18-Feb	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**18-Feb**		**18-Feb**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.5	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		18-Feb		18-Feb	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**18-Feb**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		24-Feb		24-Feb	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**24-Feb**		**24-Feb**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.5	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		24-Feb		24-Feb	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	0.4	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**24-Feb**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**01-Mar**		**01-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**01-Mar**		**01-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**		**Fort McKay South**	
Station #	**AMS 9**		**AMS 13**	
Sample Date	**01-Mar**		**01-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**01-Mar**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		07-Mar		07-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.4	V0	0.5	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**07-Mar**		**07-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	0.5	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	07-Mar		07-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**07-Mar**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		13-Mar		13-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.5	V0	0.3	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**13-Mar**		**13-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**			**Fort McKay South**	
Station #	**AMS 9**			**AMS 13**	
Sample Date	**13-Mar**			**13-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.6	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**13-Mar**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		19-Mar		19-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**19-Mar**		**19-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		19-Mar		19-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	0.3	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**19-Mar**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.5	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		25-Mar		25-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.4	V0	0.4	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**25-Mar**		**25-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	25-Mar		25-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**25-Mar**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		31-Mar		31-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.4	V0	0.5	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**31-Mar**		**31-Mar**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.2	V0	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	31-Mar		31-Mar	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.5	V0	0.9	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**31-Mar**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.4	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		06-Apr		06-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0	1	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**06-Apr**		**06-Apr**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.9	V0	0.6	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		06-Apr		06-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.9	V0	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**06-Apr**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		12-Apr		12-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	1.1	V0	0.5	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**12-Apr**		**12-Apr**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	1.6	V0	1	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**			**Fort McKay South**	
Station #	**AMS 9**			**AMS 13**	
Sample Date	**12-Apr**			**12-Apr**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.6	V0	0.6	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**12-Apr**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.6	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		18-Apr		18-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**18-Apr**		**18-Apr**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0	1.1	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		18-Apr		18-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0	1.1	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**18-Apr**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		24-Apr		24-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	1	V0	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Athabasca Valley		Anzac	
Station #	AMS 7		AMS 14	
Sample Date	24-Apr		24-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.7	V0	0.8	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		24-Apr		24-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.9	V0	1.4	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**24-Apr**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		30-Apr		30-Apr	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.7	V0	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**30-Apr**		**30-Apr**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.9	V0	0.9	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**		**Fort McKay South**	
Station #	**AMS 9**		**AMS 13**	
Sample Date	**30-Apr**		**30-Apr**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.7	V0	1.5	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**30-Apr**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.9	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Patricia McInnes**
Station #	**AMS 6**
Sample Date	**06-May**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	1.6	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Athabasca Valley		Anzac	
Station #	AMS 7		AMS 14	
Sample Date	06-May		06-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.5	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.3	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.3	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.5	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.5	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.5	V1
Carbonyl sulphide	0.2	1.5	V0	1.5	V0
Dimethyl disulphide	0.2	0.2	V0	< 0.3	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.5	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.3	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.5	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.3	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.5	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.2	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.3	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.5	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.5	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.5	V1
Thiophene	0.2	< 0.2	V1	< 0.3	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		06-May		06-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**06-May**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		12-May		12-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	1.2	V0	1.5	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**
Station #	**AMS 7**
Sample Date	**12-May**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	1	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		12-May		12-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.5	V0	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**12-May**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	1.2	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		18-May		18-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.9	V0	1.5	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**18-May**		**18-May**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	1.3	V0	1.5	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		18-May		18-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	1.2	V4
Carbonyl sulphide	0.2	0.6	V0	1.9	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**18-May**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	1.2	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		24-May		24-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.6	V0	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**24-May**		**24-May**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0	0.8	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

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Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Fort McKay South**		**CNRL Horizon**	
Station #		**AMS 13**		**AMS 15**	
Sample Date		**24-May**		**24-May**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.9	V0	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**30-May**		**30-May**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.3	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**30-May**		**30-May**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		30-May		30-May	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**30-May**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**05-Jun**		**05-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	0.4	V0	< 0.3	V1
Carbonyl sulphide	0.2	0.4	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**05-Jun**		**05-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		05-Jun		05-Jun	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**05-Jun**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**11-Jun**		**11-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	1.2	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**11-Jun**		**11-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon	
Station #		AMS 13		AMS 15	
Sample Date		11-Jun		11-Jun	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	1.2	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**17-Jun**		**17-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**17-Jun**		**17-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**
Station #	**AMS 9**
Sample Date	**17-Jun**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**17-Jun**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**23-Jun**		**23-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	1.2	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**24-Jun**		**23-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		23-Jun		23-Jun	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	0.4	V0	0.7	V0
Carbonyl sulphide	0.2	0.9	V0	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	0.7	V0
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**23-Jun**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	1.1	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**29-Jun**		**29-Jun**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	0.3	V0	< 0.3	V1
Carbonyl sulphide	0.2	0.9	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Athabasca Valley		Anzac	
Station #	AMS 7		AMS 14	
Sample Date	29-Jun		29-Jun	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.7	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		29-Jun		29-Jun	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	0.4	V0	1	V4
Carbonyl sulphide	0.2	< 0.2	V1	1.3	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**29-Jun**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.6	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		05-Jul		05-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Athabasca Valley		Anzac	
Station #	AMS 7		AMS 14	
Sample Date	05-Jul		05-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	0.8	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		05-Jul		05-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**05-Jul**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**11-Jul**		**11-Jul**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	0.4	V0
Carbonyl sulphide	0.2	< 0.2	V1	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**11-Jul**		**11-Jul**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		11-Jul		11-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**11-Jul**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**17-Jul**		**17-Jul**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**17-Jul**		**17-Jul**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		17-Jul		17-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	1.1	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**17-Jul**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		23-Jul		23-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	1.4	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**23-Jul**		**23-Jul**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	1.1	V0	1.5	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		23-Jul		23-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	1.4	V0	1.6	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**23-Jul**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	0.9	V0
Carbonyl sulphide	0.2	3.3	V4
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**29-Jul**		**29-Jul**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**29-Jul**		**29-Jul**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		29-Jul		29-Jul	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	0.6	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**29-Jul**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	0.5	V0
Carbonyl sulphide	0.2	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**04-Aug**		**04-Aug**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**04-Aug**		**04-Aug**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	1.1	V4
Carbonyl sulphide	0.2	< 0.2	V1	2	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		04-Aug		04-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**04-Aug**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		10-Aug		10-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**10-Aug**		**10-Aug**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	2.1	V4
Carbonyl sulphide	0.2	< 0.2	V1	2.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**			**Fort McKay South**	
Station #	**AMS 9**			**AMS 13**	
Sample Date	**10-Aug**			**10-Aug**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	0.9	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**10-Aug**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	0.8	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		16-Aug		16-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	2.2	V0	1.8	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**16-Aug**		**16-Aug**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	0.6	V0	< 0.3	V1
Carbonyl sulphide	0.2	1.1	V0	0.9	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Barge Landing			Fort McKay South	
Station #	AMS 9			AMS 13	
Sample Date	16-Aug			16-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	1	V0	1.2	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**16-Aug**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	1	V0
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		22-Aug		22-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**22-Aug**		**22-Aug**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	0.7	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		22-Aug		22-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**22-Aug**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**28-Aug**		**28-Aug**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	1.4	V0
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**	
Station #		**AMS 7**		**AMS 14**	
Sample Date		**28-Aug**		**28-Aug**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		28-Aug		28-Aug	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**28-Aug**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	1.5	V4
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**03-Sep**		**03-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**03-Sep**		**03-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		03-Sep		03-Sep	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**03-Sep**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**09-Sep**		**09-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**09-Sep**		**09-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	0.4	V0
Carbonyl sulphide	0.2	0.8	V0	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		09-Sep		09-Sep	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1	< 0.3	V1
Thiophene	0.2	< 0.2	V1	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**09-Sep**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.3	< 0.3	V1
2-Ethylthiophene	0.2	< 0.2	V1
2-Methylthiophene	0.2	< 0.2	V1
3-Methylthiophene	0.3	< 0.3	V1
Butyl mercaptan	0.3	< 0.3	V1
Carbon disulphide	0.3	< 0.3	V1
Carbonyl sulphide	0.2	< 0.2	V1
Dimethyl disulphide	0.2	< 0.2	V1
Dimethyl sulphide	0.3	< 0.3	V1
Ethyl mercaptan	0.2	< 0.2	V1
Ethyl sulphide	0.3	< 0.3	V1
Hydrogen sulphide	0.2	< 0.2	V1
Isobutyl mercaptan	0.3	< 0.3	V1
Isopropyl mercaptan	0.1	< 0.1	V1
Methyl mercaptan	0.2	< 0.2	V1
Pentyl mercaptan	0.3	< 0.3	V1
Propyl mercaptan	0.3	< 0.3	V1
tert-Butyl mercaptan	0.3	< 0.3	V1
Thiophene	0.2	< 0.2	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**15-Sep**		**15-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**15-Sep**		**15-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	1.1	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		15-Sep		15-Sep	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	1	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**15-Sep**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	2	V0
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**21-Sep**		**21-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**21-Sep**		**21-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		21-Sep		21-Sep	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1.2	V0	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**21-Sep**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		27-Sep		27-Sep	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**27-Sep**		**27-Sep**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		27-Sep		27-Sep	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**27-Sep**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		03-Oct		03-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Athabasca Valley		Anzac	
Station #	AMS 7		AMS 14	
Sample Date	03-Oct		03-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		03-Oct		03-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**03-Oct**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**09-Oct**		**09-Oct**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	1.3	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**10-Oct**		**09-Oct**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**			**Fort McKay South**	
Station #	**AMS 9**			**AMS 13**	
Sample Date	**09-Oct**			**09-Oct**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**09-Oct**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		15-Oct		15-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**15-Oct**		**15-Oct**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Barge Landing			Fort McKay South	
Station #	AMS 9			AMS 13	
Sample Date	15-Oct			15-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	1.1	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**15-Oct**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**21-Oct**		**21-Oct**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Athabasca Valley		Anzac	
Station #	AMS 7		AMS 14	
Sample Date	21-Oct		21-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1.2	V0	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		21-Oct		21-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**21-Oct**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**27-Oct**		**27-Oct**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1.1	V0	1.2	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Athabasca Valley		Anzac	
Station #	AMS 7		AMS 14	
Sample Date	27-Oct		27-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1.4	V0	1.4	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Barge Landing			Fort McKay South	
Station #	AMS 9			AMS 13	
Sample Date	27-Oct			27-Oct	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1.2	V0	1	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**27-Oct**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	1.4	V0
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**02-Nov**		**02-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**02-Nov**		**02-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		02-Nov		02-Nov	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**02-Nov**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**08-Nov**		**08-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**08-Nov**		**08-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		08-Nov		08-Nov	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**08-Nov**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**14-Nov**		**14-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	1.2	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**14-Nov**		**14-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Barge Landing**		**Fort McKay South**	
Station #	**AMS 9**		**AMS 13**	
Sample Date	**14-Nov**		**14-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**14-Nov**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**20-Nov**		**20-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**20-Nov**		**20-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		20-Nov		20-Nov	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**20-Nov**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**26-Nov**		**26-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**26-Nov**		**26-Nov**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		26-Nov		26-Nov	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**26-Nov**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	1.4	V0
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**02-Dec**		**02-Dec**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1.4	V0	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**02-Dec**		**02-Dec**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Barge Landing		Fort McKay South	
Station #	AMS 9		AMS 13	
Sample Date	02-Dec		02-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1.1	V0	1.3	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**02-Dec**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Bertha Ganter - Fort McKay**		**Patricia McInnes**	
Station #		**AMS 1**		**AMS 6**	
Sample Date		**08-Dec**		**08-Dec**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1	V0	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**08-Dec**		**08-Dec**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1.1	V0	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		**Barge Landing**		**Fort McKay South**	
Station #		**AMS 9**		**AMS 13**	
Sample Date		**08-Dec**		**08-Dec**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**08-Dec**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		14-Dec		14-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1.2	V0	1.1	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**14-Dec**		**14-Dec**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		14-Dec		14-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1.4	V0	1.1	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**14-Dec**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	1.5	V0
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		20-Dec		20-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1.1	V0	< 1.0	V1
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**20-Dec**		**20-Dec**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1.3	V0	1.5	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		20-Dec		20-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	< 1.0	V1	1.1	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**20-Dec**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	1.2	V0
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes	
Station #		AMS 1		AMS 6	
Sample Date		26-Dec		26-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1.2	V0	1.4	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**Athabasca Valley**		**Anzac**	
Station #	**AMS 7**		**AMS 14**	
Sample Date	**26-Dec**		**26-Dec**	
Compound Name	**MDL (ppbv)**	**Results (ppbv)**	**Flag**	**Results (ppbv)**	**Flag**
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1.6	V0	1.2	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name		Barge Landing		Fort McKay South	
Station #		AMS 9		AMS 13	
Sample Date		26-Dec		26-Dec	
Compound Name	MDL (ppbv)	Results (ppbv)	Flag	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1	< 0.6	V1
Carbonyl sulphide	1	1	V0	1.1	V0
Dimethyl disulphide	0.8	< 0.8	V1	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1	< 0.9	V1
Thiophene	0.7	< 0.7	V1	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	**CNRL Horizon**
Station #	**AMS 15**
Sample Date	**26-Dec**

Compound Name	MDL (ppbv)	Results (ppbv)	Flag
2,5-Dimethylthiophene	0.9	< 0.9	V1
2-Ethylthiophene	1	< 1.0	V1
2-Methylthiophene	0.8	< 0.8	V1
3-Methylthiophene	0.5	< 0.5	V1
Butyl mercaptan	0.8	< 0.8	V1
Carbon disulphide	0.6	< 0.6	V1
Carbonyl sulphide	1	1.1	V0
Dimethyl disulphide	0.8	< 0.8	V1
Dimethyl sulphide	0.7	< 0.7	V1
Ethyl mercaptan	0.6	< 0.6	V1
Ethyl sulphide	0.9	< 0.9	V1
Hydrogen sulphide	0.7	< 0.7	V1
Isobutyl mercaptan	0.8	< 0.8	V1
Isopropyl mercaptan	0.9	< 0.9	V1
Methyl mercaptan	0.9	< 0.9	V1
Pentyl mercaptan	2	< 2.0	V1
Propyl mercaptan	1	< 1.0	V1
tert-Butyl mercaptan	0.9	< 0.9	V1
Thiophene	0.7	< 0.7	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name Station # Sample Date Compound Name	Bertha Ganter - Fort McKay AMS 1 Jan 01 - Dec 26 Average ppbv	Bertha Ganter - Fort McKay AMS 1 Jan 01 - Dec 26 Std Dev ppbv	Bertha Ganter - Fort McKay AMS 1 Jan 01 - Dec 26 Total Samples (#)	Bertha Ganter - Fort McKay AMS 1 Jan 01 - Dec 26 Total ≥ MDL (#)
2,5-Dimethylthiophene	0.0	0.0	61	0
2-Ethylthiophene	0.0	0.0	61	0
2-Methylthiophene	0.0	0.0	61	0
3-Methylthiophene	0.0	0.0	61	0
Butyl mercaptan	0.0	0.0	61	0
Carbon disulphide	0.0	0.1	61	2
Carbonyl sulphide	0.4	0.5	61	29
Dimethyl disulphide	0.0	0.0	61	0
Dimethyl sulphide	0.0	0.0	61	0
Ethyl mercaptan	0.0	0.0	61	0
Ethyl sulphide	0.0	0.0	61	0
Hydrogen sulphide	0.0	0.0	61	0
Isobutyl mercaptan	0.0	0.0	61	0
Isopropyl mercaptan	0.0	0.0	61	0
Methyl mercaptan	0.0	0.0	61	0
Pentyl mercaptan	0.0	0.0	61	0
Propyl mercaptan	0.0	0.0	61	0
tert-Butyl mercaptan	0.0	0.0	61	0
Thiophene	0.0	0.0	61	0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Patricia McInnes	Patricia McInnes	Patricia McInnes	Patricia McInnes
Station #	AMS 6	AMS 6	AMS 6	AMS 6
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	ppbv	ppbv		
2,5-Dimethylthiophene	0.0	0.0	61	0
2-Ethylthiophene	0.0	0.0	61	0
2-Methylthiophene	0.0	0.0	61	0
3-Methylthiophene	0.0	0.0	61	0
Butyl mercaptan	0.0	0.0	61	0
Carbon disulphide	0.0	0.1	61	1
Carbonyl sulphide	0.4	0.6	61	24
Dimethyl disulphide	0.0	0.0	61	0
Dimethyl sulphide	0.0	0.0	61	0
Ethyl mercaptan	0.0	0.0	61	0
Ethyl sulphide	0.0	0.0	61	0
Hydrogen sulphide	0.0	0.0	61	0
Isobutyl mercaptan	0.0	0.0	61	0
Isopropyl mercaptan	0.0	0.0	61	0
Methyl mercaptan	0.0	0.0	61	0
Pentyl mercaptan	0.0	0.0	61	0
Propyl mercaptan	0.0	0.0	61	0
tert-Butyl mercaptan	0.0	0.0	61	0
Thiophene	0.0	0.0	61	0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Athabasca Valley	Athabasca Valley	Athabasca Valley	Athabasca Valley
Station #	AMS 7	AMS 7	AMS 7	AMS 7
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	ppbv	ppbv		
2,5-Dimethylthiophene	0.0	0.0	61	0
2-Ethylthiophene	0.0	0.0	61	0
2-Methylthiophene	0.0	0.0	61	0
3-Methylthiophene	0.0	0.0	61	0
Butyl mercaptan	0.0	0.0	61	0
Carbon disulphide	0.0	0.1	61	1
Carbonyl sulphide	0.4	0.5	61	22
Dimethyl disulphide	0.0	0.0	61	1
Dimethyl sulphide	0.0	0.0	61	0
Ethyl mercaptan	0.0	0.0	61	0
Ethyl sulphide	0.0	0.0	61	0
Hydrogen sulphide	0.0	0.0	61	0
Isobutyl mercaptan	0.0	0.0	61	0
Isopropyl mercaptan	0.0	0.0	61	0
Methyl mercaptan	0.0	0.0	61	0
Pentyl mercaptan	0.0	0.0	61	0
Propyl mercaptan	0.0	0.0	61	0
tert-Butyl mercaptan	0.0	0.0	61	0
Thiophene	0.0	0.0	61	0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Anzac	Anzac	Anzac	Anzac
Station #	AMS 14	AMS 14	AMS 14	AMS 14
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	ppbv	ppbv		
2,5-Dimethylthiophene	0.0	0.0	60	0
2-Ethylthiophene	0.0	0.0	60	0
2-Methylthiophene	0.0	0.0	60	0
3-Methylthiophene	0.0	0.0	60	0
Butyl mercaptan	0.0	0.0	60	0
Carbon disulphide	0.1	0.3	60	3
Carbonyl sulphide	0.4	0.6	60	25
Dimethyl disulphide	0.0	0.0	60	0
Dimethyl sulphide	0.0	0.0	60	0
Ethyl mercaptan	0.0	0.0	60	0
Ethyl sulphide	0.0	0.0	60	0
Hydrogen sulphide	0.0	0.0	60	0
Isobutyl mercaptan	0.0	0.0	60	0
Isopropyl mercaptan	0.0	0.0	60	0
Methyl mercaptan	0.0	0.0	60	0
Pentyl mercaptan	0.0	0.0	60	0
Propyl mercaptan	0.0	0.0	60	0
tert-Butyl mercaptan	0.0	0.0	60	0
Thiophene	0.0	0.0	60	0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name Station # Sample Date Compound Name	Barge Landing AMS 9 Jan 01 - Dec 26 Average ppbv	Barge Landing AMS 9 Jan 01 - Dec 26 Std Dev ppbv	Barge Landing AMS 9 Jan 01 - Dec 26 Total Samples (#)	Barge Landing AMS 9 Jan 01 - Dec 26 Total ≥ MDL (#)
2,5-Dimethylthiophene	0.0	0.0	60	0
2-Ethylthiophene	0.0	0.0	60	0
2-Methylthiophene	0.0	0.0	60	0
3-Methylthiophene	0.0	0.0	60	0
Butyl mercaptan	0.0	0.0	60	0
Carbon disulphide	0.0	0.1	60	2
Carbonyl sulphide	0.3	0.5	60	21
Dimethyl disulphide	0.0	0.0	60	0
Dimethyl sulphide	0.0	0.0	60	0
Ethyl mercaptan	0.0	0.0	60	0
Ethyl sulphide	0.0	0.0	60	0
Hydrogen sulphide	0.0	0.0	60	0
Isobutyl mercaptan	0.0	0.0	60	0
Isopropyl mercaptan	0.0	0.0	60	0
Methyl mercaptan	0.0	0.0	60	0
Pentyl mercaptan	0.0	0.0	60	0
Propyl mercaptan	0.0	0.0	60	0
tert-Butyl mercaptan	0.0	0.0	60	0
Thiophene	0.0	0.0	60	0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name	Fort McKay South	Fort McKay South	Fort McKay South	Fort McKay South
Station #	AMS 13	AMS 13	AMS 13	AMS 13
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	ppbv	ppbv		
2,5-Dimethylthiophene	0.0	0.0	61	0
2-Ethylthiophene	0.0	0.0	61	0
2-Methylthiophene	0.0	0.0	61	0
3-Methylthiophene	0.0	0.0	61	0
Butyl mercaptan	0.0	0.0	61	0
Carbon disulphide	0.0	0.2	61	3
Carbonyl sulphide	0.4	0.6	61	27
Dimethyl disulphide	0.0	0.0	61	0
Dimethyl sulphide	0.0	0.0	61	0
Ethyl mercaptan	0.0	0.0	61	0
Ethyl sulphide	0.0	0.0	61	0
Hydrogen sulphide	0.0	0.0	61	0
Isobutyl mercaptan	0.0	0.0	61	0
Isopropyl mercaptan	0.0	0.0	61	0
Methyl mercaptan	0.0	0.0	61	0
Pentyl mercaptan	0.0	0.1	61	1
Propyl mercaptan	0.0	0.0	61	0
tert-Butyl mercaptan	0.0	0.0	61	0
Thiophene	0.0	0.0	61	0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Reduced Sulphur Compounds (RSCs) **Indicated Sites and Dates**

Station Name Station # Sample Date Compound Name	CNRL Horizon AMS 15 Jan 01 - Dec 26 Average ppbv	CNRL Horizon AMS 15 Jan 01 - Dec 26 Std Dev ppbv	CNRL Horizon AMS 15 Jan 01 - Dec 26 Total Samples (#)	CNRL Horizon AMS 15 Jan 01 - Dec 26 Total ≥ MDL (#)
2,5-Dimethylthiophene	0.0	0.0	61	0
2-Ethylthiophene	0.0	0.0	61	0
2-Methylthiophene	0.0	0.0	61	0
3-Methylthiophene	0.0	0.0	61	0
Butyl mercaptan	0.0	0.0	61	0
Carbon disulphide	0.0	0.2	61	3
Carbonyl sulphide	0.5	0.6	61	30
Dimethyl disulphide	0.0	0.0	61	0
Dimethyl sulphide	0.0	0.0	61	0
Ethyl mercaptan	0.0	0.0	61	0
Ethyl sulphide	0.0	0.0	61	0
Hydrogen sulphide	0.0	0.0	61	0
Isobutyl mercaptan	0.0	0.0	61	0
Isopropyl mercaptan	0.0	0.0	61	0
Methyl mercaptan	0.0	0.0	61	0
Pentyl mercaptan	0.0	0.0	61	0
Propyl mercaptan	0.0	0.0	61	0
tert-Butyl mercaptan	0.0	0.0	61	0
Thiophene	0.0	0.0	61	0

Reduced Sulphur Compounds - 2,5-Dimethylthiophene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - 2-Ethylthiophene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - 2-Methylthiophene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - 3-Methylthiophene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - Butyl mercaptan (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - Carbon disulphide (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	3%	0	0	0	0	0	0	0	0	0.4	0.011	0.064
AMS 6	Patricia McInnes	61	2%	0	0	0	0	0	0	0	0	0.4	6.6E-3	0.051
AMS 7	Athabasca Valley	61	2%	0	0	0	0	0	0	0	0	0.6	9.8E-3	0.077
AMS 14	Anzac	60	5%	0	0	0	0	0	0	0	0.2	2.1	0.06	0.31
AMS 9	Barge Landing	60	3%	0	0	0	0	0	0	0	0	0.4	0.013	0.072
AMS 13	Fort McKay South	61	5%	0	0	0	0	0	0	0	0.31	1.2	0.048	0.22
AMS 15	CNRL Horizon	61	5%	0	0	0	0	0	0	0	0.22	1.5	0.048	0.23

Reduced Sulphur Compounds - Carbonyl sulphide (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	48%	0	0	0	0	0	0.8	1.1	1.2	2.2	0.41	0.51
AMS 6	Patricia McInnes	61	39%	0	0	0	0	0	0.7	1.4	1.5	1.8	0.39	0.56
AMS 7	Athabasca Valley	61	36%	0	0	0	0	0	0.8	1.2	1.4	1.6	0.36	0.53
AMS 14	Anzac	60	42%	0	0	0	0	0	0.8	1.5	1.5	2.7	0.44	0.62
AMS 9	Barge Landing	60	35%	0	0	0	0	0	0.65	1.1	1.2	1.4	0.31	0.46
AMS 13	Fort McKay South	61	44%	0	0	0	0	0	0.9	1.2	1.4	1.9	0.44	0.55
AMS 15	CNRL Horizon	61	49%	0	0	0	0	0	0.8	1.2	1.4	3.3	0.49	0.64

Reduced Sulphur Compounds - Dimethyl disulphide (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	2%	0	0	0	0	0	0	0	0	0.2	3.3E-3	0.026
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - Dimethyl sulphide (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - Ethyl mercaptan (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - Ethyl sulphide (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - Hydrogen sulphide (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - Isobutyl mercaptan (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - Isopropyl mercaptan (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - Methyl mercaptan (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - Pentyl mercaptan (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	2%	0	0	0	0	0	0	0	0	0.7	0.011	0.09
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - Propyl mercaptan (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - tert-Butyl mercaptan (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

Reduced Sulphur Compounds - Thiophene (ppbv) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 6	Patricia McInnes	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 14	Anzac	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 9	Barge Landing	60	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 13	Fort McKay South	61	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 15	CNRL Horizon	61	0%	0	0	0	0	0	0	0	0	0	0	0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

INTEGRATED MONITORING PROGRAM
ANNUAL REPORT

PARTICULATE MATTER - IONS
DATA SUMMARY
2016

March 2017

SAMPLE COLLECTION AND DATA COMPILATION BY:

Wood Buffalo Environmental Association
Fort McMurray, Alberta

LABORATORY ANALYSIS BY:

PM ions: Atmospheric Research & Analysis, Inc.
Morrisville, NC

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

INTEGRATED MONITORING PROGRAM
ANNUAL REPORT

PARTICULATE MATTER ($PM_{2.5}$) - IONS
DATA SUMMARY
2016

March 2017

SAMPLE COLLECTION AND DATA COMPILATION BY:

Wood Buffalo Environmental Association
Fort McMurray, Alberta

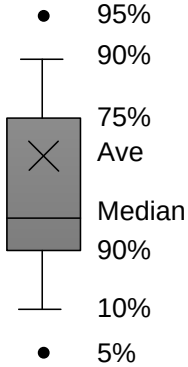
LABORATORY ANALYSIS BY:

PM ions: Atmospheric Research & Analysis, Inc.
Morrisville, NC

FILE CONTENTS DESCRIPTION	Partisol Sampler Measurements of Mass, Ions by IC and Metals by ICP-MS
SAMPLING INTERVAL	24 hour
SAMPLING FREQUENCY OF DATA	Once every 6 days
EXPLANATION OF ZERO VALUES	Zero values are contained in this file and should be treated as values below detection - Method Detection Limits (MDL) are provided with each observation
UNITS	µg/m^3 (microgram per cubic meter)
OBSERVATION TYPE	Particles
FIELD SAMPLING OR MEASUREMENT PRINCIPLE	Filtration with PM_{10} Inlet for PM_{10} and with PM_{10} Inlet/Very Sharp Cut Cyclone for $PM_{2.5}$
PARTICLE DIAMETER	< 2.5 µm or < 10 µm
MEDIUM	47 mm Teflon Filter
ANALYTICALMETHODS	MASS by Microbalance
	ELEMENTS by Inductively Coupled Plasma Mass Spectrometry (ICP/MS)
	IONS by Ion Chromatography (IC)
SAMPLE PREPARATION	DI Water extraction for IC analysis and Acid Digestion for ICP/MS Analysis
ANALYTICAL LABORATORY	Atmospheric Research & Analysis Inc
USER NOTE 1	Data are not blank corrected
USER NOTE 2	Volume is given at actual conditions of temperature and pressure during sampling as measured by the sampler
USER NOTE 3	Blank sample concentration (µg/m^3) is calculated using expected actual volume of sampler
VOLUME STANDARDIZATION	Actual Volume at Ambient Conditions (since 01-Jan-2011)
SAMPLING INSTRUMENT TYPE	For PM_{10} FRM Partisol PM_{10} sampler
	For $PM_{2.5}$ FRM Partisol $PM_{2.5}$ sampler

FLAGS USED	
V0	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
V4	Valid value despite failing to meet some QC or statistical criteria
V5	Valid value but qualified because of possible contamination
V6	Valid value but qualified due to non-standard sampling conditions
M1	Missing value because no value is available
M2	Missing value because invalidated by Data Originator

Legend description



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**01-Jan**		**01-Jan**		**01-Jan**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	2.15	V0	1.26	V0	-0.02	V1
Calcium	0.16	0.01	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.04	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V0	0.01	V0
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.04	V0	0.02	V0	0.01	V0
Sulphate	0.25	0.12	V0	0.09	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		01-Jan		01-Jan		01-Jan	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.41	V0	-0.01	V1	-0.02	V1
Calcium	0.16	0.01	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.11	V0	0.00	V1	0.00	V1
Sodium	0.05	0.02	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.01	V0
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.16	V0	0.01	V0	0.01	V0
Sulphate	0.25	0.21	V0	0.02	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.00	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**07-Jan**		**07-Jan**		**07-Jan**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	0.55	V0	1.37	V0	0.17	V0
Calcium	0.16	0.01	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.05	V0	0.03	V0	0.00	V1
Chloride	0.12	0.05	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.04	V0	0.05	V0	0.00	V1
Sulphate	0.25	0.15	V0	0.67	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.16	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**07-Jan**		**07-Jan**		**07-Jan**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	2.10	V0	0.33	V0	0.17	V0
Calcium	0.16	0.02	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.03	V0	0.00	V1	0.00	V1
Sodium	0.05	0.03	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.24	V0	0.00	V1	0.00	V1
Sulphate	0.25	0.64	V0	0.09	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.20	V0	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		13-Jan		13-Jan		13-Jan	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	6.62	V0	7.18	V0	0.14	V0
Calcium	0.16	0.01	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.03	V0	0.03	V0	0.00	V1
Sodium	0.05	0.01	V0	0.02	V0	0.00	V1
Chloride	0.12	0.00	V1	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.21	V0	0.85	V0	0.00	V1
Sulphate	0.25	1.80	V0	1.64	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.55	V0	0.63	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**13-Jan**		**13-Jan**		**13-Jan**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	22.43	V0	0.84	V0	0.14	V0
Calcium	0.16	0.01	V0	0.02	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.07	V0	0.00	V0	0.00	V1
Sodium	0.05	0.02	V0	0.06	V0	0.00	V1
Chloride	0.12	0.02	V0	0.07	V0	0.00	V1
Fluoride	0.15	0.02	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.91	V0	0.11	V0	0.00	V1
Sulphate	0.25	1.48	V0	0.12	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.50	V0	0.04	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**19-Jan**		**19-Jan**		**19-Jan**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.41	V0	4.86	V0	0.02	V1
Calcium	0.16	0.03	V0	0.02	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V1
Potassium	0.09	0.02	V0	0.03	V0	0.00	V0
Sodium	0.05	0.04	V0	0.04	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.30	V0	0.86	V0	0.05	V0
Sulphate	0.25	0.70	V0	0.70	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.25	V0	0.38	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**19-Jan**		**19-Jan**		**19-Jan**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	5.32	V0	0.49	V0	0.02	V1
Calcium	0.16	0.05	V0	0.01	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V1
Potassium	0.09	0.04	V0	0.00	V1	0.00	V0
Sodium	0.05	0.05	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.92	V0	0.02	V0	0.05	V0
Sulphate	0.25	0.69	V0	0.17	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.36	V0	0.04	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**25-Jan**		**25-Jan**		**25-Jan**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.80	V0	5.75	V0	0.36	V0
Calcium	0.16	0.01	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.02	V0	0.04	V0	0.00	V1
Sodium	0.05	0.01	V0	0.02	V0	0.00	V1
Chloride	0.12	0.00	V1	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.18	V0	0.33	V0	0.00	V1
Sulphate	0.25	0.74	V0	0.95	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.27	V0	0.35	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**25-Jan**		**25-Jan**		**25-Jan**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	8.89	V0	3.55	V0	0.36	V0
Calcium	0.16	0.01	V0	0.02	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.06	V0	0.03	V0	0.00	V1
Sodium	0.05	0.03	V0	0.01	V0	0.00	V1
Chloride	0.12	0.02	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.59	V0	0.22	V0	0.00	V1
Sulphate	0.25	2.28	V0	0.71	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.79	V0	0.26	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**31-Jan**		**31-Jan**		**31-Jan**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.02	V0	3.82	V0	0.19	V0
Calcium	0.16	0.03	V0	0.10	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.02	V0	0.00	V1
Sodium	0.05	0.05	V0	0.05	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.06	V0	0.18	V0	0.02	V0
Sulphate	0.25	0.84	V0	1.13	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.12	V0	0.26	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**31-Jan**		**31-Jan**		**31-Jan**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.20	V0	2.31	V0	0.19	V0
Calcium	0.16	0.05	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.02	V0	0.01	V0	0.00	V1
Sodium	0.05	0.05	V0	0.05	V0	0.00	V1
Chloride	0.12	0.02	V0	0.03	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.16	V0	0.35	V0	0.02	V0
Sulphate	0.25	0.95	V0	0.68	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.24	V0	0.11	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**06-Feb**		**06-Feb**		**06-Feb**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24.1**		**25.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	6.64	V0	5.97	V0	0.18	V0
Calcium	0.16	0.03	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.05	V0	0.06	V0	0.00	V1
Sodium	0.05	0.02	V0	0.02	V0	0.00	V1
Chloride	0.12	0.00	V1	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.48	V0	0.67	V0	0.02	V0
Sulphate	0.25	1.38	V0	1.18	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.48	V0	0.46	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**06-Feb**		**06-Feb**		**06-Feb**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	6.09	V0	3.17	V0	0.18	V0
Calcium	0.16	0.01	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.04	V0	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.01	V0	0.00	V1
Chloride	0.12	0.02	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.77	V0	0.05	V0	0.02	V0
Sulphate	0.25	1.09	V0	0.65	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.47	V0	0.17	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**12-Feb**		**12-Feb**		**12-Feb**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	4.09	V0	2.20	V0	0.14	V0
Calcium	0.16	0.12	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.04	V0	0.02	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.12	V0	0.07	V0	0.00	V1
Sulphate	0.25	0.64	V0	0.44	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.18	V0	0.13	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		12-Feb		12-Feb		12-Feb	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	2.42	V0	1.43	V0	0.14	V0
Calcium	0.16	0.02	V0	0.00	V1	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1	0.00	V1
Sodium	0.05	0.05	V0	0.01	V0	0.00	V1
Chloride	0.12	0.03	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.23	V0	0.02	V0	0.00	V1
Sulphate	0.25	0.40	V0	0.39	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.14	V0	0.08	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**18-Feb**		**18-Feb**		**18-Feb**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**22.8**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	2.76	V0	4.67	V0	0.04	V1
Calcium	0.16	0.00	V1	0.01	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.01	V0	0.02	V0	0.00	V1
Sodium	0.05	0.01	V0	0.02	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.24	V0	0.07	V0
Sulphate	0.25	0.75	V0	1.37	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.23	V0	0.45	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**18-Feb**		**18-Feb**		**18-Feb**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	6.88	V0	3.62	V0	0.04	V1
Calcium	0.16	0.02	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V1
Potassium	0.09	0.13	V0	0.01	V0	0.00	V1
Sodium	0.05	0.04	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.65	V0	0.01	V0	0.07	V0
Sulphate	0.25	1.46	V0	1.35	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.53	V0	0.40	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Patricia McInnes**		**Athabasca Valley**		**Travel Blank**	
Station #		**AMS 6**		**AMS 7**			
Sample Date		**24-Feb**		**24-Feb**		**24-Feb**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	1.47	V0	5.15	V0	0.21	V0
Calcium	0.16	0.02	V0	0.05	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.02	V0	0.00	V1
Sodium	0.05	0.03	V0	0.16	V0	0.00	V1
Chloride	0.12	0.03	V0	0.16	V4	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.03	V0	0.24	V0	0.03	V0
Sulphate	0.25	0.05	V0	0.15	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.05	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Anzac**		**Travel Blank**	
Station #		**AMS 14**			
Sample Date		**24-Feb**		**24-Feb**	
Particulate Size		**PM2.5**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	0.75	V0	0.21	V0
Calcium	0.16	0.02	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.03	V0
Sulphate	0.25	0.04	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

		Bertha Ganter -			
Station Name		**Fort McKay**		**Travel Blank**	
Station #		**AMS 1**			
Sample Date		**25-Feb**		**25-Feb**	
Particulate Size		**PM2.5**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	2.53	V0	0.21	V0
Calcium	0.16	0.02	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.00	V1
Potassium	0.09	0.02	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.03	V0	0.03	V0
Sulphate	0.25	0.14	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.06	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		01-Mar		01-Mar		01-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		23.9		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	6.76	V0	5.03	V0	0.03	V1
Calcium	0.16	0.02	V0	0.04	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.02	V0	0.00	V1
Potassium	0.09	0.04	V0	0.04	V0	0.00	V0
Sodium	0.05	0.14	V0	0.13	V0	0.00	V1
Chloride	0.12	0.00	V1	0.02	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.60	V0	0.97	V0	0.09	V0
Sulphate	0.25	1.69	V0	0.67	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.54	V0	0.30	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**01-Mar**		**01-Mar**		**01-Mar**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24.1**		**23.8**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.56	V0	2.89	V0	0.03	V1
Calcium	0.16	0.06	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.03	V0	0.02	V0	0.00	V1
Potassium	0.09	0.04	V0	0.03	V0	0.00	V0
Sodium	0.05	0.15	V0	0.11	V0	0.00	V1
Chloride	0.12	0.04	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.82	V0	0.33	V0	0.09	V0
Sulphate	0.25	0.54	V0	0.59	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.25	V0	0.18	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		07-Mar		07-Mar		07-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.82	V0	3.40	V0	0.01	V1
Calcium	0.16	0.03	V0	0.02	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.03	V0	0.00	V1
Sodium	0.05	0.04	V0	0.05	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.07	V0	0.29	V0	0.00	V1
Sulphate	0.25	0.66	V0	0.99	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.17	V0	0.33	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**07-Mar**		**07-Mar**		**07-Mar**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**23.7**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.65	V0	2.55	V0	0.01	V1
Calcium	0.16	0.06	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V1
Potassium	0.09	0.07	V0	0.02	V0	0.00	V1
Sodium	0.05	0.06	V0	0.04	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.51	V0	0.10	V0	0.00	V1
Sulphate	0.25	1.06	V0	0.79	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.38	V0	0.20	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**13-Mar**		**13-Mar**		**13-Mar**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	1.50	V0	3.42	V0	0.10	V0
Calcium	0.16	0.01	V0	0.01	V0	0.02	V0
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.00	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.04	V0	0.04	V0	0.07	V0
Sulphate	0.25	0.29	V0	1.21	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.13	V0	0.39	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		13-Mar		13-Mar		13-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	2.69	V0	2.43	V0	0.10	V0
Calcium	0.16	0.02	V0	0.02	V0	0.02	V0
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.00	V0	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.04	V0	0.01	V0	0.07	V0
Sulphate	0.25	0.71	V0	0.68	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.24	V0	0.22	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		19-Mar		19-Mar		19-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.50	V0	4.86	V0	0.04	V0
Calcium	0.16	0.03	V0	0.05	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.01	V0	0.00	V0
Potassium	0.09	0.00	V1	0.02	V0	0.00	V1
Sodium	0.05	0.01	V0	0.03	V0	0.00	V1
Chloride	0.12	0.00	V1	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.77	V0	0.00	V1
Sulphate	0.25	0.17	V0	0.61	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.06	V0	0.37	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		19-Mar		19-Mar		19-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	4.66	V0	1.89	V0	0.04	V0
Calcium	0.16	0.05	V0	0.02	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V0
Potassium	0.09	0.02	V0	0.00	V0	0.00	V1
Sodium	0.05	0.05	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.19	V0	0.03	V0	0.00	V1
Sulphate	0.25	0.99	V0	0.51	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.31	V0	0.17	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		25-Mar		25-Mar		25-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	9.81	V0	5.77	V0	0.20	V0
Calcium	0.16	0.12	V0	0.14	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.03	V0	0.04	V0	0.00	V1
Sodium	0.05	0.05	V0	0.07	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.10	V0	0.18	V0	0.04	V0
Sulphate	0.25	2.65	V0	1.26	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.75	V0	0.37	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**25-Mar**		**25-Mar**		**25-Mar**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	5.58	V0	3.07	V0	0.20	V0
Calcium	0.16	0.11	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.00	V0	0.00	V1
Potassium	0.09	0.04	V0	0.01	V0	0.00	V1
Sodium	0.05	0.10	V0	0.01	V0	0.00	V1
Chloride	0.12	0.04	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.21	V0	0.02	V0	0.04	V0
Sulphate	0.25	1.16	V0	1.07	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.36	V0	0.32	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**31-Mar**		**31-Mar**		**31-Mar**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	6.07	V0	5.50	V0	-0.02	V1
Calcium	0.16	0.14	V0	0.11	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.02	V0	0.00	V1
Potassium	0.09	0.00	V0	0.01	V0	0.00	V1
Sodium	0.05	0.06	V0	0.09	V0	0.00	V1
Chloride	0.12	0.01	V0	0.05	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.11	V0	0.11	V0	0.35	V0
Sulphate	0.25	1.35	V0	1.46	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.40	V0	0.42	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**31-Mar**		**31-Mar**		**31-Mar**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**0.8**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	0.73	V0	16.25	V6	-0.02	V1
Calcium	0.16	0.02	V0	0.56	V6	0.01	V0
Magnesium	0.03	0.00	V0	0.08	V6	0.00	V1
Potassium	0.09	0.00	V1	0.00	V6	0.00	V1
Sodium	0.05	0.01	V0	0.23	V6	0.00	V1
Chloride	0.12	0.01	V0	0.00	V6	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V6	0.00	V1
Nitrate	0.20	0.00	V1	0.30	V6	0.35	V0
Sulphate	0.25	0.00	V1	3.90	V6	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V6	0.00	V1
Ammonium (as N)	0.02	0.00	V0	1.08	V6	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**06-Apr**		**06-Apr**		**06-Apr**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**25.3**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	3.36	V0	3.14	V0	0.14	V0
Calcium	0.16	0.01	V0	0.02	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V0
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.08	V0	0.06	V0	0.00	V1
Sulphate	0.25	0.97	V0	1.19	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.29	V0	0.37	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**06-Apr**		**06-Apr**		**06-Apr**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24.3**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.13	V0	2.10	V0	0.14	V0
Calcium	0.16	0.02	V0	0.02	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V0
Potassium	0.09	0.01	V0	0.00	V1	0.00	V1
Sodium	0.05	0.02	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.08	V0	0.00	V1	0.00	V1
Sulphate	0.25	1.18	V0	0.79	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.36	V0	0.21	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**12-Apr**		**12-Apr**		**12-Apr**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.82	V0	6.37	V0	0.08	V0
Calcium	0.16	0.05	V0	0.13	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.02	V0	0.00	V1
Potassium	0.09	0.02	V0	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.02	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.03	V0	0.08	V0	0.03	V0
Sulphate	0.25	1.16	V0	1.58	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.30	V0	0.46	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Travel Blank**	
Station #		**AMS 7**			
Sample Date		**12-Apr**		**12-Apr**	
Particulate Size		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	5.47	V0	0.08	V0
Calcium	0.16	0.12	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.00	V1
Potassium	0.09	0.04	V0	0.00	V1
Sodium	0.05	0.02	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.08	V0	0.03	V0
Sulphate	0.25	1.20	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.32	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**18-Apr**		**18-Apr**		**18-Apr**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	11.10	V0	5.85	V0	0.16	V0
Calcium	0.16	0.25	V0	0.19	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.02	V0	0.00	V0
Potassium	0.09	0.04	V0	0.02	V0	0.00	V1
Sodium	0.05	0.04	V0	0.03	V0	0.00	V1
Chloride	0.12	0.01	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.09	V0	0.11	V0	0.04	V0
Sulphate	0.25	1.67	V0	0.52	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.45	V0	0.16	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**18-Apr**		**18-Apr**		**18-Apr**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	25.93	V0	4.43	V0	0.16	V0
Calcium	0.16	0.36	V0	0.08	V0	0.01	V0
Magnesium	0.03	0.07	V4	0.01	V0	0.00	V0
Potassium	0.09	0.16	V4	0.02	V0	0.00	V1
Sodium	0.05	0.49	V4	0.02	V0	0.00	V1
Chloride	0.12	0.73	V4	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.40	V0	0.04	V0	0.04	V0
Sulphate	0.25	1.34	V0	0.60	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.15	V0	0.18	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**24-Apr**		**24-Apr**		**24-Apr**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	6.11	V0	4.03	V0	0.17	V0
Calcium	0.16	0.14	V0	0.09	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.02	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.03	V0	0.02	V0	0.00	V1
Chloride	0.12	0.00	V1	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.06	V0	0.04	V0	0.11	V0
Sulphate	0.25	1.15	V0	0.82	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.32	V0	0.24	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**24-Apr**		**24-Apr**		**24-Apr**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	7.59	V0	7.56	V0	0.17	V0
Calcium	0.16	0.30	V0	0.08	V0	0.01	V0
Magnesium	0.03	0.05	V4	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.06	V0	0.10	V0	0.00	V1
Chloride	0.12	0.05	V0	0.12	V4	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.09	V0	0.03	V0	0.11	V0
Sulphate	0.25	0.79	V0	0.79	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.22	V0	0.21	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**30-Apr**		**30-Apr**		**30-Apr**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	6.38	V0	5.17	V0	0.12	V0
Calcium	0.16	0.15	V0	0.11	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.02	V0	0.00	V0
Potassium	0.09	0.02	V0	0.03	V0	0.00	V1
Sodium	0.05	0.02	V0	0.02	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.05	V0	0.13	V0	0.00	V1
Sulphate	0.25	0.87	V0	0.63	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.23	V0	0.20	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**30-Apr**		**30-Apr**		**30-Apr**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	5.45	V0	4.00	V0	0.12	V0
Calcium	0.16	0.10	V0	0.06	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V0
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.05	V0	0.13	V0	0.00	V1
Sulphate	0.25	0.63	V0	0.52	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.18	V0	0.19	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**06-May**		**06-May**		**06-May**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**14.9**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	61.19	V4	159.47	V4	0.23	V0
Calcium	0.16	0.19	V0	0.09	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.02	V0	0.00	V1
Potassium	0.09	0.19	V4	0.13	V0	0.00	V1
Sodium	0.05	0.01	V0	0.05	V0	0.00	V1
Chloride	0.12	0.09	V0	0.71	V4	0.00	V1
Fluoride	0.15	0.05	V4	0.12	V4	0.00	V1
Nitrate	0.20	1.22	V0	1.70	V0	0.10	V0
Sulphate	0.25	0.43	V0	1.18	V0	0.00	V1
Phosphate	0.26	0.02	V0	0.05	V4	0.00	V1
Ammonium (as N)	0.02	0.28	V0	0.74	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Travel Blank**	
Station #		**AMS 7**			
Sample Date		**06-May**		**06-May**	
Particulate Size		**PM2.5**			
Total Air Volume (m^3)		**6.7**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	394.28	V6	0.23	V0
Calcium	0.16	0.22	V6	0.01	V0
Magnesium	0.03	0.05	V6	0.00	V1
Potassium	0.09	0.45	V6	0.00	V1
Sodium	0.05	0.52	V6	0.00	V1
Chloride	0.12	1.46	V6	0.00	V1
Fluoride	0.15	0.34	V6	0.00	V1
Nitrate	0.20	4.44	V6	0.10	V0
Sulphate	0.25	2.09	V6	0.00	V1
Phosphate	0.26	0.16	V6	0.00	V1
Ammonium (as N)	0.02	1.21	V6	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		12-May		12-May		12-May	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.26	V0	36.30	V4	0.22	V0
Calcium	0.16	0.06	V0	0.05	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.01	V0	0.00	V1
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.02	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.02	V4	0.00	V1
Nitrate	0.20	0.23	V0	0.32	V0	0.00	V1
Sulphate	0.25	0.22	V0	0.61	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.01	V0	0.00	V1
Ammonium (as N)	0.02	0.10	V0	0.26	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Travel Blank**	
Station #		**AMS 7**			
Sample Date		**12-May**		**12-May**	
Particulate Size		**PM2.5**			
Total Air Volume (m^3)		**21.8**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	109.75	V4	0.22	V0
Calcium	0.16	0.08	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V1
Chloride	0.12	0.11	V0	0.00	V1
Fluoride	0.15	0.09	V4	0.00	V1
Nitrate	0.20	0.06	V0	0.00	V1
Sulphate	0.25	0.85	V0	0.00	V1
Phosphate	0.26	0.03	V0	0.00	V1
Ammonium (as N)	0.02	0.39	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**18-May**		**18-May**		**18-May**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**22**			
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	19.86	V0	130.79	V4	-9999	M1
Calcium	0.16	0.41	V0	0.13	V0	-9999	M1
Magnesium	0.03	0.03	V0	0.02	V0	-9999	M1
Potassium	0.09	0.03	V0	0.22	V4	-9999	M1
Sodium	0.05	0.03	V0	0.01	V0	-9999	M1
Chloride	0.12	0.01	V0	0.14	V4	-9999	M1
Fluoride	0.15	0.00	V1	0.10	V4	-9999	M1
Nitrate	0.20	0.16	V0	0.21	V0	-9999	M1
Sulphate	0.25	0.39	V0	0.62	V0	-9999	M1
Phosphate	0.26	0.00	V1	0.04	V4	-9999	M1
Ammonium (as N)	0.02	0.13	V0	0.51	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**18-May**		**18-May**		**18-May**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**16.9**		**24**			
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	147.44	V4	48.55	V4	-9999	M1
Calcium	0.16	0.62	V0	0.13	V0	-9999	M1
Magnesium	0.03	0.09	V4	0.02	V0	-9999	M1
Potassium	0.09	0.47	V4	0.07	V0	-9999	M1
Sodium	0.05	0.02	V0	0.01	V0	-9999	M1
Chloride	0.12	0.11	V0	0.04	V0	-9999	M1
Fluoride	0.15	0.08	V4	0.03	V4	-9999	M1
Nitrate	0.20	2.58	V4	0.56	V0	-9999	M1
Sulphate	0.25	0.67	V0	0.40	V0	-9999	M1
Phosphate	0.26	0.08	V4	0.03	V0	-9999	M1
Ammonium (as N)	0.02	0.73	V0	0.23	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		24-May		24-May		24-May	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	37.64	V4	20.50	V0	0.00	V1
Calcium	0.16	0.52	V0	0.11	V0	0.01	V0
Magnesium	0.03	0.05	V4	0.02	V0	0.00	V0
Potassium	0.09	0.11	V0	0.01	V0	0.00	V1
Sodium	0.05	0.05	V0	0.00	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.31	V0	0.14	V0	0.10	V0
Sulphate	0.25	0.87	V0	0.44	V0	0.00	V1
Phosphate	0.26	0.03	V4	0.03	V0	0.00	V1
Ammonium (as N)	0.02	0.20	V0	0.17	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		24-May		24-May		24-May	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	52.94	V4	56.31	V4	0.00	V1
Calcium	0.16	0.93	V4	0.07	V0	0.01	V0
Magnesium	0.03	0.11	V4	0.01	V0	0.00	V0
Potassium	0.09	0.10	V0	0.03	V0	0.00	V1
Sodium	0.05	0.18	V0	0.11	V0	0.00	V1
Chloride	0.12	0.09	V0	0.03	V0	0.00	V1
Fluoride	0.15	0.02	V0	0.03	V4	0.00	V1
Nitrate	0.20	0.80	V0	0.62	V0	0.10	V0
Sulphate	0.25	0.92	V0	0.61	V0	0.00	V1
Phosphate	0.26	0.18	V4	0.03	V0	0.00	V1
Ammonium (as N)	0.02	0.23	V0	0.21	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**30-May**		**30-May**		**30-May**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**			
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	3.15	V0	4.76	V0	-9999	M1
Calcium	0.16	0.01	V0	0.02	V0	-9999	M1
Magnesium	0.03	0.00	V0	0.00	V0	-9999	M1
Potassium	0.09	0.00	V1	0.01	V0	-9999	M1
Sodium	0.05	0.00	V1	0.00	V1	-9999	M1
Chloride	0.12	0.00	V1	0.00	V1	-9999	M1
Fluoride	0.15	0.00	V1	0.00	V1	-9999	M1
Nitrate	0.20	0.01	V0	0.01	V0	-9999	M1
Sulphate	0.25	0.22	V0	0.45	V0	-9999	M1
Phosphate	0.26	0.00	V1	0.00	V1	-9999	M1
Ammonium (as N)	0.02	0.06	V0	0.16	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		30-May		30-May		30-May	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24			
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.28	V0	6.27	V0	-9999	M1
Calcium	0.16	0.05	V0	0.03	V0	-9999	M1
Magnesium	0.03	0.01	V0	0.00	V0	-9999	M1
Potassium	0.09	0.01	V0	0.01	V0	-9999	M1
Sodium	0.05	0.00	V0	0.00	V1	-9999	M1
Chloride	0.12	0.00	V1	0.00	V1	-9999	M1
Fluoride	0.15	0.00	V1	0.00	V1	-9999	M1
Nitrate	0.20	0.02	V0	0.05	V0	-9999	M1
Sulphate	0.25	0.57	V0	0.75	V0	-9999	M1
Phosphate	0.26	0.00	V1	0.00	V1	-9999	M1
Ammonium (as N)	0.02	0.17	V0	0.23	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**05-Jun**		**05-Jun**		**05-Jun**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.08	V0	2.51	V0	0.13	V0
Calcium	0.16	0.07	V0	0.07	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V0
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.00	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.01	V0
Nitrate	0.20	0.01	V0	0.01	V0	0.06	V0
Sulphate	0.25	0.05	V0	0.10	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.04	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		05-Jun		05-Jun		05-Jun	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.39	V0	2.36	V0	0.13	V0
Calcium	0.16	0.08	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.00	V0	0.00	V0
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.00	V1	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.01	V0
Nitrate	0.20	0.02	V0	0.00	V1	0.06	V0
Sulphate	0.25	0.11	V0	0.09	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**11-Jun**		**11-Jun**		**11-Jun**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**22.6**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.78	V0	4.73	V0	0.35	V0
Calcium	0.16	0.08	V0	0.09	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V0
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.00	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.04	V0	0.02	V0	0.02	V0
Sulphate	0.25	0.22	V0	0.20	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.07	V0	0.06	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		11-Jun		11-Jun		11-Jun	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		23.7		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	4.58	V0	4.11	V0	0.35	V0
Calcium	0.16	0.04	V0	0.09	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V0
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.06	V0	0.00	V1
Chloride	0.12	0.00	V1	0.08	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.01	V0	0.01	V0	0.02	V0
Sulphate	0.25	0.17	V0	0.22	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.06	V0	0.07	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**17-Jun**		**17-Jun**		**17-Jun**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	2.24	V0	0.95	V0	0.35	V0
Calcium	0.16	0.07	V0	0.04	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V1
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.00	V1	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.03	V0	0.03	V0	0.03	V0
Sulphate	0.25	0.04	V0	0.04	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.01	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		17-Jun		17-Jun		17-Jun	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.36	V0	1.02	V0	0.35	V0
Calcium	0.16	0.02	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.00	V0	0.00	V1	0.00	V1
Sodium	0.05	0.00	V1	0.00	V1	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.42	V0	0.06	V0	0.03	V0
Sulphate	0.25	0.02	V0	0.03	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**23-Jun**		**23-Jun**		**23-Jun**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**22.6**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	9.41	V0	12.25	V0	0.12	V0
Calcium	0.16	0.24	V0	0.12	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.03	V0	0.03	V0	0.06	V0
Sulphate	0.25	0.33	V0	2.12	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.10	V0	0.70	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		23-Jun		23-Jun		23-Jun	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	12.42	V0	7.54	V0	0.12	V0
Calcium	0.16	0.10	V0	0.15	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.02	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.05	V0	0.02	V0	0.06	V0
Sulphate	0.25	1.58	V0	0.80	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.53	V0	0.27	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		29-Jun		29-Jun		29-Jun	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	12.22	V0	6.18	V0	0.03	V1
Calcium	0.16	0.42	V0	0.24	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.06	V0	0.00	V1	0.00	V1
Sulphate	0.25	0.53	V0	0.12	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.14	V0	0.06	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Travel Blank**	
Station #		**AMS 7**			
Sample Date		**29-Jun**		**29-Jun**	
Particulate Size		**PM2.5**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	6.02	V0	0.03	V1
Calcium	0.16	0.05	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.01	V0	0.00	V1
Sulphate	0.25	0.12	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.06	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**05-Jul**		**05-Jul**		**05-Jul**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24.2**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	13.81	V0	15.34	V0	0.15	V0
Calcium	0.16	0.09	V0	0.05	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.04	V0	0.03	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.01	V0
Nitrate	0.20	0.04	V0	0.04	V0	0.01	V0
Sulphate	0.25	0.53	V0	1.41	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.23	V0	0.50	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		05-Jul		05-Jul		05-Jul	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	16.37	V0	8.73	V0	0.15	V0
Calcium	0.16	0.05	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.04	V0	0.02	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.01	V0
Nitrate	0.20	0.06	V0	0.02	V0	0.01	V0
Sulphate	0.25	1.38	V0	0.77	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.50	V0	0.27	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**11-Jul**		**11-Jul**		**11-Jul**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	5.89	V0	8.79	V0	0.59	V0
Calcium	0.16	0.17	V0	0.28	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.02	V0	0.00	V1
Potassium	0.09	0.00	V0	0.00	V0	0.00	V1
Sodium	0.05	0.00	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.01	V0
Nitrate	0.20	0.02	V0	0.02	V0	0.03	V0
Sulphate	0.25	0.37	V0	1.27	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.42	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		11-Jul		11-Jul		11-Jul	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	10.68	V0	8.29	V0	0.59	V0
Calcium	0.16	0.15	V0	0.08	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.01	V0
Nitrate	0.20	0.04	V0	0.03	V0	0.03	V0
Sulphate	0.25	1.33	V0	0.85	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.43	V0	0.29	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**17-Jul**		**17-Jul**		**17-Jul**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	21.85	V0	21.21	V0	0.07	V0
Calcium	0.16	0.09	V0	0.15	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.05	V0	0.05	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.03	V0	0.08	V0	0.05	V0
Sulphate	0.25	0.19	V0	1.28	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.48	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		17-Jul		17-Jul		17-Jul	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	17.89	V0	11.57	V0	0.07	V0
Calcium	0.16	0.14	V0	0.09	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V1
Potassium	0.09	0.03	V0	0.02	V0	0.00	V1
Sodium	0.05	0.02	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.08	V0	0.04	V0	0.05	V0
Sulphate	0.25	0.62	V0	0.21	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.25	V0	0.10	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**23-Jul**		**23-Jul**		**23-Jul**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.25	V0	5.06	V0	0.13	V0
Calcium	0.16	0.06	V0	0.07	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.01	V0	0.00	V0
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.01	V0	0.00	V1
Sulphate	0.25	0.11	V0	0.48	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.16	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**23-Jul**		**23-Jul**		**23-Jul**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	5.56	V0	4.01	V0	0.13	V0
Calcium	0.16	0.06	V0	0.04	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V0
Potassium	0.09	0.02	V0	0.02	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.07	V0	0.33	V0	0.00	V1
Sulphate	0.25	0.33	V0	0.17	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.13	V0	0.10	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**29-Jul**		**29-Jul**		**29-Jul**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	7.12	V0	4.69	V0	0.07	V0
Calcium	0.16	0.24	V0	0.09	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.00	V1	0.00	V0	0.00	V1
Sodium	0.05	0.03	V0	0.00	V0	0.00	V1
Chloride	0.12	0.03	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.03	V0	0.01	V0	0.05	V0
Sulphate	0.25	0.48	V0	0.18	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.17	V0	0.07	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**29-Jul**		**29-Jul**		**29-Jul**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.15	V0	4.08	V0	0.07	V0
Calcium	0.16	0.07	V0	0.04	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.00	V0	0.00	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.01	V0	0.00	V1	0.05	V0
Sulphate	0.25	0.17	V0	0.19	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.08	V0	0.08	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		04-Aug		04-Aug		04-Aug	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		23.7		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.16	V0	7.88	V0	0.01	V1
Calcium	0.16	0.49	V0	0.55	V0	0.35	V4
Magnesium	0.03	0.01	V0	0.02	V0	0.00	V0
Potassium	0.09	0.00	V1	0.00	V0	0.00	V1
Sodium	0.05	0.01	V0	0.03	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.07	V0	0.15	V0	0.00	V1
Sulphate	0.25	0.39	V0	0.87	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.24	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**04-Aug**		**04-Aug**		**04-Aug**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	7.89	V0	6.27	V0	0.01	V1
Calcium	0.16	0.48	V0	0.56	V0	0.35	V4
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V0
Potassium	0.09	0.01	V0	0.02	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.11	V0	0.25	V0	0.00	V1
Sulphate	0.25	1.08	V0	0.36	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.31	V0	0.13	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**10-Aug**		**10-Aug**		**10-Aug**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.61	V0	3.32	V0	0.60	V0
Calcium	0.16	0.26	V0	0.29	V0	0.02	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V0
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.01	V0
Nitrate	0.20	0.02	V0	0.01	V0	0.14	V0
Sulphate	0.25	1.07	V0	0.33	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.34	V0	0.12	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**10-Aug**		**10-Aug**		**10-Aug**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**16.6**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	5.85	V0	4.61	V0	0.60	V0
Calcium	0.16	0.05	V0	0.06	V0	0.02	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V0
Potassium	0.09	0.02	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.01	V0
Nitrate	0.20	0.01	V0	0.00	V1	0.14	V0
Sulphate	0.25	0.34	V0	0.28	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.10	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**16-Aug**		**16-Aug**		**16-Aug**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	9.92	V0	5.86	V0	0.09	V0
Calcium	0.16	0.18	V0	0.14	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.00	V1	0.01	V0	0.00	V0
Sodium	0.05	0.01	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.07	V0	0.20	V0	0.00	V1
Sulphate	0.25	0.17	V0	0.07	V0	0.02	V0
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.04	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		16-Aug		16-Aug		16-Aug	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.12	V0	4.41	V0	0.09	V0
Calcium	0.16	0.06	V0	0.08	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V0
Sodium	0.05	0.00	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.04	V0	0.23	V0	0.00	V1
Sulphate	0.25	0.08	V0	0.06	V0	0.02	V0
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.04	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**22-Aug**		**22-Aug**		**22-Aug**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**0**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.33	V0	-9999	M2	0.07	V0
Calcium	0.16	0.11	V0	-9999	M2	0.00	V1
Magnesium	0.03	0.00	V0	-9999	M2	0.00	V1
Potassium	0.09	0.00	V1	-9999	M2	0.00	V1
Sodium	0.05	0.00	V0	-9999	M2	0.00	V1
Chloride	0.12	0.00	V1	-9999	M2	0.00	V1
Fluoride	0.15	0.00	V1	-9999	M2	0.00	V1
Nitrate	0.20	0.01	V0	-9999	M2	0.01	V0
Sulphate	0.25	0.23	V0	-9999	M2	0.00	V1
Phosphate	0.26	0.00	V1	-9999	M2	0.00	V1
Ammonium (as N)	0.02	0.05	V0	-9999	M2	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		22-Aug		22-Aug		22-Aug	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	5.66	V0	4.00	V0	0.07	V0
Calcium	0.16	0.09	V0	0.04	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V1
Potassium	0.09	0.01	V0	0.02	V0	0.00	V1
Sodium	0.05	0.00	V0	0.00	V1	0.00	V1
Chloride	0.12	0.00	V1	0.02	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.00	V1	0.01	V0
Sulphate	0.25	0.77	V0	0.40	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.25	V0	0.15	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**28-Aug**		**28-Aug**		**28-Aug**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**48**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	0.58	V0	-9999	M2	0.05	V0
Calcium	0.16	0.00	V1	-9999	M2	0.00	V1
Magnesium	0.03	0.00	V1	-9999	M2	0.00	V1
Potassium	0.09	0.00	V1	-9999	M2	0.00	V1
Sodium	0.05	0.00	V1	-9999	M2	0.00	V1
Chloride	0.12	0.00	V1	-9999	M2	0.00	V1
Fluoride	0.15	0.00	V1	-9999	M2	0.00	V1
Nitrate	0.20	0.00	V1	-9999	M2	0.00	V1
Sulphate	0.25	0.01	V0	-9999	M2	0.00	V1
Phosphate	0.26	0.00	V1	-9999	M2	0.00	V1
Ammonium (as N)	0.02	0.01	V0	-9999	M2	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		28-Aug		28-Aug		28-Aug	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	1.05	V0	0.77	V0	0.05	V0
Calcium	0.16	0.01	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V1	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1	0.00	V1
Sodium	0.05	0.00	V1	0.00	V1	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.00	V1	0.00	V1	0.00	V1
Sulphate	0.25	0.16	V0	0.03	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.01	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**03-Sep**		**03-Sep**		**03-Sep**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	0.80	V4	0.67	V0	0.05	V0
Calcium	0.16	0.00	V1	0.01	V0	0.00	V1
Magnesium	0.03	0.00	V1	0.00	V1	0.00	V1
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.00	V1	0.00	V1	0.00	V1
Chloride	0.12	0.00	V1	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.00	V1	0.00	V1	0.00	V1
Sulphate	0.25	0.02	V0	0.02	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.00	V0	0.00	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		03-Sep		03-Sep		03-Sep	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	0.74	V4	0.58	V4	0.05	V0
Calcium	0.16	0.01	V0	0.02	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V1	0.00	V1
Potassium	0.09	0.00	V1	0.01	V0	0.00	V1
Sodium	0.05	0.00	V1	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.00	V1	0.01	V0	0.00	V1
Sulphate	0.25	0.03	V0	0.05	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.00	V0	0.01	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**09-Sep**		**09-Sep**		**09-Sep**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	1.62	V4	2.56	V0	0.03	V1
Calcium	0.16	0.05	V0	0.08	V0	0.02	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V0
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.02	V0	0.00	V1	0.00	V1
Chloride	0.12	0.02	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	-9999	M2	0.01	V0	0.04	V0
Sulphate	0.25	0.03	V0	0.55	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.17	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**09-Sep**		**09-Sep**		**09-Sep**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	2.97	V0	1.53	V0	0.03	V1
Calcium	0.16	0.02	V0	0.09	V0	0.02	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V0
Potassium	0.09	0.01	V0	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.00	V1	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.01	V0	0.01	V0	0.04	V0
Sulphate	0.25	0.63	V0	0.23	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.18	V0	0.07	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**15-Sep**		**15-Sep**		**15-Sep**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.53	V0	3.71	V0	-0.16	V1
Calcium	0.16	0.19	V0	0.30	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V0
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.02	V0	0.00	V1
Sulphate	0.25	0.35	V0	0.27	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.09	V0	0.08	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**15-Sep**		**15-Sep**		**15-Sep**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**23.6**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.15	V0	3.44	V0	-0.16	V1
Calcium	0.16	0.05	V0	0.06	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V0
Potassium	0.09	0.00	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.03	V0	0.00	V1
Sulphate	0.25	0.32	V0	0.31	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.10	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**21-Sep**		**21-Sep**		**21-Sep**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	3.44	V0	2.69	V0	0.44	V0
Calcium	0.16	0.02	V0	0.13	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.01	V0	0.00	V0
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.01	V0	0.00	V1
Sulphate	0.25	0.29	V0	0.40	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.09	V0	0.14	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		21-Sep		21-Sep		21-Sep	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	4.60	V0	2.63	V0	0.44	V0
Calcium	0.16	0.08	V0	0.12	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V0
Potassium	0.09	0.01	V0	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.00	V1	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.01	V0	0.00	V1
Sulphate	0.25	0.34	V0	0.44	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.09	V0	0.14	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**27-Sep**		**27-Sep**		**27-Sep**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.34	V0	1.88	V0	0.12	V0
Calcium	0.16	0.04	V0	0.05	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.01	V0	0.00	V0
Potassium	0.09	0.01	V0	0.00	V1	0.00	V1
Sodium	0.05	0.00	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.02	V0	0.01	V0
Sulphate	0.25	0.35	V0	0.09	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.05	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**27-Sep**		**27-Sep**		**27-Sep**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	2.29	V0	1.95	V4	0.12	V0
Calcium	0.16	0.06	V0	0.14	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.02	V0	0.00	V0
Potassium	0.09	0.00	V1	0.01	V0	0.00	V1
Sodium	0.05	0.00	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.01	V0	-9999	M2	0.01	V0
Sulphate	0.25	0.13	V0	0.04	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.05	V0	0.05	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		03-Oct		03-Oct		03-Oct	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.35	V0	3.15	V0	0.47	V0
Calcium	0.16	0.02	V0	0.05	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V0
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.00	V1	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.01	V0	0.01	V0	0.06	V0
Sulphate	0.25	0.11	V0	0.32	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.05	V0	0.12	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**03-Oct**		**03-Oct**		**03-Oct**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.59	V0	2.71	V0	0.47	V0
Calcium	0.16	0.05	V0	0.04	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V0
Potassium	0.09	0.00	V1	0.01	V0	0.00	V1
Sodium	0.05	0.00	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.00	V1	0.06	V0
Sulphate	0.25	0.29	V0	0.25	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.09	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**09-Oct**		**09-Oct**		**09-Oct**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	1.04	V4	1.22	V0	0.00	V1
Calcium	0.16	0.01	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V0
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.00	V1	0.00	V1	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.01	V0	-9999	M2	0.00	V1
Sulphate	0.25	0.06	V0	0.04	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.05	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		09-Oct		09-Oct		09-Oct	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.21	V4	0.59	V0	0.00	V1
Calcium	0.16	0.02	V0	0.04	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V0
Potassium	0.09	0.01	V0	0.00	V1	0.00	V1
Sodium	0.05	0.00	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.03	V0	-9999	M2	0.00	V1
Sulphate	0.25	0.07	V0	0.01	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		15-Oct		15-Oct		15-Oct	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	0.76	V0	1.17	V0	0.10	V0
Calcium	0.16	0.02	V0	0.02	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V0
Potassium	0.09	0.00	V1	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.00	V1	0.04	V0	0.00	V1
Sulphate	0.25	0.05	V0	0.11	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		15-Oct		15-Oct		15-Oct	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	1.22	V4	0.35	V0	0.10	V0
Calcium	0.16	0.02	V0	0.02	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V0
Potassium	0.09	0.01	V0	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.05	V0	0.01	V0	0.00	V1
Sulphate	0.25	0.11	V0	0.08	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**21-Oct**		**21-Oct**		**21-Oct**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	7.22	V0	5.03	V0	0.10	V0
Calcium	0.16	0.04	V0	0.03	V0	0.02	V0
Magnesium	0.03	0.00	V0	0.01	V0	0.00	V0
Potassium	0.09	0.04	V0	0.05	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.01	V0
Nitrate	0.20	0.15	V0	0.10	V0	0.04	V0
Sulphate	0.25	0.91	V0	0.65	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.34	V0	0.22	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**21-Oct**		**21-Oct**		**21-Oct**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**23.6**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	6.19	V0	3.88	V0	0.10	V0
Calcium	0.16	0.07	V0	0.03	V0	0.02	V0
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V0
Potassium	0.09	0.04	V0	0.04	V0	0.00	V1
Sodium	0.05	0.07	V0	0.01	V0	0.00	V1
Chloride	0.12	0.05	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.01	V0
Nitrate	0.20	0.19	V0	0.02	V0	0.04	V0
Sulphate	0.25	0.67	V0	0.55	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.22	V0	0.18	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**27-Oct**		**27-Oct**		**27-Oct**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	1.91	V0	2.63	V0	0.19	V0
Calcium	0.16	0.03	V0	0.02	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.00	V1	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.10	V0	0.03	V0	0.02	V0
Sulphate	0.25	0.09	V0	0.46	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.17	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**27-Oct**		**27-Oct**		**27-Oct**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	2.73	V0	2.34	V0	0.19	V0
Calcium	0.16	0.12	V0	0.02	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.00	V0	0.00	V1
Potassium	0.09	0.02	V0	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.00	V1	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	-9999	M2	0.02	V0	0.02	V0
Sulphate	0.25	0.27	V0	0.79	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.18	V0	0.25	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		02-Nov		02-Nov		02-Nov	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.00	V0	4.66	V0	0.05	V0
Calcium	0.16	1.36	V0	0.09	V0	0.02	V0
Magnesium	0.03	0.05	V0	0.01	V0	0.00	V0
Potassium	0.09	0.01	V0	0.02	V0	0.00	V0
Sodium	0.05	0.11	V0	0.04	V0	0.00	V1
Chloride	0.12	0.14	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.21	V0	0.32	V0	0.12	V0
Sulphate	0.25	0.57	V0	0.72	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.25	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		02-Nov		02-Nov		02-Nov	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	4.12	V0	2.69	V0	0.05	V0
Calcium	0.16	0.04	V0	0.04	V0	0.02	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V0
Potassium	0.09	0.02	V0	0.02	V0	0.00	V0
Sodium	0.05	0.06	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.19	V0	0.05	V0	0.12	V0
Sulphate	0.25	0.37	V0	0.50	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.13	V0	0.17	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**08-Nov**		**08-Nov**		**08-Nov**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	9.89	V0	6.77	V0	0.11	V0
Calcium	0.16	0.04	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V0
Potassium	0.09	0.04	V0	0.03	V0	0.01	V0
Sodium	0.05	0.01	V0	0.02	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.02	V0
Nitrate	0.20	0.27	V0	0.20	V0	0.01	V0
Sulphate	0.25	0.79	V0	0.40	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.29	V0	0.15	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		08-Nov		08-Nov		08-Nov	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	4.30	V0	2.28	V0	0.11	V0
Calcium	0.16	0.03	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V0
Potassium	0.09	0.01	V0	0.01	V0	0.01	V0
Sodium	0.05	0.02	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.02	V0
Nitrate	0.20	0.16	V0	0.10	V0	0.01	V0
Sulphate	0.25	0.33	V0	0.23	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.13	V0	0.11	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**14-Nov**		**14-Nov**		**14-Nov**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	2.74	V0	1.85	V0	0.08	V0
Calcium	0.16	0.01	V0	0.01	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.01	V0	0.00	V0
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.00	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.01	V0	0.02	V0	0.00	V1
Sulphate	0.25	0.19	V0	0.05	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.06	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**14-Nov**		**14-Nov**		**14-Nov**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	2.22	V0	1.67	V0	0.08	V0
Calcium	0.16	0.01	V0	0.01	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V0
Potassium	0.09	0.01	V0	0.00	V0	0.00	V1
Sodium	0.05	0.02	V0	0.00	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.03	V0	0.01	V0	0.00	V1
Sulphate	0.25	0.06	V0	0.06	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**20-Nov**		**20-Nov**		**20-Nov**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.78	V0	3.19	V0	0.03	V1
Calcium	0.16	0.05	V0	0.15	V0	0.03	V0
Magnesium	0.03	0.00	V0	0.01	V0	0.01	V0
Potassium	0.09	0.01	V0	0.01	V0	0.00	V0
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.02	V0	0.01	V0	0.01	V0
Nitrate	0.20	0.09	V4	0.08	V4	-9999	M2
Sulphate	0.25	1.04	V0	0.87	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.33	V0	0.28	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		20-Nov		20-Nov		20-Nov	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.06	V0	2.40	V0	0.03	V1
Calcium	0.16	0.03	V0	0.20	V0	0.03	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.01	V0
Potassium	0.09	0.02	V0	0.01	V0	0.00	V0
Sodium	0.05	0.07	V0	0.00	V0	0.00	V1
Chloride	0.12	0.07	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.01	V0
Nitrate	0.20	0.08	V4	0.15	V4	-9999	M2
Sulphate	0.25	0.86	V0	0.78	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.26	V0	0.28	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		26-Nov		26-Nov		26-Nov	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	11.81	V0	9.39	V0	0.12	V0
Calcium	0.16	0.02	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V0
Potassium	0.09	0.09	V0	0.08	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.02	V0	0.01	V0
Fluoride	0.15	0.01	V0	0.01	V0	0.01	V0
Nitrate	0.20	0.49	V0	0.76	V0	0.00	V1
Sulphate	0.25	1.22	V0	0.96	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.51	V0	0.48	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		26-Nov		26-Nov		26-Nov	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	9.41	V0	5.93	V0	0.12	V0
Calcium	0.16	0.01	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.02	V0	0.00	V0
Potassium	0.09	0.08	V0	0.07	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.01	V0
Fluoride	0.15	0.01	V0	0.01	V0	0.01	V0
Nitrate	0.20	0.73	V0	0.20	V0	0.00	V1
Sulphate	0.25	0.96	V0	0.63	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.49	V0	0.24	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		02-Dec		02-Dec		02-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	17.56	V0	17.35	V0	0.11	V0
Calcium	0.16	0.03	V0	0.04	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V0
Potassium	0.09	0.12	V0	0.08	V0	0.00	V1
Sodium	0.05	0.01	V0	0.02	V0	0.00	V1
Chloride	0.12	0.01	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.01	V0
Nitrate	0.20	2.15	V0	2.60	V0	0.00	V1
Sulphate	0.25	5.10	V0	4.61	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	2.11	V0	2.08	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		02-Dec		02-Dec		02-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	15.75	V0	13.40	V0	0.11	V0
Calcium	0.16	0.04	V0	0.04	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.03	V0	0.00	V0
Potassium	0.09	0.07	V0	0.11	V0	0.00	V1
Sodium	0.05	0.02	V0	0.02	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.01	V0
Nitrate	0.20	2.52	V0	1.57	V0	0.00	V1
Sulphate	0.25	4.52	V0	3.81	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	2.03	V0	1.56	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		08-Dec		08-Dec		08-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.77	V0	3.77	V0	0.01	V1
Calcium	0.16	0.02	V0	0.04	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.02	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V0	0.00	V1
Sodium	0.05	0.06	V0	0.06	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.31	V0	0.34	V0	0.02	V0
Sulphate	0.25	0.08	V0	0.76	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.27	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		08-Dec		08-Dec		08-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.40	V0	1.84	V0	0.01	V1
Calcium	0.16	0.04	V0	0.02	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V1
Potassium	0.09	0.02	V0	0.00	V0	0.00	V1
Sodium	0.05	0.09	V0	0.08	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.97	V0	0.27	V0	0.02	V0
Sulphate	0.25	0.33	V0	0.21	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.26	V0	0.07	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		14-Dec		14-Dec		14-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	8.79	V0	3.62	V0	0.06	V0
Calcium	0.16	0.03	V0	0.04	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V1
Potassium	0.09	0.05	V0	0.05	V0	0.00	V1
Sodium	0.05	0.08	V0	0.05	V0	0.00	V1
Chloride	0.12	0.12	V0	0.02	V0	0.01	V0
Fluoride	0.15	0.01	V0	0.02	V0	0.00	V1
Nitrate	0.20	0.55	V0	0.27	V0	0.00	V1
Sulphate	0.25	0.67	V0	0.70	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.28	V0	0.22	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		14-Dec		14-Dec		14-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	8.23	V0	3.40	V0	0.06	V0
Calcium	0.16	0.05	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.04	V0	0.01	V0	0.00	V1
Potassium	0.09	0.03	V0	0.02	V0	0.00	V1
Sodium	0.05	0.20	V0	0.04	V0	0.00	V1
Chloride	0.12	0.08	V0	0.01	V0	0.01	V0
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	1.21	V0	0.12	V0	0.00	V1
Sulphate	0.25	0.65	V0	0.62	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.33	V0	0.18	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		20-Dec		20-Dec		20-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.24	V0	5.28	V0	0.20	V0
Calcium	0.16	0.01	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.04	V0	0.00	V1
Sodium	0.05	0.02	V0	0.05	V0	0.00	V1
Chloride	0.12	0.01	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.01	V0
Nitrate	0.20	0.17	V0	0.24	V0	0.00	V1
Sulphate	0.25	0.38	V0	0.69	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.15	V0	0.23	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		20-Dec		20-Dec		20-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	9.51	V0	2.90	V0	0.20	V0
Calcium	0.16	0.05	V0	0.04	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.04	V0	0.02	V0	0.00	V1
Sodium	0.05	0.08	V0	0.03	V0	0.00	V1
Chloride	0.12	0.06	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.01	V0
Nitrate	0.20	0.71	V0	0.10	V0	0.00	V1
Sulphate	0.25	1.38	V0	0.47	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.53	V0	0.14	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**26-Dec**		**26-Dec**		**26-Dec**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	6.05	V0	5.78	V0	0.56	V0
Calcium	0.16	0.02	V0	0.05	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.01	V0	0.00	V1
Potassium	0.09	0.03	V0	0.02	V0	0.00	V1
Sodium	0.05	0.03	V0	0.03	V0	0.00	V1
Chloride	0.12	0.02	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.02	V0	0.00	V1
Nitrate	0.20	0.75	V4	0.62	V4	-9999	M2
Sulphate	0.25	1.35	V0	0.76	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.57	V0	0.34	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**26-Dec**		**26-Dec**		**26-Dec**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.50	V0	3.48	V0	0.56	V0
Calcium	0.16	0.02	V0	0.02	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.02	V0	0.02	V0	0.00	V1
Sodium	0.05	0.03	V0	0.02	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.36	V4	0.22	V4	-9999	M2
Sulphate	0.25	0.59	V0	0.74	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.25	V0	0.25	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay	Bertha Ganter - Fort McKay	Bertha Ganter - Fort McKay	Bertha Ganter - Fort McKay
Station #	AMS 1	AMS 1	AMS 1	AMS 1
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM2.5	PM2.5	PM2.5	PM2.5
Compound Name	Average µg/m³	Std Dev µg/m³	Total Samples (#)	Total ≥ MDL (#)
Particulate Matter	7.01	9.32	61	61
Calcium	0.11	0.20	61	58
Magnesium	0.01	0.01	61	59
Potassium	0.02	0.03	61	41
Sodium	0.02	0.03	61	55
Chloride	0.01	0.03	61	25
Fluoride	0.00	0.01	61	18
Nitrate	0.17	0.34	60	57
Sulphate	0.66	0.79	61	61
Phosphate	0.00	0.01	61	2
Ammonium (as N)	0.22	0.30	61	61

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name	**Patricia McInnes**	**Patricia McInnes**	**Patricia McInnes**	**Patricia McInnes**
Station #	**AMS 6**	**AMS 6**	**AMS 6**	**AMS 6**
Sample Date	**Jan 01 - Dec 26**	**Jan 01 - Dec 26**	**Jan 01 - Dec 26**	**Jan 01 - Dec 26**
Particulate Size	**PM2.5**	**PM2.5**	**PM2.5**	**PM2.5**
Compound Name	**Average µg/m³**	**Std Dev µg/m³**	**Total Samples (#)**	**Total ≥ MDL (#)**
Particulate Matter	10.64	26.21	59	59
Calcium	0.08	0.10	59	59
Magnesium	0.01	0.01	59	58
Potassium	0.02	0.04	59	46
Sodium	0.02	0.02	59	54
Chloride	0.02	0.09	59	33
Fluoride	0.01	0.02	59	17
Nitrate	0.25	0.44	58	56
Sulphate	0.75	0.70	59	59
Phosphate	0.00	0.01	59	4
Ammonium (as N)	0.28	0.30	59	59

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name	**Athabasca Valley**	**Athabasca Valley**	**Athabasca Valley**	**Athabasca Valley**
Station #	**AMS 7**	**AMS 7**	**AMS 7**	**AMS 7**
Sample Date	**Jan 01 - Dec 26**	**Jan 01 - Dec 26**	**Jan 01 - Dec 26**	**Jan 01 - Dec 26**
Particulate Size	**PM2.5**	**PM2.5**	**PM2.5**	**PM2.5**
Compound Name	**Average µg/m³**	**Std Dev µg/m³**	**Total Samples (#)**	**Total ≥ MDL (#)**
Particulate Matter	17.22	54.39	61	61
Calcium	0.09	0.15	61	61
Magnesium	0.02	0.02	61	61
Potassium	0.04	0.08	61	54
Sodium	0.05	0.10	61	58
Chloride	0.06	0.21	61	38
Fluoride	0.01	0.05	61	17
Nitrate	0.39	0.74	60	57
Sulphate	0.74	0.72	61	60
Phosphate	0.01	0.03	61	4
Ammonium (as N)	0.28	0.32	61	61

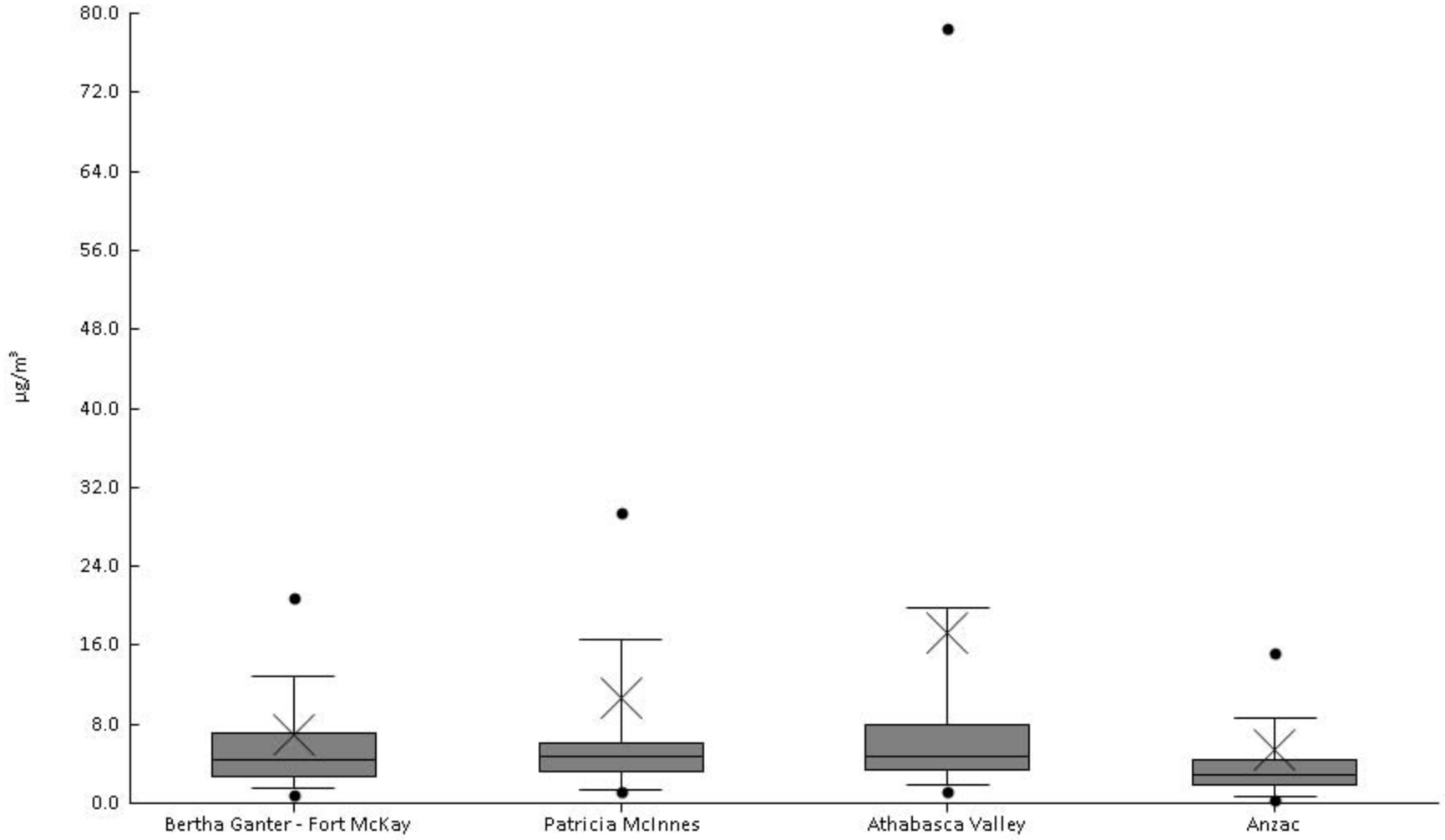
WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - IONS **Indicated Sites and Dates**

Station Name	**Anzac**	**Anzac**	**Anzac**	**Anzac**
Station #	**AMS 14**	**AMS 14**	**AMS 14**	**AMS 14**
Sample Date	**Jan 01 - Dec 26**	**Jan 01 - Dec 26**	**Jan 01 - Dec 26**	**Jan 01 - Dec 26**
Particulate Size	**PM2.5**	**PM2.5**	**PM2.5**	**PM2.5**
Compound Name	**Average µg/m³**	**Std Dev µg/m³**	**Total Samples (#)**	**Total ≥ MDL (#)**
Particulate Matter	5.38	9.61	57	56
Calcium	0.06	0.10	57	56
Magnesium	0.01	0.01	57	55
Potassium	0.01	0.02	57	40
Sodium	0.02	0.04	57	49
Chloride	0.01	0.02	57	19
Fluoride	0.00	0.01	57	16
Nitrate	0.13	0.24	55	47
Sulphate	0.55	0.71	57	57
Phosphate	0.00	0.00	57	2
Ammonium (as N)	0.18	0.24	57	57

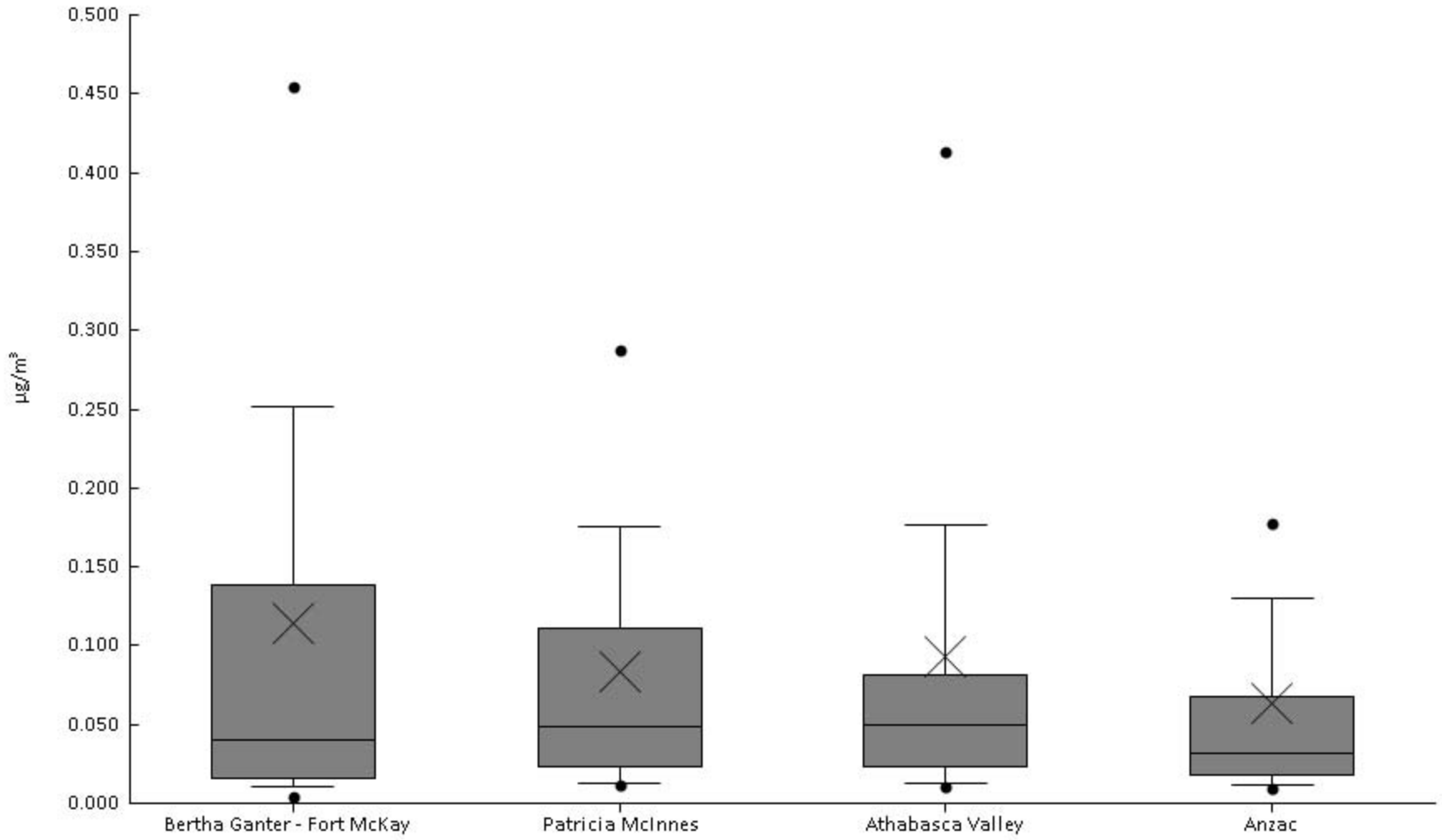
Particulate Matter (PM2.5 IONS) - Particulate Matter (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	0.55	0.78	1.4	2.8	4.3	7.1	13	21	61	7	9.3
AMS 6	Patricia McInnes	59	100%	0.67	1.2	1.4	3.1	4.8	6.1	17	30	159	11	26
AMS 7	Athabasca Valley	61	100%	0.73	1.1	1.8	3.4	4.7	8	20	79	394	17	54
AMS 14	Anzac	57	98%	-7.1E-3	0.4	0.62	1.9	2.9	4.4	8.6	15	56	5.4	9.6



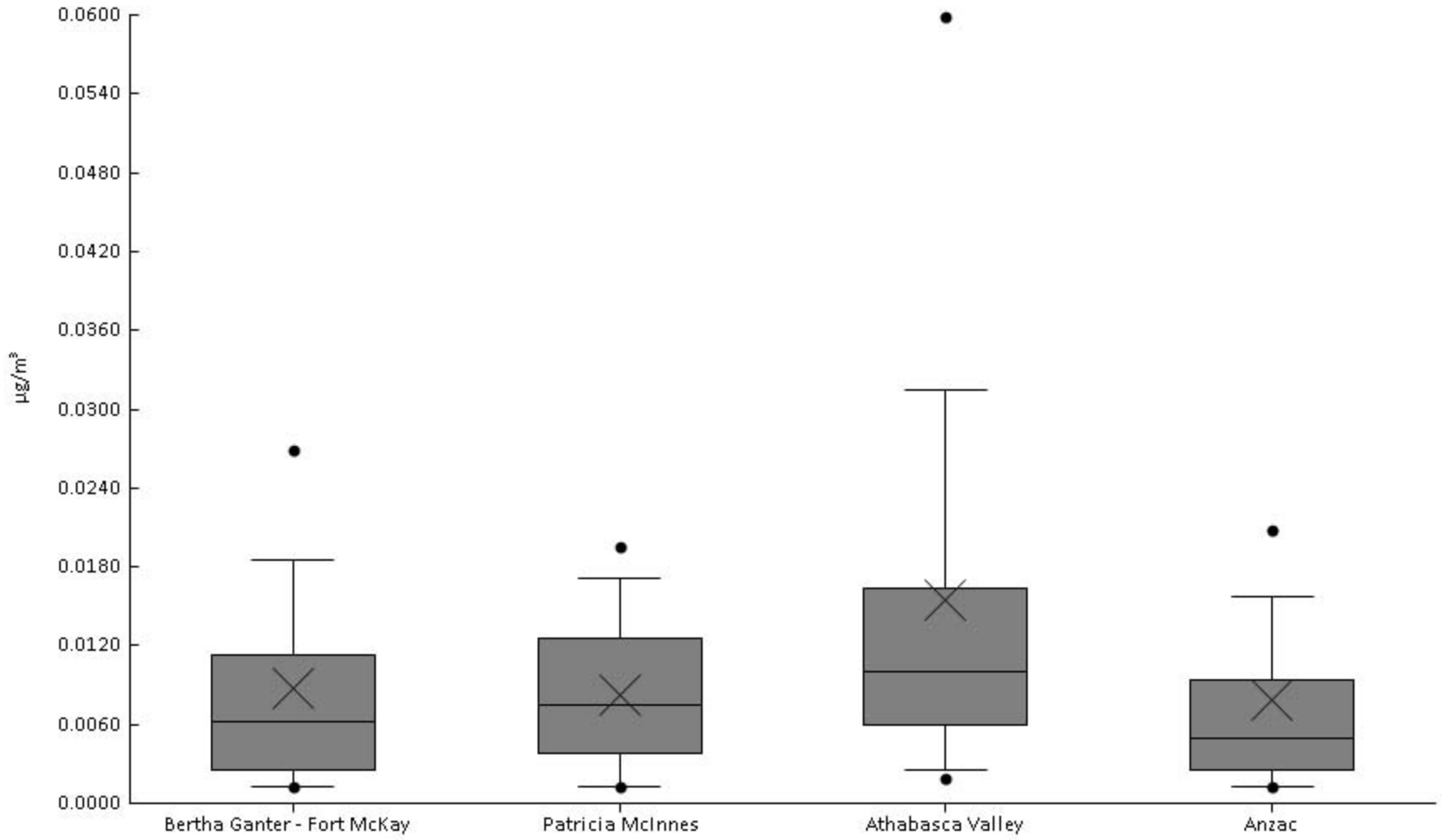
Particulate Matter (PM2.5 IONS) - Calcium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	95%	0	4.1E-3	0.01	0.016	0.04	0.14	0.25	0.45	1.4	0.11	0.2
AMS 6	Patricia McInnes	59	100%	7.5E-3	0.011	0.013	0.023	0.049	0.11	0.18	0.29	0.55	0.084	0.095
AMS 7	Athabasca Valley	61	100%	7.5E-3	0.011	0.013	0.024	0.05	0.082	0.18	0.41	0.93	0.093	0.15
AMS 14	Anzac	57	98%	0	1E-2	0.011	0.018	0.031	0.068	0.13	0.18	0.56	0.063	0.1



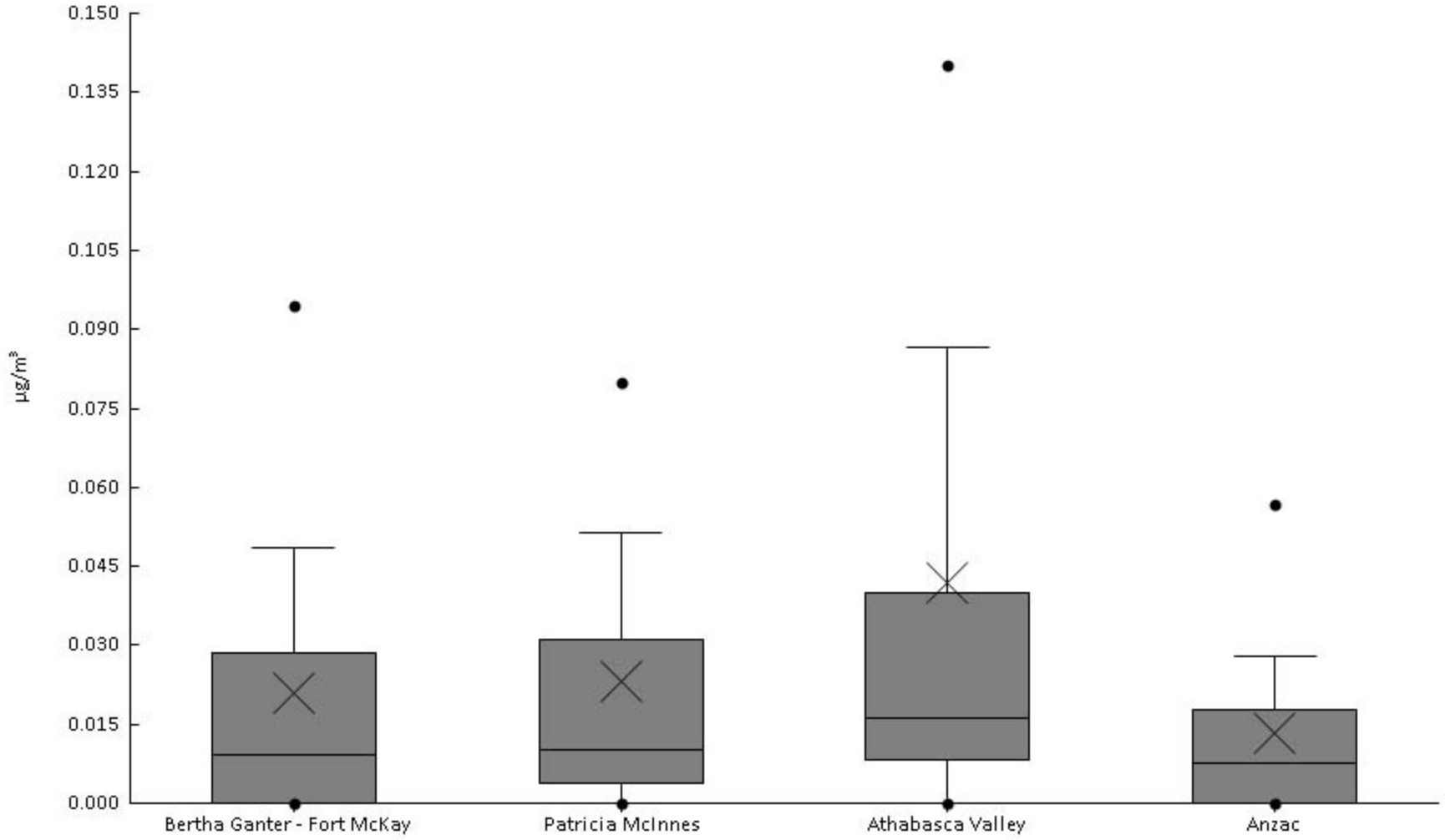
Particulate Matter (PM2.5 IONS) - Magnesium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	97%	0	1.2E-3	1.3E-3	2.5E-3	6.3E-3	0.011	0.019	0.027	0.051	8.7E-3	0.01
AMS 6	Patricia McInnes	59	98%	0	1.2E-3	1.3E-3	3.8E-3	7.5E-3	0.013	0.017	0.02	0.023	8.3E-3	5.9E-3
AMS 7	Athabasca Valley	61	100%	1.2E-3	1.9E-3	2.5E-3	5.9E-3	0.01	0.016	0.032	0.06	0.11	0.015	0.02
AMS 14	Anzac	57	96%	0	1.2E-3	1.2E-3	2.5E-3	5E-3	9.4E-3	0.016	0.021	0.075	7.9E-3	0.011



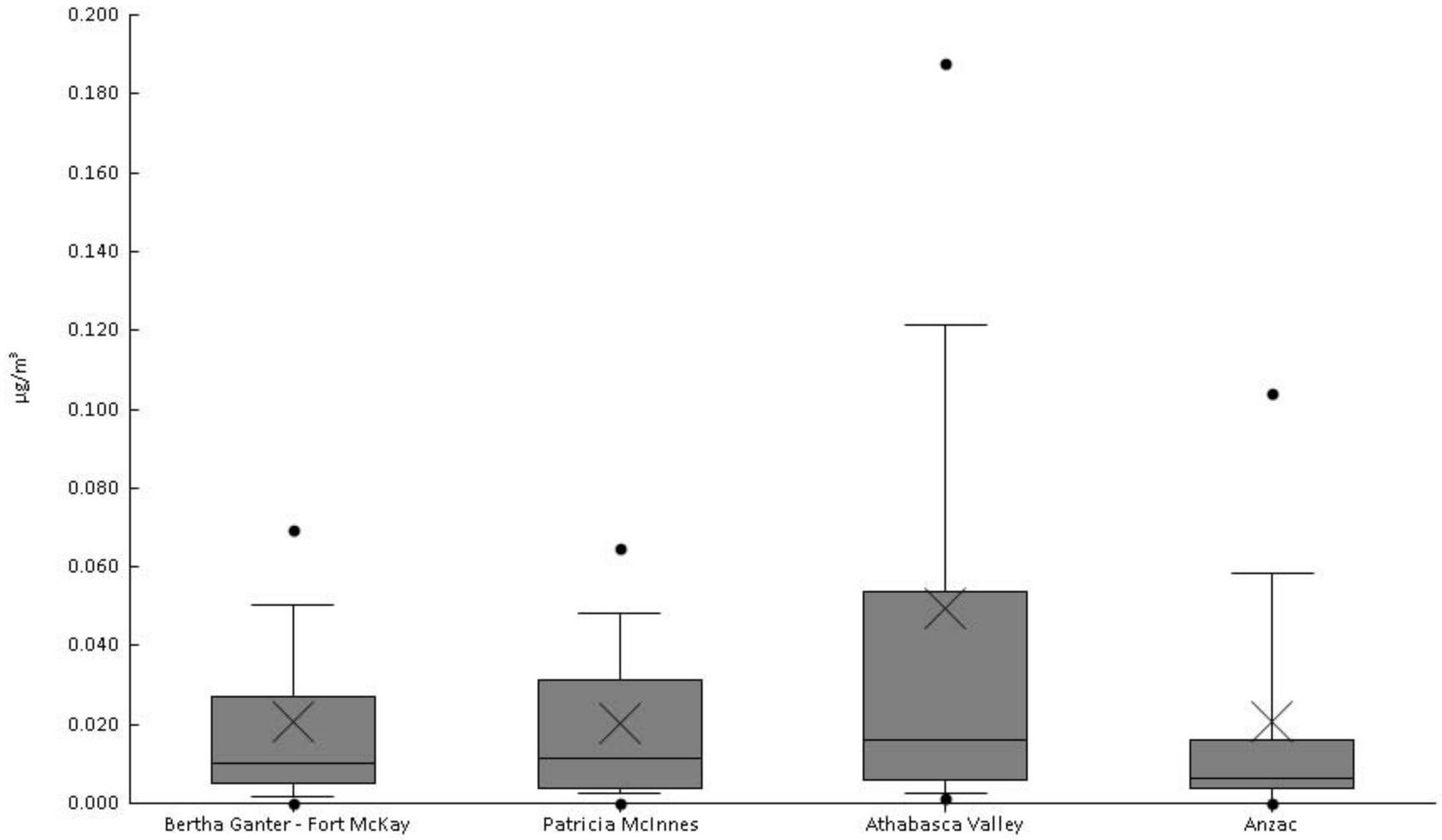
Particulate Matter (PM2.5 IONS) - Potassium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	67%	0	0	0	0	9.3E-3	0.028	0.049	0.095	0.19	0.021	0.033
AMS 6	Patricia McInnes	59	78%	0	0	0	3.8E-3	0.01	0.031	0.051	0.08	0.22	0.023	0.036
AMS 7	Athabasca Valley	61	89%	0	0	0	8.4E-3	0.016	0.04	0.087	0.14	0.47	0.042	0.083
AMS 14	Anzac	57	70%	0	0	0	0	7.5E-3	0.018	0.028	0.057	0.11	0.013	0.019



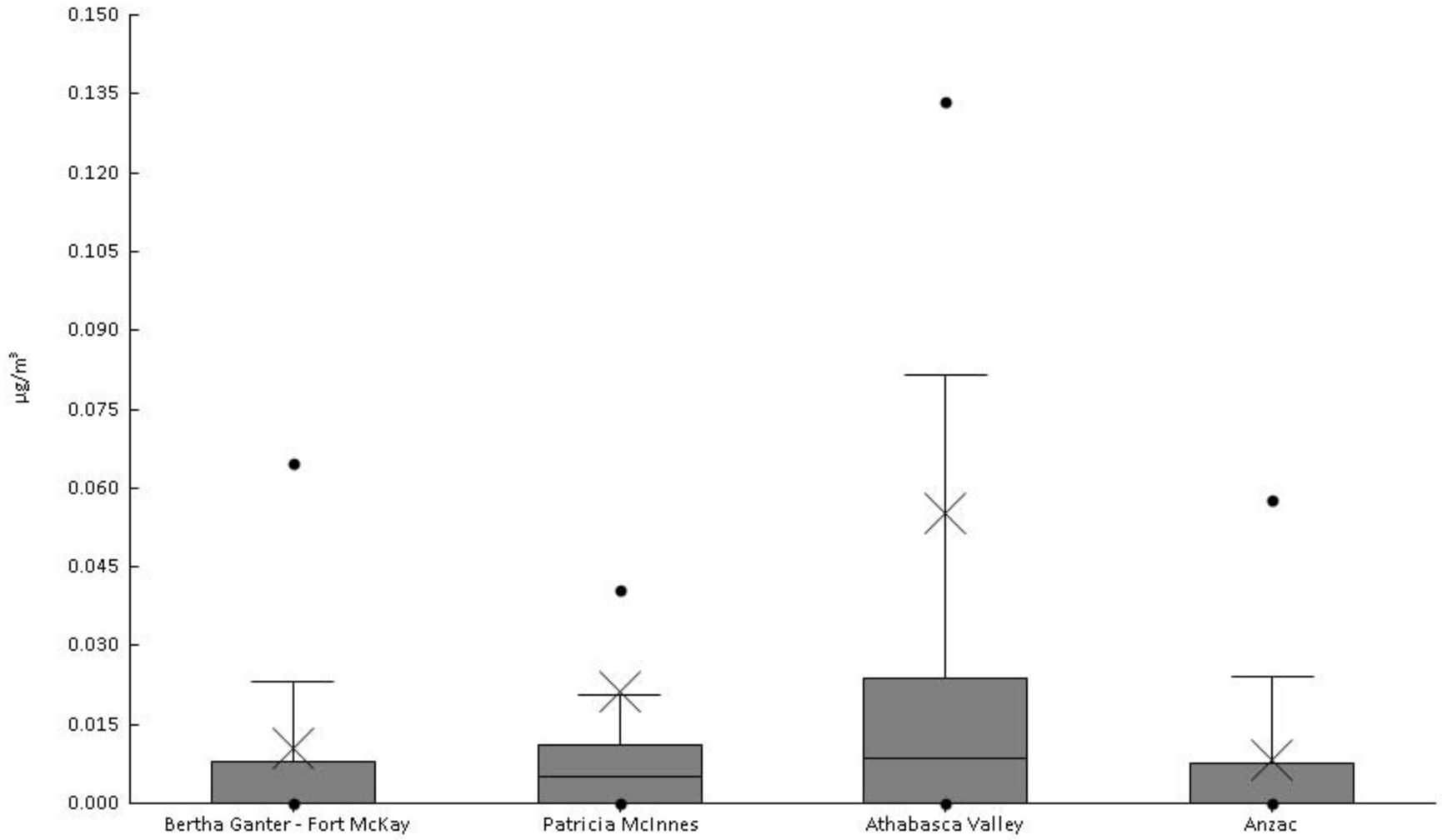
Particulate Matter (PM2.5 IONS) - Sodium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	90%	0	0	1.5E-3	5E-3	0.01	0.027	0.05	0.069	0.14	0.021	0.027
AMS 6	Patricia McInnes	59	92%	0	0	2.5E-3	3.8E-3	0.011	0.031	0.048	0.065	0.13	0.02	0.024
AMS 7	Athabasca Valley	61	95%	0	1.4E-3	2.5E-3	6E-3	0.016	0.054	0.12	0.19	0.52	0.049	0.096
AMS 14	Anzac	57	86%	0	0	0	3.7E-3	6.3E-3	0.016	0.058	0.1	0.23	0.021	0.038



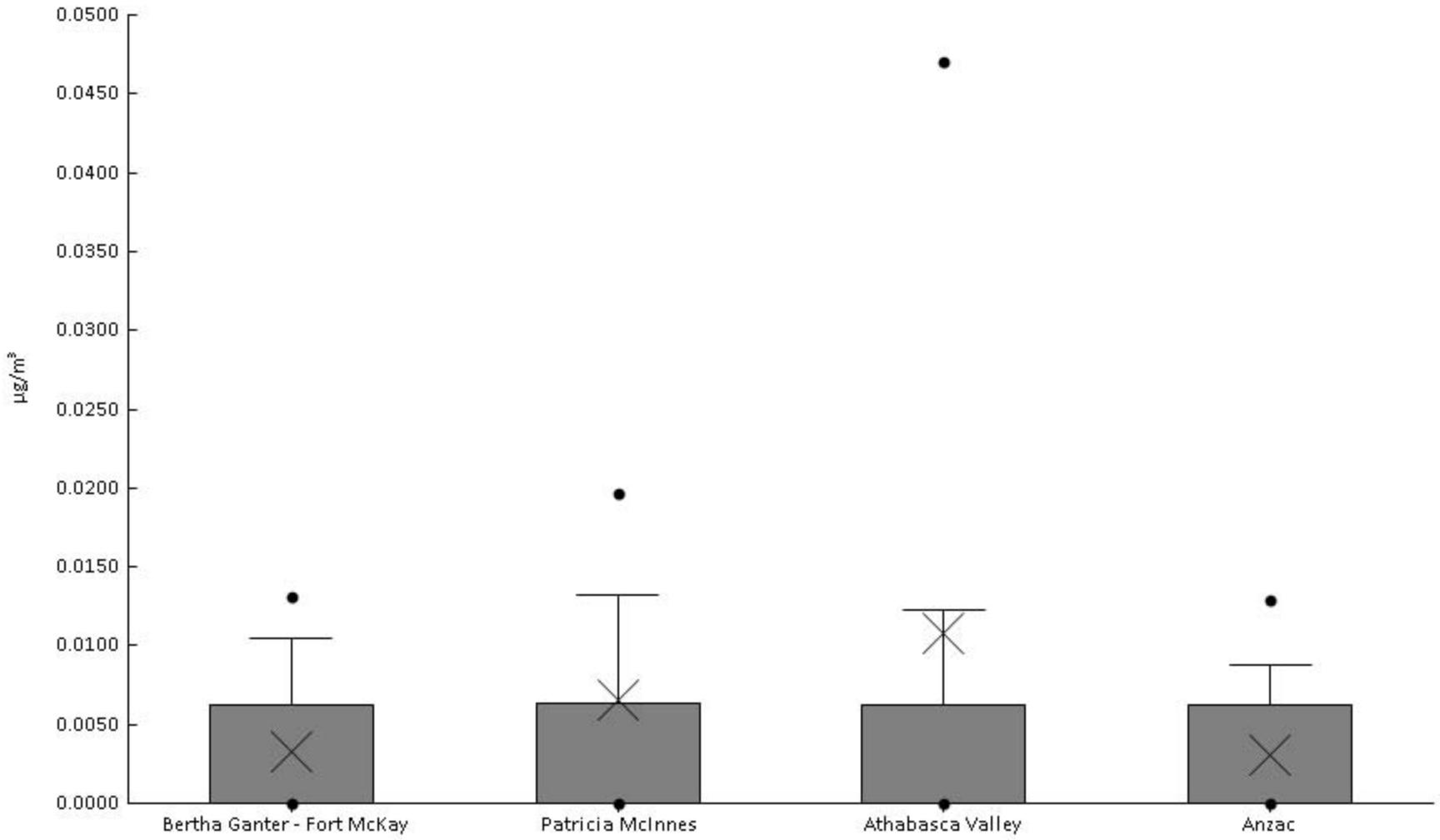
Particulate Matter (PM2.5 IONS) - Chloride (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	41%	0	0	0	0	0	7.8E-3	0.023	0.065	0.14	0.01	0.026
AMS 6	Patricia McInnes	59	56%	0	0	0	0	5E-3	0.011	0.021	0.041	0.71	0.021	0.094
AMS 7	Athabasca Valley	61	62%	0	0	0	0	8.7E-3	0.024	0.082	0.13	1.5	0.055	0.21
AMS 14	Anzac	57	33%	0	0	0	0	0	7.5E-3	0.024	0.058	0.12	8.4E-3	0.021



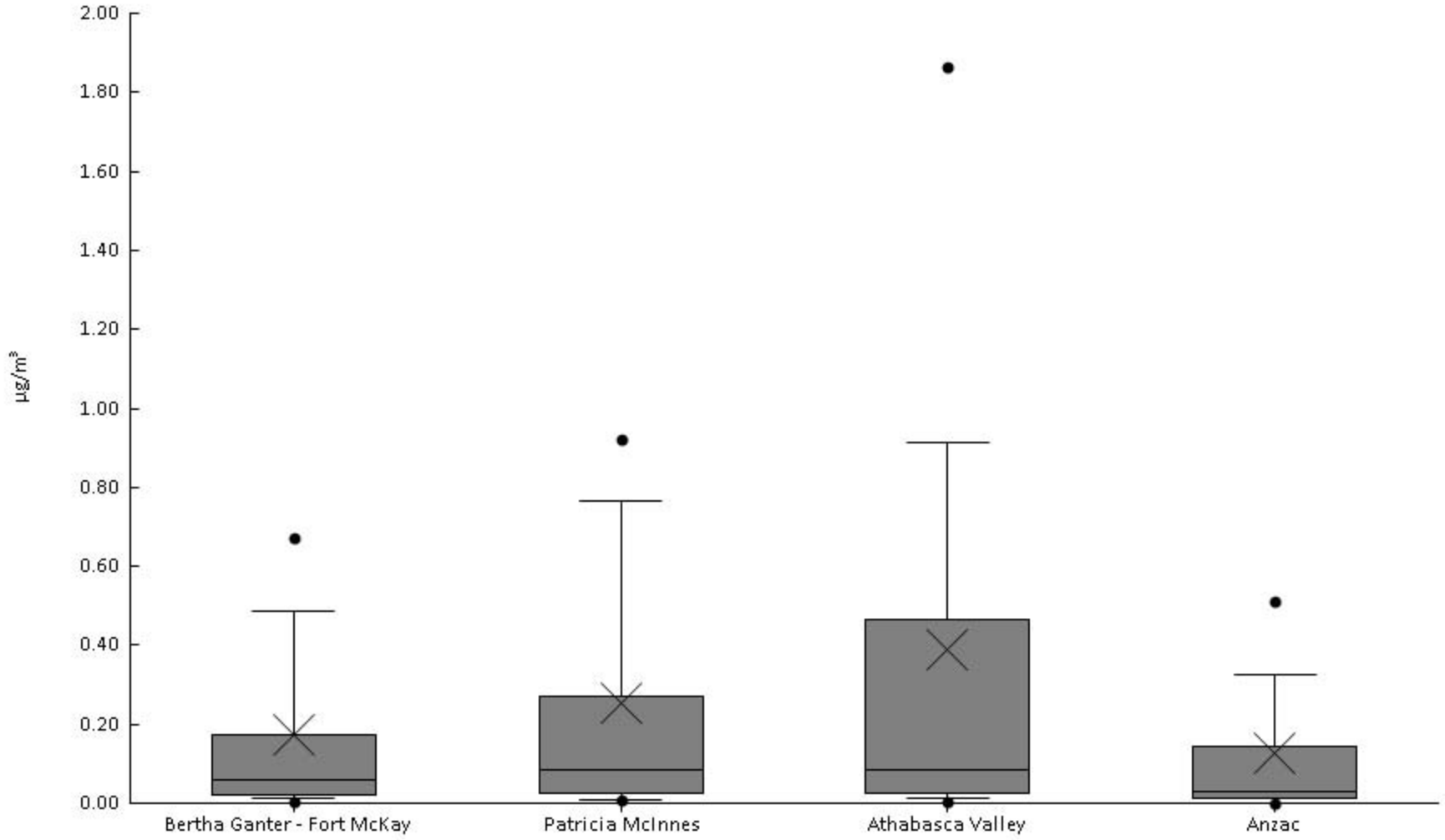
Particulate Matter (PM2.5 IONS) - Fluoride (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	30%	0	0	0	0	0	6.3E-3	0.011	0.013	0.051	3.3E-3	7.6E-3
AMS 6	Patricia McInnes	59	29%	0	0	0	0	0	6.3E-3	0.013	0.02	0.12	6.6E-3	0.021
AMS 7	Athabasca Valley	61	28%	0	0	0	0	0	6.3E-3	0.012	0.047	0.34	0.011	0.046
AMS 14	Anzac	57	28%	0	0	0	0	0	6.3E-3	8.8E-3	0.013	0.029	3.1E-3	6.2E-3



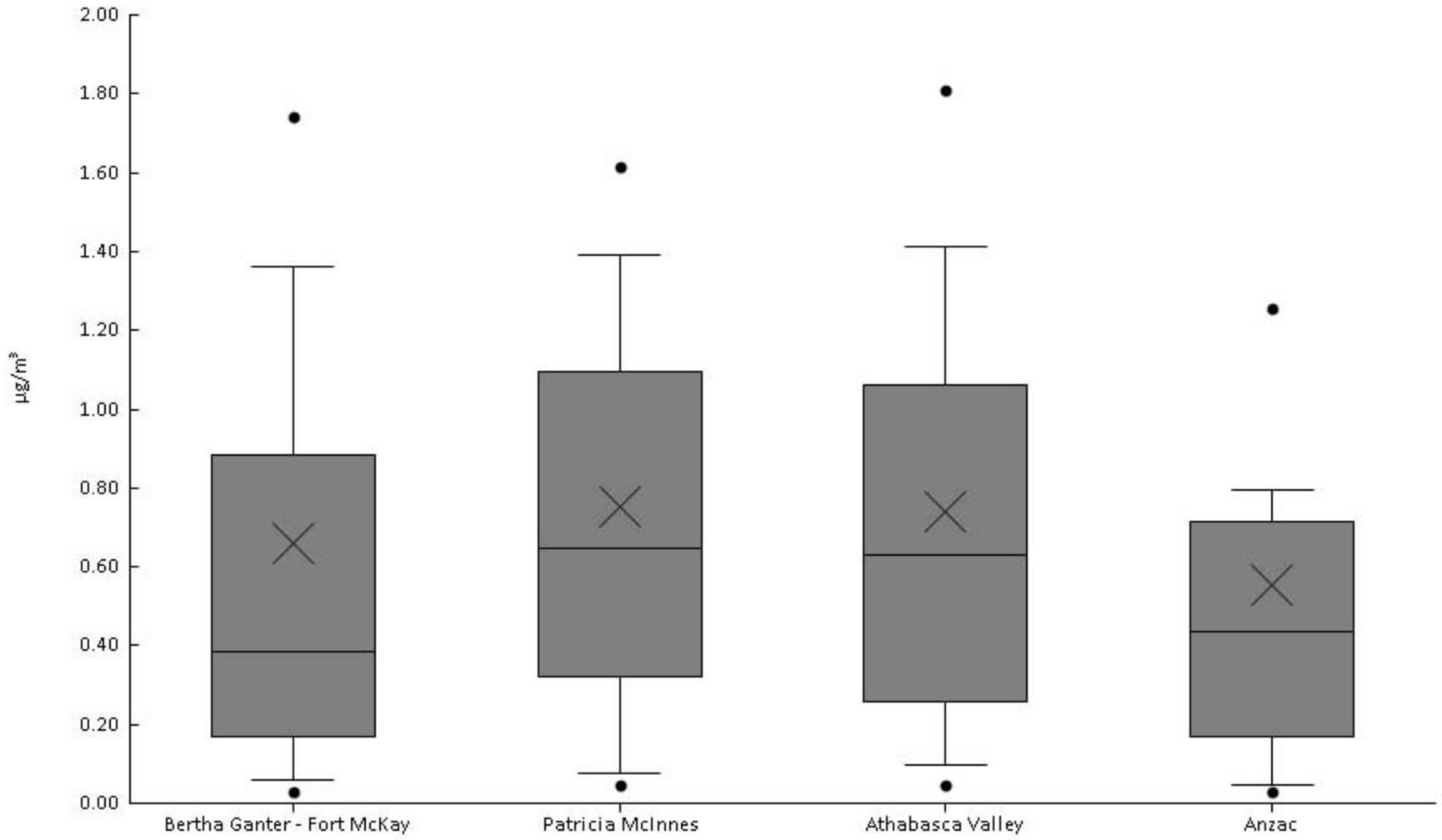
Particulate Matter (PM2.5 IONS) - Nitrate (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	60	95%	0	4.4E-3	0.011	0.022	0.059	0.17	0.49	0.67	2.1	0.17	0.34
AMS 6	Patricia McInnes	58	97%	0	9.3E-3	0.01	0.024	0.083	0.27	0.76	0.92	2.6	0.25	0.44
AMS 7	Athabasca Valley	60	95%	0	4.4E-3	0.012	0.024	0.086	0.47	0.91	1.9	4.4	0.39	0.74
AMS 14	Anzac	55	85%	0	0	0	0.012	0.031	0.14	0.33	0.51	1.6	0.13	0.24



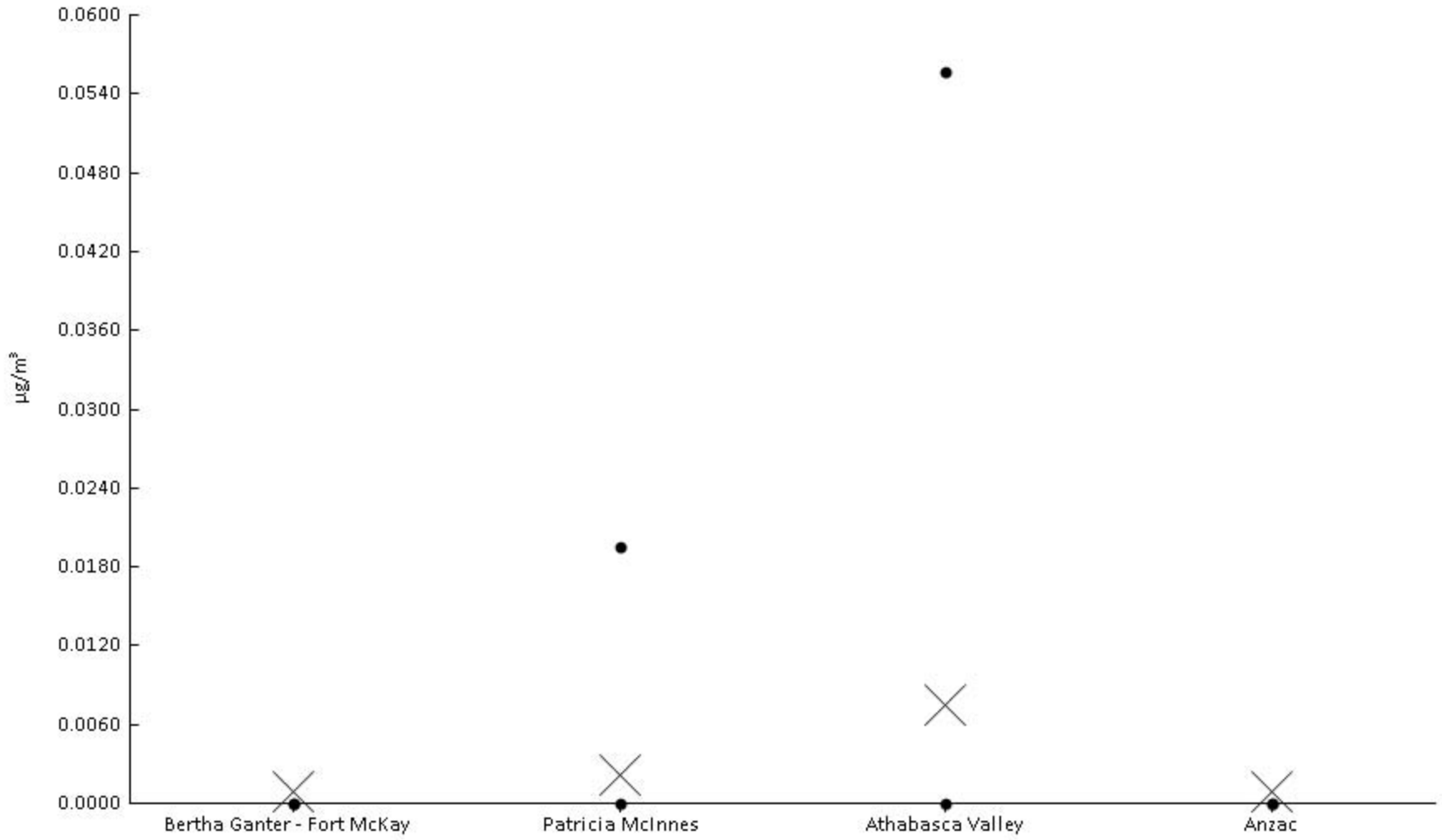
Particulate Matter (PM2.5 IONS) - Sulphate (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	0.011	0.032	0.058	0.17	0.39	0.88	1.4	1.7	5.1	0.66	0.79
AMS 6	Patricia McInnes	59	100%	0.023	0.045	0.077	0.32	0.65	1.1	1.4	1.6	4.6	0.75	0.7
AMS 7	Athabasca Valley	61	98%	0	0.046	0.096	0.26	0.63	1.1	1.4	1.8	4.5	0.74	0.72
AMS 14	Anzac	57	100%	0.013	0.031	0.046	0.17	0.44	0.72	0.79	1.3	3.9	0.55	0.71



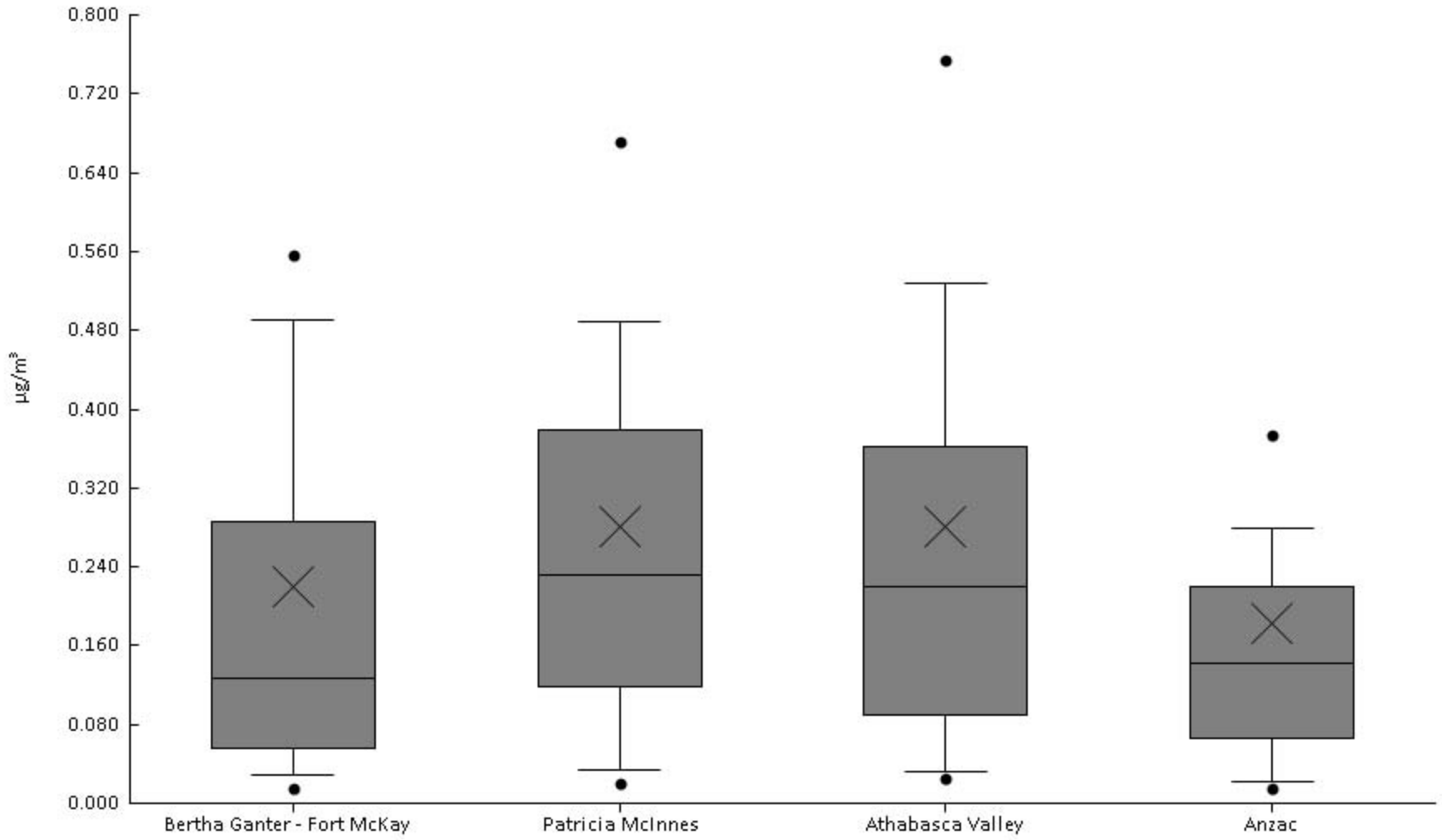
Particulate Matter (PM2.5 IONS) - Phosphate (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	3%	0	0	0	0	0	0	0	0	0.033	9E-4	5E-3
AMS 6	Patricia McInnes	59	7%	0	0	0	0	0	0	0	0.02	0.054	2.2E-3	9.1E-3
AMS 7	Athabasca Valley	61	7%	0	0	0	0	0	0	0	0.056	0.18	7.4E-3	0.032
AMS 14	Anzac	57	4%	0	0	0	0	0	0	0	0	0.026	9E-4	4.8E-3



Particulate Matter (PM2.5 IONS) - Ammonium (as N) (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	1.9E-3	0.015	0.029	0.056	0.13	0.29	0.49	0.56	2.1	0.22	0.3
AMS 6	Patricia McInnes	59	100%	2.9E-3	0.021	0.033	0.12	0.23	0.38	0.49	0.67	2.1	0.28	0.3
AMS 7	Athabasca Valley	61	100%	1.9E-3	0.026	0.033	0.089	0.22	0.36	0.53	0.75	2	0.28	0.32
AMS 14	Anzac	57	100%	4.8E-3	0.016	0.022	0.066	0.14	0.22	0.28	0.37	1.6	0.18	0.24



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

INTEGRATED MONITORING PROGRAM
ANNUAL REPORT

PARTICULATE MATTER (PM_{10}) - IONS
DATA SUMMARY
2016

March 2017

SAMPLE COLLECTION AND DATA COMPILATION BY:

Wood Buffalo Environmental Association
Fort McMurray, Alberta

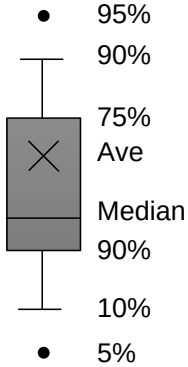
LABORATORY ANALYSIS BY:

PM ions: Atmospheric Research & Analysis, Inc.
Morrisville, NC

FILE CONTENTS DESCRIPTION	Partisol Sampler Measurements of Mass, Ions by IC and Metals by ICP-MS
SAMPLING INTERVAL	24 hour
SAMPLING FREQUENCY OF DATA	Once every 6 days
EXPLANATION OF ZERO VALUES	Zero values are contained in this file and should be treated as values below detection - Method Detection Limits (MDL) are provided with each observation
UNITS	µg/m^3 (microgram per cubic meter)
OBSERVATION TYPE	Particles
FIELD SAMPLING OR MEASUREMENT PRINCIPLE	Filtration with PM_{10} Inlet for PM_{10} and with PM_{10} Inlet/Very Sharp Cut Cyclone for $PM_{2.5}$
PARTICLE DIAMETER	< 2.5 µm or < 10 µm
MEDIUM	47 mm Teflon Filter
ANALYTICALMETHODS	MASS by Microbalance
	ELEMENTS by Inductively Coupled Plasma Mass Spectrometry (ICP/MS)
	IONS by Ion Chromatography (IC)
SAMPLE PREPARATION	DI Water extraction for IC analysis and Acid Digestion for ICP/MS Analysis
ANALYTICAL LABORATORY	Atmospheric Research & Analysis Inc
USER NOTE 1	Data are not blank corrected
USER NOTE 2	Volume is given at actual conditions of temperature and pressure during sampling as measured by the sampler
USER NOTE 3	Blank sample concentration (µg/m^3) is calculated using expected actual volume of sampler
VOLUME STANDARDIZATION	Actual Volume at Ambient Conditions (since 01-Jan-2011)
SAMPLING INSTRUMENT TYPE	For PM_{10} FRM Partisol PM_{10} sampler
	For $PM_{2.5}$ FRM Partisol $PM_{2.5}$ sampler

FLAGS USED	
V0	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
V4	Valid value despite failing to meet some QC or statistical criteria
V5	Valid value but qualified because of possible contamination
V6	Valid value but qualified due to non-standard sampling conditions
M1	Missing value because no value is available
M2	Missing value because invalidated by Data Originator

Legend description



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**01-Jan**		**01-Jan**		**01-Jan**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	3.06	V0	1.74	V0	0.06	V0
Calcium	0.16	0.03	V0	0.02	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.04	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.05	V0	0.03	V0	0.00	V1
Sulphate	0.25	0.14	V0	0.09	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**01-Jan**		**01-Jan**		**01-Jan**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	4.79	V0	2.17	V0	0.06	V0
Calcium	0.16	0.06	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.12	V0	0.02	V0	0.00	V1
Sodium	0.05	0.24	V0	0.03	V0	0.00	V1
Chloride	0.12	0.34	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.21	V0	0.08	V0	0.00	V1
Sulphate	0.25	0.24	V0	0.14	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		01-Jan		01-Jan		01-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	1.89	V0	1.72	V0	0.06	V0
Calcium	0.16	0.03	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.02	V0	0.00	V1
Sulphate	0.25	0.09	V0	0.09	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**01-Jan**		**01-Jan**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.41	V0	0.06	V0
Calcium	0.16	0.03	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V1
Potassium	0.09	0.02	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.04	V0	0.00	V1
Sulphate	0.25	0.26	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.06	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**07-Jan**		**07-Jan**		**07-Jan**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	1.96	V0	2.23	V0	0.13	V0
Calcium	0.16	0.02	V0	0.08	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.10	V0	0.01	V0	0.00	V1
Sodium	0.05	0.07	V0	0.04	V0	0.00	V1
Chloride	0.12	0.14	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.06	V0	0.11	V0	0.00	V1
Sulphate	0.25	0.16	V0	0.70	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.18	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**07-Jan**		**07-Jan**		**07-Jan**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.60	V0	3.49	V0	0.13	V0
Calcium	0.16	0.19	V0	0.09	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.03	V0	0.01	V0	0.00	V1
Sodium	0.05	0.08	V0	0.05	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.34	V0	0.09	V0	0.00	V1
Sulphate	0.25	0.66	V0	1.25	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.18	V0	0.21	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		07-Jan		07-Jan		07-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	0.91	V0	1.68	V0	0.13	V0
Calcium	0.16	0.03	V0	0.02	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.06	V0	0.08	V0	0.00	V1
Chloride	0.12	0.05	V0	0.08	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.05	V0	0.06	V0	0.00	V1
Sulphate	0.25	0.16	V0	0.24	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.04	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**07-Jan**		**07-Jan**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	2.43	V0	0.13	V0
Calcium	0.16	0.03	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.08	V0	0.00	V1
Chloride	0.12	0.06	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.09	V0	0.00	V1
Sulphate	0.25	0.42	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.09	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**13-Jan**		**13-Jan**		**13-Jan**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	9.94	V0	8.12	V0	0.05	V0
Calcium	0.16	0.08	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V1
Potassium	0.09	0.04	V0	0.04	V0	0.00	V1
Sodium	0.05	0.03	V0	0.04	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.33	V0	0.93	V0	0.15	V0
Sulphate	0.25	2.13	V0	1.84	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.61	V0	0.69	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**13-Jan**		**13-Jan**		**13-Jan**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	24.87	V0	6.23	V0	0.05	V0
Calcium	0.16	0.08	V0	0.02	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V1
Potassium	0.09	0.07	V0	0.06	V0	0.00	V1
Sodium	0.05	0.10	V0	0.02	V0	0.00	V1
Chloride	0.12	0.11	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.02	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.93	V0	0.21	V0	0.15	V0
Sulphate	0.25	1.70	V0	1.88	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.53	V0	0.52	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		13-Jan		13-Jan		13-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	7.59	V0	9.58	V0	0.05	V0
Calcium	0.16	0.06	V0	0.07	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.01	V0	0.00	V1
Potassium	0.09	0.02	V0	0.04	V0	0.00	V1
Sodium	0.05	0.03	V0	0.03	V0	0.00	V1
Chloride	0.12	0.00	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.14	V0	0.22	V0	0.15	V0
Sulphate	0.25	1.76	V0	2.46	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.45	V0	0.56	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**13-Jan**		**13-Jan**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	15.17	V0	0.05	V0
Calcium	0.16	0.22	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.00	V1
Potassium	0.09	0.04	V0	0.00	V1
Sodium	0.05	0.03	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.56	V0	0.15	V0
Sulphate	0.25	2.25	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.59	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**19-Jan**		**19-Jan**		**19-Jan**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	7.25	V0	7.47	V0	-0.03	V1
Calcium	0.16	0.07	V0	0.11	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V0
Potassium	0.09	0.02	V0	0.01	V0	0.00	V1
Sodium	0.05	0.06	V0	0.07	V0	0.00	V1
Chloride	0.12	0.00	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.35	V0	1.04	V0	0.00	V1
Sulphate	0.25	0.79	V0	0.79	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.26	V0	0.40	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**19-Jan**		**19-Jan**		**19-Jan**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	9.29	V0	7.38	V0	-0.03	V1
Calcium	0.16	0.27	V0	0.08	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.02	V0	0.00	V0
Potassium	0.09	0.05	V0	0.04	V0	0.00	V1
Sodium	0.05	0.12	V0	0.11	V0	0.00	V1
Chloride	0.12	0.07	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	1.16	V0	0.32	V0	0.00	V1
Sulphate	0.25	0.92	V0	2.37	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.40	V0	0.60	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		19-Jan		19-Jan		19-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	6.07	V0	3.83	V0	-0.03	V1
Calcium	0.16	0.06	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V0
Potassium	0.09	0.02	V0	0.01	V0	0.00	V1
Sodium	0.05	0.08	V0	0.06	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.37	V0	0.15	V0	0.00	V1
Sulphate	0.25	0.74	V0	0.82	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.25	V0	0.22	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**19-Jan**		**19-Jan**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.32	V0	-0.03	V1
Calcium	0.16	0.05	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V0
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.06	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.18	V0	0.00	V1
Sulphate	0.25	0.57	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.15	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**25-Jan**		**25-Jan**		**25-Jan**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	5.40	V0	6.39	V0	0.11	V0
Calcium	0.16	0.02	V0	0.02	V0	0.02	V0
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V0
Potassium	0.09	0.03	V0	0.04	V0	0.00	V0
Sodium	0.05	0.02	V0	0.07	V0	0.00	V1
Chloride	0.12	0.00	V0	0.05	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.20	V0	0.37	V0	0.25	V0
Sulphate	0.25	0.76	V0	1.01	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.28	V0	0.35	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		25-Jan		25-Jan		25-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	7.15	V0	3.67	V0	0.11	V0
Calcium	0.16	0.04	V0	0.01	V0	0.02	V0
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V0
Potassium	0.09	0.05	V0	0.03	V0	0.00	V0
Sodium	0.05	0.09	V0	0.01	V0	0.00	V1
Chloride	0.12	0.06	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.42	V0	0.02	V0	0.25	V0
Sulphate	0.25	1.00	V0	0.84	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.34	V0	0.25	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		25-Jan		25-Jan		25-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	4.81	V0	5.45	V0	0.11	V0
Calcium	0.16	0.02	V0	0.01	V0	0.02	V0
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V0
Potassium	0.09	0.02	V0	0.03	V0	0.00	V0
Sodium	0.05	0.01	V0	0.02	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.06	V0	0.02	V0	0.25	V0
Sulphate	0.25	0.75	V0	0.91	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.24	V0	0.21	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**25-Jan**		**25-Jan**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	6.64	V0	0.11	V0
Calcium	0.16	0.04	V0	0.02	V0
Magnesium	0.03	0.00	V0	0.00	V0
Potassium	0.09	0.03	V0	0.00	V0
Sodium	0.05	0.02	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.07	V0	0.25	V0
Sulphate	0.25	1.55	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.42	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**31-Jan**		**31-Jan**		**31-Jan**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	12.94	V0	20.81	V0	0.17	V0
Calcium	0.16	0.34	V0	2.51	V0	0.01	V0
Magnesium	0.03	0.05	V0	0.05	V0	0.00	V1
Potassium	0.09	0.02	V0	0.03	V0	0.01	V4
Sodium	0.05	0.08	V0	0.12	V0	0.00	V1
Chloride	0.12	0.08	V0	0.15	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.26	V0	0.29	V0	0.12	V0
Sulphate	0.25	0.94	V0	1.26	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.24	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**31-Jan**		**31-Jan**		**31-Jan**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	25.12	V0	3.60	V0	0.17	V0
Calcium	0.16	1.65	V0	0.07	V0	0.01	V0
Magnesium	0.03	0.06	V0	0.02	V0	0.00	V1
Potassium	0.09	0.03	V0	0.01	V0	0.01	V4
Sodium	0.05	0.18	V0	0.07	V0	0.00	V1
Chloride	0.12	0.23	V0	0.06	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.25	V0	0.18	V0	0.12	V0
Sulphate	0.25	1.14	V0	0.83	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.23	V0	0.10	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		31-Jan		31-Jan		31-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	14.45	V0	3.71	V0	0.17	V0
Calcium	0.16	0.40	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.05	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.02	V0	0.01	V4
Sodium	0.05	0.12	V0	0.09	V0	0.00	V1
Chloride	0.12	0.15	V0	0.09	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.08	V0	0.24	V0	0.12	V0
Sulphate	0.25	1.02	V0	0.87	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.09	V0	0.07	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**31-Jan**		**31-Jan**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	5.61	V0	0.17	V0
Calcium	0.16	0.09	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.00	V1
Potassium	0.09	0.02	V0	0.01	V4
Sodium	0.05	0.08	V0	0.00	V1
Chloride	0.12	0.06	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.24	V0	0.12	V0
Sulphate	0.25	0.95	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.10	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**06-Feb**		**06-Feb**		**06-Feb**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**25.2**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	14.98	V0	7.78	V0	0.13	V0
Calcium	0.16	0.34	V0	0.11	V0	0.00	V1
Magnesium	0.03	0.03	V0	0.01	V0	0.00	V1
Potassium	0.09	0.06	V0	0.04	V0	0.00	V1
Sodium	0.05	0.04	V0	0.10	V0	0.00	V1
Chloride	0.12	0.01	V0	0.05	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.79	V0	0.82	V0	0.00	V1
Sulphate	0.25	1.57	V0	1.15	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.48	V0	0.42	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**06-Feb**		**06-Feb**		**06-Feb**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	7.69	V0	4.54	V0	0.13	V0
Calcium	0.16	0.09	V0	0.07	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.05	V0	0.01	V0	0.00	V1
Sodium	0.05	0.23	V0	0.02	V0	0.00	V1
Chloride	0.12	0.14	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.88	V0	0.18	V0	0.00	V1
Sulphate	0.25	1.16	V0	0.68	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.40	V0	0.18	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		Albian Muskeg River		Travel Blank	
Station #		AMS 13		AMS 16			
Sample Date		06-Feb		06-Feb		06-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	8.07	V0	7.47	V0	0.13	V0
Calcium	0.16	0.07	V0	0.10	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.04	V0	0.05	V0	0.00	V1
Sodium	0.05	0.03	V0	0.03	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.32	V0	0.47	V0	0.00	V1
Sulphate	0.25	1.47	V0	1.22	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.43	V0	0.35	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**12-Feb**		**12-Feb**		**12-Feb**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	20.79	V0	3.95	V0	0.16	V0
Calcium	0.16	1.01	V0	0.10	V0	0.00	V1
Magnesium	0.03	0.04	V0	0.02	V0	0.00	V1
Potassium	0.09	0.02	V0	0.02	V0	0.00	V1
Sodium	0.05	0.19	V0	0.24	V0	0.00	V1
Chloride	0.12	0.24	V0	0.34	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.23	V0	0.48	V0	0.00	V1
Sulphate	0.25	0.74	V0	0.38	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.17	V0	0.14	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**12-Feb**		**12-Feb**		**12-Feb**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	5.67	V0	1.91	V0	0.16	V0
Calcium	0.16	0.21	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.03	V0	0.00	V0	0.00	V1
Potassium	0.09	0.02	V0	0.00	V1	0.00	V1
Sodium	0.05	0.55	V4	0.03	V0	0.00	V1
Chloride	0.12	0.78	V4	0.02	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.34	V0	0.04	V0	0.00	V1
Sulphate	0.25	0.44	V0	0.39	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.15	V0	0.08	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		Albian Muskeg River		Travel Blank	
Station #		AMS 13		AMS 16			
Sample Date		12-Feb		12-Feb		12-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	12.93	V0	6.58	V0	0.16	V0
Calcium	0.16	0.51	V0	0.18	V0	0.00	V1
Magnesium	0.03	0.04	V0	0.02	V0	0.00	V1
Potassium	0.09	0.03	V0	0.00	V1	0.00	V1
Sodium	0.05	0.25	V0	0.13	V0	0.00	V1
Chloride	0.12	0.33	V0	0.15	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.35	V0	0.20	V0	0.00	V1
Sulphate	0.25	0.79	V0	0.33	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.19	V0	0.08	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**18-Feb**		**18-Feb**		**18-Feb**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	4.58	V0	5.26	V0	0.13	V0
Calcium	0.16	0.06	V0	0.07	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.02	V0	0.00	V1
Sodium	0.05	0.02	V0	0.11	V0	0.00	V1
Chloride	0.12	0.00	V1	0.07	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.08	V0	0.33	V0	0.00	V1
Sulphate	0.25	0.93	V0	1.32	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.27	V0	0.41	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**18-Feb**		**18-Feb**		**18-Feb**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	11.21	V0	4.08	V0	0.13	V0
Calcium	0.16	0.38	V0	0.02	V0	0.00	V1
Magnesium	0.03	0.03	V0	0.00	V0	0.00	V1
Potassium	0.09	0.15	V0	0.02	V0	0.00	V1
Sodium	0.05	0.29	V0	0.01	V0	0.00	V1
Chloride	0.12	0.33	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.83	V0	0.02	V0	0.00	V1
Sulphate	0.25	1.68	V0	1.35	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.46	V0	0.32	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		18-Feb		18-Feb		18-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.1		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	5.13	V0	4.76	V0	0.13	V0
Calcium	0.16	0.09	V0	0.04	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.04	V0	0.03	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.10	V0	0.06	V0	0.00	V1
Sulphate	0.25	0.95	V0	1.13	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.27	V0	0.30	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**18-Feb**		**18-Feb**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	9.46	V0	0.13	V0
Calcium	0.16	0.15	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.27	V0	0.00	V1
Sulphate	0.25	0.86	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.23	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**24-Feb**		**24-Feb**		**24-Feb**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	7.17	V0	3.29	V0	0.07	V0
Calcium	0.16	0.16	V0	0.08	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V1
Potassium	0.09	0.02	V0	0.02	V0	0.00	V1
Sodium	0.05	0.25	V0	0.31	V0	0.00	V1
Chloride	0.12	0.31	V0	0.43	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.17	V0	0.07	V0	0.00	V1
Sulphate	0.25	0.62	V0	0.07	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.19	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**24-Feb**		**24-Feb**		**24-Feb**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	18.51	V0	1.25	V0	0.07	V0
Calcium	0.16	0.45	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.05	V0	0.00	V0	0.00	V1
Potassium	0.09	0.08	V0	0.01	V0	0.00	V1
Sodium	0.05	2.97	V4	0.05	V0	0.00	V1
Chloride	0.12	4.50	V4	0.06	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.35	V0	0.03	V0	0.00	V1
Sulphate	0.25	0.25	V0	0.05	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		24-Feb		24-Feb		24-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	3.40	V0	1.65	V0	0.07	V0
Calcium	0.16	0.07	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V0	0.00	V1
Sodium	0.05	0.10	V0	0.03	V0	0.00	V1
Chloride	0.12	0.11	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.05	V0	0.03	V0	0.00	V1
Sulphate	0.25	0.18	V0	0.05	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.06	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**24-Feb**		**24-Feb**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	5.96	V0	0.07	V0
Calcium	0.16	0.14	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V1
Potassium	0.09	0.03	V0	0.00	V1
Sodium	0.05	0.13	V0	0.00	V1
Chloride	0.12	0.15	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.07	V0	0.00	V1
Sulphate	0.25	0.40	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.10	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**01-Mar**		**01-Mar**		**01-Mar**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**22.9**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	14.39	V0	12.30	V0	0.03	V1
Calcium	0.16	0.26	V0	0.41	V0	0.00	V1
Magnesium	0.03	0.05	V0	0.05	V0	0.00	V1
Potassium	0.09	0.05	V0	0.05	V0	0.00	V1
Sodium	0.05	0.24	V0	0.36	V0	0.00	V1
Chloride	0.12	0.04	V0	0.27	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	1.02	V0	1.30	V0	0.02	V0
Sulphate	0.25	1.94	V0	0.80	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.53	V0	0.27	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**01-Mar**		**01-Mar**		**01-Mar**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	11.51	V0	3.53	V0	0.03	V1
Calcium	0.16	0.36	V0	0.04	V0	0.00	V1
Magnesium	0.03	0.06	V0	0.02	V0	0.00	V1
Potassium	0.09	0.05	V0	0.03	V0	0.00	V1
Sodium	0.05	0.62	V4	0.14	V0	0.00	V1
Chloride	0.12	0.68	V4	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	1.06	V0	0.43	V0	0.02	V0
Sulphate	0.25	0.64	V0	0.53	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.20	V0	0.15	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		01-Mar		01-Mar		01-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		22.9		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	13.53	V0	8.10	V0	0.03	V1
Calcium	0.16	0.25	V0	0.14	V0	0.00	V1
Magnesium	0.03	0.05	V0	0.04	V0	0.00	V1
Potassium	0.09	0.05	V0	0.04	V0	0.00	V1
Sodium	0.05	0.22	V0	0.22	V0	0.00	V1
Chloride	0.12	0.07	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.63	V0	0.78	V0	0.02	V0
Sulphate	0.25	2.29	V0	0.68	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.60	V0	0.19	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**01-Mar**		**01-Mar**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	20.92	V0	0.03	V1
Calcium	0.16	0.52	V0	0.00	V1
Magnesium	0.03	0.06	V0	0.00	V1
Potassium	0.09	0.06	V0	0.00	V1
Sodium	0.05	0.24	V0	0.00	V1
Chloride	0.12	0.03	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	1.42	V0	0.02	V0
Sulphate	0.25	1.38	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.40	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**07-Mar**		**07-Mar**		**07-Mar**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	7.89	V0	5.84	V0	0.10	V0
Calcium	0.16	0.15	V0	0.10	V0	0.01	V0
Magnesium	0.03	0.03	V0	0.02	V0	0.00	V1
Potassium	0.09	0.02	V0	0.04	V0	0.00	V1
Sodium	0.05	0.07	V0	0.14	V0	0.00	V1
Chloride	0.12	0.01	V0	0.06	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.18	V0	0.62	V0	0.08	V0
Sulphate	0.25	0.93	V0	0.97	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.24	V0	0.34	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		07-Mar		07-Mar		07-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		23.7		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	7.96	V0	3.27	V0	0.10	V0
Calcium	0.16	0.20	V0	0.05	V0	0.01	V0
Magnesium	0.03	0.03	V0	0.01	V0	0.00	V1
Potassium	0.09	0.09	V0	0.02	V0	0.00	V1
Sodium	0.05	0.24	V0	0.05	V0	0.00	V1
Chloride	0.12	0.19	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.62	V0	0.14	V0	0.08	V0
Sulphate	0.25	1.37	V0	0.86	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.35	V0	0.20	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		07-Mar		07-Mar		07-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	9.98	V0	5.43	V0	0.10	V0
Calcium	0.16	0.21	V0	0.17	V0	0.01	V0
Magnesium	0.03	0.04	V0	0.03	V0	0.00	V1
Potassium	0.09	0.02	V0	0.02	V0	0.00	V1
Sodium	0.05	0.07	V0	0.08	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.14	V0	0.29	V0	0.08	V0
Sulphate	0.25	1.04	V0	0.83	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.21	V0	0.20	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**07-Mar**		**07-Mar**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	6.45	V0	0.10	V0
Calcium	0.16	0.12	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.00	V1
Potassium	0.09	0.02	V0	0.00	V1
Sodium	0.05	0.07	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.25	V0	0.08	V0
Sulphate	0.25	0.83	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.19	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**13-Mar**		**13-Mar**		**13-Mar**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	1.85	V0	4.36	V0	0.02	V1
Calcium	0.16	0.03	V0	0.04	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.01	V0	0.00	V1
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.02	V0	0.00	V1
Chloride	0.12	0.00	V1	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.04	V0	0.08	V0	0.02	V0
Sulphate	0.25	0.33	V0	1.29	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.13	V0	0.40	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**13-Mar**		**13-Mar**		**13-Mar**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.35	V0	2.64	V0	0.02	V1
Calcium	0.16	0.07	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V0	0.00	V1
Sodium	0.05	0.23	V0	0.01	V0	0.00	V1
Chloride	0.12	0.29	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.13	V0	0.02	V0	0.02	V0
Sulphate	0.25	0.77	V0	0.70	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.24	V0	0.22	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		13-Mar		13-Mar		13-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	1.54	V0	2.96	V0	0.02	V1
Calcium	0.16	0.02	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.01	V0	0.00	V1
Potassium	0.09	0.00	V0	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.02	V0	0.02	V0
Sulphate	0.25	0.30	V0	0.44	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.10	V0	0.14	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**			**Travel Blank**	
Station #		**AMS 16**				
Sample Date		**13-Mar**			**13-Mar**	
Particulate Size		**PM10**				
Total Air Volume (m³)		**24**			**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**		**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.64	V0		0.02	V1
Calcium	0.16	0.06	V0		0.01	V0
Magnesium	0.03	0.01	V0		0.00	V1
Potassium	0.09	0.00	V1		0.00	V1
Sodium	0.05	0.01	V0		0.00	V1
Chloride	0.12	0.00	V1		0.00	V1
Fluoride	0.15	0.01	V0		0.00	V1
Nitrate	0.20	0.05	V0		0.02	V0
Sulphate	0.25	0.35	V0		0.00	V1
Phosphate	0.26	0.00	V1		0.00	V1
Ammonium (as N)	0.02	0.11	V0		0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**19-Mar**		**19-Mar**		**19-Mar**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	4.83	V0	8.77	V0	0.05	V0
Calcium	0.16	0.20	V0	0.26	V0	0.01	V0
Magnesium	0.03	0.03	V0	0.04	V0	0.00	V0
Potassium	0.09	0.00	V0	0.03	V0	0.00	V1
Sodium	0.05	0.03	V0	0.33	V0	0.00	V1
Chloride	0.12	0.02	V0	0.33	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.08	V0	0.97	V0	0.00	V1
Sulphate	0.25	0.21	V0	0.69	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.07	V0	0.33	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**19-Mar**		**19-Mar**		**19-Mar**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	11.30	V0	2.57	V0	0.05	V0
Calcium	0.16	0.33	V0	0.07	V0	0.01	V0
Magnesium	0.03	0.05	V0	0.01	V0	0.00	V0
Potassium	0.09	0.05	V0	0.01	V0	0.00	V1
Sodium	0.05	1.10	V4	0.03	V0	0.00	V1
Chloride	0.12	1.45	V4	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.43	V0	0.14	V0	0.00	V1
Sulphate	0.25	1.11	V0	0.47	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.29	V0	0.19	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		19-Mar		19-Mar		19-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	3.37	V0	2.30	V0	0.05	V0
Calcium	0.16	0.17	V0	0.07	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V0
Potassium	0.09	0.00	V0	0.00	V0	0.00	V1
Sodium	0.05	0.07	V0	0.02	V0	0.00	V1
Chloride	0.12	0.08	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.06	V0	0.41	V0	0.00	V1
Sulphate	0.25	0.27	V0	0.11	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.07	V0	0.06	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Albian Muskeg River		Travel Blank	
Station #		AMS 16			
Sample Date		19-Mar		19-Mar	
Particulate Size		PM10			
Total Air Volume (m^3)		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	6.55	V0	0.05	V0
Calcium	0.16	0.22	V0	0.01	V0
Magnesium	0.03	0.04	V0	0.00	V0
Potassium	0.09	0.00	V0	0.00	V1
Sodium	0.05	0.04	V0	0.00	V1
Chloride	0.12	0.02	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.19	V0	0.00	V1
Sulphate	0.25	0.27	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.09	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**25-Mar**		**25-Mar**		**25-Mar**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	55.99	V0	19.70	V0	0.21	V0
Calcium	0.16	2.22	V0	0.89	V0	0.00	V1
Magnesium	0.03	0.09	V0	0.11	V0	0.00	V1
Potassium	0.09	0.06	V0	0.05	V0	0.00	V1
Sodium	0.05	0.37	V0	0.50	V0	0.00	V1
Chloride	0.12	0.45	V0	0.73	V4	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.67	V0	0.40	V0	0.00	V1
Sulphate	0.25	3.48	V0	1.74	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.75	V0	0.36	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		25-Mar		25-Mar		25-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	24.46	V0	6.64	V0	0.21	V0
Calcium	0.16	1.12	V0	0.22	V0	0.00	V1
Magnesium	0.03	0.11	V0	0.04	V0	0.00	V1
Potassium	0.09	0.07	V0	0.01	V0	0.00	V1
Sodium	0.05	1.16	V4	0.05	V0	0.00	V1
Chloride	0.12	1.67	V4	0.03	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.45	V0	0.07	V0	0.00	V1
Sulphate	0.25	1.73	V0	1.35	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.32	V0	0.32	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		25-Mar		25-Mar		25-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	26.49	V0	43.08	V0	0.21	V0
Calcium	0.16	0.99	V0	0.76	V0	0.00	V1
Magnesium	0.03	0.09	V0	0.11	V0	0.00	V1
Potassium	0.09	0.05	V0	0.05	V0	0.00	V1
Sodium	0.05	0.20	V0	0.18	V0	0.00	V1
Chloride	0.12	0.20	V0	0.08	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.34	V0	0.63	V0	0.00	V1
Sulphate	0.25	2.78	V0	3.14	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.61	V0	0.71	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**			**Travel Blank**	
Station #		**AMS 16**				
Sample Date		**25-Mar**			**25-Mar**	
Particulate Size		**PM10**				
Total Air Volume (m³)		**24**			**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**		**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	138.16	V4		0.21	V0
Calcium	0.16	5.72	V4		0.00	V1
Magnesium	0.03	0.16	V0		0.00	V1
Potassium	0.09	0.11	V0		0.00	V1
Sodium	0.05	0.63	V4		0.00	V1
Chloride	0.12	0.61	V4		0.00	V1
Fluoride	0.15	0.01	V0		0.00	V1
Nitrate	0.20	0.84	V0		0.00	V1
Sulphate	0.25	4.40	V4		0.00	V1
Phosphate	0.26	0.00	V1		0.00	V1
Ammonium (as N)	0.02	0.64	V0		0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**31-Mar**		**31-Mar**		**31-Mar**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	27.62	V0	20.81	V0	-0.06	V1
Calcium	0.16	1.36	V0	0.90	V0	0.00	V1
Magnesium	0.03	0.08	V0	0.09	V0	0.00	V1
Potassium	0.09	0.01	V0	0.03	V0	0.00	V1
Sodium	0.05	0.18	V0	0.41	V0	0.00	V1
Chloride	0.12	0.15	V0	0.60	V4	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.26	V0	0.21	V0	0.00	V1
Sulphate	0.25	1.89	V0	1.77	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.40	V0	0.41	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		31-Mar		31-Mar		31-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	16.58	V0	4.65	V0	-0.06	V1
Calcium	0.16	0.76	V0	0.22	V0	0.00	V1
Magnesium	0.03	0.09	V0	0.04	V0	0.00	V1
Potassium	0.09	0.02	V0	0.01	V0	0.00	V1
Sodium	0.05	0.29	V0	0.05	V0	0.00	V1
Chloride	0.12	0.38	V0	0.03	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.16	V0	0.08	V0	0.00	V1
Sulphate	0.25	1.50	V0	0.72	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.37	V0	0.19	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		31-Mar		31-Mar		31-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	19.13	V0	23.18	V0	-0.06	V1
Calcium	0.16	0.68	V0	0.29	V0	0.00	V1
Magnesium	0.03	0.07	V0	0.04	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V0	0.00	V1
Sodium	0.05	0.12	V0	0.04	V0	0.00	V1
Chloride	0.12	0.06	V0	0.05	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.19	V0	0.24	V0	0.00	V1
Sulphate	0.25	1.70	V0	1.90	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.41	V0	0.16	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**31-Mar**		**31-Mar**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	43.95	V0	-0.06	V1
Calcium	0.16	1.32	V0	0.00	V1
Magnesium	0.03	0.12	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.16	V0	0.00	V1
Chloride	0.12	0.12	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.27	V0	0.00	V1
Sulphate	0.25	1.57	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.33	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**06-Apr**		**06-Apr**		**06-Apr**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.3**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	4.15	V0	4.08	V0	0.06	V0
Calcium	0.16	0.04	V0	0.04	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.02	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.10	V0	0.08	V0	0.00	V1
Sulphate	0.25	1.05	V0	1.24	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.33	V0	0.37	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**06-Apr**		**06-Apr**		**06-Apr**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**23**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.41	V0	2.49	V0	0.06	V0
Calcium	0.16	0.05	V0	0.02	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.07	V0	0.01	V0	0.00	V1
Chloride	0.12	0.04	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.12	V0	0.02	V0	0.00	V1
Sulphate	0.25	1.15	V0	0.80	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.34	V0	0.22	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		06-Apr		06-Apr		06-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.2		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	3.68	V0	3.67	V0	0.06	V0
Calcium	0.16	0.09	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.02	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.10	V0	0.06	V0	0.00	V1
Sulphate	0.25	0.92	V0	1.07	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.28	V0	0.31	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**06-Apr**		**06-Apr**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	5.06	V0	0.06	V0
Calcium	0.16	0.05	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.15	V0	0.00	V1
Sulphate	0.25	0.96	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.27	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**12-Apr**		**12-Apr**		**12-Apr**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	22.17	V0	33.42	V0	0.05	V0
Calcium	0.16	1.08	V0	1.81	V0	0.00	V1
Magnesium	0.03	0.05	V0	0.09	V0	0.00	V1
Potassium	0.09	0.01	V0	0.02	V0	0.00	V1
Sodium	0.05	0.09	V0	0.24	V0	0.00	V1
Chloride	0.12	0.07	V0	0.26	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.17	V0	0.35	V0	0.00	V1
Sulphate	0.25	1.45	V0	1.85	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.35	V0	0.29	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**12-Apr**		**12-Apr**		**12-Apr**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	27.55	V0	7.48	V0	0.05	V0
Calcium	0.16	1.72	V0	0.22	V0	0.00	V1
Magnesium	0.03	0.07	V0	0.03	V0	0.00	V1
Potassium	0.09	0.04	V0	0.02	V0	0.00	V1
Sodium	0.05	0.25	V0	0.03	V0	0.00	V1
Chloride	0.12	0.25	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.29	V0	0.12	V0	0.00	V1
Sulphate	0.25	1.55	V0	1.03	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.31	V0	0.27	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		12-Apr		12-Apr		12-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	17.24	V0	13.41	V0	0.05	V0
Calcium	0.16	0.51	V0	0.43	V0	0.00	V1
Magnesium	0.03	0.05	V0	0.06	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V0	0.00	V1
Sodium	0.05	0.06	V0	0.04	V0	0.00	V1
Chloride	0.12	0.03	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.15	V0	0.11	V0	0.00	V1
Sulphate	0.25	1.43	V0	1.26	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.34	V0	0.27	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**12-Apr**		**12-Apr**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	18.68	V0	0.05	V0
Calcium	0.16	0.53	V0	0.00	V1
Magnesium	0.03	0.08	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.05	V0	0.00	V1
Chloride	0.12	0.03	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.16	V0	0.00	V1
Sulphate	0.25	1.35	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.32	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**18-Apr**		**18-Apr**		**18-Apr**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	42.45	V0	28.49	V0	0.01	V1
Calcium	0.16	2.30	V0	1.14	V0	0.01	V0
Magnesium	0.03	0.06	V0	0.07	V0	0.00	V1
Potassium	0.09	0.04	V0	0.03	V0	0.00	V1
Sodium	0.05	0.25	V0	0.22	V0	0.00	V1
Chloride	0.12	0.19	V0	0.25	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.30	V0	0.20	V0	0.00	V1
Sulphate	0.25	2.05	V0	0.75	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.45	V0	0.15	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		18-Apr		18-Apr		18-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	35.93	V0	14.29	V0	0.01	V1
Calcium	0.16	1.49	V0	0.36	V0	0.01	V0
Magnesium	0.03	0.07	V0	0.05	V0	0.00	V1
Potassium	0.09	0.03	V0	0.03	V0	0.00	V1
Sodium	0.05	0.21	V0	0.15	V0	0.00	V1
Chloride	0.12	0.22	V0	0.05	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.17	V0	0.18	V0	0.00	V1
Sulphate	0.25	0.77	V0	0.92	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.14	V0	0.18	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		18-Apr		18-Apr		18-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	27.90	V0	15.73	V0	0.01	V1
Calcium	0.16	0.85	V0	0.26	V0	0.01	V0
Magnesium	0.03	0.06	V0	0.04	V0	0.00	V1
Potassium	0.09	0.04	V0	0.02	V0	0.00	V1
Sodium	0.05	0.17	V0	0.09	V0	0.00	V1
Chloride	0.12	0.06	V0	0.03	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.20	V0	0.14	V0	0.00	V1
Sulphate	0.25	1.89	V0	0.88	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.41	V0	0.21	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**18-Apr**		**18-Apr**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	28.11	V0	0.01	V1
Calcium	0.16	0.98	V0	0.01	V0
Magnesium	0.03	0.04	V0	0.00	V1
Potassium	0.09	0.03	V0	0.00	V1
Sodium	0.05	0.12	V0	0.00	V1
Chloride	0.12	0.03	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.19	V0	0.00	V1
Sulphate	0.25	1.32	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.28	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**24-Apr**		**24-Apr**		**24-Apr**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	28.66	V0	13.09	V0	0.16	V0
Calcium	0.16	1.30	V0	0.56	V0	0.00	V1
Magnesium	0.03	0.05	V0	0.08	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.18	V0	0.07	V0	0.00	V1
Chloride	0.12	0.10	V0	0.07	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.19	V0	0.16	V0	0.00	V1
Sulphate	0.25	1.53	V0	0.88	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.34	V0	0.22	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		24-Apr		24-Apr		24-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	43.54	V0	43.54	V0	0.16	V0
Calcium	0.16	2.58	V0	0.21	V0	0.00	V1
Magnesium	0.03	0.08	V0	0.04	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.26	V0	0.03	V0	0.00	V1
Chloride	0.12	0.32	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.18	V0	0.14	V0	0.00	V1
Sulphate	0.25	0.97	V0	0.88	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.21	V0	0.24	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		24-Apr		24-Apr		24-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	25.91	V0	29.74	V0	0.16	V0
Calcium	0.16	1.04	V0	1.14	V0	0.00	V1
Magnesium	0.03	0.08	V0	0.08	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.16	V0	0.16	V0	0.00	V1
Chloride	0.12	0.05	V0	0.06	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.30	V0	0.20	V0	0.00	V1
Sulphate	0.25	1.82	V0	2.10	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.43	V0	0.48	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**24-Apr**		**24-Apr**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	17.76	V0	0.16	V0
Calcium	0.16	0.65	V0	0.00	V1
Magnesium	0.03	0.07	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.08	V0	0.00	V1
Chloride	0.12	0.04	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.15	V0	0.00	V1
Sulphate	0.25	0.96	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.22	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**30-Apr**		**30-Apr**		**30-Apr**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	32.72	V0	17.59	V0	0.07	V0
Calcium	0.16	1.79	V0	0.64	V0	0.00	V1
Magnesium	0.03	0.08	V0	0.11	V0	0.00	V1
Potassium	0.09	0.03	V0	0.03	V0	0.00	V1
Sodium	0.05	0.22	V0	0.08	V0	0.00	V1
Chloride	0.12	0.20	V0	0.09	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.24	V0	0.24	V0	0.00	V1
Sulphate	0.25	1.28	V0	0.81	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.25	V0	0.20	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**30-Apr**		**30-Apr**		**30-Apr**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	23.91	V0	9.15	V0	0.07	V0
Calcium	0.16	1.00	V0	0.26	V0	0.00	V1
Magnesium	0.03	0.09	V0	0.05	V0	0.00	V1
Potassium	0.09	0.01	V0	0.02	V0	0.00	V1
Sodium	0.05	0.13	V0	0.03	V0	0.00	V1
Chloride	0.12	0.14	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.19	V0	0.33	V0	0.00	V1
Sulphate	0.25	0.83	V0	0.64	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.18	V0	0.21	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		30-Apr		30-Apr		30-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	21.07	V0	11.69	V0	0.07	V0
Calcium	0.16	0.49	V0	0.25	V0	0.00	V1
Magnesium	0.03	0.07	V0	0.05	V0	0.00	V1
Potassium	0.09	0.02	V0	0.01	V0	0.00	V1
Sodium	0.05	0.15	V0	0.03	V0	0.00	V1
Chloride	0.12	0.06	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.18	V0	0.32	V0	0.00	V1
Sulphate	0.25	1.11	V0	0.66	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.24	V0	0.21	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**30-Apr**		**30-Apr**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	20.97	V0	0.07	V0
Calcium	0.16	0.84	V0	0.00	V1
Magnesium	0.03	0.09	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.13	V0	0.00	V1
Chloride	0.12	0.05	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.29	V0	0.00	V1
Sulphate	0.25	1.49	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.32	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**06-May**		**06-May**		**06-May**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**9.7**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	78.43	V0	114.03	V6	0.26	V0
Calcium	0.16	0.87	V0	0.61	V6	0.00	V1
Magnesium	0.03	0.07	V0	0.10	V6	0.00	V1
Potassium	0.09	0.20	V4	0.00	V6	0.00	V1
Sodium	0.05	0.20	V0	0.15	V6	0.00	V1
Chloride	0.12	0.19	V0	0.11	V6	0.00	V1
Fluoride	0.15	0.06	V4	0.07	V6	0.00	V1
Nitrate	0.20	1.37	V0	0.99	V6	0.00	V1
Sulphate	0.25	0.78	V0	2.02	V6	0.00	V1
Phosphate	0.26	0.03	V0	0.06	V6	0.00	V1
Ammonium (as N)	0.02	0.26	V0	0.70	V6	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Fort McKay South		Travel Blank	
Station #		AMS 7		AMS 13			
Sample Date		06-May		06-May		06-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		7		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	476.22	V6	71.94	V0	0.26	V0
Calcium	0.16	3.22	V6	0.16	V0	0.00	V1
Magnesium	0.03	0.41	V6	0.03	V0	0.00	V1
Potassium	0.09	0.76	V6	0.26	V4	0.00	V1
Sodium	0.05	0.56	V6	0.16	V0	0.00	V1
Chloride	0.12	1.71	V6	0.12	V0	0.00	V1
Fluoride	0.15	0.37	V6	0.06	V4	0.00	V1
Nitrate	0.20	4.70	V6	1.36	V0	0.00	V1
Sulphate	0.25	3.07	V6	0.58	V0	0.00	V1
Phosphate	0.26	0.57	V6	0.03	V0	0.00	V1
Ammonium (as N)	0.02	1.16	V6	0.28	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**CNRL Horizon**		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 15**		**AMS 16**			
Sample Date		**06-May**		**06-May**		**06-May**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	39.63	V0	98.82	V0	0.26	V0
Calcium	0.16	0.80	V0	0.94	V0	0.00	V1
Magnesium	0.03	0.10	V0	0.10	V0	0.00	V1
Potassium	0.09	0.04	V0	0.27	V4	0.00	V1
Sodium	0.05	0.09	V0	0.20	V0	0.00	V1
Chloride	0.12	0.04	V0	0.23	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.07	V4	0.00	V1
Nitrate	0.20	0.25	V0	1.62	V0	0.00	V1
Sulphate	0.25	0.66	V0	0.80	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.03	V0	0.00	V1
Ammonium (as N)	0.02	0.09	V0	0.28	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**12-May**		**12-May**		**12-May**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	9.96	V0	108.64	V4	0.12	V0
Calcium	0.16	0.28	V0	0.22	V0	0.01	V0
Magnesium	0.03	0.03	V0	0.04	V0	0.00	V1
Potassium	0.09	0.00	V1	0.10	V0	0.00	V1
Sodium	0.05	0.09	V0	0.14	V0	0.00	V1
Chloride	0.12	0.02	V0	0.46	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.08	V4	0.00	V1
Nitrate	0.20	0.06	V0	1.06	V0	0.00	V1
Sulphate	0.25	0.52	V0	0.93	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.04	V0	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.55	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Fort McKay South		Travel Blank	
Station #		AMS 7		AMS 13			
Sample Date		12-May		12-May		12-May	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		21.8		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	134.92	V4	7.09	V0	0.12	V0
Calcium	0.16	1.07	V0	0.11	V0	0.01	V0
Magnesium	0.03	0.13	V0	0.02	V0	0.00	V1
Potassium	0.09	0.09	V0	0.01	V0	0.00	V1
Sodium	0.05	0.25	V0	0.09	V0	0.00	V1
Chloride	0.12	0.23	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.10	V4	0.00	V1	0.00	V1
Nitrate	0.20	1.42	V0	0.03	V0	0.00	V1
Sulphate	0.25	1.35	V0	0.56	V0	0.00	V1
Phosphate	0.26	0.07	V4	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.35	V0	0.10	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**CNRL Horizon**		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 15**		**AMS 16**			
Sample Date		**12-May**		**12-May**		**12-May**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	30.64	V0	39.34	V0	0.12	V0
Calcium	0.16	0.36	V0	1.49	V0	0.01	V0
Magnesium	0.03	0.05	V0	0.06	V0	0.00	V1
Potassium	0.09	0.03	V0	0.01	V0	0.00	V1
Sodium	0.05	0.24	V0	0.24	V0	0.00	V1
Chloride	0.12	0.07	V0	0.13	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.07	V0	0.07	V0	0.00	V1
Sulphate	0.25	0.51	V0	0.67	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.09	V0	0.08	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**18-May**		**18-May**		**18-May**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**			
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	28.00	V0	141.23	V4	-9999	M1
Calcium	0.16	0.64	V0	1.47	V0	-9999	M1
Magnesium	0.03	0.06	V0	0.17	V0	-9999	M1
Potassium	0.09	0.04	V0	0.44	V4	-9999	M1
Sodium	0.05	0.06	V0	0.17	V0	-9999	M1
Chloride	0.12	0.04	V0	0.18	V0	-9999	M1
Fluoride	0.15	0.00	V1	0.09	V4	-9999	M1
Nitrate	0.20	0.09	V0	1.33	V0	-9999	M1
Sulphate	0.25	0.53	V0	1.11	V0	-9999	M1
Phosphate	0.26	0.03	V0	0.31	V4	-9999	M1
Ammonium (as N)	0.02	0.18	V0	0.35	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**18-May**		**18-May**		**18-May**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**23.8**		**24**			
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	152.87	V4	61.44	V0	-9999	M1
Calcium	0.16	2.76	V0	0.67	V0	-9999	M1
Magnesium	0.03	0.29	V4	0.09	V0	-9999	M1
Potassium	0.09	0.70	V4	0.15	V0	-9999	M1
Sodium	0.05	0.27	V0	0.12	V0	-9999	M1
Chloride	0.12	0.22	V0	0.07	V0	-9999	M1
Fluoride	0.15	0.07	V4	0.03	V4	-9999	M1
Nitrate	0.20	2.17	V4	0.69	V0	-9999	M1
Sulphate	0.25	1.33	V0	0.62	V0	-9999	M1
Phosphate	0.26	0.42	V4	0.12	V4	-9999	M1
Ammonium (as N)	0.02	0.29	V0	0.27	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Fort McKay South**		**CNRL Horizon**		**Travel Blank**	
Station #		**AMS 13**		**AMS 15**			
Sample Date		**18-May**		**18-May**		**18-May**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**			
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	24.54	V0	29.21	V0	-9999	M1
Calcium	0.16	0.35	V0	0.44	V0	-9999	M1
Magnesium	0.03	0.05	V0	0.06	V0	-9999	M1
Potassium	0.09	0.10	V0	0.11	V0	-9999	M1
Sodium	0.05	0.07	V0	0.03	V0	-9999	M1
Chloride	0.12	0.01	V0	0.01	V0	-9999	M1
Fluoride	0.15	0.00	V1	0.00	V1	-9999	M1
Nitrate	0.20	0.35	V0	0.36	V0	-9999	M1
Sulphate	0.25	0.49	V0	0.38	V0	-9999	M1
Phosphate	0.26	0.04	V0	0.03	V0	-9999	M1
Ammonium (as N)	0.02	0.16	V0	0.16	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**18-May**		**18-May**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**			
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	67.87	V0	-9999	M1
Calcium	0.16	1.49	V0	-9999	M1
Magnesium	0.03	0.22	V0	-9999	M1
Potassium	0.09	0.07	V0	-9999	M1
Sodium	0.05	1.17	V4	-9999	M1
Chloride	0.12	0.19	V0	-9999	M1
Fluoride	0.15	0.01	V0	-9999	M1
Nitrate	0.20	0.27	V0	-9999	M1
Sulphate	0.25	3.04	V0	-9999	M1
Phosphate	0.26	0.09	V4	-9999	M1
Ammonium (as N)	0.02	0.05	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**24-May**		**24-May**		**24-May**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	42.00	V0	24.01	V0	0.02	V1
Calcium	0.16	0.80	V0	0.31	V0	0.01	V0
Magnesium	0.03	0.06	V0	0.04	V0	0.00	V1
Potassium	0.09	0.14	V0	0.05	V0	0.00	V1
Sodium	0.05	0.24	V0	0.13	V0	0.00	V1
Chloride	0.12	0.08	V0	0.04	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.38	V0	0.21	V0	0.05	V0
Sulphate	0.25	1.09	V0	0.57	V0	0.00	V1
Phosphate	0.26	0.08	V4	0.05	V4	0.00	V1
Ammonium (as N)	0.02	0.23	V0	0.15	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**24-May**		**24-May**		**24-May**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	68.70	V0	72.30	V0	0.02	V1
Calcium	0.16	0.86	V0	0.49	V0	0.01	V0
Magnesium	0.03	0.10	V0	0.07	V0	0.00	V1
Potassium	0.09	0.13	V0	0.06	V0	0.00	V1
Sodium	0.05	0.18	V0	0.13	V0	0.00	V1
Chloride	0.12	0.10	V0	0.07	V0	0.00	V1
Fluoride	0.15	0.02	V0	0.04	V4	0.00	V1
Nitrate	0.20	0.82	V0	0.65	V0	0.05	V0
Sulphate	0.25	0.89	V0	0.84	V0	0.00	V1
Phosphate	0.26	0.15	V4	0.06	V4	0.00	V1
Ammonium (as N)	0.02	0.25	V0	0.20	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		24-May		24-May		24-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	40.05	V0	38.07	V0	0.02	V1
Calcium	0.16	0.42	V0	0.53	V0	0.01	V0
Magnesium	0.03	0.05	V0	0.07	V0	0.00	V1
Potassium	0.09	0.13	V0	0.15	V0	0.00	V1
Sodium	0.05	0.26	V0	0.20	V0	0.00	V1
Chloride	0.12	0.04	V0	0.04	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.28	V0	0.27	V0	0.05	V0
Sulphate	0.25	0.93	V0	0.89	V0	0.00	V1
Phosphate	0.26	0.09	V4	0.05	V4	0.00	V1
Ammonium (as N)	0.02	0.17	V0	0.15	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**24-May**		**24-May**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	48.03	V0	0.02	V1
Calcium	0.16	0.74	V0	0.01	V0
Magnesium	0.03	0.08	V0	0.00	V1
Potassium	0.09	0.17	V0	0.00	V1
Sodium	0.05	0.19	V0	0.00	V1
Chloride	0.12	0.05	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.43	V0	0.05	V0
Sulphate	0.25	0.89	V0	0.00	V1
Phosphate	0.26	0.07	V4	0.00	V1
Ammonium (as N)	0.02	0.16	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**30-May**		**30-May**		**30-May**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**			
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	6.04	V0	7.02	V0	-9999	M1
Calcium	0.16	0.03	V0	0.08	V0	-9999	M1
Magnesium	0.03	0.01	V0	0.01	V0	-9999	M1
Potassium	0.09	0.04	V0	0.02	V0	-9999	M1
Sodium	0.05	0.00	V0	0.01	V0	-9999	M1
Chloride	0.12	0.00	V1	0.00	V1	-9999	M1
Fluoride	0.15	0.00	V1	0.00	V1	-9999	M1
Nitrate	0.20	0.03	V0	0.06	V0	-9999	M1
Sulphate	0.25	0.25	V0	0.49	V0	-9999	M1
Phosphate	0.26	0.03	V0	0.00	V1	-9999	M1
Ammonium (as N)	0.02	0.06	V0	0.15	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**30-May**		**30-May**		**30-May**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**			
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	9.47	V0	8.84	V0	-9999	M1
Calcium	0.16	0.16	V0	0.10	V0	-9999	M1
Magnesium	0.03	0.02	V0	0.01	V0	-9999	M1
Potassium	0.09	0.04	V0	0.02	V0	-9999	M1
Sodium	0.05	0.01	V0	0.00	V0	-9999	M1
Chloride	0.12	0.01	V0	0.00	V1	-9999	M1
Fluoride	0.15	0.00	V1	0.00	V1	-9999	M1
Nitrate	0.20	0.08	V0	0.08	V0	-9999	M1
Sulphate	0.25	0.67	V0	0.83	V0	-9999	M1
Phosphate	0.26	0.03	V0	0.00	V1	-9999	M1
Ammonium (as N)	0.02	0.19	V0	0.25	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		30-May		30-May		30-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24			
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	6.65	V0	5.63	V0	-9999	M1
Calcium	0.16	0.04	V0	0.10	V0	-9999	M1
Magnesium	0.03	0.01	V0	0.02	V0	-9999	M1
Potassium	0.09	0.04	V0	0.03	V0	-9999	M1
Sodium	0.05	0.00	V0	0.00	V0	-9999	M1
Chloride	0.12	0.00	V1	0.00	V1	-9999	M1
Fluoride	0.15	0.00	V1	0.00	V1	-9999	M1
Nitrate	0.20	0.04	V0	0.05	V0	-9999	M1
Sulphate	0.25	0.26	V0	0.24	V0	-9999	M1
Phosphate	0.26	0.03	V0	0.00	V1	-9999	M1
Ammonium (as N)	0.02	0.07	V0	0.06	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**30-May**		**30-May**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**			
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	15.56	V0	-9999	M1
Calcium	0.16	0.43	V0	-9999	M1
Magnesium	0.03	0.06	V0	-9999	M1
Potassium	0.09	0.02	V0	-9999	M1
Sodium	0.05	0.02	V0	-9999	M1
Chloride	0.12	0.02	V0	-9999	M1
Fluoride	0.15	0.00	V1	-9999	M1
Nitrate	0.20	0.04	V0	-9999	M1
Sulphate	0.25	0.37	V0	-9999	M1
Phosphate	0.26	0.00	V1	-9999	M1
Ammonium (as N)	0.02	0.07	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**05-Jun**		**05-Jun**		**05-Jun**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	15.75	V0	8.26	V0	0.15	V0
Calcium	0.16	0.76	V0	0.27	V0	0.01	V0
Magnesium	0.03	0.06	V0	0.04	V0	0.00	V1
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.03	V0	0.02	V0	0.00	V1
Chloride	0.12	0.02	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.01	V4
Nitrate	0.20	0.04	V0	0.03	V0	0.01	V0
Sulphate	0.25	0.16	V0	0.14	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**05-Jun**		**05-Jun**		**05-Jun**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	13.05	V0	5.18	V0	0.15	V0
Calcium	0.16	0.46	V0	0.11	V0	0.01	V0
Magnesium	0.03	0.07	V0	0.02	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1	0.00	V1
Sodium	0.05	0.04	V0	0.01	V0	0.00	V1
Chloride	0.12	0.03	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.02	V0	0.01	V0	0.01	V4
Nitrate	0.20	0.07	V0	0.02	V0	0.01	V0
Sulphate	0.25	0.21	V0	0.11	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		05-Jun		05-Jun		05-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	8.02	V0	18.88	V0	0.15	V0
Calcium	0.16	0.25	V0	0.65	V0	0.01	V0
Magnesium	0.03	0.03	V0	0.09	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.04	V0	0.00	V1
Chloride	0.12	0.01	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.01	V4
Nitrate	0.20	0.15	V0	0.05	V0	0.01	V0
Sulphate	0.25	0.06	V0	0.23	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.01	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**05-Jun**		**05-Jun**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	36.33	V0	0.15	V0
Calcium	0.16	1.51	V0	0.01	V0
Magnesium	0.03	0.17	V0	0.00	V1
Potassium	0.09	0.00	V1	0.00	V1
Sodium	0.05	0.09	V0	0.00	V1
Chloride	0.12	0.08	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V4
Nitrate	0.20	0.08	V0	0.01	V0
Sulphate	0.25	0.28	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**11-Jun**		**11-Jun**		**11-Jun**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**23.7**		**19.6**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	20.44	V0	16.09	V0	0.29	V0
Calcium	0.16	1.39	V0	0.49	V0	0.01	V0
Magnesium	0.03	0.07	V0	0.09	V0	0.00	V0
Potassium	0.09	0.00	V0	0.00	V0	0.00	V1
Sodium	0.05	0.05	V0	0.02	V0	0.00	V1
Chloride	0.12	0.03	V0	0.03	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.22	V0	0.07	V0	0.00	V1
Sulphate	0.25	0.41	V0	0.27	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.06	V0	0.04	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**11-Jun**		**11-Jun**		**11-Jun**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**23.7**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	13.52	V0	7.01	V0	0.29	V0
Calcium	0.16	0.48	V0	0.13	V0	0.01	V0
Magnesium	0.03	0.08	V0	0.03	V0	0.00	V0
Potassium	0.09	0.00	V0	0.01	V0	0.00	V1
Sodium	0.05	0.04	V0	0.01	V0	0.00	V1
Chloride	0.12	0.05	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.05	V0	0.05	V0	0.00	V1
Sulphate	0.25	0.26	V0	0.25	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.05	V0	0.08	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		11-Jun		11-Jun		11-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		23.8		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	28.52	V0	29.10	V0	0.29	V0
Calcium	0.16	1.78	V0	1.39	V0	0.01	V0
Magnesium	0.03	0.06	V0	0.13	V0	0.00	V0
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.07	V0	0.06	V0	0.00	V1
Chloride	0.12	0.03	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.13	V0	0.19	V0	0.00	V1
Sulphate	0.25	0.54	V0	0.59	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.08	V0	0.08	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**11-Jun**		**11-Jun**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	14.66	V0	0.29	V0
Calcium	0.16	0.64	V0	0.01	V0
Magnesium	0.03	0.07	V0	0.00	V0
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.00	V1
Chloride	0.12	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.07	V0	0.00	V1
Sulphate	0.25	0.23	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Athabasca Valley**		**Travel Blank**	
Station #		**AMS 1**		**AMS 7**			
Sample Date		**17-Jun**		**17-Jun**		**17-Jun**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	4.84	V0	4.54	V0	0.33	V0
Calcium	0.16	0.11	V0	0.12	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.02	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.03	V0	0.19	V0	0.03	V0
Sulphate	0.25	0.09	V0	0.06	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Anzac		Fort McKay South		Travel Blank	
Station #		AMS 14		AMS 13			
Sample Date		17-Jun		17-Jun		17-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	2.86	V0	3.07	V0	0.33	V0
Calcium	0.16	0.03	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.00	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.03	V0	0.05	V0	0.03	V0
Sulphate	0.25	0.04	V0	0.05	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.01	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**CNRL Horizon**		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 15**		**AMS 16**			
Sample Date		**17-Jun**		**17-Jun**		**17-Jun**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	5.58	V0	8.52	V0	0.33	V0
Calcium	0.16	0.09	V0	0.30	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.04	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.03	V0	0.02	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.17	V0	0.15	V0	0.03	V0
Sulphate	0.25	0.06	V0	0.11	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.01	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**23-Jun**		**23-Jun**		**23-Jun**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	36.52	V0	28.11	V0	0.08	V0
Calcium	0.16	2.35	V0	0.78	V0	0.00	V1
Magnesium	0.03	0.06	V0	0.11	V0	0.00	V1
Potassium	0.09	0.00	V1	0.01	V0	0.00	V1
Sodium	0.05	0.05	V0	0.07	V0	0.00	V1
Chloride	0.12	0.01	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.02	V0	0.00	V1
Nitrate	0.20	0.23	V0	0.19	V0	0.00	V1
Sulphate	0.25	0.64	V0	2.53	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.10	V0	0.61	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		23-Jun		23-Jun		23-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	29.67	V0	12.20	V0	0.08	V0
Calcium	0.16	1.00	V0	0.20	V0	0.00	V1
Magnesium	0.03	0.13	V0	0.03	V0	0.00	V1
Potassium	0.09	0.01	V0	0.03	V0	0.00	V1
Sodium	0.05	0.08	V0	0.02	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.21	V0	0.06	V0	0.00	V1
Sulphate	0.25	1.97	V0	0.87	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.46	V0	0.27	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		23-Jun		23-Jun		23-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	28.00	V0	54.23	V0	0.08	V0
Calcium	0.16	0.96	V0	1.56	V0	0.00	V1
Magnesium	0.03	0.09	V0	0.19	V0	0.00	V1
Potassium	0.09	0.02	V0	0.01	V0	0.00	V1
Sodium	0.05	0.04	V0	0.14	V0	0.00	V1
Chloride	0.12	0.01	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.02	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.25	V0	0.31	V0	0.00	V1
Sulphate	0.25	0.49	V0	0.66	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.10	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**23-Jun**		**23-Jun**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	63.22	V0	0.08	V0
Calcium	0.16	2.34	V0	0.00	V1
Magnesium	0.03	0.17	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.09	V0	0.00	V1
Chloride	0.12	0.03	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.29	V0	0.00	V1
Sulphate	0.25	0.70	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.06	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**29-Jun**		**29-Jun**		**29-Jun**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**14.9**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	53.42	V0	13.00	V0	0.04	V0
Calcium	0.16	5.08	V0	0.42	V0	0.00	V1
Magnesium	0.03	0.09	V0	0.07	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.06	V0	0.02	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.18	V0	0.02	V0	0.00	V1
Sulphate	0.25	1.03	V0	0.19	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.18	V0	0.05	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Fort McKay South		Travel Blank	
Station #		AMS 7		AMS 13			
Sample Date		29-Jun		29-Jun		29-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	14.00	V0	24.84	V0	0.04	V0
Calcium	0.16	0.41	V0	1.32	V0	0.00	V1
Magnesium	0.03	0.07	V0	0.08	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.03	V0	0.03	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.03	V0	0.12	V0	0.00	V1
Sulphate	0.25	0.19	V0	0.72	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.05	V0	0.15	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**CNRL Horizon**		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 15**		**AMS 16**			
Sample Date		**29-Jun**		**29-Jun**		**29-Jun**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	37.03	V0	42.09	V0	0.04	V0
Calcium	0.16	1.48	V0	1.96	V0	0.00	V1
Magnesium	0.03	0.17	V0	0.14	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.05	V0	0.05	V0	0.00	V1
Chloride	0.12	0.01	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.16	V0	0.18	V0	0.00	V1
Sulphate	0.25	0.76	V0	0.40	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.13	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**05-Jul**		**05-Jul**		**05-Jul**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24.3**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	18.86	V0	21.79	V0	0.11	V0
Calcium	0.16	0.37	V0	0.22	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.04	V0	0.00	V1
Potassium	0.09	0.05	V0	0.06	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.07	V0	0.13	V0	0.01	V0
Sulphate	0.25	0.75	V0	1.52	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.23	V0	0.48	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		05-Jul		05-Jul		05-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	23.98	V0	11.45	V0	0.11	V0
Calcium	0.16	0.35	V0	0.05	V0	0.01	V0
Magnesium	0.03	0.05	V0	0.01	V0	0.00	V1
Potassium	0.09	0.07	V0	0.04	V0	0.00	V1
Sodium	0.05	0.04	V0	0.01	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.18	V0	0.05	V0	0.01	V0
Sulphate	0.25	1.65	V0	0.78	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.45	V0	0.27	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		05-Jul		05-Jul		05-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	19.55	V0	21.61	V0	0.11	V0
Calcium	0.16	0.16	V0	0.13	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.03	V0	0.00	V1
Potassium	0.09	0.07	V0	0.09	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.07	V0	0.09	V0	0.01	V0
Sulphate	0.25	0.71	V0	0.79	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.25	V0	0.27	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**05-Jul**		**05-Jul**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**23.7**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	29.70	V0	0.11	V0
Calcium	0.16	0.61	V0	0.01	V0
Magnesium	0.03	0.09	V0	0.00	V1
Potassium	0.09	0.07	V0	0.00	V1
Sodium	0.05	0.03	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.11	V0	0.01	V0
Sulphate	0.25	0.96	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.17	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**11-Jul**		**11-Jul**		**11-Jul**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	25.87	V0	32.91	V0	0.44	V0
Calcium	0.16	1.73	V0	1.16	V0	0.01	V0
Magnesium	0.03	0.06	V0	0.17	V0	0.00	V0
Potassium	0.09	0.00	V0	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.10	V0	0.00	V1
Chloride	0.12	0.01	V0	0.05	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.01	V0
Nitrate	0.20	0.06	V0	0.17	V0	0.01	V0
Sulphate	0.25	0.59	V0	1.58	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.38	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		11-Jul		11-Jul		11-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	28.00	V0	14.88	V0	0.44	V0
Calcium	0.16	1.03	V0	0.31	V0	0.01	V0
Magnesium	0.03	0.10	V0	0.03	V0	0.00	V0
Potassium	0.09	0.02	V0	0.02	V0	0.00	V1
Sodium	0.05	0.08	V0	0.02	V0	0.00	V1
Chloride	0.12	0.03	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.01	V0
Nitrate	0.20	0.15	V0	0.10	V0	0.01	V0
Sulphate	0.25	1.77	V0	0.99	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.40	V0	0.28	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		11-Jul		11-Jul		11-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	14.11	V0	29.11	V0	0.44	V0
Calcium	0.16	0.48	V0	1.37	V0	0.01	V0
Magnesium	0.03	0.05	V0	0.19	V0	0.00	V0
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.07	V0	0.00	V1
Chloride	0.12	0.01	V0	0.04	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.01	V0
Nitrate	0.20	0.06	V0	0.08	V0	0.01	V0
Sulphate	0.25	0.54	V0	0.64	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.14	V0	0.11	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**11-Jul**		**11-Jul**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	52.07	V0	0.44	V0
Calcium	0.16	1.75	V0	0.01	V0
Magnesium	0.03	0.17	V0	0.00	V0
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.10	V0	0.00	V1
Chloride	0.12	0.06	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0
Nitrate	0.20	0.08	V0	0.01	V0
Sulphate	0.25	0.65	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.07	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**17-Jul**		**17-Jul**		**17-Jul**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	31.63	V0	35.63	V0	0.13	V0
Calcium	0.16	0.85	V0	0.74	V0	0.01	V0
Magnesium	0.03	0.05	V0	0.10	V0	0.00	V1
Potassium	0.09	0.03	V0	0.04	V0	0.00	V1
Sodium	0.05	0.02	V0	0.09	V0	0.00	V1
Chloride	0.12	0.01	V0	0.07	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.08	V0	0.18	V0	0.00	V1
Sulphate	0.25	0.37	V0	1.58	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.43	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		17-Jul		17-Jul		17-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	33.44	V0	17.13	V0	0.13	V0
Calcium	0.16	0.73	V0	0.23	V0	0.01	V0
Magnesium	0.03	0.07	V0	0.03	V0	0.00	V1
Potassium	0.09	0.04	V0	0.03	V0	0.00	V1
Sodium	0.05	0.07	V0	0.03	V0	0.00	V1
Chloride	0.12	0.03	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.19	V0	0.11	V0	0.00	V1
Sulphate	0.25	1.07	V0	0.27	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.28	V0	0.10	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		17-Jul		17-Jul		17-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	28.47	V0	68.69	V0	0.13	V0
Calcium	0.16	0.44	V0	0.99	V0	0.01	V0
Magnesium	0.03	0.05	V0	0.12	V0	0.00	V1
Potassium	0.09	0.07	V0	0.04	V0	0.00	V1
Sodium	0.05	0.03	V0	0.03	V0	0.00	V1
Chloride	0.12	0.01	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.13	V0	0.11	V0	0.00	V1
Sulphate	0.25	0.29	V0	0.41	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.10	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Albian Muskeg River		Travel Blank	
Station #		AMS 16			
Sample Date		17-Jul		17-Jul	
Particulate Size		PM10			
Total Air Volume (m^3)		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	38.92	V0	0.13	V0
Calcium	0.16	1.72	V0	0.01	V0
Magnesium	0.03	0.16	V0	0.00	V1
Potassium	0.09	0.05	V0	0.00	V1
Sodium	0.05	0.13	V0	0.00	V1
Chloride	0.12	0.09	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.20	V0	0.00	V1
Sulphate	0.25	0.61	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.06	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**23-Jul**		**23-Jul**		**23-Jul**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	14.20	V0	9.31	V0	0.14	V0
Calcium	0.16	0.77	V0	0.16	V0	0.01	V0
Magnesium	0.03	0.03	V0	0.03	V0	0.00	V1
Potassium	0.09	0.02	V0	0.02	V0	0.00	V1
Sodium	0.05	0.02	V0	0.02	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.09	V0	0.04	V0	0.00	V1
Sulphate	0.25	0.23	V0	0.54	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.16	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		23-Jul		23-Jul		23-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	11.10	V0	6.90	V0	0.14	V0
Calcium	0.16	0.21	V0	0.08	V0	0.01	V0
Magnesium	0.03	0.04	V0	0.02	V0	0.00	V1
Potassium	0.09	0.02	V0	0.03	V0	0.00	V1
Sodium	0.05	0.03	V0	0.01	V0	0.00	V1
Chloride	0.12	0.03	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.06	V0	0.19	V0	0.00	V1
Sulphate	0.25	0.46	V0	0.27	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.10	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		23-Jul		23-Jul		23-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	11.70	V0	12.42	V0	0.14	V0
Calcium	0.16	0.39	V0	0.33	V0	0.01	V0
Magnesium	0.03	0.03	V0	0.05	V0	0.00	V1
Potassium	0.09	0.02	V0	0.03	V0	0.00	V1
Sodium	0.05	0.02	V0	0.03	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.10	V0	0.27	V0	0.00	V1
Sulphate	0.25	0.20	V0	0.20	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.05	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**23-Jul**		**23-Jul**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	23.06	V0	0.14	V0
Calcium	0.16	0.71	V0	0.01	V0
Magnesium	0.03	0.07	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.05	V0	0.00	V1
Chloride	0.12	0.03	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.14	V0	0.00	V1
Sulphate	0.25	0.34	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**29-Jul**		**29-Jul**		**29-Jul**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	21.90	V0	10.19	V0	0.12	V0
Calcium	0.16	1.11	V0	0.18	V0	0.01	V0
Magnesium	0.03	0.04	V0	0.04	V0	0.00	V1
Potassium	0.09	0.00	V1	0.02	V0	0.00	V1
Sodium	0.05	0.07	V0	0.01	V0	0.00	V1
Chloride	0.12	0.05	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.07	V0	0.03	V0	0.00	V1
Sulphate	0.25	0.68	V0	0.23	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.15	V0	0.07	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**29-Jul**		**29-Jul**		**29-Jul**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	10.15	V0	7.62	V0	0.12	V0
Calcium	0.16	0.28	V0	0.12	V0	0.01	V0
Magnesium	0.03	0.04	V0	0.02	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.01	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.05	V0	0.02	V0	0.00	V1
Sulphate	0.25	0.23	V0	0.22	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.06	V0	0.08	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		29-Jul		29-Jul		29-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	21.49	V0	19.54	V0	0.12	V0
Calcium	0.16	0.38	V0	0.68	V0	0.01	V0
Magnesium	0.03	0.05	V0	0.07	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.08	V0	0.03	V0	0.00	V1
Chloride	0.12	0.03	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.07	V0	0.06	V0	0.00	V1
Sulphate	0.25	0.62	V0	0.77	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.13	V0	0.16	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**29-Jul**		**29-Jul**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	36.77	V0	0.12	V0
Calcium	0.16	1.75	V0	0.01	V0
Magnesium	0.03	0.07	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.08	V0	0.00	V1
Chloride	0.12	0.04	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.12	V0	0.00	V1
Sulphate	0.25	1.06	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.16	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**04-Aug**		**04-Aug**		**04-Aug**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	24.26	V0	33.91	V0	0.04	V0
Calcium	0.16	2.48	V0	1.42	V0	0.31	V4
Magnesium	0.03	0.07	V0	0.14	V0	0.00	V0
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.03	V0	0.12	V0	0.00	V0
Chloride	0.12	0.01	V0	0.08	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.21	V0	0.45	V0	0.06	V0
Sulphate	0.25	0.55	V0	1.12	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.09	V0	0.23	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**04-Aug**		**04-Aug**		**04-Aug**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	29.80	V0	15.37	V0	0.04	V0
Calcium	0.16	1.59	V0	0.77	V0	0.31	V4
Magnesium	0.03	0.12	V0	0.04	V0	0.00	V0
Potassium	0.09	0.02	V0	0.02	V0	0.00	V1
Sodium	0.05	0.11	V0	0.03	V0	0.00	V0
Chloride	0.12	0.10	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.36	V0	0.21	V0	0.06	V0
Sulphate	0.25	1.38	V0	0.51	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.28	V0	0.11	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		04-Aug		04-Aug		04-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	11.42	V0	32.36	V0	0.04	V0
Calcium	0.16	0.64	V0	1.15	V0	0.31	V4
Magnesium	0.03	0.03	V0	0.12	V0	0.00	V0
Potassium	0.09	0.01	V0	0.02	V0	0.00	V1
Sodium	0.05	0.02	V0	0.09	V0	0.00	V0
Chloride	0.12	0.01	V0	0.03	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.07	V0	0.13	V0	0.06	V0
Sulphate	0.25	0.51	V0	0.41	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.12	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**04-Aug**		**04-Aug**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	31.47	V0	0.04	V0
Calcium	0.16	1.57	V0	0.31	V4
Magnesium	0.03	0.11	V0	0.00	V0
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.06	V0	0.00	V0
Chloride	0.12	0.03	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.16	V0	0.06	V0
Sulphate	0.25	0.37	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**10-Aug**		**10-Aug**		**10-Aug**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	28.99	V0	19.74	V0	0.24	V0
Calcium	0.16	2.81	V0	0.42	V0	0.00	V1
Magnesium	0.03	0.06	V0	0.08	V0	0.00	V1
Potassium	0.09	0.00	V1	0.01	V0	0.00	V1
Sodium	0.05	0.07	V0	0.02	V0	0.00	V1
Chloride	0.12	0.06	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.14	V0	0.07	V0	0.00	V1
Sulphate	0.25	1.69	V0	0.46	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.30	V0	0.11	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**10-Aug**		**10-Aug**		**10-Aug**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**16.6**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	28.28	V0	8.84	V0	0.24	V0
Calcium	0.16	0.56	V0	0.15	V0	0.00	V1
Magnesium	0.03	0.11	V0	0.03	V0	0.00	V1
Potassium	0.09	0.01	V0	0.02	V0	0.00	V1
Sodium	0.05	0.03	V0	0.01	V0	0.00	V1
Chloride	0.12	0.03	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.08	V0	0.04	V0	0.00	V1
Sulphate	0.25	0.52	V0	0.35	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.09	V0	0.10	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		10-Aug		10-Aug		10-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	72.33	V0	13.71	V0	0.24	V0
Calcium	0.16	0.97	V0	0.84	V0	0.00	V1
Magnesium	0.03	0.08	V0	0.11	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.05	V0	0.08	V0	0.00	V1
Chloride	0.12	0.02	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.11	V0	0.15	V0	0.00	V1
Sulphate	0.25	1.34	V0	1.87	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.29	V0	0.38	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**10-Aug**		**10-Aug**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	77.51	V0	0.24	V0
Calcium	0.16	0.75	V0	0.00	V1
Magnesium	0.03	0.07	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.04	V0	0.00	V1
Chloride	0.12	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.09	V0	0.00	V1
Sulphate	0.25	1.12	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.21	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**16-Aug**		**16-Aug**		**16-Aug**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	34.30	V0	14.91	V0	0.11	V0
Calcium	0.16	1.30	V0	0.81	V0	0.02	V0
Magnesium	0.03	0.07	V0	0.12	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.05	V0	0.02	V0	0.00	V1
Chloride	0.12	0.04	V0	0.05	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.16	V0	0.12	V0	0.31	V0
Sulphate	0.25	0.31	V0	0.27	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		16-Aug		16-Aug		16-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	12.05	V0	8.23	V0	0.11	V0
Calcium	0.16	0.65	V0	0.18	V0	0.02	V0
Magnesium	0.03	0.11	V0	0.03	V0	0.00	V1
Potassium	0.09	0.01	V0	0.02	V0	0.00	V1
Sodium	0.05	0.03	V0	0.01	V0	0.00	V1
Chloride	0.12	0.05	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.04	V0	0.33	V0	0.31	V0
Sulphate	0.25	0.23	V0	0.11	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.06	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		16-Aug		16-Aug		16-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	24.52	V0	33.66	V0	0.11	V0
Calcium	0.16	0.36	V0	0.21	V0	0.02	V0
Magnesium	0.03	0.11	V0	0.04	V0	0.00	V1
Potassium	0.09	0.02	V0	0.02	V0	0.00	V1
Sodium	0.05	0.29	V0	0.06	V0	0.00	V1
Chloride	0.12	0.10	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.07	V0	0.28	V0	0.31	V0
Sulphate	0.25	0.62	V0	0.15	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.05	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**16-Aug**		**16-Aug**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	19.55	V0	0.11	V0
Calcium	0.16	1.78	V0	0.02	V0
Magnesium	0.03	0.28	V4	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.38	V0	0.00	V1
Chloride	0.12	0.13	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.30	V0	0.31	V0
Sulphate	0.25	1.92	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.07	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		22-Aug		22-Aug		22-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		0		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	22.67	V0	-9999	M2	0.03	V1
Calcium	0.16	1.99	V0	-9999	M2	0.00	V1
Magnesium	0.03	0.04	V0	-9999	M2	0.00	V1
Potassium	0.09	0.00	V1	-9999	M2	0.00	V1
Sodium	0.05	0.03	V0	-9999	M2	0.00	V1
Chloride	0.12	0.01	V0	-9999	M2	0.00	V1
Fluoride	0.15	0.01	V0	-9999	M2	0.00	V1
Nitrate	0.20	0.04	V0	-9999	M2	0.00	V1
Sulphate	0.25	0.50	V0	-9999	M2	0.00	V1
Phosphate	0.26	0.00	V1	-9999	M2	0.00	V1
Ammonium (as N)	0.02	0.06	V0	-9999	M2	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		22-Aug		22-Aug		22-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	15.46	V0	6.61	V0	0.03	V1
Calcium	0.16	0.57	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.05	V0	0.01	V0	0.00	V1
Potassium	0.09	0.02	V0	0.01	V0	0.00	V1
Sodium	0.05	0.03	V0	0.00	V1	0.00	V1
Chloride	0.12	0.02	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.14	V0	0.03	V0	0.00	V1
Sulphate	0.25	0.99	V0	0.44	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.24	V0	0.16	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		22-Aug		22-Aug		22-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	15.17	V0	12.28	V0	0.03	V1
Calcium	0.16	0.48	V0	0.38	V0	0.00	V1
Magnesium	0.03	0.04	V0	0.05	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.03	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.05	V0	0.04	V0	0.00	V1
Sulphate	0.25	0.41	V0	0.37	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.08	V0	0.07	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**22-Aug**		**22-Aug**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	17.16	V0	0.03	V1
Calcium	0.16	0.59	V0	0.00	V1
Magnesium	0.03	0.08	V0	0.00	V1
Potassium	0.09	0.00	V0	0.00	V1
Sodium	0.05	0.04	V0	0.00	V1
Chloride	0.12	0.03	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.04	V0	0.00	V1
Sulphate	0.25	0.44	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**28-Aug**		**28-Aug**		**28-Aug**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**48**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	3.22	V0	-9999	M2	0.05	V0
Calcium	0.16	0.02	V0	-9999	M2	0.00	V1
Magnesium	0.03	0.00	V0	-9999	M2	0.00	V1
Potassium	0.09	0.00	V1	-9999	M2	0.00	V1
Sodium	0.05	0.01	V0	-9999	M2	0.00	V1
Chloride	0.12	0.01	V0	-9999	M2	0.00	V1
Fluoride	0.15	0.01	V0	-9999	M2	0.00	V1
Nitrate	0.20	0.01	V0	-9999	M2	0.00	V1
Sulphate	0.25	0.03	V0	-9999	M2	0.00	V1
Phosphate	0.26	0.00	V1	-9999	M2	0.00	V1
Ammonium (as N)	0.02	0.01	V0	-9999	M2	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**28-Aug**		**28-Aug**		**28-Aug**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.29	V0	2.35	V0	0.05	V0
Calcium	0.16	0.03	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.00	V0	0.00	V1	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.00	V1	0.00	V1	0.00	V1
Sulphate	0.25	0.18	V0	0.04	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		28-Aug		28-Aug		28-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	3.10	V0	20.67	V0	0.05	V0
Calcium	0.16	0.02	V0	0.17	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.03	V0	0.00	V1
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.00	V0	0.03	V0	0.00	V1
Chloride	0.12	0.00	V1	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.00	V1	0.00	V1	0.00	V1
Sulphate	0.25	0.03	V0	0.37	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.01	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**28-Aug**		**28-Aug**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	14.46	V0	0.05	V0
Calcium	0.16	0.45	V0	0.00	V1
Magnesium	0.03	0.05	V0	0.00	V1
Potassium	0.09	0.00	V1	0.00	V1
Sodium	0.05	0.02	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.01	V0	0.00	V1
Sulphate	0.25	0.10	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.00	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**03-Sep**		**03-Sep**		**03-Sep**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	3.16	V0	2.00	V0	0.12	V0
Calcium	0.16	0.01	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.00	V1	0.01	V0	0.00	V1
Sodium	0.05	0.00	V0	0.00	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.01	V0	0.02	V0	0.00	V1
Sulphate	0.25	0.04	V0	0.02	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.00	V0	0.00	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**03-Sep**		**03-Sep**		**03-Sep**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	2.67	V0	1.65	V0	0.12	V0
Calcium	0.16	0.03	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.00	V0	0.00	V1	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.00	V1	0.01	V0	0.00	V1
Sulphate	0.25	0.06	V0	0.07	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.01	V0	0.01	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		03-Sep		03-Sep		03-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	3.02	V0	3.09	V0	0.12	V0
Calcium	0.16	0.01	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.00	V1	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.01	V0	0.01	V0	0.00	V1
Sulphate	0.25	0.03	V0	0.04	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.00	V0	0.00	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**03-Sep**		**03-Sep**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.64	V0	0.12	V0
Calcium	0.16	0.08	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.01	V0	0.00	V1
Sulphate	0.25	0.07	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.00	V0	0.00	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**09-Sep**		**09-Sep**		**09-Sep**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	11.57	V0	7.15	V0	0.08	V0
Calcium	0.16	0.46	V0	0.18	V0	0.01	V0
Magnesium	0.03	0.04	V0	0.04	V0	0.00	V1
Potassium	0.09	0.00	V1	0.01	V0	0.00	V1
Sodium	0.05	0.04	V0	0.01	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.17	V0	0.04	V0	0.02	V0
Sulphate	0.25	0.25	V0	0.66	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.17	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		09-Sep		09-Sep		09-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	10.97	V0	3.79	V0	0.08	V0
Calcium	0.16	0.37	V0	0.06	V0	0.01	V0
Magnesium	0.03	0.06	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.05	V0	0.03	V0	0.02	V0
Sulphate	0.25	0.78	V0	0.24	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.18	V0	0.07	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		09-Sep		09-Sep		09-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	10.43	V0	7.63	V0	0.08	V0
Calcium	0.16	0.46	V0	0.20	V0	0.01	V0
Magnesium	0.03	0.04	V0	0.02	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1	0.00	V1
Sodium	0.05	0.03	V0	0.02	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.06	V0	0.02	V0	0.02	V0
Sulphate	0.25	0.23	V0	0.16	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Albian Muskeg River			Travel Blank	
Station #		AMS 16				
Sample Date		09-Sep			09-Sep	
Particulate Size		PM10				
Total Air Volume (m³)		24			24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag		Results (µg/m³)	QC Flag
Particulate Matter	1.00	9.92	V0		0.08	V0
Calcium	0.16	0.38	V0		0.01	V0
Magnesium	0.03	0.04	V0		0.00	V1
Potassium	0.09	0.00	V1		0.00	V1
Sodium	0.05	0.02	V0		0.00	V1
Chloride	0.12	0.01	V0		0.00	V1
Fluoride	0.15	0.00	V1		0.00	V1
Nitrate	0.20	0.03	V0		0.02	V0
Sulphate	0.25	0.26	V0		0.00	V1
Phosphate	0.26	0.00	V1		0.00	V1
Ammonium (as N)	0.02	0.04	V0		0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**15-Sep**		**15-Sep**		**15-Sep**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	35.28	V0	15.10	V0	0.15	V0
Calcium	0.16	3.66	V0	0.46	V0	0.00	V1
Magnesium	0.03	0.07	V0	0.07	V0	0.00	V1
Potassium	0.09	0.00	V0	0.01	V0	0.00	V1
Sodium	0.05	0.07	V0	0.03	V0	0.00	V1
Chloride	0.12	0.04	V0	0.03	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.14	V0	0.10	V0	0.00	V1
Sulphate	0.25	0.68	V0	0.36	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.08	V0	0.08	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**15-Sep**		**15-Sep**		**15-Sep**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**23.6**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	18.65	V0	7.94	V0	0.15	V0
Calcium	0.16	0.62	V0	0.15	V0	0.00	V1
Magnesium	0.03	0.10	V0	0.03	V0	0.00	V1
Potassium	0.09	0.01	V0	0.02	V0	0.00	V1
Sodium	0.05	0.02	V0	0.01	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.09	V0	0.07	V0	0.00	V1
Sulphate	0.25	0.52	V0	0.31	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.10	V0	0.09	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		15-Sep		15-Sep		15-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	17.63	V0	34.47	V0	0.15	V0
Calcium	0.16	0.50	V0	1.34	V0	0.00	V1
Magnesium	0.03	0.04	V0	0.12	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.06	V0	0.07	V0	0.00	V1
Chloride	0.12	0.01	V0	0.04	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.06	V0	0.26	V0	0.00	V1
Sulphate	0.25	0.65	V0	0.60	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.12	V0	0.07	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**15-Sep**		**15-Sep**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	14.93	V0	0.15	V0
Calcium	0.16	0.56	V0	0.00	V1
Magnesium	0.03	0.07	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.00	V1
Chloride	0.12	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.06	V0	0.00	V1
Sulphate	0.25	0.23	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**21-Sep**		**21-Sep**		**21-Sep**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**17.2**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	17.45	V0	10.79	V6	0.46	V0
Calcium	0.16	0.80	V0	0.30	V6	0.00	V1
Magnesium	0.03	0.04	V0	0.05	V6	0.00	V1
Potassium	0.09	0.01	V0	0.01	V6	0.00	V1
Sodium	0.05	0.04	V0	0.01	V6	0.00	V1
Chloride	0.12	0.02	V0	0.01	V6	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V6	0.00	V1
Nitrate	0.20	0.14	V0	0.06	V6	0.00	V1
Sulphate	0.25	0.42	V0	0.57	V6	0.01	V0
Phosphate	0.26	0.00	V1	0.00	V6	0.00	V1
Ammonium (as N)	0.02	0.09	V0	0.15	V6	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		21-Sep		21-Sep		21-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	30.14	V0	7.54	V0	0.46	V0
Calcium	0.16	0.99	V0	0.15	V0	0.00	V1
Magnesium	0.03	0.08	V0	0.03	V0	0.00	V1
Potassium	0.09	0.02	V0	0.02	V0	0.00	V1
Sodium	0.05	0.04	V0	0.01	V0	0.00	V1
Chloride	0.12	0.06	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.08	V0	0.06	V0	0.00	V1
Sulphate	0.25	0.48	V0	0.42	V0	0.01	V0
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.08	V0	0.12	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		21-Sep		21-Sep		21-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	29.86	V0	8.19	V0	0.46	V0
Calcium	0.16	0.33	V0	0.21	V0	0.00	V1
Magnesium	0.03	0.08	V0	0.03	V0	0.00	V1
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.10	V0	0.01	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.12	V0	0.06	V0	0.00	V1
Sulphate	0.25	0.47	V0	0.27	V0	0.01	V0
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.09	V0	0.07	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**			**Travel Blank**	
Station #		**AMS 16**				
Sample Date		**21-Sep**			**21-Sep**	
Particulate Size		**PM10**				
Total Air Volume (m³)		**24**			**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**		**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	41.08	V0		0.46	V0
Calcium	0.16	1.66	V0		0.00	V1
Magnesium	0.03	0.09	V0		0.00	V1
Potassium	0.09	0.02	V0		0.00	V1
Sodium	0.05	0.08	V0		0.00	V1
Chloride	0.12	0.04	V0		0.00	V1
Fluoride	0.15	0.00	V1		0.00	V1
Nitrate	0.20	0.24	V0		0.00	V1
Sulphate	0.25	0.88	V0		0.01	V0
Phosphate	0.26	0.00	V1		0.00	V1
Ammonium (as N)	0.02	0.12	V0		0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**27-Sep**		**27-Sep**		**27-Sep**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	10.73	V0	9.11	V0	0.28	V0
Calcium	0.16	0.47	V0	0.30	V0	0.01	V0
Magnesium	0.03	0.04	V0	0.05	V0	0.00	V0
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.03	V0	0.02	V0	0.00	V1
Chloride	0.12	0.01	V0	0.04	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.08	V4	0.03	V4	-9999	M2
Sulphate	0.25	0.52	V0	0.20	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.12	V0	0.04	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**27-Sep**		**27-Sep**		**27-Sep**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	6.69	V0	6.01	V0	0.28	V0
Calcium	0.16	0.14	V0	0.15	V0	0.01	V0
Magnesium	0.03	0.03	V0	0.03	V0	0.00	V0
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.03	V4	0.06	V4	-9999	M2
Sulphate	0.25	0.19	V0	0.17	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.05	V0	0.05	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		27-Sep		27-Sep		27-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	9.26	V0	18.65	V0	0.28	V0
Calcium	0.16	0.28	V0	0.24	V0	0.01	V0
Magnesium	0.03	0.03	V0	0.04	V0	0.00	V0
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.02	V0	0.07	V0	0.00	V1
Chloride	0.12	0.01	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.05	V4	0.06	V4	-9999	M2
Sulphate	0.25	0.68	V0	0.46	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.17	V0	0.08	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**27-Sep**		**27-Sep**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	18.37	V0	0.28	V0
Calcium	0.16	0.59	V0	0.01	V0
Magnesium	0.03	0.06	V0	0.00	V0
Potassium	0.09	0.01	V0	0.00	V1
Sodium	0.05	0.14	V0	0.00	V1
Chloride	0.12	0.03	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.05	V4	-9999	M2
Sulphate	0.25	0.62	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Patricia McInnes		Athabasca Valley		Travel Blank	
Station #		AMS 6		AMS 7			
Sample Date		03-Oct		03-Oct		03-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		-9999		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	-9999	M1	14.00	V0	0.37	V0
Calcium	0.16	-9999	M1	0.58	V0	0.00	V1
Magnesium	0.03	-9999	M1	0.09	V0	0.00	V1
Potassium	0.09	-9999	M1	0.01	V0	0.00	V1
Sodium	0.05	-9999	M1	0.02	V0	0.00	V1
Chloride	0.12	-9999	M1	0.02	V0	0.00	V1
Fluoride	0.15	-9999	M1	0.01	V0	0.00	V1
Nitrate	0.20	-9999	M1	0.09	V0	0.00	V1
Sulphate	0.25	-9999	M1	0.53	V0	0.00	V1
Phosphate	0.26	-9999	M1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	-9999	M1	0.11	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Anzac		Fort McKay South		Travel Blank	
Station #		AMS 14		AMS 13			
Sample Date		03-Oct		03-Oct		03-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	4.38	V0	2.71	V0	0.37	V0
Calcium	0.16	0.05	V0	0.12	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.02	V0	0.00	V1
Potassium	0.09	0.02	V0	0.00	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.02	V0	0.01	V0	0.00	V1
Sulphate	0.25	0.29	V0	0.18	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.10	V0	0.06	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		CNRL Horizon		Albian Muskeg River		Travel Blank	
Station #		AMS 15		AMS 16			
Sample Date		03-Oct		03-Oct		03-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	2.45	V0	7.48	V0	0.37	V0
Calcium	0.16	0.05	V0	0.38	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.05	V0	0.00	V1
Potassium	0.09	0.00	V1	0.01	V0	0.00	V1
Sodium	0.05	0.00	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.01	V0	0.02	V0	0.00	V1
Sulphate	0.25	0.18	V0	0.24	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.05	V0	0.05	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort			
Station Name		**McKay**		**Travel Blank**	
Station #		**AMS 1**			
Sample Date		**05-Oct**		**05-Oct**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.72	V6	0.37	V0
Calcium	0.16	0.35	V6	0.00	V1
Magnesium	0.03	0.02	V6	0.00	V1
Potassium	0.09	0.00	V6	0.00	V1
Sodium	0.05	0.01	V6	0.00	V1
Chloride	0.12	0.00	V6	0.00	V1
Fluoride	0.15	0.00	V6	0.00	V1
Nitrate	0.20	0.00	V6	0.00	V1
Sulphate	0.25	0.21	V6	0.00	V1
Phosphate	0.26	0.00	V6	0.00	V1
Ammonium (as N)	0.02	0.04	V6	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**09-Oct**		**09-Oct**		**09-Oct**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	1.34	V0	1.76	V0	0.37	V0
Calcium	0.16	0.05	V0	0.02	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.00	V0	0.00	V0	0.00	V1
Sodium	0.05	0.02	V0	0.00	V0	0.00	V1
Chloride	0.12	0.02	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.09	V0	0.04	V0	0.00	V1
Sulphate	0.25	0.04	V0	0.12	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.05	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		09-Oct		09-Oct		09-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	1.91	V0	0.61	V0	0.37	V0
Calcium	0.16	0.05	V0	0.02	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1	0.00	V1
Sodium	0.05	0.01	V0	0.00	V1	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.06	V0	0.04	V0	0.00	V1
Sulphate	0.25	0.09	V0	0.03	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		09-Oct		09-Oct		09-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	1.21	V0	1.05	V0	0.37	V0
Calcium	0.16	0.03	V0	0.04	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.00	V0	0.00	V1
Potassium	0.09	0.00	V1	0.01	V0	0.00	V1
Sodium	0.05	0.00	V0	0.00	V1	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.01	V0	0.23	V0	0.00	V1
Sulphate	0.25	0.08	V0	0.03	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.04	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**			**Travel Blank**	
Station #		**AMS 16**				
Sample Date		**09-Oct**			**09-Oct**	
Particulate Size		**PM10**				
Total Air Volume (m³)		**24**			**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**		**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	1.73	V0		0.37	V0
Calcium	0.16	0.04	V0		0.01	V0
Magnesium	0.03	0.01	V0		0.00	V1
Potassium	0.09	0.00	V0		0.00	V1
Sodium	0.05	0.00	V0		0.00	V1
Chloride	0.12	0.00	V1		0.00	V1
Fluoride	0.15	0.00	V1		0.00	V1
Nitrate	0.20	0.33	V0		0.00	V1
Sulphate	0.25	0.04	V0		0.00	V1
Phosphate	0.26	0.00	V1		0.00	V1
Ammonium (as N)	0.02	0.04	V0		0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**15-Oct**		**15-Oct**		**15-Oct**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	1.41	V0	2.20	V0	0.10	V0
Calcium	0.16	0.05	V0	0.05	V0	0.01	V0
Magnesium	0.03	0.00	V0	0.01	V0	0.00	V0
Potassium	0.09	0.00	V1	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.09	V0	0.00	V1
Chloride	0.12	0.01	V0	0.11	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.09	V0	0.00	V1
Sulphate	0.25	0.08	V0	0.15	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**15-Oct**		**15-Oct**		**15-Oct**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	2.90	V0	0.86	V0	0.10	V0
Calcium	0.16	0.08	V0	0.02	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.00	V0	0.00	V0
Potassium	0.09	0.02	V0	0.00	V1	0.00	V1
Sodium	0.05	0.20	V0	0.01	V0	0.00	V1
Chloride	0.12	0.29	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.09	V0	0.00	V1	0.00	V1
Sulphate	0.25	0.16	V0	0.14	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.04	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		15-Oct		15-Oct		15-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	1.34	V0	0.98	V0	0.10	V0
Calcium	0.16	0.05	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V0
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.02	V0	0.01	V0	0.00	V1
Chloride	0.12	0.03	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.02	V0	0.01	V0	0.00	V1
Sulphate	0.25	0.13	V0	0.09	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**			**Travel Blank**	
Station #		**AMS 16**				
Sample Date		**15-Oct**			**15-Oct**	
Particulate Size		**PM10**				
Total Air Volume (m³)		**24**			**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**		**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	1.43	V0		0.10	V0
Calcium	0.16	0.05	V0		0.01	V0
Magnesium	0.03	0.01	V0		0.00	V0
Potassium	0.09	0.00	V1		0.00	V1
Sodium	0.05	0.01	V0		0.00	V1
Chloride	0.12	0.01	V0		0.00	V1
Fluoride	0.15	0.00	V1		0.00	V1
Nitrate	0.20	0.01	V0		0.00	V1
Sulphate	0.25	0.10	V0		0.00	V1
Phosphate	0.26	0.00	V1		0.00	V1
Ammonium (as N)	0.02	0.02	V0		0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**21-Oct**		**21-Oct**		**21-Oct**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	11.89	V0	5.97	V0	0.20	V0
Calcium	0.16	0.55	V0	0.07	V0	0.01	V0
Magnesium	0.03	0.04	V0	0.02	V0	0.00	V0
Potassium	0.09	0.05	V0	0.06	V0	0.00	V1
Sodium	0.05	0.03	V0	0.05	V0	0.00	V1
Chloride	0.12	0.03	V0	0.07	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.38	V0	0.14	V0	0.00	V1
Sulphate	0.25	1.23	V0	0.66	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.37	V0	0.22	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**21-Oct**		**21-Oct**		**21-Oct**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**23.6**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	18.47	V0	4.87	V0	0.20	V0
Calcium	0.16	0.65	V0	0.08	V0	0.01	V0
Magnesium	0.03	0.10	V0	0.02	V0	0.00	V0
Potassium	0.09	0.04	V0	0.04	V0	0.00	V1
Sodium	0.05	0.68	V4	0.02	V0	0.00	V1
Chloride	0.12	0.98	V4	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.29	V0	0.07	V0	0.00	V1
Sulphate	0.25	0.91	V0	0.53	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.19	V0	0.17	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		21-Oct		21-Oct		21-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	7.23	V0	7.82	V0	0.20	V0
Calcium	0.16	0.17	V0	0.14	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.02	V0	0.00	V0
Potassium	0.09	0.06	V0	0.07	V0	0.00	V1
Sodium	0.05	0.02	V0	0.02	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.08	V0	0.26	V0	0.00	V1
Sulphate	0.25	0.85	V0	0.69	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.26	V0	0.28	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**21-Oct**		**21-Oct**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	9.11	V0	0.20	V0
Calcium	0.16	0.24	V0	0.01	V0
Magnesium	0.03	0.03	V0	0.00	V0
Potassium	0.09	0.07	V0	0.00	V1
Sodium	0.05	0.03	V0	0.00	V1
Chloride	0.12	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.28	V0	0.00	V1
Sulphate	0.25	1.17	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.31	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**27-Oct**		**27-Oct**		**27-Oct**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	2.63	V0	7.62	V0	0.12	V0
Calcium	0.16	0.09	V0	0.31	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.07	V0	0.00	V1
Potassium	0.09	0.01	V0	0.02	V0	0.00	V1
Sodium	0.05	0.09	V0	0.03	V0	0.00	V1
Chloride	0.12	0.00	V1	0.02	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.47	V0	0.28	V0	0.00	V1
Sulphate	0.25	0.04	V0	0.49	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.17	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**27-Oct**		**27-Oct**		**27-Oct**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	12.26	V0	2.63	V0	0.12	V0
Calcium	0.16	0.55	V0	0.03	V0	0.01	V0
Magnesium	0.03	0.08	V0	0.00	V0	0.00	V1
Potassium	0.09	0.02	V0	0.00	V0	0.00	V1
Sodium	0.05	0.07	V0	0.00	V0	0.00	V1
Chloride	0.12	0.09	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.32	V0	0.01	V0	0.00	V1
Sulphate	0.25	0.67	V0	0.83	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.16	V0	0.24	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		27-Oct		27-Oct		27-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	3.33	V0	1.51	V0	0.12	V0
Calcium	0.16	0.13	V0	0.02	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.00	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V1	0.00	V1
Sodium	0.05	0.00	V0	0.00	V0	0.00	V1
Chloride	0.12	0.00	V1	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.04	V0	0.06	V0	0.00	V1
Sulphate	0.25	0.14	V0	0.10	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.04	V0	0.04	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**			**Travel Blank**	
Station #		**AMS 16**				
Sample Date		**27-Oct**			**27-Oct**	
Particulate Size		**PM10**				
Total Air Volume (m³)		**24**			**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**		**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	2.51	V0		0.12	V0
Calcium	0.16	0.04	V0		0.01	V0
Magnesium	0.03	0.00	V0		0.00	V1
Potassium	0.09	0.01	V0		0.00	V1
Sodium	0.05	0.00	V0		0.00	V1
Chloride	0.12	0.00	V1		0.00	V1
Fluoride	0.15	0.00	V1		0.00	V1
Nitrate	0.20	0.06	V0		0.00	V1
Sulphate	0.25	0.09	V0		0.00	V1
Phosphate	0.26	0.00	V1		0.00	V1
Ammonium (as N)	0.02	0.03	V0		0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**02-Nov**		**02-Nov**		**02-Nov**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	26.22	V0	27.05	V0	0.11	V0
Calcium	0.16	1.91	V0	1.26	V0	0.01	V0
Magnesium	0.03	0.06	V0	0.11	V0	0.00	V1
Potassium	0.09	0.01	V0	0.03	V0	0.00	V1
Sodium	0.05	0.13	V0	0.55	V0	0.00	V1
Chloride	0.12	0.16	V0	0.80	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.34	V0	0.76	V0	0.00	V1
Sulphate	0.25	0.65	V0	0.91	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.12	V0	0.21	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**02-Nov**		**02-Nov**		**02-Nov**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	24.07	V0	5.82	V0	0.11	V0
Calcium	0.16	1.13	V0	0.22	V0	0.01	V0
Magnesium	0.03	0.13	V0	0.04	V0	0.00	V1
Potassium	0.09	0.04	V0	0.02	V0	0.00	V1
Sodium	0.05	0.75	V0	0.02	V0	0.00	V1
Chloride	0.12	1.10	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.43	V0	0.15	V0	0.00	V1
Sulphate	0.25	0.63	V0	0.65	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.12	V0	0.19	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		02-Nov		02-Nov		02-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	15.53	V0	8.98	V0	0.11	V0
Calcium	0.16	0.91	V0	0.36	V0	0.01	V0
Magnesium	0.03	0.08	V0	0.05	V0	0.00	V1
Potassium	0.09	0.02	V0	0.01	V0	0.00	V1
Sodium	0.05	0.09	V0	0.06	V0	0.00	V1
Chloride	0.12	0.09	V0	0.05	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.21	V0	0.20	V0	0.00	V1
Sulphate	0.25	0.70	V0	0.43	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.16	V0	0.10	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**			**Travel Blank**	
Station #		**AMS 16**				
Sample Date		**02-Nov**			**02-Nov**	
Particulate Size		**PM10**				
Total Air Volume (m³)		**24**			**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**		**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	25.36	V0		0.11	V0
Calcium	0.16	1.68	V0		0.01	V0
Magnesium	0.03	0.08	V0		0.00	V1
Potassium	0.09	0.02	V0		0.00	V1
Sodium	0.05	0.08	V0		0.00	V1
Chloride	0.12	0.06	V0		0.00	V1
Fluoride	0.15	0.01	V0		0.00	V1
Nitrate	0.20	0.22	V0		0.00	V1
Sulphate	0.25	0.79	V0		0.00	V1
Phosphate	0.26	0.00	V1		0.00	V1
Ammonium (as N)	0.02	0.15	V0		0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**08-Nov**		**08-Nov**		**08-Nov**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	14.94	V0	10.10	V0	0.07	V0
Calcium	0.16	0.45	V0	0.18	V0	0.01	V0
Magnesium	0.03	0.04	V0	0.03	V0	0.00	V0
Potassium	0.09	0.04	V0	0.04	V0	0.00	V1
Sodium	0.05	0.04	V0	0.12	V0	0.00	V1
Chloride	0.12	0.04	V0	0.11	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.53	V0	0.47	V0	0.00	V1
Sulphate	0.25	1.14	V0	0.44	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.31	V0	0.15	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**08-Nov**		**08-Nov**		**08-Nov**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	9.37	V0	4.14	V0	0.07	V0
Calcium	0.16	0.27	V0	0.10	V0	0.01	V0
Magnesium	0.03	0.04	V0	0.02	V0	0.00	V0
Potassium	0.09	0.02	V0	0.01	V0	0.00	V1
Sodium	0.05	0.19	V0	0.01	V0	0.00	V1
Chloride	0.12	0.22	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.36	V0	0.18	V0	0.00	V1
Sulphate	0.25	0.43	V0	0.29	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.11	V0	0.11	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		08-Nov		08-Nov		08-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	7.88	V0	4.80	V0	0.07	V0
Calcium	0.16	0.18	V0	0.11	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.02	V0	0.00	V0
Potassium	0.09	0.03	V0	0.02	V0	0.00	V1
Sodium	0.05	0.02	V0	0.02	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1	0.00	V1
Nitrate	0.20	0.19	V0	0.34	V0	0.00	V1
Sulphate	0.25	1.07	V0	0.21	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.31	V0	0.13	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**08-Nov**		**08-Nov**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	14.60	V0	0.07	V0
Calcium	0.16	0.67	V0	0.01	V0
Magnesium	0.03	0.08	V0	0.00	V0
Potassium	0.09	0.06	V0	0.00	V1
Sodium	0.05	0.04	V0	0.00	V1
Chloride	0.12	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.40	V0	0.00	V1
Sulphate	0.25	1.75	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.41	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**14-Nov**		**14-Nov**		**14-Nov**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	3.54	V0	2.19	V0	0.07	V0
Calcium	0.16	0.04	V0	0.02	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V0
Potassium	0.09	0.03	V0	0.01	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.00	V1	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.04	V0	0.03	V0	0.00	V1
Sulphate	0.25	0.23	V0	0.05	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.07	V0	0.02	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**14-Nov**		**14-Nov**		**14-Nov**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	7.16	V0	2.13	V0	0.07	V0
Calcium	0.16	0.22	V0	0.01	V0	0.00	V1
Magnesium	0.03	0.04	V0	0.02	V0	0.00	V0
Potassium	0.09	0.01	V0	0.01	V0	0.00	V1
Sodium	0.05	0.17	V0	0.01	V0	0.00	V1
Chloride	0.12	0.24	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.07	V0	0.02	V0	0.00	V1
Sulphate	0.25	0.12	V0	0.07	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		14-Nov		14-Nov		14-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	1.93	V0	2.31	V6	0.07	V0
Calcium	0.16	0.02	V0	0.01	V6	0.00	V1
Magnesium	0.03	0.00	V0	0.01	V6	0.00	V0
Potassium	0.09	0.01	V0	0.00	V6	0.00	V1
Sodium	0.05	0.01	V0	0.02	V6	0.00	V1
Chloride	0.12	0.00	V1	0.02	V6	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V6	0.00	V1
Nitrate	0.20	0.01	V0	0.02	V6	0.00	V1
Sulphate	0.25	0.13	V0	0.03	V6	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V6	0.00	V1
Ammonium (as N)	0.02	0.05	V0	0.01	V6	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**14-Nov**		**14-Nov**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.80	V0	0.07	V0
Calcium	0.16	0.09	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.00	V0
Potassium	0.09	0.04	V0	0.00	V1
Sodium	0.05	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.09	V0	0.00	V1
Sulphate	0.25	0.42	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.13	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Athabasca Valley**		**Travel Blank**	
Station #		**AMS 1**		**AMS 7**			
Sample Date		**20-Nov**		**20-Nov**		**20-Nov**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	24.19	V0	13.09	V0	0.34	V0
Calcium	0.16	1.93	V0	0.39	V0	0.00	V1
Magnesium	0.03	0.05	V0	0.07	V0	0.00	V1
Potassium	0.09	0.02	V0	0.04	V0	0.00	V1
Sodium	0.05	0.09	V0	1.18	V0	0.00	V1
Chloride	0.12	0.08	V0	1.69	V0	0.00	V1
Fluoride	0.15	0.02	V0	0.01	V0	0.01	V0
Nitrate	0.20	0.28	V0	0.17	V0	0.02	V0
Sulphate	0.25	1.40	V0	1.00	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.35	V0	0.26	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Anzac		Fort McKay South		Travel Blank	
Station #		AMS 14		AMS 13			
Sample Date		20-Nov		20-Nov		20-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	3.96	V0	21.44	V0	0.34	V0
Calcium	0.16	0.12	V0	1.72	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.06	V0	0.00	V1
Potassium	0.09	0.02	V0	0.02	V0	0.00	V1
Sodium	0.05	0.01	V0	0.10	V0	0.00	V1
Chloride	0.12	0.01	V0	0.11	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.01	V0
Nitrate	0.20	0.15	V0	0.28	V0	0.02	V0
Sulphate	0.25	0.87	V0	1.45	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.26	V0	0.38	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**CNRL Horizon**		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 15**		**AMS 16**			
Sample Date		**20-Nov**		**20-Nov**		**20-Nov**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	25.67	V0	15.48	V0	0.34	V0
Calcium	0.16	1.17	V0	1.15	V0	0.00	V1
Magnesium	0.03	0.07	V0	0.05	V0	0.00	V1
Potassium	0.09	0.02	V0	0.02	V0	0.00	V1
Sodium	0.05	0.07	V0	0.03	V0	0.00	V1
Chloride	0.12	0.06	V0	0.03	V0	0.00	V1
Fluoride	0.15	0.02	V0	0.02	V0	0.01	V0
Nitrate	0.20	0.33	V0	0.30	V0	0.02	V0
Sulphate	0.25	2.60	V0	1.05	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.67	V0	0.26	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 6**			
Sample Date		**21-Nov**		**21-Nov**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**23.6**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	13.42	V6	0.34	V0
Calcium	0.16	0.85	V6	0.00	V1
Magnesium	0.03	0.04	V6	0.00	V1
Potassium	0.09	0.03	V6	0.00	V1
Sodium	0.05	0.06	V6	0.00	V1
Chloride	0.12	0.03	V6	0.00	V1
Fluoride	0.15	0.01	V6	0.01	V0
Nitrate	0.20	0.58	V6	0.02	V0
Sulphate	0.25	1.71	V6	0.00	V1
Phosphate	0.26	0.00	V6	0.00	V1
Ammonium (as N)	0.02	0.50	V6	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**26-Nov**		**26-Nov**		**26-Nov**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	13.01	V0	10.02	V0	0.26	V0
Calcium	0.16	0.04	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V0
Potassium	0.09	0.08	V0	0.09	V0	0.00	V1
Sodium	0.05	0.01	V0	0.04	V0	0.00	V1
Chloride	0.12	0.02	V0	0.03	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.61	V0	0.85	V0	0.00	V1
Sulphate	0.25	1.33	V0	1.00	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.57	V0	0.50	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**26-Nov**		**26-Nov**		**26-Nov**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	10.91	V0	6.60	V0	0.26	V0
Calcium	0.16	0.07	V0	0.04	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.04	V0	0.00	V0
Potassium	0.09	0.10	V0	0.09	V0	0.00	V1
Sodium	0.05	0.13	V0	0.03	V0	0.00	V1
Chloride	0.12	0.11	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.85	V0	0.28	V0	0.00	V1
Sulphate	0.25	1.01	V0	0.57	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.46	V0	0.24	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		26-Nov		26-Nov		26-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	10.40	V0	9.35	V0	0.26	V0
Calcium	0.16	0.03	V0	0.02	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.02	V0	0.00	V0
Potassium	0.09	0.09	V0	0.08	V0	0.00	V1
Sodium	0.05	0.01	V0	0.01	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.45	V0	0.30	V0	0.00	V1
Sulphate	0.25	1.22	V0	0.95	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.50	V0	0.38	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**			**Travel Blank**	
Station #		**AMS 16**				
Sample Date		**26-Nov**			**26-Nov**	
Particulate Size		**PM10**				
Total Air Volume (m³)		**24**			**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**		**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	15.36	V0		0.26	V0
Calcium	0.16	0.07	V0		0.00	V1
Magnesium	0.03	0.02	V0		0.00	V0
Potassium	0.09	0.09	V0		0.00	V1
Sodium	0.05	0.02	V0		0.00	V1
Chloride	0.12	0.01	V0		0.00	V1
Fluoride	0.15	0.01	V0		0.00	V1
Nitrate	0.20	0.66	V0		0.00	V1
Sulphate	0.25	2.92	V0		0.00	V1
Phosphate	0.26	0.00	V1		0.00	V1
Ammonium (as N)	0.02	1.04	V0		0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**02-Dec**		**02-Dec**		**02-Dec**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	24.33	V0	18.69	V0	0.04	V1
Calcium	0.16	0.22	V0	0.06	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V1
Potassium	0.09	0.09	V0	0.10	V0	0.00	V1
Sodium	0.05	0.03	V0	0.03	V0	0.00	V1
Chloride	0.12	0.02	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.02	V0	0.00	V1
Nitrate	0.20	2.45	V0	2.82	V0	0.00	V1
Sulphate	0.25	5.57	V0	4.90	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	2.19	V0	2.17	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		02-Dec		02-Dec		02-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	17.41	V0	14.69	V0	0.04	V1
Calcium	0.16	0.09	V0	0.05	V0	0.01	V0
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.07	V0	0.09	V0	0.00	V1
Sodium	0.05	0.04	V0	0.02	V0	0.00	V1
Chloride	0.12	0.02	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	2.69	V0	1.67	V0	0.00	V1
Sulphate	0.25	4.70	V0	3.87	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	2.08	V0	1.59	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		02-Dec		02-Dec		02-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	17.25	V0	16.06	V0	0.04	V1
Calcium	0.16	0.14	V0	0.06	V0	0.01	V0
Magnesium	0.03	0.02	V0	0.02	V0	0.00	V1
Potassium	0.09	0.07	V0	0.09	V0	0.00	V1
Sodium	0.05	0.03	V0	0.03	V0	0.00	V1
Chloride	0.12	0.01	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	1.96	V0	1.33	V0	0.00	V1
Sulphate	0.25	4.77	V0	4.63	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	1.91	V0	1.75	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**			**Travel Blank**	
Station #		**AMS 16**				
Sample Date		**02-Dec**			**02-Dec**	
Particulate Size		**PM10**				
Total Air Volume (m³)		**24**			**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**		**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	16.99	V0		0.04	V1
Calcium	0.16	0.21	V0		0.01	V0
Magnesium	0.03	0.02	V0		0.00	V1
Potassium	0.09	0.09	V0		0.00	V1
Sodium	0.05	0.03	V0		0.00	V1
Chloride	0.12	0.01	V0		0.00	V1
Fluoride	0.15	0.01	V0		0.00	V1
Nitrate	0.20	1.83	V0		0.00	V1
Sulphate	0.25	4.40	V0		0.00	V1
Phosphate	0.26	0.00	V1		0.00	V1
Ammonium (as N)	0.02	1.73	V0		0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**08-Dec**		**08-Dec**		**08-Dec**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	3.56	V0	3.88	V0	-0.01	V1
Calcium	0.16	0.05	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.02	V0	0.00	V1
Potassium	0.09	0.01	V0	0.00	V0	0.00	V1
Sodium	0.05	0.10	V0	0.09	V0	0.00	V1
Chloride	0.12	0.03	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.47	V0	0.37	V0	0.00	V1
Sulphate	0.25	0.07	V0	0.84	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.05	V0	0.26	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		08-Dec		08-Dec		08-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	5.89	V0	2.22	V0	-0.01	V1
Calcium	0.16	0.09	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.03	V0	0.02	V0	0.00	V1
Potassium	0.09	0.03	V0	0.00	V0	0.00	V1
Sodium	0.05	0.15	V0	0.11	V0	0.00	V1
Chloride	0.12	0.04	V0	0.02	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	1.15	V0	0.38	V0	0.00	V1
Sulphate	0.25	0.41	V0	0.22	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.24	V0	0.07	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		08-Dec		08-Dec		08-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.28	V0	2.43	V0	-0.01	V1
Calcium	0.16	0.02	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.02	V0	0.00	V1
Potassium	0.09	0.00	V1	0.00	V1	0.00	V1
Sodium	0.05	0.05	V0	0.10	V0	0.00	V1
Chloride	0.12	0.03	V0	0.03	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V0	0.00	V1
Nitrate	0.20	0.16	V0	0.34	V0	0.00	V1
Sulphate	0.25	0.07	V0	0.12	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.02	V0	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**08-Dec**		**08-Dec**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.18	V0	-0.01	V1
Calcium	0.16	0.03	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.00	V1
Potassium	0.09	0.00	V1	0.00	V1
Sodium	0.05	0.09	V0	0.00	V1
Chloride	0.12	0.07	V0	0.00	V1
Fluoride	0.15	0.00	V1	0.00	V1
Nitrate	0.20	0.20	V0	0.00	V1
Sulphate	0.25	0.10	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.03	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**14-Dec**		**14-Dec**		**14-Dec**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	12.46	V0	4.89	V0	0.05	V0
Calcium	0.16	0.15	V0	0.09	V0	0.00	V1
Magnesium	0.03	0.03	V0	0.02	V0	0.00	V1
Potassium	0.09	0.06	V0	0.04	V0	0.00	V1
Sodium	0.05	0.12	V0	0.07	V0	0.00	V1
Chloride	0.12	0.20	V0	0.05	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.67	V0	0.37	V0	0.00	V1
Sulphate	0.25	0.81	V0	0.75	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.29	V0	0.23	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**14-Dec**		**14-Dec**		**14-Dec**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	10.35	V0	4.28	V0	0.05	V0
Calcium	0.16	0.11	V0	0.05	V0	0.00	V1
Magnesium	0.03	0.06	V0	0.02	V0	0.00	V1
Potassium	0.09	0.03	V0	0.02	V0	0.00	V1
Sodium	0.05	0.30	V0	0.06	V0	0.00	V1
Chloride	0.12	0.15	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	1.38	V0	0.21	V0	0.00	V1
Sulphate	0.25	0.70	V0	0.63	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.32	V0	0.18	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		14-Dec		14-Dec		14-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	5.50	V0	7.10	V0	0.05	V0
Calcium	0.16	0.09	V0	0.06	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.02	V0	0.00	V1
Potassium	0.09	0.04	V0	0.02	V0	0.00	V1
Sodium	0.05	0.09	V0	0.08	V0	0.00	V1
Chloride	0.12	0.07	V0	0.05	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.34	V0	0.20	V0	0.00	V1
Sulphate	0.25	0.54	V0	0.46	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.16	V0	0.13	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**			**Travel Blank**	
Station #		**AMS 16**				
Sample Date		**14-Dec**			**14-Dec**	
Particulate Size		**PM10**				
Total Air Volume (m³)		**24**			**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**		**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	12.61	V0		0.05	V0
Calcium	0.16	0.13	V0		0.00	V1
Magnesium	0.03	0.03	V0		0.00	V1
Potassium	0.09	0.03	V0		0.00	V1
Sodium	0.05	0.10	V0		0.00	V1
Chloride	0.12	0.04	V0		0.00	V1
Fluoride	0.15	0.01	V0		0.00	V1
Nitrate	0.20	0.40	V0		0.00	V1
Sulphate	0.25	0.85	V0		0.00	V1
Phosphate	0.26	0.00	V1		0.00	V1
Ammonium (as N)	0.02	0.23	V0		0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**20-Dec**		**20-Dec**		**20-Dec**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	5.44	V0	5.83	V0	0.22	V0
Calcium	0.16	0.03	V0	0.03	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.02	V0	0.04	V0	0.00	V1
Sodium	0.05	0.05	V0	0.08	V0	0.00	V1
Chloride	0.12	0.02	V0	0.06	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.24	V0	0.35	V0	0.00	V1
Sulphate	0.25	0.42	V0	0.67	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.15	V0	0.24	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		20-Dec		20-Dec		20-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	11.54	V0	4.10	V0	0.22	V0
Calcium	0.16	0.10	V0	0.07	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V1
Potassium	0.09	0.05	V0	0.02	V0	0.00	V1
Sodium	0.05	0.23	V0	0.06	V0	0.00	V1
Chloride	0.12	0.22	V0	0.05	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.74	V0	0.14	V0	0.00	V1
Sulphate	0.25	1.49	V0	0.48	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.50	V0	0.14	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		20-Dec		20-Dec		20-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	2.25	V0	3.35	V0	0.22	V0
Calcium	0.16	0.03	V0	0.04	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.01	V0	0.02	V0	0.00	V1
Sodium	0.05	0.03	V0	0.03	V0	0.00	V1
Chloride	0.12	0.02	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1	0.00	V1
Nitrate	0.20	0.06	V0	0.66	V0	0.00	V1
Sulphate	0.25	0.24	V0	0.93	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.07	V0	0.40	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**20-Dec**		**20-Dec**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.66	V0	0.22	V0
Calcium	0.16	0.19	V0	0.00	V1
Magnesium	0.03	0.03	V0	0.00	V1
Potassium	0.09	0.03	V0	0.00	V1
Sodium	0.05	0.05	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.53	V0	0.00	V1
Sulphate	0.25	1.34	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.42	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

		Bertha Ganter - Fort					
Station Name		**McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**26-Dec**		**26-Dec**		**26-Dec**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	9.64	V0	6.62	V0	0.49	V0
Calcium	0.16	0.09	V0	0.05	V0	0.00	V1
Magnesium	0.03	0.02	V0	0.01	V0	0.00	V1
Potassium	0.09	0.04	V0	0.03	V0	0.00	V1
Sodium	0.05	0.06	V0	0.05	V0	0.00	V1
Chloride	0.12	0.05	V0	0.03	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.89	V0	0.66	V0	0.01	V0
Sulphate	0.25	1.43	V0	0.75	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.59	V0	0.33	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station #		**AMS 7**		**AMS 14**			
Sample Date		**26-Dec**		**26-Dec**		**26-Dec**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.90	V0	4.83	V0	0.49	V0
Calcium	0.16	0.04	V0	0.07	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.03	V0	0.02	V0	0.00	V1
Sodium	0.05	0.08	V0	0.02	V0	0.00	V1
Chloride	0.12	0.05	V0	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.01	V0	0.00	V1
Nitrate	0.20	0.42	V0	0.57	V0	0.01	V0
Sulphate	0.25	0.65	V0	0.69	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.25	V0	0.30	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		26-Dec		26-Dec		26-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	7.05	V0	4.49	V0	0.49	V0
Calcium	0.16	0.05	V0	0.04	V0	0.00	V1
Magnesium	0.03	0.01	V0	0.01	V0	0.00	V1
Potassium	0.09	0.03	V0	0.02	V0	0.00	V1
Sodium	0.05	0.04	V0	0.03	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1	0.00	V1
Fluoride	0.15	0.00	V1	0.01	V1	0.00	V1
Nitrate	0.20	0.49	V0	0.66	V0	0.01	V0
Sulphate	0.25	1.99	V0	0.93	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.67	V0	0.40	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name		**Albian Muskeg River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**26-Dec**		**26-Dec**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	10.37	V0	0.49	V0
Calcium	0.16	0.19	V0	0.00	V1
Magnesium	0.03	0.03	V0	0.00	V1
Potassium	0.09	0.03	V0	0.00	V1
Sodium	0.05	0.05	V0	0.00	V1
Chloride	0.12	0.01	V0	0.00	V1
Fluoride	0.15	0.01	V0	0.00	V1
Nitrate	0.20	0.53	V0	0.01	V0
Sulphate	0.25	1.34	V0	0.00	V1
Phosphate	0.26	0.00	V1	0.00	V1
Ammonium (as N)	0.02	0.42	V0	0.00	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay	Bertha Ganter - Fort McKay	Bertha Ganter - Fort McKay	Bertha Ganter - Fort McKay
Station #	AMS 1	AMS 1	AMS 1	AMS 1
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM10	PM10	PM10	PM10
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	µg/m³	µg/m³		
Particulate Matter	17.85	15.35	61	61
Calcium	0.82	1.02	61	61
Magnesium	0.04	0.02	61	61
Potassium	0.03	0.04	61	49
Sodium	0.07	0.08	61	61
Chloride	0.06	0.09	61	53
Fluoride	0.01	0.01	61	33
Nitrate	0.28	0.39	61	60
Sulphate	0.86	0.90	61	61
Phosphate	0.00	0.01	61	4
Ammonium (as N)	0.23	0.31	61	61

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name	Patricia McInnes	Patricia McInnes	Patricia McInnes	Patricia McInnes
Station #	AMS 6	AMS 6	AMS 6	AMS 6
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM10	PM10	PM10	PM10
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	µg/m³	µg/m³		
Particulate Matter	18.22	26.37	57	57
Calcium	0.42	0.52	57	57
Magnesium	0.05	0.04	57	57
Potassium	0.03	0.06	57	54
Sodium	0.10	0.12	57	57
Chloride	0.11	0.18	57	52
Fluoride	0.01	0.02	57	32
Nitrate	0.39	0.48	57	57
Sulphate	0.92	0.79	57	57
Phosphate	0.01	0.04	57	4
Ammonium (as N)	0.29	0.31	57	57

Station Name	Athabasca Valley	Athabasca Valley	Athabasca Valley	Athabasca Valley
Station #	AMS 7	AMS 7	AMS 7	AMS 7
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM10	PM10	PM10	PM10
Compound Name	Average µg/m³	Std Dev µg/m³	Total Samples (#)	Total ≥ MDL (#)
Particulate Matter	27.46	63.88	61	61
Calcium	0.59	0.68	61	61
Magnesium	0.06	0.07	61	61
Potassium	0.06	0.13	61	60
Sodium	0.26	0.45	61	61
Chloride	0.33	0.69	61	61
Fluoride	0.01	0.05	61	42
Nitrate	0.49	0.75	61	59
Sulphate	0.91	0.76	61	61
Phosphate	0.02	0.09	61	5
Ammonium (as N)	0.26	0.30	61	61

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name	**Anzac**	**Anzac**	**Anzac**	**Anzac**
Station #	**AMS 14**	**AMS 14**	**AMS 14**	**AMS 14**
Sample Date	**Jan 01 - Dec 26**	**Jan 01 - Dec 26**	**Jan 01 - Dec 26**	**Jan 01 - Dec 26**
Particulate Size	**PM10**	**PM10**	**PM10**	**PM10**
	Average	**Std Dev**	**Total Samples (#)**	**Total ≥ MDL (#)**
Compound Name	**µg/m³**	**µg/m³**		
Particulate Matter	8.63	12.79	58	58
Calcium	0.12	0.15	58	58
Magnesium	0.02	0.02	58	58
Potassium	0.02	0.02	58	53
Sodium	0.03	0.04	58	54
Chloride	0.01	0.02	58	42
Fluoride	0.00	0.01	58	18
Nitrate	0.16	0.25	58	56
Sulphate	0.65	0.62	58	58
Phosphate	0.00	0.02	58	2
Ammonium (as N)	0.19	0.22	58	58

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name	Fort McKay South	Fort McKay South	Fort McKay South	Fort McKay South
Station #	AMS 13	AMS 13	AMS 13	AMS 13
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM10	PM10	PM10	PM10
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	µg/m³	µg/m³		
Particulate Matter	14.36	14.31	61	61
Calcium	0.35	0.41	61	61
Magnesium	0.03	0.03	61	61
Potassium	0.03	0.04	61	57
Sodium	0.06	0.07	61	60
Chloride	0.04	0.06	61	52
Fluoride	0.00	0.01	61	28
Nitrate	0.20	0.31	61	60
Sulphate	0.80	0.80	61	61
Phosphate	0.00	0.01	61	4
Ammonium (as N)	0.22	0.27	61	61

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name	CNRL Horizon	CNRL Horizon	CNRL Horizon	CNRL Horizon
Station #	AMS 15	AMS 15	AMS 15	AMS 15
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM10	PM10	PM10	PM10
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	µg/m³	µg/m³		
Particulate Matter	15.49	14.87	59	59
Calcium	0.37	0.45	59	59
Magnesium	0.05	0.05	59	59
Potassium	0.02	0.03	59	52
Sodium	0.05	0.05	59	58
Chloride	0.02	0.02	59	47
Fluoride	0.00	0.00	59	28
Nitrate	0.21	0.23	59	58
Sulphate	0.75	0.84	59	59
Phosphate	0.00	0.01	59	2
Ammonium (as N)	0.19	0.26	59	59

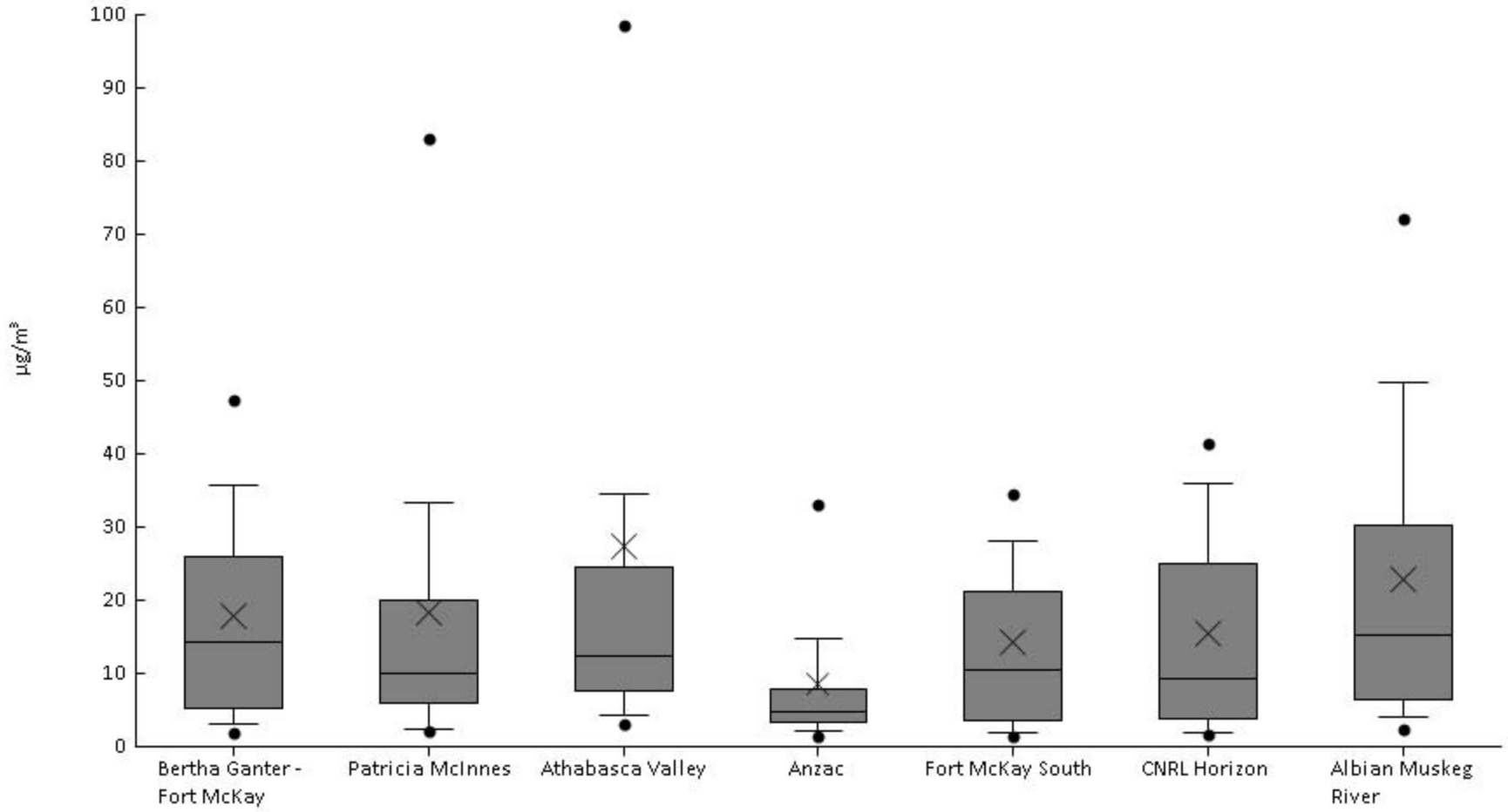
WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - IONS **Indicated Sites and Dates**

Station Name	Albian Muskeg River	Albian Muskeg River	Albian Muskeg River	Albian Muskeg River
Station #	AMS 16	AMS 16	AMS 16	AMS 16
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM10	PM10	PM10	PM10
Compound Name	Average µg/m³	Std Dev µg/m³	Total Samples (#)	Total ≥ MDL (#)
Particulate Matter	22.75	25.05	61	61
Calcium	0.72	0.90	61	61
Magnesium	0.06	0.06	61	61
Potassium	0.03	0.04	61	54
Sodium	0.10	0.17	61	61
Chloride	0.05	0.09	61	54
Fluoride	0.01	0.01	61	34
Nitrate	0.28	0.36	61	61
Sulphate	0.94	0.91	61	61
Phosphate	0.00	0.02	61	3
Ammonium (as N)	0.20	0.27	61	61

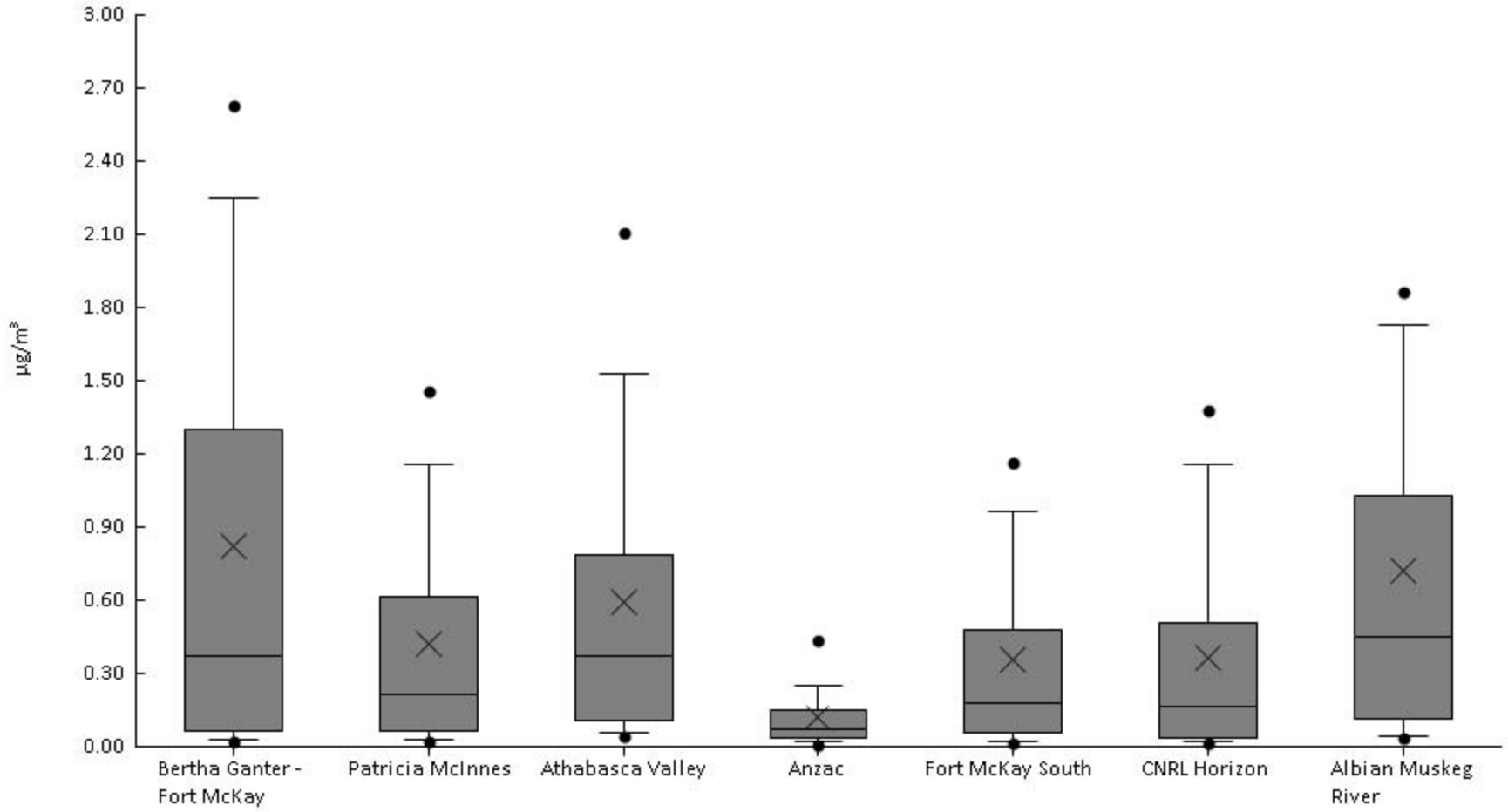
Particulate Matter (PM10 IONS) - Particulate Matter (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	1.3	1.9	3.1	5.3	14	26	36	47	78	18	15
AMS 6	Patricia McInnes	57	100%	1.7	2.1	2.4	5.8	10	20	33	83	141	18	26
AMS 7	Athabasca Valley	61	100%	1.9	3.1	4.4	7.6	12	25	34	98	476	27	64
AMS 14	Anzac	58	100%	0.61	1.4	2.1	3.3	4.8	7.9	15	33	72	8.6	13
AMS 13	Fort McKay South	61	100%	0.91	1.3	1.9	3.6	10	21	28	34	72	14	14
AMS 15	CNRL Horizon	59	100%	0.98	1.6	2	3.7	9.4	25	36	42	69	15	15
AMS 16	Albian Muskeg River	61	100%	1.4	2.5	4	6.5	15	30	50	72	138	23	25



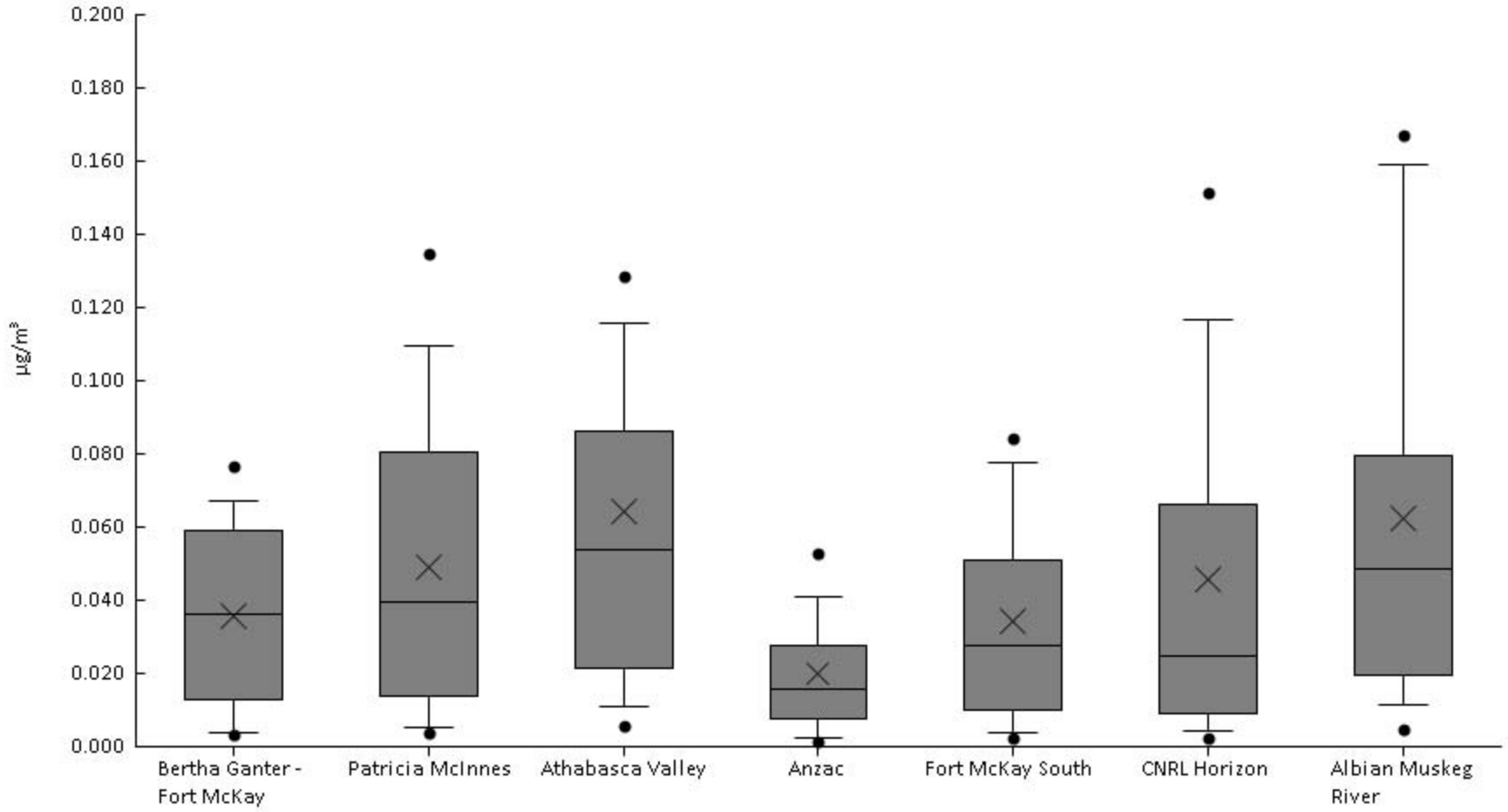
Particulate Matter (PM10 IONS) - Calcium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	0.014	0.022	0.03	0.066	0.37	1.3	2.3	2.6	5.1	0.82	1
AMS 6	Patricia McInnes	57	100%	0.013	0.019	0.028	0.064	0.22	0.61	1.2	1.5	2.5	0.42	0.52
AMS 7	Athabasca Valley	61	100%	0.025	0.04	0.056	0.11	0.37	0.79	1.5	2.1	3.2	0.59	0.68
AMS 14	Anzac	58	100%	8.7E-3	0.011	0.019	0.033	0.069	0.15	0.25	0.44	0.77	0.12	0.15
AMS 13	Fort McKay South	61	100%	0.014	0.017	0.024	0.055	0.18	0.48	0.97	1.2	1.8	0.35	0.41
AMS 15	CNRL Horizon	59	100%	7.5E-3	0.014	0.024	0.036	0.17	0.51	1.2	1.4	1.6	0.37	0.45
AMS 16	Albian Muskeg River	61	100%	0.03	0.036	0.046	0.11	0.45	1	1.7	1.9	5.7	0.72	0.9



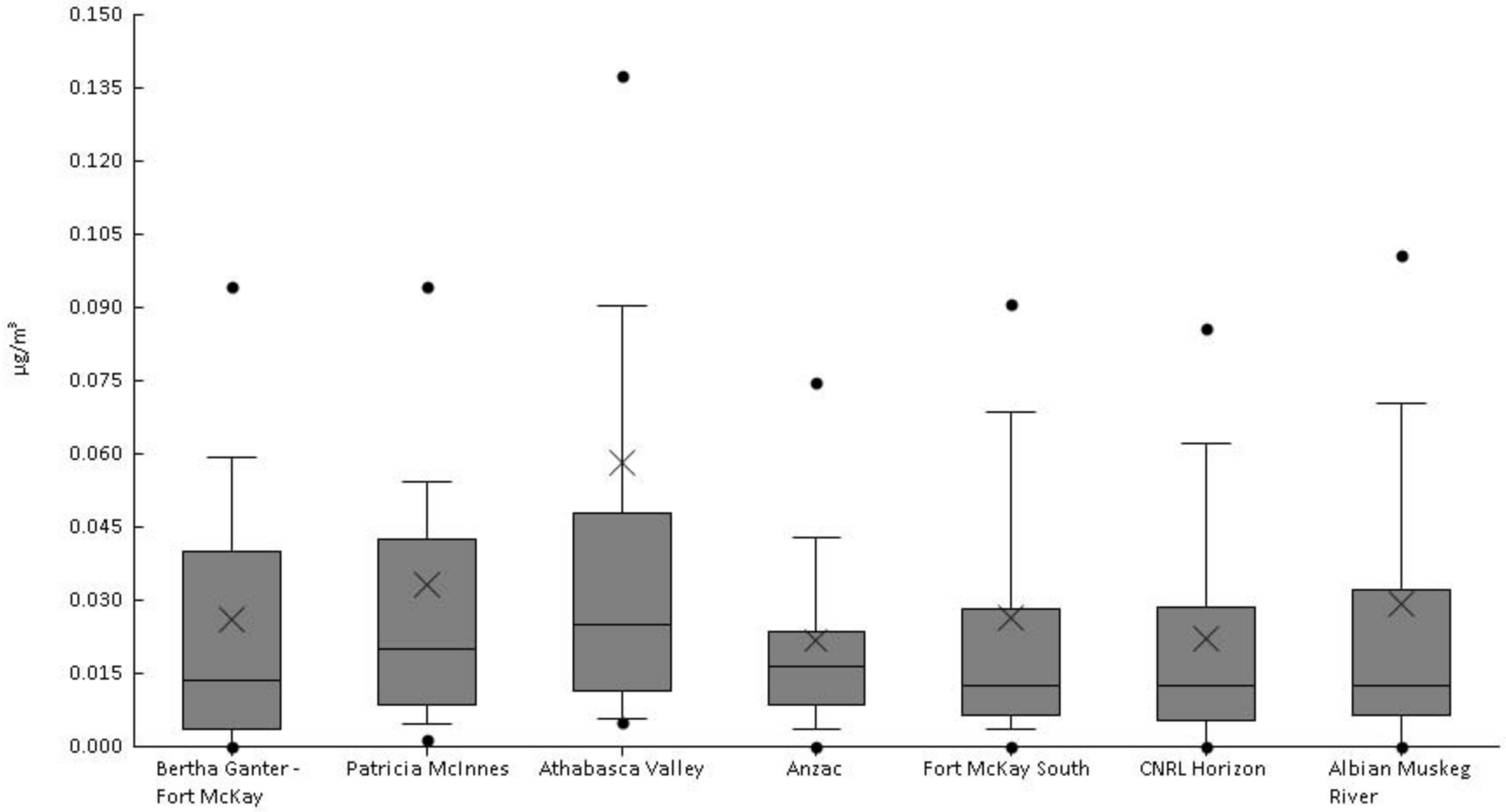
Particulate Matter (PM10 IONS) - Magnesium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	1.3E-3	3.2E-3	3.8E-3	0.013	0.036	0.059	0.067	0.077	0.095	0.036	0.025
AMS 6	Patricia McInnes	57	100%	1.2E-3	3.7E-3	5.3E-3	0.014	0.039	0.08	0.11	0.13	0.17	0.049	0.044
AMS 7	Athabasca Valley	61	100%	2.5E-3	5.7E-3	0.011	0.022	0.054	0.086	0.12	0.13	0.41	0.064	0.066
AMS 14	Anzac	58	100%	1.2E-3	1.3E-3	2.5E-3	7.5E-3	0.016	0.028	0.041	0.053	0.089	0.02	0.017
AMS 13	Fort McKay South	61	100%	1.3E-3	2.5E-3	3.7E-3	1E-2	0.028	0.051	0.078	0.084	0.11	0.034	0.028
AMS 15	CNRL Horizon	59	100%	1.2E-3	2.5E-3	4.2E-3	9.1E-3	0.025	0.066	0.12	0.15	0.19	0.046	0.048
AMS 16	Albian Muskeg River	61	100%	2.5E-3	5E-3	0.011	0.02	0.049	0.079	0.16	0.17	0.28	0.063	0.057



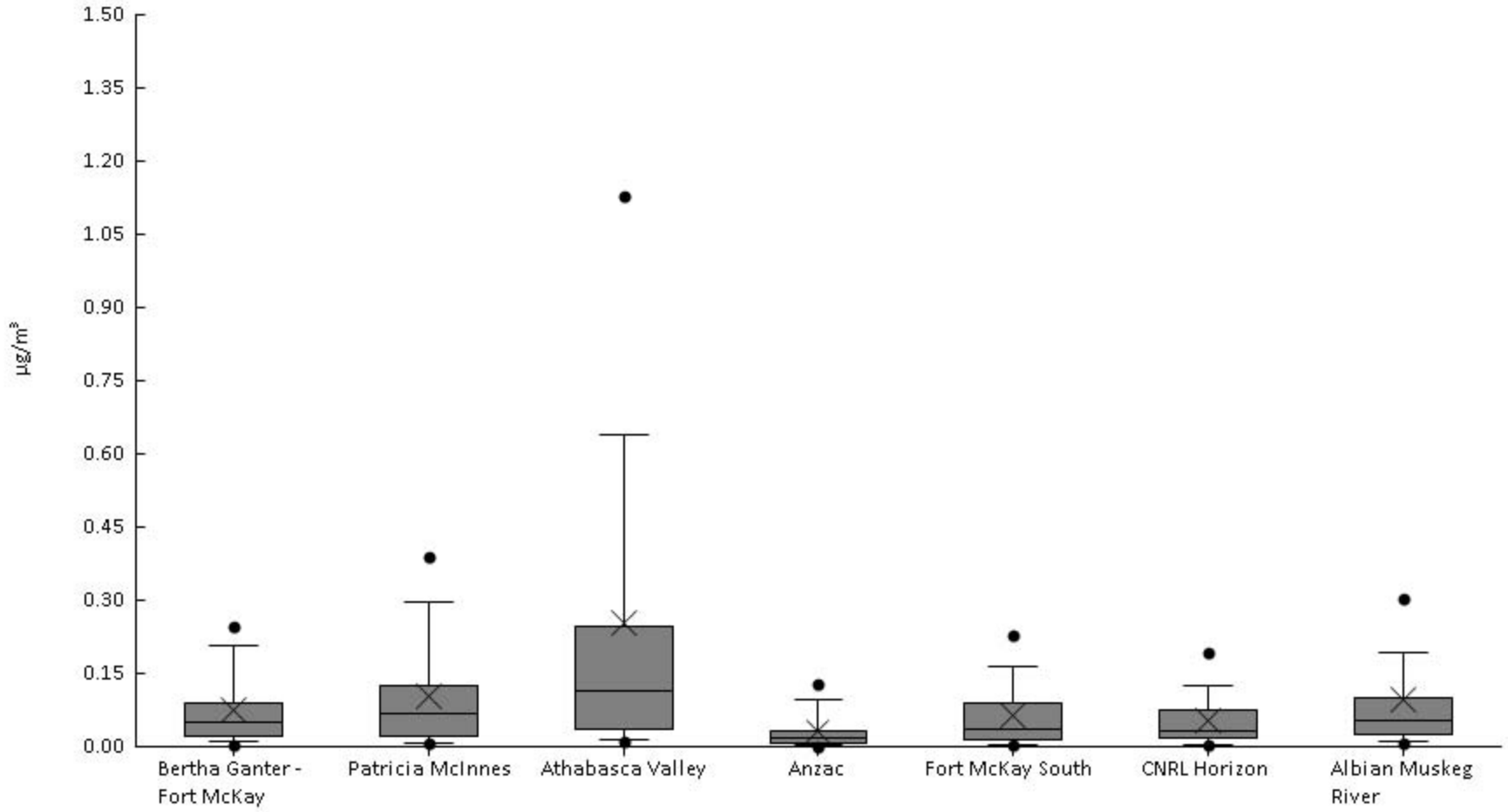
Particulate Matter (PM10 IONS) - Potassium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	80%	0	0	0	3.8E-3	0.014	0.04	0.059	0.094	0.2	0.026	0.036
AMS 6	Patricia McInnes	57	95%	0	1.3E-3	4.7E-3	8.8E-3	0.02	0.043	0.054	0.094	0.44	0.033	0.059
AMS 7	Athabasca Valley	61	98%	0	5E-3	5.8E-3	0.011	0.025	0.048	0.09	0.14	0.76	0.058	0.13
AMS 14	Anzac	58	91%	0	0	3.8E-3	8.7E-3	0.016	0.024	0.043	0.075	0.15	0.022	0.025
AMS 13	Fort McKay South	61	93%	0	0	3.8E-3	6.3E-3	0.013	0.028	0.069	0.091	0.26	0.027	0.04
AMS 15	CNRL Horizon	59	88%	0	0	0	5.3E-3	0.012	0.028	0.062	0.086	0.15	0.022	0.03
AMS 16	Albian Muskeg River	61	89%	0	0	0	6.3E-3	0.013	0.032	0.07	0.1	0.27	0.029	0.044



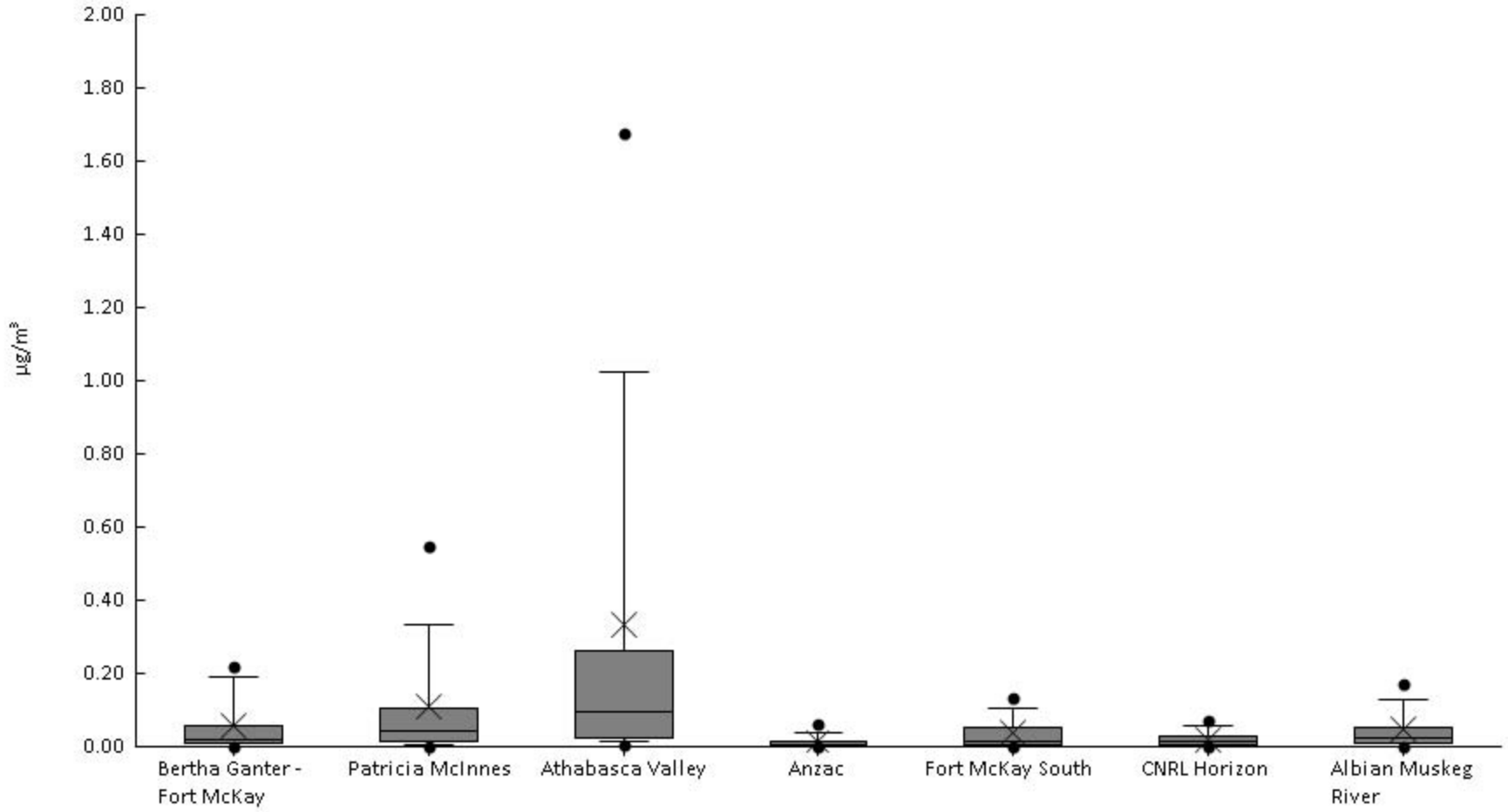
Particulate Matter (PM10 IONS) - Sodium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	2.5E-3	5E-3	0.01	0.021	0.049	0.088	0.21	0.24	0.37	0.074	0.079
AMS 6	Patricia McInnes	57	100%	2.5E-3	5.9E-3	8.7E-3	0.022	0.066	0.13	0.3	0.39	0.55	0.1	0.12
AMS 7	Athabasca Valley	61	100%	3.8E-3	9.4E-3	0.013	0.037	0.12	0.25	0.64	1.1	3	0.26	0.45
AMS 14	Anzac	58	93%	0	0	2.5E-3	6.3E-3	0.019	0.034	0.096	0.13	0.15	0.031	0.037
AMS 13	Fort McKay South	61	98%	0	2.5E-3	4.5E-3	0.015	0.037	0.09	0.16	0.23	0.29	0.065	0.069
AMS 15	CNRL Horizon	59	98%	0	3.1E-3	5E-3	0.019	0.034	0.077	0.13	0.19	0.24	0.055	0.055
AMS 16	Albian Muskeg River	61	100%	3.8E-3	7.5E-3	0.011	0.024	0.053	0.1	0.19	0.3	1.2	0.098	0.17



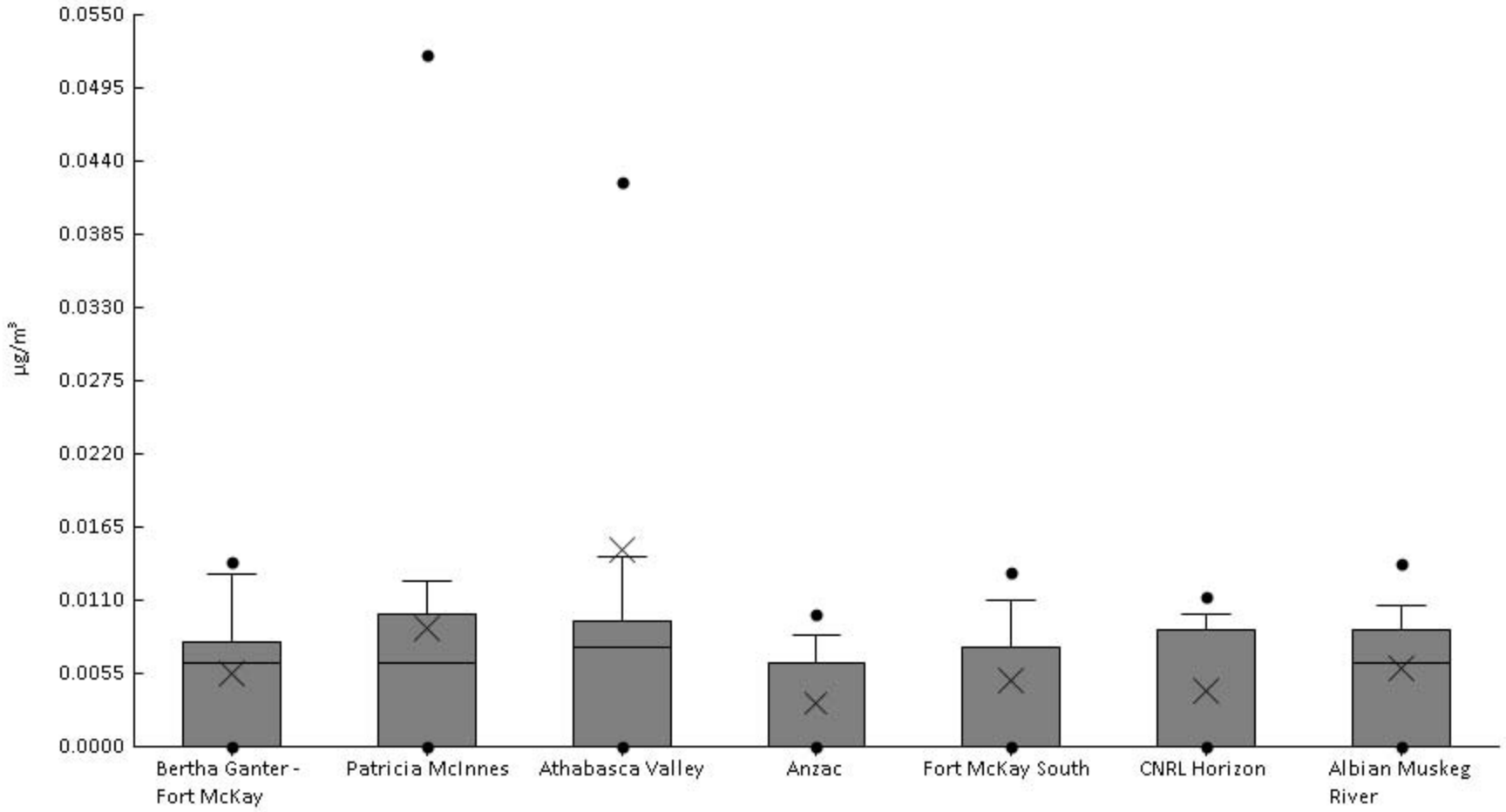
Particulate Matter (PM10 IONS) - Chloride (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	87%	0	0	0	9.7E-3	0.02	0.058	0.19	0.22	0.45	0.056	0.086
AMS 6	Patricia McInnes	57	91%	0	0	5E-3	0.012	0.041	0.11	0.34	0.55	0.8	0.11	0.18
AMS 7	Athabasca Valley	61	100%	5E-3	6.3E-3	0.015	0.024	0.096	0.26	1	1.7	4.5	0.33	0.69
AMS 14	Anzac	58	72%	0	0	0	0	6.3E-3	0.014	0.04	0.06	0.073	0.013	0.018
AMS 13	Fort McKay South	61	85%	0	0	0	6.3E-3	0.014	0.051	0.1	0.13	0.33	0.036	0.056
AMS 15	CNRL Horizon	59	80%	0	0	0	6.2E-3	0.013	0.026	0.055	0.071	0.093	0.021	0.022
AMS 16	Albian Muskeg River	61	89%	0	0	0	7.5E-3	0.023	0.053	0.13	0.17	0.61	0.049	0.088



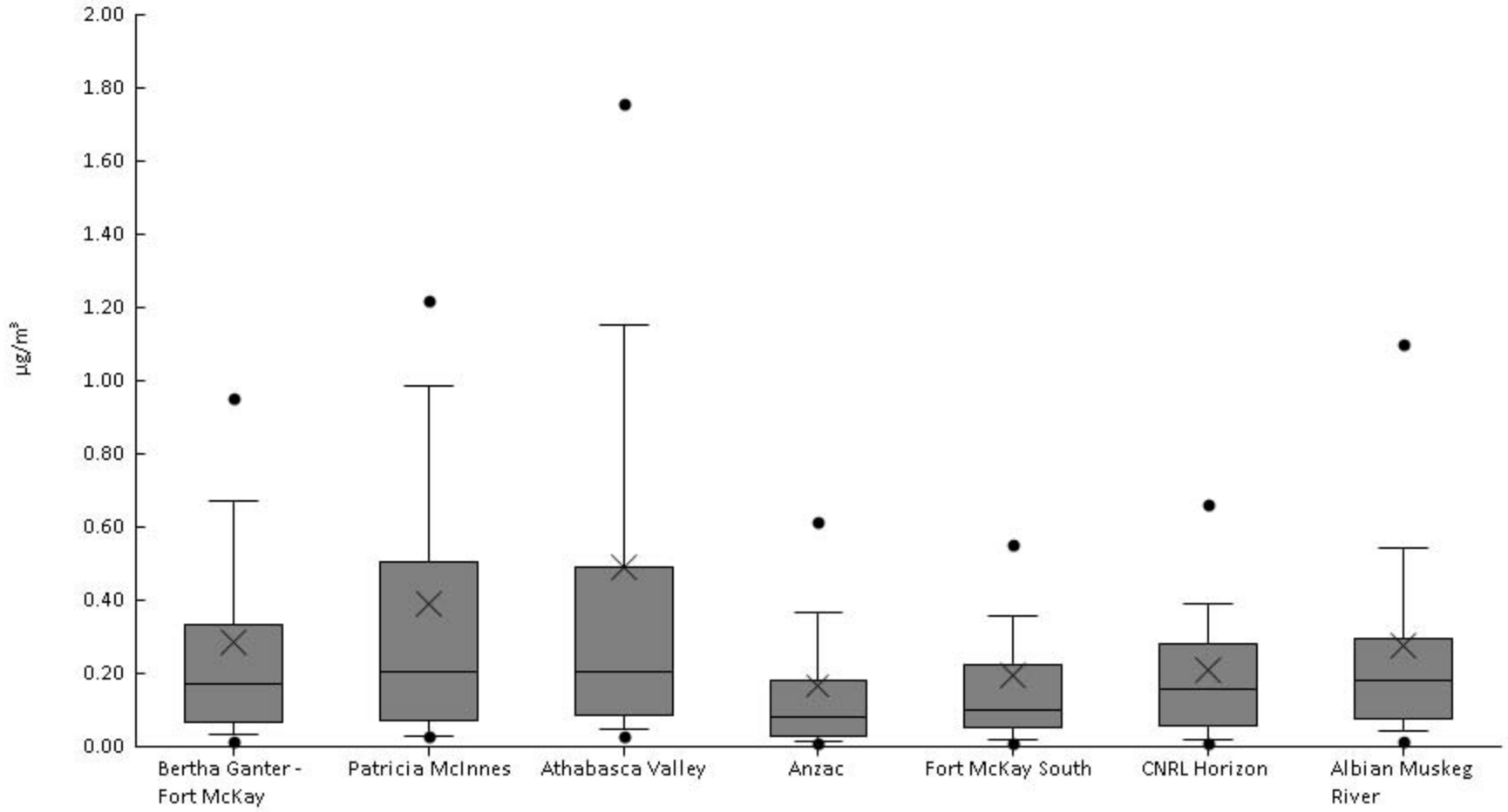
Particulate Matter (PM10 IONS) - Fluoride (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	54%	0	0	0	0	6.3E-3	7.8E-3	0.013	0.014	0.058	5.5E-3	8.3E-3
AMS 6	Patricia McInnes	57	56%	0	0	0	0	6.3E-3	1E-2	0.013	0.052	0.093	9E-3	0.018
AMS 7	Athabasca Valley	61	69%	0	0	0	0	7.5E-3	9.4E-3	0.014	0.042	0.37	0.015	0.048
AMS 14	Anzac	58	31%	0	0	0	0	0	6.3E-3	8.4E-3	0.01	0.036	3.3E-3	6.9E-3
AMS 13	Fort McKay South	61	46%	0	0	0	0	0	7.5E-3	0.011	0.013	0.061	4.9E-3	8.7E-3
AMS 15	CNRL Horizon	59	47%	0	0	0	0	0	8.8E-3	0.01	0.011	0.015	4.2E-3	4.6E-3
AMS 16	Albian Muskeg River	61	56%	0	0	0	0	6.3E-3	8.8E-3	0.011	0.014	0.071	5.9E-3	9.7E-3



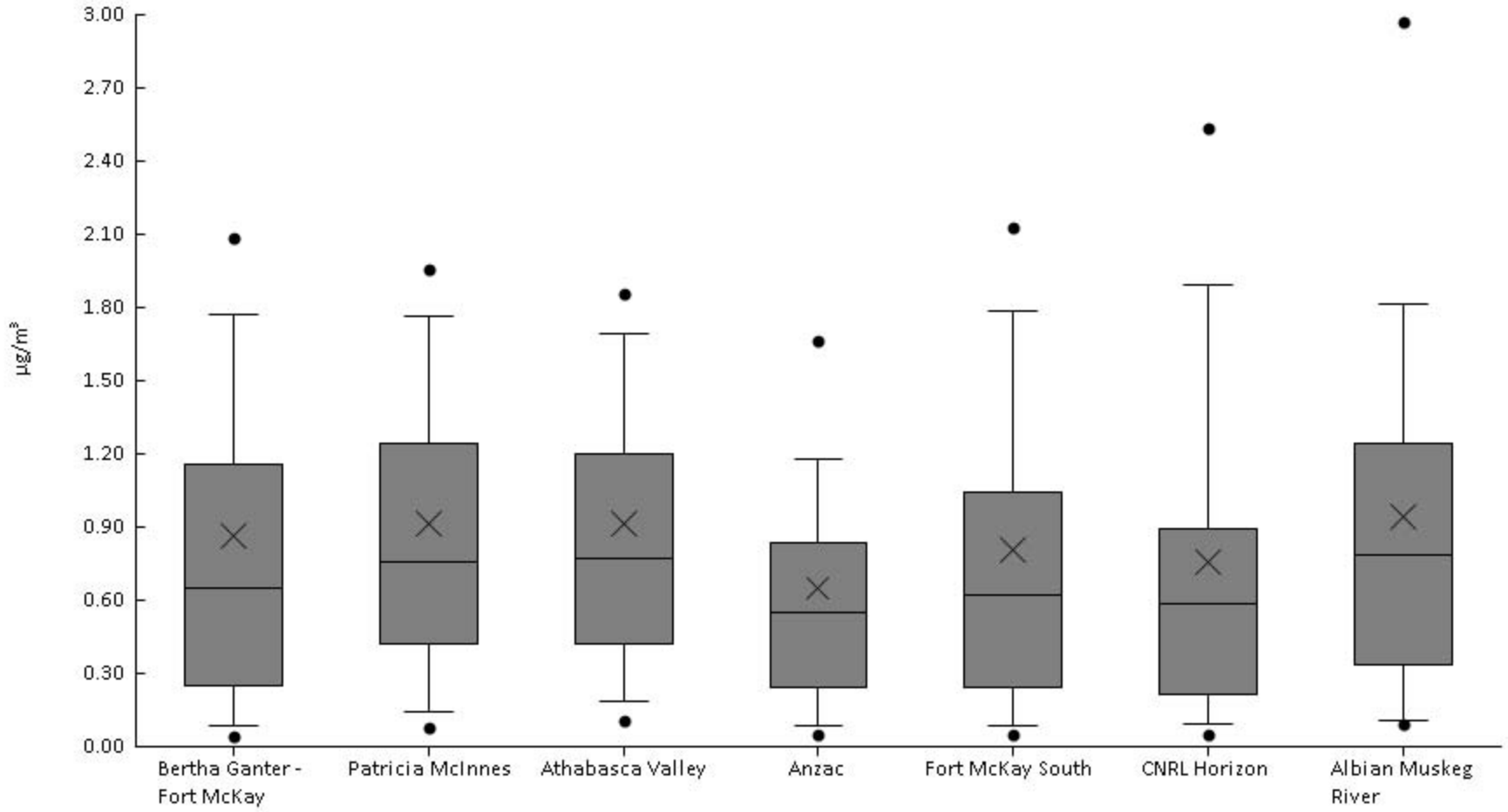
Particulate Matter (PM10 IONS) - Nitrate (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	98%	0	0.014	0.033	0.068	0.17	0.33	0.67	0.95	2.5	0.28	0.39
AMS 6	Patricia McInnes	57	100%	0.021	0.026	0.031	0.07	0.21	0.5	0.98	1.2	2.8	0.39	0.48
AMS 7	Athabasca Valley	61	97%	0	0.031	0.048	0.085	0.21	0.49	1.2	1.8	4.7	0.49	0.75
AMS 14	Anzac	58	97%	0	9.8E-3	0.016	0.03	0.082	0.18	0.36	0.61	1.7	0.16	0.25
AMS 13	Fort McKay South	61	98%	0	0.011	0.018	0.054	0.1	0.22	0.36	0.55	2	0.2	0.31
AMS 15	CNRL Horizon	59	98%	0	9.9E-3	0.02	0.055	0.16	0.28	0.39	0.66	1.3	0.21	0.23
AMS 16	Albian Muskeg River	61	100%	8.8E-3	0.013	0.042	0.074	0.18	0.29	0.54	1.1	1.8	0.28	0.36



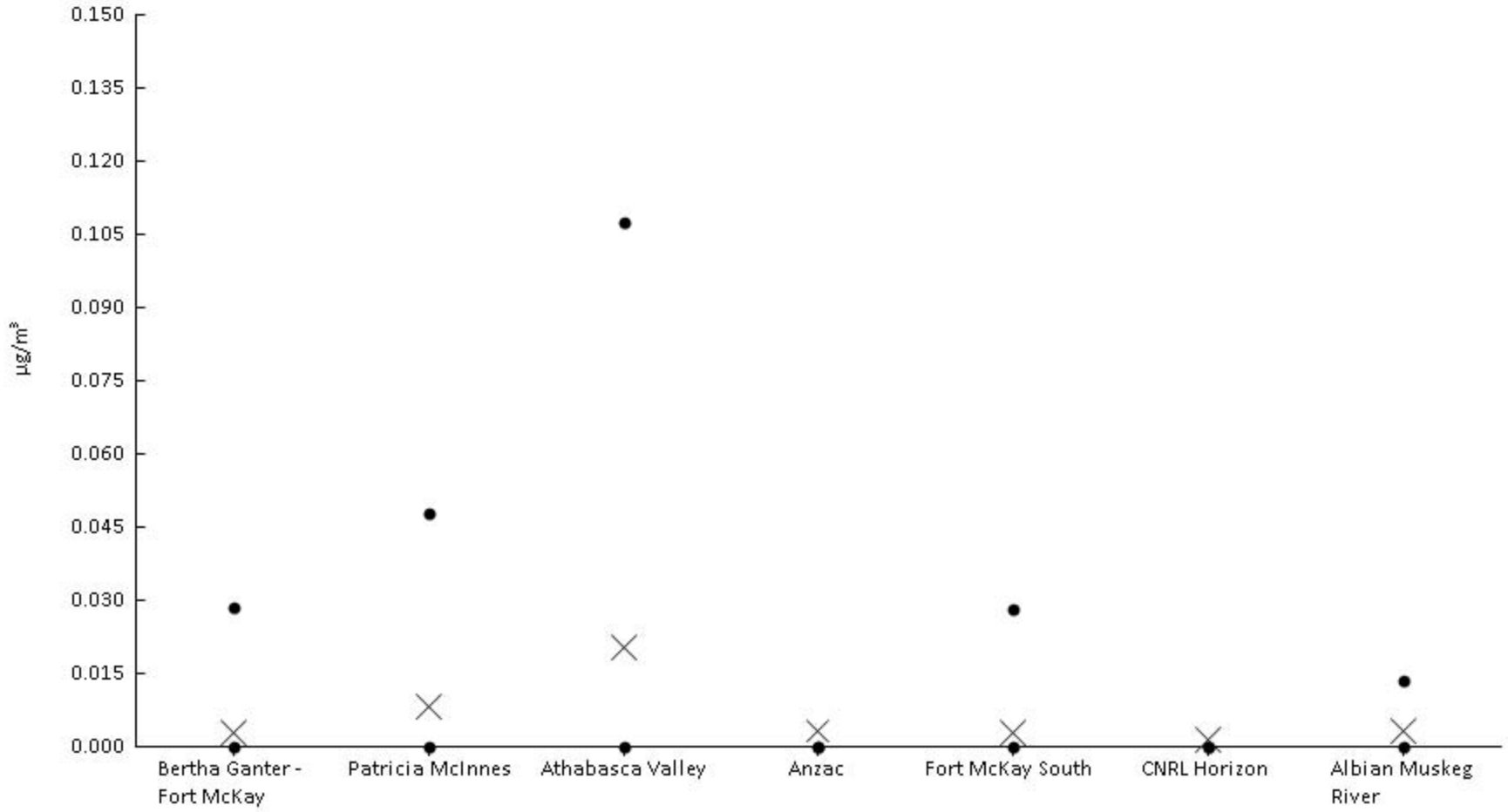
Particulate Matter (PM10 IONS) - Sulphate (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	0.028	0.043	0.087	0.25	0.65	1.2	1.8	2.1	5.6	0.86	0.9
AMS 6	Patricia McInnes	57	100%	0.024	0.077	0.14	0.42	0.75	1.2	1.8	2	4.9	0.92	0.79
AMS 7	Athabasca Valley	61	100%	0.056	0.11	0.18	0.42	0.77	1.2	1.7	1.9	4.7	0.91	0.76
AMS 14	Anzac	58	100%	0.026	0.047	0.083	0.25	0.55	0.84	1.2	1.7	3.9	0.65	0.62
AMS 13	Fort McKay South	61	100%	0.031	0.052	0.086	0.24	0.62	1	1.8	2.1	4.8	0.8	0.8
AMS 15	CNRL Horizon	59	100%	0.029	0.047	0.092	0.21	0.59	0.89	1.9	2.5	4.6	0.75	0.84
AMS 16	Albian Muskeg River	61	100%	0.036	0.092	0.11	0.34	0.79	1.2	1.8	3	4.4	0.94	0.91



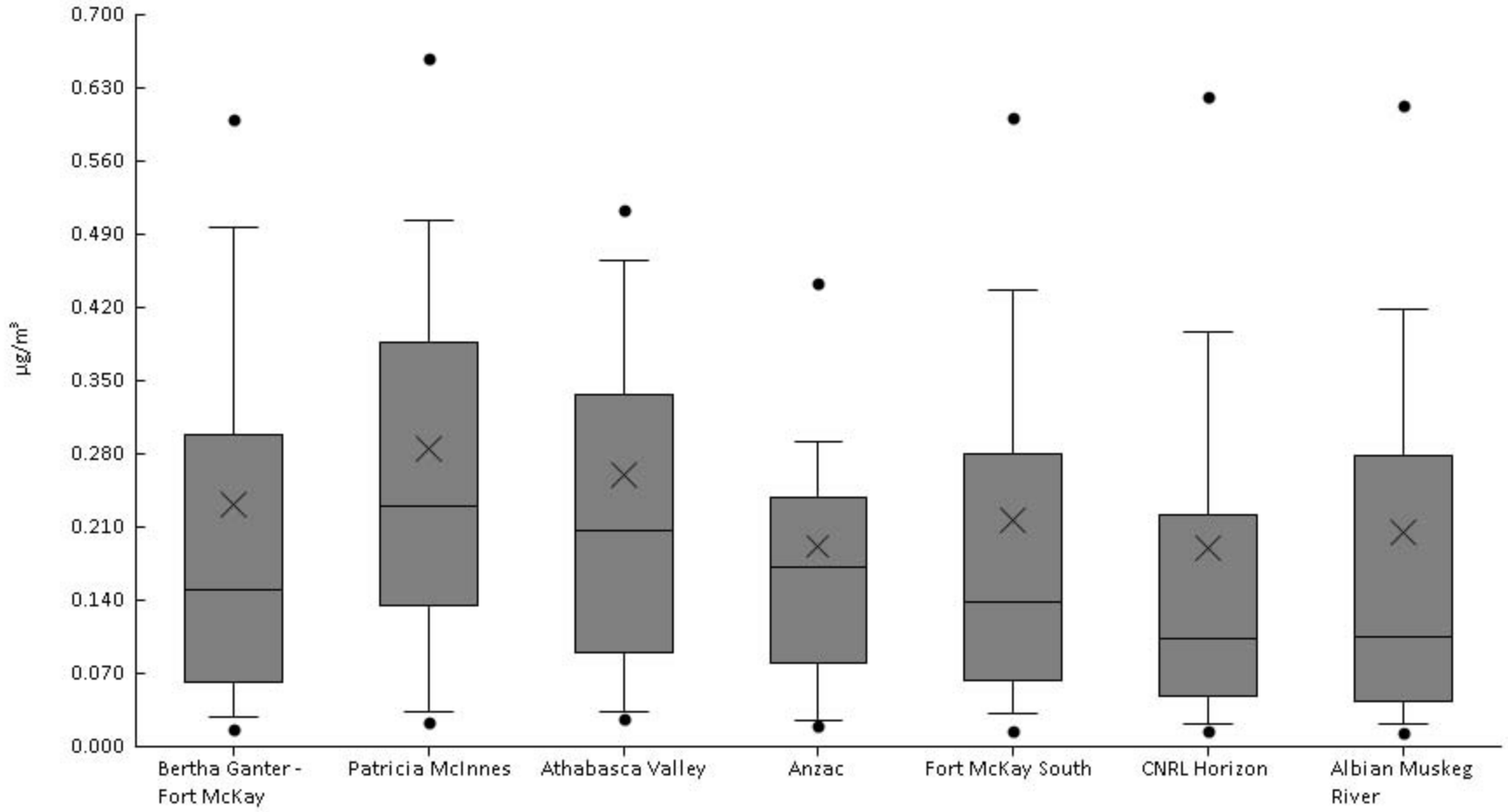
Particulate Matter (PM10 IONS) - Phosphate (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	7%	0	0	0	0	0	0	0	0.029	0.08	2.8E-3	0.012
AMS 6	Patricia McInnes	57	7%	0	0	0	0	0	0	0	0.048	0.31	8.2E-3	0.043
AMS 7	Athabasca Valley	61	8%	0	0	0	0	0	0	0	0.11	0.57	0.02	0.091
AMS 14	Anzac	58	3%	0	0	0	0	0	0	0	0	0.12	3.1E-3	0.017
AMS 13	Fort McKay South	61	7%	0	0	0	0	0	0	0	0.028	0.091	3E-3	0.013
AMS 15	CNRL Horizon	59	3%	0	0	0	0	0	0	0	0	0.054	1.5E-3	8.2E-3
AMS 16	Albian Muskeg River	61	5%	0	0	0	0	0	0	0	0.013	0.09	3.2E-3	0.015



Particulate Matter (PM10 IONS) - Ammonium (as N) (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	4.9E-3	0.016	0.028	0.062	0.15	0.3	0.5	0.6	2.2	0.23	0.31
AMS 6	Patricia McInnes	57	100%	3.9E-3	0.023	0.033	0.14	0.23	0.39	0.5	0.66	2.2	0.29	0.31
AMS 7	Athabasca Valley	61	100%	6.8E-3	0.027	0.033	0.091	0.21	0.34	0.46	0.51	2.1	0.26	0.3
AMS 14	Anzac	58	100%	0.012	0.019	0.025	0.08	0.17	0.24	0.29	0.44	1.6	0.19	0.22
AMS 13	Fort McKay South	61	100%	3.9E-3	0.016	0.032	0.063	0.14	0.28	0.44	0.6	1.9	0.22	0.27
AMS 15	CNRL Horizon	59	100%	3.9E-3	0.015	0.021	0.049	0.1	0.22	0.4	0.62	1.7	0.19	0.26
AMS 16	Albian Muskeg River	61	100%	2.9E-3	0.013	0.022	0.043	0.11	0.28	0.42	0.61	1.7	0.2	0.27



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

INTEGRATED MONITORING PROGRAM
ANNUAL REPORT

PARTICULATE MATTER - METALS
DATA SUMMARY
2016

March 2017

SAMPLE COLLECTION AND DATA COMPILATION BY:

Wood Buffalo Environmental Association
Fort McMurray, Alberta

LABORATORY ANALYSIS BY:

PM ions: Atmospheric Research & Analysis, Inc.
Morrisville, NC

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

INTEGRATED MONITORING PROGRAM
ANNUAL REPORT

PARTICULATE MATTER ($PM_{2.5}$) - METALS DATA SUMMARY 2016

March 2017

SAMPLE COLLECTION AND DATA COMPILATION BY:

Wood Buffalo Environmental Association
Fort McMurray, Alberta

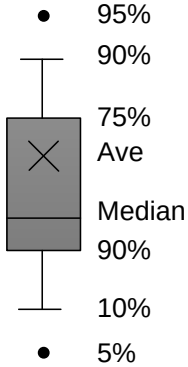
LABORATORY ANALYSIS BY:

PM metals: Atmospheric Research & Analysis, Inc.
Morrisville, NC

FILE CONTENTS DESCRIPTION	Partisol Sampler Measurements of Mass, Ions by IC and Metals by ICP-MS
SAMPLING INTERVAL	24 hour
SAMPLING FREQUENCY OF DATA	Once every 6 days
EXPLANATION OF ZERO VALUES	Zero values are contained in this file and should be treated as values below detection - Method Detection Limits (MDL) are provided with each observation
UNITS	µg/m^3 (microgram per cubic meter)
OBSERVATION TYPE	Particles
FIELD SAMPLING OR MEASUREMENT PRINCIPLE	Filtration with PM_{10} Inlet for PM_{10} and with PM_{10} Inlet/Very Sharp Cut Cyclone for $PM_{2.5}$
PARTICLE DIAMETER	< 2.5 µm or < 10 µm
MEDIUM	47 mm Teflon Filter
ANALYTICALMETHODS	MASS by Microbalance
	ELEMENTS by Inductively Coupled Plasma Mass Spectrometry (ICP/MS)
	IONS by Ion Chromatography (IC)
SAMPLE PREPARATION	DI Water extraction for IC analysis and Acid Digestion for ICP/MS Analysis
ANALYTICAL LABORATORY	Atmospheric Research & Analysis Inc
USER NOTE 1	Data are not blank corrected
USER NOTE 2	Volume is given at actual conditions of temperature and pressure during sampling as measured by the sampler
USER NOTE 3	Blank sample concentration (µg/m^3) is calculated using expected actual volume of sampler
VOLUME STANDARDIZATION	Actual Volume at Ambient Conditions (since 01-Jan-2011)
SAMPLING INSTRUMENT TYPE	For PM_{10} FRM Partisol PM_{10} sampler
	For $PM_{2.5}$ FRM Partisol $PM_{2.5}$ sampler

FLAGS USED	
V0	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
V4	Valid value despite failing to meet some QC or statistical criteria
V5	Valid value but qualified because of possible contamination
V6	Valid value but qualified due to non-standard sampling conditions
M1	Missing value because no value is available
M2	Missing value because invalidated by Data Originator

Legend description



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**01-Jan**		**01-Jan**		**01-Jan**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	2.15	V0	1.44	V0	-0.07	V1
Aluminum	0.1380326	0.0103698	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000427	V0	0.0000283	V0	0.0000000	V1
Arsenic	0.0001060	0.0000293	V0	0.0000220	V0	0.0000055	V0
Barium	0.0092847	0.0020536	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0006727	V4	0.0000105	V0	0.0000246	V0
Cadmium	0.0000174	0.0000356	V0	0.0000276	V0	0.0000000	V1
Calcium	0.4112124	0.0174686	V0	0.0000000	V1	0.0000000	V1
Cerium	0.0000174	0.0000065	V0	0.0000042	V0	0.0000000	V1
Cesium	0.0000100	0.0000016	V0	0.0000007	V0	0.0000000	V1
Chromium	0.0022262	0.0001188	V0	0.0000000	V1	0.0000000	V1
Cobalt	0.0000273	0.0000408	V0	0.0000474	V0	0.0000243	V0
Copper	0.0017171	0.0012596	V0	0.0002318	V0	0.0001423	V0
Iron	0.0393063	0.0056907	V0	0.0033000	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000031	V0	0.0000018	V0	0.0000000	V1
Lead	0.0008577	0.0003129	V0	0.0000650	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0039986	V0	0.0012354	V0	0.0010988	V0
Manganese	0.0006949	0.0001536	V0	0.0000971	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000019	V0	0.0000000	V1	0.0000000	V1
Nickel	0.0005429	0.0001064	V0	0.0001465	V0	0.0001529	V0
Niobium	0.0000202	0.0000023	V0	0.0000022	V0	0.0000014	V0
Palladium	0.0000632	0.0000070	V0	0.0000000	V1	0.0000310	V0
Phosphorus	0.0459574	0.0046898	V0	0.0051715	V0	0.0045680	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000022	V0
Potassium	0.0061261	0.0559946	V0	0.0171535	V0	0.0019349	V0
Praseodymium	0.0000070	0.0000000	V1	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000467	V0	0.0000207	V0	0.0000011	V0
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000058	V0	0.0000027	V0	0.0000004	V0
Sodium	0.0169447	0.0077980	V0	0.0053521	V0	0.0014678	V0
Strontium	0.0003375	0.0003115	V0	0.0000301	V0	0.0000238	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000007	V0	0.0000003	V0	0.0000000	V1
Tin	0.0004414	0.0000388	V0	0.0000416	V0	0.0000000	V1
Titanium	0.0015201	0.0008027	V0	0.0002968	V0	0.0002261	V0
Tungsten	0.0000938	0.0000388	V0	0.0000424	V0	0.0000386	V0
Uranium	0.0000048	0.0000003	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0000540	V0	0.0000428	V0	0.0000391	V0
Zinc	0.0055897	0.0025792	V0	0.0016281	V0	0.0002399	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		01-Jan		01-Jan		01-Jan	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.44	V0	1.56	V0	-0.07	V1
Aluminum	0.1380326	0.0106858	V0	0.0057532	V0	0.0000000	V1
Antimony	0.0001784	0.0001403	V0	0.0000249	V0	0.0000000	V1
Arsenic	0.0001060	0.0000503	V0	0.0000263	V0	0.0000055	V0
Barium	0.0092847	0.0042855	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0001578	V4	0.0000352	V0	0.0000246	V0
Cadmium	0.0000174	0.0000480	V0	0.0000264	V0	0.0000000	V1
Calcium	0.4112124	0.0215558	V0	0.0205384	V0	0.0000000	V1
Cerium	0.0000174	0.0000251	V0	0.0000068	V0	0.0000000	V1
Cesium	0.0000100	0.0000011	V0	0.0000007	V0	0.0000000	V1
Chromium	0.0022262	0.0001338	V0	0.0001191	V0	0.0000000	V1
Cobalt	0.0000273	0.0000798	V0	0.0000691	V0	0.0000243	V0
Copper	0.0017171	0.0015007	V0	0.0002589	V0	0.0001423	V0
Iron	0.0393063	0.0145480	V0	0.0044602	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000094	V0	0.0000026	V0	0.0000000	V1
Lead	0.0008577	0.0001551	V0	0.0000671	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0086368	V0	0.0043976	V0	0.0010988	V0
Manganese	0.0006949	0.0002717	V0	0.0001896	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000942	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000029	V0	0.0000000	V1	0.0000000	V1
Nickel	0.0005429	0.0001299	V0	0.0000755	V0	0.0001529	V0
Niobium	0.0000202	0.0000020	V0	0.0000011	V0	0.0000014	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000310	V0
Phosphorus	0.0459574	0.0062662	V0	0.0066156	V0	0.0045680	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000022	V0
Potassium	0.0061261	0.1068789	V0	0.0280492	V0	0.0019349	V0
Praseodymium	0.0000070	0.0000007	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000734	V0	0.0000335	V0	0.0000011	V0
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000200	V0	0.0000182	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000067	V0	0.0000047	V0	0.0000004	V0
Sodium	0.0169447	0.0230500	V0	0.0115955	V0	0.0014678	V0
Strontium	0.0003375	0.0015223	V0	0.0000728	V0	0.0000238	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000004	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000007	V0	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0001233	V0	0.0000547	V0	0.0000000	V1
Titanium	0.0015201	0.0009886	V0	0.0004944	V0	0.0002261	V0
Tungsten	0.0000938	0.0000411	V0	0.0000665	V0	0.0000386	V0
Uranium	0.0000048	0.0000000	V1	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0000796	V0	0.0000744	V0	0.0000391	V0
Zinc	0.0055897	0.0056394	V0	0.0019096	V0	0.0002399	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		07-Jan		07-Jan		07-Jan	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	0.76	V0	1.61	V0	0.32	V0
Aluminum	0.1380326	0.0000000	V1	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000000	V1	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0000000	V1	0.0000000	V1	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000193	V0	0.0000291	V0	0.0000684	V0
Cadmium	0.0000174	0.0000009	V0	0.0000007	V0	0.0000000	V1
Calcium	0.4112124	0.0000000	V1	0.0339752	V0	0.0000000	V1
Cerium	0.0000174	0.0000023	V0	0.0000044	V0	0.0000000	V1
Cesium	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0000000	V1	0.0001879	V0	0.0000000	V1
Cobalt	0.0000273	0.0000586	V0	0.0000832	V0	0.0000537	V0
Copper	0.0017171	0.0002099	V0	0.0002736	V0	0.0001205	V0
Iron	0.0393063	0.0024640	V0	0.0044569	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000010	V0	0.0000021	V0	0.0000000	V1
Lead	0.0008577	0.0000413	V0	0.0000375	V0	0.0000000	V1
Lithium	0.0000374	0.0000150	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0094367	V0	0.0073900	V0	0.0019066	V0
Manganese	0.0006949	0.0000521	V0	0.0001644	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000454	V0	0.0000000	V1
Neodymium	0.0000140	0.0000000	V1	0.0000000	V1	0.0000000	V1
Nickel	0.0005429	0.0001535	V0	0.0006349	V0	0.0000954	V0
Niobium	0.0000202	0.0000008	V1	0.0000018	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0059306	V0	0.0054895	V0	0.0056533	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0054451	V0	0.0071402	V0	0.0030512	V0
Praseodymium	0.0000070	0.0000000	V1	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000056	V0	0.0000078	V0	0.0000016	V0
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0467698	V0	0.0346980	V0	0.0019045	V0
Strontium	0.0003375	0.0000746	V0	0.0000906	V0	0.0000162	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000000	V1	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0000221	V0	0.0000551	V0	0.0000000	V1
Titanium	0.0015201	0.0002271	V0	0.0003215	V0	0.0005009	V0
Tungsten	0.0000938	0.0000617	V0	0.0000624	V0	0.0000317	V0
Uranium	0.0000048	0.0000000	V1	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0000655	V0	0.0001243	V0	0.0000693	V0
Zinc	0.0055897	0.0005042	V0	0.0008107	V0	0.0004897	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		07-Jan		07-Jan		07-Jan	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.12	V0	2.95	V0	0.32	V0
Aluminum	0.1380326	0.0000000	V1	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000410	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0000078	V0	0.0000076	V0	0.0000000	V1
Barium	0.0092847	0.0004712	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000309	V0	0.0000666	V0	0.0000684	V0
Cadmium	0.0000174	0.0000000	V1	0.0000000	V1	0.0000000	V1
Calcium	0.4112124	0.0199564	V0	0.0211049	V0	0.0000000	V1
Cerium	0.0000174	0.0000045	V0	0.0000041	V0	0.0000000	V1
Cesium	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0005369	V0	0.0001819	V0	0.0000000	V1
Cobalt	0.0000273	0.0000523	V0	0.0000693	V0	0.0000537	V0
Copper	0.0017171	0.0004468	V0	0.0001845	V0	0.0001205	V0
Iron	0.0393063	0.0091299	V0	0.0051900	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000016	V0	0.0000016	V0	0.0000000	V1
Lead	0.0008577	0.0000371	V0	0.0000365	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0076703	V0	0.0060745	V0	0.0019066	V0
Manganese	0.0006949	0.0003224	V0	0.0001836	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000320	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000000	V1	0.0000000	V1	0.0000000	V1
Nickel	0.0005429	0.0002785	V0	0.0001722	V0	0.0000954	V0
Niobium	0.0000202	0.0000012	V0	0.0000012	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0050109	V0	0.0058287	V0	0.0056533	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0278641	V0	0.0094172	V0	0.0030512	V0
Praseodymium	0.0000070	0.0000000	V1	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000443	V0	0.0000126	V0	0.0000016	V0
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000352	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000016	V0	0.0000000	V1
Sodium	0.0169447	0.0307893	V0	0.0304864	V0	0.0019045	V0
Strontium	0.0003375	0.0000891	V0	0.0000564	V0	0.0000162	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000000	V1	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0000753	V0	0.0000683	V0	0.0000000	V1
Titanium	0.0015201	0.0014645	V0	0.0005238	V0	0.0005009	V0
Tungsten	0.0000938	0.0000335	V0	0.0000714	V0	0.0000317	V0
Uranium	0.0000048	0.0000002	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0001309	V0	0.0001195	V0	0.0000693	V0
Zinc	0.0055897	0.0023498	V0	0.0009737	V0	0.0004897	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**13-Jan**		**13-Jan**		**13-Jan**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	6.70	V0	7.05	V0	0.14	V0
Aluminum	0.1380326	0.0088317	V0	0.0105779	V0	0.0000000	V1
Antimony	0.0001784	0.0000508	V0	0.0000727	V0	0.0000000	V1
Arsenic	0.0001060	0.0000756	V0	0.0000854	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0006334	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000176	V0	0.0000079	V0	0.0000397	V0
Cadmium	0.0000174	0.0000343	V0	0.0000382	V0	0.0000000	V1
Calcium	0.4112124	0.0235687	V0	0.0172038	V0	0.0000000	V1
Cerium	0.0000174	0.0000101	V0	0.0000147	V0	0.0000020	V0
Cesium	0.0000100	0.0000000	V1	0.0000005	V0	0.0000005	V0
Chromium	0.0022262	0.0001969	V0	0.0002024	V0	0.0000000	V1
Cobalt	0.0000273	0.0000832	V0	0.0000476	V0	0.0000395	V0
Copper	0.0017171	0.0004003	V0	0.0005752	V0	0.0005349	V0
Iron	0.0393063	0.0311108	V0	0.0115827	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000297	V0	0.0000183	V0	0.0000008	V0
Lead	0.0008577	0.0000976	V0	0.0001168	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1	0.0000030	V0
Magnesium	0.0091409	0.0027938	V0	0.0026805	V0	0.0014453	V0
Manganese	0.0006949	0.0010402	V0	0.0004899	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000754	V0	0.0000753	V0	0.0000000	V1
Neodymium	0.0000140	0.0000000	V1	0.0000000	V1	0.0000013	V0
Nickel	0.0005429	0.0002068	V0	0.0001621	V0	0.0001175	V0
Niobium	0.0000202	0.0000017	V0	0.0000019	V0	0.0000008	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0063295	V0	0.0063602	V0	0.0034622	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000019	V0
Potassium	0.0061261	0.0408868	V0	0.0568297	V0	0.0022957	V0
Praseodymium	0.0000070	0.0000000	V1	0.0000000	V1	0.0000004	V0
Rubidium	0.0000184	0.0000589	V0	0.0000958	V0	0.0000010	V0
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000317	V0	0.0000217	V0
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0374066	V0
Silver	0.0000100	0.0000019	V0	0.0000021	V0	0.0000005	V0
Sodium	0.0169447	0.0142035	V0	0.0195421	V0	0.0022133	V0
Strontium	0.0003375	0.0000574	V0	0.0000662	V0	0.0000179	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000000	V1	0.0000000	V1	0.0000004	V0
Tin	0.0004414	0.0001070	V0	0.0001228	V0	0.0000000	V1
Titanium	0.0015201	0.0004700	V0	0.0004861	V0	0.0003581	V0
Tungsten	0.0000938	0.0000781	V0	0.0000408	V0	0.0000278	V0
Uranium	0.0000048	0.0000134	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0001793	V0	0.0001102	V0	0.0000431	V0
Zinc	0.0055897	0.0047258	V0	0.0044440	V0	0.0004761	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		13-Jan		13-Jan		13-Jan	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.4		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	21.83	V0	5.65	V0	0.14	V0
Aluminum	0.1380326	0.0087897	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0001367	V0	0.0001824	V0	0.0000000	V1
Arsenic	0.0001060	0.0000989	V0	0.0000865	V0	0.0000000	V1
Barium	0.0092847	0.0009515	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000093	V0	0.0000000	V1
Bismuth	0.0000093	0.0000183	V0	0.0000489	V0	0.0000397	V0
Cadmium	0.0000174	0.0001212	V4	0.0000377	V0	0.0000000	V1
Calcium	0.4112124	0.0260539	V0	0.0182632	V0	0.0000000	V1
Cerium	0.0000174	0.0000136	V0	0.0000037	V0	0.0000020	V0
Cesium	0.0000100	0.0000015	V0	0.0000011	V0	0.0000005	V0
Chromium	0.0022262	0.0011821	V0	0.0001753	V0	0.0000000	V1
Cobalt	0.0000273	0.0001055	V0	0.0000412	V0	0.0000395	V0
Copper	0.0017171	0.0032797	V0	0.0002625	V0	0.0005349	V0
Iron	0.0393063	0.0266949	V0	0.0051956	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000161	V0	0.0000156	V0	0.0000008	V0
Lead	0.0008577	0.0001925	V0	0.0001064	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000153	V0	0.0000030	V0
Magnesium	0.0091409	0.0044266	V0	0.0018265	V0	0.0014453	V0
Manganese	0.0006949	0.0011003	V0	0.0002196	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000838	V0	0.0000447	V0	0.0000000	V1
Neodymium	0.0000140	0.0000000	V1	0.0000038	V0	0.0000013	V0
Nickel	0.0005429	0.0007316	V0	0.0007343	V0	0.0001175	V0
Niobium	0.0000202	0.0000031	V0	0.0000026	V0	0.0000008	V0
Palladium	0.0000632	0.0000000	V1	0.0000036	V0	0.0000000	V1
Phosphorus	0.0459574	0.0054499	V0	0.0046829	V0	0.0034622	V0
Platinum	0.0000088	0.0000000	V1	0.0000021	V0	0.0000019	V0
Potassium	0.0061261	0.0783119	V0	0.0490722	V0	0.0022957	V0
Praseodymium	0.0000070	0.0000000	V1	0.0000006	V0	0.0000004	V0
Rubidium	0.0000184	0.0001174	V0	0.0000861	V0	0.0000010	V0
Samarium	0.0000133	0.0000000	V1	0.0000011	V0	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000578	V0	0.0000217	V0
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0374066	V0
Silver	0.0000100	0.0000034	V0	0.0000026	V0	0.0000005	V0
Sodium	0.0169447	0.0268881	V0	0.0149322	V0	0.0022133	V0
Strontium	0.0003375	0.0000968	V0	0.0000500	V0	0.0000179	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000007	V0	0.0000008	V0	0.0000000	V1
Thorium	0.0000059	0.0000006	V0	0.0000007	V0	0.0000004	V0
Tin	0.0004414	0.0001562	V0	0.0001255	V0	0.0000000	V1
Titanium	0.0015201	0.0010469	V0	0.0004435	V0	0.0003581	V0
Tungsten	0.0000938	0.0000653	V0	0.0000405	V0	0.0000278	V0
Uranium	0.0000048	0.0000000	V1	0.0000005	V0	0.0000000	V1
Vanadium	0.0007697	0.0001280	V0	0.0001309	V0	0.0000431	V0
Zinc	0.0055897	0.0077151	V0	0.0029585	V0	0.0004761	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**19-Jan**		**19-Jan**		**19-Jan**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	4.38	V0	4.82	V0	0.03	V1
Aluminum	0.1380326	0.0109988	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000757	V0	0.0000687	V0	0.0000000	V1
Arsenic	0.0001060	0.0000480	V0	0.0000323	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000060	V0
Bismuth	0.0000093	0.0000546	V0	0.0000146	V0	0.0000132	V0
Cadmium	0.0000174	0.0000110	V0	0.0000089	V0	0.0000019	V0
Calcium	0.4112124	0.0463069	V0	0.0000000	V1	0.0000000	V1
Cerium	0.0000174	0.0000124	V0	0.0000076	V0	0.0000000	V1
Cesium	0.0000100	0.0000010	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0001826	V4	0.0000000	V4	-9999	M2
Cobalt	0.0000273	0.0000857	V0	0.0000484	V0	0.0000581	V0
Copper	0.0017171	0.0003757	V0	0.0002972	V0	0.0001048	V0
Iron	0.0393063	0.0093375	V0	0.0103943	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000113	V0	0.0000076	V0	0.0000000	V1
Lead	0.0008577	0.0001062	V0	0.0001256	V0	0.0000000	V1
Lithium	0.0000374	0.0000219	V0	0.0000080	V0	0.0000000	V1
Magnesium	0.0091409	0.0106298	V0	0.0054070	V0	0.0011569	V0
Manganese	0.0006949	0.0004203	V0	0.0004245	V0	0.0000437	V0
Molybdenum	0.0007116	0.0000571	V4	0.0001241	V4	-9999	M2
Neodymium	0.0000140	0.0000041	V0	0.0000018	V0	0.0000027	V0
Nickel	0.0005429	-9999	M2	0.0002807	V4	-9999	M2
Niobium	0.0000202	0.0000025	V0	0.0000024	V0	0.0000016	V0
Palladium	0.0000632	0.0000046	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0053562	V0	0.0033172	V0	0.0034614	V0
Platinum	0.0000088	0.0000006	V0	0.0000000	V1	0.0000014	V0
Potassium	0.0061261	0.0287315	V0	0.0159452	V0	0.0013524	V0
Praseodymium	0.0000070	0.0000012	V0	0.0000007	V0	0.0000004	V0
Rubidium	0.0000184	0.0000476	V0	0.0000275	V0	0.0000000	V1
Samarium	0.0000133	0.0000006	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000951	V0	0.0000411	V0	0.0000540	V0
Silicon	0.7676322	0.0362734	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000016	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0547302	V0	0.0291355	V0	0.0009944	V0
Strontium	0.0003375	0.0001017	V0	0.0000579	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000011	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000010	V0	0.0000004	V0	0.0000000	V1
Tin	0.0004414	0.0000868	V0	0.0000674	V0	0.0000000	V1
Titanium	0.0015201	0.0020898	V0	0.0005613	V0	0.0004486	V0
Tungsten	0.0000938	0.0000490	V0	0.0000390	V0	0.0001469	V0
Uranium	0.0000048	0.0000017	V0	0.0000010	V0	0.0000000	V1
Vanadium	0.0007697	0.0002040	V0	0.0001187	V0	0.0000000	V1
Zinc	0.0055897	0.0031876	V0	0.0019324	V0	0.0003238	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		19-Jan		19-Jan		19-Jan	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.33	V0	5.28	V0	0.03	V1
Aluminum	0.1380326	0.0096311	V0	0.0079848	V0	0.0000000	V1
Antimony	0.0001784	0.0000742	V0	0.0000964	V0	0.0000000	V1
Arsenic	0.0001060	0.0000545	V0	0.0000611	V0	0.0000000	V1
Barium	0.0092847	0.0006456	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000060	V0
Bismuth	0.0000093	0.0000136	V0	0.0000502	V0	0.0000132	V0
Cadmium	0.0000174	0.0000113	V0	0.0000193	V0	0.0000019	V0
Calcium	0.4112124	0.0368288	V0	0.0240290	V0	0.0000000	V1
Cerium	0.0000174	0.0000143	V0	0.0000097	V0	0.0000000	V1
Cesium	0.0000100	0.0000013	V0	0.0000008	V0	0.0000000	V1
Chromium	0.0022262	0.0001231	V4	0.0001369	V4	-9999	M2
Cobalt	0.0000273	0.0000607	V0	0.0000514	V0	0.0000581	V0
Copper	0.0017171	0.0005737	V0	0.0003297	V0	0.0001048	V0
Iron	0.0393063	0.0180275	V0	0.0104341	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000084	V0	0.0000211	V0	0.0000000	V1
Lead	0.0008577	0.0001022	V0	0.0001639	V0	0.0000000	V1
Lithium	0.0000374	0.0000135	V0	0.0000023	V0	0.0000000	V1
Magnesium	0.0091409	0.0079601	V0	0.0112493	V0	0.0011569	V0
Manganese	0.0006949	0.0008392	V0	0.0004405	V0	0.0000437	V0
Molybdenum	0.0007116	0.0001059	V4	0.0000791	V4	-9999	M2
Neodymium	0.0000140	0.0000044	V0	0.0000012	V0	0.0000027	V0
Nickel	0.0005429	0.0003000	V4	0.0001795	V4	-9999	M2
Niobium	0.0000202	0.0000038	V0	0.0000016	V0	0.0000016	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0047165	V0	0.0029527	V0	0.0034614	V0
Platinum	0.0000088	0.0000009	V0	0.0000000	V1	0.0000014	V0
Potassium	0.0061261	0.0379818	V0	0.0285746	V0	0.0013524	V0
Praseodymium	0.0000070	0.0000014	V0	0.0000007	V0	0.0000004	V0
Rubidium	0.0000184	0.0000653	V0	0.0000530	V0	0.0000000	V1
Samarium	0.0000133	0.0000006	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000525	V0	0.0000429	V0	0.0000540	V0
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000013	V0	0.0000021	V0	0.0000000	V1
Sodium	0.0169447	0.0381840	V0	0.0739515	V0	0.0009944	V0
Strontium	0.0003375	0.0001256	V0	0.0001083	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000007	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000012	V0	0.0000005	V0	0.0000000	V1
Tin	0.0004414	0.0001751	V0	0.0002463	V0	0.0000000	V1
Titanium	0.0015201	0.0009441	V0	0.0006242	V0	0.0004486	V0
Tungsten	0.0000938	0.0000574	V0	0.0000494	V0	0.0001469	V0
Uranium	0.0000048	0.0000014	V0	0.0000029	V0	0.0000000	V1
Vanadium	0.0007697	0.0001425	V0	0.0002923	V0	0.0000000	V1
Zinc	0.0055897	0.0038863	V0	0.0026819	V0	0.0003238	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		25-Jan		25-Jan		25-Jan	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.38	V0	5.56	V0	0.11	V0
Aluminum	0.1380326	0.0000000	V1	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000309	V0	0.0000947	V0	0.0000000	V1
Arsenic	0.0001060	0.0000310	V0	0.0000467	V0	0.0000061	V0
Barium	0.0092847	0.0000000	V1	0.0004116	V0	0.0000000	V1
Beryllium	0.0000946	0.0000052	V0	0.0000000	V1	0.0000094	V0
Bismuth	0.0000093	0.0000089	V0	0.0000075	V0	0.0000049	V0
Cadmium	0.0000174	0.0000311	V0	0.0000333	V0	0.0000000	V1
Calcium	0.4112124	0.0292569	V0	0.0190386	V0	0.0000000	V1
Cerium	0.0000174	0.0000077	V0	0.0000155	V0	0.0000010	V0
Cesium	0.0000100	0.0000008	V0	0.0000009	V0	0.0000000	V1
Chromium	0.0022262	-9999	M2	0.0002083	V0	0.0003378	V0
Cobalt	0.0000273	0.0000904	V0	0.0000305	V0	0.0000708	V0
Copper	0.0017171	0.0014035	V0	0.0006172	V0	0.0000939	V0
Iron	0.0393063	0.0191929	V0	0.0077214	V0	0.0024037	V0
Lanthanum	0.0000130	0.0000047	V0	0.0000064	V0	0.0000000	V1
Lead	0.0008577	0.0000929	V0	0.0001765	V0	0.0000000	V1
Lithium	0.0000374	0.0000096	V0	0.0000093	V0	0.0000051	V0
Magnesium	0.0091409	0.0028336	V0	0.0021603	V0	0.0011434	V0
Manganese	0.0006949	0.0008812	V0	0.0002810	V0	0.0000414	V0
Molybdenum	0.0007116	0.0000522	V0	0.0000782	V0	0.0000443	V0
Neodymium	0.0000140	0.0000020	V0	0.0000037	V0	0.0000007	V0
Nickel	0.0005429	-9999	M2	0.0002554	V0	0.0002718	V0
Niobium	0.0000202	0.0000020	V0	0.0000017	V0	0.0000010	V0
Palladium	0.0000632	0.0000041	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0029087	V0	0.0000000	V1	0.0026446	V0
Platinum	0.0000088	0.0000022	V0	0.0000024	V0	0.0000021	V0
Potassium	0.0061261	0.0303176	V0	0.0425466	V0	0.0008776	V0
Praseodymium	0.0000070	0.0000004	V0	0.0000008	V0	0.0000000	V1
Rubidium	0.0000184	0.0000438	V0	0.0000549	V0	0.0000000	V1
Samarium	0.0000133	0.0000007	V0	0.0000012	V0	0.0000000	V1
Selenium	0.0003366	0.0000471	V0	0.0000459	V0	0.0000240	V0
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000043	V0	0.0000040	V0	0.0000019	V0
Sodium	0.0169447	0.0101694	V0	0.0245069	V0	0.0011515	V0
Strontium	0.0003375	0.0000518	V0	0.0000404	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000008	V0	0.0000012	V0	0.0000000	V1
Thorium	0.0000059	0.0000005	V0	0.0000004	V0	0.0000000	V1
Tin	0.0004414	0.0000576	V0	0.0001728	V0	0.0000000	V1
Titanium	0.0015201	0.0004300	V0	0.0005022	V0	0.0008894	V0
Tungsten	0.0000938	0.0000504	V0	0.0000288	V0	0.0000573	V0
Uranium	0.0000048	0.0000000	V1	0.0000005	V0	0.0000000	V1
Vanadium	0.0007697	0.0001543	V0	0.0001674	V0	0.0000869	V0
Zinc	0.0055897	0.0036822	V0	0.0034235	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		25-Jan		25-Jan		25-Jan	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.00	V0	3.28	V0	0.11	V0
Aluminum	0.1380326	0.0065917	V0	-9999	M2	0.0000000	V1
Antimony	0.0001784	0.0001338	V0	-9999	M2	0.0000000	V1
Arsenic	0.0001060	0.0000637	V0	-9999	M2	0.0000061	V0
Barium	0.0092847	0.0007755	V0	-9999	M2	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	-9999	M2	0.0000094	V0
Bismuth	0.0000093	0.0000099	V0	-9999	M2	0.0000049	V0
Cadmium	0.0000174	0.0000477	V0	-9999	M2	0.0000000	V1
Calcium	0.4112124	0.0186671	V0	-9999	M2	0.0000000	V1
Cerium	0.0000174	0.0000144	V0	-9999	M2	0.0000010	V0
Cesium	0.0000100	0.0000009	V0	-9999	M2	0.0000000	V1
Chromium	0.0022262	0.0013267	V0	-9999	M2	0.0003378	V0
Cobalt	0.0000273	0.0000690	V0	-9999	M2	0.0000708	V0
Copper	0.0017171	0.0008949	V0	-9999	M2	0.0000939	V0
Iron	0.0393063	0.0202520	V0	-9999	M2	0.0024037	V0
Lanthanum	0.0000130	0.0000060	V0	-9999	M2	0.0000000	V1
Lead	0.0008577	0.0005839	V0	-9999	M2	0.0000000	V1
Lithium	0.0000374	0.0000096	V0	-9999	M2	0.0000051	V0
Magnesium	0.0091409	0.0037619	V0	-9999	M2	0.0011434	V0
Manganese	0.0006949	0.0006486	V0	-9999	M2	0.0000414	V0
Molybdenum	0.0007116	0.0001133	V0	-9999	M2	0.0000443	V0
Neodymium	0.0000140	0.0000055	V0	-9999	M2	0.0000007	V0
Nickel	0.0005429	0.0007567	V0	-9999	M2	0.0002718	V0
Niobium	0.0000202	0.0000024	V0	-9999	M2	0.0000010	V0
Palladium	0.0000632	0.0000034	V0	-9999	M2	0.0000000	V1
Phosphorus	0.0459574	0.0031567	V0	-9999	M2	0.0026446	V0
Platinum	0.0000088	0.0000023	V0	-9999	M2	0.0000021	V0
Potassium	0.0061261	0.0355322	V0	-9999	M2	0.0008776	V0
Praseodymium	0.0000070	0.0000012	V0	-9999	M2	0.0000000	V1
Rubidium	0.0000184	0.0000521	V0	-9999	M2	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	-9999	M2	0.0000000	V1
Selenium	0.0003366	0.0000480	V0	-9999	M2	0.0000240	V0
Silicon	0.7676322	0.0000000	V1	-9999	M2	0.0000000	V1
Silver	0.0000100	0.0000034	V0	-9999	M2	0.0000019	V0
Sodium	0.0169447	0.0178250	V0	-9999	M2	0.0011515	V0
Strontium	0.0003375	0.0000723	V0	-9999	M2	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	-9999	M2	0.0000000	V1
Thallium	0.0000090	0.0000009	V0	-9999	M2	0.0000000	V1
Thorium	0.0000059	0.0000006	V0	-9999	M2	0.0000000	V1
Tin	0.0004414	0.0001347	V0	-9999	M2	0.0000000	V1
Titanium	0.0015201	0.0009380	V0	-9999	M2	0.0008894	V0
Tungsten	0.0000938	0.0000531	V0	-9999	M2	0.0000573	V0
Uranium	0.0000048	0.0000006	V0	-9999	M2	0.0000000	V1
Vanadium	0.0007697	0.0001753	V0	-9999	M2	0.0000869	V0
Zinc	0.0055897	0.0042809	V0	-9999	M2	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		31-Jan		31-Jan		31-Jan	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.12	V0	3.75	V0	0.19	V0
Aluminum	0.1380326	0.0245184	V0	0.0234284	V0	0.0000000	V1
Antimony	0.0001784	0.0000253	V0	0.0000228	V0	0.0000000	V1
Arsenic	0.0001060	0.0000777	V0	0.0000701	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000679	V0	0.0000281	V0	0.0000032	V0
Cadmium	0.0000174	0.0000190	V0	0.0000141	V0	0.0000000	V1
Calcium	0.4112124	0.0396437	V0	0.1317778	V0	0.0000000	V1
Cerium	0.0000174	0.0000240	V0	0.0000256	V0	0.0000010	V0
Cesium	0.0000100	0.0000036	V0	0.0000038	V0	0.0000000	V1
Chromium	0.0022262	0.0004435	V0	0.0001968	V0	0.0002174	V0
Cobalt	0.0000273	0.0000654	V0	0.0000575	V0	0.0000569	V0
Copper	0.0017171	0.0004789	V0	0.0004069	V0	0.0000931	V0
Iron	0.0393063	0.0152110	V0	0.0232152	V0	0.0021543	V0
Lanthanum	0.0000130	0.0000119	V0	0.0000122	V0	0.0000000	V1
Lead	0.0008577	0.0004682	V0	0.0004161	V0	0.0000000	V1
Lithium	0.0000374	0.0000222	V0	0.0000185	V0	0.0000024	V0
Magnesium	0.0091409	0.0135121	V0	0.0142261	V0	0.0010258	V0
Manganese	0.0006949	0.0004472	V0	0.0006667	V0	0.0000456	V0
Molybdenum	0.0007116	0.0003064	V0	0.0001198	V0	0.0000000	V1
Neodymium	0.0000140	0.0000100	V0	0.0000082	V0	0.0000000	V1
Nickel	0.0005429	-9999	M2	0.0002650	V0	0.0001681	V0
Niobium	0.0000202	0.0000036	V0	0.0000035	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000054	V0	0.0000000	V1
Phosphorus	0.0459574	0.0041403	V0	0.0044156	V0	0.0032938	V0
Platinum	0.0000088	0.0000006	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0181112	V0	0.0353720	V0	0.0025201	V0
Praseodymium	0.0000070	0.0000027	V0	0.0000026	V0	0.0000000	V1
Rubidium	0.0000184	0.0000491	V0	0.0000803	V0	0.0000000	V1
Samarium	0.0000133	0.0000026	V0	0.0000000	V1	0.0000011	V0
Selenium	0.0003366	0.0001271	V0	0.0001238	V0	0.0000301	V0
Silicon	0.7676322	0.0408915	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000021	V0	0.0000023	V0	0.0000006	V0
Sodium	0.0169447	0.0499115	V0	0.0492863	V0	0.0017506	V0
Strontium	0.0003375	0.0001773	V0	0.0002214	V0	0.0000153	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000032	V0	0.0000024	V0	0.0000000	V1
Thorium	0.0000059	0.0000033	V0	0.0000029	V0	0.0000000	V1
Tin	0.0004414	0.0000828	V0	0.0000826	V0	0.0000000	V1
Titanium	0.0015201	0.0012540	V0	0.0010919	V0	0.0005688	V0
Tungsten	0.0000938	0.0000348	V0	0.0000570	V0	0.0000614	V0
Uranium	0.0000048	0.0000020	V0	0.0000021	V0	0.0000000	V1
Vanadium	0.0007697	0.0001038	V0	0.0005792	V0	0.0000000	V1
Zinc	0.0055897	0.0019997	V0	0.0025309	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		31-Jan		31-Jan		31-Jan	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.55	V0	0.91	V0	0.19	V0
Aluminum	0.1380326	0.0221862	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000167	V0	0.0000135	V0	0.0000000	V1
Arsenic	0.0001060	0.0000541	V0	0.0000283	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000119	V0	0.0000187	V0	0.0000032	V0
Cadmium	0.0000174	0.0000121	V0	0.0000067	V0	0.0000000	V1
Calcium	0.4112124	0.0581777	V0	0.0000000	V1	0.0000000	V1
Cerium	0.0000174	0.0000244	V0	0.0000036	V0	0.0000010	V0
Cesium	0.0000100	0.0000031	V0	0.0000009	V0	0.0000000	V1
Chromium	0.0022262	0.0001639	V0	0.0002085	V0	0.0002174	V0
Cobalt	0.0000273	0.0000764	V0	0.0000404	V0	0.0000569	V0
Copper	0.0017171	0.0004576	V0	0.0002297	V0	0.0000931	V0
Iron	0.0393063	0.0265591	V0	0.0040916	V0	0.0021543	V0
Lanthanum	0.0000130	0.0000121	V0	0.0000019	V0	0.0000000	V1
Lead	0.0008577	0.0003346	V0	0.0002121	V0	0.0000000	V1
Lithium	0.0000374	0.0000178	V0	0.0000000	V1	0.0000024	V0
Magnesium	0.0091409	0.0105830	V0	0.0053888	V0	0.0010258	V0
Manganese	0.0006949	0.0006452	V0	0.0001098	V0	0.0000456	V0
Molybdenum	0.0007116	0.0000530	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000099	V0	0.0000000	V1	0.0000000	V1
Nickel	0.0005429	0.0002065	V0	0.0001661	V0	0.0001681	V0
Niobium	0.0000202	0.0000031	V0	0.0000000	V1	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0041711	V0	0.0021485	V0	0.0032938	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0296104	V0	0.0092939	V0	0.0025201	V0
Praseodymium	0.0000070	0.0000026	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000708	V0	0.0000138	V0	0.0000000	V1
Samarium	0.0000133	0.0000012	V0	0.0000000	V1	0.0000011	V0
Selenium	0.0003366	0.0001016	V0	0.0000410	V0	0.0000301	V0
Silicon	0.7676322	0.0667260	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000014	V0	0.0000000	V1	0.0000006	V0
Sodium	0.0169447	0.0460626	V0	0.0309881	V0	0.0017506	V0
Strontium	0.0003375	0.0001575	V0	0.0000516	V0	0.0000153	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000019	V0	0.0000007	V0	0.0000000	V1
Thorium	0.0000059	0.0000030	V0	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0000910	V0	0.0000357	V0	0.0000000	V1
Titanium	0.0015201	0.0010994	V0	0.0002716	V0	0.0005688	V0
Tungsten	0.0000938	0.0000853	V0	0.0000479	V0	0.0000614	V0
Uranium	0.0000048	0.0000017	V0	0.0000002	V0	0.0000000	V1
Vanadium	0.0007697	0.0002436	V0	0.0000713	V0	0.0000000	V1
Zinc	0.0055897	0.0021848	V0	0.0006784	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**06-Feb**		**06-Feb**		**06-Feb**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24.1**		**25.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	6.56	V0	5.81	V0	0.11	V0
Aluminum	0.1380326	0.0114484	V0	0.0070675	V0	0.0000000	V1
Antimony	0.0001784	0.0000394	V0	0.0104773	V4	0.0000000	V1
Arsenic	0.0001060	0.0000648	V0	0.0000713	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000158	V0	0.0000184	V0	0.0000027	V0
Cadmium	0.0000174	0.0000240	V0	0.0000281	V0	0.0000009	V0
Calcium	0.4112124	0.0256868	V0	0.0206805	V0	0.0000000	V1
Cerium	0.0000174	0.0000146	V0	0.0000103	V0	0.0000000	V1
Cesium	0.0000100	0.0000018	V0	0.0000013	V0	0.0000000	V1
Chromium	0.0022262	0.0002300	V0	0.0001495	V0	0.0000989	V0
Cobalt	0.0000273	0.0000553	V0	0.0000494	V0	0.0000979	V0
Copper	0.0017171	0.0004434	V0	0.0008188	V0	0.0002236	V0
Iron	0.0393063	0.0120829	V0	0.0090076	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000308	V0	0.0000390	V0	0.0000000	V1
Lead	0.0008577	0.0001995	V0	0.0002415	V0	0.0000000	V1
Lithium	0.0000374	0.0000283	V0	0.0000000	V1	0.0000062	V0
Magnesium	0.0091409	0.0040871	V0	0.0029563	V0	0.0006200	V0
Manganese	0.0006949	0.0006992	V0	0.0004610	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000943	V0	0.0000814	V0	0.0000000	V1
Neodymium	0.0000140	0.0000040	V0	0.0000026	V0	0.0000000	V1
Nickel	0.0005429	0.0002746	V0	0.0001445	V0	0.0002002	V0
Niobium	0.0000202	0.0000037	V0	0.0000016	V0	0.0000023	V0
Palladium	0.0000632	0.0000155	V0	0.0000000	V1	0.0000039	V0
Phosphorus	0.0459574	0.0105287	V0	0.0093681	V0	0.0083370	V0
Platinum	0.0000088	0.0000013	V0	0.0000010	V0	0.0000000	V1
Potassium	0.0061261	0.0466919	V0	0.0461968	V0	0.0006354	V0
Praseodymium	0.0000070	0.0000010	V0	0.0000005	V0	0.0000000	V1
Rubidium	0.0000184	0.0000999	V0	0.0000719	V0	0.0000022	V0
Samarium	0.0000133	0.0000020	V0	0.0000008	V0	0.0000007	V0
Selenium	0.0003366	0.0000438	V0	0.0000197	V0	0.0000000	V1
Silicon	0.7676322	0.1851025	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000039	V0	0.0000022	V0	0.0000005	V0
Sodium	0.0169447	0.0165320	V0	0.0185184	V0	0.0014007	V0
Strontium	0.0003375	0.0000730	V0	0.0000626	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000017	V0	0.0000010	V0	0.0000000	V1
Thorium	0.0000059	0.0000013	V0	0.0000006	V0	0.0000000	V1
Tin	0.0004414	0.0001059	V0	0.0002812	V0	0.0000000	V1
Titanium	0.0015201	0.0006440	V0	0.0006012	V0	0.0002450	V0
Tungsten	0.0000938	0.0000501	V0	0.0000616	V0	0.0000399	V0
Uranium	0.0000048	0.0000013	V0	0.0000008	V0	0.0000003	V0
Vanadium	0.0007697	0.0003166	V0	0.0002495	V0	0.0000548	V0
Zinc	0.0055897	0.0047772	V0	0.0037521	V0	0.0003405	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		06-Feb		06-Feb		06-Feb	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.84	V0	3.24	V0	0.11	V0
Aluminum	0.1380326	0.0061581	V0	0.0085784	V0	0.0000000	V1
Antimony	0.0001784	0.0000511	V0	0.0000389	V0	0.0000000	V1
Arsenic	0.0001060	0.0000766	V0	0.0000641	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000069	V0	0.0000113	V0	0.0000027	V0
Cadmium	0.0000174	0.0000222	V0	0.0000206	V0	0.0000009	V0
Calcium	0.4112124	0.0000000	V1	0.0000000	V1	0.0000000	V1
Cerium	0.0000174	0.0000106	V0	0.0000098	V0	0.0000000	V1
Cesium	0.0000100	0.0000010	V0	0.0000015	V0	0.0000000	V1
Chromium	0.0022262	0.0002160	V0	0.0002354	V0	0.0000989	V0
Cobalt	0.0000273	0.0000611	V0	0.0000528	V0	0.0000979	V0
Copper	0.0017171	0.0004805	V0	0.0002596	V0	0.0002236	V0
Iron	0.0393063	0.0087625	V0	0.0089354	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000305	V0	0.0000679	V0	0.0000000	V1
Lead	0.0008577	0.0002001	V0	0.0002131	V0	0.0000000	V1
Lithium	0.0000374	0.0000065	V0	0.0000085	V0	0.0000062	V0
Magnesium	0.0091409	0.0027755	V0	0.0030295	V0	0.0006200	V0
Manganese	0.0006949	0.0004301	V0	0.0004171	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000745	V0	0.0001100	V0	0.0000000	V1
Neodymium	0.0000140	0.0000014	V0	0.0000037	V0	0.0000000	V1
Nickel	0.0005429	0.0005427	V0	0.0001909	V0	0.0002002	V0
Niobium	0.0000202	0.0000032	V0	0.0000030	V0	0.0000023	V0
Palladium	0.0000632	0.0000055	V0	0.0000000	V1	0.0000039	V0
Phosphorus	0.0459574	0.0075647	V0	0.0094176	V0	0.0083370	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0316463	V0	0.0275486	V0	0.0006354	V0
Praseodymium	0.0000070	0.0000007	V0	0.0000008	V0	0.0000000	V1
Rubidium	0.0000184	0.0000684	V0	0.0000511	V0	0.0000022	V0
Samarium	0.0000133	0.0000009	V0	0.0000007	V0	0.0000007	V0
Selenium	0.0003366	0.0000336	V0	0.0000413	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.1399262	V0	0.0000000	V1
Silver	0.0000100	0.0000024	V0	0.0000021	V0	0.0000005	V0
Sodium	0.0169447	0.0218405	V0	0.0157138	V0	0.0014007	V0
Strontium	0.0003375	0.0000545	V0	0.0000607	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000011	V0	0.0000010	V0	0.0000000	V1
Thorium	0.0000059	0.0000007	V0	0.0000012	V0	0.0000000	V1
Tin	0.0004414	0.0000976	V0	0.0000816	V0	0.0000000	V1
Titanium	0.0015201	0.0006717	V0	0.0006241	V0	0.0002450	V0
Tungsten	0.0000938	0.0000629	V0	0.0000473	V0	0.0000399	V0
Uranium	0.0000048	0.0000012	V0	0.0000015	V0	0.0000003	V0
Vanadium	0.0007697	0.0002689	V0	0.0004263	V0	0.0000548	V0
Zinc	0.0055897	0.0027709	V0	0.0026220	V0	0.0003405	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Patricia McInnes		Athabasca Valley		Travel Blank	
Station #		AMS 6		AMS 7			
Sample Date		12-Feb		12-Feb		12-Feb	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.15	V0	2.47	V0	0.12	V0
Aluminum	0.1380326	0.0070221	V0	0.0073095	V0	0.0000000	V1
Antimony	0.0001784	0.0000362	V0	0.0000685	V0	0.0000000	V1
Arsenic	0.0001060	0.0000494	V0	0.0000517	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0006971	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000149	V0	0.0000061	V0	0.0000016	V0
Cadmium	0.0000174	0.0000159	V0	0.0000123	V0	0.0000000	V1
Calcium	0.4112124	0.0193967	V0	0.0208385	V0	0.0000000	V1
Cerium	0.0000174	0.0000121	V0	0.0000250	V0	0.0000000	V1
Cesium	0.0000100	0.0000014	V0	0.0000015	V0	0.0000000	V1
Chromium	0.0022262	0.0001202	V0	0.0002057	V0	0.0000000	V1
Cobalt	0.0000273	0.0000449	V0	0.0000753	V0	0.0000443	V0
Copper	0.0017171	0.0005632	V0	0.0006017	V0	0.0012437	V0
Iron	0.0393063	0.0073239	V0	0.0159620	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000046	V0	0.0000091	V0	0.0000000	V1
Lead	0.0008577	0.0003638	V0	0.0003639	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0038298	V0	0.0042343	V0	0.0000000	V1
Manganese	0.0006949	0.0002623	V0	0.0003764	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000380	V0	0.0000000	V1
Neodymium	0.0000140	0.0000000	V1	0.0000041	V0	0.0000000	V1
Nickel	0.0005429	0.0000982	V0	0.0001854	V0	0.0000718	V0
Niobium	0.0000202	0.0000016	V0	0.0000023	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000062	V0	0.0000036	V0
Phosphorus	0.0459574	0.0055489	V0	0.0069092	V0	0.0054394	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0173510	V0	0.0138870	V0	0.0003814	V0
Praseodymium	0.0000070	0.0000006	V0	0.0000010	V0	0.0000000	V1
Rubidium	0.0000184	0.0000397	V0	0.0000304	V0	0.0000000	V1
Samarium	0.0000133	0.0000008	V0	0.0000008	V0	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000298	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0861828	V0	0.0000000	V1
Silver	0.0000100	0.0000022	V0	0.0000018	V0	0.0000000	V1
Sodium	0.0169447	0.0211979	V0	0.0483250	V0	0.0000000	V1
Strontium	0.0003375	0.0000809	V0	0.0001107	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000018	V0	0.0000019	V0	0.0000000	V1
Thorium	0.0000059	0.0000000	V1	0.0000011	V0	0.0000000	V1
Tin	0.0004414	0.0000757	V0	0.0000812	V0	0.0000000	V1
Titanium	0.0015201	0.0005085	V0	0.0007405	V0	0.0001745	V0
Tungsten	0.0000938	0.0000555	V0	0.0000683	V0	0.0000556	V0
Uranium	0.0000048	0.0000005	V0	0.0000006	V0	0.0000000	V1
Vanadium	0.0007697	0.0000627	V0	0.0000653	V0	0.0000000	V1
Zinc	0.0055897	0.0015585	V0	0.0012379	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		**Anzac**		**Travel Blank**	
Station #		**AMS 14**			
Sample Date		**12-Feb**		**12-Feb**	
Particulate Size		**PM2.5**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	0.88	V0	0.12	V0
Aluminum	0.1380326	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000103	V0	0.0000000	V1
Arsenic	0.0001060	0.0000219	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000148	V0	0.0000016	V0
Cadmium	0.0000174	0.0000046	V0	0.0000000	V1
Calcium	0.4112124	0.0000000	V1	0.0000000	V1
Cerium	0.0000174	0.0000038	V0	0.0000000	V1
Cesium	0.0000100	0.0000006	V0	0.0000000	V1
Chromium	0.0022262	0.0003583	V0	0.0000000	V1
Cobalt	0.0000273	0.0000475	V0	0.0000443	V0
Copper	0.0017171	0.0002380	V0	0.0012437	V0
Iron	0.0393063	0.0094949	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000023	V0	0.0000000	V1
Lead	0.0008577	0.0002704	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0023505	V0	0.0000000	V1
Manganese	0.0006949	0.0001986	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000000	V1	0.0000000	V1
Nickel	0.0005429	0.0002152	V0	0.0000718	V0
Niobium	0.0000202	0.0000013	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000036	V0
Phosphorus	0.0459574	0.0060991	V0	0.0054394	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0067862	V0	0.0003814	V0
Praseodymium	0.0000070	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000137	V0	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0121676	V0	0.0000000	V1
Strontium	0.0003375	0.0000386	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000000	V1
Thorium	0.0000059	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0000375	V0	0.0000000	V1
Titanium	0.0015201	0.0002240	V0	0.0001745	V0
Tungsten	0.0000938	0.0000302	V0	0.0000556	V0
Uranium	0.0000048	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0000397	V0	0.0000000	V1
Zinc	0.0055897	0.0005554	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -				
Station Name		**Fort McKay**		**Travel Blank**		
Station #		**AMS 1**				
Sample Date		**17-Feb**		**17-Feb**		
Particulate Size		**PM2.5**				
Total Air Volume (m^3)		**23.6**		**24**		
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	1.82	V0	0.12	V0
Aluminum	0.1380326	0.0082101	V0	0.0000000	V1
Antimony	0.0001784	0.0000098	V0	0.0000000	V1
Arsenic	0.0001060	0.0000418	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000143	V0	0.0000016	V0
Cadmium	0.0000174	0.0000078	V0	0.0000000	V1
Calcium	0.4112124	0.0177053	V0	0.0000000	V1
Cerium	0.0000174	0.0000060	V0	0.0000000	V1
Cesium	0.0000100	0.0000012	V0	0.0000000	V1
Chromium	0.0022262	0.0001519	V0	0.0000000	V1
Cobalt	0.0000273	0.0000527	V0	0.0000443	V0
Copper	0.0017171	0.0001560	V0	0.0012437	V0
Iron	0.0393063	0.0057627	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000031	V0	0.0000000	V1
Lead	0.0008577	0.0003496	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0047497	V0	0.0000000	V1
Manganese	0.0006949	0.0002682	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000000	V1	0.0000000	V1
Nickel	0.0005429	0.0001333	V0	0.0000718	V0
Niobium	0.0000202	0.0000014	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000036	V0
Phosphorus	0.0459574	0.0072703	V0	0.0054394	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0066406	V0	0.0003814	V0
Praseodymium	0.0000070	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000166	V0	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000151	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0153730	V0	0.0000000	V1
Strontium	0.0003375	0.0000583	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000013	V0	0.0000000	V1
Thorium	0.0000059	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0000483	V0	0.0000000	V1
Titanium	0.0015201	0.0005996	V0	0.0001745	V0
Tungsten	0.0000938	0.0000674	V0	0.0000556	V0
Uranium	0.0000048	0.0000003	V0	0.0000000	V1
Vanadium	0.0007697	0.0000757	V0	0.0000000	V1
Zinc	0.0055897	0.0012245	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		18-Feb		18-Feb		18-Feb	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.69	V0	4.29	V0	0.08	V0
Aluminum	0.1380326	0.0059715	V0	0.0059823	V0	0.0000000	V1
Antimony	0.0001784	0.0000242	V0	0.0000439	V0	0.0000000	V1
Arsenic	0.0001060	0.0000393	V0	0.0000446	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000127	V0	0.0000121	V0	0.0000000	V1
Bismuth	0.0000093	0.0000131	V0	0.0000270	V0	0.0000125	V0
Cadmium	0.0000174	0.0000096	V0	0.0000148	V0	0.0000000	V1
Calcium	0.4112124	0.0000000	V1	0.0171742	V0	0.0000000	V1
Cerium	0.0000174	0.0000071	V0	0.0000109	V0	0.0000000	V1
Cesium	0.0000100	0.0000011	V0	0.0000013	V0	0.0000000	V1
Chromium	0.0022262	0.0002237	V0	0.0001746	V0	0.0000974	V0
Cobalt	0.0000273	0.0000468	V0	0.0000499	V0	0.0000357	V0
Copper	0.0017171	0.0003355	V0	0.0004048	V0	0.0001076	V0
Iron	0.0393063	0.0122115	V0	0.0118575	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000039	V0	0.0000074	V0	0.0000000	V1
Lead	0.0008577	0.0002458	V0	0.0002676	V0	0.0000000	V1
Lithium	0.0000374	0.0000103	V0	0.0000041	V0	0.0000000	V1
Magnesium	0.0091409	0.0028311	V0	0.0037855	V0	0.0006625	V0
Manganese	0.0006949	0.0009742	V0	0.0006228	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000761	V0	0.0000495	V0	0.0000000	V1
Neodymium	0.0000140	0.0000040	V0	0.0000027	V0	0.0000000	V1
Nickel	0.0005429	0.0003317	V0	0.0001954	V0	0.0001020	V0
Niobium	0.0000202	0.0000031	V0	0.0000020	V0	0.0000000	V1
Palladium	0.0000632	0.0000027	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0043964	V0	0.0038003	V0	0.0052301	V0
Platinum	0.0000088	0.0000016	V0	0.0000018	V0	0.0000000	V1
Potassium	0.0061261	0.0096515	V0	0.0239247	V0	0.0013758	V0
Praseodymium	0.0000070	0.0000007	V0	0.0000007	V0	0.0000000	V1
Rubidium	0.0000184	0.0000178	V0	0.0000440	V0	0.0000009	V0
Samarium	0.0000133	0.0000018	V0	0.0000022	V0	0.0000000	V1
Selenium	0.0003366	0.0000354	V0	0.0000448	V0	0.0000000	V1
Silicon	0.7676322	0.0721886	V0	0.0501293	V0	0.0000000	V1
Silver	0.0000100	0.0000008	V0	0.0000031	V0	0.0000000	V1
Sodium	0.0169447	0.0108080	V0	0.0187935	V0	0.0008762	V0
Strontium	0.0003375	0.0000410	V0	0.0000785	V0	0.0000165	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000012	V0	0.0000011	V0	0.0000000	V1
Thorium	0.0000059	0.0000012	V0	0.0000006	V0	0.0000000	V1
Tin	0.0004414	0.0000496	V0	0.0000874	V0	0.0000000	V1
Titanium	0.0015201	0.0005260	V0	0.0005916	V0	0.0001278	V0
Tungsten	0.0000938	0.0000409	V0	0.0000458	V0	0.0000343	V0
Uranium	0.0000048	0.0000010	V0	0.0000014	V0	0.0000000	V1
Vanadium	0.0007697	0.0000709	V0	0.0001599	V0	0.0000000	V1
Zinc	0.0055897	0.0016733	V0	0.0029915	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		18-Feb		18-Feb		18-Feb	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	6.39	V0	3.56	V0	0.08	V0
Aluminum	0.1380326	0.0083283	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0001060	V0	0.0000208	V0	0.0000000	V1
Arsenic	0.0001060	0.0000615	V0	0.0000356	V0	0.0000000	V1
Barium	0.0092847	0.0013253	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000116	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000261	V0	0.0000153	V0	0.0000125	V0
Cadmium	0.0000174	0.0000170	V0	0.0000144	V0	0.0000000	V1
Calcium	0.4112124	0.0373047	V0	0.0000000	V1	0.0000000	V1
Cerium	0.0000174	0.0000144	V0	0.0000036	V0	0.0000000	V1
Cesium	0.0000100	0.0000029	V0	0.0000008	V0	0.0000000	V1
Chromium	0.0022262	0.0003341	V0	0.0004363	V0	0.0000974	V0
Cobalt	0.0000273	0.0000549	V0	0.0000500	V0	0.0000357	V0
Copper	0.0017171	0.0008851	V0	0.0001574	V0	0.0001076	V0
Iron	0.0393063	0.0260717	V0	0.0047418	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000082	V0	0.0000059	V0	0.0000000	V1
Lead	0.0008577	0.0003499	V0	0.0001977	V0	0.0000000	V1
Lithium	0.0000374	0.0000192	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0062104	V0	0.0025604	V0	0.0006625	V0
Manganese	0.0006949	0.0025102	V0	0.0001979	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001236	V0	0.0000316	V0	0.0000000	V1
Neodymium	0.0000140	0.0000034	V0	0.0000009	V0	0.0000000	V1
Nickel	0.0005429	0.0003596	V0	0.0003390	V0	0.0001020	V0
Niobium	0.0000202	0.0000041	V0	0.0000018	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0053637	V0	0.0049043	V0	0.0052301	V0
Platinum	0.0000088	0.0000014	V0	0.0000016	V0	0.0000000	V1
Potassium	0.0061261	0.1240422	V0	0.0164377	V0	0.0013758	V0
Praseodymium	0.0000070	0.0000012	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0002412	V0	0.0000247	V0	0.0000009	V0
Samarium	0.0000133	0.0000015	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000532	V0	0.0000523	V0	0.0000000	V1
Silicon	0.7676322	0.0496961	V0	0.0654970	V0	0.0000000	V1
Silver	0.0000100	0.0000053	V0	0.0000008	V0	0.0000000	V1
Sodium	0.0169447	0.0393264	V0	0.0096020	V0	0.0008762	V0
Strontium	0.0003375	0.0002195	V0	0.0000432	V0	0.0000165	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000018	V0	0.0000009	V0	0.0000000	V1
Thorium	0.0000059	0.0000013	V0	0.0000004	V0	0.0000000	V1
Tin	0.0004414	0.0001425	V0	0.0000695	V0	0.0000000	V1
Titanium	0.0015201	0.0010251	V0	0.0004165	V0	0.0001278	V0
Tungsten	0.0000938	0.0000630	V0	0.0000705	V0	0.0000343	V0
Uranium	0.0000048	0.0000017	V0	0.0000025	V0	0.0000000	V1
Vanadium	0.0007697	0.0002810	V0	0.0001058	V0	0.0000000	V1
Zinc	0.0055897	0.0116113	V0	0.0013612	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Patricia McInnes		Athabasca Valley		Travel Blank	
Station #		AMS 6		AMS 7			
Sample Date		24-Feb		24-Feb		24-Feb	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	1.07	V0	4.98	V0	0.09	V0
Aluminum	0.1380326	0.0073910	V0	0.0186630	V0	0.0000000	V1
Antimony	0.0001784	0.0000779	V0	0.0004693	V4	0.0000000	V1
Arsenic	0.0001060	0.0000372	V0	0.0000585	V0	0.0000000	V1
Barium	0.0092847	0.0006600	V0	0.0045436	V0	0.0000000	V1
Beryllium	0.0000946	0.0000097	V0	0.0000000	V1	0.0000315	V0
Bismuth	0.0000093	0.0000258	V0	0.0000368	V0	0.0000042	V0
Cadmium	0.0000174	0.0000093	V0	0.0000524	V0	0.0000018	V0
Calcium	0.4112124	0.0000000	V1	0.0544521	V0	0.0000000	V1
Cerium	0.0000174	0.0000166	V0	0.0002711	V0	0.0000013	V0
Cesium	0.0000100	0.0000009	V0	0.0000017	V0	0.0000000	V1
Chromium	0.0022262	0.0002176	V0	0.0003107	V0	0.0000999	V0
Cobalt	0.0000273	0.0000602	V0	0.0000636	V0	0.0000773	V0
Copper	0.0017171	0.0006610	V0	0.0029920	V0	0.0000814	V0
Iron	0.0393063	0.0150874	V0	0.0735875	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000068	V0	0.0000276	V0	0.0000006	V0
Lead	0.0008577	0.0000486	V0	0.0004321	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000097	V0	0.0000134	V0
Magnesium	0.0091409	0.0040895	V0	0.0099219	V0	0.0006357	V0
Manganese	0.0006949	0.0002285	V0	0.0011089	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000306	V0	0.0001987	V0	0.0000000	V1
Neodymium	0.0000140	0.0000053	V0	0.0000150	V0	0.0000014	V0
Nickel	0.0005429	0.0001709	V0	0.0003553	V0	0.0002372	V0
Niobium	0.0000202	0.0000016	V0	0.0000096	V0	0.0000019	V0
Palladium	0.0000632	0.0000036	V0	0.0000093	V0	0.0000030	V0
Phosphorus	0.0459574	0.0050957	V0	0.0067546	V0	0.0038246	V0
Platinum	0.0000088	0.0000020	V0	0.0000035	V0	0.0000025	V0
Potassium	0.0061261	0.0146576	V0	0.0305720	V0	0.0010479	V0
Praseodymium	0.0000070	0.0000009	V0	0.0000044	V0	0.0000003	V0
Rubidium	0.0000184	0.0000237	V0	0.0000473	V0	0.0000013	V0
Samarium	0.0000133	0.0000014	V0	0.0000025	V0	0.0000024	V0
Selenium	0.0003366	0.0000263	V0	0.0000962	V0	0.0000183	V0
Silicon	0.7676322	0.0630741	V0	0.1857273	V0	0.0761368	V0
Silver	0.0000100	0.0000007	V0	0.0000040	V0	0.0000004	V0
Sodium	0.0169447	0.0365179	V0	0.1588099	V0	0.0010767	V0
Strontium	0.0003375	0.0000773	V0	0.0004785	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000011	V0	0.0000008	V0
Thorium	0.0000059	0.0000013	V0	0.0000043	V0	0.0000008	V0
Tin	0.0004414	0.0000750	V0	0.0003196	V0	0.0000000	V1
Titanium	0.0015201	0.0006541	V0	0.0023394	V0	0.0002244	V0
Tungsten	0.0000938	0.0000431	V0	0.0000821	V0	0.0000745	V0
Uranium	0.0000048	0.0000008	V0	0.0000018	V0	0.0000007	V0
Vanadium	0.0007697	0.0000000	V1	0.0000817	V0	0.0000000	V1
Zinc	0.0055897	0.0023730	V0	0.0120083	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		**Anzac**		**Travel Blank**	
Station #		**AMS 14**			
Sample Date		**24-Feb**		**24-Feb**	
Particulate Size		**PM2.5**			
Total Air Volume (m³)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	0.73	V0	0.09	V0
Aluminum	0.1380326	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000081	V0	0.0000000	V1
Arsenic	0.0001060	0.0000155	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000242	V4	0.0000315	V0
Bismuth	0.0000093	0.0000133	V0	0.0000042	V0
Cadmium	0.0000174	0.0000027	V0	0.0000018	V0
Calcium	0.4112124	0.0000000	V1	0.0000000	V1
Cerium	0.0000174	0.0000096	V0	0.0000013	V0
Cesium	0.0000100	0.0000008	V0	0.0000000	V1
Chromium	0.0022262	0.0001202	V0	0.0000999	V0
Cobalt	0.0000273	0.0000427	V0	0.0000773	V0
Copper	0.0017171	0.0001663	V0	0.0000814	V0
Iron	0.0393063	0.0058859	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000046	V0	0.0000006	V0
Lead	0.0008577	0.0000360	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000134	V0
Magnesium	0.0091409	0.0036001	V0	0.0006357	V0
Manganese	0.0006949	0.0001252	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000041	V0	0.0000014	V0
Nickel	0.0005429	0.0002027	V0	0.0002372	V0
Niobium	0.0000202	0.0000013	V0	0.0000019	V0
Palladium	0.0000632	0.0000000	V1	0.0000030	V0
Phosphorus	0.0459574	0.0037475	V0	0.0038246	V0
Platinum	0.0000088	0.0000024	V0	0.0000025	V0
Potassium	0.0061261	0.0084154	V0	0.0010479	V0
Praseodymium	0.0000070	0.0000004	V0	0.0000003	V0
Rubidium	0.0000184	0.0000136	V0	0.0000013	V0
Samarium	0.0000133	0.0000028	V0	0.0000024	V0
Selenium	0.0003366	0.0000366	V0	0.0000183	V0
Silicon	0.7676322	0.1140806	V0	0.0761368	V0
Silver	0.0000100	0.0000010	V0	0.0000004	V0
Sodium	0.0169447	0.0166593	V0	0.0010767	V0
Strontium	0.0003375	0.0000461	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000009	V0	0.0000008	V0
Thorium	0.0000059	0.0000009	V0	0.0000008	V0
Tin	0.0004414	0.0000428	V0	0.0000000	V1
Titanium	0.0015201	0.0004164	V0	0.0002244	V0
Tungsten	0.0000938	0.0000379	V0	0.0000745	V0
Uranium	0.0000048	0.0000004	V0	0.0000007	V0
Vanadium	0.0007697	0.0000000	V1	0.0000000	V1
Zinc	0.0055897	0.0005977	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -				
Station Name		**Fort McKay**		**Travel Blank**		
Station #		**AMS 1**				
Sample Date		**25-Feb**		**25-Feb**		
Particulate Size		**PM2.5**				
Total Air Volume (m^3)		**23.6**		**24**		
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	2.43	V0	0.09	V0
Aluminum	0.1380326	0.0059922	V0	0.0000000	V1
Antimony	0.0001784	0.0000320	V0	0.0000000	V1
Arsenic	0.0001060	0.0000225	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000046	V0	0.0000315	V0
Bismuth	0.0000093	0.0000048	V0	0.0000042	V0
Cadmium	0.0000174	0.0000135	V0	0.0000018	V0
Calcium	0.4112124	0.0203908	V0	0.0000000	V1
Cerium	0.0000174	0.0000170	V0	0.0000013	V0
Cesium	0.0000100	0.0000010	V0	0.0000000	V1
Chromium	0.0022262	0.0001117	V0	0.0000999	V0
Cobalt	0.0000273	0.0000792	V0	0.0000773	V0
Copper	0.0017171	0.0002408	V0	0.0000814	V0
Iron	0.0393063	0.0089826	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000073	V0	0.0000006	V0
Lead	0.0008577	0.0000859	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000134	V0
Magnesium	0.0091409	0.0028238	V0	0.0006357	V0
Manganese	0.0006949	0.0003143	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000027	V0	0.0000014	V0
Nickel	0.0005429	0.0001949	V0	0.0002372	V0
Niobium	0.0000202	0.0000023	V0	0.0000019	V0
Palladium	0.0000632	0.0000000	V1	0.0000030	V0
Phosphorus	0.0459574	0.0048274	V0	0.0038246	V0
Platinum	0.0000088	0.0000012	V0	0.0000025	V0
Potassium	0.0061261	0.0176967	V0	0.0010479	V0
Praseodymium	0.0000070	0.0000008	V0	0.0000003	V0
Rubidium	0.0000184	0.0000250	V0	0.0000013	V0
Samarium	0.0000133	0.0000000	V1	0.0000024	V0
Selenium	0.0003366	0.0000306	V0	0.0000183	V0
Silicon	0.7676322	0.0886707	V0	0.0761368	V0
Silver	0.0000100	0.0000009	V0	0.0000004	V0
Sodium	0.0169447	0.0165207	V0	0.0010767	V0
Strontium	0.0003375	0.0000653	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000007	V0	0.0000008	V0
Thorium	0.0000059	0.0000007	V0	0.0000008	V0
Tin	0.0004414	0.0000465	V0	0.0000000	V1
Titanium	0.0015201	0.0003929	V0	0.0002244	V0
Tungsten	0.0000938	0.0000542	V0	0.0000745	V0
Uranium	0.0000048	0.0000005	V0	0.0000007	V0
Vanadium	0.0007697	0.0000000	V1	0.0000000	V1
Zinc	0.0055897	0.0017077	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		01-Mar		01-Mar		01-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		22.7		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	6.65	V0	5.01	V0	0.05	V0
Aluminum	0.1380326	0.0111797	V0	0.0128903	V0	0.0000000	V1
Antimony	0.0001784	0.0000950	V0	0.0001219	V0	0.0000000	V1
Arsenic	0.0001060	0.0000482	V0	0.0000685	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0007476	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000076	V0	0.0000187	V0	0.0000070	V0
Cadmium	0.0000174	0.0000307	V0	0.0000214	V0	0.0000000	V1
Calcium	0.4112124	0.0226124	V0	0.0329173	V0	0.0000000	V1
Cerium	0.0000174	0.0000129	V0	0.0000260	V0	0.0000000	V1
Cesium	0.0000100	0.0000006	V0	0.0000006	V0	0.0000000	V1
Chromium	0.0022262	0.0001296	V0	0.0001571	V0	0.0000000	V1
Cobalt	0.0000273	0.0000771	V0	0.0000419	V0	0.0000548	V0
Copper	0.0017171	0.0006816	V0	0.0005748	V0	0.0000000	V1
Iron	0.0393063	0.0157383	V0	0.0280535	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000221	V0	0.0000299	V0	0.0000000	V1
Lead	0.0008577	0.0003342	V0	0.0003148	V0	0.0000000	V1
Lithium	0.0000374	0.0000160	V0	0.0000204	V0	0.0000082	V0
Magnesium	0.0091409	0.0160705	V0	0.0188645	V0	0.0006309	V0
Manganese	0.0006949	0.0005732	V0	0.0006335	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000700	V0	0.0000570	V0	0.0000000	V1
Neodymium	0.0000140	0.0000050	V0	0.0000070	V0	0.0000000	V1
Nickel	0.0005429	0.0002808	V0	0.0001551	V0	0.0000842	V0
Niobium	0.0000202	0.0000020	V0	0.0000021	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000046	V0
Phosphorus	0.0459574	0.0069836	V0	0.0062975	V0	0.0053710	V0
Platinum	0.0000088	0.0000000	V1	0.0000005	V0	0.0000000	V1
Potassium	0.0061261	0.0296618	V0	0.0330744	V0	0.0007413	V0
Praseodymium	0.0000070	0.0000006	V0	0.0000016	V0	0.0000000	V1
Rubidium	0.0000184	0.0000600	V0	0.0000632	V0	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	0.0000006	V0	0.0000000	V1
Selenium	0.0003366	0.0000346	V0	0.0000381	V0	0.0000000	V1
Silicon	0.7676322	0.0575780	V0	0.0836482	V0	0.0000000	V1
Silver	0.0000100	0.0000008	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.1024076	V0	0.1205178	V0	0.0022267	V0
Strontium	0.0003375	0.0001402	V0	0.0001882	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000005	V0	0.0000000	V1
Thorium	0.0000059	0.0000011	V0	0.0000017	V0	0.0000000	V1
Tin	0.0004414	0.0000966	V0	0.0001251	V0	0.0000000	V1
Titanium	0.0015201	0.0005989	V0	0.0007922	V0	0.0001048	V0
Tungsten	0.0000938	0.0000531	V0	0.0000388	V0	0.0000512	V0
Uranium	0.0000048	0.0000000	V1	0.0000007	V0	0.0000000	V1
Vanadium	0.0007697	0.0002169	V0	0.0001393	V0	0.0000000	V1
Zinc	0.0055897	0.0043019	V0	0.0043474	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		01-Mar		01-Mar		01-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24.1		23.9		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.71	V0	2.76	V0	0.05	V0
Aluminum	0.1380326	0.0142776	V0	0.0062535	V0	0.0000000	V1
Antimony	0.0001784	0.0002336	V0	0.0000556	V0	0.0000000	V1
Arsenic	0.0001060	0.0000737	V0	0.0000713	V0	0.0000000	V1
Barium	0.0092847	0.0012175	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000277	V0	0.0000148	V0	0.0000070	V0
Cadmium	0.0000174	0.0000575	V0	0.0000165	V0	0.0000000	V1
Calcium	0.4112124	0.0412202	V0	0.0177840	V0	0.0000000	V1
Cerium	0.0000174	0.0000276	V0	0.0000071	V0	0.0000000	V1
Cesium	0.0000100	0.0000007	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0002070	V0	0.0001332	V0	0.0000000	V1
Cobalt	0.0000273	0.0000563	V0	0.0003125	V4	0.0000548	V0
Copper	0.0017171	0.0014029	V0	0.0002389	V0	0.0000000	V1
Iron	0.0393063	0.0369868	V0	0.0062848	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000257	V0	0.0000140	V0	0.0000000	V1
Lead	0.0008577	0.0005925	V0	0.0001992	V0	0.0000000	V1
Lithium	0.0000374	0.0000203	V0	0.0000116	V0	0.0000082	V0
Magnesium	0.0091409	0.0220212	V0	0.0154490	V0	0.0006309	V0
Manganese	0.0006949	0.0008497	V0	0.0001916	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000909	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000072	V0	0.0000021	V0	0.0000000	V1
Nickel	0.0005429	0.0002077	V0	0.0005457	V0	0.0000842	V0
Niobium	0.0000202	0.0000029	V0	0.0000012	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000046	V0
Phosphorus	0.0459574	0.0065334	V0	0.0074406	V0	0.0053710	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0340120	V0	0.0222343	V0	0.0007413	V0
Praseodymium	0.0000070	0.0000016	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000583	V0	0.0000346	V0	0.0000000	V1
Samarium	0.0000133	0.0000006	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000321	V0	0.0000405	V0	0.0000000	V1
Silicon	0.7676322	0.0707207	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000005	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.1424903	V0	0.0978179	V0	0.0022267	V0
Strontium	0.0003375	0.0002338	V0	0.0001264	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000017	V0	0.0000010	V0	0.0000000	V1
Tin	0.0004414	0.0001500	V0	0.0000961	V0	0.0000000	V1
Titanium	0.0015201	0.0011400	V0	0.0005337	V0	0.0001048	V0
Tungsten	0.0000938	0.0000418	V0	0.0000361	V0	0.0000512	V0
Uranium	0.0000048	0.0000005	V0	0.0000016	V0	0.0000000	V1
Vanadium	0.0007697	0.0001127	V0	0.0000980	V0	0.0000000	V1
Zinc	0.0055897	0.0043923	V0	0.0016795	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		07-Mar		07-Mar		07-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.59	V0	3.75	V0	0.08	V0
Aluminum	0.1380326	0.0105197	V0	0.0120618	V0	0.0000000	V1
Antimony	0.0001784	0.0000111	V0	0.0000237	V0	0.0000000	V1
Arsenic	0.0001060	0.0000182	V0	0.0000219	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000113	V0	0.0000151	V0	0.0000021	V0
Cadmium	0.0000174	0.0000039	V0	0.0000052	V0	0.0000000	V1
Calcium	0.4112124	0.0190339	V0	0.0185282	V0	0.0000000	V1
Cerium	0.0000174	0.0000135	V0	0.0000179	V0	0.0000000	V1
Cesium	0.0000100	0.0000000	V1	0.0000005	V0	0.0000000	V1
Chromium	0.0022262	0.0002022	V0	0.0002053	V0	0.0001074	V0
Cobalt	0.0000273	0.0000625	V0	0.0000395	V0	0.0000643	V0
Copper	0.0017171	0.0004241	V0	0.0002850	V0	0.0001765	V0
Iron	0.0393063	0.0120458	V0	0.0147210	V0	0.0016509	V0
Lanthanum	0.0000130	0.0000068	V0	0.0000086	V0	0.0000000	V1
Lead	0.0008577	0.0000773	V0	0.0000828	V0	0.0000000	V1
Lithium	0.0000374	0.0000195	V0	0.0000183	V0	0.0000022	V0
Magnesium	0.0091409	0.0074222	V0	0.0079996	V0	0.0006070	V0
Manganese	0.0006949	0.0003893	V0	0.0006235	V0	0.0000359	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000664	V0	0.0000000	V1
Neodymium	0.0000140	0.0000043	V0	0.0000061	V0	0.0000000	V1
Nickel	0.0005429	0.0002761	V0	0.0004521	V0	0.0001077	V0
Niobium	0.0000202	0.0000016	V0	0.0000016	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0076846	V0	0.0075399	V0	0.0067030	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0109401	V0	0.0223520	V0	0.0010647	V0
Praseodymium	0.0000070	0.0000007	V0	0.0000011	V0	0.0000000	V1
Rubidium	0.0000184	0.0000194	V0	0.0000350	V0	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000201	V0	0.0000000	V1
Silicon	0.7676322	0.0458534	V0	0.0840277	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0367166	V0	0.0459028	V0	0.0010619	V0
Strontium	0.0003375	0.0000794	V0	0.0000951	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000013	V0	0.0000012	V0	0.0000000	V1
Tin	0.0004414	0.0000582	V0	0.0000843	V0	0.0000000	V1
Titanium	0.0015201	0.0006642	V0	0.0005720	V0	0.0001197	V0
Tungsten	0.0000938	0.0000310	V0	0.0000401	V0	0.0000565	V0
Uranium	0.0000048	0.0000106	V0	0.0000101	V0	0.0000000	V1
Vanadium	0.0007697	0.0000581	V0	0.0001378	V0	0.0000000	V1
Zinc	0.0055897	0.0014573	V0	0.0039263	V0	0.0003303	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		07-Mar		07-Mar		07-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		23.7		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.49	V0	2.96	V0	0.08	V0
Aluminum	0.1380326	0.0131774	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000398	V0	0.0000212	V0	0.0000000	V1
Arsenic	0.0001060	0.0000226	V0	0.0000176	V0	0.0000000	V1
Barium	0.0092847	0.0006252	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000141	V0	0.0000051	V0	0.0000021	V0
Cadmium	0.0000174	0.0000045	V0	0.0000043	V0	0.0000000	V1
Calcium	0.4112124	0.0254677	V0	0.0251674	V0	0.0000000	V1
Cerium	0.0000174	0.0000188	V0	0.0000054	V0	0.0000000	V1
Cesium	0.0000100	0.0000010	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0004290	V0	0.0001905	V0	0.0001074	V0
Cobalt	0.0000273	0.0000758	V0	0.0000315	V0	0.0000643	V0
Copper	0.0017171	0.0004057	V0	0.0001161	V0	0.0001765	V0
Iron	0.0393063	0.0178156	V0	0.0047065	V0	0.0016509	V0
Lanthanum	0.0000130	0.0000090	V0	0.0000040	V0	0.0000000	V1
Lead	0.0008577	0.0000948	V0	0.0000714	V0	0.0000000	V1
Lithium	0.0000374	0.0000211	V0	0.0000061	V0	0.0000022	V0
Magnesium	0.0091409	0.0088149	V0	0.0069529	V0	0.0006070	V0
Manganese	0.0006949	0.0008763	V0	0.0001283	V0	0.0000359	V0
Molybdenum	0.0007116	0.0000542	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000054	V0	0.0000017	V0	0.0000000	V1
Nickel	0.0005429	0.0003544	V0	0.0001989	V0	0.0001077	V0
Niobium	0.0000202	0.0000027	V0	0.0000000	V1	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0076594	V0	0.0051963	V0	0.0067030	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0565881	V0	0.0101322	V0	0.0010647	V0
Praseodymium	0.0000070	0.0000012	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000867	V0	0.0000150	V0	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000363	V0	0.0000214	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000029	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0529466	V0	0.0357457	V0	0.0010619	V0
Strontium	0.0003375	0.0001359	V0	0.0000706	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000020	V0	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0001000	V0	0.0000952	V0	0.0000000	V1
Titanium	0.0015201	0.0008191	V0	0.0003570	V0	0.0001197	V0
Tungsten	0.0000938	0.0000634	V0	0.0000320	V0	0.0000565	V0
Uranium	0.0000048	0.0000118	V0	0.0000071	V0	0.0000000	V1
Vanadium	0.0007697	0.0001451	V0	0.0000591	V0	0.0000000	V1
Zinc	0.0055897	0.0050182	V0	0.0009568	V0	0.0003303	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		13-Mar		13-Mar		13-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.65	V0	3.34	V0	0.11	V0
Aluminum	0.1380326	0.0079963	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000098	V0	0.0000278	V0	0.0000000	V1
Arsenic	0.0001060	0.0000582	V0	0.0000390	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000000	V1	0.0000025	V0	0.0000303	V0
Cadmium	0.0000174	0.0000000	V1	0.0000024	V0	0.0000000	V1
Calcium	0.4112124	0.0000000	V1	0.0000000	V1	0.0000000	V1
Cerium	0.0000174	0.0000049	V0	0.0000107	V0	0.0000014	V0
Cesium	0.0000100	0.0000009	V0	0.0000006	V0	0.0000000	V1
Chromium	0.0022262	0.0000931	V0	0.0001364	V0	0.0000000	V1
Cobalt	0.0000273	0.0000499	V0	0.0000475	V0	0.0000611	V0
Copper	0.0017171	0.0002651	V0	0.0002561	V0	0.0001966	V0
Iron	0.0393063	0.0053336	V0	0.0071095	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000031	V0	0.0000072	V0	0.0000000	V1
Lead	0.0008577	0.0000556	V0	0.0000720	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0019799	V0	0.0019041	V0	0.0009617	V0
Manganese	0.0006949	0.0002371	V0	0.0002904	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000528	V0	0.0000000	V1
Neodymium	0.0000140	0.0000013	V0	0.0000013	V0	0.0000000	V1
Nickel	0.0005429	0.0001348	V0	0.0001553	V0	0.0001306	V0
Niobium	0.0000202	0.0000016	V0	0.0000018	V0	0.0000009	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0028179	V0	0.0023332	V0	0.0026585	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0079012	V0	0.0108332	V0	0.0011313	V0
Praseodymium	0.0000070	0.0000005	V0	0.0000006	V0	0.0000000	V1
Rubidium	0.0000184	0.0000140	V0	0.0000191	V0	0.0000013	V0
Samarium	0.0000133	0.0000006	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000244	V0	0.0000386	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000008	V0	0.0000010	V0
Sodium	0.0169447	0.0053164	V0	0.0066058	V0	0.0011016	V0
Strontium	0.0003375	0.0000318	V0	0.0000467	V0	0.0000228	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000004	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000006	V0	0.0000007	V0	0.0000003	V0
Tin	0.0004414	0.0000444	V0	0.0000550	V0	0.0000000	V1
Titanium	0.0015201	0.0004086	V0	0.0004549	V0	0.0005126	V0
Tungsten	0.0000938	0.0000358	V0	0.0000361	V0	0.0000652	V0
Uranium	0.0000048	0.0000017	V0	0.0000011	V0	0.0000000	V1
Vanadium	0.0007697	0.0000369	V0	0.0001725	V0	0.0000000	V1
Zinc	0.0055897	0.0011794	V0	0.0013845	V0	0.0004752	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		13-Mar		13-Mar		13-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.75	V0	2.48	V0	0.11	V0
Aluminum	0.1380326	0.0067794	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000864	V0	0.0000180	V0	0.0000000	V1
Arsenic	0.0001060	0.0000402	V0	0.0000291	V0	0.0000000	V1
Barium	0.0092847	0.0007418	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000063	V0	0.0000000	V1
Bismuth	0.0000093	0.0000124	V0	0.0000030	V0	0.0000303	V0
Cadmium	0.0000174	0.0000027	V0	0.0000034	V0	0.0000000	V1
Calcium	0.4112124	0.0000000	V1	0.0000000	V1	0.0000000	V1
Cerium	0.0000174	0.0000096	V0	0.0000041	V0	0.0000014	V0
Cesium	0.0000100	0.0000007	V0	0.0000007	V0	0.0000000	V1
Chromium	0.0022262	0.0002200	V0	0.0005566	V0	0.0000000	V1
Cobalt	0.0000273	0.0000496	V0	0.0000558	V0	0.0000611	V0
Copper	0.0017171	0.0006483	V0	0.0001815	V0	0.0001966	V0
Iron	0.0393063	0.0164358	V0	0.0070426	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000051	V0	0.0000039	V0	0.0000000	V1
Lead	0.0008577	0.0000685	V0	0.0000696	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0021457	V0	0.0016418	V0	0.0009617	V0
Manganese	0.0006949	0.0005806	V0	0.0002274	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000859	V0	0.0000487	V0	0.0000000	V1
Neodymium	0.0000140	0.0000022	V0	0.0000000	V1	0.0000000	V1
Nickel	0.0005429	0.0002502	V0	0.0003010	V0	0.0001306	V0
Niobium	0.0000202	0.0000021	V0	0.0000033	V0	0.0000009	V0
Palladium	0.0000632	0.0000041	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0023847	V0	0.0046649	V0	0.0026585	V0
Platinum	0.0000088	0.0000000	V1	0.0000007	V0	0.0000000	V1
Potassium	0.0061261	0.0135581	V0	0.0093632	V0	0.0011313	V0
Praseodymium	0.0000070	0.0000009	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000232	V0	0.0000167	V0	0.0000013	V0
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000480	V0	0.0000511	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000011	V0	0.0000011	V0	0.0000010	V0
Sodium	0.0169447	0.0158582	V0	0.0061025	V0	0.0011016	V0
Strontium	0.0003375	0.0000738	V0	0.0000271	V0	0.0000228	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000006	V0	0.0000004	V0	0.0000000	V1
Thorium	0.0000059	0.0000007	V0	0.0000005	V0	0.0000003	V0
Tin	0.0004414	0.0001263	V0	0.0000608	V0	0.0000000	V1
Titanium	0.0015201	0.0005953	V0	0.0003205	V0	0.0005126	V0
Tungsten	0.0000938	0.0000380	V0	0.0000487	V0	0.0000652	V0
Uranium	0.0000048	0.0000017	V0	0.0000010	V0	0.0000000	V1
Vanadium	0.0007697	0.0002204	V0	0.0001337	V0	0.0000000	V1
Zinc	0.0055897	0.0015844	V0	0.0011155	V0	0.0004752	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		19-Mar		19-Mar		19-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.50	V0	4.88	V0	0.05	V0
Aluminum	0.1380326	0.0090910	V0	0.0101618	V0	0.0062181	V0
Antimony	0.0001784	0.0000127	V0	0.0000729	V0	0.0000000	V1
Arsenic	0.0001060	0.0001024	V0	0.0000538	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0005724	V0	0.0017100	V0
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000000	V1	0.0000030	V0	0.0000564	V0
Cadmium	0.0000174	0.0000014	V0	0.0000123	V0	0.0000000	V1
Calcium	0.4112124	0.0000000	V1	0.0188893	V0	0.0233329	V0
Cerium	0.0000174	0.0000098	V0	0.0000231	V0	0.0000010	V0
Cesium	0.0000100	0.0000012	V0	0.0000013	V0	0.0000000	V1
Chromium	0.0022262	0.0001259	V0	0.0002342	V0	0.0001020	V0
Cobalt	0.0000273	0.0000574	V0	0.0000437	V0	0.0000618	V0
Copper	0.0017171	0.0002090	V0	0.0005263	V0	0.0003210	V0
Iron	0.0393063	0.0122791	V0	0.0186798	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000048	V0	0.0000206	V0	0.0000000	V1
Lead	0.0008577	0.0000689	V0	0.0001237	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0031194	V0	0.0037641	V0	0.0016582	V0
Manganese	0.0006949	0.0004380	V0	0.0007516	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000817	V0	0.0000000	V1
Neodymium	0.0000140	0.0000029	V0	0.0000051	V0	0.0000000	V1
Nickel	0.0005429	0.0001040	V0	0.0002107	V0	0.0001652	V0
Niobium	0.0000202	0.0000019	V0	0.0000024	V0	0.0000009	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0025333	V0	0.0024960	V0	0.0000000	V1
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0109793	V0	0.0284301	V0	0.0028895	V0
Praseodymium	0.0000070	0.0000013	V0	0.0000015	V0	0.0000000	V1
Rubidium	0.0000184	0.0000262	V0	0.0000523	V0	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	0.0000011	V0	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000420	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000010	V0	0.0000026	V0	0.0000010	V0
Sodium	0.0169447	0.0127215	V0	0.0265670	V0	0.0031290	V0
Strontium	0.0003375	0.0000503	V0	0.0000926	V0	0.0000496	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000007	V0	0.0000007	V0	0.0000000	V1
Thorium	0.0000059	0.0000012	V0	0.0000016	V0	0.0000000	V1
Tin	0.0004414	0.0000299	V0	0.0001121	V0	0.0000000	V1
Titanium	0.0015201	0.0005716	V0	0.0006310	V0	0.0003883	V0
Tungsten	0.0000938	0.0000562	V0	0.0000405	V0	0.0000641	V0
Uranium	0.0000048	0.0000005	V0	0.0000007	V0	0.0000000	V1
Vanadium	0.0007697	0.0000383	V0	0.0002962	V0	0.0000000	V1
Zinc	0.0055897	0.0019269	V0	0.0051496	V0	0.0011688	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		19-Mar		19-Mar		19-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.79	V0	1.71	V0	0.05	V0
Aluminum	0.1380326	0.0137432	V0	0.0000000	V1	0.0062181	V0
Antimony	0.0001784	0.0001384	V0	0.0000131	V0	0.0000000	V1
Arsenic	0.0001060	0.0000623	V0	0.0000274	V0	0.0000000	V1
Barium	0.0092847	0.0012672	V0	0.0000000	V1	0.0017100	V0
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000139	V0	0.0000107	V0	0.0000564	V0
Cadmium	0.0000174	0.0000092	V0	0.0000000	V1	0.0000000	V1
Calcium	0.4112124	0.0286496	V0	0.0000000	V1	0.0233329	V0
Cerium	0.0000174	0.0000266	V0	0.0000045	V0	0.0000010	V0
Cesium	0.0000100	0.0000015	V0	0.0000004	V0	0.0000000	V1
Chromium	0.0022262	0.0003571	V0	0.0000970	V0	0.0001020	V0
Cobalt	0.0000273	0.0000524	V0	0.0000397	V0	0.0000618	V0
Copper	0.0017171	0.0010390	V0	0.0001666	V0	0.0003210	V0
Iron	0.0393063	0.0327612	V0	0.0056930	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000225	V0	0.0000202	V0	0.0000000	V1
Lead	0.0008577	0.0001402	V0	0.0000629	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0053165	V0	0.0018600	V0	0.0016582	V0
Manganese	0.0006949	0.0009998	V0	0.0001575	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001590	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000057	V0	0.0000011	V0	0.0000000	V1
Nickel	0.0005429	0.0003038	V0	0.0000941	V0	0.0001652	V0
Niobium	0.0000202	0.0000036	V0	0.0000011	V0	0.0000009	V0
Palladium	0.0000632	0.0000036	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0036735	V0	0.0000000	V1	0.0000000	V1
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0387273	V0	0.0076120	V0	0.0028895	V0
Praseodymium	0.0000070	0.0000018	V0	0.0000003	V0	0.0000000	V1
Rubidium	0.0000184	0.0000631	V0	0.0000133	V0	0.0000000	V1
Samarium	0.0000133	0.0000006	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000528	V0	0.0000202	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000037	V0	0.0000186	V4	0.0000010	V0
Sodium	0.0169447	0.0541219	V0	0.0078736	V0	0.0031290	V0
Strontium	0.0003375	0.0001375	V0	0.0000303	V0	0.0000496	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000008	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000019	V0	0.0000004	V0	0.0000000	V1
Tin	0.0004414	0.0001675	V0	0.0000218	V0	0.0000000	V1
Titanium	0.0015201	0.0010941	V0	0.0004050	V0	0.0003883	V0
Tungsten	0.0000938	0.0000552	V0	0.0000257	V0	0.0000641	V0
Uranium	0.0000048	0.0000010	V0	0.0000002	V0	0.0000000	V1
Vanadium	0.0007697	0.0005145	V0	0.0000559	V0	0.0000000	V1
Zinc	0.0055897	0.0048131	V0	0.0006481	V0	0.0011688	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		25-Mar		25-Mar		25-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	10.20	V0	5.68	V0	0.18	V0
Aluminum	0.1380326	0.0886827	V0	0.0330930	V0	0.0000000	V1
Antimony	0.0001784	0.0001051	V0	0.0001902	V0	0.0000000	V1
Arsenic	0.0001060	0.0003032	V0	0.0002007	V0	0.0000000	V1
Barium	0.0092847	0.0012929	V0	0.0009879	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000330	V0	0.0000406	V0	0.0000606	V0
Cadmium	0.0000174	0.0000365	V0	0.0000297	V0	0.0000000	V1
Calcium	0.4112124	0.1314780	V0	0.0581831	V0	0.0213192	V0
Cerium	0.0000174	0.0001339	V0	0.0000572	V0	0.0000015	V0
Cesium	0.0000100	0.0000167	V0	0.0000092	V0	0.0000000	V1
Chromium	0.0022262	0.0003074	V0	0.0002128	V0	0.0001494	V0
Cobalt	0.0000273	0.0000980	V0	0.0001223	V0	0.0000406	V0
Copper	0.0017171	0.0014582	V0	0.0007104	V0	0.0001735	V0
Iron	0.0393063	0.0990809	V0	0.0412680	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000680	V0	0.0000281	V0	0.0000000	V1
Lead	0.0008577	0.0011707	V4	0.0008582	V0	0.0000000	V1
Lithium	0.0000374	0.0001131	V0	0.0000492	V0	0.0000000	V1
Magnesium	0.0091409	0.0229477	V0	0.0145465	V0	0.0014022	V0
Manganese	0.0006949	0.0025599	V0	0.0011530	V0	0.0000000	V1
Molybdenum	0.0007116	0.0007192	V4	0.0000733	V0	0.0000000	V1
Neodymium	0.0000140	0.0000540	V0	0.0000190	V0	0.0000000	V1
Nickel	0.0005429	0.0007414	V0	0.0002430	V0	0.0001744	V0
Niobium	0.0000202	0.0000167	V0	0.0000057	V0	0.0000000	V1
Palladium	0.0000632	0.0000035	V0	0.0000037	V0	0.0000041	V0
Phosphorus	0.0459574	0.0039888	V0	0.0081878	V0	0.0049981	V0
Platinum	0.0000088	0.0000000	V1	0.0000027	V0	0.0000000	V1
Potassium	0.0061261	0.0569976	V0	0.0347163	V0	0.0018129	V0
Praseodymium	0.0000070	0.0000141	V0	0.0000050	V0	0.0000000	V1
Rubidium	0.0000184	0.0002131	V0	0.0001131	V0	0.0000012	V0
Samarium	0.0000133	0.0000101	V0	0.0000023	V0	0.0000000	V1
Selenium	0.0003366	0.0002179	V0	0.0000932	V0	0.0000000	V1
Silicon	0.7676322	0.2815040	V0	0.0945572	V0	0.0000000	V1
Silver	0.0000100	0.0000049	V0	0.0000054	V0	0.0000000	V1
Sodium	0.0169447	0.0503224	V0	0.0542130	V0	0.0020032	V0
Strontium	0.0003375	0.0004672	V0	0.0002467	V0	0.0000256	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000144	V0	0.0000104	V0	0.0000000	V1
Thorium	0.0000059	0.0000165	V0	0.0000053	V0	0.0000000	V1
Tin	0.0004414	0.0001389	V0	0.0001527	V0	0.0000000	V1
Titanium	0.0015201	0.0046071	V0	0.0019960	V0	0.0002926	V0
Tungsten	0.0000938	0.0000953	V0	0.0000715	V0	0.0000358	V0
Uranium	0.0000048	0.0000091	V0	0.0000046	V0	0.0000000	V1
Vanadium	0.0007697	0.0037221	V4	0.0001840	V0	0.0000362	V0
Zinc	0.0055897	0.0057033	V0	0.0032610	V0	0.0006523	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		25-Mar		25-Mar		25-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.63	V0	3.29	V0	0.18	V0
Aluminum	0.1380326	0.0473033	V0	0.0200202	V0	0.0000000	V1
Antimony	0.0001784	0.0001581	V0	0.0000572	V0	0.0000000	V1
Arsenic	0.0001060	0.0002288	V0	0.0001054	V0	0.0000000	V1
Barium	0.0092847	0.0014268	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000368	V0	0.0000305	V0	0.0000606	V0
Cadmium	0.0000174	0.0000316	V0	0.0000158	V0	0.0000000	V1
Calcium	0.4112124	0.0749229	V0	0.0224253	V0	0.0213192	V0
Cerium	0.0000174	0.0000774	V0	0.0000266	V0	0.0000015	V0
Cesium	0.0000100	0.0000112	V0	0.0000052	V0	0.0000000	V1
Chromium	0.0022262	0.0002062	V0	0.0000000	V1	0.0001494	V0
Cobalt	0.0000273	0.0000871	V0	0.0000452	V0	0.0000406	V0
Copper	0.0017171	0.0009948	V0	0.0002438	V0	0.0001735	V0
Iron	0.0393063	0.0642874	V0	0.0176253	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000369	V0	0.0000153	V0	0.0000000	V1
Lead	0.0008577	0.0009790	V0	0.0005393	V0	0.0000000	V1
Lithium	0.0000374	0.0000656	V0	0.0000293	V0	0.0000000	V1
Magnesium	0.0091409	0.0198247	V0	0.0088711	V0	0.0014022	V0
Manganese	0.0006949	0.0015816	V0	0.0005650	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000808	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000271	V0	0.0000078	V0	0.0000000	V1
Nickel	0.0005429	0.0002246	V0	0.0001416	V0	0.0001744	V0
Niobium	0.0000202	0.0000069	V0	0.0000033	V0	0.0000000	V1
Palladium	0.0000632	0.0000030	V0	0.0000000	V1	0.0000041	V0
Phosphorus	0.0459574	0.0090042	V0	0.0073885	V0	0.0049981	V0
Platinum	0.0000088	0.0000008	V0	0.0000010	V0	0.0000000	V1
Potassium	0.0061261	0.0395946	V0	0.0182938	V0	0.0018129	V0
Praseodymium	0.0000070	0.0000069	V0	0.0000024	V0	0.0000000	V1
Rubidium	0.0000184	0.0001398	V0	0.0000672	V0	0.0000012	V0
Samarium	0.0000133	0.0000030	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0001197	V0	0.0000651	V0	0.0000000	V1
Silicon	0.7676322	0.0895879	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000044	V0	0.0000026	V0	0.0000000	V1
Sodium	0.0169447	0.0967591	V0	0.0150100	V0	0.0020032	V0
Strontium	0.0003375	0.0003524	V0	0.0001254	V0	0.0000256	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000116	V0	0.0000059	V0	0.0000000	V1
Thorium	0.0000059	0.0000079	V0	0.0000035	V0	0.0000000	V1
Tin	0.0004414	0.0001735	V0	0.0000459	V0	0.0000000	V1
Titanium	0.0015201	0.0024210	V0	0.0012196	V0	0.0002926	V0
Tungsten	0.0000938	0.0001057	V0	0.0000526	V0	0.0000358	V0
Uranium	0.0000048	0.0000058	V0	0.0000029	V0	0.0000000	V1
Vanadium	0.0007697	0.0002331	V0	0.0001187	V0	0.0000362	V0
Zinc	0.0055897	0.0039419	V0	0.0014891	V0	0.0006523	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**31-Mar**		**31-Mar**		**31-Mar**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	6.10	V0	5.50	V0	0.05	V0
Aluminum	0.1380326	0.0920426	V0	0.0442419	V0	0.0000000	V1
Antimony	0.0001784	0.0000408	V0	0.0000875	V0	0.0000107	V0
Arsenic	0.0001060	0.0000959	V0	0.0000604	V0	0.0000000	V1
Barium	0.0092847	0.0009418	V0	0.0009263	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000084	V0	0.0000250	V0	0.0000654	V0
Cadmium	0.0000174	0.0000093	V0	0.0000086	V0	0.0000000	V1
Calcium	0.4112124	0.1077718	V0	0.0852143	V0	0.0000000	V1
Cerium	0.0000174	0.0001102	V0	0.0000593	V0	0.0000000	V1
Cesium	0.0000100	0.0000085	V0	0.0000043	V0	0.0000000	V1
Chromium	0.0022262	0.0002760	V0	0.0002130	V0	0.0001212	V0
Cobalt	0.0000273	0.0000903	V0	0.0001283	V0	0.0000559	V0
Copper	0.0017171	0.0007434	V0	0.0005942	V0	0.0012980	V0
Iron	0.0393063	0.0793811	V0	0.0628426	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000535	V0	0.0000274	V0	0.0000000	V1
Lead	0.0008577	0.0003001	V0	0.0002262	V0	0.0000000	V1
Lithium	0.0000374	0.0001117	V0	0.0000582	V0	0.0000031	V0
Magnesium	0.0091409	0.0300855	V0	0.0224333	V0	0.0010192	V0
Manganese	0.0006949	0.0016997	V0	0.0013466	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001189	V0	0.0000688	V0	0.0000000	V1
Neodymium	0.0000140	0.0000468	V0	0.0000202	V0	0.0000000	V1
Nickel	0.0005429	0.0004009	V0	0.0001891	V0	0.0001626	V0
Niobium	0.0000202	0.0000155	V0	0.0000061	V0	0.0000012	V0
Palladium	0.0000632	0.0000028	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0108963	V0	0.0101849	V0	0.0070587	V0
Platinum	0.0000088	0.0000007	V0	0.0000010	V0	0.0000004	V0
Potassium	0.0061261	0.0295331	V0	0.0223692	V0	0.0012620	V0
Praseodymium	0.0000070	0.0000123	V0	0.0000059	V0	0.0000000	V1
Rubidium	0.0000184	0.0001425	V0	0.0000782	V0	0.0000000	V1
Samarium	0.0000133	0.0000070	V0	0.0000024	V0	0.0000000	V1
Selenium	0.0003366	0.0001145	V0	0.0000765	V0	0.0000185	V0
Silicon	0.7676322	0.1790847	V0	0.1017273	V0	0.0000000	V1
Silver	0.0000100	0.0000010	V0	0.0000011	V0	0.0000009	V0
Sodium	0.0169447	0.0579819	V0	0.0973302	V0	0.0014894	V0
Strontium	0.0003375	0.0004411	V0	0.0002885	V0	0.0000165	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000043	V0	0.0000031	V0	0.0000000	V1
Thorium	0.0000059	0.0000150	V0	0.0000066	V0	0.0000000	V1
Tin	0.0004414	0.0000595	V0	0.0000849	V0	0.0000000	V1
Titanium	0.0015201	0.0032367	V0	0.0018127	V0	0.0004670	V0
Tungsten	0.0000938	0.0001550	V0	0.0000934	V0	0.0000431	V0
Uranium	0.0000048	0.0000042	V0	0.0000025	V0	0.0000000	V1
Vanadium	0.0007697	0.0006738	V0	0.0003689	V0	0.0000424	V0
Zinc	0.0055897	0.0019353	V0	0.0017105	V0	0.0006597	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		31-Mar		31-Mar		31-Mar	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.74	V0	2.05	V0	0.05	V0
Aluminum	0.1380326	0.0569498	V0	0.0224729	V0	0.0000000	V1
Antimony	0.0001784	0.0001088	V0	0.0000157	V0	0.0000107	V0
Arsenic	0.0001060	0.0000759	V0	0.0000424	V0	0.0000000	V1
Barium	0.0092847	0.0013693	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000044	V0	0.0000000	V1
Bismuth	0.0000093	0.0000216	V0	0.0000230	V0	0.0000654	V0
Cadmium	0.0000174	0.0000079	V0	0.0000057	V0	0.0000000	V1
Calcium	0.4112124	0.0967390	V0	0.0286250	V0	0.0000000	V1
Cerium	0.0000174	0.0000758	V0	0.0000231	V0	0.0000000	V1
Cesium	0.0000100	0.0000053	V0	0.0000029	V0	0.0000000	V1
Chromium	0.0022262	0.0002401	V0	0.0001856	V0	0.0001212	V0
Cobalt	0.0000273	0.0000990	V0	0.0000573	V0	0.0000559	V0
Copper	0.0017171	0.0007068	V0	0.0001829	V0	0.0012980	V0
Iron	0.0393063	0.0700391	V0	0.0182159	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000352	V0	0.0000109	V0	0.0000000	V1
Lead	0.0008577	0.0002966	V0	0.0002067	V0	0.0000000	V1
Lithium	0.0000374	0.0000638	V0	0.0000274	V0	0.0000031	V0
Magnesium	0.0091409	0.0290052	V0	0.0114117	V0	0.0010192	V0
Manganese	0.0006949	0.0016490	V0	0.0005215	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000879	V0	0.0000398	V0	0.0000000	V1
Neodymium	0.0000140	0.0000271	V0	0.0000079	V0	0.0000000	V1
Nickel	0.0005429	0.0002314	V0	0.0003830	V0	0.0001626	V0
Niobium	0.0000202	0.0000081	V0	0.0000038	V0	0.0000012	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0108251	V0	0.0100459	V0	0.0070587	V0
Platinum	0.0000088	0.0000005	V0	0.0000006	V0	0.0000004	V0
Potassium	0.0061261	0.0267499	V0	0.0107117	V0	0.0012620	V0
Praseodymium	0.0000070	0.0000078	V0	0.0000023	V0	0.0000000	V1
Rubidium	0.0000184	0.0000990	V0	0.0000389	V0	0.0000000	V1
Samarium	0.0000133	0.0000037	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000931	V0	0.0000601	V0	0.0000185	V0
Silicon	0.7676322	0.0953785	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000006	V0	0.0000009	V0	0.0000009	V0
Sodium	0.0169447	0.0763075	V0	0.0286389	V0	0.0014894	V0
Strontium	0.0003375	0.0003957	V0	0.0001344	V0	0.0000165	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000039	V0	0.0000027	V0	0.0000000	V1
Thorium	0.0000059	0.0000093	V0	0.0000028	V0	0.0000000	V1
Tin	0.0004414	0.0001010	V0	0.0000355	V0	0.0000000	V1
Titanium	0.0015201	0.0028750	V0	0.0011013	V0	0.0004670	V0
Tungsten	0.0000938	0.0001249	V0	0.0000538	V0	0.0000431	V0
Uranium	0.0000048	0.0000028	V0	0.0000013	V0	0.0000000	V1
Vanadium	0.0007697	0.0005572	V0	0.0001794	V0	0.0000424	V0
Zinc	0.0055897	0.0021849	V0	0.0008538	V0	0.0006597	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**06-Apr**		**06-Apr**		**06-Apr**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24.1**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	4.11	V0	2.77	V0	0.13	V0
Aluminum	0.1380326	0.0175131	V0	0.0154715	V0	0.0000000	V1
Antimony	0.0001784	0.0000362	V0	0.0000237	V0	0.0000408	V4
Arsenic	0.0001060	0.0001366	V0	0.0000462	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000098	V0	0.0000049	V0	0.0000059	V0
Cadmium	0.0000174	0.0000102	V0	0.0000060	V0	0.0000000	V1
Calcium	0.4112124	0.0225267	V0	0.0226192	V0	0.0000000	V1
Cerium	0.0000174	0.0000137	V0	0.0000109	V0	0.0000000	V1
Cesium	0.0000100	0.0000024	V0	0.0000014	V0	0.0000000	V1
Chromium	0.0022262	0.0002394	V0	0.0001698	V0	0.0000000	V1
Cobalt	0.0000273	0.0000618	V0	0.0000694	V0	0.0000389	V0
Copper	0.0017171	0.0006442	V0	0.0006429	V0	0.0002749	V0
Iron	0.0393063	0.0091990	V0	0.0062066	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000069	V0	0.0000047	V0	0.0000000	V1
Lead	0.0008577	0.0003680	V0	0.0001857	V0	0.0000000	V1
Lithium	0.0000374	0.0000172	V0	0.0000156	V0	0.0000067	V0
Magnesium	0.0091409	0.0068379	V0	0.0040170	V0	0.0010846	V0
Manganese	0.0006949	0.0006009	V0	0.0002781	V0	0.0000327	V0
Molybdenum	0.0007116	0.0000394	V0	0.0000547	V0	0.0000000	V1
Neodymium	0.0000140	0.0000065	V0	0.0000032	V0	0.0000000	V1
Nickel	0.0005429	0.0001774	V0	0.0001507	V0	0.0000722	V0
Niobium	0.0000202	0.0000031	V0	0.0000019	V0	0.0000000	V1
Palladium	0.0000632	0.0000103	V0	0.0000126	V0	0.0000050	V0
Phosphorus	0.0459574	0.0101219	V0	0.0092175	V0	0.0095000	V0
Platinum	0.0000088	0.0000020	V0	0.0000009	V0	0.0000007	V0
Potassium	0.0061261	0.0105439	V0	0.0066782	V0	0.0024160	V0
Praseodymium	0.0000070	0.0000012	V0	0.0000007	V0	0.0000000	V1
Rubidium	0.0000184	0.0000329	V0	0.0000200	V0	0.0000012	V0
Samarium	0.0000133	0.0000013	V0	0.0000010	V0	0.0000000	V1
Selenium	0.0003366	0.0000382	V0	0.0000292	V0	0.0000000	V1
Silicon	0.1893637	0.0264818	V0	0.0181480	V0	0.0000000	V1
Silver	0.0000100	0.0000006	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	-9999	M2	0.0117192	V0	0.0014397	V0
Strontium	0.0003375	0.0001006	V0	0.0000713	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000022	V0	0.0000015	V0	0.0000000	V1
Thorium	0.0000059	0.0000017	V0	0.0000011	V0	0.0000000	V1
Tin	0.0004414	0.0001379	V0	0.0000980	V0	0.0000000	V1
Titanium	0.0015201	0.0011018	V0	0.0005796	V0	0.0001876	V0
Tungsten	0.0000938	0.0000616	V0	0.0000607	V0	0.0000470	V0
Uranium	0.0000048	0.0000041	V0	0.0000018	V0	0.0000000	V1
Vanadium	0.0007697	0.0001370	V0	0.0003216	V0	0.0000000	V1
Zinc	0.0055897	0.0018021	V0	0.0010733	V0	0.0002411	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		06-Apr		06-Apr		06-Apr	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		23		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.27	V0	2.05	V0	0.13	V0
Aluminum	0.1380326	0.0132450	V0	0.0108428	V0	0.0000000	V1
Antimony	0.0001784	0.0000409	V0	0.0000153	V0	0.0000408	V4
Arsenic	0.0001060	0.0001457	V0	0.0000434	V0	0.0000000	V1
Barium	0.0092847	0.0004082	V0	0.0043030	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000096	V0	0.0000291	V0	0.0000059	V0
Cadmium	0.0000174	0.0000089	V0	0.0000115	V0	0.0000000	V1
Calcium	0.4112124	0.0224478	V0	0.0204311	V0	0.0000000	V1
Cerium	0.0000174	0.0000159	V0	0.0000083	V0	0.0000000	V1
Cesium	0.0000100	0.0000024	V0	0.0000012	V0	0.0000000	V1
Chromium	0.0022262	0.0003010	V0	0.0001649	V0	0.0000000	V1
Cobalt	0.0000273	0.0000704	V0	0.0000516	V0	0.0000389	V0
Copper	0.0017171	0.0005126	V0	0.0008890	V0	0.0002749	V0
Iron	0.0393063	0.0107727	V0	0.0049994	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000078	V0	0.0000038	V0	0.0000000	V1
Lead	0.0008577	0.0002421	V0	0.0001394	V0	0.0000000	V1
Lithium	0.0000374	0.0000158	V0	0.0000121	V0	0.0000067	V0
Magnesium	0.0091409	0.0056900	V0	0.0037451	V0	0.0010846	V0
Manganese	0.0006949	0.0004154	V0	0.0001913	V0	0.0000327	V0
Molybdenum	0.0007116	0.0001369	V0	0.0000741	V0	0.0000000	V1
Neodymium	0.0000140	0.0000070	V0	0.0000034	V0	0.0000000	V1
Nickel	0.0005429	0.0002095	V0	0.0003021	V0	0.0000722	V0
Niobium	0.0000202	0.0000030	V0	0.0000034	V0	0.0000000	V1
Palladium	0.0000632	0.0000045	V0	0.0000000	V1	0.0000050	V0
Phosphorus	0.0459574	0.0093934	V0	0.0099471	V0	0.0095000	V0
Platinum	0.0000088	0.0000000	V1	0.0000010	V0	0.0000007	V0
Potassium	0.0061261	0.0089638	V0	0.0086702	V0	0.0024160	V0
Praseodymium	0.0000070	0.0000017	V0	0.0000005	V0	0.0000000	V1
Rubidium	0.0000184	0.0000292	V0	0.0000197	V0	0.0000012	V0
Samarium	0.0000133	0.0000010	V0	0.0000006	V0	0.0000000	V1
Selenium	0.0003366	0.0000592	V0	0.0000347	V0	0.0000000	V1
Silicon	0.1893637	0.0389679	V0	0.0192405	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0184738	V0	0.0100652	V0	0.0014397	V0
Strontium	0.0003375	0.0001104	V0	0.0002069	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000023	V0	0.0000011	V0	0.0000000	V1
Thorium	0.0000059	0.0000018	V0	0.0000009	V0	0.0000000	V1
Tin	0.0004414	0.0001003	V0	0.0001123	V0	0.0000000	V1
Titanium	0.0015201	0.0008721	V0	0.0006413	V0	0.0001876	V0
Tungsten	0.0000938	0.0000486	V0	0.0000462	V0	0.0000470	V0
Uranium	0.0000048	0.0000031	V0	0.0000013	V0	0.0000000	V1
Vanadium	0.0007697	0.0005879	V0	0.0003404	V0	0.0000000	V1
Zinc	0.0055897	0.0011278	V0	0.0020340	V0	0.0002411	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**12-Apr**		**12-Apr**		**12-Apr**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	5.03	V0	6.50	V0	0.24	V0
Aluminum	0.1380326	0.0597519	V0	0.0479633	V0	0.0000000	V1
Antimony	0.0001784	0.0000438	V0	0.0000512	V0	0.0000000	V1
Arsenic	0.0001060	0.0000878	V0	0.0000732	V0	0.0000000	V1
Barium	0.0092847	0.0004716	V0	0.0006506	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000112	V0	0.0000126	V0	0.0000084	V0
Cadmium	0.0000174	0.0000141	V0	0.0000165	V0	0.0000000	V1
Calcium	0.4112124	0.0625828	V0	0.0884278	V0	0.0000000	V1
Cerium	0.0000174	0.0000584	V0	0.0000564	V0	0.0000013	V0
Cesium	0.0000100	0.0000065	V0	0.0000053	V0	0.0000000	V1
Chromium	0.0022262	0.0002449	V0	0.0002731	V0	0.0001008	V0
Cobalt	0.0000273	0.0000695	V0	0.0000683	V0	0.0000380	V0
Copper	0.0017171	0.0010376	V0	0.0005701	V0	0.0001456	V0
Iron	0.0393063	0.0318329	V0	0.0411133	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000395	V0	0.0000313	V0	0.0000000	V1
Lead	0.0008577	0.0004759	V0	0.0003475	V0	0.0000000	V1
Lithium	0.0000374	0.0000761	V0	0.0000522	V0	0.0000032	V0
Magnesium	0.0091409	0.0130173	V0	0.0164194	V0	0.0010489	V0
Manganese	0.0006949	0.0010059	V0	0.0011720	V0	0.0000538	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000653	V0	0.0000000	V1
Neodymium	0.0000140	0.0000245	V0	0.0000244	V0	0.0000000	V1
Nickel	0.0005429	0.0002344	V0	0.0002076	V0	0.0001007	V0
Niobium	0.0000202	0.0000077	V0	0.0000058	V0	0.0000008	V1
Palladium	0.0000632	0.0000038	V0	0.0000063	V0	0.0000000	V1
Phosphorus	0.0459574	0.0102106	V0	0.0109135	V0	0.0068153	V0
Platinum	0.0000088	0.0000017	V0	0.0000007	V0	0.0000008	V0
Potassium	0.0061261	0.0242336	V0	0.0279914	V0	0.0015885	V0
Praseodymium	0.0000070	0.0000064	V0	0.0000059	V0	0.0000000	V1
Rubidium	0.0000184	0.0000960	V0	0.0000969	V0	0.0000021	V0
Samarium	0.0000133	0.0000051	V0	0.0000048	V0	0.0000000	V1
Selenium	0.0003366	0.0001083	V0	0.0000747	V0	0.0000000	V1
Silicon	0.1893637	0.1448743	V0	0.2071622	V0	0.0000000	V1
Silver	0.0000100	0.0000009	V0	0.0000008	V0	0.0000000	V1
Sodium	0.0169447	0.1095058	V0	0.0393315	V0	0.0016307	V0
Strontium	0.0003375	0.0002457	V0	0.0002697	V0	0.0000141	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000040	V0	0.0000032	V0	0.0000000	V1
Thorium	0.0000059	0.0000077	V0	0.0000072	V0	0.0000000	V1
Tin	0.0004414	0.0000886	V0	0.0000853	V0	0.0000000	V1
Titanium	0.0015201	0.0024995	V0	0.0017801	V0	0.0002122	V0
Tungsten	0.0000938	0.0000519	V0	0.0000693	V0	0.0000499	V0
Uranium	0.0000048	0.0000098	V0	0.0000064	V0	0.0000000	V1
Vanadium	0.0007697	0.0001896	V0	0.0003226	V0	0.0000000	V1
Zinc	0.0055897	0.0021463	V0	0.0024541	V0	0.0002482	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		12-Apr		12-Apr		12-Apr	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.57	V0	3.33	V0	0.24	V0
Aluminum	0.1380326	0.0549838	V0	0.0332763	V0	0.0000000	V1
Antimony	0.0001784	0.0000932	V0	0.0000452	V0	0.0000000	V1
Arsenic	0.0001060	0.0000933	V0	0.0000928	V0	0.0000000	V1
Barium	0.0092847	0.0012095	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000040	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000179	V0	0.0000150	V0	0.0000084	V0
Cadmium	0.0000174	0.0000148	V0	0.0000175	V0	0.0000000	V1
Calcium	0.4112124	0.1176036	V0	0.0437397	V0	0.0000000	V1
Cerium	0.0000174	0.0000613	V0	0.0000349	V0	0.0000013	V0
Cesium	0.0000100	0.0000058	V0	0.0000046	V0	0.0000000	V1
Chromium	0.0022262	0.0003101	V0	0.0001956	V0	0.0001008	V0
Cobalt	0.0000273	0.0000905	V0	0.0000704	V0	0.0000380	V0
Copper	0.0017171	0.0008181	V0	0.0004172	V0	0.0001456	V0
Iron	0.0393063	0.0516245	V0	0.0205607	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000345	V0	0.0000253	V0	0.0000000	V1
Lead	0.0008577	0.0003379	V0	0.0004209	V0	0.0000000	V1
Lithium	0.0000374	0.0000597	V0	0.0000384	V0	0.0000032	V0
Magnesium	0.0091409	0.0178333	V0	0.0100872	V0	0.0010489	V0
Manganese	0.0006949	0.0015309	V0	0.0006797	V0	0.0000538	V0
Molybdenum	0.0007116	0.0000578	V0	0.0000309	V0	0.0000000	V1
Neodymium	0.0000140	0.0000253	V0	0.0000129	V0	0.0000000	V1
Nickel	0.0005429	0.0002518	V0	0.0001823	V0	0.0001007	V0
Niobium	0.0000202	0.0000076	V0	0.0000044	V0	0.0000008	V1
Palladium	0.0000632	0.0000028	V0	0.0000040	V0	0.0000000	V1
Phosphorus	0.0459574	0.0098770	V0	0.0108357	V0	0.0068153	V0
Platinum	0.0000088	0.0000007	V0	0.0000004	V0	0.0000008	V0
Potassium	0.0061261	0.0510482	V0	0.0216829	V0	0.0015885	V0
Praseodymium	0.0000070	0.0000065	V0	0.0000040	V0	0.0000000	V1
Rubidium	0.0000184	0.0001304	V0	0.0000712	V0	0.0000021	V0
Samarium	0.0000133	0.0000046	V0	0.0000019	V0	0.0000000	V1
Selenium	0.0003366	0.0000856	V0	0.0000789	V0	0.0000000	V1
Silicon	0.1893637	0.1923455	V0	0.0872415	V0	0.0000000	V1
Silver	0.0000100	0.0000010	V0	0.0000016	V0	0.0000000	V1
Sodium	0.0169447	0.0270813	V0	0.0164340	V0	0.0016307	V0
Strontium	0.0003375	0.0003643	V0	0.0001772	V0	0.0000141	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000034	V0	0.0000038	V0	0.0000000	V1
Thorium	0.0000059	0.0000072	V0	0.0000050	V0	0.0000000	V1
Tin	0.0004414	0.0001261	V0	0.0001071	V0	0.0000000	V1
Titanium	0.0015201	0.0022984	V0	0.0012614	V0	0.0002122	V0
Tungsten	0.0000938	0.0000798	V0	0.0000621	V0	0.0000499	V0
Uranium	0.0000048	0.0000072	V0	0.0000042	V0	0.0000000	V1
Vanadium	0.0007697	0.0002351	V0	0.0001782	V0	0.0000000	V1
Zinc	0.0055897	0.0039683	V0	0.0017405	V0	0.0002482	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		18-Apr		18-Apr		18-Apr	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	10.93	V0	5.64	V0	0.06	V0
Aluminum	0.1380326	0.2047331	V0	0.1102836	V0	0.0081814	V0
Antimony	0.0001784	0.0000742	V0	0.0001589	V0	0.0000000	V1
Arsenic	0.0001060	0.0001363	V0	0.0001881	V0	0.0000000	V1
Barium	0.0092847	0.0020135	V0	0.0019504	V0	0.0000000	V1
Beryllium	0.0000946	0.0000073	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000278	V0	0.0000144	V0	0.0000108	V0
Cadmium	0.0000174	0.0000212	V0	0.0000189	V0	0.0000000	V1
Calcium	0.4112124	0.2476705	V0	0.1445073	V0	0.0000000	V1
Cerium	0.0000174	0.0002245	V0	0.0001855	V0	0.0000014	V0
Cesium	0.0000100	0.0000180	V0	0.0000097	V0	0.0000000	V1
Chromium	0.0022262	0.0005760	V0	0.0003329	V0	0.0001171	V0
Cobalt	0.0000273	0.0001283	V0	0.0001214	V0	0.0000371	V0
Copper	0.0017171	0.0014417	V0	0.0020119	V0	0.0002488	V0
Iron	0.0393063	0.2034507	V0	0.1384021	V0	0.0016378	V0
Lanthanum	0.0000130	0.0001159	V0	0.0001022	V0	0.0000000	V1
Lead	0.0008577	0.0005176	V0	0.0005315	V0	0.0000000	V1
Lithium	0.0000374	0.0001799	V0	0.0000836	V0	0.0000038	V0
Magnesium	0.0091409	0.0389657	V0	0.0336657	V0	0.0014607	V0
Manganese	0.0006949	0.0038904	V0	0.0025632	V0	0.0000826	V0
Molybdenum	0.0007116	0.0002102	V0	0.0000544	V0	0.0000000	V1
Neodymium	0.0000140	0.0000990	V0	0.0000635	V0	0.0000007	V0
Nickel	0.0005429	0.0007155	V0	0.0005860	V0	0.0001004	V0
Niobium	0.0000202	0.0000281	V0	0.0000133	V0	0.0000009	V0
Palladium	0.0000632	0.0000073	V0	0.0000069	V0	0.0000034	V0
Phosphorus	0.0459574	0.0100605	V0	0.0072248	V0	0.0052152	V0
Platinum	0.0000088	0.0000011	V0	0.0000008	V0	0.0000010	V0
Potassium	0.0061261	0.0656263	V0	0.0309447	V0	0.0031579	V0
Praseodymium	0.0000070	0.0000249	V0	0.0000179	V0	0.0000000	V1
Rubidium	0.0000184	0.0003115	V0	0.0001509	V0	0.0000019	V0
Samarium	0.0000133	0.0000180	V0	0.0000105	V0	0.0000000	V1
Selenium	0.0003366	0.0001847	V0	0.0001125	V0	0.0000000	V1
Silicon	0.1893637	0.7675614	V0	0.4179411	V0	0.0000000	V1
Silver	0.0000100	0.0000042	V0	0.0000015	V0	0.0000000	V1
Sodium	0.0169447	0.0398562	V0	0.0345508	V0	0.0015190	V0
Strontium	0.0003375	0.0008561	V0	0.0005571	V0	0.0000000	V1
Tantalum	0.0000394	0.0000019	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000061	V0	0.0000053	V0	0.0000000	V1
Thorium	0.0000059	0.0000281	V0	0.0000168	V0	0.0000000	V1
Tin	0.0004414	0.0001188	V0	0.0001673	V0	0.0000000	V1
Titanium	0.0015201	0.0079968	V0	0.0040627	V0	0.0003324	V0
Tungsten	0.0000938	0.0000961	V0	0.0001851	V0	0.0000534	V0
Uranium	0.0000048	0.0000088	V0	0.0000051	V0	0.0000008	V0
Vanadium	0.0007697	0.0016359	V4	0.0002392	V0	0.0000000	V1
Zinc	0.0055897	0.0048830	V0	0.0038973	V0	0.0003977	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		18-Apr		18-Apr		18-Apr	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	7.28	V0	5.18	V0	0.06	V0
Aluminum	0.1380326	0.1433440	V0	0.0752060	V0	0.0081814	V0
Antimony	0.0001784	0.0001879	V0	0.0000399	V0	0.0000000	V1
Arsenic	0.0001060	0.0001182	V0	0.0001024	V0	0.0000000	V1
Barium	0.0092847	0.0027294	V0	0.0007191	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000296	V0	0.0000173	V0	0.0000108	V0
Cadmium	0.0000174	0.0000135	V0	0.0000213	V0	0.0000000	V1
Calcium	0.4112124	0.2042659	V0	0.0620794	V0	0.0000000	V1
Cerium	0.0000174	0.0001960	V0	0.0000708	V0	0.0000014	V0
Cesium	0.0000100	0.0000116	V0	0.0000076	V0	0.0000000	V1
Chromium	0.0022262	0.0004636	V0	0.0002185	V0	0.0001171	V0
Cobalt	0.0000273	0.0001969	V0	0.0000669	V0	0.0000371	V0
Copper	0.0017171	0.0014508	V0	0.0004572	V0	0.0002488	V0
Iron	0.0393063	0.2069329	V0	0.0403891	V0	0.0016378	V0
Lanthanum	0.0000130	0.0000971	V0	0.0000413	V0	0.0000000	V1
Lead	0.0008577	0.0004854	V0	0.0004360	V0	0.0000000	V1
Lithium	0.0000374	0.0001174	V0	0.0000457	V0	0.0000038	V0
Magnesium	0.0091409	0.0461788	V0	0.0171605	V0	0.0014607	V0
Manganese	0.0006949	0.0033632	V0	0.0015160	V0	0.0000826	V0
Molybdenum	0.0007116	0.0000575	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000727	V0	0.0000301	V0	0.0000007	V0
Nickel	0.0005429	0.0004228	V0	0.0004082	V0	0.0001004	V0
Niobium	0.0000202	0.0000208	V0	0.0000088	V0	0.0000009	V0
Palladium	0.0000632	0.0000044	V0	0.0000000	V1	0.0000034	V0
Phosphorus	0.0459574	0.0092468	V0	0.0078192	V0	0.0052152	V0
Platinum	0.0000088	0.0000010	V0	0.0000009	V0	0.0000010	V0
Potassium	0.0061261	0.0395649	V0	0.0236827	V0	0.0031579	V0
Praseodymium	0.0000070	0.0000181	V0	0.0000073	V0	0.0000000	V1
Rubidium	0.0000184	0.0002018	V0	0.0001002	V0	0.0000019	V0
Samarium	0.0000133	0.0000145	V0	0.0000049	V0	0.0000000	V1
Selenium	0.0003366	0.0001256	V0	0.0000947	V0	0.0000000	V1
Silicon	0.1893637	0.5166629	V0	0.2194642	V0	0.0000000	V1
Silver	0.0000100	0.0000017	V0	0.0000013	V0	0.0000000	V1
Sodium	0.0169447	0.0493877	V0	0.0193396	V0	0.0015190	V0
Strontium	0.0003375	0.0007066	V0	0.0003051	V0	0.0000000	V1
Tantalum	0.0000394	0.0000020	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000052	V0	0.0000049	V0	0.0000000	V1
Thorium	0.0000059	0.0000212	V0	0.0000107	V0	0.0000000	V1
Tin	0.0004414	0.0001877	V0	0.0000740	V0	0.0000000	V1
Titanium	0.0015201	0.0063587	V0	0.0022971	V0	0.0003324	V0
Tungsten	0.0000938	0.0001609	V0	0.0000556	V0	0.0000534	V0
Uranium	0.0000048	0.0000067	V0	0.0000034	V0	0.0000008	V0
Vanadium	0.0007697	0.0003421	V0	0.0001538	V0	0.0000000	V1
Zinc	0.0055897	0.0034832	V0	0.0020774	V0	0.0003977	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		24-Apr		24-Apr		24-Apr	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	6.16	V0	4.32	V0	0.18	V0
Aluminum	0.1380326	0.1239680	V0	0.0474180	V0	0.0172765	V0
Antimony	0.0001784	0.0000368	V0	0.0000756	V0	0.0000000	V1
Arsenic	0.0001060	0.0000983	V0	0.0001314	V0	0.0000000	V1
Barium	0.0092847	0.0010135	V0	0.0006036	V0	0.0000000	V1
Beryllium	0.0000946	0.0000063	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000165	V0	0.0000131	V0	0.0000037	V0
Cadmium	0.0000174	0.0000141	V0	0.0000156	V0	0.0000000	V1
Calcium	0.4112124	0.1342721	V0	0.0570010	V0	0.0000000	V1
Cerium	0.0000174	0.0001300	V0	0.0000540	V0	0.0000011	V0
Cesium	0.0000100	0.0000114	V0	0.0000045	V0	0.0000000	V1
Chromium	0.0022262	0.0004025	V0	-9999	M2	0.0000000	V1
Cobalt	0.0000273	0.0000934	V0	0.0000934	V0	0.0000463	V0
Copper	0.0017171	0.0020809	V0	-9999	M2	0.0003008	V0
Iron	0.0393063	0.0885973	V0	0.0516002	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000681	V0	0.0000254	V0	0.0000000	V1
Lead	0.0008577	0.0003549	V0	-9999	M2	0.0000000	V1
Lithium	0.0000374	0.0000844	V0	0.0000173	V0	0.0000000	V1
Magnesium	0.0091409	0.0262515	V0	0.0144610	V0	0.0010244	V0
Manganese	0.0006949	0.0015690	V0	0.0008927	V0	0.0000589	V0
Molybdenum	0.0007116	0.0001111	V0	-9999	M2	0.0000000	V1
Neodymium	0.0000140	0.0000550	V0	0.0000219	V0	0.0000000	V1
Nickel	0.0005429	0.0004080	V0	-9999	M2	0.0001308	V0
Niobium	0.0000202	0.0000200	V0	0.0000073	V0	0.0000009	V0
Palladium	0.0000632	0.0000030	V0	0.0000036	V0	0.0000000	V1
Phosphorus	0.0459574	0.0051086	V0	0.0038545	V0	0.0039796	V0
Platinum	0.0000088	0.0000024	V0	0.0000011	V0	0.0000014	V0
Potassium	0.0061261	0.0440332	V0	0.0230717	V0	0.0018824	V0
Praseodymium	0.0000070	0.0000144	V0	0.0000057	V0	0.0000000	V1
Rubidium	0.0000184	0.0001763	V0	0.0000716	V0	0.0000000	V1
Samarium	0.0000133	0.0000101	V0	0.0000038	V0	0.0000000	V1
Selenium	0.0003366	0.0001183	V0	0.0000910	V0	0.0000152	V0
Silicon	0.1893637	0.3935879	V0	0.1810375	V0	0.0000000	V1
Silver	0.0000100	0.0000041	V0	0.0000031	V0	0.0000013	V0
Sodium	0.0169447	0.0304976	V0	0.0207539	V0	0.0022993	V0
Strontium	0.0003375	0.0005016	V0	0.0002369	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000052	V0	0.0000036	V0	0.0000000	V1
Thorium	0.0000059	0.0000169	V0	0.0000066	V0	0.0000000	V1
Tin	0.0004414	0.0000805	V0	0.0001699	V0	0.0000000	V1
Titanium	0.0015201	0.0052307	V0	0.0016520	V0	0.0002429	V0
Tungsten	0.0000938	0.0000720	V0	0.0001270	V0	0.0001148	V0
Uranium	0.0000048	0.0000052	V0	0.0000020	V0	0.0000000	V1
Vanadium	0.0007697	0.0006337	V0	0.0001044	V0	0.0000000	V1
Zinc	0.0055897	0.0041702	V0	-9999	M2	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		24-Apr		24-Apr		24-Apr	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	8.08	V0	8.08	V0	0.18	V0
Aluminum	0.1380326	0.1715828	V0	0.0365675	V0	0.0172765	V0
Antimony	0.0001784	0.0001096	V0	0.0000295	V0	0.0000000	V1
Arsenic	0.0001060	0.0001086	V0	0.0000784	V0	0.0000000	V1
Barium	0.0092847	0.0024708	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000092	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000347	V0	0.0000240	V0	0.0000037	V0
Cadmium	0.0000174	0.0000168	V0	0.0000127	V0	0.0000000	V1
Calcium	0.4112124	0.3600551	V0	0.0422169	V0	0.0000000	V1
Cerium	0.0000174	0.0002459	V0	0.0000423	V0	0.0000011	V0
Cesium	0.0000100	0.0000137	V0	0.0000045	V0	0.0000000	V1
Chromium	0.0022262	0.0004371	V0	0.0001419	V0	0.0000000	V1
Cobalt	0.0000273	0.0002130	V0	0.0000614	V0	0.0000463	V0
Copper	0.0017171	0.0016395	V0	0.0002040	V0	0.0003008	V0
Iron	0.0393063	0.3463898	V4	0.0267669	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001232	V0	0.0000236	V0	0.0000000	V1
Lead	0.0008577	0.0004324	V0	0.0003354	V0	0.0000000	V1
Lithium	0.0000374	0.0001327	V0	0.0000045	V0	0.0000000	V1
Magnesium	0.0091409	0.0719851	V0	0.0114960	V0	0.0010244	V0
Manganese	0.0006949	0.0053298	V0	0.0006471	V0	0.0000589	V0
Molybdenum	0.0007116	0.0000593	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0001019	V0	0.0000177	V0	0.0000000	V1
Nickel	0.0005429	0.0003588	V0	0.0001987	V0	0.0001308	V0
Niobium	0.0000202	0.0000251	V0	0.0000064	V0	0.0000009	V0
Palladium	0.0000632	0.0000032	V0	0.0000027	V0	0.0000000	V1
Phosphorus	0.0459574	0.0073813	V0	0.0040129	V0	0.0039796	V0
Platinum	0.0000088	0.0000015	V0	0.0000010	V0	0.0000014	V0
Potassium	0.0061261	0.0716639	V0	0.0220314	V0	0.0018824	V0
Praseodymium	0.0000070	0.0000260	V0	0.0000046	V0	0.0000000	V1
Rubidium	0.0000184	0.0002549	V0	0.0000637	V0	0.0000000	V1
Samarium	0.0000133	0.0000177	V0	0.0000031	V0	0.0000000	V1
Selenium	0.0003366	0.0001601	V0	0.0000664	V0	0.0000152	V0
Silicon	0.1893637	0.7558351	V0	0.1016152	V0	0.0000000	V1
Silver	0.0000100	0.0000025	V0	0.0000017	V0	0.0000013	V0
Sodium	0.0169447	0.0621539	V0	0.0180644	V0	0.0022993	V0
Strontium	0.0003375	0.0009925	V0	0.0001968	V0	0.0000000	V1
Tantalum	0.0000394	0.0000030	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000056	V0	0.0000045	V0	0.0000000	V1
Thorium	0.0000059	0.0000305	V0	0.0000060	V0	0.0000000	V1
Tin	0.0004414	0.0001379	V0	0.0000750	V0	0.0000000	V1
Titanium	0.0015201	0.0083799	V0	0.0016230	V0	0.0002429	V0
Tungsten	0.0000938	0.0005083	V4	0.0000682	V0	0.0001148	V0
Uranium	0.0000048	0.0000085	V0	0.0000021	V0	0.0000000	V1
Vanadium	0.0007697	0.0004541	V0	0.0000877	V0	0.0000000	V1
Zinc	0.0055897	0.0036868	V0	0.0012643	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**30-Apr**		**30-Apr**		**30-Apr**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	6.06	V0	5.15	V0	0.04	V0
Aluminum	0.1380326	0.1161139	V0	0.0440845	V0	0.0000000	V1
Antimony	0.0001784	0.0000485	V0	0.0001131	V0	0.0000000	V1
Arsenic	0.0001060	0.0000923	V0	0.0008806	V4	0.0000000	V1
Barium	0.0092847	0.0012867	V0	0.0006911	V0	0.0000000	V1
Beryllium	0.0000946	0.0000054	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000214	V0	0.0000123	V0	0.0000015	V0
Cadmium	0.0000174	0.0000208	V0	0.0000221	V0	0.0000000	V1
Calcium	0.4112124	0.1532467	V0	0.0553495	V0	0.0000000	V1
Cerium	0.0000174	0.0001287	V0	0.0000463	V0	0.0000013	V0
Cesium	0.0000100	0.0000117	V0	0.0000042	V0	0.0000000	V1
Chromium	0.0022262	0.0003630	V0	0.0005305	V0	0.0001840	V0
Cobalt	0.0000273	0.0004077	V4	0.0000691	V0	0.0000376	V0
Copper	0.0017171	0.0010896	V0	0.0014821	V0	0.0001325	V0
Iron	0.0393063	0.1030238	V0	0.0389467	V0	0.0028564	V0
Lanthanum	0.0000130	0.0000640	V0	0.0000290	V0	0.0000000	V1
Lead	0.0008577	0.0003480	V0	0.0002419	V0	0.0000000	V1
Lithium	0.0000374	0.0000828	V0	0.0000111	V0	0.0000000	V1
Magnesium	0.0091409	0.0274612	V0	0.0136070	V0	0.0005778	V0
Manganese	0.0006949	0.0022227	V0	0.0008733	V0	0.0000446	V0
Molybdenum	0.0007116	0.0000618	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000567	V0	0.0000192	V0	0.0000000	V1
Nickel	0.0005429	0.0006196	V0	0.0002629	V0	0.0001319	V0
Niobium	0.0000202	0.0000172	V0	0.0000053	V0	0.0000000	V1
Palladium	0.0000632	0.0000030	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0058892	V0	0.0041255	V0	0.0029859	V0
Platinum	0.0000088	0.0000004	V0	0.0000006	V0	0.0000005	V0
Potassium	0.0061261	0.0738804	V0	0.0346497	V0	0.0008724	V0
Praseodymium	0.0000070	0.0000143	V0	0.0000045	V0	0.0000000	V1
Rubidium	0.0000184	0.0002141	V0	0.0000838	V0	0.0000010	V0
Samarium	0.0000133	0.0000104	V0	0.0000036	V0	0.0000000	V1
Selenium	0.0003366	0.0001456	V0	0.0000935	V0	0.0000000	V1
Silicon	0.1893637	0.3327861	V0	0.2103263	V0	0.0000000	V1
Silver	0.0000100	0.0000025	V0	0.0000025	V0	0.0000000	V1
Sodium	0.0169447	0.0298285	V0	0.0170575	V0	0.0009009	V0
Strontium	0.0003375	0.0005428	V0	0.0002173	V0	0.0000231	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000057	V0	0.0000037	V0	0.0000000	V1
Thorium	0.0000059	0.0000178	V0	0.0000062	V0	0.0000000	V1
Tin	0.0004414	0.0001186	V0	0.0001356	V0	0.0000000	V1
Titanium	0.0015201	0.0043544	V0	0.0015912	V0	0.0001816	V0
Tungsten	0.0000938	0.0000710	V0	0.0000623	V0	0.0000409	V0
Uranium	0.0000048	0.0000048	V0	0.0000021	V0	0.0000000	V1
Vanadium	0.0007697	0.0003014	V0	0.0001030	V0	0.0000000	V1
Zinc	0.0055897	0.0039779	V0	0.0024108	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		30-Apr		30-Apr		30-Apr	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.76	V0	3.76	V0	0.04	V0
Aluminum	0.1380326	0.1065723	V0	0.0448045	V0	0.0000000	V1
Antimony	0.0001784	0.0002793	V0	0.0000629	V0	0.0000000	V1
Arsenic	0.0001060	0.0002157	V0	0.0001194	V0	0.0000000	V1
Barium	0.0092847	0.0030732	V0	0.0008367	V0	0.0000000	V1
Beryllium	0.0000946	0.0000045	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000194	V0	0.0000130	V0	0.0000015	V0
Cadmium	0.0000174	0.0000275	V0	0.0000192	V0	0.0000000	V1
Calcium	0.4112124	0.1548125	V0	0.0492442	V0	0.0000000	V1
Cerium	0.0000174	0.0001471	V0	0.0000559	V0	0.0000013	V0
Cesium	0.0000100	0.0000098	V0	0.0000053	V0	0.0000000	V1
Chromium	0.0022262	0.0003188	V0	0.0002284	V0	0.0001840	V0
Cobalt	0.0000273	0.0000694	V0	0.0000687	V0	0.0000376	V0
Copper	0.0017171	0.0016552	V0	0.0005562	V0	0.0001325	V0
Iron	0.0393063	0.1423569	V0	0.0759940	V0	0.0028564	V0
Lanthanum	0.0000130	0.0000806	V0	0.0000326	V0	0.0000000	V1
Lead	0.0008577	0.0004107	V0	0.0003216	V0	0.0000000	V1
Lithium	0.0000374	0.0000645	V0	0.0000147	V0	0.0000000	V1
Magnesium	0.0091409	0.0371537	V0	0.0136843	V0	0.0005778	V0
Manganese	0.0006949	0.0025183	V0	0.0012574	V0	0.0000446	V0
Molybdenum	0.0007116	0.0000603	V0	0.0000343	V0	0.0000000	V1
Neodymium	0.0000140	0.0000551	V0	0.0000213	V0	0.0000000	V1
Nickel	0.0005429	0.0007194	V0	0.0001743	V0	0.0001319	V0
Niobium	0.0000202	0.0000146	V0	0.0000069	V0	0.0000000	V1
Palladium	0.0000632	0.0000062	V0	0.0000031	V0	0.0000000	V1
Phosphorus	0.0459574	0.0060353	V0	0.0070094	V0	0.0029859	V0
Platinum	0.0000088	0.0000011	V0	0.0000010	V0	0.0000005	V0
Potassium	0.0061261	0.0538583	V0	0.0326697	V0	0.0008724	V0
Praseodymium	0.0000070	0.0000150	V0	0.0000055	V0	0.0000000	V1
Rubidium	0.0000184	0.0001662	V0	0.0000847	V0	0.0000010	V0
Samarium	0.0000133	0.0000093	V0	0.0000034	V0	0.0000000	V1
Selenium	0.0003366	0.0001481	V0	0.0001327	V0	0.0000000	V1
Silicon	0.1893637	0.3416092	V0	0.1363366	V0	0.0000000	V1
Silver	0.0000100	0.0000023	V0	0.0000017	V0	0.0000000	V1
Sodium	0.0169447	0.0358825	V0	0.0165953	V0	0.0009009	V0
Strontium	0.0003375	0.0005978	V0	0.0002464	V0	0.0000231	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000050	V0	0.0000041	V0	0.0000000	V1
Thorium	0.0000059	0.0000183	V0	0.0000076	V0	0.0000000	V1
Tin	0.0004414	0.0002424	V0	0.0001423	V0	0.0000000	V1
Titanium	0.0015201	0.0047341	V0	0.0018271	V0	0.0001816	V0
Tungsten	0.0000938	0.0001108	V0	0.0000510	V0	0.0000409	V0
Uranium	0.0000048	0.0000053	V0	0.0000026	V0	0.0000000	V1
Vanadium	0.0007697	0.0002544	V0	0.0001089	V0	0.0000000	V1
Zinc	0.0055897	0.0035142	V0	0.0016830	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**06-May**		**06-May**		**06-May**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**9.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	64.61	V4	267.16	V6	0.33	V0
Aluminum	0.1380326	0.0695659	V0	0.0385227	V6	0.0000000	V1
Antimony	0.0001784	0.0000593	V0	0.0009487	V6	0.0000000	V1
Arsenic	0.0001060	0.0002441	V0	0.0074826	V6	0.0000000	V1
Barium	0.0092847	0.0007418	V0	0.0000000	V6	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V6	0.0000000	V1
Bismuth	0.0000093	0.0000487	V0	0.0001643	V6	0.0000022	V0
Cadmium	0.0000174	0.0003007	V4	0.0017278	V6	0.0000000	V1
Calcium	0.4112124	0.1254596	V0	0.0928114	V6	0.0000000	V1
Cerium	0.0000174	0.0000787	V0	0.0000400	V6	0.0000000	V1
Cesium	0.0000100	0.0000158	V0	0.0000289	V6	0.0000000	V1
Chromium	0.0022262	0.0003258	V0	0.0011496	V6	0.0000000	V1
Cobalt	0.0000273	0.0000722	V0	0.0001664	V6	0.0000467	V0
Copper	0.0017171	0.0004492	V0	0.0135230	V6	0.0002300	V0
Iron	0.0393063	0.0709427	V0	0.0364643	V6	0.0000000	V1
Lanthanum	0.0000130	0.0000373	V0	0.0000178	V6	0.0000000	V1
Lead	0.0008577	0.0005952	V0	0.0113580	V6	0.0000000	V1
Lithium	0.0000374	0.0000807	V0	0.0001622	V6	0.0000000	V1
Magnesium	0.0091409	0.0169158	V0	0.0162370	V6	0.0007917	V0
Manganese	0.0006949	0.0018474	V0	0.0017439	V6	0.0000440	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V6	0.0000000	V1
Neodymium	0.0000140	0.0000332	V0	0.0000160	V6	0.0000006	V0
Nickel	0.0005429	0.0002401	V0	0.0008882	V6	0.0000798	V0
Niobium	0.0000202	0.0000091	V0	0.0000073	V6	0.0000000	V1
Palladium	0.0000632	0.0000381	V0	0.0000000	V6	0.0000118	V0
Phosphorus	0.0459574	0.0440398	V0	0.1025093	V6	0.0344729	V0
Platinum	0.0000088	0.0000012	V0	0.0000021	V6	0.0000008	V0
Potassium	0.0061261	0.3092086	V4	0.2117614	V6	0.0009071	V0
Praseodymium	0.0000070	0.0000088	V0	0.0000046	V6	0.0000000	V1
Rubidium	0.0000184	0.0007358	V4	0.0005111	V6	0.0000008	V0
Samarium	0.0000133	0.0000064	V0	0.0000028	V6	0.0000000	V1
Selenium	0.0003366	0.0001020	V0	0.0001341	V6	0.0000000	V1
Silicon	0.2058250	0.1839014	V0	0.0826830	V6	0.0000000	V1
Silver	0.0000100	0.0000110	V0	0.0000940	V6	0.0000000	V1
Sodium	0.0169447	0.2261954	V4	0.0742796	V6	0.0010054	V0
Strontium	0.0003375	0.0003754	V0	0.0003964	V6	0.0000194	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V6	0.0000000	V1
Thallium	0.0000090	0.0000112	V0	0.0000230	V6	0.0000000	V1
Thorium	0.0000059	0.0000104	V0	0.0000047	V6	0.0000000	V1
Tin	0.0004414	0.0001320	V0	0.0014395	V6	0.0000000	V1
Titanium	0.0015201	0.0026828	V0	0.0021912	V6	0.0001433	V0
Tungsten	0.0000938	0.0000776	V0	0.0001488	V6	0.0000398	V0
Uranium	0.0000048	0.0000028	V0	0.0000015	V6	0.0000000	V1
Vanadium	0.0007697	0.0001824	V0	0.0002265	V6	0.0000000	V1
Zinc	0.0055897	0.0181141	V4	0.0421033	V6	0.0002520	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Travel Blank**	
Station #		**AMS 7**			
Sample Date		**06-May**		**06-May**	
Particulate Size		**PM2.5**			
Total Air Volume (m³)		**6.8**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	393.98	V6	0.33	V0
Aluminum	0.1380326	0.1158265	V6	0.0000000	V1
Antimony	0.0001784	0.0014839	V6	0.0000000	V1
Arsenic	0.0001060	0.0062437	V6	0.0000000	V1
Barium	0.0092847	0.0035130	V6	0.0000000	V1
Beryllium	0.0000946	0.0000000	V6	0.0000000	V1
Bismuth	0.0000093	0.0002379	V6	0.0000022	V0
Cadmium	0.0000174	0.0027200	V6	0.0000000	V1
Calcium	0.4112124	0.3104214	V6	0.0000000	V1
Cerium	0.0000174	0.0001473	V6	0.0000000	V1
Cesium	0.0000100	0.0000410	V6	0.0000000	V1
Chromium	0.0022262	0.0007110	V6	0.0000000	V1
Cobalt	0.0000273	0.0001772	V6	0.0000467	V0
Copper	0.0017171	0.0203385	V6	0.0002300	V0
Iron	0.0393063	0.1568631	V6	0.0000000	V1
Lanthanum	0.0000130	0.0000678	V6	0.0000000	V1
Lead	0.0008577	0.0151378	V6	0.0000000	V1
Lithium	0.0000374	0.0002802	V6	0.0000000	V1
Magnesium	0.0091409	0.0559922	V6	0.0007917	V0
Manganese	0.0006949	0.0053370	V6	0.0000440	V0
Molybdenum	0.0007116	0.0000000	V6	0.0000000	V1
Neodymium	0.0000140	0.0000640	V6	0.0000006	V0
Nickel	0.0005429	0.0006284	V6	0.0000798	V0
Niobium	0.0000202	0.0000205	V6	0.0000000	V1
Palladium	0.0000632	0.0001526	V6	0.0000118	V0
Phosphorus	0.0459574	0.1313954	V6	0.0344729	V0
Platinum	0.0000088	0.0000050	V6	0.0000008	V0
Potassium	0.0061261	0.4276923	V6	0.0009071	V0
Praseodymium	0.0000070	0.0000172	V6	0.0000000	V1
Rubidium	0.0000184	0.0008721	V6	0.0000008	V0
Samarium	0.0000133	0.0000120	V6	0.0000000	V1
Selenium	0.0003366	0.0003206	V6	0.0000000	V1
Silicon	0.2058250	0.4063335	V6	0.0000000	V1
Silver	0.0000100	0.0001045	V6	0.0000000	V1
Sodium	0.0169447	0.0984000	V6	0.0010054	V0
Strontium	0.0003375	0.0014775	V6	0.0000194	V0
Tantalum	0.0000394	0.0000000	V6	0.0000000	V1
Thallium	0.0000090	0.0000303	V6	0.0000000	V1
Thorium	0.0000059	0.0000170	V6	0.0000000	V1
Tin	0.0004414	0.0020593	V6	0.0000000	V1
Titanium	0.0015201	0.0055523	V6	0.0001433	V0
Tungsten	0.0000938	0.0002136	V6	0.0000398	V0
Uranium	0.0000048	0.0000052	V6	0.0000000	V1
Vanadium	0.0007697	0.0003856	V6	0.0000000	V1
Zinc	0.0055897	0.0651306	V6	0.0002520	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		12-May		12-May		12-May	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.07	V0	36.63	V4	0.09	V0
Aluminum	0.1380326	0.0439895	V0	0.0276441	V0	0.0072240	V0
Antimony	0.0001784	0.0000215	V0	0.0000149	V0	0.0000000	V1
Arsenic	0.0001060	0.0000318	V0	0.0002545	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000132	V0	0.0000092	V0	0.0000275	V0
Cadmium	0.0000174	0.0000049	V0	0.0000152	V0	0.0000000	V1
Calcium	0.4112124	0.0599755	V0	0.0357944	V0	0.0000000	V1
Cerium	0.0000174	0.0000443	V0	0.0000307	V0	0.0000000	V1
Cesium	0.0000100	0.0000039	V0	0.0000032	V0	0.0000000	V1
Chromium	0.0022262	0.0006550	V0	0.0001497	V0	0.0001527	V0
Cobalt	0.0000273	0.0000499	V0	0.0000525	V0	0.0000543	V0
Copper	0.0017171	0.0005432	V0	0.0002087	V0	0.0002491	V0
Iron	0.0393063	0.0271084	V0	0.0170261	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000216	V0	0.0000157	V0	0.0000000	V1
Lead	0.0008577	0.0001524	V0	0.0001733	V0	0.0000000	V1
Lithium	0.0000374	0.0000388	V0	0.0000197	V0	0.0000000	V1
Magnesium	0.0091409	0.0075775	V0	0.0068979	V0	0.0010869	V0
Manganese	0.0006949	0.0006204	V0	0.0005225	V0	0.0000576	V0
Molybdenum	0.0007116	0.0000860	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000198	V0	0.0000130	V0	0.0000000	V1
Nickel	0.0005429	0.0004250	V0	0.0002521	V0	0.0004658	V0
Niobium	0.0000202	0.0000071	V0	0.0000050	V0	0.0000019	V0
Palladium	0.0000632	0.0000398	V0	0.0000034	V0	0.0000084	V0
Phosphorus	0.0459574	0.0473391	V0	0.0288542	V0	0.0362834	V0
Platinum	0.0000088	0.0000014	V0	0.0000008	V0	0.0000004	V0
Potassium	0.0061261	0.0148117	V0	0.0166752	V0	0.0013638	V0
Praseodymium	0.0000070	0.0000048	V0	0.0000033	V0	0.0000000	V1
Rubidium	0.0000184	0.0000520	V0	0.0000448	V0	0.0000008	V0
Samarium	0.0000133	0.0000036	V0	0.0000022	V0	0.0000000	V1
Selenium	0.0003366	0.0000476	V0	0.0000514	V0	0.0000000	V1
Silicon	0.2058250	0.1186118	V0	0.0650239	V0	0.0000000	V1
Silver	0.0000100	0.0000356	V4	0.0000024	V0	0.0000007	V0
Sodium	0.0169447	0.0220887	V0	0.0114083	V0	0.0015309	V0
Strontium	0.0003375	0.0002233	V0	0.0001447	V0	0.0000186	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000028	V0	0.0000038	V0	0.0000000	V1
Thorium	0.0000059	0.0000052	V0	0.0000041	V0	0.0000000	V1
Tin	0.0004414	0.0000549	V0	0.0000987	V0	0.0000000	V1
Titanium	0.0015201	0.0016337	V0	0.0012565	V0	0.0002565	V0
Tungsten	0.0000938	0.0000458	V0	0.0000359	V0	0.0001448	V0
Uranium	0.0000048	0.0000015	V0	0.0000011	V0	0.0000000	V1
Vanadium	0.0007697	0.0001307	V0	0.0000976	V0	0.0000000	V1
Zinc	0.0055897	0.0010368	V0	0.0011535	V0	0.0002517	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Travel Blank	
Station #		AMS 7			
Sample Date		12-May		12-May	
Particulate Size		PM2.5			
Total Air Volume (m³)		21.9		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	110.53	V4	0.09	V0
Aluminum	0.1380326	0.0610724	V0	0.0072240	V0
Antimony	0.0001784	0.0013192	V4	0.0000000	V1
Arsenic	0.0001060	0.0007747	V4	0.0000000	V1
Barium	0.0092847	0.0012936	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000305	V0	0.0000275	V0
Cadmium	0.0000174	0.0001864	V4	0.0000000	V1
Calcium	0.4112124	0.1091846	V0	0.0000000	V1
Cerium	0.0000174	0.0000723	V0	0.0000000	V1
Cesium	0.0000100	0.0000066	V0	0.0000000	V1
Chromium	0.0022262	0.0002740	V0	0.0001527	V0
Cobalt	0.0000273	0.0000878	V0	0.0000543	V0
Copper	0.0017171	0.0053632	V4	0.0002491	V0
Iron	0.0393063	0.0694305	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000359	V0	0.0000000	V1
Lead	0.0008577	0.0004085	V0	0.0000000	V1
Lithium	0.0000374	0.0000493	V0	0.0000000	V1
Magnesium	0.0091409	0.0188008	V0	0.0010869	V0
Manganese	0.0006949	0.0021950	V0	0.0000576	V0
Molybdenum	0.0007116	0.0000356	V0	0.0000000	V1
Neodymium	0.0000140	0.0000315	V0	0.0000000	V1
Nickel	0.0005429	0.0004370	V0	0.0004658	V0
Niobium	0.0000202	0.0000080	V0	0.0000019	V0
Palladium	0.0000632	0.0000219	V0	0.0000084	V0
Phosphorus	0.0459574	0.0355686	V0	0.0362834	V0
Platinum	0.0000088	0.0000013	V0	0.0000004	V0
Potassium	0.0061261	0.0807741	V0	0.0013638	V0
Praseodymium	0.0000070	0.0000081	V0	0.0000000	V1
Rubidium	0.0000184	0.0001498	V0	0.0000008	V0
Samarium	0.0000133	0.0000058	V0	0.0000000	V1
Selenium	0.0003366	0.0001324	V0	0.0000000	V1
Silicon	0.2058250	0.1789835	V0	0.0000000	V1
Silver	0.0000100	0.0000051	V0	0.0000007	V0
Sodium	0.0169447	0.0168887	V0	0.0015309	V0
Strontium	0.0003375	0.0004347	V0	0.0000186	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000062	V0	0.0000000	V1
Thorium	0.0000059	0.0000096	V0	0.0000000	V1
Tin	0.0004414	0.0001184	V0	0.0000000	V1
Titanium	0.0015201	0.0023038	V0	0.0002565	V0
Tungsten	0.0000938	0.0001044	V0	0.0001448	V0
Uranium	0.0000048	0.0000025	V0	0.0000000	V1
Vanadium	0.0007697	0.0002167	V0	0.0000000	V1
Zinc	0.0055897	0.0058736	V0	0.0002517	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**18-May**		**18-May**		**18-May**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**19.1**			
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	25.78	V0	138.84	V4	-9999	M1
Aluminum	0.1380326	0.5390885	V4	0.0484543	V0	-9999	M1
Antimony	0.0001784	0.0000534	V0	0.0000268	V0	-9999	M1
Arsenic	0.0001060	0.0001361	V0	0.0004640	V0	-9999	M1
Barium	0.0092847	0.0051036	V0	0.0017967	V0	-9999	M1
Beryllium	0.0000946	0.0000146	V0	0.0000000	V1	-9999	M1
Bismuth	0.0000093	0.0000080	V0	0.0000144	V0	-9999	M1
Cadmium	0.0000174	0.0000657	V0	0.0002836	V4	-9999	M1
Calcium	0.4112124	0.7219911	V0	0.1670202	V0	-9999	M1
Cerium	0.0000174	0.0005355	V4	0.0000556	V0	-9999	M1
Cesium	0.0000100	0.0000420	V4	0.0000152	V0	-9999	M1
Chromium	0.0022262	0.0008869	V0	0.0002204	V0	-9999	M1
Cobalt	0.0000273	0.0002224	V0	0.0002481	V0	-9999	M1
Copper	0.0017171	0.0018458	V0	0.0005054	V0	-9999	M1
Iron	0.0393063	0.4869077	V4	0.0388929	V0	-9999	M1
Lanthanum	0.0000130	0.0002688	V4	0.0000275	V0	-9999	M1
Lead	0.0008577	0.0003484	V0	0.0005872	V0	-9999	M1
Lithium	0.0000374	0.0004981	V4	0.0000537	V0	-9999	M1
Magnesium	0.0091409	0.1011135	V4	0.0305245	V0	-9999	M1
Manganese	0.0006949	0.0117541	V4	0.0081750	V4	-9999	M1
Molybdenum	0.0007116	0.0001222	V0	0.0000000	V1	-9999	M1
Neodymium	0.0000140	0.0002428	V4	0.0000247	V0	-9999	M1
Nickel	0.0005429	0.0008149	V0	0.0004121	V0	-9999	M1
Niobium	0.0000202	0.0000608	V4	0.0000080	V0	-9999	M1
Palladium	0.0000632	0.0000271	V0	0.0000056	V0	-9999	M1
Phosphorus	0.0459574	0.0439606	V0	0.0557369	V0	-9999	M1
Platinum	0.0000088	0.0000009	V0	0.0000005	V0	-9999	M1
Potassium	0.0061261	0.2266678	V4	0.4020659	V4	-9999	M1
Praseodymium	0.0000070	0.0000615	V4	0.0000069	V0	-9999	M1
Rubidium	0.0000184	0.0007942	V4	0.0007574	V4	-9999	M1
Samarium	0.0000133	0.0000464	V4	0.0000049	V0	-9999	M1
Selenium	0.0003366	0.0003911	V4	0.0001182	V0	-9999	M1
Silicon	0.2058250	1.9128657	V4	0.1522006	V0	-9999	M1
Silver	0.0000100	0.0000091	V0	0.0000139	V0	-9999	M1
Sodium	0.0169447	0.0695197	V0	0.0144000	V0	-9999	M1
Strontium	0.0003375	0.0022506	V4	0.0009118	V0	-9999	M1
Tantalum	0.0000394	0.0000041	V0	0.0000000	V1	-9999	M1
Thallium	0.0000090	0.0000083	V0	0.0000149	V0	-9999	M1
Thorium	0.0000059	0.0000722	V4	0.0000070	V0	-9999	M1
Tin	0.0004414	0.0001795	V0	0.0001094	V0	-9999	M1
Titanium	0.0015201	0.0207385	V4	0.0018078	V0	-9999	M1
Tungsten	0.0000938	0.0001164	V0	0.0000570	V0	-9999	M1
Uranium	0.0000048	0.0000213	V4	0.0000024	V0	-9999	M1
Vanadium	0.0007697	0.0015663	V4	0.0001653	V0	-9999	M1
Zinc	0.0055897	0.0066639	V0	0.0211418	V4	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		18-May		18-May		18-May	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		15.7		24			
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	155.66	V4	49.43	V4	-9999	M1
Aluminum	0.1380326	0.1411234	V0	0.0566118	V0	-9999	M1
Antimony	0.0001784	0.0000782	V0	0.0000368	V0	-9999	M1
Arsenic	0.0001060	0.0004591	V0	0.0002712	V0	-9999	M1
Barium	0.0092847	0.0046055	V0	0.0030213	V0	-9999	M1
Beryllium	0.0000946	0.0000062	V0	0.0000000	V1	-9999	M1
Bismuth	0.0000093	0.0000198	V0	0.0000099	V0	-9999	M1
Cadmium	0.0000174	0.0005451	V4	0.0001218	V4	-9999	M1
Calcium	0.4112124	0.3758050	V0	0.3389942	V0	-9999	M1
Cerium	0.0000174	0.0001487	V0	0.0000670	V0	-9999	M1
Cesium	0.0000100	0.0000205	V0	0.0000091	V0	-9999	M1
Chromium	0.0022262	0.0003892	V0	0.0003454	V0	-9999	M1
Cobalt	0.0000273	0.0001211	V0	0.0001003	V0	-9999	M1
Copper	0.0017171	0.0038831	V0	0.0009336	V0	-9999	M1
Iron	0.0393063	0.1513750	V0	0.0661873	V0	-9999	M1
Lanthanum	0.0000130	0.0000742	V0	0.0000349	V0	-9999	M1
Lead	0.0008577	0.0005895	V0	0.0003022	V0	-9999	M1
Lithium	0.0000374	0.0001165	V0	0.0000466	V0	-9999	M1
Magnesium	0.0091409	0.0601290	V0	0.0612356	V0	-9999	M1
Manganese	0.0006949	0.0136041	V4	0.0112894	V4	-9999	M1
Molybdenum	0.0007116	0.0000525	V0	0.0000379	V0	-9999	M1
Neodymium	0.0000140	0.0000671	V0	0.0000291	V0	-9999	M1
Nickel	0.0005429	0.0004464	V0	0.0002483	V0	-9999	M1
Niobium	0.0000202	0.0000171	V0	0.0000076	V0	-9999	M1
Palladium	0.0000632	0.0000310	V0	0.0000096	V0	-9999	M1
Phosphorus	0.0459574	0.0752925	V0	0.0641728	V0	-9999	M1
Platinum	0.0000088	0.0000016	V0	0.0000004	V0	-9999	M1
Potassium	0.0061261	0.5441719	V4	0.1667937	V4	-9999	M1
Praseodymium	0.0000070	0.0000177	V0	0.0000076	V0	-9999	M1
Rubidium	0.0000184	0.0008475	V4	0.0003856	V0	-9999	M1
Samarium	0.0000133	0.0000119	V0	0.0000062	V0	-9999	M1
Selenium	0.0003366	0.0002142	V0	0.0000868	V0	-9999	M1
Silicon	0.2058250	0.3865180	V0	0.2113055	V0	-9999	M1
Silver	0.0000100	0.0000194	V0	0.0000071	V0	-9999	M1
Sodium	0.0169447	0.0220074	V0	0.0122899	V0	-9999	M1
Strontium	0.0003375	0.0018174	V0	0.0014948	V0	-9999	M1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	-9999	M1
Thallium	0.0000090	0.0000162	V0	0.0000055	V0	-9999	M1
Thorium	0.0000059	0.0000193	V0	0.0000092	V0	-9999	M1
Tin	0.0004414	0.0001449	V0	0.0001379	V0	-9999	M1
Titanium	0.0015201	0.0044683	V0	0.0021512	V0	-9999	M1
Tungsten	0.0000938	0.0001187	V0	0.0000570	V0	-9999	M1
Uranium	0.0000048	0.0000055	V0	0.0000035	V0	-9999	M1
Vanadium	0.0007697	0.0004789	V0	0.0001533	V0	-9999	M1
Zinc	0.0055897	0.0323194	V4	0.0106521	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**24-May**		**24-May**		**24-May**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	42.15	V4	26.07	V0	0.15	V0
Aluminum	0.1380326	0.4424006	V4	0.0956927	V0	0.0063711	V0
Antimony	0.0001784	0.0000569	V0	0.0000793	V0	0.0000000	V1
Arsenic	0.0001060	0.0001966	V0	0.0001282	V0	0.0000000	V1
Barium	0.0092847	0.0049905	V0	0.0023030	V0	0.0000000	V1
Beryllium	0.0000946	0.0000114	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000117	V0	0.0000334	V0	0.0000053	V0
Cadmium	0.0000174	0.0000806	V0	0.0000357	V0	0.0000000	V1
Calcium	0.4112124	0.6981518	V0	0.3131897	V0	0.0246178	V0
Cerium	0.0000174	0.0004462	V4	0.0000877	V0	0.0000010	V0
Cesium	0.0000100	0.0000380	V4	0.0000079	V0	0.0000000	V1
Chromium	0.0022262	0.0006890	V0	0.0002457	V0	0.0002322	V0
Cobalt	0.0000273	0.0001600	V0	0.0001128	V0	0.0000161	V0
Copper	0.0017171	0.0027134	V0	0.0035823	V0	0.0002146	V0
Iron	0.0393063	0.3468375	V4	0.0782428	V0	0.0022864	V0
Lanthanum	0.0000130	0.0002147	V4	0.0000410	V0	0.0000000	V1
Lead	0.0008577	0.0004599	V0	0.0002028	V0	0.0000000	V1
Lithium	0.0000374	0.0004065	V4	0.0000664	V0	0.0000023	V0
Magnesium	0.0091409	0.1011669	V4	0.0533509	V0	0.0023591	V0
Manganese	0.0006949	0.0172623	V4	0.0163235	V4	0.0000778	V0
Molybdenum	0.0007116	0.0001713	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0001970	V4	0.0000382	V0	0.0000000	V1
Nickel	0.0005429	0.0006936	V0	0.0002808	V0	0.0002392	V0
Niobium	0.0000202	0.0000458	V4	0.0000095	V0	0.0000012	V0
Palladium	0.0000632	0.0000417	V0	0.0000162	V0	0.0000302	V0
Phosphorus	0.0459574	0.0464991	V0	0.0505700	V0	0.0270118	V0
Platinum	0.0000088	0.0000012	V0	0.0000014	V0	0.0000008	V0
Potassium	0.0061261	0.2753335	V4	0.0799970	V0	0.0065045	V0
Praseodymium	0.0000070	0.0000512	V4	0.0000100	V0	0.0000000	V1
Rubidium	0.0000184	0.0008340	V4	0.0002113	V0	0.0000035	V0
Samarium	0.0000133	0.0000375	V4	0.0000071	V0	0.0000000	V1
Selenium	0.0003366	0.0003508	V4	0.0000964	V0	0.0000000	V1
Silicon	0.2058250	1.3406318	V4	0.3545559	V0	0.0000000	V1
Silver	0.0000100	0.0000095	V0	0.0000028	V0	0.0000014	V0
Sodium	0.0169447	0.0787605	V0	0.0211906	V0	0.0019014	V0
Strontium	0.0003375	0.0022848	V4	0.0010620	V0	0.0000194	V0
Tantalum	0.0000394	0.0000031	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000098	V0	0.0000026	V0	0.0000000	V1
Thorium	0.0000059	0.0000584	V4	0.0000136	V0	0.0000000	V1
Tin	0.0004414	0.0001082	V0	0.0000583	V0	0.0000199	V0
Titanium	0.0015201	0.0133954	V4	0.0028558	V0	0.0006057	V0
Tungsten	0.0000938	0.0000803	V0	0.0001114	V0	0.0000135	V0
Uranium	0.0000048	0.0000176	V4	0.0000061	V0	0.0000002	V0
Vanadium	0.0007697	0.0010808	V0	0.0002129	V0	0.0000000	V1
Zinc	0.0055897	0.0102312	V0	0.0028958	V0	0.0007589	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		24-May		24-May		24-May	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	52.80	V4	56.58	V4	0.15	V0
Aluminum	0.1380326	0.0520239	V0	0.0197245	V0	0.0063711	V0
Antimony	0.0001784	0.0001360	V0	0.0000174	V0	0.0000000	V1
Arsenic	0.0001060	0.0003092	V0	0.0002646	V0	0.0000000	V1
Barium	0.0092847	0.0021058	V0	0.0004888	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000082	V0	0.0000119	V0	0.0000053	V0
Cadmium	0.0000174	0.0000458	V0	0.0000518	V0	0.0000000	V1
Calcium	0.4112124	0.1464104	V0	0.0591634	V0	0.0246178	V0
Cerium	0.0000174	0.0000575	V0	0.0000231	V0	0.0000010	V0
Cesium	0.0000100	0.0000055	V0	0.0000031	V0	0.0000000	V1
Chromium	0.0022262	0.0002847	V0	0.0003691	V0	0.0002322	V0
Cobalt	0.0000273	0.0001316	V0	0.0000820	V0	0.0000161	V0
Copper	0.0017171	0.0010710	V0	0.0006742	V0	0.0002146	V0
Iron	0.0393063	0.0674505	V0	0.0211966	V0	0.0022864	V0
Lanthanum	0.0000130	0.0000271	V0	0.0000109	V0	0.0000000	V1
Lead	0.0008577	0.0002269	V0	0.0001494	V0	0.0000000	V1
Lithium	0.0000374	0.0000417	V0	0.0000223	V0	0.0000023	V0
Magnesium	0.0091409	0.0255749	V0	0.0105924	V0	0.0023591	V0
Manganese	0.0006949	0.0084386	V4	0.0017600	V0	0.0000778	V0
Molybdenum	0.0007116	0.0000341	V0	0.0000322	V0	0.0000000	V1
Neodymium	0.0000140	0.0000249	V0	0.0000094	V0	0.0000000	V1
Nickel	0.0005429	0.0003563	V0	0.0002235	V0	0.0002392	V0
Niobium	0.0000202	0.0000065	V0	0.0000065	V0	0.0000012	V0
Palladium	0.0000632	0.0000588	V4	0.0000152	V0	0.0000302	V0
Phosphorus	0.0459574	0.0330050	V0	0.0244642	V0	0.0270118	V0
Platinum	0.0000088	0.0000015	V0	0.0000007	V0	0.0000008	V0
Potassium	0.0061261	0.0478659	V0	0.0227395	V0	0.0065045	V0
Praseodymium	0.0000070	0.0000062	V0	0.0000026	V0	0.0000000	V1
Rubidium	0.0000184	0.0001153	V0	0.0000658	V0	0.0000035	V0
Samarium	0.0000133	0.0000051	V0	0.0000016	V0	0.0000000	V1
Selenium	0.0003366	0.0001315	V0	0.0000828	V0	0.0000000	V1
Silicon	0.2058250	0.1680317	V0	0.0677550	V0	0.0000000	V1
Silver	0.0000100	0.0000028	V0	0.0000042	V0	0.0000014	V0
Sodium	0.0169447	0.0115298	V0	0.0058436	V0	0.0019014	V0
Strontium	0.0003375	0.0005954	V0	0.0002334	V0	0.0000194	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000039	V0	0.0000034	V0	0.0000000	V1
Thorium	0.0000059	0.0000075	V0	0.0000033	V0	0.0000000	V1
Tin	0.0004414	0.0001116	V0	0.0000784	V0	0.0000199	V0
Titanium	0.0015201	0.0022112	V0	0.0012255	V0	0.0006057	V0
Tungsten	0.0000938	0.0000687	V0	0.0000676	V0	0.0000135	V0
Uranium	0.0000048	0.0000038	V0	0.0000019	V0	0.0000002	V0
Vanadium	0.0007697	0.0002427	V0	0.0000604	V0	0.0000000	V1
Zinc	0.0055897	0.0027849	V0	0.0015279	V0	0.0007589	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		30-May		30-May		30-May	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24			
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.24	V0	4.51	V0	-9999	M1
Aluminum	0.1380326	0.0261652	V0	0.0165353	V0	-9999	V1
Antimony	0.0001784	0.0000083	V0	0.0000226	V0	-9999	V1
Arsenic	0.0001060	0.0000334	V0	0.0000467	V0	-9999	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	-9999	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	-9999	V1
Bismuth	0.0000093	0.0000022	V0	0.0000107	V0	-9999	V1
Cadmium	0.0000174	0.0000048	V0	0.0000058	V0	-9999	V1
Calcium	0.4112124	0.0503708	V0	0.0368931	V0	-9999	V1
Cerium	0.0000174	0.0000243	V0	0.0000115	V0	-9999	V1
Cesium	0.0000100	0.0000025	V0	0.0000013	V0	-9999	V1
Chromium	0.0022262	0.0002241	V0	0.0001309	V0	-9999	V1
Cobalt	0.0000273	0.0000422	V0	0.0000066	V0	-9999	V1
Copper	0.0017171	0.0003194	V0	0.0001896	V0	-9999	V1
Iron	0.0393063	0.0228856	V0	0.0106207	V0	-9999	V1
Lanthanum	0.0000130	0.0000113	V0	0.0000055	V0	-9999	V1
Lead	0.0008577	0.0000962	V0	0.0000640	V0	-9999	V1
Lithium	0.0000374	0.0000279	V0	0.0000119	V0	-9999	V1
Magnesium	0.0091409	0.0081359	V0	0.0063333	V0	-9999	V1
Manganese	0.0006949	0.0007801	V0	0.0006344	V0	-9999	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	-9999	V1
Neodymium	0.0000140	0.0000112	V0	0.0000044	V0	-9999	V1
Nickel	0.0005429	0.0001632	V0	0.0001515	V0	-9999	V1
Niobium	0.0000202	0.0000036	V0	0.0000019	V0	-9999	V1
Palladium	0.0000632	0.0000094	V0	0.0000175	V0	-9999	V1
Phosphorus	0.0459574	0.0450987	V0	0.0416819	V0	-9999	V1
Platinum	0.0000088	0.0000006	V0	0.0000004	V0	-9999	V1
Potassium	0.0061261	0.0211039	V0	0.0156213	V0	-9999	V1
Praseodymium	0.0000070	0.0000031	V0	0.0000012	V0	-9999	V1
Rubidium	0.0000184	0.0000513	V0	0.0000300	V0	-9999	V1
Samarium	0.0000133	0.0000022	V0	0.0000012	V0	-9999	V1
Selenium	0.0003366	0.0000314	V0	0.0000902	V0	-9999	V1
Silicon	0.2058250	0.1265737	V0	0.0309520	V0	-9999	V1
Silver	0.0000100	0.0000070	V0	0.0000012	V0	-9999	V1
Sodium	0.0169447	0.0052895	V0	0.0042442	V0	-9999	V1
Strontium	0.0003375	0.0001326	V0	0.0001008	V0	-9999	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	-9999	V1
Thallium	0.0000090	0.0000009	V0	0.0000007	V0	-9999	V1
Thorium	0.0000059	0.0000033	V0	0.0000016	V0	-9999	V1
Tin	0.0004414	0.0000310	V0	0.0000840	V0	-9999	V1
Titanium	0.0015201	0.0015966	V0	0.0008440	V0	-9999	V1
Tungsten	0.0000938	0.0000462	V0	0.0000000	V1	-9999	V1
Uranium	0.0000048	0.0000017	V0	0.0000014	V0	-9999	V1
Vanadium	0.0007697	0.0000793	V0	0.0000450	V0	-9999	V1
Zinc	0.0055897	0.0010068	V0	0.0009613	V0	-9999	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		30-May		30-May		30-May	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24			
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.64	V0	6.38	V0	-9999	M1
Aluminum	0.1380326	0.0221745	V0	0.0153909	V0	-9999	M1
Antimony	0.0001784	0.0000584	V0	0.0000147	V0	-9999	M1
Arsenic	0.0001060	0.0000510	V0	0.0002297	V0	-9999	M1
Barium	0.0092847	0.0005850	V0	0.0000000	V1	-9999	M1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	-9999	M1
Bismuth	0.0000093	0.0000082	V0	0.0000067	V0	-9999	M1
Cadmium	0.0000174	0.0000065	V0	0.0000065	V0	-9999	M1
Calcium	0.4112124	0.0613660	V0	0.0253518	V0	-9999	M1
Cerium	0.0000174	0.0000205	V0	0.0000108	V0	-9999	M1
Cesium	0.0000100	0.0000022	V0	0.0000014	V0	-9999	M1
Chromium	0.0022262	0.0004612	V0	0.0002566	V0	-9999	M1
Cobalt	0.0000273	0.0000179	V0	0.0000497	V0	-9999	M1
Copper	0.0017171	0.0006959	V0	0.0005132	V0	-9999	M1
Iron	0.0393063	0.0227724	V0	0.0075865	V0	-9999	M1
Lanthanum	0.0000130	0.0000099	V0	0.0000058	V0	-9999	M1
Lead	0.0008577	0.0000818	V0	0.0000880	V0	-9999	M1
Lithium	0.0000374	0.0000199	V0	0.0000175	V0	-9999	M1
Magnesium	0.0091409	0.0089564	V0	0.0044043	V0	-9999	M1
Manganese	0.0006949	0.0018343	V0	0.0006935	V0	-9999	M1
Molybdenum	0.0007116	0.0000308	V0	0.0000000	V1	-9999	M1
Neodymium	0.0000140	0.0000097	V0	0.0000041	V0	-9999	M1
Nickel	0.0005429	0.0002526	V0	0.0002791	V0	-9999	M1
Niobium	0.0000202	0.0000029	V0	0.0000053	V0	-9999	M1
Palladium	0.0000632	0.0000219	V0	0.0000086	V0	-9999	M1
Phosphorus	0.0459574	0.0441108	V0	0.0428458	V0	-9999	M1
Platinum	0.0000088	0.0000005	V0	0.0000010	V0	-9999	M1
Potassium	0.0061261	0.0273895	V0	0.0143364	V0	-9999	M1
Praseodymium	0.0000070	0.0000024	V0	0.0000008	V0	-9999	M1
Rubidium	0.0000184	0.0000630	V0	0.0000320	V0	-9999	M1
Samarium	0.0000133	0.0000014	V0	0.0000006	V0	-9999	M1
Selenium	0.0003366	0.0000576	V0	0.0000506	V0	-9999	M1
Silicon	0.2058250	0.0682618	V0	0.0262379	V0	-9999	M1
Silver	0.0000100	0.0000023	V0	0.0000013	V0	-9999	M1
Sodium	0.0169447	0.0059902	V0	0.0044359	V0	-9999	M1
Strontium	0.0003375	0.0001918	V0	0.0000924	V0	-9999	M1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	-9999	M1
Thallium	0.0000090	0.0000011	V0	0.0000009	V0	-9999	M1
Thorium	0.0000059	0.0000027	V0	0.0000012	V0	-9999	M1
Tin	0.0004414	0.0000594	V0	0.0000769	V0	-9999	M1
Titanium	0.0015201	0.0009410	V0	0.0008558	V0	-9999	M1
Tungsten	0.0000938	0.0000194	V0	0.0000715	V0	-9999	M1
Uranium	0.0000048	0.0000017	V0	0.0000016	V0	-9999	M1
Vanadium	0.0007697	0.0000988	V0	0.0000333	V0	-9999	M1
Zinc	0.0055897	0.0024664	V0	0.0014751	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**05-Jun**		**05-Jun**		**05-Jun**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.56	V0	5.83	V0	0.15	V0
Aluminum	0.1380326	0.1337107	V0	0.0948059	V0	0.0099702	V0
Antimony	0.0001784	0.0000128	V0	0.0000624	V0	0.0000000	V1
Arsenic	0.0001060	0.0000303	V0	0.0000321	V0	0.0000000	V1
Barium	0.0092847	0.0011521	V0	0.0014018	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000024	V0	0.0000218	V0	0.0000019	V0
Cadmium	0.0000174	0.0000021	V0	0.0000029	V0	0.0000010	V0
Calcium	0.4112124	0.1907101	V0	0.1868235	V0	0.0210245	V0
Cerium	0.0000174	0.0001259	V0	0.0000867	V0	0.0000010	V0
Cesium	0.0000100	0.0000092	V0	0.0000055	V0	0.0000000	V1
Chromium	0.0022262	0.0003531	V0	0.0006131	V0	0.0001631	V0
Cobalt	0.0000273	0.0000461	V0	0.0000371	V0	0.0000688	V0
Copper	0.0017171	0.0011063	V0	0.0007474	V0	0.0003455	V0
Iron	0.0393063	0.1115274	V0	0.1004539	V0	0.0020339	V0
Lanthanum	0.0000130	0.0000685	V0	0.0000470	V0	0.0000000	V1
Lead	0.0008577	0.0000806	V0	0.0000885	V0	0.0000000	V1
Lithium	0.0000374	0.0001284	V0	0.0000755	V0	0.0000000	V1
Magnesium	0.0091409	0.0241877	V0	0.0300398	V0	0.0021873	V0
Manganese	0.0006949	0.0031246	V0	0.0035476	V0	0.0000962	V0
Molybdenum	0.0007116	0.0000402	V0	0.0000795	V0	0.0000000	V1
Neodymium	0.0000140	0.0000564	V0	0.0000373	V0	0.0000000	V1
Nickel	0.0005429	0.0003876	V0	0.0002508	V0	0.0001735	V0
Niobium	0.0000202	0.0000146	V0	0.0000086	V0	0.0000015	V0
Palladium	0.0000632	0.0000096	V0	0.0000127	V0	0.0000452	V0
Phosphorus	0.0459574	0.0188065	V0	0.0226256	V0	0.0289870	V0
Platinum	0.0000088	0.0000006	V0	0.0000006	V0	0.0000008	V0
Potassium	0.0061261	0.0446861	V0	0.0355866	V0	0.0036787	V0
Praseodymium	0.0000070	0.0000140	V0	0.0000100	V0	0.0000000	V1
Rubidium	0.0000184	0.0001660	V0	0.0001085	V0	0.0000024	V0
Samarium	0.0000133	0.0000102	V0	0.0000069	V0	0.0000000	V1
Selenium	0.0003366	0.0001435	V0	0.0000508	V0	0.0000000	V1
Silicon	0.1270650	0.4134583	V0	0.5078398	V0	0.0000000	V1
Silver	0.0000100	0.0000011	V0	0.0000016	V0	0.0000009	V0
Sodium	0.0169447	0.0132147	V0	0.0183231	V0	0.0020658	V0
Strontium	0.0003375	0.0004876	V0	0.0005384	V0	0.0000232	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000014	V0	0.0000012	V0	0.0000000	V1
Thorium	0.0000059	0.0000173	V0	0.0000119	V0	0.0000000	V1
Tin	0.0004414	0.0000425	V0	0.0000751	V0	0.0000000	V1
Titanium	0.0015201	0.0069909	V0	0.0053349	V0	0.0006285	V0
Tungsten	0.0000938	0.0000203	V0	0.0000442	V0	0.0000118	V0
Uranium	0.0000048	0.0000045	V0	0.0000037	V0	0.0000000	V1
Vanadium	0.0007697	0.0002830	V0	0.0002630	V0	0.0000000	V1
Zinc	0.0055897	0.0013037	V0	0.0016904	V0	0.0008053	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		05-Jun		05-Jun		05-Jun	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.94	V0	2.34	V0	0.15	V0
Aluminum	0.1380326	0.0681049	V0	0.0185473	V0	0.0099702	V0
Antimony	0.0001784	0.0000542	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0000405	V0	0.0000168	V0	0.0000000	V1
Barium	0.0092847	0.0014151	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000048	V0	0.0000057	V0	0.0000019	V0
Cadmium	0.0000174	0.0000028	V0	0.0000020	V0	0.0000010	V0
Calcium	0.4112124	0.1290193	V0	0.0225368	V0	0.0210245	V0
Cerium	0.0000174	0.0000545	V0	0.0000098	V0	0.0000010	V0
Cesium	0.0000100	0.0000038	V0	0.0000008	V0	0.0000000	V1
Chromium	0.0022262	0.0002896	V0	0.0001818	V0	0.0001631	V0
Cobalt	0.0000273	0.0000583	V0	0.0000433	V0	0.0000688	V0
Copper	0.0017171	0.0005443	V0	0.0004632	V0	0.0003455	V0
Iron	0.0393063	0.0693570	V0	0.0105218	V0	0.0020339	V0
Lanthanum	0.0000130	0.0000290	V0	0.0000053	V0	0.0000000	V1
Lead	0.0008577	0.0002009	V0	0.0000503	V0	0.0000000	V1
Lithium	0.0000374	0.0000446	V0	0.0000076	V0	0.0000000	V1
Magnesium	0.0091409	0.0194793	V0	0.0043397	V0	0.0021873	V0
Manganese	0.0006949	0.0042897	V0	0.0004157	V0	0.0000962	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000223	V0	0.0000041	V0	0.0000000	V1
Nickel	0.0005429	0.0002313	V0	0.0001517	V0	0.0001735	V0
Niobium	0.0000202	0.0000053	V0	0.0000014	V0	0.0000015	V0
Palladium	0.0000632	0.0000073	V0	0.0000305	V0	0.0000452	V0
Phosphorus	0.0459574	0.0194928	V0	0.0147166	V0	0.0289870	V0
Platinum	0.0000088	0.0000025	V0	0.0000013	V0	0.0000008	V0
Potassium	0.0061261	0.0272944	V0	0.0071160	V0	0.0036787	V0
Praseodymium	0.0000070	0.0000059	V0	0.0000010	V0	0.0000000	V1
Rubidium	0.0000184	0.0000767	V0	0.0000157	V0	0.0000024	V0
Samarium	0.0000133	0.0000044	V0	0.0000006	V0	0.0000000	V1
Selenium	0.0003366	0.0000478	V0	0.0000000	V1	0.0000000	V1
Silicon	0.1270650	0.2353487	V0	0.0298104	V0	0.0000000	V1
Silver	0.0000100	0.0000007	V0	0.0000006	V0	0.0000009	V0
Sodium	0.0169447	0.0112331	V0	0.0029256	V0	0.0020658	V0
Strontium	0.0003375	0.0004043	V0	0.0000631	V0	0.0000232	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000008	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000068	V0	0.0000013	V0	0.0000000	V1
Tin	0.0004414	0.0000601	V0	0.0000319	V0	0.0000000	V1
Titanium	0.0015201	0.0020246	V0	0.0006614	V0	0.0006285	V0
Tungsten	0.0000938	0.0001050	V0	0.0000783	V0	0.0000118	V0
Uranium	0.0000048	0.0000022	V0	0.0000004	V0	0.0000000	V1
Vanadium	0.0007697	0.0002155	V0	0.0000732	V0	0.0000000	V1
Zinc	0.0055897	0.0014031	V0	0.0006317	V0	0.0008053	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**11-Jun**		**11-Jun**		**11-Jun**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**23.8**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	5.67	V0	5.08	V0	0.28	V0
Aluminum	0.1380326	0.0987862	V0	0.0259833	V0	0.0102050	V0
Antimony	0.0001784	0.0000172	V0	0.0000551	V0	0.0000000	V1
Arsenic	0.0001060	0.0000451	V0	0.0000552	V0	0.0000000	V1
Barium	0.0092847	0.0007645	V0	0.0004928	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000120	V0	0.0000079	V0	0.0000058	V0
Cadmium	0.0000174	0.0000033	V0	0.0000038	V0	0.0000000	V1
Calcium	0.4112124	0.1603416	V0	0.0417642	V0	0.0192253	V0
Cerium	0.0000174	0.0000823	V0	0.0000204	V0	0.0000000	V1
Cesium	0.0000100	0.0000067	V0	0.0000014	V0	0.0000000	V1
Chromium	0.0022262	0.0003806	V0	0.0003247	V0	0.0000000	V1
Cobalt	0.0000273	0.0000324	V0	0.0000324	V0	0.0000657	V0
Copper	0.0017171	0.0016118	V0	0.0005351	V0	0.0003331	V0
Iron	0.0393063	0.0735312	V0	0.0212716	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000436	V0	0.0000107	V0	0.0000000	V1
Lead	0.0008577	0.0000862	V0	0.0000828	V0	0.0000000	V1
Lithium	0.0000374	0.0000851	V0	0.0000152	V0	0.0000017	V0
Magnesium	0.0091409	0.0212827	V0	0.0072904	V0	0.0021617	V0
Manganese	0.0006949	0.0019893	V0	0.0004535	V0	0.0000713	V0
Molybdenum	0.0007116	0.0000637	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000355	V0	0.0000064	V0	0.0000000	V1
Nickel	0.0005429	0.0002861	V0	0.0003129	V0	0.0002236	V0
Niobium	0.0000202	0.0000106	V0	0.0000029	V0	0.0000000	V1
Palladium	0.0000632	0.0000087	V0	0.0000137	V0	0.0000103	V0
Phosphorus	0.0459574	0.0166996	V0	0.0129021	V0	0.0107826	V0
Platinum	0.0000088	0.0000004	V0	0.0000000	V1	0.0000006	V0
Potassium	0.0061261	0.0399577	V0	0.0124312	V0	0.0025962	V0
Praseodymium	0.0000070	0.0000092	V0	0.0000017	V0	0.0000000	V1
Rubidium	0.0000184	0.0001287	V0	0.0000295	V0	0.0000021	V0
Samarium	0.0000133	0.0000066	V0	0.0000013	V0	0.0000000	V1
Selenium	0.0003366	0.0000587	V0	0.0000332	V0	0.0000000	V1
Silicon	0.1270650	0.3904892	V0	0.0722280	V0	0.0000000	V1
Silver	0.0000100	0.0000012	V0	0.0000009	V0	0.0000000	V1
Sodium	0.0169447	0.0138293	V0	0.0063944	V0	0.0013217	V0
Strontium	0.0003375	0.0003836	V0	0.0001038	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000013	V0	0.0000007	V0	0.0000000	V1
Thorium	0.0000059	0.0000113	V0	0.0000023	V0	0.0000003	V0
Tin	0.0004414	0.0000384	V0	0.0000709	V0	0.0000000	V1
Titanium	0.0015201	0.0034765	V0	0.0009725	V0	0.0005658	V0
Tungsten	0.0000938	0.0000164	V0	0.0000211	V0	0.0000569	V0
Uranium	0.0000048	0.0000033	V0	0.0000009	V0	0.0000000	V1
Vanadium	0.0007697	0.0001891	V0	0.0000446	V0	0.0000000	V1
Zinc	0.0055897	0.0011830	V0	0.0023143	V0	0.0006744	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		11-Jun		11-Jun		11-Jun	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		23.7		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.59	V0	3.82	V0	0.28	V0
Aluminum	0.1380326	0.0230198	V0	0.0152423	V0	0.0102050	V0
Antimony	0.0001784	0.0000597	V0	0.0000106	V0	0.0000000	V1
Arsenic	0.0001060	0.0000435	V0	0.0000389	V0	0.0000000	V1
Barium	0.0092847	0.0006278	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000050	V0	0.0000176	V0	0.0000058	V0
Cadmium	0.0000174	0.0000047	V0	0.0000027	V0	0.0000000	V1
Calcium	0.4112124	0.0371748	V0	0.0310479	V0	0.0192253	V0
Cerium	0.0000174	0.0000266	V0	0.0000068	V0	0.0000000	V1
Cesium	0.0000100	0.0000018	V0	0.0000008	V0	0.0000000	V1
Chromium	0.0022262	0.0002522	V0	0.0000000	V1	0.0000000	V1
Cobalt	0.0000273	0.0000541	V0	0.0000036	V0	0.0000657	V0
Copper	0.0017171	0.0004643	V0	0.0004527	V0	0.0003331	V0
Iron	0.0393063	0.0251143	V0	0.0066652	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000129	V0	0.0000036	V0	0.0000000	V1
Lead	0.0008577	0.0001074	V0	0.0000476	V0	0.0000000	V1
Lithium	0.0000374	0.0000150	V0	0.0000076	V0	0.0000017	V0
Magnesium	0.0091409	0.0084571	V0	0.0049431	V0	0.0021617	V0
Manganese	0.0006949	0.0005312	V0	0.0002609	V0	0.0000713	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000082	V0	0.0000028	V0	0.0000000	V1
Nickel	0.0005429	0.0001762	V0	0.0000773	V0	0.0002236	V0
Niobium	0.0000202	0.0000032	V0	0.0000015	V0	0.0000000	V1
Palladium	0.0000632	0.0000041	V0	0.0000041	V0	0.0000103	V0
Phosphorus	0.0459574	0.0122916	V0	0.0126564	V0	0.0107826	V0
Platinum	0.0000088	0.0000008	V0	0.0000000	V1	0.0000006	V0
Potassium	0.0061261	0.0134965	V0	0.0071529	V0	0.0025962	V0
Praseodymium	0.0000070	0.0000023	V0	0.0000007	V0	0.0000000	V1
Rubidium	0.0000184	0.0000340	V0	0.0000173	V0	0.0000021	V0
Samarium	0.0000133	0.0000015	V0	0.0000006	V0	0.0000000	V1
Selenium	0.0003366	0.0000332	V0	0.0000173	V0	0.0000000	V1
Silicon	0.1270650	0.0713085	V0	0.0339784	V0	0.0000000	V1
Silver	0.0000100	0.0000130	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0070937	V0	0.0033031	V0	0.0013217	V0
Strontium	0.0003375	0.0001239	V0	0.0000603	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000010	V0	0.0000005	V0	0.0000000	V1
Thorium	0.0000059	0.0000030	V0	0.0000011	V0	0.0000003	V0
Tin	0.0004414	0.0000788	V0	0.0000285	V0	0.0000000	V1
Titanium	0.0015201	0.0013315	V0	0.0005467	V0	0.0005658	V0
Tungsten	0.0000938	0.0000853	V0	0.0000000	V1	0.0000569	V0
Uranium	0.0000048	0.0000016	V0	0.0000005	V0	0.0000000	V1
Vanadium	0.0007697	0.0000485	V0	0.0000000	V1	0.0000000	V1
Zinc	0.0055897	0.0010220	V0	0.0010778	V0	0.0006744	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**17-Jun**		**17-Jun**		**17-Jun**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	2.08	V0	1.30	V0	0.35	V0
Aluminum	0.1380326	0.0350629	V0	0.0137026	V0	0.0000000	V1
Antimony	0.0001784	0.0000000	V1	0.0000106	V0	0.0000000	V1
Arsenic	0.0001060	0.0000114	V0	0.0000100	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000017	V0	0.0000035	V0	0.0000027	V0
Cadmium	0.0000174	0.0000013	V0	0.0000000	V1	0.0000000	V1
Calcium	0.4112124	0.0391924	V0	0.0267957	V0	0.0000000	V1
Cerium	0.0000174	0.0000200	V0	0.0000067	V0	0.0000000	V1
Cesium	0.0000100	0.0000018	V0	0.0000005	V0	0.0000000	V1
Chromium	0.0022262	0.0002419	V0	0.0001511	V0	0.0001460	V0
Cobalt	0.0000273	0.0000332	V0	0.0000200	V0	0.0000191	V0
Copper	0.0017171	0.0004720	V0	0.0004067	V0	0.0001036	V0
Iron	0.0393063	0.0172216	V0	0.0072863	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000102	V0	0.0000038	V0	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000000	V1	0.0000558	V0
Lithium	0.0000374	0.0000275	V0	0.0000051	V0	0.0000000	V1
Magnesium	0.0091409	0.0073339	V0	0.0035053	V0	0.0016913	V0
Manganese	0.0006949	0.0004455	V0	0.0002857	V0	0.0000424	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000079	V0	0.0000023	V0	0.0000000	V1
Nickel	0.0005429	0.0003340	V0	0.0001257	V0	0.0000805	V0
Niobium	0.0000202	0.0000044	V0	0.0000021	V0	0.0000000	V1
Palladium	0.0000632	0.0000055	V0	0.0000027	V0	0.0000029	V0
Phosphorus	0.0459574	0.0160427	V0	0.0124337	V0	0.0103400	V0
Platinum	0.0000088	0.0000004	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0167478	V0	0.0087063	V0	0.0015325	V0
Praseodymium	0.0000070	0.0000022	V0	0.0000007	V0	0.0000000	V1
Rubidium	0.0000184	0.0000388	V0	0.0000115	V0	0.0000019	V0
Samarium	0.0000133	0.0000018	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000202	V0	0.0000000	V1	0.0000000	V1
Silicon	0.1270650	0.0507781	V0	0.0114852	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000020	V0	0.0000000	V1
Sodium	0.0169447	0.0327305	V0	0.0035622	V0	0.0010571	V0
Strontium	0.0003375	0.0001056	V0	0.0000582	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000028	V0	0.0000008	V0	0.0000000	V1
Tin	0.0004414	0.0000297	V0	0.0000228	V0	0.0000000	V1
Titanium	0.0015201	0.0013466	V0	0.0007129	V0	0.0009483	V0
Tungsten	0.0000938	0.0000155	V0	0.0000086	V0	0.0000063	V0
Uranium	0.0000048	0.0000008	V0	0.0000002	V0	0.0000000	V1
Vanadium	0.0007697	0.0000590	V0	0.0000000	V1	0.0000000	V1
Zinc	0.0055897	0.0013608	V0	0.0007243	V0	0.0003672	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		17-Jun		17-Jun		17-Jun	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.33	V0	0.92	V0	0.35	V0
Aluminum	0.1380326	0.0072299	V0	0.0075918	V0	0.0000000	V1
Antimony	0.0001784	0.0000190	V0	0.0000084	V0	0.0000000	V1
Arsenic	0.0001060	0.0000076	V0	0.0000077	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000027	V0	0.0000047	V0	0.0000027	V0
Cadmium	0.0000174	0.0000000	V1	0.0000008	V0	0.0000000	V1
Calcium	0.4112124	0.0000000	V1	0.0301377	V0	0.0000000	V1
Cerium	0.0000174	0.0000048	V0	0.0000047	V0	0.0000000	V1
Cesium	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0008936	V0	0.0001442	V0	0.0001460	V0
Cobalt	0.0000273	0.0000446	V0	0.0000116	V0	0.0000191	V0
Copper	0.0017171	0.0002634	V0	0.0001679	V0	0.0001036	V0
Iron	0.0393063	0.0105235	V0	0.0040194	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000021	V0	0.0000022	V0	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000000	V1	0.0000558	V0
Lithium	0.0000374	0.0000044	V0	0.0000045	V0	0.0000000	V1
Magnesium	0.0091409	0.0022481	V0	0.0028429	V0	0.0016913	V0
Manganese	0.0006949	0.0001760	V0	0.0001314	V0	0.0000424	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000018	V0	0.0000009	V0	0.0000000	V1
Nickel	0.0005429	0.0001468	V0	0.0001758	V0	0.0000805	V0
Niobium	0.0000202	0.0000019	V0	0.0000030	V0	0.0000000	V1
Palladium	0.0000632	0.0000036	V0	0.0000093	V0	0.0000029	V0
Phosphorus	0.0459574	0.0111233	V0	0.0124189	V0	0.0103400	V0
Platinum	0.0000088	0.0000009	V0	0.0000008	V0	0.0000000	V1
Potassium	0.0061261	0.0054337	V0	0.0090903	V0	0.0015325	V0
Praseodymium	0.0000070	0.0000004	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000089	V0	0.0000086	V0	0.0000019	V0
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silicon	0.1270650	0.0209972	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0023487	V0	0.0039985	V0	0.0010571	V0
Strontium	0.0003375	0.0000346	V0	0.0000349	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000005	V0	0.0000003	V0	0.0000000	V1
Tin	0.0004414	0.0000308	V0	0.0000332	V0	0.0000000	V1
Titanium	0.0015201	0.0004070	V0	0.0007181	V0	0.0009483	V0
Tungsten	0.0000938	0.0000786	V0	0.0000086	V0	0.0000063	V0
Uranium	0.0000048	0.0000000	V1	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0000000	V1	0.0000000	V1	0.0000000	V1
Zinc	0.0055897	0.0005560	V0	0.0008459	V0	0.0003672	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		23-Jun		23-Jun		23-Jun	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	10.97	V0	12.37	V0	0.04	V1
Aluminum	0.1380326	0.2064595	V0	0.0810745	V0	0.0000000	V1
Antimony	0.0001784	0.0000205	V0	0.0000436	V0	0.0000000	V1
Arsenic	0.0001060	0.0000598	V0	0.0000971	V0	0.0000000	V1
Barium	0.0092847	0.0013454	V0	0.0008102	V0	0.0000000	V1
Beryllium	0.0000946	0.0000070	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000296	V0	0.0000086	V0	0.0000331	V0
Cadmium	0.0000174	0.0000064	V0	0.0000058	V0	0.0000000	V1
Calcium	0.4112124	0.3365254	V0	0.0592486	V0	0.0000000	V1
Cerium	0.0000174	0.0001841	V0	0.0000632	V0	0.0000000	V1
Cesium	0.0000100	0.0000129	V0	0.0000041	V0	0.0000000	V1
Chromium	0.0022262	0.0004165	V0	0.0003426	V0	0.0001300	V0
Cobalt	0.0000273	0.0000523	V0	0.0000564	V0	0.0000319	V0
Copper	0.0017171	0.0007043	V0	0.0007027	V0	0.0002611	V0
Iron	0.0393063	0.1629647	V0	0.0547256	V0	0.0020491	V0
Lanthanum	0.0000130	0.0000872	V0	0.0000331	V0	0.0000000	V1
Lead	0.0008577	0.0001451	V0	0.0001089	V0	0.0000000	V1
Lithium	0.0000374	0.0002170	V0	0.0000579	V0	0.0000000	V1
Magnesium	0.0091409	0.0386744	V0	0.0170138	V0	0.0013608	V0
Manganese	0.0006949	0.0030548	V0	0.0011939	V0	0.0000767	V0
Molybdenum	0.0007116	0.0000312	V0	0.0000348	V0	0.0000000	V1
Neodymium	0.0000140	0.0000785	V0	0.0000268	V0	0.0000000	V1
Nickel	0.0005429	0.0002651	V0	0.0002193	V0	0.0001403	V0
Niobium	0.0000202	0.0000195	V0	0.0000077	V0	0.0000010	V0
Palladium	0.0000632	0.0000035	V0	0.0000091	V0	0.0000172	V0
Phosphorus	0.0459574	0.0193230	V0	0.0154457	V0	0.0117100	V0
Platinum	0.0000088	0.0000000	V1	0.0000011	V0	0.0000000	V1
Potassium	0.0061261	0.0629748	V0	0.0320278	V0	0.0034199	V0
Praseodymium	0.0000070	0.0000205	V0	0.0000069	V0	0.0000000	V1
Rubidium	0.0000184	0.0002400	V0	0.0000876	V0	0.0000018	V0
Samarium	0.0000133	0.0000151	V0	0.0000050	V0	0.0000000	V1
Selenium	0.0003366	0.0001549	V0	0.0000955	V0	0.0000000	V1
Silicon	0.1270650	0.6722301	V0	0.2531572	V0	0.0000000	V1
Silver	0.0000100	0.0000013	V0	0.0000015	V0	0.0000000	V1
Sodium	0.0169447	0.0202890	V0	0.0153955	V0	0.0013749	V0
Strontium	0.0003375	0.0007000	V0	0.0002421	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000019	V0	0.0000011	V0	0.0000000	V1
Thorium	0.0000059	0.0000245	V0	0.0000077	V0	0.0000000	V1
Tin	0.0004414	0.0000644	V0	0.0000760	V0	0.0000000	V1
Titanium	0.0015201	0.0099809	V0	0.0047990	V0	0.0004583	V0
Tungsten	0.0000938	0.0000108	V0	0.0000860	V0	0.0000108	V0
Uranium	0.0000048	0.0000061	V0	0.0000022	V0	0.0000000	V1
Vanadium	0.0007697	0.0003824	V0	0.0002068	V0	0.0000000	V1
Zinc	0.0055897	0.0016284	V0	0.0017401	V0	0.0005271	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		23-Jun		23-Jun		23-Jun	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	11.97	V0	7.56	V0	0.04	V1
Aluminum	0.1380326	0.0677283	V0	0.0373474	V0	0.0000000	V1
Antimony	0.0001784	0.0000557	V0	0.0000189	V0	0.0000000	V1
Arsenic	0.0001060	0.0000495	V0	0.0000550	V0	0.0000000	V1
Barium	0.0092847	0.0010477	V0	0.0004773	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000062	V0	0.0000053	V0	0.0000331	V0
Cadmium	0.0000174	0.0000073	V0	0.0000078	V0	0.0000000	V1
Calcium	0.4112124	0.0697221	V0	0.0347931	V0	0.0000000	V1
Cerium	0.0000174	0.0000593	V0	0.0000257	V0	0.0000000	V1
Cesium	0.0000100	0.0000041	V0	0.0000017	V0	0.0000000	V1
Chromium	0.0022262	0.0002091	V0	0.0002656	V0	0.0001300	V0
Cobalt	0.0000273	0.0000529	V0	0.0000911	V0	0.0000319	V0
Copper	0.0017171	0.0004872	V0	0.0002393	V0	0.0002611	V0
Iron	0.0393063	0.0650262	V0	0.0296507	V0	0.0020491	V0
Lanthanum	0.0000130	0.0000302	V0	0.0000145	V0	0.0000000	V1
Lead	0.0008577	0.0001313	V0	0.0000610	V0	0.0000000	V1
Lithium	0.0000374	0.0000568	V0	0.0000212	V0	0.0000000	V1
Magnesium	0.0091409	0.0169481	V0	0.0077762	V0	0.0013608	V0
Manganese	0.0006949	0.0012389	V0	0.0008151	V0	0.0000767	V0
Molybdenum	0.0007116	0.0000427	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000253	V0	0.0000102	V0	0.0000000	V1
Nickel	0.0005429	0.0002622	V0	0.0001940	V0	0.0001403	V0
Niobium	0.0000202	0.0000086	V0	0.0000032	V0	0.0000010	V0
Palladium	0.0000632	0.0000052	V0	0.0000065	V0	0.0000172	V0
Phosphorus	0.0459574	0.0147266	V0	0.0141020	V0	0.0117100	V0
Platinum	0.0000088	0.0000006	V0	0.0000004	V0	0.0000000	V1
Potassium	0.0061261	0.0266443	V0	0.0195714	V0	0.0034199	V0
Praseodymium	0.0000070	0.0000067	V0	0.0000026	V0	0.0000000	V1
Rubidium	0.0000184	0.0000841	V0	0.0000411	V0	0.0000018	V0
Samarium	0.0000133	0.0000046	V0	0.0000020	V0	0.0000000	V1
Selenium	0.0003366	0.0000870	V0	0.0000456	V0	0.0000000	V1
Silicon	0.1270650	0.3082115	V0	0.1093852	V0	0.0000000	V1
Silver	0.0000100	0.0000009	V0	0.0000013	V0	0.0000000	V1
Sodium	0.0169447	0.0133553	V0	0.0086722	V0	0.0013749	V0
Strontium	0.0003375	0.0002661	V0	0.0001199	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000008	V0	0.0000005	V0	0.0000000	V1
Thorium	0.0000059	0.0000080	V0	0.0000033	V0	0.0000000	V1
Tin	0.0004414	0.0000801	V0	0.0000556	V0	0.0000000	V1
Titanium	0.0015201	0.0039774	V0	0.0012347	V0	0.0004583	V0
Tungsten	0.0000938	0.0000832	V0	0.0001029	V0	0.0000108	V0
Uranium	0.0000048	0.0000020	V0	0.0000009	V0	0.0000000	V1
Vanadium	0.0007697	0.0002368	V0	0.0000930	V0	0.0000000	V1
Zinc	0.0055897	0.0014824	V0	0.0009166	V0	0.0005271	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**29-Jun**		**29-Jun**		**29-Jun**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	15.62	V0	6.20	V0	-0.04	V1
Aluminum	0.1380326	0.2973130	V4	0.0324444	V0	0.0072352	V0
Antimony	0.0001784	0.0000342	V0	0.0000593	V0	0.0000000	V1
Arsenic	0.0001060	0.0000744	V0	0.0000289	V0	0.0000000	V1
Barium	0.0092847	0.0017785	V0	0.0006422	V0	0.0000000	V1
Beryllium	0.0000946	0.0000084	V0	0.0000046	V0	0.0000000	V1
Bismuth	0.0000093	0.0000148	V0	0.0000059	V0	0.0000876	V0
Cadmium	0.0000174	0.0000110	V0	0.0000090	V0	0.0000000	V1
Calcium	0.4112124	0.8693558	V4	0.0405266	V0	0.0257912	V0
Cerium	0.0000174	0.0002509	V0	0.0000266	V0	0.0000000	V1
Cesium	0.0000100	0.0000182	V0	0.0000022	V0	0.0000000	V1
Chromium	0.0022262	0.0005553	V0	0.0005106	V0	0.0001607	V0
Cobalt	0.0000273	0.0000897	V0	0.0000625	V0	0.0000177	V0
Copper	0.0017171	0.0008740	V0	0.0004859	V0	0.0003116	V0
Iron	0.0393063	0.2409539	V0	0.0315661	V0	0.0030514	V0
Lanthanum	0.0000130	0.0001161	V0	0.0000113	V0	0.0000000	V1
Lead	0.0008577	0.0001826	V0	0.0000752	V0	0.0000000	V1
Lithium	0.0000374	0.0002969	V4	0.0000182	V0	0.0000000	V1
Magnesium	0.0091409	0.0615204	V0	0.0099498	V0	0.0019711	V0
Manganese	0.0006949	0.0047571	V0	0.0005957	V0	0.0000735	V0
Molybdenum	0.0007116	0.0000865	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0001064	V0	0.0000097	V0	0.0000000	V1
Nickel	0.0005429	0.0004506	V0	0.0002033	V0	0.0002254	V0
Niobium	0.0000202	0.0000247	V0	0.0000029	V0	0.0000012	V0
Palladium	0.0000632	0.0000056	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0172388	V0	0.0103498	V0	0.0113181	V0
Platinum	0.0000088	0.0000004	V0	0.0000010	V0	0.0000000	V1
Potassium	0.0061261	0.0971102	V0	0.0189112	V0	0.0078794	V0
Praseodymium	0.0000070	0.0000278	V0	0.0000026	V0	0.0000000	V1
Rubidium	0.0000184	0.0003757	V0	0.0000648	V0	0.0000020	V0
Samarium	0.0000133	0.0000203	V0	0.0000018	V0	0.0000000	V1
Selenium	0.0003366	0.0001362	V0	0.0000396	V0	0.0000000	V1
Silicon	0.1270650	0.9531064	V4	0.0879796	V0	0.0000000	V1
Silver	0.0000100	0.0000025	V0	0.0000010	V0	0.0000000	V1
Sodium	0.0169447	0.0252195	V0	0.0061123	V0	0.0018976	V0
Strontium	0.0003375	0.0012318	V0	0.0001237	V0	0.0000172	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000034	V0	0.0000011	V0	0.0000000	V1
Thorium	0.0000059	0.0000338	V0	0.0000041	V0	0.0000000	V1
Tin	0.0004414	0.0000514	V0	0.0000614	V0	0.0000216	V0
Titanium	0.0015201	0.0067977	V0	0.0012401	V0	0.0009027	V0
Tungsten	0.0000938	0.0000235	V0	0.0000631	V0	0.0000131	V0
Uranium	0.0000048	0.0000081	V0	0.0000011	V0	0.0000000	V1
Vanadium	0.0007697	0.0006702	V0	0.0000698	V0	0.0000000	V1
Zinc	0.0055897	0.0028287	V0	0.0013508	V0	0.0005347	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Travel Blank	
Station #		AMS 7			
Sample Date		29-Jun		29-Jun	
Particulate Size		PM2.5			
Total Air Volume (m³)		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	6.00	V0	-0.04	V1
Aluminum	0.1380326	0.0307645	V0	0.0072352	V0
Antimony	0.0001784	0.0000940	V0	0.0000000	V1
Arsenic	0.0001060	0.0000540	V0	0.0000000	V1
Barium	0.0092847	0.0009597	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000084	V0	0.0000876	V0
Cadmium	0.0000174	0.0000068	V0	0.0000000	V1
Calcium	0.4112124	0.0356138	V0	0.0257912	V0
Cerium	0.0000174	0.0000282	V0	0.0000000	V1
Cesium	0.0000100	0.0000024	V0	0.0000000	V1
Chromium	0.0022262	0.0001718	V0	0.0001607	V0
Cobalt	0.0000273	0.0000489	V0	0.0000177	V0
Copper	0.0017171	0.0006600	V0	0.0003116	V0
Iron	0.0393063	0.0375873	V0	0.0030514	V0
Lanthanum	0.0000130	0.0000120	V0	0.0000000	V1
Lead	0.0008577	0.0001265	V0	0.0000000	V1
Lithium	0.0000374	0.0000221	V0	0.0000000	V1
Magnesium	0.0091409	0.0097255	V0	0.0019711	V0
Manganese	0.0006949	0.0006329	V0	0.0000735	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000103	V0	0.0000000	V1
Nickel	0.0005429	0.0002764	V0	0.0002254	V0
Niobium	0.0000202	0.0000036	V0	0.0000012	V0
Palladium	0.0000632	0.0000033	V0	0.0000000	V1
Phosphorus	0.0459574	0.0107388	V0	0.0113181	V0
Platinum	0.0000088	0.0000005	V0	0.0000000	V1
Potassium	0.0061261	0.0186715	V0	0.0078794	V0
Praseodymium	0.0000070	0.0000026	V0	0.0000000	V1
Rubidium	0.0000184	0.0000646	V0	0.0000020	V0
Samarium	0.0000133	0.0000021	V0	0.0000000	V1
Selenium	0.0003366	0.0000331	V0	0.0000000	V1
Silicon	0.1270650	0.1016644	V0	0.0000000	V1
Silver	0.0000100	0.0000008	V0	0.0000000	V1
Sodium	0.0169447	0.0078032	V0	0.0018976	V0
Strontium	0.0003375	0.0001341	V0	0.0000172	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000010	V0	0.0000000	V1
Thorium	0.0000059	0.0000031	V0	0.0000000	V1
Tin	0.0004414	0.0000965	V0	0.0000216	V0
Titanium	0.0015201	0.0013544	V0	0.0009027	V0
Tungsten	0.0000938	0.0000716	V0	0.0000131	V0
Uranium	0.0000048	0.0000009	V0	0.0000000	V1
Vanadium	0.0007697	0.0000726	V0	0.0000000	V1
Zinc	0.0055897	0.0013063	V0	0.0005347	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**05-Jul**		**05-Jul**		**05-Jul**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24.2**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	14.51	V0	15.43	V0	0.02	V1
Aluminum	0.1380326	0.0177384	V0	0.0167644	V0	0.0121333	V0
Antimony	0.0001784	0.0000176	V0	0.0000379	V0	0.0000088	V0
Arsenic	0.0001060	0.0000732	V0	0.0001093	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0004586	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000145	V0	0.0000057	V0	0.0000186	V0
Cadmium	0.0000174	0.0000249	V0	0.0000263	V0	0.0000000	V1
Calcium	0.4112124	0.0641965	V0	0.0261850	V0	0.0000000	V1
Cerium	0.0000174	0.0000202	V0	0.0000274	V0	0.0000008	V0
Cesium	0.0000100	0.0000082	V0	0.0000070	V0	0.0000000	V1
Chromium	0.0022262	0.0003480	V0	0.0002181	V0	0.0001783	V0
Cobalt	0.0000273	0.0002245	V0	0.0000464	V0	0.0000113	V0
Copper	0.0017171	0.0007445	V0	0.0005626	V0	0.0002166	V0
Iron	0.0393063	0.0188103	V0	0.0159572	V0	0.0016578	V0
Lanthanum	0.0000130	0.0000093	V0	0.0000125	V0	0.0000000	V1
Lead	0.0008577	0.0001091	V0	0.0001459	V0	0.0000000	V1
Lithium	0.0000374	0.0000183	V0	0.0000161	V0	0.0000000	V1
Magnesium	0.0091409	0.0063151	V0	0.0059448	V0	0.0009010	V0
Manganese	0.0006949	0.0008790	V0	0.0007726	V0	0.0001302	V0
Molybdenum	0.0007116	0.0000398	V0	0.0001757	V0	0.0000000	V1
Neodymium	0.0000140	0.0000086	V0	0.0000091	V0	0.0000000	V1
Nickel	0.0005429	0.0002125	V0	0.0002837	V0	0.0001949	V0
Niobium	0.0000202	0.0000034	V0	0.0000031	V0	0.0000015	V0
Palladium	0.0000632	0.0000065	V0	0.0000066	V0	0.0000054	V0
Phosphorus	0.0459574	0.0303890	V0	0.0247392	V0	0.0198534	V0
Platinum	0.0000088	0.0000011	V0	0.0000012	V0	0.0000006	V0
Potassium	0.0061261	0.0693765	V0	0.0603573	V0	0.0022137	V0
Praseodymium	0.0000070	0.0000021	V0	0.0000024	V0	0.0000000	V1
Rubidium	0.0000184	0.0002546	V0	0.0002265	V0	0.0000013	V0
Samarium	0.0000133	0.0000014	V0	0.0000016	V0	0.0000000	V1
Selenium	0.0003366	0.0000720	V0	0.0001689	V0	0.0000000	V1
Silicon	0.7676322	0.0542222	V0	0.0380076	V0	0.0000000	V1
Silver	0.0000100	0.0000041	V0	0.0000041	V0	0.0000006	V0
Sodium	0.0169447	0.0047377	V0	0.0060844	V0	0.0008911	V0
Strontium	0.0003375	0.0001159	V0	0.0001000	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000046	V0	0.0000044	V0	0.0000000	V1
Thorium	0.0000059	0.0000026	V0	0.0000023	V0	0.0000000	V1
Tin	0.0004414	0.0000404	V0	0.0000788	V0	0.0000000	V1
Titanium	0.0015201	0.0009338	V0	0.0012563	V0	0.0004136	V0
Tungsten	0.0000938	0.0003928	V4	0.0000849	V0	0.0000089	V0
Uranium	0.0000048	0.0000009	V0	0.0000016	V0	0.0000000	V1
Vanadium	0.0007697	0.0001229	V0	0.0009081	V0	0.0000000	V1
Zinc	0.0055897	0.0034047	V0	0.0037880	V0	0.0003164	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		05-Jul		05-Jul		05-Jul	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	16.46	V0	8.71	V0	0.02	V1
Aluminum	0.1380326	0.0151648	V0	0.0085461	V0	0.0121333	V0
Antimony	0.0001784	0.0000894	V0	0.0000159	V0	0.0000088	V0
Arsenic	0.0001060	0.0000820	V0	0.0001147	V0	0.0000000	V1
Barium	0.0092847	0.0009528	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000071	V0	0.0000036	V0	0.0000186	V0
Cadmium	0.0000174	0.0000191	V0	0.0000114	V0	0.0000000	V1
Calcium	0.4112124	0.0280961	V0	0.0196776	V0	0.0000000	V1
Cerium	0.0000174	0.0000300	V0	0.0000088	V0	0.0000008	V0
Cesium	0.0000100	0.0000057	V0	0.0000029	V0	0.0000000	V1
Chromium	0.0022262	0.0006163	V0	0.0002511	V0	0.0001783	V0
Cobalt	0.0000273	0.0000519	V0	0.0000694	V0	0.0000113	V0
Copper	0.0017171	0.0008865	V0	0.0006501	V0	0.0002166	V0
Iron	0.0393063	0.0237947	V0	0.0067359	V0	0.0016578	V0
Lanthanum	0.0000130	0.0000154	V0	0.0000038	V0	0.0000000	V1
Lead	0.0008577	0.0001375	V0	0.0000767	V0	0.0000000	V1
Lithium	0.0000374	0.0000186	V0	0.0000071	V0	0.0000000	V1
Magnesium	0.0091409	0.0055106	V0	0.0038399	V0	0.0009010	V0
Manganese	0.0006949	0.0008550	V0	0.0003079	V0	0.0001302	V0
Molybdenum	0.0007116	0.0001785	V0	0.0000531	V0	0.0000000	V1
Neodymium	0.0000140	0.0000081	V0	0.0000030	V0	0.0000000	V1
Nickel	0.0005429	0.0003099	V0	0.0001676	V0	0.0001949	V0
Niobium	0.0000202	0.0000040	V0	0.0000022	V0	0.0000015	V0
Palladium	0.0000632	0.0000152	V0	0.0000061	V0	0.0000054	V0
Phosphorus	0.0459574	0.0218850	V0	0.0223602	V0	0.0198534	V0
Platinum	0.0000088	0.0000011	V0	0.0000009	V0	0.0000006	V0
Potassium	0.0061261	0.0533126	V0	0.0304969	V0	0.0022137	V0
Praseodymium	0.0000070	0.0000023	V0	0.0000007	V0	0.0000000	V1
Rubidium	0.0000184	0.0001854	V0	0.0000936	V0	0.0000013	V0
Samarium	0.0000133	0.0000017	V0	0.0000006	V0	0.0000000	V1
Selenium	0.0003366	0.0000700	V0	0.0000304	V0	0.0000000	V1
Silicon	0.7676322	0.0528866	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000035	V0	0.0000016	V0	0.0000006	V0
Sodium	0.0169447	0.0079705	V0	0.0039765	V0	0.0008911	V0
Strontium	0.0003375	0.0001337	V0	0.0000489	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000035	V0	0.0000018	V0	0.0000000	V1
Thorium	0.0000059	0.0000027	V0	0.0000009	V0	0.0000000	V1
Tin	0.0004414	0.0001287	V0	0.0000857	V0	0.0000000	V1
Titanium	0.0015201	0.0013034	V0	0.0007522	V0	0.0004136	V0
Tungsten	0.0000938	0.0000681	V0	0.0000923	V0	0.0000089	V0
Uranium	0.0000048	0.0000018	V0	0.0000005	V0	0.0000000	V1
Vanadium	0.0007697	0.0008819	V0	0.0001871	V0	0.0000000	V1
Zinc	0.0055897	0.0030805	V0	0.0057083	V0	0.0003164	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**11-Jul**		**11-Jul**		**11-Jul**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	7.73	V0	9.14	V0	0.39	V0
Aluminum	0.1380326	0.0985274	V0	0.0598801	V0	0.0141499	V0
Antimony	0.0001784	0.0000172	V0	0.0000444	V0	0.0000000	V1
Arsenic	0.0001060	0.0000386	V0	0.0000934	V0	0.0000000	V1
Barium	0.0092847	0.0010037	V0	0.0006678	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000072	V0	0.0000059	V0	0.0000550	V0
Cadmium	0.0000174	0.0000028	V0	0.0000061	V0	0.0000000	V1
Calcium	0.4112124	0.2756979	V0	0.0558159	V0	0.0000000	V1
Cerium	0.0000174	0.0001159	V0	0.0000702	V0	0.0000008	V0
Cesium	0.0000100	0.0000079	V0	0.0000042	V0	0.0000000	V1
Chromium	0.0022262	0.0003814	V0	0.0002686	V0	0.0001765	V0
Cobalt	0.0000273	0.0000405	V0	0.0000697	V0	0.0000197	V0
Copper	0.0017171	0.0006260	V0	0.0006090	V0	0.0002452	V0
Iron	0.0393063	0.1295117	V0	0.0513656	V0	0.0016758	V0
Lanthanum	0.0000130	0.0000573	V0	0.0000319	V0	0.0000000	V1
Lead	0.0008577	0.0000664	V0	0.0000884	V0	0.0000000	V1
Lithium	0.0000374	0.0001022	V0	0.0000570	V0	0.0000000	V1
Magnesium	0.0091409	0.0242129	V0	0.0110690	V0	0.0010612	V0
Manganese	0.0006949	0.0024741	V0	0.0010854	V0	0.0001024	V0
Molybdenum	0.0007116	0.0000336	V0	0.0004107	V4	0.0000000	V1
Neodymium	0.0000140	0.0000503	V0	0.0000266	V0	0.0000000	V1
Nickel	0.0005429	0.0002532	V0	0.0005432	V0	0.0001617	V0
Niobium	0.0000202	0.0000112	V0	0.0000079	V0	0.0000010	V0
Palladium	0.0000632	0.0000102	V0	0.0000097	V0	0.0000047	V0
Phosphorus	0.0459574	0.0253789	V0	0.0185506	V0	0.0189037	V0
Platinum	0.0000088	0.0000005	V0	0.0000012	V0	0.0000005	V0
Potassium	0.0061261	0.0339567	V0	0.0192702	V0	0.0038158	V0
Praseodymium	0.0000070	0.0000134	V0	0.0000070	V0	0.0000000	V1
Rubidium	0.0000184	0.0001495	V0	0.0000778	V0	0.0000016	V0
Samarium	0.0000133	0.0000094	V0	0.0000048	V0	0.0000000	V1
Selenium	0.0003366	0.0000975	V0	0.0000991	V0	0.0000000	V1
Silicon	0.7676322	0.3830875	V0	0.2115468	V0	0.0000000	V1
Silver	0.0000100	0.0000019	V0	0.0000016	V0	0.0000007	V0
Sodium	0.0169447	0.0103719	V0	0.0069223	V0	0.0008561	V0
Strontium	0.0003375	0.0004992	V0	0.0002036	V0	0.0000145	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000014	V0	0.0000010	V0	0.0000000	V1
Thorium	0.0000059	0.0000143	V0	0.0000083	V0	0.0000000	V1
Tin	0.0004414	0.0000545	V0	0.0000788	V0	0.0000000	V1
Titanium	0.0015201	0.0035202	V0	0.0021141	V0	0.0005495	V0
Tungsten	0.0000938	0.0000158	V0	0.0001024	V0	0.0000084	V0
Uranium	0.0000048	0.0000042	V0	0.0000040	V0	0.0000000	V1
Vanadium	0.0007697	0.0002308	V0	0.0024746	V4	0.0000000	V1
Zinc	0.0055897	0.0007528	V0	0.0012585	V0	0.0003164	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		11-Jul		11-Jul		11-Jul	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	10.22	V0	7.81	V0	0.39	V0
Aluminum	0.1380326	0.0751245	V0	0.0240326	V0	0.0141499	V0
Antimony	0.0001784	0.0000609	V0	0.0000094	V0	0.0000000	V1
Arsenic	0.0001060	0.0001018	V0	0.0000833	V0	0.0000000	V1
Barium	0.0092847	0.0010993	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000090	V0	0.0000026	V0	0.0000550	V0
Cadmium	0.0000174	0.0000052	V0	0.0000022	V0	0.0000000	V1
Calcium	0.4112124	0.0988861	V0	0.0261798	V0	0.0000000	V1
Cerium	0.0000174	0.0000915	V0	0.0000271	V0	0.0000008	V0
Cesium	0.0000100	0.0000062	V0	0.0000018	V0	0.0000000	V1
Chromium	0.0022262	0.0003154	V0	0.0001496	V0	0.0001765	V0
Cobalt	0.0000273	0.0000654	V0	0.0000489	V0	0.0000197	V0
Copper	0.0017171	0.0004599	V0	0.0003114	V0	0.0002452	V0
Iron	0.0393063	0.0688066	V0	0.0179001	V0	0.0016758	V0
Lanthanum	0.0000130	0.0000435	V0	0.0000130	V0	0.0000000	V1
Lead	0.0008577	0.0001152	V0	0.0000399	V0	0.0000000	V1
Lithium	0.0000374	0.0000850	V0	0.0000220	V0	0.0000000	V1
Magnesium	0.0091409	0.0147015	V0	0.0046314	V0	0.0010612	V0
Manganese	0.0006949	0.0014037	V0	0.0004123	V0	0.0001024	V0
Molybdenum	0.0007116	0.0004569	V4	0.0000756	V0	0.0000000	V1
Neodymium	0.0000140	0.0000400	V0	0.0000103	V0	0.0000000	V1
Nickel	0.0005429	0.0006459	V0	0.0002824	V0	0.0001617	V0
Niobium	0.0000202	0.0000129	V0	0.0000032	V0	0.0000010	V0
Palladium	0.0000632	0.0000098	V0	0.0000029	V0	0.0000047	V0
Phosphorus	0.0459574	0.0192978	V0	0.0176935	V0	0.0189037	V0
Platinum	0.0000088	0.0000014	V0	0.0000007	V0	0.0000005	V0
Potassium	0.0061261	0.0360730	V0	0.0130454	V0	0.0038158	V0
Praseodymium	0.0000070	0.0000105	V0	0.0000026	V0	0.0000000	V1
Rubidium	0.0000184	0.0001284	V0	0.0000383	V0	0.0000016	V0
Samarium	0.0000133	0.0000072	V0	0.0000020	V0	0.0000000	V1
Selenium	0.0003366	0.0001057	V0	0.0000611	V0	0.0000000	V1
Silicon	0.7676322	0.2784487	V0	0.0677464	V0	0.0000000	V1
Silver	0.0000100	0.0000018	V0	0.0000011	V0	0.0000007	V0
Sodium	0.0169447	0.0107593	V0	0.0041319	V0	0.0008561	V0
Strontium	0.0003375	0.0004422	V0	0.0000863	V0	0.0000145	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000014	V0	0.0000004	V0	0.0000000	V1
Thorium	0.0000059	0.0000123	V0	0.0000027	V0	0.0000000	V1
Tin	0.0004414	0.0001145	V0	0.0000945	V0	0.0000000	V1
Titanium	0.0015201	0.0033594	V0	0.0010682	V0	0.0005495	V0
Tungsten	0.0000938	0.0000896	V0	0.0000616	V0	0.0000084	V0
Uranium	0.0000048	0.0000057	V0	0.0000013	V0	0.0000000	V1
Vanadium	0.0007697	0.0028346	V4	0.0004339	V0	0.0000000	V1
Zinc	0.0055897	0.0019880	V0	0.0007479	V0	0.0003164	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		17-Jul		17-Jul		17-Jul	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	23.30	V0	21.44	V0	0.03	V1
Aluminum	0.1380326	0.0639869	V0	0.0327835	V0	0.0000000	V1
Antimony	0.0001784	0.0000114	V0	0.0000228	V0	0.0000000	V1
Arsenic	0.0001060	0.0001667	V0	0.0002769	V0	0.0000000	V1
Barium	0.0092847	0.0025749	V0	0.0004880	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000113	V0	0.0000109	V0	0.0000137	V0
Cadmium	0.0000174	0.0000306	V0	0.0000267	V0	0.0000000	V1
Calcium	0.4112124	0.1704789	V0	0.0504896	V0	0.0384592	V0
Cerium	0.0000174	0.0000680	V0	0.0000414	V0	0.0000013	V0
Cesium	0.0000100	0.0000137	V0	0.0000090	V0	0.0000000	V1
Chromium	0.0022262	0.0004418	V0	0.0002924	V0	0.0004000	V0
Cobalt	0.0000273	0.0000426	V0	0.0000630	V0	0.0000260	V0
Copper	0.0017171	0.0010436	V0	0.0004206	V0	0.0005373	V0
Iron	0.0393063	0.0797090	V0	0.0307108	V0	0.0036856	V0
Lanthanum	0.0000130	0.0000328	V0	0.0000191	V0	0.0000000	V1
Lead	0.0008577	0.0001119	V0	0.0001478	V0	0.0000000	V1
Lithium	0.0000374	0.0000686	V0	0.0000358	V0	0.0000000	V1
Magnesium	0.0091409	0.0155252	V0	0.0080746	V0	0.0024967	V0
Manganese	0.0006949	0.0017167	V0	0.0008768	V0	0.0000608	V0
Molybdenum	0.0007116	0.0000617	V0	0.0004620	V4	0.0000000	V1
Neodymium	0.0000140	0.0000280	V0	0.0000163	V0	0.0000000	V1
Nickel	0.0005429	0.0002871	V0	0.0005351	V0	0.0002623	V0
Niobium	0.0000202	0.0000097	V0	0.0000056	V0	0.0000012	V0
Palladium	0.0000632	0.0000075	V0	0.0000101	V0	0.0000035	V0
Phosphorus	0.0459574	0.0180483	V0	0.0167369	V0	0.0155247	V0
Platinum	0.0000088	0.0000013	V0	0.0000009	V0	0.0000006	V0
Potassium	0.0061261	0.0972230	V0	0.0714405	V0	0.0016620	V0
Praseodymium	0.0000070	0.0000073	V0	0.0000042	V0	0.0000000	V1
Rubidium	0.0000184	0.0003796	V0	0.0002543	V0	0.0000017	V0
Samarium	0.0000133	0.0000049	V0	0.0000029	V0	0.0000000	V1
Selenium	0.0003366	0.0000750	V0	0.0001448	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000057	V0	0.0000049	V0	0.0000000	V1
Sodium	0.0169447	0.0152839	V0	0.0102670	V0	0.0014391	V0
Strontium	0.0003375	0.0003238	V0	0.0001378	V0	0.0000268	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000065	V0	0.0000050	V0	0.0000000	V1
Thorium	0.0000059	0.0000088	V0	0.0000052	V0	0.0000000	V1
Tin	0.0004414	0.0000518	V0	0.0000493	V0	0.0000000	V1
Titanium	0.0015201	0.0024080	V0	0.0023609	V0	0.0004986	V0
Tungsten	0.0000938	0.0000418	V0	0.0000229	V0	0.0000334	V0
Uranium	0.0000048	0.0000024	V0	0.0000036	V0	0.0000000	V1
Vanadium	0.0007697	0.0001197	V0	0.0027467	V4	0.0000000	V1
Zinc	0.0055897	0.0059543	V0	0.0039108	V0	0.0015419	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		17-Jul		17-Jul		17-Jul	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	20.72	V0	11.49	V0	0.03	V1
Aluminum	0.1380326	0.0434412	V0	0.0157458	V0	0.0000000	V1
Antimony	0.0001784	0.0001347	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0001790	V0	0.0000730	V0	0.0000000	V1
Barium	0.0092847	0.0011017	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000142	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000489	V0	0.0000023	V0	0.0000137	V0
Cadmium	0.0000174	0.0000278	V0	0.0000073	V0	0.0000000	V1
Calcium	0.4112124	0.0728833	V0	0.0275341	V0	0.0384592	V0
Cerium	0.0000174	0.0000824	V0	0.0000243	V0	0.0000013	V0
Cesium	0.0000100	0.0000104	V0	0.0000035	V0	0.0000000	V1
Chromium	0.0022262	0.0005176	V0	0.0001581	V0	0.0004000	V0
Cobalt	0.0000273	0.0000611	V0	0.0000477	V0	0.0000260	V0
Copper	0.0017171	0.0018865	V0	0.0002495	V0	0.0005373	V0
Iron	0.0393063	0.0466067	V0	0.0170250	V0	0.0036856	V0
Lanthanum	0.0000130	0.0000423	V0	0.0000112	V0	0.0000000	V1
Lead	0.0008577	0.0001463	V0	0.0000451	V0	0.0000000	V1
Lithium	0.0000374	0.0000487	V0	0.0000147	V0	0.0000000	V1
Magnesium	0.0091409	0.0114943	V0	0.0039035	V0	0.0024967	V0
Manganese	0.0006949	0.0012056	V0	0.0003846	V0	0.0000608	V0
Molybdenum	0.0007116	0.0003946	V4	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000228	V0	0.0000060	V0	0.0000000	V1
Nickel	0.0005429	0.0026019	V4	0.0001806	V0	0.0002623	V0
Niobium	0.0000202	0.0000097	V0	0.0000042	V0	0.0000012	V0
Palladium	0.0000632	0.0000147	V0	0.0000043	V0	0.0000035	V0
Phosphorus	0.0459574	0.0169556	V0	0.0156237	V0	0.0155247	V0
Platinum	0.0000088	0.0000009	V0	0.0000007	V0	0.0000006	V0
Potassium	0.0061261	0.0846280	V0	0.0252679	V0	0.0016620	V0
Praseodymium	0.0000070	0.0000077	V0	0.0000016	V0	0.0000000	V1
Rubidium	0.0000184	0.0002976	V0	0.0000994	V0	0.0000017	V0
Samarium	0.0000133	0.0000042	V0	0.0000012	V0	0.0000000	V1
Selenium	0.0003366	0.0001421	V0	0.0000367	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000058	V0	0.0000010	V0	0.0000000	V1
Sodium	0.0169447	0.0142718	V0	0.0060586	V0	0.0014391	V0
Strontium	0.0003375	0.0002142	V0	0.0000811	V0	0.0000268	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000051	V0	0.0000017	V0	0.0000000	V1
Thorium	0.0000059	0.0000070	V0	0.0000020	V0	0.0000000	V1
Tin	0.0004414	0.0001097	V0	0.0000465	V0	0.0000000	V1
Titanium	0.0015201	0.0025397	V0	0.0007688	V0	0.0004986	V0
Tungsten	0.0000938	0.0000670	V0	0.0000614	V0	0.0000334	V0
Uranium	0.0000048	0.0000036	V0	0.0000007	V0	0.0000000	V1
Vanadium	0.0007697	0.0021455	V4	0.0001115	V0	0.0000000	V1
Zinc	0.0055897	0.0046025	V0	0.0013183	V0	0.0015419	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**23-Jul**		**23-Jul**		**23-Jul**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	5.38	V0	5.16	V0	0.11	V0
Aluminum	0.1380326	0.0449978	V0	0.0179857	V0	0.0000000	V1
Antimony	0.0001784	0.0000094	V0	0.0000322	V0	0.0000000	V1
Arsenic	0.0001060	0.0000276	V0	0.0000415	V0	0.0000000	V1
Barium	0.0092847	0.0010814	V0	0.0004573	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000636	V0	0.0000117	V0	0.0000018	V0
Cadmium	0.0000174	0.0000060	V0	0.0000054	V0	0.0000000	V1
Calcium	0.4112124	0.1090609	V0	0.0313493	V0	0.0185857	V0
Cerium	0.0000174	0.0000435	V0	0.0000176	V0	0.0000007	V0
Cesium	0.0000100	0.0000035	V0	0.0000015	V0	0.0000000	V1
Chromium	0.0022262	0.0001543	V0	0.0001594	V0	0.0001635	V0
Cobalt	0.0000273	0.0000560	V0	0.0000453	V0	0.0000362	V0
Copper	0.0017171	0.0010447	V0	0.0004995	V0	0.0001866	V0
Iron	0.0393063	0.0372935	V0	0.0178319	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000202	V0	0.0000076	V0	0.0000000	V1
Lead	0.0008577	0.0000476	V0	0.0000462	V0	0.0000000	V1
Lithium	0.0000374	0.0000635	V0	0.0000139	V0	0.0000000	V1
Magnesium	0.0091409	0.0083922	V0	0.0058888	V0	0.0012213	V0
Manganese	0.0006949	0.0008941	V0	0.0004166	V0	0.0000291	V0
Molybdenum	0.0007116	0.0000431	V0	0.0000370	V0	0.0000655	V0
Neodymium	0.0000140	0.0000181	V0	0.0000062	V0	0.0000000	V1
Nickel	0.0005429	0.0001430	V0	0.0002026	V0	0.0003746	V0
Niobium	0.0000202	0.0000077	V0	0.0000133	V0	0.0000020	V0
Palladium	0.0000632	0.0000034	V0	0.0000041	V0	0.0000034	V0
Phosphorus	0.0459574	0.0170514	V0	0.0151174	V0	0.0134637	V0
Platinum	0.0000088	0.0000046	V0	0.0000009	V0	0.0000009	V0
Potassium	0.0061261	0.0319782	V0	0.0176845	V0	0.0009493	V0
Praseodymium	0.0000070	0.0000049	V0	0.0000016	V0	0.0000000	V1
Rubidium	0.0000184	0.0000800	V0	0.0000387	V0	0.0000011	V0
Samarium	0.0000133	0.0000037	V0	0.0000011	V0	0.0000000	V1
Selenium	0.0003366	0.0000360	V0	0.0000411	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000014	V0	0.0000012	V0	0.0000000	V1
Sodium	0.0169447	0.0065271	V0	0.0067326	V0	0.0000000	V1
Strontium	0.0003375	0.0002277	V0	0.0000962	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000008	V0	0.0000006	V0	0.0000000	V1
Thorium	0.0000059	0.0000061	V0	0.0000022	V0	0.0000000	V1
Tin	0.0004414	0.0000419	V0	0.0000600	V0	0.0000000	V1
Titanium	0.0015201	0.0019172	V0	0.0011972	V0	0.0002694	V0
Tungsten	0.0000938	0.0000604	V0	0.0000709	V0	0.0000302	V0
Uranium	0.0000048	0.0000016	V0	0.0000010	V0	0.0000000	V1
Vanadium	0.0007697	0.0000877	V0	0.0001627	V0	0.0000000	V1
Zinc	0.0055897	0.0013375	V0	0.0012996	V0	0.0011867	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		23-Jul		23-Jul		23-Jul	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.91	V0	3.96	V0	0.11	V0
Aluminum	0.1380326	0.0264524	V0	0.0210651	V0	0.0000000	V1
Antimony	0.0001784	0.0001755	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0000572	V0	0.0000562	V0	0.0000000	V1
Barium	0.0092847	0.0011081	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000078	V0	0.0000117	V0	0.0000018	V0
Cadmium	0.0000174	0.0000061	V0	0.0000075	V0	0.0000000	V1
Calcium	0.4112124	0.0371683	V0	0.0245313	V0	0.0185857	V0
Cerium	0.0000174	0.0000277	V0	0.0000109	V0	0.0000007	V0
Cesium	0.0000100	0.0000019	V0	0.0000010	V0	0.0000000	V1
Chromium	0.0022262	0.0002181	V0	0.0002947	V0	0.0001635	V0
Cobalt	0.0000273	0.0000501	V0	0.0000191	V0	0.0000362	V0
Copper	0.0017171	0.0007299	V0	0.0002849	V0	0.0001866	V0
Iron	0.0393063	0.0284401	V0	0.0088504	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000118	V0	0.0000047	V0	0.0000000	V1
Lead	0.0008577	0.0000523	V0	0.0000396	V0	0.0000000	V1
Lithium	0.0000374	0.0000223	V0	0.0000066	V0	0.0000000	V1
Magnesium	0.0091409	0.0067088	V0	0.0033005	V0	0.0012213	V0
Manganese	0.0006949	0.0005948	V0	0.0004136	V0	0.0000291	V0
Molybdenum	0.0007116	0.0000326	V0	0.0001454	V0	0.0000655	V0
Neodymium	0.0000140	0.0000095	V0	0.0000034	V0	0.0000000	V1
Nickel	0.0005429	0.0003834	V0	0.0002372	V0	0.0003746	V0
Niobium	0.0000202	0.0000049	V0	0.0000029	V0	0.0000020	V0
Palladium	0.0000632	0.0000054	V0	0.0000034	V0	0.0000034	V0
Phosphorus	0.0459574	0.0143130	V0	0.0148609	V0	0.0134637	V0
Platinum	0.0000088	0.0000009	V0	0.0000013	V0	0.0000009	V0
Potassium	0.0061261	0.0178861	V0	0.0160880	V0	0.0009493	V0
Praseodymium	0.0000070	0.0000028	V0	0.0000010	V0	0.0000000	V1
Rubidium	0.0000184	0.0000444	V0	0.0000329	V0	0.0000011	V0
Samarium	0.0000133	0.0000017	V0	0.0000007	V0	0.0000000	V1
Selenium	0.0003366	0.0000355	V0	0.0000355	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000010	V0	0.0000007	V0	0.0000000	V1
Sodium	0.0169447	0.0087046	V0	0.0039525	V0	0.0000000	V1
Strontium	0.0003375	0.0001478	V0	0.0000534	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000006	V0	0.0000000	V1
Thorium	0.0000059	0.0000029	V0	0.0000012	V0	0.0000000	V1
Tin	0.0004414	0.0001100	V0	0.0000441	V0	0.0000000	V1
Titanium	0.0015201	0.0014191	V0	0.0031299	V0	0.0002694	V0
Tungsten	0.0000938	0.0000759	V0	0.0000112	V0	0.0000302	V0
Uranium	0.0000048	0.0000011	V0	0.0000005	V0	0.0000000	V1
Vanadium	0.0007697	0.0001057	V0	0.0001695	V0	0.0000000	V1
Zinc	0.0055897	0.0013940	V0	0.0023725	V0	0.0011867	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**29-Jul**		**29-Jul**		**29-Jul**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	9.12	V0	4.74	V0	0.03	V1
Aluminum	0.1380326	0.1269326	V0	0.0280219	V0	0.0000000	V1
Antimony	0.0001784	0.0000180	V0	0.0000505	V0	0.0000000	V1
Arsenic	0.0001060	0.0000523	V0	0.0002627	V0	0.0000000	V1
Barium	0.0092847	0.0010447	V0	0.0005399	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000190	V0	0.0000055	V0	0.0000015	V0
Cadmium	0.0000174	0.0000035	V0	0.0000148	V0	0.0000000	V1
Calcium	0.4112124	0.2250446	V0	0.0300779	V0	0.0000000	V1
Cerium	0.0000174	0.0001201	V0	0.0000286	V0	0.0000000	V1
Cesium	0.0000100	0.0000094	V0	0.0000015	V0	0.0000000	V1
Chromium	0.0022262	0.0003354	V0	0.0002379	V0	0.0000969	V0
Cobalt	0.0000273	0.0000552	V0	0.0000201	V0	0.0000236	V0
Copper	0.0017171	0.0013764	V0	0.0004766	V0	0.0003251	V0
Iron	0.0393063	0.1066542	V0	0.0217140	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000562	V0	0.0000128	V0	0.0000006	V0
Lead	0.0008577	0.0000775	V0	0.0000794	V0	0.0000000	V1
Lithium	0.0000374	0.0001038	V0	0.0000148	V0	0.0000000	V1
Magnesium	0.0091409	0.0245622	V0	0.0062925	V0	0.0012986	V0
Manganese	0.0006949	0.0018933	V0	0.0004676	V0	0.0000679	V0
Molybdenum	0.0007116	0.0000592	V0	0.0000341	V0	0.0000000	V1
Neodymium	0.0000140	0.0000503	V0	0.0000086	V0	0.0000000	V1
Nickel	0.0005429	0.0002568	V0	0.0001523	V0	0.0000633	V0
Niobium	0.0000202	0.0000135	V0	0.0000038	V0	0.0000000	V1
Palladium	0.0000632	0.0000185	V0	0.0000189	V0	0.0000053	V0
Phosphorus	0.0459574	0.0157899	V0	0.0120750	V0	0.0133131	V0
Platinum	0.0000088	0.0000010	V0	0.0000018	V0	0.0000007	V0
Potassium	0.0061261	0.0503107	V0	0.0167676	V0	0.0008509	V0
Praseodymium	0.0000070	0.0000130	V0	0.0000024	V0	0.0000000	V1
Rubidium	0.0000184	0.0001644	V0	0.0000335	V0	0.0000015	V0
Samarium	0.0000133	0.0000100	V0	0.0000017	V0	0.0000000	V1
Selenium	0.0003366	0.0000883	V0	0.0000507	V0	0.0000000	V1
Silicon	0.7676322	0.3714806	V0	0.1428476	V0	0.0000000	V1
Silver	0.0000100	0.0000045	V0	0.0000026	V0	0.0000000	V1
Sodium	0.0169447	0.0199949	V0	0.0072056	V0	0.0008857	V0
Strontium	0.0003375	0.0005133	V0	0.0000924	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000016	V0	0.0000009	V0	0.0000000	V1
Thorium	0.0000059	0.0000160	V0	0.0000028	V0	0.0000000	V1
Tin	0.0004414	0.0000491	V0	0.0000742	V0	0.0000000	V1
Titanium	0.0015201	0.0043359	V0	0.0010637	V0	0.0003764	V0
Tungsten	0.0000938	0.0000506	V0	0.0000621	V0	0.0000452	V0
Uranium	0.0000048	0.0000044	V0	0.0000008	V0	0.0000000	V1
Vanadium	0.0007697	0.0002991	V0	0.0000624	V0	0.0000000	V1
Zinc	0.0055897	0.0011592	V0	0.0013822	V0	0.0007693	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		29-Jul		29-Jul		29-Jul	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.39	V0	4.33	V0	0.03	V1
Aluminum	0.1380326	0.0194359	V0	0.0149183	V0	0.0000000	V1
Antimony	0.0001784	0.0000794	V0	0.0000076	V0	0.0000000	V1
Arsenic	0.0001060	0.0001025	V0	0.0000591	V0	0.0000000	V1
Barium	0.0092847	0.0009980	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000218	V0	0.0000288	V0	0.0000015	V0
Cadmium	0.0000174	0.0000028	V0	0.0000017	V0	0.0000000	V1
Calcium	0.4112124	0.0281016	V0	0.0253408	V0	0.0000000	V1
Cerium	0.0000174	0.0000202	V0	0.0000139	V0	0.0000000	V1
Cesium	0.0000100	0.0000011	V0	0.0000010	V0	0.0000000	V1
Chromium	0.0022262	0.0001523	V0	0.0001600	V0	0.0000969	V0
Cobalt	0.0000273	0.0000946	V0	0.0000367	V0	0.0000236	V0
Copper	0.0017171	0.0007237	V0	0.0003357	V0	0.0003251	V0
Iron	0.0393063	0.0246150	V0	0.0118251	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000087	V0	0.0000059	V0	0.0000006	V0
Lead	0.0008577	0.0000683	V0	0.0000409	V0	0.0000000	V1
Lithium	0.0000374	0.0000119	V0	0.0000103	V0	0.0000000	V1
Magnesium	0.0091409	0.0061923	V0	0.0046916	V0	0.0012986	V0
Manganese	0.0006949	0.0004237	V0	0.0002670	V0	0.0000679	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000063	V0	0.0000053	V0	0.0000000	V1
Nickel	0.0005429	0.0002226	V0	0.0001626	V0	0.0000633	V0
Niobium	0.0000202	0.0000031	V0	0.0000024	V0	0.0000000	V1
Palladium	0.0000632	0.0000053	V0	0.0000000	V1	0.0000053	V0
Phosphorus	0.0459574	0.0133510	V0	0.0148533	V0	0.0133131	V0
Platinum	0.0000088	0.0000007	V0	0.0000006	V0	0.0000007	V0
Potassium	0.0061261	0.0122826	V0	0.0103569	V0	0.0008509	V0
Praseodymium	0.0000070	0.0000018	V0	0.0000013	V0	0.0000000	V1
Rubidium	0.0000184	0.0000273	V0	0.0000240	V0	0.0000015	V0
Samarium	0.0000133	0.0000014	V0	0.0000011	V0	0.0000000	V1
Selenium	0.0003366	0.0000286	V0	0.0000241	V0	0.0000000	V1
Silicon	0.7676322	0.0780144	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000007	V0	0.0000025	V0	0.0000000	V1
Sodium	0.0169447	0.0054483	V0	0.0044213	V0	0.0008857	V0
Strontium	0.0003375	0.0001017	V0	0.0000613	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000005	V0	0.0000000	V1
Thorium	0.0000059	0.0000021	V0	0.0000019	V0	0.0000000	V1
Tin	0.0004414	0.0000818	V0	0.0000301	V0	0.0000000	V1
Titanium	0.0015201	0.0011751	V0	0.0008183	V0	0.0003764	V0
Tungsten	0.0000938	0.0000879	V0	0.0000389	V0	0.0000452	V0
Uranium	0.0000048	0.0000006	V0	0.0000006	V0	0.0000000	V1
Vanadium	0.0007697	0.0000435	V0	0.0000414	V0	0.0000000	V1
Zinc	0.0055897	0.0008485	V0	0.0010778	V0	0.0007693	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**04-Aug**		**04-Aug**		**04-Aug**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	7.09	V0	8.36	V0	-0.03	V1
Aluminum	0.1380326	0.0196577	V0	0.0098917	V0	0.0000000	V1
Antimony	0.0001784	0.0000138	V0	0.0000455	V0	0.0000000	V1
Arsenic	0.0001060	0.0000836	V0	0.0001455	V0	0.0000000	V1
Barium	0.0092847	0.0165787	V4	0.0194888	V4	-9999	M2
Beryllium	0.0000946	0.0000000	V1	0.0000058	V0	0.0000065	V0
Bismuth	0.0000093	0.0000000	V1	0.0000000	V1	0.0000000	V1
Cadmium	0.0000174	0.0000066	V0	0.0000088	V0	0.0000016	V0
Calcium	0.4112124	0.9389225	V4	0.6924440	V4	-9999	M2
Cerium	0.0000174	0.0000499	V0	0.0000196	V0	0.0000028	V0
Cesium	0.0000100	0.0000029	V0	0.0000016	V0	0.0000000	V1
Chromium	0.0022262	0.0000000	V1	0.0000000	V1	0.0000000	V1
Cobalt	0.0000273	0.0000187	V0	0.0000280	V0	0.0000020	V0
Copper	0.0017171	0.0004827	V0	0.0008149	V0	0.0006024	V0
Iron	0.0393063	0.0310322	V0	0.0171514	V0	0.0030963	V0
Lanthanum	0.0000130	0.0000182	V0	0.0000096	V0	0.0000009	V0
Lead	0.0008577	0.0000396	V0	0.0000378	V0	0.0000000	V1
Lithium	0.0000374	0.0000321	V0	0.0000251	V0	0.0000039	V0
Magnesium	0.0091409	0.0177453	V0	0.0213774	V0	0.0035169	V0
Manganese	0.0006949	0.0020329	V0	0.0017201	V0	0.0000995	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000136	V0	0.0000088	V0	0.0000013	V0
Nickel	0.0005429	0.0000840	V0	0.0000946	V0	0.0000000	V1
Niobium	0.0000202	0.0000038	V0	0.0000013	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0000000	V1	0.0000000	V1	0.0000000	V1
Platinum	0.0000088	0.0000000	V1	0.0000048	V0	0.0000000	V1
Potassium	0.0061261	0.0347654	V0	0.0261215	V0	0.0040978	V0
Praseodymium	0.0000070	0.0000038	V0	0.0000054	V0	0.0000000	V1
Rubidium	0.0000184	0.0000633	V0	0.0000402	V0	0.0000024	V0
Samarium	0.0000133	0.0000033	V0	0.0000020	V0	0.0000000	V1
Selenium	0.0003366	0.0001340	V0	0.0001319	V0	0.0000228	V0
Silicon	0.7676322	0.1329305	V4	0.1693194	V4	-9999	M2
Silver	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0119606	V4	0.0175230	V4	-9999	M2
Strontium	0.0003375	0.0008920	V4	0.0008365	V4	-9999	M2
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000007	V0	0.0000000	V1
Thorium	0.0000059	0.0000046	V0	0.0000033	V0	0.0000000	V1
Tin	0.0004414	0.0000000	V1	0.0000260	V0	0.0000000	V1
Titanium	0.0015201	0.0010001	V0	0.0003947	V0	0.0001476	V0
Tungsten	0.0000938	0.0000072	V0	0.0000128	V0	0.0000000	V1
Uranium	0.0000048	0.0000014	V0	0.0000008	V0	0.0000000	V1
Vanadium	0.0007697	0.0001121	V0	0.0001353	V0	0.0000000	V1
Zinc	0.0055897	0.0031298	V4	0.0056541	V4	-9999	M2

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		04-Aug		04-Aug		04-Aug	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	8.45	V0	6.43	V0	-0.03	V1
Aluminum	0.1380326	0.0061644	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000615	V0	0.0000208	V0	0.0000000	V1
Arsenic	0.0001060	0.0001112	V0	0.0002738	V0	0.0000000	V1
Barium	0.0092847	0.0203983	V4	0.0209276	V4	-9999	M2
Beryllium	0.0000946	0.0000052	V0	0.0000044	V0	0.0000065	V0
Bismuth	0.0000093	0.0000000	V1	0.0000000	V1	0.0000000	V1
Cadmium	0.0000174	0.0000076	V0	0.0000110	V0	0.0000016	V0
Calcium	0.4112124	0.6357763	V4	0.4225215	V4	-9999	M2
Cerium	0.0000174	0.0000155	V0	0.0000128	V0	0.0000028	V0
Cesium	0.0000100	0.0000016	V0	0.0000008	V0	0.0000000	V1
Chromium	0.0022262	0.0000000	V1	0.0000000	V1	0.0000000	V1
Cobalt	0.0000273	0.0000475	V0	0.0000236	V0	0.0000020	V0
Copper	0.0017171	0.0007633	V0	0.0005796	V0	0.0006024	V0
Iron	0.0393063	0.0133301	V0	0.0049996	V0	0.0030963	V0
Lanthanum	0.0000130	0.0000058	V0	0.0000037	V0	0.0000009	V0
Lead	0.0008577	0.0000000	V1	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000125	V0	0.0000060	V0	0.0000039	V0
Magnesium	0.0091409	0.0164972	V0	0.0105625	V0	0.0035169	V0
Manganese	0.0006949	0.0017071	V0	0.0004123	V0	0.0000995	V0
Molybdenum	0.0007116	0.0000316	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000073	V0	0.0000040	V0	0.0000013	V0
Nickel	0.0005429	0.0000669	V0	0.0000495	V0	0.0000000	V1
Niobium	0.0000202	0.0000010	V0	0.0000000	V1	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0000000	V1	0.0000000	V1	0.0000000	V1
Platinum	0.0000088	0.0000007	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0375170	V0	0.0334714	V0	0.0040978	V0
Praseodymium	0.0000070	0.0000016	V0	0.0000017	V0	0.0000000	V1
Rubidium	0.0000184	0.0000530	V0	0.0000368	V0	0.0000024	V0
Samarium	0.0000133	0.0000013	V0	0.0000010	V0	0.0000000	V1
Selenium	0.0003366	0.0001173	V0	0.0000935	V0	0.0000228	V0
Silicon	0.7676322	0.1765441	V4	0.1595620	V4	-9999	M2
Silver	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0140189	V4	0.0087687	V4	-9999	M2
Strontium	0.0003375	0.0007692	V4	0.0006152	V4	-9999	M2
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000005	V0	0.0000000	V1
Thorium	0.0000059	0.0000020	V0	0.0000012	V0	0.0000000	V1
Tin	0.0004414	0.0000426	V0	0.0000218	V0	0.0000000	V1
Titanium	0.0015201	0.0004153	V0	0.0002735	V0	0.0001476	V0
Tungsten	0.0000938	0.0000358	V0	0.0000304	V0	0.0000000	V1
Uranium	0.0000048	0.0000008	V0	0.0000004	V0	0.0000000	V1
Vanadium	0.0007697	0.0001269	V0	0.0000545	V0	0.0000000	V1
Zinc	0.0055897	0.0062605	V4	0.0037723	V4	-9999	M2

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**10-Aug**		**10-Aug**		**10-Aug**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.79	V0	3.45	V0	0.03	V1
Aluminum	0.1380326	0.1450257	V0	0.0229825	V0	0.0000000	V1
Antimony	0.0001784	0.0000378	V0	0.0000616	V0	0.0000000	V1
Arsenic	0.0001060	0.0000818	V0	0.0000822	V0	0.0000182	V4
Barium	0.0092847	0.0015815	V0	0.0007164	V0	0.0000000	V1
Beryllium	0.0000946	0.0000042	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000175	V0	0.0000051	V0	0.0000063	V0
Cadmium	0.0000174	0.0000095	V0	0.0000095	V0	0.0000000	V1
Calcium	0.4112124	0.4671931	V0	0.0409282	V0	0.0000000	V1
Cerium	0.0000174	0.0001739	V0	0.0000328	V0	0.0000009	V0
Cesium	0.0000100	0.0000113	V0	0.0000019	V0	0.0000000	V1
Chromium	0.0022262	0.0007449	V0	0.0004596	V0	0.0002017	V0
Cobalt	0.0000273	0.0000995	V0	0.0000328	V0	0.0000777	V0
Copper	0.0017171	0.0008163	V0	0.0004430	V0	0.0000929	V0
Iron	0.0393063	0.1761771	V0	0.0306203	V0	0.0033227	V0
Lanthanum	0.0000130	0.0000859	V0	0.0000160	V0	0.0000005	V0
Lead	0.0008577	0.0001264	V0	0.0001068	V0	0.0000000	V1
Lithium	0.0000374	0.0001690	V0	0.0000159	V0	0.0000000	V1
Magnesium	0.0091409	0.0379988	V0	0.0080088	V0	0.0017355	V0
Manganese	0.0006949	0.0036865	V0	0.0005516	V0	0.0000444	V0
Molybdenum	0.0007116	0.0001378	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000761	V0	0.0000112	V0	0.0000000	V1
Nickel	0.0005429	0.0006668	V0	0.0003252	V0	0.0001845	V0
Niobium	0.0000202	0.0000211	V0	0.0000047	V0	0.0000013	V0
Palladium	0.0000632	0.0000053	V0	0.0000000	V1	0.0000073	V0
Phosphorus	0.0459574	0.0147822	V0	0.0108515	V0	0.0094896	V0
Platinum	0.0000088	0.0000008	V0	0.0000014	V0	0.0000012	V0
Potassium	0.0061261	0.0643177	V0	0.0234434	V0	0.0011854	V0
Praseodymium	0.0000070	0.0000201	V0	0.0000037	V0	0.0000000	V1
Rubidium	0.0000184	0.0002329	V0	0.0000488	V0	0.0000012	V0
Samarium	0.0000133	0.0000136	V0	0.0000026	V0	0.0000000	V1
Selenium	0.0003366	0.0001697	V0	0.0000561	V0	0.0000000	V1
Silicon	0.7676322	0.4645569	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000022	V0	0.0000015	V0	0.0000005	V0
Sodium	0.0169447	0.0216563	V0	0.0060313	V0	0.0009654	V0
Strontium	0.0003375	0.0008200	V0	0.0001220	V0	0.0000162	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000018	V0	0.0000016	V0	0.0000000	V1
Thorium	0.0000059	0.0000223	V0	0.0000038	V0	0.0000000	V1
Tin	0.0004414	0.0000951	V0	0.0000825	V0	0.0000222	V0
Titanium	0.0015201	0.0080581	V0	0.0017083	V0	0.0007651	V0
Tungsten	0.0000938	0.0000836	V0	0.0000412	V0	0.0000345	V0
Uranium	0.0000048	0.0000072	V0	0.0000020	V0	0.0000000	V1
Vanadium	0.0007697	0.0008229	V0	0.0000578	V0	0.0000000	V1
Zinc	0.0055897	0.0024270	V0	0.0017627	V0	0.0004420	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		10-Aug		10-Aug		10-Aug	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.31	V0	3.30	V0	0.03	V1
Aluminum	0.1380326	0.0241466	V0	0.0110796	V0	0.0000000	V1
Antimony	0.0001784	0.0000989	V0	0.0000125	V0	0.0000000	V1
Arsenic	0.0001060	0.0000666	V0	0.0000468	V0	0.0000182	V4
Barium	0.0092847	0.0011033	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000063	V0	0.0000047	V0	0.0000063	V0
Cadmium	0.0000174	0.0000087	V0	0.0000076	V0	0.0000000	V1
Calcium	0.4112124	0.0471361	V0	0.0244308	V0	0.0000000	V1
Cerium	0.0000174	0.0000367	V0	0.0000406	V0	0.0000009	V0
Cesium	0.0000100	0.0000019	V0	0.0000008	V0	0.0000000	V1
Chromium	0.0022262	0.0001646	V0	0.0013551	V0	0.0002017	V0
Cobalt	0.0000273	0.0000491	V0	0.0000393	V0	0.0000777	V0
Copper	0.0017171	0.0006550	V0	0.0002222	V0	0.0000929	V0
Iron	0.0393063	0.0377612	V0	0.0170922	V0	0.0033227	V0
Lanthanum	0.0000130	0.0000175	V0	0.0000147	V0	0.0000005	V0
Lead	0.0008577	0.0001230	V0	0.0000518	V0	0.0000000	V1
Lithium	0.0000374	0.0000257	V0	0.0000080	V0	0.0000000	V1
Magnesium	0.0091409	0.0097118	V0	0.0051397	V0	0.0017355	V0
Manganese	0.0006949	0.0007115	V0	0.0004157	V0	0.0000444	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000315	V0	0.0000000	V1
Neodymium	0.0000140	0.0000133	V0	0.0000255	V0	0.0000000	V1
Nickel	0.0005429	0.0002129	V0	0.0005345	V0	0.0001845	V0
Niobium	0.0000202	0.0000051	V0	0.0000040	V0	0.0000013	V0
Palladium	0.0000632	0.0000037	V0	0.0000000	V1	0.0000073	V0
Phosphorus	0.0459574	0.0125303	V0	0.0105920	V0	0.0094896	V0
Platinum	0.0000088	0.0000005	V0	0.0000026	V0	0.0000012	V0
Potassium	0.0061261	0.0235405	V0	0.0194739	V0	0.0011854	V0
Praseodymium	0.0000070	0.0000037	V0	0.0000057	V0	0.0000000	V1
Rubidium	0.0000184	0.0000504	V0	0.0000345	V0	0.0000012	V0
Samarium	0.0000133	0.0000027	V0	0.0000046	V0	0.0000000	V1
Selenium	0.0003366	0.0000556	V0	0.0000554	V0	0.0000000	V1
Silicon	0.7676322	0.0544661	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000009	V0	0.0000008	V0	0.0000005	V0
Sodium	0.0169447	0.0073555	V0	0.0058253	V0	0.0009654	V0
Strontium	0.0003375	0.0001522	V0	0.0000645	V0	0.0000162	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000040	V0	0.0000024	V0	0.0000000	V1
Tin	0.0004414	0.0000918	V0	0.0000326	V0	0.0000222	V0
Titanium	0.0015201	0.0014994	V0	0.0006804	V0	0.0007651	V0
Tungsten	0.0000938	0.0000637	V0	0.0000766	V0	0.0000345	V0
Uranium	0.0000048	0.0000017	V0	0.0000010	V0	0.0000000	V1
Vanadium	0.0007697	0.0000614	V0	0.0000338	V0	0.0000000	V1
Zinc	0.0055897	0.0016742	V0	0.0010477	V0	0.0004420	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**16-Aug**		**16-Aug**		**16-Aug**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	13.43	V0	5.95	V0	-0.06	V1
Aluminum	0.1380326	0.0688967	V0	0.0279176	V0	0.0000000	V1
Antimony	0.0001784	0.0000123	V0	0.0000100	V0	0.0000000	V1
Arsenic	0.0001060	0.0000285	V0	0.0000192	V0	0.0000000	V1
Barium	0.0092847	0.0007919	V0	0.0004581	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000751	V0	0.0000012	V0	0.0000025	V0
Cadmium	0.0000174	0.0000058	V0	0.0000039	V0	0.0000000	V1
Calcium	0.4112124	0.1077848	V0	0.0413051	V0	0.0173124	V0
Cerium	0.0000174	0.0000790	V0	0.0000272	V0	0.0000000	V1
Cesium	0.0000100	0.0000053	V0	0.0000020	V0	0.0000008	V0
Chromium	0.0022262	0.0002413	V0	0.0001417	V0	0.0001311	V0
Cobalt	0.0000273	0.0000560	V0	0.0000281	V0	0.0000596	V0
Copper	0.0017171	0.0005808	V0	0.0001371	V0	0.0003252	V0
Iron	0.0393063	0.0698677	V0	0.0231774	V0	0.0021296	V0
Lanthanum	0.0000130	0.0000390	V0	0.0000134	V0	0.0000000	V1
Lead	0.0008577	0.0000958	V0	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000712	V0	0.0000170	V0	0.0000016	V0
Magnesium	0.0091409	0.0144729	V0	0.0076994	V0	0.0041269	V0
Manganese	0.0006949	0.0013546	V0	0.0004725	V0	0.0000542	V0
Molybdenum	0.0007116	0.0000387	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000360	V0	0.0000114	V0	0.0000000	V1
Nickel	0.0005429	0.0002433	V0	0.0001293	V0	0.0001530	V0
Niobium	0.0000202	0.0000081	V0	0.0000036	V0	0.0000015	V0
Palladium	0.0000632	0.0000033	V0	0.0000041	V0	0.0000000	V1
Phosphorus	0.0459574	0.0101841	V0	0.0093484	V0	0.0079350	V0
Platinum	0.0000088	0.0000007	V0	0.0000004	V0	0.0000005	V0
Potassium	0.0061261	0.0283699	V0	0.0132034	V0	0.0023776	V0
Praseodymium	0.0000070	0.0000104	V0	0.0000029	V0	0.0000000	V1
Rubidium	0.0000184	0.0001050	V0	0.0000404	V0	0.0000086	V4
Samarium	0.0000133	0.0000062	V0	0.0000024	V0	0.0000000	V1
Selenium	0.0003366	0.0000558	V0	0.0000273	V0	0.0000000	V1
Silicon	0.7676322	0.1506398	V0	0.0678593	V0	0.0000000	V1
Silver	0.0000100	0.0000014	V0	0.0000006	V0	0.0000000	V1
Sodium	0.0169447	0.0092304	V0	0.0053131	V0	0.0010983	V0
Strontium	0.0003375	0.0002801	V0	0.0001834	V0	0.0000158	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000012	V0	0.0000007	V0	0.0000000	V1
Thorium	0.0000059	0.0000102	V0	0.0000039	V0	0.0000000	V1
Tin	0.0004414	0.0000296	V0	0.0000283	V0	0.0000000	V1
Titanium	0.0015201	0.0023897	V0	0.0013174	V0	0.0009917	V0
Tungsten	0.0000938	0.0000467	V0	0.0000316	V0	0.0000586	V0
Uranium	0.0000048	0.0000026	V0	0.0000015	V0	0.0000000	V1
Vanadium	0.0007697	0.0001788	V0	0.0000647	V0	0.0000000	V1
Zinc	0.0055897	0.0010925	V0	0.0011715	V0	0.0007930	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		16-Aug		16-Aug		16-Aug	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.84	V0	4.48	V0	-0.06	V1
Aluminum	0.1380326	0.0386538	V0	0.0209662	V0	0.0000000	V1
Antimony	0.0001784	0.0001125	V0	0.0000094	V0	0.0000000	V1
Arsenic	0.0001060	0.0000388	V0	0.0000524	V0	0.0000000	V1
Barium	0.0092847	0.0016664	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000175	V0	0.0000033	V0	0.0000025	V0
Cadmium	0.0000174	0.0000049	V0	0.0000069	V0	0.0000000	V1
Calcium	0.4112124	0.0592978	V0	0.0223436	V0	0.0173124	V0
Cerium	0.0000174	0.0000495	V0	0.0000216	V0	0.0000000	V1
Cesium	0.0000100	0.0000028	V0	0.0000018	V0	0.0000008	V0
Chromium	0.0022262	0.0001601	V0	0.0002432	V0	0.0001311	V0
Cobalt	0.0000273	0.0000692	V0	0.0000366	V0	0.0000596	V0
Copper	0.0017171	0.0010032	V0	0.0001957	V0	0.0003252	V0
Iron	0.0393063	0.0581118	V0	0.0215690	V0	0.0021296	V0
Lanthanum	0.0000130	0.0000241	V0	0.0000111	V0	0.0000000	V1
Lead	0.0008577	0.0000678	V0	0.0000374	V0	0.0000000	V1
Lithium	0.0000374	0.0000366	V0	0.0000152	V0	0.0000016	V0
Magnesium	0.0091409	0.0136118	V0	0.0048672	V0	0.0041269	V0
Manganese	0.0006949	0.0010100	V0	0.0004675	V0	0.0000542	V0
Molybdenum	0.0007116	0.0000307	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000196	V0	0.0000090	V0	0.0000000	V1
Nickel	0.0005429	0.0003038	V0	0.0002206	V0	0.0001530	V0
Niobium	0.0000202	0.0000060	V0	0.0000034	V0	0.0000015	V0
Palladium	0.0000632	0.0000000	V1	0.0000043	V0	0.0000000	V1
Phosphorus	0.0459574	0.0105346	V0	0.0094251	V0	0.0079350	V0
Platinum	0.0000088	0.0000011	V0	0.0000011	V0	0.0000005	V0
Potassium	0.0061261	0.0213468	V0	0.0131815	V0	0.0023776	V0
Praseodymium	0.0000070	0.0000052	V0	0.0000027	V0	0.0000000	V1
Rubidium	0.0000184	0.0000621	V0	0.0000361	V0	0.0000086	V4
Samarium	0.0000133	0.0000035	V0	0.0000020	V0	0.0000000	V1
Selenium	0.0003366	0.0000433	V0	0.0000195	V0	0.0000000	V1
Silicon	0.7676322	0.0919248	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000005	V0	-9999	M2	0.0000000	V1
Sodium	0.0169447	0.0077535	V0	0.0046580	V0	0.0010983	V0
Strontium	0.0003375	0.0002269	V0	0.0000831	V0	0.0000158	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000008	V0	0.0000012	V0	0.0000000	V1
Thorium	0.0000059	0.0000060	V0	0.0000031	V0	0.0000000	V1
Tin	0.0004414	0.0001056	V0	0.0000332	V0	0.0000000	V1
Titanium	0.0015201	0.0017675	V0	0.0009409	V0	0.0009917	V0
Tungsten	0.0000938	0.0000823	V0	0.0000510	V0	0.0000586	V0
Uranium	0.0000048	0.0000017	V0	0.0000011	V0	0.0000000	V1
Vanadium	0.0007697	0.0000901	V0	0.0000445	V0	0.0000000	V1
Zinc	0.0055897	0.0014970	V0	0.0008303	V0	0.0007930	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		22-Aug		22-Aug		22-Aug	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.32	V0	-9999	M2	-0.01	V1
Aluminum	0.1380326	0.0443424	V0	-9999	M2	0.0000000	V1
Antimony	0.0001784	0.0000150	V0	-9999	M2	0.0000000	V1
Arsenic	0.0001060	0.0000177	V0	-9999	M2	0.0000000	V1
Barium	0.0092847	0.0004425	V0	-9999	M2	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	-9999	M2	0.0000000	V1
Bismuth	0.0000093	0.0000000	V1	-9999	M2	0.0000055	V0
Cadmium	0.0000174	0.0000016	V0	-9999	M2	0.0000000	V1
Calcium	0.4112124	0.1215001	V0	-9999	M2	0.0256237	V0
Cerium	0.0000174	0.0000455	V0	-9999	M2	0.0000026	V0
Cesium	0.0000100	0.0000027	V0	-9999	M2	0.0000000	V1
Chromium	0.0022262	0.0002080	V0	-9999	M2	0.0000000	V1
Cobalt	0.0000273	0.0000201	V0	-9999	M2	0.0000264	V0
Copper	0.0017171	0.0002719	V0	-9999	M2	0.0001696	V0
Iron	0.0393063	0.0484689	V0	-9999	M2	0.0000000	V1
Lanthanum	0.0000130	0.0000221	V0	-9999	M2	0.0000009	V0
Lead	0.0008577	0.0000455	V0	-9999	M2	0.0000000	V1
Lithium	0.0000374	0.0000567	V0	-9999	M2	0.0000000	V1
Magnesium	0.0091409	0.0092472	V0	-9999	M2	0.0033258	V0
Manganese	0.0006949	0.0010159	V0	-9999	M2	0.0000000	V1
Molybdenum	0.0007116	0.0000432	V0	-9999	M2	0.0000000	V1
Neodymium	0.0000140	0.0000199	V0	-9999	M2	0.0000009	V0
Nickel	0.0005429	0.0001543	V0	-9999	M2	0.0000746	V0
Niobium	0.0000202	0.0000051	V0	-9999	M2	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	-9999	M2	0.0000029	V0
Phosphorus	0.0459574	0.0034584	V0	-9999	M2	0.0000000	V1
Platinum	0.0000088	0.0000009	V0	-9999	M2	0.0000006	V0
Potassium	0.0061261	0.0176484	V0	-9999	M2	0.0020981	V0
Praseodymium	0.0000070	0.0000047	V0	-9999	M2	0.0000000	V1
Rubidium	0.0000184	0.0000597	V0	-9999	M2	0.0000019	V0
Samarium	0.0000133	0.0000032	V0	-9999	M2	0.0000000	V1
Selenium	0.0003366	0.0000337	V0	-9999	M2	0.0000000	V1
Silicon	0.7676322	0.1397819	V0	-9999	M2	0.0000000	V1
Silver	0.0000100	0.0000000	V1	-9999	M2	0.0000000	V1
Sodium	0.0169447	0.0061601	V0	-9999	M2	0.0014213	V0
Strontium	0.0003375	0.0002327	V0	-9999	M2	0.0000213	V0
Tantalum	0.0000394	0.0000000	V1	-9999	M2	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	-9999	M2	0.0000000	V1
Thorium	0.0000059	0.0000052	V0	-9999	M2	0.0000000	V1
Tin	0.0004414	0.0000291	V0	-9999	M2	0.0000000	V1
Titanium	0.0015201	0.0042088	V0	-9999	M2	0.0005159	V0
Tungsten	0.0000938	0.0000165	V0	-9999	M2	0.0000407	V0
Uranium	0.0000048	0.0000025	V0	-9999	M2	0.0000000	V1
Vanadium	0.0007697	0.0001023	V0	-9999	M2	0.0000000	V1
Zinc	0.0055897	0.0006762	V0	-9999	M2	0.0010503	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		22-Aug		22-Aug		22-Aug	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.56	V0	3.93	V0	-0.01	V1
Aluminum	0.1380326	0.0224414	V0	0.0066590	V0	0.0000000	V1
Antimony	0.0001784	0.0000545	V0	0.0000101	V0	0.0000000	V1
Arsenic	0.0001060	0.0000426	V0	0.0000229	V0	0.0000000	V1
Barium	0.0092847	0.0007799	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000038	V0	0.0000004	V0	0.0000055	V0
Cadmium	0.0000174	0.0000021	V0	0.0000014	V0	0.0000000	V1
Calcium	0.4112124	0.0440432	V0	0.0000000	V1	0.0256237	V0
Cerium	0.0000174	0.0000239	V0	0.0000056	V0	0.0000026	V0
Cesium	0.0000100	0.0000017	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0002118	V0	0.0001133	V0	0.0000000	V1
Cobalt	0.0000273	0.0000111	V0	0.0000286	V0	0.0000264	V0
Copper	0.0017171	0.0007760	V0	0.0013393	V0	0.0001696	V0
Iron	0.0393063	0.0295521	V0	0.0055367	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000115	V0	0.0000033	V0	0.0000009	V0
Lead	0.0008577	0.0000871	V0	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000223	V0	0.0000040	V0	0.0000000	V1
Magnesium	0.0091409	0.0083058	V0	0.0025228	V0	0.0033258	V0
Manganese	0.0006949	0.0007496	V0	0.0001610	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001591	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000097	V0	0.0000023	V0	0.0000009	V0
Nickel	0.0005429	0.0002686	V0	0.0001184	V0	0.0000746	V0
Niobium	0.0000202	0.0000040	V0	0.0000000	V1	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000029	V0
Phosphorus	0.0459574	0.0024433	V0	0.0000000	V1	0.0000000	V1
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000006	V0
Potassium	0.0061261	0.0423916	V0	0.0079313	V0	0.0020981	V0
Praseodymium	0.0000070	0.0000021	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000788	V0	0.0000135	V0	0.0000019	V0
Samarium	0.0000133	0.0000014	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000550	V0	0.0000154	V0	0.0000000	V1
Silicon	0.7676322	0.0912336	V0	0.0423324	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0070203	V0	0.0024302	V0	0.0014213	V0
Strontium	0.0003375	0.0001254	V0	0.0000372	V0	0.0000213	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000022	V0	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0001021	V0	0.0000343	V0	0.0000000	V1
Titanium	0.0015201	0.0026966	V0	0.0004924	V0	0.0005159	V0
Tungsten	0.0000938	0.0000190	V0	0.0000518	V0	0.0000407	V0
Uranium	0.0000048	0.0000021	V0	0.0000029	V0	0.0000000	V1
Vanadium	0.0007697	0.0007222	V0	0.0000642	V0	0.0000000	V1
Zinc	0.0055897	0.0026461	V0	0.0004803	V0	0.0010503	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		28-Aug		28-Aug		28-Aug	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	0.63	V0	-9999	M2	0.03	V1
Aluminum	0.1380326	0.0065074	V0	-9999	M2	0.0000000	V1
Antimony	0.0001784	0.0000000	V1	-9999	M2	0.0000000	V1
Arsenic	0.0001060	0.0000000	V1	-9999	M2	0.0000000	V1
Barium	0.0092847	0.0000000	V1	-9999	M2	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	-9999	M2	0.0000000	V1
Bismuth	0.0000093	0.0000005	V0	-9999	M2	0.0000015	V0
Cadmium	0.0000174	0.0000008	V0	-9999	M2	0.0000000	V1
Calcium	0.4112124	0.0241597	V0	-9999	M2	0.0172033	V0
Cerium	0.0000174	0.0000048	V0	-9999	M2	0.0000000	V1
Cesium	0.0000100	0.0000000	V1	-9999	M2	0.0000000	V1
Chromium	0.0022262	0.0002205	V0	-9999	M2	0.0002874	V0
Cobalt	0.0000273	0.0000087	V0	-9999	M2	0.0000335	V0
Copper	0.0017171	0.0001255	V0	-9999	M2	0.0001388	V0
Iron	0.0393063	0.0060534	V0	-9999	M2	0.0073642	V0
Lanthanum	0.0000130	0.0000020	V0	-9999	M2	0.0000000	V1
Lead	0.0008577	0.0000000	V1	-9999	M2	0.0000000	V1
Lithium	0.0000374	0.0000059	V0	-9999	M2	0.0000000	V1
Magnesium	0.0091409	0.0021966	V0	-9999	M2	0.0024677	V0
Manganese	0.0006949	0.0001193	V0	-9999	M2	0.0001032	V0
Molybdenum	0.0007116	0.0000302	V0	-9999	M2	0.0000000	V1
Neodymium	0.0000140	0.0000016	V0	-9999	M2	0.0000000	V1
Nickel	0.0005429	0.0002082	V0	-9999	M2	0.0005702	V0
Niobium	0.0000202	0.0000000	V1	-9999	M2	0.0000014	V0
Palladium	0.0000632	0.0000000	V1	-9999	M2	0.0000000	V1
Phosphorus	0.0459574	0.0000000	V1	-9999	M2	0.0000000	V1
Platinum	0.0000088	0.0000004	V0	-9999	M2	0.0000000	V1
Potassium	0.0061261	0.0042856	V0	-9999	M2	0.0015277	V0
Praseodymium	0.0000070	0.0000000	V1	-9999	M2	0.0000000	V1
Rubidium	0.0000184	0.0000084	V0	-9999	M2	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	-9999	M2	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	-9999	M2	0.0000000	V1
Silicon	0.7676322	0.0705466	V0	-9999	M2	0.0437277	V0
Silver	0.0000100	0.0000000	V1	-9999	M2	0.0000000	V1
Sodium	0.0169447	0.0036813	V0	-9999	M2	0.0008214	V0
Strontium	0.0003375	0.0000364	V0	-9999	M2	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	-9999	M2	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	-9999	M2	0.0000000	V1
Thorium	0.0000059	0.0000000	V1	-9999	M2	0.0000000	V1
Tin	0.0004414	0.0000224	V0	-9999	M2	0.0000000	V1
Titanium	0.0015201	0.0007438	V0	-9999	M2	0.0003761	V0
Tungsten	0.0000938	0.0000052	V0	-9999	M2	0.0000561	V0
Uranium	0.0000048	0.0000000	V1	-9999	M2	0.0000000	V1
Vanadium	0.0007697	0.0000000	V1	-9999	M2	0.0000000	V1
Zinc	0.0055897	0.0006042	V0	-9999	M2	0.0006104	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		28-Aug		28-Aug		28-Aug	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.04	V0	0.61	V0	0.03	V1
Aluminum	0.1380326	0.0000000	V1	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000256	V0	0.0000080	V0	0.0000000	V1
Arsenic	0.0001060	0.0000327	V0	0.0000000	V1	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000000	V1	0.0000277	V0	0.0000015	V0
Cadmium	0.0000174	0.0000009	V0	0.0000016	V0	0.0000000	V1
Calcium	0.4112124	0.0000000	V1	0.0254197	V0	0.0172033	V0
Cerium	0.0000174	0.0000063	V0	0.0000016	V0	0.0000000	V1
Cesium	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0000952	V0	0.0001607	V0	0.0002874	V0
Cobalt	0.0000273	0.0000278	V0	0.0000308	V0	0.0000335	V0
Copper	0.0017171	0.0006928	V0	0.0001717	V0	0.0001388	V0
Iron	0.0393063	0.0064541	V0	0.0029537	V0	0.0073642	V0
Lanthanum	0.0000130	0.0000025	V0	0.0000006	V0	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000067	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0020383	V0	0.0024081	V0	0.0024677	V0
Manganese	0.0006949	0.0001276	V0	0.0000866	V0	0.0001032	V0
Molybdenum	0.0007116	0.0001126	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000019	V0	0.0000008	V0	0.0000000	V1
Nickel	0.0005429	0.0001596	V0	0.0001073	V0	0.0005702	V0
Niobium	0.0000202	0.0000010	V0	0.0000010	V0	0.0000014	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0000000	V1	0.0000000	V1	0.0000000	V1
Platinum	0.0000088	0.0000000	V1	0.0000004	V0	0.0000000	V1
Potassium	0.0061261	0.0049759	V0	0.0045785	V0	0.0015277	V0
Praseodymium	0.0000070	0.0000000	V1	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000086	V0	0.0000068	V0	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0564672	V0	0.0651667	V0	0.0437277	V0
Silver	0.0000100	0.0000000	V1	0.0000005	V0	0.0000000	V1
Sodium	0.0169447	0.0040190	V0	0.0020047	V0	0.0008214	V0
Strontium	0.0003375	0.0000392	V0	0.0000244	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000000	V1	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0000419	V0	0.0000293	V0	0.0000000	V1
Titanium	0.0015201	0.0006848	V0	0.0006177	V0	0.0003761	V0
Tungsten	0.0000938	0.0000584	V0	0.0000438	V0	0.0000561	V0
Uranium	0.0000048	0.0000004	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0006046	V0	0.0000340	V0	0.0000000	V1
Zinc	0.0055897	0.0005596	V0	0.0010135	V0	0.0006104	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		03-Sep		03-Sep		03-Sep	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.01	V4	0.51	V0	0.08	V0
Aluminum	0.1380326	0.0073253	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000092	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0000344	V0	0.0000057	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000095	V0	0.0000014	V0	0.0000121	V0
Cadmium	0.0000174	0.0000012	V0	0.0000000	V1	0.0000009	V0
Calcium	0.4112124	0.0244183	V0	0.0000000	V1	0.0000000	V1
Cerium	0.0000174	0.0000045	V0	0.0000016	V0	0.0000011	V0
Cesium	0.0000100	0.0000004	V0	0.0000000	V1	0.0000006	V0
Chromium	0.0022262	-9999	M2	0.0001436	V0	0.0000000	V1
Cobalt	0.0000273	-9999	M2	0.0000372	V0	0.0000147	V0
Copper	0.0017171	-9999	M2	0.0001551	V0	0.0000748	V0
Iron	0.0393063	0.0142039	V0	0.0027354	V0	0.0017017	V0
Lanthanum	0.0000130	0.0000017	V0	0.0000010	V0	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000065	V0	0.0000000	V1	0.0000021	V0
Magnesium	0.0091409	0.0031224	V0	0.0017074	V0	0.0007532	V0
Manganese	0.0006949	0.0002688	V0	0.0000697	V0	0.0000000	V1
Molybdenum	0.0007116	-9999	M2	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000022	V0	0.0000000	V1	0.0000008	V0
Nickel	0.0005429	-9999	M2	0.0001562	V0	0.0000718	V0
Niobium	0.0000202	0.0000018	V0	0.0000011	V0	0.0000011	V0
Palladium	0.0000632	-9999	M2	0.0000038	V0	0.0000049	V0
Phosphorus	0.0459574	0.0100828	V0	0.0087944	V0	0.0085294	V0
Platinum	0.0000088	0.0000014	V0	0.0000009	V0	0.0000019	V0
Potassium	0.0061261	0.0061763	V0	0.0035704	V0	0.0004665	V0
Praseodymium	0.0000070	0.0000007	V0	0.0000000	V1	0.0000007	V0
Rubidium	0.0000184	0.0000104	V0	0.0000037	V0	0.0000015	V0
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000007	V0
Selenium	0.0003366	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000005	V0	0.0000010	V0
Sodium	0.0169447	0.0037816	V0	0.0018210	V0	0.0009380	V0
Strontium	0.0003375	0.0000367	V0	0.0000193	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000005	V0
Thorium	0.0000059	0.0000005	V0	0.0000000	V1	0.0000008	V0
Tin	0.0004414	0.0000187	V0	0.0000208	V0	0.0000000	V1
Titanium	0.0015201	-9999	M2	0.0003834	V0	0.0003081	V0
Tungsten	0.0000938	0.0000774	V0	0.0000508	V0	0.0000362	V0
Uranium	0.0000048	0.0000002	V0	0.0000000	V1	0.0000008	V0
Vanadium	0.0007697	0.0000567	V0	0.0000765	V0	0.0000376	V0
Zinc	0.0055897	-9999	M2	0.0004526	V0	0.0003686	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		03-Sep		03-Sep		03-Sep	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	0.92	V4	0.55	V4	0.08	V0
Aluminum	0.1380326	0.0065147	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000233	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0000085	V0	0.0000072	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000036	V0	0.0000056	V0	0.0000121	V0
Cadmium	0.0000174	0.0000000	V1	0.0000009	V0	0.0000009	V0
Calcium	0.4112124	0.0198725	V0	0.0175743	V0	0.0000000	V1
Cerium	0.0000174	0.0000049	V0	0.0000015	V0	0.0000011	V0
Cesium	0.0000100	0.0000000	V1	0.0000000	V1	0.0000006	V0
Chromium	0.0022262	0.0002096	V0	0.0001118	V0	0.0000000	V1
Cobalt	0.0000273	0.0000202	V0	0.0000514	V0	0.0000147	V0
Copper	0.0017171	0.0003258	V0	0.0001767	V0	0.0000748	V0
Iron	0.0393063	0.0068183	V0	0.0026624	V0	0.0017017	V0
Lanthanum	0.0000130	0.0000015	V0	0.0000000	V1	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000040	V0	0.0000000	V1	0.0000021	V0
Magnesium	0.0091409	0.0032298	V0	0.0023700	V0	0.0007532	V0
Manganese	0.0006949	0.0001051	V0	0.0000693	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000015	V0	0.0000007	V0	0.0000008	V0
Nickel	0.0005429	0.0002688	V0	0.0001713	V0	0.0000718	V0
Niobium	0.0000202	0.0000015	V0	0.0000012	V0	0.0000011	V0
Palladium	0.0000632	0.0000032	V0	0.0000000	V1	0.0000049	V0
Phosphorus	0.0459574	0.0098633	V0	0.0086670	V0	0.0085294	V0
Platinum	0.0000088	0.0000005	V0	0.0000010	V0	0.0000019	V0
Potassium	0.0061261	0.0106524	V0	0.0048617	V0	0.0004665	V0
Praseodymium	0.0000070	0.0000005	V0	0.0000000	V1	0.0000007	V0
Rubidium	0.0000184	0.0000083	V0	0.0000042	V0	0.0000015	V0
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000007	V0
Selenium	0.0003366	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000005	V0	0.0000000	V1	0.0000010	V0
Sodium	0.0169447	0.0048299	V0	0.0020178	V0	0.0009380	V0
Strontium	0.0003375	0.0000516	V0	0.0000268	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000005	V0
Thorium	0.0000059	0.0000005	V0	0.0000000	V1	0.0000008	V0
Tin	0.0004414	0.0000420	V0	0.0000187	V0	0.0000000	V1
Titanium	0.0015201	0.0008424	V0	0.0004628	V0	0.0003081	V0
Tungsten	0.0000938	0.0000378	V0	0.0000708	V0	0.0000362	V0
Uranium	0.0000048	0.0000004	V0	0.0000000	V1	0.0000008	V0
Vanadium	0.0007697	0.0001177	V0	0.0001079	V0	0.0000376	V0
Zinc	0.0055897	0.0006395	V0	0.0006993	V0	0.0003686	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**09-Sep**		**09-Sep**		**09-Sep**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	1.55	V4	2.37	V0	0.01	V1
Aluminum	0.1380326	0.0369141	V0	0.0109299	V0	0.0000000	V1
Antimony	0.0001784	0.0000083	V0	0.0000472	V0	0.0000000	V1
Arsenic	0.0001060	0.0000256	V0	0.0002235	V0	0.0000000	V1
Barium	0.0092847	0.0004007	V0	0.0004575	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000121	V0	0.0000012	V0	0.0000180	V0
Cadmium	0.0000174	0.0000000	V1	0.0000035	V0	0.0000012	V0
Calcium	0.4112124	0.0531378	V0	0.0246650	V0	0.0000000	V1
Cerium	0.0000174	0.0000350	V0	0.0000128	V0	0.0000018	V0
Cesium	0.0000100	0.0000021	V0	0.0000000	V1	0.0000014	V0
Chromium	0.0022262	0.0001794	V0	0.0001889	V0	0.0000000	V1
Cobalt	0.0000273	0.0000383	V0	0.0000458	V0	0.0000122	V0
Copper	0.0017171	0.0007680	V0	0.0003919	V0	0.0001356	V0
Iron	0.0393063	0.0274600	V0	0.0139978	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000169	V0	0.0000051	V0	0.0000017	V0
Lead	0.0008577	0.0000000	V1	0.0000390	V0	0.0000000	V1
Lithium	0.0000374	0.0000342	V0	0.0000103	V0	0.0000036	V0
Magnesium	0.0091409	0.0087317	V0	0.0038989	V0	0.0010096	V0
Manganese	0.0006949	0.0005237	V0	0.0002346	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000699	V0	0.0000623	V0	0.0000000	V1
Neodymium	0.0000140	0.0000153	V0	0.0000042	V0	0.0000017	V0
Nickel	0.0005429	0.0002091	V0	0.0002145	V0	0.0001051	V0
Niobium	0.0000202	0.0000052	V0	0.0000019	V0	0.0000027	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000075	V0
Phosphorus	0.0459574	0.0091180	V0	0.0079735	V0	0.0066301	V0
Platinum	0.0000088	0.0000057	V0	0.0000000	V1	0.0000020	V0
Potassium	0.0061261	0.0154410	V0	0.0086604	V0	0.0005441	V0
Praseodymium	0.0000070	0.0000035	V0	0.0000004	V0	0.0000015	V0
Rubidium	0.0000184	0.0000477	V0	0.0000196	V0	0.0000029	V0
Samarium	0.0000133	0.0000021	V0	0.0000000	V1	0.0000013	V0
Selenium	0.0003366	0.0000426	V0	0.0000255	V0	0.0000000	V1
Silicon	0.7676322	0.0515097	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1	0.0000017	V0
Sodium	0.0169447	0.0069272	V0	0.0037812	V0	0.0011148	V0
Strontium	0.0003375	0.0001439	V0	0.0000690	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000011	V0
Thorium	0.0000059	0.0000034	V0	0.0000000	V1	0.0000010	V0
Tin	0.0004414	0.0000401	V0	0.0000597	V0	0.0000000	V1
Titanium	0.0015201	0.0025346	V0	0.0007614	V0	0.0004495	V0
Tungsten	0.0000938	0.0000633	V0	0.0000486	V0	0.0000218	V0
Uranium	0.0000048	0.0000012	V0	0.0000000	V1	0.0000015	V0
Vanadium	0.0007697	0.0002334	V0	0.0001643	V0	0.0000000	V1
Zinc	0.0055897	0.0011275	V0	0.0011045	V0	0.0003416	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		09-Sep		09-Sep		09-Sep	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.99	V0	1.43	V0	0.01	V1
Aluminum	0.1380326	0.0160253	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000796	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0012414	V0	0.0000294	V0	0.0000000	V1
Barium	0.0092847	0.0010781	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000062	V0	0.0000473	V0	0.0000180	V0
Cadmium	0.0000174	0.0000119	V0	0.0000113	V0	0.0000012	V0
Calcium	0.4112124	0.0421936	V0	0.0247369	V0	0.0000000	V1
Cerium	0.0000174	0.0000264	V0	0.0000028	V0	0.0000018	V0
Cesium	0.0000100	0.0000011	V0	0.0000000	V1	0.0000014	V0
Chromium	0.0022262	0.0001665	V0	0.0001134	V0	0.0000000	V1
Cobalt	0.0000273	0.0000561	V0	0.0000080	V0	0.0000122	V0
Copper	0.0017171	0.0007249	V0	0.0001985	V0	0.0001356	V0
Iron	0.0393063	0.0302008	V0	0.0047034	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000109	V0	0.0000008	V0	0.0000017	V0
Lead	0.0008577	0.0000691	V0	0.0000774	V0	0.0000000	V1
Lithium	0.0000374	0.0000205	V0	0.0000041	V0	0.0000036	V0
Magnesium	0.0091409	0.0066937	V0	0.0018520	V0	0.0010096	V0
Manganese	0.0006949	0.0006123	V0	0.0001116	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001595	V0	0.0000480	V0	0.0000000	V1
Neodymium	0.0000140	0.0000085	V0	0.0000000	V1	0.0000017	V0
Nickel	0.0005429	0.0002681	V0	0.0001720	V0	0.0001051	V0
Niobium	0.0000202	0.0000039	V0	0.0000009	V0	0.0000027	V0
Palladium	0.0000632	0.0000047	V0	0.0000000	V1	0.0000075	V0
Phosphorus	0.0459574	0.0092775	V0	0.0086674	V0	0.0066301	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000020	V0
Potassium	0.0061261	0.0207187	V0	0.0102608	V0	0.0005441	V0
Praseodymium	0.0000070	0.0000021	V0	0.0000000	V1	0.0000015	V0
Rubidium	0.0000184	0.0000327	V0	0.0000081	V0	0.0000029	V0
Samarium	0.0000133	0.0000014	V0	0.0000000	V1	0.0000013	V0
Selenium	0.0003366	0.0000393	V0	0.0000151	V0	0.0000000	V1
Silicon	0.7676322	0.0422077	V0	0.0376705	V0	0.0000000	V1
Silver	0.0000100	0.0000009	V0	0.0000000	V1	0.0000017	V0
Sodium	0.0169447	0.0057265	V0	0.0027526	V0	0.0011148	V0
Strontium	0.0003375	0.0001374	V0	0.0000285	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000007	V0	0.0000000	V1	0.0000011	V0
Thorium	0.0000059	0.0000016	V0	0.0000000	V1	0.0000010	V0
Tin	0.0004414	0.0000762	V0	0.0000563	V0	0.0000000	V1
Titanium	0.0015201	0.0012336	V0	0.0003878	V0	0.0004495	V0
Tungsten	0.0000938	0.0000402	V0	0.0000000	V1	0.0000218	V0
Uranium	0.0000048	0.0000011	V0	0.0000000	V1	0.0000015	V0
Vanadium	0.0007697	0.0006874	V0	0.0002007	V0	0.0000000	V1
Zinc	0.0055897	0.0017281	V0	0.0013775	V0	0.0003416	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**15-Sep**		**15-Sep**		**15-Sep**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**23.9**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	4.51	V0	4.07	V6	0.06	V0
Aluminum	0.1380326	0.0687085	V0	0.0297038	V6	0.0000000	V1
Antimony	0.0001784	0.0000933	V0	0.0000830	V6	0.0000000	V1
Arsenic	0.0001060	0.0001044	V0	0.0013499	V6	0.0000000	V1
Barium	0.0092847	0.0006297	V0	0.0009563	V6	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V6	0.0000000	V1
Bismuth	0.0000093	0.0000022	V0	0.0000398	V6	0.0000098	V0
Cadmium	0.0000174	0.0000021	V0	0.0000143	V6	0.0000000	V1
Calcium	0.4112124	0.2042032	V0	0.0584723	V6	0.0000000	V1
Cerium	0.0000174	0.0000728	V0	0.0000381	V6	0.0000000	V1
Cesium	0.0000100	0.0000042	V0	0.0000011	V6	0.0000000	V1
Chromium	0.0022262	0.0002780	V0	0.0002129	V6	0.0000000	V1
Cobalt	0.0000273	0.0000603	V0	0.0000782	V6	0.0000175	V0
Copper	0.0017171	0.0009948	V0	0.0006018	V6	0.0001446	V0
Iron	0.0393063	0.0580109	V0	0.0315758	V6	0.0000000	V1
Lanthanum	0.0000130	0.0000337	V0	0.0000153	V6	0.0000000	V1
Lead	0.0008577	0.0000660	V0	0.0000850	V6	0.0000000	V1
Lithium	0.0000374	0.0000840	V0	0.0000222	V6	0.0000027	V0
Magnesium	0.0091409	0.0145188	V0	0.0097476	V6	0.0013441	V0
Manganese	0.0006949	0.0013970	V0	0.0005658	V6	0.0000000	V1
Molybdenum	0.0007116	0.0000779	V0	0.0000484	V6	0.0000000	V1
Neodymium	0.0000140	0.0000289	V0	0.0000120	V6	0.0000000	V1
Nickel	0.0005429	0.0007510	V0	0.0002356	V6	0.0000672	V0
Niobium	0.0000202	0.0000113	V0	0.0000040	V6	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V6	0.0000000	V1
Phosphorus	0.0459574	0.0104725	V0	0.0101138	V6	0.0089474	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V6	0.0000005	V0
Potassium	0.0061261	0.0247554	V0	0.0224151	V6	0.0005252	V0
Praseodymium	0.0000070	0.0000070	V0	0.0000024	V6	0.0000000	V1
Rubidium	0.0000184	0.0000893	V0	0.0000466	V6	0.0000010	V0
Samarium	0.0000133	0.0000046	V0	0.0000013	V6	0.0000000	V1
Selenium	0.0003366	0.0000767	V0	0.0000464	V6	0.0000000	V1
Silicon	0.7676322	0.1894525	V0	0.0750836	V6	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000012	V6	0.0000000	V1
Sodium	0.0169447	0.0098299	V0	0.0108466	V6	0.0008249	V0
Strontium	0.0003375	0.0003610	V0	0.0001874	V6	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V6	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V6	0.0000000	V1
Thorium	0.0000059	0.0000078	V0	0.0000025	V6	0.0000000	V1
Tin	0.0004414	0.0000528	V0	0.0001044	V6	0.0000000	V1
Titanium	0.0015201	0.0029316	V0	0.0016327	V6	0.0003975	V0
Tungsten	0.0000938	0.0000540	V0	0.0000664	V6	0.0000447	V0
Uranium	0.0000048	0.0000020	V0	0.0000007	V6	0.0000000	V1
Vanadium	0.0007697	0.0003573	V0	0.0001906	V6	0.0000000	V1
Zinc	0.0055897	0.0017913	V0	0.0016083	V6	0.0003807	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		15-Sep		15-Sep		15-Sep	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		23.6		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.06	V0	3.34	V0	0.06	V0
Aluminum	0.1380326	0.0283057	V0	0.0095873	V0	0.0000000	V1
Antimony	0.0001784	0.0000996	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0000620	V0	0.0000638	V0	0.0000000	V1
Barium	0.0092847	0.0015375	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000036	V0	0.0000015	V0	0.0000098	V0
Cadmium	0.0000174	0.0000030	V0	0.0000013	V0	0.0000000	V1
Calcium	0.4112124	0.0569794	V0	0.0244905	V0	0.0000000	V1
Cerium	0.0000174	0.0000413	V0	0.0000098	V0	0.0000000	V1
Cesium	0.0000100	0.0000011	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0001930	V0	0.0002421	V0	0.0000000	V1
Cobalt	0.0000273	0.0000188	V0	0.0000724	V0	0.0000175	V0
Copper	0.0017171	0.0008089	V0	0.0006010	V0	0.0001446	V0
Iron	0.0393063	0.0442655	V0	0.0104407	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000194	V0	0.0000041	V0	0.0000000	V1
Lead	0.0008577	0.0001300	V0	0.0000390	V0	0.0000000	V1
Lithium	0.0000374	0.0000250	V0	0.0000078	V0	0.0000027	V0
Magnesium	0.0091409	0.0111709	V0	0.0045658	V0	0.0013441	V0
Manganese	0.0006949	0.0008091	V0	0.0002501	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000683	V0	0.0000299	V0	0.0000000	V1
Neodymium	0.0000140	0.0000146	V0	0.0000043	V0	0.0000000	V1
Nickel	0.0005429	0.0003183	V0	0.0001898	V0	0.0000672	V0
Niobium	0.0000202	0.0000108	V0	0.0000014	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0092349	V0	0.0097607	V0	0.0089474	V0
Platinum	0.0000088	0.0000000	V1	0.0000004	V0	0.0000005	V0
Potassium	0.0061261	0.0188960	V0	0.0116707	V0	0.0005252	V0
Praseodymium	0.0000070	0.0000033	V0	0.0000005	V0	0.0000000	V1
Rubidium	0.0000184	0.0000433	V0	0.0000184	V0	0.0000010	V0
Samarium	0.0000133	0.0000016	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000459	V0	0.0000224	V0	0.0000000	V1
Silicon	0.7676322	0.0640953	V0	0.1481405	V0	0.0000000	V1
Silver	0.0000100	0.0000013	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0086722	V0	0.0069519	V0	0.0008249	V0
Strontium	0.0003375	0.0001926	V0	0.0000514	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000029	V0	0.0000004	V0	0.0000000	V1
Tin	0.0004414	0.0000936	V0	0.0000000	V1	0.0000000	V1
Titanium	0.0015201	0.0015476	V0	0.0005768	V0	0.0003975	V0
Tungsten	0.0000938	0.0000214	V0	0.0001035	V0	0.0000447	V0
Uranium	0.0000048	0.0000007	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0002261	V0	0.0001419	V0	0.0000000	V1
Zinc	0.0055897	0.0018966	V0	0.0007407	V0	0.0003807	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**21-Sep**		**21-Sep**		**21-Sep**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**-9999**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.16	V0	3.06	V6	0.45	V0
Aluminum	0.1380326	0.0222164	V0	0.0117071	V6	0.0000000	V1
Antimony	0.0001784	0.0000625	V0	0.0000492	V6	0.0000000	V1
Arsenic	0.0001060	0.0000252	V0	0.0000244	V6	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0005772	V6	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V6	0.0000000	V1
Bismuth	0.0000093	0.0000032	V0	0.0000035	V6	0.0000032	V0
Cadmium	0.0000174	0.0000111	V0	0.0000025	V6	0.0000000	V1
Calcium	0.4112124	0.0464776	V0	0.0244777	V6	0.0000000	V1
Cerium	0.0000174	0.0000239	V0	0.0000179	V6	0.0000009	V0
Cesium	0.0000100	0.0000014	V0	0.0000006	V6	0.0000000	V1
Chromium	0.0022262	0.0001130	V0	0.0000961	V6	0.0002060	V0
Cobalt	0.0000273	0.0000480	V0	0.0000978	V6	0.0000170	V0
Copper	0.0017171	0.0005704	V0	0.0004271	V6	0.0002377	V0
Iron	0.0393063	0.0273419	V0	0.0162971	V6	0.0022028	V0
Lanthanum	0.0000130	0.0000118	V0	0.0000131	V6	0.0000000	V1
Lead	0.0008577	0.0001792	V0	0.0000825	V6	0.0000000	V1
Lithium	0.0000374	0.0000222	V0	0.0000090	V6	0.0000000	V1
Magnesium	0.0091409	0.0055140	V0	0.0040598	V6	0.0006628	V0
Manganese	0.0006949	0.0004879	V0	0.0002521	V6	0.0000000	V1
Molybdenum	0.0007116	0.0000401	V0	0.0000000	V6	0.0000000	V1
Neodymium	0.0000140	0.0000094	V0	0.0000052	V6	0.0000000	V1
Nickel	0.0005429	0.0001496	V0	0.0001650	V6	0.0001381	V0
Niobium	0.0000202	0.0000044	V0	0.0000025	V6	0.0000012	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V6	0.0000000	V1
Phosphorus	0.0459574	0.0103495	V0	0.0096697	V6	0.0078246	V0
Platinum	0.0000088	0.0000000	V1	0.0000012	V6	0.0000015	V0
Potassium	0.0061261	0.0161482	V0	0.0076346	V6	0.0003874	V0
Praseodymium	0.0000070	0.0000024	V0	0.0000020	V6	0.0000000	V1
Rubidium	0.0000184	0.0000357	V0	0.0000160	V6	0.0000015	V0
Samarium	0.0000133	0.0000015	V0	0.0000017	V6	0.0000000	V1
Selenium	0.0003366	0.0000376	V0	0.0000291	V6	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V6	0.0000000	V1
Silver	0.0000100	0.0000006	V0	0.0000010	V6	0.0000000	V1
Sodium	0.0169447	0.0095537	V0	0.0039345	V6	0.0007448	V0
Strontium	0.0003375	0.0001050	V0	0.0000759	V6	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V6	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000013	V6	0.0000000	V1
Thorium	0.0000059	0.0000027	V0	0.0000021	V6	0.0000003	V0
Tin	0.0004414	0.0000433	V0	0.0000705	V6	0.0000000	V1
Titanium	0.0015201	0.0010342	V0	0.0008760	V6	0.0003714	V0
Tungsten	0.0000938	0.0000524	V0	0.0000578	V6	0.0000357	V0
Uranium	0.0000048	0.0000007	V0	0.0000012	V6	0.0000002	V0
Vanadium	0.0007697	0.0000850	V0	0.0000000	V6	0.0000000	V1
Zinc	0.0055897	0.0010785	V0	0.0010996	V6	0.0003583	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		21-Sep		21-Sep		21-Sep	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.77	V0	2.54	V0	0.45	V0
Aluminum	0.1380326	0.0525223	V0	0.0110625	V0	0.0000000	V1
Antimony	0.0001784	0.0003436	V0	0.0001048	V0	0.0000000	V1
Arsenic	0.0001060	0.0005360	V0	0.0000759	V0	0.0000000	V1
Barium	0.0092847	0.0033603	V0	0.0008194	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000115	V0	0.0000012	V0	0.0000032	V0
Cadmium	0.0000174	0.0000090	V0	0.0000047	V0	0.0000000	V1
Calcium	0.4112124	0.1120495	V0	0.0242021	V0	0.0000000	V1
Cerium	0.0000174	0.0000837	V0	0.0000115	V0	0.0000009	V0
Cesium	0.0000100	0.0000031	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0003101	V0	0.0003031	V0	0.0002060	V0
Cobalt	0.0000273	0.0000429	V0	0.0000601	V0	0.0000170	V0
Copper	0.0017171	0.0018862	V0	0.0002633	V0	0.0002377	V0
Iron	0.0393063	0.0902757	V0	0.0408041	V0	0.0022028	V0
Lanthanum	0.0000130	0.0000350	V0	0.0000047	V0	0.0000000	V1
Lead	0.0008577	0.0002498	V0	0.0000560	V0	0.0000000	V1
Lithium	0.0000374	0.0000429	V0	0.0000068	V0	0.0000000	V1
Magnesium	0.0091409	0.0195820	V0	0.0036896	V0	0.0006628	V0
Manganese	0.0006949	0.0017178	V0	0.0004304	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000827	V0	0.0000345	V0	0.0000000	V1
Neodymium	0.0000140	0.0000280	V0	0.0000030	V0	0.0000000	V1
Nickel	0.0005429	0.0002974	V0	0.0002063	V0	0.0001381	V0
Niobium	0.0000202	0.0000082	V0	0.0000018	V0	0.0000012	V0
Palladium	0.0000632	0.0000106	V0	0.0000101	V0	0.0000000	V1
Phosphorus	0.0459574	0.0120113	V0	0.0120312	V0	0.0078246	V0
Platinum	0.0000088	0.0000000	V1	0.0000012	V0	0.0000015	V0
Potassium	0.0061261	0.0330111	V0	0.0074095	V0	0.0003874	V0
Praseodymium	0.0000070	0.0000075	V0	0.0000006	V0	0.0000000	V1
Rubidium	0.0000184	0.0000709	V0	0.0000152	V0	0.0000015	V0
Samarium	0.0000133	0.0000044	V0	0.0000006	V0	0.0000000	V1
Selenium	0.0003366	0.0000880	V0	0.0000306	V0	0.0000000	V1
Silicon	0.7676322	0.2250618	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000010	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0128997	V0	0.0034599	V0	0.0007448	V0
Strontium	0.0003375	0.0003548	V0	0.0000815	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000006	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000069	V0	0.0000008	V0	0.0000003	V0
Tin	0.0004414	0.0002328	V0	0.0000343	V0	0.0000000	V1
Titanium	0.0015201	0.0031321	V0	0.0006850	V0	0.0003714	V0
Tungsten	0.0000938	0.0000310	V0	0.0000903	V0	0.0000357	V0
Uranium	0.0000048	0.0000021	V0	0.0000000	V1	0.0000002	V0
Vanadium	0.0007697	0.0002349	V0	0.0001197	V0	0.0000000	V1
Zinc	0.0055897	0.0026684	V0	0.0010458	V0	0.0003583	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Athabasca Valley**		**Travel Blank**	
Station #		**AMS 1**		**AMS 7**			
Sample Date		**27-Sep**		**27-Sep**		**27-Sep**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.33	V0	2.07	V0	0.02	V1
Aluminum	0.1380326	0.0356928	V0	0.0230841	V0	0.0000000	V1
Antimony	0.0001784	0.0000173	V0	0.0000827	V0	0.0000000	V1
Arsenic	0.0001060	0.0000227	V0	0.0000264	V0	0.0000000	V1
Barium	0.0092847	0.0004564	V0	0.0012431	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000230	V0	0.0000129	V0	0.0000121	V0
Cadmium	0.0000174	0.0000071	V0	0.0000026	V0	0.0000000	V1
Calcium	0.4112124	0.0656305	V0	0.0468648	V0	0.0000000	V1
Cerium	0.0000174	0.0000372	V0	0.0000250	V0	0.0000000	V1
Cesium	0.0000100	0.0000021	V0	0.0000006	V0	0.0000000	V1
Chromium	0.0022262	0.0002134	V0	0.0002680	V0	0.0003432	V0
Cobalt	0.0000273	0.0000327	V0	0.0000396	V0	0.0000387	V0
Copper	0.0017171	0.0010848	V0	0.0010677	V0	0.0001079	V0
Iron	0.0393063	0.0339684	V0	0.0283907	V0	0.0026293	V0
Lanthanum	0.0000130	0.0000218	V0	0.0000147	V0	0.0000000	V1
Lead	0.0008577	0.0000568	V0	0.0000537	V0	0.0000000	V1
Lithium	0.0000374	0.0000246	V0	0.0000118	V0	0.0000000	V1
Magnesium	0.0091409	0.0083196	V0	0.0071274	V0	0.0009578	V0
Manganese	0.0006949	0.0007506	V0	0.0006082	V0	0.0000306	V0
Molybdenum	0.0007116	0.0000410	V0	0.0000340	V0	0.0000000	V1
Neodymium	0.0000140	0.0000143	V0	0.0000089	V0	0.0000000	V1
Nickel	0.0005429	0.0002102	V0	0.0002726	V0	0.0003272	V0
Niobium	0.0000202	0.0000043	V0	0.0000034	V0	0.0000025	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000088	V0
Phosphorus	0.0459574	0.0131807	V0	0.0133833	V0	0.0119936	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000015	V0
Potassium	0.0061261	0.0291018	V0	0.0136379	V0	0.0005028	V0
Praseodymium	0.0000070	0.0000037	V0	0.0000021	V0	0.0000000	V1
Rubidium	0.0000184	0.0000624	V0	0.0000273	V0	0.0000000	V1
Samarium	0.0000133	0.0000026	V0	0.0000010	V0	0.0000000	V1
Selenium	0.0003366	0.0000530	V0	0.0000488	V0	0.0000166	V0
Silicon	0.7676322	0.1047961	V0	0.0785546	V0	0.0000000	V1
Silver	0.0000100	0.0000010	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0082345	V0	0.0081711	V0	0.0010232	V0
Strontium	0.0003375	0.0001551	V0	0.0001356	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000006	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000044	V0	0.0000027	V0	0.0000000	V1
Tin	0.0004414	0.0000472	V0	0.0000866	V0	0.0000000	V1
Titanium	0.0015201	0.0013833	V0	0.0016276	V0	0.0002954	V0
Tungsten	0.0000938	0.0000315	V0	0.0000673	V0	0.0000399	V0
Uranium	0.0000048	0.0000009	V0	0.0000005	V0	0.0000000	V1
Vanadium	0.0007697	0.0001373	V0	0.0000469	V0	0.0000000	V1
Zinc	0.0055897	0.0019915	V0	0.0012744	V0	0.0004616	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		**Anzac**		**Travel Blank**	
Station #		**AMS 14**			
Sample Date		**27-Sep**		**27-Sep**	
Particulate Size		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	1.70	V4	0.02	V1
Aluminum	0.1380326	0.0191292	V0	0.0000000	V1
Antimony	0.0001784	0.0000095	V0	0.0000000	V1
Arsenic	0.0001060	0.0000811	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000085	V0	0.0000121	V0
Cadmium	0.0000174	0.0000016	V0	0.0000000	V1
Calcium	0.4112124	0.0357090	V0	0.0000000	V1
Cerium	0.0000174	0.0000224	V0	0.0000000	V1
Cesium	0.0000100	0.0000007	V0	0.0000000	V1
Chromium	0.0022262	0.0001424	V0	0.0003432	V0
Cobalt	0.0000273	0.0000458	V0	0.0000387	V0
Copper	0.0017171	0.0002606	V0	0.0001079	V0
Iron	0.0393063	0.0194171	V0	0.0026293	V0
Lanthanum	0.0000130	0.0000122	V0	0.0000000	V1
Lead	0.0008577	0.0000454	V0	0.0000000	V1
Lithium	0.0000374	0.0000093	V0	0.0000000	V1
Magnesium	0.0091409	0.0054954	V0	0.0009578	V0
Manganese	0.0006949	0.0005283	V0	0.0000306	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000080	V0	0.0000000	V1
Nickel	0.0005429	0.0001574	V0	0.0003272	V0
Niobium	0.0000202	0.0000035	V0	0.0000025	V0
Palladium	0.0000632	0.0000056	V0	0.0000088	V0
Phosphorus	0.0459574	0.0124923	V0	0.0119936	V0
Platinum	0.0000088	0.0000008	V0	0.0000015	V0
Potassium	0.0061261	0.0114253	V0	0.0005028	V0
Praseodymium	0.0000070	0.0000019	V0	0.0000000	V1
Rubidium	0.0000184	0.0000254	V0	0.0000000	V1
Samarium	0.0000133	0.0000013	V0	0.0000000	V1
Selenium	0.0003366	0.0000457	V0	0.0000166	V0
Silicon	0.7676322	0.0592664	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0073988	V0	0.0010232	V0
Strontium	0.0003375	0.0000922	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000004	V0	0.0000000	V1
Thorium	0.0000059	0.0000028	V0	0.0000000	V1
Tin	0.0004414	0.0000248	V0	0.0000000	V1
Titanium	0.0015201	0.0009791	V0	0.0002954	V0
Tungsten	0.0000938	0.0000504	V0	0.0000399	V0
Uranium	0.0000048	0.0000005	V0	0.0000000	V1
Vanadium	0.0007697	0.0000363	V0	0.0000000	V1
Zinc	0.0055897	0.0005411	V0	0.0004616	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Patricia McInnes		Travel Blank	
Station #		AMS 6			
Sample Date		28-Sep		28-Sep	
Particulate Size		PM2.5			
Total Air Volume (m³)		23.9		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.55	V6	0.02	V1
Aluminum	0.1380326	0.0383470	V6	0.0000000	V1
Antimony	0.0001784	0.0001205	V6	0.0000000	V1
Arsenic	0.0001060	0.0000374	V6	0.0000000	V1
Barium	0.0092847	0.0013693	V6	0.0000000	V1
Beryllium	0.0000946	0.0000000	V6	0.0000000	V1
Bismuth	0.0000093	0.0000043	V6	0.0000121	V0
Cadmium	0.0000174	0.0000115	V6	0.0000000	V1
Calcium	0.4112124	0.0727239	V6	0.0000000	V1
Cerium	0.0000174	0.0000598	V6	0.0000000	V1
Cesium	0.0000100	0.0000021	V6	0.0000000	V1
Chromium	0.0022262	0.0002170	V6	0.0003432	V0
Cobalt	0.0000273	0.0000294	V6	0.0000387	V0
Copper	0.0017171	0.0010030	V6	0.0001079	V0
Iron	0.0393063	0.0471748	V6	0.0026293	V0
Lanthanum	0.0000130	0.0000277	V6	0.0000000	V1
Lead	0.0008577	0.0000824	V6	0.0000000	V1
Lithium	0.0000374	0.0000271	V6	0.0000000	V1
Magnesium	0.0091409	0.0140725	V6	0.0009578	V0
Manganese	0.0006949	0.0009106	V6	0.0000306	V0
Molybdenum	0.0007116	0.0000393	V6	0.0000000	V1
Neodymium	0.0000140	0.0000186	V6	0.0000000	V1
Nickel	0.0005429	0.0001977	V6	0.0003272	V0
Niobium	0.0000202	0.0000057	V6	0.0000025	V0
Palladium	0.0000632	0.0000057	V6	0.0000088	V0
Phosphorus	0.0459574	0.0125934	V6	0.0119936	V0
Platinum	0.0000088	0.0000005	V6	0.0000015	V0
Potassium	0.0061261	0.0313196	V6	0.0005028	V0
Praseodymium	0.0000070	0.0000049	V6	0.0000000	V1
Rubidium	0.0000184	0.0000657	V6	0.0000000	V1
Samarium	0.0000133	0.0000028	V6	0.0000000	V1
Selenium	0.0003366	0.0000650	V6	0.0000166	V0
Silicon	0.7676322	0.1500823	V6	0.0000000	V1
Silver	0.0000100	0.0000014	V6	0.0000000	V1
Sodium	0.0169447	0.0126843	V6	0.0010232	V0
Strontium	0.0003375	0.0002493	V6	0.0000000	V1
Tantalum	0.0000394	0.0000000	V6	0.0000000	V1
Thallium	0.0000090	0.0000008	V6	0.0000000	V1
Thorium	0.0000059	0.0000054	V6	0.0000000	V1
Tin	0.0004414	0.0001219	V6	0.0000000	V1
Titanium	0.0015201	0.0020612	V6	0.0002954	V0
Tungsten	0.0000938	0.0000518	V6	0.0000399	V0
Uranium	0.0000048	0.0000011	V6	0.0000000	V1
Vanadium	0.0007697	0.0001635	V6	0.0000000	V1
Zinc	0.0055897	0.0027862	V6	0.0004616	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**03-Oct**		**03-Oct**		**03-Oct**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	1.37	V0	3.31	V0	0.32	V0
Aluminum	0.1380326	0.0000000	V1	0.0122209	V0	0.0000000	V1
Antimony	0.0001784	0.0000330	V0	0.0000549	V0	0.0000000	V1
Arsenic	0.0001060	0.0000104	V0	0.0002129	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0005851	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000039	V0	0.0000451	V0	0.0000386	V0
Cadmium	0.0000174	0.0000035	V0	0.0000112	V0	0.0000000	V1
Calcium	0.4112124	0.0242673	V0	0.0293274	V0	0.0000000	V1
Cerium	0.0000174	0.0000059	V0	0.0000185	V0	0.0000000	V1
Cesium	0.0000100	0.0000005	V0	0.0000010	V0	0.0000000	V1
Chromium	0.0022262	0.0001153	V0	0.0001863	V0	0.0000000	V1
Cobalt	0.0000273	0.0000248	V0	0.0000345	V0	0.0000258	V0
Copper	0.0017171	0.0006512	V0	0.0007759	V0	0.0002515	V0
Iron	0.0393063	0.0069935	V0	0.0180105	V0	0.0068362	V0
Lanthanum	0.0000130	0.0000027	V0	0.0000084	V0	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000429	V0	0.0000000	V1
Lithium	0.0000374	0.0000047	V0	0.0000101	V0	0.0000000	V1
Magnesium	0.0091409	0.0023129	V0	0.0050767	V0	0.0006217	V0
Manganese	0.0006949	0.0001713	V0	0.0003317	V0	0.0000856	V0
Molybdenum	0.0007116	0.0000000	V1	0.0001289	V0	0.0000000	V1
Neodymium	0.0000140	0.0000024	V0	0.0000061	V0	0.0000000	V1
Nickel	0.0005429	0.0001228	V0	0.0002179	V0	0.0005606	V0
Niobium	0.0000202	0.0000015	V0	0.0000037	V0	0.0000012	V0
Palladium	0.0000632	0.0000068	V0	0.0000159	V0	0.0000000	V1
Phosphorus	0.0459574	0.0095199	V0	0.0097087	V0	0.0090478	V0
Platinum	0.0000088	0.0000011	V0	0.0000016	V0	0.0000010	V0
Potassium	0.0061261	0.0055298	V0	0.0115892	V0	0.0008876	V0
Praseodymium	0.0000070	0.0000006	V0	0.0000017	V0	0.0000000	V1
Rubidium	0.0000184	0.0000116	V0	0.0000272	V0	0.0000009	V0
Samarium	0.0000133	0.0000000	V1	0.0000013	V0	0.0000009	V0
Selenium	0.0003366	0.0000000	V1	0.0000295	V0	0.0000000	V1
Silicon	0.7676322	0.0330234	V0	0.0665723	V0	0.0000000	V1
Silver	0.0000100	0.0000071	V0	0.0000037	V0	0.0000123	V0
Sodium	0.0169447	0.0027062	V0	0.0056559	V0	0.0009618	V0
Strontium	0.0003375	0.0000383	V0	0.0000878	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000005	V0	0.0000000	V1
Thorium	0.0000059	0.0000009	V0	0.0000019	V0	0.0000000	V1
Tin	0.0004414	0.0000327	V0	0.0000708	V0	0.0000000	V1
Titanium	0.0015201	0.0005734	V0	0.0008959	V0	0.0002192	V0
Tungsten	0.0000938	0.0000371	V0	0.0000398	V0	0.0000365	V0
Uranium	0.0000048	0.0000003	V0	0.0000007	V0	0.0000000	V1
Vanadium	0.0007697	0.0000000	V1	0.0000614	V0	0.0000000	V1
Zinc	0.0055897	0.0011131	V0	0.0014019	V0	0.0004513	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		03-Oct		03-Oct		03-Oct	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.45	V0	2.97	V0	0.32	V0
Aluminum	0.1380326	0.0253197	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0001382	V0	0.0000121	V0	0.0000000	V1
Arsenic	0.0001060	0.0000300	V0	0.0000261	V0	0.0000000	V1
Barium	0.0092847	0.0017849	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000136	V0	0.0000814	V0	0.0000386	V0
Cadmium	0.0000174	0.0000100	V0	0.0000133	V0	0.0000000	V1
Calcium	0.4112124	0.0597177	V0	0.0284752	V0	0.0000000	V1
Cerium	0.0000174	0.0000370	V0	0.0000043	V0	0.0000000	V1
Cesium	0.0000100	0.0000016	V0	0.0000006	V0	0.0000000	V1
Chromium	0.0022262	0.0002143	V0	0.0002041	V0	0.0000000	V1
Cobalt	0.0000273	0.0000609	V0	0.0000744	V0	0.0000258	V0
Copper	0.0017171	0.0011438	V0	0.0002652	V0	0.0002515	V0
Iron	0.0393063	0.0370317	V0	0.0051735	V0	0.0068362	V0
Lanthanum	0.0000130	0.0000157	V0	0.0000022	V0	0.0000000	V1
Lead	0.0008577	0.0000502	V0	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000188	V0	0.0000021	V0	0.0000000	V1
Magnesium	0.0091409	0.0091564	V0	0.0027580	V0	0.0006217	V0
Manganese	0.0006949	0.0006404	V0	0.0001183	V0	0.0000856	V0
Molybdenum	0.0007116	0.0000520	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000136	V0	0.0000015	V0	0.0000000	V1
Nickel	0.0005429	0.0002210	V0	0.0001759	V0	0.0005606	V0
Niobium	0.0000202	0.0000060	V0	0.0000027	V0	0.0000012	V0
Palladium	0.0000632	0.0000089	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0101439	V0	0.0087453	V0	0.0090478	V0
Platinum	0.0000088	0.0000016	V0	0.0000012	V0	0.0000010	V0
Potassium	0.0061261	0.0163869	V0	0.0140006	V0	0.0008876	V0
Praseodymium	0.0000070	0.0000034	V0	0.0000004	V0	0.0000000	V1
Rubidium	0.0000184	0.0000392	V0	0.0000242	V0	0.0000009	V0
Samarium	0.0000133	0.0000024	V0	0.0000000	V1	0.0000009	V0
Selenium	0.0003366	0.0000453	V0	0.0000269	V0	0.0000000	V1
Silicon	0.7676322	0.1312524	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000034	V0	0.0000047	V0	0.0000123	V0
Sodium	0.0169447	0.0058221	V0	0.0047692	V0	0.0009618	V0
Strontium	0.0003375	0.0002042	V0	0.0000368	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000008	V0	0.0000004	V0	0.0000000	V1
Thorium	0.0000059	0.0000034	V0	0.0000005	V0	0.0000000	V1
Tin	0.0004414	0.0001408	V0	0.0000298	V0	0.0000000	V1
Titanium	0.0015201	0.0017291	V0	0.0014470	V0	0.0002192	V0
Tungsten	0.0000938	0.0000830	V0	0.0000490	V0	0.0000365	V0
Uranium	0.0000048	0.0000015	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0000751	V0	0.0000000	V1	0.0000000	V1
Zinc	0.0055897	0.0020756	V0	0.0016251	V0	0.0004513	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**09-Oct**		**09-Oct**		**09-Oct**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	0.97	V4	1.18	V0	0.56	V0
Aluminum	0.1380326	0.0000000	V1	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000170	V0	0.0000254	V0	0.0000000	V1
Arsenic	0.0001060	0.0000227	V0	0.0000166	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000109	V0	0.0000045	V0	0.0000128	V0
Cadmium	0.0000174	0.0000025	V0	0.0000021	V0	0.0000000	V1
Calcium	0.4112124	0.0000000	V1	0.0216019	V0	0.0000000	V1
Cerium	0.0000174	0.0000047	V0	0.0000073	V0	0.0000000	V1
Cesium	0.0000100	0.0000005	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0000961	V0	0.0001533	V0	0.0001074	V0
Cobalt	0.0000273	0.0000305	V0	0.0000238	V0	0.0000397	V0
Copper	0.0017171	0.0002472	V0	0.0002612	V0	0.0001352	V0
Iron	0.0393063	0.0040804	V0	0.0098330	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000021	V0	0.0000031	V0	0.0000000	V1
Lead	0.0008577	0.0000640	V0	0.0000532	V0	0.0000000	V1
Lithium	0.0000374	0.0000024	V0	0.0000016	V0	0.0000000	V1
Magnesium	0.0091409	0.0014439	V0	0.0025879	V0	0.0005986	V0
Manganese	0.0006949	0.0002325	V0	0.0002221	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000019	V0	0.0000015	V0	0.0000000	V1
Nickel	0.0005429	0.0000933	V0	0.0001058	V0	0.0001530	V0
Niobium	0.0000202	0.0000014	V0	0.0000018	V0	0.0000012	V0
Palladium	0.0000632	0.0000000	V1	0.0000039	V0	0.0000085	V0
Phosphorus	0.0459574	0.0091083	V0	0.0083980	V0	0.0074225	V0
Platinum	0.0000088	0.0000008	V0	0.0000010	V0	0.0000012	V0
Potassium	0.0061261	0.0033103	V0	0.0071353	V0	0.0009192	V0
Praseodymium	0.0000070	0.0000006	V0	0.0000004	V0	0.0000000	V1
Rubidium	0.0000184	0.0000086	V0	0.0000133	V0	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000145	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000007	V0	0.0000008	V0	0.0000022	V0
Sodium	0.0169447	0.0022558	V0	0.0022334	V0	0.0012005	V0
Strontium	0.0003375	0.0000312	V0	0.0000327	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000006	V0	0.0000004	V0	0.0000000	V1
Tin	0.0004414	0.0000210	V0	0.0000443	V0	0.0000000	V1
Titanium	0.0015201	0.0006668	V0	0.0008712	V0	0.0002475	V0
Tungsten	0.0000938	0.0000307	V0	0.0000483	V0	0.0000539	V0
Uranium	0.0000048	0.0000013	V0	0.0000007	V0	0.0000000	V1
Vanadium	0.0007697	0.0000000	V1	0.0000399	V0	0.0000000	V1
Zinc	0.0055897	0.0010235	V0	0.0009737	V0	0.0003235	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		09-Oct		09-Oct		09-Oct	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	0.92	V4	0.40	V0	0.56	V0
Aluminum	0.1380326	0.0077824	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000451	V0	0.0000075	V0	0.0000000	V1
Arsenic	0.0001060	0.0000134	V0	0.0000106	V0	0.0000000	V1
Barium	0.0092847	0.0004783	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000049	V0	0.0001114	V0	0.0000128	V0
Cadmium	0.0000174	0.0000026	V0	0.0000018	V0	0.0000000	V1
Calcium	0.4112124	0.0205094	V0	0.0343710	V0	0.0000000	V1
Cerium	0.0000174	0.0000052	V0	0.0000012	V0	0.0000000	V1
Cesium	0.0000100	0.0000006	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0006889	V0	0.0002182	V0	0.0001074	V0
Cobalt	0.0000273	0.0001826	V0	0.0000344	V0	0.0000397	V0
Copper	0.0017171	0.0008037	V0	0.0003104	V0	0.0001352	V0
Iron	0.0393063	0.0092432	V0	0.0025693	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000022	V0	0.0000008	V0	0.0000000	V1
Lead	0.0008577	0.0000647	V0	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000031	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0029920	V0	0.0023584	V0	0.0005986	V0
Manganese	0.0006949	0.0002749	V0	0.0000508	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000886	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000017	V0	0.0000007	V0	0.0000000	V1
Nickel	0.0005429	0.0006989	V0	0.0002519	V0	0.0001530	V0
Niobium	0.0000202	0.0000022	V0	0.0000048	V0	0.0000012	V0
Palladium	0.0000632	0.0000031	V0	0.0000000	V1	0.0000085	V0
Phosphorus	0.0459574	0.0088868	V0	0.0076096	V0	0.0074225	V0
Platinum	0.0000088	0.0000014	V0	0.0000024	V0	0.0000012	V0
Potassium	0.0061261	0.0114414	V0	0.0033379	V0	0.0009192	V0
Praseodymium	0.0000070	0.0000005	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000219	V0	0.0000051	V0	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000152	V0	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0376109	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000031	V0	0.0000016	V0	0.0000022	V0
Sodium	0.0169447	0.0041519	V0	0.0030497	V0	0.0012005	V0
Strontium	0.0003375	0.0000482	V0	0.0000838	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000004	V0	0.0000000	V1
Thorium	0.0000059	0.0000005	V0	0.0000004	V0	0.0000000	V1
Tin	0.0004414	0.0000794	V0	0.0000514	V0	0.0000000	V1
Titanium	0.0015201	0.0006784	V0	0.0007720	V0	0.0002475	V0
Tungsten	0.0000938	0.0000391	V0	0.0000809	V0	0.0000539	V0
Uranium	0.0000048	0.0000007	V0	0.0000006	V0	0.0000000	V1
Vanadium	0.0007697	0.0000000	V1	0.0000000	V1	0.0000000	V1
Zinc	0.0055897	0.0018674	V0	0.0014912	V0	0.0003235	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		15-Oct		15-Oct		15-Oct	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	0.76	V0	1.31	V0	0.06	V0
Aluminum	0.1380326	0.0000000	V1	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000077	V0	0.0000312	V0	0.0000000	V1
Arsenic	0.0001060	0.0000121	V0	0.0000175	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000696	V0	0.0000106	V0	0.0000060	V0
Cadmium	0.0000174	0.0000012	V0	0.0000070	V0	0.0000000	V1
Calcium	0.4112124	0.0000000	V1	0.0218011	V0	0.0000000	V1
Cerium	0.0000174	0.0000035	V0	0.0000069	V0	0.0000000	V1
Cesium	0.0000100	0.0000000	V1	0.0000004	V0	0.0000000	V1
Chromium	0.0022262	0.0002445	V0	0.0001592	V0	0.0001238	V0
Cobalt	0.0000273	0.0000499	V0	0.0000277	V0	0.0000445	V0
Copper	0.0017171	0.0004688	V0	0.0003848	V0	0.0002277	V0
Iron	0.0393063	0.0100153	V0	0.0057503	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000014	V0	0.0000027	V0	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000050	V0	0.0000025	V0	0.0000000	V1
Magnesium	0.0091409	0.0016158	V0	0.0020572	V0	0.0009997	V0
Manganese	0.0006949	0.0004444	V0	0.0002219	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000615	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000009	V0	0.0000011	V0	0.0000000	V1
Nickel	0.0005429	0.0001743	V0	0.0001020	V0	0.0000756	V0
Niobium	0.0000202	0.0000018	V0	0.0000018	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000034	V0
Phosphorus	0.0459574	0.0085578	V0	0.0080169	V0	0.0000000	V1
Platinum	0.0000088	0.0000010	V0	0.0000007	V0	0.0000011	V0
Potassium	0.0061261	0.0023792	V0	0.0110218	V0	0.0007464	V0
Praseodymium	0.0000070	0.0000005	V0	0.0000004	V0	0.0000000	V1
Rubidium	0.0000184	0.0000051	V0	0.0000217	V0	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000170	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1	0.0000007	V0
Sodium	0.0169447	0.0061905	V0	0.0115936	V0	0.0000000	V1
Strontium	0.0003375	0.0000597	V0	0.0000469	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000003	V0	0.0000003	V0	0.0000000	V1
Tin	0.0004414	0.0000267	V0	0.0000779	V0	0.0000000	V1
Titanium	0.0015201	0.0004154	V0	0.0006918	V0	0.0004644	V0
Tungsten	0.0000938	0.0000360	V0	0.0000491	V0	0.0000725	V0
Uranium	0.0000048	0.0000082	V0	0.0000035	V0	0.0000000	V1
Vanadium	0.0007697	0.0000000	V1	0.0000000	V1	0.0000000	V1
Zinc	0.0055897	0.0010549	V0	0.0014805	V0	0.0003676	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		15-Oct		15-Oct		15-Oct	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.15	V4	0.49	V0	0.06	V0
Aluminum	0.1380326	0.0000000	V1	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000477	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0000106	V0	0.0000055	V0	0.0000000	V1
Barium	0.0092847	0.0005870	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000068	V0	0.0001957	V0	0.0000060	V0
Cadmium	0.0000174	0.0000030	V0	0.0000000	V1	0.0000000	V1
Calcium	0.4112124	0.0261243	V0	0.0240029	V0	0.0000000	V1
Cerium	0.0000174	0.0000103	V0	0.0000008	V0	0.0000000	V1
Cesium	0.0000100	0.0000005	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0001634	V0	0.0001945	V0	0.0001238	V0
Cobalt	0.0000273	0.0000174	V0	0.0000476	V0	0.0000445	V0
Copper	0.0017171	0.0008284	V0	0.0004731	V0	0.0002277	V0
Iron	0.0393063	0.0082979	V0	0.0050483	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000040	V0	0.0000000	V1	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000052	V0	0.0000017	V0	0.0000000	V1
Magnesium	0.0091409	0.0035023	V0	0.0021419	V0	0.0009997	V0
Manganese	0.0006949	0.0005828	V0	0.0000575	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000303	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000014	V0	0.0000000	V1	0.0000000	V1
Nickel	0.0005429	0.0001781	V0	0.0002118	V0	0.0000756	V0
Niobium	0.0000202	0.0000017	V0	0.0000015	V0	0.0000000	V1
Palladium	0.0000632	0.0000055	V0	0.0000039	V0	0.0000034	V0
Phosphorus	0.0459574	0.0022015	V0	0.0000000	V1	0.0000000	V1
Platinum	0.0000088	0.0000019	V0	0.0000010	V0	0.0000011	V0
Potassium	0.0061261	0.0150846	V0	0.0026936	V0	0.0007464	V0
Praseodymium	0.0000070	0.0000000	V1	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000274	V0	0.0000051	V0	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000153	V0	0.0000192	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000011	V0	0.0000000	V1	0.0000007	V0
Sodium	0.0169447	0.0152304	V0	0.0088624	V0	0.0000000	V1
Strontium	0.0003375	0.0000774	V0	0.0000215	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000000	V1	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0000780	V0	0.0000291	V0	0.0000000	V1
Titanium	0.0015201	0.0007335	V0	0.0014748	V0	0.0004644	V0
Tungsten	0.0000938	0.0000121	V0	0.0000447	V0	0.0000725	V0
Uranium	0.0000048	0.0000045	V0	0.0000036	V0	0.0000000	V1
Vanadium	0.0007697	0.0000000	V1	0.0000000	V1	0.0000000	V1
Zinc	0.0055897	0.0020137	V0	0.0010719	V0	0.0003676	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		21-Oct		21-Oct		21-Oct	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	7.37	V0	5.23	V0	0.10	V0
Aluminum	0.1380326	0.0154280	V0	0.0069140	V0	0.0000000	V1
Antimony	0.0001784	0.0000950	V0	0.0000845	V0	0.0000000	V1
Arsenic	0.0001060	0.0001133	V0	0.0000999	V0	0.0000000	V1
Barium	0.0092847	0.0004148	V0	0.0007333	V0	0.0006441	V0
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000056	V0	0.0000216	V0	0.0000042	V0
Cadmium	0.0000174	0.0003091	V0	0.0001714	V0	0.0000010	V0
Calcium	0.4112124	0.0337442	V0	0.0241169	V0	0.0196911	V0
Cerium	0.0000174	0.0000246	V0	0.0000162	V0	0.0000000	V1
Cesium	0.0000100	0.0000023	V0	0.0000016	V0	0.0000000	V1
Chromium	0.0022262	0.0001413	V0	0.0001951	V0	0.0001223	V0
Cobalt	0.0000273	0.0000622	V0	0.0000541	V0	0.0000067	V0
Copper	0.0017171	0.0014057	V0	0.0005666	V0	0.0002329	V0
Iron	0.0393063	0.0212638	V0	0.0120556	V0	0.0024437	V0
Lanthanum	0.0000130	0.0000308	V0	0.0000247	V0	0.0000000	V1
Lead	0.0008577	0.0002281	V0	0.0002281	V0	0.0000000	V1
Lithium	0.0000374	0.0000274	V0	0.0000223	V0	0.0000022	V0
Magnesium	0.0091409	0.0046372	V0	0.0045505	V0	0.0051936	V0
Manganese	0.0006949	0.0005765	V0	0.0002876	V0	0.0000468	V0
Molybdenum	0.0007116	0.0000477	V0	0.0000519	V0	0.0005883	V0
Neodymium	0.0000140	0.0000073	V0	0.0000029	V0	0.0000000	V1
Nickel	0.0005429	0.0001708	V0	0.0002363	V0	0.0001965	V0
Niobium	0.0000202	0.0000024	V0	0.0000023	V0	0.0000019	V0
Palladium	0.0000632	0.0000000	V1	0.0000028	V0	0.0000000	V1
Phosphorus	0.0459574	0.0028283	V0	0.0027442	V0	0.0000000	V1
Platinum	0.0000088	0.0000012	V0	0.0000014	V0	0.0000021	V0
Potassium	0.0061261	0.0730446	V0	0.0591737	V0	0.0015856	V0
Praseodymium	0.0000070	0.0000019	V0	0.0000008	V0	0.0000000	V1
Rubidium	0.0000184	0.0000922	V0	0.0000751	V0	0.0000041	V0
Samarium	0.0000133	0.0000011	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000581	V0	0.0000604	V0	0.0001238	V0
Silicon	0.7676322	0.0547106	V0	0.0785645	V0	0.0000000	V1
Silver	0.0000100	0.0000054	V0	0.0000056	V0	0.0000000	V1
Sodium	0.0169447	0.0069819	V0	0.0086778	V0	0.0011899	V0
Strontium	0.0003375	0.0000891	V0	0.0000805	V0	0.0000220	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000024	V0	0.0000020	V0	0.0000000	V1
Thorium	0.0000059	0.0000017	V0	0.0000006	V0	0.0000000	V1
Tin	0.0004414	0.0000733	V0	0.0000734	V0	0.0000000	V1
Titanium	0.0015201	0.0009105	V0	0.0007038	V0	0.0135541	V0
Tungsten	0.0000938	0.0000430	V0	0.0003084	V0	0.0000000	V1
Uranium	0.0000048	0.0000003	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0001585	V0	0.0001147	V0	0.0000000	V1
Zinc	0.0055897	0.0115267	V0	0.0081891	V0	0.0005507	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		21-Oct		21-Oct		21-Oct	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		23.5		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	6.16	V0	4.23	V0	0.10	V0
Aluminum	0.1380326	0.0294211	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0002992	V0	0.0000291	V0	0.0000000	V1
Arsenic	0.0001060	0.0001925	V0	0.0000580	V0	0.0000000	V1
Barium	0.0092847	0.0036291	V0	0.0000000	V1	0.0006441	V0
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000291	V0	0.0000056	V0	0.0000042	V0
Cadmium	0.0000174	0.0000814	V0	0.0000716	V0	0.0000010	V0
Calcium	0.4112124	0.0577736	V0	0.0000000	V1	0.0196911	V0
Cerium	0.0000174	0.0000531	V0	0.0000075	V0	0.0000000	V1
Cesium	0.0000100	0.0000029	V0	0.0000011	V0	0.0000000	V1
Chromium	0.0022262	0.0002331	V0	0.0001112	V0	0.0001223	V0
Cobalt	0.0000273	0.0000469	V0	0.0000251	V0	0.0000067	V0
Copper	0.0017171	0.0019559	V0	0.0002025	V0	0.0002329	V0
Iron	0.0393063	0.0660087	V0	0.0054143	V0	0.0024437	V0
Lanthanum	0.0000130	0.0000363	V0	0.0000136	V0	0.0000000	V1
Lead	0.0008577	0.0002352	V0	0.0001466	V0	0.0000000	V1
Lithium	0.0000374	0.0000319	V0	0.0000067	V0	0.0000022	V0
Magnesium	0.0091409	0.0108320	V0	0.0022485	V0	0.0051936	V0
Manganese	0.0006949	0.0009826	V0	0.0001623	V0	0.0000468	V0
Molybdenum	0.0007116	0.0000891	V0	0.0000000	V1	0.0005883	V0
Neodymium	0.0000140	0.0000173	V0	0.0000019	V0	0.0000000	V1
Nickel	0.0005429	0.0002096	V0	0.0001096	V0	0.0001965	V0
Niobium	0.0000202	0.0000066	V0	0.0000012	V0	0.0000019	V0
Palladium	0.0000632	0.0000124	V0	0.0000058	V0	0.0000000	V1
Phosphorus	0.0459574	0.0000000	V1	0.0022031	V0	0.0000000	V1
Platinum	0.0000088	0.0000016	V0	0.0000012	V0	0.0000021	V0
Potassium	0.0061261	0.0473125	V0	0.0327944	V0	0.0015856	V0
Praseodymium	0.0000070	0.0000046	V0	0.0000004	V0	0.0000000	V1
Rubidium	0.0000184	0.0000886	V0	0.0000471	V0	0.0000041	V0
Samarium	0.0000133	0.0000028	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000728	V0	0.0000310	V0	0.0001238	V0
Silicon	0.7676322	0.1500711	V0	0.0420214	V0	0.0000000	V1
Silver	0.0000100	0.0000037	V0	0.0000031	V0	0.0000000	V1
Sodium	0.0169447	0.0465644	V0	0.0049250	V0	0.0011899	V0
Strontium	0.0003375	0.0003069	V0	0.0000511	V0	0.0000220	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000016	V0	0.0000011	V0	0.0000000	V1
Thorium	0.0000059	0.0000047	V0	0.0000004	V0	0.0000000	V1
Tin	0.0004414	0.0003046	V0	0.0000425	V0	0.0000000	V1
Titanium	0.0015201	0.0022208	V0	0.0003903	V0	0.0135541	V0
Tungsten	0.0000938	0.0000836	V0	0.0001088	V0	0.0000000	V1
Uranium	0.0000048	0.0000013	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0001000	V0	0.0000361	V0	0.0000000	V1
Zinc	0.0055897	0.0061971	V0	0.0041827	V0	0.0005507	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		27-Oct		27-Oct		27-Oct	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.92	V0	2.90	V0	0.11	V0
Aluminum	0.1380326	0.0000000	V1	0.0118017	V0	0.0000000	V1
Antimony	0.0001784	0.0000088	V0	0.0000522	V0	0.0000000	V1
Arsenic	0.0001060	0.0000269	V0	0.0021576	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0006194	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000039	V0	0.0000202	V0	0.0000152	V0
Cadmium	0.0000174	0.0000193	V0	0.0000178	V0	0.0000013	V0
Calcium	0.4112124	0.0203339	V0	0.0317007	V0	0.0000000	V1
Cerium	0.0000174	0.0000050	V0	0.0000174	V0	0.0000008	V0
Cesium	0.0000100	0.0000000	V1	0.0000009	V0	0.0000005	V0
Chromium	0.0022262	0.0001412	V0	0.0004662	V0	0.0000000	V1
Cobalt	0.0000273	0.0000194	V0	-9999	M2	0.0000081	V0
Copper	0.0017171	-9999	M2	0.0010642	V0	0.0001607	V0
Iron	0.0393063	0.0079326	V0	0.0176520	V0	0.0024144	V0
Lanthanum	0.0000130	0.0000024	V0	0.0000078	V0	0.0000006	V0
Lead	0.0008577	0.0000543	V0	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000087	V0	0.0000124	V0	0.0000034	V0
Magnesium	0.0091409	0.0016730	V0	0.0045507	V0	0.0009755	V0
Manganese	0.0006949	0.0002896	V0	0.0004638	V0	0.0000326	V0
Molybdenum	0.0007116	0.0001100	V0	0.0000963	V0	0.0001421	V0
Neodymium	0.0000140	0.0000016	V0	0.0000054	V0	0.0000000	V1
Nickel	0.0005429	0.0001666	V0	-9999	M2	0.0001343	V0
Niobium	0.0000202	0.0000026	V0	0.0000030	V0	0.0000023	V0
Palladium	0.0000632	0.0000000	V1	0.0000030	V0	0.0000058	V0
Phosphorus	0.0459574	0.0000000	V1	0.0044117	V0	0.0000000	V1
Platinum	0.0000088	0.0000011	V0	0.0000008	V0	0.0000018	V0
Potassium	0.0061261	0.0151382	V0	0.0163967	V0	0.0015484	V0
Praseodymium	0.0000070	0.0000003	V0	0.0000015	V0	0.0000004	V0
Rubidium	0.0000184	0.0000181	V0	0.0000335	V0	0.0000042	V0
Samarium	0.0000133	0.0000000	V1	0.0000008	V0	0.0000000	V1
Selenium	0.0003366	0.0000276	V0	0.0000391	V0	0.0000324	V0
Silicon	0.7676322	0.0378204	V0	0.1149540	V0	0.0000000	V1
Silver	0.0000100	0.0000011	V0	0.0000013	V0	0.0000009	V0
Sodium	0.0169447	0.0021329	V0	0.0047428	V0	0.0010354	V0
Strontium	0.0003375	0.0000342	V0	0.0000833	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000003	V0	0.0000015	V0	0.0000000	V1
Tin	0.0004414	0.0000391	V0	0.0001003	V0	0.0000000	V1
Titanium	0.0015201	0.0024780	V0	0.0010753	V0	0.0040038	V0
Tungsten	0.0000938	0.0000102	V0	0.0000685	V0	0.0000090	V0
Uranium	0.0000048	0.0000000	V1	0.0000003	V0	0.0000000	V1
Vanadium	0.0007697	0.0000000	V1	0.0001068	V0	0.0000000	V1
Zinc	0.0055897	0.0051756	V0	0.0035379	V0	0.0004192	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		27-Oct		27-Oct		27-Oct	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.95	V0	2.23	V0	0.11	V0
Aluminum	0.1380326	0.0232589	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000756	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0000212	V0	0.0000104	V0	0.0000000	V1
Barium	0.0092847	0.0012819	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000035	V0	0.0000014	V0	0.0000152	V0
Cadmium	0.0000174	0.0000133	V0	0.0000082	V0	0.0000013	V0
Calcium	0.4112124	0.0471699	V0	0.0000000	V1	0.0000000	V1
Cerium	0.0000174	0.0000334	V0	0.0000043	V0	0.0000008	V0
Cesium	0.0000100	0.0000020	V0	0.0000000	V1	0.0000005	V0
Chromium	0.0022262	0.0001773	V0	0.0002539	V0	0.0000000	V1
Cobalt	0.0000273	0.0000658	V0	0.0000126	V0	0.0000081	V0
Copper	0.0017171	0.0010574	V0	0.0005392	V0	0.0001607	V0
Iron	0.0393063	0.0354474	V0	0.0027448	V0	0.0024144	V0
Lanthanum	0.0000130	0.0000154	V0	0.0000021	V0	0.0000006	V0
Lead	0.0008577	0.0000406	V0	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000225	V0	0.0000027	V0	0.0000034	V0
Magnesium	0.0091409	0.0079250	V0	0.0016791	V0	0.0009755	V0
Manganese	0.0006949	0.0007628	V0	0.0000645	V0	0.0000326	V0
Molybdenum	0.0007116	0.0000522	V0	0.0000000	V1	0.0001421	V0
Neodymium	0.0000140	0.0000135	V0	0.0000015	V0	0.0000000	V1
Nickel	0.0005429	0.0002522	V0	0.0002349	V0	0.0001343	V0
Niobium	0.0000202	0.0000047	V0	0.0000000	V1	0.0000023	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000058	V0
Phosphorus	0.0459574	0.0000000	V1	0.0000000	V1	0.0000000	V1
Platinum	0.0000088	0.0000009	V0	0.0000004	V0	0.0000018	V0
Potassium	0.0061261	0.0198093	V0	0.0060804	V0	0.0015484	V0
Praseodymium	0.0000070	0.0000033	V0	0.0000000	V1	0.0000004	V0
Rubidium	0.0000184	0.0000502	V0	0.0000084	V0	0.0000042	V0
Samarium	0.0000133	0.0000021	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000335	V0	0.0000198	V0	0.0000324	V0
Silicon	0.7676322	0.1544035	V0	0.0780033	V0	0.0000000	V1
Silver	0.0000100	0.0000013	V0	0.0000016	V0	0.0000009	V0
Sodium	0.0169447	0.0071437	V0	0.0012102	V0	0.0010354	V0
Strontium	0.0003375	0.0001630	V0	0.0000193	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000037	V0	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0001148	V0	0.0000000	V1	0.0000000	V1
Titanium	0.0015201	0.0015739	V0	0.0010766	V0	0.0040038	V0
Tungsten	0.0000938	0.0000739	V0	0.0000339	V0	0.0000090	V0
Uranium	0.0000048	0.0000008	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0001049	V0	0.0000000	V1	0.0000000	V1
Zinc	0.0055897	0.0030552	V0	0.0015498	V0	0.0004192	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**02-Nov**		**02-Nov**		**02-Nov**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	5.00	V0	4.86	V0	0.08	V0
Aluminum	0.1380326	0.0590797	V0	0.0220276	V0	0.0000000	V1
Antimony	0.0001784	0.0000365	V0	0.0000984	V0	0.0000000	V1
Arsenic	0.0001060	0.0000590	V0	0.0001343	V0	0.0000000	V1
Barium	0.0092847	0.0010207	V0	0.0010894	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000188	V0	0.0000066	V0	0.0000054	V0
Cadmium	0.0000174	0.0000176	V0	0.0000151	V0	0.0000000	V1
Calcium	0.4112124	0.1401399	V0	0.0454444	V0	0.0000000	V1
Cerium	0.0000174	0.0000952	V0	0.0000379	V0	0.0000000	V1
Cesium	0.0000100	0.0000048	V0	0.0000019	V0	0.0000000	V1
Chromium	0.0022262	0.0002166	V0	0.0001647	V0	0.0000000	V1
Cobalt	0.0000273	0.0000500	V0	0.0000335	V0	0.0000254	V0
Copper	0.0017171	0.0012887	V0	0.0009169	V0	0.0002232	V0
Iron	0.0393063	0.0787585	V0	0.0340118	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000437	V0	0.0000251	V0	0.0000000	V1
Lead	0.0008577	0.0001012	V0	0.0001161	V0	0.0000000	V1
Lithium	0.0000374	0.0000590	V0	0.0000227	V0	0.0000000	V1
Magnesium	0.0091409	0.0176619	V0	0.0092131	V0	0.0007327	V0
Manganese	0.0006949	0.0019848	V0	0.0007876	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001451	V0	0.0000624	V0	0.0000000	V1
Neodymium	0.0000140	0.0000345	V0	0.0000126	V0	0.0000000	V1
Nickel	0.0005429	0.0003081	V0	0.0001610	V0	0.0001347	V0
Niobium	0.0000202	0.0000093	V0	0.0000042	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000035	V0	0.0000000	V1
Phosphorus	0.0459574	0.0089369	V0	0.0076825	V0	0.0066104	V0
Platinum	0.0000088	0.0000014	V0	0.0000012	V0	0.0000011	V0
Potassium	0.0061261	0.0361103	V0	0.0236757	V0	0.0005450	V0
Praseodymium	0.0000070	0.0000105	V0	0.0000033	V0	0.0000000	V1
Rubidium	0.0000184	0.0001083	V0	0.0000518	V0	0.0000009	V0
Samarium	0.0000133	0.0000068	V0	0.0000021	V0	0.0000000	V1
Selenium	0.0003366	0.0000951	V0	0.0000662	V0	0.0000200	V0
Silicon	0.7676322	0.2376333	V0	0.1778568	V0	0.0000000	V1
Silver	0.0000100	0.0000019	V0	0.0000019	V0	0.0000000	V1
Sodium	0.0169447	0.0322631	V0	0.0284715	V0	0.0007217	V0
Strontium	0.0003375	0.0003718	V0	0.0001522	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000013	V0	0.0000007	V0	0.0000000	V1
Thorium	0.0000059	0.0000105	V0	0.0000039	V0	0.0000000	V1
Tin	0.0004414	0.0001141	V0	0.0001157	V0	0.0000000	V1
Titanium	0.0015201	0.0048283	V0	0.0011962	V0	0.0004240	V0
Tungsten	0.0000938	0.0000284	V0	0.0000506	V0	0.0000827	V0
Uranium	0.0000048	0.0000026	V0	0.0000012	V0	0.0000000	V1
Vanadium	0.0007697	0.0002609	V0	0.0002516	V0	0.0000000	V1
Zinc	0.0055897	0.0037722	V0	0.0036355	V0	0.0003264	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		02-Nov		02-Nov		02-Nov	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		0		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.11	V0	-9999	M1	0.08	V0
Aluminum	0.1380326	0.0305333	V0	-9999	M1	0.0000000	V1
Antimony	0.0001784	0.0001186	V0	-9999	M1	0.0000000	V1
Arsenic	0.0001060	0.0001736	V0	-9999	M1	0.0000000	V1
Barium	0.0092847	0.0016119	V0	-9999	M1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	-9999	M1	0.0000000	V1
Bismuth	0.0000093	0.0000143	V0	-9999	M1	0.0000054	V0
Cadmium	0.0000174	0.0000163	V0	-9999	M1	0.0000000	V1
Calcium	0.4112124	0.0613953	V0	-9999	M1	0.0000000	V1
Cerium	0.0000174	0.0000511	V0	-9999	M1	0.0000000	V1
Cesium	0.0000100	0.0000024	V0	-9999	M1	0.0000000	V1
Chromium	0.0022262	0.0003115	V0	-9999	M1	0.0000000	V1
Cobalt	0.0000273	0.0000387	V0	-9999	M1	0.0000254	V0
Copper	0.0017171	0.0010288	V0	-9999	M1	0.0002232	V0
Iron	0.0393063	0.0515676	V0	-9999	M1	0.0000000	V1
Lanthanum	0.0000130	0.0000269	V0	-9999	M1	0.0000000	V1
Lead	0.0008577	0.0001090	V0	-9999	M1	0.0000000	V1
Lithium	0.0000374	0.0000250	V0	-9999	M1	0.0000000	V1
Magnesium	0.0091409	0.0119174	V0	-9999	M1	0.0007327	V0
Manganese	0.0006949	0.0010717	V0	-9999	M1	0.0000000	V1
Molybdenum	0.0007116	0.0000606	V0	-9999	M1	0.0000000	V1
Neodymium	0.0000140	0.0000171	V0	-9999	M1	0.0000000	V1
Nickel	0.0005429	0.0002167	V0	-9999	M1	0.0001347	V0
Niobium	0.0000202	0.0000065	V0	-9999	M1	0.0000000	V1
Palladium	0.0000632	0.0000072	V0	-9999	M1	0.0000000	V1
Phosphorus	0.0459574	0.0068196	V0	-9999	M1	0.0066104	V0
Platinum	0.0000088	0.0000023	V0	-9999	M1	0.0000011	V0
Potassium	0.0061261	0.0301045	V0	-9999	M1	0.0005450	V0
Praseodymium	0.0000070	0.0000048	V0	-9999	M1	0.0000000	V1
Rubidium	0.0000184	0.0000625	V0	-9999	M1	0.0000009	V0
Samarium	0.0000133	0.0000027	V0	-9999	M1	0.0000000	V1
Selenium	0.0003366	0.0000697	V0	-9999	M1	0.0000200	V0
Silicon	0.7676322	0.1626536	V0	-9999	M1	0.0000000	V1
Silver	0.0000100	0.0000019	V0	-9999	M1	0.0000000	V1
Sodium	0.0169447	0.0460749	V0	-9999	M1	0.0007217	V0
Strontium	0.0003375	0.0002154	V0	-9999	M1	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	-9999	M1	0.0000000	V1
Thallium	0.0000090	0.0000010	V0	-9999	M1	0.0000000	V1
Thorium	0.0000059	0.0000052	V0	-9999	M1	0.0000000	V1
Tin	0.0004414	0.0001434	V0	-9999	M1	0.0000000	V1
Titanium	0.0015201	0.0021377	V0	-9999	M1	0.0004240	V0
Tungsten	0.0000938	0.0000547	V0	-9999	M1	0.0000827	V0
Uranium	0.0000048	0.0000014	V0	-9999	M1	0.0000000	V1
Vanadium	0.0007697	0.0001555	V0	-9999	M1	0.0000000	V1
Zinc	0.0055897	0.0032643	V0	-9999	M1	0.0003264	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**08-Nov**		**08-Nov**		**08-Nov**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	9.61	V0	7.18	V0	0.14	V0
Aluminum	0.1380326	0.0198523	V0	0.0090946	V0	0.0000000	V1
Antimony	0.0001784	0.0001208	V0	0.0002051	V0	0.0000000	V1
Arsenic	0.0001060	0.0001293	V0	0.0001574	V0	0.0000000	V1
Barium	0.0092847	0.0012904	V0	0.0017709	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000147	V0	0.0000132	V0	0.0000025	V0
Cadmium	0.0000174	0.0000340	V0	0.0000419	V0	0.0000000	V1
Calcium	0.4112124	0.0568661	V0	0.0209829	V0	0.0000000	V1
Cerium	0.0000174	0.0000400	V0	0.0000373	V0	0.0000000	V1
Cesium	0.0000100	0.0000027	V0	0.0000018	V0	0.0000000	V1
Chromium	0.0022262	0.0008842	V0	0.0001493	V0	0.0001071	V0
Cobalt	0.0000273	0.0002085	V0	0.0000374	V0	0.0000120	V0
Copper	0.0017171	0.0010913	V0	0.0015915	V0	0.0014993	V0
Iron	0.0393063	0.0449970	V0	0.0233072	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000573	V0	0.0000562	V0	0.0000000	V1
Lead	0.0008577	0.0002182	V0	0.0001940	V0	0.0000000	V1
Lithium	0.0000374	0.0000280	V0	0.0000105	V0	0.0000000	V1
Magnesium	0.0091409	0.0067632	V0	0.0034060	V0	0.0018000	V0
Manganese	0.0006949	0.0023811	V0	0.0005477	V0	0.0000000	V1
Molybdenum	0.0007116	0.0002601	V0	0.0000686	V0	0.0000716	V0
Neodymium	0.0000140	0.0000112	V0	0.0000068	V0	0.0000000	V1
Nickel	0.0005429	0.0007010	V0	0.0001625	V0	0.0001458	V0
Niobium	0.0000202	0.0000058	V0	0.0000042	V0	0.0000011	V0
Palladium	0.0000632	0.0000053	V0	0.0000063	V0	0.0000064	V0
Phosphorus	0.0459574	0.0102593	V0	0.0087727	V0	0.0079959	V0
Platinum	0.0000088	0.0000020	V0	0.0000021	V0	0.0000022	V0
Potassium	0.0061261	0.0477928	V0	0.0286726	V0	0.0013606	V0
Praseodymium	0.0000070	0.0000032	V0	0.0000024	V0	0.0000000	V1
Rubidium	0.0000184	0.0000987	V0	0.0000579	V0	0.0000027	V0
Samarium	0.0000133	0.0000017	V0	0.0000014	V0	0.0000000	V1
Selenium	0.0003366	0.0001289	V0	0.0001064	V0	0.0000183	V0
Silicon	0.7676322	0.1185307	V0	0.0629163	V0	0.0000000	V1
Silver	0.0000100	0.0000058	V0	0.0000044	V0	0.0000005	V0
Sodium	0.0169447	0.0114430	V0	0.0122391	V0	0.0009816	V0
Strontium	0.0003375	0.0001863	V0	0.0001122	V0	0.0001451	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000015	V0	0.0000018	V0	0.0000000	V1
Thorium	0.0000059	0.0000034	V0	0.0000022	V0	0.0000000	V1
Tin	0.0004414	0.0001444	V0	0.0002508	V0	0.0000000	V1
Titanium	0.0015201	0.0029161	V0	0.0014022	V0	0.0015577	V0
Tungsten	0.0000938	0.0000266	V0	0.0000579	V0	0.0000159	V0
Uranium	0.0000048	0.0000011	V0	0.0000014	V0	0.0000002	V0
Vanadium	0.0007697	0.0001818	V0	0.0001488	V0	0.0000608	V0
Zinc	0.0055897	0.0068049	V0	0.0036401	V0	0.0012659	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		08-Nov		08-Nov		08-Nov	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.23	V0	2.31	V0	0.14	V0
Aluminum	0.1380326	0.0176818	V0	0.0117774	V0	0.0000000	V1
Antimony	0.0001784	0.0003677	V0	0.0000386	V0	0.0000000	V1
Arsenic	0.0001060	0.0001066	V0	0.0000690	V0	0.0000000	V1
Barium	0.0092847	0.0047346	V0	0.0004687	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000253	V0	0.0000039	V0	0.0000025	V0
Cadmium	0.0000174	0.0000136	V0	0.0000136	V0	0.0000000	V1
Calcium	0.4112124	0.0358604	V0	0.0234960	V0	0.0000000	V1
Cerium	0.0000174	0.0000915	V0	0.0000125	V0	0.0000000	V1
Cesium	0.0000100	0.0000013	V0	0.0000008	V0	0.0000000	V1
Chromium	0.0022262	0.0002988	V0	0.0001409	V0	0.0001071	V0
Cobalt	0.0000273	0.0000376	V0	0.0000271	V0	0.0000120	V0
Copper	0.0017171	0.0025867	V0	0.0005617	V0	0.0014993	V0
Iron	0.0393063	0.0525958	V0	0.0117171	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000529	V0	0.0000719	V0	0.0000000	V1
Lead	0.0008577	0.0001868	V0	0.0001364	V0	0.0000000	V1
Lithium	0.0000374	0.0000140	V0	0.0000058	V0	0.0000000	V1
Magnesium	0.0091409	0.0061422	V0	0.0033989	V0	0.0018000	V0
Manganese	0.0006949	0.0009130	V0	0.0003299	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001052	V0	0.0000361	V0	0.0000716	V0
Neodymium	0.0000140	0.0000161	V0	0.0000037	V0	0.0000000	V1
Nickel	0.0005429	0.0002199	V0	0.0001611	V0	0.0001458	V0
Niobium	0.0000202	0.0000073	V0	0.0000021	V0	0.0000011	V0
Palladium	0.0000632	0.0000140	V0	0.0000000	V1	0.0000064	V0
Phosphorus	0.0459574	0.0085836	V0	0.0086743	V0	0.0079959	V0
Platinum	0.0000088	0.0000025	V0	0.0000009	V0	0.0000022	V0
Potassium	0.0061261	0.0141720	V0	0.0113719	V0	0.0013606	V0
Praseodymium	0.0000070	0.0000076	V0	0.0000010	V0	0.0000000	V1
Rubidium	0.0000184	0.0000300	V0	0.0000215	V0	0.0000027	V0
Samarium	0.0000133	0.0000015	V0	0.0000006	V0	0.0000000	V1
Selenium	0.0003366	0.0001212	V0	0.0000889	V0	0.0000183	V0
Silicon	0.7676322	0.1163156	V0	0.0982823	V0	0.0000000	V1
Silver	0.0000100	0.0000020	V0	0.0000018	V0	0.0000005	V0
Sodium	0.0169447	0.0144908	V0	0.0064334	V0	0.0009816	V0
Strontium	0.0003375	0.0002822	V0	0.0000700	V0	0.0001451	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000009	V0	0.0000007	V0	0.0000000	V1
Thorium	0.0000059	0.0000028	V0	0.0000014	V0	0.0000000	V1
Tin	0.0004414	0.0003526	V0	0.0000856	V0	0.0000000	V1
Titanium	0.0015201	0.0029039	V0	0.0009493	V0	0.0015577	V0
Tungsten	0.0000938	0.0000727	V0	0.0000729	V0	0.0000159	V0
Uranium	0.0000048	0.0000015	V0	0.0000007	V0	0.0000002	V0
Vanadium	0.0007697	0.0001480	V0	0.0001026	V0	0.0000608	V0
Zinc	0.0055897	0.0029243	V0	0.0016704	V0	0.0012659	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**14-Nov**		**14-Nov**		**14-Nov**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	2.70	V0	1.95	V0	0.00	V1
Aluminum	0.1380326	0.0070949	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000270	V0	0.0000333	V0	0.0000000	V1
Arsenic	0.0001060	0.0000382	V0	0.0000440	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000098	V0	0.0000031	V0	0.0000058	V0
Cadmium	0.0000174	0.0000143	V0	0.0000098	V0	0.0000010	V0
Calcium	0.4112124	0.0000000	V1	0.0000000	V1	0.0000000	V1
Cerium	0.0000174	0.0000079	V0	0.0000080	V0	0.0000009	V0
Cesium	0.0000100	0.0000008	V0	0.0000000	V1	0.0000005	V0
Chromium	0.0022262	0.0001262	V0	0.0005570	V0	0.0000000	V1
Cobalt	0.0000273	0.0000309	V0	0.0000527	V0	0.0000244	V0
Copper	0.0017171	0.0004189	V0	0.0004720	V0	0.0001114	V0
Iron	0.0393063	0.0060731	V0	0.0064281	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000062	V0	0.0000096	V0	0.0000000	V1
Lead	0.0008577	0.0000573	V0	0.0000533	V0	0.0000000	V1
Lithium	0.0000374	0.0000023	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0022045	V0	0.0019501	V0	0.0008954	V0
Manganese	0.0006949	0.0003848	V0	0.0001814	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000013	V0	0.0000009	V0	0.0000006	V0
Nickel	0.0005429	0.0001424	V0	0.0002619	V0	0.0002314	V0
Niobium	0.0000202	0.0000014	V0	0.0000012	V0	0.0000012	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000028	V0
Phosphorus	0.0459574	0.0082445	V0	0.0082588	V0	0.0059138	V0
Platinum	0.0000088	0.0000015	V0	0.0000016	V0	0.0000014	V0
Potassium	0.0061261	0.0204334	V0	0.0086014	V0	0.0009646	V0
Praseodymium	0.0000070	0.0000004	V0	0.0000000	V1	0.0000005	V0
Rubidium	0.0000184	0.0000376	V0	0.0000147	V0	0.0000028	V0
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000006	V0
Selenium	0.0003366	0.0000314	V0	0.0000291	V0	0.0000153	V0
Silicon	0.7676322	0.0438734	V0	0.0449896	V0	0.0000000	V1
Silver	0.0000100	0.0000019	V0	0.0000008	V0	0.0000011	V0
Sodium	0.0169447	0.0049128	V0	0.0044310	V0	0.0010127	V0
Strontium	0.0003375	0.0000503	V0	0.0000296	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000000	V1	0.0000006	V0
Thorium	0.0000059	0.0000007	V0	0.0000000	V1	0.0000004	V0
Tin	0.0004414	0.0000726	V0	0.0000477	V0	0.0000000	V1
Titanium	0.0015201	0.0005497	V0	0.0004095	V0	0.0005040	V0
Tungsten	0.0000938	0.0000389	V0	0.0000694	V0	0.0000100	V0
Uranium	0.0000048	0.0000000	V1	0.0000000	V1	0.0000004	V0
Vanadium	0.0007697	0.0001043	V0	0.0000988	V0	0.0000630	V0
Zinc	0.0055897	0.0026298	V0	0.0012116	V0	0.0005053	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		14-Nov		14-Nov		14-Nov	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.28	V0	1.65	V0	0.00	V1
Aluminum	0.1380326	0.0122091	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0003384	V0	0.0000105	V0	0.0000000	V1
Arsenic	0.0001060	0.0000380	V0	0.0000268	V0	0.0000000	V1
Barium	0.0092847	0.0015427	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000092	V0	0.0000017	V0	0.0000058	V0
Cadmium	0.0000174	0.0000137	V0	0.0000064	V0	0.0000010	V0
Calcium	0.4112124	0.0362515	V0	0.0000000	V1	0.0000000	V1
Cerium	0.0000174	0.0000226	V0	0.0000030	V0	0.0000009	V0
Cesium	0.0000100	0.0000011	V0	0.0000000	V1	0.0000005	V0
Chromium	0.0022262	0.0004109	V0	0.0002176	V0	0.0000000	V1
Cobalt	0.0000273	0.0000240	V0	0.0000070	V0	0.0000244	V0
Copper	0.0017171	0.0009647	V0	0.0001545	V0	0.0001114	V0
Iron	0.0393063	0.0244280	V0	0.0026863	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000119	V0	0.0000226	V0	0.0000000	V1
Lead	0.0008577	0.0000707	V0	0.0000438	V0	0.0000000	V1
Lithium	0.0000374	0.0000111	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0054809	V0	0.0016121	V0	0.0008954	V0
Manganese	0.0006949	0.0006091	V0	0.0000761	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001078	V0	0.0000298	V0	0.0000000	V1
Neodymium	0.0000140	0.0000058	V0	0.0000006	V0	0.0000006	V0
Nickel	0.0005429	0.0002864	V0	0.0001753	V0	0.0002314	V0
Niobium	0.0000202	0.0000040	V0	0.0000009	V0	0.0000012	V0
Palladium	0.0000632	0.0000056	V0	0.0000039	V0	0.0000028	V0
Phosphorus	0.0459574	0.0077074	V0	0.0066545	V0	0.0059138	V0
Platinum	0.0000088	0.0000015	V0	0.0000010	V0	0.0000014	V0
Potassium	0.0061261	0.0147162	V0	0.0066469	V0	0.0009646	V0
Praseodymium	0.0000070	0.0000018	V0	0.0000000	V1	0.0000005	V0
Rubidium	0.0000184	0.0000313	V0	0.0000107	V0	0.0000028	V0
Samarium	0.0000133	0.0000010	V0	0.0000000	V1	0.0000006	V0
Selenium	0.0003366	0.0000554	V0	0.0000308	V0	0.0000153	V0
Silicon	0.7676322	0.0919358	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000016	V0	0.0000012	V0	0.0000011	V0
Sodium	0.0169447	0.0151246	V0	0.0034891	V0	0.0010127	V0
Strontium	0.0003375	0.0001341	V0	0.0000265	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000000	V1	0.0000006	V0
Thorium	0.0000059	0.0000021	V0	0.0000000	V1	0.0000004	V0
Tin	0.0004414	0.0001301	V0	0.0000334	V0	0.0000000	V1
Titanium	0.0015201	0.0028713	V0	0.0005329	V0	0.0005040	V0
Tungsten	0.0000938	0.0000204	V0	0.0000077	V0	0.0000100	V0
Uranium	0.0000048	0.0000006	V0	0.0000000	V1	0.0000004	V0
Vanadium	0.0007697	0.0000892	V0	0.0000981	V0	0.0000630	V0
Zinc	0.0055897	0.0026960	V0	0.0011901	V0	0.0005053	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		20-Nov		20-Nov		20-Nov	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.74	V0	3.11	V0	-0.21	V1
Aluminum	0.1380326	0.0251066	V0	0.0073859	V0	0.0000000	V1
Antimony	0.0001784	0.0000174	V0	0.0000438	V0	0.0000000	V1
Arsenic	0.0001060	0.0000239	V0	0.0003386	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0003920	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000214	V0	0.0000037	V0	0.0000671	V0
Cadmium	0.0000174	0.0000055	V0	0.0000081	V0	0.0000000	V1
Calcium	0.4112124	0.0902158	V0	0.0202584	V0	0.0254999	V0
Cerium	0.0000174	0.0000305	V0	0.0000156	V0	0.0000012	V0
Cesium	0.0000100	0.0000022	V0	0.0000008	V0	0.0000000	V1
Chromium	0.0022262	0.0001271	V0	0.0001019	V0	0.0002069	V0
Cobalt	0.0000273	0.0000436	V0	0.0000593	V0	0.0000109	V0
Copper	0.0017171	0.0003415	V0	0.0004162	V0	0.0002130	V0
Iron	0.0393063	0.0260289	V0	0.0136407	V0	0.0024637	V0
Lanthanum	0.0000130	0.0000157	V0	0.0000087	V0	0.0000000	V1
Lead	0.0008577	0.0000539	V0	0.0000556	V0	0.0000000	V1
Lithium	0.0000374	0.0000232	V0	0.0000036	V0	0.0000000	V1
Magnesium	0.0091409	0.0075004	V0	0.0035489	V0	0.0026029	V0
Manganese	0.0006949	0.0007602	V0	0.0002551	V0	0.0000386	V0
Molybdenum	0.0007116	0.0000575	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000148	V0	0.0000049	V0	0.0000000	V1
Nickel	0.0005429	0.0001842	V0	0.0001171	V0	0.0001603	V0
Niobium	0.0000202	0.0000040	V0	0.0000023	V0	0.0000018	V0
Palladium	0.0000632	0.0000000	V1	0.0000067	V0	0.0000049	V0
Phosphorus	0.0459574	0.0064081	V0	0.0058162	V0	0.0054572	V0
Platinum	0.0000088	0.0000012	V0	0.0000019	V0	0.0000013	V0
Potassium	0.0061261	0.0180409	V0	0.0122173	V0	0.0034718	V0
Praseodymium	0.0000070	0.0000034	V0	0.0000014	V0	0.0000000	V1
Rubidium	0.0000184	0.0000461	V0	0.0000250	V0	0.0000031	V0
Samarium	0.0000133	0.0000024	V0	0.0000009	V0	0.0000000	V1
Selenium	0.0003366	0.0000515	V0	0.0000368	V0	0.0000233	V0
Silicon	0.7676322	0.1646364	V0	0.0351414	V0	0.0000000	V1
Silver	0.0000100	0.0000006	V0	0.0000015	V0	0.0000000	V1
Sodium	0.0169447	0.0083280	V0	0.0075802	V0	0.0020865	V0
Strontium	0.0003375	0.0001497	V0	0.0000644	V0	0.0000224	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000004	V0	0.0000006	V0	0.0000000	V1
Thorium	0.0000059	0.0000042	V0	0.0000016	V0	0.0000000	V1
Tin	0.0004414	0.0000450	V0	0.0000660	V0	0.0000000	V1
Titanium	0.0015201	0.0048395	V0	0.0006381	V0	0.0011549	V0
Tungsten	0.0000938	0.0000562	V0	0.0000794	V0	0.0000131	V0
Uranium	0.0000048	0.0000012	V0	0.0000007	V0	0.0000000	V1
Vanadium	0.0007697	0.0002912	V0	0.0000611	V0	0.0000000	V1
Zinc	0.0055897	0.0122188	V0	0.0012049	V0	0.0006260	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		20-Nov		20-Nov		20-Nov	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.12	V0	2.70	V0	-0.21	V1
Aluminum	0.1380326	0.0140325	V0	0.0129520	V0	0.0000000	V1
Antimony	0.0001784	0.0000598	V0	0.0000117	V0	0.0000000	V1
Arsenic	0.0001060	0.0000204	V0	0.0000186	V0	0.0000000	V1
Barium	0.0092847	0.0006086	V0	0.0005120	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000040	V0	0.0000000	V1
Bismuth	0.0000093	0.0000114	V0	0.0000065	V0	0.0000671	V0
Cadmium	0.0000174	0.0000062	V0	0.0000053	V0	0.0000000	V1
Calcium	0.4112124	0.0399125	V0	0.0334499	V0	0.0254999	V0
Cerium	0.0000174	0.0000266	V0	0.0000164	V0	0.0000012	V0
Cesium	0.0000100	0.0000009	V0	0.0000008	V0	0.0000000	V1
Chromium	0.0022262	0.0001447	V0	0.0001580	V0	0.0002069	V0
Cobalt	0.0000273	0.0000431	V0	0.0000282	V0	0.0000109	V0
Copper	0.0017171	0.0005821	V0	0.0003355	V0	0.0002130	V0
Iron	0.0393063	0.0172724	V0	0.0098648	V0	0.0024637	V0
Lanthanum	0.0000130	0.0000120	V0	0.0000096	V0	0.0000000	V1
Lead	0.0008577	0.0000570	V0	0.0000431	V0	0.0000000	V1
Lithium	0.0000374	0.0000086	V0	0.0000062	V0	0.0000000	V1
Magnesium	0.0091409	0.0061282	V0	0.0046069	V0	0.0026029	V0
Manganese	0.0006949	0.0003491	V0	0.0002392	V0	0.0000386	V0
Molybdenum	0.0007116	0.0000302	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000076	V0	0.0000066	V0	0.0000000	V1
Nickel	0.0005429	0.0001734	V0	0.0001661	V0	0.0001603	V0
Niobium	0.0000202	0.0000027	V0	0.0000021	V0	0.0000018	V0
Palladium	0.0000632	0.0000029	V0	0.0000063	V0	0.0000049	V0
Phosphorus	0.0459574	0.0057731	V0	0.0054957	V0	0.0054572	V0
Platinum	0.0000088	0.0000014	V0	0.0000011	V0	0.0000013	V0
Potassium	0.0061261	0.0145185	V0	0.0108444	V0	0.0034718	V0
Praseodymium	0.0000070	0.0000019	V0	0.0000018	V0	0.0000000	V1
Rubidium	0.0000184	0.0000264	V0	0.0000211	V0	0.0000031	V0
Samarium	0.0000133	0.0000014	V0	0.0000009	V0	0.0000000	V1
Selenium	0.0003366	0.0000428	V0	0.0000409	V0	0.0000233	V0
Silicon	0.7676322	0.1242988	V0	0.0950249	V0	0.0000000	V1
Silver	0.0000100	0.0000007	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0465010	V0	0.0050928	V0	0.0020865	V0
Strontium	0.0003375	0.0000944	V0	0.0000729	V0	0.0000224	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000024	V0	0.0000020	V0	0.0000000	V1
Tin	0.0004414	0.0000848	V0	0.0000748	V0	0.0000000	V1
Titanium	0.0015201	0.0012590	V0	0.0007368	V0	0.0011549	V0
Tungsten	0.0000938	0.0000690	V0	0.0000336	V0	0.0000131	V0
Uranium	0.0000048	0.0000006	V0	0.0000005	V0	0.0000000	V1
Vanadium	0.0007697	0.0001084	V0	0.0000761	V0	0.0000000	V1
Zinc	0.0055897	0.0016040	V0	0.0016673	V0	0.0006260	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**26-Nov**		**26-Nov**		**26-Nov**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	11.88	V0	9.54	V0	0.16	V0
Aluminum	0.1380326	0.0063295	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000435	V0	0.0000663	V0	0.0000000	V1
Arsenic	0.0001060	0.0000839	V0	0.0001497	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0004688	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000089	V0	0.0000051	V0	0.0000030	V0
Cadmium	0.0000174	0.0001690	V0	0.0001435	V0	0.0000012	V0
Calcium	0.4112124	0.0317694	V0	0.0000000	V1	0.0278128	V0
Cerium	0.0000174	0.0000099	V0	0.0000095	V0	0.0000000	V1
Cesium	0.0000100	0.0000022	V0	0.0000014	V0	0.0000000	V1
Chromium	0.0022262	0.0001835	V0	0.0003599	V0	0.0000000	V1
Cobalt	0.0000273	0.0000363	V0	0.0000639	V0	0.0000118	V0
Copper	0.0017171	0.0006320	V0	0.0004607	V0	0.0000965	V0
Iron	0.0393063	0.0080746	V0	0.0073619	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000131	V0	0.0000094	V0	0.0000000	V1
Lead	0.0008577	0.0001690	V0	0.0002369	V0	0.0000000	V1
Lithium	0.0000374	0.0000081	V0	0.0000064	V0	0.0000000	V1
Magnesium	0.0091409	0.0026448	V0	0.0020675	V0	0.0010128	V0
Manganese	0.0006949	0.0005022	V0	0.0002904	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000419	V0	0.0000349	V0	0.0000564	V0
Neodymium	0.0000140	0.0000033	V0	0.0000013	V0	0.0000000	V1
Nickel	0.0005429	0.0001435	V0	0.0004030	V0	0.0001041	V0
Niobium	0.0000202	0.0000022	V0	0.0000025	V0	0.0000011	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000048	V0
Phosphorus	0.0459574	0.0056502	V0	0.0061642	V0	0.0050041	V0
Platinum	0.0000088	0.0000016	V0	0.0000013	V0	0.0000008	V0
Potassium	0.0061261	0.0881832	V0	0.0756086	V0	0.0021880	V0
Praseodymium	0.0000070	0.0000010	V0	0.0000003	V0	0.0000000	V1
Rubidium	0.0000184	0.0001204	V0	0.0000986	V0	0.0000028	V0
Samarium	0.0000133	0.0000007	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000508	V0	0.0000527	V0	0.0000353	V0
Silicon	0.7676322	0.0000000	V1	0.0401791	V0	0.0000000	V1
Silver	0.0000100	0.0000079	V0	0.0000073	V0	0.0000000	V1
Sodium	0.0169447	0.0068946	V0	0.0091267	V0	0.0013430	V0
Strontium	0.0003375	0.0000525	V0	0.0000455	V0	0.0000162	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000024	V0	0.0000018	V0	0.0000000	V1
Thorium	0.0000059	0.0000009	V0	0.0000003	V0	0.0000000	V1
Tin	0.0004414	0.0000685	V0	0.0000774	V0	0.0000000	V1
Titanium	0.0015201	0.0005048	V0	0.0005918	V0	0.0018167	V0
Tungsten	0.0000938	0.0000509	V0	0.0000930	V0	0.0000066	V0
Uranium	0.0000048	0.0000004	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0000424	V0	0.0000000	V1	0.0000000	V1
Zinc	0.0055897	0.0096030	V0	0.0087919	V0	0.0008311	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		26-Nov		26-Nov		26-Nov	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		23.6		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	8.98	V0	6.18	V0	0.16	V0
Aluminum	0.1380326	0.0064046	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0001749	V0	0.0000641	V0	0.0000000	V1
Arsenic	0.0001060	0.0001487	V0	0.0001551	V0	0.0000000	V1
Barium	0.0092847	0.0016828	V0	0.0009441	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000268	V0	0.0000197	V0	0.0000030	V0
Cadmium	0.0000174	0.0001436	V0	0.0000970	V0	0.0000012	V0
Calcium	0.4112124	0.0218724	V0	0.0254824	V0	0.0278128	V0
Cerium	0.0000174	0.0000153	V0	0.0000047	V0	0.0000000	V1
Cesium	0.0000100	0.0000014	V0	0.0000011	V0	0.0000000	V1
Chromium	0.0022262	0.0001591	V0	0.0001663	V0	0.0000000	V1
Cobalt	0.0000273	0.0000205	V0	0.0000343	V0	0.0000118	V0
Copper	0.0017171	0.0011295	V0	0.0002431	V0	0.0000965	V0
Iron	0.0393063	0.0175703	V0	0.0072203	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000095	V0	0.0000040	V0	0.0000000	V1
Lead	0.0008577	0.0001798	V0	0.0001942	V0	0.0000000	V1
Lithium	0.0000374	0.0000045	V0	0.0000025	V0	0.0000000	V1
Magnesium	0.0091409	0.0025164	V0	0.0025774	V0	0.0010128	V0
Manganese	0.0006949	0.0003826	V0	0.0002451	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000509	V0	0.0000303	V0	0.0000564	V0
Neodymium	0.0000140	0.0000029	V0	0.0000012	V0	0.0000000	V1
Nickel	0.0005429	0.0001147	V0	0.0005594	V0	0.0001041	V0
Niobium	0.0000202	0.0000027	V0	0.0000117	V0	0.0000011	V0
Palladium	0.0000632	0.0000045	V0	0.0000063	V0	0.0000048	V0
Phosphorus	0.0459574	0.0050657	V0	0.0053373	V0	0.0050041	V0
Platinum	0.0000088	0.0000012	V0	0.0000009	V0	0.0000008	V0
Potassium	0.0061261	0.0772477	V0	0.0519689	V0	0.0021880	V0
Praseodymium	0.0000070	0.0000008	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000996	V0	0.0000749	V0	0.0000028	V0
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000573	V0	0.0000467	V0	0.0000353	V0
Silicon	0.7676322	0.0376114	V0	0.0365368	V0	0.0000000	V1
Silver	0.0000100	0.0000071	V0	0.0000078	V0	0.0000000	V1
Sodium	0.0169447	0.0111637	V0	0.0080116	V0	0.0013430	V0
Strontium	0.0003375	0.0000930	V0	0.0000587	V0	0.0000162	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000017	V0	0.0000016	V0	0.0000000	V1
Thorium	0.0000059	0.0000005	V0	0.0000005	V0	0.0000000	V1
Tin	0.0004414	0.0001758	V0	0.0001102	V0	0.0000000	V1
Titanium	0.0015201	0.0012365	V0	0.0010447	V0	0.0018167	V0
Tungsten	0.0000938	0.0000359	V0	0.0000604	V0	0.0000066	V0
Uranium	0.0000048	0.0000003	V0	0.0000003	V0	0.0000000	V1
Vanadium	0.0007697	0.0000000	V1	0.0000000	V1	0.0000000	V1
Zinc	0.0055897	0.0083929	V0	0.0055240	V0	0.0008311	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**02-Dec**		**02-Dec**		**02-Dec**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	16.91	V0	17.58	V0	-0.01	V1
Aluminum	0.1380326	0.0300468	V0	0.0238159	V0	0.0069395	V0
Antimony	0.0001784	0.0001041	V0	0.0006007	V0	0.0000000	V1
Arsenic	0.0001060	0.0001853	V0	0.0002409	V0	0.0000000	V1
Barium	0.0092847	0.0011162	V0	0.0013932	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000235	V0	0.0000078	V0	0.0000008	V0
Cadmium	0.0000174	0.0000620	V0	0.0000852	V0	0.0000000	V1
Calcium	0.4112124	0.0580076	V0	0.0387710	V0	0.0000000	V1
Cerium	0.0000174	0.0000272	V0	0.0000373	V0	0.0000000	V1
Cesium	0.0000100	0.0000027	V0	0.0000025	V0	0.0000000	V1
Chromium	0.0022262	0.0002162	V0	0.0002330	V0	0.0005366	V0
Cobalt	0.0000273	0.0000622	V0	0.0000176	V0	0.0000682	V0
Copper	0.0017171	0.0006227	V0	0.0009311	V0	0.0001823	V0
Iron	0.0393063	0.0249069	V0	0.0255652	V0	0.0080123	V0
Lanthanum	0.0000130	0.0001068	V0	0.0001194	V0	0.0000000	V1
Lead	0.0008577	0.0005431	V0	0.0003610	V0	0.0000000	V1
Lithium	0.0000374	0.0000257	V0	0.0000201	V0	0.0000000	V1
Magnesium	0.0091409	0.0070790	V0	0.0069731	V0	0.0020241	V0
Manganese	0.0006949	0.0015792	V0	0.0006675	V0	0.0001045	V0
Molybdenum	0.0007116	0.0001804	V0	0.0001071	V0	0.0000729	V0
Neodymium	0.0000140	0.0000107	V0	0.0000098	V0	0.0000000	V1
Nickel	0.0005429	0.0002704	V0	0.0002313	V0	0.0003208	V0
Niobium	0.0000202	0.0000043	V0	0.0000051	V0	0.0000000	V1
Palladium	0.0000632	0.0000046	V0	0.0000051	V0	0.0000000	V1
Phosphorus	0.0459574	0.0064227	V0	0.0072868	V0	0.0021092	V0
Platinum	0.0000088	0.0000011	V0	0.0000010	V0	0.0000025	V0
Potassium	0.0061261	0.0987295	V0	0.0966174	V0	0.0015242	V0
Praseodymium	0.0000070	0.0000028	V0	0.0000028	V0	0.0000000	V1
Rubidium	0.0000184	0.0001452	V0	0.0001635	V0	0.0000014	V0
Samarium	0.0000133	0.0000019	V0	0.0000017	V0	0.0000000	V1
Selenium	0.0003366	0.0001060	V0	0.0001001	V0	0.0000000	V1
Silicon	0.7676322	0.0415234	V0	0.0760744	V0	0.0000000	V1
Silver	0.0000100	0.0000059	V0	0.0000065	V0	0.0000000	V1
Sodium	0.0169447	0.0180346	V0	0.0207216	V0	0.0010685	V0
Strontium	0.0003375	0.0002114	V0	0.0001670	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000020	V0	0.0000024	V0	0.0000000	V1
Thorium	0.0000059	0.0000035	V0	0.0000032	V0	0.0000000	V1
Tin	0.0004414	0.0001813	V0	0.0002598	V0	0.0000000	V1
Titanium	0.0015201	0.0014614	V0	0.0016609	V0	0.0008936	V0
Tungsten	0.0000938	0.0001090	V0	0.0000453	V0	0.0000675	V0
Uranium	0.0000048	0.0000018	V0	0.0000016	V0	0.0000000	V1
Vanadium	0.0007697	0.0006368	V0	0.0001970	V0	0.0000643	V0
Zinc	0.0055897	0.0085726	V0	0.0088167	V0	0.0005290	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		02-Dec		02-Dec		02-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	15.63	V0	13.74	V0	-0.01	V1
Aluminum	0.1380326	0.0169143	V0	0.0135521	V0	0.0069395	V0
Antimony	0.0001784	0.0001786	V0	0.0000662	V0	0.0000000	V1
Arsenic	0.0001060	0.0001763	V0	0.0001506	V0	0.0000000	V1
Barium	0.0092847	0.0017269	V0	0.0004846	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000127	V0	0.0000091	V0	0.0000008	V0
Cadmium	0.0000174	0.0000722	V0	0.0000544	V0	0.0000000	V1
Calcium	0.4112124	0.0268739	V0	0.0365339	V0	0.0000000	V1
Cerium	0.0000174	0.0000299	V0	0.0000097	V0	0.0000000	V1
Cesium	0.0000100	0.0000019	V0	0.0000013	V0	0.0000000	V1
Chromium	0.0022262	0.0003529	V0	0.0001803	V0	0.0005366	V0
Cobalt	0.0000273	0.0000317	V0	0.0000411	V0	0.0000682	V0
Copper	0.0017171	0.0009077	V0	0.0002632	V0	0.0001823	V0
Iron	0.0393063	0.0244354	V0	0.0101469	V0	0.0080123	V0
Lanthanum	0.0000130	0.0000951	V0	0.0000602	V0	0.0000000	V1
Lead	0.0008577	0.0002586	V0	0.0001802	V0	0.0000000	V1
Lithium	0.0000374	0.0000115	V0	0.0000064	V0	0.0000000	V1
Magnesium	0.0091409	0.0048186	V0	0.0038631	V0	0.0020241	V0
Manganese	0.0006949	0.0005410	V0	0.0003414	V0	0.0001045	V0
Molybdenum	0.0007116	0.0001095	V0	0.0000511	V0	0.0000729	V0
Neodymium	0.0000140	0.0000074	V0	0.0000037	V0	0.0000000	V1
Nickel	0.0005429	0.0003085	V0	0.0001887	V0	0.0003208	V0
Niobium	0.0000202	0.0000054	V0	0.0000025	V0	0.0000000	V1
Palladium	0.0000632	0.0000039	V0	0.0000215	V0	0.0000000	V1
Phosphorus	0.0459574	0.0063484	V0	0.0056839	V0	0.0021092	V0
Platinum	0.0000088	0.0000012	V0	0.0000013	V0	0.0000025	V0
Potassium	0.0061261	0.0731388	V0	0.0609261	V0	0.0015242	V0
Praseodymium	0.0000070	0.0000022	V0	0.0000009	V0	0.0000000	V1
Rubidium	0.0000184	0.0001097	V0	0.0000817	V0	0.0000014	V0
Samarium	0.0000133	0.0000012	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0001001	V0	0.0000771	V0	0.0000000	V1
Silicon	0.7676322	0.0585384	V0	0.0740313	V0	0.0000000	V1
Silver	0.0000100	0.0000058	V0	0.0000040	V0	0.0000000	V1
Sodium	0.0169447	0.0188096	V0	0.0119079	V0	0.0010685	V0
Strontium	0.0003375	0.0001729	V0	0.0000999	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000021	V0	0.0000013	V0	0.0000000	V1
Thorium	0.0000059	0.0000027	V0	0.0000014	V0	0.0000000	V1
Tin	0.0004414	0.0002071	V0	0.0001073	V0	0.0000000	V1
Titanium	0.0015201	0.0011865	V0	0.0007763	V0	0.0008936	V0
Tungsten	0.0000938	0.0000765	V0	0.0000581	V0	0.0000675	V0
Uranium	0.0000048	0.0000018	V0	0.0000008	V0	0.0000000	V1
Vanadium	0.0007697	0.0001620	V0	0.0001057	V0	0.0000643	V0
Zinc	0.0055897	0.0072575	V0	0.0053982	V0	0.0005290	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**08-Dec**		**08-Dec**		**08-Dec**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	2.79	V0	3.35	V0	0.05	V0
Aluminum	0.1380326	0.0070460	V0	0.0084086	V0	0.0060021	V0
Antimony	0.0001784	0.0000349	V0	0.0000169	V0	0.0000000	V1
Arsenic	0.0001060	0.0007994	V0	0.0000229	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000050	V0	0.0000040	V0	0.0000000	V1
Bismuth	0.0000093	0.0000069	V0	0.0000256	V0	0.0000010	V0
Cadmium	0.0000174	0.0000104	V0	0.0000039	V0	0.0000012	V0
Calcium	0.4112124	0.0262958	V0	0.0363232	V0	0.0179401	V0
Cerium	0.0000174	0.0000144	V0	0.0000096	V0	0.0000000	V1
Cesium	0.0000100	0.0000008	V0	0.0000008	V0	0.0000000	V1
Chromium	0.0022262	0.0001749	V0	0.0003371	V0	0.0000000	V1
Cobalt	0.0000273	0.0000446	V0	0.0000274	V0	0.0000467	V0
Copper	0.0017171	0.0005563	V0	0.0003735	V0	0.0005279	V0
Iron	0.0393063	0.0194391	V0	0.0102009	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000055	V0	0.0000045	V0	0.0000000	V1
Lead	0.0008577	0.0000576	V0	0.0000817	V0	0.0000000	V1
Lithium	0.0000374	0.0000077	V0	0.0000090	V0	0.0000073	V0
Magnesium	0.0091409	0.0118434	V0	0.0101658	V0	0.0016838	V0
Manganese	0.0006949	0.0009995	V0	0.0007361	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000733	V0	0.0001479	V0	0.0002186	V0
Neodymium	0.0000140	0.0000027	V0	0.0000037	V0	0.0000000	V1
Nickel	0.0005429	0.0001952	V0	0.0003951	V0	0.0000861	V0
Niobium	0.0000202	0.0000021	V0	0.0000019	V0	0.0000000	V1
Palladium	0.0000632	0.0000042	V0	0.0000045	V0	0.0000064	V0
Phosphorus	0.0459574	0.0063323	V0	0.0080375	V0	0.0033193	V0
Platinum	0.0000088	0.0000013	V0	0.0000008	V0	0.0000011	V0
Potassium	0.0061261	0.0282205	V0	0.0090809	V0	0.0011685	V0
Praseodymium	0.0000070	0.0000010	V0	0.0000009	V0	0.0000000	V1
Rubidium	0.0000184	0.0000400	V0	0.0000183	V0	0.0000013	V0
Samarium	0.0000133	0.0000000	V1	0.0000009	V0	0.0000000	V1
Selenium	0.0003366	0.0000178	V0	0.0000360	V0	0.0000000	V1
Silicon	0.7676322	0.0717371	V4	0.1660905	V4	-9999	M2
Silver	0.0000100	0.0000026	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0570643	V0	0.0397442	V0	0.0017708	V0
Strontium	0.0003375	0.0000935	V0	0.0000894	V0	0.0000206	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000004	V0	0.0000000	V1
Thorium	0.0000059	0.0000008	V0	0.0000010	V0	0.0000000	V1
Tin	0.0004414	0.0000483	V0	0.0000562	V0	0.0000000	V1
Titanium	0.0015201	0.0006849	V0	0.0005898	V0	0.0003453	V0
Tungsten	0.0000938	0.0000691	V0	0.0000639	V0	0.0000825	V0
Uranium	0.0000048	0.0000004	V0	0.0000008	V0	0.0000000	V1
Vanadium	0.0007697	0.0000648	V0	0.0006682	V0	0.0000549	V0
Zinc	0.0055897	0.0045748	V0	0.0023990	V0	0.0007101	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		08-Dec		08-Dec		08-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.06	V0	1.90	V0	0.05	V0
Aluminum	0.1380326	0.0100209	V0	0.0000000	V1	0.0060021	V0
Antimony	0.0001784	0.0000602	V0	0.0000104	V0	0.0000000	V1
Arsenic	0.0001060	0.0000380	V0	0.0000115	V0	0.0000000	V1
Barium	0.0092847	0.0006807	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000169	V0	0.0000037	V0	0.0000010	V0
Cadmium	0.0000174	0.0000032	V0	0.0000042	V0	0.0000012	V0
Calcium	0.4112124	0.0246564	V0	0.0000000	V1	0.0179401	V0
Cerium	0.0000174	0.0000104	V0	0.0000034	V0	0.0000000	V1
Cesium	0.0000100	0.0000007	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0003439	V0	0.0001966	V0	0.0000000	V1
Cobalt	0.0000273	0.0000232	V0	0.0000125	V0	0.0000467	V0
Copper	0.0017171	0.0006961	V0	0.0001665	V0	0.0005279	V0
Iron	0.0393063	0.0157141	V0	0.0041851	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000042	V0	0.0000015	V0	0.0000000	V1
Lead	0.0008577	0.0000521	V0	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000099	V0	0.0000000	V1	0.0000073	V0
Magnesium	0.0091409	0.0112337	V0	0.0070825	V0	0.0016838	V0
Manganese	0.0006949	0.0009584	V0	0.0000862	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000828	V0	0.0000852	V0	0.0002186	V0
Neodymium	0.0000140	0.0000032	V0	0.0000008	V0	0.0000000	V1
Nickel	0.0005429	0.0002972	V0	0.0002059	V0	0.0000861	V0
Niobium	0.0000202	0.0000025	V0	0.0000018	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000064	V0
Phosphorus	0.0459574	0.0051815	V0	0.0061965	V0	0.0033193	V0
Platinum	0.0000088	0.0000010	V0	0.0000006	V0	0.0000011	V0
Potassium	0.0061261	0.0229109	V0	0.0065546	V0	0.0011685	V0
Praseodymium	0.0000070	0.0000008	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000366	V0	0.0000083	V0	0.0000013	V0
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000227	V0	0.0000261	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V4	0.0868060	V4	-9999	M2
Silver	0.0000100	0.0000007	V0	0.0000017	V0	0.0000000	V1
Sodium	0.0169447	0.0509925	V0	0.0324090	V0	0.0017708	V0
Strontium	0.0003375	0.0001244	V0	0.0000534	V0	0.0000206	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000004	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000008	V0	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0000903	V0	0.0000321	V0	0.0000000	V1
Titanium	0.0015201	0.0007968	V0	0.0017089	V0	0.0003453	V0
Tungsten	0.0000938	0.0000393	V0	0.0000092	V0	0.0000825	V0
Uranium	0.0000048	0.0000005	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0001442	V0	0.0000494	V0	0.0000549	V0
Zinc	0.0055897	0.0034700	V0	0.0007652	V0	0.0007101	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**14-Dec**		**14-Dec**		**14-Dec**	
Particulate Size		**PM2.5**		**PM2.5**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	8.71	V0	3.64	V0	0.05	V0
Aluminum	0.1380326	0.0151074	V0	0.0119225	V0	0.0000000	V1
Antimony	0.0001784	0.0001976	V0	0.0000493	V0	0.0000000	V1
Arsenic	0.0001060	0.0000914	V0	0.0000757	V0	0.0000000	V1
Barium	0.0092847	0.0010725	V0	0.0004798	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000426	V0	0.0000104	V0	0.0000020	V0
Cadmium	0.0000174	0.0000256	V0	0.0000254	V0	0.0000016	V0
Calcium	0.4112124	0.0605483	V0	0.0334151	V0	0.0000000	V1
Cerium	0.0000174	0.0000319	V0	0.0000166	V0	0.0000032	V0
Cesium	0.0000100	0.0000037	V0	0.0000041	V0	0.0000005	V0
Chromium	0.0022262	0.0003056	V0	0.0001915	V0	0.0000000	V1
Cobalt	0.0000273	0.0000666	V0	0.0000186	V0	0.0000446	V0
Copper	0.0017171	0.0020639	V0	0.0003672	V0	0.0001784	V0
Iron	0.0393063	0.0380215	V0	0.0134528	V0	0.0017958	V0
Lanthanum	0.0000130	0.0000123	V0	0.0000073	V0	0.0000012	V0
Lead	0.0008577	0.0004299	V0	0.0004328	V0	0.0000000	V1
Lithium	0.0000374	0.0000206	V0	0.0000128	V0	0.0000000	V1
Magnesium	0.0091409	0.0176624	V0	0.0107520	V0	0.0015054	V0
Manganese	0.0006949	0.0017991	V0	0.0007001	V0	0.0000339	V0
Molybdenum	0.0007116	0.0002398	V0	0.0000466	V0	0.0000000	V1
Neodymium	0.0000140	0.0000083	V0	0.0000043	V0	0.0000007	V0
Nickel	0.0005429	0.0004180	V0	0.0001495	V0	0.0002251	V0
Niobium	0.0000202	0.0000039	V0	0.0000024	V0	0.0000013	V0
Palladium	0.0000632	0.0000104	V0	0.0000035	V0	0.0000089	V0
Phosphorus	0.0459574	0.0091256	V0	0.0067968	V0	0.0051236	V0
Platinum	0.0000088	0.0000018	V0	0.0000005	V0	0.0000015	V0
Potassium	0.0061261	0.0834218	V0	0.0558001	V0	0.0012627	V0
Praseodymium	0.0000070	0.0000017	V0	0.0000012	V0	0.0000000	V1
Rubidium	0.0000184	0.0001265	V0	0.0000851	V0	0.0000031	V0
Samarium	0.0000133	0.0000007	V0	0.0000007	V0	0.0000000	V1
Selenium	0.0003366	0.0000517	V0	0.0000499	V0	0.0000175	V0
Silicon	0.7676322	0.0767583	V0	0.0354006	V0	0.0466092	V0
Silver	0.0000100	0.0000066	V0	0.0000028	V0	0.0000000	V1
Sodium	0.0169447	0.0767179	V0	0.0390393	V0	0.0011880	V0
Strontium	0.0003375	0.0002352	V0	0.0001442	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000035	V0	0.0000047	V0	0.0000000	V1
Thorium	0.0000059	0.0000018	V0	0.0000014	V0	0.0000000	V1
Tin	0.0004414	0.0004770	V0	0.0001704	V0	0.0000000	V1
Titanium	0.0015201	0.0012304	V0	0.0011706	V0	0.0011770	V0
Tungsten	0.0000938	0.0000969	V0	0.0000231	V0	0.0000066	V0
Uranium	0.0000048	0.0000009	V0	0.0000009	V0	0.0000000	V1
Vanadium	0.0007697	0.0001168	V0	0.0001060	V0	0.0000000	V1
Zinc	0.0055897	0.0110669	V0	0.0054581	V0	0.0004089	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		14-Dec		14-Dec		14-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	7.95	V0	3.52	V0	0.05	V0
Aluminum	0.1380326	0.0144031	V0	0.0102266	V0	0.0000000	V1
Antimony	0.0001784	0.0001126	V0	0.0000296	V0	0.0000000	V1
Arsenic	0.0001060	0.0000726	V0	0.0000632	V0	0.0000000	V1
Barium	0.0092847	0.0013323	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000108	V0	0.0000136	V0	0.0000020	V0
Cadmium	0.0000174	0.0000260	V0	0.0000260	V0	0.0000016	V0
Calcium	0.4112124	0.0496592	V0	0.0239887	V0	0.0000000	V1
Cerium	0.0000174	0.0000325	V0	0.0000089	V0	0.0000032	V0
Cesium	0.0000100	0.0000024	V0	0.0000034	V0	0.0000005	V0
Chromium	0.0022262	0.0001932	V0	0.0001453	V0	0.0000000	V1
Cobalt	0.0000273	0.0000138	V0	0.0000139	V0	0.0000446	V0
Copper	0.0017171	0.0009569	V0	0.0003584	V0	0.0001784	V0
Iron	0.0393063	0.0236994	V0	0.0087575	V0	0.0017958	V0
Lanthanum	0.0000130	0.0000140	V0	0.0000052	V0	0.0000012	V0
Lead	0.0008577	0.0004330	V0	0.0003686	V0	0.0000000	V1
Lithium	0.0000374	0.0000180	V0	0.0000116	V0	0.0000000	V1
Magnesium	0.0091409	0.0295513	V0	0.0096645	V0	0.0015054	V0
Manganese	0.0006949	0.0006169	V0	0.0003229	V0	0.0000339	V0
Molybdenum	0.0007116	0.0001192	V0	0.0002224	V0	0.0000000	V1
Neodymium	0.0000140	0.0000076	V0	0.0000034	V0	0.0000007	V0
Nickel	0.0005429	0.0001742	V0	0.0002536	V0	0.0002251	V0
Niobium	0.0000202	0.0000057	V0	0.0000028	V0	0.0000013	V0
Palladium	0.0000632	0.0000140	V0	0.0000064	V0	0.0000089	V0
Phosphorus	0.0459574	0.0085140	V0	0.0056794	V0	0.0051236	V0
Platinum	0.0000088	0.0000020	V0	0.0000013	V0	0.0000015	V0
Potassium	0.0061261	0.0443869	V0	0.0407319	V0	0.0012627	V0
Praseodymium	0.0000070	0.0000021	V0	0.0000007	V0	0.0000000	V1
Rubidium	0.0000184	0.0000620	V0	0.0000606	V0	0.0000031	V0
Samarium	0.0000133	0.0000012	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000604	V0	0.0000636	V0	0.0000175	V0
Silicon	0.7676322	0.0688321	V0	0.0000000	V1	0.0466092	V0
Silver	0.0000100	0.0000046	V0	0.0000046	V0	0.0000000	V1
Sodium	0.0169447	0.1575433	V0	0.0371642	V0	0.0011880	V0
Strontium	0.0003375	0.0003445	V0	0.0000874	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000024	V0	0.0000043	V0	0.0000000	V1
Thorium	0.0000059	0.0000024	V0	0.0000012	V0	0.0000000	V1
Tin	0.0004414	0.0001741	V0	0.0001379	V0	0.0000000	V1
Titanium	0.0015201	0.0020723	V0	0.0053349	V0	0.0011770	V0
Tungsten	0.0000938	0.0000178	V0	0.0000108	V0	0.0000066	V0
Uranium	0.0000048	0.0000012	V0	0.0000007	V0	0.0000000	V1
Vanadium	0.0007697	0.0000887	V0	0.0000847	V0	0.0000000	V1
Zinc	0.0055897	0.0073483	V0	0.0035175	V0	0.0004089	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		20-Dec		20-Dec		20-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.35	V0	5.25	V0	0.23	V0
Aluminum	0.1380326	0.0076482	V0	0.0068205	V0	0.0000000	V1
Antimony	0.0001784	0.0004499	V0	0.0004299	V0	0.0000000	V1
Arsenic	0.0001060	0.0000270	V0	0.0000500	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0003883	V0	0.0000000	V1
Beryllium	0.0000946	0.0000043	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000112	V0	0.0000082	V0	0.0000029	V0
Cadmium	0.0000174	0.0000330	V0	0.0000471	V0	0.0000008	V0
Calcium	0.4112124	0.0235686	V0	0.0252791	V0	0.0000000	V1
Cerium	0.0000174	0.0000081	V0	0.0000137	V0	0.0000000	V1
Cesium	0.0000100	0.0000010	V0	0.0000017	V0	0.0000000	V1
Chromium	0.0022262	0.0002012	V0	0.0002145	V0	0.0000000	V1
Cobalt	0.0000273	0.0000188	V0	0.0000286	V0	0.0000219	V0
Copper	0.0017171	0.0006801	V0	0.0011557	V0	0.0000839	V0
Iron	0.0393063	0.0083012	V0	0.0127299	V0	0.0018404	V0
Lanthanum	0.0000130	0.0000066	V0	0.0000115	V0	0.0000000	V1
Lead	0.0008577	0.0002714	V0	0.0002183	V0	0.0000000	V1
Lithium	0.0000374	0.0000055	V0	0.0000084	V0	0.0000000	V1
Magnesium	0.0091409	0.0035549	V0	0.0057438	V0	0.0016897	V0
Manganese	0.0006949	0.0002754	V0	0.0006051	V0	0.0000338	V0
Molybdenum	0.0007116	0.0001228	V4	0.0001240	V4	-9999	M2
Neodymium	0.0000140	0.0000022	V0	0.0000028	V0	0.0000000	V1
Nickel	0.0005429	0.0002513	V0	0.0004466	V0	0.0002243	V0
Niobium	0.0000202	0.0000017	V0	0.0000020	V0	0.0000012	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0054395	V0	0.0059492	V0	0.0049239	V0
Platinum	0.0000088	0.0000028	V0	0.0000009	V0	0.0000015	V0
Potassium	0.0061261	0.0225193	V0	0.0522205	V0	0.0020432	V0
Praseodymium	0.0000070	0.0000006	V0	0.0000008	V0	0.0000000	V1
Rubidium	0.0000184	0.0000381	V0	0.0000955	V0	0.0000029	V0
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000372	V0	0.0000410	V0	0.0001150	V0
Silicon	0.7676322	0.0000000	V1	0.0755248	V0	0.0000000	V1
Silver	0.0000100	0.0000015	V0	0.0000042	V0	0.0000000	V1
Sodium	0.0169447	0.0200229	V0	0.0375097	V0	0.0015963	V0
Strontium	0.0003375	0.0000543	V0	0.0000692	V0	0.0000159	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000010	V0	0.0000019	V0	0.0000000	V1
Thorium	0.0000059	0.0000005	V0	0.0000008	V0	0.0000000	V1
Tin	0.0004414	0.0002241	V0	0.0002976	V0	0.0000000	V1
Titanium	0.0015201	0.0024208	V4	0.0012670	V4	-9999	M2
Tungsten	0.0000938	0.0000149	V0	0.0000280	V0	0.0000109	V0
Uranium	0.0000048	0.0000003	V0	0.0000004	V0	0.0000000	V1
Vanadium	0.0007697	0.0000575	V0	0.0001419	V0	0.0000000	V1
Zinc	0.0055897	0.0030419	V0	0.0063809	V0	0.0003977	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		20-Dec		20-Dec		20-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	9.12	V0	3.08	V0	0.23	V0
Aluminum	0.1380326	0.0139411	V0	0.0059046	V0	0.0000000	V1
Antimony	0.0001784	0.0006439	V0	0.0000127	V0	0.0000000	V1
Arsenic	0.0001060	0.0003021	V0	0.0000156	V0	0.0000000	V1
Barium	0.0092847	0.0028813	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000169	V0	0.0000130	V0	0.0000029	V0
Cadmium	0.0000174	0.0007083	V0	0.0000207	V0	0.0000008	V0
Calcium	0.4112124	0.0422452	V0	0.0195993	V0	0.0000000	V1
Cerium	0.0000174	0.0000620	V0	0.0000050	V0	0.0000000	V1
Cesium	0.0000100	0.0000028	V0	0.0000008	V0	0.0000000	V1
Chromium	0.0022262	0.0008039	V0	0.0002128	V0	0.0000000	V1
Cobalt	0.0000273	0.0000409	V0	0.0000086	V0	0.0000219	V0
Copper	0.0017171	0.0018882	V0	0.0002677	V0	0.0000839	V0
Iron	0.0393063	0.0563840	V0	0.0048052	V0	0.0018404	V0
Lanthanum	0.0000130	0.0000286	V0	0.0000039	V0	0.0000000	V1
Lead	0.0008577	0.0004903	V0	0.0000567	V0	0.0000000	V1
Lithium	0.0000374	0.0000271	V0	0.0000031	V0	0.0000000	V1
Magnesium	0.0091409	0.0066145	V0	0.0048281	V0	0.0016897	V0
Manganese	0.0006949	0.0014148	V0	0.0001982	V0	0.0000338	V0
Molybdenum	0.0007116	0.0004111	V4	0.0002574	V4	-9999	M2
Neodymium	0.0000140	0.0000109	V0	0.0000017	V0	0.0000000	V1
Nickel	0.0005429	0.0008974	V0	0.0001803	V0	0.0002243	V0
Niobium	0.0000202	0.0000072	V0	0.0000013	V0	0.0000012	V0
Palladium	0.0000632	0.0000111	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0077031	V0	0.0054633	V0	0.0049239	V0
Platinum	0.0000088	0.0000015	V0	0.0000008	V0	0.0000015	V0
Potassium	0.0061261	0.0518498	V0	0.0197540	V0	0.0020432	V0
Praseodymium	0.0000070	0.0000034	V0	0.0000004	V0	0.0000000	V1
Rubidium	0.0000184	0.0000915	V0	0.0000372	V0	0.0000029	V0
Samarium	0.0000133	0.0000014	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000816	V0	0.0000538	V0	0.0001150	V0
Silicon	0.7676322	0.0765170	V0	0.0649715	V0	0.0000000	V1
Silver	0.0000100	0.0000066	V0	0.0000098	V0	0.0000000	V1
Sodium	0.0169447	0.0607972	V0	0.0198016	V0	0.0015963	V0
Strontium	0.0003375	0.0002684	V0	0.0000415	V0	0.0000159	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000032	V0	0.0000008	V0	0.0000000	V1
Thorium	0.0000059	0.0000035	V0	0.0000006	V0	0.0000000	V1
Tin	0.0004414	0.0002649	V0	0.0000782	V0	0.0000000	V1
Titanium	0.0015201	0.0021999	V4	0.0056960	V4	-9999	M2
Tungsten	0.0000938	0.0000225	V0	0.0000088	V0	0.0000109	V0
Uranium	0.0000048	0.0000016	V0	0.0000002	V0	0.0000000	V1
Vanadium	0.0007697	0.0002686	V0	0.0001716	V0	0.0000000	V1
Zinc	0.0055897	0.0091208	V0	0.0021008	V0	0.0003977	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		26-Dec		26-Dec		26-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.93	V0	5.76	V0	0.48	V0
Aluminum	0.1380326	0.0142089	V0	0.0120070	V0	0.0000000	V1
Antimony	0.0001784	0.0001123	V0	0.0001057	V0	0.0000000	V1
Arsenic	0.0001060	0.0003464	V0	0.0001086	V0	0.0000000	V1
Barium	0.0092847	0.0005556	V0	0.0008058	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000154	V0	0.0000156	V0	0.0000033	V0
Cadmium	0.0000174	0.0000246	V0	0.0000250	V0	0.0000000	V1
Calcium	0.4112124	0.0266363	V0	0.0229083	V0	0.0000000	V1
Cerium	0.0000174	0.0000161	V0	0.0000202	V0	0.0000019	V0
Cesium	0.0000100	0.0000038	V0	0.0000025	V0	0.0000005	V0
Chromium	0.0022262	0.0002454	V0	0.0002511	V0	0.0005618	V0
Cobalt	0.0000273	0.0000346	V0	0.0000213	V0	0.0000447	V0
Copper	0.0017171	0.0012803	V0	0.0006088	V0	0.0008194	V0
Iron	0.0393063	0.0116859	V0	0.0129550	V0	0.0058304	V0
Lanthanum	0.0000130	0.0000633	V0	0.0000460	V0	0.0000009	V0
Lead	0.0008577	0.0005123	V0	0.0004416	V0	0.0000000	V1
Lithium	0.0000374	0.0000125	V0	0.0000119	V0	0.0000000	V1
Magnesium	0.0091409	0.0060997	V0	0.0058434	V0	0.0013721	V0
Manganese	0.0006949	0.0005192	V0	0.0003215	V0	0.0000817	V0
Molybdenum	0.0007116	0.0000705	V0	0.0000642	V0	0.0000347	V0
Neodymium	0.0000140	0.0000054	V0	0.0000049	V0	0.0000009	V0
Nickel	0.0005429	0.0002068	V0	0.0001286	V0	0.0003769	V0
Niobium	0.0000202	0.0000030	V0	0.0000026	V0	0.0000037	V0
Palladium	0.0000632	0.0000027	V0	0.0000072	V0	0.0000068	V0
Phosphorus	0.0459574	0.0063747	V0	0.0053255	V0	0.0042985	V0
Platinum	0.0000088	0.0000014	V0	0.0000006	V0	0.0000014	V0
Potassium	0.0061261	0.0400014	V0	0.0300864	V0	0.0011762	V0
Praseodymium	0.0000070	0.0000015	V0	0.0000015	V0	0.0000003	V0
Rubidium	0.0000184	0.0000752	V0	0.0000531	V0	0.0000027	V0
Samarium	0.0000133	0.0000011	V0	0.0000007	V0	0.0000000	V1
Selenium	0.0003366	0.0000525	V0	0.0000470	V0	0.0000175	V0
Silicon	0.7676322	0.0496774	V0	0.0559951	V0	0.0000000	V1
Silver	0.0000100	0.0000027	V0	0.0000034	V0	0.0000006	V0
Sodium	0.0169447	0.0300981	V0	0.0224786	V0	0.0017296	V0
Strontium	0.0003375	0.0001359	V0	0.0001928	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000036	V0	0.0000026	V0	0.0000000	V1
Thorium	0.0000059	0.0000023	V0	0.0000017	V0	0.0000003	V0
Tin	0.0004414	0.0004009	V0	0.0002390	V0	0.0000000	V1
Titanium	0.0015201	0.0010047	V0	0.0009670	V0	0.0011577	V0
Tungsten	0.0000938	0.0000430	V0	0.0000558	V0	0.0000818	V0
Uranium	0.0000048	0.0000022	V0	0.0000020	V0	0.0000003	V0
Vanadium	0.0007697	0.0002352	V0	0.0000899	V0	0.0000000	V1
Zinc	0.0055897	0.0085196	V0	0.0036134	V0	0.0006680	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		26-Dec		26-Dec		26-Dec	
Particulate Size		PM2.5		PM2.5			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.94	V0	3.44	V0	0.48	V0
Aluminum	0.1380326	0.0131774	V0	0.0127412	V0	0.0000000	V1
Antimony	0.0001784	0.0001116	V0	0.0000428	V0	0.0000000	V1
Arsenic	0.0001060	0.0001026	V0	0.0000733	V0	0.0000000	V1
Barium	0.0092847	0.0008974	V0	0.0004827	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000117	V0	0.0000109	V0	0.0000033	V0
Cadmium	0.0000174	0.0000290	V0	0.0000167	V0	0.0000000	V1
Calcium	0.4112124	0.0228461	V0	0.0206080	V0	0.0000000	V1
Cerium	0.0000174	0.0000146	V0	0.0000110	V0	0.0000019	V0
Cesium	0.0000100	0.0000029	V0	0.0000024	V0	0.0000005	V0
Chromium	0.0022262	0.0001919	V0	0.0004439	V0	0.0005618	V0
Cobalt	0.0000273	0.0000124	V0	0.0000218	V0	0.0000447	V0
Copper	0.0017171	0.0012920	V0	0.0002149	V0	0.0008194	V0
Iron	0.0393063	0.0117769	V0	0.0102981	V0	0.0058304	V0
Lanthanum	0.0000130	0.0000364	V0	0.0000489	V0	0.0000009	V0
Lead	0.0008577	0.0004339	V0	0.0003607	V0	0.0000000	V1
Lithium	0.0000374	0.0000104	V0	0.0000070	V0	0.0000000	V1
Magnesium	0.0091409	0.0059016	V0	0.0055597	V0	0.0013721	V0
Manganese	0.0006949	0.0002817	V0	0.0002570	V0	0.0000817	V0
Molybdenum	0.0007116	0.0000506	V0	0.0004184	V0	0.0000347	V0
Neodymium	0.0000140	0.0000046	V0	0.0000046	V0	0.0000009	V0
Nickel	0.0005429	0.0001450	V0	0.0003090	V0	0.0003769	V0
Niobium	0.0000202	0.0000033	V0	0.0000037	V0	0.0000037	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000068	V0
Phosphorus	0.0459574	0.0058117	V0	0.0046715	V0	0.0042985	V0
Platinum	0.0000088	0.0000010	V0	0.0000009	V0	0.0000014	V0
Potassium	0.0061261	0.0340301	V0	0.0219668	V0	0.0011762	V0
Praseodymium	0.0000070	0.0000012	V0	0.0000012	V0	0.0000003	V0
Rubidium	0.0000184	0.0000519	V0	0.0000387	V0	0.0000027	V0
Samarium	0.0000133	0.0000006	V0	0.0000007	V0	0.0000000	V1
Selenium	0.0003366	0.0000438	V0	0.0000928	V0	0.0000175	V0
Silicon	0.7676322	0.0000000	V1	0.0683966	V0	0.0000000	V1
Silver	0.0000100	0.0000018	V0	0.0000012	V0	0.0000006	V0
Sodium	0.0169447	0.0289050	V0	0.0207243	V0	0.0017296	V0
Strontium	0.0003375	0.0001264	V0	0.0001126	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000031	V0	0.0000026	V0	0.0000000	V1
Thorium	0.0000059	0.0000016	V0	0.0000019	V0	0.0000003	V0
Tin	0.0004414	0.0002067	V0	0.0001165	V0	0.0000000	V1
Titanium	0.0015201	0.0011585	V0	0.0084000	V0	0.0011577	V0
Tungsten	0.0000938	0.0000278	V0	0.0000089	V0	0.0000818	V0
Uranium	0.0000048	0.0000025	V0	0.0000020	V0	0.0000003	V0
Vanadium	0.0007697	0.0000816	V0	0.0000957	V0	0.0000000	V1
Zinc	0.0055897	0.0031459	V0	0.0016578	V0	0.0006680	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay	Bertha Ganter - Fort McKay	Bertha Ganter - Fort McKay	Bertha Ganter - Fort McKay
Station #	AMS 1	AMS 1	AMS 1	AMS 1
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM2.5	PM2.5	PM2.5	PM2.5
Compound Name	Average µg/m³	Std Dev µg/m³	Total Samples (#)	Total ≥ MDL (#)
Particulate Matter	7.58	10.13	61	61
Aluminum	0.0612278	0.0993443	61	55
Antimony	0.0000455	0.0000642	61	58
Arsenic	0.0000856	0.0001156	61	59
Barium	0.0009345	0.0022850	61	31
Beryllium	0.0000016	0.0000034	61	13
Bismuth	0.0000280	0.0000858	61	57
Cadmium	0.0000275	0.0000575	61	59
Calcium	0.1289114	0.2035784	61	54
Cerium	0.0000649	0.0000980	61	61
Cesium	0.0000056	0.0000080	61	55
Chromium	0.0002818	0.0001924	59	57
Cobalt	0.0000706	0.0000628	60	60
Copper	0.0008186	0.0005397	59	59
Iron	0.0577709	0.0853093	61	61
Lanthanum	0.0000367	0.0000487	61	61
Lead	0.0001967	0.0002059	61	55
Lithium	0.0000610	0.0000931	61	55
Magnesium	0.0153334	0.0197126	61	61
Manganese	0.0016142	0.0026512	61	61
Molybdenum	0.0000787	0.0001081	60	45
Neodymium	0.0000271	0.0000439	61	58
Nickel	0.0002970	0.0001915	57	57
Niobium	0.0000081	0.0000107	61	59
Palladium	0.0000058	0.0000094	60	35
Phosphorus	0.0121183	0.0115856	61	58
Platinum	0.0000010	0.0000010	61	47
Potassium	0.0465543	0.0578146	61	61
Praseodymium	0.0000070	0.0000113	61	56
Rubidium	0.0001287	0.0001748	61	61
Samarium	0.0000050	0.0000084	61	44
Selenium	0.0000737	0.0000762	61	51
Silicon	0.1943937	0.3337467	61	46
Silver	0.0000032	0.0000050	61	49
Sodium	0.0276514	0.0358074	60	60
Strontium	0.0003144	0.0004405	61	61
Tantalum	0.0000001	0.0000007	61	3
Thallium	0.0000022	0.0000029	61	45
Thorium	0.0000082	0.0000131	61	57
Tin	0.0000809	0.0000803	61	60
Titanium	0.0028372	0.0035192	60	60
Tungsten	0.0000565	0.0000524	61	61
Uranium	0.0000033	0.0000043	61	55
Vanadium	0.0003047	0.0005533	61	55
Zinc	0.0037021	0.0035302	60	60

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name	Patricia McInnes	Patricia McInnes	Patricia McInnes	Patricia McInnes
Station #	AMS 6	AMS 6	AMS 6	AMS 6
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM2.5	PM2.5	PM2.5	PM2.5
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	µg/m³	µg/m³		
Particulate Matter	12.85	38.34	59	59
Aluminum	0.0229378	0.0247983	59	49
Antimony	0.0002660	0.0013604	59	57
Arsenic	0.0002936	0.0010101	59	58
Barium	0.0008753	0.0025244	59	40
Beryllium	0.0000006	0.0000022	59	5
Bismuth	0.0000156	0.0000223	59	58
Cadmium	0.0000540	0.0002262	59	57
Calcium	0.0569935	0.0990267	59	52
Cerium	0.0000299	0.0000291	59	59
Cesium	0.0000030	0.0000045	59	53
Chromium	0.0002434	0.0001750	58	55
Cobalt	0.0000566	0.0000401	58	58
Copper	0.0008669	0.0017697	58	58
Iron	0.0253001	0.0241867	59	59
Lanthanum	0.0000197	0.0000214	59	59
Lead	0.0003628	0.0014783	58	53
Lithium	0.0000215	0.0000275	59	49
Magnesium	0.0096087	0.0093714	59	59
Manganese	0.0010639	0.0023193	59	59
Molybdenum	0.0000603	0.0000843	58	38
Neodymium	0.0000102	0.0000115	59	54
Nickel	0.0002529	0.0001522	57	57
Niobium	0.0000039	0.0000028	59	59
Palladium	0.0000042	0.0000051	59	34
Phosphorus	0.0124404	0.0159278	59	57
Platinum	0.0000009	0.0000008	59	46
Potassium	0.0373864	0.0575358	59	59
Praseodymium	0.0000028	0.0000031	59	54
Rubidium	0.0000823	0.0001187	59	59
Samarium	0.0000018	0.0000020	59	43
Selenium	0.0000570	0.0000397	59	54
Silicon	0.0849981	0.1050680	59	41
Silver	0.0000038	0.0000122	59	50
Sodium	0.0213695	0.0224432	59	59
Strontium	0.0001791	0.0002086	59	59
Tantalum	0.0000000	0.0000000	59	0
Thallium	0.0000021	0.0000037	59	44
Thorium	0.0000031	0.0000034	59	53
Tin	0.0001225	0.0001852	59	59
Titanium	0.0012680	0.0010022	59	59
Tungsten	0.0000621	0.0000454	59	58
Uranium	0.0000016	0.0000018	59	51
Vanadium	0.0002480	0.0004741	59	54
Zinc	0.0037784	0.0059810	58	58

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name	Athabasca Valley	Athabasca Valley	Athabasca Valley	Athabasca Valley
Station #	AMS 7	AMS 7	AMS 7	AMS 7
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM2.5	PM2.5	PM2.5	PM2.5
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	µg/m³	µg/m³		
Particulate Matter	17.07	54.71	61	61
Aluminum	0.0321631	0.0366126	61	58
Antimony	0.0001699	0.0002555	61	61
Arsenic	0.0002284	0.0008072	61	61
Barium	0.0017750	0.0026904	61	56
Beryllium	0.0000009	0.0000028	61	7
Bismuth	0.0000207	0.0000352	61	59
Cadmium	0.0000872	0.0003614	61	58
Calcium	0.0753599	0.1054011	61	57
Cerium	0.0000492	0.0000553	61	61
Cesium	0.0000038	0.0000061	61	57
Chromium	0.0003319	0.0002424	61	60
Cobalt	0.0000642	0.0000430	61	61
Copper	0.0014487	0.0026168	61	61
Iron	0.0475474	0.0551725	61	61
Lanthanum	0.0000252	0.0000253	61	61
Lead	0.0004558	0.0019207	61	56
Lithium	0.0000312	0.0000435	61	55
Magnesium	0.0135369	0.0142709	61	61
Manganese	0.0014631	0.0021337	61	61
Molybdenum	0.0000856	0.0000903	61	53
Neodymium	0.0000161	0.0000196	61	59
Nickel	0.0003539	0.0003399	61	61
Niobium	0.0000059	0.0000050	61	61
Palladium	0.0000087	0.0000209	61	43
Phosphorus	0.0127696	0.0192891	61	57
Platinum	0.0000010	0.0000009	61	44
Potassium	0.0506241	0.0851449	61	61
Praseodymium	0.0000043	0.0000051	61	57
Rubidium	0.0001037	0.0001528	61	61
Samarium	0.0000027	0.0000036	61	48
Selenium	0.0000683	0.0000551	61	56
Silicon	0.1136892	0.1395945	61	46
Silver	0.0000043	0.0000134	61	54
Sodium	0.0317402	0.0356583	61	61
Strontium	0.0003014	0.0003557	61	61
Tantalum	0.0000001	0.0000005	61	2
Thallium	0.0000023	0.0000046	61	49
Thorium	0.0000047	0.0000058	61	58
Tin	0.0001616	0.0002558	61	61
Titanium	0.0019249	0.0014861	61	61
Tungsten	0.0000733	0.0000667	61	61
Uranium	0.0000022	0.0000023	61	58
Vanadium	0.0002902	0.0004554	61	57
Zinc	0.0049662	0.0090203	61	61

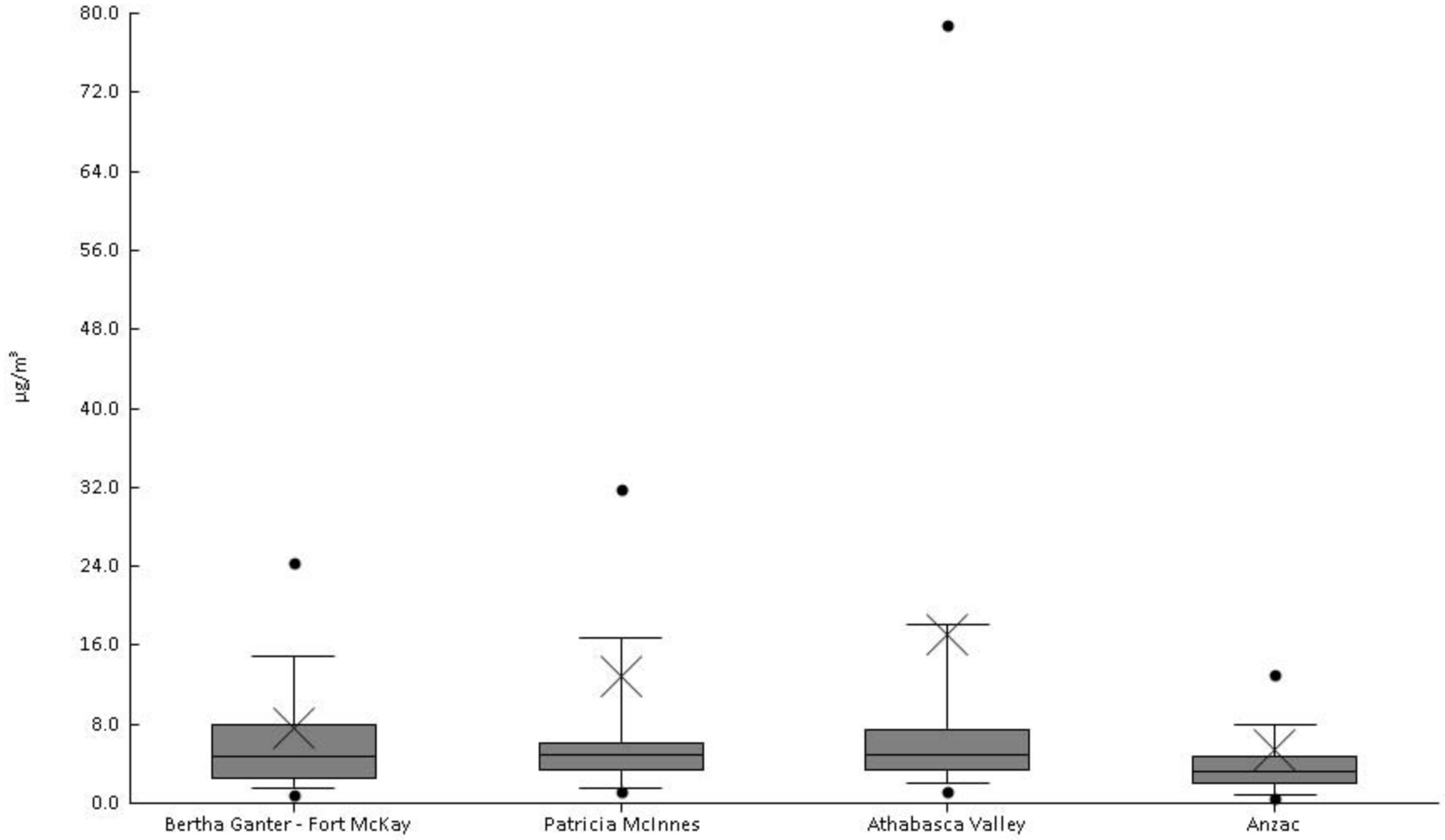
WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM2.5) - METALS **Indicated Sites and Dates**

Station Name	Anzac	Anzac	Anzac	Anzac
Station #	AMS 14	AMS 14	AMS 14	AMS 14
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM2.5	PM2.5	PM2.5	PM2.5
Compound Name	Average µg/m³	Std Dev µg/m³	Total Samples (#)	Total ≥ MDL (#)
Particulate Matter	5.37	9.56	57	57
Aluminum	0.0120029	0.0151815	56	35
Antimony	0.0000253	0.0000316	56	47
Arsenic	0.0000660	0.0000652	56	55
Barium	0.0006158	0.0028558	56	13
Beryllium	0.0000009	0.0000036	56	6
Bismuth	0.0000205	0.0000317	56	55
Cadmium	0.0000156	0.0000231	56	53
Calcium	0.0348638	0.0691975	56	44
Cerium	0.0000142	0.0000156	56	56
Cesium	0.0000015	0.0000019	56	41
Chromium	0.0002194	0.0001850	56	53
Cobalt	0.0000485	0.0000421	56	56
Copper	0.0003461	0.0002261	56	56
Iron	0.0127800	0.0142488	56	56
Lanthanum	0.0000131	0.0000167	56	54
Lead	0.0001229	0.0001303	56	46
Lithium	0.0000093	0.0000109	56	43
Magnesium	0.0063784	0.0083212	56	56
Manganese	0.0005500	0.0014987	56	56
Molybdenum	0.0000377	0.0000732	56	26
Neodymium	0.0000053	0.0000070	56	49
Nickel	0.0002267	0.0001256	56	56
Niobium	0.0000028	0.0000023	56	51
Palladium	0.0000034	0.0000057	56	25
Phosphorus	0.0095639	0.0102314	56	50
Platinum	0.0000008	0.0000006	56	43
Potassium	0.0201191	0.0235658	56	56
Praseodymium	0.0000013	0.0000018	56	37
Rubidium	0.0000415	0.0000539	56	56
Samarium	0.0000008	0.0000014	56	27
Selenium	0.0000425	0.0000287	56	50
Silicon	0.0461756	0.0570857	56	30
Silver	0.0000020	0.0000031	55	39
Sodium	0.0136770	0.0168995	56	56
Strontium	0.0001169	0.0002093	56	56
Tantalum	0.0000000	0.0000000	56	0
Thallium	0.0000011	0.0000016	56	36
Thorium	0.0000016	0.0000022	56	43
Tin	0.0000640	0.0000434	56	54
Titanium	0.0011785	0.0014231	56	56
Tungsten	0.0000500	0.0000264	56	54
Uranium	0.0000011	0.0000014	56	42
Vanadium	0.0001034	0.0000943	56	48
Zinc	0.0018427	0.0017138	56	56

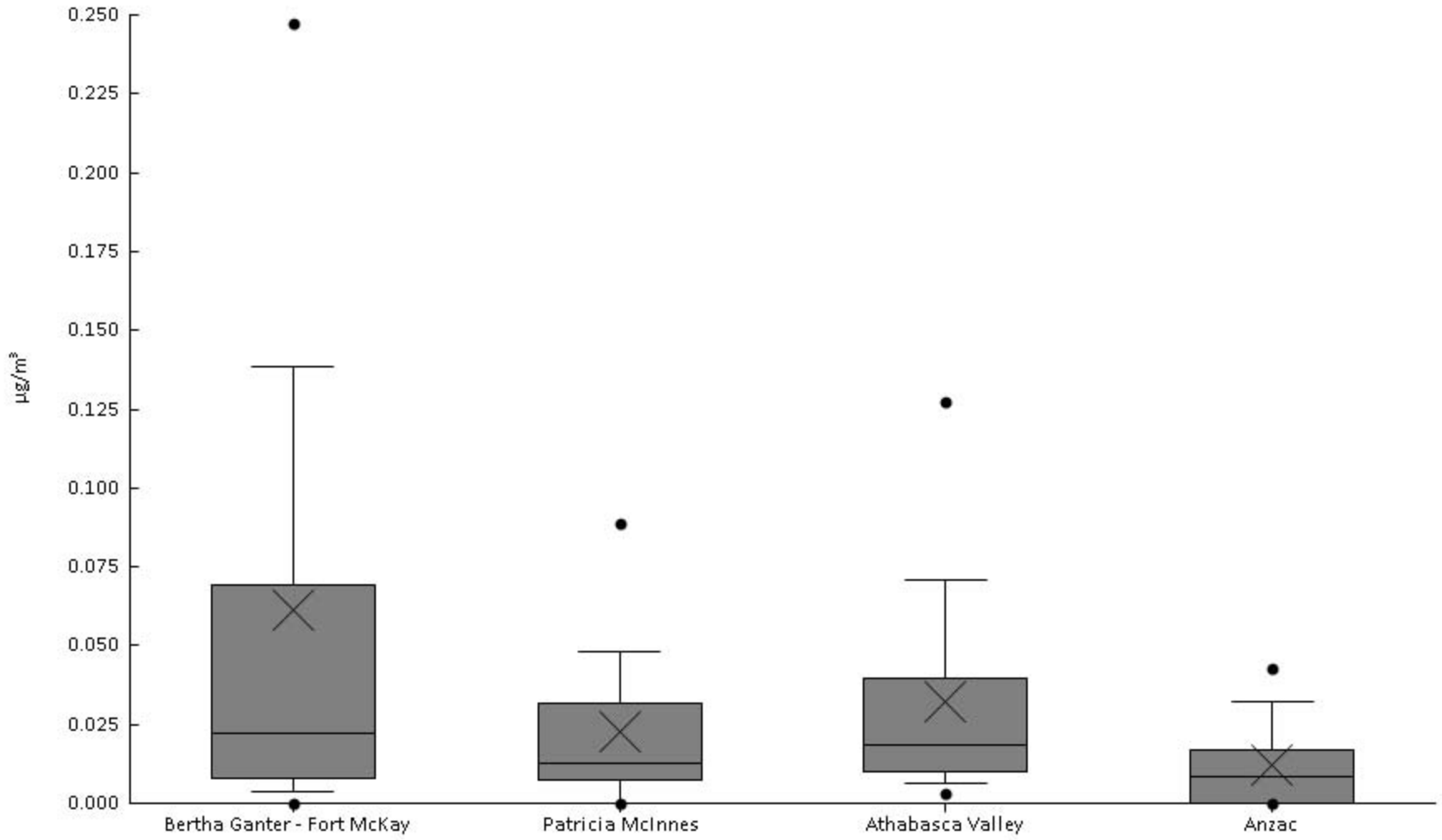
Particulate Matter (PM2.5 METALS) - Particulate Matter (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	0.63	0.88	1.4	2.6	4.8	8	15	24	65	7.6	10
AMS 6	Patricia McInnes	59	100%	0.51	1.2	1.5	3.3	4.9	6.1	17	32	267	13	38
AMS 7	Athabasca Valley	61	100%	0.92	1.1	2.1	3.4	4.9	7.4	18	79	394	17	55
AMS 14	Anzac	57	100%	0.4	0.57	0.88	2	3.3	4.7	8	13	57	5.4	9.6



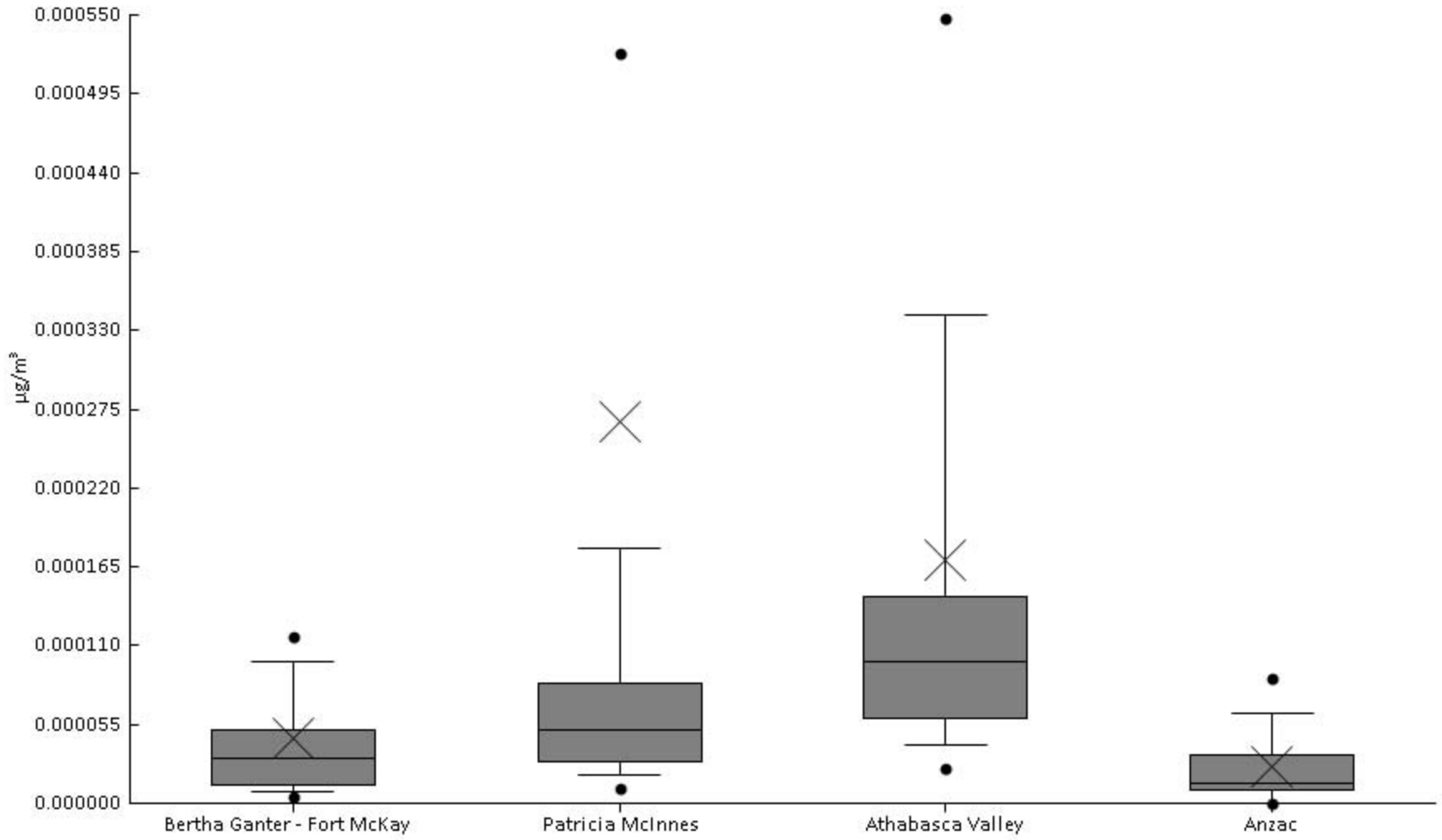
Particulate Matter (PM2.5 METALS) - Aluminum (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	90%	0	0	3.6E-3	8.2E-3	0.022	0.069	0.14	0.25	0.54	0.061	0.099
AMS 6	Patricia McInnes	59	83%	0	0	0	7.1E-3	0.013	0.032	0.048	0.089	0.11	0.023	0.025
AMS 7	Athabasca Valley	61	95%	0	3.4E-3	6.5E-3	9.9E-3	0.019	0.04	0.071	0.13	0.17	0.032	0.037
AMS 14	Anzac	56	62%	0	0	0	0	8.6E-3	0.017	0.032	0.043	0.075	0.012	0.015



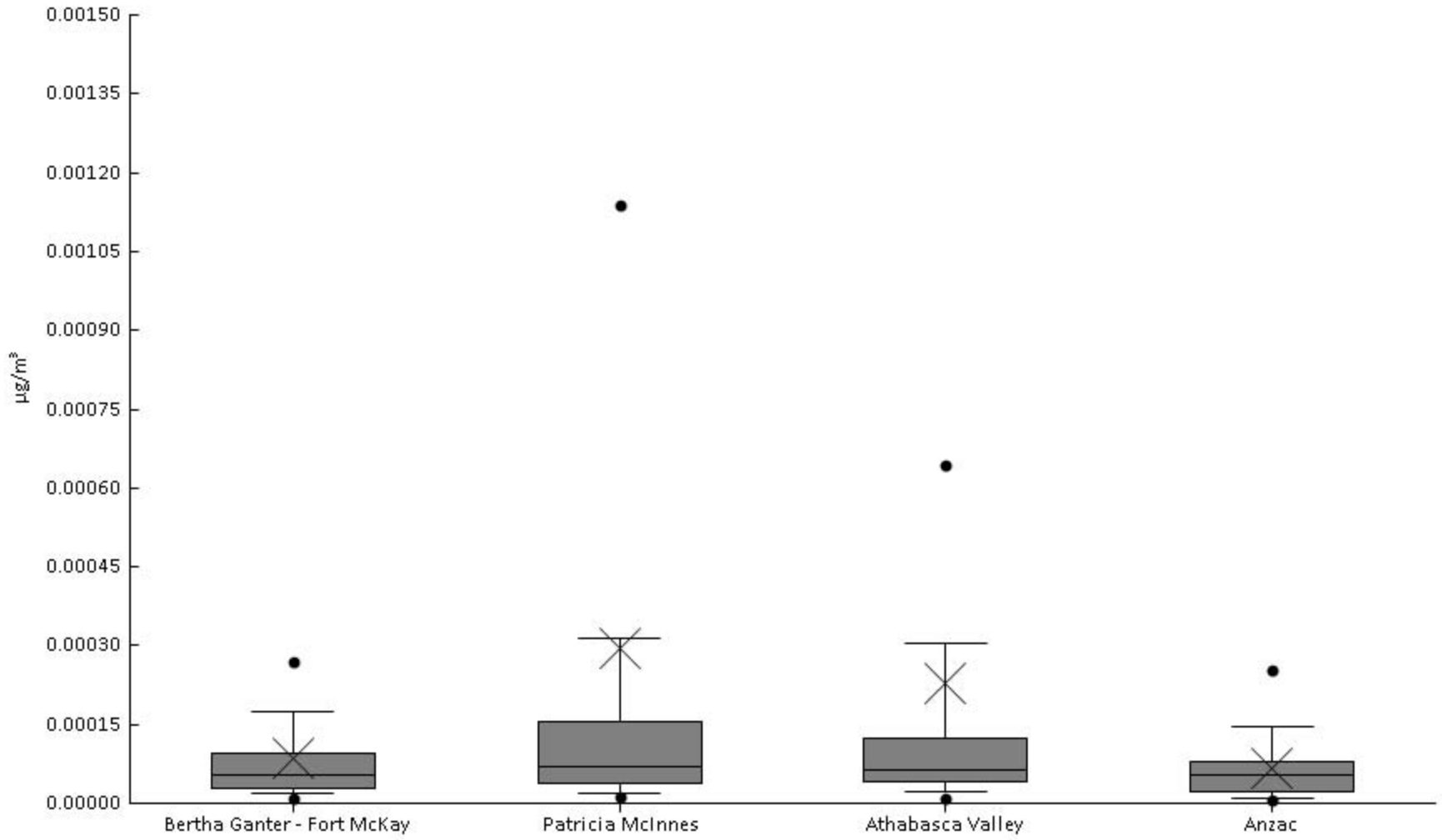
Particulate Matter (PM2.5 METALS) - Antimony (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	95%	0	4.2E-6	8.6E-6	1.3E-5	3.1E-5	5.1E-5	9.9E-5	1.2E-4	4.5E-4	4.6E-5	6.4E-5
AMS 6	Patricia McInnes	59	97%	0	1E-5	1.9E-5	2.9E-5	5.1E-5	8.4E-5	1.8E-4	5.2E-4	0.01	2.7E-4	1.4E-3
AMS 7	Athabasca Valley	61	100%	1.7E-5	2.5E-5	4.1E-5	6E-5	9.9E-5	1.4E-4	3.4E-4	5.5E-4	1.5E-3	1.7E-4	2.6E-4
AMS 14	Anzac	56	84%	0	0	0	8.9E-6	1.4E-5	3.3E-5	6.2E-5	8.7E-5	1.8E-4	2.5E-5	3.2E-5



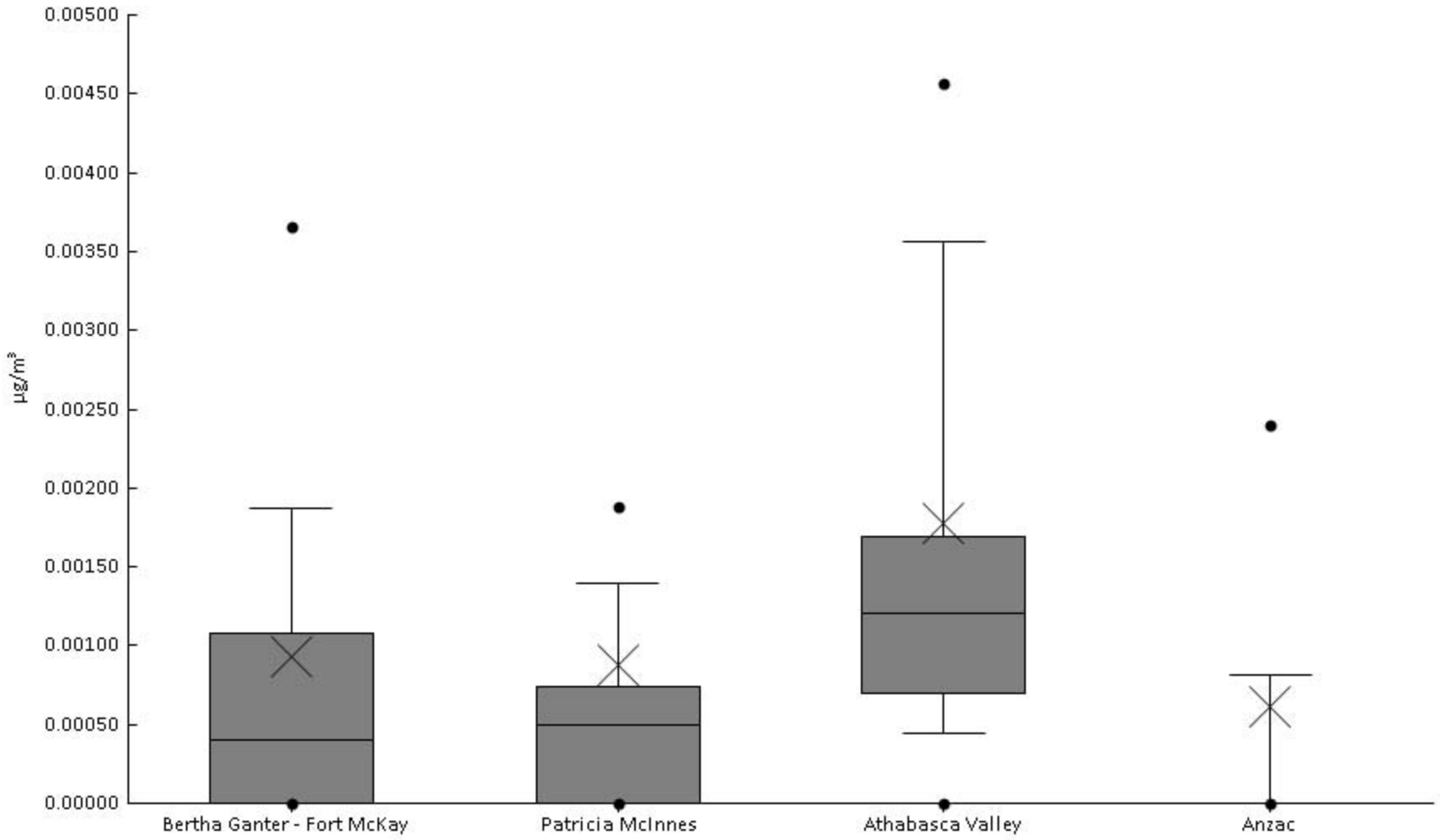
Particulate Matter (PM2.5 METALS) - Arsenic (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	97%	0	1.1E-5	1.8E-5	2.7E-5	5.2E-5	9.6E-5	1.7E-4	2.7E-4	8E-4	8.6E-5	1.2E-4
AMS 6	Patricia McInnes	59	98%	0	1.3E-5	2E-5	3.8E-5	7.1E-5	1.6E-4	3.1E-4	1.1E-3	7.5E-3	2.9E-4	1E-3
AMS 7	Athabasca Valley	61	100%	7.6E-6	9.7E-6	2.1E-5	4E-5	6.4E-5	1.3E-4	3E-4	6.4E-4	6.2E-3	2.3E-4	8.1E-4
AMS 14	Anzac	56	98%	0	7.3E-6	1E-5	2.2E-5	5.4E-5	8E-5	1.5E-4	2.5E-4	2.7E-4	6.6E-5	6.5E-5



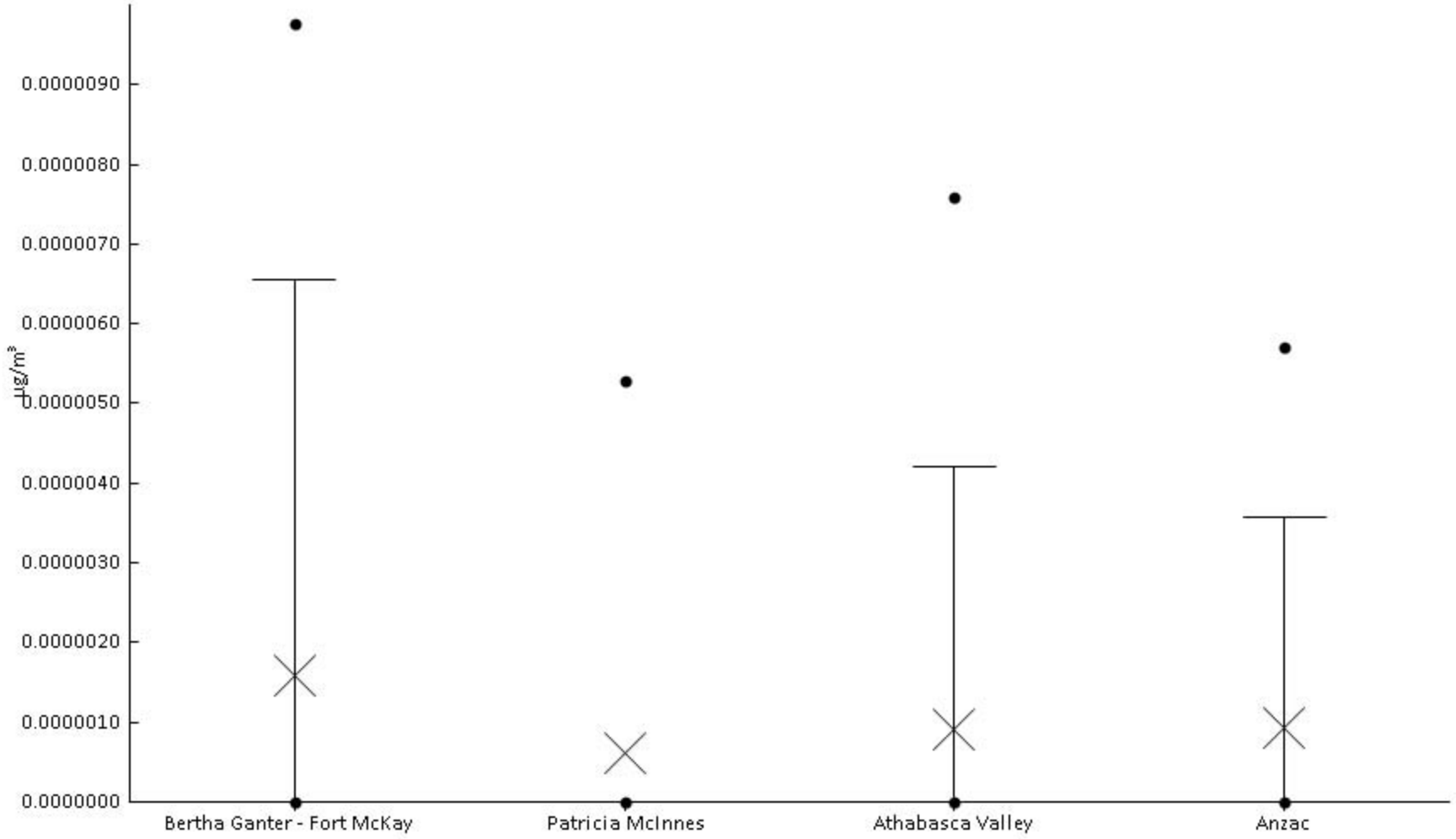
Particulate Matter (PM2.5 METALS) - Barium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	51%	0	0	0	0	4E-4	1.1E-3	1.9E-3	3.7E-3	0.017	9.3E-4	2.3E-3
AMS 6	Patricia McInnes	59	68%	0	0	0	0	4.9E-4	7.4E-4	1.4E-3	1.9E-3	0.019	8.8E-4	2.5E-3
AMS 7	Athabasca Valley	61	92%	0	0	4.5E-4	6.9E-4	1.2E-3	1.7E-3	3.6E-3	4.6E-3	0.02	1.8E-3	2.7E-3
AMS 14	Anzac	56	23%	0	0	0	0	0	0	8.1E-4	2.4E-3	0.021	6.2E-4	2.9E-3



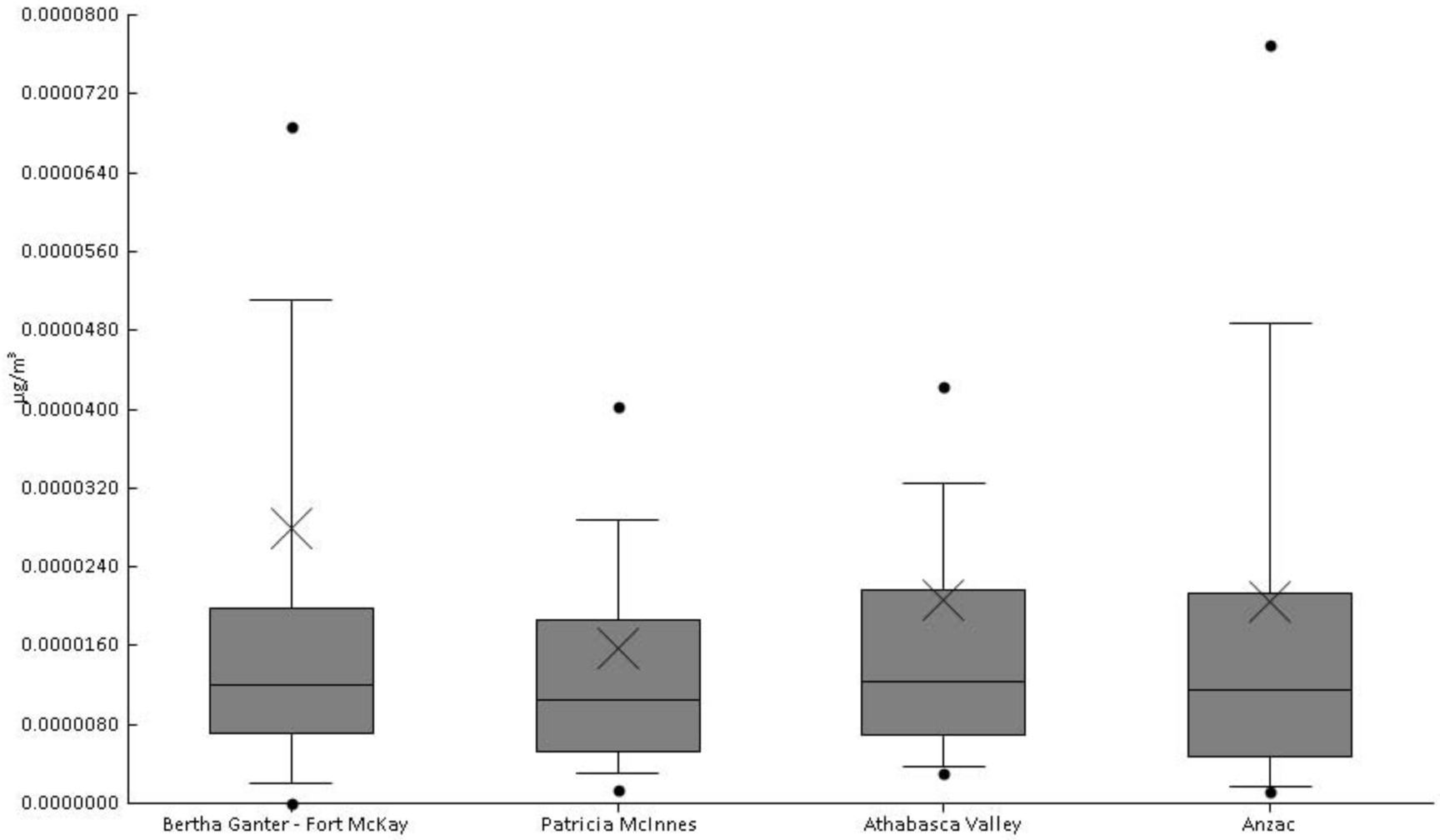
Particulate Matter (PM2.5 METALS) - Beryllium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	21%	0	0	0	0	0	0	6.5E-6	9.8E-6	1.5E-5	1.6E-6	3.4E-6
AMS 6	Patricia McInnes	59	8%	0	0	0	0	0	0	0	5.3E-6	1.2E-5	6.1E-7	2.2E-6
AMS 7	Athabasca Valley	61	11%	0	0	0	0	0	0	4.2E-6	7.6E-6	1.4E-5	9E-7	2.8E-6
AMS 14	Anzac	56	11%	0	0	0	0	0	0	3.6E-6	5.7E-6	2.4E-5	9.4E-7	3.6E-6



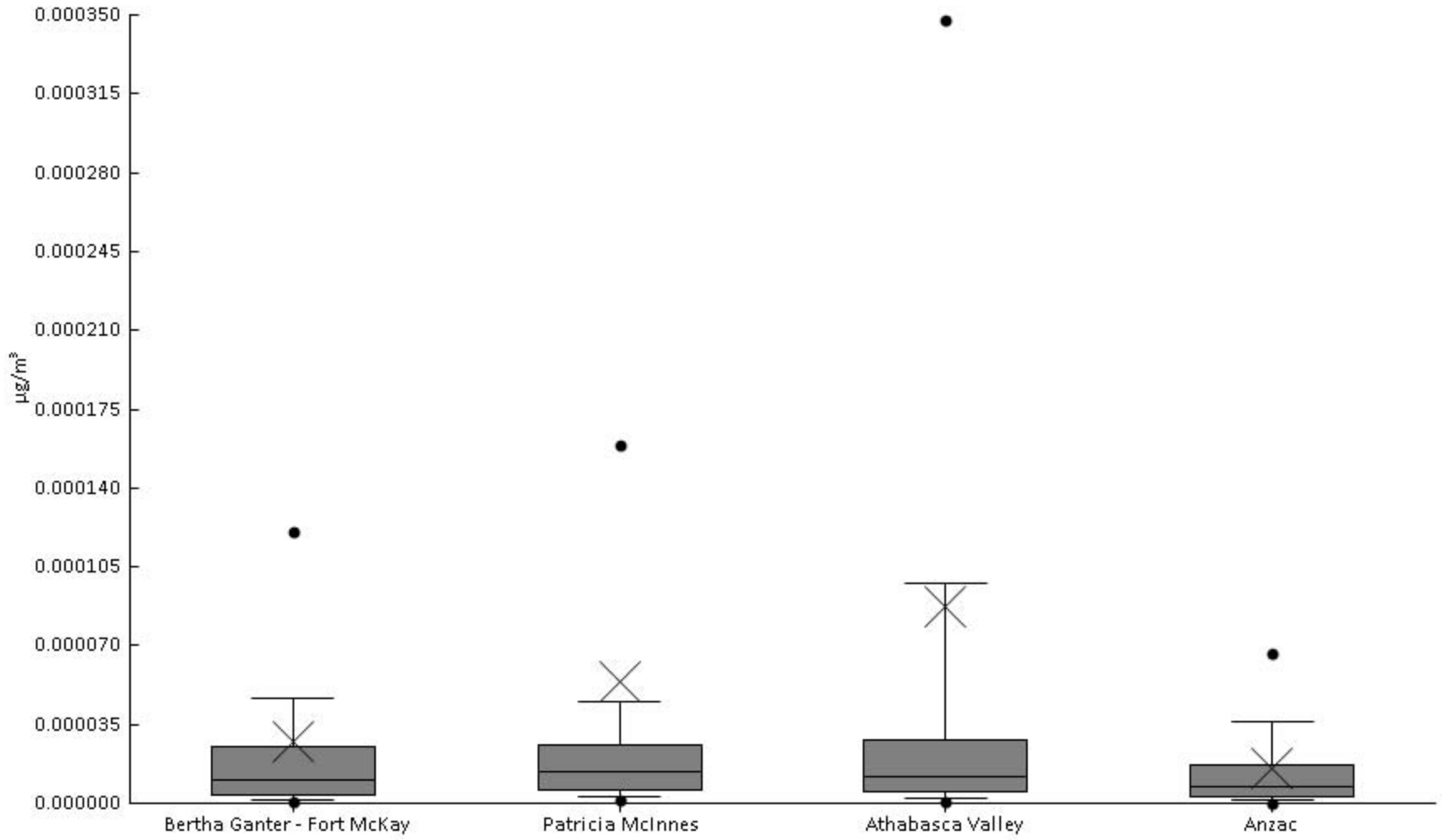
Particulate Matter (PM2.5 METALS) - Bismuth (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	93%	0	0	2E-6	7.2E-6	1.2E-5	2E-5	5.1E-5	6.9E-5	6.7E-4	2.8E-5	8.6E-5
AMS 6	Patricia McInnes	59	98%	0	1.3E-6	3E-6	5.2E-6	1.1E-5	1.9E-5	2.9E-5	4E-5	1.6E-4	1.6E-5	2.2E-5
AMS 7	Athabasca Valley	61	97%	0	3.1E-6	3.7E-6	6.9E-6	1.2E-5	2.2E-5	3.2E-5	4.2E-5	2.4E-4	2.1E-5	3.5E-5
AMS 14	Anzac	56	98%	0	1.2E-6	1.8E-6	4.7E-6	1.2E-5	2.1E-5	4.9E-5	7.7E-5	2E-4	2.1E-5	3.2E-5



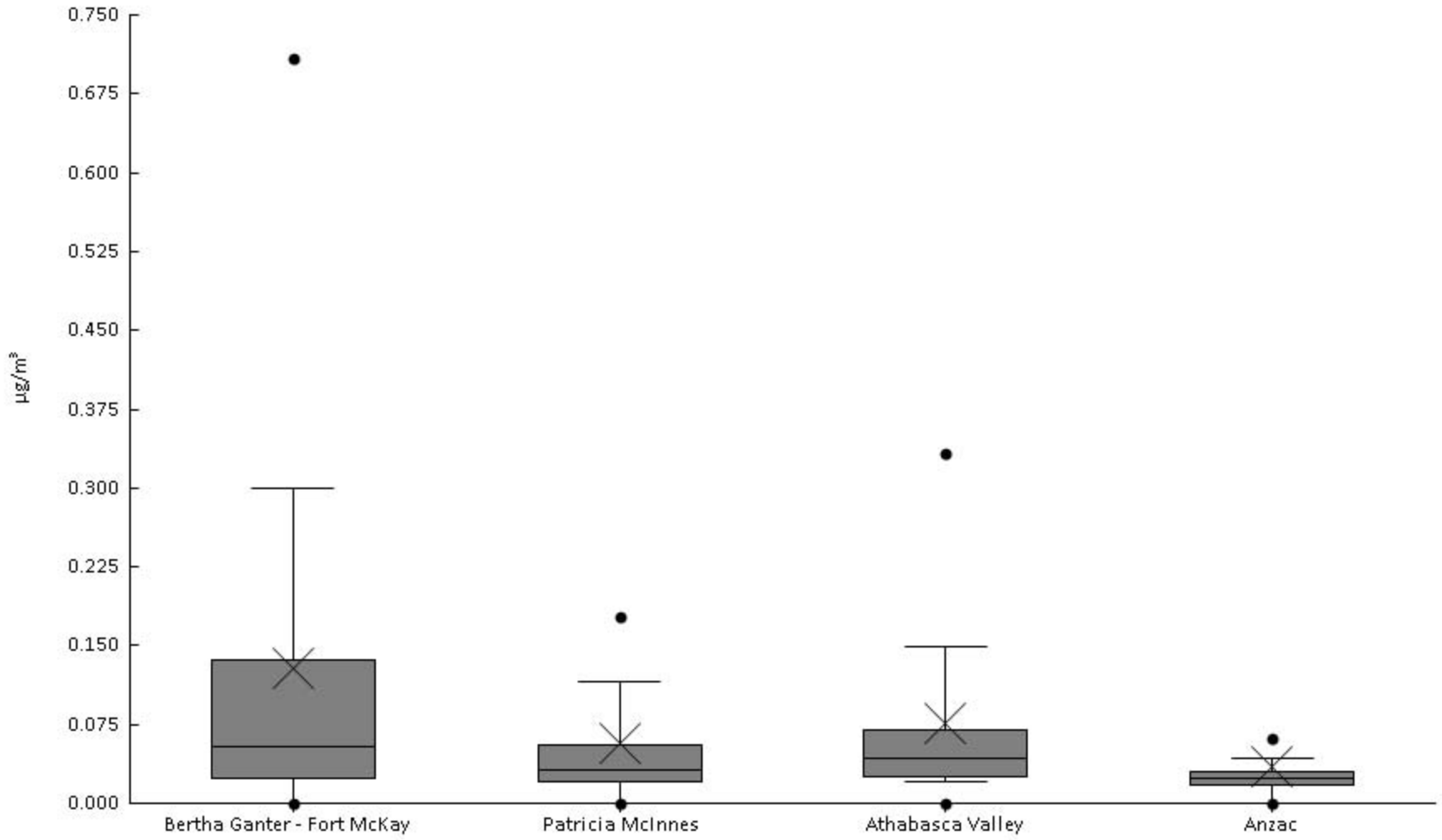
Particulate Matter (PM2.5 METALS) - Cadmium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	97%	0	8.7E-7	1.2E-6	3.5E-6	1E-5	2.5E-5	4.7E-5	1.2E-4	3.1E-4	2.7E-5	5.8E-5
AMS 6	Patricia McInnes	59	97%	0	1.4E-6	2.7E-6	5.9E-6	1.4E-5	2.6E-5	4.5E-5	1.6E-4	1.7E-3	5.4E-5	2.3E-4
AMS 7	Athabasca Valley	61	95%	0	4.9E-7	2.6E-6	4.8E-6	1.2E-5	2.8E-5	9.7E-5	3.5E-4	2.7E-3	8.7E-5	3.6E-4
AMS 14	Anzac	56	95%	0	2.4E-7	1.3E-6	2.7E-6	7.6E-6	1.7E-5	3.7E-5	6.6E-5	1.2E-4	1.6E-5	2.3E-5



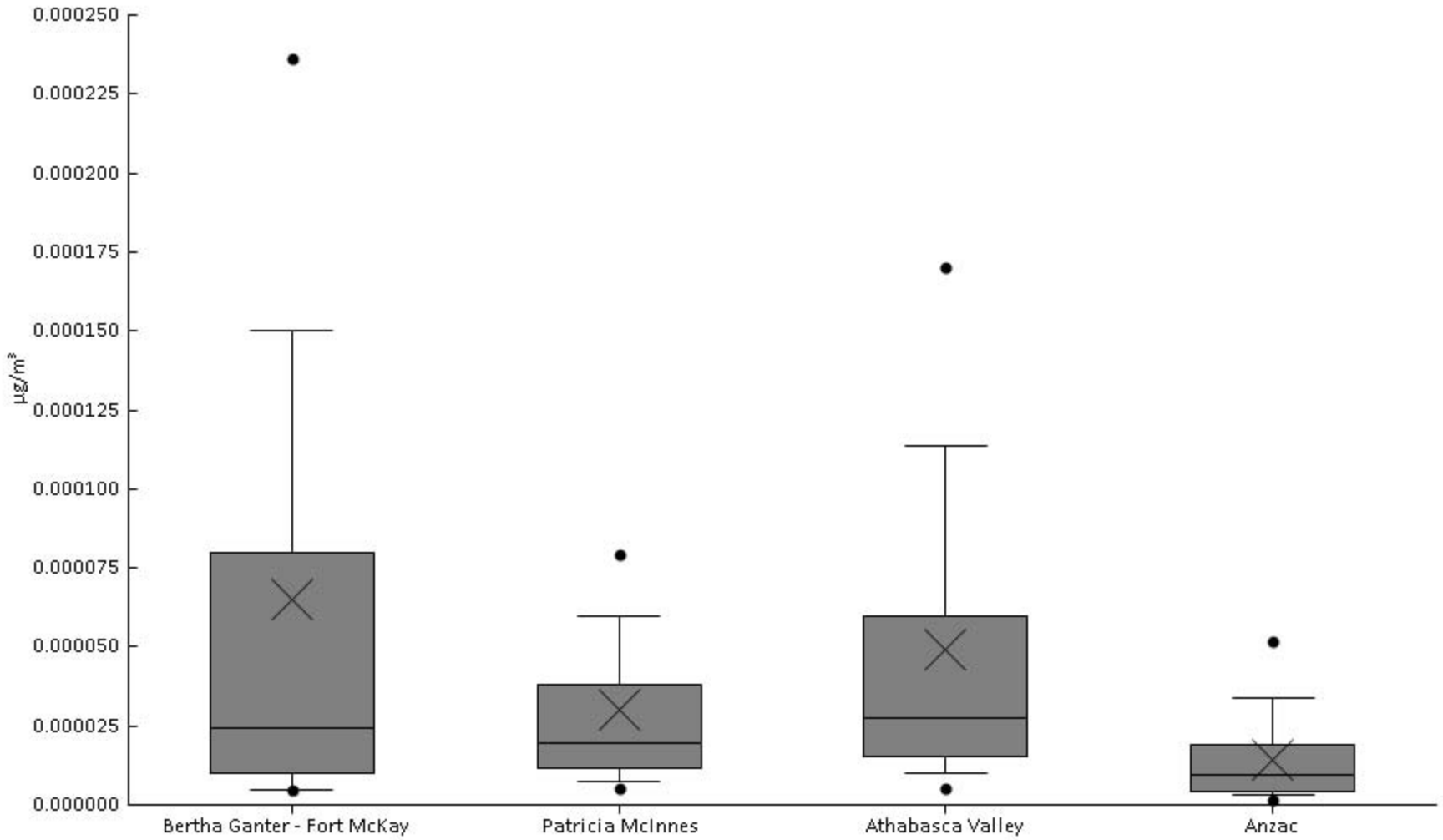
Particulate Matter (PM2.5 METALS) - Calcium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	89%	0	0	0	0.024	0.053	0.14	0.3	0.71	0.94	0.13	0.2
AMS 6	Patricia McInnes	59	88%	0	0	0	0.021	0.032	0.056	0.12	0.18	0.69	0.057	0.099
AMS 7	Athabasca Valley	61	93%	0	0	0.02	0.026	0.042	0.071	0.15	0.33	0.64	0.075	0.11
AMS 14	Anzac	56	79%	0	0	0	0.018	0.024	0.029	0.044	0.061	0.42	0.035	0.069



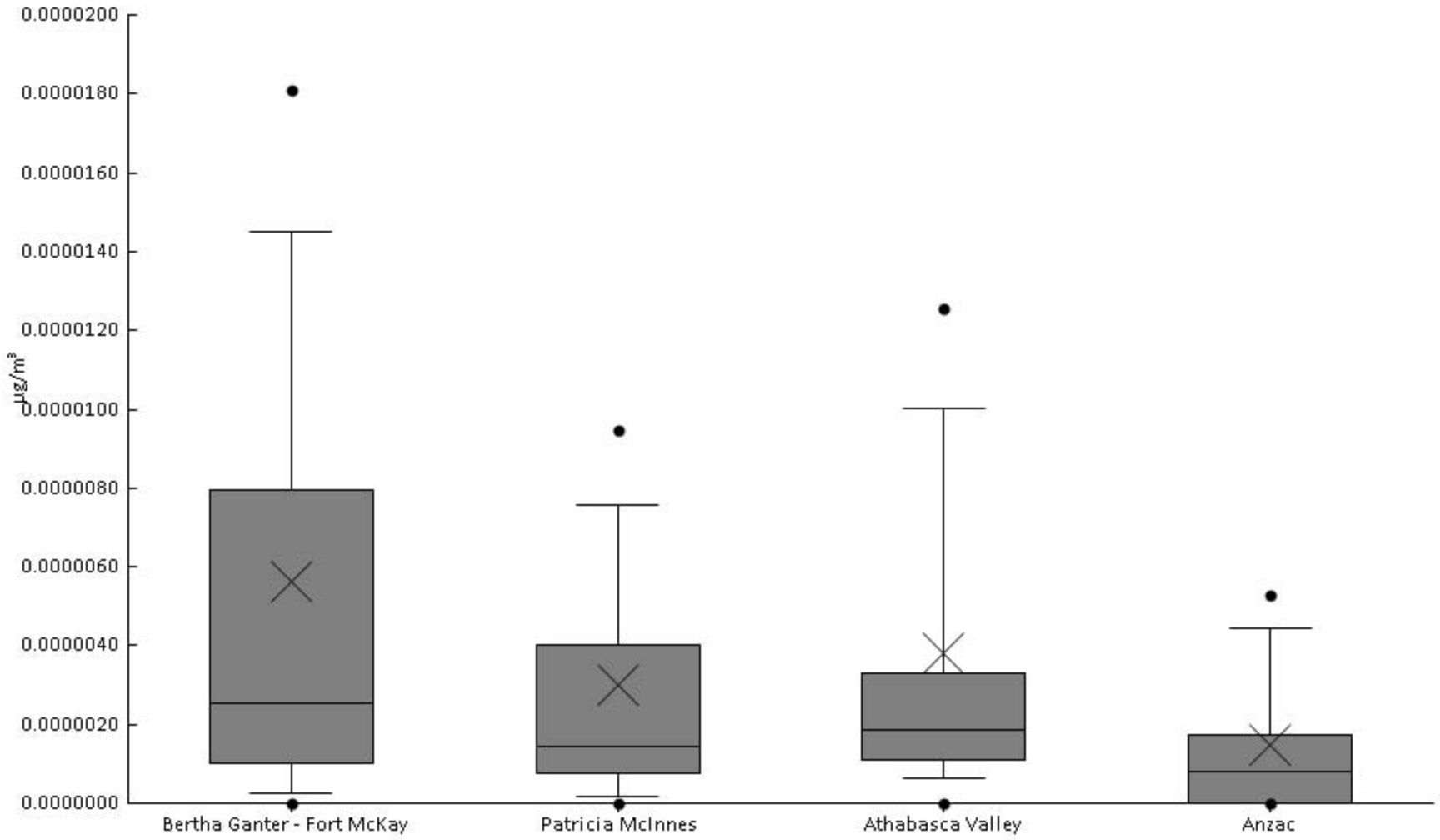
Particulate Matter (PM2.5 METALS) - Cerium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	2.3E-6	4.6E-6	4.9E-6	9.9E-6	2.5E-5	8E-5	1.5E-4	2.4E-4	5.4E-4	6.5E-5	9.8E-5
AMS 6	Patricia McInnes	59	100%	1.6E-6	5.4E-6	7.5E-6	1.2E-5	2E-5	3.8E-5	6E-5	7.9E-5	1.9E-4	3E-5	2.9E-5
AMS 7	Athabasca Valley	61	100%	4.5E-6	5.1E-6	1E-5	1.5E-5	2.8E-5	6E-5	1.1E-4	1.7E-4	2.7E-4	4.9E-5	5.5E-5
AMS 14	Anzac	56	100%	7.8E-7	1.5E-6	3E-6	4.3E-6	9.3E-6	1.9E-5	3.4E-5	5.2E-5	7.1E-5	1.4E-5	1.6E-5



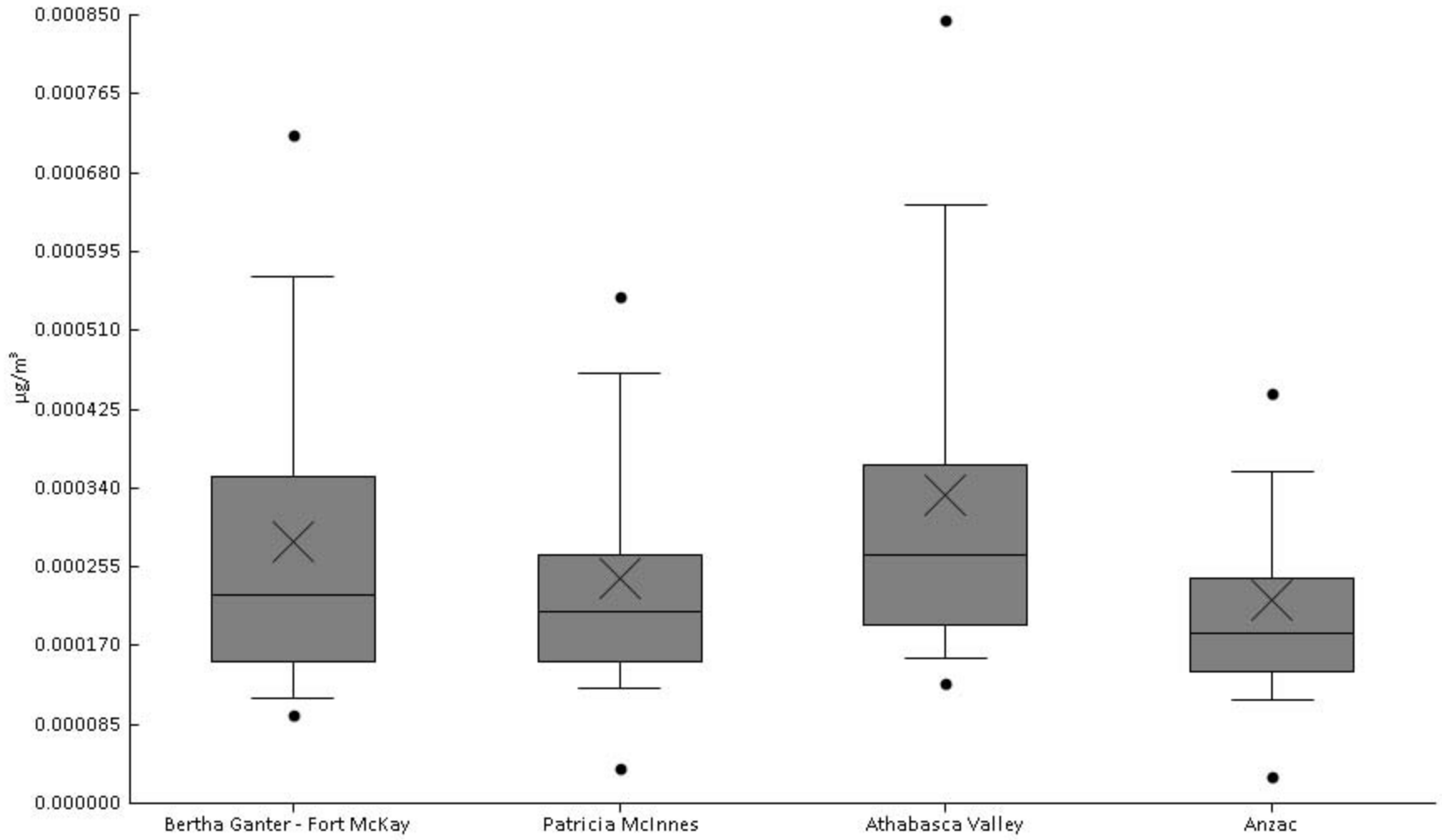
Particulate Matter (PM2.5 METALS) - Cesium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	90%	0	0	2.6E-7	1E-6	2.5E-6	8E-6	1.5E-5	1.8E-5	4.2E-5	5.6E-6	8E-6
AMS 6	Patricia McInnes	59	90%	0	0	1.7E-7	7.8E-7	1.5E-6	4E-6	7.6E-6	9.5E-6	2.9E-5	3E-6	4.5E-6
AMS 7	Athabasca Valley	61	93%	0	0	6.5E-7	1.1E-6	1.9E-6	3.3E-6	1E-5	1.3E-5	4.1E-5	3.8E-6	6.1E-6
AMS 14	Anzac	56	73%	0	0	0	0	8.1E-7	1.7E-6	4.4E-6	5.3E-6	9.1E-6	1.5E-6	1.9E-6



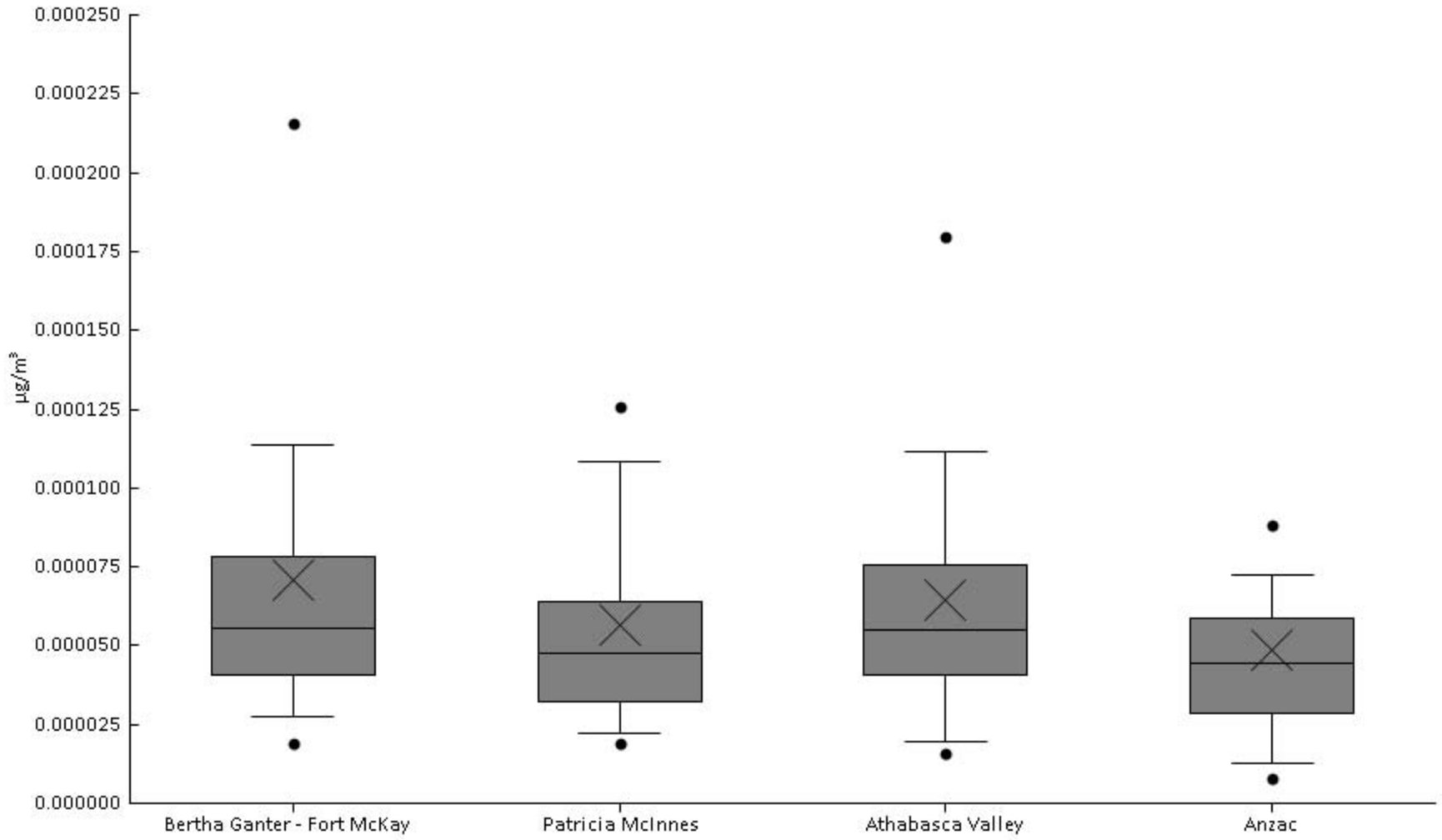
Particulate Matter (PM2.5 METALS) - Chromium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	97%	0	9.4E-5	1.1E-4	1.5E-4	2.2E-4	3.5E-4	5.7E-4	7.2E-4	8.9E-4	2.8E-4	1.9E-4
AMS 6	Patricia McInnes	58	95%	0	3.8E-5	1.2E-4	1.5E-4	2.1E-4	2.7E-4	4.6E-4	5.5E-4	1.1E-3	2.4E-4	1.7E-4
AMS 7	Athabasca Valley	61	98%	0	1.3E-4	1.6E-4	1.9E-4	2.7E-4	3.7E-4	6.5E-4	8.4E-4	1.3E-3	3.3E-4	2.4E-4
AMS 14	Anzac	56	95%	0	2.9E-5	1.1E-4	1.4E-4	1.8E-4	2.4E-4	3.6E-4	4.4E-4	1.4E-3	2.2E-4	1.9E-4



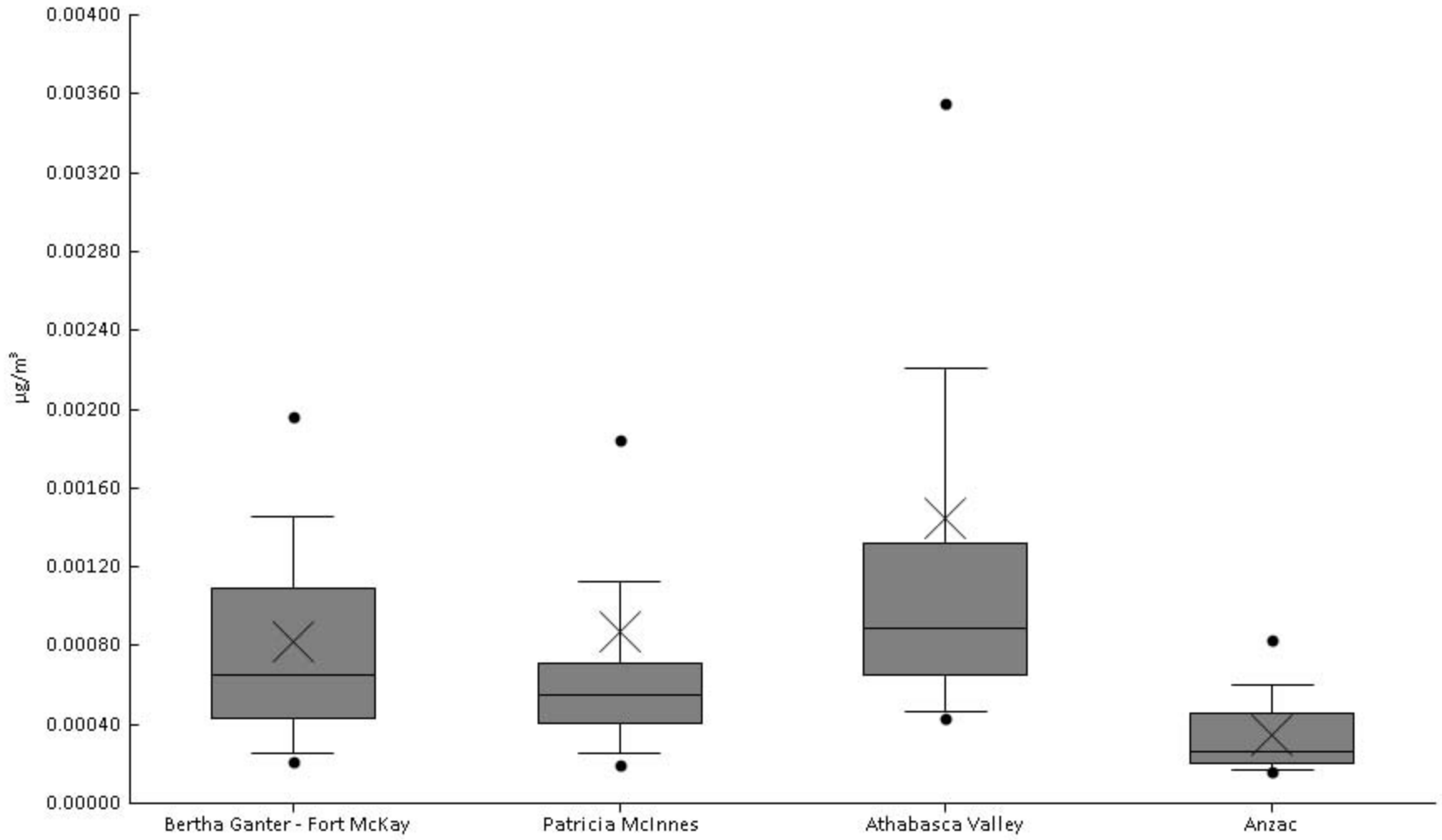
Particulate Matter (PM2.5 METALS) - Cobalt (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	60	100%	8.7E-6	1.9E-5	2.8E-5	4.1E-5	5.5E-5	7.8E-5	1.1E-4	2.2E-4	4.1E-4	7.1E-5	6.3E-5
AMS 6	Patricia McInnes	58	100%	6.6E-6	1.9E-5	2.2E-5	3.2E-5	4.7E-5	6.4E-5	1.1E-4	1.3E-4	2.5E-4	5.7E-5	4E-5
AMS 7	Athabasca Valley	61	100%	1.1E-5	1.6E-5	2E-5	4.1E-5	5.5E-5	7.5E-5	1.1E-4	1.8E-4	2.1E-4	6.4E-5	4.3E-5
AMS 14	Anzac	56	100%	3.6E-6	8.2E-6	1.2E-5	2.8E-5	4.4E-5	5.9E-5	7.2E-5	8.8E-5	3.1E-4	4.8E-5	4.2E-5



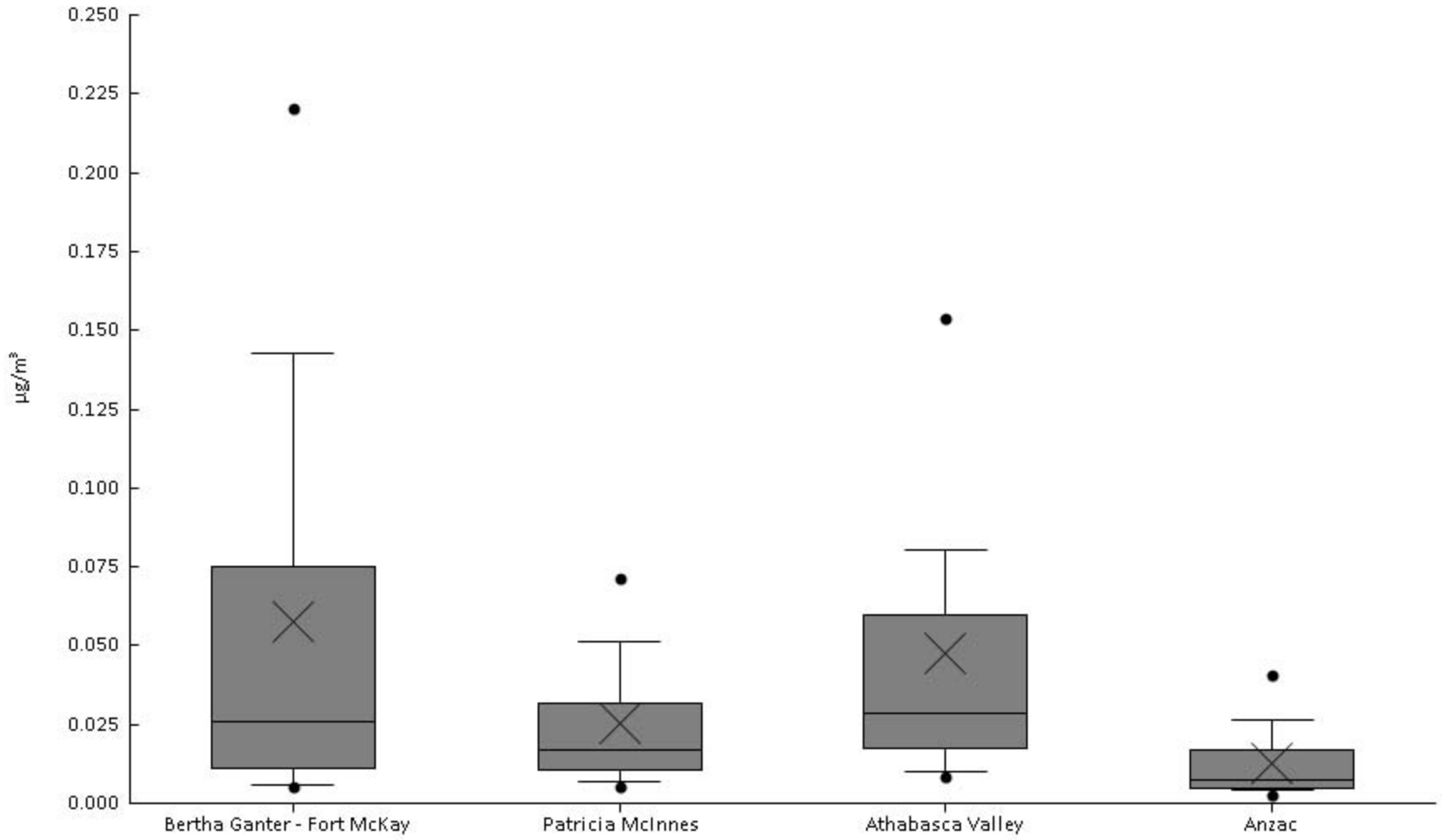
Particulate Matter (PM2.5 METALS) - Copper (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	100%	1.3E-4	2.1E-4	2.5E-4	4.3E-4	6.5E-4	1.1E-3	1.5E-3	2E-3	2.7E-3	8.2E-4	5.4E-4
AMS 6	Patricia McInnes	58	100%	1.4E-4	2E-4	2.6E-4	4E-4	5.5E-4	7.1E-4	1.1E-3	1.8E-3	0.014	8.7E-4	1.8E-3
AMS 7	Athabasca Valley	61	100%	2.6E-4	4.3E-4	4.6E-4	6.5E-4	8.9E-4	1.3E-3	2.2E-3	3.6E-3	0.02	1.4E-3	2.6E-3
AMS 14	Anzac	56	100%	1.2E-4	1.6E-4	1.7E-4	2E-4	2.6E-4	4.5E-4	6E-4	8.2E-4	1.3E-3	3.5E-4	2.3E-4



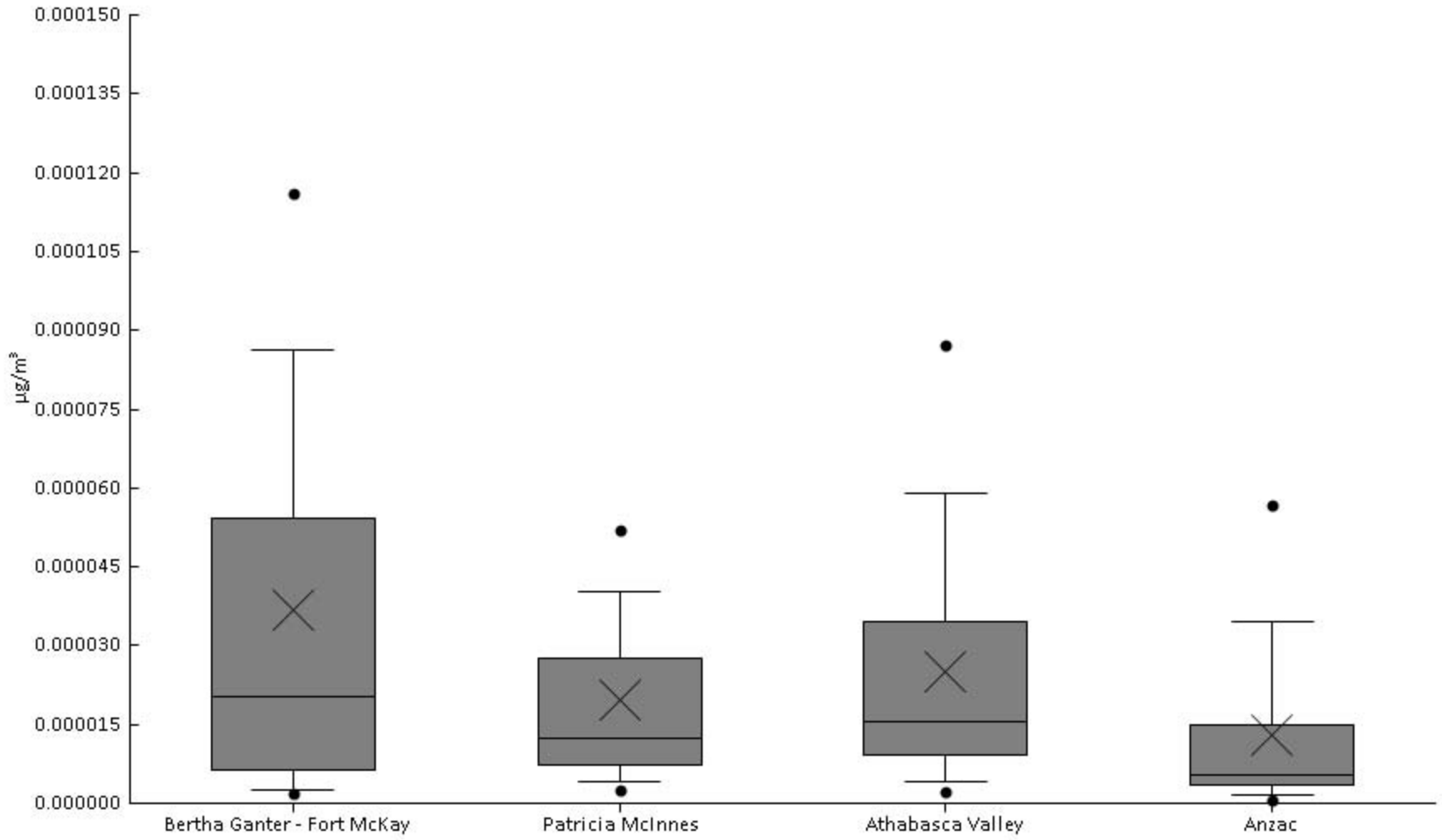
Particulate Matter (PM2.5 METALS) - Iron (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	2.5E-3	5.5E-3	6.1E-3	0.011	0.026	0.075	0.14	0.22	0.49	0.058	0.085
AMS 6	Patricia McInnes	59	100%	2.7E-3	5E-3	6.7E-3	0.01	0.017	0.032	0.052	0.071	0.14	0.025	0.024
AMS 7	Athabasca Valley	61	100%	6.5E-3	8.6E-3	0.01	0.017	0.028	0.06	0.08	0.15	0.35	0.048	0.055
AMS 14	Anzac	56	100%	2.6E-3	2.7E-3	4E-3	5E-3	7.4E-3	0.017	0.026	0.041	0.076	0.013	0.014



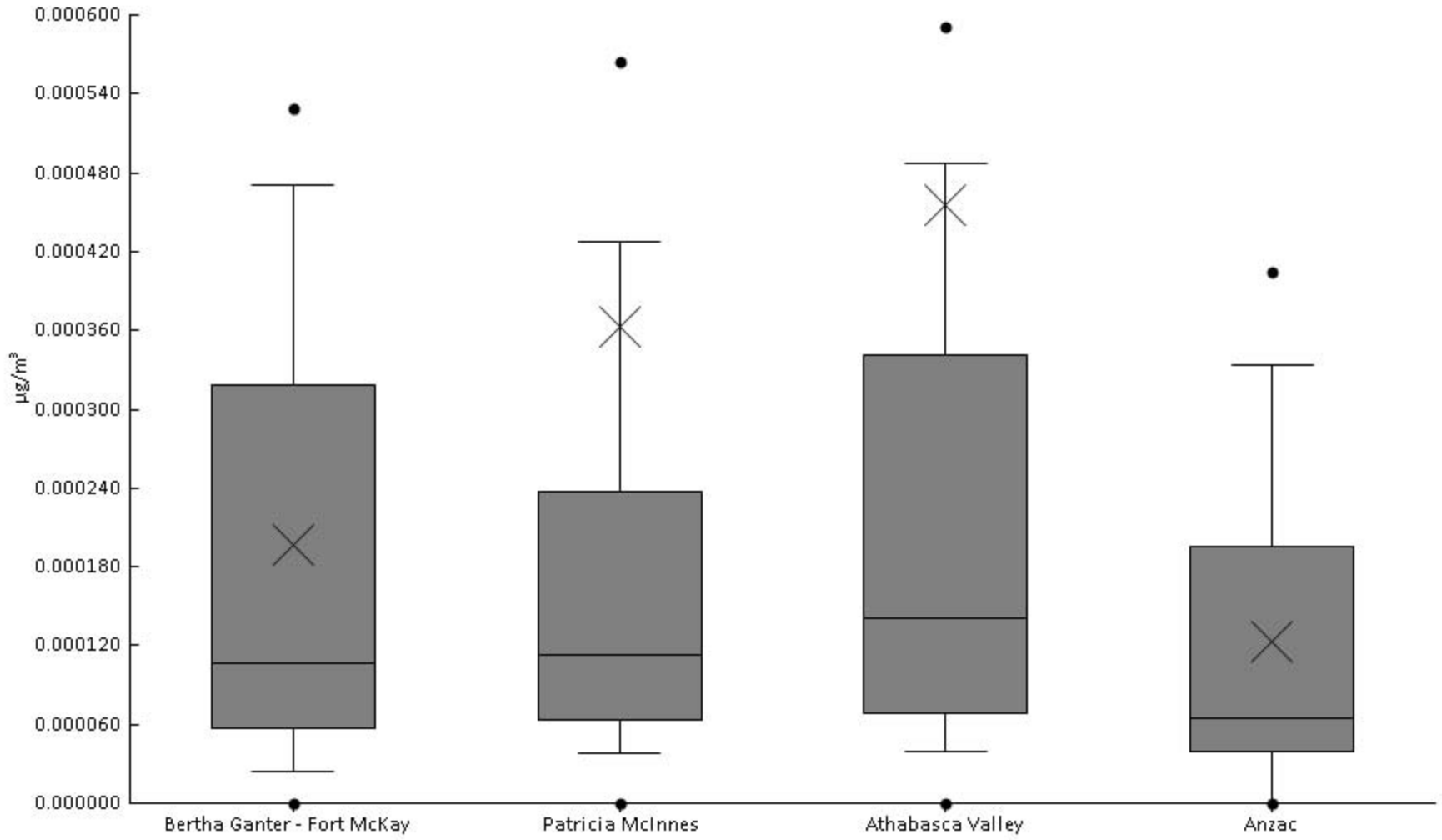
Particulate Matter (PM2.5 METALS) - Lanthanum (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	1E-6	1.8E-6	2.6E-6	6.5E-6	2E-5	5.4E-5	8.6E-5	1.2E-4	2.7E-4	3.7E-5	4.9E-5
AMS 6	Patricia McInnes	59	100%	1E-6	2.4E-6	4E-6	7.3E-6	1.2E-5	2.7E-5	4E-5	5.2E-5	1.2E-4	2E-5	2.1E-5
AMS 7	Athabasca Valley	61	100%	1.5E-6	2.1E-6	4.1E-6	9.1E-6	1.5E-5	3.5E-5	5.9E-5	8.7E-5	1.2E-4	2.5E-5	2.5E-5
AMS 14	Anzac	56	96%	0	6.6E-7	1.5E-6	3.5E-6	5.5E-6	1.5E-5	3.5E-5	5.7E-5	7.2E-5	1.3E-5	1.7E-5



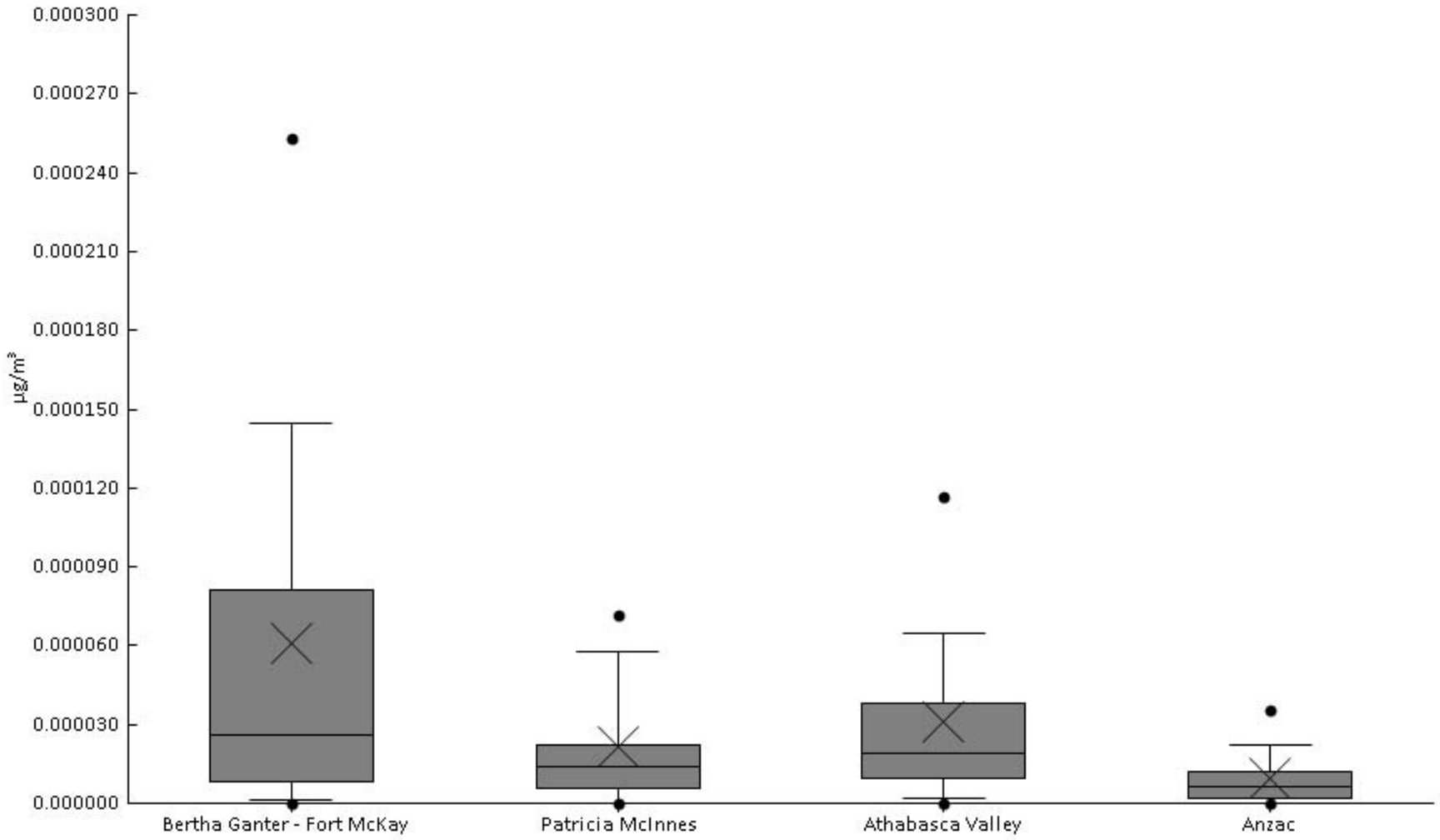
Particulate Matter (PM2.5 METALS) - Lead (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	90%	0	0	2.4E-5	5.8E-5	1.1E-4	3.2E-4	4.7E-4	5.3E-4	1.2E-3	2E-4	2.1E-4
AMS 6	Patricia McInnes	58	91%	0	0	3.8E-5	6.4E-5	1.1E-4	2.4E-4	4.3E-4	5.6E-4	0.011	3.6E-4	1.5E-3
AMS 7	Athabasca Valley	61	92%	0	0	3.9E-5	6.8E-5	1.4E-4	3.4E-4	4.9E-4	5.9E-4	0.015	4.6E-4	1.9E-3
AMS 14	Anzac	56	82%	0	0	0	3.9E-5	6.5E-5	2E-4	3.3E-4	4.1E-4	5.4E-4	1.2E-4	1.3E-4



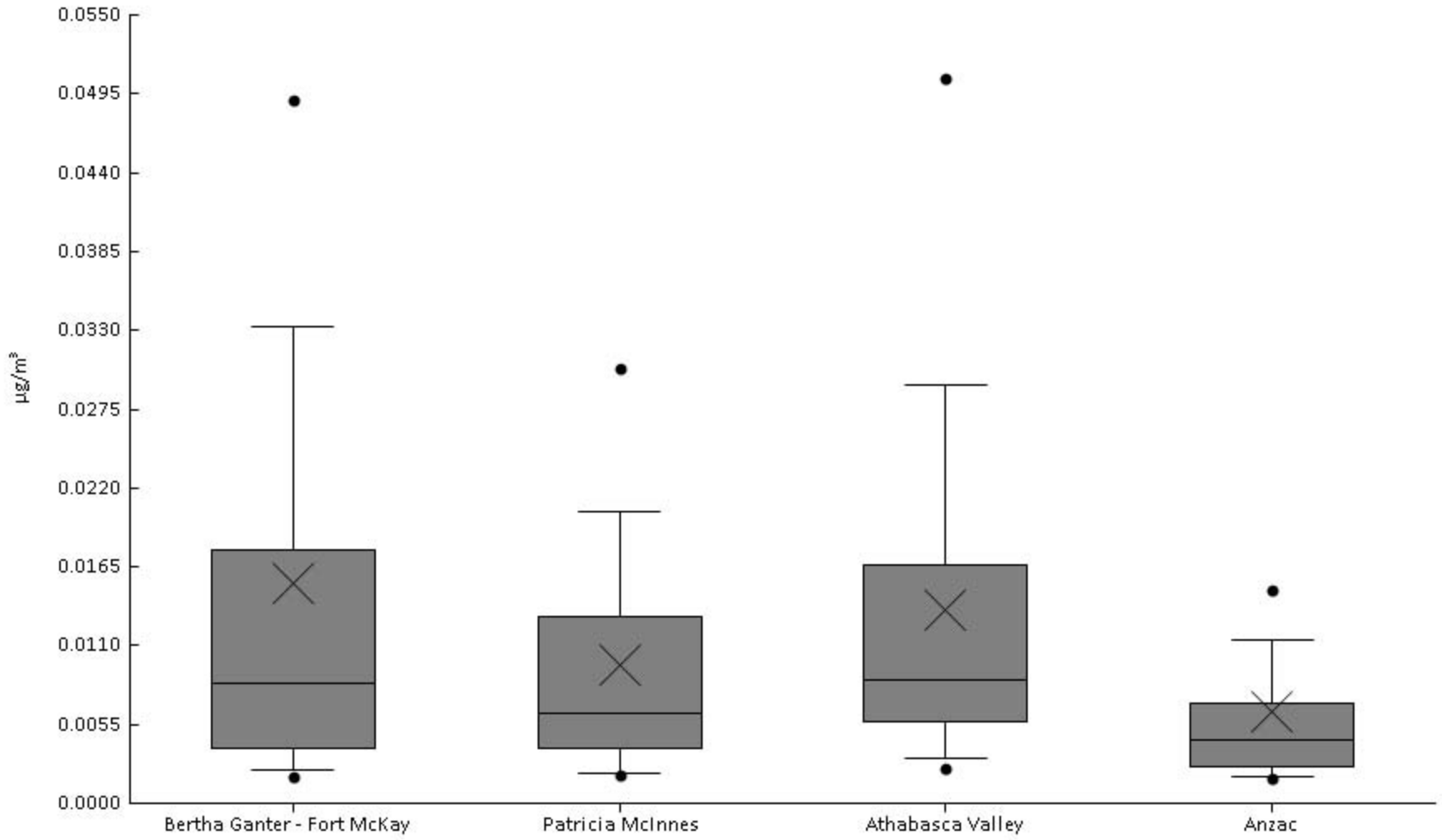
Particulate Matter (PM2.5 METALS) - Lithium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	90%	0	0	1.4E-6	8.6E-6	2.6E-5	8.1E-5	1.4E-4	2.5E-4	5E-4	6.1E-5	9.3E-5
AMS 6	Patricia McInnes	59	83%	0	0	0	5.5E-6	1.4E-5	2.2E-5	5.8E-5	7.1E-5	1.6E-4	2.2E-5	2.8E-5
AMS 7	Athabasca Valley	61	90%	0	0	1.9E-6	9.7E-6	1.9E-5	3.8E-5	6.5E-5	1.2E-4	2.8E-4	3.1E-5	4.3E-5
AMS 14	Anzac	56	77%	0	0	0	1.9E-6	6.5E-6	1.2E-5	2.2E-5	3.6E-5	4.7E-5	9.3E-6	1.1E-5



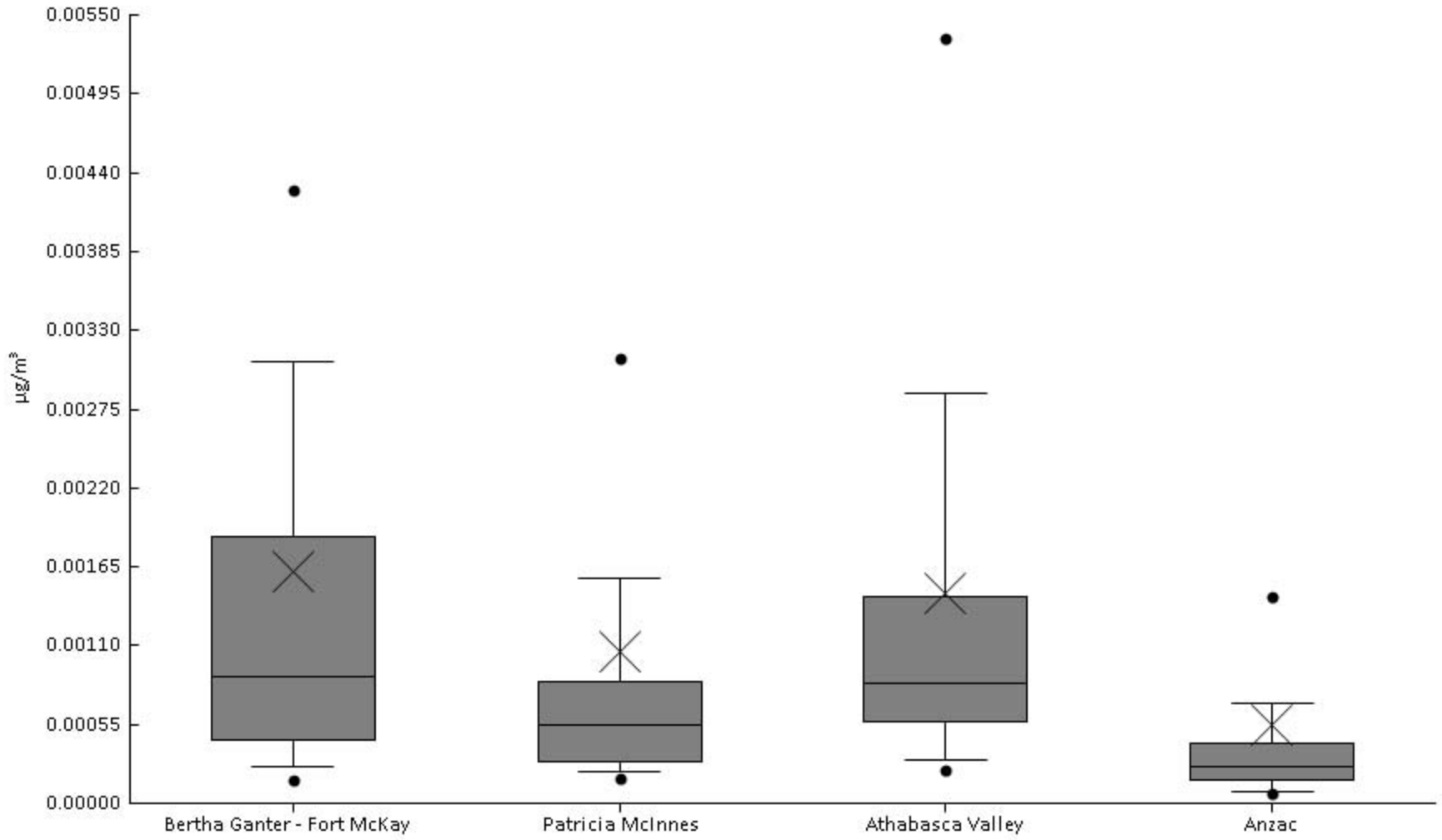
Particulate Matter (PM2.5 METALS) - Magnesium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	1.4E-3	1.8E-3	2.3E-3	3.9E-3	8.3E-3	0.018	0.033	0.049	0.1	0.015	0.02
AMS 6	Patricia McInnes	59	100%	1.2E-3	1.9E-3	2.1E-3	3.8E-3	6.3E-3	0.013	0.02	0.03	0.053	9.6E-3	9.4E-3
AMS 7	Athabasca Valley	61	100%	2E-3	2.4E-3	3.1E-3	5.6E-3	8.6E-3	0.017	0.029	0.051	0.072	0.014	0.014
AMS 14	Anzac	56	100%	1.6E-3	1.7E-3	1.9E-3	2.6E-3	4.4E-3	7E-3	0.011	0.015	0.061	6.4E-3	8.3E-3



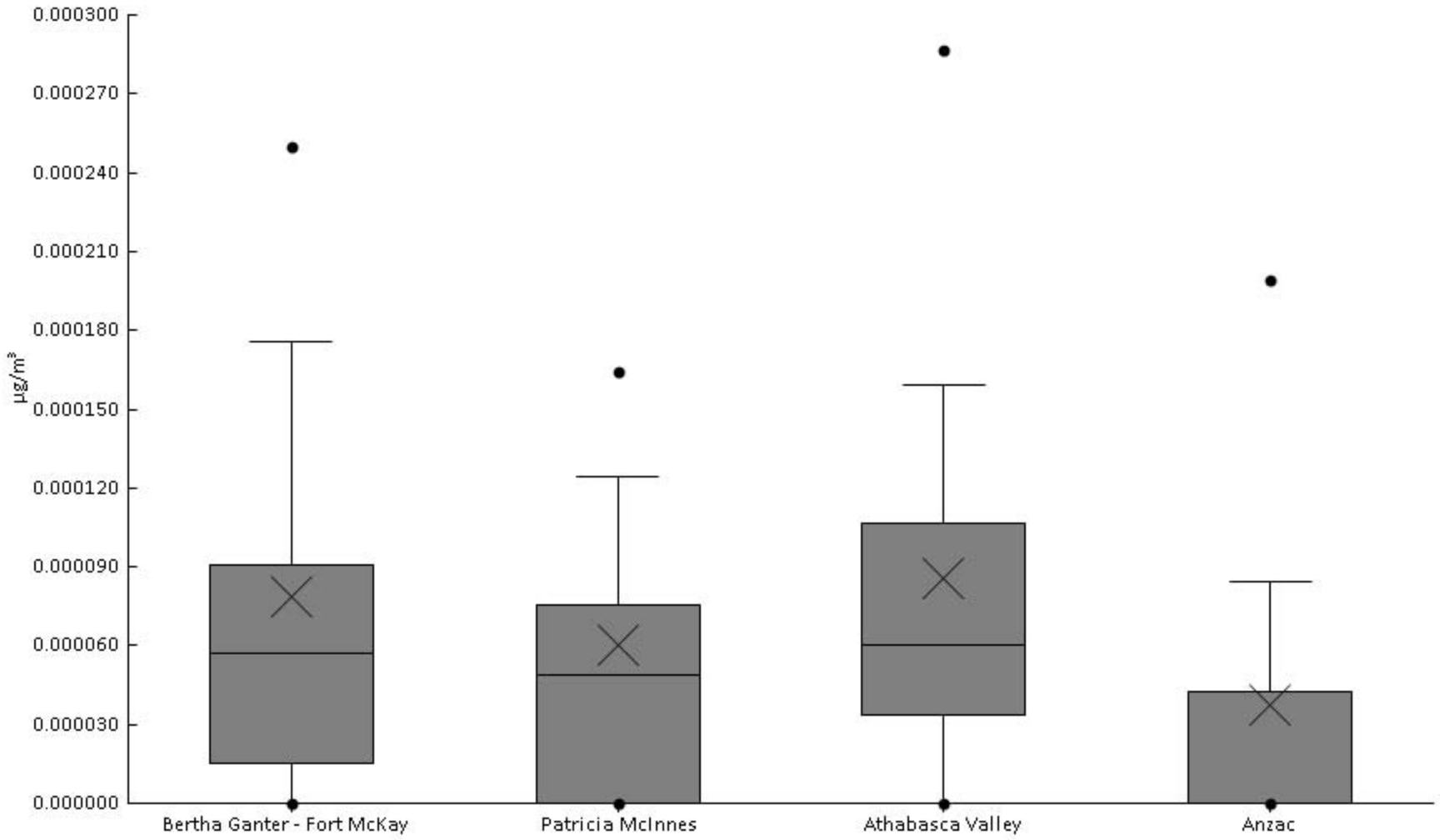
Particulate Matter (PM2.5 METALS) - Manganese (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	5.2E-5	1.6E-4	2.6E-4	4.4E-4	8.8E-4	1.9E-3	3.1E-3	4.3E-3	0.017	1.6E-3	2.7E-3
AMS 6	Patricia McInnes	59	100%	7E-5	1.7E-4	2.2E-4	2.9E-4	5.5E-4	8.5E-4	1.6E-3	3.1E-3	0.016	1.1E-3	2.3E-3
AMS 7	Athabasca Valley	61	100%	1.1E-4	2.3E-4	3.1E-4	5.7E-4	8.4E-4	1.4E-3	2.9E-3	5.3E-3	0.014	1.5E-3	2.1E-3
AMS 14	Anzac	56	100%	5.1E-5	6.6E-5	8.6E-5	1.6E-4	2.5E-4	4.2E-4	6.9E-4	1.4E-3	0.011	5.5E-4	1.5E-3



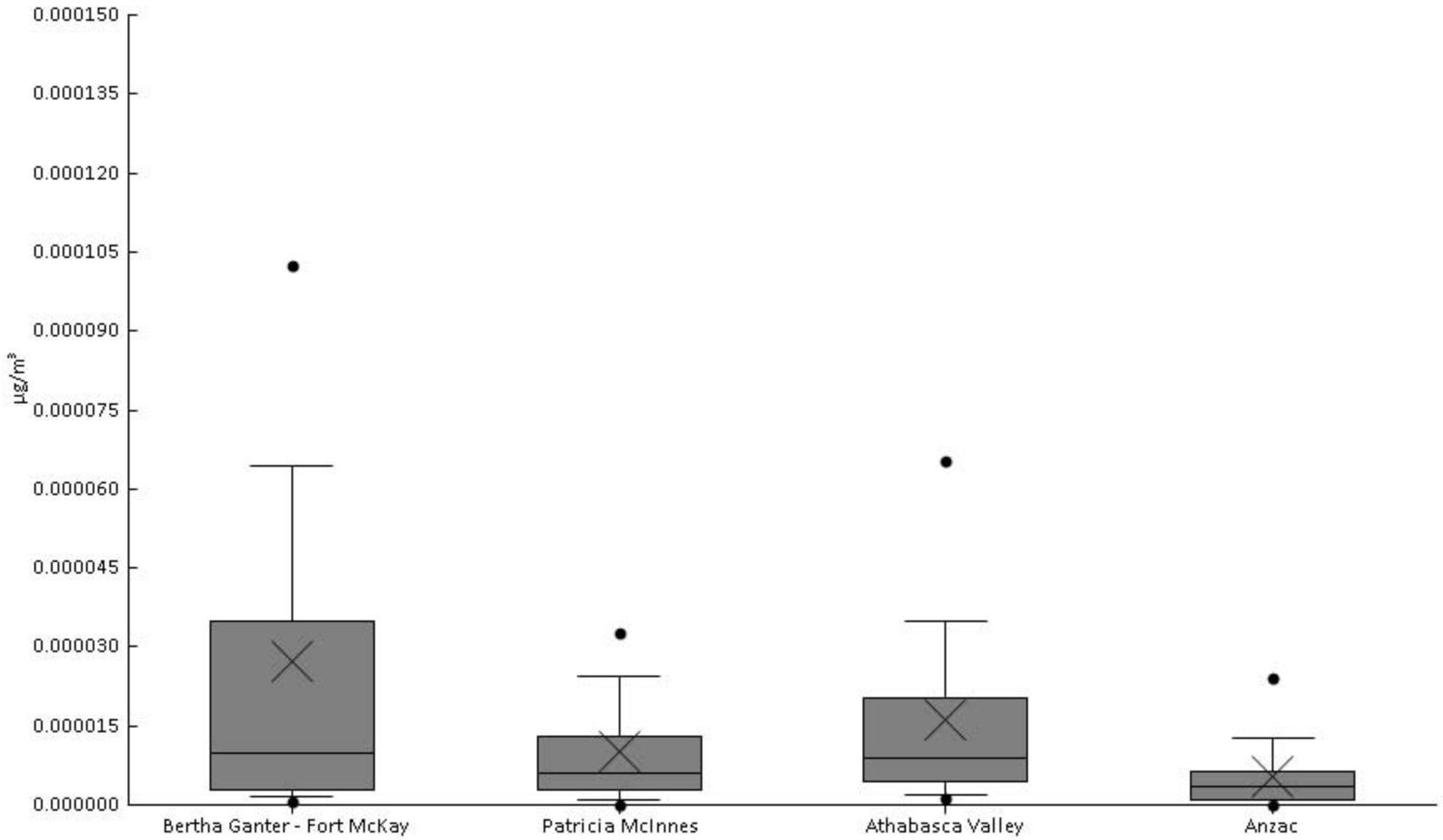
Particulate Matter (PM2.5 METALS) - Molybdenum (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	60	75%	0	0	0	1.5E-5	5.7E-5	9E-5	1.8E-4	2.5E-4	7.2E-4	7.9E-5	1.1E-4
AMS 6	Patricia McInnes	58	66%	0	0	0	0	4.9E-5	7.5E-5	1.2E-4	1.6E-4	4.6E-4	6E-5	8.4E-5
AMS 7	Athabasca Valley	61	87%	0	0	0	3.4E-5	6E-5	1.1E-4	1.6E-4	2.9E-4	4.6E-4	8.6E-5	9E-5
AMS 14	Anzac	56	46%	0	0	0	0	0	4.2E-5	8.5E-5	2E-4	4.2E-4	3.8E-5	7.3E-5



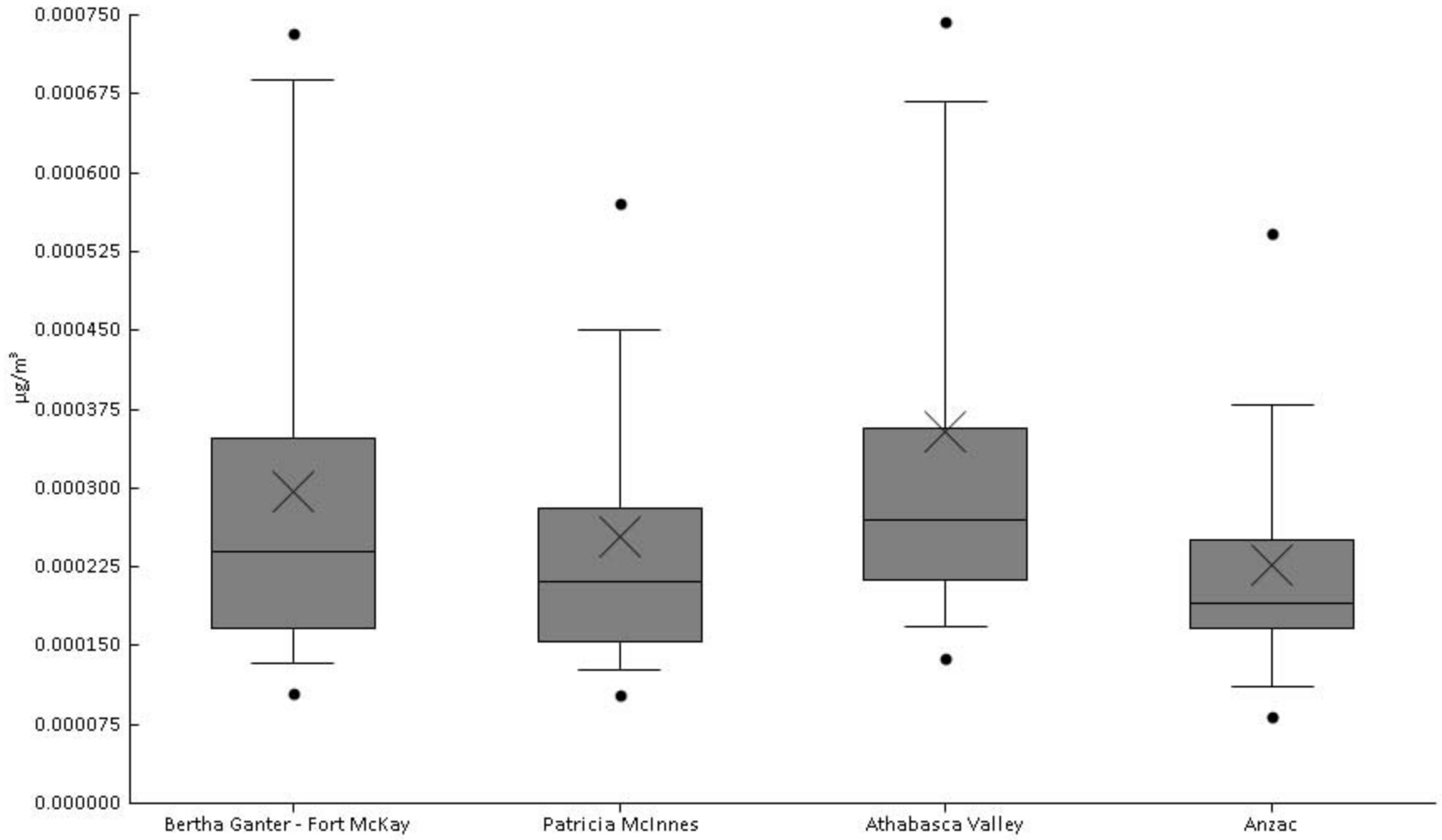
Particulate Matter (PM2.5 METALS) - Neodymium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	95%	0	4.8E-7	1.5E-6	2.7E-6	1E-5	3.5E-5	6.4E-5	1E-4	2.4E-4	2.7E-5	4.4E-5
AMS 6	Patricia McInnes	59	92%	0	0	1E-6	2.8E-6	6.1E-6	1.3E-5	2.5E-5	3.3E-5	6.3E-5	1E-5	1.1E-5
AMS 7	Athabasca Valley	61	97%	0	1.4E-6	1.8E-6	4.5E-6	8.9E-6	2E-5	3.5E-5	6.5E-5	1E-4	1.6E-5	2E-5
AMS 14	Anzac	56	88%	0	0	0	1E-6	3.4E-6	6.3E-6	1.3E-5	2.4E-5	3E-5	5.3E-6	7E-6



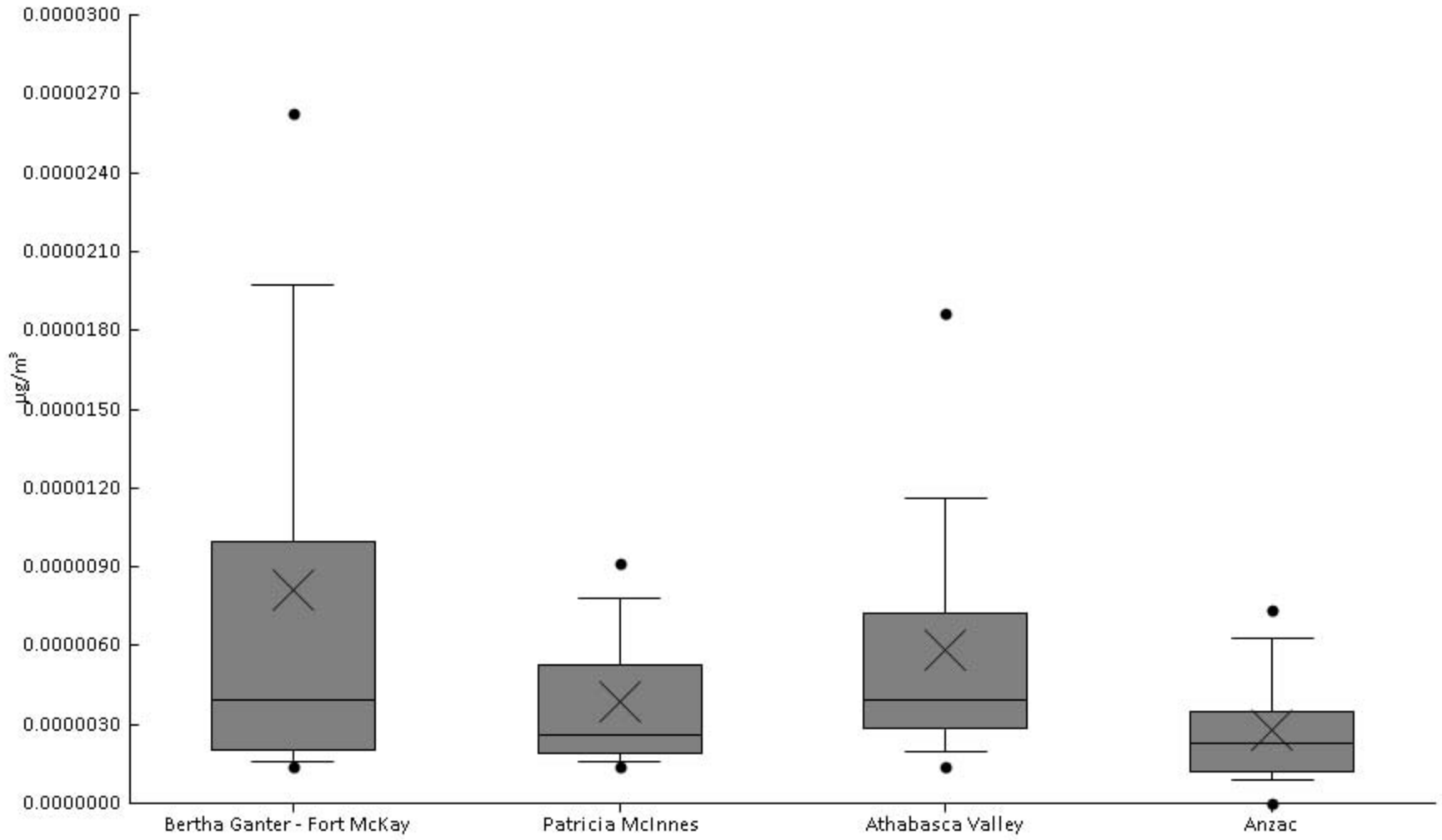
Particulate Matter (PM2.5 METALS) - Nickel (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	57	100%	8.4E-5	1E-4	1.3E-4	1.7E-4	2.4E-4	3.5E-4	6.9E-4	7.3E-4	8.1E-4	3E-4	1.9E-4
AMS 6	Patricia McInnes	57	100%	9.5E-5	1E-4	1.3E-4	1.5E-4	2.1E-4	2.8E-4	4.5E-4	5.7E-4	8.9E-4	2.5E-4	1.5E-4
AMS 7	Athabasca Valley	61	100%	6.7E-5	1.4E-4	1.7E-4	2.1E-4	2.7E-4	3.6E-4	6.7E-4	7.4E-4	2.6E-3	3.5E-4	3.4E-4
AMS 14	Anzac	56	100%	5E-5	8.2E-5	1.1E-4	1.7E-4	1.9E-4	2.5E-4	3.8E-4	5.4E-4	7.3E-4	2.3E-4	1.3E-4



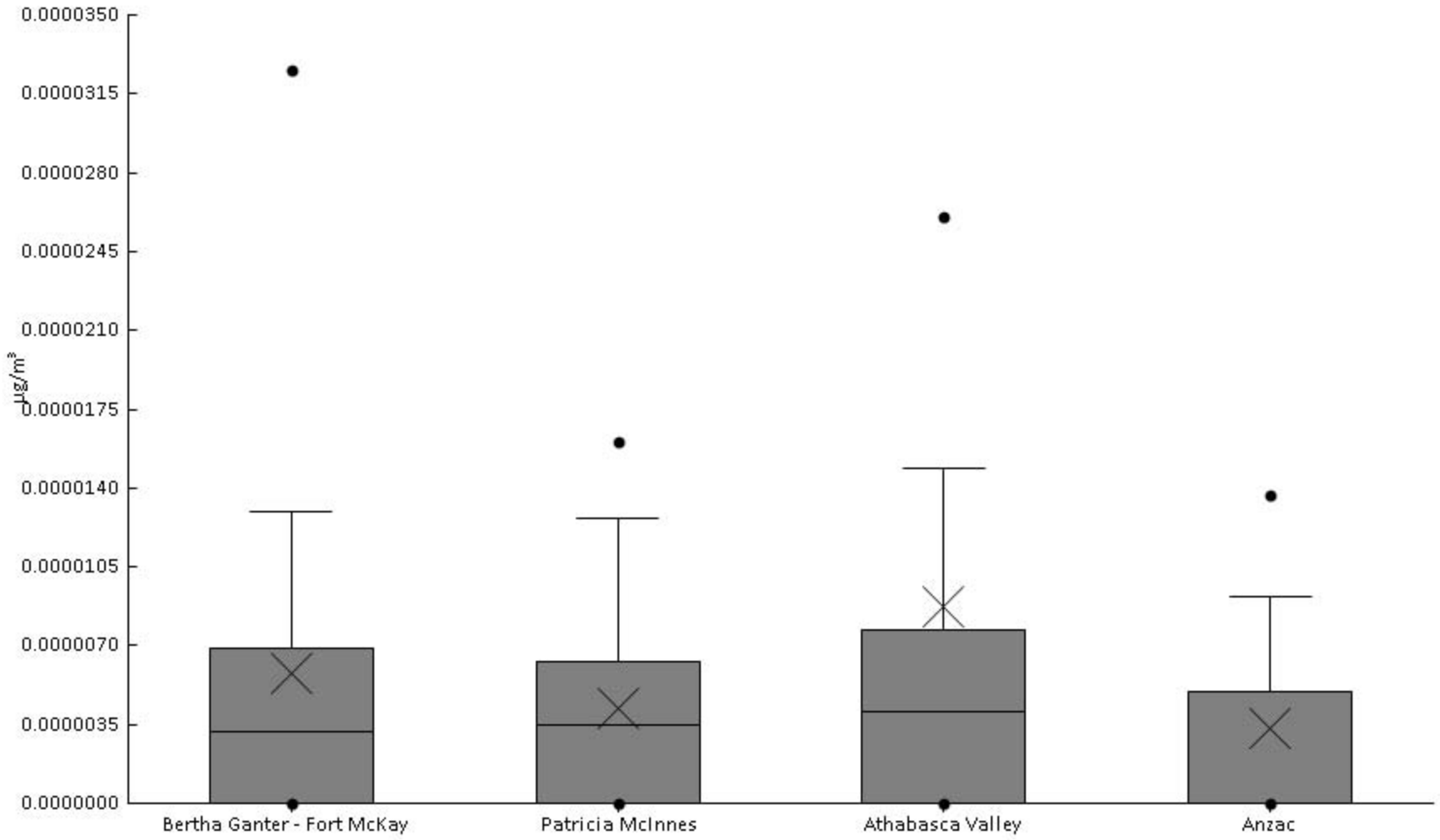
Particulate Matter (PM2.5 METALS) - Niobium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	97%	0	1.4E-6	1.6E-6	2.1E-6	3.9E-6	9.9E-6	2E-5	2.6E-5	6.1E-5	8.1E-6	1.1E-5
AMS 6	Patricia McInnes	59	100%	1.1E-6	1.4E-6	1.6E-6	1.9E-6	2.6E-6	5.3E-6	7.8E-6	9.1E-6	1.3E-5	3.9E-6	2.8E-6
AMS 7	Athabasca Valley	61	100%	9.8E-7	1.4E-6	2E-6	2.8E-6	4E-6	7.3E-6	1.2E-5	1.9E-5	2.5E-5	5.9E-6	5E-6
AMS 14	Anzac	56	91%	0	0	8.9E-7	1.2E-6	2.3E-6	3.5E-6	6.3E-6	7.4E-6	1.2E-5	2.8E-6	2.3E-6



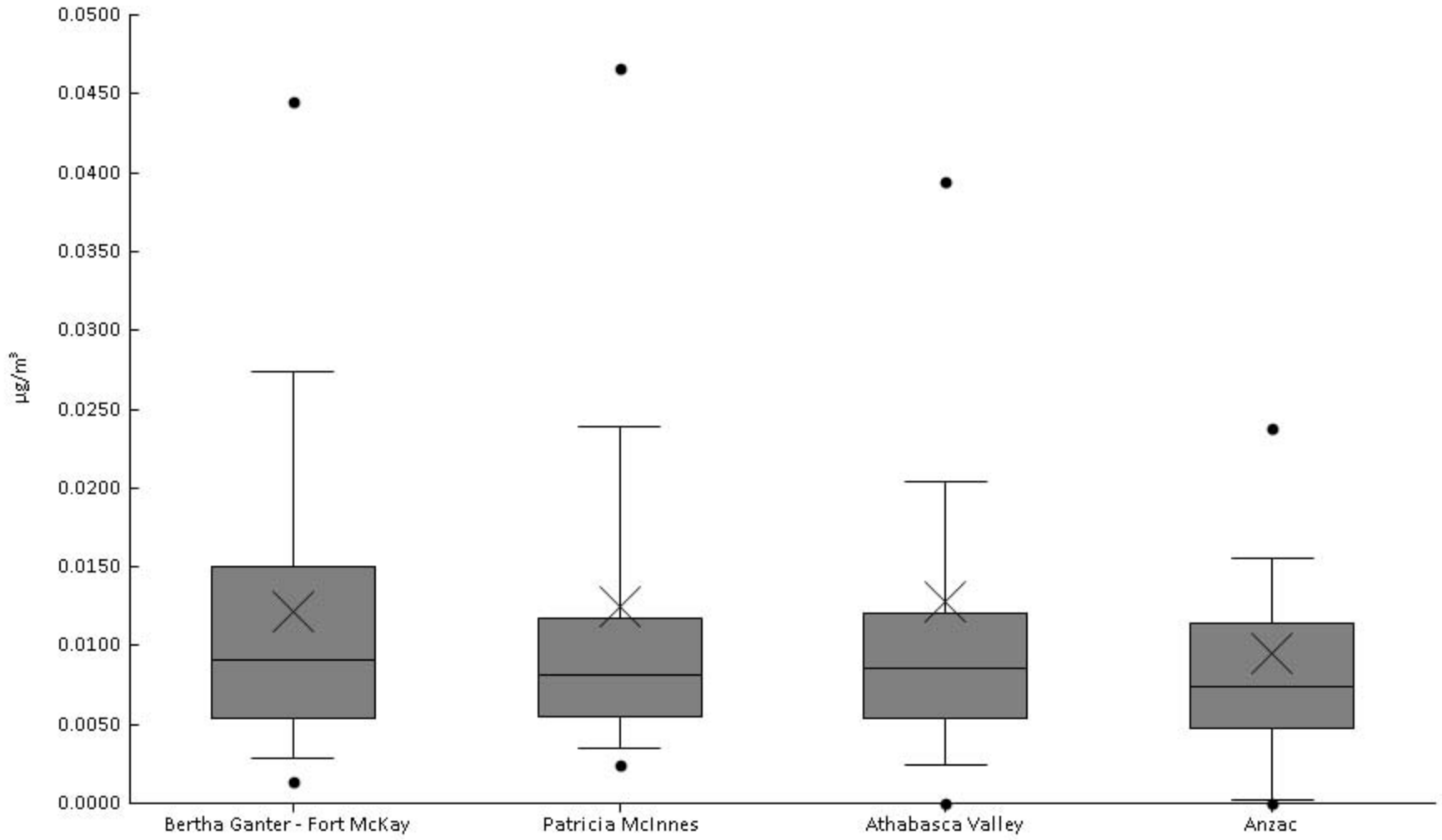
Particulate Matter (PM2.5 METALS) - Palladium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	60	58%	0	0	0	0	3.2E-6	6.9E-6	1.3E-5	3.3E-5	4.2E-5	5.8E-6	9.4E-6
AMS 6	Patricia McInnes	59	58%	0	0	0	0	3.5E-6	6.3E-6	1.3E-5	1.6E-5	1.9E-5	4.2E-6	5.1E-6
AMS 7	Athabasca Valley	61	70%	0	0	0	0	4.1E-6	7.7E-6	1.5E-5	2.6E-5	1.5E-4	8.7E-6	2.1E-5
AMS 14	Anzac	56	45%	0	0	0	0	0	5E-6	9.2E-6	1.4E-5	3.1E-5	3.4E-6	5.7E-6



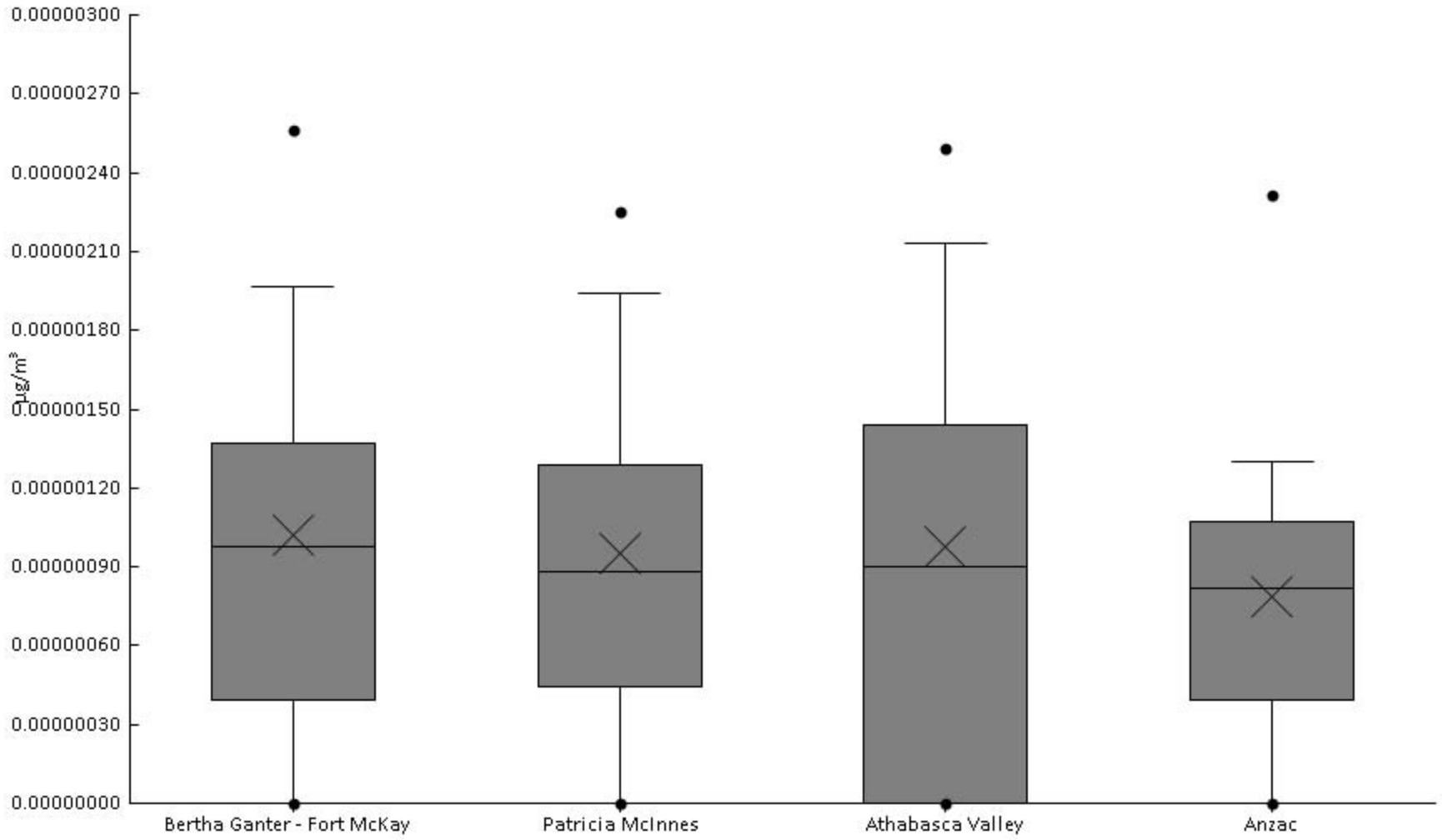
Particulate Matter (PM2.5 METALS) - Phosphorus (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	95%	0	1.4E-3	2.9E-3	5.4E-3	9.1E-3	0.015	0.027	0.045	0.047	0.012	0.012
AMS 6	Patricia McInnes	59	97%	0	2.4E-3	3.5E-3	5.5E-3	8.2E-3	0.012	0.024	0.047	0.1	0.012	0.016
AMS 7	Athabasca Valley	61	93%	0	0	2.4E-3	5.4E-3	8.5E-3	0.012	0.02	0.039	0.13	0.013	0.019
AMS 14	Anzac	56	89%	0	0	2.1E-4	4.8E-3	7.4E-3	0.011	0.016	0.024	0.064	9.6E-3	0.01



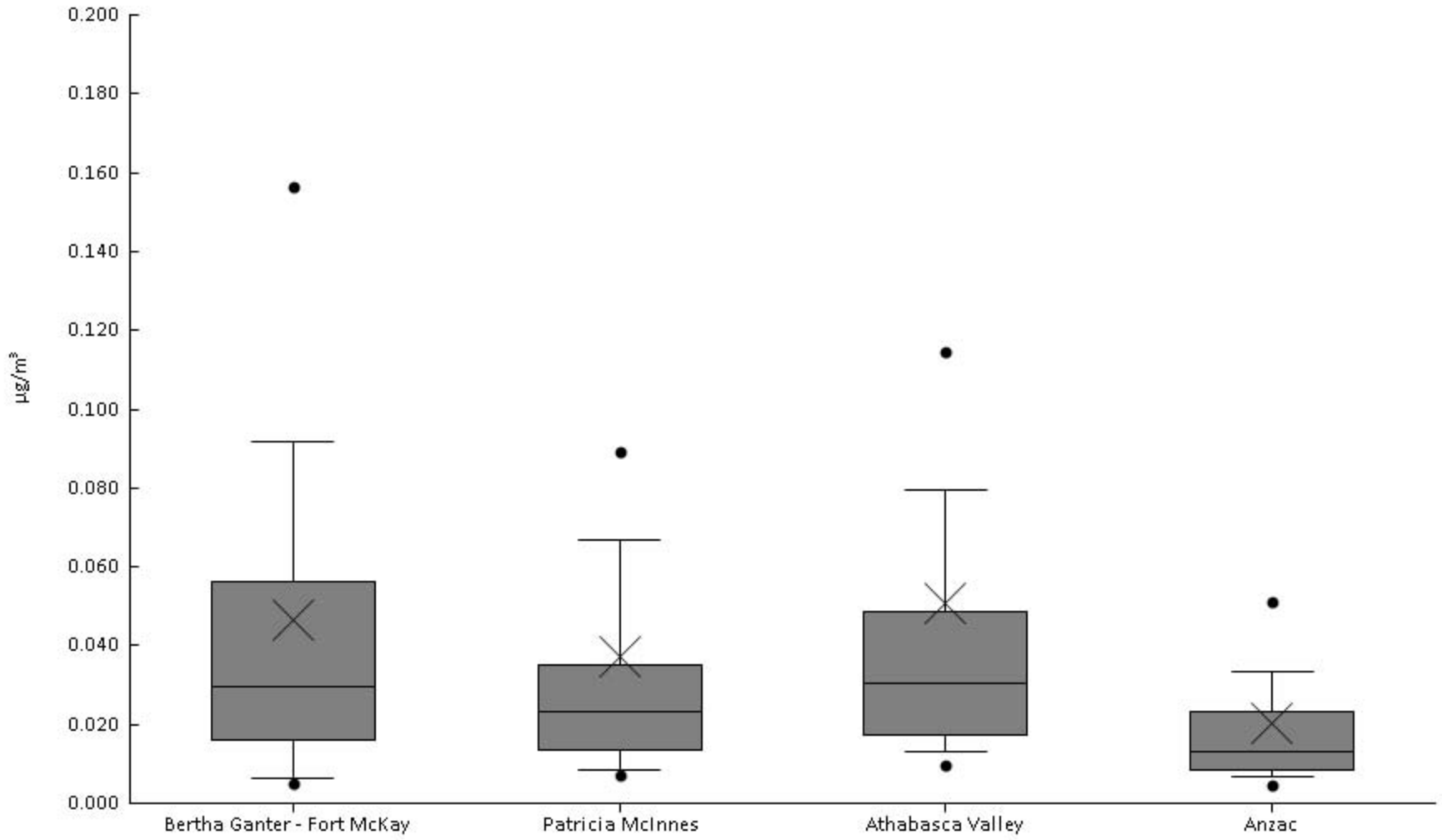
Particulate Matter (PM2.5 METALS) - Platinum (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	77%	0	0	0	3.9E-7	9.8E-7	1.4E-6	2E-6	2.6E-6	5.7E-6	1E-6	1E-6
AMS 6	Patricia McInnes	59	78%	0	0	0	4.4E-7	8.8E-7	1.3E-6	1.9E-6	2.3E-6	4.8E-6	9.5E-7	8.5E-7
AMS 7	Athabasca Valley	61	72%	0	0	0	0	9E-7	1.4E-6	2.1E-6	2.5E-6	5E-6	9.8E-7	9.5E-7
AMS 14	Anzac	56	77%	0	0	0	3.9E-7	8.2E-7	1.1E-6	1.3E-6	2.3E-6	2.6E-6	7.8E-7	6.3E-7



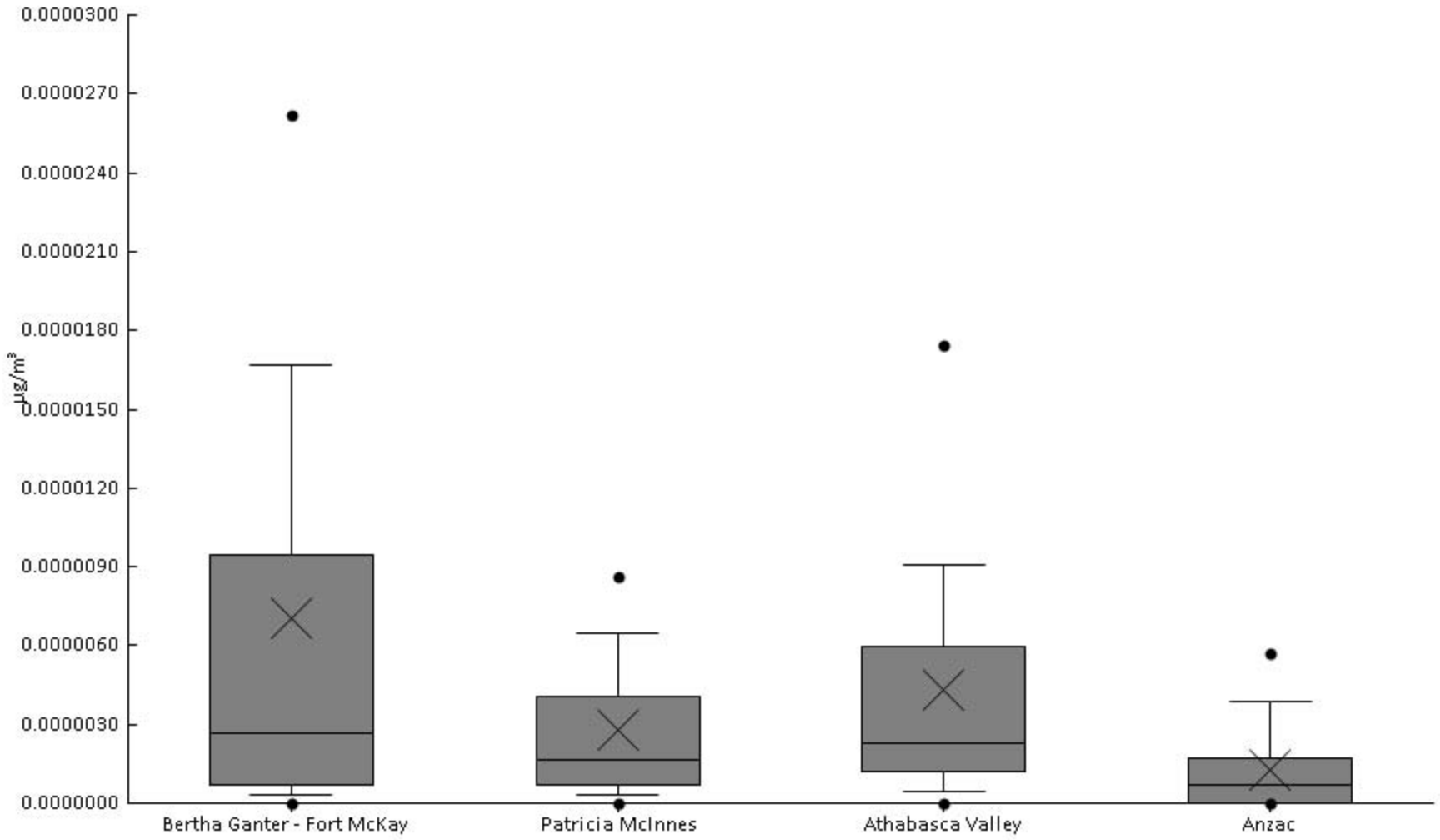
Particulate Matter (PM2.5 METALS) - Potassium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	2.4E-3	4.9E-3	6.5E-3	0.016	0.03	0.056	0.092	0.16	0.31	0.047	0.058
AMS 6	Patricia McInnes	59	100%	3.6E-3	7.1E-3	8.6E-3	0.014	0.023	0.035	0.067	0.089	0.4	0.037	0.058
AMS 7	Athabasca Valley	61	100%	5E-3	9.9E-3	0.013	0.018	0.031	0.049	0.079	0.11	0.54	0.051	0.085
AMS 14	Anzac	56	100%	2.7E-3	4.7E-3	6.6E-3	8.5E-3	0.013	0.023	0.033	0.051	0.17	0.02	0.024



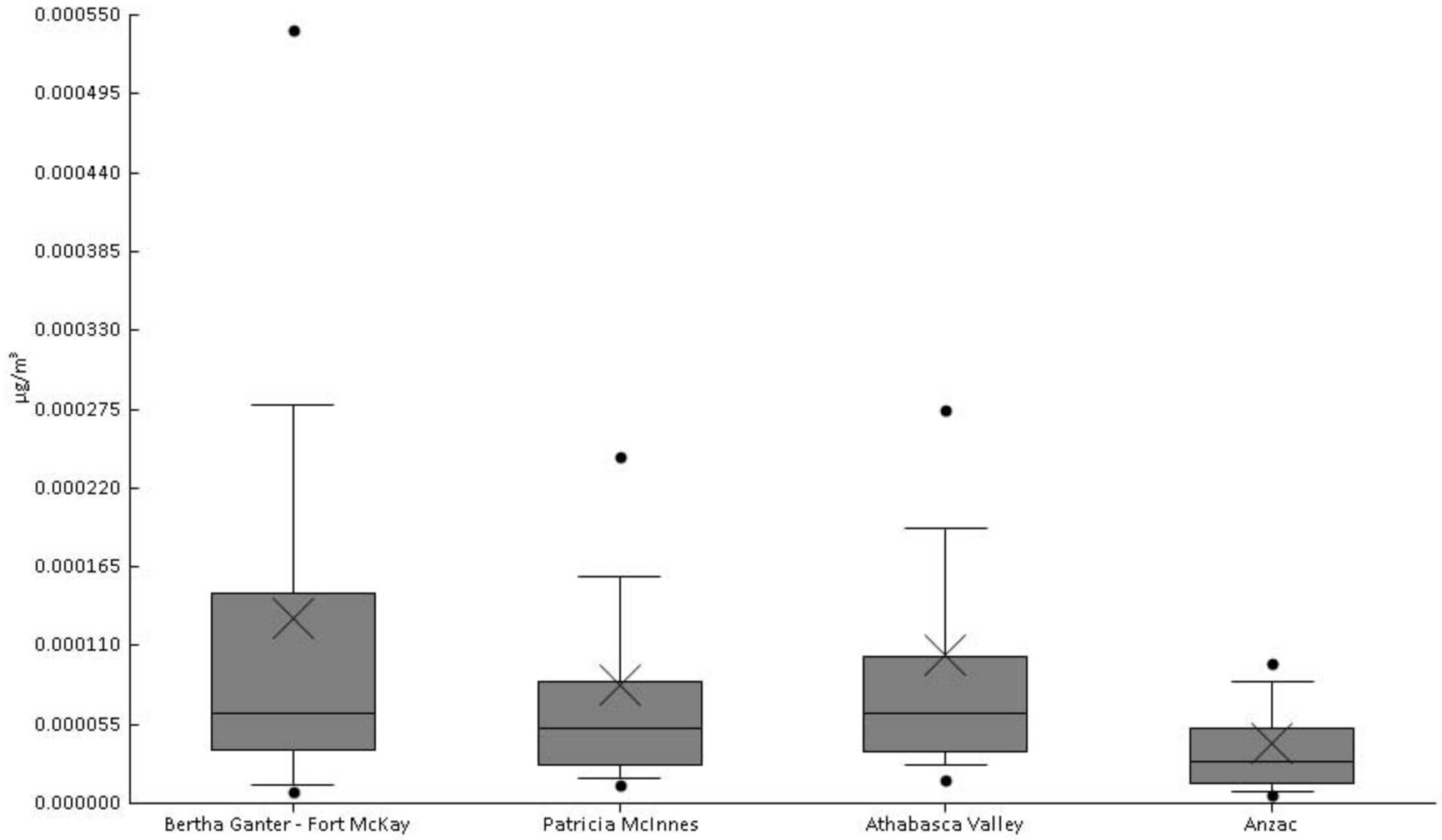
Particulate Matter (PM2.5 METALS) - Praseodymium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	92%	0	0	3.3E-7	6.8E-7	2.7E-6	9.5E-6	1.7E-5	2.6E-5	6.1E-5	7E-6	1.1E-5
AMS 6	Patricia McInnes	59	92%	0	0	3.3E-7	7E-7	1.6E-6	4.1E-6	6.5E-6	8.7E-6	1.8E-5	2.8E-6	3.1E-6
AMS 7	Athabasca Valley	61	93%	0	0	4.8E-7	1.2E-6	2.3E-6	6E-6	9.1E-6	1.7E-5	2.6E-5	4.3E-6	5.1E-6
AMS 14	Anzac	56	66%	0	0	0	0	6.7E-7	1.7E-6	3.9E-6	5.7E-6	7.6E-6	1.3E-6	1.8E-6



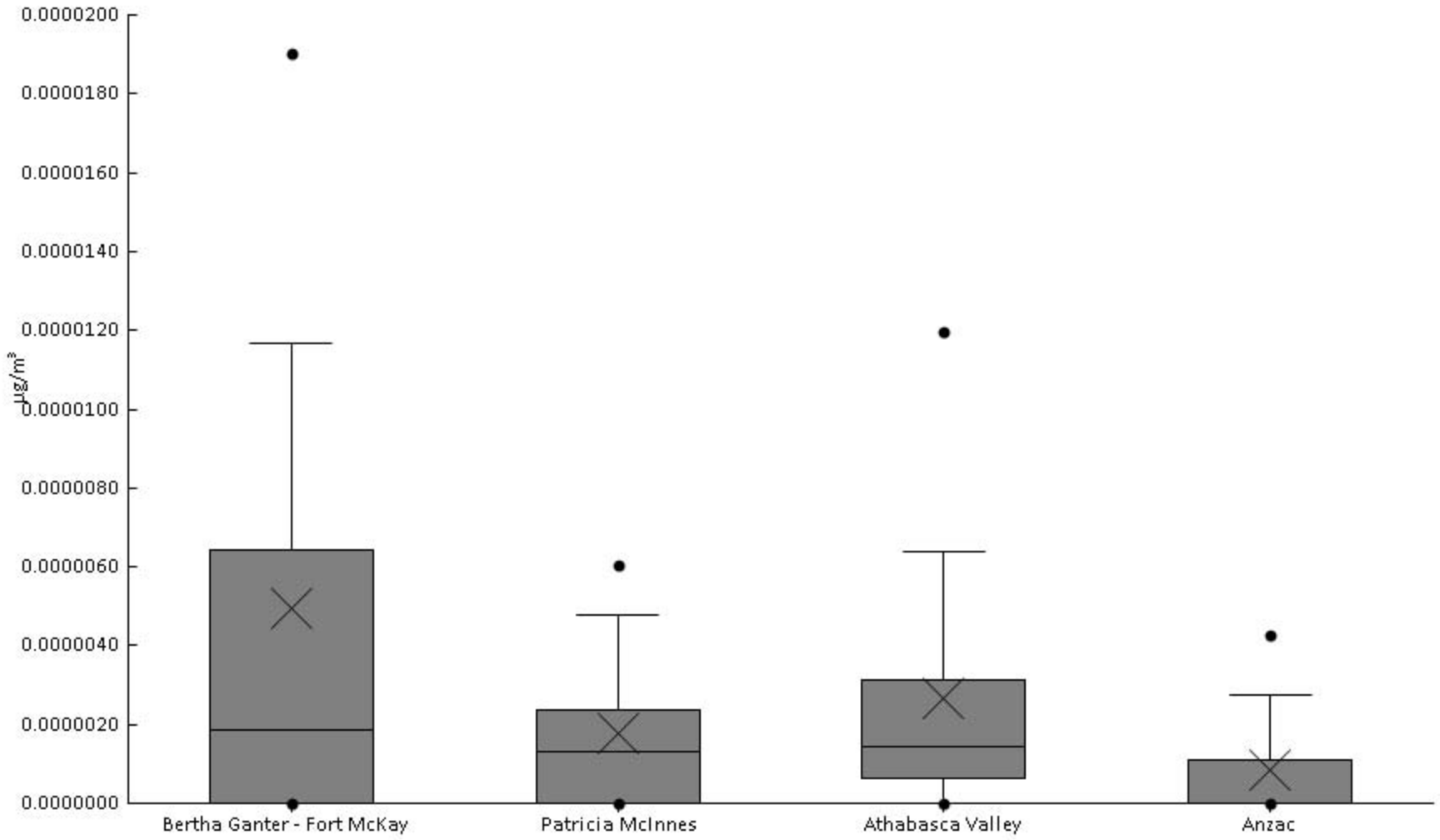
Particulate Matter (PM2.5 METALS) - Rubidium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	5.1E-6	8.5E-6	1.3E-5	3.7E-5	6.2E-5	1.5E-4	2.8E-4	5.4E-4	8.3E-4	1.3E-4	1.7E-4
AMS 6	Patricia McInnes	59	100%	3.7E-6	1.2E-5	1.7E-5	2.7E-5	5.2E-5	8.5E-5	1.6E-4	2.4E-4	7.6E-4	8.2E-5	1.2E-4
AMS 7	Athabasca Valley	61	100%	8.3E-6	1.6E-5	2.7E-5	3.6E-5	6.3E-5	1E-4	1.9E-4	2.7E-4	8.7E-4	1E-4	1.5E-4
AMS 14	Anzac	56	100%	4.2E-6	5.6E-6	8.3E-6	1.4E-5	2.9E-5	5.2E-5	8.4E-5	9.8E-5	3.9E-4	4.2E-5	5.4E-5



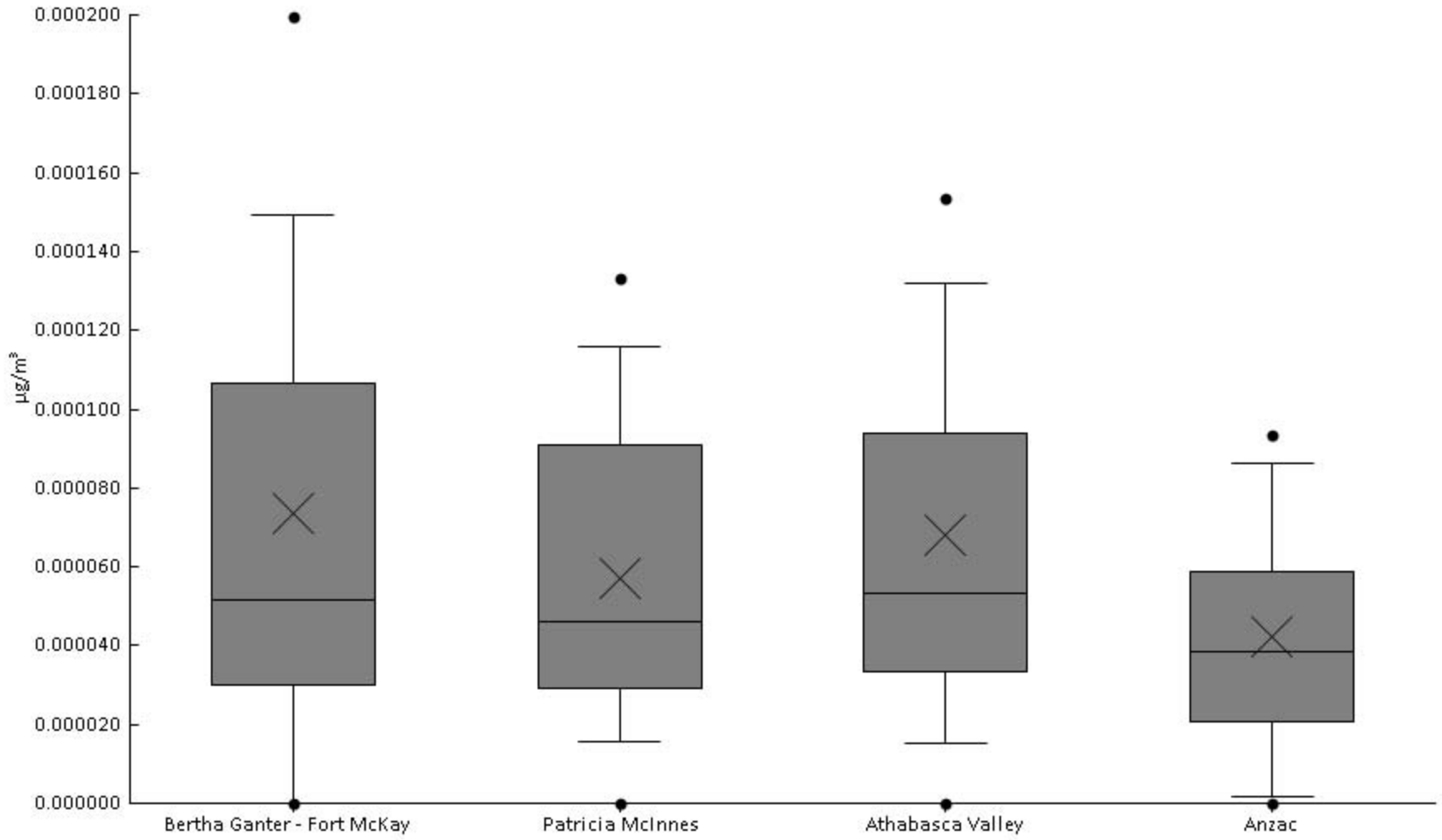
Particulate Matter (PM2.5 METALS) - Samarium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	72%	0	0	0	0	1.9E-6	6.4E-6	1.2E-5	1.9E-5	4.6E-5	5E-6	8.4E-6
AMS 6	Patricia McInnes	59	73%	0	0	0	0	1.3E-6	2.4E-6	4.8E-6	6E-6	1.1E-5	1.8E-6	2E-6
AMS 7	Athabasca Valley	61	79%	0	0	0	6.2E-7	1.4E-6	3.1E-6	6.4E-6	1.2E-5	1.8E-5	2.7E-6	3.6E-6
AMS 14	Anzac	56	48%	0	0	0	0	0	1.1E-6	2.7E-6	4.3E-6	6.2E-6	8.5E-7	1.4E-6



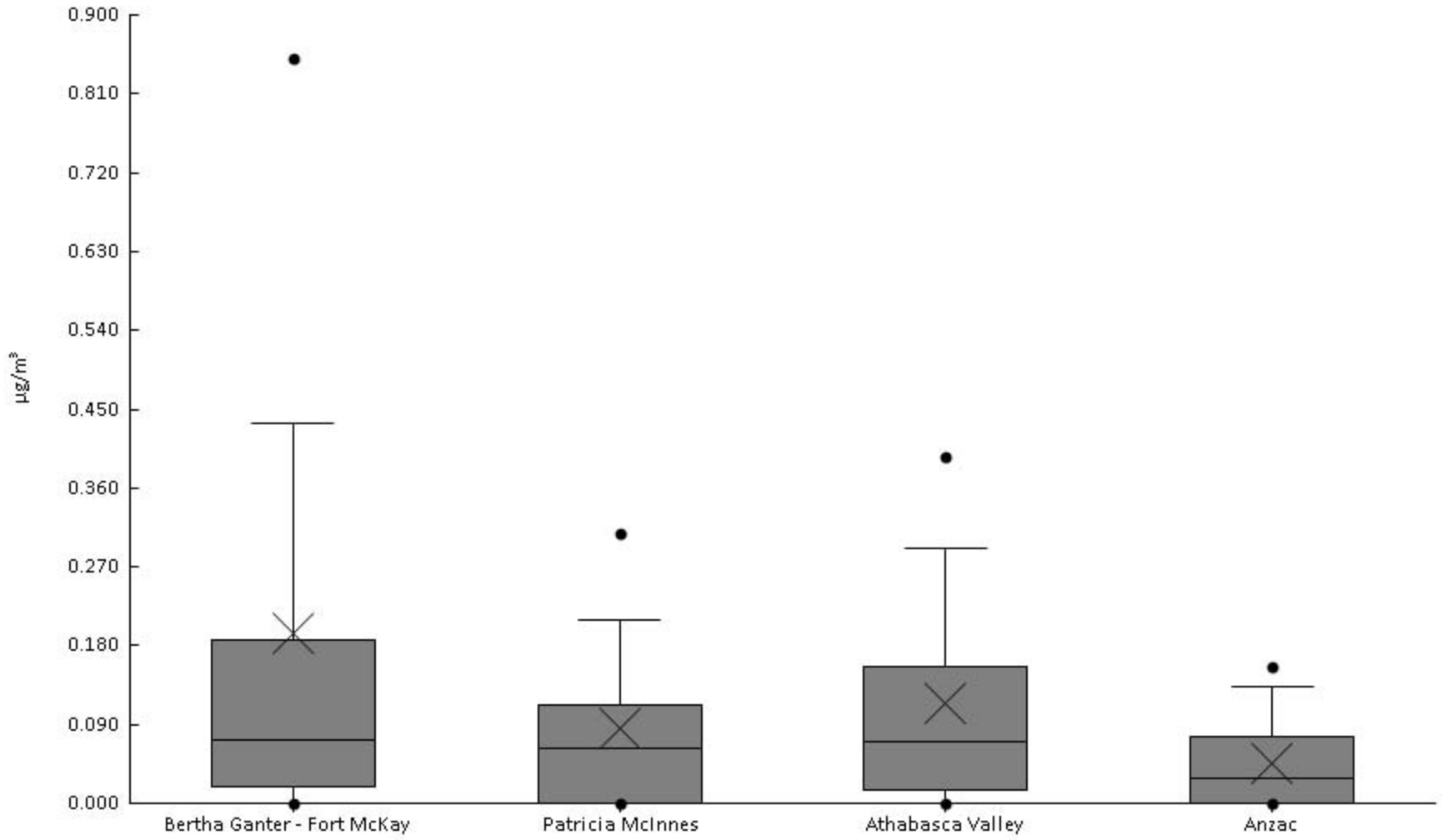
Particulate Matter (PM2.5 METALS) - Selenium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	84%	0	0	0	3E-5	5.2E-5	1.1E-4	1.5E-4	2E-4	3.9E-4	7.4E-5	7.6E-5
AMS 6	Patricia McInnes	59	92%	0	0	1.5E-5	2.9E-5	4.6E-5	9.1E-5	1.2E-4	1.3E-4	1.7E-4	5.7E-5	4E-5
AMS 7	Athabasca Valley	61	92%	0	0	1.5E-5	3.4E-5	5.3E-5	9.4E-5	1.3E-4	1.5E-4	3.2E-4	6.8E-5	5.5E-5
AMS 14	Anzac	56	89%	0	0	1.5E-6	2.1E-5	3.9E-5	5.9E-5	8.6E-5	9.3E-5	1.3E-4	4.2E-5	2.9E-5



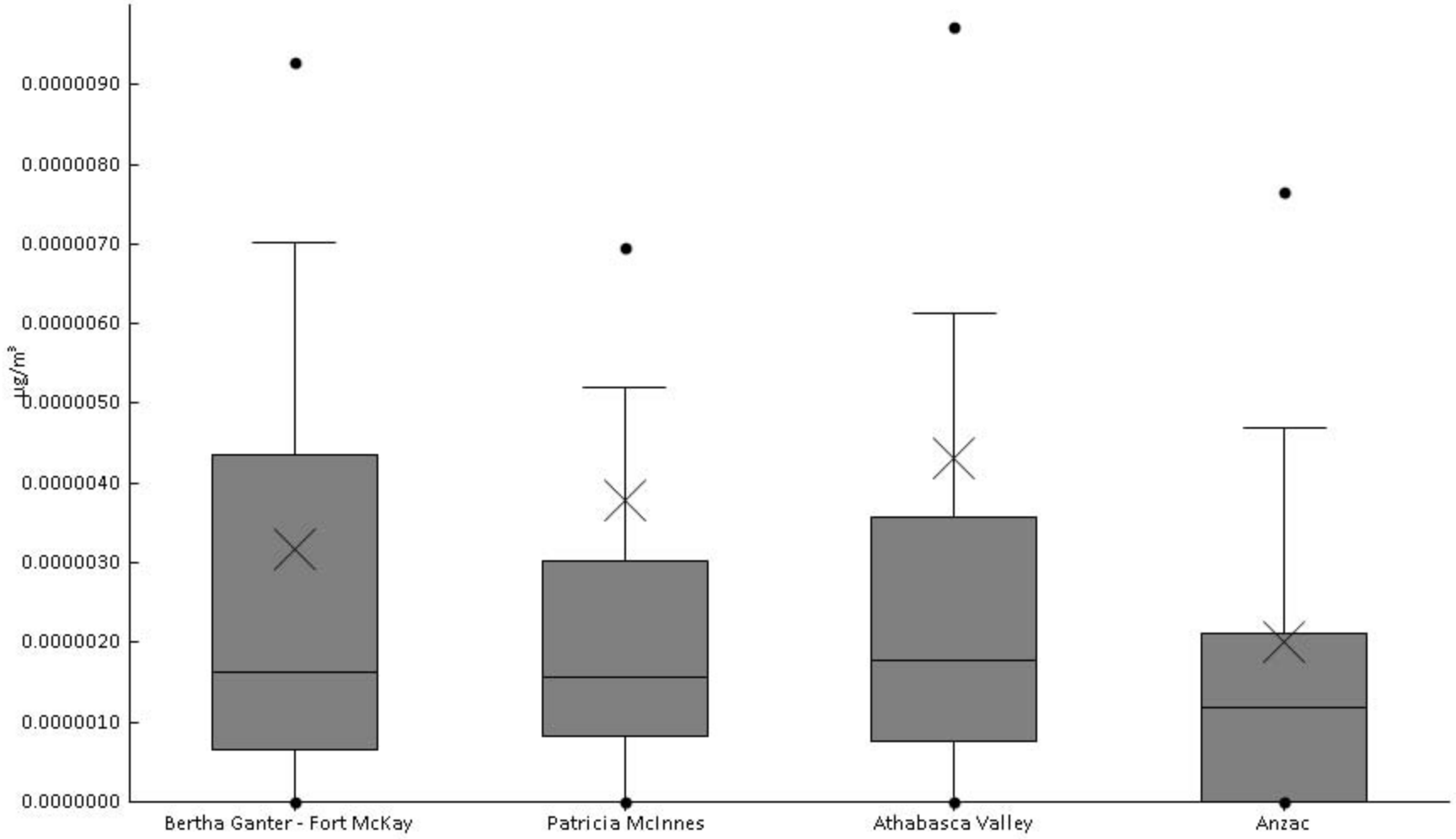
Particulate Matter (PM2.5 METALS) - Silicon (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	75%	0	0	0	0.02	0.072	0.19	0.43	0.85	1.9	0.19	0.33
AMS 6	Patricia McInnes	59	69%	0	0	0	0	0.063	0.11	0.21	0.31	0.51	0.085	0.11
AMS 7	Athabasca Valley	61	75%	0	0	0	0.016	0.071	0.16	0.29	0.4	0.76	0.11	0.14
AMS 14	Anzac	56	54%	0	0	0	0	0.028	0.076	0.13	0.16	0.22	0.046	0.057



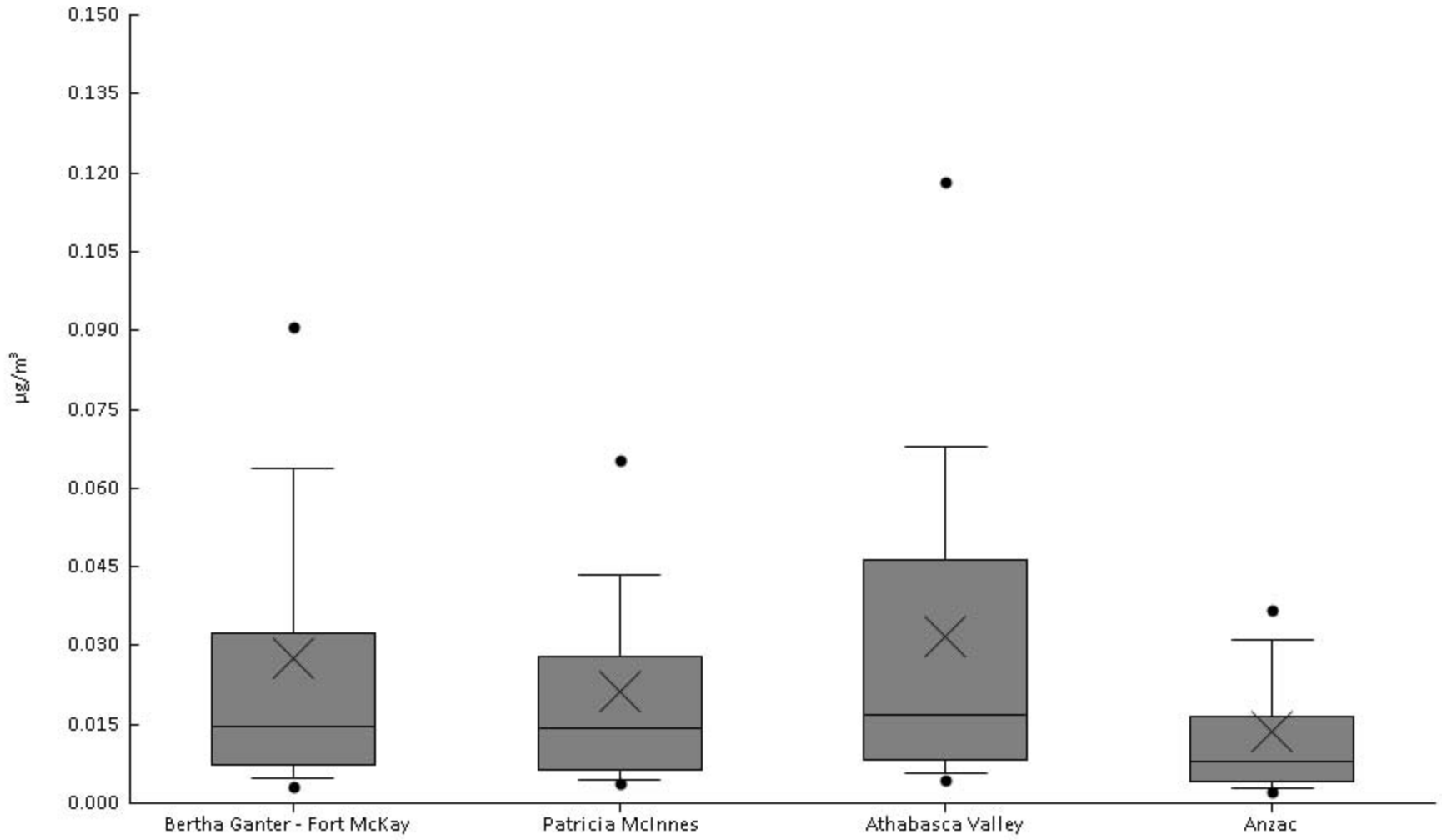
Particulate Matter (PM2.5 METALS) - Silver (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	80%	0	0	0	6.6E-7	1.6E-6	4.4E-6	7E-6	9.3E-6	3.6E-5	3.2E-6	5E-6
AMS 6	Patricia McInnes	59	85%	0	0	0	8.3E-7	1.6E-6	3E-6	5.2E-6	7E-6	9.4E-5	3.8E-6	1.2E-5
AMS 7	Athabasca Valley	61	89%	0	0	0	7.5E-7	1.8E-6	3.6E-6	6.1E-6	9.7E-6	1E-4	4.3E-6	1.3E-5
AMS 14	Anzac	55	71%	0	0	0	0	1.2E-6	2.1E-6	4.7E-6	7.7E-6	1.9E-5	2E-6	3.1E-6



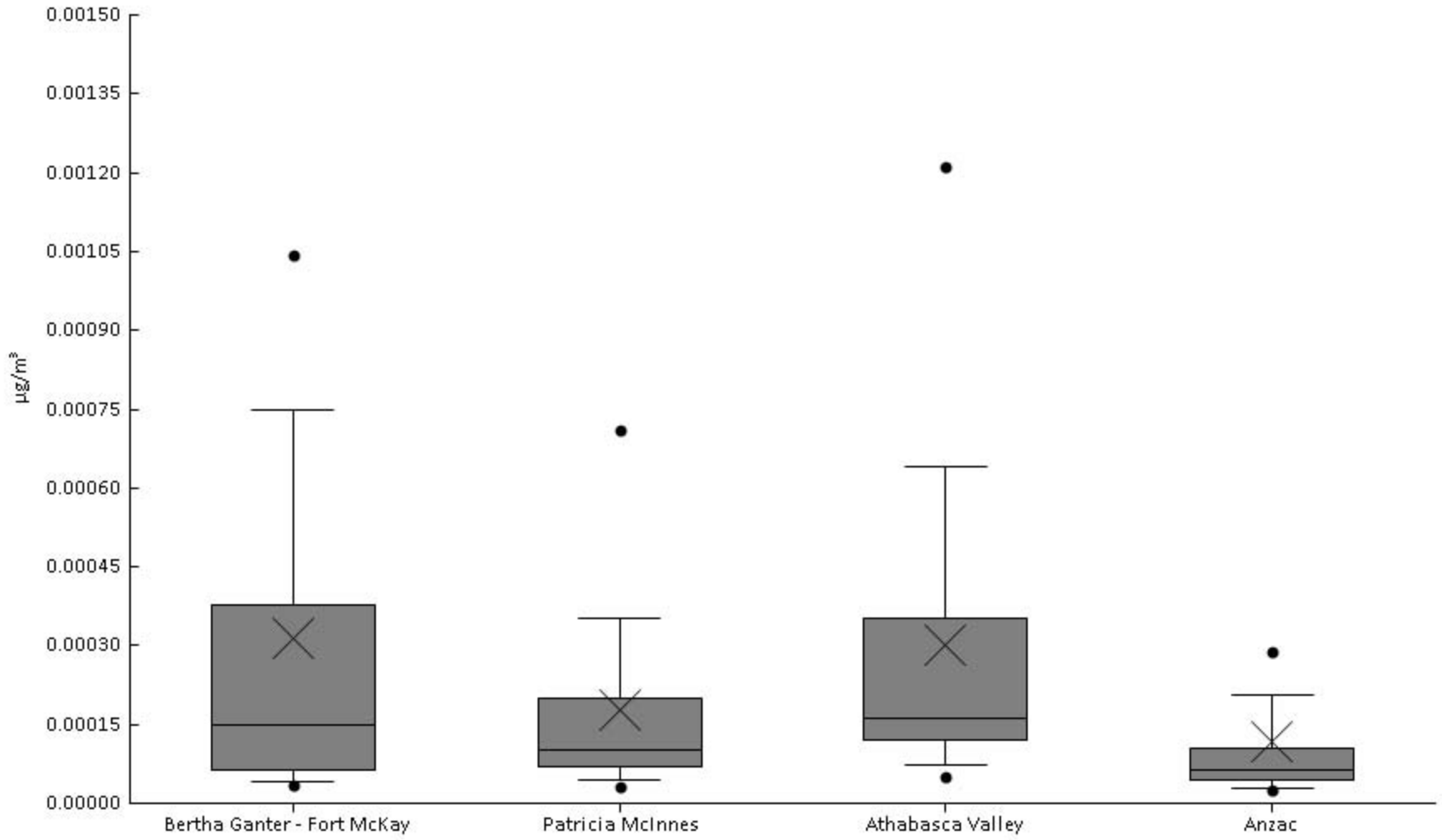
Particulate Matter (PM2.5 METALS) - Sodium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	60	100%	2.1E-3	3.2E-3	4.8E-3	7.4E-3	0.015	0.032	0.064	0.091	0.23	0.028	0.036
AMS 6	Patricia McInnes	59	100%	1.8E-3	3.7E-3	4.3E-3	6.4E-3	0.014	0.028	0.043	0.065	0.12	0.021	0.022
AMS 7	Athabasca Valley	61	100%	2.3E-3	4.5E-3	5.8E-3	8.1E-3	0.017	0.046	0.068	0.12	0.16	0.032	0.036
AMS 14	Anzac	56	100%	1.2E-3	2.1E-3	2.9E-3	4.3E-3	7.9E-3	0.017	0.031	0.037	0.098	0.014	0.017



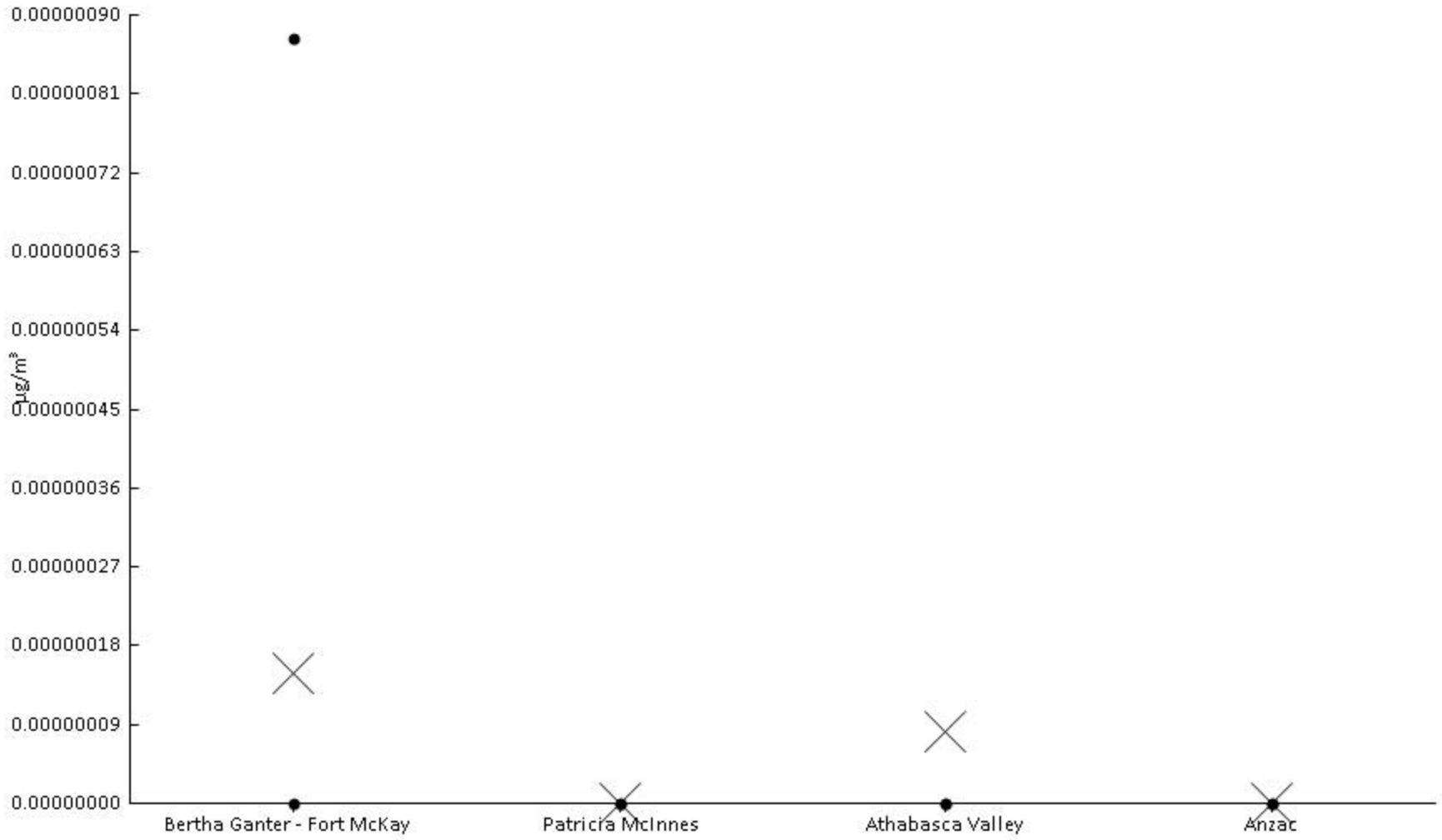
Particulate Matter (PM2.5 METALS) - Strontium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	3.1E-5	3.5E-5	4E-5	6.4E-5	1.5E-4	3.8E-4	7.5E-4	1E-3	2.3E-3	3.1E-4	4.4E-4
AMS 6	Patricia McInnes	59	100%	1.9E-5	3.1E-5	4.6E-5	7E-5	1E-4	2E-4	3.5E-4	7.1E-4	1.1E-3	1.8E-4	2.1E-4
AMS 7	Athabasca Valley	61	100%	3.5E-5	5E-5	7.3E-5	1.2E-4	1.6E-4	3.5E-4	6.4E-4	1.2E-3	1.8E-3	3E-4	3.6E-4
AMS 14	Anzac	56	100%	1.9E-5	2.5E-5	2.7E-5	4.5E-5	6.4E-5	1E-4	2.1E-4	2.9E-4	1.5E-3	1.2E-4	2.1E-4



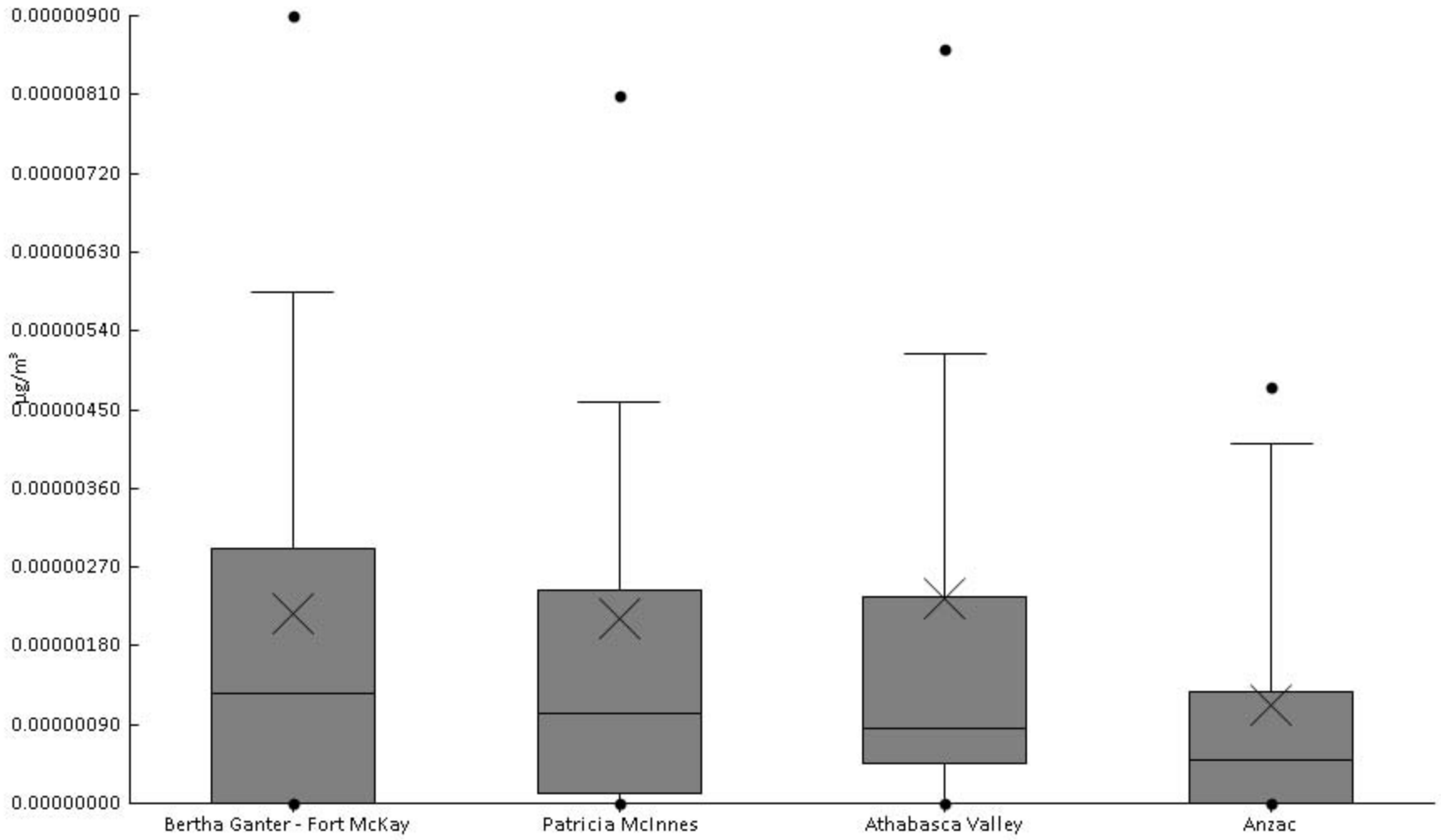
Particulate Matter (PM2.5 METALS) - Tantalum (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	5%	0	0	0	0	0	0	0	8.7E-7	4.1E-6	1.5E-7	6.9E-7
AMS 6	Patricia McInnes	59	0%	0	0	0	0	0	0	0	0	0	0	0
AMS 7	Athabasca Valley	61	3%	0	0	0	0	0	0	0	0	3E-6	8.2E-8	4.6E-7
AMS 14	Anzac	56	0%	0	0	0	0	0	0	0	0	0	0	0



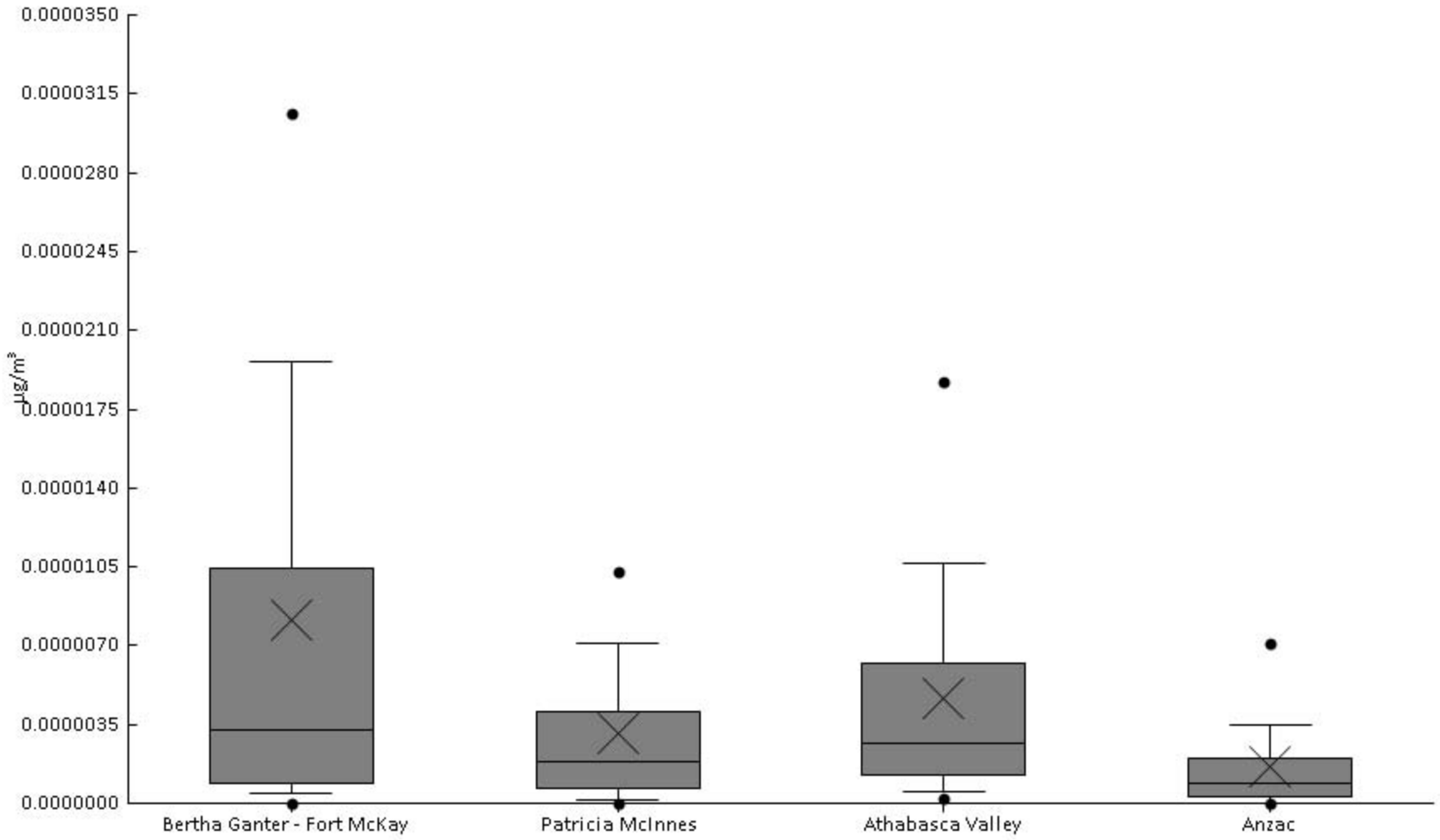
Particulate Matter (PM2.5 METALS) - Thallium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	74%	0	0	0	0	1.2E-6	2.9E-6	5.8E-6	9E-6	1.4E-5	2.2E-6	2.9E-6
AMS 6	Patricia McInnes	59	75%	0	0	0	1.1E-7	1E-6	2.4E-6	4.6E-6	8.1E-6	2.3E-5	2.1E-6	3.7E-6
AMS 7	Athabasca Valley	61	80%	0	0	0	4.6E-7	8.6E-7	2.4E-6	5.1E-6	8.6E-6	3E-5	2.3E-6	4.6E-6
AMS 14	Anzac	56	64%	0	0	0	0	4.9E-7	1.3E-6	4.1E-6	4.8E-6	5.9E-6	1.1E-6	1.6E-6



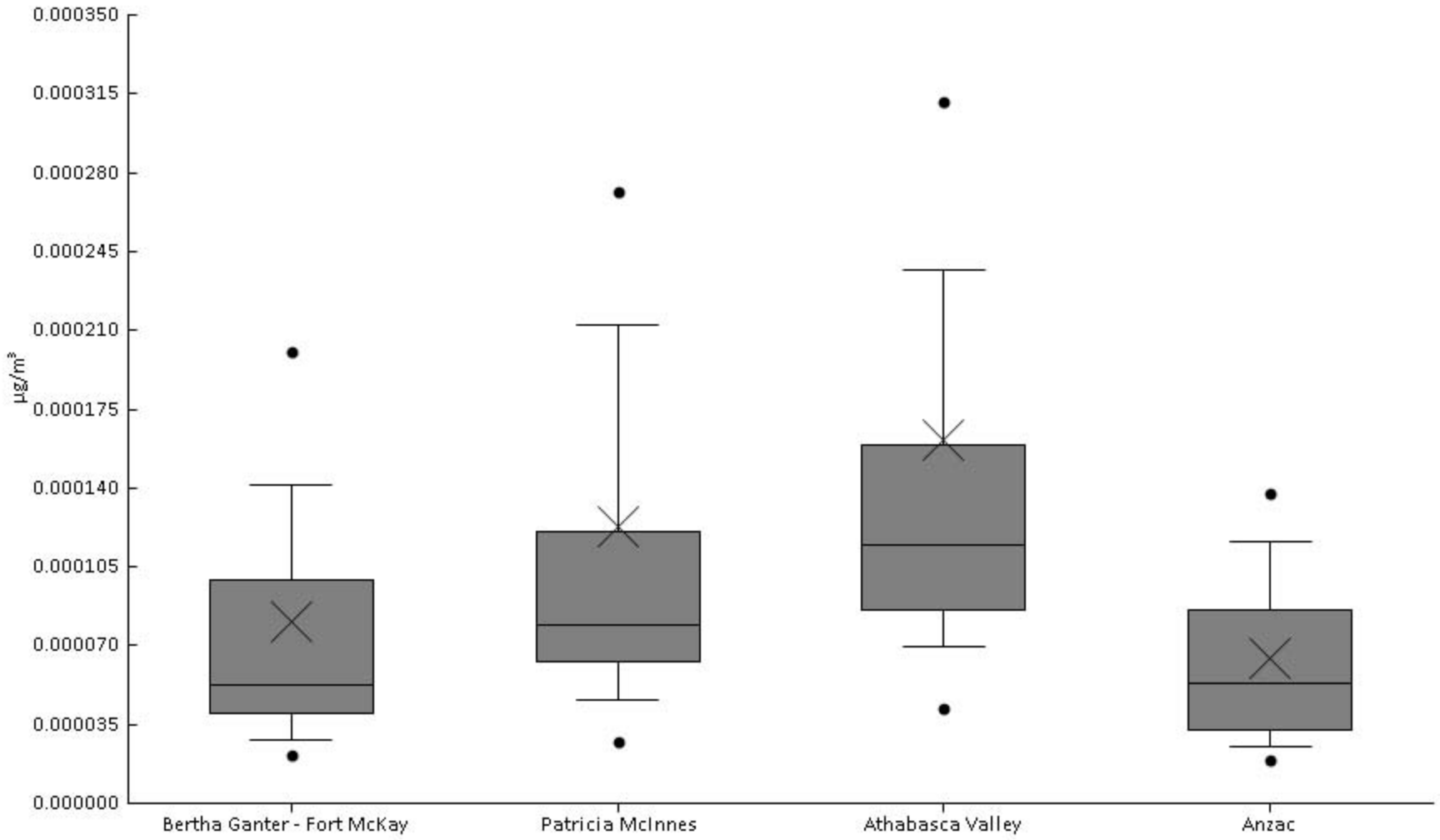
Particulate Matter (PM2.5 METALS) - Thorium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	93%	0	0	4.4E-7	8.6E-7	3.3E-6	1E-5	2E-5	3.1E-5	7.2E-5	8.2E-6	1.3E-5
AMS 6	Patricia McInnes	59	90%	0	0	1.3E-7	6.6E-7	1.9E-6	4.1E-6	7.1E-6	1E-5	1.7E-5	3.1E-6	3.4E-6
AMS 7	Athabasca Valley	61	95%	0	2.5E-7	5.3E-7	1.3E-6	2.7E-6	6.2E-6	1.1E-5	1.9E-5	3.1E-5	4.7E-6	5.8E-6
AMS 14	Anzac	56	77%	0	0	0	3.3E-7	9.1E-7	2E-6	3.5E-6	7.1E-6	1.1E-5	1.6E-6	2.2E-6



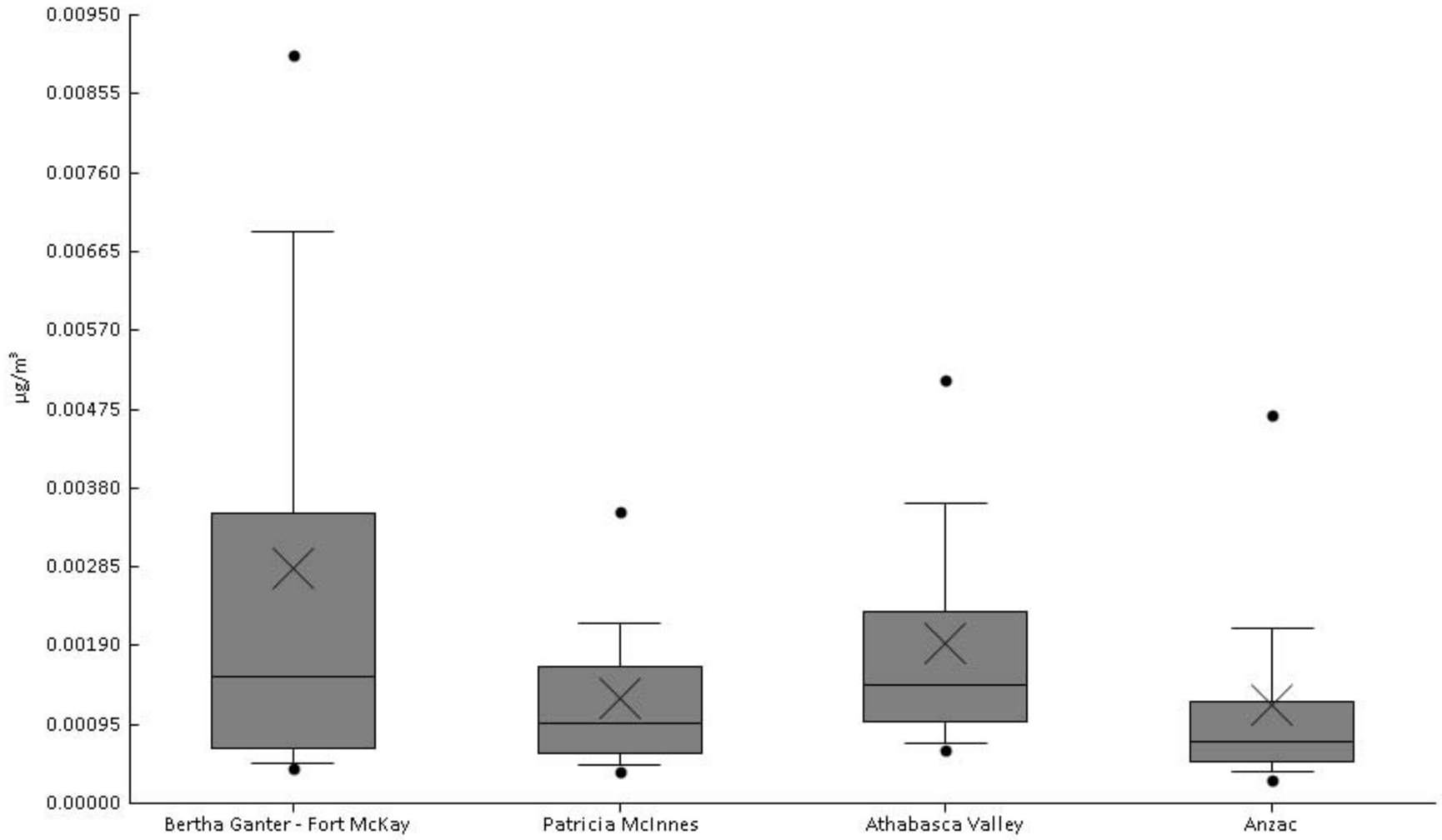
Particulate Matter (PM2.5 METALS) - Tin (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	98%	0	2.2E-5	2.8E-5	4E-5	5.3E-5	9.9E-5	1.4E-4	2E-4	4.8E-4	8.1E-5	8E-5
AMS 6	Patricia McInnes	59	100%	2.1E-5	2.7E-5	4.6E-5	6.3E-5	7.9E-5	1.2E-4	2.1E-4	2.7E-4	1.4E-3	1.2E-4	1.9E-4
AMS 7	Athabasca Valley	61	100%	3.1E-5	4.2E-5	6.9E-5	8.6E-5	1.1E-4	1.6E-4	2.4E-4	3.1E-4	2.1E-3	1.6E-4	2.6E-4
AMS 14	Anzac	56	96%	0	2E-5	2.5E-5	3.3E-5	5.3E-5	8.6E-5	1.2E-4	1.4E-4	2.5E-4	6.4E-5	4.3E-5



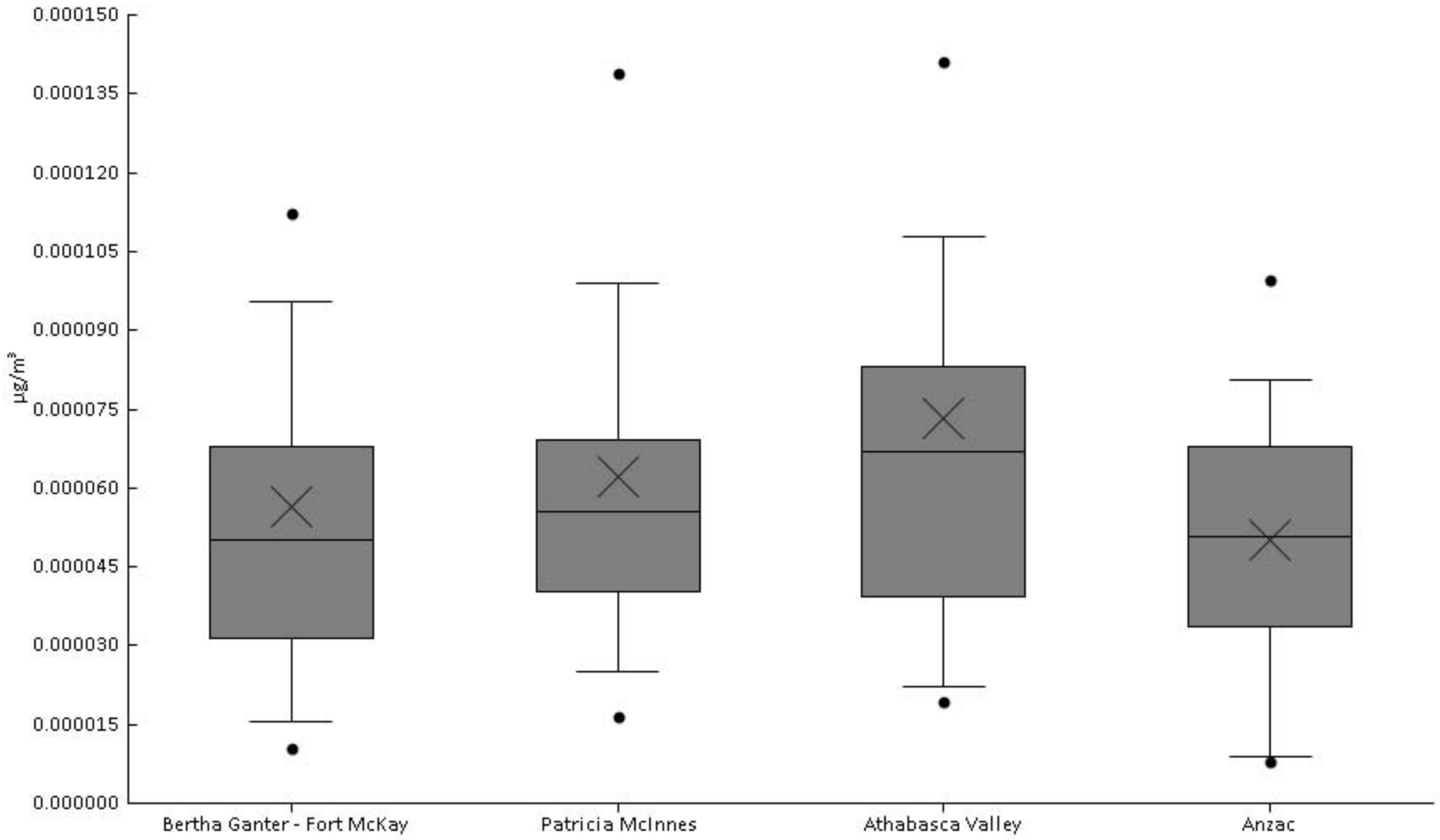
Particulate Matter (PM2.5 METALS) - Titanium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	60	100%	2.3E-4	4.1E-4	4.9E-4	6.7E-4	1.5E-3	3.5E-3	6.9E-3	9E-3	0.021	2.8E-3	3.5E-3
AMS 6	Patricia McInnes	59	100%	3E-4	3.9E-4	4.7E-4	5.9E-4	9.7E-4	1.6E-3	2.2E-3	3.5E-3	5.3E-3	1.3E-3	1E-3
AMS 7	Athabasca Valley	61	100%	4.1E-4	6.4E-4	7.1E-4	9.8E-4	1.4E-3	2.3E-3	3.6E-3	5.1E-3	8.4E-3	1.9E-3	1.5E-3
AMS 14	Anzac	56	100%	2.2E-4	2.9E-4	3.9E-4	5.1E-4	7.4E-4	1.2E-3	2.1E-3	4.7E-3	8.4E-3	1.2E-3	1.4E-3



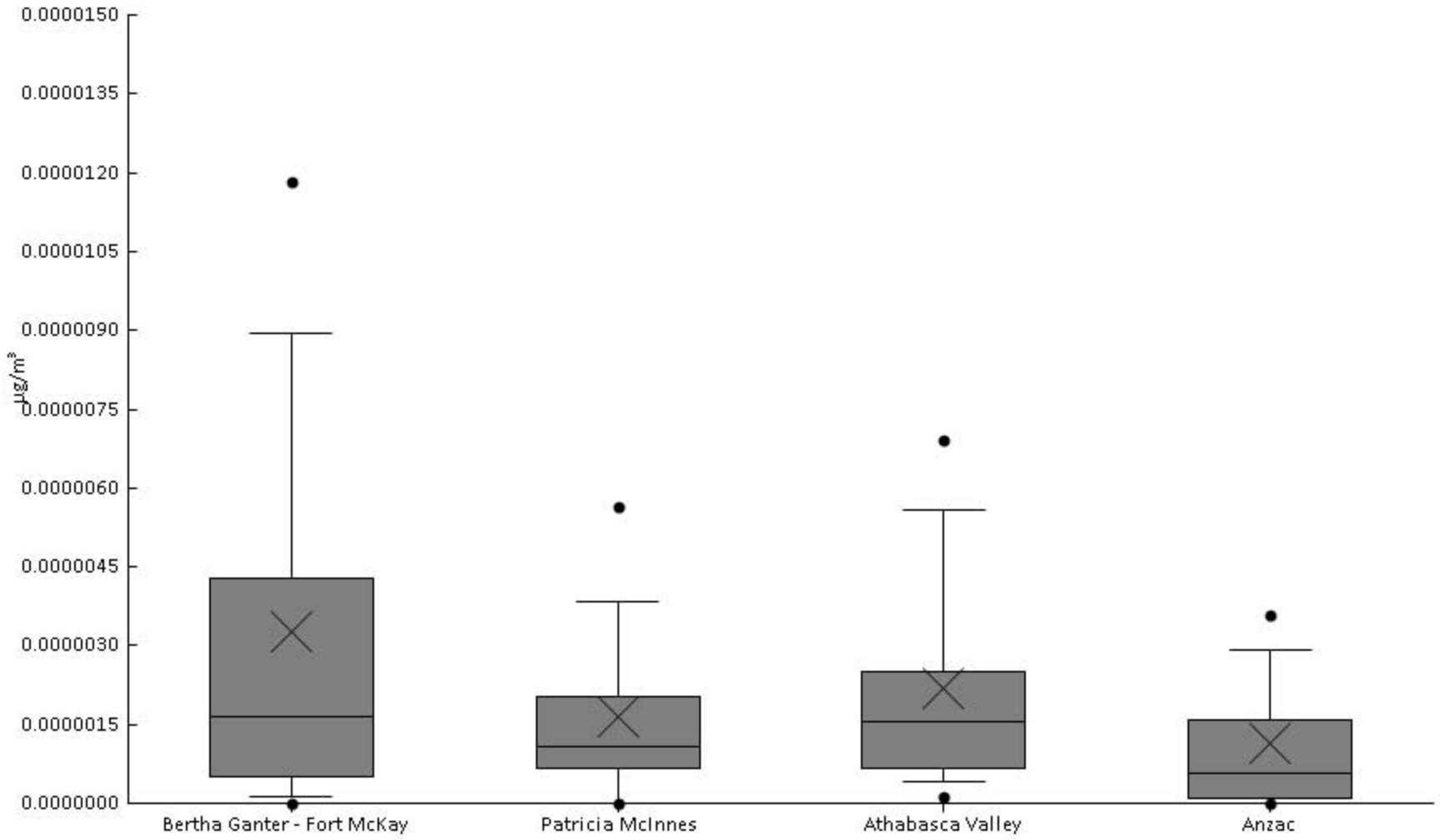
Particulate Matter (PM2.5 METALS) - Tungsten (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	5.2E-6	1.1E-5	1.6E-5	3.1E-5	5E-5	6.8E-5	9.6E-5	1.1E-4	3.9E-4	5.7E-5	5.2E-5
AMS 6	Patricia McInnes	59	98%	0	1.7E-5	2.5E-5	4E-5	5.6E-5	6.9E-5	9.9E-5	1.4E-4	3.1E-4	6.2E-5	4.5E-5
AMS 7	Athabasca Valley	61	100%	1.2E-5	1.9E-5	2.2E-5	3.9E-5	6.7E-5	8.3E-5	1.1E-4	1.4E-4	5.1E-4	7.3E-5	6.7E-5
AMS 14	Anzac	56	96%	0	8E-6	9E-6	3.4E-5	5.1E-5	6.8E-5	8.1E-5	1E-4	1.1E-4	5E-5	2.6E-5



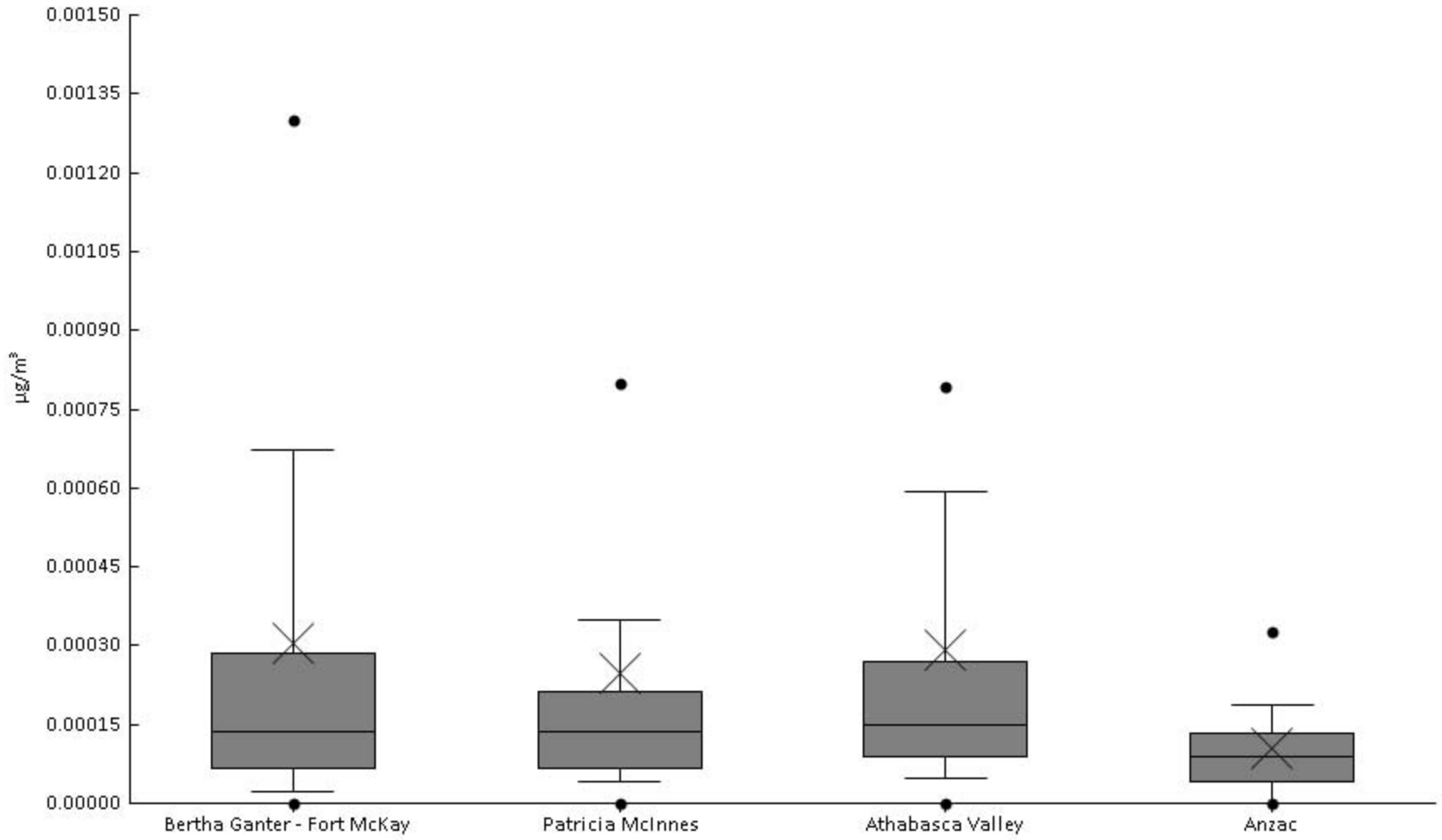
Particulate Matter (PM2.5 METALS) - Uranium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	90%	0	0	1.4E-7	4.9E-7	1.7E-6	4.3E-6	8.9E-6	1.2E-5	2.1E-5	3.3E-6	4.3E-6
AMS 6	Patricia McInnes	59	86%	0	0	0	6.6E-7	1.1E-6	2E-6	3.9E-6	5.6E-6	1E-5	1.6E-6	1.8E-6
AMS 7	Athabasca Valley	61	95%	0	1.2E-7	4E-7	6.8E-7	1.6E-6	2.5E-6	5.6E-6	6.9E-6	1.2E-5	2.2E-6	2.3E-6
AMS 14	Anzac	56	75%	0	0	0	1E-7	5.9E-7	1.6E-6	2.9E-6	3.6E-6	7.1E-6	1.1E-6	1.4E-6



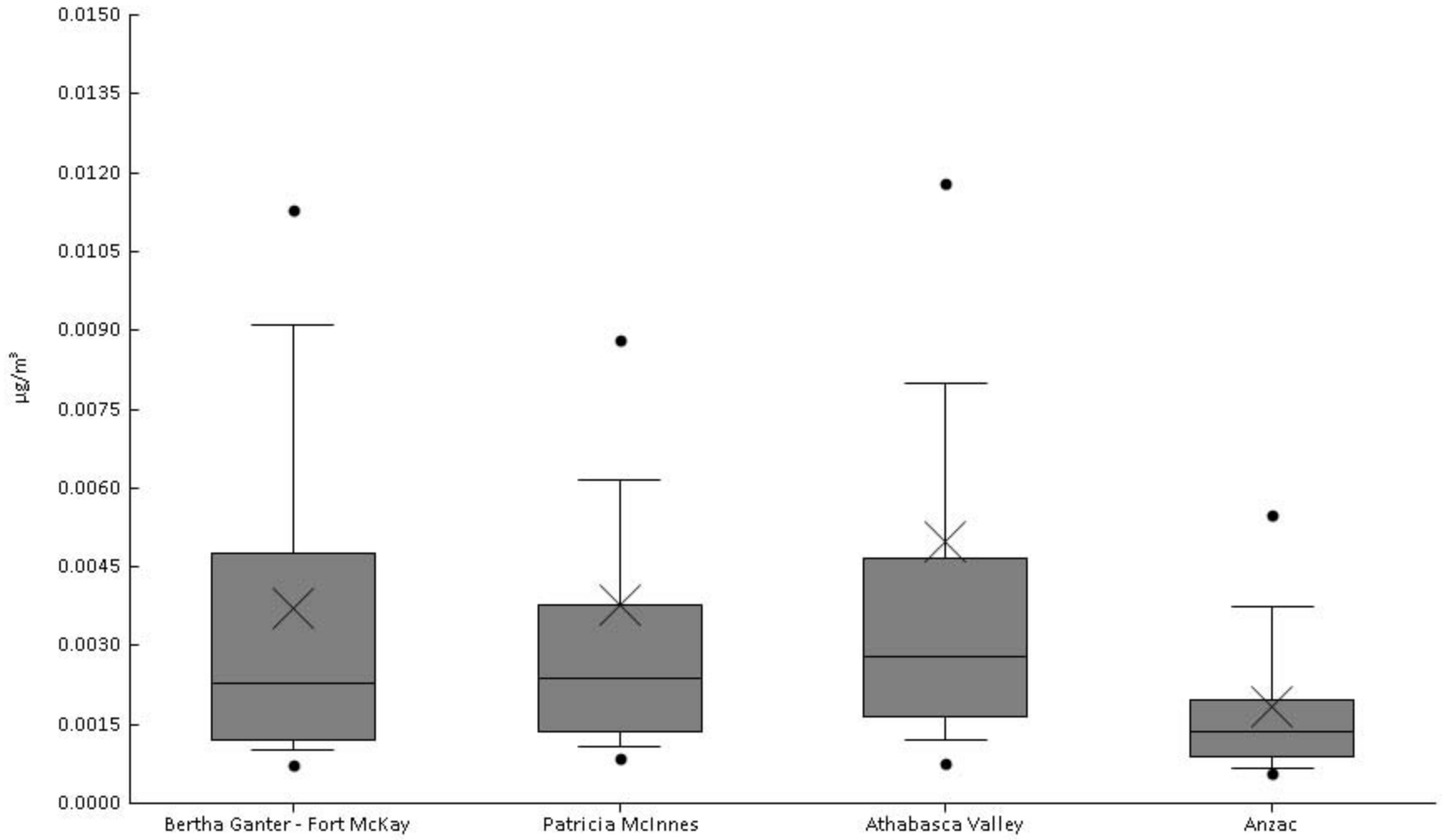
Particulate Matter (PM2.5 METALS) - Vanadium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	90%	0	0	2.2E-5	6.5E-5	1.4E-4	2.9E-4	6.7E-4	1.3E-3	3.7E-3	3E-4	5.5E-4
AMS 6	Patricia McInnes	59	92%	0	0	4.1E-5	6.6E-5	1.4E-4	2.1E-4	3.5E-4	8E-4	2.7E-3	2.5E-4	4.7E-4
AMS 7	Athabasca Valley	61	93%	0	0	4.8E-5	8.9E-5	1.5E-4	2.7E-4	5.9E-4	7.9E-4	2.8E-3	2.9E-4	4.6E-4
AMS 14	Anzac	56	86%	0	0	0	4.1E-5	9E-5	1.3E-4	1.9E-4	3.3E-4	4.3E-4	1E-4	9.4E-5



Particulate Matter (PM2.5 METALS) - Zinc (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	60	100%	5E-4	7.1E-4	1E-3	1.2E-3	2.3E-3	4.8E-3	9.1E-3	0.011	0.018	3.7E-3	3.5E-3
AMS 6	Patricia McInnes	58	100%	4.5E-4	8.7E-4	1.1E-3	1.4E-3	2.4E-3	3.8E-3	6.2E-3	8.8E-3	0.042	3.8E-3	6E-3
AMS 7	Athabasca Valley	61	100%	5.6E-4	7.5E-4	1.2E-3	1.7E-3	2.8E-3	4.7E-3	8E-3	0.012	0.065	5E-3	9E-3
AMS 14	Anzac	56	100%	4.8E-4	5.7E-4	6.5E-4	8.9E-4	1.4E-3	2E-3	3.7E-3	5.5E-3	0.011	1.8E-3	1.7E-3



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

INTEGRATED MONITORING PROGRAM
ANNUAL REPORT

PARTICULATE MATTER (PM_{10}) - METALS DATA SUMMARY 2016

March 2017

SAMPLE COLLECTION AND DATA COMPILATION BY:

Wood Buffalo Environmental Association
Fort McMurray, Alberta

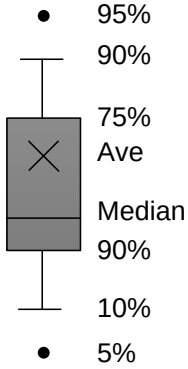
LABORATORY ANALYSIS BY:

PM metals: Atmospheric Research & Analysis, Inc.
Morrisville, NC

FILE CONTENTS DESCRIPTION	Partisol Sampler Measurements of Mass, Ions by IC and Metals by ICP-MS
SAMPLING INTERVAL	24 hour
SAMPLING FREQUENCY OF DATA	Once every 6 days
EXPLANATION OF ZERO VALUES	Zero values are contained in this file and should be treated as values below detection - Method Detection Limits (MDL) are provided with each observation
UNITS	µg/m^3 (microgram per cubic meter)
OBSERVATION TYPE	Particles
FIELD SAMPLING OR MEASUREMENT PRINCIPLE	Filtration with PM_{10} Inlet for PM_{10} and with PM_{10} Inlet/Very Sharp Cut Cyclone for $PM_{2.5}$
PARTICLE DIAMETER	< 2.5 µm or < 10 µm
MEDIUM	47 mm Teflon Filter
ANALYTICALMETHODS	MASS by Microbalance
	ELEMENTS by Inductively Coupled Plasma Mass Spectrometry (ICP/MS)
	IONS by Ion Chromatography (IC)
SAMPLE PREPARATION	DI Water extraction for IC analysis and Acid Digestion for ICP/MS Analysis
ANALYTICAL LABORATORY	Atmospheric Research & Analysis Inc
USER NOTE 1	Data are not blank corrected
USER NOTE 2	Volume is given at actual conditions of temperature and pressure during sampling as measured by the sampler
USER NOTE 3	Blank sample concentration (µg/m^3) is calculated using expected actual volume of sampler
VOLUME STANDARDIZATION	Actual Volume at Ambient Conditions (since 01-Jan-2011)
SAMPLING INSTRUMENT TYPE	For PM_{10} FRM Partisol PM_{10} sampler
	For $PM_{2.5}$ FRM Partisol $PM_{2.5}$ sampler

FLAGS USED	
V0	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
V4	Valid value despite failing to meet some QC or statistical criteria
V5	Valid value but qualified because of possible contamination
V6	Valid value but qualified due to non-standard sampling conditions
M1	Missing value because no value is available
M2	Missing value because invalidated by Data Originator

Legend description



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		01-Jan		01-Jan		01-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.53	V0	1.67	V0	0.05	V0
Aluminum	0.1380326	0.0167572	V0	0.0175469	V0	0.0000000	V1
Antimony	0.0001784	0.0000419	V0	0.0000548	V0	0.0000000	V1
Arsenic	0.0001060	0.0000270	V0	0.0000385	V0	0.0000000	V1
Barium	0.0092847	0.0015514	V0	0.0004724	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0002064	V4	0.0000299	V0	0.0000010	V0
Cadmium	0.0000174	0.0000225	V0	0.0000358	V0	0.0000000	V1
Calcium	0.4112124	0.0354989	V0	0.0244661	V0	0.0000000	V1
Cerium	0.0000174	0.0000141	V0	0.0000156	V0	0.0000000	V1
Cesium	0.0000100	0.0000018	V0	0.0000027	V0	0.0000000	V1
Chromium	0.0022262	0.0002147	V0	0.0001260	V0	0.0000000	V1
Cobalt	0.0000273	0.0000680	V0	0.0000532	V0	0.0000507	V0
Copper	0.0017171	0.0012129	V0	0.0003137	V0	0.0005281	V0
Iron	0.0393063	0.0123889	V0	0.0143320	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000060	V0	0.0000074	V0	0.0000000	V1
Lead	0.0008577	0.0002800	V0	0.0000905	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0055272	V0	0.0056708	V0	0.0003920	V0
Manganese	0.0006949	0.0002862	V0	0.0004444	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000024	V0	0.0000059	V0	0.0000000	V1
Nickel	0.0005429	0.0001985	V0	0.0001173	V0	0.0001329	V0
Niobium	0.0000202	0.0000025	V0	0.0000021	V0	0.0000009	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0055617	V0	0.0071158	V0	0.0056248	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000006	V0
Potassium	0.0061261	0.0423828	V0	0.0278730	V0	0.0006985	V0
Praseodymium	0.0000070	0.0000006	V0	0.0000010	V0	0.0000000	V1
Rubidium	0.0000184	0.0000398	V0	0.0000516	V0	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	0.0000011	V0	0.0000000	V1
Selenium	0.0003366	0.0000232	V0	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0653253	V0	0.0671797	V0	0.0000000	V1
Silver	0.0000100	0.0000030	V0	0.0000045	V0	0.0000000	V1
Sodium	0.0169447	0.0085189	V0	0.0111959	V0	0.0017989	V0
Strontium	0.0003375	0.0002566	V0	0.0000866	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000017	V0	0.0000025	V0	0.0000000	V1
Tin	0.0004414	0.0000325	V0	0.0000537	V0	0.0000000	V1
Titanium	0.0015201	0.0007623	V0	0.0007007	V0	0.0001738	V0
Tungsten	0.0000938	0.0000572	V0	0.0000358	V0	0.0000492	V0
Uranium	0.0000048	0.0000004	V0	0.0000011	V0	0.0000000	V1
Vanadium	0.0007697	0.0000902	V0	0.0000656	V0	0.0000361	V0
Zinc	0.0055897	0.0017671	V0	0.0019411	V0	0.0002998	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		01-Jan		01-Jan		01-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.75	V0	2.09	V0	0.05	V0
Aluminum	0.1380326	0.0258093	V0	0.0201702	V0	0.0000000	V1
Antimony	0.0001784	0.0004266	V0	0.0000269	V0	0.0000000	V1
Arsenic	0.0001060	0.0000707	V0	0.0000310	V0	0.0000000	V1
Barium	0.0092847	0.0070170	V0	0.0004788	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0002053	V4	0.0003022	V4	0.0000010	V0
Cadmium	0.0000174	0.0000523	V0	0.0000318	V0	0.0000000	V1
Calcium	0.4112124	0.0597707	V0	0.0425251	V0	0.0000000	V1
Cerium	0.0000174	0.0000772	V0	0.0000184	V0	0.0000000	V1
Cesium	0.0000100	0.0000042	V0	0.0000030	V0	0.0000000	V1
Chromium	0.0022262	0.0004779	V0	0.0001222	V0	0.0000000	V1
Cobalt	0.0000273	0.0000658	V0	0.0000501	V0	0.0000507	V0
Copper	0.0017171	0.0031421	V0	0.0003184	V0	0.0005281	V0
Iron	0.0393063	0.0597118	V0	0.0130343	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000276	V0	0.0000090	V0	0.0000000	V1
Lead	0.0008577	0.0001761	V0	0.0000862	V0	0.0000000	V1
Lithium	0.0000374	0.0000057	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0159747	V0	0.0112551	V0	0.0003920	V0
Manganese	0.0006949	0.0009696	V0	0.0005537	V0	0.0000000	V1
Molybdenum	0.0007116	0.0003804	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000123	V0	0.0000049	V0	0.0000000	V1
Nickel	0.0005429	0.0002808	V0	0.0001985	V0	0.0001329	V0
Niobium	0.0000202	0.0000061	V0	0.0000063	V0	0.0000009	V0
Palladium	0.0000632	0.0000033	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0103657	V0	0.0063983	V0	0.0056248	V0
Platinum	0.0000088	0.0000034	V0	0.0000000	V1	0.0000006	V0
Potassium	0.0061261	0.1439375	V0	0.0417794	V0	0.0006985	V0
Praseodymium	0.0000070	0.0000043	V0	0.0000011	V0	0.0000000	V1
Rubidium	0.0000184	0.0001098	V0	0.0000672	V0	0.0000000	V1
Samarium	0.0000133	0.0000025	V0	0.0000011	V0	0.0000000	V1
Selenium	0.0003366	0.0000565	V0	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0621503	V0	0.0775331	V0	0.0000000	V1
Silver	0.0000100	0.0000090	V0	0.0000088	V0	0.0000000	V1
Sodium	0.0169447	0.2030275	V0	0.0244515	V0	0.0017989	V0
Strontium	0.0003375	0.0021113	V0	0.0001607	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000010	V0	0.0000010	V0	0.0000000	V1
Thorium	0.0000059	0.0000040	V0	0.0000024	V0	0.0000000	V1
Tin	0.0004414	0.0001821	V0	0.0000476	V0	0.0000000	V1
Titanium	0.0015201	0.0018556	V0	0.0010874	V0	0.0001738	V0
Tungsten	0.0000938	0.0000698	V0	0.0000519	V0	0.0000492	V0
Uranium	0.0000048	0.0000015	V0	0.0000007	V0	0.0000000	V1
Vanadium	0.0007697	0.0001282	V0	0.0001231	V0	0.0000361	V0
Zinc	0.0055897	0.0067132	V0	0.0025783	V0	0.0002998	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		01-Jan		01-Jan		01-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.64	V0	1.48	V0	0.05	V0
Aluminum	0.1380326	0.0239381	V0	0.0260507	V0	0.0000000	V1
Antimony	0.0001784	0.0000094	V0	0.0000102	V0	0.0000000	V1
Arsenic	0.0001060	0.0000125	V0	0.0000445	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000250	V0	0.0000633	V0	0.0000010	V0
Cadmium	0.0000174	0.0000105	V0	0.0000281	V0	0.0000000	V1
Calcium	0.4112124	0.0266543	V0	0.0310084	V0	0.0000000	V1
Cerium	0.0000174	0.0000229	V0	0.0000226	V0	0.0000000	V1
Cesium	0.0000100	0.0000021	V0	0.0000032	V0	0.0000000	V1
Chromium	0.0022262	0.0001507	V0	0.0001595	V0	0.0000000	V1
Cobalt	0.0000273	0.0000660	V0	0.0000687	V0	0.0000507	V0
Copper	0.0017171	0.0064927	V4	0.0003318	V0	0.0005281	V0
Iron	0.0393063	0.0159029	V0	0.0196572	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000088	V0	0.0000109	V0	0.0000000	V1
Lead	0.0008577	0.0000888	V0	0.0000572	V0	0.0000000	V1
Lithium	0.0000374	0.0000042	V0	0.0000110	V0	0.0000000	V1
Magnesium	0.0091409	0.0048912	V0	0.0073514	V0	0.0003920	V0
Manganese	0.0006949	0.0002912	V0	0.0005634	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000030	V0	0.0000083	V0	0.0000000	V1
Nickel	0.0005429	0.0002371	V0	0.0001190	V0	0.0001329	V0
Niobium	0.0000202	0.0000035	V0	0.0000049	V0	0.0000009	V0
Palladium	0.0000632	0.0000000	V1	0.0000964	V0	0.0000000	V1
Phosphorus	0.0459574	0.0065887	V0	0.0073458	V0	0.0056248	V0
Platinum	0.0000088	0.0000000	V1	0.0000035	V0	0.0000006	V0
Potassium	0.0061261	0.0156115	V0	0.0288564	V0	0.0006985	V0
Praseodymium	0.0000070	0.0000018	V0	0.0000022	V0	0.0000000	V1
Rubidium	0.0000184	0.0000395	V0	0.0000538	V0	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	0.0000008	V0	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000375	V0	0.0000000	V1
Silicon	0.7676322	0.0651032	V0	0.0906549	V0	0.0000000	V1
Silver	0.0000100	0.0000021	V0	0.0000052	V0	0.0000000	V1
Sodium	0.0169447	0.0080611	V0	0.0103534	V0	0.0017989	V0
Strontium	0.0003375	0.0000877	V0	0.0001094	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000005	V0	0.0000000	V1
Thorium	0.0000059	0.0000024	V0	0.0000033	V0	0.0000000	V1
Tin	0.0004414	0.0000211	V0	0.0000420	V0	0.0000000	V1
Titanium	0.0015201	0.0010114	V0	0.0015255	V0	0.0001738	V0
Tungsten	0.0000938	0.0000588	V0	0.0000442	V0	0.0000492	V0
Uranium	0.0000048	0.0000006	V0	0.0000016	V0	0.0000000	V1
Vanadium	0.0007697	0.0001204	V0	0.0000982	V0	0.0000361	V0
Zinc	0.0055897	0.0009619	V0	0.0020190	V0	0.0002998	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**01-Jan**		**01-Jan**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	4.62	V0	0.05	V0
Aluminum	0.1380326	0.0900032	V0	0.0000000	V1
Antimony	0.0001784	0.0000144	V0	0.0000000	V1
Arsenic	0.0001060	0.0000209	V0	0.0000000	V1
Barium	0.0092847	0.0006915	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000169	V0	0.0000010	V0
Cadmium	0.0000174	0.0000252	V0	0.0000000	V1
Calcium	0.4112124	0.0511968	V0	0.0000000	V1
Cerium	0.0000174	0.0000936	V0	0.0000000	V1
Cesium	0.0000100	0.0000060	V0	0.0000000	V1
Chromium	0.0022262	0.0002226	V0	0.0000000	V1
Cobalt	0.0000273	0.0000951	V0	0.0000507	V0
Copper	0.0017171	0.0028729	V0	0.0005281	V0
Iron	0.0393063	0.0570691	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000435	V0	0.0000000	V1
Lead	0.0008577	0.0000752	V0	0.0000000	V1
Lithium	0.0000374	0.0000956	V0	0.0000000	V1
Magnesium	0.0091409	0.0124985	V0	0.0003920	V0
Manganese	0.0006949	0.0013023	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000384	V0	0.0000000	V1
Nickel	0.0005429	0.0002715	V0	0.0001329	V0
Niobium	0.0000202	0.0000124	V0	0.0000009	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0070235	V0	0.0056248	V0
Platinum	0.0000088	0.0000000	V1	0.0000006	V0
Potassium	0.0061261	0.0372220	V0	0.0006985	V0
Praseodymium	0.0000070	0.0000098	V0	0.0000000	V1
Rubidium	0.0000184	0.0001150	V0	0.0000000	V1
Samarium	0.0000133	0.0000058	V0	0.0000000	V1
Selenium	0.0003366	0.0000359	V0	0.0000000	V1
Silicon	0.7676322	0.2846405	V0	0.0000000	V1
Silver	0.0000100	0.0000021	V0	0.0000000	V1
Sodium	0.0169447	0.0141079	V0	0.0017989	V0
Strontium	0.0003375	0.0002458	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000010	V0	0.0000000	V1
Thorium	0.0000059	0.0000114	V0	0.0000000	V1
Tin	0.0004414	0.0000250	V0	0.0000000	V1
Titanium	0.0015201	0.0030593	V0	0.0001738	V0
Tungsten	0.0000938	0.0000648	V0	0.0000492	V0
Uranium	0.0000048	0.0000028	V0	0.0000000	V1
Vanadium	0.0007697	0.0002958	V0	0.0000361	V0
Zinc	0.0055897	0.0023871	V0	0.0002998	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**07-Jan**		**07-Jan**		**07-Jan**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	1.86	V0	2.26	V0	0.05	V0
Aluminum	0.1380326	0.0139297	V0	0.0089590	V0	0.0000000	V1
Antimony	0.0001784	0.0000000	V1	0.0000108	V0	0.0000000	V1
Arsenic	0.0001060	0.0000095	V0	0.0000058	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000235	V0	0.0000081	V0	0.0000020	V0
Cadmium	0.0000174	0.0000009	V0	0.0000000	V1	0.0000000	V1
Calcium	0.4112124	0.0275513	V0	0.0601519	V0	0.0000000	V1
Cerium	0.0000174	0.0000129	V0	0.0000090	V0	0.0000000	V1
Cesium	0.0000100	0.0000012	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0002886	V0	0.0001283	V0	0.0000000	V1
Cobalt	0.0000273	0.0000794	V0	0.0000531	V0	0.0000589	V0
Copper	0.0017171	0.0003498	V0	0.0002954	V0	0.0020192	V0
Iron	0.0393063	0.0102063	V0	0.0101895	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000059	V0	0.0000177	V0	0.0000000	V1
Lead	0.0008577	0.0000548	V0	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0133558	V0	0.0073958	V0	0.0007712	V0
Manganese	0.0006949	0.0002056	V0	0.0002467	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000047	V0	0.0000010	V0	0.0000000	V1
Nickel	0.0005429	0.0002057	V0	0.0002001	V0	0.0000868	V0
Niobium	0.0000202	0.0000025	V0	0.0000013	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0074471	V0	0.0059537	V0	0.0065220	V0
Platinum	0.0000088	0.0000008	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0098849	V0	0.0080340	V0	0.0007074	V0
Praseodymium	0.0000070	0.0000009	V0	0.0000004	V0	0.0000000	V1
Rubidium	0.0000184	0.0000184	V0	0.0000129	V0	0.0000000	V1
Samarium	0.0000133	0.0000008	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0337789	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0623951	V0	0.0286564	V0	0.0014279	V0
Strontium	0.0003375	0.0001228	V0	0.0001259	V0	0.0000154	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000018	V0	0.0000013	V0	0.0000000	V1
Tin	0.0004414	0.0000000	V1	0.0000421	V0	0.0000000	V1
Titanium	0.0015201	0.0004901	V0	0.0004438	V0	0.0002878	V0
Tungsten	0.0000938	0.0000829	V0	0.0000451	V0	0.0000505	V0
Uranium	0.0000048	0.0000004	V0	0.0000004	V0	0.0000000	V1
Vanadium	0.0007697	0.0001875	V0	0.0001122	V0	0.0000357	V0
Zinc	0.0055897	0.0010280	V0	0.0012389	V0	0.0012268	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		07-Jan		07-Jan		07-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.77	V0	3.63	V0	0.05	V0
Aluminum	0.1380326	0.0302248	V0	0.0243260	V0	0.0000000	V1
Antimony	0.0001784	0.0001469	V0	0.0000174	V0	0.0000000	V1
Arsenic	0.0001060	0.0000162	V0	0.0000057	V0	0.0000000	V1
Barium	0.0092847	0.0018766	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000594	V0	0.0009545	V4	0.0000020	V0
Cadmium	0.0000174	0.0000016	V0	0.0000000	V1	0.0000000	V1
Calcium	0.4112124	0.2170080	V0	0.1057984	V0	0.0000000	V1
Cerium	0.0000174	0.0000361	V0	0.0000239	V0	0.0000000	V1
Cesium	0.0000100	0.0000023	V0	0.0000017	V0	0.0000000	V1
Chromium	0.0022262	0.0001656	V0	0.0003233	V0	0.0000000	V1
Cobalt	0.0000273	0.0000841	V0	0.0000557	V0	0.0000589	V0
Copper	0.0017171	0.0010928	V0	0.0003584	V0	0.0020192	V0
Iron	0.0393063	0.0500799	V0	0.0214017	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000166	V0	0.0000114	V0	0.0000000	V1
Lead	0.0008577	0.0000602	V0	0.0000653	V0	0.0000000	V1
Lithium	0.0000374	0.0000144	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0179615	V0	0.0140347	V0	0.0007712	V0
Manganese	0.0006949	0.0017179	V0	0.0005823	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000594	V0	0.0000422	V0	0.0000000	V1
Neodymium	0.0000140	0.0000124	V0	0.0000055	V0	0.0000000	V1
Nickel	0.0005429	0.0001531	V0	0.0002568	V0	0.0000868	V0
Niobium	0.0000202	0.0000048	V0	0.0000031	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0077828	V0	0.0048383	V0	0.0065220	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0414194	V0	0.0178597	V0	0.0007074	V0
Praseodymium	0.0000070	0.0000036	V0	0.0000018	V0	0.0000000	V1
Rubidium	0.0000184	0.0000840	V0	0.0000445	V0	0.0000000	V1
Samarium	0.0000133	0.0000030	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000402	V0	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0741649	V0	0.0841919	V0	0.0000000	V1
Silver	0.0000100	0.0000005	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0698202	V0	0.0446758	V0	0.0014279	V0
Strontium	0.0003375	0.0004865	V0	0.0001973	V0	0.0000154	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000043	V0	0.0000023	V0	0.0000000	V1
Tin	0.0004414	0.0001178	V0	0.0000600	V0	0.0000000	V1
Titanium	0.0015201	0.0017598	V0	0.0013194	V0	0.0002878	V0
Tungsten	0.0000938	0.0000714	V0	0.0000454	V0	0.0000505	V0
Uranium	0.0000048	0.0000012	V0	0.0000004	V0	0.0000000	V1
Vanadium	0.0007697	0.0001893	V0	0.0003137	V0	0.0000357	V0
Zinc	0.0055897	0.0032596	V0	0.0021404	V0	0.0012268	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		07-Jan		07-Jan		07-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.07	V0	1.55	V0	0.05	V0
Aluminum	0.1380326	0.0125741	V0	0.0503958	V0	0.0000000	V1
Antimony	0.0001784	0.0000107	V0	0.0000095	V0	0.0000000	V1
Arsenic	0.0001060	0.0000000	V1	0.0000206	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000529	V0	0.0000315	V0	0.0000020	V0
Cadmium	0.0000174	0.0000000	V1	0.0000000	V1	0.0000000	V1
Calcium	0.4112124	0.0235906	V0	0.0227267	V0	0.0000000	V1
Cerium	0.0000174	0.0000088	V0	0.0000415	V0	0.0000000	V1
Cesium	0.0000100	0.0000007	V0	0.0000034	V0	0.0000000	V1
Chromium	0.0022262	0.0002200	V0	0.0001457	V0	0.0000000	V1
Cobalt	0.0000273	0.0000503	V0	0.0000666	V0	0.0000589	V0
Copper	0.0017171	0.0002940	V0	0.0005540	V0	0.0020192	V0
Iron	0.0393063	0.0086629	V0	0.0278816	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000040	V0	0.0000210	V0	0.0000000	V1
Lead	0.0008577	0.0000516	V0	0.0000737	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000253	V0	0.0000000	V1
Magnesium	0.0091409	0.0114278	V0	0.0178499	V0	0.0007712	V0
Manganese	0.0006949	0.0001521	V0	0.0006659	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000013	V0	0.0000114	V0	0.0000000	V1
Nickel	0.0005429	0.0001020	V0	0.0001277	V0	0.0000868	V0
Niobium	0.0000202	0.0000021	V0	0.0000056	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0051639	V0	0.0053276	V0	0.0065220	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0077872	V0	0.0174695	V0	0.0007074	V0
Praseodymium	0.0000070	0.0000000	V1	0.0000037	V0	0.0000000	V1
Rubidium	0.0000184	0.0000176	V0	0.0000613	V0	0.0000000	V1
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0553297	V0	0.0924762	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0532300	V0	0.0686397	V0	0.0014279	V0
Strontium	0.0003375	0.0001039	V0	0.0001927	V0	0.0000154	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000010	V0	0.0000046	V0	0.0000000	V1
Tin	0.0004414	0.0000274	V0	0.0000503	V0	0.0000000	V1
Titanium	0.0015201	0.0005435	V0	0.0018123	V0	0.0002878	V0
Tungsten	0.0000938	0.0000417	V0	0.0000679	V0	0.0000505	V0
Uranium	0.0000048	0.0000000	V1	0.0000010	V0	0.0000000	V1
Vanadium	0.0007697	0.0000848	V0	0.0001459	V0	0.0000357	V0
Zinc	0.0055897	0.0005353	V0	0.0009084	V0	0.0012268	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**07-Jan**		**07-Jan**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	2.69	V0	0.05	V0
Aluminum	0.1380326	0.0903185	V0	0.0000000	V1
Antimony	0.0001784	0.0001125	V0	0.0000000	V1
Arsenic	0.0001060	0.0000182	V0	0.0000000	V1
Barium	0.0092847	0.0005723	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000421	V0	0.0000020	V0
Cadmium	0.0000174	0.0000000	V1	0.0000000	V1
Calcium	0.4112124	0.0448226	V0	0.0000000	V1
Cerium	0.0000174	0.0000746	V0	0.0000000	V1
Cesium	0.0000100	0.0000056	V0	0.0000000	V1
Chromium	0.0022262	0.0002558	V0	0.0000000	V1
Cobalt	0.0000273	0.0000799	V0	0.0000589	V0
Copper	0.0017171	0.0003484	V0	0.0020192	V0
Iron	0.0393063	0.0546260	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000343	V0	0.0000000	V1
Lead	0.0008577	0.0000748	V0	0.0000000	V1
Lithium	0.0000374	0.0001064	V0	0.0000000	V1
Magnesium	0.0091409	0.0226507	V0	0.0007712	V0
Manganese	0.0006949	0.0010285	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000354	V0	0.0000000	V1
Neodymium	0.0000140	0.0000307	V0	0.0000000	V1
Nickel	0.0005429	0.0001544	V0	0.0000868	V0
Niobium	0.0000202	0.0000085	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0061281	V0	0.0065220	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0243167	V0	0.0007074	V0
Praseodymium	0.0000070	0.0000080	V0	0.0000000	V1
Rubidium	0.0000184	0.0000969	V0	0.0000000	V1
Samarium	0.0000133	0.0000028	V0	0.0000000	V1
Selenium	0.0003366	0.0000330	V0	0.0000000	V1
Silicon	0.7676322	0.2148386	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0759256	V0	0.0014279	V0
Strontium	0.0003375	0.0002855	V0	0.0000154	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000102	V0	0.0000000	V1
Tin	0.0004414	0.0000734	V0	0.0000000	V1
Titanium	0.0015201	0.0027106	V0	0.0002878	V0
Tungsten	0.0000938	0.0000588	V0	0.0000505	V0
Uranium	0.0000048	0.0000024	V0	0.0000000	V1
Vanadium	0.0007697	0.0002723	V0	0.0000357	V0
Zinc	0.0055897	0.0011883	V0	0.0012268	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**13-Jan**		**13-Jan**		**13-Jan**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	10.23	V0	7.99	V0	0.11	V0
Aluminum	0.1380326	0.0898199	V0	0.0166772	V0	0.0061983	V0
Antimony	0.0001784	0.0000707	V0	0.0002450	V0	0.0000000	V1
Arsenic	0.0001060	0.0000779	V0	0.0000766	V0	0.0000000	V1
Barium	0.0092847	0.0012535	V0	0.0018653	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000383	V0	0.0001458	V0	0.0000015	V0
Cadmium	0.0000174	0.0000422	V0	0.0000435	V0	0.0000017	V0
Calcium	0.4112124	0.0948204	V0	0.0502821	V0	0.0000000	V1
Cerium	0.0000174	0.0001049	V0	0.0000553	V0	0.0000011	V0
Cesium	0.0000100	0.0000061	V0	0.0000012	V0	0.0000008	V0
Chromium	0.0022262	0.0004917	V0	0.0009836	V0	0.0002969	V0
Cobalt	0.0000273	0.0000903	V0	0.0000872	V0	0.0000805	V0
Copper	0.0017171	0.0005451	V0	0.0014744	V0	0.0002591	V0
Iron	0.0393063	0.0692201	V0	0.0394070	V0	0.0024593	V0
Lanthanum	0.0000130	0.0000990	V0	0.0000417	V0	0.0000000	V1
Lead	0.0008577	0.0001458	V0	0.0001290	V0	0.0000000	V1
Lithium	0.0000374	0.0000731	V0	0.0000000	V1	0.0000067	V0
Magnesium	0.0091409	0.0156522	V0	0.0085800	V0	0.0010893	V0
Manganese	0.0006949	0.0020510	V0	0.0010601	V0	0.0000364	V0
Molybdenum	0.0007116	0.0001272	V0	0.0001662	V0	0.0000000	V1
Neodymium	0.0000140	0.0000394	V0	0.0000063	V0	0.0000022	V0
Nickel	0.0005429	0.0006050	V0	0.0011181	V0	0.0002991	V0
Niobium	0.0000202	0.0000116	V0	0.0000040	V0	0.0000030	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0071136	V0	0.0057052	V0	0.0025326	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000017	V0
Potassium	0.0061261	0.0656008	V0	0.0649096	V0	0.0058443	V0
Praseodymium	0.0000070	0.0000108	V0	0.0000042	V0	0.0000003	V0
Rubidium	0.0000184	0.0001667	V0	0.0001143	V0	0.0000175	V0
Samarium	0.0000133	0.0000031	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000301	V0	0.0000287	V0	0.0000147	V0
Silicon	0.7676322	0.2181862	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000020	V0	0.0000036	V0	0.0000000	V1
Sodium	0.0169447	0.0325970	V0	0.0442640	V0	0.0020693	V0
Strontium	0.0003375	0.0003255	V0	0.0001986	V0	0.0000154	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000122	V0	0.0000018	V0	0.0000000	V1
Tin	0.0004414	0.0000808	V0	0.0001953	V0	0.0000000	V1
Titanium	0.0015201	0.0032425	V0	0.0015818	V0	0.0002405	V0
Tungsten	0.0000938	0.0000776	V0	0.0000529	V0	0.0000533	V0
Uranium	0.0000048	0.0000173	V0	0.0000008	V0	0.0000000	V1
Vanadium	0.0007697	0.0008849	V0	0.0001789	V0	0.0000622	V0
Zinc	0.0055897	0.0058175	V0	0.0053903	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		13-Jan		13-Jan		13-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	24.62	V0	6.27	V0	0.11	V0
Aluminum	0.1380326	0.0294830	V0	0.0115510	V0	0.0061983	V0
Antimony	0.0001784	0.0004023	V0	0.0001456	V0	0.0000000	V1
Arsenic	0.0001060	0.0001410	V0	0.0000564	V0	0.0000000	V1
Barium	0.0092847	0.0033584	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000062	V0	0.0000000	V1
Bismuth	0.0000093	0.0000409	V0	0.0004547	V4	0.0000015	V0
Cadmium	0.0000174	0.0001354	V4	0.0000275	V0	0.0000017	V0
Calcium	0.4112124	0.0994466	V0	0.0247996	V0	0.0000000	V1
Cerium	0.0000174	0.0000586	V0	0.0000113	V0	0.0000011	V0
Cesium	0.0000100	0.0000033	V0	0.0000012	V0	0.0000008	V0
Chromium	0.0022262	0.0008313	V0	0.0003772	V0	0.0002969	V0
Cobalt	0.0000273	0.0001236	V0	0.0000739	V0	0.0000805	V0
Copper	0.0017171	0.0025971	V0	0.0007902	V0	0.0002591	V0
Iron	0.0393063	0.0824013	V0	0.0101460	V0	0.0024593	V0
Lanthanum	0.0000130	0.0000456	V0	0.0000236	V0	0.0000000	V1
Lead	0.0008577	0.0001990	V0	0.0000894	V0	0.0000000	V1
Lithium	0.0000374	0.0000392	V0	0.0000138	V0	0.0000067	V0
Magnesium	0.0091409	0.0146251	V0	0.0041858	V0	0.0010893	V0
Manganese	0.0006949	0.0029043	V0	0.0003797	V0	0.0000364	V0
Molybdenum	0.0007116	0.0001700	V0	0.0000316	V0	0.0000000	V1
Neodymium	0.0000140	0.0000189	V0	0.0000056	V0	0.0000022	V0
Nickel	0.0005429	0.0010362	V0	0.0005213	V0	0.0002991	V0
Niobium	0.0000202	0.0000082	V0	0.0000021	V0	0.0000030	V0
Palladium	0.0000632	0.0000111	V0	0.0000031	V0	0.0000000	V1
Phosphorus	0.0459574	0.0071700	V0	0.0037299	V0	0.0025326	V0
Platinum	0.0000088	0.0000019	V0	0.0000031	V0	0.0000017	V0
Potassium	0.0061261	0.0993960	V0	0.0393131	V0	0.0058443	V0
Praseodymium	0.0000070	0.0000049	V0	0.0000015	V0	0.0000003	V0
Rubidium	0.0000184	0.0001563	V0	0.0000751	V0	0.0000175	V0
Samarium	0.0000133	0.0000027	V0	0.0000016	V0	0.0000000	V1
Selenium	0.0003366	0.0001082	V0	0.0000439	V0	0.0000147	V0
Silicon	0.7676322	0.1402942	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000034	V0	0.0000027	V0	0.0000000	V1
Sodium	0.0169447	0.0934060	V0	0.0185258	V0	0.0020693	V0
Strontium	0.0003375	0.0004060	V0	0.0000796	V0	0.0000154	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000021	V0	0.0000009	V0	0.0000000	V1
Thorium	0.0000059	0.0000039	V0	0.0000019	V0	0.0000000	V1
Tin	0.0004414	0.0002780	V0	0.0000619	V0	0.0000000	V1
Titanium	0.0015201	0.0023085	V0	0.0007016	V0	0.0002405	V0
Tungsten	0.0000938	0.0000718	V0	0.0000482	V0	0.0000533	V0
Uranium	0.0000048	0.0000016	V0	0.0000008	V0	0.0000000	V1
Vanadium	0.0007697	0.0001791	V0	0.0001267	V0	0.0000622	V0
Zinc	0.0055897	0.0078335	V0	0.0025455	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		13-Jan		13-Jan		13-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	7.76	V0	9.35	V0	0.11	V0
Aluminum	0.1380326	0.0718801	V0	0.0619919	V0	0.0061983	V0
Antimony	0.0001784	0.0000683	V0	0.0000839	V0	0.0000000	V1
Arsenic	0.0001060	0.0000558	V0	0.0000828	V0	0.0000000	V1
Barium	0.0092847	0.0008773	V0	0.0008893	V0	0.0000000	V1
Beryllium	0.0000946	0.0000074	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0002047	V4	0.0000511	V0	0.0000015	V0
Cadmium	0.0000174	0.0000236	V0	0.0000371	V0	0.0000017	V0
Calcium	0.4112124	0.0614854	V0	0.0599559	V0	0.0000000	V1
Cerium	0.0000174	0.0000721	V0	0.0000612	V0	0.0000011	V0
Cesium	0.0000100	0.0000053	V0	0.0000048	V0	0.0000008	V0
Chromium	0.0022262	0.0005972	V0	0.0002251	V0	0.0002969	V0
Cobalt	0.0000273	0.0000986	V0	0.0000719	V0	0.0000805	V0
Copper	0.0017171	0.0004990	V0	0.0005462	V0	0.0002591	V0
Iron	0.0393063	0.0541519	V0	0.0528689	V0	0.0024593	V0
Lanthanum	0.0000130	0.0000604	V0	0.0000758	V0	0.0000000	V1
Lead	0.0008577	0.0000918	V0	0.0001186	V0	0.0000000	V1
Lithium	0.0000374	0.0000963	V0	0.0000590	V0	0.0000067	V0
Magnesium	0.0091409	0.0112387	V0	0.0131694	V0	0.0010893	V0
Manganese	0.0006949	0.0014311	V0	0.0013409	V0	0.0000364	V0
Molybdenum	0.0007116	0.0000766	V0	0.0000815	V0	0.0000000	V1
Neodymium	0.0000140	0.0000321	V0	0.0000287	V0	0.0000022	V0
Nickel	0.0005429	0.0004833	V0	0.0003874	V0	0.0002991	V0
Niobium	0.0000202	0.0000111	V0	0.0000087	V0	0.0000030	V0
Palladium	0.0000632	0.0000038	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0047380	V0	0.0058055	V0	0.0025326	V0
Platinum	0.0000088	0.0000017	V0	0.0000006	V0	0.0000017	V0
Potassium	0.0061261	0.0392528	V0	0.0469312	V0	0.0058443	V0
Praseodymium	0.0000070	0.0000080	V0	0.0000070	V0	0.0000003	V0
Rubidium	0.0000184	0.0001094	V0	0.0001105	V0	0.0000175	V0
Samarium	0.0000133	0.0000075	V0	0.0000057	V0	0.0000000	V1
Selenium	0.0003366	0.0000741	V0	0.0000832	V0	0.0000147	V0
Silicon	0.7676322	0.2774003	V0	0.1985647	V0	0.0000000	V1
Silver	0.0000100	0.0000024	V0	0.0000034	V0	0.0000000	V1
Sodium	0.0169447	0.0287833	V0	0.0285084	V0	0.0020693	V0
Strontium	0.0003375	0.0002308	V0	0.0002359	V0	0.0000154	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000013	V0	0.0000012	V0	0.0000000	V1
Thorium	0.0000059	0.0000090	V0	0.0000083	V0	0.0000000	V1
Tin	0.0004414	0.0000990	V0	0.0001135	V0	0.0000000	V1
Titanium	0.0015201	0.0029553	V0	0.0024393	V0	0.0002405	V0
Tungsten	0.0000938	0.0000860	V0	0.0000723	V0	0.0000533	V0
Uranium	0.0000048	0.0000128	V0	0.0000149	V0	0.0000000	V1
Vanadium	0.0007697	0.0004190	V0	0.0005375	V0	0.0000622	V0
Zinc	0.0055897	0.0035384	V0	0.0041268	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**13-Jan**		**13-Jan**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	15.06	V0	0.11	V0
Aluminum	0.1380326	0.3199880	V0	0.0061983	V0
Antimony	0.0001784	0.0000722	V0	0.0000000	V1
Arsenic	0.0001060	0.0001182	V0	0.0000000	V1
Barium	0.0092847	0.0024114	V0	0.0000000	V1
Beryllium	0.0000946	0.0000114	V0	0.0000000	V1
Bismuth	0.0000093	0.0000326	V0	0.0000015	V0
Cadmium	0.0000174	0.0000535	V0	0.0000017	V0
Calcium	0.4112124	0.2153722	V0	0.0000000	V1
Cerium	0.0000174	0.0003445	V0	0.0000011	V0
Cesium	0.0000100	0.0000218	V0	0.0000008	V0
Chromium	0.0022262	0.0017879	V0	0.0002969	V0
Cobalt	0.0000273	0.0001440	V0	0.0000805	V0
Copper	0.0017171	0.0010593	V0	0.0002591	V0
Iron	0.0393063	0.2109602	V0	0.0024593	V0
Lanthanum	0.0000130	0.0002091	V0	0.0000000	V1
Lead	0.0008577	0.0004549	V0	0.0000000	V1
Lithium	0.0000374	0.0004373	V0	0.0000067	V0
Magnesium	0.0091409	0.0458593	V0	0.0010893	V0
Manganese	0.0006949	0.0044694	V0	0.0000364	V0
Molybdenum	0.0007116	0.0001716	V0	0.0000000	V1
Neodymium	0.0000140	0.0001370	V0	0.0000022	V0
Nickel	0.0005429	0.0013416	V0	0.0002991	V0
Niobium	0.0000202	0.0000515	V0	0.0000030	V0
Palladium	0.0000632	0.0000087	V0	0.0000000	V1
Phosphorus	0.0459574	0.0102807	V0	0.0025326	V0
Platinum	0.0000088	0.0000010	V0	0.0000017	V0
Potassium	0.0061261	0.1134896	V0	0.0058443	V0
Praseodymium	0.0000070	0.0000384	V0	0.0000003	V0
Rubidium	0.0000184	0.0004022	V0	0.0000175	V0
Samarium	0.0000133	0.0000277	V0	0.0000000	V1
Selenium	0.0003366	0.0002649	V0	0.0000147	V0
Silicon	0.7676322	0.6642718	V0	0.0000000	V1
Silver	0.0000100	0.0000048	V0	0.0000000	V1
Sodium	0.0169447	0.0404433	V0	0.0020693	V0
Strontium	0.0003375	0.0008313	V0	0.0000154	V0
Tantalum	0.0000394	0.0000031	V0	0.0000000	V1
Thallium	0.0000090	0.0000037	V0	0.0000000	V1
Thorium	0.0000059	0.0000455	V0	0.0000000	V1
Tin	0.0004414	0.0001016	V0	0.0000000	V1
Titanium	0.0015201	0.0143189	V0	0.0002405	V0
Tungsten	0.0000938	0.0000910	V0	0.0000533	V0
Uranium	0.0000048	0.0000306	V0	0.0000000	V1
Vanadium	0.0007697	0.0015603	V0	0.0000622	V0
Zinc	0.0055897	0.0078844	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		19-Jan		19-Jan		19-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	7.72	V0	7.41	V0	0.12	V0
Aluminum	0.1380326	0.1077447	V0	0.0659278	V0	0.0000000	V1
Antimony	0.0001784	0.0000665	V0	0.0001226	V0	0.0000000	V1
Arsenic	0.0001060	0.0000372	V0	0.0000389	V0	0.0000000	V1
Barium	0.0092847	0.0008348	V0	0.0009900	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0001447	V0	0.0000499	V0	0.0000110	V0
Cadmium	0.0000174	0.0000083	V0	0.0000123	V0	0.0000012	V0
Calcium	0.4112124	0.0548368	V0	0.1062489	V0	0.0000000	V1
Cerium	0.0000174	0.0001048	V0	0.0000778	V0	0.0000000	V1
Cesium	0.0000100	0.0000079	V0	0.0000045	V0	0.0000000	V1
Chromium	0.0022262	0.0003624	V0	0.0005050	V0	0.0000000	V1
Cobalt	0.0000273	0.0001037	V0	0.0000731	V0	0.0000537	V0
Copper	0.0017171	0.0004281	V0	0.0005529	V0	0.0001178	V0
Iron	0.0393063	0.0576617	V0	0.0578494	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000537	V0	0.0000444	V0	0.0000000	V1
Lead	0.0008577	0.0001163	V0	0.0001821	V0	0.0000000	V1
Lithium	0.0000374	0.0001427	V0	0.0000616	V0	0.0000023	V0
Magnesium	0.0091409	0.0165762	V0	0.0215085	V0	0.0006235	V0
Manganese	0.0006949	0.0013638	V0	0.0013933	V0	0.0000319	V0
Molybdenum	0.0007116	0.0001009	V0	0.0001765	V0	0.0000000	V1
Neodymium	0.0000140	0.0000456	V0	0.0000292	V0	0.0000000	V1
Nickel	0.0005429	0.0005042	V0	0.0003983	V0	0.0000830	V0
Niobium	0.0000202	0.0000165	V0	0.0000105	V0	0.0000009	V0
Palladium	0.0000632	0.0000026	V0	0.0000028	V0	0.0000000	V1
Phosphorus	0.0459574	0.0050241	V0	0.0039695	V0	0.0025005	V0
Platinum	0.0000088	0.0000007	V0	0.0000000	V1	0.0000017	V0
Potassium	0.0061261	0.0396498	V0	0.0360004	V0	0.0008322	V0
Praseodymium	0.0000070	0.0000120	V0	0.0000079	V0	0.0000000	V1
Rubidium	0.0000184	0.0001377	V0	0.0001074	V0	0.0000000	V1
Samarium	0.0000133	0.0000076	V0	0.0000058	V0	0.0000010	V0
Selenium	0.0003366	0.0000905	V0	0.0000941	V0	0.0000183	V0
Silicon	0.7676322	0.3917640	V0	0.2256370	V0	0.0000000	V1
Silver	0.0000100	0.0000005	V0	0.0000011	V0	0.0000000	V1
Sodium	0.0169447	0.0429436	V0	0.0557312	V0	0.0008149	V0
Strontium	0.0003375	0.0003030	V0	0.0002926	V0	0.0000226	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000006	V0	0.0000007	V0	0.0000000	V1
Thorium	0.0000059	0.0000140	V0	0.0000095	V0	0.0000000	V1
Tin	0.0004414	0.0000501	V0	0.0000994	V0	0.0000000	V1
Titanium	0.0015201	0.0043803	V0	0.0052586	V0	0.0002198	V0
Tungsten	0.0000938	0.0000849	V0	0.0000684	V0	0.0000492	V0
Uranium	0.0000048	0.0000049	V0	0.0000036	V0	0.0000000	V1
Vanadium	0.0007697	0.0007382	V0	0.0006017	V0	0.0000000	V1
Zinc	0.0055897	0.0020118	V0	0.0030035	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		19-Jan		19-Jan		19-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	9.35	V0	7.54	V0	0.12	V0
Aluminum	0.1380326	0.1015426	V0	0.0294538	V0	0.0000000	V1
Antimony	0.0001784	0.0002681	V0	0.0000745	V0	0.0000000	V1
Arsenic	0.0001060	0.0000716	V0	0.0000630	V0	0.0000000	V1
Barium	0.0092847	0.0033620	V0	0.0007174	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0001365	V0	0.0001857	V4	0.0000110	V0
Cadmium	0.0000174	0.0000161	V0	0.0000184	V0	0.0000012	V0
Calcium	0.4112124	0.3059691	V0	0.0784000	V0	0.0000000	V1
Cerium	0.0000174	0.0001281	V0	0.0000392	V0	0.0000000	V1
Cesium	0.0000100	0.0000079	V0	0.0000026	V0	0.0000000	V1
Chromium	0.0022262	0.0003556	V0	0.0005527	V0	0.0000000	V1
Cobalt	0.0000273	0.0001195	V0	0.0000642	V0	0.0000537	V0
Copper	0.0017171	0.0018818	V0	0.0004582	V0	0.0001178	V0
Iron	0.0393063	0.1026453	V0	0.0302075	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000653	V0	0.0000436	V0	0.0000000	V1
Lead	0.0008577	0.0001736	V0	0.0001622	V0	0.0000000	V1
Lithium	0.0000374	0.0001007	V0	0.0000244	V0	0.0000023	V0
Magnesium	0.0091409	0.0339982	V0	0.0162476	V0	0.0006235	V0
Manganese	0.0006949	0.0037987	V0	0.0009783	V0	0.0000319	V0
Molybdenum	0.0007116	0.0002320	V0	0.0000834	V0	0.0000000	V1
Neodymium	0.0000140	0.0000491	V0	0.0000167	V0	0.0000000	V1
Nickel	0.0005429	0.0005020	V0	0.0004600	V0	0.0000830	V0
Niobium	0.0000202	0.0000167	V0	0.0000062	V0	0.0000009	V0
Palladium	0.0000632	0.0000026	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0074948	V0	0.0041468	V0	0.0025005	V0
Platinum	0.0000088	0.0000006	V0	0.0000000	V1	0.0000017	V0
Potassium	0.0061261	0.0760797	V0	0.0322057	V0	0.0008322	V0
Praseodymium	0.0000070	0.0000139	V0	0.0000044	V0	0.0000000	V1
Rubidium	0.0000184	0.0002000	V0	0.0000711	V0	0.0000000	V1
Samarium	0.0000133	0.0000089	V0	0.0000015	V0	0.0000010	V0
Selenium	0.0003366	0.0001200	V0	0.0000751	V0	0.0000183	V0
Silicon	0.7676322	0.3033043	V0	0.0599395	V0	0.0000000	V1
Silver	0.0000100	0.0000041	V0	0.0000022	V0	0.0000000	V1
Sodium	0.0169447	0.1182891	V0	0.0861659	V0	0.0008149	V0
Strontium	0.0003375	0.0008531	V0	0.0002500	V0	0.0000226	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000021	V0	0.0000012	V0	0.0000000	V1
Thorium	0.0000059	0.0000159	V0	0.0000051	V0	0.0000000	V1
Tin	0.0004414	0.0002002	V0	0.0000954	V0	0.0000000	V1
Titanium	0.0015201	0.0051008	V0	0.0014266	V0	0.0002198	V0
Tungsten	0.0000938	0.0001760	V0	0.0000527	V0	0.0000492	V0
Uranium	0.0000048	0.0000058	V0	0.0000043	V0	0.0000000	V1
Vanadium	0.0007697	0.0007598	V0	0.0004067	V0	0.0000000	V1
Zinc	0.0055897	0.0049248	V0	0.0025963	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		19-Jan		19-Jan		19-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.82	V0	3.58	V0	0.12	V0
Aluminum	0.1380326	0.1196433	V0	0.0403299	V0	0.0000000	V1
Antimony	0.0001784	0.0001117	V0	0.0000304	V0	0.0000000	V1
Arsenic	0.0001060	0.0000525	V0	0.0000649	V0	0.0000000	V1
Barium	0.0092847	0.0010979	V0	0.0004806	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000711	V0	0.0000172	V0	0.0000110	V0
Cadmium	0.0000174	0.0000099	V0	0.0000088	V0	0.0000012	V0
Calcium	0.4112124	0.0665943	V0	0.0360210	V0	0.0000000	V1
Cerium	0.0000174	0.0001173	V0	0.0000379	V0	0.0000000	V1
Cesium	0.0000100	0.0000083	V0	0.0000028	V0	0.0000000	V1
Chromium	0.0022262	0.0002421	V0	0.0002448	V0	0.0000000	V1
Cobalt	0.0000273	0.0001134	V0	0.0000498	V0	0.0000537	V0
Copper	0.0017171	0.0004410	V0	0.0003627	V0	0.0001178	V0
Iron	0.0393063	0.0713681	V0	0.0320931	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000630	V0	0.0000272	V0	0.0000000	V1
Lead	0.0008577	0.0001313	V0	0.0001083	V0	0.0000000	V1
Lithium	0.0000374	0.0001578	V0	0.0000339	V0	0.0000023	V0
Magnesium	0.0091409	0.0210481	V0	0.0146640	V0	0.0006235	V0
Manganese	0.0006949	0.0015712	V0	0.0007205	V0	0.0000319	V0
Molybdenum	0.0007116	0.0000888	V0	0.0000492	V0	0.0000000	V1
Neodymium	0.0000140	0.0000465	V0	0.0000153	V0	0.0000000	V1
Nickel	0.0005429	0.0002941	V0	0.0003070	V0	0.0000830	V0
Niobium	0.0000202	0.0000153	V0	0.0000049	V0	0.0000009	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0058486	V0	0.0028811	V0	0.0025005	V0
Platinum	0.0000088	0.0000005	V0	0.0000000	V1	0.0000017	V0
Potassium	0.0061261	0.0457442	V0	0.0215317	V0	0.0008322	V0
Praseodymium	0.0000070	0.0000137	V0	0.0000043	V0	0.0000000	V1
Rubidium	0.0000184	0.0001646	V0	0.0000609	V0	0.0000000	V1
Samarium	0.0000133	0.0000085	V0	0.0000030	V0	0.0000010	V0
Selenium	0.0003366	0.0001064	V0	0.0000561	V0	0.0000183	V0
Silicon	0.7676322	0.2875419	V0	0.0613984	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000011	V0	0.0000000	V1
Sodium	0.0169447	0.0772753	V0	0.0596412	V0	0.0008149	V0
Strontium	0.0003375	0.0003470	V0	0.0001751	V0	0.0000226	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000013	V0	0.0000004	V0	0.0000000	V1
Thorium	0.0000059	0.0000155	V0	0.0000052	V0	0.0000000	V1
Tin	0.0004414	0.0000978	V0	0.0000828	V0	0.0000000	V1
Titanium	0.0015201	0.0044614	V0	0.0014176	V0	0.0002198	V0
Tungsten	0.0000938	0.0001057	V0	0.0000584	V0	0.0000492	V0
Uranium	0.0000048	0.0000054	V0	0.0000026	V0	0.0000000	V1
Vanadium	0.0007697	0.0004929	V0	0.0002801	V0	0.0000000	V1
Zinc	0.0055897	0.0028008	V0	0.0015539	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**19-Jan**		**19-Jan**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	5.02	V0	0.12	V0
Aluminum	0.1380326	0.0912146	V0	0.0000000	V1
Antimony	0.0001784	0.0000210	V0	0.0000000	V1
Arsenic	0.0001060	0.0000271	V0	0.0000000	V1
Barium	0.0092847	0.0005809	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000089	V0	0.0000110	V0
Cadmium	0.0000174	0.0000037	V0	0.0000012	V0
Calcium	0.4112124	0.0412757	V0	0.0000000	V1
Cerium	0.0000174	0.0000834	V0	0.0000000	V1
Cesium	0.0000100	0.0000059	V0	0.0000000	V1
Chromium	0.0022262	0.0001749	V0	0.0000000	V1
Cobalt	0.0000273	0.0000715	V0	0.0000537	V0
Copper	0.0017171	0.0002703	V0	0.0001178	V0
Iron	0.0393063	0.0451190	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000424	V0	0.0000000	V1
Lead	0.0008577	0.0000652	V0	0.0000000	V1
Lithium	0.0000374	0.0001173	V0	0.0000023	V0
Magnesium	0.0091409	0.0149452	V0	0.0006235	V0
Manganese	0.0006949	0.0010845	V0	0.0000319	V0
Molybdenum	0.0007116	0.0000315	V0	0.0000000	V1
Neodymium	0.0000140	0.0000352	V0	0.0000000	V1
Nickel	0.0005429	0.0001827	V0	0.0000830	V0
Niobium	0.0000202	0.0000130	V0	0.0000009	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0035349	V0	0.0025005	V0
Platinum	0.0000088	0.0000000	V1	0.0000017	V0
Potassium	0.0061261	0.0269130	V0	0.0008322	V0
Praseodymium	0.0000070	0.0000099	V0	0.0000000	V1
Rubidium	0.0000184	0.0001044	V0	0.0000000	V1
Samarium	0.0000133	0.0000042	V0	0.0000010	V0
Selenium	0.0003366	0.0000880	V0	0.0000183	V0
Silicon	0.7676322	0.2975303	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0392577	V0	0.0008149	V0
Strontium	0.0003375	0.0002423	V0	0.0000226	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000006	V0	0.0000000	V1
Thorium	0.0000059	0.0000122	V0	0.0000000	V1
Tin	0.0004414	0.0000495	V0	0.0000000	V1
Titanium	0.0015201	0.0036783	V0	0.0002198	V0
Tungsten	0.0000938	0.0000512	V0	0.0000492	V0
Uranium	0.0000048	0.0000036	V0	0.0000000	V1
Vanadium	0.0007697	0.0002146	V0	0.0000000	V1
Zinc	0.0055897	0.0021200	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Athabasca Valley**		**Travel Blank**	
Station #		**AMS 1**		**AMS 7**			
Sample Date		**25-Jan**		**25-Jan**		**25-Jan**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	8.21	V0	5.78	V0	0.03	V1
Aluminum	0.1380326	0.1116750	V0	0.0084773	V0	0.0000000	V1
Antimony	0.0001784	0.0000551	V0	0.0003685	V0	0.0000000	V1
Arsenic	0.0001060	0.0000597	V0	0.0000801	V0	0.0000000	V1
Barium	0.0092847	0.0011152	V0	0.0031926	V0	0.0000000	V1
Beryllium	0.0000946	0.0000139	V0	0.0000104	V0	0.0000055	V0
Bismuth	0.0000093	0.0000308	V0	0.0000106	V0	0.0000026	V0
Cadmium	0.0000174	0.0000389	V0	0.0000523	V0	0.0000016	V0
Calcium	0.4112124	0.1523353	V0	0.0311871	V0	0.0000000	V1
Cerium	0.0000174	0.0001131	V0	0.0000399	V0	0.0000000	V1
Cesium	0.0000100	0.0000088	V0	0.0000013	V0	0.0000000	V1
Chromium	0.0022262	0.0009047	V0	0.0004328	V0	0.0001222	V0
Cobalt	0.0000273	0.0000820	V0	0.0000626	V0	0.0000491	V0
Copper	0.0017171	0.0009029	V0	0.0023706	V0	0.0001362	V0
Iron	0.0393063	0.0987697	V0	0.0475852	V0	0.0025430	V0
Lanthanum	0.0000130	0.0000543	V0	0.0000136	V0	0.0000000	V1
Lead	0.0008577	0.0001477	V0	0.0006530	V0	0.0000000	V1
Lithium	0.0000374	0.0001301	V0	0.0000151	V0	0.0000121	V0
Magnesium	0.0091409	0.0232206	V0	0.0058765	V0	0.0011457	V0
Manganese	0.0006949	0.0019455	V0	0.0009273	V0	0.0000411	V0
Molybdenum	0.0007116	0.0001227	V0	0.0001686	V0	0.0000000	V1
Neodymium	0.0000140	0.0000464	V0	0.0000097	V0	0.0000006	V0
Nickel	0.0005429	0.0007449	V0	0.0003615	V0	0.0001657	V0
Niobium	0.0000202	0.0000133	V0	0.0000047	V0	0.0000009	V0
Palladium	0.0000632	0.0000043	V0	0.0000083	V0	0.0000000	V1
Phosphorus	0.0459574	0.0064723	V0	0.0047117	V0	0.0039017	V0
Platinum	0.0000088	0.0000030	V0	0.0000035	V0	0.0000020	V0
Potassium	0.0061261	0.0691772	V0	0.0426121	V0	0.0009798	V0
Praseodymium	0.0000070	0.0000126	V0	0.0000036	V0	0.0000000	V1
Rubidium	0.0000184	0.0001818	V0	0.0000607	V0	0.0000000	V1
Samarium	0.0000133	0.0000100	V0	0.0000014	V0	0.0000000	V1
Selenium	0.0003366	0.0001288	V0	0.0000651	V0	0.0000274	V0
Silicon	0.7676322	0.3094435	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000047	V0	0.0000039	V0	0.0000000	V1
Sodium	0.0169447	0.0336558	V0	0.0646595	V0	0.0016192	V0
Strontium	0.0003375	0.0004228	V0	0.0001930	V0	0.0000169	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000025	V0	0.0000009	V0	0.0000000	V1
Thorium	0.0000059	0.0000135	V0	0.0000015	V0	0.0000000	V1
Tin	0.0004414	0.0000688	V0	0.0002441	V0	0.0000000	V1
Titanium	0.0015201	0.0040116	V0	0.0016731	V0	0.0005533	V0
Tungsten	0.0000938	0.0000624	V0	0.0000793	V0	0.0000505	V0
Uranium	0.0000048	0.0000046	V0	0.0000010	V0	0.0000000	V1
Vanadium	0.0007697	0.0007673	V0	0.0002538	V0	0.0000000	V1
Zinc	0.0055897	0.0047324	V0	0.0051584	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Anzac		Fort McKay South		Travel Blank	
Station #		AMS 14		AMS 13			
Sample Date		25-Jan		25-Jan		25-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.73	V0	4.85	V0	0.03	V1
Aluminum	0.1380326	0.0084085	V0	0.0157051	V0	0.0000000	V1
Antimony	0.0001784	0.0000211	V0	0.0000106	V0	0.0000000	V1
Arsenic	0.0001060	0.0000255	V0	0.0000168	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000040	V0	0.0000055	V0
Bismuth	0.0000093	0.0000060	V0	0.0000025	V0	0.0000026	V0
Cadmium	0.0000174	0.0000259	V0	0.0000171	V0	0.0000016	V0
Calcium	0.4112124	0.0000000	V1	0.0183502	V0	0.0000000	V1
Cerium	0.0000174	0.0000145	V0	0.0000150	V0	0.0000000	V1
Cesium	0.0000100	0.0000008	V0	0.0000014	V0	0.0000000	V1
Chromium	0.0022262	0.0001647	V0	0.0001362	V0	0.0001222	V0
Cobalt	0.0000273	0.0000511	V0	0.0000789	V0	0.0000491	V0
Copper	0.0017171	0.0004781	V0	0.0005980	V0	0.0001362	V0
Iron	0.0393063	0.0130590	V0	0.0180986	V0	0.0025430	V0
Lanthanum	0.0000130	0.0000077	V0	0.0000083	V0	0.0000000	V1
Lead	0.0008577	0.0000731	V0	0.0000509	V0	0.0000000	V1
Lithium	0.0000374	0.0000095	V0	0.0000159	V0	0.0000121	V0
Magnesium	0.0091409	0.0036274	V0	0.0046235	V0	0.0011457	V0
Manganese	0.0006949	0.0003570	V0	0.0003964	V0	0.0000411	V0
Molybdenum	0.0007116	0.0001127	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000052	V0	0.0000087	V0	0.0000006	V0
Nickel	0.0005429	0.0015114	V0	0.0002279	V0	0.0001657	V0
Niobium	0.0000202	0.0000028	V0	0.0000025	V0	0.0000009	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0031373	V0	0.0035925	V0	0.0039017	V0
Platinum	0.0000088	0.0000009	V0	0.0000010	V0	0.0000020	V0
Potassium	0.0061261	0.0285750	V0	0.0195928	V0	0.0009798	V0
Praseodymium	0.0000070	0.0000020	V0	0.0000018	V0	0.0000000	V1
Rubidium	0.0000184	0.0000476	V0	0.0000342	V0	0.0000000	V1
Samarium	0.0000133	0.0000008	V0	0.0000023	V0	0.0000000	V1
Selenium	0.0003366	0.0000517	V0	0.0000278	V0	0.0000274	V0
Silicon	0.7676322	0.0000000	V1	0.0704295	V0	0.0000000	V1
Silver	0.0000100	0.0000025	V0	0.0000025	V0	0.0000000	V1
Sodium	0.0169447	0.0151250	V0	0.0120270	V0	0.0016192	V0
Strontium	0.0003375	0.0000485	V0	0.0000680	V0	0.0000169	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000013	V0	0.0000018	V0	0.0000000	V1
Tin	0.0004414	0.0000616	V0	0.0000376	V0	0.0000000	V1
Titanium	0.0015201	0.0004918	V0	0.0008568	V0	0.0005533	V0
Tungsten	0.0000938	0.0000478	V0	0.0000990	V0	0.0000505	V0
Uranium	0.0000048	0.0000007	V0	0.0000006	V0	0.0000000	V1
Vanadium	0.0007697	0.0004333	V0	0.0000769	V0	0.0000000	V1
Zinc	0.0055897	0.0023680	V0	0.0025698	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		CNRL Horizon		Albian Muskeg River		Travel Blank	
Station #		AMS 15		AMS 16			
Sample Date		25-Jan		25-Jan		25-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	4.41	V0	6.86	V0	0.03	V1
Aluminum	0.1380326	0.0120148	V0	0.0293429	V0	0.0000000	V1
Antimony	0.0001784	0.0000174	V0	0.0000459	V0	0.0000000	V1
Arsenic	0.0001060	0.0000562	V0	0.0000544	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0005881	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000055	V0
Bismuth	0.0000093	0.0000564	V0	0.0000051	V0	0.0000026	V0
Cadmium	0.0000174	0.0000358	V0	0.0000270	V0	0.0000016	V0
Calcium	0.4112124	0.0000000	V1	0.0475630	V0	0.0000000	V1
Cerium	0.0000174	0.0000153	V0	0.0000387	V0	0.0000000	V1
Cesium	0.0000100	0.0000011	V0	0.0000023	V0	0.0000000	V1
Chromium	0.0022262	0.0006977	V0	0.0012312	V0	0.0001222	V0
Cobalt	0.0000273	0.0000515	V0	0.0000885	V0	0.0000491	V0
Copper	0.0017171	0.0003169	V0	0.0009005	V0	0.0001362	V0
Iron	0.0393063	0.0121359	V0	0.0648499	V0	0.0025430	V0
Lanthanum	0.0000130	0.0000113	V0	0.0000194	V0	0.0000000	V1
Lead	0.0008577	0.0000882	V0	0.0001089	V0	0.0000000	V1
Lithium	0.0000374	0.0000151	V0	0.0000299	V0	0.0000121	V0
Magnesium	0.0091409	0.0037191	V0	0.0075493	V0	0.0011457	V0
Manganese	0.0006949	0.0003791	V0	0.0020119	V0	0.0000411	V0
Molybdenum	0.0007116	0.0000000	V1	0.0002940	V0	0.0000000	V1
Neodymium	0.0000140	0.0000056	V0	0.0000138	V0	0.0000006	V0
Nickel	0.0005429	0.0004617	V0	0.0010477	V0	0.0001657	V0
Niobium	0.0000202	0.0000020	V0	0.0000063	V0	0.0000009	V0
Palladium	0.0000632	0.0000000	V1	0.0000103	V0	0.0000000	V1
Phosphorus	0.0459574	0.0042154	V0	0.0045285	V0	0.0039017	V0
Platinum	0.0000088	0.0000019	V0	0.0000019	V0	0.0000020	V0
Potassium	0.0061261	0.0359046	V0	0.0375784	V0	0.0009798	V0
Praseodymium	0.0000070	0.0000017	V0	0.0000040	V0	0.0000000	V1
Rubidium	0.0000184	0.0000529	V0	0.0000732	V0	0.0000000	V1
Samarium	0.0000133	0.0000013	V0	0.0000028	V0	0.0000000	V1
Selenium	0.0003366	0.0000508	V0	0.0000644	V0	0.0000274	V0
Silicon	0.7676322	0.0336540	V0	0.0444625	V0	0.0000000	V1
Silver	0.0000100	0.0000022	V0	0.0000022	V0	0.0000000	V1
Sodium	0.0169447	0.0184559	V0	0.0250883	V0	0.0016192	V0
Strontium	0.0003375	0.0000553	V0	0.0001519	V0	0.0000169	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000019	V0	0.0000041	V0	0.0000000	V1
Tin	0.0004414	0.0000496	V0	0.0000711	V0	0.0000000	V1
Titanium	0.0015201	0.0005837	V0	0.0018512	V0	0.0005533	V0
Tungsten	0.0000938	0.0000380	V0	0.0000747	V0	0.0000505	V0
Uranium	0.0000048	0.0000005	V0	0.0000013	V0	0.0000000	V1
Vanadium	0.0007697	0.0001378	V0	0.0008270	V0	0.0000000	V1
Zinc	0.0055897	0.0027659	V0	0.0043343	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 6**			
Sample Date		**26-Jan**		**26-Jan**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	2.33	V0	0.03	V1
Aluminum	0.1380326	0.0185819	V0	0.0000000	V1
Antimony	0.0001784	0.0001058	V0	0.0000000	V1
Arsenic	0.0001060	0.0001161	V0	0.0000000	V1
Barium	0.0092847	0.0009531	V0	0.0000000	V1
Beryllium	0.0000946	0.0000050	V0	0.0000055	V0
Bismuth	0.0000093	0.0000147	V0	0.0000026	V0
Cadmium	0.0000174	0.0000160	V0	0.0000016	V0
Calcium	0.4112124	0.0322280	V0	0.0000000	V1
Cerium	0.0000174	0.0000231	V0	0.0000000	V1
Cesium	0.0000100	0.0000027	V0	0.0000000	V1
Chromium	0.0022262	0.0002877	V0	0.0001222	V0
Cobalt	0.0000273	0.0000612	V0	0.0000491	V0
Copper	0.0017171	0.0006814	V0	0.0001362	V0
Iron	0.0393063	0.0240986	V0	0.0025430	V0
Lanthanum	0.0000130	0.0000105	V0	0.0000000	V1
Lead	0.0008577	0.0002942	V0	0.0000000	V1
Lithium	0.0000374	0.0000174	V0	0.0000121	V0
Magnesium	0.0091409	0.0081624	V0	0.0011457	V0
Manganese	0.0006949	0.0005379	V0	0.0000411	V0
Molybdenum	0.0007116	0.0000526	V0	0.0000000	V1
Neodymium	0.0000140	0.0000089	V0	0.0000006	V0
Nickel	0.0005429	0.0001713	V0	0.0001657	V0
Niobium	0.0000202	0.0000031	V0	0.0000009	V0
Palladium	0.0000632	0.0000042	V0	0.0000000	V1
Phosphorus	0.0459574	0.0048272	V0	0.0039017	V0
Platinum	0.0000088	0.0000035	V0	0.0000020	V0
Potassium	0.0061261	0.0227171	V0	0.0009798	V0
Praseodymium	0.0000070	0.0000027	V0	0.0000000	V1
Rubidium	0.0000184	0.0000534	V0	0.0000000	V1
Samarium	0.0000133	0.0000021	V0	0.0000000	V1
Selenium	0.0003366	0.0000497	V0	0.0000274	V0
Silicon	0.7676322	0.0475533	V0	0.0000000	V1
Silver	0.0000100	0.0000006	V0	0.0000000	V1
Sodium	0.0169447	0.0651029	V0	0.0016192	V0
Strontium	0.0003375	0.0001218	V0	0.0000169	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000008	V0	0.0000000	V1
Thorium	0.0000059	0.0000030	V0	0.0000000	V1
Tin	0.0004414	0.0000697	V0	0.0000000	V1
Titanium	0.0015201	0.0014215	V0	0.0005533	V0
Tungsten	0.0000938	0.0000460	V0	0.0000505	V0
Uranium	0.0000048	0.0000006	V0	0.0000000	V1
Vanadium	0.0007697	0.0000751	V0	0.0000000	V1
Zinc	0.0055897	0.0023339	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		31-Jan		31-Jan		31-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	13.11	V0	19.83	V0	0.12	V0
Aluminum	0.1380326	0.3758975	V0	0.4395144	V0	0.0000000	V1
Antimony	0.0001784	0.0000299	V0	0.0000629	V0	0.0000000	V1
Arsenic	0.0001060	0.0000879	V0	0.0001159	V0	0.0000000	V1
Barium	0.0092847	0.0024928	V0	0.0039648	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000161	V0	0.0000169	V0	0.0000013	V0
Cadmium	0.0000174	0.0000134	V0	0.0000164	V0	0.0000000	V1
Calcium	0.4112124	0.2450231	V0	2.3807677	V0	0.0000000	V1
Cerium	0.0000174	0.0003786	V0	0.0004775	V0	0.0000000	V1
Cesium	0.0000100	0.0000245	V0	0.0000357	V0	0.0000000	V1
Chromium	0.0022262	0.0004959	V0	0.0006157	V0	0.0000000	V1
Cobalt	0.0000273	0.0001527	V0	0.0002304	V0	0.0000525	V0
Copper	0.0017171	0.0005000	V0	0.0007328	V0	0.0000823	V0
Iron	0.0393063	0.2147508	V0	0.4026710	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001818	V0	0.0002333	V0	0.0000000	V1
Lead	0.0008577	0.0004205	V0	0.0005556	V0	0.0000000	V1
Lithium	0.0000374	0.0004563	V0	0.0004101	V0	0.0000000	V1
Magnesium	0.0091409	0.0629709	V0	0.1279966	V0	0.0007897	V0
Manganese	0.0006949	0.0040322	V0	0.0078691	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000344	V0	0.0002049	V0	0.0000000	V1
Neodymium	0.0000140	0.0001608	V0	0.0002132	V0	0.0000000	V1
Nickel	0.0005429	0.0004242	V0	0.0006834	V0	0.0000889	V0
Niobium	0.0000202	0.0000408	V0	0.0000486	V0	0.0000000	V1
Palladium	0.0000632	0.0000028	V0	0.0000054	V0	0.0000000	V1
Phosphorus	0.0459574	0.0063266	V0	0.0073271	V0	0.0020124	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.1045770	V0	0.1739843	V0	0.0006970	V0
Praseodymium	0.0000070	0.0000429	V0	0.0000548	V0	0.0000000	V1
Rubidium	0.0000184	0.0004428	V0	0.0007034	V0	0.0000000	V1
Samarium	0.0000133	0.0000287	V0	0.0000386	V0	0.0000000	V1
Selenium	0.0003366	0.0002650	V0	0.0003672	V0	0.0000152	V0
Silicon	0.7676322	1.1265299	V0	1.0507028	V0	0.0000000	V1
Silver	0.0000100	0.0000018	V0	0.0000899	V4	0.0000000	V1
Sodium	0.0169447	0.0726918	V0	0.1283969	V0	0.0009557	V0
Strontium	0.0003375	0.0010179	V0	0.0032338	V0	0.0000000	V1
Tantalum	0.0000394	0.0000028	V0	0.0000038	V0	0.0000000	V1
Thallium	0.0000090	0.0000051	V0	0.0000077	V0	0.0000000	V1
Thorium	0.0000059	0.0000511	V0	0.0000637	V0	0.0000000	V1
Tin	0.0004414	0.0000575	V0	0.0001416	V0	0.0000000	V1
Titanium	0.0015201	0.0122904	V0	0.0139873	V0	0.0005772	V0
Tungsten	0.0000938	0.0001305	V0	0.0002257	V0	0.0000533	V0
Uranium	0.0000048	0.0000151	V0	0.0000201	V0	0.0000000	V1
Vanadium	0.0007697	0.0007268	V0	0.0015751	V0	0.0000000	V1
Zinc	0.0055897	0.0018613	V0	0.0033932	V0	0.0004574	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		31-Jan		31-Jan		31-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	21.33	V0	3.65	V0	0.12	V0
Aluminum	0.1380326	0.5372036	V0	0.0276884	V0	0.0000000	V1
Antimony	0.0001784	0.0000434	V0	0.0000139	V0	0.0000000	V1
Arsenic	0.0001060	0.0001383	V0	0.0000334	V0	0.0000000	V1
Barium	0.0092847	0.0049447	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000050	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000129	V0	0.0000076	V0	0.0000013	V0
Cadmium	0.0000174	0.0000163	V0	0.0000044	V0	0.0000000	V1
Calcium	0.4112124	1.1770013	V0	0.0376788	V0	0.0000000	V1
Cerium	0.0000174	0.0006230	V0	0.0000775	V0	0.0000000	V1
Cesium	0.0000100	0.0000393	V0	0.0000024	V0	0.0000000	V1
Chromium	0.0022262	0.0008328	V0	0.0000986	V0	0.0000000	V1
Cobalt	0.0000273	0.0002338	V0	0.0000572	V0	0.0000525	V0
Copper	0.0017171	0.0010723	V0	0.0002511	V0	0.0000823	V0
Iron	0.0393063	0.5254975	V0	0.0317216	V0	0.0000000	V1
Lanthanum	0.0000130	0.0002971	V0	0.0000542	V0	0.0000000	V1
Lead	0.0008577	0.0005114	V0	0.0001945	V0	0.0000000	V1
Lithium	0.0000374	0.0004619	V0	0.0000138	V0	0.0000000	V1
Magnesium	0.0091409	0.1283205	V0	0.0104734	V0	0.0007897	V0
Manganese	0.0006949	0.0100165	V0	0.0004955	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001389	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0002698	V0	0.0000423	V0	0.0000000	V1
Nickel	0.0005429	0.0007330	V0	0.0002138	V0	0.0000889	V0
Niobium	0.0000202	0.0000640	V0	0.0000038	V0	0.0000000	V1
Palladium	0.0000632	0.0000049	V0	0.0001489	V4	0.0000000	V1
Phosphorus	0.0459574	0.0099996	V0	0.0034104	V0	0.0020124	V0
Platinum	0.0000088	0.0000007	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.1918854	V0	0.0131678	V0	0.0006970	V0
Praseodymium	0.0000070	0.0000697	V0	0.0000271	V0	0.0000000	V1
Rubidium	0.0000184	0.0007488	V0	0.0000410	V0	0.0000000	V1
Samarium	0.0000133	0.0000483	V0	0.0000184	V0	0.0000000	V1
Selenium	0.0003366	0.0003941	V0	0.0000698	V0	0.0000152	V0
Silicon	0.7676322	1.8055809	V0	0.0823728	V0	0.0000000	V1
Silver	0.0000100	0.0000039	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.1605804	V0	0.0359235	V0	0.0009557	V0
Strontium	0.0003375	0.0023235	V0	0.0001210	V0	0.0000000	V1
Tantalum	0.0000394	0.0000060	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000075	V0	0.0000005	V0	0.0000000	V1
Thorium	0.0000059	0.0000782	V0	0.0000294	V0	0.0000000	V1
Tin	0.0004414	0.0000982	V0	0.0000246	V0	0.0000000	V1
Titanium	0.0015201	0.0201487	V0	0.0009345	V0	0.0005772	V0
Tungsten	0.0000938	0.0002548	V0	0.0000439	V0	0.0000533	V0
Uranium	0.0000048	0.0000232	V0	0.0000008	V0	0.0000000	V1
Vanadium	0.0007697	0.0013374	V0	0.0001299	V0	0.0000000	V1
Zinc	0.0055897	0.0034731	V0	0.0010952	V0	0.0004574	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		31-Jan		31-Jan		31-Jan	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	14.86	V0	3.40	V0	0.12	V0
Aluminum	0.1380326	0.5107663	V0	0.0241029	V0	0.0000000	V1
Antimony	0.0001784	0.0000202	V0	0.0000163	V0	0.0000000	V1
Arsenic	0.0001060	0.0001048	V0	0.0000658	V0	0.0000000	V1
Barium	0.0092847	0.0030712	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000179	V0	0.0000631	V0	0.0000013	V0
Cadmium	0.0000174	0.0000128	V0	0.0000146	V0	0.0000000	V1
Calcium	0.4112124	0.3859815	V0	0.0270121	V0	0.0000000	V1
Cerium	0.0000174	0.0005204	V0	0.0000202	V0	0.0000000	V1
Cesium	0.0000100	0.0000344	V0	0.0000032	V0	0.0000000	V1
Chromium	0.0022262	0.0007307	V0	0.0000995	V0	0.0000000	V1
Cobalt	0.0000273	0.0001913	V0	0.0000560	V0	0.0000525	V0
Copper	0.0017171	0.0005960	V0	0.0003096	V0	0.0000823	V0
Iron	0.0393063	0.2687845	V0	0.0229011	V0	0.0000000	V1
Lanthanum	0.0000130	0.0002511	V0	0.0000107	V0	0.0000000	V1
Lead	0.0008577	0.0004680	V0	0.0004600	V0	0.0000000	V1
Lithium	0.0000374	0.0007375	V0	0.0000116	V0	0.0000000	V1
Magnesium	0.0091409	0.0827504	V0	0.0143872	V0	0.0007897	V0
Manganese	0.0006949	0.0054639	V0	0.0005009	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000517	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0002214	V0	0.0000059	V0	0.0000000	V1
Nickel	0.0005429	0.0005444	V0	0.0003395	V0	0.0000889	V0
Niobium	0.0000202	0.0000643	V0	0.0000030	V0	0.0000000	V1
Palladium	0.0000632	0.0000054	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0075728	V0	0.0030207	V0	0.0020124	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.1324702	V0	0.0183429	V0	0.0006970	V0
Praseodymium	0.0000070	0.0000577	V0	0.0000019	V0	0.0000000	V1
Rubidium	0.0000184	0.0005962	V0	0.0000547	V0	0.0000000	V1
Samarium	0.0000133	0.0000377	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0003728	V0	0.0000875	V0	0.0000152	V0
Silicon	0.7676322	1.2916275	V0	0.0325417	V0	0.0000000	V1
Silver	0.0000100	0.0000032	V0	0.0000006	V0	0.0000000	V1
Sodium	0.0169447	0.1266714	V0	0.0877977	V0	0.0009557	V0
Strontium	0.0003375	0.0013365	V0	0.0001542	V0	0.0000000	V1
Tantalum	0.0000394	0.0000038	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000057	V0	0.0000023	V0	0.0000000	V1
Thorium	0.0000059	0.0000737	V0	0.0000024	V0	0.0000000	V1
Tin	0.0004414	0.0000661	V0	0.0000479	V0	0.0000000	V1
Titanium	0.0015201	0.0179416	V0	0.0008500	V0	0.0005772	V0
Tungsten	0.0000938	0.0001549	V0	0.0000431	V0	0.0000533	V0
Uranium	0.0000048	0.0000197	V0	0.0000019	V0	0.0000000	V1
Vanadium	0.0007697	0.0008360	V0	0.0000951	V0	0.0000000	V1
Zinc	0.0055897	0.0024915	V0	0.0011930	V0	0.0004574	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**31-Jan**		**31-Jan**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	6.09	V0	0.12	V0
Aluminum	0.1380326	0.1799833	V0	0.0000000	V1
Antimony	0.0001784	0.0000229	V0	0.0000000	V1
Arsenic	0.0001060	0.0000713	V0	0.0000000	V1
Barium	0.0092847	0.0011932	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000413	V0	0.0000013	V0
Cadmium	0.0000174	0.0000136	V0	0.0000000	V1
Calcium	0.4112124	0.0976073	V0	0.0000000	V1
Cerium	0.0000174	0.0001724	V0	0.0000000	V1
Cesium	0.0000100	0.0000123	V0	0.0000000	V1
Chromium	0.0022262	0.0003225	V0	0.0000000	V1
Cobalt	0.0000273	0.0001625	V0	0.0000525	V0
Copper	0.0017171	0.0004179	V0	0.0000823	V0
Iron	0.0393063	0.0943235	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000841	V0	0.0000000	V1
Lead	0.0008577	0.0004614	V0	0.0000000	V1
Lithium	0.0000374	0.0002085	V0	0.0000000	V1
Magnesium	0.0091409	0.0308012	V0	0.0007897	V0
Manganese	0.0006949	0.0020974	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000712	V0	0.0000000	V1
Nickel	0.0005429	0.0003827	V0	0.0000889	V0
Niobium	0.0000202	0.0000200	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0044474	V0	0.0020124	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0559124	V0	0.0006970	V0
Praseodymium	0.0000070	0.0000191	V0	0.0000000	V1
Rubidium	0.0000184	0.0002161	V0	0.0000000	V1
Samarium	0.0000133	0.0000097	V0	0.0000000	V1
Selenium	0.0003366	0.0001740	V0	0.0000152	V0
Silicon	0.7676322	0.3490184	V0	0.0000000	V1
Silver	0.0000100	0.0000007	V0	0.0000000	V1
Sodium	0.0169447	0.0709031	V0	0.0009557	V0
Strontium	0.0003375	0.0004781	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000030	V0	0.0000000	V1
Thorium	0.0000059	0.0000234	V0	0.0000000	V1
Tin	0.0004414	0.0000562	V0	0.0000000	V1
Titanium	0.0015201	0.0059260	V0	0.0005772	V0
Tungsten	0.0000938	0.0000650	V0	0.0000533	V0
Uranium	0.0000048	0.0000065	V0	0.0000000	V1
Vanadium	0.0007697	0.0002957	V0	0.0000000	V1
Zinc	0.0055897	0.0017625	V0	0.0004574	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**06-Feb**		**06-Feb**		**06-Feb**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24.1**		**25.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	11.85	V0	7.48	V0	0.12	V0
Aluminum	0.1380326	0.1244676	V0	0.0432617	V0	0.0000000	V1
Antimony	0.0001784	0.0000862	V0	0.0127635	V4	0.0000000	V1
Arsenic	0.0001060	0.0000867	V0	0.0000870	V0	0.0000000	V1
Barium	0.0092847	0.0018279	V0	0.0013807	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000082	V0	0.0000235	V0	0.0000068	V0
Cadmium	0.0000174	0.0000318	V0	0.0000346	V0	0.0000010	V0
Calcium	0.4112124	0.2405876	V0	0.1106996	V0	0.0000000	V1
Cerium	0.0000174	0.0001464	V0	0.0000528	V0	0.0000000	V1
Cesium	0.0000100	0.0000110	V0	0.0000046	V0	0.0000000	V1
Chromium	0.0022262	0.0003880	V0	0.0002646	V0	0.0001061	V0
Cobalt	0.0000273	0.0001047	V0	0.0000728	V0	0.0000558	V0
Copper	0.0017171	0.0008863	V0	0.0013217	V0	0.0000761	V0
Iron	0.0393063	0.1073895	V0	0.0428510	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001136	V0	0.0000841	V0	0.0000000	V1
Lead	0.0008577	0.0003030	V0	0.0003167	V0	0.0000000	V1
Lithium	0.0000374	0.0001274	V0	0.0000319	V0	0.0000000	V1
Magnesium	0.0091409	0.0352892	V0	0.0152660	V0	0.0007040	V0
Manganese	0.0006949	0.0030770	V0	0.0017731	V0	0.0000000	V1
Molybdenum	0.0007116	0.0002123	V0	0.0001222	V0	0.0000000	V1
Neodymium	0.0000140	0.0000588	V0	0.0000185	V0	0.0000000	V1
Nickel	0.0005429	0.0007791	V0	0.0003375	V0	0.0001021	V0
Niobium	0.0000202	0.0000180	V0	0.0000071	V0	0.0000000	V1
Palladium	0.0000632	0.0000058	V0	0.0000043	V0	0.0000069	V0
Phosphorus	0.0459574	0.0111331	V0	0.0125869	V0	0.0096837	V0
Platinum	0.0000088	0.0000018	V0	0.0000000	V1	0.0000019	V0
Potassium	0.0061261	0.0910765	V0	0.0734432	V0	0.0008338	V0
Praseodymium	0.0000070	0.0000158	V0	0.0000048	V0	0.0000000	V1
Rubidium	0.0000184	0.0002722	V0	0.0001395	V0	0.0000028	V0
Samarium	0.0000133	0.0000123	V0	0.0000036	V0	0.0000025	V4
Selenium	0.0003366	0.0001683	V0	0.0000641	V0	0.0000000	V1
Silicon	0.7676322	0.3609625	V0	0.1892679	V0	0.0000000	V1
Silver	0.0000100	0.0000033	V0	0.0000039	V0	0.0000006	V0
Sodium	0.0169447	0.0456461	V0	0.0866227	V0	0.0012427	V0
Strontium	0.0003375	0.0006520	V0	0.0003404	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000027	V0	0.0000019	V0	0.0000005	V0
Thorium	0.0000059	0.0000189	V0	0.0000059	V0	0.0000000	V1
Tin	0.0004414	0.0001090	V0	0.0003643	V0	0.0000000	V1
Titanium	0.0015201	0.0085675	V0	0.0020499	V0	0.0005311	V0
Tungsten	0.0000938	0.0000915	V0	0.0000821	V0	0.0000693	V0
Uranium	0.0000048	0.0000063	V0	0.0000029	V0	0.0000000	V1
Vanadium	0.0007697	0.0015870	V0	0.0005008	V0	0.0000000	V1
Zinc	0.0055897	0.0065736	V0	0.0058776	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		06-Feb		06-Feb		06-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	8.01	V0	4.28	V0	0.12	V0
Aluminum	0.1380326	0.0505308	V0	0.0409938	V0	0.0000000	V1
Antimony	0.0001784	0.0001280	V0	0.0000536	V0	0.0000000	V1
Arsenic	0.0001060	0.0000963	V0	0.0000831	V0	0.0000000	V1
Barium	0.0092847	0.0015952	V0	0.0007443	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000183	V0	0.0000250	V0	0.0000068	V0
Cadmium	0.0000174	0.0000283	V0	0.0000225	V0	0.0000010	V0
Calcium	0.4112124	0.1039112	V0	0.0661584	V0	0.0000000	V1
Cerium	0.0000174	0.0000681	V0	0.0000447	V0	0.0000000	V1
Cesium	0.0000100	0.0000049	V0	0.0000036	V0	0.0000000	V1
Chromium	0.0022262	0.0004169	V0	0.0003033	V0	0.0001061	V0
Cobalt	0.0000273	0.0000849	V0	0.0000699	V0	0.0000558	V0
Copper	0.0017171	0.0008317	V0	0.0007445	V0	0.0000761	V0
Iron	0.0393063	0.0607210	V0	0.0318741	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000811	V0	0.0001027	V0	0.0000000	V1
Lead	0.0008577	0.0002876	V0	0.0002416	V0	0.0000000	V1
Lithium	0.0000374	0.0000255	V0	0.0000143	V0	0.0000000	V1
Magnesium	0.0091409	0.0163568	V0	0.0115831	V0	0.0007040	V0
Manganese	0.0006949	0.0016007	V0	0.0009574	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001170	V0	0.0001154	V0	0.0000000	V1
Neodymium	0.0000140	0.0000214	V0	0.0000166	V0	0.0000000	V1
Nickel	0.0005429	0.0003292	V0	0.0004498	V0	0.0001021	V0
Niobium	0.0000202	0.0000084	V0	0.0000060	V0	0.0000000	V1
Palladium	0.0000632	0.0000128	V0	0.0000000	V1	0.0000069	V0
Phosphorus	0.0459574	0.0091450	V0	0.0090642	V0	0.0096837	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000019	V0
Potassium	0.0061261	0.0601009	V0	0.0387556	V0	0.0008338	V0
Praseodymium	0.0000070	0.0000068	V0	0.0000047	V0	0.0000000	V1
Rubidium	0.0000184	0.0001490	V0	0.0000964	V0	0.0000028	V0
Samarium	0.0000133	0.0000045	V0	0.0000020	V0	0.0000025	V4
Selenium	0.0003366	0.0000827	V0	0.0000532	V0	0.0000000	V1
Silicon	0.7676322	0.2040602	V0	0.1820081	V0	0.0000000	V1
Silver	0.0000100	0.0000023	V0	0.0000032	V0	0.0000006	V0
Sodium	0.0169447	0.1974973	V0	0.0270660	V0	0.0012427	V0
Strontium	0.0003375	0.0003497	V0	0.0002119	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000015	V0	0.0000014	V0	0.0000005	V0
Thorium	0.0000059	0.0000073	V0	0.0000063	V0	0.0000000	V1
Tin	0.0004414	0.0001367	V0	0.0000721	V0	0.0000000	V1
Titanium	0.0015201	0.0024348	V0	0.0013769	V0	0.0005311	V0
Tungsten	0.0000938	0.0001259	V0	0.0000889	V0	0.0000693	V0
Uranium	0.0000048	0.0000037	V0	0.0000028	V0	0.0000000	V1
Vanadium	0.0007697	0.0004792	V0	0.0005725	V0	0.0000000	V1
Zinc	0.0055897	0.0051004	V0	0.0026458	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		06-Feb		06-Feb		06-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	8.86	V0	9.70	V0	0.12	V0
Aluminum	0.1380326	0.0781299	V0	0.1334689	V0	0.0000000	V1
Antimony	0.0001784	0.0000460	V0	0.0000496	V0	0.0000000	V1
Arsenic	0.0001060	0.0000906	V0	0.0000885	V0	0.0000000	V1
Barium	0.0092847	0.0009669	V0	0.0013852	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000087	V0	0.0000161	V0	0.0000068	V0
Cadmium	0.0000174	0.0000226	V0	0.0000195	V0	0.0000010	V0
Calcium	0.4112124	0.0824588	V0	0.0822707	V0	0.0000000	V1
Cerium	0.0000174	0.0000765	V0	0.0001221	V0	0.0000000	V1
Cesium	0.0000100	0.0000063	V0	0.0000100	V0	0.0000000	V1
Chromium	0.0022262	0.0003072	V0	0.0003746	V0	0.0001061	V0
Cobalt	0.0000273	0.0000862	V0	0.0000754	V0	0.0000558	V0
Copper	0.0017171	0.0005329	V0	0.0006450	V0	0.0000761	V0
Iron	0.0393063	0.0627075	V0	0.1009807	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000675	V0	0.0000921	V0	0.0000000	V1
Lead	0.0008577	0.0002091	V0	0.0002278	V0	0.0000000	V1
Lithium	0.0000374	0.0000816	V0	0.0001064	V0	0.0000000	V1
Magnesium	0.0091409	0.0166788	V0	0.0251205	V0	0.0007040	V0
Manganese	0.0006949	0.0018362	V0	0.0020599	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001483	V0	0.0000807	V0	0.0000000	V1
Neodymium	0.0000140	0.0000311	V0	0.0000524	V0	0.0000000	V1
Nickel	0.0005429	0.0004943	V0	0.0003492	V0	0.0001021	V0
Niobium	0.0000202	0.0000107	V0	0.0000167	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000032	V0	0.0000069	V0
Phosphorus	0.0459574	0.0089544	V0	0.0097024	V0	0.0096837	V0
Platinum	0.0000088	0.0000005	V0	0.0000000	V1	0.0000019	V0
Potassium	0.0061261	0.0535758	V0	0.0630322	V0	0.0008338	V0
Praseodymium	0.0000070	0.0000084	V0	0.0000139	V0	0.0000000	V1
Rubidium	0.0000184	0.0001586	V0	0.0002122	V0	0.0000028	V0
Samarium	0.0000133	0.0000064	V0	0.0000087	V0	0.0000025	V4
Selenium	0.0003366	0.0000808	V0	0.0001023	V0	0.0000000	V1
Silicon	0.7676322	0.3221359	V0	0.3826969	V0	0.0000000	V1
Silver	0.0000100	0.0000023	V0	0.0000022	V0	0.0000006	V0
Sodium	0.0169447	0.0345078	V0	0.0324580	V0	0.0012427	V0
Strontium	0.0003375	0.0003077	V0	0.0003810	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000016	V0	0.0000019	V0	0.0000005	V0
Thorium	0.0000059	0.0000103	V0	0.0000159	V0	0.0000000	V1
Tin	0.0004414	0.0000936	V0	0.0000754	V0	0.0000000	V1
Titanium	0.0015201	0.0029261	V0	0.0043083	V0	0.0005311	V0
Tungsten	0.0000938	0.0000877	V0	0.0000522	V0	0.0000693	V0
Uranium	0.0000048	0.0000039	V0	0.0000053	V0	0.0000000	V1
Vanadium	0.0007697	0.0009679	V0	0.0005440	V0	0.0000000	V1
Zinc	0.0055897	0.0046502	V0	0.0048502	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**06-Feb**		**06-Feb**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	8.15	V0	0.12	V0
Aluminum	0.1380326	0.0818457	V0	0.0000000	V1
Antimony	0.0001784	0.0000569	V0	0.0000000	V1
Arsenic	0.0001060	0.0000958	V0	0.0000000	V1
Barium	0.0092847	0.0011607	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0001442	V0	0.0000068	V0
Cadmium	0.0000174	0.0000269	V0	0.0000010	V0
Calcium	0.4112124	0.1074907	V0	0.0000000	V1
Cerium	0.0000174	0.0000799	V0	0.0000000	V1
Cesium	0.0000100	0.0000073	V0	0.0000000	V1
Chromium	0.0022262	0.0004433	V0	0.0001061	V0
Cobalt	0.0000273	0.0000866	V0	0.0000558	V0
Copper	0.0017171	0.0039605	V0	0.0000761	V0
Iron	0.0393063	0.0812211	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000783	V0	0.0000000	V1
Lead	0.0008577	0.0002871	V0	0.0000000	V1
Lithium	0.0000374	0.0000832	V0	0.0000000	V1
Magnesium	0.0091409	0.0175806	V0	0.0007040	V0
Manganese	0.0006949	0.0028700	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001244	V0	0.0000000	V1
Neodymium	0.0000140	0.0000305	V0	0.0000000	V1
Nickel	0.0005429	0.0005177	V0	0.0001021	V0
Niobium	0.0000202	0.0000119	V0	0.0000000	V1
Palladium	0.0000632	0.0000047	V0	0.0000069	V0
Phosphorus	0.0459574	0.0092122	V0	0.0096837	V0
Platinum	0.0000088	0.0000000	V1	0.0000019	V0
Potassium	0.0061261	0.0566444	V0	0.0008338	V0
Praseodymium	0.0000070	0.0000084	V0	0.0000000	V1
Rubidium	0.0000184	0.0001699	V0	0.0000028	V0
Samarium	0.0000133	0.0000053	V0	0.0000025	V4
Selenium	0.0003366	0.0000822	V0	0.0000000	V1
Silicon	0.7676322	0.2716147	V0	0.0000000	V1
Silver	0.0000100	0.0000025	V0	0.0000006	V0
Sodium	0.0169447	0.0406751	V0	0.0012427	V0
Strontium	0.0003375	0.0003419	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000015	V0	0.0000005	V0
Thorium	0.0000059	0.0000098	V0	0.0000000	V1
Tin	0.0004414	0.0001387	V0	0.0000000	V1
Titanium	0.0015201	0.0030571	V0	0.0005311	V0
Tungsten	0.0000938	0.0000790	V0	0.0000693	V0
Uranium	0.0000048	0.0000037	V0	0.0000000	V1
Vanadium	0.0007697	0.0004988	V0	0.0000000	V1
Zinc	0.0055897	0.0054754	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		12-Feb		12-Feb		12-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	21.90	V0	2.80	V0	0.15	V0
Aluminum	0.1380326	0.5064495	V0	0.0249673	V0	0.0000000	V1
Antimony	0.0001784	0.0000372	V0	0.0001213	V0	0.0000000	V1
Arsenic	0.0001060	0.0001486	V0	0.0000435	V0	0.0000000	V1
Barium	0.0092847	0.0047664	V0	0.0011505	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000122	V0	0.0000695	V0	0.0000025	V0
Cadmium	0.0000174	0.0000262	V0	0.0000130	V0	0.0000000	V1
Calcium	0.4112124	1.0240952	V0	0.0808396	V0	0.0000000	V1
Cerium	0.0000174	0.0006028	V0	0.0000451	V0	0.0000000	V1
Cesium	0.0000100	0.0000380	V0	0.0000027	V0	0.0000000	V1
Chromium	0.0022262	0.0006975	V0	0.0001892	V0	0.0001119	V0
Cobalt	0.0000273	0.0002596	V0	0.0000722	V0	0.0000498	V0
Copper	0.0017171	0.0008502	V0	0.0008722	V0	0.0012268	V0
Iron	0.0393063	0.4942644	V0	0.0422434	V0	0.0018723	V0
Lanthanum	0.0000130	0.0002865	V0	0.0000190	V0	0.0000000	V1
Lead	0.0008577	0.0004449	V0	0.0003431	V0	0.0000000	V1
Lithium	0.0000374	0.0004523	V0	0.0000059	V0	0.0000000	V1
Magnesium	0.0091409	0.1150406	V0	0.0136117	V0	0.0009302	V0
Manganese	0.0006949	0.0102341	V0	0.0010372	V0	0.0000534	V0
Molybdenum	0.0007116	0.0004050	V0	0.0000512	V0	0.0000000	V1
Neodymium	0.0000140	0.0002698	V0	0.0000119	V0	0.0000000	V1
Nickel	0.0005429	0.0010929	V0	0.0002094	V0	0.0001556	V0
Niobium	0.0000202	0.0000524	V0	0.0000042	V0	0.0000010	V0
Palladium	0.0000632	0.0000055	V0	0.0000045	V0	0.0000000	V1
Phosphorus	0.0459574	0.0123371	V0	0.0082346	V0	0.0074786	V0
Platinum	0.0000088	0.0000000	V1	0.0000010	V0	0.0000000	V1
Potassium	0.0061261	0.1665518	V0	0.0276961	V0	0.0015020	V0
Praseodymium	0.0000070	0.0000693	V0	0.0000033	V0	0.0000000	V1
Rubidium	0.0000184	0.0007200	V0	0.0000641	V0	0.0000016	V0
Samarium	0.0000133	0.0000514	V0	0.0000036	V0	0.0000000	V1
Selenium	0.0003366	0.0003887	V0	0.0000542	V0	0.0000000	V1
Silicon	0.7676322	1.3460645	V0	0.1670690	V0	0.0000000	V1
Silver	0.0000100	0.0000034	V0	0.0000020	V0	0.0000000	V1
Sodium	0.0169447	0.1652078	V0	0.1643347	V0	0.0017699	V0
Strontium	0.0003375	0.0021221	V0	0.0002492	V0	0.0000150	V0
Tantalum	0.0000394	0.0000039	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000067	V0	0.0000024	V0	0.0000000	V1
Thorium	0.0000059	0.0000797	V0	0.0000032	V0	0.0000000	V1
Tin	0.0004414	0.0000725	V0	0.0001208	V0	0.0000000	V1
Titanium	0.0015201	0.0158704	V0	0.0013236	V0	0.0003213	V0
Tungsten	0.0000938	0.0002862	V0	0.0000698	V0	0.0000391	V0
Uranium	0.0000048	0.0000224	V0	0.0000013	V0	0.0000000	V1
Vanadium	0.0007697	0.0029726	V0	0.0001838	V0	0.0000000	V1
Zinc	0.0055897	0.0036500	V0	0.0017126	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		12-Feb		12-Feb		12-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	6.16	V0	1.85	V0	0.15	V0
Aluminum	0.1380326	0.0417766	V0	0.0167453	V0	0.0000000	V1
Antimony	0.0001784	0.0002496	V0	0.0000211	V0	0.0000000	V1
Arsenic	0.0001060	0.0000568	V0	0.0000368	V0	0.0000000	V1
Barium	0.0092847	0.0027036	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000146	V0	0.0000134	V0	0.0000025	V0
Cadmium	0.0000174	0.0000132	V0	0.0000073	V0	0.0000000	V1
Calcium	0.4112124	0.1500100	V0	0.0264172	V0	0.0000000	V1
Cerium	0.0000174	0.0000932	V0	0.0000188	V0	0.0000000	V1
Cesium	0.0000100	0.0000037	V0	0.0000019	V0	0.0000000	V1
Chromium	0.0022262	0.0003570	V0	0.0001860	V0	0.0001119	V0
Cobalt	0.0000273	0.0001062	V0	0.0000720	V0	0.0000498	V0
Copper	0.0017171	0.0016956	V0	0.0001974	V0	0.0012268	V0
Iron	0.0393063	0.0953867	V0	0.0147854	V0	0.0018723	V0
Lanthanum	0.0000130	0.0000360	V0	0.0000090	V0	0.0000000	V1
Lead	0.0008577	0.0003910	V0	0.0003067	V0	0.0000000	V1
Lithium	0.0000374	0.0000293	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0262846	V0	0.0073954	V0	0.0009302	V0
Manganese	0.0006949	0.0016264	V0	0.0004638	V0	0.0000534	V0
Molybdenum	0.0007116	0.0000706	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000257	V0	0.0000053	V0	0.0000000	V1
Nickel	0.0005429	0.0002727	V0	0.0001723	V0	0.0001556	V0
Niobium	0.0000202	0.0000083	V0	0.0000018	V0	0.0000010	V0
Palladium	0.0000632	0.0000099	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0089872	V0	0.0059337	V0	0.0074786	V0
Platinum	0.0000088	0.0000014	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0326489	V0	0.0122737	V0	0.0015020	V0
Praseodymium	0.0000070	0.0000073	V0	0.0000017	V0	0.0000000	V1
Rubidium	0.0000184	0.0000779	V0	0.0000342	V0	0.0000016	V0
Samarium	0.0000133	0.0000046	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000802	V0	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.2514604	V0	0.1055558	V0	0.0000000	V1
Silver	0.0000100	0.0000027	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.3923039	V0	0.0273248	V0	0.0017699	V0
Strontium	0.0003375	0.0005080	V0	0.0001044	V0	0.0000150	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000022	V0	0.0000013	V0	0.0000000	V1
Thorium	0.0000059	0.0000065	V0	0.0000021	V0	0.0000000	V1
Tin	0.0004414	0.0001794	V0	0.0000426	V0	0.0000000	V1
Titanium	0.0015201	0.0026954	V0	0.0005600	V0	0.0003213	V0
Tungsten	0.0000938	0.0001872	V0	0.0001800	V0	0.0000391	V0
Uranium	0.0000048	0.0000024	V0	0.0000006	V0	0.0000000	V1
Vanadium	0.0007697	0.0001891	V0	0.0000876	V0	0.0000000	V1
Zinc	0.0055897	0.0020624	V0	0.0010645	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		12-Feb		12-Feb		12-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	14.56	V0	20.09	V0	0.15	V0
Aluminum	0.1380326	0.1398612	V0	0.6217680	V0	0.0000000	V1
Antimony	0.0001784	0.0000240	V0	0.0000412	V0	0.0000000	V1
Arsenic	0.0001060	0.0000553	V0	0.0001732	V0	0.0000000	V1
Barium	0.0092847	0.0014022	V0	0.0061133	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000081	V0	0.0000212	V0	0.0000025	V0
Cadmium	0.0000174	0.0000123	V0	0.0000468	V0	0.0000000	V1
Calcium	0.4112124	0.2366621	V0	0.4388204	V0	0.0000000	V1
Cerium	0.0000174	0.0001768	V0	0.0007241	V0	0.0000000	V1
Cesium	0.0000100	0.0000094	V0	0.0000494	V0	0.0000000	V1
Chromium	0.0022262	0.0003192	V0	0.0009688	V0	0.0001119	V0
Cobalt	0.0000273	0.0001061	V0	0.0002562	V0	0.0000498	V0
Copper	0.0017171	0.0002582	V0	0.0008369	V0	0.0012268	V0
Iron	0.0393063	0.1613417	V0	0.5098503	V0	0.0018723	V0
Lanthanum	0.0000130	0.0000810	V0	0.0003337	V0	0.0000000	V1
Lead	0.0008577	0.0001669	V0	0.0006211	V0	0.0000000	V1
Lithium	0.0000374	0.0001228	V0	0.0007490	V0	0.0000000	V1
Magnesium	0.0091409	0.0327498	V0	0.0942470	V0	0.0009302	V0
Manganese	0.0006949	0.0033712	V0	0.0120152	V0	0.0000534	V0
Molybdenum	0.0007116	0.0001854	V0	0.0005219	V0	0.0000000	V1
Neodymium	0.0000140	0.0000787	V0	0.0003098	V0	0.0000000	V1
Nickel	0.0005429	0.0005779	V0	0.0014078	V0	0.0001556	V0
Niobium	0.0000202	0.0000179	V0	0.0001117	V0	0.0000010	V0
Palladium	0.0000632	0.0000000	V1	0.0000127	V0	0.0000000	V1
Phosphorus	0.0459574	0.0075703	V0	0.0144057	V0	0.0074786	V0
Platinum	0.0000088	0.0000000	V1	0.0000024	V0	0.0000000	V1
Potassium	0.0061261	0.0516361	V0	0.1812819	V0	0.0015020	V0
Praseodymium	0.0000070	0.0000203	V0	0.0000821	V0	0.0000000	V1
Rubidium	0.0000184	0.0001991	V0	0.0008379	V0	0.0000016	V0
Samarium	0.0000133	0.0000145	V0	0.0000616	V0	0.0000000	V1
Selenium	0.0003366	0.0001094	V0	0.0005613	V0	0.0000000	V1
Silicon	0.7676322	0.7519540	V0	1.3911631	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000045	V0	0.0000000	V1
Sodium	0.0169447	0.1069236	V0	0.0915482	V0	0.0017699	V0
Strontium	0.0003375	0.0005714	V0	0.0018613	V0	0.0000150	V0
Tantalum	0.0000394	0.0000000	V1	0.0000067	V0	0.0000000	V1
Thallium	0.0000090	0.0000022	V0	0.0000079	V0	0.0000000	V1
Thorium	0.0000059	0.0000235	V0	0.0000948	V0	0.0000000	V1
Tin	0.0004414	0.0000572	V0	0.0001130	V0	0.0000000	V1
Titanium	0.0015201	0.0048718	V0	0.0244627	V0	0.0003213	V0
Tungsten	0.0000938	0.0001198	V0	0.0002115	V0	0.0000391	V0
Uranium	0.0000048	0.0000073	V0	0.0000262	V0	0.0000000	V1
Vanadium	0.0007697	0.0016377	V0	0.0040080	V0	0.0000000	V1
Zinc	0.0055897	0.0016612	V0	0.0060062	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**12-Feb**		**12-Feb**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	6.54	V0	0.15	V0
Aluminum	0.1380326	0.1391822	V0	0.0000000	V1
Antimony	0.0001784	0.0000272	V0	0.0000000	V1
Arsenic	0.0001060	0.0000469	V0	0.0000000	V1
Barium	0.0092847	0.0014263	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000058	V0	0.0000025	V0
Cadmium	0.0000174	0.0000055	V0	0.0000000	V1
Calcium	0.4112124	0.1954721	V0	0.0000000	V1
Cerium	0.0000174	0.0001430	V0	0.0000000	V1
Cesium	0.0000100	0.0000103	V0	0.0000000	V1
Chromium	0.0022262	0.0007403	V0	0.0001119	V0
Cobalt	0.0000273	0.0000975	V0	0.0000498	V0
Copper	0.0017171	0.0006167	V0	0.0012268	V0
Iron	0.0393063	0.1411234	V0	0.0018723	V0
Lanthanum	0.0000130	0.0000845	V0	0.0000000	V1
Lead	0.0008577	0.0002822	V0	0.0000000	V1
Lithium	0.0000374	0.0001326	V0	0.0000000	V1
Magnesium	0.0091409	0.0307112	V0	0.0009302	V0
Manganese	0.0006949	0.0035578	V0	0.0000534	V0
Molybdenum	0.0007116	0.0000860	V0	0.0000000	V1
Neodymium	0.0000140	0.0000795	V0	0.0000000	V1
Nickel	0.0005429	0.0004368	V0	0.0001556	V0
Niobium	0.0000202	0.0000269	V0	0.0000010	V0
Palladium	0.0000632	0.0000041	V0	0.0000000	V1
Phosphorus	0.0459574	0.0088207	V0	0.0074786	V0
Platinum	0.0000088	0.0000007	V0	0.0000000	V1
Potassium	0.0061261	0.0463620	V0	0.0015020	V0
Praseodymium	0.0000070	0.0000192	V0	0.0000000	V1
Rubidium	0.0000184	0.0001971	V0	0.0000016	V0
Samarium	0.0000133	0.0000145	V0	0.0000000	V1
Selenium	0.0003366	0.0001291	V0	0.0000000	V1
Silicon	0.7676322	0.4180038	V0	0.0000000	V1
Silver	0.0000100	0.0000010	V0	0.0000000	V1
Sodium	0.0169447	0.0953470	V0	0.0017699	V0
Strontium	0.0003375	0.0005500	V0	0.0000150	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000023	V0	0.0000000	V1
Thorium	0.0000059	0.0000208	V0	0.0000000	V1
Tin	0.0004414	0.0000745	V0	0.0000000	V1
Titanium	0.0015201	0.0055741	V0	0.0003213	V0
Tungsten	0.0000938	0.0001044	V0	0.0000391	V0
Uranium	0.0000048	0.0000063	V0	0.0000000	V1
Vanadium	0.0007697	0.0003059	V0	0.0000000	V1
Zinc	0.0055897	0.0023004	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		18-Feb		18-Feb		18-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.63	V0	6.06	V0	0.18	V0
Aluminum	0.1380326	0.0535640	V0	0.0295506	V0	0.0000000	V1
Antimony	0.0001784	0.0000228	V0	0.0001279	V0	0.0000000	V1
Arsenic	0.0001060	0.0000484	V0	0.0000470	V0	0.0000000	V1
Barium	0.0092847	0.0008853	V0	0.0013486	V0	0.0000000	V1
Beryllium	0.0000946	0.0000160	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000779	V0	0.0000090	V0	0.0000030	V0
Cadmium	0.0000174	0.0000118	V0	0.0000128	V0	0.0000000	V1
Calcium	0.4112124	0.0567051	V0	0.0790337	V0	0.0000000	V1
Cerium	0.0000174	0.0002950	V0	0.0000431	V0	0.0000000	V1
Cesium	0.0000100	0.0000043	V0	0.0000028	V0	0.0000000	V1
Chromium	0.0022262	0.0005643	V0	0.0002534	V0	0.0002495	V0
Cobalt	0.0000273	0.0000731	V0	0.0000555	V0	0.0001714	V0
Copper	0.0017171	0.0004035	V0	0.0008658	V0	0.0000000	V1
Iron	0.0393063	0.0555677	V0	0.0438408	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000323	V0	0.0000210	V0	0.0000000	V1
Lead	0.0008577	0.0003053	V0	0.0002751	V0	0.0000000	V1
Lithium	0.0000374	0.0000602	V0	0.0000210	V0	0.0000000	V1
Magnesium	0.0091409	0.0119753	V0	0.0106421	V0	0.0004885	V0
Manganese	0.0006949	0.0015878	V0	0.0015482	V0	0.0000438	V0
Molybdenum	0.0007116	0.0000649	V0	0.0000808	V0	0.0000000	V1
Neodymium	0.0000140	0.0000251	V0	0.0000152	V0	0.0000000	V1
Nickel	0.0005429	0.0003616	V0	0.0002799	V0	0.0003043	V0
Niobium	0.0000202	0.0000101	V0	0.0000057	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000033	V0
Phosphorus	0.0459574	0.0062853	V0	0.0057291	V0	0.0064316	V0
Platinum	0.0000088	0.0000024	V0	0.0000004	V0	0.0000000	V1
Potassium	0.0061261	0.0246226	V0	0.0325965	V0	0.0008270	V0
Praseodymium	0.0000070	0.0000072	V0	0.0000039	V0	0.0000000	V1
Rubidium	0.0000184	0.0000786	V0	0.0000753	V0	0.0000000	V1
Samarium	0.0000133	0.0000064	V0	0.0000028	V0	0.0000000	V1
Selenium	0.0003366	0.0000807	V0	0.0000585	V0	0.0000000	V1
Silicon	0.7676322	0.3164794	V0	0.1979861	V0	0.0000000	V1
Silver	0.0000100	0.0000021	V0	0.0000013	V0	0.0000000	V1
Sodium	0.0169447	0.0223054	V0	0.0819933	V0	0.0000000	V1
Strontium	0.0003375	0.0002054	V0	0.0003138	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000018	V0	0.0000011	V0	0.0000000	V1
Thorium	0.0000059	0.0000084	V0	0.0000045	V0	0.0000000	V1
Tin	0.0004414	0.0000599	V0	0.0000990	V0	0.0000000	V1
Titanium	0.0015201	0.0028833	V0	0.0015210	V0	0.0001742	V0
Tungsten	0.0000938	0.0000632	V0	0.0000666	V0	0.0000694	V0
Uranium	0.0000048	0.0000031	V0	0.0000027	V0	0.0000000	V1
Vanadium	0.0007697	0.0002597	V0	0.0002867	V0	0.0000000	V1
Zinc	0.0055897	0.0021667	V0	0.0032449	V0	0.0002722	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		18-Feb		18-Feb		18-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	11.56	V0	3.93	V0	0.18	V0
Aluminum	0.1380326	0.0769965	V0	0.0061336	V0	0.0000000	V1
Antimony	0.0001784	0.0002407	V0	0.0000220	V0	0.0000000	V1
Arsenic	0.0001060	0.0000637	V0	0.0000391	V0	0.0000000	V1
Barium	0.0092847	0.0043116	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000060	V0	0.0000067	V0	0.0000000	V1
Bismuth	0.0000093	0.0000210	V0	0.0000047	V0	0.0000030	V0
Cadmium	0.0000174	0.0000189	V0	0.0000088	V0	0.0000000	V1
Calcium	0.4112124	0.3242133	V0	0.0189847	V0	0.0000000	V1
Cerium	0.0000174	0.0001057	V0	0.0000062	V0	0.0000000	V1
Cesium	0.0000100	0.0000076	V0	0.0000009	V0	0.0000000	V1
Chromium	0.0022262	0.0006115	V0	0.0003612	V0	0.0002495	V0
Cobalt	0.0000273	0.0001079	V0	0.0003251	V0	0.0001714	V0
Copper	0.0017171	0.0017091	V0	0.0002113	V0	0.0000000	V1
Iron	0.0393063	0.1302293	V0	0.0072161	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000539	V0	0.0000062	V0	0.0000000	V1
Lead	0.0008577	0.0003270	V0	0.0001337	V0	0.0000000	V1
Lithium	0.0000374	0.0000755	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0321057	V0	0.0030658	V0	0.0004885	V0
Manganese	0.0006949	0.0090182	V0	0.0002539	V0	0.0000438	V0
Molybdenum	0.0007116	0.0001958	V0	0.0000924	V0	0.0000000	V1
Neodymium	0.0000140	0.0000408	V0	0.0000027	V0	0.0000000	V1
Nickel	0.0005429	0.0006841	V0	0.0005878	V0	0.0003043	V0
Niobium	0.0000202	0.0000150	V0	0.0000017	V0	0.0000000	V1
Palladium	0.0000632	0.0000039	V0	0.0000000	V1	0.0000033	V0
Phosphorus	0.0459574	0.0115018	V0	0.0031631	V0	0.0064316	V0
Platinum	0.0000088	0.0000012	V0	0.0000008	V0	0.0000000	V1
Potassium	0.0061261	0.1406854	V0	0.0126569	V0	0.0008270	V0
Praseodymium	0.0000070	0.0000111	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0003173	V0	0.0000210	V0	0.0000000	V1
Samarium	0.0000133	0.0000083	V0	0.0000016	V0	0.0000000	V1
Selenium	0.0003366	0.0000995	V0	0.0000315	V0	0.0000000	V1
Silicon	0.7676322	0.3340727	V0	0.0549279	V0	0.0000000	V1
Silver	0.0000100	0.0000055	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.2109756	V0	0.0088677	V0	0.0000000	V1
Strontium	0.0003375	0.0013135	V0	0.0000494	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000026	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000115	V0	0.0000005	V0	0.0000000	V1
Tin	0.0004414	0.0001737	V0	0.0000329	V0	0.0000000	V1
Titanium	0.0015201	0.0037911	V0	0.0005120	V0	0.0001742	V0
Tungsten	0.0000938	0.0001602	V0	0.0000611	V0	0.0000694	V0
Uranium	0.0000048	0.0000044	V0	0.0000020	V0	0.0000000	V1
Vanadium	0.0007697	0.0006039	V0	0.0000838	V0	0.0000000	V1
Zinc	0.0055897	0.0116696	V0	0.0012553	V0	0.0002722	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		18-Feb		18-Feb		18-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		23.8		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.92	V0	4.94	V0	0.18	V0
Aluminum	0.1380326	0.0717912	V0	0.0494136	V0	0.0000000	V1
Antimony	0.0001784	0.0000384	V0	0.0000188	V0	0.0000000	V1
Arsenic	0.0001060	0.0000662	V0	0.0000418	V0	0.0000000	V1
Barium	0.0092847	0.0010038	V0	0.0005661	V0	0.0000000	V1
Beryllium	0.0000946	0.0000141	V0	0.0000048	V0	0.0000000	V1
Bismuth	0.0000093	0.0000359	V0	0.0000161	V0	0.0000030	V0
Cadmium	0.0000174	0.0000101	V0	0.0000073	V0	0.0000000	V1
Calcium	0.4112124	0.0619483	V0	0.0418329	V0	0.0000000	V1
Cerium	0.0000174	0.0000816	V0	0.0000565	V0	0.0000000	V1
Cesium	0.0000100	0.0000058	V0	0.0000042	V0	0.0000000	V1
Chromium	0.0022262	0.0004908	V0	0.0002947	V0	0.0002495	V0
Cobalt	0.0000273	0.0001060	V0	0.0000637	V0	0.0001714	V0
Copper	0.0017171	0.0005711	V0	0.0004069	V0	0.0000000	V1
Iron	0.0393063	0.0794846	V0	0.0483467	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000446	V0	0.0000286	V0	0.0000000	V1
Lead	0.0008577	0.0003422	V0	0.0002773	V0	0.0000000	V1
Lithium	0.0000374	0.0000763	V0	0.0000464	V0	0.0000000	V1
Magnesium	0.0091409	0.0177800	V0	0.0113724	V0	0.0004885	V0
Manganese	0.0006949	0.0024914	V0	0.0014167	V0	0.0000438	V0
Molybdenum	0.0007116	0.0000858	V0	0.0000437	V0	0.0000000	V1
Neodymium	0.0000140	0.0000336	V0	0.0000248	V0	0.0000000	V1
Nickel	0.0005429	0.0004522	V0	0.0002830	V0	0.0003043	V0
Niobium	0.0000202	0.0000123	V0	0.0000082	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000033	V0
Phosphorus	0.0459574	0.0041869	V0	0.0056263	V0	0.0064316	V0
Platinum	0.0000088	0.0000018	V0	0.0000017	V0	0.0000000	V1
Potassium	0.0061261	0.0267481	V0	0.0217438	V0	0.0008270	V0
Praseodymium	0.0000070	0.0000090	V0	0.0000060	V0	0.0000000	V1
Rubidium	0.0000184	0.0000986	V0	0.0000675	V0	0.0000000	V1
Samarium	0.0000133	0.0000083	V0	0.0000056	V0	0.0000000	V1
Selenium	0.0003366	0.0000697	V0	0.0000588	V0	0.0000000	V1
Silicon	0.7676322	0.2884110	V0	0.2382523	V0	0.0000000	V1
Silver	0.0000100	0.0000004	V0	0.0000008	V0	0.0000000	V1
Sodium	0.0169447	0.0382865	V0	0.0228969	V0	0.0000000	V1
Strontium	0.0003375	0.0002492	V0	0.0001908	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000019	V0	0.0000014	V0	0.0000000	V1
Thorium	0.0000059	0.0000108	V0	0.0000093	V0	0.0000000	V1
Tin	0.0004414	0.0000646	V0	0.0000584	V0	0.0000000	V1
Titanium	0.0015201	0.0029731	V0	0.0020958	V0	0.0001742	V0
Tungsten	0.0000938	0.0000727	V0	0.0000422	V0	0.0000694	V0
Uranium	0.0000048	0.0000035	V0	0.0000027	V0	0.0000000	V1
Vanadium	0.0007697	0.0002765	V0	0.0003003	V0	0.0000000	V1
Zinc	0.0055897	0.0021539	V0	0.0024880	V0	0.0002722	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**18-Feb**		**18-Feb**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	10.76	V0	0.18	V0
Aluminum	0.1380326	0.2206281	V0	0.0000000	V1
Antimony	0.0001784	0.0000464	V0	0.0000000	V1
Arsenic	0.0001060	0.0000945	V0	0.0000000	V1
Barium	0.0092847	0.0017419	V0	0.0000000	V1
Beryllium	0.0000946	0.0000160	V0	0.0000000	V1
Bismuth	0.0000093	0.0000141	V0	0.0000030	V0
Cadmium	0.0000174	0.0000104	V0	0.0000000	V1
Calcium	0.4112124	0.1603902	V0	0.0000000	V1
Cerium	0.0000174	0.0002413	V0	0.0000000	V1
Cesium	0.0000100	0.0000158	V0	0.0000000	V1
Chromium	0.0022262	0.0006532	V0	0.0002495	V0
Cobalt	0.0000273	0.0001323	V0	0.0001714	V0
Copper	0.0017171	0.0006960	V0	0.0000000	V1
Iron	0.0393063	0.1961861	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001142	V0	0.0000000	V1
Lead	0.0008577	0.0003814	V0	0.0000000	V1
Lithium	0.0000374	0.0002740	V0	0.0000000	V1
Magnesium	0.0091409	0.0381729	V0	0.0004885	V0
Manganese	0.0006949	0.0046307	V0	0.0000438	V0
Molybdenum	0.0007116	0.0001378	V0	0.0000000	V1
Neodymium	0.0000140	0.0000986	V0	0.0000000	V1
Nickel	0.0005429	0.0006249	V0	0.0003043	V0
Niobium	0.0000202	0.0000368	V0	0.0000000	V1
Palladium	0.0000632	0.0000032	V0	0.0000033	V0
Phosphorus	0.0459574	0.0088190	V0	0.0064316	V0
Platinum	0.0000088	0.0000020	V0	0.0000000	V1
Potassium	0.0061261	0.0678412	V0	0.0008270	V0
Praseodymium	0.0000070	0.0000282	V0	0.0000000	V1
Rubidium	0.0000184	0.0002765	V0	0.0000000	V1
Samarium	0.0000133	0.0000191	V0	0.0000000	V1
Selenium	0.0003366	0.0001486	V0	0.0000000	V1
Silicon	0.7676322	0.7348325	V0	0.0000000	V1
Silver	0.0000100	0.0000013	V0	0.0000000	V1
Sodium	0.0169447	0.0343264	V0	0.0000000	V1
Strontium	0.0003375	0.0006283	V0	0.0000000	V1
Tantalum	0.0000394	0.0000023	V0	0.0000000	V1
Thallium	0.0000090	0.0000039	V0	0.0000000	V1
Thorium	0.0000059	0.0000325	V0	0.0000000	V1
Tin	0.0004414	0.0000771	V0	0.0000000	V1
Titanium	0.0015201	0.0079955	V0	0.0001742	V0
Tungsten	0.0000938	0.0001775	V0	0.0000694	V0
Uranium	0.0000048	0.0000094	V0	0.0000000	V1
Vanadium	0.0007697	0.0007091	V0	0.0000000	V1
Zinc	0.0055897	0.0053726	V0	0.0002722	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		24-Feb		24-Feb		24-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	8.44	V0	2.98	V0	0.34	V0
Aluminum	0.1380326	0.0690583	V0	0.0510552	V0	0.0000000	V1
Antimony	0.0001784	0.0000788	V0	0.0003064	V0	0.0000000	V1
Arsenic	0.0001060	0.0000468	V0	0.0000752	V0	0.0000000	V1
Barium	0.0092847	0.0017981	V0	0.0027322	V0	0.0000000	V1
Beryllium	0.0000946	0.0000096	V0	0.0000149	V0	0.0000151	V4
Bismuth	0.0000093	0.0000047	V0	0.0000143	V0	0.0000091	V0
Cadmium	0.0000174	0.0000052	V0	0.0000067	V0	0.0000000	V1
Calcium	0.4112124	0.1756320	V0	0.0828423	V0	0.0000000	V1
Cerium	0.0000174	0.0000985	V0	0.0000758	V0	0.0000000	V1
Cesium	0.0000100	0.0000061	V0	0.0000060	V0	0.0000000	V1
Chromium	0.0022262	0.0003201	V0	0.0003465	V0	0.0000000	V1
Cobalt	0.0000273	0.0000836	V0	0.0000738	V0	0.0000684	V0
Copper	0.0017171	0.0009354	V0	0.0019190	V0	0.0000876	V0
Iron	0.0393063	0.1102102	V0	0.0798521	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000439	V0	0.0000347	V0	0.0000000	V1
Lead	0.0008577	0.0000880	V0	0.0000798	V0	0.0000000	V1
Lithium	0.0000374	0.0000550	V0	0.0000187	V0	0.0000040	V0
Magnesium	0.0091409	0.0242299	V0	0.0215525	V0	0.0006944	V0
Manganese	0.0006949	0.0024799	V0	0.0012170	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001434	V0	0.0000671	V0	0.0000000	V1
Neodymium	0.0000140	0.0000386	V0	0.0000249	V0	0.0000009	V0
Nickel	0.0005429	0.0005109	V0	0.0002143	V0	0.0002020	V0
Niobium	0.0000202	0.0000105	V0	0.0000069	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000052	V0	0.0000037	V0
Phosphorus	0.0459574	0.0050866	V0	0.0045003	V0	0.0053935	V0
Platinum	0.0000088	0.0000008	V0	0.0000025	V0	0.0000034	V0
Potassium	0.0061261	0.0427885	V0	0.0372420	V0	0.0007653	V0
Praseodymium	0.0000070	0.0000105	V0	0.0000068	V0	0.0000000	V1
Rubidium	0.0000184	0.0001175	V0	0.0000937	V0	0.0000000	V1
Samarium	0.0000133	0.0000091	V0	0.0000055	V0	0.0000014	V0
Selenium	0.0003366	0.0000886	V0	0.0000603	V0	0.0000316	V0
Silicon	0.7676322	0.3487410	V0	0.2242101	V0	0.0638468	V0
Silver	0.0000100	0.0000024	V0	0.0000012	V0	0.0000000	V1
Sodium	0.0169447	0.1931719	V0	0.2442881	V0	0.0015374	V0
Strontium	0.0003375	0.0004960	V0	0.0003425	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000010	V0	0.0000015	V0	0.0000005	V0
Thorium	0.0000059	0.0000125	V0	0.0000096	V0	0.0000000	V1
Tin	0.0004414	0.0000829	V0	0.0001818	V0	0.0000000	V1
Titanium	0.0015201	0.0028893	V0	0.0025316	V0	0.0001434	V0
Tungsten	0.0000938	0.0001253	V0	0.0000826	V0	0.0000725	V0
Uranium	0.0000048	0.0000041	V0	0.0000026	V0	0.0000003	V0
Vanadium	0.0007697	0.0009267	V0	0.0001197	V0	0.0000000	V1
Zinc	0.0055897	0.0027348	V0	0.0022457	V0	0.0002837	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		24-Feb		24-Feb		24-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	19.17	V0	1.30	V0	0.34	V0
Aluminum	0.1380326	0.1887622	V0	0.0258604	V0	0.0000000	V1
Antimony	0.0001784	0.0018478	V4	0.0000145	V0	0.0000000	V1
Arsenic	0.0001060	0.0001529	V0	0.0000236	V0	0.0000000	V1
Barium	0.0092847	0.0200294	V0	0.0005372	V0	0.0000000	V1
Beryllium	0.0000946	0.0000119	V0	0.0000197	V0	0.0000151	V4
Bismuth	0.0000093	0.0000575	V0	0.0000088	V0	0.0000091	V0
Cadmium	0.0000174	0.0000605	V0	0.0000042	V0	0.0000000	V1
Calcium	0.4112124	0.6216499	V0	0.0286312	V0	0.0000000	V1
Cerium	0.0000174	0.0011538	V0	0.0000282	V0	0.0000000	V1
Cesium	0.0000100	0.0000127	V0	0.0000038	V0	0.0000000	V1
Chromium	0.0022262	0.0013155	V0	0.0001525	V0	0.0000000	V1
Cobalt	0.0000273	0.0002403	V0	0.0000623	V0	0.0000684	V0
Copper	0.0017171	0.0115935	V4	0.0002219	V0	0.0000876	V0
Iron	0.0393063	0.5116367	V0	0.0230050	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001811	V0	0.0000137	V0	0.0000000	V1
Lead	0.0008577	0.0006467	V0	0.0000420	V0	0.0000000	V1
Lithium	0.0000374	0.0001425	V0	0.0000111	V0	0.0000040	V0
Magnesium	0.0091409	0.1154468	V0	0.0095715	V0	0.0006944	V0
Manganese	0.0006949	0.0073382	V0	0.0004607	V0	0.0000000	V1
Molybdenum	0.0007116	0.0006172	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0001402	V0	0.0000128	V0	0.0000009	V0
Nickel	0.0005429	0.0007617	V0	0.0001591	V0	0.0002020	V0
Niobium	0.0000202	0.0000438	V0	0.0000029	V0	0.0000000	V1
Palladium	0.0000632	0.0000434	V0	0.0000000	V1	0.0000037	V0
Phosphorus	0.0459574	0.0111724	V0	0.0056678	V0	0.0053935	V0
Platinum	0.0000088	0.0000069	V4	0.0000022	V0	0.0000034	V0
Potassium	0.0061261	0.1537184	V0	0.0149045	V0	0.0007653	V0
Praseodymium	0.0000070	0.0000411	V0	0.0000030	V0	0.0000000	V1
Rubidium	0.0000184	0.0002874	V0	0.0000426	V0	0.0000000	V1
Samarium	0.0000133	0.0000228	V0	0.0000039	V0	0.0000014	V0
Selenium	0.0003366	0.0003546	V0	0.0000376	V0	0.0000316	V0
Silicon	0.7676322	0.5705708	V0	0.2499246	V0	0.0638468	V0
Silver	0.0000100	0.0000084	V0	0.0000008	V0	0.0000000	V1
Sodium	0.0169447	2.8848718	V4	0.0428972	V0	0.0015374	V0
Strontium	0.0003375	0.0030117	V0	0.0001186	V0	0.0000000	V1
Tantalum	0.0000394	0.0000050	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000038	V0	0.0000007	V0	0.0000005	V0
Thorium	0.0000059	0.0000386	V0	0.0000051	V0	0.0000000	V1
Tin	0.0004414	0.0010883	V4	0.0000314	V0	0.0000000	V1
Titanium	0.0015201	0.0179343	V0	0.0011238	V0	0.0001434	V0
Tungsten	0.0000938	0.0006881	V0	0.0000613	V0	0.0000725	V0
Uranium	0.0000048	0.0000122	V0	0.0000012	V0	0.0000003	V0
Vanadium	0.0007697	0.0005187	V0	0.0000713	V0	0.0000000	V1
Zinc	0.0055897	0.0185707	V0	0.0007970	V0	0.0002837	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		24-Feb		24-Feb		24-Feb	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.11	V0	1.91	V0	0.34	V0
Aluminum	0.1380326	0.0397011	V0	0.0300955	V0	0.0000000	V1
Antimony	0.0001784	0.0000361	V0	0.0000097	V0	0.0000000	V1
Arsenic	0.0001060	0.0000270	V0	0.0000256	V0	0.0000000	V1
Barium	0.0092847	0.0009887	V0	0.0004504	V0	0.0000000	V1
Beryllium	0.0000946	0.0000163	V0	0.0000217	V0	0.0000151	V4
Bismuth	0.0000093	0.0000090	V0	0.0000128	V0	0.0000091	V0
Cadmium	0.0000174	0.0000038	V0	0.0000024	V0	0.0000000	V1
Calcium	0.4112124	0.0708349	V0	0.0249178	V0	0.0000000	V1
Cerium	0.0000174	0.0000443	V0	0.0000280	V0	0.0000000	V1
Cesium	0.0000100	0.0000043	V0	0.0000035	V0	0.0000000	V1
Chromium	0.0022262	0.0002303	V0	0.0002973	V0	0.0000000	V1
Cobalt	0.0000273	0.0000502	V0	0.0000683	V0	0.0000684	V0
Copper	0.0017171	0.0099623	V4	0.0001971	V0	0.0000876	V0
Iron	0.0393063	0.0497624	V0	0.0337193	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000204	V0	0.0000133	V0	0.0000000	V1
Lead	0.0008577	0.0000559	V0	0.0000449	V0	0.0000000	V1
Lithium	0.0000374	0.0000254	V0	0.0000134	V0	0.0000040	V0
Magnesium	0.0091409	0.0124295	V0	0.0094117	V0	0.0006944	V0
Manganese	0.0006949	0.0014119	V0	0.0008329	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000425	V0	0.0000349	V0	0.0000000	V1
Neodymium	0.0000140	0.0000194	V0	0.0000138	V0	0.0000009	V0
Nickel	0.0005429	0.0003127	V0	0.0003736	V0	0.0002020	V0
Niobium	0.0000202	0.0000056	V0	0.0000049	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000037	V0
Phosphorus	0.0459574	0.0066932	V0	0.0041907	V0	0.0053935	V0
Platinum	0.0000088	0.0000025	V0	0.0000012	V0	0.0000034	V0
Potassium	0.0061261	0.0220163	V0	0.0135622	V0	0.0007653	V0
Praseodymium	0.0000070	0.0000048	V0	0.0000031	V0	0.0000000	V1
Rubidium	0.0000184	0.0000625	V0	0.0000408	V0	0.0000000	V1
Samarium	0.0000133	0.0000052	V0	0.0000037	V0	0.0000014	V0
Selenium	0.0003366	0.0000584	V0	0.0000510	V0	0.0000316	V0
Silicon	0.7676322	0.2618478	V0	0.2114054	V0	0.0638468	V0
Silver	0.0000100	0.0000015	V0	0.0000006	V0	0.0000000	V1
Sodium	0.0169447	0.0922204	V0	0.0315732	V0	0.0015374	V0
Strontium	0.0003375	0.0002399	V0	0.0001250	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000014	V0	0.0000008	V0	0.0000005	V0
Thorium	0.0000059	0.0000070	V0	0.0000051	V0	0.0000000	V1
Tin	0.0004414	0.0000594	V0	0.0000269	V0	0.0000000	V1
Titanium	0.0015201	0.0017401	V0	0.0011249	V0	0.0001434	V0
Tungsten	0.0000938	0.0000555	V0	0.0000518	V0	0.0000725	V0
Uranium	0.0000048	0.0000020	V0	0.0000014	V0	0.0000003	V0
Vanadium	0.0007697	0.0002920	V0	0.0000711	V0	0.0000000	V1
Zinc	0.0055897	0.0016424	V0	0.0010544	V0	0.0002837	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**24-Feb**		**24-Feb**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	5.70	V0	0.34	V0
Aluminum	0.1380326	0.1212558	V0	0.0000000	V1
Antimony	0.0001784	0.0000359	V0	0.0000000	V1
Arsenic	0.0001060	0.0000355	V0	0.0000000	V1
Barium	0.0092847	0.0012711	V0	0.0000000	V1
Beryllium	0.0000946	0.0000154	V0	0.0000151	V4
Bismuth	0.0000093	0.0000141	V0	0.0000091	V0
Cadmium	0.0000174	0.0000025	V0	0.0000000	V1
Calcium	0.4112124	0.1073531	V0	0.0000000	V1
Cerium	0.0000174	0.0001249	V0	0.0000000	V1
Cesium	0.0000100	0.0000103	V0	0.0000000	V1
Chromium	0.0022262	0.0003476	V0	0.0000000	V1
Cobalt	0.0000273	0.0000843	V0	0.0000684	V0
Copper	0.0017171	0.0004244	V0	0.0000876	V0
Iron	0.0393063	0.0890027	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000579	V0	0.0000000	V1
Lead	0.0008577	0.0000850	V0	0.0000000	V1
Lithium	0.0000374	0.0001235	V0	0.0000040	V0
Magnesium	0.0091409	0.0195303	V0	0.0006944	V0
Manganese	0.0006949	0.0025658	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000609	V0	0.0000000	V1
Neodymium	0.0000140	0.0000525	V0	0.0000009	V0
Nickel	0.0005429	0.0003677	V0	0.0002020	V0
Niobium	0.0000202	0.0000165	V0	0.0000000	V1
Palladium	0.0000632	0.0000036	V0	0.0000037	V0
Phosphorus	0.0459574	0.0068068	V0	0.0053935	V0
Platinum	0.0000088	0.0000020	V0	0.0000034	V0
Potassium	0.0061261	0.0398604	V0	0.0007653	V0
Praseodymium	0.0000070	0.0000141	V0	0.0000000	V1
Rubidium	0.0000184	0.0001576	V0	0.0000000	V1
Samarium	0.0000133	0.0000112	V0	0.0000014	V0
Selenium	0.0003366	0.0000935	V0	0.0000316	V0
Silicon	0.7676322	0.4378310	V0	0.0638468	V0
Silver	0.0000100	0.0000017	V0	0.0000000	V1
Sodium	0.0169447	0.0817846	V0	0.0015374	V0
Strontium	0.0003375	0.0003884	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000019	V0	0.0000005	V0
Thorium	0.0000059	0.0000173	V0	0.0000000	V1
Tin	0.0004414	0.0000463	V0	0.0000000	V1
Titanium	0.0015201	0.0044267	V0	0.0001434	V0
Tungsten	0.0000938	0.0000666	V0	0.0000725	V0
Uranium	0.0000048	0.0000050	V0	0.0000003	V0
Vanadium	0.0007697	0.0004591	V0	0.0000000	V1
Zinc	0.0055897	0.0023125	V0	0.0002837	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		01-Mar		01-Mar		01-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		22.7		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	13.90	V0	11.37	V0	0.00	V1
Aluminum	0.1380326	0.2204918	V0	0.1848374	V0	0.0000000	V1
Antimony	0.0001784	0.0001735	V0	0.0003551	V0	0.0000000	V1
Arsenic	0.0001060	0.0001120	V0	0.0001080	V0	0.0000000	V1
Barium	0.0092847	0.0025016	V0	0.0045039	V0	0.0000000	V1
Beryllium	0.0000946	0.0000059	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000186	V0	0.0000146	V0	0.0000012	V0
Cadmium	0.0000174	0.0000484	V0	0.0000266	V0	0.0000000	V1
Calcium	0.4112124	0.2677867	V0	0.4430596	V0	0.0000000	V1
Cerium	0.0000174	0.0002806	V0	0.0002782	V0	0.0000000	V1
Cesium	0.0000100	0.0000152	V0	0.0000124	V0	0.0000000	V1
Chromium	0.0022262	0.0005298	V0	0.0005462	V0	0.0001908	V0
Cobalt	0.0000273	0.0001302	V0	0.0001383	V0	0.0000609	V0
Copper	0.0017171	0.0014725	V0	0.0022038	V0	0.0000000	V1
Iron	0.0393063	0.2147301	V0	0.3474882	V0	0.0023515	V0
Lanthanum	0.0000130	0.0001760	V0	0.0001631	V0	0.0000000	V1
Lead	0.0008577	0.0005849	V0	0.0004842	V0	0.0000000	V1
Lithium	0.0000374	0.0002267	V0	0.0001498	V0	0.0000033	V0
Magnesium	0.0091409	0.0685990	V0	0.0805661	V0	0.0007753	V0
Manganese	0.0006949	0.0045256	V0	0.0063350	V0	0.0000405	V0
Molybdenum	0.0007116	0.0002060	V0	0.0001762	V0	0.0000000	V1
Neodymium	0.0000140	0.0001129	V0	0.0001116	V0	0.0000000	V1
Nickel	0.0005429	0.0009164	V0	0.0004650	V0	0.0001753	V0
Niobium	0.0000202	0.0000317	V0	0.0000280	V0	0.0000000	V1
Palladium	0.0000632	0.0000048	V0	0.0000083	V0	0.0000000	V1
Phosphorus	0.0459574	0.0111865	V0	0.0110163	V0	0.0073148	V0
Platinum	0.0000088	0.0000011	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.1072894	V0	0.0995679	V0	0.0007873	V0
Praseodymium	0.0000070	0.0000314	V0	0.0000291	V0	0.0000000	V1
Rubidium	0.0000184	0.0003580	V0	0.0003177	V0	0.0000000	V1
Samarium	0.0000133	0.0000202	V0	0.0000169	V0	0.0000000	V1
Selenium	0.0003366	0.0001893	V0	0.0001596	V0	0.0000000	V1
Silicon	0.7676322	0.7033024	V0	0.6546395	V0	0.0000000	V1
Silver	0.0000100	0.0000016	V0	0.0000022	V0	0.0000000	V1
Sodium	0.0169447	0.2326432	V0	0.2976303	V0	0.0014669	V0
Strontium	0.0003375	0.0009837	V0	0.0011783	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000017	V0	0.0000000	V1
Thallium	0.0000090	0.0000031	V0	0.0000023	V0	0.0000000	V1
Thorium	0.0000059	0.0000367	V0	0.0000294	V0	0.0000000	V1
Tin	0.0004414	0.0001341	V0	0.0002548	V0	0.0000000	V1
Titanium	0.0015201	0.0084177	V0	0.0081343	V0	0.0002391	V0
Tungsten	0.0000938	0.0001172	V0	0.0001866	V0	0.0000530	V0
Uranium	0.0000048	0.0000089	V0	0.0000091	V0	0.0000000	V1
Vanadium	0.0007697	0.0017166	V0	0.0005203	V0	0.0000000	V1
Zinc	0.0055897	0.0070966	V0	0.0061226	V0	0.0002529	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		01-Mar		01-Mar		01-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	12.00	V0	3.38	V0	0.00	V1
Aluminum	0.1380326	0.1722965	V0	0.0239292	V0	0.0000000	V1
Antimony	0.0001784	0.0005322	V0	0.0000448	V0	0.0000000	V1
Arsenic	0.0001060	0.0001153	V0	0.0000702	V0	0.0000000	V1
Barium	0.0092847	0.0054032	V0	0.0005734	V0	0.0000000	V1
Beryllium	0.0000946	0.0000049	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000272	V0	0.0000338	V0	0.0000012	V0
Cadmium	0.0000174	0.0000558	V0	0.0000192	V0	0.0000000	V1
Calcium	0.4112124	0.4015397	V0	0.0449960	V0	0.0000000	V1
Cerium	0.0000174	0.0002520	V0	0.0000249	V0	0.0000000	V1
Cesium	0.0000100	0.0000110	V0	0.0000015	V0	0.0000000	V1
Chromium	0.0022262	0.0004890	V0	0.0002061	V0	0.0001908	V0
Cobalt	0.0000273	0.0001194	V0	0.0000665	V0	0.0000609	V0
Copper	0.0017171	0.0057173	V4	0.0002521	V0	0.0000000	V1
Iron	0.0393063	0.3654974	V0	0.0207126	V0	0.0023515	V0
Lanthanum	0.0000130	0.0001410	V0	0.0000327	V0	0.0000000	V1
Lead	0.0008577	0.0006563	V0	0.0001752	V0	0.0000000	V1
Lithium	0.0000374	0.0001566	V0	0.0000247	V0	0.0000033	V0
Magnesium	0.0091409	0.0837213	V0	0.0220717	V0	0.0007753	V0
Manganese	0.0006949	0.0065465	V0	0.0005318	V0	0.0000405	V0
Molybdenum	0.0007116	0.0002202	V0	0.0000334	V0	0.0000000	V1
Neodymium	0.0000140	0.0000989	V0	0.0000085	V0	0.0000000	V1
Nickel	0.0005429	0.0003796	V0	0.0003147	V0	0.0001753	V0
Niobium	0.0000202	0.0000258	V0	0.0000035	V0	0.0000000	V1
Palladium	0.0000632	0.0000085	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0111861	V0	0.0070166	V0	0.0073148	V0
Platinum	0.0000088	0.0000009	V0	0.0000005	V0	0.0000000	V1
Potassium	0.0061261	0.0970439	V0	0.0324674	V0	0.0007873	V0
Praseodymium	0.0000070	0.0000276	V0	0.0000023	V0	0.0000000	V1
Rubidium	0.0000184	0.0002862	V0	0.0000666	V0	0.0000000	V1
Samarium	0.0000133	0.0000170	V0	0.0000010	V0	0.0000000	V1
Selenium	0.0003366	0.0001577	V0	0.0000383	V0	0.0000000	V1
Silicon	0.7676322	0.7079907	V0	0.1298509	V0	0.0000000	V1
Silver	0.0000100	0.0000016	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.5301845	V4	0.1234496	V0	0.0014669	V0
Strontium	0.0003375	0.0011780	V0	0.0002235	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000022	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000258	V0	0.0000028	V0	0.0000000	V1
Tin	0.0004414	0.0003103	V0	0.0000494	V0	0.0000000	V1
Titanium	0.0015201	0.0076731	V0	0.0012448	V0	0.0002391	V0
Tungsten	0.0000938	0.0002072	V0	0.0000615	V0	0.0000530	V0
Uranium	0.0000048	0.0000086	V0	0.0000013	V0	0.0000000	V1
Vanadium	0.0007697	0.0004699	V0	0.0001379	V0	0.0000000	V1
Zinc	0.0055897	0.0064842	V0	0.0021071	V0	0.0002529	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		01-Mar		01-Mar		01-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		22.8		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	14.00	V0	8.56	V0	0.00	V1
Aluminum	0.1380326	0.2413023	V0	0.1805744	V0	0.0000000	V1
Antimony	0.0001784	0.0001447	V0	0.0000407	V0	0.0000000	V1
Arsenic	0.0001060	0.0001179	V0	0.0000805	V0	0.0000000	V1
Barium	0.0092847	0.0026971	V0	0.0018991	V0	0.0000000	V1
Beryllium	0.0000946	0.0000070	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000106	V0	0.0000236	V0	0.0000012	V0
Cadmium	0.0000174	0.0000375	V0	0.0000138	V0	0.0000000	V1
Calcium	0.4112124	0.2986851	V0	0.1081087	V0	0.0000000	V1
Cerium	0.0000174	0.0002927	V0	0.0004175	V0	0.0000000	V1
Cesium	0.0000100	0.0000160	V0	0.0000135	V0	0.0000000	V1
Chromium	0.0022262	0.0005266	V0	0.0003735	V0	0.0001908	V0
Cobalt	0.0000273	0.0001275	V0	0.0001116	V0	0.0000609	V0
Copper	0.0017171	0.0007821	V0	0.0005896	V0	0.0000000	V1
Iron	0.0393063	0.2295593	V0	0.1745401	V0	0.0023515	V0
Lanthanum	0.0000130	0.0001761	V0	0.0001276	V0	0.0000000	V1
Lead	0.0008577	0.0004609	V0	0.0002394	V0	0.0000000	V1
Lithium	0.0000374	0.0002661	V0	0.0001802	V0	0.0000033	V0
Magnesium	0.0091409	0.0687770	V0	0.0553539	V0	0.0007753	V0
Manganese	0.0006949	0.0047596	V0	0.0028938	V0	0.0000405	V0
Molybdenum	0.0007116	0.0002402	V0	0.0000763	V0	0.0000000	V1
Neodymium	0.0000140	0.0001251	V0	0.0000898	V0	0.0000000	V1
Nickel	0.0005429	0.0009225	V0	0.0004257	V0	0.0001753	V0
Niobium	0.0000202	0.0000320	V0	0.0000214	V0	0.0000000	V1
Palladium	0.0000632	0.0000029	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0113812	V0	0.0102748	V0	0.0073148	V0
Platinum	0.0000088	0.0000011	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.1083692	V0	0.0783357	V0	0.0007873	V0
Praseodymium	0.0000070	0.0000327	V0	0.0000226	V0	0.0000000	V1
Rubidium	0.0000184	0.0003638	V0	0.0002825	V0	0.0000000	V1
Samarium	0.0000133	0.0000220	V0	0.0000155	V0	0.0000000	V1
Selenium	0.0003366	0.0002355	V0	0.0001471	V0	0.0000000	V1
Silicon	0.7676322	0.8145364	V0	0.6132210	V0	0.0000000	V1
Silver	0.0000100	0.0000014	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.2242126	V0	0.2049146	V0	0.0014669	V0
Strontium	0.0003375	0.0009976	V0	0.0007225	V0	0.0000000	V1
Tantalum	0.0000394	0.0000021	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000025	V0	0.0000015	V0	0.0000000	V1
Thorium	0.0000059	0.0000377	V0	0.0000257	V0	0.0000000	V1
Tin	0.0004414	0.0001299	V0	0.0000679	V0	0.0000000	V1
Titanium	0.0015201	0.0093596	V0	0.0072981	V0	0.0002391	V0
Tungsten	0.0000938	0.0001212	V0	0.0001111	V0	0.0000530	V0
Uranium	0.0000048	0.0000105	V0	0.0000069	V0	0.0000000	V1
Vanadium	0.0007697	0.0021084	V0	0.0006907	V0	0.0000000	V1
Zinc	0.0055897	0.0059314	V0	0.0032511	V0	0.0002529	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**01-Mar**		**01-Mar**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24.1**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	22.74	V0	0.00	V1
Aluminum	0.1380326	0.6317128	V0	0.0000000	V1
Antimony	0.0001784	0.0002264	V0	0.0000000	V1
Arsenic	0.0001060	0.0002023	V0	0.0000000	V1
Barium	0.0092847	0.0052242	V0	0.0000000	V1
Beryllium	0.0000946	0.0000167	V0	0.0000000	V1
Bismuth	0.0000093	0.0001267	V0	0.0000012	V0
Cadmium	0.0000174	0.0000547	V0	0.0000000	V1
Calcium	0.4112124	0.6581005	V0	0.0000000	V1
Cerium	0.0000174	0.0007201	V0	0.0000000	V1
Cesium	0.0000100	0.0000390	V0	0.0000000	V1
Chromium	0.0022262	0.0013506	V0	0.0001908	V0
Cobalt	0.0000273	0.0002246	V0	0.0000609	V0
Copper	0.0017171	0.0013975	V0	0.0000000	V1
Iron	0.0393063	0.4889148	V0	0.0023515	V0
Lanthanum	0.0000130	0.0003980	V0	0.0000000	V1
Lead	0.0008577	0.0009118	V0	0.0000000	V1
Lithium	0.0000374	0.0007531	V0	0.0000033	V0
Magnesium	0.0091409	0.1299404	V0	0.0007753	V0
Manganese	0.0006949	0.0115327	V0	0.0000405	V0
Molybdenum	0.0007116	0.0003385	V0	0.0000000	V1
Neodymium	0.0000140	0.0003025	V0	0.0000000	V1
Nickel	0.0005429	0.0018512	V0	0.0001753	V0
Niobium	0.0000202	0.0000931	V0	0.0000000	V1
Palladium	0.0000632	0.0000114	V0	0.0000000	V1
Phosphorus	0.0459574	0.0148691	V0	0.0073148	V0
Platinum	0.0000088	0.0000016	V0	0.0000000	V1
Potassium	0.0061261	0.2136992	V0	0.0007873	V0
Praseodymium	0.0000070	0.0000806	V0	0.0000000	V1
Rubidium	0.0000184	0.0008128	V0	0.0000000	V1
Samarium	0.0000133	0.0000513	V0	0.0000000	V1
Selenium	0.0003366	0.0004803	V0	0.0000000	V1
Silicon	0.7676322	1.5654536	V0	0.0000000	V1
Silver	0.0000100	0.0000038	V0	0.0000000	V1
Sodium	0.0169447	0.2332738	V0	0.0014669	V0
Strontium	0.0003375	0.0020462	V0	0.0000000	V1
Tantalum	0.0000394	0.0000059	V0	0.0000000	V1
Thallium	0.0000090	0.0000061	V0	0.0000000	V1
Thorium	0.0000059	0.0000907	V0	0.0000000	V1
Tin	0.0004414	0.0001852	V0	0.0000000	V1
Titanium	0.0015201	0.0253580	V0	0.0002391	V0
Tungsten	0.0000938	0.0001550	V0	0.0000530	V0
Uranium	0.0000048	0.0000238	V0	0.0000000	V1
Vanadium	0.0007697	0.0031361	V0	0.0000000	V1
Zinc	0.0055897	0.0124378	V0	0.0002529	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		07-Mar		07-Mar		07-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	7.99	V0	5.84	V0	0.26	V0
Aluminum	0.1380326	0.1956337	V0	0.0641990	V0	0.0000000	V1
Antimony	0.0001784	0.0000216	V0	0.0000518	V0	0.0000000	V1
Arsenic	0.0001060	0.0000662	V0	0.0000308	V0	0.0000000	V1
Barium	0.0092847	0.0016727	V0	0.0010739	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000045	V0	0.0000054	V0	0.0000020	V0
Cadmium	0.0000174	0.0000071	V0	0.0000040	V0	0.0000000	V1
Calcium	0.4112124	0.1809386	V0	0.0743337	V0	0.0000000	V1
Cerium	0.0000174	0.0002285	V0	0.0000863	V0	0.0000012	V0
Cesium	0.0000100	0.0000130	V0	0.0000042	V0	0.0000000	V1
Chromium	0.0022262	0.0005589	V0	0.0004147	V0	0.0002265	V0
Cobalt	0.0000273	0.0001012	V0	0.0000707	V0	0.0000821	V0
Copper	0.0017171	0.0007301	V0	0.0005048	V0	0.0001022	V0
Iron	0.0393063	0.1657744	V0	0.0592021	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001124	V0	0.0000408	V0	0.0000000	V1
Lead	0.0008577	0.0001669	V0	0.0000950	V0	0.0000000	V1
Lithium	0.0000374	0.0001797	V0	0.0000634	V0	0.0000055	V0
Magnesium	0.0091409	0.0466356	V0	0.0199156	V0	0.0008075	V0
Manganese	0.0006949	0.0029288	V0	0.0016719	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000571	V0	0.0000701	V0	0.0000000	V1
Neodymium	0.0000140	0.0000939	V0	0.0000358	V0	0.0000000	V1
Nickel	0.0005429	0.0004684	V0	0.0004160	V0	0.0001149	V0
Niobium	0.0000202	0.0000249	V0	0.0000084	V0	0.0000000	V1
Palladium	0.0000632	0.0000028	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0084219	V0	0.0074547	V0	0.0056732	V0
Platinum	0.0000088	0.0000000	V1	0.0000011	V0	0.0000000	V1
Potassium	0.0061261	0.0686309	V0	0.0399220	V0	0.0023818	V0
Praseodymium	0.0000070	0.0000259	V0	0.0000095	V0	0.0000000	V1
Rubidium	0.0000184	0.0002597	V0	0.0001041	V0	0.0000000	V1
Samarium	0.0000133	0.0000173	V0	0.0000055	V0	0.0000000	V1
Selenium	0.0003366	0.0001453	V0	0.0000557	V0	0.0000000	V1
Silicon	0.7676322	0.6907267	V0	0.3285063	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000008	V0	0.0000000	V1
Sodium	0.0169447	0.0745796	V0	0.1044740	V0	0.0020130	V0
Strontium	0.0003375	0.0006576	V0	0.0003199	V0	0.0000180	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000014	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000299	V0	0.0000105	V0	0.0000000	V1
Tin	0.0004414	0.0000734	V0	0.0000777	V0	0.0000000	V1
Titanium	0.0015201	0.0068802	V0	0.0025554	V0	0.0004053	V0
Tungsten	0.0000938	0.0000664	V0	0.0000608	V0	0.0000791	V0
Uranium	0.0000048	0.0000209	V0	0.0000106	V0	0.0000000	V1
Vanadium	0.0007697	0.0005332	V0	0.0003062	V0	0.0000000	V1
Zinc	0.0055897	0.0022885	V0	0.0040912	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		07-Mar		07-Mar		07-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		23.7		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	8.08	V0	3.14	V0	0.26	V0
Aluminum	0.1380326	0.0929806	V0	0.0129579	V0	0.0000000	V1
Antimony	0.0001784	0.0000966	V0	0.0000157	V0	0.0000000	V1
Arsenic	0.0001060	0.0000422	V0	0.0000184	V0	0.0000000	V1
Barium	0.0092847	0.0026015	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000104	V0	0.0000072	V0	0.0000020	V0
Cadmium	0.0000174	0.0000068	V0	0.0000044	V0	0.0000000	V1
Calcium	0.4112124	0.1660031	V0	0.0219283	V0	0.0000000	V1
Cerium	0.0000174	0.0001182	V0	0.0000137	V0	0.0000012	V0
Cesium	0.0000100	0.0000063	V0	0.0000004	V0	0.0000000	V1
Chromium	0.0022262	0.0003564	V0	0.0000000	V1	0.0002265	V0
Cobalt	0.0000273	0.0000940	V0	0.0000489	V0	0.0000821	V0
Copper	0.0017171	0.0016025	V0	0.0001897	V0	0.0001022	V0
Iron	0.0393063	0.0855038	V0	0.0111878	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000582	V0	0.0000088	V0	0.0000000	V1
Lead	0.0008577	0.0001588	V0	0.0000637	V0	0.0000000	V1
Lithium	0.0000374	0.0000936	V0	0.0000182	V0	0.0000055	V0
Magnesium	0.0091409	0.0325800	V0	0.0076597	V0	0.0008075	V0
Manganese	0.0006949	0.0037842	V0	0.0002597	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000815	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000478	V0	0.0000036	V0	0.0000000	V1
Nickel	0.0005429	0.0003194	V0	0.0001805	V0	0.0001149	V0
Niobium	0.0000202	0.0000110	V0	0.0000021	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0113570	V0	0.0067291	V0	0.0056732	V0
Platinum	0.0000088	0.0000006	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0934302	V0	0.0114475	V0	0.0023818	V0
Praseodymium	0.0000070	0.0000126	V0	0.0000008	V0	0.0000000	V1
Rubidium	0.0000184	0.0001944	V0	0.0000258	V0	0.0000000	V1
Samarium	0.0000133	0.0000074	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000692	V0	0.0000155	V0	0.0000000	V1
Silicon	0.7676322	0.3663952	V0	0.0383586	V0	0.0000000	V1
Silver	0.0000100	0.0000057	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.2016123	V0	0.0339650	V0	0.0020130	V0
Strontium	0.0003375	0.0006932	V0	0.0000869	V0	0.0000180	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000008	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000150	V0	0.0000012	V0	0.0000000	V1
Tin	0.0004414	0.0001277	V0	0.0000444	V0	0.0000000	V1
Titanium	0.0015201	0.0032938	V0	0.0006010	V0	0.0004053	V0
Tungsten	0.0000938	0.0001654	V0	0.0000413	V0	0.0000791	V0
Uranium	0.0000048	0.0000149	V0	0.0000061	V0	0.0000000	V1
Vanadium	0.0007697	0.0003728	V0	0.0000669	V0	0.0000000	V1
Zinc	0.0055897	0.0064341	V0	0.0009606	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		07-Mar		07-Mar		07-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	10.77	V0	6.26	V0	0.26	V0
Aluminum	0.1380326	0.2677757	V0	0.1463549	V0	0.0000000	V1
Antimony	0.0001784	0.0000175	V0	0.0000178	V0	0.0000000	V1
Arsenic	0.0001060	0.0000753	V0	0.0000675	V0	0.0000000	V1
Barium	0.0092847	0.0022640	V0	0.0014232	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000183	V0	0.0000422	V0	0.0000020	V0
Cadmium	0.0000174	0.0000032	V0	0.0000049	V0	0.0000000	V1
Calcium	0.4112124	0.1971141	V0	0.0869578	V0	0.0000000	V1
Cerium	0.0000174	0.0003071	V0	0.0001771	V0	0.0000012	V0
Cesium	0.0000100	0.0000182	V0	0.0000104	V0	0.0000000	V1
Chromium	0.0022262	0.0006953	V0	0.0002366	V0	0.0002265	V0
Cobalt	0.0000273	0.0001389	V0	0.0000936	V0	0.0000821	V0
Copper	0.0017171	0.0004242	V0	0.0003551	V0	0.0001022	V0
Iron	0.0393063	0.2340073	V0	0.1289094	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001505	V0	0.0000915	V0	0.0000000	V1
Lead	0.0008577	0.0001778	V0	0.0001429	V0	0.0000000	V1
Lithium	0.0000374	0.0002508	V0	0.0001209	V0	0.0000055	V0
Magnesium	0.0091409	0.0525845	V0	0.0318416	V0	0.0008075	V0
Manganese	0.0006949	0.0038953	V0	0.0023374	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000662	V0	0.0000407	V0	0.0000000	V1
Neodymium	0.0000140	0.0001301	V0	0.0000767	V0	0.0000000	V1
Nickel	0.0005429	0.0006825	V0	0.0002724	V0	0.0001149	V0
Niobium	0.0000202	0.0000383	V0	0.0000150	V0	0.0000000	V1
Palladium	0.0000632	0.0000039	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0104116	V0	0.0077081	V0	0.0056732	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0853417	V0	0.0518080	V0	0.0023818	V0
Praseodymium	0.0000070	0.0000350	V0	0.0000197	V0	0.0000000	V1
Rubidium	0.0000184	0.0003476	V0	0.0002036	V0	0.0000000	V1
Samarium	0.0000133	0.0000235	V0	0.0000129	V0	0.0000000	V1
Selenium	0.0003366	0.0001581	V0	0.0000860	V0	0.0000000	V1
Silicon	0.7676322	1.0167986	V0	0.4882124	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000005	V0	0.0000000	V1
Sodium	0.0169447	0.0641933	V0	0.0702956	V0	0.0020130	V0
Strontium	0.0003375	0.0008244	V0	0.0004442	V0	0.0000180	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000018	V0	0.0000009	V0	0.0000000	V1
Thorium	0.0000059	0.0000398	V0	0.0000213	V0	0.0000000	V1
Tin	0.0004414	0.0000869	V0	0.0000697	V0	0.0000000	V1
Titanium	0.0015201	0.0093867	V0	0.0046954	V0	0.0004053	V0
Tungsten	0.0000938	0.0000884	V0	0.0000571	V0	0.0000791	V0
Uranium	0.0000048	0.0000229	V0	0.0000197	V0	0.0000000	V1
Vanadium	0.0007697	0.0006592	V0	0.0003970	V0	0.0000000	V1
Zinc	0.0055897	0.0017386	V0	0.0020271	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**07-Mar**		**07-Mar**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	6.66	V0	0.26	V0
Aluminum	0.1380326	0.1520754	V0	0.0000000	V1
Antimony	0.0001784	0.0000224	V0	0.0000000	V1
Arsenic	0.0001060	0.0000485	V0	0.0000000	V1
Barium	0.0092847	0.0011855	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000206	V0	0.0000020	V0
Cadmium	0.0000174	0.0000054	V0	0.0000000	V1
Calcium	0.4112124	0.1492615	V0	0.0000000	V1
Cerium	0.0000174	0.0001778	V0	0.0000012	V0
Cesium	0.0000100	0.0000102	V0	0.0000000	V1
Chromium	0.0022262	0.0005436	V0	0.0002265	V0
Cobalt	0.0000273	0.0000865	V0	0.0000821	V0
Copper	0.0017171	0.0006549	V0	0.0001022	V0
Iron	0.0393063	0.1233920	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000885	V0	0.0000000	V1
Lead	0.0008577	0.0001519	V0	0.0000000	V1
Lithium	0.0000374	0.0001813	V0	0.0000055	V0
Magnesium	0.0091409	0.0352536	V0	0.0008075	V0
Manganese	0.0006949	0.0028171	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000656	V0	0.0000000	V1
Neodymium	0.0000140	0.0000753	V0	0.0000000	V1
Nickel	0.0005429	0.0003447	V0	0.0001149	V0
Niobium	0.0000202	0.0000222	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0092185	V0	0.0056732	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0490246	V0	0.0023818	V0
Praseodymium	0.0000070	0.0000193	V0	0.0000000	V1
Rubidium	0.0000184	0.0001977	V0	0.0000000	V1
Samarium	0.0000133	0.0000132	V0	0.0000000	V1
Selenium	0.0003366	0.0001090	V0	0.0000000	V1
Silicon	0.7676322	0.4280788	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0773040	V0	0.0020130	V0
Strontium	0.0003375	0.0005174	V0	0.0000180	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000008	V0	0.0000000	V1
Thorium	0.0000059	0.0000222	V0	0.0000000	V1
Tin	0.0004414	0.0000838	V0	0.0000000	V1
Titanium	0.0015201	0.0056534	V0	0.0004053	V0
Tungsten	0.0000938	0.0000898	V0	0.0000791	V0
Uranium	0.0000048	0.0000200	V0	0.0000000	V1
Vanadium	0.0007697	0.0003286	V0	0.0000000	V1
Zinc	0.0055897	0.0026750	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		13-Mar		13-Mar		13-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.81	V0	4.21	V0	0.12	V0
Aluminum	0.1380326	0.0117938	V0	0.0236569	V0	0.0000000	V1
Antimony	0.0001784	0.0000112	V0	0.0001074	V0	0.0000000	V1
Arsenic	0.0001060	0.0000623	V0	0.0000540	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0009720	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000000	V1	0.0000088	V0	0.0000000	V1
Cadmium	0.0000174	0.0000000	V1	0.0000034	V0	0.0000000	V1
Calcium	0.4112124	0.0000000	V1	0.0464275	V0	0.0000000	V1
Cerium	0.0000174	0.0000124	V0	0.0000363	V0	0.0000000	V1
Cesium	0.0000100	0.0000015	V0	0.0000022	V0	0.0000000	V1
Chromium	0.0022262	0.0001206	V0	0.0002485	V0	0.0000000	V1
Cobalt	0.0000273	0.0000468	V0	0.0000727	V0	0.0000727	V0
Copper	0.0017171	0.0001756	V0	0.0005590	V0	0.0005111	V0
Iron	0.0393063	0.0141535	V0	0.0340129	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000075	V0	0.0000202	V0	0.0000000	V1
Lead	0.0008577	0.0000570	V0	0.0000965	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0041017	V0	0.0087346	V0	0.0005156	V0
Manganese	0.0006949	0.0003802	V0	0.0010216	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000898	V0	0.0000000	V1
Neodymium	0.0000140	0.0000041	V0	0.0000101	V0	0.0000000	V1
Nickel	0.0005429	0.0001121	V0	0.0002692	V0	0.0000661	V0
Niobium	0.0000202	0.0000030	V0	0.0000052	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000032	V0	0.0000027	V0
Phosphorus	0.0459574	0.0020931	V0	0.0044077	V0	0.0030694	V0
Platinum	0.0000088	0.0000004	V0	0.0000000	V1	0.0000005	V0
Potassium	0.0061261	0.0090996	V0	0.0199532	V0	0.0004577	V0
Praseodymium	0.0000070	0.0000015	V0	0.0000031	V0	0.0000000	V1
Rubidium	0.0000184	0.0000231	V0	0.0000461	V0	0.0000000	V1
Samarium	0.0000133	0.0000008	V0	0.0000022	V0	0.0000000	V1
Selenium	0.0003366	0.0000394	V0	0.0000690	V0	0.0000000	V1
Silicon	0.7676322	0.0436308	V0	0.0458442	V0	0.0000000	V1
Silver	0.0000100	0.0000009	V0	0.0000019	V0	0.0000000	V1
Sodium	0.0169447	0.0071009	V0	0.0256719	V0	0.0000000	V1
Strontium	0.0003375	0.0000597	V0	0.0001823	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000004	V0	0.0000006	V0	0.0000000	V1
Thorium	0.0000059	0.0000017	V0	0.0000036	V0	0.0000000	V1
Tin	0.0004414	0.0000316	V0	0.0000736	V0	0.0000000	V1
Titanium	0.0015201	0.0009057	V0	0.0013607	V0	0.0001771	V0
Tungsten	0.0000938	0.0000489	V0	0.0000494	V0	0.0000709	V0
Uranium	0.0000048	0.0000022	V0	0.0000024	V0	0.0000000	V1
Vanadium	0.0007697	0.0000536	V0	0.0002863	V0	0.0000000	V1
Zinc	0.0055897	0.0010272	V0	0.0021962	V0	0.0005368	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		13-Mar		13-Mar		13-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.31	V0	2.72	V0	0.12	V0
Aluminum	0.1380326	0.0335460	V0	0.0093800	V0	0.0000000	V1
Antimony	0.0001784	0.0002658	V0	0.0000207	V0	0.0000000	V1
Arsenic	0.0001060	0.0000626	V0	0.0000278	V0	0.0000000	V1
Barium	0.0092847	0.0028359	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000231	V0	0.0000017	V0	0.0000000	V1
Cadmium	0.0000174	0.0000026	V0	0.0000030	V0	0.0000000	V1
Calcium	0.4112124	0.0765912	V0	0.0221482	V0	0.0000000	V1
Cerium	0.0000174	0.0000552	V0	0.0000103	V0	0.0000000	V1
Cesium	0.0000100	0.0000027	V0	0.0000010	V0	0.0000000	V1
Chromium	0.0022262	0.0004041	V0	0.0000000	V1	0.0000000	V1
Cobalt	0.0000273	0.0000774	V0	0.0000436	V0	0.0000727	V0
Copper	0.0017171	0.0016424	V0	0.0001941	V0	0.0005111	V0
Iron	0.0393063	0.0829419	V0	0.0098884	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000257	V0	0.0000075	V0	0.0000000	V1
Lead	0.0008577	0.0000992	V0	0.0000673	V0	0.0000000	V1
Lithium	0.0000374	0.0000017	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0139232	V0	0.0042897	V0	0.0005156	V0
Manganese	0.0006949	0.0019832	V0	0.0003667	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001561	V0	0.0000456	V0	0.0000000	V1
Neodymium	0.0000140	0.0000166	V0	0.0000039	V0	0.0000000	V1
Nickel	0.0005429	0.0004813	V0	0.0001400	V0	0.0000661	V0
Niobium	0.0000202	0.0000071	V0	0.0000026	V0	0.0000000	V1
Palladium	0.0000632	0.0000053	V0	0.0000000	V1	0.0000027	V0
Phosphorus	0.0459574	0.0053599	V0	0.0028327	V0	0.0030694	V0
Platinum	0.0000088	0.0000012	V0	0.0000000	V1	0.0000005	V0
Potassium	0.0061261	0.0352664	V0	0.0127519	V0	0.0004577	V0
Praseodymium	0.0000070	0.0000055	V0	0.0000012	V0	0.0000000	V1
Rubidium	0.0000184	0.0000667	V0	0.0000265	V0	0.0000000	V1
Samarium	0.0000133	0.0000028	V0	0.0000008	V0	0.0000000	V1
Selenium	0.0003366	0.0000971	V0	0.0000377	V0	0.0000000	V1
Silicon	0.7676322	0.0354950	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000036	V0	0.0000009	V0	0.0000000	V1
Sodium	0.0169447	0.2576740	V0	0.0085506	V0	0.0000000	V1
Strontium	0.0003375	0.0003702	V0	0.0000651	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000008	V0	0.0000004	V0	0.0000000	V1
Thorium	0.0000059	0.0000049	V0	0.0000012	V0	0.0000000	V1
Tin	0.0004414	0.0001638	V0	0.0000687	V0	0.0000000	V1
Titanium	0.0015201	0.0021520	V0	0.0005545	V0	0.0001771	V0
Tungsten	0.0000938	0.0000903	V0	0.0000432	V0	0.0000709	V0
Uranium	0.0000048	0.0000029	V0	0.0000012	V0	0.0000000	V1
Vanadium	0.0007697	0.0003563	V0	0.0001518	V0	0.0000000	V1
Zinc	0.0055897	0.0024446	V0	0.0012372	V0	0.0005368	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		13-Mar		13-Mar		13-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.66	V0	2.99	V0	0.12	V0
Aluminum	0.1380326	0.0120685	V0	0.0356488	V0	0.0000000	V1
Antimony	0.0001784	0.0000656	V0	0.0000138	V0	0.0000000	V1
Arsenic	0.0001060	0.0000364	V0	0.0000290	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0006079	V0	0.0000000	V1
Beryllium	0.0000946	0.0000081	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000197	V0	0.0000136	V0	0.0000000	V1
Cadmium	0.0000174	0.0000009	V0	0.0000022	V0	0.0000000	V1
Calcium	0.4112124	0.0000000	V1	0.0374934	V0	0.0000000	V1
Cerium	0.0000174	0.0000152	V0	0.0000306	V0	0.0000000	V1
Cesium	0.0000100	0.0000012	V0	0.0000024	V0	0.0000000	V1
Chromium	0.0022262	0.0001115	V0	0.0002260	V0	0.0000000	V1
Cobalt	0.0000273	0.0000491	V0	0.0000840	V0	0.0000727	V0
Copper	0.0017171	0.0003047	V0	0.0007110	V0	0.0005111	V0
Iron	0.0393063	0.0138824	V0	0.0343221	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000074	V0	0.0000170	V0	0.0000000	V1
Lead	0.0008577	0.0000410	V0	0.0000708	V0	0.0000000	V1
Lithium	0.0000374	0.0000000	V1	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0033621	V0	0.0066525	V0	0.0005156	V0
Manganese	0.0006949	0.0003123	V0	0.0008474	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000405	V0	0.0000000	V1
Neodymium	0.0000140	0.0000045	V0	0.0000120	V0	0.0000000	V1
Nickel	0.0005429	0.0002472	V0	0.0003308	V0	0.0000661	V0
Niobium	0.0000202	0.0000033	V0	0.0000078	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000027	V0
Phosphorus	0.0459574	0.0026188	V0	0.0047322	V0	0.0030694	V0
Platinum	0.0000088	0.0000009	V0	0.0000000	V1	0.0000005	V0
Potassium	0.0061261	0.0086744	V0	0.0112465	V0	0.0004577	V0
Praseodymium	0.0000070	0.0000019	V0	0.0000034	V0	0.0000000	V1
Rubidium	0.0000184	0.0000191	V0	0.0000323	V0	0.0000000	V1
Samarium	0.0000133	0.0000017	V0	0.0000032	V0	0.0000000	V1
Selenium	0.0003366	0.0000254	V0	0.0000498	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0525894	V0	0.0000000	V1
Silver	0.0000100	0.0000008	V0	0.0000018	V0	0.0000000	V1
Sodium	0.0169447	0.0082771	V0	0.0080350	V0	0.0000000	V1
Strontium	0.0003375	0.0000554	V0	0.0001078	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000017	V0	0.0000042	V0	0.0000000	V1
Tin	0.0004414	0.0000384	V0	0.0000517	V0	0.0000000	V1
Titanium	0.0015201	0.0010035	V0	0.0019901	V0	0.0001771	V0
Tungsten	0.0000938	0.0000399	V0	0.0000773	V0	0.0000709	V0
Uranium	0.0000048	0.0000020	V0	0.0000025	V0	0.0000000	V1
Vanadium	0.0007697	0.0000469	V0	0.0000828	V0	0.0000000	V1
Zinc	0.0055897	0.0010051	V0	0.0018789	V0	0.0005368	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**13-Mar**		**13-Mar**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	4.41	V0	0.12	V0
Aluminum	0.1380326	0.0447043	V0	0.0000000	V1
Antimony	0.0001784	0.0000205	V0	0.0000000	V1
Arsenic	0.0001060	0.0000236	V0	0.0000000	V1
Barium	0.0092847	0.0005697	V0	0.0000000	V1
Beryllium	0.0000946	0.0000042	V0	0.0000000	V1
Bismuth	0.0000093	0.0000266	V0	0.0000000	V1
Cadmium	0.0000174	0.0000011	V0	0.0000000	V1
Calcium	0.4112124	0.0567733	V0	0.0000000	V1
Cerium	0.0000174	0.0000389	V0	0.0000000	V1
Cesium	0.0000100	0.0000032	V0	0.0000000	V1
Chromium	0.0022262	0.0003356	V0	0.0000000	V1
Cobalt	0.0000273	0.0000785	V0	0.0000727	V0
Copper	0.0017171	0.0004714	V0	0.0005111	V0
Iron	0.0393063	0.0516136	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000207	V0	0.0000000	V1
Lead	0.0008577	0.0000709	V0	0.0000000	V1
Lithium	0.0000374	0.0000216	V0	0.0000000	V1
Magnesium	0.0091409	0.0100667	V0	0.0005156	V0
Manganese	0.0006949	0.0011284	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001423	V0	0.0000000	V1
Neodymium	0.0000140	0.0000153	V0	0.0000000	V1
Nickel	0.0005429	0.0002400	V0	0.0000661	V0
Niobium	0.0000202	0.0000063	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000027	V0
Phosphorus	0.0459574	0.0061995	V0	0.0030694	V0
Platinum	0.0000088	0.0000000	V1	0.0000005	V0
Potassium	0.0061261	0.0159381	V0	0.0004577	V0
Praseodymium	0.0000070	0.0000045	V0	0.0000000	V1
Rubidium	0.0000184	0.0000523	V0	0.0000000	V1
Samarium	0.0000133	0.0000036	V0	0.0000000	V1
Selenium	0.0003366	0.0000476	V0	0.0000000	V1
Silicon	0.7676322	0.1065524	V0	0.0000000	V1
Silver	0.0000100	0.0000011	V0	0.0000000	V1
Sodium	0.0169447	0.0160830	V0	0.0000000	V1
Strontium	0.0003375	0.0001751	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000006	V0	0.0000000	V1
Thorium	0.0000059	0.0000050	V0	0.0000000	V1
Tin	0.0004414	0.0000470	V0	0.0000000	V1
Titanium	0.0015201	0.0016159	V0	0.0001771	V0
Tungsten	0.0000938	0.0000826	V0	0.0000709	V0
Uranium	0.0000048	0.0000029	V0	0.0000000	V1
Vanadium	0.0007697	0.0000930	V0	0.0000000	V1
Zinc	0.0055897	0.0050566	V0	0.0005368	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		19-Mar		19-Mar		19-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.58	V0	8.52	V0	0.04	V1
Aluminum	0.1380326	0.0862815	V0	0.0950452	V0	0.0000000	V1
Antimony	0.0001784	0.0000177	V0	0.0002465	V0	0.0000000	V1
Arsenic	0.0001060	0.0001422	V0	0.0000834	V0	0.0000000	V1
Barium	0.0092847	0.0007990	V0	0.0028898	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000000	V1	0.0000457	V0	0.0000119	V0
Cadmium	0.0000174	0.0000018	V0	0.0000164	V0	0.0000000	V1
Calcium	0.4112124	0.1216204	V0	0.2013103	V0	0.0000000	V1
Cerium	0.0000174	0.0001045	V0	0.0001575	V0	0.0000000	V1
Cesium	0.0000100	0.0000064	V0	0.0000070	V0	0.0000000	V1
Chromium	0.0022262	0.0002797	V0	0.0005964	V0	0.0000000	V1
Cobalt	0.0000273	0.0000961	V0	0.0001260	V0	0.0000612	V0
Copper	0.0017171	0.0002797	V0	0.0016776	V0	0.0000000	V1
Iron	0.0393063	0.1130984	V0	0.1496226	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000478	V0	0.0000864	V0	0.0000000	V1
Lead	0.0008577	0.0000961	V0	0.0001721	V0	0.0000000	V1
Lithium	0.0000374	0.0000477	V0	0.0000499	V0	0.0000000	V1
Magnesium	0.0091409	0.0233455	V0	0.0362614	V0	0.0004966	V0
Manganese	0.0006949	0.0020341	V0	0.0038239	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000303	V0	0.0001495	V0	0.0000000	V1
Neodymium	0.0000140	0.0000417	V0	0.0000564	V0	0.0000000	V1
Nickel	0.0005429	0.0002592	V0	0.0004244	V0	0.0000785	V0
Niobium	0.0000202	0.0000098	V0	0.0000174	V0	0.0000011	V0
Palladium	0.0000632	0.0000000	V1	0.0000068	V0	0.0000000	V1
Phosphorus	0.0459574	0.0050428	V0	0.0070709	V0	0.0032236	V0
Platinum	0.0000088	0.0000000	V1	0.0000011	V0	0.0000000	V1
Potassium	0.0061261	0.0340501	V0	0.0679140	V0	0.0007365	V0
Praseodymium	0.0000070	0.0000109	V0	0.0000145	V0	0.0000000	V1
Rubidium	0.0000184	0.0001269	V0	0.0001720	V0	0.0000000	V1
Samarium	0.0000133	0.0000061	V0	0.0000090	V0	0.0000000	V1
Selenium	0.0003366	0.0000649	V0	0.0001231	V0	0.0000000	V1
Silicon	0.7676322	0.2939571	V0	0.3977764	V0	0.0000000	V1
Silver	0.0000100	0.0000013	V0	0.0000039	V0	0.0000000	V1
Sodium	0.0169447	0.0309484	V0	0.2640968	V0	0.0000000	V1
Strontium	0.0003375	0.0003413	V0	0.0006330	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000015	V0	0.0000018	V0	0.0000000	V1
Thorium	0.0000059	0.0000130	V0	0.0000156	V0	0.0000000	V1
Tin	0.0004414	0.0000282	V0	0.0001978	V0	0.0000000	V1
Titanium	0.0015201	0.0025941	V0	0.0040184	V0	0.0002086	V0
Tungsten	0.0000938	0.0000668	V0	0.0001757	V0	0.0000762	V0
Uranium	0.0000048	0.0000033	V0	0.0000053	V0	0.0000000	V1
Vanadium	0.0007697	0.0002021	V0	0.0005627	V0	0.0000000	V1
Zinc	0.0055897	0.0020826	V0	0.0069753	V0	0.0002571	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		19-Mar		19-Mar		19-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	11.46	V0	2.39	V0	0.04	V1
Aluminum	0.1380326	0.1022911	V0	0.0288132	V0	0.0000000	V1
Antimony	0.0001784	0.0004217	V0	0.0000300	V0	0.0000000	V1
Arsenic	0.0001060	0.0000863	V0	0.0000427	V0	0.0000000	V1
Barium	0.0092847	0.0049407	V0	0.0008146	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000300	V0	0.0000622	V0	0.0000119	V0
Cadmium	0.0000174	0.0000114	V0	0.0000039	V0	0.0000000	V1
Calcium	0.4112124	0.2724653	V0	0.0601727	V0	0.0000000	V1
Cerium	0.0000174	0.0001609	V0	0.0000297	V0	0.0000000	V1
Cesium	0.0000100	0.0000076	V0	0.0000022	V0	0.0000000	V1
Chromium	0.0022262	0.0005711	V0	0.0002166	V0	0.0000000	V1
Cobalt	0.0000273	0.0001369	V0	0.0001067	V0	0.0000612	V0
Copper	0.0017171	0.0027780	V0	0.0006821	V0	0.0000000	V1
Iron	0.0393063	0.1899714	V0	0.0329550	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000879	V0	0.0000492	V0	0.0000000	V1
Lead	0.0008577	0.0001857	V0	0.0001090	V0	0.0000000	V1
Lithium	0.0000374	0.0000585	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0464250	V0	0.0099823	V0	0.0004966	V0
Manganese	0.0006949	0.0048310	V0	0.0008987	V0	0.0000000	V1
Molybdenum	0.0007116	0.0002534	V0	0.0000356	V0	0.0000000	V1
Neodymium	0.0000140	0.0000599	V0	0.0000134	V0	0.0000000	V1
Nickel	0.0005429	0.0004945	V0	0.0002481	V0	0.0000785	V0
Niobium	0.0000202	0.0000168	V0	0.0000057	V0	0.0000011	V0
Palladium	0.0000632	0.0000091	V0	0.0000027	V0	0.0000000	V1
Phosphorus	0.0459574	0.0075753	V0	0.0027275	V0	0.0032236	V0
Platinum	0.0000088	0.0000014	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0909585	V0	0.0175414	V0	0.0007365	V0
Praseodymium	0.0000070	0.0000163	V0	0.0000033	V0	0.0000000	V1
Rubidium	0.0000184	0.0001895	V0	0.0000451	V0	0.0000000	V1
Samarium	0.0000133	0.0000109	V0	0.0000029	V0	0.0000000	V1
Selenium	0.0003366	0.0001430	V0	0.0000425	V0	0.0000000	V1
Silicon	0.7676322	0.4567771	V0	0.1147179	V0	0.0000000	V1
Silver	0.0000100	0.0000137	V0	0.0000022	V0	0.0000000	V1
Sodium	0.0169447	0.7732941	V4	0.0264353	V0	0.0000000	V1
Strontium	0.0003375	0.0009018	V0	0.0001630	V0	0.0000000	V1
Tantalum	0.0000394	0.0000018	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000022	V0	0.0000009	V0	0.0000000	V1
Thorium	0.0000059	0.0000174	V0	0.0000042	V0	0.0000000	V1
Tin	0.0004414	0.0003207	V0	0.0000519	V0	0.0000000	V1
Titanium	0.0015201	0.0049145	V0	0.0011004	V0	0.0002086	V0
Tungsten	0.0000938	0.0002883	V0	0.0001234	V0	0.0000762	V0
Uranium	0.0000048	0.0000055	V0	0.0000016	V0	0.0000000	V1
Vanadium	0.0007697	0.0008568	V0	0.0001593	V0	0.0000000	V1
Zinc	0.0055897	0.0062314	V0	0.0019100	V0	0.0002571	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		19-Mar		19-Mar		19-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.59	V0	2.67	V0	0.04	V1
Aluminum	0.1380326	0.0950286	V0	0.0391323	V0	0.0000000	V1
Antimony	0.0001784	0.0000203	V0	0.0000092	V0	0.0000000	V1
Arsenic	0.0001060	0.0001140	V0	0.0000220	V0	0.0000000	V1
Barium	0.0092847	0.0009972	V0	0.0005337	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000108	V0	0.0000104	V0	0.0000119	V0
Cadmium	0.0000174	0.0000011	V0	0.0000000	V1	0.0000000	V1
Calcium	0.4112124	0.1355048	V0	0.0491792	V0	0.0000000	V1
Cerium	0.0000174	0.0001084	V0	0.0000456	V0	0.0000000	V1
Cesium	0.0000100	0.0000070	V0	0.0000031	V0	0.0000000	V1
Chromium	0.0022262	0.0003439	V0	0.0001415	V0	0.0000000	V1
Cobalt	0.0000273	0.0001031	V0	0.0000957	V0	0.0000612	V0
Copper	0.0017171	0.0003591	V0	0.0001539	V0	0.0000000	V1
Iron	0.0393063	0.1124714	V0	0.0480380	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000535	V0	0.0000218	V0	0.0000000	V1
Lead	0.0008577	0.0000988	V0	0.0000607	V0	0.0000000	V1
Lithium	0.0000374	0.0000573	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0260567	V0	0.0109228	V0	0.0004966	V0
Manganese	0.0006949	0.0019948	V0	0.0006919	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000367	V0	0.0000326	V0	0.0000000	V1
Neodymium	0.0000140	0.0000474	V0	0.0000191	V0	0.0000000	V1
Nickel	0.0005429	0.0002314	V0	0.0001935	V0	0.0000785	V0
Niobium	0.0000202	0.0000120	V0	0.0000053	V0	0.0000011	V0
Palladium	0.0000632	0.0000027	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0030445	V0	0.0030908	V0	0.0032236	V0
Platinum	0.0000088	0.0000005	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0349320	V0	0.0141735	V0	0.0007365	V0
Praseodymium	0.0000070	0.0000119	V0	0.0000052	V0	0.0000000	V1
Rubidium	0.0000184	0.0001324	V0	0.0000510	V0	0.0000000	V1
Samarium	0.0000133	0.0000080	V0	0.0000037	V0	0.0000000	V1
Selenium	0.0003366	0.0000672	V0	0.0000375	V0	0.0000000	V1
Silicon	0.7676322	0.2891709	V0	0.1635244	V0	0.0000000	V1
Silver	0.0000100	0.0000014	V0	0.0000007	V0	0.0000000	V1
Sodium	0.0169447	0.0704790	V0	0.0215245	V0	0.0000000	V1
Strontium	0.0003375	0.0003750	V0	0.0001830	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000018	V0	0.0000006	V0	0.0000000	V1
Thorium	0.0000059	0.0000142	V0	0.0000062	V0	0.0000000	V1
Tin	0.0004414	0.0000489	V0	0.0000234	V0	0.0000000	V1
Titanium	0.0015201	0.0035876	V0	0.0015039	V0	0.0002086	V0
Tungsten	0.0000938	0.0001037	V0	0.0000879	V0	0.0000762	V0
Uranium	0.0000048	0.0000037	V0	0.0000021	V0	0.0000000	V1
Vanadium	0.0007697	0.0002223	V0	0.0001444	V0	0.0000000	V1
Zinc	0.0055897	0.0023550	V0	0.0014793	V0	0.0002571	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**19-Mar**		**19-Mar**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	6.39	V0	0.04	V1
Aluminum	0.1380326	0.1465767	V0	0.0000000	V1
Antimony	0.0001784	0.0000351	V0	0.0000000	V1
Arsenic	0.0001060	0.0000337	V0	0.0000000	V1
Barium	0.0092847	0.0014070	V0	0.0000000	V1
Beryllium	0.0000946	0.0000064	V0	0.0000000	V1
Bismuth	0.0000093	0.0000098	V0	0.0000119	V0
Cadmium	0.0000174	0.0000000	V1	0.0000000	V1
Calcium	0.4112124	0.1702867	V0	0.0000000	V1
Cerium	0.0000174	0.0001715	V0	0.0000000	V1
Cesium	0.0000100	0.0000089	V0	0.0000000	V1
Chromium	0.0022262	0.0004757	V0	0.0000000	V1
Cobalt	0.0000273	0.0001198	V0	0.0000612	V0
Copper	0.0017171	0.0004529	V0	0.0000000	V1
Iron	0.0393063	0.1538624	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000833	V0	0.0000000	V1
Lead	0.0008577	0.0000961	V0	0.0000000	V1
Lithium	0.0000374	0.0001349	V0	0.0000000	V1
Magnesium	0.0091409	0.0346593	V0	0.0004966	V0
Manganese	0.0006949	0.0029663	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000418	V0	0.0000000	V1
Neodymium	0.0000140	0.0000723	V0	0.0000000	V1
Nickel	0.0005429	0.0003052	V0	0.0000785	V0
Niobium	0.0000202	0.0000187	V0	0.0000011	V0
Palladium	0.0000632	0.0000047	V0	0.0000000	V1
Phosphorus	0.0459574	0.0037842	V0	0.0032236	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0411084	V0	0.0007365	V0
Praseodymium	0.0000070	0.0000198	V0	0.0000000	V1
Rubidium	0.0000184	0.0001676	V0	0.0000000	V1
Samarium	0.0000133	0.0000132	V0	0.0000000	V1
Selenium	0.0003366	0.0000953	V0	0.0000000	V1
Silicon	0.7676322	0.4911667	V0	0.0000000	V1
Silver	0.0000100	0.0000010	V0	0.0000000	V1
Sodium	0.0169447	0.0365864	V0	0.0000000	V1
Strontium	0.0003375	0.0005875	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000016	V0	0.0000000	V1
Thorium	0.0000059	0.0000203	V0	0.0000000	V1
Tin	0.0004414	0.0000400	V0	0.0000000	V1
Titanium	0.0015201	0.0055732	V0	0.0002086	V0
Tungsten	0.0000938	0.0001340	V0	0.0000762	V0
Uranium	0.0000048	0.0000057	V0	0.0000000	V1
Vanadium	0.0007697	0.0003163	V0	0.0000000	V1
Zinc	0.0055897	0.0028776	V0	0.0002571	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		25-Mar		25-Mar		25-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	49.16	V0	27.87	V0	0.18	V0
Aluminum	0.1380326	1.7712275	V0	0.7766315	V0	0.0000000	V1
Antimony	0.0001784	0.0001776	V0	0.0003703	V0	0.0000000	V1
Arsenic	0.0001060	0.0005387	V0	0.0003395	V0	0.0000000	V1
Barium	0.0092847	0.0121201	V0	0.0077755	V0	0.0000000	V1
Beryllium	0.0000946	0.0000464	V0	0.0000250	V0	0.0000000	V1
Bismuth	0.0000093	0.0000353	V0	0.0000373	V0	0.0000106	V0
Cadmium	0.0000174	0.0000404	V0	0.0000298	V0	0.0000000	V1
Calcium	0.4112124	2.1668909	V0	0.7989429	V0	0.0000000	V1
Cerium	0.0000174	0.0020457	V0	0.0007599	V0	0.0000000	V1
Cesium	0.0000100	0.0001057	V0	0.0000523	V0	0.0000000	V1
Chromium	0.0022262	0.0019260	V0	0.0011915	V0	0.0001718	V0
Cobalt	0.0000273	0.0005535	V0	0.0003193	V0	0.0000767	V0
Copper	0.0017171	0.0021124	V0	0.0024670	V0	0.0000979	V0
Iron	0.0393063	1.4028339	V0	0.6437938	V0	0.0000000	V1
Lanthanum	0.0000130	0.0007560	V0	0.0003645	V0	0.0000000	V1
Lead	0.0008577	0.0014820	V0	0.0011319	V0	0.0000000	V1
Lithium	0.0000374	0.0018114	V0	0.0007066	V0	0.0000000	V1
Magnesium	0.0091409	0.3590708	V0	0.2001919	V0	0.0005737	V0
Manganese	0.0006949	0.0241947	V0	0.0112582	V0	0.0000349	V0
Molybdenum	0.0007116	0.0009517	V4	0.0004003	V0	0.0000000	V1
Neodymium	0.0000140	0.0006848	V0	0.0003266	V0	0.0000000	V1
Nickel	0.0005429	0.0025824	V0	0.0012952	V0	0.0001475	V0
Niobium	0.0000202	0.0001880	V0	0.0000919	V0	0.0000000	V1
Palladium	0.0000632	0.0000194	V0	0.0000113	V0	0.0000000	V1
Phosphorus	0.0459574	0.0274258	V0	0.0167497	V0	0.0056060	V0
Platinum	0.0000088	0.0000000	V1	0.0000033	V0	0.0000000	V1
Potassium	0.0061261	0.4654132	V0	0.2142206	V0	0.0008640	V0
Praseodymium	0.0000070	0.0001815	V0	0.0000856	V0	0.0000000	V1
Rubidium	0.0000184	0.0018819	V0	0.0009242	V0	0.0000000	V1
Samarium	0.0000133	0.0001298	V0	0.0000576	V0	0.0000000	V1
Selenium	0.0003366	0.0011521	V0	0.0004923	V0	0.0000000	V1
Silicon	0.7676322	4.5727083	V0	2.5213600	V0	0.0000000	V1
Silver	0.0000100	0.0000095	V0	0.0000121	V0	0.0000000	V1
Sodium	0.0169447	0.4413866	V0	0.5941966	V4	0.0007491	V0
Strontium	0.0003375	0.0052578	V0	0.0026286	V0	0.0000000	V1
Tantalum	0.0000394	0.0000131	V0	0.0000062	V0	0.0000000	V1
Thallium	0.0000090	0.0000253	V0	0.0000150	V0	0.0000000	V1
Thorium	0.0000059	0.0001960	V0	0.0000993	V0	0.0000000	V1
Tin	0.0004414	0.0001693	V0	0.0003013	V0	0.0000000	V1
Titanium	0.0015201	0.0733877	V0	0.0242461	V0	0.0002131	V0
Tungsten	0.0000938	0.0006540	V0	0.0004298	V0	0.0000665	V0
Uranium	0.0000048	0.0000595	V0	0.0000297	V0	0.0000000	V1
Vanadium	0.0007697	0.0091828	V4	0.0028731	V0	0.0000000	V1
Zinc	0.0055897	0.0074257	V0	0.0068179	V0	0.0003246	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		25-Mar		25-Mar		25-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	23.60	V0	6.57	V0	0.18	V0
Aluminum	0.1380326	0.5932195	V0	0.0985105	V0	0.0000000	V1
Antimony	0.0001784	0.0005156	V0	0.0000989	V0	0.0000000	V1
Arsenic	0.0001060	0.0003598	V0	0.0001357	V0	0.0000000	V1
Barium	0.0092847	0.0091106	V0	0.0016723	V0	0.0000000	V1
Beryllium	0.0000946	0.0000235	V0	0.0000042	V0	0.0000000	V1
Bismuth	0.0000093	0.0000483	V0	0.0000401	V0	0.0000106	V0
Cadmium	0.0000174	0.0000388	V0	0.0000180	V0	0.0000000	V1
Calcium	0.4112124	1.1709637	V0	0.1963158	V0	0.0000000	V1
Cerium	0.0000174	0.0007203	V0	0.0001452	V0	0.0000000	V1
Cesium	0.0000100	0.0000421	V0	0.0000103	V0	0.0000000	V1
Chromium	0.0022262	0.0010520	V0	0.0003013	V0	0.0001718	V0
Cobalt	0.0000273	0.0003501	V0	0.0001660	V0	0.0000767	V0
Copper	0.0017171	0.0033752	V0	0.0004148	V0	0.0000979	V0
Iron	0.0393063	0.7854059	V0	0.1850525	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003447	V0	0.0000740	V0	0.0000000	V1
Lead	0.0008577	0.0012966	V0	0.0005705	V0	0.0000000	V1
Lithium	0.0000374	0.0004898	V0	0.0001039	V0	0.0000000	V1
Magnesium	0.0091409	0.2716255	V0	0.0615913	V0	0.0005737	V0
Manganese	0.0006949	0.0134412	V0	0.0035205	V0	0.0000349	V0
Molybdenum	0.0007116	0.0002207	V0	0.0000396	V0	0.0000000	V1
Neodymium	0.0000140	0.0002857	V0	0.0000575	V0	0.0000000	V1
Nickel	0.0005429	0.0007612	V0	0.0002524	V0	0.0001475	V0
Niobium	0.0000202	0.0000683	V0	0.0000139	V0	0.0000000	V1
Palladium	0.0000632	0.0000151	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0175713	V0	0.0099836	V0	0.0056060	V0
Platinum	0.0000088	0.0000041	V0	0.0000008	V0	0.0000000	V1
Potassium	0.0061261	0.2193035	V0	0.0410941	V0	0.0008640	V0
Praseodymium	0.0000070	0.0000773	V0	0.0000156	V0	0.0000000	V1
Rubidium	0.0000184	0.0007778	V0	0.0001866	V0	0.0000000	V1
Samarium	0.0000133	0.0000502	V0	0.0000081	V0	0.0000000	V1
Selenium	0.0003366	0.0004579	V0	0.0001159	V0	0.0000000	V1
Silicon	0.7676322	1.9584896	V0	0.4498408	V0	0.0000000	V1
Silver	0.0000100	0.0000076	V0	0.0000026	V0	0.0000000	V1
Sodium	0.0169447	1.2898283	V4	0.0474508	V0	0.0007491	V0
Strontium	0.0003375	0.0031300	V0	0.0006092	V0	0.0000000	V1
Tantalum	0.0000394	0.0000073	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000186	V0	0.0000073	V0	0.0000000	V1
Thorium	0.0000059	0.0000812	V0	0.0000174	V0	0.0000000	V1
Tin	0.0004414	0.0003603	V0	0.0000608	V0	0.0000000	V1
Titanium	0.0015201	0.0217316	V0	0.0044515	V0	0.0002131	V0
Tungsten	0.0000938	0.0010209	V4	0.0005051	V0	0.0000665	V0
Uranium	0.0000048	0.0000294	V0	0.0000072	V0	0.0000000	V1
Vanadium	0.0007697	0.0013541	V0	0.0002970	V0	0.0000000	V1
Zinc	0.0055897	0.0089519	V0	0.0021596	V0	0.0003246	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		25-Mar		25-Mar		25-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	27.19	V0	47.97	V0	0.18	V0
Aluminum	0.1380326	1.0520894	V0	2.0358696	V0	0.0000000	V1
Antimony	0.0001784	0.0001510	V0	0.0001294	V0	0.0000000	V1
Arsenic	0.0001060	0.0004406	V0	0.0005733	V0	0.0000000	V1
Barium	0.0092847	0.0082968	V0	0.0138220	V0	0.0000000	V1
Beryllium	0.0000946	0.0000340	V0	0.0000706	V0	0.0000000	V1
Bismuth	0.0000093	0.0000596	V0	0.0000684	V0	0.0000106	V0
Cadmium	0.0000174	0.0000308	V0	0.0000377	V0	0.0000000	V1
Calcium	0.4112124	1.1183943	V0	0.7155256	V0	0.0000000	V1
Cerium	0.0000174	0.0010438	V0	0.0024010	V0	0.0000000	V1
Cesium	0.0000100	0.0000718	V0	0.0001322	V0	0.0000000	V1
Chromium	0.0022262	0.0012286	V0	0.0023855	V0	0.0001718	V0
Cobalt	0.0000273	0.0002997	V0	0.0005770	V0	0.0000767	V0
Copper	0.0017171	0.0010143	V0	0.0014781	V0	0.0000979	V0
Iron	0.0393063	0.7964150	V0	1.3763692	V0	0.0000000	V1
Lanthanum	0.0000130	0.0005048	V0	0.0008518	V0	0.0000000	V1
Lead	0.0008577	0.0012881	V0	0.0015948	V0	0.0000000	V1
Lithium	0.0000374	0.0010393	V0	0.0020648	V0	0.0000000	V1
Magnesium	0.0091409	0.2189726	V0	0.3236673	V0	0.0005737	V0
Manganese	0.0006949	0.0143172	V0	0.0216263	V0	0.0000349	V0
Molybdenum	0.0007116	0.0006465	V0	0.0004915	V0	0.0000000	V1
Neodymium	0.0000140	0.0004547	V0	0.0008023	V0	0.0000000	V1
Nickel	0.0005429	0.0018901	V0	0.0022023	V0	0.0001475	V0
Niobium	0.0000202	0.0000960	V0	0.0001989	V0	0.0000000	V1
Palladium	0.0000632	0.0000096	V0	0.0000190	V0	0.0000000	V1
Phosphorus	0.0459574	0.0208181	V0	0.0298308	V0	0.0056060	V0
Platinum	0.0000088	0.0000022	V0	0.0000011	V0	0.0000000	V1
Potassium	0.0061261	0.2781308	V0	0.4685720	V0	0.0008640	V0
Praseodymium	0.0000070	0.0001200	V0	0.0002093	V0	0.0000000	V1
Rubidium	0.0000184	0.0011179	V0	0.0021360	V0	0.0000000	V1
Samarium	0.0000133	0.0000861	V0	0.0001518	V0	0.0000000	V1
Selenium	0.0003366	0.0006495	V0	0.0011470	V0	0.0000000	V1
Silicon	0.7676322	2.1175254	V0	5.6403583	V0	0.0000000	V1
Silver	0.0000100	0.0000085	V0	0.0000104	V0	0.0000000	V1
Sodium	0.0169447	0.2846045	V0	0.2819669	V0	0.0007491	V0
Strontium	0.0003375	0.0031455	V0	0.0050252	V0	0.0000000	V1
Tantalum	0.0000394	0.0000078	V0	0.0000146	V0	0.0000000	V1
Thallium	0.0000090	0.0000197	V0	0.0000310	V0	0.0000000	V1
Thorium	0.0000059	0.0001346	V0	0.0002405	V0	0.0000000	V1
Tin	0.0004414	0.0001499	V0	0.0001490	V0	0.0000000	V1
Titanium	0.0015201	0.0345633	V0	0.0663821	V0	0.0002131	V0
Tungsten	0.0000938	0.0003190	V0	0.0003283	V0	0.0000665	V0
Uranium	0.0000048	0.0000416	V0	0.0000813	V0	0.0000000	V1
Vanadium	0.0007697	0.0063236	V0	0.0062809	V0	0.0000000	V1
Zinc	0.0055897	0.0052625	V0	0.0072671	V0	0.0003246	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**25-Mar**		**25-Mar**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	115.70	V4	0.18	V0
Aluminum	0.1380326	4.4924253	V4	0.0000000	V1
Antimony	0.0001784	0.0001473	V0	0.0000000	V1
Arsenic	0.0001060	0.0011338	V4	0.0000000	V1
Barium	0.0092847	0.0356437	V4	0.0000000	V1
Beryllium	0.0000946	0.0001704	V4	0.0000000	V1
Bismuth	0.0000093	0.0000526	V0	0.0000106	V0
Cadmium	0.0000174	0.0000422	V0	0.0000000	V1
Calcium	0.4112124	5.1848443	V4	0.0000000	V1
Cerium	0.0000174	0.0050961	V4	0.0000000	V1
Cesium	0.0000100	0.0002969	V4	0.0000000	V1
Chromium	0.0022262	0.0049833	V4	0.0001718	V0
Cobalt	0.0000273	0.0012562	V4	0.0000767	V0
Copper	0.0017171	0.0023962	V0	0.0000979	V0
Iron	0.0393063	4.9394561	V4	0.0000000	V1
Lanthanum	0.0000130	0.0024207	V4	0.0000000	V1
Lead	0.0008577	0.0023158	V4	0.0000000	V1
Lithium	0.0000374	0.0054536	V4	0.0000000	V1
Magnesium	0.0091409	0.8859531	V4	0.0005737	V0
Manganese	0.0006949	0.0804867	V4	0.0000349	V0
Molybdenum	0.0007116	0.0016436	V4	0.0000000	V1
Neodymium	0.0000140	0.0022342	V4	0.0000000	V1
Nickel	0.0005429	0.0041144	V4	0.0001475	V0
Niobium	0.0000202	0.0004962	V4	0.0000000	V1
Palladium	0.0000632	0.0000410	V0	0.0000000	V1
Phosphorus	0.0459574	0.0565753	V0	0.0056060	V0
Platinum	0.0000088	0.0000017	V0	0.0000000	V1
Potassium	0.0061261	1.1121287	V4	0.0008640	V0
Praseodymium	0.0000070	0.0005878	V4	0.0000000	V1
Rubidium	0.0000184	0.0049689	V4	0.0000000	V1
Samarium	0.0000133	0.0004133	V4	0.0000000	V1
Selenium	0.0003366	0.0024831	V4	0.0000000	V1
Silicon	0.7676322	12.8872333	V4	0.0000000	V1
Silver	0.0000100	0.0000183	V0	0.0000000	V1
Sodium	0.0169447	0.5780414	V4	0.0007491	V0
Strontium	0.0003375	0.0153425	V4	0.0000000	V1
Tantalum	0.0000394	0.0000375	V4	0.0000000	V1
Thallium	0.0000090	0.0000539	V4	0.0000000	V1
Thorium	0.0000059	0.0006365	V4	0.0000000	V1
Tin	0.0004414	0.0002294	V0	0.0000000	V1
Titanium	0.0015201	0.1510978	V4	0.0002131	V0
Tungsten	0.0000938	0.0009860	V4	0.0000665	V0
Uranium	0.0000048	0.0001847	V4	0.0000000	V1
Vanadium	0.0007697	0.0145449	V4	0.0000000	V1
Zinc	0.0055897	0.0121522	V0	0.0003246	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		31-Mar		31-Mar		31-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	25.15	V0	15.81	V0	0.03	V1
Aluminum	0.1380326	0.8833781	V0	0.3525696	V0	0.0000000	V1
Antimony	0.0001784	0.0000725	V0	0.0002982	V0	0.0000000	V1
Arsenic	0.0001060	0.0002062	V0	0.0001112	V0	0.0000000	V1
Barium	0.0092847	0.0059012	V0	0.0045172	V0	0.0000000	V1
Beryllium	0.0000946	0.0000338	V0	0.0000120	V0	0.0000000	V1
Bismuth	0.0000093	0.0000139	V0	0.0000302	V0	0.0000139	V0
Cadmium	0.0000174	0.0000102	V0	0.0000103	V0	0.0000000	V1
Calcium	0.4112124	1.0152999	V0	0.6298566	V0	0.0000000	V1
Cerium	0.0000174	0.0007060	V0	0.0003613	V0	0.0000000	V1
Cesium	0.0000100	0.0000533	V0	0.0000187	V0	0.0000000	V1
Chromium	0.0022262	0.0012237	V0	0.0007245	V0	0.0003288	V0
Cobalt	0.0000273	0.0003399	V0	0.0002834	V0	0.0000647	V0
Copper	0.0017171	0.0015488	V0	0.0018418	V0	0.0003811	V0
Iron	0.0393063	0.7755733	V0	0.4960294	V0	0.0018049	V0
Lanthanum	0.0000130	0.0003330	V0	0.0001726	V0	0.0000000	V1
Lead	0.0008577	0.0004737	V0	0.0003464	V0	0.0000000	V1
Lithium	0.0000374	0.0009272	V0	0.0003371	V0	0.0000000	V1
Magnesium	0.0091409	0.2027338	V0	0.1574847	V0	0.0014931	V0
Manganese	0.0006949	0.0122911	V0	0.0079858	V0	0.0000386	V0
Molybdenum	0.0007116	0.0002036	V0	0.0001443	V0	0.0000351	V0
Neodymium	0.0000140	0.0003157	V0	0.0001597	V0	0.0000000	V1
Nickel	0.0005429	0.0013192	V0	0.0006204	V0	0.0002194	V0
Niobium	0.0000202	0.0000661	V0	0.0000325	V0	0.0000000	V1
Palladium	0.0000632	0.0000073	V0	0.0000071	V0	0.0000000	V1
Phosphorus	0.0459574	0.0203507	V0	0.0142293	V0	0.0081090	V0
Platinum	0.0000088	0.0000013	V0	0.0000013	V0	0.0000000	V1
Potassium	0.0061261	0.2059442	V0	0.0893555	V0	0.0011123	V0
Praseodymium	0.0000070	0.0000822	V0	0.0000415	V0	0.0000000	V1
Rubidium	0.0000184	0.0009602	V0	0.0004093	V0	0.0000019	V0
Samarium	0.0000133	0.0000557	V0	0.0000243	V0	0.0000000	V1
Selenium	0.0003366	0.0004644	V0	0.0002442	V0	0.0000000	V1
Silicon	0.7676322	2.8487463	V0	1.2094113	V0	0.0000000	V1
Silver	0.0000100	0.0000036	V0	0.0000018	V0	0.0000007	V0
Sodium	0.0169447	0.1660085	V0	0.3504504	V0	0.0034401	V0
Strontium	0.0003375	0.0029737	V0	0.0016920	V0	0.0000194	V0
Tantalum	0.0000394	0.0000051	V0	0.0000030	V0	0.0000000	V1
Thallium	0.0000090	0.0000100	V0	0.0000056	V0	0.0000000	V1
Thorium	0.0000059	0.0000930	V0	0.0000429	V0	0.0000000	V1
Tin	0.0004414	0.0000848	V0	0.0001972	V0	0.0000000	V1
Titanium	0.0015201	0.0228703	V0	0.0113904	V0	0.0007496	V0
Tungsten	0.0000938	0.0003373	V0	0.0004896	V0	0.0000655	V0
Uranium	0.0000048	0.0000304	V0	0.0000130	V0	0.0000000	V1
Vanadium	0.0007697	0.0024768	V0	0.0011333	V0	0.0000000	V1
Zinc	0.0055897	0.0031348	V0	0.0041930	V0	0.0003279	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		31-Mar		31-Mar		31-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	18.34	V0	6.40	V0	0.03	V1
Aluminum	0.1380326	0.3630318	V0	0.2268417	V0	0.0000000	V1
Antimony	0.0001784	0.0001985	V0	0.0000290	V0	0.0000000	V1
Arsenic	0.0001060	0.0001005	V0	0.0000755	V0	0.0000000	V1
Barium	0.0092847	0.0044850	V0	0.0016398	V0	0.0000000	V1
Beryllium	0.0000946	0.0000102	V0	0.0000143	V0	0.0000000	V1
Bismuth	0.0000093	0.0000191	V0	0.0000427	V0	0.0000139	V0
Cadmium	0.0000174	0.0000070	V0	0.0000068	V0	0.0000000	V1
Calcium	0.4112124	0.6026848	V0	0.1801323	V0	0.0000000	V1
Cerium	0.0000174	0.0003450	V0	0.0001781	V0	0.0000000	V1
Cesium	0.0000100	0.0000209	V0	0.0000144	V0	0.0000000	V1
Chromium	0.0022262	0.0005804	V0	0.0003959	V0	0.0003288	V0
Cobalt	0.0000273	0.0001999	V0	0.0001267	V0	0.0000647	V0
Copper	0.0017171	0.0013961	V0	0.0006006	V0	0.0003811	V0
Iron	0.0393063	0.4406363	V0	0.1464509	V0	0.0018049	V0
Lanthanum	0.0000130	0.0001674	V0	0.0000845	V0	0.0000000	V1
Lead	0.0008577	0.0003012	V0	0.0002627	V0	0.0000000	V1
Lithium	0.0000374	0.0003003	V0	0.0001853	V0	0.0000000	V1
Magnesium	0.0091409	0.1468327	V0	0.0567352	V0	0.0014931	V0
Manganese	0.0006949	0.0072501	V0	0.0024692	V0	0.0000386	V0
Molybdenum	0.0007116	0.0001103	V0	0.0004997	V0	0.0000351	V0
Neodymium	0.0000140	0.0001450	V0	0.0000789	V0	0.0000000	V1
Nickel	0.0005429	0.0004372	V0	0.0005537	V0	0.0002194	V0
Niobium	0.0000202	0.0000322	V0	0.0000200	V0	0.0000000	V1
Palladium	0.0000632	0.0000043	V0	0.0000031	V0	0.0000000	V1
Phosphorus	0.0459574	0.0126670	V0	0.0123887	V0	0.0081090	V0
Platinum	0.0000088	0.0000015	V0	0.0000009	V0	0.0000000	V1
Potassium	0.0061261	0.0867387	V0	0.0440488	V0	0.0011123	V0
Praseodymium	0.0000070	0.0000401	V0	0.0000210	V0	0.0000000	V1
Rubidium	0.0000184	0.0004154	V0	0.0002473	V0	0.0000019	V0
Samarium	0.0000133	0.0000238	V0	0.0000122	V0	0.0000000	V1
Selenium	0.0003366	0.0002288	V0	0.0001350	V0	0.0000000	V1
Silicon	0.7676322	1.9141804	V0	0.6362288	V0	0.0000000	V1
Silver	0.0000100	0.0000016	V0	0.0000013	V0	0.0000007	V0
Sodium	0.0169447	0.2632828	V0	0.0593256	V0	0.0034401	V0
Strontium	0.0003375	0.0016569	V0	0.0007217	V0	0.0000194	V0
Tantalum	0.0000394	0.0000033	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000051	V0	0.0000044	V0	0.0000000	V1
Thorium	0.0000059	0.0000445	V0	0.0000238	V0	0.0000000	V1
Tin	0.0004414	0.0001388	V0	0.0000536	V0	0.0000000	V1
Titanium	0.0015201	0.0111977	V0	0.0068650	V0	0.0007496	V0
Tungsten	0.0000938	0.0004571	V0	0.0001760	V0	0.0000655	V0
Uranium	0.0000048	0.0000123	V0	0.0000068	V0	0.0000000	V1
Vanadium	0.0007697	0.0009475	V0	0.0005485	V0	0.0000000	V1
Zinc	0.0055897	0.0037143	V0	0.0019460	V0	0.0003279	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		31-Mar		31-Mar		31-Mar	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	19.24	V0	27.81	V0	0.03	V1
Aluminum	0.1380326	0.7097296	V0	1.6296994	V0	0.0000000	V1
Antimony	0.0001784	0.0000602	V0	0.0000591	V0	0.0000000	V1
Arsenic	0.0001060	0.0001788	V0	0.0002791	V0	0.0000000	V1
Barium	0.0092847	0.0048043	V0	0.0106794	V0	0.0000000	V1
Beryllium	0.0000946	0.0000249	V0	0.0000495	V0	0.0000000	V1
Bismuth	0.0000093	0.0000234	V0	0.0000991	V0	0.0000139	V0
Cadmium	0.0000174	0.0000057	V0	0.0000184	V0	0.0000000	V1
Calcium	0.4112124	0.5429342	V0	0.9469302	V0	0.0000000	V1
Cerium	0.0000174	0.0005596	V0	0.0013435	V0	0.0000000	V1
Cesium	0.0000100	0.0000445	V0	0.0001018	V0	0.0000000	V1
Chromium	0.0022262	0.0011015	V0	0.0016949	V0	0.0003288	V0
Cobalt	0.0000273	0.0002309	V0	0.0004065	V0	0.0000647	V0
Copper	0.0017171	0.0006838	V0	0.0009704	V0	0.0003811	V0
Iron	0.0393063	0.5342539	V0	1.1266719	V0	0.0018049	V0
Lanthanum	0.0000130	0.0002709	V0	0.0006480	V0	0.0000000	V1
Lead	0.0008577	0.0003861	V0	0.0006400	V0	0.0000000	V1
Lithium	0.0000374	0.0006997	V0	0.0015854	V0	0.0000000	V1
Magnesium	0.0091409	0.1484486	V0	0.3207890	V0	0.0014931	V0
Manganese	0.0006949	0.0080799	V0	0.0161027	V0	0.0000386	V0
Molybdenum	0.0007116	0.0001879	V0	0.0002153	V0	0.0000351	V0
Neodymium	0.0000140	0.0002506	V0	0.0005857	V0	0.0000000	V1
Nickel	0.0005429	0.0010067	V0	0.0012831	V0	0.0002194	V0
Niobium	0.0000202	0.0000764	V0	0.0001461	V0	0.0000000	V1
Palladium	0.0000632	0.0000062	V0	0.0000144	V0	0.0000000	V1
Phosphorus	0.0459574	0.0173144	V0	0.0256271	V0	0.0081090	V0
Platinum	0.0000088	0.0000006	V0	0.0000010	V0	0.0000000	V1
Potassium	0.0061261	0.1361669	V0	0.3474828	V0	0.0011123	V0
Praseodymium	0.0000070	0.0000660	V0	0.0001593	V0	0.0000000	V1
Rubidium	0.0000184	0.0007653	V0	0.0016670	V0	0.0000019	V0
Samarium	0.0000133	0.0000467	V0	0.0001111	V0	0.0000000	V1
Selenium	0.0003366	0.0003732	V0	0.0008660	V0	0.0000000	V1
Silicon	0.7676322	2.5284954	V0	4.4742792	V0	0.0000000	V1
Silver	0.0000100	0.0000021	V0	0.0000064	V0	0.0000007	V0
Sodium	0.0169447	0.1211417	V0	0.1897859	V0	0.0034401	V0
Strontium	0.0003375	0.0021414	V0	0.0042791	V0	0.0000194	V0
Tantalum	0.0000394	0.0000043	V0	0.0000095	V0	0.0000000	V1
Thallium	0.0000090	0.0000079	V0	0.0000151	V0	0.0000000	V1
Thorium	0.0000059	0.0000765	V0	0.0001829	V0	0.0000000	V1
Tin	0.0004414	0.0000598	V0	0.0000874	V0	0.0000000	V1
Titanium	0.0015201	0.0213055	V0	0.0496151	V0	0.0007496	V0
Tungsten	0.0000938	0.0001891	V0	0.0002016	V0	0.0000655	V0
Uranium	0.0000048	0.0000250	V0	0.0000524	V0	0.0000000	V1
Vanadium	0.0007697	0.0020619	V0	0.0036271	V0	0.0000000	V1
Zinc	0.0055897	0.0024327	V0	0.0048727	V0	0.0003279	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**31-Mar**		**31-Mar**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	26.97	V0	0.03	V1
Aluminum	0.1380326	1.0008850	V0	0.0000000	V1
Antimony	0.0001784	0.0000337	V0	0.0000000	V1
Arsenic	0.0001060	0.0001410	V0	0.0000000	V1
Barium	0.0092847	0.0049603	V0	0.0000000	V1
Beryllium	0.0000946	0.0000345	V0	0.0000000	V1
Bismuth	0.0000093	0.0000196	V0	0.0000139	V0
Cadmium	0.0000174	0.0000058	V0	0.0000000	V1
Calcium	0.4112124	0.4870686	V0	0.0000000	V1
Cerium	0.0000174	0.0007508	V0	0.0000000	V1
Cesium	0.0000100	0.0000531	V0	0.0000000	V1
Chromium	0.0022262	0.0011190	V0	0.0003288	V0
Cobalt	0.0000273	0.0002973	V0	0.0000647	V0
Copper	0.0017171	0.0009407	V0	0.0003811	V0
Iron	0.0393063	0.5924057	V0	0.0018049	V0
Lanthanum	0.0000130	0.0003539	V0	0.0000000	V1
Lead	0.0008577	0.0003617	V0	0.0000000	V1
Lithium	0.0000374	0.0013633	V0	0.0000000	V1
Magnesium	0.0091409	0.1427444	V0	0.0014931	V0
Manganese	0.0006949	0.0097062	V0	0.0000386	V0
Molybdenum	0.0007116	0.0002792	V0	0.0000351	V0
Neodymium	0.0000140	0.0003331	V0	0.0000000	V1
Nickel	0.0005429	0.0009789	V0	0.0002194	V0
Niobium	0.0000202	0.0000894	V0	0.0000000	V1
Palladium	0.0000632	0.0000069	V0	0.0000000	V1
Phosphorus	0.0459574	0.0177643	V0	0.0081090	V0
Platinum	0.0000088	0.0000010	V0	0.0000000	V1
Potassium	0.0061261	0.1423767	V0	0.0011123	V0
Praseodymium	0.0000070	0.0000866	V0	0.0000000	V1
Rubidium	0.0000184	0.0008837	V0	0.0000019	V0
Samarium	0.0000133	0.0000620	V0	0.0000000	V1
Selenium	0.0003366	0.0004416	V0	0.0000000	V1
Silicon	0.7676322	3.7326463	V0	0.0000000	V1
Silver	0.0000100	0.0000018	V0	0.0000007	V0
Sodium	0.0169447	0.0930938	V0	0.0034401	V0
Strontium	0.0003375	0.0023360	V0	0.0000194	V0
Tantalum	0.0000394	0.0000059	V0	0.0000000	V1
Thallium	0.0000090	0.0000078	V0	0.0000000	V1
Thorium	0.0000059	0.0001042	V0	0.0000000	V1
Tin	0.0004414	0.0000577	V0	0.0000000	V1
Titanium	0.0015201	0.0285814	V0	0.0007496	V0
Tungsten	0.0000938	0.0001208	V0	0.0000655	V0
Uranium	0.0000048	0.0000318	V0	0.0000000	V1
Vanadium	0.0007697	0.0019050	V0	0.0000000	V1
Zinc	0.0055897	0.0025538	V0	0.0003279	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		06-Apr		06-Apr		06-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.1		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.56	V0	3.79	V0	0.08	V0
Aluminum	0.1380326	0.0584422	V0	0.0240176	V0	0.0000000	V1
Antimony	0.0001784	0.0000479	V0	0.0000590	V0	0.0000000	V1
Arsenic	0.0001060	0.0001741	V0	0.0000630	V0	0.0000000	V1
Barium	0.0092847	0.0006227	V0	0.0004952	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000135	V0	0.0000078	V0	0.0000141	V0
Cadmium	0.0000174	0.0000114	V0	0.0000068	V0	0.0000000	V1
Calcium	0.4112124	0.0731880	V0	0.0443881	V0	0.0000000	V1
Cerium	0.0000174	0.0000522	V0	0.0000293	V0	0.0000000	V1
Cesium	0.0000100	0.0000053	V0	0.0000029	V0	0.0000000	V1
Chromium	0.0022262	0.0003867	V0	0.0001601	V0	0.0001155	V0
Cobalt	0.0000273	0.0000975	V0	0.0000606	V0	0.0000509	V0
Copper	0.0017171	0.0008951	V0	0.0004723	V0	0.0010779	V0
Iron	0.0393063	0.0392364	V0	0.0199362	V0	0.0016692	V0
Lanthanum	0.0000130	0.0000266	V0	0.0000132	V0	0.0000000	V1
Lead	0.0008577	0.0004090	V0	0.0002106	V0	0.0000000	V1
Lithium	0.0000374	0.0000551	V0	0.0000296	V0	0.0000045	V0
Magnesium	0.0091409	0.0166753	V0	0.0099148	V0	0.0013002	V0
Manganese	0.0006949	0.0012190	V0	0.0005931	V0	0.0000382	V0
Molybdenum	0.0007116	0.0000906	V0	0.0000634	V0	0.0000000	V1
Neodymium	0.0000140	0.0000207	V0	0.0000105	V0	0.0000000	V1
Nickel	0.0005429	0.0003850	V0	0.0001780	V0	0.0002443	V0
Niobium	0.0000202	0.0000094	V0	0.0000038	V0	0.0000000	V1
Palladium	0.0000632	0.0000069	V0	0.0000063	V0	0.0000054	V0
Phosphorus	0.0459574	0.0121173	V0	0.0110011	V0	0.0105713	V0
Platinum	0.0000088	0.0000011	V0	0.0000011	V0	0.0000005	V0
Potassium	0.0061261	0.0231051	V0	0.0134639	V0	0.0012903	V0
Praseodymium	0.0000070	0.0000054	V0	0.0000030	V0	0.0000000	V1
Rubidium	0.0000184	0.0000874	V0	0.0000452	V0	0.0000019	V0
Samarium	0.0000133	0.0000037	V0	0.0000019	V0	0.0000000	V1
Selenium	0.0003366	0.0000687	V0	0.0000421	V0	0.0000000	V1
Silicon	0.1893637	0.1456354	V0	0.0663870	V0	0.0000000	V1
Silver	0.0000100	0.0000040	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0301741	V0	0.0201010	V0	0.0013905	V0
Strontium	0.0003375	0.0002821	V0	0.0001655	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000030	V0	0.0000020	V0	0.0000000	V1
Thorium	0.0000059	0.0000066	V0	0.0000037	V0	0.0000000	V1
Tin	0.0004414	0.0001029	V0	0.0000739	V0	0.0000000	V1
Titanium	0.0015201	0.0024796	V0	0.0011394	V0	0.0002869	V0
Tungsten	0.0000938	0.0000905	V0	0.0000617	V0	0.0000535	V0
Uranium	0.0000048	0.0000056	V0	0.0000027	V0	0.0000000	V1
Vanadium	0.0007697	0.0002784	V0	0.0003019	V0	0.0000000	V1
Zinc	0.0055897	0.0031020	V0	0.0012711	V0	0.0002657	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		06-Apr		06-Apr		06-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		23		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.33	V0	2.49	V0	0.08	V0
Aluminum	0.1380326	0.0425219	V0	0.0152941	V0	0.0000000	V1
Antimony	0.0001784	0.0000751	V0	0.0000180	V0	0.0000000	V1
Arsenic	0.0001060	0.0001677	V0	0.0000476	V0	0.0000000	V1
Barium	0.0092847	0.0011172	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000303	V0	0.0000082	V0	0.0000141	V0
Cadmium	0.0000174	0.0000078	V0	0.0000053	V0	0.0000000	V1
Calcium	0.4112124	0.0743008	V0	0.0237133	V0	0.0000000	V1
Cerium	0.0000174	0.0000497	V0	0.0000149	V0	0.0000000	V1
Cesium	0.0000100	0.0000044	V0	0.0000016	V0	0.0000000	V1
Chromium	0.0022262	0.0002679	V0	0.0001660	V0	0.0001155	V0
Cobalt	0.0000273	0.0000809	V0	0.0000561	V0	0.0000509	V0
Copper	0.0017171	0.0008001	V0	0.0002764	V0	0.0010779	V0
Iron	0.0393063	0.0374007	V0	0.0086301	V0	0.0016692	V0
Lanthanum	0.0000130	0.0000243	V0	0.0000074	V0	0.0000000	V1
Lead	0.0008577	0.0002617	V0	0.0001563	V0	0.0000000	V1
Lithium	0.0000374	0.0000475	V0	0.0000174	V0	0.0000045	V0
Magnesium	0.0091409	0.0149888	V0	0.0056696	V0	0.0013002	V0
Manganese	0.0006949	0.0010150	V0	0.0003025	V0	0.0000382	V0
Molybdenum	0.0007116	0.0001543	V0	0.0000837	V0	0.0000000	V1
Neodymium	0.0000140	0.0000211	V0	0.0000051	V0	0.0000000	V1
Nickel	0.0005429	0.0003048	V0	0.0001913	V0	0.0002443	V0
Niobium	0.0000202	0.0000072	V0	0.0000030	V0	0.0000000	V1
Palladium	0.0000632	0.0000073	V0	0.0000068	V0	0.0000054	V0
Phosphorus	0.0459574	0.0122694	V0	0.0102407	V0	0.0105713	V0
Platinum	0.0000088	0.0000013	V0	0.0000008	V0	0.0000005	V0
Potassium	0.0061261	0.0210401	V0	0.0102250	V0	0.0012903	V0
Praseodymium	0.0000070	0.0000057	V0	0.0000014	V0	0.0000000	V1
Rubidium	0.0000184	0.0000714	V0	0.0000305	V0	0.0000019	V0
Samarium	0.0000133	0.0000033	V0	0.0000017	V0	0.0000000	V1
Selenium	0.0003366	0.0000820	V0	0.0000356	V0	0.0000000	V1
Silicon	0.1893637	0.1280717	V0	0.0359615	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000005	V0	0.0000000	V1
Sodium	0.0169447	0.0666523	V0	0.0119077	V0	0.0013905	V0
Strontium	0.0003375	0.0003029	V0	0.0000937	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000027	V0	0.0000013	V0	0.0000000	V1
Thorium	0.0000059	0.0000062	V0	0.0000021	V0	0.0000000	V1
Tin	0.0004414	0.0001061	V0	0.0000605	V0	0.0000000	V1
Titanium	0.0015201	0.0022459	V0	0.0007552	V0	0.0002869	V0
Tungsten	0.0000938	0.0000865	V0	0.0000497	V0	0.0000535	V0
Uranium	0.0000048	0.0000043	V0	0.0000018	V0	0.0000000	V1
Vanadium	0.0007697	0.0006596	V0	0.0003858	V0	0.0000000	V1
Zinc	0.0055897	0.0016560	V0	0.0012103	V0	0.0002657	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		06-Apr		06-Apr		06-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24.2		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.84	V0	3.69	V0	0.08	V0
Aluminum	0.1380326	0.0344194	V0	0.0321054	V0	0.0000000	V1
Antimony	0.0001784	0.0000389	V0	0.0000285	V0	0.0000000	V1
Arsenic	0.0001060	0.0000867	V0	0.0000822	V0	0.0000000	V1
Barium	0.0092847	0.0005309	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000159	V0	0.0000189	V0	0.0000141	V0
Cadmium	0.0000174	0.0000067	V0	0.0000096	V0	0.0000000	V1
Calcium	0.4112124	0.0618522	V0	0.0394547	V0	0.0000000	V1
Cerium	0.0000174	0.0000398	V0	0.0000352	V0	0.0000000	V1
Cesium	0.0000100	0.0000041	V0	0.0000041	V0	0.0000000	V1
Chromium	0.0022262	0.0002179	V0	0.0002050	V0	0.0001155	V0
Cobalt	0.0000273	0.0001080	V0	0.0000731	V0	0.0000509	V0
Copper	0.0017171	0.0006108	V0	0.0006639	V0	0.0010779	V0
Iron	0.0393063	0.0286419	V0	0.0237511	V0	0.0016692	V0
Lanthanum	0.0000130	0.0000184	V0	0.0000164	V0	0.0000000	V1
Lead	0.0008577	0.0002554	V0	0.0002949	V0	0.0000000	V1
Lithium	0.0000374	0.0000398	V0	0.0000335	V0	0.0000045	V0
Magnesium	0.0091409	0.0118695	V0	0.0110833	V0	0.0013002	V0
Manganese	0.0006949	0.0008778	V0	0.0007006	V0	0.0000382	V0
Molybdenum	0.0007116	0.0000507	V0	0.0000309	V0	0.0000000	V1
Neodymium	0.0000140	0.0000156	V0	0.0000134	V0	0.0000000	V1
Nickel	0.0005429	0.0002892	V0	0.0002187	V0	0.0002443	V0
Niobium	0.0000202	0.0000073	V0	0.0000046	V0	0.0000000	V1
Palladium	0.0000632	0.0000047	V0	0.0000036	V0	0.0000054	V0
Phosphorus	0.0459574	0.0095388	V0	0.0103793	V0	0.0105713	V0
Platinum	0.0000088	0.0000010	V0	0.0000008	V0	0.0000005	V0
Potassium	0.0061261	0.0154135	V0	0.0147882	V0	0.0012903	V0
Praseodymium	0.0000070	0.0000041	V0	0.0000035	V0	0.0000000	V1
Rubidium	0.0000184	0.0000624	V0	0.0000596	V0	0.0000019	V0
Samarium	0.0000133	0.0000039	V0	0.0000027	V0	0.0000000	V1
Selenium	0.0003366	0.0000442	V0	0.0000519	V0	0.0000000	V1
Silicon	0.1893637	0.1196910	V0	0.0999913	V0	0.0000000	V1
Silver	0.0000100	0.0000025	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0258126	V0	0.0239584	V0	0.0013905	V0
Strontium	0.0003375	0.0002203	V0	0.0002059	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000023	V0	0.0000023	V0	0.0000000	V1
Thorium	0.0000059	0.0000054	V0	0.0000045	V0	0.0000000	V1
Tin	0.0004414	0.0000678	V0	0.0000644	V0	0.0000000	V1
Titanium	0.0015201	0.0016368	V0	0.0012089	V0	0.0002869	V0
Tungsten	0.0000938	0.0000652	V0	0.0000366	V0	0.0000535	V0
Uranium	0.0000048	0.0000043	V0	0.0000047	V0	0.0000000	V1
Vanadium	0.0007697	0.0001702	V0	0.0001911	V0	0.0000000	V1
Zinc	0.0055897	0.0014815	V0	0.0013632	V0	0.0002657	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**06-Apr**		**06-Apr**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	4.37	V0	0.08	V0
Aluminum	0.1380326	0.0468394	V0	0.0000000	V1
Antimony	0.0001784	0.0000461	V0	0.0000000	V1
Arsenic	0.0001060	0.0001091	V0	0.0000000	V1
Barium	0.0092847	0.0005160	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000306	V0	0.0000141	V0
Cadmium	0.0000174	0.0000096	V0	0.0000000	V1
Calcium	0.4112124	0.0554288	V0	0.0000000	V1
Cerium	0.0000174	0.0000569	V0	0.0000000	V1
Cesium	0.0000100	0.0000053	V0	0.0000000	V1
Chromium	0.0022262	0.0001827	V0	0.0001155	V0
Cobalt	0.0000273	0.0000737	V0	0.0000509	V0
Copper	0.0017171	0.0004604	V0	0.0010779	V0
Iron	0.0393063	0.0374284	V0	0.0016692	V0
Lanthanum	0.0000130	0.0000290	V0	0.0000000	V1
Lead	0.0008577	0.0003521	V0	0.0000000	V1
Lithium	0.0000374	0.0000657	V0	0.0000045	V0
Magnesium	0.0091409	0.0145203	V0	0.0013002	V0
Manganese	0.0006949	0.0013859	V0	0.0000382	V0
Molybdenum	0.0007116	0.0000780	V0	0.0000000	V1
Neodymium	0.0000140	0.0000222	V0	0.0000000	V1
Nickel	0.0005429	0.0002155	V0	0.0002443	V0
Niobium	0.0000202	0.0000075	V0	0.0000000	V1
Palladium	0.0000632	0.0000050	V0	0.0000054	V0
Phosphorus	0.0459574	0.0101897	V0	0.0105713	V0
Platinum	0.0000088	0.0000016	V0	0.0000005	V0
Potassium	0.0061261	0.0198546	V0	0.0012903	V0
Praseodymium	0.0000070	0.0000060	V0	0.0000000	V1
Rubidium	0.0000184	0.0000850	V0	0.0000019	V0
Samarium	0.0000133	0.0000051	V0	0.0000000	V1
Selenium	0.0003366	0.0000604	V0	0.0000000	V1
Silicon	0.1893637	0.0999913	V0	0.0000000	V1
Silver	0.0000100	0.0000005	V0	0.0000000	V1
Sodium	0.0169447	0.0293644	V0	0.0013905	V0
Strontium	0.0003375	0.0002647	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000030	V0	0.0000000	V1
Thorium	0.0000059	0.0000084	V0	0.0000000	V1
Tin	0.0004414	0.0000941	V0	0.0000000	V1
Titanium	0.0015201	0.0019618	V0	0.0002869	V0
Tungsten	0.0000938	0.0000639	V0	0.0000535	V0
Uranium	0.0000048	0.0000065	V0	0.0000000	V1
Vanadium	0.0007697	0.0003783	V0	0.0000000	V1
Zinc	0.0055897	0.0025562	V0	0.0002657	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		12-Apr		12-Apr		12-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	25.47	V0	31.94	V0	0.18	V0
Aluminum	0.1380326	1.1890581	V0	1.1564199	V0	0.0000000	V1
Antimony	0.0001784	0.0000536	V0	0.0002565	V0	0.0000000	V1
Arsenic	0.0001060	0.0002037	V0	0.0002676	V0	0.0000000	V1
Barium	0.0092847	0.0060757	V0	0.0098190	V0	0.0000000	V1
Beryllium	0.0000946	0.0000326	V0	0.0000261	V0	0.0000000	V1
Bismuth	0.0000093	0.0000127	V0	0.0000272	V0	0.0000050	V0
Cadmium	0.0000174	0.0000173	V0	0.0000252	V0	0.0000000	V1
Calcium	0.4112124	1.4215018	V0	2.0358178	V0	0.0180936	V0
Cerium	0.0000174	0.0010116	V0	0.0011477	V0	0.0000094	V4
Cesium	0.0000100	0.0000706	V0	0.0000702	V0	0.0000000	V1
Chromium	0.0022262	0.0012408	V0	0.0016172	V0	0.0000000	V1
Cobalt	0.0000273	0.0002930	V0	0.0003873	V0	0.0000470	V0
Copper	0.0017171	0.0007679	V0	0.0016544	V0	0.0002286	V0
Iron	0.0393063	0.6871805	V0	1.0576515	V0	0.0000000	V1
Lanthanum	0.0000130	0.0005007	V0	0.0005735	V0	0.0000048	V4
Lead	0.0008577	0.0006837	V0	0.0008339	V0	0.0000000	V1
Lithium	0.0000374	0.0015286	V0	0.0009009	V0	0.0000024	V0
Magnesium	0.0091409	0.1595091	V0	0.3433746	V0	0.0011044	V0
Manganese	0.0006949	0.0122965	V0	0.0176210	V0	0.0000332	V0
Molybdenum	0.0007116	0.0000856	V0	0.0002367	V0	0.0000000	V1
Neodymium	0.0000140	0.0004274	V0	0.0004924	V0	0.0000000	V1
Nickel	0.0005429	0.0009812	V0	0.0014124	V0	0.0000552	V0
Niobium	0.0000202	0.0001280	V0	0.0001129	V0	0.0000014	V0
Palladium	0.0000632	0.0000189	V0	0.0000229	V0	0.0000027	V0
Phosphorus	0.0459574	0.0186989	V0	0.0232592	V0	0.0087477	V0
Platinum	0.0000088	0.0000012	V0	0.0000020	V0	0.0000008	V0
Potassium	0.0061261	0.2082435	V0	0.3655604	V0	0.0012790	V0
Praseodymium	0.0000070	0.0001158	V0	0.0001317	V0	0.0000000	V1
Rubidium	0.0000184	0.0011947	V0	0.0013779	V0	0.0000019	V0
Samarium	0.0000133	0.0000778	V0	0.0000899	V0	0.0000000	V1
Selenium	0.0003366	0.0005818	V0	0.0006284	V0	0.0000000	V1
Silicon	0.1893637	2.4212223	V0	3.2977752	V0	0.0000000	V1
Silver	0.0000100	0.0000049	V0	0.0000055	V0	0.0000000	V1
Sodium	0.0169447	0.1224567	V0	0.2699184	V0	0.0013736	V0
Strontium	0.0003375	0.0034420	V0	0.0045356	V0	0.0000201	V0
Tantalum	0.0000394	0.0000083	V0	0.0000089	V0	0.0000000	V1
Thallium	0.0000090	0.0000124	V0	0.0000125	V0	0.0000000	V1
Thorium	0.0000059	0.0001346	V0	0.0001405	V0	0.0000000	V1
Tin	0.0004414	0.0001079	V0	0.0001929	V0	0.0000000	V1
Titanium	0.0015201	0.0492498	V0	0.0463766	V0	0.0001960	V0
Tungsten	0.0000938	0.0001577	V0	0.0006165	V0	0.0000483	V0
Uranium	0.0000048	0.0000442	V0	0.0000439	V0	0.0000000	V1
Vanadium	0.0007697	0.0019460	V0	0.0029749	V0	0.0000000	V1
Zinc	0.0055897	0.0033556	V0	0.0079345	V0	0.0002840	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		12-Apr		12-Apr		12-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	30.58	V0	6.81	V0	0.18	V0
Aluminum	0.1380326	0.9054451	V0	0.1651341	V0	0.0000000	V1
Antimony	0.0001784	0.0002545	V0	0.0000499	V0	0.0000000	V1
Arsenic	0.0001060	0.0002428	V0	0.0000968	V0	0.0000000	V1
Barium	0.0092847	0.0085255	V0	0.0017379	V0	0.0000000	V1
Beryllium	0.0000946	0.0000255	V0	0.0000055	V0	0.0000000	V1
Bismuth	0.0000093	0.0000336	V0	0.0000166	V0	0.0000050	V0
Cadmium	0.0000174	0.0000324	V0	0.0000139	V0	0.0000000	V1
Calcium	0.4112124	1.9803817	V0	0.2278593	V0	0.0180936	V0
Cerium	0.0000174	0.0008056	V0	0.0001813	V0	0.0000094	V4
Cesium	0.0000100	0.0000545	V0	0.0000146	V0	0.0000000	V1
Chromium	0.0022262	0.0013362	V0	0.0005126	V0	0.0000000	V1
Cobalt	0.0000273	0.0003348	V0	0.0001184	V0	0.0000470	V0
Copper	0.0017171	0.0016815	V0	0.0005700	V0	0.0002286	V0
Iron	0.0393063	0.8249014	V0	0.1429225	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003939	V0	0.0001002	V0	0.0000048	V4
Lead	0.0008577	0.0005851	V0	0.0004354	V0	0.0000000	V1
Lithium	0.0000374	0.0007206	V0	0.0001558	V0	0.0000024	V0
Magnesium	0.0091409	0.2516041	V0	0.0491802	V0	0.0011044	V0
Manganese	0.0006949	0.0154183	V0	0.0029115	V0	0.0000332	V0
Molybdenum	0.0007116	0.0002024	V0	0.0000448	V0	0.0000000	V1
Neodymium	0.0000140	0.0003512	V0	0.0000815	V0	0.0000000	V1
Nickel	0.0005429	0.0009509	V0	0.0004761	V0	0.0000552	V0
Niobium	0.0000202	0.0000957	V0	0.0000197	V0	0.0000014	V0
Palladium	0.0000632	0.0000160	V0	0.0000058	V0	0.0000027	V0
Phosphorus	0.0459574	0.0232889	V0	0.0121489	V0	0.0087477	V0
Platinum	0.0000088	0.0000015	V0	0.0000013	V0	0.0000008	V0
Potassium	0.0061261	0.2499679	V0	0.0558948	V0	0.0012790	V0
Praseodymium	0.0000070	0.0000923	V0	0.0000215	V0	0.0000000	V1
Rubidium	0.0000184	0.0011089	V0	0.0002539	V0	0.0000019	V0
Samarium	0.0000133	0.0000630	V0	0.0000140	V0	0.0000000	V1
Selenium	0.0003366	0.0004692	V0	0.0001386	V0	0.0000000	V1
Silicon	0.1893637	2.8297055	V0	0.5290043	V0	0.0000000	V1
Silver	0.0000100	0.0000044	V0	0.0000014	V0	0.0000000	V1
Sodium	0.0169447	0.2505380	V0	0.0436697	V0	0.0013736	V0
Strontium	0.0003375	0.0040547	V0	0.0006997	V0	0.0000201	V0
Tantalum	0.0000394	0.0000075	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000107	V0	0.0000048	V0	0.0000000	V1
Thorium	0.0000059	0.0000986	V0	0.0000242	V0	0.0000000	V1
Tin	0.0004414	0.0001857	V0	0.0000781	V0	0.0000000	V1
Titanium	0.0015201	0.0291758	V0	0.0060257	V0	0.0001960	V0
Tungsten	0.0000938	0.0005213	V0	0.0001221	V0	0.0000483	V0
Uranium	0.0000048	0.0000342	V0	0.0000088	V0	0.0000000	V1
Vanadium	0.0007697	0.0020646	V0	0.0004736	V0	0.0000000	V1
Zinc	0.0055897	0.0085866	V0	0.0022457	V0	0.0002840	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		12-Apr		12-Apr		12-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	15.01	V0	13.80	V0	0.18	V0
Aluminum	0.1380326	0.7646562	V0	0.4381201	V0	0.0000000	V1
Antimony	0.0001784	0.0000705	V0	0.0000434	V0	0.0000000	V1
Arsenic	0.0001060	0.0001511	V0	0.0001576	V0	0.0000000	V1
Barium	0.0092847	0.0042640	V0	0.0037014	V0	0.0000000	V1
Beryllium	0.0000946	0.0000199	V0	0.0000127	V0	0.0000000	V1
Bismuth	0.0000093	0.0000501	V0	0.0000118	V0	0.0000050	V0
Cadmium	0.0000174	0.0000175	V0	0.0000162	V0	0.0000000	V1
Calcium	0.4112124	0.4943303	V0	0.4406313	V0	0.0180936	V0
Cerium	0.0000174	0.0006337	V0	0.0004148	V0	0.0000094	V4
Cesium	0.0000100	0.0000419	V0	0.0000284	V0	0.0000000	V1
Chromium	0.0022262	0.0009122	V0	0.0005685	V0	0.0000000	V1
Cobalt	0.0000273	0.0002078	V0	0.0001685	V0	0.0000470	V0
Copper	0.0017171	0.0006644	V0	0.0006867	V0	0.0002286	V0
Iron	0.0393063	0.4562269	V0	0.4994505	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003181	V0	0.0002085	V0	0.0000048	V4
Lead	0.0008577	0.0005852	V0	0.0005166	V0	0.0000000	V1
Lithium	0.0000374	0.0009166	V0	0.0003504	V0	0.0000024	V0
Magnesium	0.0091409	0.1059812	V0	0.1117045	V0	0.0011044	V0
Manganese	0.0006949	0.0081654	V0	0.0078868	V0	0.0000332	V0
Molybdenum	0.0007116	0.0000713	V0	0.0000950	V0	0.0000000	V1
Neodymium	0.0000140	0.0002855	V0	0.0001774	V0	0.0000000	V1
Nickel	0.0005429	0.0006901	V0	0.0007508	V0	0.0000552	V0
Niobium	0.0000202	0.0000829	V0	0.0000404	V0	0.0000014	V0
Palladium	0.0000632	0.0000137	V0	0.0000101	V0	0.0000027	V0
Phosphorus	0.0459574	0.0165212	V0	0.0151497	V0	0.0087477	V0
Platinum	0.0000088	0.0000013	V0	0.0000008	V0	0.0000008	V0
Potassium	0.0061261	0.1384383	V0	0.1146271	V0	0.0012790	V0
Praseodymium	0.0000070	0.0000710	V0	0.0000479	V0	0.0000000	V1
Rubidium	0.0000184	0.0007321	V0	0.0005111	V0	0.0000019	V0
Samarium	0.0000133	0.0000505	V0	0.0000346	V0	0.0000000	V1
Selenium	0.0003366	0.0003738	V0	0.0002518	V0	0.0000000	V1
Silicon	0.1893637	1.2157509	V0	1.1941337	V0	0.0000000	V1
Silver	0.0000100	0.0000032	V0	0.0000015	V0	0.0000000	V1
Sodium	0.0169447	0.0836203	V0	0.0695539	V0	0.0013736	V0
Strontium	0.0003375	0.0018596	V0	0.0016702	V0	0.0000201	V0
Tantalum	0.0000394	0.0000053	V0	0.0000026	V0	0.0000000	V1
Thallium	0.0000090	0.0000091	V0	0.0000073	V0	0.0000000	V1
Thorium	0.0000059	0.0000765	V0	0.0000534	V0	0.0000000	V1
Tin	0.0004414	0.0001246	V0	0.0001030	V0	0.0000000	V1
Titanium	0.0015201	0.0253809	V0	0.0125416	V0	0.0001960	V0
Tungsten	0.0000938	0.0001614	V0	0.0001878	V0	0.0000483	V0
Uranium	0.0000048	0.0000292	V0	0.0000214	V0	0.0000000	V1
Vanadium	0.0007697	0.0012894	V0	0.0017267	V0	0.0000000	V1
Zinc	0.0055897	0.0033409	V0	0.0028880	V0	0.0002840	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**12-Apr**		**12-Apr**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	17.16	V0	0.18	V0
Aluminum	0.1380326	0.8320563	V0	0.0000000	V1
Antimony	0.0001784	0.0000528	V0	0.0000000	V1
Arsenic	0.0001060	0.0001490	V0	0.0000000	V1
Barium	0.0092847	0.0046417	V0	0.0000000	V1
Beryllium	0.0000946	0.0000225	V0	0.0000000	V1
Bismuth	0.0000093	0.0000304	V0	0.0000050	V0
Cadmium	0.0000174	0.0000186	V0	0.0000000	V1
Calcium	0.4112124	0.5408740	V0	0.0180936	V0
Cerium	0.0000174	0.0007047	V0	0.0000094	V4
Cesium	0.0000100	0.0000474	V0	0.0000000	V1
Chromium	0.0022262	0.0010189	V0	0.0000000	V1
Cobalt	0.0000273	0.0002082	V0	0.0000470	V0
Copper	0.0017171	0.0007597	V0	0.0002286	V0
Iron	0.0393063	0.6120689	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003504	V0	0.0000048	V4
Lead	0.0008577	0.0006315	V0	0.0000000	V1
Lithium	0.0000374	0.0010293	V0	0.0000024	V0
Magnesium	0.0091409	0.1287708	V0	0.0011044	V0
Manganese	0.0006949	0.0115921	V0	0.0000332	V0
Molybdenum	0.0007116	0.0000809	V0	0.0000000	V1
Neodymium	0.0000140	0.0003018	V0	0.0000000	V1
Nickel	0.0005429	0.0007566	V0	0.0000552	V0
Niobium	0.0000202	0.0000872	V0	0.0000014	V0
Palladium	0.0000632	0.0000124	V0	0.0000027	V0
Phosphorus	0.0459574	0.0171902	V0	0.0087477	V0
Platinum	0.0000088	0.0000008	V0	0.0000008	V0
Potassium	0.0061261	0.1501191	V0	0.0012790	V0
Praseodymium	0.0000070	0.0000794	V0	0.0000000	V1
Rubidium	0.0000184	0.0007924	V0	0.0000019	V0
Samarium	0.0000133	0.0000577	V0	0.0000000	V1
Selenium	0.0003366	0.0003865	V0	0.0000000	V1
Silicon	0.1893637	1.5706168	V0	0.0000000	V1
Silver	0.0000100	0.0000028	V0	0.0000000	V1
Sodium	0.0169447	0.0779915	V0	0.0013736	V0
Strontium	0.0003375	0.0021118	V0	0.0000201	V0
Tantalum	0.0000394	0.0000057	V0	0.0000000	V1
Thallium	0.0000090	0.0000093	V0	0.0000000	V1
Thorium	0.0000059	0.0000868	V0	0.0000000	V1
Tin	0.0004414	0.0001358	V0	0.0000000	V1
Titanium	0.0015201	0.0267366	V0	0.0001960	V0
Tungsten	0.0000938	0.0000755	V0	0.0000483	V0
Uranium	0.0000048	0.0000321	V0	0.0000000	V1
Vanadium	0.0007697	0.0013365	V0	0.0000000	V1
Zinc	0.0055897	0.0047043	V0	0.0002840	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		18-Apr		18-Apr		18-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	54.69	V0	15.05	V0	0.08	V0
Aluminum	0.1380326	2.6909309	V0	0.2954686	V0	0.0103385	V0
Antimony	0.0001784	0.0002122	V0	0.0003040	V0	0.0000000	V1
Arsenic	0.0001060	0.0005433	V0	0.0002071	V0	0.0000000	V1
Barium	0.0092847	0.0196741	V0	0.0051795	V0	0.0000000	V1
Beryllium	0.0000946	0.0000594	V0	0.0000063	V0	0.0000000	V1
Bismuth	0.0000093	0.0000280	V0	0.0000167	V0	0.0000030	V0
Cadmium	0.0000174	0.0000373	V0	0.0000288	V0	0.0000000	V1
Calcium	0.4112124	4.1639008	V4	0.7173713	V0	0.0000000	V1
Cerium	0.0000174	0.0023360	V0	0.0004112	V0	0.0000000	V1
Cesium	0.0000100	0.0001515	V0	0.0000213	V0	0.0000000	V1
Chromium	0.0022262	0.0026283	V0	0.0008019	V0	0.0000000	V1
Cobalt	0.0000273	0.0007000	V0	0.0008158	V0	0.0000300	V0
Copper	0.0017171	0.0033223	V0	0.0031978	V0	0.0001359	V0
Iron	0.0393063	2.1985739	V0	0.5247604	V0	0.0000000	V1
Lanthanum	0.0000130	0.0011439	V0	0.0002038	V0	0.0000000	V1
Lead	0.0008577	0.0013134	V0	0.0005189	V0	0.0000000	V1
Lithium	0.0000374	0.0016945	V0	0.0002332	V0	0.0000000	V1
Magnesium	0.0091409	0.4407007	V0	0.1466213	V0	0.0005970	V0
Manganese	0.0006949	0.0369291	V0	0.0086789	V0	0.0000815	V0
Molybdenum	0.0007116	0.0005804	V0	0.0001094	V0	0.0000000	V1
Neodymium	0.0000140	0.0010201	V0	0.0001733	V0	0.0000000	V1
Nickel	0.0005429	0.0029212	V0	0.0013879	V0	0.0000543	V0
Niobium	0.0000202	0.0002498	V0	0.0000442	V0	0.0000000	V1
Palladium	0.0000632	0.0000290	V0	0.0000093	V0	0.0000000	V1
Phosphorus	0.0459574	0.0358807	V0	0.0143975	V0	0.0060375	V0
Platinum	0.0000088	0.0000017	V0	0.0000018	V0	0.0000007	V0
Potassium	0.0061261	0.6655936	V0	0.0845096	V0	0.0008035	V0
Praseodymium	0.0000070	0.0002639	V0	0.0000458	V0	0.0000000	V1
Rubidium	0.0000184	0.0026770	V0	0.0004260	V0	0.0000000	V1
Samarium	0.0000133	0.0001937	V0	0.0000309	V0	0.0000000	V1
Selenium	0.0003366	0.0012013	V0	0.0002314	V0	0.0000000	V1
Silicon	0.1893637	6.6607711	V0	1.5430700	V0	0.0000000	V1
Silver	0.0000100	0.0000138	V0	0.0000022	V0	0.0000000	V1
Sodium	0.0169447	0.5927396	V4	0.1284095	V0	0.0012254	V0
Strontium	0.0003375	0.0092666	V0	0.0018457	V0	0.0000000	V1
Tantalum	0.0000394	0.0000189	V0	0.0000049	V0	0.0000000	V1
Thallium	0.0000090	0.0000275	V0	0.0000066	V0	0.0000000	V1
Thorium	0.0000059	0.0002905	V0	0.0000551	V0	0.0000000	V1
Tin	0.0004414	0.0002566	V0	0.0002121	V0	0.0000000	V1
Titanium	0.0015201	0.0720391	V0	0.0128387	V0	0.0001430	V0
Tungsten	0.0000938	0.0006459	V0	0.0005614	V0	0.0000245	V0
Uranium	0.0000048	0.0000877	V0	0.0000156	V0	0.0000000	V1
Vanadium	0.0007697	0.0073664	V4	0.0007061	V0	0.0000615	V0
Zinc	0.0055897	0.0114226	V0	0.0070325	V0	0.0002815	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		18-Apr		18-Apr		18-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	33.96	V0	13.74	V0	0.08	V0
Aluminum	0.1380326	1.3825171	V0	0.5727592	V0	0.0103385	V0
Antimony	0.0001784	0.0005684	V0	0.0000612	V0	0.0000000	V1
Arsenic	0.0001060	0.0003606	V0	0.0001943	V0	0.0000000	V1
Barium	0.0092847	0.0156561	V0	0.0052908	V0	0.0000000	V1
Beryllium	0.0000946	0.0000261	V0	0.0000098	V0	0.0000000	V1
Bismuth	0.0000093	0.0000406	V0	0.0000415	V0	0.0000030	V0
Cadmium	0.0000174	0.0000237	V0	0.0000319	V0	0.0000000	V1
Calcium	0.4112124	2.0812438	V0	0.4444364	V0	0.0000000	V1
Cerium	0.0000174	0.0012674	V0	0.0004392	V0	0.0000000	V1
Cesium	0.0000100	0.0000696	V0	0.0000314	V0	0.0000000	V1
Chromium	0.0022262	0.0016732	V0	0.0005732	V0	0.0000000	V1
Cobalt	0.0000273	0.0004836	V0	0.0001892	V0	0.0000300	V0
Copper	0.0017171	0.0039981	V0	0.0010798	V0	0.0001359	V0
Iron	0.0393063	1.5339938	V0	0.4436097	V0	0.0000000	V1
Lanthanum	0.0000130	0.0006284	V0	0.0002289	V0	0.0000000	V1
Lead	0.0008577	0.0010106	V0	0.0006718	V0	0.0000000	V1
Lithium	0.0000374	0.0007293	V0	0.0002416	V0	0.0000000	V1
Magnesium	0.0091409	0.4035484	V0	0.1194429	V0	0.0005970	V0
Manganese	0.0006949	0.0240401	V0	0.0099223	V0	0.0000815	V0
Molybdenum	0.0007116	0.0001989	V0	0.0000427	V0	0.0000000	V1
Neodymium	0.0000140	0.0005443	V0	0.0001949	V0	0.0000000	V1
Nickel	0.0005429	0.0011891	V0	0.0004942	V0	0.0000543	V0
Niobium	0.0000202	0.0001335	V0	0.0000516	V0	0.0000000	V1
Palladium	0.0000632	0.0000255	V0	0.0000047	V0	0.0000000	V1
Phosphorus	0.0459574	0.0280024	V0	0.0224990	V0	0.0060375	V0
Platinum	0.0000088	0.0000016	V0	0.0000012	V0	0.0000007	V0
Potassium	0.0061261	0.3512110	V0	0.1034021	V0	0.0008035	V0
Praseodymium	0.0000070	0.0001404	V0	0.0000497	V0	0.0000000	V1
Rubidium	0.0000184	0.0013349	V0	0.0005531	V0	0.0000000	V1
Samarium	0.0000133	0.0001012	V0	0.0000353	V0	0.0000000	V1
Selenium	0.0003366	0.0006598	V0	0.0002410	V0	0.0000000	V1
Silicon	0.1893637	3.0363658	V0	1.2865716	V0	0.0000000	V1
Silver	0.0000100	0.0000077	V0	0.0000035	V0	0.0000000	V1
Sodium	0.0169447	0.2561464	V0	0.1667454	V0	0.0012254	V0
Strontium	0.0003375	0.0049269	V0	0.0016687	V0	0.0000000	V1
Tantalum	0.0000394	0.0000134	V0	0.0000036	V0	0.0000000	V1
Thallium	0.0000090	0.0000157	V0	0.0000109	V0	0.0000000	V1
Thorium	0.0000059	0.0001661	V0	0.0000613	V0	0.0000000	V1
Tin	0.0004414	0.0004300	V0	0.0000780	V0	0.0000000	V1
Titanium	0.0015201	0.0407932	V0	0.0148133	V0	0.0001430	V0
Tungsten	0.0000938	0.0014317	V4	0.0002866	V0	0.0000245	V0
Uranium	0.0000048	0.0000459	V0	0.0000196	V0	0.0000000	V1
Vanadium	0.0007697	0.0020823	V0	0.0008309	V0	0.0000615	V0
Zinc	0.0055897	0.0139569	V0	0.0042594	V0	0.0002815	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		18-Apr		18-Apr		18-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	37.82	V0	13.75	V0	0.08	V0
Aluminum	0.1380326	1.0988424	V0	0.6699296	V0	0.0103385	V0
Antimony	0.0001784	0.0001210	V0	0.0000530	V0	0.0000000	V1
Arsenic	0.0001060	0.0002426	V0	0.0001553	V0	0.0000000	V1
Barium	0.0092847	0.0072602	V0	0.0038229	V0	0.0000000	V1
Beryllium	0.0000946	0.0000254	V0	0.0000089	V0	0.0000000	V1
Bismuth	0.0000093	0.0000255	V0	0.0000218	V0	0.0000030	V0
Cadmium	0.0000174	0.0000144	V0	0.0000166	V0	0.0000000	V1
Calcium	0.4112124	0.9011569	V0	0.2548129	V0	0.0000000	V1
Cerium	0.0000174	0.0008875	V0	0.0004553	V0	0.0000000	V1
Cesium	0.0000100	0.0000592	V0	0.0000369	V0	0.0000000	V1
Chromium	0.0022262	0.0013799	V0	0.0008589	V0	0.0000000	V1
Cobalt	0.0000273	0.0003444	V0	0.0001741	V0	0.0000300	V0
Copper	0.0017171	0.0037763	V0	0.0005952	V0	0.0001359	V0
Iron	0.0393063	0.8071392	V0	0.3010882	V0	0.0000000	V1
Lanthanum	0.0000130	0.0004267	V0	0.0002293	V0	0.0000000	V1
Lead	0.0008577	0.0009342	V0	0.0004951	V0	0.0000000	V1
Lithium	0.0000374	0.0008250	V0	0.0004036	V0	0.0000000	V1
Magnesium	0.0091409	0.1472821	V0	0.0759654	V0	0.0005970	V0
Manganese	0.0006949	0.0129239	V0	0.0058287	V0	0.0000815	V0
Molybdenum	0.0007116	0.0003816	V0	0.0001570	V0	0.0000000	V1
Neodymium	0.0000140	0.0003973	V0	0.0001947	V0	0.0000000	V1
Nickel	0.0005429	0.0018789	V0	0.0008866	V0	0.0000543	V0
Niobium	0.0000202	0.0001085	V0	0.0000551	V0	0.0000000	V1
Palladium	0.0000632	0.0000104	V0	0.0000066	V0	0.0000000	V1
Phosphorus	0.0459574	0.0178793	V0	0.0152117	V0	0.0060375	V0
Platinum	0.0000088	0.0000010	V0	0.0000010	V0	0.0000007	V0
Potassium	0.0061261	0.2609015	V0	0.0953948	V0	0.0008035	V0
Praseodymium	0.0000070	0.0001017	V0	0.0000503	V0	0.0000000	V1
Rubidium	0.0000184	0.0010369	V0	0.0005791	V0	0.0000000	V1
Samarium	0.0000133	0.0000754	V0	0.0000402	V0	0.0000000	V1
Selenium	0.0003366	0.0004811	V0	0.0002595	V0	0.0000000	V1
Silicon	0.1893637	5.0604571	V0	1.4487327	V0	0.0000000	V1
Silver	0.0000100	0.0000046	V0	0.0000021	V0	0.0000000	V1
Sodium	0.0169447	0.1733641	V0	0.0860642	V0	0.0012254	V0
Strontium	0.0003375	0.0032586	V0	0.0015023	V0	0.0000000	V1
Tantalum	0.0000394	0.0000072	V0	0.0000034	V0	0.0000000	V1
Thallium	0.0000090	0.0000129	V0	0.0000083	V0	0.0000000	V1
Thorium	0.0000059	0.0001099	V0	0.0000623	V0	0.0000000	V1
Tin	0.0004414	0.0001253	V0	0.0000707	V0	0.0000000	V1
Titanium	0.0015201	0.0314885	V0	0.0156135	V0	0.0001430	V0
Tungsten	0.0000938	0.0001893	V0	0.0000758	V0	0.0000245	V0
Uranium	0.0000048	0.0000405	V0	0.0000183	V0	0.0000000	V1
Vanadium	0.0007697	0.0043577	V0	0.0018417	V0	0.0000615	V0
Zinc	0.0055897	0.0067152	V0	0.0023309	V0	0.0002815	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**18-Apr**		**18-Apr**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	25.36	V0	0.08	V0
Aluminum	0.1380326	1.5909989	V0	0.0103385	V0
Antimony	0.0001784	0.0000693	V0	0.0000000	V1
Arsenic	0.0001060	0.0002383	V0	0.0000000	V1
Barium	0.0092847	0.0083514	V0	0.0000000	V1
Beryllium	0.0000946	0.0000289	V0	0.0000000	V1
Bismuth	0.0000093	0.0000202	V0	0.0000030	V0
Cadmium	0.0000174	0.0000206	V0	0.0000000	V1
Calcium	0.4112124	1.0805063	V0	0.0000000	V1
Cerium	0.0000174	0.0011014	V0	0.0000000	V1
Cesium	0.0000100	0.0000847	V0	0.0000000	V1
Chromium	0.0022262	0.0012735	V0	0.0000000	V1
Cobalt	0.0000273	0.0003393	V0	0.0000300	V0
Copper	0.0017171	0.0009082	V0	0.0001359	V0
Iron	0.0393063	0.8025331	V0	0.0000000	V1
Lanthanum	0.0000130	0.0005501	V0	0.0000000	V1
Lead	0.0008577	0.0007586	V0	0.0000000	V1
Lithium	0.0000374	0.0009171	V0	0.0000000	V1
Magnesium	0.0091409	0.1842252	V0	0.0005970	V0
Manganese	0.0006949	0.0130598	V0	0.0000815	V0
Molybdenum	0.0007116	0.0001797	V0	0.0000000	V1
Neodymium	0.0000140	0.0004846	V0	0.0000000	V1
Nickel	0.0005429	0.0013303	V0	0.0000543	V0
Niobium	0.0000202	0.0001288	V0	0.0000000	V1
Palladium	0.0000632	0.0000147	V0	0.0000000	V1
Phosphorus	0.0459574	0.0200363	V0	0.0060375	V0
Platinum	0.0000088	0.0000006	V0	0.0000007	V0
Potassium	0.0061261	0.3206917	V0	0.0008035	V0
Praseodymium	0.0000070	0.0001250	V0	0.0000000	V1
Rubidium	0.0000184	0.0013811	V0	0.0000000	V1
Samarium	0.0000133	0.0000930	V0	0.0000000	V1
Selenium	0.0003366	0.0005749	V0	0.0000000	V1
Silicon	0.1893637	1.9997233	V0	0.0000000	V1
Silver	0.0000100	0.0000055	V0	0.0000000	V1
Sodium	0.0169447	0.1459591	V0	0.0012254	V0
Strontium	0.0003375	0.0033930	V0	0.0000000	V1
Tantalum	0.0000394	0.0000090	V0	0.0000000	V1
Thallium	0.0000090	0.0000149	V0	0.0000000	V1
Thorium	0.0000059	0.0001497	V0	0.0000000	V1
Tin	0.0004414	0.0001037	V0	0.0000000	V1
Titanium	0.0015201	0.0382958	V0	0.0001430	V0
Tungsten	0.0000938	0.0001298	V0	0.0000245	V0
Uranium	0.0000048	0.0000419	V0	0.0000000	V1
Vanadium	0.0007697	0.0030334	V0	0.0000615	V0
Zinc	0.0055897	0.0041470	V0	0.0002815	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		24-Apr		24-Apr		24-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	24.93	V0	12.38	V0	0.20	V0
Aluminum	0.1380326	0.7691341	V0	0.2687326	V0	0.0000000	V1
Antimony	0.0001784	0.0000517	V0	0.0002419	V0	0.0000000	V1
Arsenic	0.0001060	0.0002376	V0	0.0002528	V0	0.0000000	V1
Barium	0.0092847	0.0061316	V0	0.0044180	V0	0.0000000	V1
Beryllium	0.0000946	0.0000262	V0	0.0000099	V0	0.0000000	V1
Bismuth	0.0000093	0.0000154	V0	0.0000243	V0	0.0000114	V0
Cadmium	0.0000174	0.0000180	V0	0.0000227	V0	0.0000000	V1
Calcium	0.4112124	1.0358442	V0	0.6277020	V0	0.0000000	V1
Cerium	0.0000174	0.0007906	V0	0.0003604	V0	0.0000000	V1
Cesium	0.0000100	0.0000625	V0	0.0000203	V0	0.0000000	V1
Chromium	0.0022262	0.0011386	V0	0.0005932	V0	0.0001300	V0
Cobalt	0.0000273	0.0002910	V0	0.0002042	V0	0.0000386	V0
Copper	0.0017171	0.0016074	V0	0.0019435	V0	0.0000726	V0
Iron	0.0393063	0.6068111	V0	0.4008407	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003951	V0	0.0001795	V0	0.0000000	V1
Lead	0.0008577	0.0005838	V0	0.0005605	V0	0.0000000	V1
Lithium	0.0000374	0.0006674	V0	0.0001966	V0	0.0000000	V1
Magnesium	0.0091409	0.1490594	V0	0.1390954	V0	0.0007539	V0
Manganese	0.0006949	0.0093891	V0	0.0068235	V0	0.0000305	V0
Molybdenum	0.0007116	0.0001875	V0	0.0000703	V0	0.0000000	V1
Neodymium	0.0000140	0.0003456	V0	0.0001483	V0	0.0000000	V1
Nickel	0.0005429	0.0010825	V0	0.0004507	V0	0.0001231	V0
Niobium	0.0000202	0.0001091	V0	0.0000418	V0	0.0000023	V0
Palladium	0.0000632	0.0000118	V0	0.0000068	V0	0.0000000	V1
Phosphorus	0.0459574	0.0146454	V0	0.0131326	V0	0.0066180	V0
Platinum	0.0000088	0.0000019	V0	0.0000018	V0	0.0000017	V0
Potassium	0.0061261	0.2574545	V0	0.1144448	V0	0.0133025	V0
Praseodymium	0.0000070	0.0000906	V0	0.0000390	V0	0.0000000	V1
Rubidium	0.0000184	0.0010345	V0	0.0004053	V0	0.0000010	V0
Samarium	0.0000133	0.0000654	V0	0.0000271	V0	0.0000000	V1
Selenium	0.0003366	0.0005116	V0	0.0002247	V0	0.0000276	V0
Silicon	0.1893637	2.2733807	V0	1.0525466	V0	0.0000000	V1
Silver	0.0000100	0.0000040	V0	0.0000031	V0	0.0000000	V1
Sodium	0.0169447	0.1466914	V0	0.0875757	V0	0.0013063	V0
Strontium	0.0003375	0.0030906	V0	0.0016548	V0	0.0000000	V1
Tantalum	0.0000394	0.0000069	V0	0.0000042	V0	0.0000000	V1
Thallium	0.0000090	0.0000121	V0	0.0000079	V0	0.0000000	V1
Thorium	0.0000059	0.0001047	V0	0.0000439	V0	0.0000000	V1
Tin	0.0004414	0.0000920	V0	0.0001984	V0	0.0000000	V1
Titanium	0.0015201	0.0309452	V0	0.0116070	V0	0.0001862	V0
Tungsten	0.0000938	0.0001816	V0	0.0004968	V0	0.0000319	V0
Uranium	0.0000048	0.0000349	V0	0.0000132	V0	0.0000000	V1
Vanadium	0.0007697	0.0024899	V0	0.0005949	V0	0.0000000	V1
Zinc	0.0055897	0.0035235	V0	0.0064695	V0	0.0002741	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		24-Apr		24-Apr		24-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	54.02	V0	54.02	V0	0.20	V0
Aluminum	0.1380326	0.8064846	V0	0.1657896	V0	0.0000000	V1
Antimony	0.0001784	0.0002755	V0	0.0000411	V0	0.0000000	V1
Arsenic	0.0001060	0.0003238	V0	0.0001080	V0	0.0000000	V1
Barium	0.0092847	0.0123142	V0	0.0017825	V0	0.0000000	V1
Beryllium	0.0000946	0.0000359	V0	0.0000080	V0	0.0000000	V1
Bismuth	0.0000093	0.0000501	V0	0.0000232	V0	0.0000114	V0
Cadmium	0.0000174	0.0000175	V0	0.0000175	V0	0.0000000	V1
Calcium	0.4112124	2.9690491	V0	0.2650540	V0	0.0000000	V1
Cerium	0.0000174	0.0011490	V0	0.0002166	V0	0.0000000	V1
Cesium	0.0000100	0.0000509	V0	0.0000140	V0	0.0000000	V1
Chromium	0.0022262	0.0018423	V0	0.0004147	V0	0.0001300	V0
Cobalt	0.0000273	0.0009336	V4	0.0001147	V0	0.0000386	V0
Copper	0.0017171	0.0024122	V0	0.0006574	V0	0.0000726	V0
Iron	0.0393063	1.9825478	V0	0.1573934	V0	0.0000000	V1
Lanthanum	0.0000130	0.0005715	V0	0.0001071	V0	0.0000000	V1
Lead	0.0008577	0.0008481	V0	0.0004280	V0	0.0000000	V1
Lithium	0.0000374	0.0006525	V0	0.0000983	V0	0.0000000	V1
Magnesium	0.0091409	0.5152088	V0	0.0648161	V0	0.0007539	V0
Manganese	0.0006949	0.0314704	V0	0.0035919	V0	0.0000305	V0
Molybdenum	0.0007116	0.0002023	V0	0.0000410	V0	0.0000000	V1
Neodymium	0.0000140	0.0004979	V0	0.0000878	V0	0.0000000	V1
Nickel	0.0005429	0.0013292	V0	0.0003702	V0	0.0001231	V0
Niobium	0.0000202	0.0001246	V0	0.0000231	V0	0.0000023	V0
Palladium	0.0000632	0.0000132	V0	0.0000040	V0	0.0000000	V1
Phosphorus	0.0459574	0.0217695	V0	0.0075089	V0	0.0066180	V0
Platinum	0.0000088	0.0000029	V0	0.0000013	V0	0.0000017	V0
Potassium	0.0061261	0.3437173	V0	0.0694996	V0	0.0133025	V0
Praseodymium	0.0000070	0.0001295	V0	0.0000227	V0	0.0000000	V1
Rubidium	0.0000184	0.0011983	V0	0.0002542	V0	0.0000010	V0
Samarium	0.0000133	0.0000880	V0	0.0000155	V0	0.0000000	V1
Selenium	0.0003366	0.0006092	V0	0.0001351	V0	0.0000276	V0
Silicon	0.1893637	4.6982640	V0	0.5538152	V0	0.0000000	V1
Silver	0.0000100	0.0000070	V0	0.0000020	V0	0.0000000	V1
Sodium	0.0169447	0.2605111	V0	0.0538669	V0	0.0013063	V0
Strontium	0.0003375	0.0056322	V0	0.0008304	V0	0.0000000	V1
Tantalum	0.0000394	0.0000176	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000152	V0	0.0000068	V0	0.0000000	V1
Thorium	0.0000059	0.0001387	V0	0.0000288	V0	0.0000000	V1
Tin	0.0004414	0.0002558	V0	0.0000682	V0	0.0000000	V1
Titanium	0.0015201	0.0377467	V0	0.0059669	V0	0.0001862	V0
Tungsten	0.0000938	0.0043014	V4	0.0001061	V0	0.0000319	V0
Uranium	0.0000048	0.0000444	V0	0.0000086	V0	0.0000000	V1
Vanadium	0.0007697	0.0021227	V0	0.0003371	V0	0.0000000	V1
Zinc	0.0055897	0.0124382	V0	0.0018477	V0	0.0002741	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		24-Apr		24-Apr		24-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	26.63	V0	28.45	V0	0.20	V0
Aluminum	0.1380326	1.1810828	V0	0.9718625	V0	0.0000000	V1
Antimony	0.0001784	0.0000747	V0	0.0000605	V0	0.0000000	V1
Arsenic	0.0001060	0.0002732	V0	0.0002891	V0	0.0000000	V1
Barium	0.0092847	0.0083331	V0	0.0074375	V0	0.0000000	V1
Beryllium	0.0000946	0.0000322	V0	0.0000353	V0	0.0000000	V1
Bismuth	0.0000093	0.0000220	V0	0.0000252	V0	0.0000114	V0
Cadmium	0.0000174	0.0000208	V0	0.0000195	V0	0.0000000	V1
Calcium	0.4112124	1.0445720	V0	1.0219043	V0	0.0000000	V1
Cerium	0.0000174	0.0011152	V0	0.0009239	V0	0.0000000	V1
Cesium	0.0000100	0.0000952	V0	0.0000773	V0	0.0000000	V1
Chromium	0.0022262	0.0014499	V0	0.0013870	V0	0.0001300	V0
Cobalt	0.0000273	0.0003502	V0	0.0003360	V0	0.0000386	V0
Copper	0.0017171	0.0011295	V0	0.0010452	V0	0.0000726	V0
Iron	0.0393063	0.6789797	V0	0.9524111	V0	0.0000000	V1
Lanthanum	0.0000130	0.0005660	V0	0.0004458	V0	0.0000000	V1
Lead	0.0008577	0.0007445	V0	0.0006564	V0	0.0000000	V1
Lithium	0.0000374	0.0009785	V0	0.0008506	V0	0.0000000	V1
Magnesium	0.0091409	0.1956658	V0	0.1999025	V0	0.0007539	V0
Manganese	0.0006949	0.0102062	V0	0.0135255	V0	0.0000305	V0
Molybdenum	0.0007116	0.0002768	V0	0.0001895	V0	0.0000000	V1
Neodymium	0.0000140	0.0005181	V0	0.0004089	V0	0.0000000	V1
Nickel	0.0005429	0.0015663	V0	0.0013383	V0	0.0001231	V0
Niobium	0.0000202	0.0001528	V0	0.0001230	V0	0.0000023	V0
Palladium	0.0000632	0.0000177	V0	0.0000126	V0	0.0000000	V1
Phosphorus	0.0459574	0.0147560	V0	0.0162387	V0	0.0066180	V0
Platinum	0.0000088	0.0000016	V0	0.0000009	V0	0.0000017	V0
Potassium	0.0061261	0.3457464	V0	0.2921658	V0	0.0133025	V0
Praseodymium	0.0000070	0.0001299	V0	0.0001048	V0	0.0000000	V1
Rubidium	0.0000184	0.0015612	V0	0.0012826	V0	0.0000010	V0
Samarium	0.0000133	0.0000970	V0	0.0000807	V0	0.0000000	V1
Selenium	0.0003366	0.0006283	V0	0.0005666	V0	0.0000276	V0
Silicon	0.1893637	3.1677815	V0	3.5980887	V0	0.0000000	V1
Silver	0.0000100	0.0000084	V0	0.0000050	V0	0.0000000	V1
Sodium	0.0169447	0.1823347	V0	0.1590055	V0	0.0013063	V0
Strontium	0.0003375	0.0038361	V0	0.0034831	V0	0.0000000	V1
Tantalum	0.0000394	0.0000096	V0	0.0000087	V0	0.0000000	V1
Thallium	0.0000090	0.0000157	V0	0.0000144	V0	0.0000000	V1
Thorium	0.0000059	0.0001557	V0	0.0001261	V0	0.0000000	V1
Tin	0.0004414	0.0001213	V0	0.0001140	V0	0.0000000	V1
Titanium	0.0015201	0.0413816	V0	0.0347878	V0	0.0001862	V0
Tungsten	0.0000938	0.0001563	V0	0.0001353	V0	0.0000319	V0
Uranium	0.0000048	0.0000458	V0	0.0000449	V0	0.0000000	V1
Vanadium	0.0007697	0.0035931	V0	0.0029556	V0	0.0000000	V1
Zinc	0.0055897	0.0040016	V0	0.0036697	V0	0.0002741	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**24-Apr**		**24-Apr**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	14.35	V0	0.20	V0
Aluminum	0.1380326	0.6537103	V0	0.0000000	V1
Antimony	0.0001784	0.0000466	V0	0.0000000	V1
Arsenic	0.0001060	0.0001692	V0	0.0000000	V1
Barium	0.0092847	0.0048617	V0	0.0000000	V1
Beryllium	0.0000946	0.0000175	V0	0.0000000	V1
Bismuth	0.0000093	0.0000211	V0	0.0000114	V0
Cadmium	0.0000174	0.0000186	V0	0.0000000	V1
Calcium	0.4112124	0.5741905	V0	0.0000000	V1
Cerium	0.0000174	0.0006534	V0	0.0000000	V1
Cesium	0.0000100	0.0000503	V0	0.0000000	V1
Chromium	0.0022262	0.0007956	V0	0.0001300	V0
Cobalt	0.0000273	0.0002032	V0	0.0000386	V0
Copper	0.0017171	0.0012387	V0	0.0000726	V0
Iron	0.0393063	0.5055136	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003055	V0	0.0000000	V1
Lead	0.0008577	0.0005730	V0	0.0000000	V1
Lithium	0.0000374	0.0005382	V0	0.0000000	V1
Magnesium	0.0091409	0.1262700	V0	0.0007539	V0
Manganese	0.0006949	0.0087199	V0	0.0000305	V0
Molybdenum	0.0007116	0.0000942	V0	0.0000000	V1
Neodymium	0.0000140	0.0002879	V0	0.0000000	V1
Nickel	0.0005429	0.0007017	V0	0.0001231	V0
Niobium	0.0000202	0.0000693	V0	0.0000023	V0
Palladium	0.0000632	0.0000071	V0	0.0000000	V1
Phosphorus	0.0459574	0.0102865	V0	0.0066180	V0
Platinum	0.0000088	0.0000015	V0	0.0000017	V0
Potassium	0.0061261	0.1886417	V0	0.0133025	V0
Praseodymium	0.0000070	0.0000718	V0	0.0000000	V1
Rubidium	0.0000184	0.0008734	V0	0.0000010	V0
Samarium	0.0000133	0.0000508	V0	0.0000000	V1
Selenium	0.0003366	0.0003512	V0	0.0000276	V0
Silicon	0.1893637	1.6210406	V0	0.0000000	V1
Silver	0.0000100	0.0000044	V0	0.0000000	V1
Sodium	0.0169447	0.0877474	V0	0.0013063	V0
Strontium	0.0003375	0.0021533	V0	0.0000000	V1
Tantalum	0.0000394	0.0000043	V0	0.0000000	V1
Thallium	0.0000090	0.0000108	V0	0.0000000	V1
Thorium	0.0000059	0.0000877	V0	0.0000000	V1
Tin	0.0004414	0.0001080	V0	0.0000000	V1
Titanium	0.0015201	0.0200799	V0	0.0001862	V0
Tungsten	0.0000938	0.0001173	V0	0.0000319	V0
Uranium	0.0000048	0.0000241	V0	0.0000000	V1
Vanadium	0.0007697	0.0013458	V0	0.0000000	V1
Zinc	0.0055897	0.0025568	V0	0.0002741	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		30-Apr		30-Apr		30-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	25.43	V0	14.02	V0	0.08	V0
Aluminum	0.1380326	0.7458515	V0	0.3553546	V0	0.0092639	V0
Antimony	0.0001784	0.0000706	V0	0.0003154	V0	0.0000000	V1
Arsenic	0.0001060	0.0002457	V0	0.0016531	V4	0.0000000	V1
Barium	0.0092847	0.0074160	V0	0.0055033	V0	0.0000000	V1
Beryllium	0.0000946	0.0000256	V0	0.0000109	V0	0.0000000	V1
Bismuth	0.0000093	0.0000149	V0	0.0000213	V0	0.0000006	V0
Cadmium	0.0000174	0.0000204	V0	0.0000350	V0	0.0000000	V1
Calcium	0.4112124	1.3858564	V0	0.5987813	V0	0.0000000	V1
Cerium	0.0000174	0.0007929	V0	0.0004182	V0	0.0000009	V0
Cesium	0.0000100	0.0000575	V0	0.0000265	V0	0.0000000	V1
Chromium	0.0022262	0.0012134	V0	0.0007492	V0	0.0001267	V0
Cobalt	0.0000273	0.0002721	V0	0.0001582	V0	0.0000360	V0
Copper	0.0017171	0.0019327	V0	0.0016750	V0	0.0007197	V0
Iron	0.0393063	0.7619172	V0	0.4044918	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003910	V0	0.0002276	V0	0.0000000	V1
Lead	0.0008577	0.0005517	V0	0.0005056	V0	0.0000000	V1
Lithium	0.0000374	0.0007141	V0	0.0002236	V0	0.0000000	V1
Magnesium	0.0091409	0.1818962	V0	0.1426104	V0	0.0006200	V0
Manganese	0.0006949	0.0140599	V0	0.0079583	V0	0.0000812	V0
Molybdenum	0.0007116	0.0001290	V0	0.0000723	V0	0.0000000	V1
Neodymium	0.0000140	0.0003474	V0	0.0001790	V0	0.0000000	V1
Nickel	0.0005429	0.0013930	V0	0.0005458	V0	0.0002138	V0
Niobium	0.0000202	0.0000926	V0	0.0000423	V0	0.0000000	V1
Palladium	0.0000632	0.0000098	V0	0.0000076	V0	0.0000000	V1
Phosphorus	0.0459574	0.0190413	V0	0.0127210	V0	0.0052384	V0
Platinum	0.0000088	0.0000018	V0	0.0000014	V0	0.0000009	V0
Potassium	0.0061261	0.2688803	V0	0.1533519	V0	0.0008139	V0
Praseodymium	0.0000070	0.0000893	V0	0.0000461	V0	0.0000000	V1
Rubidium	0.0000184	0.0010367	V0	0.0005295	V0	0.0000000	V1
Samarium	0.0000133	0.0000680	V0	0.0000319	V0	0.0000000	V1
Selenium	0.0003366	0.0004867	V0	0.0002933	V0	0.0000219	V0
Silicon	0.1893637	3.0530425	V0	1.3936883	V0	0.0000000	V1
Silver	0.0000100	0.0000067	V0	0.0000062	V0	0.0000000	V1
Sodium	0.0169447	0.1729847	V0	0.0893579	V0	0.0015788	V0
Strontium	0.0003375	0.0035366	V0	0.0018884	V0	0.0000218	V0
Tantalum	0.0000394	0.0000064	V0	0.0000044	V0	0.0000000	V1
Thallium	0.0000090	0.0000122	V0	0.0000084	V0	0.0000000	V1
Thorium	0.0000059	0.0001072	V0	0.0000558	V0	0.0000000	V1
Tin	0.0004414	0.0001019	V0	0.0001848	V0	0.0000000	V1
Titanium	0.0015201	0.0267089	V0	0.0123496	V0	0.0001822	V0
Tungsten	0.0000938	0.0001804	V0	0.0002883	V0	0.0000467	V0
Uranium	0.0000048	0.0000343	V0	0.0000168	V0	0.0000000	V1
Vanadium	0.0007697	0.0020194	V0	0.0007588	V0	0.0000325	V0
Zinc	0.0055897	0.0058182	V0	0.0067658	V0	0.0006014	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		30-Apr		30-Apr		30-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	22.29	V0	9.38	V0	0.08	V0
Aluminum	0.1380326	0.5696922	V0	0.1982747	V0	0.0092639	V0
Antimony	0.0001784	0.0006469	V4	0.0001334	V0	0.0000000	V1
Arsenic	0.0001060	0.0004229	V0	0.0001911	V0	0.0000000	V1
Barium	0.0092847	0.0117274	V0	0.0034648	V0	0.0000000	V1
Beryllium	0.0000946	0.0000180	V0	0.0000093	V0	0.0000000	V1
Bismuth	0.0000093	0.0000601	V0	0.0000118	V0	0.0000006	V0
Cadmium	0.0000174	0.0000311	V0	0.0000238	V0	0.0000000	V1
Calcium	0.4112124	1.2862172	V0	0.2553946	V0	0.0000000	V1
Cerium	0.0000174	0.0007062	V0	0.0002140	V0	0.0000009	V0
Cesium	0.0000100	0.0000401	V0	0.0000159	V0	0.0000000	V1
Chromium	0.0022262	0.0010861	V0	0.0006055	V0	0.0001267	V0
Cobalt	0.0000273	0.0002988	V0	0.0001204	V0	0.0000360	V0
Copper	0.0017171	0.0039489	V0	0.0008257	V0	0.0007197	V0
Iron	0.0393063	0.9037569	V0	0.3638446	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003568	V0	0.0001210	V0	0.0000000	V1
Lead	0.0008577	0.0006856	V0	0.0003736	V0	0.0000000	V1
Lithium	0.0000374	0.0004098	V0	0.0001162	V0	0.0000000	V1
Magnesium	0.0091409	0.2620124	V0	0.0708262	V0	0.0006200	V0
Manganese	0.0006949	0.0152842	V0	0.0062798	V0	0.0000812	V0
Molybdenum	0.0007116	0.0001566	V0	0.0000977	V0	0.0000000	V1
Neodymium	0.0000140	0.0003017	V0	0.0000933	V0	0.0000000	V1
Nickel	0.0005429	0.0007891	V0	0.0004367	V0	0.0002138	V0
Niobium	0.0000202	0.0000690	V0	0.0000265	V0	0.0000000	V1
Palladium	0.0000632	0.0000160	V0	0.0000033	V0	0.0000000	V1
Phosphorus	0.0459574	0.0207965	V0	0.0160039	V0	0.0052384	V0
Platinum	0.0000088	0.0000013	V0	0.0000008	V0	0.0000009	V0
Potassium	0.0061261	0.2280258	V0	0.0940136	V0	0.0008139	V0
Praseodymium	0.0000070	0.0000770	V0	0.0000235	V0	0.0000000	V1
Rubidium	0.0000184	0.0007909	V0	0.0003148	V0	0.0000000	V1
Samarium	0.0000133	0.0000535	V0	0.0000172	V0	0.0000000	V1
Selenium	0.0003366	0.0004288	V0	0.0002091	V0	0.0000219	V0
Silicon	0.1893637	2.0780630	V0	0.7271958	V0	0.0000000	V1
Silver	0.0000100	0.0000079	V0	0.0000035	V0	0.0000000	V1
Sodium	0.0169447	0.1632887	V0	0.0487916	V0	0.0015788	V0
Strontium	0.0003375	0.0032838	V0	0.0009352	V0	0.0000218	V0
Tantalum	0.0000394	0.0000076	V0	0.0000017	V0	0.0000000	V1
Thallium	0.0000090	0.0000110	V0	0.0000062	V0	0.0000000	V1
Thorium	0.0000059	0.0000907	V0	0.0000317	V0	0.0000000	V1
Tin	0.0004414	0.0004418	V0	0.0001086	V0	0.0000000	V1
Titanium	0.0015201	0.0219513	V0	0.0070273	V0	0.0001822	V0
Tungsten	0.0000938	0.0007971	V4	0.0001236	V0	0.0000467	V0
Uranium	0.0000048	0.0000279	V0	0.0000109	V0	0.0000000	V1
Vanadium	0.0007697	0.0012869	V0	0.0004448	V0	0.0000325	V0
Zinc	0.0055897	0.0129096	V0	0.0028622	V0	0.0006014	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		30-Apr		30-Apr		30-Apr	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	22.43	V0	15.89	V0	0.08	V0
Aluminum	0.1380326	0.8608057	V0	0.6348952	V0	0.0092639	V0
Antimony	0.0001784	0.0000601	V0	0.0000417	V0	0.0000000	V1
Arsenic	0.0001060	0.0002135	V0	0.0002169	V0	0.0000000	V1
Barium	0.0092847	0.0078003	V0	0.0065642	V0	0.0000000	V1
Beryllium	0.0000946	0.0000249	V0	0.0000208	V0	0.0000000	V1
Bismuth	0.0000093	0.0000160	V0	0.0000124	V0	0.0000006	V0
Cadmium	0.0000174	0.0000160	V0	0.0000157	V0	0.0000000	V1
Calcium	0.4112124	0.5496296	V0	0.3419657	V0	0.0000000	V1
Cerium	0.0000174	0.0007955	V0	0.0005821	V0	0.0000009	V0
Cesium	0.0000100	0.0000728	V0	0.0000507	V0	0.0000000	V1
Chromium	0.0022262	0.0011454	V0	0.0008120	V0	0.0001267	V0
Cobalt	0.0000273	0.0003019	V0	0.0002177	V0	0.0000360	V0
Copper	0.0017171	0.0008985	V0	0.0008054	V0	0.0007197	V0
Iron	0.0393063	0.5854006	V0	0.4802524	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003950	V0	0.0003010	V0	0.0000000	V1
Lead	0.0008577	0.0005039	V0	0.0004731	V0	0.0000000	V1
Lithium	0.0000374	0.0006938	V0	0.0004594	V0	0.0000000	V1
Magnesium	0.0091409	0.1676894	V0	0.1159439	V0	0.0006200	V0
Manganese	0.0006949	0.0095285	V0	0.0104241	V0	0.0000812	V0
Molybdenum	0.0007116	0.0000909	V0	0.0000850	V0	0.0000000	V1
Neodymium	0.0000140	0.0003683	V0	0.0002599	V0	0.0000000	V1
Nickel	0.0005429	0.0010041	V0	0.0007688	V0	0.0002138	V0
Niobium	0.0000202	0.0000867	V0	0.0000672	V0	0.0000000	V1
Palladium	0.0000632	0.0000090	V0	0.0000055	V0	0.0000000	V1
Phosphorus	0.0459574	0.0221839	V0	0.0169936	V0	0.0052384	V0
Platinum	0.0000088	0.0000010	V0	0.0000011	V0	0.0000009	V0
Potassium	0.0061261	0.2660986	V0	0.1928200	V0	0.0008139	V0
Praseodymium	0.0000070	0.0000937	V0	0.0000676	V0	0.0000000	V1
Rubidium	0.0000184	0.0011546	V0	0.0008211	V0	0.0000000	V1
Samarium	0.0000133	0.0000695	V0	0.0000501	V0	0.0000000	V1
Selenium	0.0003366	0.0004683	V0	0.0004047	V0	0.0000219	V0
Silicon	0.1893637	2.8697660	V0	1.8372030	V0	0.0000000	V1
Silver	0.0000100	0.0000078	V0	0.0000035	V0	0.0000000	V1
Sodium	0.0169447	0.1759046	V0	0.0842853	V0	0.0015788	V0
Strontium	0.0003375	0.0029187	V0	0.0019556	V0	0.0000218	V0
Tantalum	0.0000394	0.0000062	V0	0.0000049	V0	0.0000000	V1
Thallium	0.0000090	0.0000124	V0	0.0000109	V0	0.0000000	V1
Thorium	0.0000059	0.0001161	V0	0.0000877	V0	0.0000000	V1
Tin	0.0004414	0.0000952	V0	0.0001372	V0	0.0000000	V1
Titanium	0.0015201	0.0272709	V0	0.0206261	V0	0.0001822	V0
Tungsten	0.0000938	0.0001492	V0	0.0000775	V0	0.0000467	V0
Uranium	0.0000048	0.0000347	V0	0.0000270	V0	0.0000000	V1
Vanadium	0.0007697	0.0020243	V0	0.0015648	V0	0.0000325	V0
Zinc	0.0055897	0.0033886	V0	0.0027331	V0	0.0006014	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**30-Apr**		**30-Apr**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	22.83	V0	0.08	V0
Aluminum	0.1380326	0.6989331	V0	0.0092639	V0
Antimony	0.0001784	0.0000465	V0	0.0000000	V1
Arsenic	0.0001060	0.0001713	V0	0.0000000	V1
Barium	0.0092847	0.0058177	V0	0.0000000	V1
Beryllium	0.0000946	0.0000232	V0	0.0000000	V1
Bismuth	0.0000093	0.0000115	V0	0.0000006	V0
Cadmium	0.0000174	0.0000129	V0	0.0000000	V1
Calcium	0.4112124	0.7249943	V0	0.0000000	V1
Cerium	0.0000174	0.0006989	V0	0.0000009	V0
Cesium	0.0000100	0.0000527	V0	0.0000000	V1
Chromium	0.0022262	0.0010359	V0	0.0001267	V0
Cobalt	0.0000273	0.0003015	V0	0.0000360	V0
Copper	0.0017171	0.0014402	V0	0.0007197	V0
Iron	0.0393063	0.6110779	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003452	V0	0.0000000	V1
Lead	0.0008577	0.0004640	V0	0.0000000	V1
Lithium	0.0000374	0.0006176	V0	0.0000000	V1
Magnesium	0.0091409	0.1381728	V0	0.0006200	V0
Manganese	0.0006949	0.0108869	V0	0.0000812	V0
Molybdenum	0.0007116	0.0001287	V0	0.0000000	V1
Neodymium	0.0000140	0.0003077	V0	0.0000000	V1
Nickel	0.0005429	0.0010163	V0	0.0002138	V0
Niobium	0.0000202	0.0000925	V0	0.0000000	V1
Palladium	0.0000632	0.0000087	V0	0.0000000	V1
Phosphorus	0.0459574	0.0137125	V0	0.0052384	V0
Platinum	0.0000088	0.0000008	V0	0.0000009	V0
Potassium	0.0061261	0.2033326	V0	0.0008139	V0
Praseodymium	0.0000070	0.0000794	V0	0.0000000	V1
Rubidium	0.0000184	0.0009031	V0	0.0000000	V1
Samarium	0.0000133	0.0000579	V0	0.0000000	V1
Selenium	0.0003366	0.0004293	V0	0.0000219	V0
Silicon	0.1893637	2.6131987	V0	0.0000000	V1
Silver	0.0000100	0.0000038	V0	0.0000000	V1
Sodium	0.0169447	0.1293251	V0	0.0015788	V0
Strontium	0.0003375	0.0024553	V0	0.0000218	V0
Tantalum	0.0000394	0.0000059	V0	0.0000000	V1
Thallium	0.0000090	0.0000108	V0	0.0000000	V1
Thorium	0.0000059	0.0000948	V0	0.0000000	V1
Tin	0.0004414	0.0000922	V0	0.0000000	V1
Titanium	0.0015201	0.0261327	V0	0.0001822	V0
Tungsten	0.0000938	0.0001461	V0	0.0000467	V0
Uranium	0.0000048	0.0000305	V0	0.0000000	V1
Vanadium	0.0007697	0.0018335	V0	0.0000325	V0
Zinc	0.0055897	0.0029852	V0	0.0006014	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**06-May**		**06-May**		**06-May**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**8.8**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	79.44	V0	121.78	V6	0.46	V0
Aluminum	0.1380326	0.7173212	V0	0.5386993	V6	0.0079523	V0
Antimony	0.0001784	0.0000838	V0	0.0000600	V6	0.0000000	V1
Arsenic	0.0001060	0.0003277	V0	0.0007698	V6	0.0000000	V1
Barium	0.0092847	0.0069604	V0	0.0051018	V6	0.0000000	V1
Beryllium	0.0000946	0.0000199	V0	0.0000148	V6	0.0000000	V1
Bismuth	0.0000093	0.0000300	V0	0.0000953	V6	0.0000060	V0
Cadmium	0.0000174	0.0002925	V4	0.0000406	V6	0.0000000	V1
Calcium	0.4112124	1.1677699	V0	0.7785799	V6	0.0000000	V1
Cerium	0.0000174	0.0007342	V0	0.0006081	V6	0.0000000	V1
Cesium	0.0000100	0.0000638	V0	0.0000387	V6	0.0000000	V1
Chromium	0.0022262	0.0008889	V0	0.0010378	V6	0.0001664	V0
Cobalt	0.0000273	0.0002431	V0	0.0003046	V6	0.0000551	V0
Copper	0.0017171	0.0009042	V0	0.0008597	V6	0.0002363	V0
Iron	0.0393063	0.5750143	V0	0.4294148	V6	0.0020205	V0
Lanthanum	0.0000130	0.0003427	V0	0.0003101	V6	0.0000000	V1
Lead	0.0008577	0.0007927	V0	0.0006462	V6	0.0000000	V1
Lithium	0.0000374	0.0007201	V0	0.0004418	V6	0.0000000	V1
Magnesium	0.0091409	0.1523829	V0	0.1304040	V6	0.0012785	V0
Manganese	0.0006949	0.0139920	V0	0.0113267	V6	0.0000890	V0
Molybdenum	0.0007116	0.0000625	V0	0.0001569	V6	0.0000000	V1
Neodymium	0.0000140	0.0003321	V0	0.0002587	V6	0.0000000	V1
Nickel	0.0005429	0.0011508	V0	0.0011201	V6	0.0001222	V0
Niobium	0.0000202	0.0000879	V0	0.0000645	V6	0.0000008	V0
Palladium	0.0000632	0.0000761	V0	0.0000734	V6	0.0000037	V0
Phosphorus	0.0459574	0.0546791	V0	0.0896052	V6	0.0331364	V0
Platinum	0.0000088	0.0000017	V0	0.0000028	V6	0.0000009	V0
Potassium	0.0061261	0.5033288	V0	0.1785964	V6	0.0014502	V0
Praseodymium	0.0000070	0.0000865	V0	0.0000673	V6	0.0000000	V1
Rubidium	0.0000184	0.0015672	V0	0.0007415	V6	0.0000015	V0
Samarium	0.0000133	0.0000632	V0	0.0000481	V6	0.0000000	V1
Selenium	0.0003366	0.0005606	V0	0.0004136	V6	0.0000000	V1
Silicon	0.2058250	1.8046763	V0	1.9635064	V6	0.0000000	V1
Silver	0.0000100	0.0000154	V0	0.0000078	V6	0.0000006	V0
Sodium	0.0169447	0.1166263	V0	0.1966140	V6	0.0015500	V0
Strontium	0.0003375	0.0032633	V0	0.0029839	V6	0.0000160	V0
Tantalum	0.0000394	0.0000058	V0	0.0000000	V6	0.0000000	V1
Thallium	0.0000090	0.0000161	V0	0.0000155	V6	0.0000000	V1
Thorium	0.0000059	0.0000956	V0	0.0000756	V6	0.0000000	V1
Tin	0.0004414	0.0001104	V0	0.0002532	V6	0.0000000	V1
Titanium	0.0015201	0.0263446	V0	0.0189775	V6	0.0002080	V0
Tungsten	0.0000938	0.0001617	V0	0.0001918	V6	0.0000387	V0
Uranium	0.0000048	0.0000275	V0	0.0000242	V6	0.0000000	V1
Vanadium	0.0007697	0.0015035	V0	0.0014252	V6	0.0000000	V1
Zinc	0.0055897	0.0193256	V0	0.0044858	V6	0.0002711	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Fort McKay South		Travel Blank	
Station #		AMS 7		AMS 13			
Sample Date		06-May		06-May		06-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		6.8		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	471.90	V6	72.97	V0	0.46	V0
Aluminum	0.1380326	0.8585773	V6	0.3008068	V0	0.0079523	V0
Antimony	0.0001784	0.0016861	V6	0.0000919	V0	0.0000000	V1
Arsenic	0.0001060	0.0068413	V6	0.0004533	V0	0.0000000	V1
Barium	0.0092847	0.0462787	V6	0.0034174	V0	0.0000000	V1
Beryllium	0.0000946	0.0000286	V6	0.0000075	V0	0.0000000	V1
Bismuth	0.0000093	0.0002422	V6	0.0000198	V0	0.0000060	V0
Cadmium	0.0000174	0.0027632	V6	0.0003306	V4	0.0000000	V1
Calcium	0.4112124	4.4849473	V6	0.2083985	V0	0.0000000	V1
Cerium	0.0000174	0.0008875	V6	0.0002813	V0	0.0000000	V1
Cesium	0.0000100	0.0000870	V6	0.0000335	V0	0.0000000	V1
Chromium	0.0022262	0.0020769	V6	0.0004298	V0	0.0001664	V0
Cobalt	0.0000273	0.0006222	V6	0.0001088	V0	0.0000551	V0
Copper	0.0017171	0.0195873	V6	0.0007247	V0	0.0002363	V0
Iron	0.0393063	0.9638220	V6	0.1695892	V0	0.0020205	V0
Lanthanum	0.0000130	0.0004234	V6	0.0001316	V0	0.0000000	V1
Lead	0.0008577	0.0160621	V6	0.0006706	V0	0.0000000	V1
Lithium	0.0000374	0.0008503	V6	0.0002982	V0	0.0000000	V1
Magnesium	0.0091409	0.5114338	V6	0.0612681	V0	0.0012785	V0
Manganese	0.0006949	0.0780336	V6	0.0062730	V0	0.0000890	V0
Molybdenum	0.0007116	0.0002919	V6	0.0000429	V0	0.0000000	V1
Neodymium	0.0000140	0.0003905	V6	0.0001272	V0	0.0000000	V1
Nickel	0.0005429	0.0018261	V6	0.0004810	V0	0.0001222	V0
Niobium	0.0000202	0.0001309	V6	0.0000361	V0	0.0000008	V0
Palladium	0.0000632	0.0001421	V6	0.0000277	V0	0.0000037	V0
Phosphorus	0.0459574	0.3130628	V6	0.0522218	V0	0.0331364	V0
Platinum	0.0000088	0.0000055	V6	0.0000015	V0	0.0000009	V0
Potassium	0.0061261	1.1693525	V6	0.3698939	V0	0.0014502	V0
Praseodymium	0.0000070	0.0001025	V6	0.0000329	V0	0.0000000	V1
Rubidium	0.0000184	0.0020437	V6	0.0009886	V0	0.0000015	V0
Samarium	0.0000133	0.0000765	V6	0.0000241	V0	0.0000000	V1
Selenium	0.0003366	0.0009409	V6	0.0002275	V0	0.0000000	V1
Silicon	0.2058250	2.9192757	V6	0.7500629	V0	0.0000000	V1
Silver	0.0000100	0.0001159	V6	0.0000123	V0	0.0000006	V0
Sodium	0.0169447	0.2067691	V6	0.0408437	V0	0.0015500	V0
Strontium	0.0003375	0.0176242	V6	0.0012869	V0	0.0000160	V0
Tantalum	0.0000394	0.0000099	V6	0.0000024	V0	0.0000000	V1
Thallium	0.0000090	0.0000383	V6	0.0000123	V0	0.0000000	V1
Thorium	0.0000059	0.0001107	V6	0.0000374	V0	0.0000000	V1
Tin	0.0004414	0.0023567	V6	0.0001584	V0	0.0000000	V1
Titanium	0.0015201	0.0454426	V6	0.0108404	V0	0.0002080	V0
Tungsten	0.0000938	0.0007576	V6	0.0000565	V0	0.0000387	V0
Uranium	0.0000048	0.0000358	V6	0.0000110	V0	0.0000000	V1
Vanadium	0.0007697	0.0028845	V6	0.0006698	V0	0.0000000	V1
Zinc	0.0055897	0.0861940	V6	0.0204983	V4	0.0002711	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		CNRL Horizon		Albian Muskeg River		Travel Blank	
Station #		AMS 15		AMS 16			
Sample Date		06-May		06-May		06-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	39.30	V0	102.80	V4	0.46	V0
Aluminum	0.1380326	1.2969876	V0	1.0634113	V0	0.0079523	V0
Antimony	0.0001784	0.0000386	V0	0.0001644	V0	0.0000000	V1
Arsenic	0.0001060	0.0002709	V0	0.0003677	V0	0.0000000	V1
Barium	0.0092847	0.0114935	V0	0.0090321	V0	0.0000000	V1
Beryllium	0.0000946	0.0000438	V0	0.0000326	V0	0.0000000	V1
Bismuth	0.0000093	0.0000106	V0	0.0000139	V0	0.0000060	V0
Cadmium	0.0000174	0.0000533	V0	0.0004065	V4	0.0000000	V1
Calcium	0.4112124	1.0545458	V0	1.0828044	V0	0.0000000	V1
Cerium	0.0000174	0.0013211	V0	0.0011674	V0	0.0000000	V1
Cesium	0.0000100	0.0000976	V0	0.0000861	V0	0.0000000	V1
Chromium	0.0022262	0.0017524	V0	0.0012546	V0	0.0001664	V0
Cobalt	0.0000273	0.0003933	V0	0.0003178	V0	0.0000551	V0
Copper	0.0017171	0.0007934	V0	0.0008929	V0	0.0002363	V0
Iron	0.0393063	1.7751114	V0	1.1614764	V0	0.0020205	V0
Lanthanum	0.0000130	0.0005950	V0	0.0005303	V0	0.0000000	V1
Lead	0.0008577	0.0005759	V0	0.0008644	V0	0.0000000	V1
Lithium	0.0000374	0.0014329	V0	0.0012719	V0	0.0000000	V1
Magnesium	0.0091409	0.3080833	V0	0.2145492	V0	0.0012785	V0
Manganese	0.0006949	0.0241444	V0	0.0234188	V0	0.0000890	V0
Molybdenum	0.0007116	0.0000926	V0	0.0000929	V0	0.0000000	V1
Neodymium	0.0000140	0.0005979	V0	0.0005078	V0	0.0000000	V1
Nickel	0.0005429	0.0013759	V0	0.0010796	V0	0.0001222	V0
Niobium	0.0000202	0.0001502	V0	0.0001221	V0	0.0000008	V0
Palladium	0.0000632	0.0000777	V0	0.0000828	V0	0.0000037	V0
Phosphorus	0.0459574	0.0468516	V0	0.0480421	V0	0.0331364	V0
Platinum	0.0000088	0.0000018	V0	0.0000021	V0	0.0000009	V0
Potassium	0.0061261	0.3757021	V0	0.6085122	V0	0.0014502	V0
Praseodymium	0.0000070	0.0001544	V0	0.0001321	V0	0.0000000	V1
Rubidium	0.0000184	0.0016198	V0	0.0020877	V0	0.0000015	V0
Samarium	0.0000133	0.0001146	V0	0.0000961	V0	0.0000000	V1
Selenium	0.0003366	0.0008973	V0	0.0007037	V0	0.0000000	V1
Silicon	0.2058250	4.5196821	V0	2.9645019	V0	0.0000000	V1
Silver	0.0000100	0.0000119	V0	0.0000185	V0	0.0000006	V0
Sodium	0.0169447	0.1266907	V0	0.1183275	V0	0.0015500	V0
Strontium	0.0003375	0.0044081	V0	0.0038523	V0	0.0000160	V0
Tantalum	0.0000394	0.0000099	V0	0.0000084	V0	0.0000000	V1
Thallium	0.0000090	0.0000156	V0	0.0000217	V0	0.0000000	V1
Thorium	0.0000059	0.0001691	V0	0.0001497	V0	0.0000000	V1
Tin	0.0004414	0.0000963	V0	0.0001169	V0	0.0000000	V1
Titanium	0.0015201	0.0421652	V0	0.0353694	V0	0.0002080	V0
Tungsten	0.0000938	0.0001016	V0	0.0001669	V0	0.0000387	V0
Uranium	0.0000048	0.0000534	V0	0.0000379	V0	0.0000000	V1
Vanadium	0.0007697	0.0027202	V0	0.0019025	V0	0.0000000	V1
Zinc	0.0055897	0.0049682	V0	0.0225919	V4	0.0002711	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		12-May		12-May		12-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	8.82	V0	111.18	V4	0.14	V0
Aluminum	0.1380326	0.4037078	V0	0.0669285	V0	0.0000000	V1
Antimony	0.0001784	0.0000264	V0	0.0003183	V0	0.0000000	V1
Arsenic	0.0001060	0.0000739	V0	0.0027177	V4	0.0000084	V0
Barium	0.0092847	0.0024962	V0	0.0014479	V0	0.0000000	V1
Beryllium	0.0000946	0.0000111	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000106	V0	0.0000569	V0	0.0000031	V0
Cadmium	0.0000174	0.0000060	V0	0.0006112	V4	0.0000010	V0
Calcium	0.4112124	0.2700443	V0	0.2025358	V0	0.0000000	V1
Cerium	0.0000174	0.0003543	V0	0.0000762	V0	0.0000014	V0
Cesium	0.0000100	0.0000293	V0	0.0000156	V0	0.0000006	V0
Chromium	0.0022262	0.0005901	V0	0.0003800	V0	0.0002341	V0
Cobalt	0.0000273	0.0001330	V0	0.0000822	V0	0.0000402	V0
Copper	0.0017171	0.0005946	V4	0.0047461	V4	-9999	M2
Iron	0.0393063	0.2215314	V0	0.0649779	V0	0.0021258	V0
Lanthanum	0.0000130	0.0001709	V0	0.0000341	V0	0.0000000	V1
Lead	0.0008577	0.0002322	V4	0.0038815	V4	-9999	M2
Lithium	0.0000374	0.0004389	V0	0.0001111	V0	0.0000000	V1
Magnesium	0.0091409	0.0502705	V0	0.0324549	V0	0.0006574	V0
Manganese	0.0006949	0.0042663	V0	0.0037940	V0	0.0000712	V0
Molybdenum	0.0007116	0.0000500	V0	0.0000309	V0	0.0000000	V1
Neodymium	0.0000140	0.0001530	V0	0.0000343	V0	0.0000000	V1
Nickel	0.0005429	0.0005875	V4	0.0002715	V4	-9999	M2
Niobium	0.0000202	0.0000421	V0	0.0000090	V0	0.0000020	V0
Palladium	0.0000632	0.0000337	V0	0.0000458	V0	0.0000203	V0
Phosphorus	0.0459574	0.0316442	V0	0.0512520	V0	0.0287633	V0
Platinum	0.0000088	0.0000011	V0	0.0000025	V0	0.0000011	V0
Potassium	0.0061261	0.0905895	V0	0.1193468	V0	0.0010534	V0
Praseodymium	0.0000070	0.0000383	V0	0.0000094	V0	0.0000004	V0
Rubidium	0.0000184	0.0004471	V0	0.0002737	V0	0.0000011	V0
Samarium	0.0000133	0.0000287	V0	0.0000065	V0	0.0000000	V1
Selenium	0.0003366	0.0002131	V0	0.0000928	V0	0.0000161	V0
Silicon	0.2058250	1.2707166	V0	0.2377796	V0	0.0000000	V1
Silver	0.0000100	0.0000032	V0	0.0000276	V4	0.0000010	V0
Sodium	0.0169447	0.0886256	V0	0.0338485	V0	0.0015778	V0
Strontium	0.0003375	0.0011251	V0	0.0009507	V0	0.0000164	V0
Tantalum	0.0000394	0.0000026	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000056	V0	0.0000096	V0	0.0000000	V1
Thorium	0.0000059	0.0000492	V0	0.0000084	V0	0.0000003	V0
Tin	0.0004414	0.0000624	V0	0.0004828	V4	0.0000409	V0
Titanium	0.0015201	0.0117683	V0	0.0025645	V0	0.0002218	V0
Tungsten	0.0000938	0.0000635	V0	0.0000851	V0	0.0000427	V0
Uranium	0.0000048	0.0000137	V0	0.0000038	V0	0.0000000	V1
Vanadium	0.0007697	0.0007425	V0	0.0002381	V0	0.0000000	V1
Zinc	0.0055897	0.0020978	V0	0.0156402	V0	0.0048510	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Fort McKay South		Travel Blank	
Station #		AMS 7		AMS 13			
Sample Date		12-May		12-May		12-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		21.7		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	133.89	V4	7.66	V0	0.14	V0
Aluminum	0.1380326	0.6375017	V0	0.4004925	V0	0.0000000	V1
Antimony	0.0001784	0.0015961	V4	0.0000183	V0	0.0000000	V1
Arsenic	0.0001060	0.0009539	V4	0.0000663	V0	0.0000084	V0
Barium	0.0092847	0.0112119	V0	0.0022224	V0	0.0000000	V1
Beryllium	0.0000946	0.0000168	V0	0.0000110	V0	0.0000000	V1
Bismuth	0.0000093	0.0000402	V0	0.0000076	V0	0.0000031	V0
Cadmium	0.0000174	0.0001895	V4	0.0000066	V0	0.0000010	V0
Calcium	0.4112124	1.3469692	V0	0.1515220	V0	0.0000000	V1
Cerium	0.0000174	0.0007076	V0	0.0004114	V0	0.0000014	V0
Cesium	0.0000100	0.0000460	V0	0.0000260	V0	0.0000006	V0
Chromium	0.0022262	0.0015652	V0	0.0006694	V0	0.0002341	V0
Cobalt	0.0000273	0.0002904	V0	0.0001309	V0	0.0000402	V0
Copper	0.0017171	0.0091444	V4	0.0006164	V4	-9999	M2
Iron	0.0393063	0.9632303	V0	0.2100585	V0	0.0021258	V0
Lanthanum	0.0000130	0.0003594	V0	0.0001995	V0	0.0000000	V1
Lead	0.0008577	0.0006399	V4	0.0002702	V4	-9999	M2
Lithium	0.0000374	0.0004486	V0	0.0004784	V0	0.0000000	V1
Magnesium	0.0091409	0.2158284	V0	0.0413442	V0	0.0006574	V0
Manganese	0.0006949	0.0212627	V0	0.0042007	V0	0.0000712	V0
Molybdenum	0.0007116	0.0002217	V0	0.0000847	V0	0.0000000	V1
Neodymium	0.0000140	0.0003126	V0	0.0001726	V0	0.0000000	V1
Nickel	0.0005429	0.0010859	V4	0.0004791	V4	-9999	M2
Niobium	0.0000202	0.0000783	V0	0.0000514	V0	0.0000020	V0
Palladium	0.0000632	0.0000475	V0	0.0000308	V0	0.0000203	V0
Phosphorus	0.0459574	0.0779415	V0	0.0375820	V0	0.0287633	V0
Platinum	0.0000088	0.0000016	V0	0.0000008	V0	0.0000011	V0
Potassium	0.0061261	0.3067872	V0	0.0770232	V0	0.0010534	V0
Praseodymium	0.0000070	0.0000810	V0	0.0000455	V0	0.0000004	V0
Rubidium	0.0000184	0.0009531	V0	0.0004044	V0	0.0000011	V0
Samarium	0.0000133	0.0000573	V0	0.0000328	V0	0.0000000	V1
Selenium	0.0003366	0.0004661	V0	0.0002622	V0	0.0000161	V0
Silicon	0.2058250	2.0296818	V0	0.8941745	V0	0.0000000	V1
Silver	0.0000100	0.0000108	V0	0.0000033	V0	0.0000010	V0
Sodium	0.0169447	0.1436525	V0	0.1105305	V0	0.0015778	V0
Strontium	0.0003375	0.0048593	V0	0.0009622	V0	0.0000164	V0
Tantalum	0.0000394	0.0000059	V0	0.0000031	V0	0.0000000	V1
Thallium	0.0000090	0.0000126	V0	0.0000056	V0	0.0000000	V1
Thorium	0.0000059	0.0001013	V0	0.0000559	V0	0.0000003	V0
Tin	0.0004414	0.0002275	V0	0.0000598	V0	0.0000409	V0
Titanium	0.0015201	0.0274313	V0	0.0140629	V0	0.0002218	V0
Tungsten	0.0000938	0.0004523	V0	0.0000587	V0	0.0000427	V0
Uranium	0.0000048	0.0000270	V0	0.0000141	V0	0.0000000	V1
Vanadium	0.0007697	0.0014172	V0	0.0007500	V0	0.0000000	V1
Zinc	0.0055897	0.0131838	V0	0.0012775	V0	0.0048510	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		CNRL Horizon		Albian Muskeg River		Travel Blank	
Station #		AMS 15		AMS 16			
Sample Date		12-May		12-May		12-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	31.21	V0	39.24	V0	0.14	V0
Aluminum	0.1380326	1.3539074	V0	1.4040722	V0	0.0000000	V1
Antimony	0.0001784	0.0000242	V0	0.0000225	V0	0.0000000	V1
Arsenic	0.0001060	0.0002064	V0	0.0002181	V0	0.0000084	V0
Barium	0.0092847	0.0101830	V0	0.0090872	V0	0.0000000	V1
Beryllium	0.0000946	0.0000382	V0	0.0000404	V0	0.0000000	V1
Bismuth	0.0000093	0.0000149	V0	0.0000138	V0	0.0000031	V0
Cadmium	0.0000174	0.0000074	V0	0.0000067	V0	0.0000010	V0
Calcium	0.4112124	0.4552784	V0	1.2240170	V0	0.0000000	V1
Cerium	0.0000174	0.0011795	V0	0.0014395	V0	0.0000014	V0
Cesium	0.0000100	0.0001113	V0	0.0000867	V0	0.0000006	V0
Chromium	0.0022262	0.0016226	V0	0.0016252	V0	0.0002341	V0
Cobalt	0.0000273	0.0003359	V0	0.0003993	V0	0.0000402	V0
Copper	0.0017171	0.0011466	V4	0.0008010	V4	-9999	M2
Iron	0.0393063	0.7369702	V0	1.6022685	V0	0.0021258	V0
Lanthanum	0.0000130	0.0005718	V0	0.0006781	V0	0.0000000	V1
Lead	0.0008577	0.0004382	V4	0.0005033	V4	-9999	M2
Lithium	0.0000374	0.0012107	V0	0.0017207	V0	0.0000000	V1
Magnesium	0.0091409	0.1773756	V0	0.1869863	V0	0.0006574	V0
Manganese	0.0006949	0.0109211	V0	0.0241390	V0	0.0000712	V0
Molybdenum	0.0007116	0.0000842	V0	0.0000971	V0	0.0000000	V1
Neodymium	0.0000140	0.0005606	V0	0.0006319	V0	0.0000000	V1
Nickel	0.0005429	0.0013648	V4	0.0013737	V4	-9999	M2
Niobium	0.0000202	0.0001437	V0	0.0001650	V0	0.0000020	V0
Palladium	0.0000632	0.0000684	V0	0.0000793	V0	0.0000203	V0
Phosphorus	0.0459574	0.0420309	V0	0.0417030	V0	0.0287633	V0
Platinum	0.0000088	0.0000017	V0	0.0000015	V0	0.0000011	V0
Potassium	0.0061261	0.3448890	V0	0.3215119	V0	0.0010534	V0
Praseodymium	0.0000070	0.0001398	V0	0.0001616	V0	0.0000004	V0
Rubidium	0.0000184	0.0016978	V0	0.0015213	V0	0.0000011	V0
Samarium	0.0000133	0.0001087	V0	0.0001171	V0	0.0000000	V1
Selenium	0.0003366	0.0006699	V0	0.0008815	V0	0.0000161	V0
Silicon	0.2058250	4.6818186	V0	4.5066566	V0	0.0000000	V1
Silver	0.0000100	0.0000084	V0	0.0000086	V0	0.0000010	V0
Sodium	0.0169447	0.1362140	V0	0.1152826	V0	0.0015778	V0
Strontium	0.0003375	0.0043141	V0	0.0036036	V0	0.0000164	V0
Tantalum	0.0000394	0.0000096	V0	0.0000106	V0	0.0000000	V1
Thallium	0.0000090	0.0000133	V0	0.0000167	V0	0.0000000	V1
Thorium	0.0000059	0.0001657	V0	0.0001880	V0	0.0000003	V0
Tin	0.0004414	0.0000756	V0	0.0000648	V0	0.0000409	V0
Titanium	0.0015201	0.0465023	V0	0.0505178	V0	0.0002218	V0
Tungsten	0.0000938	0.0000755	V0	0.0001012	V0	0.0000427	V0
Uranium	0.0000048	0.0000494	V0	0.0000513	V0	0.0000000	V1
Vanadium	0.0007697	0.0027641	V0	0.0025940	V0	0.0000000	V1
Zinc	0.0055897	0.0023325	V0	0.0023466	V0	0.0048510	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		18-May		18-May		18-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		21.9			
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	27.97	V0	153.68	V4	-9999	M1
Aluminum	0.1380326	0.5332892	V0	0.4337507	V0	-9999	M1
Antimony	0.0001784	0.0000484	V0	0.0000287	V0	-9999	M1
Arsenic	0.0001060	0.0001610	V0	0.0005784	V0	-9999	M1
Barium	0.0092847	0.0060042	V0	0.0171257	V0	-9999	M1
Beryllium	0.0000946	0.0000146	V0	0.0000112	V0	-9999	M1
Bismuth	0.0000093	0.0000266	V0	0.0000860	V0	-9999	M1
Cadmium	0.0000174	0.0000647	V0	0.0002788	V4	-9999	M1
Calcium	0.4112124	0.7145305	V0	1.8273834	V0	-9999	M1
Cerium	0.0000174	0.0005605	V0	0.0004503	V0	-9999	M1
Cesium	0.0000100	0.0000405	V0	0.0000413	V0	-9999	M1
Chromium	0.0022262	0.0007253	V0	0.0006497	V0	-9999	M1
Cobalt	0.0000273	0.0002399	V0	0.0002203	V0	-9999	M1
Copper	0.0017171	0.0021025	V0	0.0011402	V0	-9999	M1
Iron	0.0393063	0.4725753	V0	0.2872356	V0	-9999	M1
Lanthanum	0.0000130	0.0002722	V0	0.0002251	V0	-9999	M1
Lead	0.0008577	0.0003509	V0	0.0007153	V0	-9999	M1
Lithium	0.0000374	0.0004914	V0	0.0003251	V0	-9999	M1
Magnesium	0.0091409	0.1061713	V0	0.2162369	V0	-9999	M1
Manganese	0.0006949	0.0143445	V0	0.1013892	V4	-9999	M1
Molybdenum	0.0007116	0.0000891	V0	0.0000849	V0	-9999	M1
Neodymium	0.0000140	0.0002636	V0	0.0002003	V0	-9999	M1
Nickel	0.0005429	0.0007069	V0	0.0007875	V0	-9999	M1
Niobium	0.0000202	0.0000543	V0	0.0000507	V0	-9999	M1
Palladium	0.0000632	0.0000340	V0	0.0000356	V0	-9999	M1
Phosphorus	0.0459574	0.0576923	V0	0.1472543	V4	-9999	M1
Platinum	0.0000088	0.0000010	V0	0.0000010	V0	-9999	M1
Potassium	0.0061261	0.2358633	V0	0.6990708	V0	-9999	M1
Praseodymium	0.0000070	0.0000667	V0	0.0000504	V0	-9999	M1
Rubidium	0.0000184	0.0008355	V0	0.0015172	V0	-9999	M1
Samarium	0.0000133	0.0000501	V0	0.0000363	V0	-9999	M1
Selenium	0.0003366	0.0003290	V0	0.0003578	V0	-9999	M1
Silicon	0.2058250	2.0229005	V0	1.1486438	V0	-9999	M1
Silver	0.0000100	0.0000086	V0	0.0000195	V0	-9999	M1
Sodium	0.0169447	0.0969948	V0	0.0585809	V0	-9999	M1
Strontium	0.0003375	0.0023691	V0	0.0077572	V0	-9999	M1
Tantalum	0.0000394	0.0000035	V0	0.0000030	V0	-9999	M1
Thallium	0.0000090	0.0000088	V0	0.0000176	V0	-9999	M1
Thorium	0.0000059	0.0000756	V0	0.0000586	V0	-9999	M1
Tin	0.0004414	0.0000683	V0	0.0000751	V0	-9999	M1
Titanium	0.0015201	0.0159976	V0	0.0165803	V0	-9999	M1
Tungsten	0.0000938	0.0000995	V0	0.0000750	V0	-9999	M1
Uranium	0.0000048	0.0000218	V0	0.0000183	V0	-9999	M1
Vanadium	0.0007697	0.0012896	V0	0.0013083	V0	-9999	M1
Zinc	0.0055897	0.0069340	V0	0.0282415	V4	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		18-May		18-May		18-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24			
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	149.88	V4	61.01	V0	-9999	M1
Aluminum	0.1380326	0.9749370	V0	0.2624792	V0	-9999	M1
Antimony	0.0001784	0.0001295	V0	0.0000805	V0	-9999	M1
Arsenic	0.0001060	0.0005233	V0	0.0003665	V0	-9999	M1
Barium	0.0092847	0.0331445	V4	0.0088937	V0	-9999	M1
Beryllium	0.0000946	0.0000250	V0	0.0000059	V0	-9999	M1
Bismuth	0.0000093	0.0000186	V0	0.0000189	V0	-9999	M1
Cadmium	0.0000174	0.0004116	V4	0.0001267	V4	-9999	M1
Calcium	0.4112124	2.8559771	V0	1.1142602	V0	-9999	M1
Cerium	0.0000174	0.0010819	V0	0.0002884	V0	-9999	M1
Cesium	0.0000100	0.0000763	V0	0.0000234	V0	-9999	M1
Chromium	0.0022262	0.0011925	V0	0.0004860	V0	-9999	M1
Cobalt	0.0000273	0.0004784	V0	0.0001737	V0	-9999	M1
Copper	0.0017171	0.0022552	V0	0.0010223	V0	-9999	M1
Iron	0.0393063	0.7875198	V0	0.2325953	V0	-9999	M1
Lanthanum	0.0000130	0.0005390	V0	0.0001473	V0	-9999	M1
Lead	0.0008577	0.0008851	V0	0.0003178	V0	-9999	M1
Lithium	0.0000374	0.0007299	V0	0.0001716	V0	-9999	M1
Magnesium	0.0091409	0.4157209	V0	0.1562605	V0	-9999	M1
Manganese	0.0006949	0.1134568	V4	0.0407188	V0	-9999	M1
Molybdenum	0.0007116	0.0001429	V0	0.0000578	V0	-9999	M1
Neodymium	0.0000140	0.0004831	V0	0.0001277	V0	-9999	M1
Nickel	0.0005429	0.0013961	V0	0.0004897	V0	-9999	M1
Niobium	0.0000202	0.0001147	V0	0.0000326	V0	-9999	M1
Palladium	0.0000632	0.0000630	V0	0.0000220	V0	-9999	M1
Phosphorus	0.0459574	0.1956484	V4	0.1015728	V0	-9999	M1
Platinum	0.0000088	0.0000019	V0	0.0000008	V0	-9999	M1
Potassium	0.0061261	0.8741321	V0	0.3673665	V0	-9999	M1
Praseodymium	0.0000070	0.0001241	V0	0.0000335	V0	-9999	M1
Rubidium	0.0000184	0.0021812	V0	0.0007835	V0	-9999	M1
Samarium	0.0000133	0.0000907	V0	0.0000242	V0	-9999	M1
Selenium	0.0003366	0.0007180	V0	0.0002437	V0	-9999	M1
Silicon	0.2058250	3.1564636	V0	0.9523732	V0	-9999	M1
Silver	0.0000100	0.0000247	V4	0.0000105	V0	-9999	M1
Sodium	0.0169447	0.1495284	V0	0.0416358	V0	-9999	M1
Strontium	0.0003375	0.0137277	V4	0.0042805	V0	-9999	M1
Tantalum	0.0000394	0.0000090	V0	0.0000023	V0	-9999	M1
Thallium	0.0000090	0.0000198	V0	0.0000077	V0	-9999	M1
Thorium	0.0000059	0.0001485	V0	0.0000378	V0	-9999	M1
Tin	0.0004414	0.0001342	V0	0.0001198	V0	-9999	M1
Titanium	0.0015201	0.0316401	V0	0.0090979	V0	-9999	M1
Tungsten	0.0000938	0.0004927	V0	0.0001375	V0	-9999	M1
Uranium	0.0000048	0.0000400	V0	0.0000140	V0	-9999	M1
Vanadium	0.0007697	0.0022172	V0	0.0006149	V0	-9999	M1
Zinc	0.0055897	0.0395442	V4	0.0150316	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		18-May		18-May		18-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24			
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	26.05	V0	31.70	V0	-9999	M1
Aluminum	0.1380326	0.6148350	V0	0.6777492	V0	-9999	M1
Antimony	0.0001784	0.0000201	V0	0.0000205	V0	-9999	M1
Arsenic	0.0001060	0.0001628	V0	0.0001645	V0	-9999	M1
Barium	0.0092847	0.0059037	V0	0.0067026	V0	-9999	M1
Beryllium	0.0000946	0.0000152	V0	0.0000196	V0	-9999	M1
Bismuth	0.0000093	0.0000287	V0	0.0000260	V0	-9999	M1
Cadmium	0.0000174	0.0000686	V0	0.0000825	V0	-9999	M1
Calcium	0.4112124	0.3874827	V0	0.3508355	V0	-9999	M1
Cerium	0.0000174	0.0006151	V0	0.0006497	V0	-9999	M1
Cesium	0.0000100	0.0000403	V0	0.0000526	V0	-9999	M1
Chromium	0.0022262	0.0007505	V0	0.0008144	V0	-9999	M1
Cobalt	0.0000273	0.0001996	V0	0.0002176	V0	-9999	M1
Copper	0.0017171	0.0005760	V0	0.0006120	V0	-9999	M1
Iron	0.0393063	0.4334520	V0	0.4743203	V0	-9999	M1
Lanthanum	0.0000130	0.0003067	V0	0.0003163	V0	-9999	M1
Lead	0.0008577	0.0003466	V0	0.0003751	V0	-9999	M1
Lithium	0.0000374	0.0005273	V0	0.0006180	V0	-9999	M1
Magnesium	0.0091409	0.0959342	V0	0.1090015	V0	-9999	M1
Manganese	0.0006949	0.0139403	V0	0.0153318	V0	-9999	M1
Molybdenum	0.0007116	0.0000680	V0	0.0000866	V0	-9999	M1
Neodymium	0.0000140	0.0002824	V0	0.0003149	V0	-9999	M1
Nickel	0.0005429	0.0007198	V0	0.0009220	V0	-9999	M1
Niobium	0.0000202	0.0000680	V0	0.0000721	V0	-9999	M1
Palladium	0.0000632	0.0000438	V0	0.0000340	V0	-9999	M1
Phosphorus	0.0459574	0.0590668	V0	0.0684751	V0	-9999	M1
Platinum	0.0000088	0.0000009	V0	0.0000011	V0	-9999	M1
Potassium	0.0061261	0.2633233	V0	0.2968287	V0	-9999	M1
Praseodymium	0.0000070	0.0000716	V0	0.0000785	V0	-9999	M1
Rubidium	0.0000184	0.0008723	V0	0.0010446	V0	-9999	M1
Samarium	0.0000133	0.0000529	V0	0.0000614	V0	-9999	M1
Selenium	0.0003366	0.0004387	V0	0.0004164	V0	-9999	M1
Silicon	0.2058250	1.7135326	V0	1.8872282	V0	-9999	M1
Silver	0.0000100	0.0000081	V0	0.0000114	V0	-9999	M1
Sodium	0.0169447	0.1147995	V0	0.0600681	V0	-9999	M1
Strontium	0.0003375	0.0020352	V0	0.0023390	V0	-9999	M1
Tantalum	0.0000394	0.0000042	V0	0.0000048	V0	-9999	M1
Thallium	0.0000090	0.0000082	V0	0.0000098	V0	-9999	M1
Thorium	0.0000059	0.0000845	V0	0.0000896	V0	-9999	M1
Tin	0.0004414	0.0000717	V0	0.0000860	V0	-9999	M1
Titanium	0.0015201	0.0237977	V0	0.0212305	V0	-9999	M1
Tungsten	0.0000938	0.0000654	V0	0.0000959	V0	-9999	M1
Uranium	0.0000048	0.0000224	V0	0.0000270	V0	-9999	M1
Vanadium	0.0007697	0.0012640	V0	0.0018233	V0	-9999	M1
Zinc	0.0055897	0.0063771	V0	0.0074166	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**18-May**		**18-May**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**			
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	66.13	V0	-9999	M1
Aluminum	0.1380326	3.2789549	V4	-9999	M1
Antimony	0.0001784	0.0000295	V0	-9999	M1
Arsenic	0.0001060	0.0003443	V0	-9999	M1
Barium	0.0092847	0.0248743	V0	-9999	M1
Beryllium	0.0000946	0.0000887	V0	-9999	M1
Bismuth	0.0000093	0.0000175	V0	-9999	M1
Cadmium	0.0000174	0.0000346	V0	-9999	M1
Calcium	0.4112124	1.9009577	V0	-9999	M1
Cerium	0.0000174	0.0034801	V4	-9999	M1
Cesium	0.0000100	0.0001942	V4	-9999	M1
Chromium	0.0022262	0.0031882	V0	-9999	M1
Cobalt	0.0000273	0.0007952	V0	-9999	M1
Copper	0.0017171	0.0011789	V0	-9999	M1
Iron	0.0393063	2.3118942	V0	-9999	M1
Lanthanum	0.0000130	0.0016337	V4	-9999	M1
Lead	0.0008577	0.0009239	V0	-9999	M1
Lithium	0.0000374	0.0035411	V4	-9999	M1
Magnesium	0.0091409	0.4102191	V0	-9999	M1
Manganese	0.0006949	0.0754420	V4	-9999	M1
Molybdenum	0.0007116	0.0002948	V0	-9999	M1
Neodymium	0.0000140	0.0015601	V4	-9999	M1
Nickel	0.0005429	0.0030042	V0	-9999	M1
Niobium	0.0000202	0.0003594	V4	-9999	M1
Palladium	0.0000632	0.0001690	V4	-9999	M1
Phosphorus	0.0459574	0.0907929	V0	-9999	M1
Platinum	0.0000088	0.0000035	V0	-9999	M1
Potassium	0.0061261	0.8697712	V0	-9999	M1
Praseodymium	0.0000070	0.0004001	V4	-9999	M1
Rubidium	0.0000184	0.0034996	V0	-9999	M1
Samarium	0.0000133	0.0002956	V4	-9999	M1
Selenium	0.0003366	0.0020389	V4	-9999	M1
Silicon	0.2058250	7.7003710	V0	-9999	M1
Silver	0.0000100	0.0000211	V0	-9999	M1
Sodium	0.0169447	1.1763731	V4	-9999	M1
Strontium	0.0003375	0.0112680	V4	-9999	M1
Tantalum	0.0000394	0.0000238	V0	-9999	M1
Thallium	0.0000090	0.0000293	V0	-9999	M1
Thorium	0.0000059	0.0004236	V4	-9999	M1
Tin	0.0004414	0.0001287	V0	-9999	M1
Titanium	0.0015201	0.0955996	V0	-9999	M1
Tungsten	0.0000938	0.0001855	V0	-9999	M1
Uranium	0.0000048	0.0001209	V4	-9999	M1
Vanadium	0.0007697	0.0056764	V0	-9999	M1
Zinc	0.0055897	0.0076970	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		24-May		24-May		24-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	42.99	V0	21.89	V0	0.08	V0
Aluminum	0.1380326	0.3319441	V0	0.0497996	V0	0.0074753	V0
Antimony	0.0001784	0.0000500	V0	0.0001111	V0	0.0000000	V1
Arsenic	0.0001060	0.0001909	V0	0.0001368	V0	0.0000000	V1
Barium	0.0092847	0.0055053	V0	0.0016363	V0	0.0000000	V1
Beryllium	0.0000946	0.0000092	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000148	V0	0.0000141	V0	0.0000030	V0
Cadmium	0.0000174	0.0000818	V0	0.0000428	V0	0.0000011	V0
Calcium	0.4112124	0.9613303	V0	0.1688451	V0	0.0177987	V0
Cerium	0.0000174	0.0003622	V0	0.0000669	V0	0.0000000	V1
Cesium	0.0000100	0.0000280	V0	0.0000058	V0	0.0000000	V1
Chromium	0.0022262	0.0005018	V4	0.0002301	V4	-9999	M2
Cobalt	0.0000273	0.0001607	V0	0.0001378	V0	0.0001349	V0
Copper	0.0017171	0.0021551	V0	0.0036556	V0	0.0003476	V0
Iron	0.0393063	0.2563098	V0	0.0636860	V0	0.0071372	V0
Lanthanum	0.0000130	0.0001684	V0	0.0000315	V0	0.0000011	V0
Lead	0.0008577	0.0004518	V0	0.0002182	V0	0.0000000	V1
Lithium	0.0000374	0.0003094	V0	0.0000488	V0	0.0000048	V0
Magnesium	0.0091409	0.1026775	V0	0.0303568	V0	0.0021971	V0
Manganese	0.0006949	0.0284981	V0	0.0082892	V0	0.0000957	V0
Molybdenum	0.0007116	0.0001867	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0001586	V0	0.0000283	V0	0.0000000	V1
Nickel	0.0005429	0.0006365	V0	0.0002753	V0	0.0004687	V0
Niobium	0.0000202	0.0000375	V0	0.0000062	V0	0.0000010	V0
Palladium	0.0000632	0.0000359	V0	0.0000198	V0	0.0000284	V0
Phosphorus	0.0459574	0.0630563	V0	0.0392993	V0	0.0308731	V0
Platinum	0.0000088	0.0000016	V0	0.0000014	V0	0.0000017	V0
Potassium	0.0061261	0.2760732	V0	0.0456173	V0	0.0019351	V0
Praseodymium	0.0000070	0.0000411	V0	0.0000075	V0	0.0000000	V1
Rubidium	0.0000184	0.0007606	V0	0.0001243	V0	0.0000030	V0
Samarium	0.0000133	0.0000301	V0	0.0000056	V0	0.0000000	V1
Selenium	0.0003366	0.0002658	V0	0.0000839	V0	0.0000000	V1
Silicon	0.2058250	1.0174955	V0	0.1786312	V0	0.0000000	V1
Silver	0.0000100	0.0000098	V0	0.0000030	V0	0.0000007	V0
Sodium	0.0169447	0.1382739	V0	0.0118300	V0	0.0018237	V0
Strontium	0.0003375	0.0026308	V0	0.0007215	V0	0.0000172	V0
Tantalum	0.0000394	0.0000023	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000090	V0	0.0000031	V0	0.0000000	V1
Thorium	0.0000059	0.0000429	V0	0.0000083	V0	0.0000000	V1
Tin	0.0004414	0.0000809	V0	0.0000853	V0	0.0001138	V4
Titanium	0.0015201	0.0108484	V0	0.0020380	V0	0.0007668	V0
Tungsten	0.0000938	0.0000706	V0	0.0000652	V0	0.0001117	V0
Uranium	0.0000048	0.0000155	V0	0.0000048	V0	0.0000000	V1
Vanadium	0.0007697	0.0008894	V0	0.0001825	V0	0.0000342	V0
Zinc	0.0055897	0.0110944	V0	0.0026841	V0	0.0008949	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		24-May		24-May		24-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	69.02	V0	73.59	V0	0.08	V0
Aluminum	0.1380326	0.0427713	V0	0.2132682	V0	0.0074753	V0
Antimony	0.0001784	0.0001362	V0	0.0000371	V0	0.0000000	V1
Arsenic	0.0001060	0.0003239	V0	0.0003624	V0	0.0000000	V1
Barium	0.0092847	0.0019196	V0	0.0056685	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000071	V0	0.0000000	V1
Bismuth	0.0000093	0.0000200	V0	0.0000096	V0	0.0000030	V0
Cadmium	0.0000174	0.0003289	V4	0.0000628	V0	0.0000011	V0
Calcium	0.4112124	0.1532199	V0	0.6926662	V0	0.0177987	V0
Cerium	0.0000174	0.0000475	V0	0.0002570	V0	0.0000000	V1
Cesium	0.0000100	0.0000049	V0	0.0000171	V0	0.0000000	V1
Chromium	0.0022262	0.0003251	V4	0.0005225	V4	-9999	M2
Cobalt	0.0000273	0.0000598	V0	0.0001381	V0	0.0001349	V0
Copper	0.0017171	0.0014931	V0	0.0006869	V0	0.0003476	V0
Iron	0.0393063	0.0503790	V0	0.3087520	V0	0.0071372	V0
Lanthanum	0.0000130	0.0000224	V0	0.0001194	V0	0.0000011	V0
Lead	0.0008577	0.0002473	V0	0.0002992	V0	0.0000000	V1
Lithium	0.0000374	0.0000329	V0	0.0001631	V0	0.0000048	V0
Magnesium	0.0091409	0.0300948	V0	0.1185932	V0	0.0021971	V0
Manganese	0.0006949	0.0102542	V0	0.0204075	V0	0.0000957	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000378	V0	0.0000000	V1
Neodymium	0.0000140	0.0000195	V0	0.0001164	V0	0.0000000	V1
Nickel	0.0005429	0.0002530	V0	0.0004117	V0	0.0004687	V0
Niobium	0.0000202	0.0000062	V0	0.0000236	V0	0.0000010	V0
Palladium	0.0000632	0.0000204	V0	0.0000159	V0	0.0000284	V0
Phosphorus	0.0459574	0.0365981	V0	0.0648271	V0	0.0308731	V0
Platinum	0.0000088	0.0000011	V0	0.0000009	V0	0.0000017	V0
Potassium	0.0061261	0.0490751	V0	0.1635540	V0	0.0019351	V0
Praseodymium	0.0000070	0.0000050	V0	0.0000285	V0	0.0000000	V1
Rubidium	0.0000184	0.0001143	V0	0.0004434	V0	0.0000030	V0
Samarium	0.0000133	0.0000036	V0	0.0000205	V0	0.0000000	V1
Selenium	0.0003366	0.0001107	V0	0.0002405	V0	0.0000000	V1
Silicon	0.2058250	0.1311304	V0	0.8805290	V0	0.0000000	V1
Silver	0.0000100	0.0000144	V0	0.0000044	V0	0.0000007	V0
Sodium	0.0169447	0.0120859	V0	0.0461954	V0	0.0018237	V0
Strontium	0.0003375	0.0005811	V0	0.0024613	V0	0.0000172	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000038	V0	0.0000065	V0	0.0000000	V1
Thorium	0.0000059	0.0000065	V0	0.0000319	V0	0.0000000	V1
Tin	0.0004414	0.0000953	V0	0.0000645	V0	0.0001138	V4
Titanium	0.0015201	0.0017467	V0	0.0076631	V0	0.0007668	V0
Tungsten	0.0000938	0.0000685	V0	0.0000986	V0	0.0001117	V0
Uranium	0.0000048	0.0000033	V0	0.0000120	V0	0.0000000	V1
Vanadium	0.0007697	0.0001172	V0	0.0005257	V0	0.0000342	V0
Zinc	0.0055897	0.0030857	V0	0.0056509	V0	0.0008949	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		24-May		24-May		24-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24.1		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	41.37	V0	39.31	V0	0.08	V0
Aluminum	0.1380326	0.3125233	V0	0.3293073	V0	0.0074753	V0
Antimony	0.0001784	0.0000368	V0	0.0000410	V0	0.0000000	V1
Arsenic	0.0001060	0.0001772	V0	0.0001673	V0	0.0000000	V1
Barium	0.0092847	0.0048821	V0	0.0050074	V0	0.0000000	V1
Beryllium	0.0000946	0.0000083	V0	0.0000101	V0	0.0000000	V1
Bismuth	0.0000093	0.0000235	V0	0.0000370	V0	0.0000030	V0
Cadmium	0.0000174	0.0000866	V0	0.0000895	V0	0.0000011	V0
Calcium	0.4112124	0.6134362	V0	0.7002147	V0	0.0177987	V0
Cerium	0.0000174	0.0003245	V0	0.0004065	V0	0.0000000	V1
Cesium	0.0000100	0.0000270	V0	0.0000289	V0	0.0000000	V1
Chromium	0.0022262	0.0004049	V4	0.0005599	V4	-9999	M2
Cobalt	0.0000273	0.0001339	V0	0.0001454	V0	0.0001349	V0
Copper	0.0017171	0.0009737	V0	0.0008735	V0	0.0003476	V0
Iron	0.0393063	0.1683353	V0	0.5182336	V0	0.0071372	V0
Lanthanum	0.0000130	0.0001473	V0	0.0001881	V0	0.0000011	V0
Lead	0.0008577	0.0004528	V0	0.0004589	V0	0.0000000	V1
Lithium	0.0000374	0.0002795	V0	0.0002935	V0	0.0000048	V0
Magnesium	0.0091409	0.0847824	V0	0.1309413	V0	0.0021971	V0
Manganese	0.0006949	0.0278285	V0	0.0229638	V0	0.0000957	V0
Molybdenum	0.0007116	0.0000651	V0	0.0000651	V0	0.0000000	V1
Neodymium	0.0000140	0.0001400	V0	0.0001731	V0	0.0000000	V1
Nickel	0.0005429	0.0005358	V0	0.0005955	V0	0.0004687	V0
Niobium	0.0000202	0.0000331	V0	0.0000463	V0	0.0000010	V0
Palladium	0.0000632	0.0000220	V0	0.0000370	V0	0.0000284	V0
Phosphorus	0.0459574	0.0617985	V0	0.0501694	V0	0.0308731	V0
Platinum	0.0000088	0.0000010	V0	0.0000018	V0	0.0000017	V0
Potassium	0.0061261	0.2942672	V0	0.2891006	V0	0.0019351	V0
Praseodymium	0.0000070	0.0000361	V0	0.0000455	V0	0.0000000	V1
Rubidium	0.0000184	0.0007447	V0	0.0008151	V0	0.0000030	V0
Samarium	0.0000133	0.0000265	V0	0.0000323	V0	0.0000000	V1
Selenium	0.0003366	0.0002751	V0	0.0002696	V0	0.0000000	V1
Silicon	0.2058250	0.9042130	V0	1.0199234	V0	0.0000000	V1
Silver	0.0000100	0.0000087	V0	0.0000099	V0	0.0000007	V0
Sodium	0.0169447	0.1589165	V0	0.1140097	V0	0.0018237	V0
Strontium	0.0003375	0.0022143	V0	0.0021978	V0	0.0000172	V0
Tantalum	0.0000394	0.0000020	V0	0.0000023	V0	0.0000000	V1
Thallium	0.0000090	0.0000089	V0	0.0000102	V0	0.0000000	V1
Thorium	0.0000059	0.0000367	V0	0.0000491	V0	0.0000000	V1
Tin	0.0004414	0.0000693	V0	0.0000734	V0	0.0001138	V4
Titanium	0.0015201	0.0093472	V0	0.0108406	V0	0.0007668	V0
Tungsten	0.0000938	0.0000624	V0	0.0000659	V0	0.0001117	V0
Uranium	0.0000048	0.0000132	V0	0.0000161	V0	0.0000000	V1
Vanadium	0.0007697	0.0008508	V0	0.0008330	V0	0.0000342	V0
Zinc	0.0055897	0.0115252	V0	0.0116519	V0	0.0008949	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**24-May**		**24-May**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	51.58	V0	0.08	V0
Aluminum	0.1380326	0.8011264	V0	0.0074753	V0
Antimony	0.0001784	0.0000994	V0	0.0000000	V1
Arsenic	0.0001060	0.0002321	V0	0.0000000	V1
Barium	0.0092847	0.0084544	V0	0.0000000	V1
Beryllium	0.0000946	0.0000233	V0	0.0000000	V1
Bismuth	0.0000093	0.0000150	V0	0.0000030	V0
Cadmium	0.0000174	0.0000890	V0	0.0000011	V0
Calcium	0.4112124	1.0142558	V0	0.0177987	V0
Cerium	0.0000174	0.0008859	V0	0.0000000	V1
Cesium	0.0000100	0.0000580	V0	0.0000000	V1
Chromium	0.0022262	0.0009182	V4	-9999	M2
Cobalt	0.0000273	0.0002827	V0	0.0001349	V0
Copper	0.0017171	0.0008632	V0	0.0003476	V0
Iron	0.0393063	0.7614168	V0	0.0071372	V0
Lanthanum	0.0000130	0.0004045	V0	0.0000011	V0
Lead	0.0008577	0.0006245	V0	0.0000000	V1
Lithium	0.0000374	0.0008554	V0	0.0000048	V0
Magnesium	0.0091409	0.1702828	V0	0.0021971	V0
Manganese	0.0006949	0.0348090	V0	0.0000957	V0
Molybdenum	0.0007116	0.0000788	V0	0.0000000	V1
Neodymium	0.0000140	0.0003845	V0	0.0000000	V1
Nickel	0.0005429	0.0010964	V0	0.0004687	V0
Niobium	0.0000202	0.0000925	V0	0.0000010	V0
Palladium	0.0000632	0.0000516	V0	0.0000284	V0
Phosphorus	0.0459574	0.0676495	V0	0.0308731	V0
Platinum	0.0000088	0.0000014	V0	0.0000017	V0
Potassium	0.0061261	0.4093344	V0	0.0019351	V0
Praseodymium	0.0000070	0.0001006	V0	0.0000000	V1
Rubidium	0.0000184	0.0013513	V0	0.0000030	V0
Samarium	0.0000133	0.0000710	V0	0.0000000	V1
Selenium	0.0003366	0.0006304	V0	0.0000000	V1
Silicon	0.2058250	2.2273512	V0	0.0000000	V1
Silver	0.0000100	0.0000140	V0	0.0000007	V0
Sodium	0.0169447	0.1092546	V0	0.0018237	V0
Strontium	0.0003375	0.0033883	V0	0.0000172	V0
Tantalum	0.0000394	0.0000058	V0	0.0000000	V1
Thallium	0.0000090	0.0000153	V0	0.0000000	V1
Thorium	0.0000059	0.0001108	V0	0.0000000	V1
Tin	0.0004414	0.0001292	V0	0.0001138	V4
Titanium	0.0015201	0.0369209	V0	0.0007668	V0
Tungsten	0.0000938	0.0001175	V0	0.0001117	V0
Uranium	0.0000048	0.0000315	V0	0.0000000	V1
Vanadium	0.0007697	0.0014303	V0	0.0000342	V0
Zinc	0.0055897	0.0128672	V0	0.0008949	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**30-May**		**30-May**		**30-May**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**			
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	6.26	V0	7.75	V0	-9999	M1
Aluminum	0.1380326	0.0288562	V0	0.0660488	V0	-9999	M1
Antimony	0.0001784	0.0000125	V0	0.0000219	V0	-9999	M1
Arsenic	0.0001060	0.0000403	V0	0.0000554	V0	-9999	M1
Barium	0.0092847	0.0000000	V1	0.0007084	V0	-9999	M1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	-9999	M1
Bismuth	0.0000093	0.0000148	V0	0.0000562	V0	-9999	M1
Cadmium	0.0000174	0.0000068	V0	0.0000079	V0	-9999	M1
Calcium	0.4112124	0.0530937	V0	0.1313357	V0	-9999	M1
Cerium	0.0000174	0.0000248	V0	0.0000777	V0	-9999	M1
Cesium	0.0000100	0.0000028	V0	0.0000059	V0	-9999	M1
Chromium	0.0022262	0.0001442	V0	0.0002122	V0	-9999	M1
Cobalt	0.0000273	0.0000091	V0	0.0000234	V0	-9999	M1
Copper	0.0017171	0.0005229	V0	0.0002701	V0	-9999	M1
Iron	0.0393063	0.0227785	V0	0.0651097	V0	-9999	M1
Lanthanum	0.0000130	0.0000114	V0	0.0000361	V0	-9999	M1
Lead	0.0008577	0.0000685	V0	0.0000824	V0	-9999	M1
Lithium	0.0000374	0.0000224	V0	0.0000855	V0	-9999	M1
Magnesium	0.0091409	0.0120046	V0	0.0241939	V0	-9999	M1
Manganese	0.0006949	0.0009969	V0	0.0018471	V0	-9999	M1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	-9999	M1
Neodymium	0.0000140	0.0000109	V0	0.0000347	V0	-9999	M1
Nickel	0.0005429	0.0000977	V0	0.0002076	V0	-9999	M1
Niobium	0.0000202	0.0000028	V0	0.0000076	V0	-9999	M1
Palladium	0.0000632	0.0000077	V0	0.0000077	V0	-9999	M1
Phosphorus	0.0459574	0.0731313	V0	0.0527037	V0	-9999	M1
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	-9999	M1
Potassium	0.0061261	0.0587036	V0	0.0521045	V0	-9999	M1
Praseodymium	0.0000070	0.0000029	V0	0.0000088	V0	-9999	M1
Rubidium	0.0000184	0.0000843	V0	0.0001213	V0	-9999	M1
Samarium	0.0000133	0.0000021	V0	0.0000065	V0	-9999	M1
Selenium	0.0003366	0.0000371	V0	0.0000889	V0	-9999	M1
Silicon	0.2058250	0.0781576	V0	0.2162067	V0	-9999	M1
Silver	0.0000100	0.0000016	V0	0.0000016	V0	-9999	M1
Sodium	0.0169447	0.0054366	V0	0.0103332	V0	-9999	M1
Strontium	0.0003375	0.0001533	V0	0.0003662	V0	-9999	M1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	-9999	M1
Thallium	0.0000090	0.0000008	V0	0.0000014	V0	-9999	M1
Thorium	0.0000059	0.0000036	V0	0.0000094	V0	-9999	M1
Tin	0.0004414	0.0000331	V0	0.0000411	V0	-9999	M1
Titanium	0.0015201	0.0010492	V0	0.0026856	V0	-9999	M1
Tungsten	0.0000938	0.0000102	V0	0.0000164	V0	-9999	M1
Uranium	0.0000048	0.0000019	V0	0.0000037	V0	-9999	M1
Vanadium	0.0007697	0.0000578	V0	0.0001738	V0	-9999	M1
Zinc	0.0055897	0.0013323	V0	0.0016933	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		30-May		30-May		30-May	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24			
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	10.12	V0	8.93	V0	-9999	M1
Aluminum	0.1380326	0.0725224	V0	0.0598388	V0	-9999	M1
Antimony	0.0001784	0.0000638	V0	0.0000422	V0	-9999	M1
Arsenic	0.0001060	0.0000578	V0	0.0002514	V0	-9999	M1
Barium	0.0092847	0.0015654	V0	0.0010531	V0	-9999	M1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	-9999	M1
Bismuth	0.0000093	0.0000041	V0	0.0000072	V0	-9999	M1
Cadmium	0.0000174	0.0000087	V0	0.0000105	V0	-9999	M1
Calcium	0.4112124	0.2046340	V0	0.1394744	V0	-9999	M1
Cerium	0.0000174	0.0000926	V0	0.0000530	V0	-9999	M1
Cesium	0.0000100	0.0000060	V0	0.0000052	V0	-9999	M1
Chromium	0.0022262	0.0003856	V0	0.0002936	V0	-9999	M1
Cobalt	0.0000273	0.0000905	V0	0.0000229	V0	-9999	M1
Copper	0.0017171	0.0006610	V0	0.0008112	V0	-9999	M1
Iron	0.0393063	0.0904464	V0	0.0467454	V0	-9999	M1
Lanthanum	0.0000130	0.0000426	V0	0.0000242	V0	-9999	M1
Lead	0.0008577	0.0001946	V0	0.0001174	V0	-9999	M1
Lithium	0.0000374	0.0000707	V0	0.0000530	V0	-9999	M1
Magnesium	0.0091409	0.0342473	V0	0.0205754	V0	-9999	M1
Manganese	0.0006949	0.0039500	V0	0.0048109	V0	-9999	M1
Molybdenum	0.0007116	0.0000448	V0	0.0000000	V1	-9999	M1
Neodymium	0.0000140	0.0000409	V0	0.0000238	V0	-9999	M1
Nickel	0.0005429	0.0004690	V0	0.0001874	V0	-9999	M1
Niobium	0.0000202	0.0000087	V0	0.0000083	V0	-9999	M1
Palladium	0.0000632	0.0000068	V0	0.0000126	V0	-9999	M1
Phosphorus	0.0459574	0.0597664	V0	0.0571794	V0	-9999	M1
Platinum	0.0000088	0.0000011	V0	0.0000004	V0	-9999	M1
Potassium	0.0061261	0.0676677	V0	0.0494570	V0	-9999	M1
Praseodymium	0.0000070	0.0000104	V0	0.0000060	V0	-9999	M1
Rubidium	0.0000184	0.0001567	V0	0.0001285	V0	-9999	M1
Samarium	0.0000133	0.0000072	V0	0.0000043	V0	-9999	M1
Selenium	0.0003366	0.0001050	V0	0.0000753	V0	-9999	M1
Silicon	0.2058250	0.2991571	V0	0.1646265	V0	-9999	M1
Silver	0.0000100	0.0000033	V0	0.0000025	V0	-9999	M1
Sodium	0.0169447	0.0272785	V0	0.0095073	V0	-9999	M1
Strontium	0.0003375	0.0006034	V0	0.0004481	V0	-9999	M1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	-9999	M1
Thallium	0.0000090	0.0000016	V0	0.0000015	V0	-9999	M1
Thorium	0.0000059	0.0000110	V0	0.0000067	V0	-9999	M1
Tin	0.0004414	0.0000696	V0	0.0000691	V0	-9999	M1
Titanium	0.0015201	0.0029202	V0	0.0022777	V0	-9999	M1
Tungsten	0.0000938	0.0001050	V0	0.0000186	V0	-9999	M1
Uranium	0.0000048	0.0000040	V0	0.0000038	V0	-9999	M1
Vanadium	0.0007697	0.0001845	V0	0.0001479	V0	-9999	M1
Zinc	0.0055897	0.0031220	V0	0.0027401	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		30-May		30-May		30-May	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		24		24			
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	7.11	V0	5.89	V0	-9999	M1
Aluminum	0.1380326	0.0305936	V0	0.0307434	V0	-9999	M1
Antimony	0.0001784	0.0000168	V0	0.0000158	V0	-9999	M1
Arsenic	0.0001060	0.0000533	V0	0.0000363	V0	-9999	M1
Barium	0.0092847	0.0005538	V0	0.0005311	V0	-9999	M1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	-9999	M1
Bismuth	0.0000093	0.0000342	V0	0.0000129	V0	-9999	M1
Cadmium	0.0000174	0.0000090	V0	0.0000071	V0	-9999	M1
Calcium	0.4112124	0.0596230	V0	0.0572559	V0	-9999	M1
Cerium	0.0000174	0.0000286	V0	0.0000338	V0	-9999	M1
Cesium	0.0000100	0.0000035	V0	0.0000033	V0	-9999	M1
Chromium	0.0022262	0.0002041	V0	0.0004005	V0	-9999	M1
Cobalt	0.0000273	0.0000573	V0	0.0001178	V0	-9999	M1
Copper	0.0017171	0.0003209	V0	0.0003533	V0	-9999	M1
Iron	0.0393063	0.0292245	V0	0.0460499	V0	-9999	M1
Lanthanum	0.0000130	0.0000131	V0	0.0000154	V0	-9999	M1
Lead	0.0008577	0.0000769	V0	0.0000656	V0	-9999	M1
Lithium	0.0000374	0.0000263	V0	0.0000321	V0	-9999	M1
Magnesium	0.0091409	0.0149365	V0	0.0151729	V0	-9999	M1
Manganese	0.0006949	0.0012119	V0	0.0015029	V0	-9999	M1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	-9999	M1
Neodymium	0.0000140	0.0000133	V0	0.0000142	V0	-9999	M1
Nickel	0.0005429	0.0001743	V0	0.0002769	V0	-9999	M1
Niobium	0.0000202	0.0000042	V0	0.0000065	V0	-9999	M1
Palladium	0.0000632	0.0000053	V0	0.0000046	V0	-9999	M1
Phosphorus	0.0459574	0.0722132	V0	0.0642138	V0	-9999	M1
Platinum	0.0000088	0.0000009	V0	0.0000008	V0	-9999	M1
Potassium	0.0061261	0.0658800	V0	0.0511102	V0	-9999	M1
Praseodymium	0.0000070	0.0000032	V0	0.0000038	V0	-9999	M1
Rubidium	0.0000184	0.0001168	V0	0.0000841	V0	-9999	M1
Samarium	0.0000133	0.0000023	V0	0.0000031	V0	-9999	M1
Selenium	0.0003366	0.0000439	V0	0.0000482	V0	-9999	M1
Silicon	0.2058250	0.0812922	V0	0.1036426	V0	-9999	M1
Silver	0.0000100	0.0000014	V0	0.0000013	V0	-9999	M1
Sodium	0.0169447	0.0055107	V0	0.0071336	V0	-9999	M1
Strontium	0.0003375	0.0001750	V0	0.0001734	V0	-9999	M1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	-9999	M1
Thallium	0.0000090	0.0000010	V0	0.0000011	V0	-9999	M1
Thorium	0.0000059	0.0000037	V0	0.0000042	V0	-9999	M1
Tin	0.0004414	0.0000350	V0	0.0000405	V0	-9999	M1
Titanium	0.0015201	0.0017038	V0	0.0017575	V0	-9999	M1
Tungsten	0.0000938	0.0000682	V0	0.0001851	V0	-9999	M1
Uranium	0.0000048	0.0000020	V0	0.0000029	V0	-9999	M1
Vanadium	0.0007697	0.0000704	V0	0.0000933	V0	-9999	M1
Zinc	0.0055897	0.0018505	V0	0.0020605	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**30-May**		**30-May**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**			
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	21.62	V0	-9999	M1
Aluminum	0.1380326	0.7362985	V0	-9999	M1
Antimony	0.0001784	0.0000193	V0	-9999	M1
Arsenic	0.0001060	0.0001211	V0	-9999	M1
Barium	0.0092847	0.0046741	V0	-9999	M1
Beryllium	0.0000946	0.0000220	V0	-9999	M1
Bismuth	0.0000093	0.0000111	V0	-9999	M1
Cadmium	0.0000174	0.0000081	V0	-9999	M1
Calcium	0.4112124	0.7732684	V0	-9999	M1
Cerium	0.0000174	0.0007597	V0	-9999	M1
Cesium	0.0000100	0.0000475	V0	-9999	M1
Chromium	0.0022262	0.0011386	V0	-9999	M1
Cobalt	0.0000273	0.0002183	V0	-9999	M1
Copper	0.0017171	0.0009655	V0	-9999	M1
Iron	0.0393063	0.6960166	V0	-9999	M1
Lanthanum	0.0000130	0.0003434	V0	-9999	M1
Lead	0.0008577	0.0003356	V0	-9999	M1
Lithium	0.0000374	0.0012904	V0	-9999	M1
Magnesium	0.0091409	0.1521507	V0	-9999	M1
Manganese	0.0006949	0.0125412	V0	-9999	M1
Molybdenum	0.0007116	0.0001087	V0	-9999	M1
Neodymium	0.0000140	0.0003347	V0	-9999	M1
Nickel	0.0005429	0.0011242	V0	-9999	M1
Niobium	0.0000202	0.0000816	V0	-9999	M1
Palladium	0.0000632	0.0000437	V0	-9999	M1
Phosphorus	0.0459574	0.0584500	V0	-9999	M1
Platinum	0.0000088	0.0000011	V0	-9999	M1
Potassium	0.0061261	0.1998024	V0	-9999	M1
Praseodymium	0.0000070	0.0000878	V0	-9999	M1
Rubidium	0.0000184	0.0007920	V0	-9999	M1
Samarium	0.0000133	0.0000645	V0	-9999	M1
Selenium	0.0003366	0.0004562	V0	-9999	M1
Silicon	0.2058250	2.1230886	V0	-9999	M1
Silver	0.0000100	0.0000061	V0	-9999	M1
Sodium	0.0169447	0.0464245	V0	-9999	M1
Strontium	0.0003375	0.0020730	V0	-9999	M1
Tantalum	0.0000394	0.0000054	V0	-9999	M1
Thallium	0.0000090	0.0000082	V0	-9999	M1
Thorium	0.0000059	0.0000979	V0	-9999	M1
Tin	0.0004414	0.0000758	V0	-9999	M1
Titanium	0.0015201	0.0246793	V0	-9999	M1
Tungsten	0.0000938	0.0000898	V0	-9999	M1
Uranium	0.0000048	0.0000283	V0	-9999	M1
Vanadium	0.0007697	0.0013858	V0	-9999	M1
Zinc	0.0055897	0.0034846	V0	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		05-Jun		05-Jun		05-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	13.42	V0	7.68	V0	0.13	V0
Aluminum	0.1380326	0.4088500	V0	0.1603044	V0	0.0000000	V1
Antimony	0.0001784	0.0000185	V0	0.0000816	V0	0.0000000	V1
Arsenic	0.0001060	0.0000501	V0	0.0000482	V0	0.0000000	V1
Barium	0.0092847	0.0025521	V0	0.0021266	V0	0.0000000	V1
Beryllium	0.0000946	0.0000107	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000058	V0	0.0000059	V0	0.0000035	V0
Cadmium	0.0000174	0.0000026	V0	0.0000035	V0	0.0000000	V1
Calcium	0.4112124	0.5630450	V0	0.2763412	V0	0.0193395	V0
Cerium	0.0000174	0.0003696	V0	0.0001696	V0	0.0000009	V0
Cesium	0.0000100	0.0000245	V0	0.0000095	V0	0.0000006	V0
Chromium	0.0022262	0.0005985	V0	0.0003460	V0	0.0001910	V0
Cobalt	0.0000273	0.0000998	V0	0.0000509	V0	0.0000504	V0
Copper	0.0017171	0.0008080	V0	0.0006985	V0	0.0002430	V0
Iron	0.0393063	0.2779680	V0	0.1700091	V0	0.0022547	V0
Lanthanum	0.0000130	0.0001918	V0	0.0000931	V0	0.0000006	V0
Lead	0.0008577	0.0001402	V0	0.0001032	V0	0.0000435	V0
Lithium	0.0000374	0.0004141	V0	0.0001197	V0	0.0000040	V0
Magnesium	0.0091409	0.0705423	V0	0.0604820	V0	0.0026688	V0
Manganese	0.0006949	0.0055643	V0	0.0034320	V0	0.0000531	V0
Molybdenum	0.0007116	0.0000359	V0	0.0000359	V0	0.0000000	V1
Neodymium	0.0000140	0.0001602	V0	0.0000706	V0	0.0000000	V1
Nickel	0.0005429	0.0004174	V0	0.0002538	V0	0.0002313	V0
Niobium	0.0000202	0.0000417	V0	0.0000180	V0	0.0000017	V0
Palladium	0.0000632	0.0000179	V0	0.0000101	V0	0.0000147	V0
Phosphorus	0.0459574	0.0232925	V0	0.0229119	V0	0.0135074	V0
Platinum	0.0000088	0.0000006	V0	0.0000005	V0	0.0000009	V0
Potassium	0.0061261	0.1148845	V0	0.0623685	V0	0.0028681	V0
Praseodymium	0.0000070	0.0000407	V0	0.0000182	V0	0.0000004	V0
Rubidium	0.0000184	0.0004666	V0	0.0001957	V0	0.0000040	V0
Samarium	0.0000133	0.0000298	V0	0.0000127	V0	0.0000000	V1
Selenium	0.0003366	0.0002066	V0	0.0000928	V0	0.0000000	V1
Silicon	0.1270650	1.3868188	V0	0.6276867	V0	0.0000000	V1
Silver	0.0000100	0.0000021	V0	0.0000009	V0	0.0000034	V4
Sodium	0.0169447	0.0380342	V0	0.0333107	V0	0.0019123	V0
Strontium	0.0003375	0.0012687	V0	0.0007507	V0	0.0000155	V0
Tantalum	0.0000394	0.0000025	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000034	V0	0.0000017	V0	0.0000000	V1
Thorium	0.0000059	0.0000483	V0	0.0000223	V0	0.0000008	V0
Tin	0.0004414	0.0000605	V0	0.0000923	V0	0.0000000	V1
Titanium	0.0015201	0.0156863	V0	0.0063684	V0	0.0021294	V0
Tungsten	0.0000938	0.0000278	V0	0.0000890	V0	0.0000167	V0
Uranium	0.0000048	0.0000131	V0	0.0000062	V0	0.0000003	V0
Vanadium	0.0007697	0.0007105	V0	0.0004113	V0	0.0000370	V0
Zinc	0.0055897	0.0013956	V0	0.0024743	V0	0.0007814	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		05-Jun		05-Jun		05-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	13.28	V0	6.33	V0	0.13	V0
Aluminum	0.1380326	0.2591983	V0	0.0708225	V0	0.0000000	V1
Antimony	0.0001784	0.0001135	V0	0.0000133	V0	0.0000000	V1
Arsenic	0.0001060	0.0000706	V0	0.0000314	V0	0.0000000	V1
Barium	0.0092847	0.0043248	V0	0.0008587	V0	0.0000000	V1
Beryllium	0.0000946	0.0000067	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000081	V0	0.0000074	V0	0.0000035	V0
Cadmium	0.0000174	0.0000057	V0	0.0000037	V0	0.0000000	V1
Calcium	0.4112124	0.5488950	V0	0.1295430	V0	0.0193395	V0
Cerium	0.0000174	0.0002469	V0	0.0000670	V0	0.0000009	V0
Cesium	0.0000100	0.0000152	V0	0.0000042	V0	0.0000006	V0
Chromium	0.0022262	0.0005756	V0	0.0002918	V0	0.0001910	V0
Cobalt	0.0000273	0.0002532	V0	0.0000324	V0	0.0000504	V0
Copper	0.0017171	0.0011690	V0	0.0002898	V0	0.0002430	V0
Iron	0.0393063	0.2713603	V0	0.0669246	V0	0.0022547	V0
Lanthanum	0.0000130	0.0001323	V0	0.0000390	V0	0.0000006	V0
Lead	0.0008577	0.0002808	V0	0.0000615	V0	0.0000435	V0
Lithium	0.0000374	0.0001915	V0	0.0000503	V0	0.0000040	V0
Magnesium	0.0091409	0.1038612	V0	0.0238132	V0	0.0026688	V0
Manganese	0.0006949	0.0084149	V0	0.0024430	V0	0.0000531	V0
Molybdenum	0.0007116	0.0000589	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0001089	V0	0.0000294	V0	0.0000000	V1
Nickel	0.0005429	0.0007457	V0	0.0003458	V0	0.0002313	V0
Niobium	0.0000202	0.0000271	V0	0.0000073	V0	0.0000017	V0
Palladium	0.0000632	0.0000161	V0	0.0000067	V0	0.0000147	V0
Phosphorus	0.0459574	0.0326849	V0	0.0222914	V0	0.0135074	V0
Platinum	0.0000088	0.0000016	V0	0.0000000	V1	0.0000009	V0
Potassium	0.0061261	0.1133912	V0	0.0375444	V0	0.0028681	V0
Praseodymium	0.0000070	0.0000279	V0	0.0000075	V0	0.0000004	V0
Rubidium	0.0000184	0.0003276	V0	0.0000955	V0	0.0000040	V0
Samarium	0.0000133	0.0000200	V0	0.0000054	V0	0.0000000	V1
Selenium	0.0003366	0.0001459	V0	0.0000387	V0	0.0000000	V1
Silicon	0.1270650	1.0817714	V0	0.3431149	V0	0.0000000	V1
Silver	0.0000100	0.0000020	V0	0.0000005	V0	0.0000034	V4
Sodium	0.0169447	0.0595970	V0	0.0137214	V0	0.0019123	V0
Strontium	0.0003375	0.0016930	V0	0.0003463	V0	0.0000155	V0
Tantalum	0.0000394	0.0000024	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000026	V0	0.0000009	V0	0.0000000	V1
Thorium	0.0000059	0.0000302	V0	0.0000088	V0	0.0000008	V0
Tin	0.0004414	0.0001115	V0	0.0000404	V0	0.0000000	V1
Titanium	0.0015201	0.0116029	V0	0.0023174	V0	0.0021294	V0
Tungsten	0.0000938	0.0003244	V0	0.0000253	V0	0.0000167	V0
Uranium	0.0000048	0.0000091	V0	0.0000028	V0	0.0000003	V0
Vanadium	0.0007697	0.0005780	V0	0.0001554	V0	0.0000370	V0
Zinc	0.0055897	0.0045933	V0	0.0014799	V0	0.0007814	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		05-Jun		05-Jun		05-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	8.01	V0	20.97	V0	0.13	V0
Aluminum	0.1380326	0.1824371	V0	0.6862888	V0	0.0000000	V1
Antimony	0.0001784	0.0000142	V0	0.0000198	V0	0.0000000	V1
Arsenic	0.0001060	0.0000581	V0	0.0001072	V0	0.0000000	V1
Barium	0.0092847	0.0012727	V0	0.0058862	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000220	V0	0.0000000	V1
Bismuth	0.0000093	0.0000024	V0	0.0000076	V0	0.0000035	V0
Cadmium	0.0000174	0.0000027	V0	0.0000032	V0	0.0000000	V1
Calcium	0.4112124	0.1868508	V0	0.6206885	V0	0.0193395	V0
Cerium	0.0000174	0.0001552	V0	0.0006089	V0	0.0000009	V0
Cesium	0.0000100	0.0000117	V0	0.0000417	V0	0.0000006	V0
Chromium	0.0022262	0.0003819	V0	0.0009420	V0	0.0001910	V0
Cobalt	0.0000273	0.0000886	V0	0.0001978	V0	0.0000504	V0
Copper	0.0017171	0.0007087	V0	0.0005558	V0	0.0002430	V0
Iron	0.0393063	0.1369901	V0	0.8309510	V0	0.0022547	V0
Lanthanum	0.0000130	0.0000812	V0	0.0003268	V0	0.0000006	V0
Lead	0.0008577	0.0000917	V0	0.0002146	V0	0.0000435	V0
Lithium	0.0000374	0.0001670	V0	0.0005906	V0	0.0000040	V0
Magnesium	0.0091409	0.0317774	V0	0.1832127	V0	0.0026688	V0
Manganese	0.0006949	0.0031331	V0	0.0133449	V0	0.0000531	V0
Molybdenum	0.0007116	0.0000371	V0	0.0000601	V0	0.0000000	V1
Neodymium	0.0000140	0.0000681	V0	0.0002739	V0	0.0000000	V1
Nickel	0.0005429	0.0003675	V0	0.0006864	V0	0.0002313	V0
Niobium	0.0000202	0.0000177	V0	0.0000635	V0	0.0000017	V0
Palladium	0.0000632	0.0000082	V0	0.0000160	V0	0.0000147	V0
Phosphorus	0.0459574	0.0249342	V0	0.0292588	V0	0.0135074	V0
Platinum	0.0000088	0.0000007	V0	0.0000006	V0	0.0000009	V0
Potassium	0.0061261	0.0656727	V0	0.1759464	V0	0.0028681	V0
Praseodymium	0.0000070	0.0000169	V0	0.0000711	V0	0.0000004	V0
Rubidium	0.0000184	0.0002299	V0	0.0007517	V0	0.0000040	V0
Samarium	0.0000133	0.0000129	V0	0.0000527	V0	0.0000000	V1
Selenium	0.0003366	0.0000854	V0	0.0002990	V0	0.0000000	V1
Silicon	0.1270650	0.6685887	V0	2.2078254	V0	0.0000000	V1
Silver	0.0000100	0.0000011	V0	0.0000027	V0	0.0000034	V4
Sodium	0.0169447	0.0160335	V0	0.0694163	V0	0.0019123	V0
Strontium	0.0003375	0.0005433	V0	0.0021161	V0	0.0000155	V0
Tantalum	0.0000394	0.0000000	V1	0.0000042	V0	0.0000000	V1
Thallium	0.0000090	0.0000016	V0	0.0000067	V0	0.0000000	V1
Thorium	0.0000059	0.0000211	V0	0.0000841	V0	0.0000008	V0
Tin	0.0004414	0.0000431	V0	0.0000549	V0	0.0000000	V1
Titanium	0.0015201	0.0074644	V0	0.0232231	V0	0.0021294	V0
Tungsten	0.0000938	0.0000996	V0	0.0000572	V0	0.0000167	V0
Uranium	0.0000048	0.0000060	V0	0.0000248	V0	0.0000003	V0
Vanadium	0.0007697	0.0003232	V0	0.0013289	V0	0.0000370	V0
Zinc	0.0055897	0.0010818	V0	0.0021992	V0	0.0007814	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**05-Jun**		**05-Jun**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	31.97	V0	0.13	V0
Aluminum	0.1380326	1.5195851	V0	0.0000000	V1
Antimony	0.0001784	0.0000265	V0	0.0000000	V1
Arsenic	0.0001060	0.0001735	V0	0.0000000	V1
Barium	0.0092847	0.0083433	V0	0.0000000	V1
Beryllium	0.0000946	0.0000415	V0	0.0000000	V1
Bismuth	0.0000093	0.0000133	V0	0.0000035	V0
Cadmium	0.0000174	0.0000046	V0	0.0000000	V1
Calcium	0.4112124	1.3066809	V0	0.0193395	V0
Cerium	0.0000174	0.0013610	V0	0.0000009	V0
Cesium	0.0000100	0.0000780	V0	0.0000006	V0
Chromium	0.0022262	0.0015139	V0	0.0001910	V0
Cobalt	0.0000273	0.0003352	V0	0.0000504	V0
Copper	0.0017171	0.0014740	V0	0.0002430	V0
Iron	0.0393063	1.2446965	V0	0.0022547	V0
Lanthanum	0.0000130	0.0007213	V0	0.0000006	V0
Lead	0.0008577	0.0003989	V0	0.0000435	V0
Lithium	0.0000374	0.0018451	V0	0.0000040	V0
Magnesium	0.0091409	0.2728280	V0	0.0026688	V0
Manganese	0.0006949	0.0214642	V0	0.0000531	V0
Molybdenum	0.0007116	0.0001210	V0	0.0000000	V1
Neodymium	0.0000140	0.0005884	V0	0.0000000	V1
Nickel	0.0005429	0.0012746	V0	0.0002313	V0
Niobium	0.0000202	0.0001579	V0	0.0000017	V0
Palladium	0.0000632	0.0000294	V0	0.0000147	V0
Phosphorus	0.0459574	0.0326990	V0	0.0135074	V0
Platinum	0.0000088	0.0000012	V0	0.0000009	V0
Potassium	0.0061261	0.3253142	V0	0.0028681	V0
Praseodymium	0.0000070	0.0001548	V0	0.0000004	V0
Rubidium	0.0000184	0.0014984	V0	0.0000040	V0
Samarium	0.0000133	0.0001126	V0	0.0000000	V1
Selenium	0.0003366	0.0006494	V0	0.0000000	V1
Silicon	0.1270650	4.0934985	V0	0.0000000	V1
Silver	0.0000100	0.0000049	V0	0.0000034	V4
Sodium	0.0169447	0.1213909	V0	0.0019123	V0
Strontium	0.0003375	0.0037883	V0	0.0000155	V0
Tantalum	0.0000394	0.0000102	V0	0.0000000	V1
Thallium	0.0000090	0.0000121	V0	0.0000000	V1
Thorium	0.0000059	0.0001927	V0	0.0000008	V0
Tin	0.0004414	0.0000849	V0	0.0000000	V1
Titanium	0.0015201	0.0514938	V0	0.0021294	V0
Tungsten	0.0000938	0.0001154	V0	0.0000167	V0
Uranium	0.0000048	0.0000476	V0	0.0000003	V0
Vanadium	0.0007697	0.0023273	V0	0.0000370	V0
Zinc	0.0055897	0.0036383	V0	0.0007814	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		11-Jun		11-Jun		11-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		23.9		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	21.24	V0	11.51	V0	0.33	V0
Aluminum	0.1380326	0.6721466	V0	0.1808235	V0	0.0000000	V1
Antimony	0.0001784	0.0000361	V0	0.0002489	V0	0.0000000	V1
Arsenic	0.0001060	0.0001140	V0	0.0000921	V0	0.0000000	V1
Barium	0.0092847	0.0044368	V0	0.0034101	V0	0.0000000	V1
Beryllium	0.0000946	0.0000183	V0	0.0000052	V0	0.0000000	V1
Bismuth	0.0000093	0.0000386	V0	0.0000103	V0	0.0000037	V0
Cadmium	0.0000174	0.0000065	V0	0.0000070	V0	0.0000000	V1
Calcium	0.4112124	1.3967586	V0	0.4059152	V0	0.0000000	V1
Cerium	0.0000174	0.0005850	V0	0.0001952	V0	0.0000000	V1
Cesium	0.0000100	0.0000418	V0	0.0000103	V0	0.0000000	V1
Chromium	0.0022262	0.0008297	V0	0.0005883	V0	0.0000962	V0
Cobalt	0.0000273	0.0001637	V0	0.0000629	V0	0.0000275	V0
Copper	0.0017171	0.0025169	V0	0.0016176	V0	0.0001028	V0
Iron	0.0393063	0.4218335	V0	0.2273998	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003175	V0	0.0001083	V0	0.0000000	V1
Lead	0.0008577	0.0002524	V0	0.0001872	V0	0.0000000	V1
Lithium	0.0000374	0.0005708	V0	0.0001315	V0	0.0000000	V1
Magnesium	0.0091409	0.1511309	V0	0.1002422	V0	0.0013106	V0
Manganese	0.0006949	0.0074017	V0	0.0045082	V0	0.0000340	V0
Molybdenum	0.0007116	0.0001241	V0	0.0000640	V0	0.0000000	V1
Neodymium	0.0000140	0.0002708	V0	0.0000852	V0	0.0000000	V1
Nickel	0.0005429	0.0006993	V0	0.0010271	V0	0.0001205	V0
Niobium	0.0000202	0.0000757	V0	0.0000204	V0	0.0000000	V1
Palladium	0.0000632	0.0000155	V0	0.0000161	V0	0.0000000	V1
Phosphorus	0.0459574	0.0359321	V0	0.0282844	V0	0.0122852	V0
Platinum	0.0000088	0.0000000	V1	0.0000005	V0	0.0000000	V1
Potassium	0.0061261	0.2075715	V0	0.0829002	V0	0.0056328	V0
Praseodymium	0.0000070	0.0000683	V0	0.0000215	V0	0.0000000	V1
Rubidium	0.0000184	0.0008277	V0	0.0002439	V0	0.0000013	V0
Samarium	0.0000133	0.0000521	V0	0.0000148	V0	0.0000000	V1
Selenium	0.0003366	0.0003442	V0	0.0001263	V0	0.0000000	V1
Silicon	0.1270650	1.9337318	V0	0.7665871	V0	0.0000000	V1
Silver	0.0000100	0.0000036	V0	0.0000015	V0	0.0000000	V1
Sodium	0.0169447	0.0928623	V0	0.0451537	V0	0.0013258	V0
Strontium	0.0003375	0.0027336	V0	0.0009583	V0	0.0000000	V1
Tantalum	0.0000394	0.0000049	V0	0.0000019	V0	0.0000000	V1
Thallium	0.0000090	0.0000061	V0	0.0000027	V0	0.0000000	V1
Thorium	0.0000059	0.0000787	V0	0.0000250	V0	0.0000004	V0
Tin	0.0004414	0.0000659	V0	0.0001766	V0	0.0000000	V1
Titanium	0.0015201	0.0260082	V0	0.0078615	V0	0.0001511	V0
Tungsten	0.0000938	0.0000764	V0	0.0001286	V0	0.0000597	V0
Uranium	0.0000048	0.0000233	V0	0.0000074	V0	0.0000003	V0
Vanadium	0.0007697	0.0012726	V0	0.0003570	V0	0.0000000	V1
Zinc	0.0055897	0.0027363	V0	0.0054119	V0	0.0004212	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		11-Jun		11-Jun		11-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		23.7		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	13.11	V0	7.41	V0	0.33	V0
Aluminum	0.1380326	0.2169484	V0	0.0524103	V0	0.0000000	V1
Antimony	0.0001784	0.0002109	V0	0.0000175	V0	0.0000000	V1
Arsenic	0.0001060	0.0000834	V0	0.0000689	V0	0.0000000	V1
Barium	0.0092847	0.0040614	V0	0.0006604	V0	0.0000000	V1
Beryllium	0.0000946	0.0000056	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000141	V0	0.0000053	V0	0.0000037	V0
Cadmium	0.0000174	0.0000096	V0	0.0000063	V0	0.0000000	V1
Calcium	0.4112124	0.5196186	V0	0.1114107	V0	0.0000000	V1
Cerium	0.0000174	0.0002570	V0	0.0000459	V0	0.0000000	V1
Cesium	0.0000100	0.0000123	V0	0.0000040	V0	0.0000000	V1
Chromium	0.0022262	0.0006026	V0	0.0001212	V0	0.0000962	V0
Cobalt	0.0000273	0.0001502	V0	0.0000150	V0	0.0000275	V0
Copper	0.0017171	0.0022263	V0	0.0005605	V0	0.0001028	V0
Iron	0.0393063	0.3033589	V0	0.0428107	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001378	V0	0.0000259	V0	0.0000000	V1
Lead	0.0008577	0.0002359	V0	0.0001059	V0	0.0000000	V1
Lithium	0.0000374	0.0001544	V0	0.0000344	V0	0.0000000	V1
Magnesium	0.0091409	0.1207183	V0	0.0296097	V0	0.0013106	V0
Manganese	0.0006949	0.0058638	V0	0.0016725	V0	0.0000340	V0
Molybdenum	0.0007116	0.0000617	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0001101	V0	0.0000203	V0	0.0000000	V1
Nickel	0.0005429	0.0003720	V0	0.0001259	V0	0.0001205	V0
Niobium	0.0000202	0.0000251	V0	0.0000045	V0	0.0000000	V1
Palladium	0.0000632	0.0000122	V0	0.0000032	V0	0.0000000	V1
Phosphorus	0.0459574	0.0315632	V0	0.0259994	V0	0.0122852	V0
Platinum	0.0000088	0.0000013	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0976996	V0	0.0416801	V0	0.0056328	V0
Praseodymium	0.0000070	0.0000283	V0	0.0000052	V0	0.0000000	V1
Rubidium	0.0000184	0.0002855	V0	0.0001046	V0	0.0000013	V0
Samarium	0.0000133	0.0000197	V0	0.0000036	V0	0.0000000	V1
Selenium	0.0003366	0.0001522	V0	0.0000428	V0	0.0000000	V1
Silicon	0.1270650	0.9571631	V0	0.1914598	V0	0.0000000	V1
Silver	0.0000100	0.0000180	V0	0.0000007	V0	0.0000000	V1
Sodium	0.0169447	0.0685755	V0	0.0113938	V0	0.0013258	V0
Strontium	0.0003375	0.0012410	V0	0.0002614	V0	0.0000000	V1
Tantalum	0.0000394	0.0000019	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000032	V0	0.0000013	V0	0.0000000	V1
Thorium	0.0000059	0.0000335	V0	0.0000070	V0	0.0000004	V0
Tin	0.0004414	0.0001685	V0	0.0001156	V0	0.0000000	V1
Titanium	0.0015201	0.0094564	V0	0.0020677	V0	0.0001511	V0
Tungsten	0.0000938	0.0002650	V0	0.0000090	V0	0.0000597	V0
Uranium	0.0000048	0.0000090	V0	0.0000023	V0	0.0000003	V0
Vanadium	0.0007697	0.0004421	V0	0.0000922	V0	0.0000000	V1
Zinc	0.0055897	0.0057189	V0	0.0016076	V0	0.0004212	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		11-Jun		11-Jun		11-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		23.7		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	25.87	V0	30.90	V0	0.33	V0
Aluminum	0.1380326	0.7012843	V0	1.0062118	V0	0.0000000	V1
Antimony	0.0001784	0.0000330	V0	0.0000429	V0	0.0000000	V1
Arsenic	0.0001060	0.0001282	V0	0.0001486	V0	0.0000000	V1
Barium	0.0092847	0.0048406	V0	0.0072706	V0	0.0000000	V1
Beryllium	0.0000946	0.0000193	V0	0.0000266	V0	0.0000000	V1
Bismuth	0.0000093	0.0000085	V0	0.0000422	V0	0.0000037	V0
Cadmium	0.0000174	0.0000052	V0	0.0000061	V0	0.0000000	V1
Calcium	0.4112124	1.4164046	V0	1.2800575	V0	0.0000000	V1
Cerium	0.0000174	0.0005732	V0	0.0008604	V0	0.0000000	V1
Cesium	0.0000100	0.0000440	V0	0.0000576	V0	0.0000000	V1
Chromium	0.0022262	0.0009682	V0	0.0013390	V0	0.0000962	V0
Cobalt	0.0000273	0.0002160	V0	0.0002475	V0	0.0000275	V0
Copper	0.0017171	0.0006473	V0	0.0010293	V0	0.0001028	V0
Iron	0.0393063	0.4402379	V0	0.9745498	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003055	V0	0.0004550	V0	0.0000000	V1
Lead	0.0008577	0.0002719	V0	0.0003277	V0	0.0000000	V1
Lithium	0.0000374	0.0005966	V0	0.0009165	V0	0.0000000	V1
Magnesium	0.0091409	0.1569489	V0	0.2688294	V0	0.0013106	V0
Manganese	0.0006949	0.0072900	V0	0.0150787	V0	0.0000340	V0
Molybdenum	0.0007116	0.0001135	V0	0.0001354	V0	0.0000000	V1
Neodymium	0.0000140	0.0002672	V0	0.0003944	V0	0.0000000	V1
Nickel	0.0005429	0.0007792	V0	0.0010695	V0	0.0001205	V0
Niobium	0.0000202	0.0000664	V0	0.0000963	V0	0.0000000	V1
Palladium	0.0000632	0.0000465	V0	0.0000255	V0	0.0000000	V1
Phosphorus	0.0459574	0.0315082	V0	0.0350918	V0	0.0122852	V0
Platinum	0.0000088	0.0000017	V0	0.0000009	V0	0.0000000	V1
Potassium	0.0061261	0.2309641	V0	0.2657590	V0	0.0056328	V0
Praseodymium	0.0000070	0.0000679	V0	0.0001000	V0	0.0000000	V1
Rubidium	0.0000184	0.0008637	V0	0.0011019	V0	0.0000013	V0
Samarium	0.0000133	0.0000516	V0	0.0000767	V0	0.0000000	V1
Selenium	0.0003366	0.0003204	V0	0.0004629	V0	0.0000000	V1
Silicon	0.1270650	3.1593571	V0	3.8639121	V0	0.0000000	V1
Silver	0.0000100	0.0000040	V0	0.0000067	V0	0.0000000	V1
Sodium	0.0169447	0.0941070	V0	0.1035192	V0	0.0013258	V0
Strontium	0.0003375	0.0027363	V0	0.0033337	V0	0.0000000	V1
Tantalum	0.0000394	0.0000050	V0	0.0000070	V0	0.0000000	V1
Thallium	0.0000090	0.0000065	V0	0.0000089	V0	0.0000000	V1
Thorium	0.0000059	0.0000776	V0	0.0001186	V0	0.0000004	V0
Tin	0.0004414	0.0000594	V0	0.0000841	V0	0.0000000	V1
Titanium	0.0015201	0.0225865	V0	0.0358443	V0	0.0001511	V0
Tungsten	0.0000938	0.0001693	V0	0.0000680	V0	0.0000597	V0
Uranium	0.0000048	0.0000236	V0	0.0000351	V0	0.0000003	V0
Vanadium	0.0007697	0.0014184	V0	0.0020410	V0	0.0000000	V1
Zinc	0.0055897	0.0024156	V0	0.0033992	V0	0.0004212	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**11-Jun**		**11-Jun**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	12.22	V0	0.33	V0
Aluminum	0.1380326	0.3132583	V0	0.0000000	V1
Antimony	0.0001784	0.0000128	V0	0.0000000	V1
Arsenic	0.0001060	0.0000590	V0	0.0000000	V1
Barium	0.0092847	0.0020339	V0	0.0000000	V1
Beryllium	0.0000946	0.0000074	V0	0.0000000	V1
Bismuth	0.0000093	0.0000045	V0	0.0000037	V0
Cadmium	0.0000174	0.0000035	V0	0.0000000	V1
Calcium	0.4112124	0.3912098	V0	0.0000000	V1
Cerium	0.0000174	0.0002958	V0	0.0000000	V1
Cesium	0.0000100	0.0000159	V0	0.0000000	V1
Chromium	0.0022262	0.0006883	V0	0.0000962	V0
Cobalt	0.0000273	0.0000965	V0	0.0000275	V0
Copper	0.0017171	0.0004227	V0	0.0001028	V0
Iron	0.0393063	0.3498311	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001490	V0	0.0000000	V1
Lead	0.0008577	0.0001328	V0	0.0000000	V1
Lithium	0.0000374	0.0002974	V0	0.0000000	V1
Magnesium	0.0091409	0.0774978	V0	0.0013106	V0
Manganese	0.0006949	0.0061405	V0	0.0000340	V0
Molybdenum	0.0007116	0.0000429	V0	0.0000000	V1
Neodymium	0.0000140	0.0001307	V0	0.0000000	V1
Nickel	0.0005429	0.0004364	V0	0.0001205	V0
Niobium	0.0000202	0.0000295	V0	0.0000000	V1
Palladium	0.0000632	0.0000107	V0	0.0000000	V1
Phosphorus	0.0459574	0.0218873	V0	0.0122852	V0
Platinum	0.0000088	0.0000005	V0	0.0000000	V1
Potassium	0.0061261	0.0935728	V0	0.0056328	V0
Praseodymium	0.0000070	0.0000331	V0	0.0000000	V1
Rubidium	0.0000184	0.0003443	V0	0.0000013	V0
Samarium	0.0000133	0.0000242	V0	0.0000000	V1
Selenium	0.0003366	0.0001406	V0	0.0000000	V1
Silicon	0.1270650	1.2713465	V0	0.0000000	V1
Silver	0.0000100	0.0000029	V0	0.0000000	V1
Sodium	0.0169447	0.0323085	V0	0.0013258	V0
Strontium	0.0003375	0.0009401	V0	0.0000000	V1
Tantalum	0.0000394	0.0000018	V0	0.0000000	V1
Thallium	0.0000090	0.0000032	V0	0.0000000	V1
Thorium	0.0000059	0.0000393	V0	0.0000004	V0
Tin	0.0004414	0.0000552	V0	0.0000000	V1
Titanium	0.0015201	0.0094626	V0	0.0001511	V0
Tungsten	0.0000938	0.0000671	V0	0.0000597	V0
Uranium	0.0000048	0.0000104	V0	0.0000003	V0
Vanadium	0.0007697	0.0005160	V0	0.0000000	V1
Zinc	0.0055897	0.0013980	V0	0.0004212	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		17-Jun		17-Jun		17-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.18	V0	3.70	V0	0.43	V0
Aluminum	0.1380326	0.0612577	V0	0.0384573	V0	0.0067053	V0
Antimony	0.0001784	0.0000095	V0	0.0000108	V0	0.0000000	V1
Arsenic	0.0001060	0.0000156	V0	0.0000120	V0	0.0000000	V1
Barium	0.0092847	0.0004686	V0	0.0004014	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000024	V0	0.0000029	V0	0.0000013	V0
Cadmium	0.0000174	0.0000012	V0	0.0000009	V0	0.0000000	V1
Calcium	0.4112124	0.0945545	V0	0.0847809	V0	0.0000000	V1
Cerium	0.0000174	0.0000463	V0	0.0000360	V0	0.0000000	V1
Cesium	0.0000100	0.0000036	V0	0.0000019	V0	0.0000000	V1
Chromium	0.0022262	0.0001657	V0	0.0002317	V0	0.0001325	V0
Cobalt	0.0000273	0.0000140	V0	0.0000174	V0	0.0000281	V0
Copper	0.0017171	0.0004087	V0	0.0003989	V0	0.0000899	V0
Iron	0.0393063	0.0353338	V0	0.0436716	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000252	V0	0.0000183	V0	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000384	V0	0.0000992	V0
Lithium	0.0000374	0.0000539	V0	0.0000244	V0	0.0000000	V1
Magnesium	0.0091409	0.0123644	V0	0.0192333	V0	0.0013985	V0
Manganese	0.0006949	0.0007981	V0	0.0010416	V0	0.0000438	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000215	V0	0.0000149	V0	0.0000000	V1
Nickel	0.0005429	0.0001048	V0	0.0002090	V0	0.0000888	V0
Niobium	0.0000202	0.0000055	V0	0.0000040	V0	0.0000000	V1
Palladium	0.0000632	0.0000048	V0	0.0000048	V0	0.0000032	V0
Phosphorus	0.0459574	0.0198103	V0	0.0209444	V0	0.0102843	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0319902	V0	0.0296278	V0	0.0054361	V0
Praseodymium	0.0000070	0.0000059	V0	0.0000038	V0	0.0000000	V1
Rubidium	0.0000184	0.0000804	V0	0.0000533	V0	0.0000009	V0
Samarium	0.0000133	0.0000036	V0	0.0000027	V0	0.0000000	V1
Selenium	0.0003366	0.0000534	V0	0.0000235	V0	0.0000000	V1
Silicon	0.1270650	0.1755409	V0	0.1927097	V0	0.0000000	V1
Silver	0.0000100	0.0000010	V0	0.0000005	V0	0.0000000	V1
Sodium	0.0169447	0.0136048	V0	0.0100620	V0	0.0010671	V0
Strontium	0.0003375	0.0002229	V0	0.0002780	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000004	V0	0.0000000	V1
Thorium	0.0000059	0.0000071	V0	0.0000090	V0	0.0000000	V1
Tin	0.0004414	0.0000186	V0	0.0001272	V0	0.0000000	V1
Titanium	0.0015201	0.0039070	V0	0.0014957	V0	0.0002118	V0
Tungsten	0.0000938	0.0000088	V0	0.0000160	V0	0.0000786	V0
Uranium	0.0000048	0.0000017	V0	0.0000014	V0	0.0000000	V1
Vanadium	0.0007697	0.0001098	V0	0.0000708	V0	0.0000000	V1
Zinc	0.0055897	0.0006964	V0	0.0011102	V0	0.0002932	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		17-Jun		17-Jun		17-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.91	V0	3.12	V0	0.43	V0
Aluminum	0.1380326	0.0483332	V0	0.0219582	V0	0.0067053	V0
Antimony	0.0001784	0.0000735	V0	0.0000109	V0	0.0000000	V1
Arsenic	0.0001060	0.0000146	V0	0.0000122	V0	0.0000000	V1
Barium	0.0092847	0.0010828	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000068	V0	0.0000024	V0	0.0000013	V0
Cadmium	0.0000174	0.0000021	V0	0.0000017	V0	0.0000000	V1
Calcium	0.4112124	0.0766993	V0	0.0409862	V0	0.0000000	V1
Cerium	0.0000174	0.0000429	V0	0.0000273	V0	0.0000000	V1
Cesium	0.0000100	0.0000027	V0	0.0000011	V0	0.0000000	V1
Chromium	0.0022262	0.0002074	V0	0.0001541	V0	0.0001325	V0
Cobalt	0.0000273	0.0000499	V0	0.0000069	V0	0.0000281	V0
Copper	0.0017171	0.0006089	V0	0.0002269	V0	0.0000899	V0
Iron	0.0393063	0.0498424	V0	0.0173132	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000209	V0	0.0000103	V0	0.0000000	V1
Lead	0.0008577	0.0000639	V0	0.0000382	V0	0.0000992	V0
Lithium	0.0000374	0.0000342	V0	0.0000113	V0	0.0000000	V1
Magnesium	0.0091409	0.0182883	V0	0.0080954	V0	0.0013985	V0
Manganese	0.0006949	0.0011104	V0	0.0006166	V0	0.0000438	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000169	V0	0.0000070	V0	0.0000000	V1
Nickel	0.0005429	0.0001635	V0	0.0001095	V0	0.0000888	V0
Niobium	0.0000202	0.0000051	V0	0.0000019	V0	0.0000000	V1
Palladium	0.0000632	0.0000039	V0	0.0000056	V0	0.0000032	V0
Phosphorus	0.0459574	0.0202247	V0	0.0205178	V0	0.0102843	V0
Platinum	0.0000088	0.0000006	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0329237	V0	0.0210727	V0	0.0054361	V0
Praseodymium	0.0000070	0.0000044	V0	0.0000022	V0	0.0000000	V1
Rubidium	0.0000184	0.0000665	V0	0.0000341	V0	0.0000009	V0
Samarium	0.0000133	0.0000033	V0	0.0000012	V0	0.0000000	V1
Selenium	0.0003366	0.0000353	V0	0.0000191	V0	0.0000000	V1
Silicon	0.1270650	0.1636423	V0	0.0735812	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0129093	V0	0.0054175	V0	0.0010671	V0
Strontium	0.0003375	0.0002240	V0	0.0000946	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000004	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000051	V0	0.0000021	V0	0.0000000	V1
Tin	0.0004414	0.0000714	V0	0.0000219	V0	0.0000000	V1
Titanium	0.0015201	0.0022992	V0	0.0008523	V0	0.0002118	V0
Tungsten	0.0000938	0.0000958	V0	0.0000083	V0	0.0000786	V0
Uranium	0.0000048	0.0000016	V0	0.0000007	V0	0.0000000	V1
Vanadium	0.0007697	0.0001035	V0	0.0000356	V0	0.0000000	V1
Zinc	0.0055897	0.0014572	V0	0.0007556	V0	0.0002932	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		17-Jun		17-Jun		17-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.30	V0	7.52	V0	0.43	V0
Aluminum	0.1380326	0.0401971	V0	0.2784173	V0	0.0067053	V0
Antimony	0.0001784	0.0000000	V1	0.0000140	V0	0.0000000	V1
Arsenic	0.0001060	0.0000167	V0	0.0000343	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0018294	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000061	V0	0.0000000	V1
Bismuth	0.0000093	0.0000022	V0	0.0000239	V0	0.0000013	V0
Cadmium	0.0000174	0.0000014	V0	0.0000013	V0	0.0000000	V1
Calcium	0.4112124	0.0319087	V0	0.1076665	V0	0.0000000	V1
Cerium	0.0000174	0.0000254	V0	0.0002268	V0	0.0000000	V1
Cesium	0.0000100	0.0000021	V0	0.0000171	V0	0.0000000	V1
Chromium	0.0022262	0.0002251	V0	0.0004121	V0	0.0001325	V0
Cobalt	0.0000273	0.0000810	V0	0.0001392	V0	0.0000281	V0
Copper	0.0017171	0.0002244	V0	0.0003436	V0	0.0000899	V0
Iron	0.0393063	0.0218752	V0	0.1700764	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000137	V0	0.0001189	V0	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000793	V0	0.0000992	V0
Lithium	0.0000374	0.0000340	V0	0.0002706	V0	0.0000000	V1
Magnesium	0.0091409	0.0085223	V0	0.0475346	V0	0.0013985	V0
Manganese	0.0006949	0.0006655	V0	0.0032004	V0	0.0000438	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000110	V0	0.0001036	V0	0.0000000	V1
Nickel	0.0005429	0.0002460	V0	0.0003117	V0	0.0000888	V0
Niobium	0.0000202	0.0000034	V0	0.0000238	V0	0.0000000	V1
Palladium	0.0000632	0.0000049	V0	0.0000058	V0	0.0000032	V0
Phosphorus	0.0459574	0.0232752	V0	0.0235069	V0	0.0102843	V0
Platinum	0.0000088	0.0000006	V0	0.0000005	V0	0.0000000	V1
Potassium	0.0061261	0.0306865	V0	0.0850228	V0	0.0054361	V0
Praseodymium	0.0000070	0.0000029	V0	0.0000262	V0	0.0000000	V1
Rubidium	0.0000184	0.0000545	V0	0.0003179	V0	0.0000009	V0
Samarium	0.0000133	0.0000022	V0	0.0000196	V0	0.0000000	V1
Selenium	0.0003366	0.0000241	V0	0.0001180	V0	0.0000000	V1
Silicon	0.1270650	0.0765436	V0	0.9182275	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000009	V0	0.0000000	V1
Sodium	0.0169447	0.0099274	V0	0.0504659	V0	0.0010671	V0
Strontium	0.0003375	0.0001115	V0	0.0006843	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000021	V0	0.0000000	V1
Thorium	0.0000059	0.0000038	V0	0.0000313	V0	0.0000000	V1
Tin	0.0004414	0.0000273	V0	0.0000315	V0	0.0000000	V1
Titanium	0.0015201	0.0011141	V0	0.0087987	V0	0.0002118	V0
Tungsten	0.0000938	0.0001006	V0	0.0000236	V0	0.0000786	V0
Uranium	0.0000048	0.0000010	V0	0.0000084	V0	0.0000000	V1
Vanadium	0.0007697	0.0000575	V0	0.0004573	V0	0.0000000	V1
Zinc	0.0055897	0.0006911	V0	0.0011757	V0	0.0002932	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**17-Jun**		**17-Jun**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**14.8**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	15.51	V0	0.43	V0
Aluminum	0.1380326	0.4295264	V0	0.0067053	V0
Antimony	0.0001784	0.0000231	V0	0.0000000	V1
Arsenic	0.0001060	0.0000560	V0	0.0000000	V1
Barium	0.0092847	0.0026884	V0	0.0000000	V1
Beryllium	0.0000946	0.0000092	V0	0.0000000	V1
Bismuth	0.0000093	0.0000042	V0	0.0000013	V0
Cadmium	0.0000174	0.0000018	V0	0.0000000	V1
Calcium	0.4112124	0.4136295	V0	0.0000000	V1
Cerium	0.0000174	0.0003975	V0	0.0000000	V1
Cesium	0.0000100	0.0000237	V0	0.0000000	V1
Chromium	0.0022262	0.0006608	V0	0.0001325	V0
Cobalt	0.0000273	0.0001157	V0	0.0000281	V0
Copper	0.0017171	0.0005381	V0	0.0000899	V0
Iron	0.0393063	0.3558481	V0	0.0000000	V1
Lanthanum	0.0000130	0.0002079	V0	0.0000000	V1
Lead	0.0008577	0.0001811	V0	0.0000992	V0
Lithium	0.0000374	0.0005420	V0	0.0000000	V1
Magnesium	0.0091409	0.0861857	V0	0.0013985	V0
Manganese	0.0006949	0.0067622	V0	0.0000438	V0
Molybdenum	0.0007116	0.0000525	V0	0.0000000	V1
Neodymium	0.0000140	0.0001768	V0	0.0000000	V1
Nickel	0.0005429	0.0008654	V0	0.0000888	V0
Niobium	0.0000202	0.0000445	V0	0.0000000	V1
Palladium	0.0000632	0.0000134	V0	0.0000032	V0
Phosphorus	0.0459574	0.0319591	V0	0.0102843	V0
Platinum	0.0000088	0.0000008	V0	0.0000000	V1
Potassium	0.0061261	0.1333632	V0	0.0054361	V0
Praseodymium	0.0000070	0.0000446	V0	0.0000000	V1
Rubidium	0.0000184	0.0004633	V0	0.0000009	V0
Samarium	0.0000133	0.0000324	V0	0.0000000	V1
Selenium	0.0003366	0.0001850	V0	0.0000000	V1
Silicon	0.1270650	1.8224825	V0	0.0000000	V1
Silver	0.0000100	0.0000017	V0	0.0000000	V1
Sodium	0.0169447	0.0507162	V0	0.0010671	V0
Strontium	0.0003375	0.0011689	V0	0.0000000	V1
Tantalum	0.0000394	0.0000032	V0	0.0000000	V1
Thallium	0.0000090	0.0000034	V0	0.0000000	V1
Thorium	0.0000059	0.0000540	V0	0.0000000	V1
Tin	0.0004414	0.0000497	V0	0.0000000	V1
Titanium	0.0015201	0.0140226	V0	0.0002118	V0
Tungsten	0.0000938	0.0001108	V0	0.0000786	V0
Uranium	0.0000048	0.0000134	V0	0.0000000	V1
Vanadium	0.0007697	0.0006702	V0	0.0000000	V1
Zinc	0.0055897	0.0038130	V0	0.0002932	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**23-Jun**		**23-Jun**		**23-Jun**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	39.37	V0	27.60	V0	0.05	V0
Aluminum	0.1380326	1.1492372	V0	0.5480408	V0	0.0066508	V0
Antimony	0.0001784	0.0000460	V0	0.0001547	V0	0.0000000	V1
Arsenic	0.0001060	0.0001985	V0	0.0001753	V0	0.0000000	V1
Barium	0.0092847	0.0072712	V0	0.0052582	V0	0.0000000	V1
Beryllium	0.0000946	0.0000361	V0	0.0000191	V0	0.0000000	V1
Bismuth	0.0000093	0.0000617	V0	0.0000134	V0	0.0000158	V0
Cadmium	0.0000174	0.0000196	V0	0.0000080	V0	0.0000000	V1
Calcium	0.4112124	1.8609676	V0	0.6185251	V0	0.0000000	V1
Cerium	0.0000174	0.0010266	V0	0.0005045	V0	0.0000000	V1
Cesium	0.0000100	0.0000677	V0	0.0000308	V0	0.0000000	V1
Chromium	0.0022262	0.0012937	V0	0.0008235	V0	0.0000000	V1
Cobalt	0.0000273	0.0002946	V0	0.0001792	V0	0.0000046	V0
Copper	0.0017171	0.0014567	V0	0.0012657	V0	0.0002166	V0
Iron	0.0393063	0.8014038	V0	0.4587727	V0	0.0000000	V1
Lanthanum	0.0000130	0.0004548	V0	0.0002450	V0	0.0000000	V1
Lead	0.0008577	0.0005610	V0	0.0003089	V0	0.0000000	V1
Lithium	0.0000374	0.0013737	V0	0.0005000	V0	0.0000000	V1
Magnesium	0.0091409	0.2039516	V0	0.1626657	V0	0.0011785	V0
Manganese	0.0006949	0.0148291	V0	0.0086234	V0	0.0000370	V0
Molybdenum	0.0007116	0.0001046	V0	0.0000977	V0	0.0000000	V1
Neodymium	0.0000140	0.0004361	V0	0.0002283	V0	0.0000000	V1
Nickel	0.0005429	0.0010489	V0	0.0006667	V0	0.0000904	V0
Niobium	0.0000202	0.0001167	V0	0.0000654	V0	0.0000000	V1
Palladium	0.0000632	0.0000267	V0	0.0000145	V0	0.0000070	V0
Phosphorus	0.0459574	0.0316246	V0	0.0278540	V0	0.0129782	V0
Platinum	0.0000088	0.0000008	V0	0.0000013	V0	0.0000000	V1
Potassium	0.0061261	0.2726670	V0	0.1598783	V0	0.0006275	V0
Praseodymium	0.0000070	0.0001102	V0	0.0000582	V0	0.0000000	V1
Rubidium	0.0000184	0.0012807	V0	0.0006301	V0	0.0000017	V0
Samarium	0.0000133	0.0000828	V0	0.0000419	V0	0.0000000	V1
Selenium	0.0003366	0.0005459	V0	0.0002897	V0	0.0000000	V1
Silicon	0.1270650	4.3447317	V0	2.5560974	V0	0.0000000	V1
Silver	0.0000100	0.0000068	V0	0.0000043	V0	0.0000000	V1
Sodium	0.0169447	0.0968031	V0	0.1017693	V0	0.0011852	V0
Strontium	0.0003375	0.0036870	V0	0.0020913	V0	0.0000000	V1
Tantalum	0.0000394	0.0000075	V0	0.0000041	V0	0.0000000	V1
Thallium	0.0000090	0.0000096	V0	0.0000053	V0	0.0000000	V1
Thorium	0.0000059	0.0001291	V0	0.0000621	V0	0.0000000	V1
Tin	0.0004414	0.0000921	V0	0.0001518	V0	0.0000000	V1
Titanium	0.0015201	0.0386672	V0	0.0192776	V0	0.0004884	V0
Tungsten	0.0000938	0.0000456	V0	0.0002191	V0	0.0000000	V1
Uranium	0.0000048	0.0000358	V0	0.0000195	V0	0.0000000	V1
Vanadium	0.0007697	0.0020664	V0	0.0011996	V0	0.0000000	V1
Zinc	0.0055897	0.0049363	V0	0.0052563	V0	0.0004183	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		23-Jun		23-Jun		23-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	28.36	V0	12.27	V0	0.05	V0
Aluminum	0.1380326	0.7125086	V0	0.1442701	V0	0.0066508	V0
Antimony	0.0001784	0.0002106	V0	0.0000329	V0	0.0000000	V1
Arsenic	0.0001060	0.0001540	V0	0.0000837	V0	0.0000000	V1
Barium	0.0092847	0.0080925	V0	0.0016712	V0	0.0000000	V1
Beryllium	0.0000946	0.0000220	V0	0.0000058	V0	0.0000000	V1
Bismuth	0.0000093	0.0000130	V0	0.0001019	V0	0.0000158	V0
Cadmium	0.0000174	0.0000090	V0	0.0000136	V0	0.0000000	V1
Calcium	0.4112124	0.9634722	V0	0.1646108	V0	0.0000000	V1
Cerium	0.0000174	0.0007221	V0	0.0001350	V0	0.0000000	V1
Cesium	0.0000100	0.0000403	V0	0.0000084	V0	0.0000000	V1
Chromium	0.0022262	0.0010070	V0	0.0002190	V0	0.0000000	V1
Cobalt	0.0000273	0.0002586	V0	0.0000405	V0	0.0000046	V0
Copper	0.0017171	0.0016927	V0	0.0005771	V0	0.0002166	V0
Iron	0.0393063	0.6914423	V0	0.1493622	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003443	V0	0.0000688	V0	0.0000000	V1
Lead	0.0008577	0.0003143	V0	0.0001126	V0	0.0000000	V1
Lithium	0.0000374	0.0006502	V0	0.0001101	V0	0.0000000	V1
Magnesium	0.0091409	0.2196202	V0	0.0434017	V0	0.0011785	V0
Manganese	0.0006949	0.0122090	V0	0.0041046	V0	0.0000370	V0
Molybdenum	0.0007116	0.0001328	V0	0.0023927	V4	0.0000000	V1
Neodymium	0.0000140	0.0003070	V0	0.0000609	V0	0.0000000	V1
Nickel	0.0005429	0.0008301	V0	0.0001986	V0	0.0000904	V0
Niobium	0.0000202	0.0000794	V0	0.0000155	V0	0.0000000	V1
Palladium	0.0000632	0.0000360	V0	0.0000060	V0	0.0000070	V0
Phosphorus	0.0459574	0.0295507	V0	0.0210876	V0	0.0129782	V0
Platinum	0.0000088	0.0000011	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.2152410	V0	0.0641259	V0	0.0006275	V0
Praseodymium	0.0000070	0.0000794	V0	0.0000156	V0	0.0000000	V1
Rubidium	0.0000184	0.0008140	V0	0.0001904	V0	0.0000017	V0
Samarium	0.0000133	0.0000591	V0	0.0000115	V0	0.0000000	V1
Selenium	0.0003366	0.0004055	V0	0.0000978	V0	0.0000000	V1
Silicon	0.1270650	2.7402645	V0	0.7447829	V0	0.0000000	V1
Silver	0.0000100	0.0000059	V0	0.0000013	V0	0.0000000	V1
Sodium	0.0169447	0.1269303	V0	0.0331413	V0	0.0011852	V0
Strontium	0.0003375	0.0028767	V0	0.0005446	V0	0.0000000	V1
Tantalum	0.0000394	0.0000062	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000065	V0	0.0000017	V0	0.0000000	V1
Thorium	0.0000059	0.0000867	V0	0.0000186	V0	0.0000000	V1
Tin	0.0004414	0.0002124	V0	0.0000831	V0	0.0000000	V1
Titanium	0.0015201	0.0263765	V0	0.0052267	V0	0.0004884	V0
Tungsten	0.0000938	0.0003575	V0	0.0000297	V0	0.0000000	V1
Uranium	0.0000048	0.0000252	V0	0.0000055	V0	0.0000000	V1
Vanadium	0.0007697	0.0016226	V0	0.0003262	V0	0.0000000	V1
Zinc	0.0055897	0.0075521	V0	0.0018430	V0	0.0004183	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		23-Jun		23-Jun		23-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	23.71	V0	56.57	V0	0.05	V0
Aluminum	0.1380326	0.6238010	V0	2.6769190	V0	0.0066508	V0
Antimony	0.0001784	0.0000234	V0	0.0000414	V0	0.0000000	V1
Arsenic	0.0001060	0.0001098	V0	0.0003781	V0	0.0000000	V1
Barium	0.0092847	0.0038638	V0	0.0197321	V0	0.0000000	V1
Beryllium	0.0000946	0.0000193	V0	0.0000855	V0	0.0000000	V1
Bismuth	0.0000093	0.0000051	V0	0.0000162	V0	0.0000158	V0
Cadmium	0.0000174	0.0000058	V0	0.0000103	V0	0.0000000	V1
Calcium	0.4112124	0.5484933	V0	1.8634107	V0	0.0000000	V1
Cerium	0.0000174	0.0005100	V0	0.0023296	V0	0.0000000	V1
Cesium	0.0000100	0.0000352	V0	0.0001503	V0	0.0000000	V1
Chromium	0.0022262	0.0007399	V0	0.0025594	V0	0.0000000	V1
Cobalt	0.0000273	0.0001725	V0	0.0005905	V0	0.0000046	V0
Copper	0.0017171	0.0004978	V0	0.0012422	V0	0.0002166	V0
Iron	0.0393063	0.4986127	V0	2.3383757	V0	0.0000000	V1
Lanthanum	0.0000130	0.0002345	V0	0.0010860	V0	0.0000000	V1
Lead	0.0008577	0.0001938	V0	0.0006740	V0	0.0000000	V1
Lithium	0.0000374	0.0007883	V0	0.0026172	V4	0.0000000	V1
Magnesium	0.0091409	0.1135956	V0	0.5550595	V0	0.0011785	V0
Manganese	0.0006949	0.0093362	V0	0.0348990	V0	0.0000370	V0
Molybdenum	0.0007116	0.0000763	V0	0.0002017	V0	0.0000000	V1
Neodymium	0.0000140	0.0002294	V0	0.0010704	V0	0.0000000	V1
Nickel	0.0005429	0.0006089	V0	0.0022322	V0	0.0000904	V0
Niobium	0.0000202	0.0000564	V0	0.0002603	V0	0.0000000	V1
Palladium	0.0000632	0.0000117	V0	0.0000466	V0	0.0000070	V0
Phosphorus	0.0459574	0.0276890	V0	0.0448142	V0	0.0129782	V0
Platinum	0.0000088	0.0000004	V0	0.0000011	V0	0.0000000	V1
Potassium	0.0061261	0.1528802	V0	0.6409148	V0	0.0006275	V0
Praseodymium	0.0000070	0.0000581	V0	0.0002713	V0	0.0000000	V1
Rubidium	0.0000184	0.0006740	V0	0.0026429	V0	0.0000017	V0
Samarium	0.0000133	0.0000429	V0	0.0002112	V0	0.0000000	V1
Selenium	0.0003366	0.0002837	V0	0.0011626	V0	0.0000000	V1
Silicon	0.1270650	2.7017048	V0	6.8722488	V0	0.0000000	V1
Silver	0.0000100	0.0000024	V0	0.0000100	V0	0.0000000	V1
Sodium	0.0169447	0.0544175	V0	0.2777871	V0	0.0011852	V0
Strontium	0.0003375	0.0016660	V0	0.0078218	V0	0.0000000	V1
Tantalum	0.0000394	0.0000036	V0	0.0000174	V0	0.0000000	V1
Thallium	0.0000090	0.0000055	V0	0.0000218	V0	0.0000000	V1
Thorium	0.0000059	0.0000687	V0	0.0003093	V0	0.0000000	V1
Tin	0.0004414	0.0000583	V0	0.0001196	V0	0.0000000	V1
Titanium	0.0015201	0.0180304	V0	0.0866082	V0	0.0004884	V0
Tungsten	0.0000938	0.0000970	V0	0.0000936	V0	0.0000000	V1
Uranium	0.0000048	0.0000189	V0	0.0000876	V0	0.0000000	V1
Vanadium	0.0007697	0.0011087	V0	0.0056164	V0	0.0000000	V1
Zinc	0.0055897	0.0021529	V0	0.0046109	V0	0.0004183	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**23-Jun**		**23-Jun**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	57.89	V0	0.05	V0
Aluminum	0.1380326	2.8599930	V0	0.0066508	V0
Antimony	0.0001784	0.0000421	V0	0.0000000	V1
Arsenic	0.0001060	0.0003505	V0	0.0000000	V1
Barium	0.0092847	0.0164083	V0	0.0000000	V1
Beryllium	0.0000946	0.0000889	V0	0.0000000	V1
Bismuth	0.0000093	0.0000227	V0	0.0000158	V0
Cadmium	0.0000174	0.0000109	V0	0.0000000	V1
Calcium	0.4112124	2.2764848	V0	0.0000000	V1
Cerium	0.0000174	0.0025334	V0	0.0000000	V1
Cesium	0.0000100	0.0001476	V0	0.0000000	V1
Chromium	0.0022262	0.0026941	V0	0.0000000	V1
Cobalt	0.0000273	0.0006375	V0	0.0000046	V0
Copper	0.0017171	0.0011872	V0	0.0002166	V0
Iron	0.0393063	2.4579350	V0	0.0000000	V1
Lanthanum	0.0000130	0.0011575	V0	0.0000000	V1
Lead	0.0008577	0.0007335	V0	0.0000000	V1
Lithium	0.0000374	0.0036991	V4	0.0000000	V1
Magnesium	0.0091409	0.4723482	V0	0.0011785	V0
Manganese	0.0006949	0.0432607	V0	0.0000370	V0
Molybdenum	0.0007116	0.0001727	V0	0.0000000	V1
Neodymium	0.0000140	0.0011200	V0	0.0000000	V1
Nickel	0.0005429	0.0021581	V0	0.0000904	V0
Niobium	0.0000202	0.0002982	V4	0.0000000	V1
Palladium	0.0000632	0.0000549	V0	0.0000070	V0
Phosphorus	0.0459574	0.0388221	V0	0.0129782	V0
Platinum	0.0000088	0.0000013	V0	0.0000000	V1
Potassium	0.0061261	0.6144652	V0	0.0006275	V0
Praseodymium	0.0000070	0.0002868	V0	0.0000000	V1
Rubidium	0.0000184	0.0027586	V0	0.0000017	V0
Samarium	0.0000133	0.0002100	V0	0.0000000	V1
Selenium	0.0003366	0.0011426	V0	0.0000000	V1
Silicon	0.1270650	7.0995274	V0	0.0000000	V1
Silver	0.0000100	0.0000103	V0	0.0000000	V1
Sodium	0.0169447	0.1706116	V0	0.0011852	V0
Strontium	0.0003375	0.0066773	V0	0.0000000	V1
Tantalum	0.0000394	0.0000198	V0	0.0000000	V1
Thallium	0.0000090	0.0000238	V0	0.0000000	V1
Thorium	0.0000059	0.0003345	V0	0.0000000	V1
Tin	0.0004414	0.0001166	V0	0.0000000	V1
Titanium	0.0015201	0.0942221	V0	0.0004884	V0
Tungsten	0.0000938	0.0001206	V0	0.0000000	V1
Uranium	0.0000048	0.0000867	V0	0.0000000	V1
Vanadium	0.0007697	0.0044596	V0	0.0000000	V1
Zinc	0.0055897	0.0046921	V0	0.0004183	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		29-Jun		29-Jun		29-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	46.65	V0	13.10	V0	0.00	V1
Aluminum	0.1380326	1.3628303	V0	0.1408951	V0	0.0196948	V0
Antimony	0.0001784	0.0000521	V0	0.0001857	V0	0.0000000	V1
Arsenic	0.0001060	0.0002061	V0	0.0000465	V0	0.0000000	V1
Barium	0.0092847	0.0080649	V0	0.0023224	V0	0.0000000	V1
Beryllium	0.0000946	0.0000408	V0	0.0000066	V0	0.0000000	V1
Bismuth	0.0000093	0.0000542	V0	0.0000106	V0	0.0000156	V0
Cadmium	0.0000174	0.0000144	V0	0.0000183	V0	0.0000000	V1
Calcium	0.4112124	3.5852592	V0	0.2933319	V0	0.0213379	V0
Cerium	0.0000174	0.0011602	V0	0.0001474	V0	0.0000010	V0
Cesium	0.0000100	0.0000767	V0	0.0000072	V0	0.0000021	V4
Chromium	0.0022262	0.0012868	V0	0.0009193	V0	0.0000000	V1
Cobalt	0.0000273	0.0003179	V0	0.0000892	V0	0.0000052	V0
Copper	0.0017171	0.0014335	V0	0.0010958	V0	0.0001327	V0
Iron	0.0393063	0.9220002	V0	0.1979115	V0	0.0021035	V0
Lanthanum	0.0000130	0.0005444	V0	0.0000696	V0	0.0000000	V1
Lead	0.0008577	0.0006940	V0	0.0002553	V0	0.0000000	V1
Lithium	0.0000374	0.0013812	V0	0.0001146	V0	0.0000074	V0
Magnesium	0.0091409	0.2768597	V0	0.0760601	V0	0.0077610	V0
Manganese	0.0006949	0.0173169	V0	0.0036139	V0	0.0000633	V0
Molybdenum	0.0007116	0.0001277	V0	0.0000560	V0	0.0000000	V1
Neodymium	0.0000140	0.0005230	V0	0.0000639	V0	0.0000000	V1
Nickel	0.0005429	0.0009945	V0	0.0004543	V0	0.0000799	V0
Niobium	0.0000202	0.0001035	V0	0.0000161	V0	0.0000019	V0
Palladium	0.0000632	0.0000187	V0	0.0000077	V0	0.0000000	V1
Phosphorus	0.0459574	0.0329772	V0	0.0157402	V0	0.0116264	V0
Platinum	0.0000088	0.0000008	V0	0.0000009	V0	0.0000000	V1
Potassium	0.0061261	0.3419124	V0	0.0620159	V0	0.0051843	V0
Praseodymium	0.0000070	0.0001342	V0	0.0000161	V0	0.0000000	V1
Rubidium	0.0000184	0.0015074	V0	0.0001801	V0	0.0000188	V0
Samarium	0.0000133	0.0001027	V0	0.0000115	V0	0.0000000	V1
Selenium	0.0003366	0.0005598	V0	0.0000838	V0	0.0000159	V0
Silicon	0.1270650	4.5955220	V0	0.9963310	V0	0.0000000	V1
Silver	0.0000100	0.0000053	V0	0.0000011	V0	0.0000000	V1
Sodium	0.0169447	0.1114963	V0	0.0322975	V0	0.0023551	V0
Strontium	0.0003375	0.0053439	V0	0.0007574	V0	0.0000244	V0
Tantalum	0.0000394	0.0000070	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000111	V0	0.0000021	V0	0.0000000	V1
Thorium	0.0000059	0.0001563	V0	0.0000157	V0	0.0000003	V0
Tin	0.0004414	0.0000750	V0	0.0001119	V0	0.0000000	V1
Titanium	0.0015201	0.0361456	V0	0.0054163	V0	0.0028205	V0
Tungsten	0.0000938	0.0000606	V0	0.0002061	V0	0.0000000	V1
Uranium	0.0000048	0.0000384	V0	0.0000057	V0	0.0000000	V1
Vanadium	0.0007697	0.0023712	V0	0.0003013	V0	0.0000000	V1
Zinc	0.0055897	0.0036100	V0	0.0037621	V0	0.0009611	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Fort McKay South		Travel Blank	
Station #		AMS 7		AMS 13			
Sample Date		29-Jun		29-Jun		29-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	13.52	V0	23.99	V0	0.00	V1
Aluminum	0.1380326	0.2231807	V0	0.4702174	V0	0.0196948	V0
Antimony	0.0001784	0.0002916	V0	0.0000395	V0	0.0000000	V1
Arsenic	0.0001060	0.0000841	V0	0.0000779	V0	0.0000000	V1
Barium	0.0092847	0.0042614	V0	0.0031077	V0	0.0000000	V1
Beryllium	0.0000946	0.0000084	V0	0.0000166	V0	0.0000000	V1
Bismuth	0.0000093	0.0000113	V0	0.0000054	V0	0.0000156	V0
Cadmium	0.0000174	0.0000096	V0	0.0000087	V0	0.0000000	V1
Calcium	0.4112124	0.3485763	V0	0.9431178	V0	0.0213379	V0
Cerium	0.0000174	0.0002119	V0	0.0004454	V0	0.0000010	V0
Cesium	0.0000100	0.0000125	V0	0.0000287	V0	0.0000021	V4
Chromium	0.0022262	0.0005007	V0	0.0007173	V0	0.0000000	V1
Cobalt	0.0000273	0.0001254	V0	0.0001761	V0	0.0000052	V0
Copper	0.0017171	0.0032578	V0	0.0006845	V0	0.0001327	V0
Iron	0.0393063	0.2576344	V0	0.3770200	V0	0.0021035	V0
Lanthanum	0.0000130	0.0000990	V0	0.0002075	V0	0.0000000	V1
Lead	0.0008577	0.0004638	V0	0.0001758	V0	0.0000000	V1
Lithium	0.0000374	0.0001748	V0	0.0005739	V0	0.0000074	V0
Magnesium	0.0091409	0.0958959	V0	0.1045226	V0	0.0077610	V0
Manganese	0.0006949	0.0046757	V0	0.0073845	V0	0.0000633	V0
Molybdenum	0.0007116	0.0000602	V0	0.0001106	V0	0.0000000	V1
Neodymium	0.0000140	0.0000912	V0	0.0001986	V0	0.0000000	V1
Nickel	0.0005429	0.0005835	V0	0.0007758	V0	0.0000799	V0
Niobium	0.0000202	0.0000213	V0	0.0000510	V0	0.0000019	V0
Palladium	0.0000632	0.0000152	V0	0.0000101	V0	0.0000000	V1
Phosphorus	0.0459574	0.0189661	V0	0.0231733	V0	0.0116264	V0
Platinum	0.0000088	0.0000007	V0	0.0000006	V0	0.0000000	V1
Potassium	0.0061261	0.0841932	V0	0.1402774	V0	0.0051843	V0
Praseodymium	0.0000070	0.0000235	V0	0.0000511	V0	0.0000000	V1
Rubidium	0.0000184	0.0002774	V0	0.0005888	V0	0.0000188	V0
Samarium	0.0000133	0.0000168	V0	0.0000385	V0	0.0000000	V1
Selenium	0.0003366	0.0001217	V0	0.0002413	V0	0.0000159	V0
Silicon	0.1270650	1.1095249	V0	2.0010077	V0	0.0000000	V1
Silver	0.0000100	0.0000036	V0	0.0000025	V0	0.0000000	V1
Sodium	0.0169447	0.0533110	V0	0.0480433	V0	0.0023551	V0
Strontium	0.0003375	0.0009823	V0	0.0019048	V0	0.0000244	V0
Tantalum	0.0000394	0.0000000	V1	0.0000029	V0	0.0000000	V1
Thallium	0.0000090	0.0000027	V0	0.0000049	V0	0.0000000	V1
Thorium	0.0000059	0.0000258	V0	0.0000567	V0	0.0000003	V0
Tin	0.0004414	0.0002068	V0	0.0000679	V0	0.0000000	V1
Titanium	0.0015201	0.0078862	V0	0.0175682	V0	0.0028205	V0
Tungsten	0.0000938	0.0002159	V0	0.0000944	V0	0.0000000	V1
Uranium	0.0000048	0.0000073	V0	0.0000159	V0	0.0000000	V1
Vanadium	0.0007697	0.0004908	V0	0.0010597	V0	0.0000000	V1
Zinc	0.0055897	0.0059477	V0	0.0022656	V0	0.0009611	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		CNRL Horizon		Albian Muskeg River		Travel Blank	
Station #		AMS 15		AMS 16			
Sample Date		29-Jun		29-Jun		29-Jun	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	44.37	V0	41.69	V0	0.00	V1
Aluminum	0.1380326	1.2269485	V0	1.8076303	V0	0.0196948	V0
Antimony	0.0001784	0.0000265	V0	0.0000240	V0	0.0000000	V1
Arsenic	0.0001060	0.0001897	V0	0.0002386	V0	0.0000000	V1
Barium	0.0092847	0.0107121	V0	0.0108357	V0	0.0000000	V1
Beryllium	0.0000946	0.0000443	V0	0.0000585	V0	0.0000000	V1
Bismuth	0.0000093	0.0000181	V0	0.0000113	V0	0.0000156	V0
Cadmium	0.0000174	0.0000103	V0	0.0000148	V0	0.0000000	V1
Calcium	0.4112124	1.4953937	V0	2.1986655	V0	0.0213379	V0
Cerium	0.0000174	0.0011382	V0	0.0017205	V0	0.0000010	V0
Cesium	0.0000100	0.0000630	V0	0.0000908	V0	0.0000021	V4
Chromium	0.0022262	0.0012472	V0	0.0016452	V0	0.0000000	V1
Cobalt	0.0000273	0.0002927	V0	0.0004070	V0	0.0000052	V0
Copper	0.0017171	0.0008898	V0	0.0008494	V0	0.0001327	V0
Iron	0.0393063	1.5627154	V0	1.8783921	V0	0.0021035	V0
Lanthanum	0.0000130	0.0005355	V0	0.0007880	V0	0.0000000	V1
Lead	0.0008577	0.0003404	V0	0.0004561	V0	0.0000000	V1
Lithium	0.0000374	0.0011908	V0	0.0019970	V0	0.0000074	V0
Magnesium	0.0091409	0.3936979	V0	0.4017491	V0	0.0077610	V0
Manganese	0.0006949	0.0235767	V0	0.0329571	V0	0.0000633	V0
Molybdenum	0.0007116	0.0001182	V0	0.0001227	V0	0.0000000	V1
Neodymium	0.0000140	0.0005120	V0	0.0007502	V0	0.0000000	V1
Nickel	0.0005429	0.0010314	V0	0.0013492	V0	0.0000799	V0
Niobium	0.0000202	0.0001112	V0	0.0001894	V0	0.0000019	V0
Palladium	0.0000632	0.0000243	V0	0.0000329	V0	0.0000000	V1
Phosphorus	0.0459574	0.0313174	V0	0.0322392	V0	0.0116264	V0
Platinum	0.0000088	0.0000006	V0	0.0000009	V0	0.0000000	V1
Potassium	0.0061261	0.2896221	V0	0.3872639	V0	0.0051843	V0
Praseodymium	0.0000070	0.0001302	V0	0.0001927	V0	0.0000000	V1
Rubidium	0.0000184	0.0012444	V0	0.0018542	V0	0.0000188	V0
Samarium	0.0000133	0.0000981	V0	0.0001419	V0	0.0000000	V1
Selenium	0.0003366	0.0005400	V0	0.0007709	V0	0.0000159	V0
Silicon	0.1270650	4.5332537	V0	4.3008231	V0	0.0000000	V1
Silver	0.0000100	0.0000056	V0	0.0000066	V0	0.0000000	V1
Sodium	0.0169447	0.1210448	V0	0.1298029	V0	0.0023551	V0
Strontium	0.0003375	0.0041620	V0	0.0052489	V0	0.0000244	V0
Tantalum	0.0000394	0.0000073	V0	0.0000125	V0	0.0000000	V1
Thallium	0.0000090	0.0000119	V0	0.0000169	V0	0.0000000	V1
Thorium	0.0000059	0.0001441	V0	0.0002293	V0	0.0000003	V0
Tin	0.0004414	0.0000666	V0	0.0000717	V0	0.0000000	V1
Titanium	0.0015201	0.0364331	V0	0.0592758	V0	0.0028205	V0
Tungsten	0.0000938	0.0000424	V0	0.0001004	V0	0.0000000	V1
Uranium	0.0000048	0.0000402	V0	0.0000549	V0	0.0000000	V1
Vanadium	0.0007697	0.0026609	V0	0.0027589	V0	0.0000000	V1
Zinc	0.0055897	0.0030977	V0	0.0036064	V0	0.0009611	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		05-Jul		05-Jul		05-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	19.19	V0	21.17	V0	0.17	V0
Aluminum	0.1380326	0.0710848	V0	0.0833685	V0	0.0057728	V0
Antimony	0.0001784	0.0000259	V0	0.0001347	V0	0.0000000	V1
Arsenic	0.0001060	0.0000857	V0	0.0001173	V0	0.0000000	V1
Barium	0.0092847	0.0008680	V0	0.0023048	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000775	V0	0.0000093	V0	0.0000075	V0
Cadmium	0.0000174	0.0000284	V0	0.0000261	V0	0.0000000	V1
Calcium	0.4112124	0.3751843	V0	0.2138556	V0	0.0000000	V1
Cerium	0.0000174	0.0000788	V0	0.0001230	V0	0.0000000	V1
Cesium	0.0000100	0.0000125	V0	0.0000119	V0	0.0000000	V1
Chromium	0.0022262	0.0003058	V0	0.0004273	V0	0.0004873	V0
Cobalt	0.0000273	0.0000308	V0	0.0000885	V0	0.0000053	V0
Copper	0.0017171	0.0012128	V0	0.0012054	V0	0.0002000	V0
Iron	0.0393063	0.0695003	V0	0.1234673	V0	0.0024166	V0
Lanthanum	0.0000130	0.0000382	V0	0.0000570	V0	0.0000000	V1
Lead	0.0008577	0.0001404	V0	0.0002087	V0	0.0000000	V1
Lithium	0.0000374	0.0000760	V0	0.0000751	V0	0.0000000	V1
Magnesium	0.0091409	0.0257136	V0	0.0476685	V0	0.0008737	V0
Manganese	0.0006949	0.0024656	V0	0.0036729	V0	0.0000827	V0
Molybdenum	0.0007116	0.0000443	V0	0.0001931	V0	0.0000000	V1
Neodymium	0.0000140	0.0000323	V0	0.0000481	V0	0.0000000	V1
Nickel	0.0005429	0.0003011	V0	0.0008073	V0	0.0002426	V0
Niobium	0.0000202	0.0000093	V0	0.0000125	V0	0.0000000	V1
Palladium	0.0000632	0.0000072	V0	0.0000184	V0	0.0000094	V0
Phosphorus	0.0459574	0.0476052	V0	0.0465123	V0	0.0231003	V0
Platinum	0.0000088	0.0000008	V0	0.0000018	V0	0.0000004	V0
Potassium	0.0061261	0.1265184	V0	0.1276776	V0	0.0021527	V0
Praseodymium	0.0000070	0.0000086	V0	0.0000127	V0	0.0000000	V1
Rubidium	0.0000184	0.0003645	V0	0.0003453	V0	0.0000008	V0
Samarium	0.0000133	0.0000061	V0	0.0000085	V0	0.0000000	V1
Selenium	0.0003366	0.0001266	V0	0.0001301	V0	0.0000000	V1
Silicon	0.7676322	0.2180991	V0	0.3412970	V0	0.0000000	V1
Silver	0.0000100	0.0000060	V0	0.0000050	V0	0.0000000	V1
Sodium	0.0169447	0.0112163	V0	0.0206061	V0	0.0022800	V0
Strontium	0.0003375	0.0005485	V0	0.0005993	V0	0.0000181	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000056	V0	0.0000051	V0	0.0000000	V1
Thorium	0.0000059	0.0000098	V0	0.0000133	V0	0.0000000	V1
Tin	0.0004414	0.0000730	V0	0.0002200	V0	0.0000000	V1
Titanium	0.0015201	0.0042545	V0	0.0042974	V0	0.0002997	V0
Tungsten	0.0000938	0.0000262	V0	0.0001337	V0	0.0000000	V1
Uranium	0.0000048	0.0000034	V0	0.0000050	V0	0.0000000	V1
Vanadium	0.0007697	0.0002207	V0	0.0010709	V0	0.0000000	V1
Zinc	0.0055897	0.0041084	V0	0.0053399	V0	0.0008354	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		05-Jul		05-Jul		05-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	23.23	V0	11.45	V0	0.17	V0
Aluminum	0.1380326	0.1390719	V0	0.0150286	V0	0.0057728	V0
Antimony	0.0001784	0.0002869	V0	0.0000229	V0	0.0000000	V1
Arsenic	0.0001060	0.0001207	V0	0.0001098	V0	0.0000000	V1
Barium	0.0092847	0.0045733	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000279	V0	0.0000571	V0	0.0000075	V0
Cadmium	0.0000174	0.0000241	V0	0.0000117	V0	0.0000000	V1
Calcium	0.4112124	0.3180174	V0	0.0495593	V0	0.0000000	V1
Cerium	0.0000174	0.0001886	V0	0.0000211	V0	0.0000000	V1
Cesium	0.0000100	0.0000153	V0	0.0000033	V0	0.0000000	V1
Chromium	0.0022262	0.0005472	V0	0.0001693	V0	0.0004873	V0
Cobalt	0.0000273	0.0000866	V0	0.0000280	V0	0.0000053	V0
Copper	0.0017171	0.0022709	V0	0.0006684	V0	0.0002000	V0
Iron	0.0393063	0.2068885	V0	0.0144142	V0	0.0024166	V0
Lanthanum	0.0000130	0.0000911	V0	0.0000108	V0	0.0000000	V1
Lead	0.0008577	0.0002379	V0	0.0000660	V0	0.0000000	V1
Lithium	0.0000374	0.0001252	V0	0.0000125	V0	0.0000000	V1
Magnesium	0.0091409	0.0618614	V0	0.0087695	V0	0.0008737	V0
Manganese	0.0006949	0.0052906	V0	0.0008827	V0	0.0000827	V0
Molybdenum	0.0007116	0.0002836	V0	0.0000533	V0	0.0000000	V1
Neodymium	0.0000140	0.0000805	V0	0.0000075	V0	0.0000000	V1
Nickel	0.0005429	0.0007043	V0	0.0002782	V0	0.0002426	V0
Niobium	0.0000202	0.0000222	V0	0.0000028	V0	0.0000000	V1
Palladium	0.0000632	0.0000192	V0	0.0000091	V0	0.0000094	V0
Phosphorus	0.0459574	0.0469398	V0	0.0359078	V0	0.0231003	V0
Platinum	0.0000088	0.0000013	V0	0.0000008	V0	0.0000004	V0
Potassium	0.0061261	0.1525293	V0	0.0544421	V0	0.0021527	V0
Praseodymium	0.0000070	0.0000212	V0	0.0000020	V0	0.0000000	V1
Rubidium	0.0000184	0.0004052	V0	0.0001218	V0	0.0000008	V0
Samarium	0.0000133	0.0000136	V0	0.0000012	V0	0.0000000	V1
Selenium	0.0003366	0.0001632	V0	0.0000315	V0	0.0000000	V1
Silicon	0.7676322	0.5395419	V0	0.0568236	V0	0.0000000	V1
Silver	0.0000100	0.0000054	V0	0.0000019	V0	0.0000000	V1
Sodium	0.0169447	0.0422712	V0	0.0056687	V0	0.0022800	V0
Strontium	0.0003375	0.0010208	V0	0.0001028	V0	0.0000181	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000055	V0	0.0000017	V0	0.0000000	V1
Thorium	0.0000059	0.0000223	V0	0.0000021	V0	0.0000000	V1
Tin	0.0004414	0.0002735	V0	0.0000771	V0	0.0000000	V1
Titanium	0.0015201	0.0091704	V0	0.0010062	V0	0.0002997	V0
Tungsten	0.0000938	0.0002164	V0	0.0000210	V0	0.0000000	V1
Uranium	0.0000048	0.0000083	V0	0.0000009	V0	0.0000000	V1
Vanadium	0.0007697	0.0013482	V0	0.0006321	V0	0.0000000	V1
Zinc	0.0055897	0.0065938	V0	0.0019118	V0	0.0008354	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		05-Jul		05-Jul		05-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	19.28	V0	23.08	V0	0.17	V0
Aluminum	0.1380326	0.0510292	V0	0.1317989	V0	0.0057728	V0
Antimony	0.0001784	0.0000305	V0	0.0000167	V0	0.0000000	V1
Arsenic	0.0001060	0.0000795	V0	0.0002183	V0	0.0000000	V1
Barium	0.0092847	0.0008675	V0	0.0014459	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000039	V0	0.0001120	V0	0.0000075	V0
Cadmium	0.0000174	0.0000234	V0	0.0000282	V0	0.0000000	V1
Calcium	0.4112124	0.1208347	V0	0.1155456	V0	0.0000000	V1
Cerium	0.0000174	0.0000623	V0	0.0001475	V0	0.0000000	V1
Cesium	0.0000100	0.0000104	V0	0.0000175	V0	0.0000000	V1
Chromium	0.0022262	0.0003066	V0	0.0004539	V0	0.0004873	V0
Cobalt	0.0000273	0.0000553	V0	0.0000425	V0	0.0000053	V0
Copper	0.0017171	0.0004829	V0	0.0004347	V0	0.0002000	V0
Iron	0.0393063	0.0569275	V0	0.1328765	V0	0.0024166	V0
Lanthanum	0.0000130	0.0000296	V0	0.0000714	V0	0.0000000	V1
Lead	0.0008577	0.0001194	V0	0.0001470	V0	0.0000000	V1
Lithium	0.0000374	0.0000805	V0	0.0001448	V0	0.0000000	V1
Magnesium	0.0091409	0.0190087	V0	0.0347375	V0	0.0008737	V0
Manganese	0.0006949	0.0019626	V0	0.0033668	V0	0.0000827	V0
Molybdenum	0.0007116	0.0000388	V0	0.0000366	V0	0.0000000	V1
Neodymium	0.0000140	0.0000271	V0	0.0000645	V0	0.0000000	V1
Nickel	0.0005429	0.0002128	V0	0.0002542	V0	0.0002426	V0
Niobium	0.0000202	0.0000085	V0	0.0000160	V0	0.0000000	V1
Palladium	0.0000632	0.0000056	V0	0.0000077	V0	0.0000094	V0
Phosphorus	0.0459574	0.0461116	V0	0.0441296	V0	0.0231003	V0
Platinum	0.0000088	0.0000009	V0	0.0000000	V1	0.0000004	V0
Potassium	0.0061261	0.1078529	V0	0.1468451	V0	0.0021527	V0
Praseodymium	0.0000070	0.0000072	V0	0.0000170	V0	0.0000000	V1
Rubidium	0.0000184	0.0003096	V0	0.0004302	V0	0.0000008	V0
Samarium	0.0000133	0.0000052	V0	0.0000130	V0	0.0000000	V1
Selenium	0.0003366	0.0000905	V0	0.0001655	V0	0.0000000	V1
Silicon	0.7676322	0.2399923	V0	0.5472362	V0	0.0000000	V1
Silver	0.0000100	0.0000041	V0	0.0000052	V0	0.0000000	V1
Sodium	0.0169447	0.0088138	V0	0.0176626	V0	0.0022800	V0
Strontium	0.0003375	0.0002827	V0	0.0005197	V0	0.0000181	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000048	V0	0.0000060	V0	0.0000000	V1
Thorium	0.0000059	0.0000078	V0	0.0000182	V0	0.0000000	V1
Tin	0.0004414	0.0000753	V0	0.0000564	V0	0.0000000	V1
Titanium	0.0015201	0.0027548	V0	0.0050407	V0	0.0002997	V0
Tungsten	0.0000938	0.0000611	V0	0.0000063	V0	0.0000000	V1
Uranium	0.0000048	0.0000025	V0	0.0000061	V0	0.0000000	V1
Vanadium	0.0007697	0.0001851	V0	0.0003614	V0	0.0000000	V1
Zinc	0.0055897	0.0045212	V0	0.0044865	V0	0.0008354	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**05-Jul**		**05-Jul**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**23.7**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	30.38	V0	0.17	V0
Aluminum	0.1380326	0.5051237	V0	0.0057728	V0
Antimony	0.0001784	0.0000260	V0	0.0000000	V1
Arsenic	0.0001060	0.0001420	V0	0.0000000	V1
Barium	0.0092847	0.0043180	V0	0.0000000	V1
Beryllium	0.0000946	0.0000165	V0	0.0000000	V1
Bismuth	0.0000093	0.0000341	V0	0.0000075	V0
Cadmium	0.0000174	0.0000314	V0	0.0000000	V1
Calcium	0.4112124	0.6582410	V0	0.0000000	V1
Cerium	0.0000174	0.0006485	V0	0.0000000	V1
Cesium	0.0000100	0.0000413	V0	0.0000000	V1
Chromium	0.0022262	0.0007819	V0	0.0004873	V0
Cobalt	0.0000273	0.0001491	V0	0.0000053	V0
Copper	0.0017171	0.0007837	V0	0.0002000	V0
Iron	0.0393063	0.5720797	V0	0.0024166	V0
Lanthanum	0.0000130	0.0003094	V0	0.0000000	V1
Lead	0.0008577	0.0002793	V0	0.0000000	V1
Lithium	0.0000374	0.0007565	V0	0.0000000	V1
Magnesium	0.0091409	0.1276112	V0	0.0008737	V0
Manganese	0.0006949	0.0115961	V0	0.0000827	V0
Molybdenum	0.0007116	0.0000899	V0	0.0000000	V1
Neodymium	0.0000140	0.0002709	V0	0.0000000	V1
Nickel	0.0005429	0.0006324	V0	0.0002426	V0
Niobium	0.0000202	0.0000719	V0	0.0000000	V1
Palladium	0.0000632	0.0000198	V0	0.0000094	V0
Phosphorus	0.0459574	0.0448265	V0	0.0231003	V0
Platinum	0.0000088	0.0000006	V0	0.0000004	V0
Potassium	0.0061261	0.2367474	V0	0.0021527	V0
Praseodymium	0.0000070	0.0000724	V0	0.0000000	V1
Rubidium	0.0000184	0.0008602	V0	0.0000008	V0
Samarium	0.0000133	0.0000490	V0	0.0000000	V1
Selenium	0.0003366	0.0003638	V0	0.0000000	V1
Silicon	0.7676322	1.5171559	V0	0.0000000	V1
Silver	0.0000100	0.0000067	V0	0.0000000	V1
Sodium	0.0169447	0.0463222	V0	0.0022800	V0
Strontium	0.0003375	0.0018485	V0	0.0000181	V0
Tantalum	0.0000394	0.0000044	V0	0.0000000	V1
Thallium	0.0000090	0.0000109	V0	0.0000000	V1
Thorium	0.0000059	0.0000858	V0	0.0000000	V1
Tin	0.0004414	0.0001946	V0	0.0000000	V1
Titanium	0.0015201	0.0213619	V0	0.0002997	V0
Tungsten	0.0000938	0.0000353	V0	0.0000000	V1
Uranium	0.0000048	0.0000234	V0	0.0000000	V1
Vanadium	0.0007697	0.0011188	V0	0.0000000	V1
Zinc	0.0055897	0.0055914	V0	0.0008354	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		11-Jul		11-Jul		11-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	27.51	V0	33.05	V0	0.60	V0
Aluminum	0.1380326	0.6750343	V0	1.0207119	V0	0.0000000	V1
Antimony	0.0001784	0.0000210	V0	0.0002463	V0	0.0000128	V0
Arsenic	0.0001060	0.0001543	V0	0.0002568	V0	0.0000000	V1
Barium	0.0092847	0.0067011	V0	0.0100334	V0	0.0000000	V1
Beryllium	0.0000946	0.0000198	V0	0.0000306	V0	0.0000000	V1
Bismuth	0.0000093	0.0000044	V0	0.0000142	V0	0.0000132	V0
Cadmium	0.0000174	0.0000063	V0	0.0000088	V0	0.0000017	V0
Calcium	0.4112124	1.5321060	V0	1.2976574	V0	0.0000000	V1
Cerium	0.0000174	0.0007964	V0	0.0012200	V0	0.0000000	V1
Cesium	0.0000100	0.0000505	V0	0.0000703	V0	0.0000000	V1
Chromium	0.0022262	0.0017788	V0	0.0014351	V0	0.0003947	V0
Cobalt	0.0000273	0.0002707	V0	0.0003497	V0	0.0000092	V0
Copper	0.0017171	0.0012528	V0	0.0017017	V0	0.0001789	V0
Iron	0.0393063	0.6993174	V0	0.9626670	V0	0.0026225	V0
Lanthanum	0.0000130	0.0003953	V0	0.0005941	V0	0.0000000	V1
Lead	0.0008577	0.0003852	V0	0.0009252	V0	0.0000000	V1
Lithium	0.0000374	0.0007217	V0	0.0010990	V0	0.0000000	V1
Magnesium	0.0091409	0.1441453	V0	0.2874108	V0	0.0013222	V0
Manganese	0.0006949	0.0127752	V0	0.0171044	V0	0.0000534	V0
Molybdenum	0.0007116	0.0001864	V0	0.0005842	V0	0.0000000	V1
Neodymium	0.0000140	0.0003515	V0	0.0005271	V0	0.0000000	V1
Nickel	0.0005429	0.0012341	V0	0.0016862	V0	0.0000822	V0
Niobium	0.0000202	0.0000792	V0	0.0001200	V0	0.0000000	V1
Palladium	0.0000632	0.0000255	V0	0.0000374	V0	0.0000059	V0
Phosphorus	0.0459574	0.0355905	V0	0.0354320	V0	0.0175923	V0
Platinum	0.0000088	0.0000016	V0	0.0000022	V0	0.0000000	V1
Potassium	0.0061261	0.2115302	V0	0.3063500	V0	0.0017519	V0
Praseodymium	0.0000070	0.0000922	V0	0.0001396	V0	0.0000000	V1
Rubidium	0.0000184	0.0009839	V0	0.0012425	V0	0.0000014	V0
Samarium	0.0000133	0.0000653	V0	0.0000977	V0	0.0000000	V1
Selenium	0.0003366	0.0004901	V0	0.0006640	V0	0.0000000	V1
Silicon	0.7676322	2.8053929	V0	3.3097474	V0	0.0000000	V1
Silver	0.0000100	0.0000045	V0	0.0000065	V0	0.0000005	V0
Sodium	0.0169447	0.0598884	V0	0.1442691	V0	0.0020354	V0
Strontium	0.0003375	0.0029388	V0	0.0037249	V0	0.0000257	V0
Tantalum	0.0000394	0.0000050	V0	0.0000078	V0	0.0000000	V1
Thallium	0.0000090	0.0000085	V0	0.0000114	V0	0.0000000	V1
Thorium	0.0000059	0.0000980	V0	0.0001543	V0	0.0000000	V1
Tin	0.0004414	0.0000660	V0	0.0001942	V0	0.0000000	V1
Titanium	0.0015201	0.0248123	V0	0.0437994	V0	0.0003185	V0
Tungsten	0.0000938	0.0001062	V0	0.0003436	V0	0.0000000	V1
Uranium	0.0000048	0.0000278	V0	0.0000437	V0	0.0000000	V1
Vanadium	0.0007697	0.0014394	V0	0.0053262	V0	0.0000000	V1
Zinc	0.0055897	0.0072277	V0	0.0051385	V0	0.0002757	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		11-Jul		11-Jul		11-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	27.08	V0	14.84	V0	0.60	V0
Aluminum	0.1380326	0.5566419	V0	0.2168828	V0	0.0000000	V1
Antimony	0.0001784	0.0001383	V0	0.0000200	V0	0.0000128	V0
Arsenic	0.0001060	0.0001543	V0	0.0001107	V0	0.0000000	V1
Barium	0.0092847	0.0052948	V0	0.0017823	V0	0.0000000	V1
Beryllium	0.0000946	0.0000180	V0	0.0000067	V0	0.0000000	V1
Bismuth	0.0000093	0.0000100	V0	0.0000610	V0	0.0000132	V0
Cadmium	0.0000174	0.0000066	V0	0.0000042	V0	0.0000017	V0
Calcium	0.4112124	0.7557662	V0	0.2283663	V0	0.0000000	V1
Cerium	0.0000174	0.0007019	V0	0.0002332	V0	0.0000000	V1
Cesium	0.0000100	0.0000407	V0	0.0000169	V0	0.0000000	V1
Chromium	0.0022262	0.0014593	V0	0.0004031	V0	0.0003947	V0
Cobalt	0.0000273	0.0001827	V0	0.0000609	V0	0.0000092	V0
Copper	0.0017171	0.0019495	V0	0.0004758	V0	0.0001789	V0
Iron	0.0393063	0.4900260	V0	0.1613548	V0	0.0026225	V0
Lanthanum	0.0000130	0.0004034	V0	0.0001128	V0	0.0000000	V1
Lead	0.0008577	0.0002580	V0	0.0001023	V0	0.0000000	V1
Lithium	0.0000374	0.0005824	V0	0.0002438	V0	0.0000000	V1
Magnesium	0.0091409	0.1269277	V0	0.0430376	V0	0.0013222	V0
Manganese	0.0006949	0.0094077	V0	0.0030761	V0	0.0000534	V0
Molybdenum	0.0007116	0.0004686	V0	0.0000919	V0	0.0000000	V1
Neodymium	0.0000140	0.0002468	V0	0.0000969	V0	0.0000000	V1
Nickel	0.0005429	0.0011229	V0	0.0003346	V0	0.0000822	V0
Niobium	0.0000202	0.0000599	V0	0.0000247	V0	0.0000000	V1
Palladium	0.0000632	0.0000199	V0	0.0000176	V0	0.0000059	V0
Phosphorus	0.0459574	0.0308972	V0	0.0310877	V0	0.0175923	V0
Platinum	0.0000088	0.0000016	V0	0.0000005	V0	0.0000000	V1
Potassium	0.0061261	0.1750619	V0	0.0808790	V0	0.0017519	V0
Praseodymium	0.0000070	0.0000644	V0	0.0000253	V0	0.0000000	V1
Rubidium	0.0000184	0.0007105	V0	0.0003134	V0	0.0000014	V0
Samarium	0.0000133	0.0000463	V0	0.0000193	V0	0.0000000	V1
Selenium	0.0003366	0.0003298	V0	0.0001369	V0	0.0000000	V1
Silicon	0.7676322	2.3127117	V0	0.8759646	V0	0.0000000	V1
Silver	0.0000100	0.0000049	V0	0.0000021	V0	0.0000005	V0
Sodium	0.0169447	0.0726949	V0	0.0270880	V0	0.0020354	V0
Strontium	0.0003375	0.0020755	V0	0.0007467	V0	0.0000257	V0
Tantalum	0.0000394	0.0000040	V0	0.0000017	V0	0.0000000	V1
Thallium	0.0000090	0.0000064	V0	0.0000025	V0	0.0000000	V1
Thorium	0.0000059	0.0000678	V0	0.0000289	V0	0.0000000	V1
Tin	0.0004414	0.0001327	V0	0.0000859	V0	0.0000000	V1
Titanium	0.0015201	0.0249495	V0	0.0077333	V0	0.0003185	V0
Tungsten	0.0000938	0.0001182	V0	0.0000262	V0	0.0000000	V1
Uranium	0.0000048	0.0000231	V0	0.0000087	V0	0.0000000	V1
Vanadium	0.0007697	0.0038342	V0	0.0008343	V0	0.0000000	V1
Zinc	0.0055897	0.0047625	V0	0.0017576	V0	0.0002757	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		11-Jul		11-Jul		11-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	14.47	V0	29.56	V0	0.60	V0
Aluminum	0.1380326	0.3476100	V0	1.0066185	V0	0.0000000	V1
Antimony	0.0001784	0.0000350	V0	0.0000423	V0	0.0000128	V0
Arsenic	0.0001060	0.0000997	V0	0.0002579	V0	0.0000000	V1
Barium	0.0092847	0.0034054	V0	0.0121668	V0	0.0000000	V1
Beryllium	0.0000946	0.0000103	V0	0.0000336	V0	0.0000000	V1
Bismuth	0.0000093	0.0000303	V0	0.0000827	V0	0.0000132	V0
Cadmium	0.0000174	0.0000037	V0	0.0000061	V0	0.0000017	V0
Calcium	0.4112124	0.4813439	V0	1.5721518	V0	0.0000000	V1
Cerium	0.0000174	0.0003960	V0	0.0013094	V0	0.0000000	V1
Cesium	0.0000100	0.0000241	V0	0.0000708	V0	0.0000000	V1
Chromium	0.0022262	0.0006863	V0	0.0015867	V0	0.0003947	V0
Cobalt	0.0000273	0.0001188	V0	0.0002916	V0	0.0000092	V0
Copper	0.0017171	0.0005206	V0	0.0012163	V0	0.0001789	V0
Iron	0.0393063	0.4239280	V0	1.8389097	V0	0.0026225	V0
Lanthanum	0.0000130	0.0001908	V0	0.0006415	V0	0.0000000	V1
Lead	0.0008577	0.0001250	V0	0.0003377	V0	0.0000000	V1
Lithium	0.0000374	0.0004069	V0	0.0010197	V0	0.0000000	V1
Magnesium	0.0091409	0.0848373	V0	0.3489462	V0	0.0013222	V0
Manganese	0.0006949	0.0078017	V0	0.0284109	V0	0.0000534	V0
Molybdenum	0.0007116	0.0000620	V0	0.0001587	V0	0.0000000	V1
Neodymium	0.0000140	0.0001723	V0	0.0005680	V0	0.0000000	V1
Nickel	0.0005429	0.0004959	V0	0.0012917	V0	0.0000822	V0
Niobium	0.0000202	0.0000410	V0	0.0001249	V0	0.0000000	V1
Palladium	0.0000632	0.0000117	V0	0.0000379	V0	0.0000059	V0
Phosphorus	0.0459574	0.0285925	V0	0.0406956	V0	0.0175923	V0
Platinum	0.0000088	0.0000007	V0	0.0000011	V0	0.0000000	V1
Potassium	0.0061261	0.1017790	V0	0.2980432	V0	0.0017519	V0
Praseodymium	0.0000070	0.0000452	V0	0.0001491	V0	0.0000000	V1
Rubidium	0.0000184	0.0004484	V0	0.0011918	V0	0.0000014	V0
Samarium	0.0000133	0.0000317	V0	0.0001064	V0	0.0000000	V1
Selenium	0.0003366	0.0002137	V0	0.0006999	V0	0.0000000	V1
Silicon	0.7676322	1.2022767	V0	3.1750681	V0	0.0000000	V1
Silver	0.0000100	0.0000023	V0	0.0000065	V0	0.0000005	V0
Sodium	0.0169447	0.0297461	V0	0.1235814	V0	0.0020354	V0
Strontium	0.0003375	0.0012709	V0	0.0041970	V0	0.0000257	V0
Tantalum	0.0000394	0.0000025	V0	0.0000083	V0	0.0000000	V1
Thallium	0.0000090	0.0000042	V0	0.0000131	V0	0.0000000	V1
Thorium	0.0000059	0.0000494	V0	0.0001650	V0	0.0000000	V1
Tin	0.0004414	0.0000988	V0	0.0001007	V0	0.0000000	V1
Titanium	0.0015201	0.0121021	V0	0.0386367	V0	0.0003185	V0
Tungsten	0.0000938	0.0000787	V0	0.0000486	V0	0.0000000	V1
Uranium	0.0000048	0.0000136	V0	0.0000452	V0	0.0000000	V1
Vanadium	0.0007697	0.0007208	V0	0.0021650	V0	0.0000000	V1
Zinc	0.0055897	0.0020026	V0	0.0034579	V0	0.0002757	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**11-Jul**		**11-Jul**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	54.33	V0	0.60	V0
Aluminum	0.1380326	2.8403967	V0	0.0000000	V1
Antimony	0.0001784	0.0000332	V0	0.0000128	V0
Arsenic	0.0001060	0.0003422	V0	0.0000000	V1
Barium	0.0092847	0.0179682	V0	0.0000000	V1
Beryllium	0.0000946	0.0000733	V0	0.0000000	V1
Bismuth	0.0000093	0.0001059	V0	0.0000132	V0
Cadmium	0.0000174	0.0000080	V0	0.0000017	V0
Calcium	0.4112124	2.0720312	V0	0.0000000	V1
Cerium	0.0000174	0.0032327	V4	0.0000000	V1
Cesium	0.0000100	0.0001935	V4	0.0000000	V1
Chromium	0.0022262	0.0028407	V0	0.0003947	V0
Cobalt	0.0000273	0.0006395	V0	0.0000092	V0
Copper	0.0017171	0.0014377	V0	0.0001789	V0
Iron	0.0393063	2.2814770	V0	0.0026225	V0
Lanthanum	0.0000130	0.0015489	V4	0.0000000	V1
Lead	0.0008577	0.0007614	V0	0.0000000	V1
Lithium	0.0000374	0.0043256	V4	0.0000000	V1
Magnesium	0.0091409	0.4328510	V0	0.0013222	V0
Manganese	0.0006949	0.0403915	V0	0.0000534	V0
Molybdenum	0.0007116	0.0002123	V0	0.0000000	V1
Neodymium	0.0000140	0.0013800	V4	0.0000000	V1
Nickel	0.0005429	0.0023043	V0	0.0000822	V0
Niobium	0.0000202	0.0003518	V4	0.0000000	V1
Palladium	0.0000632	0.0000876	V0	0.0000059	V0
Phosphorus	0.0459574	0.0433735	V0	0.0175923	V0
Platinum	0.0000088	0.0000026	V0	0.0000000	V1
Potassium	0.0061261	0.6194276	V0	0.0017519	V0
Praseodymium	0.0000070	0.0003653	V4	0.0000000	V1
Rubidium	0.0000184	0.0031791	V0	0.0000014	V0
Samarium	0.0000133	0.0002550	V4	0.0000000	V1
Selenium	0.0003366	0.0014138	V0	0.0000000	V1
Silicon	0.7676322	6.7216444	V0	0.0000000	V1
Silver	0.0000100	0.0000135	V0	0.0000005	V0
Sodium	0.0169447	0.1761956	V0	0.0020354	V0
Strontium	0.0003375	0.0073496	V0	0.0000257	V0
Tantalum	0.0000394	0.0000237	V0	0.0000000	V1
Thallium	0.0000090	0.0000266	V0	0.0000000	V1
Thorium	0.0000059	0.0004284	V4	0.0000000	V1
Tin	0.0004414	0.0001497	V0	0.0000000	V1
Titanium	0.0015201	0.1096060	V4	0.0003185	V0
Tungsten	0.0000938	0.0001563	V0	0.0000000	V1
Uranium	0.0000048	0.0001070	V0	0.0000000	V1
Vanadium	0.0007697	0.0045499	V0	0.0000000	V1
Zinc	0.0055897	0.0059440	V0	0.0002757	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		17-Jul		17-Jul		17-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	31.19	V0	36.15	V0	0.06	V0
Aluminum	0.1380326	0.2785499	V0	0.5641782	V0	0.0000000	V1
Antimony	0.0001784	0.0000138	V0	0.0000936	V0	0.0000000	V1
Arsenic	0.0001060	0.0002114	V0	0.0003834	V0	0.0000000	V1
Barium	0.0092847	0.0027996	V0	0.0063555	V0	0.0000000	V1
Beryllium	0.0000946	0.0000083	V0	0.0000163	V0	0.0000000	V1
Bismuth	0.0000093	0.0000050	V0	0.0001044	V0	0.0000129	V0
Cadmium	0.0000174	0.0000295	V0	0.0000295	V0	0.0000018	V0
Calcium	0.4112124	0.8148460	V0	0.8691844	V0	0.0000000	V1
Cerium	0.0000174	0.0003316	V0	0.0006745	V0	0.0000000	V1
Cesium	0.0000100	0.0000297	V0	0.0000478	V0	0.0000000	V1
Chromium	0.0022262	0.0005904	V0	0.0009807	V0	0.0000000	V1
Cobalt	0.0000273	0.0000952	V0	0.0001740	V0	0.0000155	V0
Copper	0.0017171	0.0010634	V0	0.0013503	V0	0.0001190	V0
Iron	0.0393063	0.3161152	V0	0.5347342	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001617	V0	0.0003332	V0	0.0000000	V1
Lead	0.0008577	0.0001717	V0	0.0003371	V0	0.0000000	V1
Lithium	0.0000374	0.0003358	V0	0.0006278	V0	0.0000000	V1
Magnesium	0.0091409	0.0682972	V0	0.1581442	V0	0.0007038	V0
Manganese	0.0006949	0.0070172	V0	0.0117551	V0	0.0000344	V0
Molybdenum	0.0007116	0.0000871	V0	0.0006042	V0	0.0000000	V1
Neodymium	0.0000140	0.0001433	V0	0.0002973	V0	0.0000000	V1
Nickel	0.0005429	0.0005176	V0	0.0012066	V0	0.0000844	V0
Niobium	0.0000202	0.0000365	V0	0.0000775	V0	0.0000000	V1
Palladium	0.0000632	0.0000160	V0	0.0000327	V0	0.0000028	V0
Phosphorus	0.0459574	0.0227105	V0	0.0278869	V0	0.0140102	V0
Platinum	0.0000088	0.0000013	V0	0.0000025	V0	0.0000009	V0
Potassium	0.0061261	0.1550358	V0	0.2242839	V0	0.0005257	V0
Praseodymium	0.0000070	0.0000376	V0	0.0000775	V0	0.0000000	V1
Rubidium	0.0000184	0.0006520	V0	0.0009811	V0	0.0000000	V1
Samarium	0.0000133	0.0000268	V0	0.0000545	V0	0.0000000	V1
Selenium	0.0003366	0.0002074	V0	0.0004291	V0	0.0000000	V1
Silicon	0.7676322	0.6314159	V0	1.3397767	V0	0.0000000	V1
Silver	0.0000100	0.0000064	V0	0.0000082	V0	0.0000000	V1
Sodium	0.0169447	0.0307609	V0	0.1044064	V0	0.0000000	V1
Strontium	0.0003375	0.0014604	V0	0.0026006	V0	0.0000000	V1
Tantalum	0.0000394	0.0000022	V0	0.0000054	V0	0.0000000	V1
Thallium	0.0000090	0.0000084	V0	0.0000105	V0	0.0000000	V1
Thorium	0.0000059	0.0000430	V0	0.0000896	V0	0.0000000	V1
Tin	0.0004414	0.0000641	V0	0.0001294	V0	0.0000000	V1
Titanium	0.0015201	0.0127375	V0	0.0228871	V0	0.0003274	V0
Tungsten	0.0000938	0.0000531	V0	0.0001711	V0	0.0000217	V0
Uranium	0.0000048	0.0000121	V0	0.0000284	V0	0.0000000	V1
Vanadium	0.0007697	0.0005403	V0	0.0042299	V0	0.0000000	V1
Zinc	0.0055897	0.0042798	V0	0.0058433	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		17-Jul		17-Jul		17-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	32.08	V0	19.30	V0	0.06	V0
Aluminum	0.1380326	0.5025221	V0	0.2338079	V0	0.0000000	V1
Antimony	0.0001784	0.0002252	V0	0.0000147	V0	0.0000000	V1
Arsenic	0.0001060	0.0002605	V0	0.0001249	V0	0.0000000	V1
Barium	0.0092847	0.0060856	V0	0.0021253	V0	0.0000000	V1
Beryllium	0.0000946	0.0000155	V0	0.0000067	V0	0.0000000	V1
Bismuth	0.0000093	0.0000309	V0	0.0000068	V0	0.0000129	V0
Cadmium	0.0000174	0.0000295	V0	0.0000100	V0	0.0000018	V0
Calcium	0.4112124	0.7226318	V0	0.2745112	V0	0.0000000	V1
Cerium	0.0000174	0.0005919	V0	0.0002488	V0	0.0000000	V1
Cesium	0.0000100	0.0000425	V0	0.0000194	V0	0.0000000	V1
Chromium	0.0022262	0.0008170	V0	0.0005115	V0	0.0000000	V1
Cobalt	0.0000273	0.0001980	V0	0.0000827	V0	0.0000155	V0
Copper	0.0017171	0.0023444	V0	0.0004045	V0	0.0001190	V0
Iron	0.0393063	0.4435196	V0	0.2114106	V0	0.0000000	V1
Lanthanum	0.0000130	0.0002880	V0	0.0001243	V0	0.0000000	V1
Lead	0.0008577	0.0003077	V0	0.0001313	V0	0.0000000	V1
Lithium	0.0000374	0.0005552	V0	0.0002406	V0	0.0000000	V1
Magnesium	0.0091409	0.1083051	V0	0.0513842	V0	0.0007038	V0
Manganese	0.0006949	0.0100517	V0	0.0049556	V0	0.0000344	V0
Molybdenum	0.0007116	0.0005311	V0	0.0000721	V0	0.0000000	V1
Neodymium	0.0000140	0.0002538	V0	0.0001018	V0	0.0000000	V1
Nickel	0.0005429	0.0012375	V0	0.0004590	V0	0.0000844	V0
Niobium	0.0000202	0.0000725	V0	0.0000283	V0	0.0000000	V1
Palladium	0.0000632	0.0000309	V0	0.0000091	V0	0.0000028	V0
Phosphorus	0.0459574	0.0282787	V0	0.0252060	V0	0.0140102	V0
Platinum	0.0000088	0.0000015	V0	0.0000009	V0	0.0000009	V0
Potassium	0.0061261	0.2138664	V0	0.1013683	V0	0.0005257	V0
Praseodymium	0.0000070	0.0000681	V0	0.0000270	V0	0.0000000	V1
Rubidium	0.0000184	0.0008860	V0	0.0004098	V0	0.0000000	V1
Samarium	0.0000133	0.0000474	V0	0.0000195	V0	0.0000000	V1
Selenium	0.0003366	0.0003657	V0	0.0001490	V0	0.0000000	V1
Silicon	0.7676322	1.1258672	V0	0.6458869	V0	0.0000000	V1
Silver	0.0000100	0.0000075	V0	0.0000025	V0	0.0000000	V1
Sodium	0.0169447	0.0761225	V0	0.0400572	V0	0.0000000	V1
Strontium	0.0003375	0.0020451	V0	0.0008687	V0	0.0000000	V1
Tantalum	0.0000394	0.0000049	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000097	V0	0.0000046	V0	0.0000000	V1
Thorium	0.0000059	0.0000786	V0	0.0000317	V0	0.0000000	V1
Tin	0.0004414	0.0002063	V0	0.0000545	V0	0.0000000	V1
Titanium	0.0015201	0.0201745	V0	0.0076742	V0	0.0003274	V0
Tungsten	0.0000938	0.0001659	V0	0.0000614	V0	0.0000217	V0
Uranium	0.0000048	0.0000225	V0	0.0000102	V0	0.0000000	V1
Vanadium	0.0007697	0.0035819	V0	0.0006209	V0	0.0000000	V1
Zinc	0.0055897	0.0074115	V0	0.0025641	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		17-Jul		17-Jul		17-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	28.23	V0	68.47	V0	0.06	V0
Aluminum	0.1380326	0.2485338	V0	0.5291649	V0	0.0000000	V1
Antimony	0.0001784	0.0000318	V0	0.0000276	V0	0.0000000	V1
Arsenic	0.0001060	0.0001981	V0	0.0003525	V0	0.0000000	V1
Barium	0.0092847	0.0027935	V0	0.0076720	V0	0.0000000	V1
Beryllium	0.0000946	0.0000092	V0	0.0000194	V0	0.0000000	V1
Bismuth	0.0000093	0.0000489	V0	0.0000314	V0	0.0000129	V0
Cadmium	0.0000174	0.0000284	V0	0.0000372	V0	0.0000018	V0
Calcium	0.4112124	0.3471219	V0	1.0849401	V0	0.0000000	V1
Cerium	0.0000174	0.0002799	V0	0.0006879	V0	0.0000000	V1
Cesium	0.0000100	0.0000253	V0	0.0000467	V0	0.0000000	V1
Chromium	0.0022262	0.0007500	V0	0.0010253	V0	0.0000000	V1
Cobalt	0.0000273	0.0001516	V0	0.0002351	V0	0.0000155	V0
Copper	0.0017171	0.0006241	V0	0.0007825	V0	0.0001190	V0
Iron	0.0393063	0.3010487	V0	1.2607742	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001335	V0	0.0003402	V0	0.0000000	V1
Lead	0.0008577	0.0001673	V0	0.0002849	V0	0.0000000	V1
Lithium	0.0000374	0.0003016	V0	0.0004999	V0	0.0000000	V1
Magnesium	0.0091409	0.0586244	V0	0.1931221	V0	0.0007038	V0
Manganese	0.0006949	0.0071679	V0	0.0189507	V0	0.0000344	V0
Molybdenum	0.0007116	0.0000596	V0	0.0001716	V0	0.0000000	V1
Neodymium	0.0000140	0.0001226	V0	0.0003001	V0	0.0000000	V1
Nickel	0.0005429	0.0004415	V0	0.0009116	V0	0.0000844	V0
Niobium	0.0000202	0.0000366	V0	0.0000647	V0	0.0000000	V1
Palladium	0.0000632	0.0000093	V0	0.0000214	V0	0.0000028	V0
Phosphorus	0.0459574	0.0292880	V0	0.0277276	V0	0.0140102	V0
Platinum	0.0000088	0.0000029	V0	0.0000018	V0	0.0000009	V0
Potassium	0.0061261	0.1578578	V0	0.2389651	V0	0.0005257	V0
Praseodymium	0.0000070	0.0000322	V0	0.0000797	V0	0.0000000	V1
Rubidium	0.0000184	0.0005964	V0	0.0010480	V0	0.0000000	V1
Samarium	0.0000133	0.0000237	V0	0.0000587	V0	0.0000000	V1
Selenium	0.0003366	0.0001883	V0	0.0003485	V0	0.0000000	V1
Silicon	0.7676322	0.6180112	V0	1.3343220	V0	0.0000000	V1
Silver	0.0000100	0.0000057	V0	0.0000085	V0	0.0000000	V1
Sodium	0.0169447	0.0317729	V0	0.0601060	V0	0.0000000	V1
Strontium	0.0003375	0.0010927	V0	0.0027307	V0	0.0000000	V1
Tantalum	0.0000394	0.0000022	V0	0.0000041	V0	0.0000000	V1
Thallium	0.0000090	0.0000082	V0	0.0000145	V0	0.0000000	V1
Thorium	0.0000059	0.0000357	V0	0.0000893	V0	0.0000000	V1
Tin	0.0004414	0.0000613	V0	0.0000537	V0	0.0000000	V1
Titanium	0.0015201	0.0099202	V0	0.0193109	V0	0.0003274	V0
Tungsten	0.0000938	0.0000812	V0	0.0001662	V0	0.0000217	V0
Uranium	0.0000048	0.0000111	V0	0.0000273	V0	0.0000000	V1
Vanadium	0.0007697	0.0005163	V0	0.0012465	V0	0.0000000	V1
Zinc	0.0055897	0.0048755	V0	0.0064012	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**17-Jul**		**17-Jul**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	40.54	V0	0.06	V0
Aluminum	0.1380326	2.2223314	V0	0.0000000	V1
Antimony	0.0001784	0.0000399	V0	0.0000000	V1
Arsenic	0.0001060	0.0004204	V0	0.0000000	V1
Barium	0.0092847	0.0162549	V0	0.0000000	V1
Beryllium	0.0000946	0.0000629	V0	0.0000000	V1
Bismuth	0.0000093	0.0000152	V0	0.0000129	V0
Cadmium	0.0000174	0.0000360	V0	0.0000018	V0
Calcium	0.4112124	1.8586386	V0	0.0000000	V1
Cerium	0.0000174	0.0025078	V0	0.0000000	V1
Cesium	0.0000100	0.0001547	V0	0.0000000	V1
Chromium	0.0022262	0.0024092	V0	0.0000000	V1
Cobalt	0.0000273	0.0005660	V0	0.0000155	V0
Copper	0.0017171	0.0014640	V0	0.0001190	V0
Iron	0.0393063	2.2310113	V0	0.0000000	V1
Lanthanum	0.0000130	0.0012032	V0	0.0000000	V1
Lead	0.0008577	0.0007132	V0	0.0000000	V1
Lithium	0.0000374	0.0030819	V4	0.0000000	V1
Magnesium	0.0091409	0.3640621	V0	0.0007038	V0
Manganese	0.0006949	0.0417442	V0	0.0000344	V0
Molybdenum	0.0007116	0.0001978	V0	0.0000000	V1
Neodymium	0.0000140	0.0010760	V0	0.0000000	V1
Nickel	0.0005429	0.0021621	V0	0.0000844	V0
Niobium	0.0000202	0.0003170	V4	0.0000000	V1
Palladium	0.0000632	0.0000667	V0	0.0000028	V0
Phosphorus	0.0459574	0.0362400	V0	0.0140102	V0
Platinum	0.0000088	0.0000031	V0	0.0000009	V0
Potassium	0.0061261	0.5955731	V0	0.0005257	V0
Praseodymium	0.0000070	0.0002840	V0	0.0000000	V1
Rubidium	0.0000184	0.0028592	V0	0.0000000	V1
Samarium	0.0000133	0.0002008	V0	0.0000000	V1
Selenium	0.0003366	0.0012753	V0	0.0000000	V1
Silicon	0.7676322	4.6187518	V0	0.0000000	V1
Silver	0.0000100	0.0000156	V0	0.0000000	V1
Sodium	0.0169447	0.1881680	V0	0.0000000	V1
Strontium	0.0003375	0.0064749	V0	0.0000000	V1
Tantalum	0.0000394	0.0000207	V0	0.0000000	V1
Thallium	0.0000090	0.0000274	V0	0.0000000	V1
Thorium	0.0000059	0.0003458	V0	0.0000000	V1
Tin	0.0004414	0.0001418	V0	0.0000000	V1
Titanium	0.0015201	0.0983600	V0	0.0003274	V0
Tungsten	0.0000938	0.0002351	V0	0.0000217	V0
Uranium	0.0000048	0.0000903	V0	0.0000000	V1
Vanadium	0.0007697	0.0036870	V0	0.0000000	V1
Zinc	0.0055897	0.0094367	V0	0.0000000	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		23-Jul		23-Jul		23-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	15.34	V0	9.93	V0	0.21	V0
Aluminum	0.1380326	0.3211401	V0	0.1178094	V0	0.0000000	V1
Antimony	0.0001784	0.0000150	V0	0.0001180	V0	0.0000000	V1
Arsenic	0.0001060	0.0000657	V0	0.0000676	V0	0.0000000	V1
Barium	0.0092847	0.0022504	V0	0.0023758	V0	0.0000000	V1
Beryllium	0.0000946	0.0000088	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000061	V0	0.0000100	V0	0.0000023	V0
Cadmium	0.0000174	0.0000081	V0	0.0000076	V0	0.0000000	V1
Calcium	0.4112124	0.6719724	V0	0.1670874	V0	0.0000000	V1
Cerium	0.0000174	0.0003075	V0	0.0001268	V0	0.0000000	V1
Cesium	0.0000100	0.0000243	V0	0.0000088	V0	0.0000000	V1
Chromium	0.0022262	0.0004957	V0	0.0004412	V0	0.0001194	V0
Cobalt	0.0000273	0.0001060	V0	0.0000730	V0	0.0000316	V0
Copper	0.0017171	0.0016281	V0	0.0011232	V0	0.0007129	V0
Iron	0.0393063	0.2437968	V0	0.1320650	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001501	V0	0.0000605	V0	0.0000000	V1
Lead	0.0008577	0.0001674	V0	0.0001203	V0	0.0000000	V1
Lithium	0.0000374	0.0005205	V0	0.0001107	V0	0.0000000	V1
Magnesium	0.0091409	0.0505826	V0	0.0386783	V0	0.0009892	V0
Manganese	0.0006949	0.0057474	V0	0.0026877	V0	0.0000339	V0
Molybdenum	0.0007116	0.0000716	V0	0.0000554	V0	0.0000000	V1
Neodymium	0.0000140	0.0001332	V0	0.0000531	V0	0.0000000	V1
Nickel	0.0005429	0.0005060	V0	0.0003001	V0	0.0001021	V0
Niobium	0.0000202	0.0000385	V0	0.0000143	V0	0.0000000	V1
Palladium	0.0000632	0.0000123	V0	0.0000149	V0	0.0000032	V0
Phosphorus	0.0459574	0.0268822	V0	0.0251568	V0	0.0139050	V0
Platinum	0.0000088	0.0000014	V0	0.0000018	V0	0.0000009	V0
Potassium	0.0061261	0.1138157	V0	0.0628971	V0	0.0007736	V0
Praseodymium	0.0000070	0.0000348	V0	0.0000137	V0	0.0000000	V1
Rubidium	0.0000184	0.0004526	V0	0.0001868	V0	0.0000008	V0
Samarium	0.0000133	0.0000245	V0	0.0000098	V0	0.0000000	V1
Selenium	0.0003366	0.0001748	V0	0.0000937	V0	0.0000000	V1
Silicon	0.7676322	0.7588581	V0	0.2689777	V0	0.0000000	V1
Silver	0.0000100	0.0000040	V0	0.0000021	V0	0.0000000	V1
Sodium	0.0169447	0.0245331	V0	0.0244146	V0	0.0011199	V0
Strontium	0.0003375	0.0013208	V0	0.0006003	V0	0.0000000	V1
Tantalum	0.0000394	0.0000022	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000035	V0	0.0000016	V0	0.0000000	V1
Thorium	0.0000059	0.0000443	V0	0.0000167	V0	0.0000000	V1
Tin	0.0004414	0.0000459	V0	0.0001163	V0	0.0000192	V0
Titanium	0.0015201	0.0109439	V0	0.0051111	V0	0.0003089	V0
Tungsten	0.0000938	0.0000438	V0	0.0000990	V0	0.0000363	V0
Uranium	0.0000048	0.0000126	V0	0.0000052	V0	0.0000000	V1
Vanadium	0.0007697	0.0005783	V0	0.0003876	V0	0.0000000	V1
Zinc	0.0055897	0.0016555	V0	0.0027036	V0	0.0005962	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		23-Jul		23-Jul		23-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	10.66	V0	6.96	V0	0.21	V0
Aluminum	0.1380326	0.1345265	V0	0.0346434	V0	0.0000000	V1
Antimony	0.0001784	0.0002942	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0001048	V0	0.0000424	V0	0.0000000	V1
Barium	0.0092847	0.0043947	V0	0.0004783	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000353	V0	0.0000022	V0	0.0000023	V0
Cadmium	0.0000174	0.0000101	V0	0.0000057	V0	0.0000000	V1
Calcium	0.4112124	0.2079926	V0	0.0507877	V0	0.0000000	V1
Cerium	0.0000174	0.0001674	V0	0.0000372	V0	0.0000000	V1
Cesium	0.0000100	0.0000102	V0	0.0000028	V0	0.0000000	V1
Chromium	0.0022262	0.0004531	V0	0.0002379	V0	0.0001194	V0
Cobalt	0.0000273	0.0000732	V0	0.0000605	V0	0.0000316	V0
Copper	0.0017171	0.0021756	V0	0.0002387	V0	0.0007129	V0
Iron	0.0393063	0.1728108	V0	0.0301309	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000774	V0	0.0000169	V0	0.0000000	V1
Lead	0.0008577	0.0001456	V0	0.0000373	V0	0.0000000	V1
Lithium	0.0000374	0.0001261	V0	0.0000322	V0	0.0000000	V1
Magnesium	0.0091409	0.0451476	V0	0.0101717	V0	0.0009892	V0
Manganese	0.0006949	0.0032385	V0	0.0013299	V0	0.0000339	V0
Molybdenum	0.0007116	0.0000873	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000673	V0	0.0000151	V0	0.0000000	V1
Nickel	0.0005429	0.0005787	V0	0.0002334	V0	0.0001021	V0
Niobium	0.0000202	0.0000184	V0	0.0000049	V0	0.0000000	V1
Palladium	0.0000632	0.0000212	V0	0.0000064	V0	0.0000032	V0
Phosphorus	0.0459574	0.0269223	V0	0.0207950	V0	0.0139050	V0
Platinum	0.0000088	0.0000019	V0	0.0000008	V0	0.0000009	V0
Potassium	0.0061261	0.0756684	V0	0.0335014	V0	0.0007736	V0
Praseodymium	0.0000070	0.0000180	V0	0.0000040	V0	0.0000000	V1
Rubidium	0.0000184	0.0002116	V0	0.0000774	V0	0.0000008	V0
Samarium	0.0000133	0.0000131	V0	0.0000033	V0	0.0000000	V1
Selenium	0.0003366	0.0001084	V0	0.0000284	V0	0.0000000	V1
Silicon	0.7676322	0.3130337	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000024	V0	0.0000320	V4	0.0000000	V1
Sodium	0.0169447	0.0372091	V0	0.0088384	V0	0.0011199	V0
Strontium	0.0003375	0.0007778	V0	0.0001782	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000020	V0	0.0000007	V0	0.0000000	V1
Thorium	0.0000059	0.0000228	V0	0.0000052	V0	0.0000000	V1
Tin	0.0004414	0.0002594	V0	0.0000319	V0	0.0000192	V0
Titanium	0.0015201	0.0081489	V0	0.0015581	V0	0.0003089	V0
Tungsten	0.0000938	0.0001035	V0	0.0000468	V0	0.0000363	V0
Uranium	0.0000048	0.0000064	V0	0.0000016	V0	0.0000000	V1
Vanadium	0.0007697	0.0003665	V0	0.0001930	V0	0.0000000	V1
Zinc	0.0055897	0.0036303	V0	0.0009946	V0	0.0005962	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		23-Jul		23-Jul		23-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	11.30	V0	13.30	V0	0.21	V0
Aluminum	0.1380326	0.3048419	V0	0.3030399	V0	0.0000000	V1
Antimony	0.0001784	0.0000152	V0	0.0000196	V0	0.0000000	V1
Arsenic	0.0001060	0.0000464	V0	0.0000760	V0	0.0000000	V1
Barium	0.0092847	0.0015489	V0	0.0029381	V0	0.0000000	V1
Beryllium	0.0000946	0.0000056	V0	0.0000086	V0	0.0000000	V1
Bismuth	0.0000093	0.0000184	V0	0.0000100	V0	0.0000023	V0
Cadmium	0.0000174	0.0000051	V0	0.0000055	V0	0.0000000	V1
Calcium	0.4112124	0.2893905	V0	0.2688857	V0	0.0000000	V1
Cerium	0.0000174	0.0002227	V0	0.0003127	V0	0.0000000	V1
Cesium	0.0000100	0.0000153	V0	0.0000236	V0	0.0000000	V1
Chromium	0.0022262	0.0006817	V0	0.0006927	V0	0.0001194	V0
Cobalt	0.0000273	0.0001251	V0	0.0001114	V0	0.0000316	V0
Copper	0.0017171	0.0006409	V0	0.0004219	V0	0.0007129	V0
Iron	0.0393063	0.1722415	V0	0.3331167	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001044	V0	0.0001485	V0	0.0000000	V1
Lead	0.0008577	0.0000901	V0	0.0001301	V0	0.0000000	V1
Lithium	0.0000374	0.0003465	V0	0.0003502	V0	0.0000000	V1
Magnesium	0.0091409	0.0365819	V0	0.0643204	V0	0.0009892	V0
Manganese	0.0006949	0.0038031	V0	0.0059854	V0	0.0000339	V0
Molybdenum	0.0007116	0.0000515	V0	0.0000477	V0	0.0000000	V1
Neodymium	0.0000140	0.0000941	V0	0.0001390	V0	0.0000000	V1
Nickel	0.0005429	0.0003808	V0	0.0004114	V0	0.0001021	V0
Niobium	0.0000202	0.0000281	V0	0.0000349	V0	0.0000000	V1
Palladium	0.0000632	0.0000118	V0	0.0000134	V0	0.0000032	V0
Phosphorus	0.0459574	0.0268735	V0	0.0295853	V0	0.0139050	V0
Platinum	0.0000088	0.0000011	V0	0.0000010	V0	0.0000009	V0
Potassium	0.0061261	0.0862610	V0	0.1123385	V0	0.0007736	V0
Praseodymium	0.0000070	0.0000253	V0	0.0000363	V0	0.0000000	V1
Rubidium	0.0000184	0.0002938	V0	0.0004290	V0	0.0000008	V0
Samarium	0.0000133	0.0000174	V0	0.0000266	V0	0.0000000	V1
Selenium	0.0003366	0.0001252	V0	0.0001578	V0	0.0000000	V1
Silicon	0.7676322	0.5038479	V0	0.8354615	V0	0.0000000	V1
Silver	0.0000100	0.0000014	V0	0.0000023	V0	0.0000000	V1
Sodium	0.0169447	0.0201173	V0	0.0352234	V0	0.0011199	V0
Strontium	0.0003375	0.0007521	V0	0.0011412	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000022	V0	0.0000000	V1
Thallium	0.0000090	0.0000020	V0	0.0000034	V0	0.0000000	V1
Thorium	0.0000059	0.0000307	V0	0.0000448	V0	0.0000000	V1
Tin	0.0004414	0.0000803	V0	0.0000404	V0	0.0000192	V0
Titanium	0.0015201	0.0117029	V0	0.0102072	V0	0.0003089	V0
Tungsten	0.0000938	0.0000992	V0	0.0000488	V0	0.0000363	V0
Uranium	0.0000048	0.0000082	V0	0.0000136	V0	0.0000000	V1
Vanadium	0.0007697	0.0004011	V0	0.0006469	V0	0.0000000	V1
Zinc	0.0055897	0.0014983	V0	0.0015704	V0	0.0005962	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**23-Jul**		**23-Jul**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	24.28	V0	0.21	V0
Aluminum	0.1380326	0.7136515	V0	0.0000000	V1
Antimony	0.0001784	0.0000238	V0	0.0000000	V1
Arsenic	0.0001060	0.0001104	V0	0.0000000	V1
Barium	0.0092847	0.0049783	V0	0.0000000	V1
Beryllium	0.0000946	0.0000210	V0	0.0000000	V1
Bismuth	0.0000093	0.0000101	V0	0.0000023	V0
Cadmium	0.0000174	0.0000062	V0	0.0000000	V1
Calcium	0.4112124	0.6763421	V0	0.0000000	V1
Cerium	0.0000174	0.0007040	V0	0.0000000	V1
Cesium	0.0000100	0.0000453	V0	0.0000000	V1
Chromium	0.0022262	0.0010185	V0	0.0001194	V0
Cobalt	0.0000273	0.0002393	V0	0.0000316	V0
Copper	0.0017171	0.0005578	V0	0.0007129	V0
Iron	0.0393063	0.7434067	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003295	V0	0.0000000	V1
Lead	0.0008577	0.0002908	V0	0.0000000	V1
Lithium	0.0000374	0.0010604	V0	0.0000000	V1
Magnesium	0.0091409	0.1196148	V0	0.0009892	V0
Manganese	0.0006949	0.0143014	V0	0.0000339	V0
Molybdenum	0.0007116	0.0000789	V0	0.0000000	V1
Neodymium	0.0000140	0.0003073	V0	0.0000000	V1
Nickel	0.0005429	0.0008744	V0	0.0001021	V0
Niobium	0.0000202	0.0000885	V0	0.0000000	V1
Palladium	0.0000632	0.0000202	V0	0.0000032	V0
Phosphorus	0.0459574	0.0289876	V0	0.0139050	V0
Platinum	0.0000088	0.0000016	V0	0.0000009	V0
Potassium	0.0061261	0.1857117	V0	0.0007736	V0
Praseodymium	0.0000070	0.0000817	V0	0.0000000	V1
Rubidium	0.0000184	0.0008170	V0	0.0000008	V0
Samarium	0.0000133	0.0000571	V0	0.0000000	V1
Selenium	0.0003366	0.0003728	V0	0.0000000	V1
Silicon	0.7676322	1.8610697	V0	0.0000000	V1
Silver	0.0000100	0.0000036	V0	0.0000000	V1
Sodium	0.0169447	0.0607762	V0	0.0011199	V0
Strontium	0.0003375	0.0022656	V0	0.0000000	V1
Tantalum	0.0000394	0.0000058	V0	0.0000000	V1
Thallium	0.0000090	0.0000074	V0	0.0000000	V1
Thorium	0.0000059	0.0000996	V0	0.0000000	V1
Tin	0.0004414	0.0000563	V0	0.0000192	V0
Titanium	0.0015201	0.0267568	V0	0.0003089	V0
Tungsten	0.0000938	0.0001207	V0	0.0000363	V0
Uranium	0.0000048	0.0000284	V0	0.0000000	V1
Vanadium	0.0007697	0.0012679	V0	0.0000000	V1
Zinc	0.0055897	0.0027894	V0	0.0005962	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		29-Jul		29-Jul		29-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	24.93	V0	10.29	V0	0.32	V0
Aluminum	0.1380326	0.6463363	V0	0.1739624	V0	0.0000000	V1
Antimony	0.0001784	0.0000424	V0	0.0001612	V0	0.0000000	V1
Arsenic	0.0001060	0.0001315	V0	0.0003004	V0	0.0000000	V1
Barium	0.0092847	0.0054311	V0	0.0029365	V0	0.0000000	V1
Beryllium	0.0000946	0.0000170	V0	0.0000047	V0	0.0000000	V1
Bismuth	0.0000093	0.0000093	V0	0.0000115	V0	0.0000023	V0
Cadmium	0.0000174	0.0000050	V0	0.0000175	V0	0.0000000	V1
Calcium	0.4112124	1.2325034	V0	0.2179702	V0	0.0000000	V1
Cerium	0.0000174	0.0006556	V0	0.0002152	V0	0.0000000	V1
Cesium	0.0000100	0.0000495	V0	0.0000112	V0	0.0000000	V1
Chromium	0.0022262	0.0008437	V0	0.0005558	V0	0.0000944	V0
Cobalt	0.0000273	0.0002105	V0	0.0000629	V0	0.0000092	V0
Copper	0.0017171	0.0019647	V0	0.0013545	V0	0.0000748	V0
Iron	0.0393063	0.4854827	V0	0.1719122	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003106	V0	0.0001021	V0	0.0000000	V1
Lead	0.0008577	0.0002317	V0	0.0001528	V0	0.0000000	V1
Lithium	0.0000374	0.0005759	V0	0.0001285	V0	0.0000000	V1
Magnesium	0.0091409	0.1320159	V0	0.0611406	V0	0.0013803	V0
Manganese	0.0006949	0.0083227	V0	0.0031498	V0	0.0000371	V0
Molybdenum	0.0007116	0.0001037	V0	0.0000471	V0	0.0000000	V1
Neodymium	0.0000140	0.0002923	V0	0.0000884	V0	0.0000000	V1
Nickel	0.0005429	0.0007351	V0	0.0003799	V0	0.0000768	V0
Niobium	0.0000202	0.0000843	V0	0.0000225	V0	0.0000009	V0
Palladium	0.0000632	0.0000191	V0	0.0000252	V0	0.0000028	V0
Phosphorus	0.0459574	0.0243912	V0	0.0229057	V0	0.0116690	V0
Platinum	0.0000088	0.0000014	V0	0.0000019	V0	0.0000000	V1
Potassium	0.0061261	0.2112811	V0	0.0935495	V0	0.0004849	V0
Praseodymium	0.0000070	0.0000750	V0	0.0000231	V0	0.0000000	V1
Rubidium	0.0000184	0.0008485	V0	0.0002450	V0	0.0000000	V1
Samarium	0.0000133	0.0000548	V0	0.0000156	V0	0.0000000	V1
Selenium	0.0003366	0.0003950	V0	0.0001253	V0	0.0000000	V1
Silicon	0.7676322	2.1035605	V0	0.6276474	V0	0.0000000	V1
Silver	0.0000100	0.0000039	V0	0.0000028	V0	0.0000000	V1
Sodium	0.0169447	0.0892286	V0	0.0453452	V0	0.0010377	V0
Strontium	0.0003375	0.0026596	V0	0.0007239	V0	0.0000000	V1
Tantalum	0.0000394	0.0000054	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000064	V0	0.0000021	V0	0.0000000	V1
Thorium	0.0000059	0.0000915	V0	0.0000254	V0	0.0000000	V1
Tin	0.0004414	0.0000565	V0	0.0001640	V0	0.0000000	V1
Titanium	0.0015201	0.0277549	V0	0.0075034	V0	0.0003384	V0
Tungsten	0.0000938	0.0000615	V0	0.0000640	V0	0.0000175	V0
Uranium	0.0000048	0.0000249	V0	0.0000067	V0	0.0000000	V1
Vanadium	0.0007697	0.0013685	V0	0.0003474	V0	0.0000000	V1
Zinc	0.0055897	0.0023202	V0	0.0049804	V0	0.0003937	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		29-Jul		29-Jul		29-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	10.42	V0	7.42	V0	0.32	V0
Aluminum	0.1380326	0.1372273	V0	0.1076157	V0	0.0000000	V1
Antimony	0.0001784	0.0002936	V0	0.0000138	V0	0.0000000	V1
Arsenic	0.0001060	0.0001446	V0	0.0000885	V0	0.0000000	V1
Barium	0.0092847	0.0040521	V0	0.0010704	V0	0.0000000	V1
Beryllium	0.0000946	0.0000045	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000200	V0	0.0000033	V0	0.0000023	V0
Cadmium	0.0000174	0.0000044	V0	0.0000046	V0	0.0000000	V1
Calcium	0.4112124	0.2488818	V0	0.0728759	V0	0.0000000	V1
Cerium	0.0000174	0.0001617	V0	0.0000775	V0	0.0000000	V1
Cesium	0.0000100	0.0000086	V0	0.0000051	V0	0.0000000	V1
Chromium	0.0022262	0.0007873	V0	0.0003153	V0	0.0000944	V0
Cobalt	0.0000273	0.0001526	V0	0.0000595	V0	0.0000092	V0
Copper	0.0017171	0.0045364	V0	0.0004366	V0	0.0000748	V0
Iron	0.0393063	0.1946607	V0	0.0615527	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000740	V0	0.0000380	V0	0.0000000	V1
Lead	0.0008577	0.0001950	V0	0.0000931	V0	0.0000000	V1
Lithium	0.0000374	0.0000988	V0	0.0000514	V0	0.0000000	V1
Magnesium	0.0091409	0.0557372	V0	0.0192154	V0	0.0013803	V0
Manganese	0.0006949	0.0035497	V0	0.0017528	V0	0.0000371	V0
Molybdenum	0.0007116	0.0000609	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000721	V0	0.0000344	V0	0.0000000	V1
Nickel	0.0005429	0.0003442	V0	0.0002538	V0	0.0000768	V0
Niobium	0.0000202	0.0000209	V0	0.0000101	V0	0.0000009	V0
Palladium	0.0000632	0.0000131	V0	0.0000167	V0	0.0000028	V0
Phosphorus	0.0459574	0.0207442	V0	0.0260086	V0	0.0116690	V0
Platinum	0.0000088	0.0000011	V0	0.0000015	V0	0.0000000	V1
Potassium	0.0061261	0.0679045	V0	0.0536780	V0	0.0004849	V0
Praseodymium	0.0000070	0.0000180	V0	0.0000098	V0	0.0000000	V1
Rubidium	0.0000184	0.0001820	V0	0.0001347	V0	0.0000000	V1
Samarium	0.0000133	0.0000124	V0	0.0000062	V0	0.0000000	V1
Selenium	0.0003366	0.0001155	V0	0.0000616	V0	0.0000000	V1
Silicon	0.7676322	0.5285950	V0	0.2297254	V0	0.0000000	V1
Silver	0.0000100	0.0000025	V0	0.0000018	V0	0.0000000	V1
Sodium	0.0169447	0.0284208	V0	0.0138464	V0	0.0010377	V0
Strontium	0.0003375	0.0007226	V0	0.0002569	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000020	V0	0.0000013	V0	0.0000000	V1
Thorium	0.0000059	0.0000197	V0	0.0000110	V0	0.0000000	V1
Tin	0.0004414	0.0002251	V0	0.0000377	V0	0.0000000	V1
Titanium	0.0015201	0.0073507	V0	0.0031469	V0	0.0003384	V0
Tungsten	0.0000938	0.0001933	V0	0.0000540	V0	0.0000175	V0
Uranium	0.0000048	0.0000061	V0	0.0000038	V0	0.0000000	V1
Vanadium	0.0007697	0.0002839	V0	0.0001551	V0	0.0000000	V1
Zinc	0.0055897	0.0045108	V0	0.0015562	V0	0.0003937	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		29-Jul		29-Jul		29-Jul	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	24.29	V0	20.80	V0	0.32	V0
Aluminum	0.1380326	0.8701751	V0	0.4826365	V0	0.0000000	V1
Antimony	0.0001784	0.0000333	V0	0.0000215	V0	0.0000000	V1
Arsenic	0.0001060	0.0001798	V0	0.0001349	V0	0.0000000	V1
Barium	0.0092847	0.0071516	V0	0.0044191	V0	0.0000000	V1
Beryllium	0.0000946	0.0000217	V0	0.0000156	V0	0.0000000	V1
Bismuth	0.0000093	0.0000054	V0	0.0000154	V0	0.0000023	V0
Cadmium	0.0000174	0.0000035	V0	0.0000042	V0	0.0000000	V1
Calcium	0.4112124	0.4976946	V0	0.5507468	V0	0.0000000	V1
Cerium	0.0000174	0.0008322	V0	0.0005320	V0	0.0000000	V1
Cesium	0.0000100	0.0000690	V0	0.0000340	V0	0.0000000	V1
Chromium	0.0022262	0.0010231	V0	0.0006889	V0	0.0000944	V0
Cobalt	0.0000273	0.0002475	V0	0.0001608	V0	0.0000092	V0
Copper	0.0017171	0.0008055	V0	0.0005646	V0	0.0000748	V0
Iron	0.0393063	0.6189915	V0	0.6806589	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003881	V0	0.0002494	V0	0.0000000	V1
Lead	0.0008577	0.0002720	V0	0.0001727	V0	0.0000000	V1
Lithium	0.0000374	0.0007910	V0	0.0005237	V0	0.0000000	V1
Magnesium	0.0091409	0.1525379	V0	0.1302224	V0	0.0013803	V0
Manganese	0.0006949	0.0091855	V0	0.0101402	V0	0.0000371	V0
Molybdenum	0.0007116	0.0000713	V0	0.0000606	V0	0.0000000	V1
Neodymium	0.0000140	0.0003780	V0	0.0002347	V0	0.0000000	V1
Nickel	0.0005429	0.0008564	V0	0.0006695	V0	0.0000768	V0
Niobium	0.0000202	0.0001045	V0	0.0000592	V0	0.0000009	V0
Palladium	0.0000632	0.0000246	V0	0.0000153	V0	0.0000028	V0
Phosphorus	0.0459574	0.0260291	V0	0.0248712	V0	0.0116690	V0
Platinum	0.0000088	0.0000014	V0	0.0000010	V0	0.0000000	V1
Potassium	0.0061261	0.2526611	V0	0.1503036	V0	0.0004849	V0
Praseodymium	0.0000070	0.0000977	V0	0.0000617	V0	0.0000000	V1
Rubidium	0.0000184	0.0011113	V0	0.0005824	V0	0.0000000	V1
Samarium	0.0000133	0.0000705	V0	0.0000438	V0	0.0000000	V1
Selenium	0.0003366	0.0004463	V0	0.0003081	V0	0.0000000	V1
Silicon	0.7676322	2.5512721	V0	1.4505428	V0	0.0000000	V1
Silver	0.0000100	0.0000041	V0	0.0000030	V0	0.0000000	V1
Sodium	0.0169447	0.1170606	V0	0.0511715	V0	0.0010377	V0
Strontium	0.0003375	0.0026768	V0	0.0018570	V0	0.0000000	V1
Tantalum	0.0000394	0.0000070	V0	0.0000040	V0	0.0000000	V1
Thallium	0.0000090	0.0000090	V0	0.0000058	V0	0.0000000	V1
Thorium	0.0000059	0.0001199	V0	0.0000716	V0	0.0000000	V1
Tin	0.0004414	0.0000680	V0	0.0000495	V0	0.0000000	V1
Titanium	0.0015201	0.0330305	V0	0.0202636	V0	0.0003384	V0
Tungsten	0.0000938	0.0005500	V0	0.0000458	V0	0.0000175	V0
Uranium	0.0000048	0.0000335	V0	0.0000213	V0	0.0000000	V1
Vanadium	0.0007697	0.0018748	V0	0.0010377	V0	0.0000000	V1
Zinc	0.0055897	0.0021842	V0	0.0021609	V0	0.0003937	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**29-Jul**		**29-Jul**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	41.86	V0	0.32	V0
Aluminum	0.1380326	1.4551525	V0	0.0000000	V1
Antimony	0.0001784	0.0000371	V0	0.0000000	V1
Arsenic	0.0001060	0.0002710	V0	0.0000000	V1
Barium	0.0092847	0.0120092	V0	0.0000000	V1
Beryllium	0.0000946	0.0000407	V0	0.0000000	V1
Bismuth	0.0000093	0.0000183	V0	0.0000023	V0
Cadmium	0.0000174	0.0000056	V0	0.0000000	V1
Calcium	0.4112124	2.3325102	V0	0.0000000	V1
Cerium	0.0000174	0.0014920	V0	0.0000000	V1
Cesium	0.0000100	0.0001017	V0	0.0000000	V1
Chromium	0.0022262	0.0016524	V0	0.0000944	V0
Cobalt	0.0000273	0.0004392	V0	0.0000092	V0
Copper	0.0017171	0.0012038	V0	0.0000748	V0
Iron	0.0393063	1.4710940	V0	0.0000000	V1
Lanthanum	0.0000130	0.0006968	V0	0.0000000	V1
Lead	0.0008577	0.0004870	V0	0.0000000	V1
Lithium	0.0000374	0.0016391	V0	0.0000000	V1
Magnesium	0.0091409	0.2847817	V0	0.0013803	V0
Manganese	0.0006949	0.0245767	V0	0.0000371	V0
Molybdenum	0.0007116	0.0001517	V0	0.0000000	V1
Neodymium	0.0000140	0.0006536	V0	0.0000000	V1
Nickel	0.0005429	0.0019222	V0	0.0000768	V0
Niobium	0.0000202	0.0001821	V0	0.0000009	V0
Palladium	0.0000632	0.0000354	V0	0.0000028	V0
Phosphorus	0.0459574	0.0286767	V0	0.0116690	V0
Platinum	0.0000088	0.0000013	V0	0.0000000	V1
Potassium	0.0061261	0.4103801	V0	0.0004849	V0
Praseodymium	0.0000070	0.0001741	V0	0.0000000	V1
Rubidium	0.0000184	0.0018006	V0	0.0000000	V1
Samarium	0.0000133	0.0001217	V0	0.0000000	V1
Selenium	0.0003366	0.0007842	V0	0.0000000	V1
Silicon	0.7676322	3.9080756	V0	0.0000000	V1
Silver	0.0000100	0.0000069	V0	0.0000000	V1
Sodium	0.0169447	0.1432386	V0	0.0010377	V0
Strontium	0.0003375	0.0054652	V0	0.0000000	V1
Tantalum	0.0000394	0.0000126	V0	0.0000000	V1
Thallium	0.0000090	0.0000155	V0	0.0000000	V1
Thorium	0.0000059	0.0002037	V0	0.0000000	V1
Tin	0.0004414	0.0001010	V0	0.0000000	V1
Titanium	0.0015201	0.0583650	V0	0.0003384	V0
Tungsten	0.0000938	0.0001496	V0	0.0000175	V0
Uranium	0.0000048	0.0000568	V0	0.0000000	V1
Vanadium	0.0007697	0.0027486	V0	0.0000000	V1
Zinc	0.0055897	0.0035921	V0	0.0003937	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**04-Aug**		**04-Aug**		**04-Aug**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	26.25	V0	32.67	V0	0.03	V1
Aluminum	0.1380326	0.0851197	V0	0.0564222	V0	0.0000000	V1
Antimony	0.0001784	0.0000205	V0	0.0000973	V0	0.0000000	V1
Arsenic	0.0001060	0.0001320	V0	0.0002024	V0	0.0000000	V1
Barium	0.0092847	0.0133335	V4	0.0194510	V4	-9999	M2
Beryllium	0.0000946	0.0000066	V0	0.0000093	V0	0.0000000	V1
Bismuth	0.0000093	0.0000006	V0	0.0000000	V1	0.0000000	V1
Cadmium	0.0000174	0.0000113	V0	0.0000075	V0	0.0000010	V0
Calcium	0.4112124	2.7072876	V4	1.4203417	V4	-9999	M2
Cerium	0.0000174	0.0001207	V0	0.0001182	V0	0.0000015	V0
Cesium	0.0000100	0.0000113	V0	0.0000099	V0	0.0000000	V1
Chromium	0.0022262	0.0001528	V0	0.0001633	V0	0.0000000	V1
Cobalt	0.0000273	0.0000511	V0	0.0000753	V0	0.0000047	V0
Copper	0.0017171	0.0005283	V0	0.0007596	V0	0.0009601	V0
Iron	0.0393063	0.0389931	V0	0.0368218	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000692	V0	0.0000502	V0	0.0000000	V1
Lead	0.0008577	0.0001518	V0	0.0000559	V0	0.0000000	V1
Lithium	0.0000374	0.0001190	V0	0.0001212	V0	0.0000000	V1
Magnesium	0.0091409	0.0722853	V0	0.1379833	V0	0.0032462	V0
Manganese	0.0006949	0.0034798	V0	0.0058163	V0	0.0000363	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000383	V0	0.0000000	V1
Neodymium	0.0000140	0.0000603	V0	0.0000474	V0	0.0000009	V0
Nickel	0.0005429	0.0001640	V0	0.0002674	V0	0.0000000	V1
Niobium	0.0000202	0.0000111	V0	0.0000080	V0	0.0000000	V1
Palladium	0.0000632	0.0000029	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0028085	V0	0.0027936	V0	0.0000000	V1
Platinum	0.0000088	0.0000005	V0	0.0000022	V0	0.0000000	V1
Potassium	0.0061261	0.0435514	V0	0.0544976	V0	0.0017127	V0
Praseodymium	0.0000070	0.0000144	V0	0.0000153	V0	0.0000000	V1
Rubidium	0.0000184	0.0002340	V0	0.0002047	V0	0.0000000	V1
Samarium	0.0000133	0.0000113	V0	0.0000108	V0	0.0000000	V1
Selenium	0.0003366	0.0002878	V0	0.0002709	V0	0.0000382	V0
Silicon	0.7676322	0.2944565	V4	0.2708985	V4	-9999	M2
Silver	0.0000100	0.0000012	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0359320	V0	0.1332367	V0	0.0015520	V0
Strontium	0.0003375	0.0034303	V4	0.0031175	V4	-9999	M2
Tantalum	0.0000394	0.0000008	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000016	V0	0.0000020	V0	0.0000000	V1
Thorium	0.0000059	0.0000193	V0	0.0000193	V0	0.0000000	V1
Tin	0.0004414	0.0000000	V1	0.0000381	V0	0.0000000	V1
Titanium	0.0015201	0.0033916	V0	0.0030098	V0	0.0001000	V0
Tungsten	0.0000938	0.0000108	V0	0.0000148	V0	0.0000053	V0
Uranium	0.0000048	0.0000059	V0	0.0000060	V0	0.0000000	V1
Vanadium	0.0007697	0.0002875	V0	0.0003409	V0	0.0000000	V1
Zinc	0.0055897	0.0027072	V4	0.0059403	V4	-9999	M2

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		04-Aug		04-Aug		04-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	29.13	V0	15.90	V0	0.03	V1
Aluminum	0.1380326	0.0686124	V0	0.0270101	V0	0.0000000	V1
Antimony	0.0001784	0.0002014	V0	0.0000273	V0	0.0000000	V1
Arsenic	0.0001060	0.0001651	V0	0.0002661	V0	0.0000000	V1
Barium	0.0092847	0.0203598	V4	0.0185631	V4	-9999	M2
Beryllium	0.0000946	0.0000108	V0	0.0000076	V0	0.0000000	V1
Bismuth	0.0000093	0.0000047	V0	0.0000000	V1	0.0000000	V1
Cadmium	0.0000174	0.0000110	V0	0.0000125	V0	0.0000010	V0
Calcium	0.4112124	1.6548934	V4	1.2349535	V4	-9999	M2
Cerium	0.0000174	0.0001431	V0	0.0000582	V0	0.0000015	V0
Cesium	0.0000100	0.0000104	V0	0.0000059	V0	0.0000000	V1
Chromium	0.0022262	0.0001718	V0	0.0000000	V1	0.0000000	V1
Cobalt	0.0000273	0.0001019	V0	0.0000548	V0	0.0000047	V0
Copper	0.0017171	0.0011463	V0	0.0006560	V0	0.0009601	V0
Iron	0.0393063	0.0447005	V0	0.0363240	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000494	V0	0.0000265	V0	0.0000000	V1
Lead	0.0008577	0.0000773	V0	0.0000388	V0	0.0000000	V1
Lithium	0.0000374	0.0001734	V0	0.0000498	V0	0.0000000	V1
Magnesium	0.0091409	0.1410628	V0	0.0500373	V0	0.0032462	V0
Manganese	0.0006949	0.0072589	V0	0.0033320	V0	0.0000363	V0
Molybdenum	0.0007116	0.0000525	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000497	V0	0.0000263	V0	0.0000009	V0
Nickel	0.0005429	0.0002507	V0	0.0001162	V0	0.0000000	V1
Niobium	0.0000202	0.0000134	V0	0.0000052	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0028670	V0	0.0088120	V0	0.0000000	V1
Platinum	0.0000088	0.0000033	V0	0.0000032	V0	0.0000000	V1
Potassium	0.0061261	0.0623367	V0	0.1251150	V0	0.0017127	V0
Praseodymium	0.0000070	0.0000134	V0	0.0000076	V0	0.0000000	V1
Rubidium	0.0000184	0.0002245	V0	0.0001433	V0	0.0000000	V1
Samarium	0.0000133	0.0000114	V0	0.0000079	V0	0.0000000	V1
Selenium	0.0003366	0.0002718	V0	0.0001280	V0	0.0000382	V0
Silicon	0.7676322	0.2971251	V4	0.2913183	V4	-9999	M2
Silver	0.0000100	0.0000008	V0	0.0000006	V0	0.0000000	V1
Sodium	0.0169447	0.0906576	V0	0.0366135	V0	0.0015520	V0
Strontium	0.0003375	0.0030712	V4	0.0014003	V4	-9999	M2
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000021	V0	0.0000020	V0	0.0000000	V1
Thorium	0.0000059	0.0000195	V0	0.0000065	V0	0.0000000	V1
Tin	0.0004414	0.0000952	V0	0.0000272	V0	0.0000000	V1
Titanium	0.0015201	0.0035142	V0	0.0012292	V0	0.0001000	V0
Tungsten	0.0000938	0.0000398	V0	0.0000283	V0	0.0000053	V0
Uranium	0.0000048	0.0000061	V0	0.0000029	V0	0.0000000	V1
Vanadium	0.0007697	0.0003778	V0	0.0001217	V0	0.0000000	V1
Zinc	0.0055897	0.0115677	V4	0.0057341	V4	-9999	M2

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		04-Aug		04-Aug		04-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	10.38	V0	25.85	V0	0.03	V1
Aluminum	0.1380326	0.0101304	V0	0.1030349	V0	0.0000000	V1
Antimony	0.0001784	0.0000091	V0	0.0000149	V0	0.0000000	V1
Arsenic	0.0001060	0.0001037	V0	0.0001299	V0	0.0000000	V1
Barium	0.0092847	0.0173560	V4	0.0227907	V4	-9999	M2
Beryllium	0.0000946	0.0000070	V0	0.0000132	V0	0.0000000	V1
Bismuth	0.0000093	0.0000000	V1	0.0000000	V1	0.0000000	V1
Cadmium	0.0000174	0.0000077	V0	0.0000069	V0	0.0000010	V0
Calcium	0.4112124	0.7854955	V4	1.2436611	V4	-9999	M2
Cerium	0.0000174	0.0000425	V0	0.0001820	V0	0.0000015	V0
Cesium	0.0000100	0.0000022	V0	0.0000167	V0	0.0000000	V1
Chromium	0.0022262	0.0000000	V1	0.0002188	V0	0.0000000	V1
Cobalt	0.0000273	0.0000214	V0	0.0001312	V0	0.0000047	V0
Copper	0.0017171	0.0004484	V0	0.0011477	V0	0.0009601	V0
Iron	0.0393063	0.0212202	V0	0.0924078	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000130	V0	0.0000780	V0	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000752	V0	0.0000000	V1
Lithium	0.0000374	0.0000217	V0	0.0001789	V0	0.0000000	V1
Magnesium	0.0091409	0.0322126	V0	0.1421018	V0	0.0032462	V0
Manganese	0.0006949	0.0025720	V0	0.0073762	V0	0.0000363	V0
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000159	V0	0.0000946	V0	0.0000009	V0
Nickel	0.0005429	0.0000718	V0	0.0003365	V0	0.0000000	V1
Niobium	0.0000202	0.0000013	V0	0.0000194	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000039	V0	0.0000000	V1
Phosphorus	0.0459574	0.0011713	V1	0.0032552	V0	0.0000000	V1
Platinum	0.0000088	0.0000000	V1	0.0000072	V4	0.0000000	V1
Potassium	0.0061261	0.0458268	V0	0.0489530	V0	0.0017127	V0
Praseodymium	0.0000070	0.0000035	V0	0.0000210	V0	0.0000000	V1
Rubidium	0.0000184	0.0000789	V0	0.0002842	V0	0.0000000	V1
Samarium	0.0000133	0.0000037	V0	0.0000172	V0	0.0000000	V1
Selenium	0.0003366	0.0001338	V0	0.0003030	V0	0.0000382	V0
Silicon	0.7676322	0.1785259	V4	0.4762399	V4	-9999	M2
Silver	0.0000100	0.0000005	V0	0.0000009	V0	0.0000000	V1
Sodium	0.0169447	0.0188485	V0	0.0762983	V0	0.0015520	V0
Strontium	0.0003375	0.0009491	V4	0.0029838	V4	-9999	M2
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000030	V0	0.0000000	V1
Thorium	0.0000059	0.0000036	V0	0.0000302	V0	0.0000000	V1
Tin	0.0004414	0.0000000	V1	0.0000198	V0	0.0000000	V1
Titanium	0.0015201	0.0006503	V0	0.0046576	V0	0.0001000	V0
Tungsten	0.0000938	0.0000000	V1	0.0000220	V0	0.0000053	V0
Uranium	0.0000048	0.0000013	V0	0.0000100	V0	0.0000000	V1
Vanadium	0.0007697	0.0001071	V0	0.0003560	V0	0.0000000	V1
Zinc	0.0055897	0.0035651	V4	0.0050142	V4	-9999	M2

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**04-Aug**		**04-Aug**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	46.19	V0	0.03	V1
Aluminum	0.1380326	0.1465996	V0	0.0000000	V1
Antimony	0.0001784	0.0000118	V0	0.0000000	V1
Arsenic	0.0001060	0.0001228	V0	0.0000000	V1
Barium	0.0092847	0.0186093	V4	-9999	M2
Beryllium	0.0000946	0.0000133	V0	0.0000000	V1
Bismuth	0.0000093	0.0000000	V1	0.0000000	V1
Cadmium	0.0000174	0.0000043	V0	0.0000010	V0
Calcium	0.4112124	3.1912217	V4	-9999	M2
Cerium	0.0000174	0.0002564	V0	0.0000015	V0
Cesium	0.0000100	0.0000190	V0	0.0000000	V1
Chromium	0.0022262	0.0002435	V0	0.0000000	V1
Cobalt	0.0000273	0.0001310	V0	0.0000047	V0
Copper	0.0017171	0.0005349	V0	0.0009601	V0
Iron	0.0393063	0.0351898	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001055	V0	0.0000000	V1
Lead	0.0008577	0.0001130	V0	0.0000000	V1
Lithium	0.0000374	0.0003627	V0	0.0000000	V1
Magnesium	0.0091409	0.1830139	V0	0.0032462	V0
Manganese	0.0006949	0.0129521	V0	0.0000363	V0
Molybdenum	0.0007116	0.0000303	V0	0.0000000	V1
Neodymium	0.0000140	0.0001004	V0	0.0000009	V0
Nickel	0.0005429	0.0003158	V0	0.0000000	V1
Niobium	0.0000202	0.0000260	V0	0.0000000	V1
Palladium	0.0000632	0.0000036	V0	0.0000000	V1
Phosphorus	0.0459574	0.0000000	V1	0.0000000	V1
Platinum	0.0000088	0.0000074	V4	0.0000000	V1
Potassium	0.0061261	0.1029938	V0	0.0017127	V0
Praseodymium	0.0000070	0.0000278	V0	0.0000000	V1
Rubidium	0.0000184	0.0003750	V0	0.0000000	V1
Samarium	0.0000133	0.0000213	V0	0.0000000	V1
Selenium	0.0003366	0.0003213	V0	0.0000382	V0
Silicon	0.7676322	0.5625301	V4	-9999	M2
Silver	0.0000100	0.0000004	V1	0.0000000	V1
Sodium	0.0169447	0.0898893	V0	0.0015520	V0
Strontium	0.0003375	0.0044125	V4	-9999	M2
Tantalum	0.0000394	0.0000017	V0	0.0000000	V1
Thallium	0.0000090	0.0000030	V0	0.0000000	V1
Thorium	0.0000059	0.0000443	V0	0.0000000	V1
Tin	0.0004414	0.0000238	V0	0.0000000	V1
Titanium	0.0015201	0.0062997	V0	0.0001000	V0
Tungsten	0.0000938	0.0000206	V0	0.0000053	V0
Uranium	0.0000048	0.0000116	V0	0.0000000	V1
Vanadium	0.0007697	0.0004241	V0	0.0000000	V1
Zinc	0.0055897	0.0033259	V4	-9999	M2

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		10-Aug		10-Aug		10-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	28.76	V0	22.74	V0	-0.03	V1
Aluminum	0.1380326	0.7174884	V0	0.1316914	V0	0.0000000	V1
Antimony	0.0001784	0.0000577	V0	0.0001733	V0	0.0000000	V1
Arsenic	0.0001060	0.0001985	V0	0.0001028	V0	0.0000000	V1
Barium	0.0092847	0.0072034	V0	0.0027656	V0	0.0000000	V1
Beryllium	0.0000946	0.0000234	V0	0.0000041	V0	0.0000000	V1
Bismuth	0.0000093	0.0000092	V0	0.0000661	V0	0.0000039	V0
Cadmium	0.0000174	0.0000119	V0	0.0000091	V0	0.0000000	V1
Calcium	0.4112124	2.4829948	V0	0.2717568	V0	0.0000000	V1
Cerium	0.0000174	0.0008461	V0	0.0001929	V0	0.0000035	V0
Cesium	0.0000100	0.0000604	V0	0.0000091	V0	0.0000000	V1
Chromium	0.0022262	0.0010468	V0	0.0006552	V0	0.0001266	V0
Cobalt	0.0000273	0.0002598	V0	0.0000706	V0	0.0000305	V0
Copper	0.0017171	0.0014552	V0	0.0011763	V0	0.0005835	V0
Iron	0.0393063	0.7936240	V0	0.2168553	V0	0.0000000	V1
Lanthanum	0.0000130	0.0004117	V0	0.0000951	V0	0.0000017	V0
Lead	0.0008577	0.0003589	V0	0.0001600	V0	0.0000000	V1
Lithium	0.0000374	0.0008062	V0	0.0001244	V0	0.0000000	V1
Magnesium	0.0091409	0.1936381	V0	0.0643126	V0	0.0026125	V0
Manganese	0.0006949	0.0149315	V0	0.0036709	V0	0.0000326	V0
Molybdenum	0.0007116	0.0001802	V0	0.0007270	V0	0.0000000	V1
Neodymium	0.0000140	0.0003772	V0	0.0000809	V0	0.0000013	V0
Nickel	0.0005429	0.0012384	V0	0.0004153	V0	0.0001562	V0
Niobium	0.0000202	0.0000922	V0	0.0000198	V0	0.0000013	V0
Palladium	0.0000632	0.0000153	V0	0.0000077	V0	0.0000084	V0
Phosphorus	0.0459574	0.0277848	V0	0.0180522	V0	0.0081299	V0
Platinum	0.0000088	0.0000013	V0	0.0000008	V0	0.0000015	V0
Potassium	0.0061261	0.2582398	V0	0.0636098	V0	0.0014238	V0
Praseodymium	0.0000070	0.0000996	V0	0.0000216	V0	0.0000000	V1
Rubidium	0.0000184	0.0011778	V0	0.0002128	V0	0.0000009	V0
Samarium	0.0000133	0.0000703	V0	0.0000145	V0	0.0000000	V1
Selenium	0.0003366	0.0005488	V0	0.0002367	V0	0.0000000	V1
Silicon	0.7676322	2.1670730	V0	0.7207233	V0	0.0000000	V1
Silver	0.0000100	0.0000044	V0	0.0000017	V0	0.0000000	V1
Sodium	0.0169447	0.0967647	V0	0.0253961	V0	0.0009581	V0
Strontium	0.0003375	0.0042777	V0	0.0008355	V0	0.0000172	V0
Tantalum	0.0000394	0.0000062	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000084	V0	0.0000018	V0	0.0000000	V1
Thorium	0.0000059	0.0001107	V0	0.0000216	V0	0.0000003	V0
Tin	0.0004414	0.0000830	V0	0.0001253	V0	0.0000000	V1
Titanium	0.0015201	0.0283097	V0	0.0197122	V0	0.0006755	V0
Tungsten	0.0000938	0.0001125	V0	0.0000654	V0	0.0000377	V0
Uranium	0.0000048	0.0000323	V0	0.0000082	V0	0.0000003	V0
Vanadium	0.0007697	0.0029487	V0	0.0003286	V0	0.0000000	V1
Zinc	0.0055897	0.0034627	V0	0.0043588	V0	0.0008167	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		10-Aug		10-Aug		10-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	14.64	V0	8.67	V0	-0.03	V1
Aluminum	0.1380326	0.2632440	V0	0.0649348	V0	0.0000000	V1
Antimony	0.0001784	0.0003066	V0	0.0000157	V0	0.0000000	V1
Arsenic	0.0001060	0.0001575	V0	0.0000592	V0	0.0000000	V1
Barium	0.0092847	0.0062340	V0	0.0009423	V0	0.0000000	V1
Beryllium	0.0000946	0.0000098	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000163	V0	0.0000052	V0	0.0000039	V0
Cadmium	0.0000174	0.0000144	V0	0.0000097	V0	0.0000000	V1
Calcium	0.4112124	0.5767116	V0	0.1544052	V0	0.0000000	V1
Cerium	0.0000174	0.0003604	V0	0.0000938	V0	0.0000035	V0
Cesium	0.0000100	0.0000192	V0	0.0000048	V0	0.0000000	V1
Chromium	0.0022262	0.0007088	V0	0.0004164	V0	0.0001266	V0
Cobalt	0.0000273	0.0001322	V0	0.0000316	V0	0.0000305	V0
Copper	0.0017171	0.0021789	V0	0.0005828	V0	0.0005835	V0
Iron	0.0393063	0.4390013	V0	0.0791233	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001767	V0	0.0000488	V0	0.0000017	V0
Lead	0.0008577	0.0003960	V0	0.0000799	V0	0.0000000	V1
Lithium	0.0000374	0.0002418	V0	0.0000548	V0	0.0000000	V1
Magnesium	0.0091409	0.1287344	V0	0.0342281	V0	0.0026125	V0
Manganese	0.0006949	0.0079119	V0	0.0023664	V0	0.0000326	V0
Molybdenum	0.0007116	0.0000773	V0	0.0000874	V0	0.0000000	V1
Neodymium	0.0000140	0.0001524	V0	0.0000409	V0	0.0000013	V0
Nickel	0.0005429	0.0004941	V0	0.0002844	V0	0.0001562	V0
Niobium	0.0000202	0.0000388	V0	0.0000104	V0	0.0000013	V0
Palladium	0.0000632	0.0000160	V0	0.0000059	V0	0.0000084	V0
Phosphorus	0.0459574	0.0246249	V0	0.0226503	V0	0.0081299	V0
Platinum	0.0000088	0.0000012	V0	0.0000019	V0	0.0000015	V0
Potassium	0.0061261	0.1184847	V0	0.0597140	V0	0.0014238	V0
Praseodymium	0.0000070	0.0000408	V0	0.0000109	V0	0.0000000	V1
Rubidium	0.0000184	0.0004224	V0	0.0001454	V0	0.0000009	V0
Samarium	0.0000133	0.0000281	V0	0.0000075	V0	0.0000000	V1
Selenium	0.0003366	0.0002470	V0	0.0001090	V0	0.0000000	V1
Silicon	0.7676322	0.9214084	V0	0.1778252	V0	0.0000000	V1
Silver	0.0000100	0.0000056	V0	0.0000013	V0	0.0000000	V1
Sodium	0.0169447	0.0505753	V0	0.0156124	V0	0.0009581	V0
Strontium	0.0003375	0.0016664	V0	0.0003518	V0	0.0000172	V0
Tantalum	0.0000394	0.0000030	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000041	V0	0.0000012	V0	0.0000000	V1
Thorium	0.0000059	0.0000421	V0	0.0000126	V0	0.0000003	V0
Tin	0.0004414	0.0002324	V0	0.0000346	V0	0.0000000	V1
Titanium	0.0015201	0.0125236	V0	0.0044762	V0	0.0006755	V0
Tungsten	0.0000938	0.0001684	V0	0.0000532	V0	0.0000377	V0
Uranium	0.0000048	0.0000133	V0	0.0000038	V0	0.0000003	V0
Vanadium	0.0007697	0.0006163	V0	0.0001409	V0	0.0000000	V1
Zinc	0.0055897	0.0077492	V0	0.0016048	V0	0.0008167	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		10-Aug		10-Aug		10-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	57.00	V0	13.05	V0	-0.03	V1
Aluminum	0.1380326	0.3608505	V0	0.8515344	V0	0.0000000	V1
Antimony	0.0001784	0.0000553	V0	0.0000297	V0	0.0000000	V1
Arsenic	0.0001060	0.0001231	V0	0.0001972	V0	0.0000000	V1
Barium	0.0092847	0.0035708	V0	0.0079568	V0	0.0000000	V1
Beryllium	0.0000946	0.0000121	V0	0.0000270	V0	0.0000000	V1
Bismuth	0.0000093	0.0000051	V0	0.0000062	V0	0.0000039	V0
Cadmium	0.0000174	0.0000084	V0	0.0000100	V0	0.0000000	V1
Calcium	0.4112124	0.6798339	V0	0.7054456	V0	0.0000000	V1
Cerium	0.0000174	0.0003993	V0	0.0009221	V0	0.0000035	V0
Cesium	0.0000100	0.0000286	V0	0.0000690	V0	0.0000000	V1
Chromium	0.0022262	0.0007835	V0	0.0012389	V0	0.0001266	V0
Cobalt	0.0000273	0.0001597	V0	0.0002933	V0	0.0000305	V0
Copper	0.0017171	0.0005014	V0	0.0007080	V0	0.0005835	V0
Iron	0.0393063	0.3642027	V0	0.9113784	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001920	V0	0.0004410	V0	0.0000017	V0
Lead	0.0008577	0.0001826	V0	0.0003249	V0	0.0000000	V1
Lithium	0.0000374	0.0003967	V0	0.0011321	V0	0.0000000	V1
Magnesium	0.0091409	0.0975366	V0	0.1670046	V0	0.0026125	V0
Manganese	0.0006949	0.0065183	V0	0.0173812	V0	0.0000326	V0
Molybdenum	0.0007116	0.0001579	V0	0.0001240	V0	0.0000000	V1
Neodymium	0.0000140	0.0001765	V0	0.0004225	V0	0.0000013	V0
Nickel	0.0005429	0.0010047	V0	0.0011661	V0	0.0001562	V0
Niobium	0.0000202	0.0000478	V0	0.0001115	V0	0.0000013	V0
Palladium	0.0000632	0.0000087	V0	0.0000171	V0	0.0000084	V0
Phosphorus	0.0459574	0.0212144	V0	0.0233666	V0	0.0081299	V0
Platinum	0.0000088	0.0000010	V0	0.0000013	V0	0.0000015	V0
Potassium	0.0061261	0.1325998	V0	0.2470341	V0	0.0014238	V0
Praseodymium	0.0000070	0.0000463	V0	0.0001092	V0	0.0000000	V1
Rubidium	0.0000184	0.0005486	V0	0.0011894	V0	0.0000009	V0
Samarium	0.0000133	0.0000351	V0	0.0000797	V0	0.0000000	V1
Selenium	0.0003366	0.0003163	V0	0.0005656	V0	0.0000000	V1
Silicon	0.7676322	1.2220032	V0	3.0931387	V0	0.0000000	V1
Silver	0.0000100	0.0000023	V0	0.0000040	V0	0.0000000	V1
Sodium	0.0169447	0.0505660	V0	0.0939290	V0	0.0009581	V0
Strontium	0.0003375	0.0016084	V0	0.0031453	V0	0.0000172	V0
Tantalum	0.0000394	0.0000037	V0	0.0000072	V0	0.0000000	V1
Thallium	0.0000090	0.0000059	V0	0.0000100	V0	0.0000000	V1
Thorium	0.0000059	0.0000497	V0	0.0001198	V0	0.0000003	V0
Tin	0.0004414	0.0000725	V0	0.0000651	V0	0.0000000	V1
Titanium	0.0015201	0.0162924	V0	0.0322136	V0	0.0006755	V0
Tungsten	0.0000938	0.0000738	V0	0.0000853	V0	0.0000377	V0
Uranium	0.0000048	0.0000161	V0	0.0000403	V0	0.0000003	V0
Vanadium	0.0007697	0.0023711	V0	0.0027574	V0	0.0000000	V1
Zinc	0.0055897	0.0027823	V0	0.0029012	V0	0.0008167	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**10-Aug**		**10-Aug**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	80.71	V0	-0.03	V1
Aluminum	0.1380326	0.4323450	V0	0.0000000	V1
Antimony	0.0001784	0.0000263	V0	0.0000000	V1
Arsenic	0.0001060	0.0001150	V0	0.0000000	V1
Barium	0.0092847	0.0043024	V0	0.0000000	V1
Beryllium	0.0000946	0.0000133	V0	0.0000000	V1
Bismuth	0.0000093	0.0000041	V0	0.0000039	V0
Cadmium	0.0000174	0.0000080	V0	0.0000000	V1
Calcium	0.4112124	0.7272609	V0	0.0000000	V1
Cerium	0.0000174	0.0005526	V0	0.0000035	V0
Cesium	0.0000100	0.0000326	V0	0.0000000	V1
Chromium	0.0022262	0.0007803	V0	0.0001266	V0
Cobalt	0.0000273	0.0001865	V0	0.0000305	V0
Copper	0.0017171	0.0004048	V0	0.0005835	V0
Iron	0.0393063	0.5613624	V0	0.0000000	V1
Lanthanum	0.0000130	0.0002702	V0	0.0000017	V0
Lead	0.0008577	0.0001931	V0	0.0000000	V1
Lithium	0.0000374	0.0004774	V0	0.0000000	V1
Magnesium	0.0091409	0.1129973	V0	0.0026125	V0
Manganese	0.0006949	0.0097932	V0	0.0000326	V0
Molybdenum	0.0007116	0.0000740	V0	0.0000000	V1
Neodymium	0.0000140	0.0002439	V0	0.0000013	V0
Nickel	0.0005429	0.0006270	V0	0.0001562	V0
Niobium	0.0000202	0.0000540	V0	0.0000013	V0
Palladium	0.0000632	0.0000154	V0	0.0000084	V0
Phosphorus	0.0459574	0.0212450	V0	0.0081299	V0
Platinum	0.0000088	0.0000011	V0	0.0000015	V0
Potassium	0.0061261	0.1486020	V0	0.0014238	V0
Praseodymium	0.0000070	0.0000644	V0	0.0000000	V1
Rubidium	0.0000184	0.0006480	V0	0.0000009	V0
Samarium	0.0000133	0.0000445	V0	0.0000000	V1
Selenium	0.0003366	0.0003738	V0	0.0000000	V1
Silicon	0.7676322	1.2168887	V0	0.0000000	V1
Silver	0.0000100	0.0000022	V0	0.0000000	V1
Sodium	0.0169447	0.0531116	V0	0.0009581	V0
Strontium	0.0003375	0.0019164	V0	0.0000172	V0
Tantalum	0.0000394	0.0000034	V0	0.0000000	V1
Thallium	0.0000090	0.0000056	V0	0.0000000	V1
Thorium	0.0000059	0.0000702	V0	0.0000003	V0
Tin	0.0004414	0.0000536	V0	0.0000000	V1
Titanium	0.0015201	0.0167203	V0	0.0006755	V0
Tungsten	0.0000938	0.0000841	V0	0.0000377	V0
Uranium	0.0000048	0.0000193	V0	0.0000003	V0
Vanadium	0.0007697	0.0011630	V0	0.0000000	V1
Zinc	0.0055897	0.0019713	V0	0.0008167	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		16-Aug		16-Aug		16-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	34.09	V0	14.80	V0	0.06	V0
Aluminum	0.1380326	0.9018034	V0	0.6575953	V0	0.0000000	V1
Antimony	0.0001784	0.0000398	V0	0.0000557	V0	0.0000000	V1
Arsenic	0.0001060	0.0002365	V0	0.0001717	V0	0.0000000	V1
Barium	0.0092847	0.0095759	V0	0.0101381	V0	0.0000000	V1
Beryllium	0.0000946	0.0000267	V0	0.0000198	V0	0.0000000	V1
Bismuth	0.0000093	0.0000073	V0	0.0001189	V0	0.0000018	V0
Cadmium	0.0000174	0.0000170	V0	0.0000117	V0	0.0000000	V1
Calcium	0.4112124	1.2365261	V0	0.8704045	V0	0.0180858	V0
Cerium	0.0000174	0.0010655	V0	0.0006630	V0	0.0000020	V0
Cesium	0.0000100	0.0000730	V0	0.0000511	V0	0.0000000	V1
Chromium	0.0022262	0.0012849	V0	0.0008826	V0	0.0001228	V0
Cobalt	0.0000273	0.0003158	V0	0.0002138	V0	0.0000378	V0
Copper	0.0017171	0.0017207	V0	0.0006436	V0	0.0001910	V0
Iron	0.0393063	0.8327516	V0	0.5068291	V0	0.0018064	V0
Lanthanum	0.0000130	0.0005283	V0	0.0003367	V0	0.0000007	V0
Lead	0.0008577	0.0012396	V0	0.0002695	V0	0.0000000	V1
Lithium	0.0000374	0.0010361	V0	0.0004533	V0	0.0000000	V1
Magnesium	0.0091409	0.1559997	V0	0.2082500	V0	0.0029712	V0
Manganese	0.0006949	0.0164677	V0	0.0096341	V0	0.0000317	V0
Molybdenum	0.0007116	0.0000882	V0	0.0000492	V0	0.0000000	V1
Neodymium	0.0000140	0.0004795	V0	0.0002953	V0	0.0000009	V0
Nickel	0.0005429	0.0009430	V0	0.0006932	V0	0.0001284	V0
Niobium	0.0000202	0.0001223	V0	0.0000791	V0	0.0000018	V0
Palladium	0.0000632	0.0000160	V0	0.0000115	V0	0.0000040	V0
Phosphorus	0.0459574	0.0285860	V0	0.0226334	V0	0.0080294	V0
Platinum	0.0000088	0.0000015	V0	0.0000011	V0	0.0000009	V0
Potassium	0.0061261	0.2869318	V0	0.1875026	V0	0.0010769	V0
Praseodymium	0.0000070	0.0001255	V0	0.0000780	V0	0.0000000	V1
Rubidium	0.0000184	0.0013926	V0	0.0008810	V0	0.0000008	V0
Samarium	0.0000133	0.0000909	V0	0.0000563	V0	0.0000000	V1
Selenium	0.0003366	0.0006177	V0	0.0003874	V0	0.0000000	V1
Silicon	0.7676322	2.5684272	V0	2.1544183	V0	0.0000000	V1
Silver	0.0000100	0.0000049	V0	0.0000032	V0	0.0000000	V1
Sodium	0.0169447	0.0937099	V0	0.1011384	V0	0.0012369	V0
Strontium	0.0003375	0.0034589	V0	0.0052239	V0	0.0000191	V0
Tantalum	0.0000394	0.0000077	V0	0.0000057	V0	0.0000000	V1
Thallium	0.0000090	0.0000107	V0	0.0000079	V0	0.0000000	V1
Thorium	0.0000059	0.0001403	V0	0.0001006	V0	0.0000000	V1
Tin	0.0004414	0.0000686	V0	0.0000665	V0	0.0000000	V1
Titanium	0.0015201	0.0367225	V0	0.0232925	V0	0.0006965	V0
Tungsten	0.0000938	0.0000849	V0	0.0001516	V0	0.0000292	V0
Uranium	0.0000048	0.0000380	V0	0.0000376	V0	0.0000000	V1
Vanadium	0.0007697	0.0020750	V0	0.0013099	V0	0.0000000	V1
Zinc	0.0055897	0.0035542	V0	0.0033921	V0	0.0008535	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		16-Aug		16-Aug		16-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	16.59	V0	8.35	V0	0.06	V0
Aluminum	0.1380326	0.2164945	V0	0.0938554	V0	0.0000000	V1
Antimony	0.0001784	0.0002383	V0	0.0000144	V0	0.0000000	V1
Arsenic	0.0001060	0.0000891	V0	0.0000671	V0	0.0000000	V1
Barium	0.0092847	0.0050236	V0	0.0014504	V0	0.0000000	V1
Beryllium	0.0000946	0.0000064	V0	0.0000041	V0	0.0000000	V1
Bismuth	0.0000093	0.0000140	V0	0.0000050	V0	0.0000018	V0
Cadmium	0.0000174	0.0000072	V0	0.0000083	V0	0.0000000	V1
Calcium	0.4112124	0.4502102	V0	0.1025119	V0	0.0180858	V0
Cerium	0.0000174	0.0002927	V0	0.0001120	V0	0.0000020	V0
Cesium	0.0000100	0.0000155	V0	0.0000072	V0	0.0000000	V1
Chromium	0.0022262	0.0005273	V0	0.0002156	V0	0.0001228	V0
Cobalt	0.0000273	0.0001468	V0	0.0000365	V0	0.0000378	V0
Copper	0.0017171	0.0024649	V0	0.0002698	V0	0.0001910	V0
Iron	0.0393063	0.3481191	V0	0.0993561	V0	0.0018064	V0
Lanthanum	0.0000130	0.0001450	V0	0.0000573	V0	0.0000007	V0
Lead	0.0008577	0.0002085	V0	0.0000698	V0	0.0000000	V1
Lithium	0.0000374	0.0002080	V0	0.0000780	V0	0.0000000	V1
Magnesium	0.0091409	0.1018117	V0	0.0271200	V0	0.0029712	V0
Manganese	0.0006949	0.0061098	V0	0.0024091	V0	0.0000317	V0
Molybdenum	0.0007116	0.0000694	V0	0.0000917	V0	0.0000000	V1
Neodymium	0.0000140	0.0001291	V0	0.0000501	V0	0.0000009	V0
Nickel	0.0005429	0.0005924	V0	0.0001770	V0	0.0001284	V0
Niobium	0.0000202	0.0000291	V0	0.0000115	V0	0.0000018	V0
Palladium	0.0000632	0.0000117	V0	0.0000000	V1	0.0000040	V0
Phosphorus	0.0459574	0.0177185	V0	0.0160861	V0	0.0080294	V0
Platinum	0.0000088	0.0000011	V0	0.0000015	V0	0.0000009	V0
Potassium	0.0061261	0.0878090	V0	0.0476657	V0	0.0010769	V0
Praseodymium	0.0000070	0.0000336	V0	0.0000135	V0	0.0000000	V1
Rubidium	0.0000184	0.0003409	V0	0.0001628	V0	0.0000008	V0
Samarium	0.0000133	0.0000237	V0	0.0000101	V0	0.0000000	V1
Selenium	0.0003366	0.0001771	V0	0.0000876	V0	0.0000000	V1
Silicon	0.7676322	0.9689678	V0	0.4102102	V0	0.0000000	V1
Silver	0.0000100	0.0000020	V0	0.0000018	V0	0.0000000	V1
Sodium	0.0169447	0.0399422	V0	0.0179981	V0	0.0012369	V0
Strontium	0.0003375	0.0013060	V0	0.0004051	V0	0.0000191	V0
Tantalum	0.0000394	0.0000024	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000030	V0	0.0000024	V0	0.0000000	V1
Thorium	0.0000059	0.0000376	V0	0.0000169	V0	0.0000000	V1
Tin	0.0004414	0.0002976	V0	0.0000365	V0	0.0000000	V1
Titanium	0.0015201	0.0112716	V0	0.0048758	V0	0.0006965	V0
Tungsten	0.0000938	0.0003442	V0	0.0000163	V0	0.0000292	V0
Uranium	0.0000048	0.0000106	V0	0.0000055	V0	0.0000000	V1
Vanadium	0.0007697	0.0005329	V0	0.0002029	V0	0.0000000	V1
Zinc	0.0055897	0.0060663	V0	0.0013738	V0	0.0008535	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		16-Aug		16-Aug		16-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	21.62	V0	38.06	V0	0.06	V0
Aluminum	0.1380326	2.5725538	V0	0.4191256	V0	0.0000000	V1
Antimony	0.0001784	0.0000316	V0	0.0000145	V0	0.0000000	V1
Arsenic	0.0001060	0.0003209	V0	0.0000814	V0	0.0000000	V1
Barium	0.0092847	0.0205353	V0	0.0037686	V0	0.0000000	V1
Beryllium	0.0000946	0.0000672	V0	0.0000122	V0	0.0000000	V1
Bismuth	0.0000093	0.0000461	V0	0.0000036	V0	0.0000018	V0
Cadmium	0.0000174	0.0000135	V0	0.0000086	V0	0.0000000	V1
Calcium	0.4112124	0.3511406	V0	0.1714658	V0	0.0180858	V0
Cerium	0.0000174	0.0025241	V0	0.0004156	V0	0.0000020	V0
Cesium	0.0000100	0.0002189	V4	0.0000352	V0	0.0000000	V1
Chromium	0.0022262	0.0029281	V0	0.0006686	V0	0.0001228	V0
Cobalt	0.0000273	0.0006272	V0	0.0001545	V0	0.0000378	V0
Copper	0.0017171	0.0013554	V0	0.0003945	V0	0.0001910	V0
Iron	0.0393063	1.1965030	V0	0.2592478	V0	0.0018064	V0
Lanthanum	0.0000130	0.0011947	V0	0.0001998	V0	0.0000007	V0
Lead	0.0008577	0.0006777	V0	0.0001347	V0	0.0000000	V1
Lithium	0.0000374	0.0033918	V4	0.0004709	V0	0.0000000	V1
Magnesium	0.0091409	0.3101268	V0	0.0719120	V0	0.0029712	V0
Manganese	0.0006949	0.0229994	V0	0.0046222	V0	0.0000317	V0
Molybdenum	0.0007116	0.0003000	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0011617	V0	0.0001961	V0	0.0000009	V0
Nickel	0.0005429	0.0021909	V0	0.0004664	V0	0.0001284	V0
Niobium	0.0000202	0.0003121	V4	0.0000456	V0	0.0000018	V0
Palladium	0.0000632	0.0000428	V0	0.0000097	V0	0.0000040	V0
Phosphorus	0.0459574	0.0348023	V0	0.0192314	V0	0.0080294	V0
Platinum	0.0000088	0.0000023	V0	0.0000013	V0	0.0000009	V0
Potassium	0.0061261	0.6655435	V0	0.1272431	V0	0.0010769	V0
Praseodymium	0.0000070	0.0002981	V0	0.0000500	V0	0.0000000	V1
Rubidium	0.0000184	0.0035263	V0	0.0006035	V0	0.0000008	V0
Samarium	0.0000133	0.0002254	V0	0.0000375	V0	0.0000000	V1
Selenium	0.0003366	0.0016477	V4	0.0002287	V0	0.0000000	V1
Silicon	0.7676322	7.1498264	V0	1.1000135	V0	0.0000000	V1
Silver	0.0000100	0.0000097	V0	0.0000022	V0	0.0000000	V1
Sodium	0.0169447	0.2438262	V0	0.0693727	V0	0.0012369	V0
Strontium	0.0003375	0.0066670	V0	0.0013522	V0	0.0000191	V0
Tantalum	0.0000394	0.0000205	V0	0.0000029	V0	0.0000000	V1
Thallium	0.0000090	0.0000234	V0	0.0000042	V0	0.0000000	V1
Thorium	0.0000059	0.0003422	V0	0.0000549	V0	0.0000000	V1
Tin	0.0004414	0.0001031	V0	0.0000342	V0	0.0000000	V1
Titanium	0.0015201	0.0962288	V0	0.0138162	V0	0.0006965	V0
Tungsten	0.0000938	0.0000812	V0	0.0000884	V0	0.0000292	V0
Uranium	0.0000048	0.0001019	V0	0.0000159	V0	0.0000000	V1
Vanadium	0.0007697	0.0052041	V0	0.0009004	V0	0.0000000	V1
Zinc	0.0055897	0.0048411	V0	0.0016098	V0	0.0008535	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**16-Aug**		**16-Aug**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	19.73	V0	0.06	V0
Aluminum	0.1380326	4.0894462	V4	0.0000000	V1
Antimony	0.0001784	0.0000637	V0	0.0000000	V1
Arsenic	0.0001060	0.0005451	V0	0.0000000	V1
Barium	0.0092847	0.0309085	V4	0.0000000	V1
Beryllium	0.0000946	0.0001209	V4	0.0000000	V1
Bismuth	0.0000093	0.0000263	V0	0.0000018	V0
Cadmium	0.0000174	0.0000216	V0	0.0000000	V1
Calcium	0.4112124	2.0693525	V0	0.0180858	V0
Cerium	0.0000174	0.0055613	V4	0.0000020	V0
Cesium	0.0000100	0.0002745	V4	0.0000000	V1
Chromium	0.0022262	0.0041079	V4	0.0001228	V0
Cobalt	0.0000273	0.0011512	V4	0.0000378	V0
Copper	0.0017171	0.0014942	V0	0.0001910	V0
Iron	0.0393063	2.9747420	V4	0.0018064	V0
Lanthanum	0.0000130	0.0026355	V4	0.0000007	V0
Lead	0.0008577	0.0014818	V0	0.0000000	V1
Lithium	0.0000374	0.0057998	V4	0.0000000	V1
Magnesium	0.0091409	0.5362572	V0	0.0029712	V0
Manganese	0.0006949	0.0612856	V4	0.0000317	V0
Molybdenum	0.0007116	0.0004587	V0	0.0000000	V1
Neodymium	0.0000140	0.0024692	V4	0.0000009	V0
Nickel	0.0005429	0.0038235	V4	0.0001284	V0
Niobium	0.0000202	0.0005694	V4	0.0000018	V0
Palladium	0.0000632	0.0000865	V0	0.0000040	V0
Phosphorus	0.0459574	0.0468736	V0	0.0080294	V0
Platinum	0.0000088	0.0000034	V0	0.0000009	V0
Potassium	0.0061261	0.9165251	V0	0.0010769	V0
Praseodymium	0.0000070	0.0006461	V4	0.0000000	V1
Rubidium	0.0000184	0.0047425	V4	0.0000008	V0
Samarium	0.0000133	0.0004695	V4	0.0000000	V1
Selenium	0.0003366	0.0033210	V4	0.0000000	V1
Silicon	0.7676322	7.5221854	V0	0.0000000	V1
Silver	0.0000100	0.0000176	V0	0.0000000	V1
Sodium	0.0169447	0.4212284	V0	0.0012369	V0
Strontium	0.0003375	0.0114793	V4	0.0000191	V0
Tantalum	0.0000394	0.0000391	V4	0.0000000	V1
Thallium	0.0000090	0.0000362	V0	0.0000000	V1
Thorium	0.0000059	0.0006617	V4	0.0000000	V1
Tin	0.0004414	0.0001638	V0	0.0000000	V1
Titanium	0.0015201	0.1656371	V4	0.0006965	V0
Tungsten	0.0000938	0.0002766	V0	0.0000292	V0
Uranium	0.0000048	0.0001768	V4	0.0000000	V1
Vanadium	0.0007697	0.0084613	V4	0.0000000	V1
Zinc	0.0055897	0.0074467	V0	0.0008535	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**22-Aug**		**22-Aug**		**22-Aug**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**0**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	23.00	V0	-9999	M2	0.38	V0
Aluminum	0.1380326	0.5067641	V0	-9999	M2	0.0000000	V1
Antimony	0.0001784	0.0000258	V0	-9999	M2	0.0000000	V1
Arsenic	0.0001060	0.0000754	V0	-9999	M2	0.0000000	V1
Barium	0.0092847	0.0039538	V0	-9999	M2	0.0000000	V1
Beryllium	0.0000946	0.0000146	V0	-9999	M2	0.0000000	V1
Bismuth	0.0000093	0.0000011	V0	-9999	M2	0.0000032	V0
Cadmium	0.0000174	0.0000045	V0	-9999	M2	0.0000000	V1
Calcium	0.4112124	1.6774996	V0	-9999	M2	0.0000000	V1
Cerium	0.0000174	0.0005780	V0	-9999	M2	0.0000000	V1
Cesium	0.0000100	0.0000392	V0	-9999	M2	0.0000000	V1
Chromium	0.0022262	0.0007225	V0	-9999	M2	0.0000958	V0
Cobalt	0.0000273	0.0001732	V0	-9999	M2	0.0000242	V0
Copper	0.0017171	0.0007512	V0	-9999	M2	0.0001878	V0
Iron	0.0393063	0.3916473	V0	-9999	M2	0.0000000	V1
Lanthanum	0.0000130	0.0002741	V0	-9999	M2	0.0000000	V1
Lead	0.0008577	0.0003081	V0	-9999	M2	0.0000000	V1
Lithium	0.0000374	0.0007558	V0	-9999	M2	0.0000000	V1
Magnesium	0.0091409	0.1052470	V0	-9999	M2	0.0031922	V0
Manganese	0.0006949	0.0084185	V0	-9999	M2	0.0000000	V1
Molybdenum	0.0007116	0.0000553	V0	-9999	M2	0.0000000	V1
Neodymium	0.0000140	0.0002460	V0	-9999	M2	0.0000000	V1
Nickel	0.0005429	0.0005907	V0	-9999	M2	0.0000851	V0
Niobium	0.0000202	0.0000653	V0	-9999	M2	0.0000000	V1
Palladium	0.0000632	0.0000128	V0	-9999	M2	0.0000000	V1
Phosphorus	0.0459574	0.0151571	V0	-9999	M2	0.0000000	V1
Platinum	0.0000088	0.0000008	V0	-9999	M2	0.0000000	V1
Potassium	0.0061261	0.1541419	V0	-9999	M2	0.0015678	V0
Praseodymium	0.0000070	0.0000654	V0	-9999	M2	0.0000000	V1
Rubidium	0.0000184	0.0007298	V0	-9999	M2	0.0000000	V1
Samarium	0.0000133	0.0000455	V0	-9999	M2	0.0000000	V1
Selenium	0.0003366	0.0003613	V0	-9999	M2	0.0000000	V1
Silicon	0.7676322	1.5244187	V0	-9999	M2	0.0000000	V1
Silver	0.0000100	0.0000020	V0	-9999	M2	0.0000000	V1
Sodium	0.0169447	0.0486203	V0	-9999	M2	0.0008978	V0
Strontium	0.0003375	0.0028385	V0	-9999	M2	0.0000000	V1
Tantalum	0.0000394	0.0000040	V0	-9999	M2	0.0000000	V1
Thallium	0.0000090	0.0000045	V0	-9999	M2	0.0000000	V1
Thorium	0.0000059	0.0000677	V0	-9999	M2	0.0000000	V1
Tin	0.0004414	0.0000452	V0	-9999	M2	0.0000000	V1
Titanium	0.0015201	0.0201396	V0	-9999	M2	0.0004666	V0
Tungsten	0.0000938	0.0000611	V0	-9999	M2	0.0000410	V0
Uranium	0.0000048	0.0000232	V0	-9999	M2	0.0000000	V1
Vanadium	0.0007697	0.0010164	V0	-9999	M2	0.0000000	V1
Zinc	0.0055897	0.0021186	V0	-9999	M2	0.0009261	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		22-Aug		22-Aug		22-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	11.94	V0	6.68	V0	0.38	V0
Aluminum	0.1380326	0.2192259	V0	0.0243178	V0	0.0000000	V1
Antimony	0.0001784	0.0001297	V0	0.0000177	V0	0.0000000	V1
Arsenic	0.0001060	0.0000740	V0	0.0000398	V0	0.0000000	V1
Barium	0.0092847	0.0034499	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000065	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000142	V0	0.0000118	V0	0.0000032	V0
Cadmium	0.0000174	0.0000046	V0	0.0000048	V0	0.0000000	V1
Calcium	0.4112124	0.3995864	V0	0.0427638	V0	0.0000000	V1
Cerium	0.0000174	0.0002759	V0	0.0000237	V0	0.0000000	V1
Cesium	0.0000100	0.0000182	V0	0.0000017	V0	0.0000000	V1
Chromium	0.0022262	0.0004847	V0	0.0003580	V0	0.0000958	V0
Cobalt	0.0000273	0.0001068	V0	0.0000199	V0	0.0000242	V0
Copper	0.0017171	0.0009466	V0	0.0018825	V0	0.0001878	V0
Iron	0.0393063	0.1997918	V0	0.0195388	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001300	V0	0.0000130	V0	0.0000000	V1
Lead	0.0008577	0.0001534	V0	0.0000616	V0	0.0000000	V1
Lithium	0.0000374	0.0002060	V0	0.0000175	V0	0.0000000	V1
Magnesium	0.0091409	0.0581113	V0	0.0111403	V0	0.0031922	V0
Manganese	0.0006949	0.0042557	V0	0.0007909	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001761	V0	0.0002394	V0	0.0000000	V1
Neodymium	0.0000140	0.0001188	V0	0.0000099	V0	0.0000000	V1
Nickel	0.0005429	0.0005522	V0	0.0003401	V0	0.0000851	V0
Niobium	0.0000202	0.0000287	V0	0.0000032	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0097778	V0	0.0148329	V0	0.0000000	V1
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.1075032	V0	0.0371565	V0	0.0015678	V0
Praseodymium	0.0000070	0.0000305	V0	0.0000023	V0	0.0000000	V1
Rubidium	0.0000184	0.0003880	V0	0.0000862	V0	0.0000000	V1
Samarium	0.0000133	0.0000213	V0	0.0000014	V0	0.0000000	V1
Selenium	0.0003366	0.0001821	V0	0.0000687	V0	0.0000000	V1
Silicon	0.7676322	0.6023133	V0	0.1350047	V0	0.0000000	V1
Silver	0.0000100	0.0000018	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0372411	V0	0.0070673	V0	0.0008978	V0
Strontium	0.0003375	0.0010367	V0	0.0001186	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000019	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000311	V0	0.0000029	V0	0.0000000	V1
Tin	0.0004414	0.0001175	V0	0.0000344	V0	0.0000000	V1
Titanium	0.0015201	0.0091336	V0	0.0056794	V0	0.0004666	V0
Tungsten	0.0000938	0.0001074	V0	0.0000202	V0	0.0000410	V0
Uranium	0.0000048	0.0000102	V0	0.0000052	V0	0.0000000	V1
Vanadium	0.0007697	0.0011186	V0	0.0001206	V0	0.0000000	V1
Zinc	0.0055897	0.0040130	V0	0.0016717	V0	0.0009261	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		22-Aug		22-Aug		22-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	13.64	V0	12.18	V0	0.38	V0
Aluminum	0.1380326	0.2711329	V0	0.2252699	V0	0.0000000	V1
Antimony	0.0001784	0.0000243	V0	0.0000161	V0	0.0000000	V1
Arsenic	0.0001060	0.0000581	V0	0.0000614	V0	0.0000000	V1
Barium	0.0092847	0.0023811	V0	0.0032351	V0	0.0000000	V1
Beryllium	0.0000946	0.0000083	V0	0.0000089	V0	0.0000000	V1
Bismuth	0.0000093	0.0000203	V0	0.0000441	V0	0.0000032	V0
Cadmium	0.0000174	0.0000040	V0	0.0000051	V0	0.0000000	V1
Calcium	0.4112124	0.3281270	V0	0.4526938	V0	0.0000000	V1
Cerium	0.0000174	0.0003266	V0	0.0003229	V0	0.0000000	V1
Cesium	0.0000100	0.0000193	V0	0.0000159	V0	0.0000000	V1
Chromium	0.0022262	0.0005789	V0	0.0004583	V0	0.0000958	V0
Cobalt	0.0000273	0.0001424	V0	0.0001084	V0	0.0000242	V0
Copper	0.0017171	0.0012341	V0	0.0008119	V0	0.0001878	V0
Iron	0.0393063	0.2659483	V0	0.5433842	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001532	V0	0.0001529	V0	0.0000000	V1
Lead	0.0008577	0.0003868	V0	0.0001060	V0	0.0000000	V1
Lithium	0.0000374	0.0004002	V0	0.0002051	V0	0.0000000	V1
Magnesium	0.0091409	0.0506848	V0	0.0946238	V0	0.0031922	V0
Manganese	0.0006949	0.0054426	V0	0.0083456	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000564	V0	0.0000436	V0	0.0000000	V1
Neodymium	0.0000140	0.0001388	V0	0.0001425	V0	0.0000000	V1
Nickel	0.0005429	0.0004898	V0	0.0005673	V0	0.0000851	V0
Niobium	0.0000202	0.0000401	V0	0.0000280	V0	0.0000000	V1
Palladium	0.0000632	0.0000084	V0	0.0000052	V0	0.0000000	V1
Phosphorus	0.0459574	0.0141031	V0	0.0161444	V0	0.0000000	V1
Platinum	0.0000088	0.0000004	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0902426	V0	0.0945030	V0	0.0015678	V0
Praseodymium	0.0000070	0.0000361	V0	0.0000367	V0	0.0000000	V1
Rubidium	0.0000184	0.0003865	V0	0.0003487	V0	0.0000000	V1
Samarium	0.0000133	0.0000259	V0	0.0000271	V0	0.0000000	V1
Selenium	0.0003366	0.0001684	V0	0.0001788	V0	0.0000000	V1
Silicon	0.7676322	0.8423381	V0	0.6154384	V0	0.0000000	V1
Silver	0.0000100	0.0000013	V0	0.0000293	V4	0.0000000	V1
Sodium	0.0169447	0.0351917	V0	0.0244965	V0	0.0008978	V0
Strontium	0.0003375	0.0010101	V0	0.0012040	V0	0.0000000	V1
Tantalum	0.0000394	0.0000020	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000024	V0	0.0000028	V0	0.0000000	V1
Thorium	0.0000059	0.0000378	V0	0.0000409	V0	0.0000000	V1
Tin	0.0004414	0.0001230	V0	0.0000360	V0	0.0000000	V1
Titanium	0.0015201	0.0116050	V0	0.0126318	V0	0.0004666	V0
Tungsten	0.0000938	0.0000684	V0	0.0000448	V0	0.0000410	V0
Uranium	0.0000048	0.0000119	V0	0.0000130	V0	0.0000000	V1
Vanadium	0.0007697	0.0005584	V0	0.0006895	V0	0.0000000	V1
Zinc	0.0055897	0.0021980	V0	0.0013740	V0	0.0009261	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**22-Aug**		**22-Aug**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	17.84	V0	0.38	V0
Aluminum	0.1380326	0.5097842	V0	0.0000000	V1
Antimony	0.0001784	0.0000173	V0	0.0000000	V1
Arsenic	0.0001060	0.0000917	V0	0.0000000	V1
Barium	0.0092847	0.0051634	V0	0.0000000	V1
Beryllium	0.0000946	0.0000152	V0	0.0000000	V1
Bismuth	0.0000093	0.0000132	V0	0.0000032	V0
Cadmium	0.0000174	0.0000037	V0	0.0000000	V1
Calcium	0.4112124	0.7076224	V0	0.0000000	V1
Cerium	0.0000174	0.0007119	V0	0.0000000	V1
Cesium	0.0000100	0.0000350	V0	0.0000000	V1
Chromium	0.0022262	0.0007753	V0	0.0000958	V0
Cobalt	0.0000273	0.0004811	V0	0.0000242	V0
Copper	0.0017171	0.0004465	V0	0.0001878	V0
Iron	0.0393063	0.7472715	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003372	V0	0.0000000	V1
Lead	0.0008577	0.0001889	V0	0.0000000	V1
Lithium	0.0000374	0.0006294	V0	0.0000000	V1
Magnesium	0.0091409	0.1354611	V0	0.0031922	V0
Manganese	0.0006949	0.0135168	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000640	V0	0.0000000	V1
Neodymium	0.0000140	0.0003004	V0	0.0000000	V1
Nickel	0.0005429	0.0009080	V0	0.0000851	V0
Niobium	0.0000202	0.0000621	V0	0.0000000	V1
Palladium	0.0000632	0.0000045	V0	0.0000000	V1
Phosphorus	0.0459574	0.0173872	V0	0.0000000	V1
Platinum	0.0000088	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.1613079	V0	0.0015678	V0
Praseodymium	0.0000070	0.0000807	V0	0.0000000	V1
Rubidium	0.0000184	0.0007258	V0	0.0000000	V1
Samarium	0.0000133	0.0000543	V0	0.0000000	V1
Selenium	0.0003366	0.0003178	V0	0.0000000	V1
Silicon	0.7676322	1.1676922	V0	0.0000000	V1
Silver	0.0000100	0.0000022	V0	0.0000000	V1
Sodium	0.0169447	0.0661850	V0	0.0008978	V0
Strontium	0.0003375	0.0022459	V0	0.0000000	V1
Tantalum	0.0000394	0.0000033	V0	0.0000000	V1
Thallium	0.0000090	0.0000053	V0	0.0000000	V1
Thorium	0.0000059	0.0000863	V0	0.0000000	V1
Tin	0.0004414	0.0000517	V0	0.0000000	V1
Titanium	0.0015201	0.0181529	V0	0.0004666	V0
Tungsten	0.0000938	0.0001191	V0	0.0000410	V0
Uranium	0.0000048	0.0000220	V0	0.0000000	V1
Vanadium	0.0007697	0.0009699	V0	0.0000000	V1
Zinc	0.0055897	0.0022140	V0	0.0009261	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		28-Aug		28-Aug		28-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		48		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.62	V0	-9999	M2	-0.05	V1
Aluminum	0.1380326	0.0530106	V0	-9999	M2	0.0000000	V1
Antimony	0.0001784	0.0000000	V1	-9999	M2	0.0000000	V1
Arsenic	0.0001060	0.0000000	V1	-9999	M2	0.0000000	V1
Barium	0.0092847	0.0004230	V0	-9999	M2	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	-9999	M2	0.0000000	V1
Bismuth	0.0000093	0.0000063	V0	-9999	M2	0.0000020	V0
Cadmium	0.0000174	0.0000011	V0	-9999	M2	0.0000000	V1
Calcium	0.4112124	0.0347321	V0	-9999	M2	0.0000000	V1
Cerium	0.0000174	0.0000493	V0	-9999	M2	0.0000000	V1
Cesium	0.0000100	0.0000035	V0	-9999	M2	0.0000000	V1
Chromium	0.0022262	0.0002090	V0	-9999	M2	0.0000979	V0
Cobalt	0.0000273	0.0000732	V0	-9999	M2	0.0000445	V0
Copper	0.0017171	0.0001240	V0	-9999	M2	0.0001822	V0
Iron	0.0393063	0.0304634	V0	-9999	M2	0.0000000	V1
Lanthanum	0.0000130	0.0000226	V0	-9999	M2	0.0000000	V1
Lead	0.0008577	0.0000000	V1	-9999	M2	0.0000000	V1
Lithium	0.0000374	0.0000592	V0	-9999	M2	0.0000000	V1
Magnesium	0.0091409	0.0093274	V0	-9999	M2	0.0017866	V0
Manganese	0.0006949	0.0007905	V0	-9999	M2	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	-9999	M2	0.0000000	V1
Neodymium	0.0000140	0.0000208	V0	-9999	M2	0.0000000	V1
Nickel	0.0005429	0.0002711	V0	-9999	M2	0.0001518	V0
Niobium	0.0000202	0.0000060	V0	-9999	M2	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	-9999	M2	0.0000000	V1
Phosphorus	0.0459574	0.0087382	V0	-9999	M2	0.0000000	V1
Platinum	0.0000088	0.0000004	V0	-9999	M2	0.0000000	V1
Potassium	0.0061261	0.0280018	V0	-9999	M2	0.0009888	V0
Praseodymium	0.0000070	0.0000052	V0	-9999	M2	0.0000000	V1
Rubidium	0.0000184	0.0000808	V0	-9999	M2	0.0000000	V1
Samarium	0.0000133	0.0000034	V0	-9999	M2	0.0000000	V1
Selenium	0.0003366	0.0000227	V0	-9999	M2	0.0000000	V1
Silicon	0.7676322	0.1512755	V0	-9999	M2	0.0397135	V0
Silver	0.0000100	0.0000000	V1	-9999	M2	0.0000000	V1
Sodium	0.0169447	0.0092882	V0	-9999	M2	0.0010464	V0
Strontium	0.0003375	0.0001554	V0	-9999	M2	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	-9999	M2	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	-9999	M2	0.0000000	V1
Thorium	0.0000059	0.0000056	V0	-9999	M2	0.0000000	V1
Tin	0.0004414	0.0000000	V1	-9999	M2	0.0000000	V1
Titanium	0.0015201	0.0018854	V0	-9999	M2	0.0005777	V0
Tungsten	0.0000938	0.0000610	V0	-9999	M2	0.0000281	V0
Uranium	0.0000048	0.0000025	V0	-9999	M2	0.0000000	V1
Vanadium	0.0007697	0.0000990	V0	-9999	M2	0.0000000	V1
Zinc	0.0055897	0.0009999	V0	-9999	M2	0.0006246	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		28-Aug		28-Aug		28-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.47	V0	2.31	V0	-0.05	V1
Aluminum	0.1380326	0.0235635	V0	0.0066663	V0	0.0000000	V1
Antimony	0.0001784	0.0000522	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0000355	V0	0.0000000	V1	0.0000000	V1
Barium	0.0092847	0.0007496	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000015	V0	0.0000046	V0	0.0000020	V0
Cadmium	0.0000174	0.0000000	V1	0.0000021	V0	0.0000000	V1
Calcium	0.4112124	0.0429546	V0	0.0246141	V0	0.0000000	V1
Cerium	0.0000174	0.0000229	V0	0.0000070	V0	0.0000000	V1
Cesium	0.0000100	0.0000010	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0002126	V0	0.0006608	V0	0.0000979	V0
Cobalt	0.0000273	0.0000193	V0	0.0000265	V0	0.0000445	V0
Copper	0.0017171	0.0005084	V0	0.0002206	V0	0.0001822	V0
Iron	0.0393063	0.0356839	V0	0.0082767	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000110	V0	0.0000027	V0	0.0000000	V1
Lead	0.0008577	0.0000532	V0	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000203	V0	0.0000062	V0	0.0000000	V1
Magnesium	0.0091409	0.0094000	V0	0.0029072	V0	0.0017866	V0
Manganese	0.0006949	0.0006011	V0	0.0004290	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001211	V0	0.0003089	V0	0.0000000	V1
Neodymium	0.0000140	0.0000100	V0	0.0000025	V0	0.0000000	V1
Nickel	0.0005429	0.0002931	V0	0.0002279	V0	0.0001518	V0
Niobium	0.0000202	0.0000041	V0	0.0000009	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0054465	V0	0.0054430	V0	0.0000000	V1
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0194008	V0	0.0144142	V0	0.0009888	V0
Praseodymium	0.0000070	0.0000021	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000407	V0	0.0000201	V0	0.0000000	V1
Samarium	0.0000133	0.0000011	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000271	V0	0.0000424	V0	0.0000000	V1
Silicon	0.7676322	0.1030105	V0	0.0909797	V0	0.0397135	V0
Silver	0.0000100	0.0000000	V1	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0069280	V0	0.0031000	V0	0.0010464	V0
Strontium	0.0003375	0.0001231	V0	0.0000480	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000020	V0	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0000668	V0	0.0000000	V1	0.0000000	V1
Titanium	0.0015201	0.0016000	V0	0.0068102	V0	0.0005777	V0
Tungsten	0.0000938	0.0000155	V0	0.0000089	V0	0.0000281	V0
Uranium	0.0000048	0.0000011	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0005964	V0	0.0000572	V0	0.0000000	V1
Zinc	0.0055897	0.0012105	V0	0.0010422	V0	0.0006246	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		28-Aug		28-Aug		28-Aug	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.06	V0	19.88	V0	-0.05	V1
Aluminum	0.1380326	0.0494169	V0	0.8424662	V0	0.0000000	V1
Antimony	0.0001784	0.0000082	V0	0.0000175	V0	0.0000000	V1
Arsenic	0.0001060	0.0000000	V1	0.0002449	V0	0.0000000	V1
Barium	0.0092847	0.0004995	V0	0.0071377	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000239	V0	0.0000000	V1
Bismuth	0.0000093	0.0000154	V0	0.0000062	V0	0.0000020	V0
Cadmium	0.0000174	0.0000024	V0	0.0000037	V0	0.0000000	V1
Calcium	0.4112124	0.0481993	V0	0.1676222	V0	0.0000000	V1
Cerium	0.0000174	0.0000503	V0	0.0009689	V0	0.0000000	V1
Cesium	0.0000100	0.0000031	V0	0.0000648	V0	0.0000000	V1
Chromium	0.0022262	0.0001886	V0	0.0011274	V0	0.0000979	V0
Cobalt	0.0000273	0.0000530	V0	0.0002281	V0	0.0000445	V0
Copper	0.0017171	0.0003393	V0	0.0006237	V0	0.0001822	V0
Iron	0.0393063	0.0335314	V0	0.7903272	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000240	V0	0.0004730	V0	0.0000000	V1
Lead	0.0008577	0.0000380	V0	0.0003640	V0	0.0000000	V1
Lithium	0.0000374	0.0000534	V0	0.0008393	V0	0.0000000	V1
Magnesium	0.0091409	0.0092480	V0	0.1129967	V0	0.0017866	V0
Manganese	0.0006949	0.0009061	V0	0.0069749	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001375	V0	0.0000664	V0	0.0000000	V1
Neodymium	0.0000140	0.0000207	V0	0.0004226	V0	0.0000000	V1
Nickel	0.0005429	0.0002963	V0	0.0008402	V0	0.0001518	V0
Niobium	0.0000202	0.0000062	V0	0.0000938	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000124	V0	0.0000000	V1
Phosphorus	0.0459574	0.0090218	V0	0.0149185	V0	0.0000000	V1
Platinum	0.0000088	0.0000007	V0	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.0354361	V0	0.2388181	V0	0.0009888	V0
Praseodymium	0.0000070	0.0000052	V0	0.0001121	V0	0.0000000	V1
Rubidium	0.0000184	0.0000861	V0	0.0011686	V0	0.0000000	V1
Samarium	0.0000133	0.0000036	V0	0.0000776	V0	0.0000000	V1
Selenium	0.0003366	0.0000497	V0	0.0004919	V0	0.0000000	V1
Silicon	0.7676322	0.1846689	V0	2.4644790	V0	0.0397135	V0
Silver	0.0000100	0.0000000	V1	0.0000039	V0	0.0000000	V1
Sodium	0.0169447	0.0095074	V0	0.0685240	V0	0.0010464	V0
Strontium	0.0003375	0.0001594	V0	0.0018161	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000057	V0	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000104	V0	0.0000000	V1
Thorium	0.0000059	0.0000053	V0	0.0001327	V0	0.0000000	V1
Tin	0.0004414	0.0000301	V0	0.0000476	V0	0.0000000	V1
Titanium	0.0015201	0.0052319	V0	0.0290183	V0	0.0005777	V0
Tungsten	0.0000938	0.0000325	V0	0.0000407	V0	0.0000281	V0
Uranium	0.0000048	0.0000012	V0	0.0000354	V0	0.0000000	V1
Vanadium	0.0007697	0.0000950	V0	0.0015756	V0	0.0000000	V1
Zinc	0.0055897	0.0025924	V0	0.0021383	V0	0.0006246	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**28-Aug**		**28-Aug**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	13.90	V0	-0.05	V1
Aluminum	0.1380326	0.5206794	V0	0.0000000	V1
Antimony	0.0001784	0.0000182	V0	0.0000000	V1
Arsenic	0.0001060	0.0000552	V0	0.0000000	V1
Barium	0.0092847	0.0038665	V0	0.0000000	V1
Beryllium	0.0000946	0.0000136	V0	0.0000000	V1
Bismuth	0.0000093	0.0000076	V0	0.0000020	V0
Cadmium	0.0000174	0.0000019	V0	0.0000000	V1
Calcium	0.4112124	0.5044624	V0	0.0000000	V1
Cerium	0.0000174	0.0005862	V0	0.0000000	V1
Cesium	0.0000100	0.0000332	V0	0.0000000	V1
Chromium	0.0022262	0.0007550	V0	0.0000979	V0
Cobalt	0.0000273	0.0001517	V0	0.0000445	V0
Copper	0.0017171	0.0005115	V0	0.0001822	V0
Iron	0.0393063	0.5375017	V0	0.0000000	V1
Lanthanum	0.0000130	0.0002724	V0	0.0000000	V1
Lead	0.0008577	0.0001625	V0	0.0000000	V1
Lithium	0.0000374	0.0008358	V0	0.0000000	V1
Magnesium	0.0091409	0.1130782	V0	0.0017866	V0
Manganese	0.0006949	0.0097927	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000908	V0	0.0000000	V1
Neodymium	0.0000140	0.0002420	V0	0.0000000	V1
Nickel	0.0005429	0.0005766	V0	0.0001518	V0
Niobium	0.0000202	0.0000585	V0	0.0000000	V1
Palladium	0.0000632	0.0000102	V0	0.0000000	V1
Phosphorus	0.0459574	0.0095449	V0	0.0000000	V1
Platinum	0.0000088	0.0000000	V1	0.0000000	V1
Potassium	0.0061261	0.1227917	V0	0.0009888	V0
Praseodymium	0.0000070	0.0000656	V0	0.0000000	V1
Rubidium	0.0000184	0.0006119	V0	0.0000000	V1
Samarium	0.0000133	0.0000447	V0	0.0000000	V1
Selenium	0.0003366	0.0002639	V0	0.0000000	V1
Silicon	0.7676322	1.1692954	V0	0.0397135	V0
Silver	0.0000100	0.0000016	V0	0.0000000	V1
Sodium	0.0169447	0.0404115	V0	0.0010464	V0
Strontium	0.0003375	0.0016473	V0	0.0000000	V1
Tantalum	0.0000394	0.0000033	V0	0.0000000	V1
Thallium	0.0000090	0.0000041	V0	0.0000000	V1
Thorium	0.0000059	0.0000749	V0	0.0000000	V1
Tin	0.0004414	0.0000570	V0	0.0000000	V1
Titanium	0.0015201	0.0186564	V0	0.0005777	V0
Tungsten	0.0000938	0.0000843	V0	0.0000281	V0
Uranium	0.0000048	0.0000195	V0	0.0000000	V1
Vanadium	0.0007697	0.0008569	V0	0.0000000	V1
Zinc	0.0055897	0.0026997	V0	0.0006246	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**03-Sep**		**03-Sep**		**03-Sep**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	3.08	V0	1.93	V0	0.09	V0
Aluminum	0.1380326	0.0124503	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000000	V1	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0000323	V0	0.0000059	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000016	V0	0.0000030	V0	0.0000043	V0
Cadmium	0.0000174	0.0000020	V0	0.0000016	V0	0.0000000	V1
Calcium	0.4112124	0.0185127	V0	0.0000000	V1	0.0000000	V1
Cerium	0.0000174	0.0000105	V0	0.0000034	V0	0.0000000	V1
Cesium	0.0000100	0.0000009	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0000952	V0	0.0001658	V0	0.0000000	V1
Cobalt	0.0000273	0.0000306	V0	0.0000572	V0	0.0000240	V0
Copper	0.0017171	0.0002309	V0	0.0002762	V0	0.0000966	V0
Iron	0.0393063	0.0114567	V0	0.0034638	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000048	V0	0.0000012	V0	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000113	V0	0.0000020	V0	0.0000000	V1
Magnesium	0.0091409	0.0041689	V0	0.0030301	V0	0.0011092	V0
Manganese	0.0006949	0.0004524	V0	0.0002464	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000043	V0	0.0000010	V0	0.0000000	V1
Nickel	0.0005429	0.0001094	V0	0.0002281	V0	0.0001244	V0
Niobium	0.0000202	0.0000024	V0	0.0000014	V0	0.0000009	V0
Palladium	0.0000632	0.0000032	V0	0.0000000	V1	0.0000091	V0
Phosphorus	0.0459574	0.0156192	V0	0.0148787	V0	0.0080743	V0
Platinum	0.0000088	0.0000006	V0	0.0000008	V0	0.0000012	V0
Potassium	0.0061261	0.0227058	V0	0.0183879	V0	0.0005470	V0
Praseodymium	0.0000070	0.0000012	V0	0.0000004	V0	0.0000000	V1
Rubidium	0.0000184	0.0000330	V0	0.0000220	V0	0.0000008	V0
Samarium	0.0000133	0.0000007	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000005	V0	0.0000005	V0	0.0000005	V0
Sodium	0.0169447	0.0032100	V0	0.0026501	V0	0.0007650	V0
Strontium	0.0003375	0.0000541	V0	0.0000399	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000012	V0	0.0000003	V0	0.0000000	V1
Tin	0.0004414	0.0000000	V1	0.0000187	V0	0.0000000	V1
Titanium	0.0015201	0.0005397	V0	0.0002487	V0	0.0004547	V0
Tungsten	0.0000938	0.0000514	V0	0.0000760	V0	0.0000410	V0
Uranium	0.0000048	0.0000004	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0000712	V0	0.0000570	V0	0.0000651	V0
Zinc	0.0055897	0.0006778	V0	0.0004396	V0	0.0004369	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		03-Sep		03-Sep		03-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.97	V0	1.67	V0	0.09	V0
Aluminum	0.1380326	0.0126850	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000430	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0000103	V0	0.0000085	V0	0.0000000	V1
Barium	0.0092847	0.0005144	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000024	V0	0.0000033	V0	0.0000043	V0
Cadmium	0.0000174	0.0000011	V0	0.0000012	V0	0.0000000	V1
Calcium	0.4112124	0.0325968	V0	0.0187685	V0	0.0000000	V1
Cerium	0.0000174	0.0000150	V0	0.0000020	V0	0.0000000	V1
Cesium	0.0000100	0.0000008	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0001560	V0	0.0002584	V0	0.0000000	V1
Cobalt	0.0000273	0.0000104	V0	0.0000290	V0	0.0000240	V0
Copper	0.0017171	0.0003873	V0	0.0012793	V0	0.0000966	V0
Iron	0.0393063	0.0174758	V0	0.0068210	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000068	V0	0.0000000	V1	0.0000000	V1
Lead	0.0008577	0.0000366	V0	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000103	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0059598	V0	0.0031991	V0	0.0011092	V0
Manganese	0.0006949	0.0003296	V0	0.0002101	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000335	V0	0.0000000	V1
Neodymium	0.0000140	0.0000060	V0	0.0000006	V0	0.0000000	V1
Nickel	0.0005429	0.0001344	V0	0.0002575	V0	0.0001244	V0
Niobium	0.0000202	0.0000022	V0	0.0000015	V0	0.0000009	V0
Palladium	0.0000632	0.0000032	V0	0.0000000	V1	0.0000091	V0
Phosphorus	0.0459574	0.0122916	V0	0.0132267	V0	0.0080743	V0
Platinum	0.0000088	0.0000006	V0	0.0000004	V0	0.0000012	V0
Potassium	0.0061261	0.0148063	V0	0.0114463	V0	0.0005470	V0
Praseodymium	0.0000070	0.0000015	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000248	V0	0.0000140	V0	0.0000008	V0
Samarium	0.0000133	0.0000007	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000168	V0	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000000	V1	0.0000005	V0
Sodium	0.0169447	0.0052252	V0	0.0025234	V0	0.0007650	V0
Strontium	0.0003375	0.0000958	V0	0.0000314	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000013	V0	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0000549	V0	0.0000000	V1	0.0000000	V1
Titanium	0.0015201	0.0007512	V0	0.0004100	V0	0.0004547	V0
Tungsten	0.0000938	0.0000126	V0	0.0000162	V0	0.0000410	V0
Uranium	0.0000048	0.0000005	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0001228	V0	0.0000963	V0	0.0000651	V0
Zinc	0.0055897	0.0012166	V0	0.0008167	V0	0.0004369	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		03-Sep		03-Sep		03-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.33	V0	3.35	V0	0.09	V0
Aluminum	0.1380326	0.0145121	V0	0.0336712	V0	0.0000000	V1
Antimony	0.0001784	0.0000000	V1	0.0000118	V0	0.0000000	V1
Arsenic	0.0001060	0.0000214	V0	0.0000152	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0004865	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000062	V0	0.0000090	V0	0.0000043	V0
Cadmium	0.0000174	0.0000024	V0	0.0000024	V0	0.0000000	V1
Calcium	0.4112124	0.0217055	V0	0.0544214	V0	0.0000000	V1
Cerium	0.0000174	0.0000060	V0	0.0000268	V0	0.0000000	V1
Cesium	0.0000100	0.0000009	V0	0.0000027	V0	0.0000000	V1
Chromium	0.0022262	0.0000000	V1	0.0002117	V0	0.0000000	V1
Cobalt	0.0000273	0.0000477	V0	0.0000372	V0	0.0000240	V0
Copper	0.0017171	0.0001974	V0	0.0003332	V0	0.0000966	V0
Iron	0.0393063	0.0077311	V0	0.0347643	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000024	V0	0.0000127	V0	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000069	V0	0.0000340	V0	0.0000000	V1
Magnesium	0.0091409	0.0048759	V0	0.0114486	V0	0.0011092	V0
Manganese	0.0006949	0.0004254	V0	0.0009155	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000027	V0	0.0000116	V0	0.0000000	V1
Nickel	0.0005429	0.0000878	V0	0.0001708	V0	0.0001244	V0
Niobium	0.0000202	0.0000015	V0	0.0000044	V0	0.0000009	V0
Palladium	0.0000632	0.0000000	V1	0.0000026	V1	0.0000091	V0
Phosphorus	0.0459574	0.0221041	V0	0.0184697	V0	0.0080743	V0
Platinum	0.0000088	0.0000005	V0	0.0000011	V0	0.0000012	V0
Potassium	0.0061261	0.0321036	V0	0.0363028	V0	0.0005470	V0
Praseodymium	0.0000070	0.0000008	V0	0.0000031	V0	0.0000000	V1
Rubidium	0.0000184	0.0000401	V0	0.0000624	V0	0.0000008	V0
Samarium	0.0000133	0.0000000	V1	0.0000024	V0	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000277	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.0601037	V0	0.0000000	V1
Silver	0.0000100	0.0000011	V0	0.0000008	V0	0.0000005	V0
Sodium	0.0169447	0.0031741	V0	0.0106088	V0	0.0007650	V0
Strontium	0.0003375	0.0000512	V0	0.0001358	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000008	V0	0.0000029	V0	0.0000000	V1
Tin	0.0004414	0.0000000	V1	0.0000472	V0	0.0000000	V1
Titanium	0.0015201	0.0004035	V0	0.0020842	V0	0.0004547	V0
Tungsten	0.0000938	0.0000825	V0	0.0000572	V0	0.0000410	V0
Uranium	0.0000048	0.0000004	V0	0.0000011	V0	0.0000000	V1
Vanadium	0.0007697	0.0000432	V0	0.0001209	V0	0.0000651	V0
Zinc	0.0055897	0.0011010	V0	0.0017062	V0	0.0004369	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**03-Sep**		**03-Sep**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	5.19	V0	0.09	V0
Aluminum	0.1380326	0.0693432	V0	0.0000000	V1
Antimony	0.0001784	0.0000182	V0	0.0000000	V1
Arsenic	0.0001060	0.0000403	V0	0.0000000	V1
Barium	0.0092847	0.0006768	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000057	V0	0.0000043	V0
Cadmium	0.0000174	0.0000031	V0	0.0000000	V1
Calcium	0.4112124	0.0940129	V0	0.0000000	V1
Cerium	0.0000174	0.0001590	V0	0.0000000	V1
Cesium	0.0000100	0.0000047	V0	0.0000000	V1
Chromium	0.0022262	0.0003120	V0	0.0000000	V1
Cobalt	0.0000273	0.0000448	V0	0.0000240	V0
Copper	0.0017171	0.0004495	V0	0.0000966	V0
Iron	0.0393063	0.0970315	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000904	V0	0.0000000	V1
Lead	0.0008577	0.0000421	V0	0.0000000	V1
Lithium	0.0000374	0.0000924	V0	0.0000000	V1
Magnesium	0.0091409	0.0235786	V0	0.0011092	V0
Manganese	0.0006949	0.0024908	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000480	V0	0.0000000	V1
Neodymium	0.0000140	0.0000363	V0	0.0000000	V1
Nickel	0.0005429	0.0002190	V0	0.0001244	V0
Niobium	0.0000202	0.0000091	V0	0.0000009	V0
Palladium	0.0000632	0.0000077	V0	0.0000091	V0
Phosphorus	0.0459574	0.0219232	V0	0.0080743	V0
Platinum	0.0000088	0.0000008	V0	0.0000012	V0
Potassium	0.0061261	0.0372145	V0	0.0005470	V0
Praseodymium	0.0000070	0.0000096	V0	0.0000000	V1
Rubidium	0.0000184	0.0001044	V0	0.0000008	V0
Samarium	0.0000133	0.0000063	V0	0.0000000	V1
Selenium	0.0003366	0.0000781	V0	0.0000000	V1
Silicon	0.7676322	0.2278133	V0	0.0000000	V1
Silver	0.0000100	0.0000010	V0	0.0000005	V0
Sodium	0.0169447	0.0142649	V0	0.0007650	V0
Strontium	0.0003375	0.0003261	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000009	V0	0.0000000	V1
Thorium	0.0000059	0.0000085	V0	0.0000000	V1
Tin	0.0004414	0.0000301	V0	0.0000000	V1
Titanium	0.0015201	0.0029067	V0	0.0004547	V0
Tungsten	0.0000938	0.0000403	V0	0.0000410	V0
Uranium	0.0000048	0.0000066	V0	0.0000000	V1
Vanadium	0.0007697	0.0001965	V0	0.0000651	V0
Zinc	0.0055897	0.0016837	V0	0.0004369	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		09-Sep		09-Sep		09-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		23.8		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	9.05	V0	6.61	V0	0.03	V1
Aluminum	0.1380326	0.2056809	V0	0.0684002	V0	0.0000000	V1
Antimony	0.0001784	0.0000148	V0	0.0001644	V0	0.0000000	V1
Arsenic	0.0001060	0.0000478	V0	0.0002642	V0	0.0000000	V1
Barium	0.0092847	0.0017122	V0	0.0018424	V0	0.0000000	V1
Beryllium	0.0000946	0.0000060	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000037	V0	0.0000052	V0	0.0000252	V0
Cadmium	0.0000174	0.0000011	V0	0.0000053	V0	0.0000000	V1
Calcium	0.4112124	0.2957519	V0	0.1541461	V0	0.0000000	V1
Cerium	0.0000174	0.0002096	V0	0.0001015	V0	0.0000000	V1
Cesium	0.0000100	0.0000157	V0	0.0000042	V0	0.0000000	V1
Chromium	0.0022262	0.0003976	V0	0.0004657	V0	0.0001057	V0
Cobalt	0.0000273	0.0000908	V0	0.0000749	V0	0.0000185	V0
Copper	0.0017171	0.0007337	V0	0.0013075	V0	0.0001289	V0
Iron	0.0393063	0.1564307	V0	0.1090242	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000973	V0	0.0000468	V0	0.0000000	V1
Lead	0.0008577	0.0000726	V0	0.0000835	V0	0.0000000	V1
Lithium	0.0000374	0.0002499	V0	0.0000717	V0	0.0000000	V1
Magnesium	0.0091409	0.0411009	V0	0.0330917	V0	0.0017818	V0
Manganese	0.0006949	0.0031252	V0	0.0019839	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000609	V0	0.0000807	V0	0.0000000	V1
Neodymium	0.0000140	0.0000920	V0	0.0000401	V0	0.0000000	V1
Nickel	0.0005429	0.0003346	V0	0.0004339	V0	0.0000818	V0
Niobium	0.0000202	0.0000274	V0	0.0000101	V0	0.0000000	V1
Palladium	0.0000632	0.0000033	V0	0.0000097	V0	0.0000000	V1
Phosphorus	0.0459574	0.0140776	V0	0.0144472	V0	0.0068476	V0
Platinum	0.0000088	0.0000004	V0	0.0000007	V0	0.0000009	V0
Potassium	0.0061261	0.0678079	V0	0.0423457	V0	0.0006569	V0
Praseodymium	0.0000070	0.0000237	V0	0.0000102	V0	0.0000000	V1
Rubidium	0.0000184	0.0002940	V0	0.0001159	V0	0.0000009	V0
Samarium	0.0000133	0.0000166	V0	0.0000068	V0	0.0000000	V1
Selenium	0.0003366	0.0001350	V0	0.0000781	V0	0.0000000	V1
Silicon	0.7676322	0.8613174	V0	0.3511157	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000039	V0	0.0000000	V1
Sodium	0.0169447	0.0304191	V0	0.0153106	V0	0.0000000	V1
Strontium	0.0003375	0.0008073	V0	0.0004219	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000013	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000262	V0	0.0000105	V0	0.0000000	V1
Tin	0.0004414	0.0000305	V0	0.0001391	V0	0.0000000	V1
Titanium	0.0015201	0.0087336	V0	0.0037199	V0	0.0005157	V0
Tungsten	0.0000938	0.0000764	V0	0.0001018	V0	0.0000440	V0
Uranium	0.0000048	0.0000083	V0	0.0000033	V0	0.0000000	V1
Vanadium	0.0007697	0.0005408	V0	0.0003177	V0	0.0000000	V1
Zinc	0.0055897	0.0011429	V0	0.0029039	V0	0.0002513	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		09-Sep		09-Sep		09-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	8.98	V0	3.91	V0	0.03	V1
Aluminum	0.1380326	0.1402424	V0	0.0365814	V0	0.0000000	V1
Antimony	0.0001784	0.0002150	V0	0.0000118	V0	0.0000000	V1
Arsenic	0.0001060	0.0014164	V0	0.0000425	V0	0.0000000	V1
Barium	0.0092847	0.0036825	V0	0.0005779	V0	0.0000000	V1
Beryllium	0.0000946	0.0000040	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000101	V0	0.0000016	V0	0.0000252	V0
Cadmium	0.0000174	0.0000136	V0	0.0000133	V0	0.0000000	V1
Calcium	0.4112124	0.3282295	V0	0.0633632	V0	0.0000000	V1
Cerium	0.0000174	0.0001953	V0	0.0000392	V0	0.0000000	V1
Cesium	0.0000100	0.0000095	V0	0.0000018	V0	0.0000000	V1
Chromium	0.0022262	0.0004685	V0	0.0002094	V0	0.0001057	V0
Cobalt	0.0000273	0.0001584	V0	0.0000179	V0	0.0000185	V0
Copper	0.0017171	0.0016104	V0	0.0003917	V0	0.0001289	V0
Iron	0.0393063	0.2217208	V0	0.0377485	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000963	V0	0.0000182	V0	0.0000000	V1
Lead	0.0008577	0.0002008	V0	0.0001037	V0	0.0000000	V1
Lithium	0.0000374	0.0001372	V0	0.0000303	V0	0.0000000	V1
Magnesium	0.0091409	0.0686867	V0	0.0139917	V0	0.0017818	V0
Manganese	0.0006949	0.0041991	V0	0.0009139	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001896	V0	0.0000546	V0	0.0000000	V1
Neodymium	0.0000140	0.0000809	V0	0.0000170	V0	0.0000000	V1
Nickel	0.0005429	0.0009017	V0	0.0002119	V0	0.0000818	V0
Niobium	0.0000202	0.0000243	V0	0.0000048	V0	0.0000000	V1
Palladium	0.0000632	0.0000074	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0149177	V0	0.0163904	V0	0.0068476	V0
Platinum	0.0000088	0.0000009	V0	0.0000000	V1	0.0000009	V0
Potassium	0.0061261	0.0667329	V0	0.0274101	V0	0.0006569	V0
Praseodymium	0.0000070	0.0000206	V0	0.0000037	V0	0.0000000	V1
Rubidium	0.0000184	0.0002096	V0	0.0000727	V0	0.0000009	V0
Samarium	0.0000133	0.0000143	V0	0.0000026	V0	0.0000000	V1
Selenium	0.0003366	0.0001379	V0	0.0000378	V0	0.0000000	V1
Silicon	0.7676322	0.5876917	V0	0.1179526	V0	0.0000000	V1
Silver	0.0000100	0.0000012	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0271045	V0	0.0077553	V0	0.0000000	V1
Strontium	0.0003375	0.0008634	V0	0.0001593	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000017	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000209	V0	0.0000046	V0	0.0000000	V1
Tin	0.0004414	0.0001609	V0	0.0000574	V0	0.0000000	V1
Titanium	0.0015201	0.0065107	V0	0.0016699	V0	0.0005157	V0
Tungsten	0.0000938	0.0000769	V0	0.0000223	V0	0.0000440	V0
Uranium	0.0000048	0.0000066	V0	0.0000012	V0	0.0000000	V1
Vanadium	0.0007697	0.0009554	V0	0.0002993	V0	0.0000000	V1
Zinc	0.0055897	0.0049335	V0	0.0019662	V0	0.0002513	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		09-Sep		09-Sep		09-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	11.52	V0	7.93	V0	0.03	V1
Aluminum	0.1380326	0.2948151	V0	0.2632319	V0	0.0000000	V1
Antimony	0.0001784	0.0000152	V0	0.0000096	V0	0.0000000	V1
Arsenic	0.0001060	0.0000580	V0	0.0000397	V0	0.0000000	V1
Barium	0.0092847	0.0023078	V0	0.0018789	V0	0.0000000	V1
Beryllium	0.0000946	0.0000063	V0	0.0000077	V0	0.0000000	V1
Bismuth	0.0000093	0.0000010	V0	0.0000037	V0	0.0000252	V0
Cadmium	0.0000174	0.0000030	V0	0.0000014	V0	0.0000000	V1
Calcium	0.4112124	0.3855477	V0	0.1721394	V0	0.0000000	V1
Cerium	0.0000174	0.0002934	V0	0.0002341	V0	0.0000000	V1
Cesium	0.0000100	0.0000229	V0	0.0000199	V0	0.0000000	V1
Chromium	0.0022262	0.0004569	V0	0.0004339	V0	0.0001057	V0
Cobalt	0.0000273	0.0000875	V0	0.0001001	V0	0.0000185	V0
Copper	0.0017171	0.0111893	V0	0.0003781	V0	0.0001289	V0
Iron	0.0393063	0.1794349	V0	0.1631965	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001415	V0	0.0001145	V0	0.0000000	V1
Lead	0.0008577	0.0001168	V0	0.0000736	V0	0.0000000	V1
Lithium	0.0000374	0.0002925	V0	0.0002928	V0	0.0000000	V1
Magnesium	0.0091409	0.0573552	V0	0.0416360	V0	0.0017818	V0
Manganese	0.0006949	0.0032087	V0	0.0034813	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001179	V0	0.0000546	V0	0.0000000	V1
Neodymium	0.0000140	0.0001316	V0	0.0001049	V0	0.0000000	V1
Nickel	0.0005429	0.0004418	V0	0.0003486	V0	0.0000818	V0
Niobium	0.0000202	0.0000415	V0	0.0000307	V0	0.0000000	V1
Palladium	0.0000632	0.0000036	V0	0.0000084	V0	0.0000000	V1
Phosphorus	0.0459574	0.0209602	V0	0.0135155	V0	0.0068476	V0
Platinum	0.0000088	0.0000000	V1	0.0000009	V0	0.0000009	V0
Potassium	0.0061261	0.0961554	V0	0.0837018	V0	0.0006569	V0
Praseodymium	0.0000070	0.0000332	V0	0.0000264	V0	0.0000000	V1
Rubidium	0.0000184	0.0004244	V0	0.0003448	V0	0.0000009	V0
Samarium	0.0000133	0.0000237	V0	0.0000195	V0	0.0000000	V1
Selenium	0.0003366	0.0002132	V0	0.0001379	V0	0.0000000	V1
Silicon	0.7676322	1.0268524	V0	0.9890786	V0	0.0000000	V1
Silver	0.0000100	0.0000012	V0	0.0000008	V0	0.0000000	V1
Sodium	0.0169447	0.0384376	V0	0.0321141	V0	0.0000000	V1
Strontium	0.0003375	0.0010699	V0	0.0007610	V0	0.0000000	V1
Tantalum	0.0000394	0.0000019	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000022	V0	0.0000020	V0	0.0000000	V1
Thorium	0.0000059	0.0000368	V0	0.0000326	V0	0.0000000	V1
Tin	0.0004414	0.0000372	V0	0.0000293	V0	0.0000000	V1
Titanium	0.0015201	0.0121163	V0	0.0092804	V0	0.0005157	V0
Tungsten	0.0000938	0.0000421	V0	0.0000401	V0	0.0000440	V0
Uranium	0.0000048	0.0000109	V0	0.0000095	V0	0.0000000	V1
Vanadium	0.0007697	0.0009175	V0	0.0005786	V0	0.0000000	V1
Zinc	0.0055897	0.0016306	V0	0.0008096	V0	0.0002513	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**09-Sep**		**09-Sep**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	9.24	V0	0.03	V1
Aluminum	0.1380326	0.3094440	V0	0.0000000	V1
Antimony	0.0001784	0.0000102	V0	0.0000000	V1
Arsenic	0.0001060	0.0000523	V0	0.0000000	V1
Barium	0.0092847	0.0024563	V0	0.0000000	V1
Beryllium	0.0000946	0.0000098	V0	0.0000000	V1
Bismuth	0.0000093	0.0000116	V0	0.0000252	V0
Cadmium	0.0000174	0.0000021	V0	0.0000000	V1
Calcium	0.4112124	0.3690519	V0	0.0000000	V1
Cerium	0.0000174	0.0003389	V0	0.0000000	V1
Cesium	0.0000100	0.0000199	V0	0.0000000	V1
Chromium	0.0022262	0.0006534	V0	0.0001057	V0
Cobalt	0.0000273	0.0001580	V0	0.0000185	V0
Copper	0.0017171	0.0016386	V0	0.0001289	V0
Iron	0.0393063	0.2885828	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001637	V0	0.0000000	V1
Lead	0.0008577	0.0001117	V0	0.0000000	V1
Lithium	0.0000374	0.0003960	V0	0.0000000	V1
Magnesium	0.0091409	0.0675060	V0	0.0017818	V0
Manganese	0.0006949	0.0054938	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001010	V0	0.0000000	V1
Neodymium	0.0000140	0.0001462	V0	0.0000000	V1
Nickel	0.0005429	0.0005027	V0	0.0000818	V0
Niobium	0.0000202	0.0000443	V0	0.0000000	V1
Palladium	0.0000632	0.0000050	V0	0.0000000	V1
Phosphorus	0.0459574	0.0167294	V0	0.0068476	V0
Platinum	0.0000088	0.0000006	V0	0.0000009	V0
Potassium	0.0061261	0.0819799	V0	0.0006569	V0
Praseodymium	0.0000070	0.0000368	V0	0.0000000	V1
Rubidium	0.0000184	0.0003858	V0	0.0000009	V0
Samarium	0.0000133	0.0000258	V0	0.0000000	V1
Selenium	0.0003366	0.0002264	V0	0.0000000	V1
Silicon	0.7676322	0.8138540	V0	0.0000000	V1
Silver	0.0000100	0.0000012	V0	0.0000000	V1
Sodium	0.0169447	0.0314718	V0	0.0000000	V1
Strontium	0.0003375	0.0011016	V0	0.0000000	V1
Tantalum	0.0000394	0.0000020	V0	0.0000000	V1
Thallium	0.0000090	0.0000023	V0	0.0000000	V1
Thorium	0.0000059	0.0000432	V0	0.0000000	V1
Tin	0.0004414	0.0000359	V0	0.0000000	V1
Titanium	0.0015201	0.0150556	V0	0.0005157	V0
Tungsten	0.0000938	0.0000796	V0	0.0000440	V0
Uranium	0.0000048	0.0000124	V0	0.0000000	V1
Vanadium	0.0007697	0.0008271	V0	0.0000000	V1
Zinc	0.0055897	0.0028652	V0	0.0002513	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		15-Sep		15-Sep		15-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	31.02	V0	16.19	V0	0.20	V0
Aluminum	0.1380326	0.6699264	V0	0.3158145	V0	0.0000000	V1
Antimony	0.0001784	0.0001168	V0	0.0004244	V0	0.0000000	V1
Arsenic	0.0001060	0.0001938	V0	0.0014767	V0	0.0000000	V1
Barium	0.0092847	0.0047981	V0	0.0062967	V0	0.0000000	V1
Beryllium	0.0000946	0.0000203	V0	0.0000120	V0	0.0000000	V1
Bismuth	0.0000093	0.0000035	V0	0.0000151	V0	0.0000000	V1
Cadmium	0.0000174	0.0000051	V0	0.0000184	V0	0.0000000	V1
Calcium	0.4112124	2.5579942	V0	0.5588727	V0	0.0000000	V1
Cerium	0.0000174	0.0007028	V0	0.0004382	V0	0.0000000	V1
Cesium	0.0000100	0.0000495	V0	0.0000221	V0	0.0000000	V1
Chromium	0.0022262	0.0009819	V0	0.0008335	V0	0.0001016	V0
Cobalt	0.0000273	0.0002477	V0	0.0001598	V0	0.0000175	V0
Copper	0.0017171	0.0010415	V0	0.0028894	V0	0.0000921	V0
Iron	0.0393063	0.5484410	V0	0.3917901	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003300	V0	0.0002124	V0	0.0000000	V1
Lead	0.0008577	0.0003405	V0	0.0002751	V0	0.0000384	V0
Lithium	0.0000374	0.0008426	V0	0.0002924	V0	0.0000000	V1
Magnesium	0.0091409	0.1435515	V0	0.1306734	V0	0.0009983	V0
Manganese	0.0006949	0.0111306	V0	0.0069169	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001299	V0	0.0001232	V0	0.0000000	V1
Neodymium	0.0000140	0.0003014	V0	0.0001891	V0	0.0000000	V1
Nickel	0.0005429	0.0008395	V0	0.0005602	V0	0.0000880	V0
Niobium	0.0000202	0.0000661	V0	0.0000402	V0	0.0000000	V1
Palladium	0.0000632	0.0000104	V0	0.0000179	V0	0.0000106	V0
Phosphorus	0.0459574	0.0271154	V0	0.0238575	V0	0.0074366	V0
Platinum	0.0000088	0.0000008	V0	0.0000009	V0	0.0000008	V0
Potassium	0.0061261	0.2081204	V0	0.1295096	V0	0.0011153	V0
Praseodymium	0.0000070	0.0000781	V0	0.0000476	V0	0.0000000	V1
Rubidium	0.0000184	0.0009437	V0	0.0004810	V0	0.0000000	V1
Samarium	0.0000133	0.0000555	V0	0.0000320	V0	0.0000000	V1
Selenium	0.0003366	0.0003889	V0	0.0002529	V0	0.0000000	V1
Silicon	0.7676322	2.1108377	V0	1.2061628	V0	0.0000000	V1
Silver	0.0000100	0.0000024	V0	0.0000031	V0	0.0000000	V1
Sodium	0.0169447	0.0713166	V0	0.0587011	V0	0.0010694	V0
Strontium	0.0003375	0.0037087	V0	0.0016353	V0	0.0000000	V1
Tantalum	0.0000394	0.0000035	V0	0.0000022	V0	0.0000000	V1
Thallium	0.0000090	0.0000060	V0	0.0000033	V0	0.0000000	V1
Thorium	0.0000059	0.0000912	V0	0.0000525	V0	0.0000000	V1
Tin	0.0004414	0.0000526	V0	0.0002748	V0	0.0000000	V1
Titanium	0.0015201	0.0217262	V0	0.0149060	V0	0.0003352	V0
Tungsten	0.0000938	0.0000776	V0	0.0000959	V0	0.0000328	V0
Uranium	0.0000048	0.0000252	V0	0.0000148	V0	0.0000000	V1
Vanadium	0.0007697	0.0016180	V0	0.0008460	V0	0.0000000	V1
Zinc	0.0055897	0.0025511	V0	0.0080676	V0	0.0003981	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		15-Sep		15-Sep		15-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		23.6		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	13.41	V0	8.55	V0	0.20	V0
Aluminum	0.1380326	0.2238837	V0	0.0731733	V0	0.0000000	V1
Antimony	0.0001784	0.0002657	V0	0.0000121	V0	0.0000000	V1
Arsenic	0.0001060	0.0001172	V0	0.0000813	V0	0.0000000	V1
Barium	0.0092847	0.0057704	V0	0.0008762	V0	0.0000000	V1
Beryllium	0.0000946	0.0000061	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000083	V0	0.0000000	V1	0.0000000	V1
Cadmium	0.0000174	0.0000075	V0	0.0000073	V0	0.0000000	V1
Calcium	0.4112124	0.4512988	V0	0.1430634	V0	0.0000000	V1
Cerium	0.0000174	0.0002937	V0	0.0001016	V0	0.0000000	V1
Cesium	0.0000100	0.0000146	V0	0.0000045	V0	0.0000000	V1
Chromium	0.0022262	0.0005011	V0	0.0002092	V0	0.0001016	V0
Cobalt	0.0000273	0.0001131	V0	0.0000300	V0	0.0000175	V0
Copper	0.0017171	0.0021662	V0	0.0003051	V0	0.0000921	V0
Iron	0.0393063	0.3557391	V0	0.0647359	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001433	V0	0.0000495	V0	0.0000000	V1
Lead	0.0008577	0.0003138	V0	0.0000528	V0	0.0000384	V0
Lithium	0.0000374	0.0001905	V0	0.0000618	V0	0.0000000	V1
Magnesium	0.0091409	0.1006907	V0	0.0288429	V0	0.0009983	V0
Manganese	0.0006949	0.0060366	V0	0.0017823	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001059	V0	0.0000302	V0	0.0000000	V1
Neodymium	0.0000140	0.0001254	V0	0.0000432	V0	0.0000000	V1
Nickel	0.0005429	0.0004297	V0	0.0001746	V0	0.0000880	V0
Niobium	0.0000202	0.0000283	V0	0.0000094	V0	0.0000000	V1
Palladium	0.0000632	0.0000082	V0	0.0000042	V0	0.0000106	V0
Phosphorus	0.0459574	0.0204077	V0	0.0238397	V0	0.0074366	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000008	V0
Potassium	0.0061261	0.0896968	V0	0.0524531	V0	0.0011153	V0
Praseodymium	0.0000070	0.0000317	V0	0.0000111	V0	0.0000000	V1
Rubidium	0.0000184	0.0003364	V0	0.0001380	V0	0.0000000	V1
Samarium	0.0000133	0.0000217	V0	0.0000070	V0	0.0000000	V1
Selenium	0.0003366	0.0001782	V0	0.0000769	V0	0.0000000	V1
Silicon	0.7676322	0.7787771	V0	0.3933000	V0	0.0000000	V1
Silver	0.0000100	0.0000035	V0	0.0000006	V0	0.0000000	V1
Sodium	0.0169447	0.0389084	V0	0.0190032	V0	0.0010694	V0
Strontium	0.0003375	0.0012267	V0	0.0003496	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000021	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000338	V0	0.0000115	V0	0.0000000	V1
Tin	0.0004414	0.0002003	V0	0.0000268	V0	0.0000000	V1
Titanium	0.0015201	0.0089529	V0	0.0028271	V0	0.0003352	V0
Tungsten	0.0000938	0.0000900	V0	0.0000324	V0	0.0000328	V0
Uranium	0.0000048	0.0000095	V0	0.0000029	V0	0.0000000	V1
Vanadium	0.0007697	0.0006644	V0	0.0002710	V0	0.0000000	V1
Zinc	0.0055897	0.0058950	V0	0.0011628	V0	0.0003981	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		15-Sep		15-Sep		15-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	18.01	V0	31.39	V0	0.20	V0
Aluminum	0.1380326	0.5952210	V0	0.8520988	V0	0.0000000	V1
Antimony	0.0001784	0.0000344	V0	0.0000328	V0	0.0000000	V1
Arsenic	0.0001060	0.0000909	V0	0.0002120	V0	0.0000000	V1
Barium	0.0092847	0.0038671	V0	0.0076164	V0	0.0000000	V1
Beryllium	0.0000946	0.0000146	V0	0.0000333	V0	0.0000000	V1
Bismuth	0.0000093	0.0000051	V0	0.0000051	V0	0.0000000	V1
Cadmium	0.0000174	0.0000063	V0	0.0000050	V0	0.0000000	V1
Calcium	0.4112124	0.4635786	V0	0.8675913	V0	0.0000000	V1
Cerium	0.0000174	0.0005400	V0	0.0009670	V0	0.0000000	V1
Cesium	0.0000100	0.0000402	V0	0.0000569	V0	0.0000000	V1
Chromium	0.0022262	0.0008037	V0	0.0013434	V0	0.0001016	V0
Cobalt	0.0000273	0.0001638	V0	0.0003004	V0	0.0000175	V0
Copper	0.0017171	0.0008946	V0	0.0007459	V0	0.0000921	V0
Iron	0.0393063	0.2483789	V0	1.0811194	V0	0.0000000	V1
Lanthanum	0.0000130	0.0002535	V0	0.0004565	V0	0.0000000	V1
Lead	0.0008577	0.0002096	V0	0.0002859	V0	0.0000384	V0
Lithium	0.0000374	0.0005757	V0	0.0012437	V0	0.0000000	V1
Magnesium	0.0091409	0.0763355	V0	0.1917982	V0	0.0009983	V0
Manganese	0.0006949	0.0047080	V0	0.0194729	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001119	V0	0.0000883	V0	0.0000000	V1
Neodymium	0.0000140	0.0002364	V0	0.0004239	V0	0.0000000	V1
Nickel	0.0005429	0.0008158	V0	0.0011213	V0	0.0000880	V0
Niobium	0.0000202	0.0000625	V0	0.0001223	V0	0.0000000	V1
Palladium	0.0000632	0.0000074	V0	0.0000151	V0	0.0000106	V0
Phosphorus	0.0459574	0.0343531	V0	0.0250204	V0	0.0074366	V0
Platinum	0.0000088	0.0000000	V1	0.0000000	V1	0.0000008	V0
Potassium	0.0061261	0.1626637	V0	0.2292760	V0	0.0011153	V0
Praseodymium	0.0000070	0.0000612	V0	0.0001087	V0	0.0000000	V1
Rubidium	0.0000184	0.0007897	V0	0.0010549	V0	0.0000000	V1
Samarium	0.0000133	0.0000443	V0	0.0000783	V0	0.0000000	V1
Selenium	0.0003366	0.0003287	V0	0.0005385	V0	0.0000000	V1
Silicon	0.7676322	1.5041630	V0	3.1479250	V0	0.0000000	V1
Silver	0.0000100	0.0000027	V0	0.0000042	V0	0.0000000	V1
Sodium	0.0169447	0.0685745	V0	0.0775902	V0	0.0010694	V0
Strontium	0.0003375	0.0015761	V0	0.0031505	V0	0.0000000	V1
Tantalum	0.0000394	0.0000032	V0	0.0000066	V0	0.0000000	V1
Thallium	0.0000090	0.0000040	V0	0.0000092	V0	0.0000000	V1
Thorium	0.0000059	0.0000653	V0	0.0001226	V0	0.0000000	V1
Tin	0.0004414	0.0000587	V0	0.0000613	V0	0.0000000	V1
Titanium	0.0015201	0.0178653	V0	0.0350981	V0	0.0003352	V0
Tungsten	0.0000938	0.0000360	V0	0.0000634	V0	0.0000328	V0
Uranium	0.0000048	0.0000181	V0	0.0000383	V0	0.0000000	V1
Vanadium	0.0007697	0.0015796	V0	0.0018447	V0	0.0000000	V1
Zinc	0.0055897	0.0031286	V0	0.0030126	V0	0.0003981	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**15-Sep**		**15-Sep**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	17.61	V0	0.20	V0
Aluminum	0.1380326	0.6366315	V0	0.0000000	V1
Antimony	0.0001784	0.0000149	V0	0.0000000	V1
Arsenic	0.0001060	0.0000837	V0	0.0000000	V1
Barium	0.0092847	0.0044707	V0	0.0000000	V1
Beryllium	0.0000946	0.0000191	V0	0.0000000	V1
Bismuth	0.0000093	0.0000030	V0	0.0000000	V1
Cadmium	0.0000174	0.0000031	V0	0.0000000	V1
Calcium	0.4112124	0.5476234	V0	0.0000000	V1
Cerium	0.0000174	0.0007535	V0	0.0000000	V1
Cesium	0.0000100	0.0000412	V0	0.0000000	V1
Chromium	0.0022262	0.0007762	V0	0.0001016	V0
Cobalt	0.0000273	0.0001650	V0	0.0000175	V0
Copper	0.0017171	0.0004794	V0	0.0000921	V0
Iron	0.0393063	0.6027685	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003557	V0	0.0000000	V1
Lead	0.0008577	0.0001928	V0	0.0000384	V0
Lithium	0.0000374	0.0009663	V0	0.0000000	V1
Magnesium	0.0091409	0.1193227	V0	0.0009983	V0
Manganese	0.0006949	0.0119008	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000794	V0	0.0000000	V1
Neodymium	0.0000140	0.0003164	V0	0.0000000	V1
Nickel	0.0005429	0.0008236	V0	0.0000880	V0
Niobium	0.0000202	0.0000877	V0	0.0000000	V1
Palladium	0.0000632	0.0000105	V0	0.0000106	V0
Phosphorus	0.0459574	0.0233550	V0	0.0074366	V0
Platinum	0.0000088	0.0000000	V1	0.0000008	V0
Potassium	0.0061261	0.1462170	V0	0.0011153	V0
Praseodymium	0.0000070	0.0000819	V0	0.0000000	V1
Rubidium	0.0000184	0.0007545	V0	0.0000000	V1
Samarium	0.0000133	0.0000565	V0	0.0000000	V1
Selenium	0.0003366	0.0004588	V0	0.0000000	V1
Silicon	0.7676322	1.6622404	V0	0.0000000	V1
Silver	0.0000100	0.0000022	V0	0.0000000	V1
Sodium	0.0169447	0.0449475	V0	0.0010694	V0
Strontium	0.0003375	0.0020061	V0	0.0000000	V1
Tantalum	0.0000394	0.0000045	V0	0.0000000	V1
Thallium	0.0000090	0.0000054	V0	0.0000000	V1
Thorium	0.0000059	0.0000923	V0	0.0000000	V1
Tin	0.0004414	0.0000331	V0	0.0000000	V1
Titanium	0.0015201	0.0268034	V0	0.0003352	V0
Tungsten	0.0000938	0.0000360	V0	0.0000328	V0
Uranium	0.0000048	0.0000246	V0	0.0000000	V1
Vanadium	0.0007697	0.0011150	V0	0.0000000	V1
Zinc	0.0055897	0.0021267	V0	0.0003981	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		21-Sep		21-Sep		21-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		8.4		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	6.86	V6	10.08	V0	0.44	V0
Aluminum	0.1380326	0.1443420	V6	0.1134936	V0	0.0000000	V1
Antimony	0.0001784	0.0000554	V6	0.0001522	V0	0.0000000	V1
Arsenic	0.0001060	0.0000390	V6	0.0000681	V0	0.0000052	V0
Barium	0.0092847	0.0015104	V6	0.0022334	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V6	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000064	V6	0.0000033	V0	0.0000000	V1
Cadmium	0.0000174	0.0000019	V6	0.0000058	V0	0.0000000	V1
Calcium	0.4112124	0.4930871	V6	0.2514250	V0	0.0000000	V1
Cerium	0.0000174	0.0001575	V6	0.0001498	V0	0.0000000	V1
Cesium	0.0000100	0.0000114	V6	0.0000071	V0	0.0000000	V1
Chromium	0.0022262	0.0002459	V6	0.0002708	V0	0.0000000	V1
Cobalt	0.0000273	0.0000753	V6	0.0000519	V0	0.0000229	V0
Copper	0.0017171	0.0007146	V6	0.0024515	V0	0.0004569	V0
Iron	0.0393063	0.1262633	V6	0.1547699	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000762	V6	0.0000713	V0	0.0000009	V0
Lead	0.0008577	0.0002096	V6	0.0001540	V0	0.0000000	V1
Lithium	0.0000374	0.0001436	V6	0.0000983	V0	0.0000000	V1
Magnesium	0.0091409	0.0375144	V6	0.0532492	V0	0.0008300	V0
Manganese	0.0006949	0.0033230	V6	0.0028624	V0	0.0000398	V0
Molybdenum	0.0007116	0.0000336	V6	0.0000644	V0	0.0000000	V1
Neodymium	0.0000140	0.0000700	V6	0.0000614	V0	0.0000000	V1
Nickel	0.0005429	0.0002689	V6	0.0006189	V0	0.0004341	V0
Niobium	0.0000202	0.0000199	V6	0.0000162	V0	0.0000009	V0
Palladium	0.0000632	0.0000064	V6	0.0000090	V0	0.0000047	V0
Phosphorus	0.0459574	0.0172826	V6	0.0181490	V0	0.0097528	V0
Platinum	0.0000088	0.0000008	V6	0.0000007	V0	0.0000024	V0
Potassium	0.0061261	0.0610929	V6	0.0576718	V0	0.0003454	V0
Praseodymium	0.0000070	0.0000175	V6	0.0000158	V0	0.0000000	V1
Rubidium	0.0000184	0.0002246	V6	0.0001688	V0	0.0000000	V1
Samarium	0.0000133	0.0000128	V6	0.0000103	V0	0.0000000	V1
Selenium	0.0003366	0.0001157	V6	0.0001047	V0	0.0000169	V0
Silicon	0.7676322	0.5006717	V6	0.8209288	V0	0.0000000	V1
Silver	0.0000100	0.0000007	V6	0.0000009	V0	0.0000000	V1
Sodium	0.0169447	0.0196762	V6	0.0221080	V0	0.0000000	V1
Strontium	0.0003375	0.0008178	V6	0.0007212	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V6	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000013	V6	0.0000014	V0	0.0000000	V1
Thorium	0.0000059	0.0000199	V6	0.0000178	V0	0.0000000	V1
Tin	0.0004414	0.0000307	V6	0.0001243	V0	0.0000496	V0
Titanium	0.0015201	0.0057991	V6	0.0048732	V0	0.0002421	V0
Tungsten	0.0000938	0.0000574	V6	0.0000447	V0	0.0000149	V0
Uranium	0.0000048	0.0000055	V6	0.0000052	V0	0.0000000	V1
Vanadium	0.0007697	0.0003285	V6	0.0004183	V0	0.0000000	V1
Zinc	0.0055897	0.0009574	V6	0.0041158	V0	0.0003164	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		21-Sep		21-Sep		21-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	25.93	V0	7.54	V0	0.44	V0
Aluminum	0.1380326	0.5474705	V0	0.0672640	V0	0.0000000	V1
Antimony	0.0001784	0.0009411	V0	0.0003632	V0	0.0000000	V1
Arsenic	0.0001060	0.0007657	V0	0.0001017	V0	0.0000052	V0
Barium	0.0092847	0.0151443	V0	0.0039920	V0	0.0000000	V1
Beryllium	0.0000946	0.0000195	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000319	V0	0.0000261	V0	0.0000000	V1
Cadmium	0.0000174	0.0000205	V0	0.0000119	V0	0.0000000	V1
Calcium	0.4112124	1.0994366	V0	0.1154627	V0	0.0000000	V1
Cerium	0.0000174	0.0007324	V0	0.0000928	V0	0.0000000	V1
Cesium	0.0000100	0.0000374	V0	0.0000037	V0	0.0000000	V1
Chromium	0.0022262	0.0010849	V0	0.0008411	V0	0.0000000	V1
Cobalt	0.0000273	0.0002232	V0	0.0000651	V0	0.0000229	V0
Copper	0.0017171	0.0058631	V0	0.0006272	V0	0.0004569	V0
Iron	0.0393063	0.8309804	V0	0.2021514	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003466	V0	0.0000447	V0	0.0000009	V0
Lead	0.0008577	0.0006856	V0	0.0000845	V0	0.0000000	V1
Lithium	0.0000374	0.0004502	V0	0.0000424	V0	0.0000000	V1
Magnesium	0.0091409	0.2333069	V0	0.0265390	V0	0.0008300	V0
Manganese	0.0006949	0.0144868	V0	0.0026925	V0	0.0000398	V0
Molybdenum	0.0007116	0.0002005	V0	0.0000888	V0	0.0000000	V1
Neodymium	0.0000140	0.0003094	V0	0.0000402	V0	0.0000000	V1
Nickel	0.0005429	0.0008939	V0	0.0004573	V0	0.0004341	V0
Niobium	0.0000202	0.0000764	V0	0.0000098	V0	0.0000009	V0
Palladium	0.0000632	0.0000264	V0	0.0000054	V0	0.0000047	V0
Phosphorus	0.0459574	0.0307756	V0	0.0232480	V0	0.0097528	V0
Platinum	0.0000088	0.0000008	V0	0.0000007	V0	0.0000024	V0
Potassium	0.0061261	0.2038007	V0	0.0454038	V0	0.0003454	V0
Praseodymium	0.0000070	0.0000800	V0	0.0000098	V0	0.0000000	V1
Rubidium	0.0000184	0.0007478	V0	0.0001127	V0	0.0000000	V1
Samarium	0.0000133	0.0000561	V0	0.0000071	V0	0.0000000	V1
Selenium	0.0003366	0.0004191	V0	0.0000793	V0	0.0000169	V0
Silicon	0.7676322	2.8279819	V0	0.2858377	V0	0.0000000	V1
Silver	0.0000100	0.0000058	V0	0.0000012	V0	0.0000000	V1
Sodium	0.0169447	0.0933095	V0	0.0133397	V0	0.0000000	V1
Strontium	0.0003375	0.0030495	V0	0.0003582	V0	0.0000000	V1
Tantalum	0.0000394	0.0000051	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000074	V0	0.0000008	V0	0.0000000	V1
Thorium	0.0000059	0.0000821	V0	0.0000106	V0	0.0000000	V1
Tin	0.0004414	0.0006019	V0	0.0000483	V0	0.0000496	V0
Titanium	0.0015201	0.0235284	V0	0.0032814	V0	0.0002421	V0
Tungsten	0.0000938	0.0002326	V0	0.0000624	V0	0.0000149	V0
Uranium	0.0000048	0.0000250	V0	0.0000028	V0	0.0000000	V1
Vanadium	0.0007697	0.0014231	V0	0.0002887	V0	0.0000000	V1
Zinc	0.0055897	0.0137535	V0	0.0019014	V0	0.0003164	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		21-Sep		21-Sep		21-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	28.38	V0	8.69	V0	0.44	V0
Aluminum	0.1380326	1.1590437	V0	0.1888777	V0	0.0000000	V1
Antimony	0.0001784	0.0000266	V0	0.0000095	V0	0.0000000	V1
Arsenic	0.0001060	0.0002157	V0	0.0000622	V0	0.0000052	V0
Barium	0.0092847	0.0095453	V0	0.0019292	V0	0.0000000	V1
Beryllium	0.0000946	0.0000335	V0	0.0000062	V0	0.0000000	V1
Bismuth	0.0000093	0.0000077	V0	0.0000046	V0	0.0000000	V1
Cadmium	0.0000174	0.0000073	V0	0.0000038	V0	0.0000000	V1
Calcium	0.4112124	0.3436811	V0	0.2827682	V0	0.0000000	V1
Cerium	0.0000174	0.0011578	V0	0.0001954	V0	0.0000000	V1
Cesium	0.0000100	0.0000982	V0	0.0000133	V0	0.0000000	V1
Chromium	0.0022262	0.0014821	V0	0.0003724	V0	0.0000000	V1
Cobalt	0.0000273	0.0003039	V0	0.0000683	V0	0.0000229	V0
Copper	0.0017171	0.0008588	V0	0.0003568	V0	0.0004569	V0
Iron	0.0393063	0.6370619	V0	0.2068152	V0	0.0000000	V1
Lanthanum	0.0000130	0.0004960	V0	0.0000913	V0	0.0000009	V0
Lead	0.0008577	0.0003245	V0	0.0000776	V0	0.0000000	V1
Lithium	0.0000374	0.0010412	V0	0.0001634	V0	0.0000000	V1
Magnesium	0.0091409	0.2041491	V0	0.0436951	V0	0.0008300	V0
Manganese	0.0006949	0.0090812	V0	0.0036389	V0	0.0000398	V0
Molybdenum	0.0007116	0.0000809	V0	0.0000404	V0	0.0000000	V1
Neodymium	0.0000140	0.0004681	V0	0.0000811	V0	0.0000000	V1
Nickel	0.0005429	0.0012193	V0	0.0003554	V0	0.0004341	V0
Niobium	0.0000202	0.0001404	V0	0.0000235	V0	0.0000009	V0
Palladium	0.0000632	0.0000185	V0	0.0000156	V0	0.0000047	V0
Phosphorus	0.0459574	0.0351995	V0	0.0223126	V0	0.0097528	V0
Platinum	0.0000088	0.0000000	V1	0.0000011	V0	0.0000024	V0
Potassium	0.0061261	0.3528864	V0	0.0774694	V0	0.0003454	V0
Praseodymium	0.0000070	0.0001212	V0	0.0000210	V0	0.0000000	V1
Rubidium	0.0000184	0.0014269	V0	0.0002599	V0	0.0000000	V1
Samarium	0.0000133	0.0000904	V0	0.0000144	V0	0.0000000	V1
Selenium	0.0003366	0.0007289	V0	0.0001458	V0	0.0000169	V0
Silicon	0.7676322	5.1221117	V0	0.8849248	V0	0.0000000	V1
Silver	0.0000100	0.0000053	V0	0.0000011	V0	0.0000000	V1
Sodium	0.0169447	0.1295525	V0	0.0268526	V0	0.0000000	V1
Strontium	0.0003375	0.0032563	V0	0.0008114	V0	0.0000000	V1
Tantalum	0.0000394	0.0000084	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000108	V0	0.0000020	V0	0.0000000	V1
Thorium	0.0000059	0.0001385	V0	0.0000233	V0	0.0000000	V1
Tin	0.0004414	0.0000583	V0	0.0000365	V0	0.0000496	V0
Titanium	0.0015201	0.0431085	V0	0.0075948	V0	0.0002421	V0
Tungsten	0.0000938	0.0000641	V0	0.0000260	V0	0.0000149	V0
Uranium	0.0000048	0.0000443	V0	0.0000073	V0	0.0000000	V1
Vanadium	0.0007697	0.0026665	V0	0.0004897	V0	0.0000000	V1
Zinc	0.0055897	0.0027961	V0	0.0015214	V0	0.0003164	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**21-Sep**		**21-Sep**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	40.38	V0	0.44	V0
Aluminum	0.1380326	1.0252681	V0	0.0000000	V1
Antimony	0.0001784	0.0000504	V0	0.0000000	V1
Arsenic	0.0001060	0.0002252	V0	0.0000052	V0
Barium	0.0092847	0.0093395	V0	0.0000000	V1
Beryllium	0.0000946	0.0000376	V0	0.0000000	V1
Bismuth	0.0000093	0.0000192	V0	0.0000000	V1
Cadmium	0.0000174	0.0000099	V0	0.0000000	V1
Calcium	0.4112124	1.4860707	V0	0.0000000	V1
Cerium	0.0000174	0.0011537	V0	0.0000000	V1
Cesium	0.0000100	0.0000721	V0	0.0000000	V1
Chromium	0.0022262	0.0014388	V0	0.0000000	V1
Cobalt	0.0000273	0.0003667	V0	0.0000229	V0
Copper	0.0017171	0.0012586	V0	0.0004569	V0
Iron	0.0393063	1.2517959	V0	0.0000000	V1
Lanthanum	0.0000130	0.0005403	V0	0.0000009	V0
Lead	0.0008577	0.0003537	V0	0.0000000	V1
Lithium	0.0000374	0.0009617	V0	0.0000000	V1
Magnesium	0.0091409	0.2501706	V0	0.0008300	V0
Manganese	0.0006949	0.0217892	V0	0.0000398	V0
Molybdenum	0.0007116	0.0001571	V0	0.0000000	V1
Neodymium	0.0000140	0.0004985	V0	0.0000000	V1
Nickel	0.0005429	0.0012115	V0	0.0004341	V0
Niobium	0.0000202	0.0001233	V0	0.0000009	V0
Palladium	0.0000632	0.0000210	V0	0.0000047	V0
Phosphorus	0.0459574	0.0401510	V0	0.0097528	V0
Platinum	0.0000088	0.0000009	V0	0.0000024	V0
Potassium	0.0061261	0.3220217	V0	0.0003454	V0
Praseodymium	0.0000070	0.0001298	V0	0.0000000	V1
Rubidium	0.0000184	0.0012624	V0	0.0000000	V1
Samarium	0.0000133	0.0000924	V0	0.0000000	V1
Selenium	0.0003366	0.0007661	V0	0.0000169	V0
Silicon	0.7676322	5.2780910	V0	0.0000000	V1
Silver	0.0000100	0.0000048	V0	0.0000000	V1
Sodium	0.0169447	0.1099200	V0	0.0000000	V1
Strontium	0.0003375	0.0037565	V0	0.0000000	V1
Tantalum	0.0000394	0.0000078	V0	0.0000000	V1
Thallium	0.0000090	0.0000124	V0	0.0000000	V1
Thorium	0.0000059	0.0001385	V0	0.0000000	V1
Tin	0.0004414	0.0000646	V0	0.0000496	V0
Titanium	0.0015201	0.0378477	V0	0.0002421	V0
Tungsten	0.0000938	0.0001269	V0	0.0000149	V0
Uranium	0.0000048	0.0000424	V0	0.0000000	V1
Vanadium	0.0007697	0.0022992	V0	0.0000000	V1
Zinc	0.0055897	0.0030799	V0	0.0003164	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		27-Sep		27-Sep		27-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	6.78	V0	12.39	V0	0.15	V0
Aluminum	0.1380326	0.1632863	V0	0.2424577	V0	0.0000000	V1
Antimony	0.0001784	0.0000332	V0	0.0000698	V0	0.0000000	V1
Arsenic	0.0001060	0.0000520	V0	0.0000765	V0	0.0000000	V1
Barium	0.0092847	0.0018439	V0	0.0035616	V0	0.0000000	V1
Beryllium	0.0000946	0.0000061	V0	0.0000081	V0	0.0000000	V1
Bismuth	0.0000093	0.0000611	V0	0.0000016	V0	0.0000007	V0
Cadmium	0.0000174	0.0000108	V0	0.0000048	V0	0.0000000	V1
Calcium	0.4112124	0.3255122	V0	0.5884301	V0	0.0000000	V1
Cerium	0.0000174	0.0001778	V0	0.0003123	V0	0.0000000	V1
Cesium	0.0000100	0.0000118	V0	0.0000139	V0	0.0000000	V1
Chromium	0.0022262	0.0003661	V0	0.0004014	V0	0.0001533	V0
Cobalt	0.0000273	0.0000636	V0	0.0001348	V0	0.0000401	V0
Copper	0.0017171	0.0016703	V0	0.0006342	V0	0.0000933	V0
Iron	0.0393063	0.1334145	V0	0.3269451	V0	0.0019673	V0
Lanthanum	0.0000130	0.0000943	V0	0.0001581	V0	0.0000000	V1
Lead	0.0008577	0.0001072	V0	0.0001312	V0	0.0000000	V1
Lithium	0.0000374	0.0001253	V0	0.0001555	V0	0.0000000	V1
Magnesium	0.0091409	0.0401983	V0	0.1413783	V0	0.0004569	V0
Manganese	0.0006949	0.0029574	V0	0.0069885	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001064	V0	0.0001239	V0	0.0000000	V1
Neodymium	0.0000140	0.0000760	V0	0.0001272	V0	0.0000000	V1
Nickel	0.0005429	0.0012976	V0	0.0004738	V0	0.0000762	V0
Niobium	0.0000202	0.0000190	V0	0.0000299	V0	0.0000000	V1
Palladium	0.0000632	0.0000085	V0	0.0000096	V0	0.0000000	V1
Phosphorus	0.0459574	0.0175417	V0	0.0214975	V0	0.0102834	V0
Platinum	0.0000088	0.0000009	V0	0.0000009	V0	0.0000011	V0
Potassium	0.0061261	0.0788393	V0	0.1005299	V0	0.0003378	V0
Praseodymium	0.0000070	0.0000193	V0	0.0000336	V0	0.0000000	V1
Rubidium	0.0000184	0.0002513	V0	0.0003411	V0	0.0000000	V1
Samarium	0.0000133	0.0000136	V0	0.0000228	V0	0.0000000	V1
Selenium	0.0003366	0.0001414	V0	0.0002175	V0	0.0000163	V0
Silicon	0.7676322	0.5645362	V0	1.2059071	V0	0.0000000	V1
Silver	0.0000100	0.0000027	V0	0.0000015	V0	0.0000000	V1
Sodium	0.0169447	0.0328267	V0	0.0677351	V0	0.0000000	V1
Strontium	0.0003375	0.0007550	V0	0.0013926	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000020	V0	0.0000037	V0	0.0000000	V1
Thorium	0.0000059	0.0000229	V0	0.0000388	V0	0.0000000	V1
Tin	0.0004414	0.0000473	V0	0.0000869	V0	0.0000000	V1
Titanium	0.0015201	0.0063128	V0	0.0111005	V0	0.0002177	V0
Tungsten	0.0000938	0.0000501	V0	0.0001014	V0	0.0000476	V0
Uranium	0.0000048	0.0000061	V0	0.0000105	V0	0.0000000	V1
Vanadium	0.0007697	0.0005008	V0	0.0005791	V0	0.0000000	V1
Zinc	0.0055897	0.0028811	V0	0.0020100	V0	0.0003447	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		27-Sep		27-Sep		27-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	6.18	V0	4.43	V0	0.15	V0
Aluminum	0.1380326	0.1234231	V0	0.0821945	V0	0.0000000	V1
Antimony	0.0001784	0.0002065	V0	0.0000168	V0	0.0000000	V1
Arsenic	0.0001060	0.0000588	V0	0.0000997	V0	0.0000000	V1
Barium	0.0092847	0.0038341	V0	0.0013894	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000234	V0	0.0001011	V0	0.0000007	V0
Cadmium	0.0000174	0.0000069	V0	0.0000055	V0	0.0000000	V1
Calcium	0.4112124	0.2048885	V0	0.1276766	V0	0.0000000	V1
Cerium	0.0000174	0.0001498	V0	0.0000950	V0	0.0000000	V1
Cesium	0.0000100	0.0000067	V0	0.0000043	V0	0.0000000	V1
Chromium	0.0022262	0.0003431	V0	0.0002449	V0	0.0001533	V0
Cobalt	0.0000273	0.0000537	V0	0.0000731	V0	0.0000401	V0
Copper	0.0017171	0.0016233	V0	0.0011422	V0	0.0000933	V0
Iron	0.0393063	0.1444497	V0	0.0636285	V0	0.0019673	V0
Lanthanum	0.0000130	0.0000735	V0	0.0000508	V0	0.0000000	V1
Lead	0.0008577	0.0001230	V0	0.0000703	V0	0.0000000	V1
Lithium	0.0000374	0.0000744	V0	0.0000403	V0	0.0000000	V1
Magnesium	0.0091409	0.0459002	V0	0.0253511	V0	0.0004569	V0
Manganese	0.0006949	0.0030629	V0	0.0020686	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001087	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000622	V0	0.0000375	V0	0.0000000	V1
Nickel	0.0005429	0.0004155	V0	0.0003126	V0	0.0000762	V0
Niobium	0.0000202	0.0000154	V0	0.0000154	V0	0.0000000	V1
Palladium	0.0000632	0.0000068	V0	0.0000026	V0	0.0000000	V1
Phosphorus	0.0459574	0.0210460	V0	0.0196447	V0	0.0102834	V0
Platinum	0.0000088	0.0000009	V0	0.0000000	V1	0.0000011	V0
Potassium	0.0061261	0.0627022	V0	0.0529433	V0	0.0003378	V0
Praseodymium	0.0000070	0.0000160	V0	0.0000099	V0	0.0000000	V1
Rubidium	0.0000184	0.0001685	V0	0.0001127	V0	0.0000000	V1
Samarium	0.0000133	0.0000110	V0	0.0000064	V0	0.0000000	V1
Selenium	0.0003366	0.0001281	V0	0.0001101	V0	0.0000163	V0
Silicon	0.7676322	0.5715794	V0	0.3556512	V0	0.0000000	V1
Silver	0.0000100	0.0000014	V0	0.0000007	V0	0.0000000	V1
Sodium	0.0169447	0.0269173	V0	0.0200980	V0	0.0000000	V1
Strontium	0.0003375	0.0006519	V0	0.0003557	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000016	V0	0.0000013	V0	0.0000000	V1
Thorium	0.0000059	0.0000173	V0	0.0000121	V0	0.0000000	V1
Tin	0.0004414	0.0001502	V0	0.0000360	V0	0.0000000	V1
Titanium	0.0015201	0.0063194	V0	0.0038388	V0	0.0002177	V0
Tungsten	0.0000938	0.0000537	V0	0.0000744	V0	0.0000476	V0
Uranium	0.0000048	0.0000049	V0	0.0000028	V0	0.0000000	V1
Vanadium	0.0007697	0.0002569	V0	0.0001365	V0	0.0000000	V1
Zinc	0.0055897	0.0034795	V0	0.0014387	V0	0.0003447	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		27-Sep		27-Sep		27-Sep	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	8.31	V0	17.95	V0	0.15	V0
Aluminum	0.1380326	0.1480671	V0	0.8439835	V0	0.0000000	V1
Antimony	0.0001784	0.0000354	V0	0.0000247	V0	0.0000000	V1
Arsenic	0.0001060	0.0000364	V0	0.0001348	V0	0.0000000	V1
Barium	0.0092847	0.0014760	V0	0.0066566	V0	0.0000000	V1
Beryllium	0.0000946	0.0000045	V0	0.0000261	V0	0.0000000	V1
Bismuth	0.0000093	0.0000077	V0	0.0000769	V0	0.0000007	V0
Cadmium	0.0000174	0.0000030	V0	0.0000057	V0	0.0000000	V1
Calcium	0.4112124	0.2055244	V0	0.3271385	V0	0.0000000	V1
Cerium	0.0000174	0.0001447	V0	0.0007828	V0	0.0000000	V1
Cesium	0.0000100	0.0000096	V0	0.0000608	V0	0.0000000	V1
Chromium	0.0022262	0.0003502	V0	0.0010463	V0	0.0001533	V0
Cobalt	0.0000273	0.0000575	V0	0.0002490	V0	0.0000401	V0
Copper	0.0017171	0.0014289	V0	0.0007221	V0	0.0000933	V0
Iron	0.0393063	0.0972732	V0	0.4867699	V0	0.0019673	V0
Lanthanum	0.0000130	0.0000780	V0	0.0003739	V0	0.0000000	V1
Lead	0.0008577	0.0000810	V0	0.0002389	V0	0.0000000	V1
Lithium	0.0000374	0.0000898	V0	0.0008028	V0	0.0000000	V1
Magnesium	0.0091409	0.0325336	V0	0.1133141	V0	0.0004569	V0
Manganese	0.0006949	0.0023495	V0	0.0107864	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000453	V0	0.0001093	V0	0.0000000	V1
Neodymium	0.0000140	0.0000614	V0	0.0003386	V0	0.0000000	V1
Nickel	0.0005429	0.0003569	V0	0.0011010	V0	0.0000762	V0
Niobium	0.0000202	0.0000170	V0	0.0000908	V0	0.0000000	V1
Palladium	0.0000632	0.0000043	V0	0.0000137	V0	0.0000000	V1
Phosphorus	0.0459574	0.0125183	V0	0.0237620	V0	0.0102834	V0
Platinum	0.0000088	0.0000000	V1	0.0000007	V0	0.0000011	V0
Potassium	0.0061261	0.0641251	V0	0.2335267	V0	0.0003378	V0
Praseodymium	0.0000070	0.0000157	V0	0.0000872	V0	0.0000000	V1
Rubidium	0.0000184	0.0001924	V0	0.0009995	V0	0.0000000	V1
Samarium	0.0000133	0.0000110	V0	0.0000622	V0	0.0000000	V1
Selenium	0.0003366	0.0001322	V0	0.0004970	V0	0.0000163	V0
Silicon	0.7676322	0.5866300	V0	3.1943357	V0	0.0000000	V1
Silver	0.0000100	0.0000009	V0	0.0000037	V0	0.0000000	V1
Sodium	0.0169447	0.0229252	V0	0.0934547	V0	0.0000000	V1
Strontium	0.0003375	0.0005185	V0	0.0020970	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000055	V0	0.0000000	V1
Thallium	0.0000090	0.0000015	V0	0.0000082	V0	0.0000000	V1
Thorium	0.0000059	0.0000194	V0	0.0001016	V0	0.0000000	V1
Tin	0.0004414	0.0000323	V0	0.0000573	V0	0.0000000	V1
Titanium	0.0015201	0.0049734	V0	0.0275565	V0	0.0002177	V0
Tungsten	0.0000938	0.0000361	V0	0.0000841	V0	0.0000476	V0
Uranium	0.0000048	0.0000047	V0	0.0000278	V0	0.0000000	V1
Vanadium	0.0007697	0.0004576	V0	0.0015052	V0	0.0000000	V1
Zinc	0.0055897	0.0013303	V0	0.0023335	V0	0.0003447	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**27-Sep**		**27-Sep**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	14.61	V0	0.15	V0
Aluminum	0.1380326	0.5256763	V0	0.0000000	V1
Antimony	0.0001784	0.0000243	V0	0.0000000	V1
Arsenic	0.0001060	0.0000897	V0	0.0000000	V1
Barium	0.0092847	0.0040110	V0	0.0000000	V1
Beryllium	0.0000946	0.0000163	V0	0.0000000	V1
Bismuth	0.0000093	0.0000040	V0	0.0000007	V0
Cadmium	0.0000174	0.0000043	V0	0.0000000	V1
Calcium	0.4112124	0.5318478	V0	0.0000000	V1
Cerium	0.0000174	0.0005581	V0	0.0000000	V1
Cesium	0.0000100	0.0000331	V0	0.0000000	V1
Chromium	0.0022262	0.0006960	V0	0.0001533	V0
Cobalt	0.0000273	0.0001731	V0	0.0000401	V0
Copper	0.0017171	0.0005380	V0	0.0000933	V0
Iron	0.0393063	0.4508334	V0	0.0019673	V0
Lanthanum	0.0000130	0.0002631	V0	0.0000000	V1
Lead	0.0008577	0.0001745	V0	0.0000000	V1
Lithium	0.0000374	0.0005106	V0	0.0000000	V1
Magnesium	0.0091409	0.0999503	V0	0.0004569	V0
Manganese	0.0006949	0.0097300	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000696	V0	0.0000000	V1
Neodymium	0.0000140	0.0002372	V0	0.0000000	V1
Nickel	0.0005429	0.0006618	V0	0.0000762	V0
Niobium	0.0000202	0.0000554	V0	0.0000000	V1
Palladium	0.0000632	0.0000116	V0	0.0000000	V1
Phosphorus	0.0459574	0.0217538	V0	0.0102834	V0
Platinum	0.0000088	0.0000000	V1	0.0000011	V0
Potassium	0.0061261	0.1429150	V0	0.0003378	V0
Praseodymium	0.0000070	0.0000611	V0	0.0000000	V1
Rubidium	0.0000184	0.0006026	V0	0.0000000	V1
Samarium	0.0000133	0.0000424	V0	0.0000000	V1
Selenium	0.0003366	0.0003869	V0	0.0000163	V0
Silicon	0.7676322	2.2917807	V0	0.0000000	V1
Silver	0.0000100	0.0000024	V0	0.0000000	V1
Sodium	0.0169447	0.1259285	V0	0.0000000	V1
Strontium	0.0003375	0.0016163	V0	0.0000000	V1
Tantalum	0.0000394	0.0000030	V0	0.0000000	V1
Thallium	0.0000090	0.0000054	V0	0.0000000	V1
Thorium	0.0000059	0.0000680	V0	0.0000000	V1
Tin	0.0004414	0.0000524	V0	0.0000000	V1
Titanium	0.0015201	0.0176446	V0	0.0002177	V0
Tungsten	0.0000938	0.0000735	V0	0.0000476	V0
Uranium	0.0000048	0.0000174	V0	0.0000000	V1
Vanadium	0.0007697	0.0009648	V0	0.0000000	V1
Zinc	0.0055897	0.0021227	V0	0.0003447	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		03-Oct		03-Oct		03-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.18	V0	8.81	V6	0.43	V0
Aluminum	0.1380326	0.0566096	V0	0.1427606	V6	0.0000000	V1
Antimony	0.0001784	0.0000508	V0	0.0002641	V6	0.0000111	V0
Arsenic	0.0001060	0.0000197	V0	0.0002956	V6	0.0000000	V1
Barium	0.0092847	0.0006564	V0	0.0033438	V6	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000045	V6	0.0000000	V1
Bismuth	0.0000093	0.0002403	V0	0.0000172	V6	0.0000145	V0
Cadmium	0.0000174	0.0000047	V0	0.0000145	V6	0.0000012	V0
Calcium	0.4112124	0.1943284	V0	0.2646115	V6	0.0000000	V1
Cerium	0.0000174	0.0000610	V0	0.0001883	V6	0.0000009	V0
Cesium	0.0000100	0.0000041	V0	0.0000095	V6	0.0000000	V1
Chromium	0.0022262	0.0002642	V0	0.0005172	V6	0.0001002	V0
Cobalt	0.0000273	0.0000367	V0	0.0000758	V6	0.0000751	V0
Copper	0.0017171	0.0021778	V0	0.0017231	V6	0.0002885	V0
Iron	0.0393063	0.0612305	V0	0.1974148	V6	0.0043810	V0
Lanthanum	0.0000130	0.0000294	V0	0.0000893	V6	0.0000006	V0
Lead	0.0008577	0.0000566	V0	0.0001117	V6	0.0000000	V1
Lithium	0.0000374	0.0000661	V0	0.0001234	V6	0.0000000	V1
Magnesium	0.0091409	0.0157843	V0	0.0595358	V6	0.0010530	V0
Manganese	0.0006949	0.0011851	V0	0.0033167	V6	0.0000553	V0
Molybdenum	0.0007116	0.0000460	V0	0.0007699	V6	0.0000000	V1
Neodymium	0.0000140	0.0000264	V0	0.0000756	V6	0.0000021	V0
Nickel	0.0005429	0.0001645	V0	0.0005930	V6	0.0001638	V0
Niobium	0.0000202	0.0000151	V0	0.0000239	V6	0.0000013	V0
Palladium	0.0000632	0.0000048	V0	0.0000090	V6	0.0000083	V0
Phosphorus	0.0459574	0.0129903	V0	0.0146585	V6	0.0095259	V0
Platinum	0.0000088	0.0000011	V0	0.0000013	V6	0.0000007	V0
Potassium	0.0061261	0.0254023	V0	0.0531031	V6	0.0012786	V0
Praseodymium	0.0000070	0.0000068	V0	0.0000199	V6	0.0000003	V0
Rubidium	0.0000184	0.0000890	V0	0.0001997	V6	0.0000016	V0
Samarium	0.0000133	0.0000052	V0	0.0000137	V6	0.0000000	V1
Selenium	0.0003366	0.0000678	V0	0.0002533	V6	0.0000000	V1
Silicon	0.7676322	0.1735033	V0	0.6540993	V6	0.0000000	V1
Silver	0.0000100	0.0000067	V0	0.0000074	V6	0.0000132	V0
Sodium	0.0169447	0.0077089	V0	0.0199316	V6	0.0016568	V0
Strontium	0.0003375	0.0003423	V0	0.0007518	V6	0.0000238	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V6	0.0000000	V1
Thallium	0.0000090	0.0000009	V0	0.0000022	V6	0.0000000	V1
Thorium	0.0000059	0.0000088	V0	0.0000225	V6	0.0000000	V1
Tin	0.0004414	0.0000439	V0	0.0001885	V6	0.0000000	V1
Titanium	0.0015201	0.0044946	V0	0.0214585	V6	0.0003710	V0
Tungsten	0.0000938	0.0000471	V0	0.0000618	V6	0.0000830	V0
Uranium	0.0000048	0.0000025	V0	0.0000070	V6	0.0000000	V1
Vanadium	0.0007697	0.0001988	V0	0.0003556	V6	0.0000000	V1
Zinc	0.0055897	0.0019510	V0	0.0048252	V6	0.0007496	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		03-Oct		03-Oct		03-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	11.20	V0	4.42	V0	0.43	V0
Aluminum	0.1380326	0.1859755	V0	0.0239130	V0	0.0000000	V1
Antimony	0.0001784	0.0004058	V0	0.0000205	V0	0.0000111	V0
Arsenic	0.0001060	0.0000832	V0	0.0000455	V0	0.0000000	V1
Barium	0.0092847	0.0065972	V0	0.0004865	V0	0.0000000	V1
Beryllium	0.0000946	0.0000072	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000191	V0	0.0000176	V0	0.0000145	V0
Cadmium	0.0000174	0.0000164	V0	0.0000153	V0	0.0000012	V0
Calcium	0.4112124	0.4956604	V0	0.0530934	V0	0.0000000	V1
Cerium	0.0000174	0.0004064	V0	0.0000322	V0	0.0000009	V0
Cesium	0.0000100	0.0000126	V0	0.0000019	V0	0.0000000	V1
Chromium	0.0022262	0.0006225	V0	0.0001490	V0	0.0001002	V0
Cobalt	0.0000273	0.0005185	V0	0.0000245	V0	0.0000751	V0
Copper	0.0017171	0.0070603	V0	0.0003951	V0	0.0002885	V0
Iron	0.0393063	0.2628149	V0	0.0319479	V0	0.0043810	V0
Lanthanum	0.0000130	0.0001124	V0	0.0000145	V0	0.0000006	V0
Lead	0.0008577	0.0002005	V0	0.0000618	V0	0.0000000	V1
Lithium	0.0000374	0.0001538	V0	0.0000171	V0	0.0000000	V1
Magnesium	0.0091409	0.0880738	V0	0.0118715	V0	0.0010530	V0
Manganese	0.0006949	0.0055116	V0	0.0007787	V0	0.0000553	V0
Molybdenum	0.0007116	0.0001948	V0	0.0000313	V0	0.0000000	V1
Neodymium	0.0000140	0.0000998	V0	0.0000114	V0	0.0000021	V0
Nickel	0.0005429	0.0039504	V4	0.0001475	V0	0.0001638	V0
Niobium	0.0000202	0.0000268	V0	0.0000042	V0	0.0000013	V0
Palladium	0.0000632	0.0000119	V0	0.0000069	V0	0.0000083	V0
Phosphorus	0.0459574	0.0152207	V0	0.0144273	V0	0.0095259	V0
Platinum	0.0000088	0.0000019	V0	0.0000013	V0	0.0000007	V0
Potassium	0.0061261	0.0752790	V0	0.0269720	V0	0.0012786	V0
Praseodymium	0.0000070	0.0000257	V0	0.0000030	V0	0.0000003	V0
Rubidium	0.0000184	0.0002629	V0	0.0000607	V0	0.0000016	V0
Samarium	0.0000133	0.0000174	V0	0.0000023	V0	0.0000000	V1
Selenium	0.0003366	0.0001903	V0	0.0000386	V0	0.0000000	V1
Silicon	0.7676322	0.6839688	V0	0.1343191	V0	0.0000000	V1
Silver	0.0000100	0.0000071	V0	0.0000034	V0	0.0000132	V0
Sodium	0.0169447	0.0844720	V0	0.0071850	V0	0.0016568	V0
Strontium	0.0003375	0.0014802	V0	0.0001468	V0	0.0000238	V0
Tantalum	0.0000394	0.0000023	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000030	V0	0.0000009	V0	0.0000000	V1
Thorium	0.0000059	0.0000323	V0	0.0000035	V0	0.0000000	V1
Tin	0.0004414	0.0003265	V0	0.0000382	V0	0.0000000	V1
Titanium	0.0015201	0.0093558	V0	0.0016768	V0	0.0003710	V0
Tungsten	0.0000938	0.0001615	V0	0.0000126	V0	0.0000830	V0
Uranium	0.0000048	0.0000105	V0	0.0000012	V0	0.0000000	V1
Vanadium	0.0007697	0.0004560	V0	0.0000596	V0	0.0000000	V1
Zinc	0.0055897	0.0072661	V0	0.0016236	V0	0.0007496	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		03-Oct		03-Oct		03-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.96	V0	2.88	V0	0.43	V0
Aluminum	0.1380326	0.0448255	V0	0.0749730	V0	0.0000000	V1
Antimony	0.0001784	0.0000228	V0	0.0000095	V0	0.0000111	V0
Arsenic	0.0001060	0.0000177	V0	0.0000170	V0	0.0000000	V1
Barium	0.0092847	0.0004956	V0	0.0006734	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000052	V0	0.0000233	V0	0.0000145	V0
Cadmium	0.0000174	0.0000052	V0	0.0000028	V0	0.0000012	V0
Calcium	0.4112124	0.0741722	V0	0.0683437	V0	0.0000000	V1
Cerium	0.0000174	0.0000478	V0	0.0000796	V0	0.0000009	V0
Cesium	0.0000100	0.0000029	V0	0.0000047	V0	0.0000000	V1
Chromium	0.0022262	0.0001779	V0	0.0002331	V0	0.0001002	V0
Cobalt	0.0000273	0.0000327	V0	0.0000382	V0	0.0000751	V0
Copper	0.0017171	0.0005821	V0	0.0002520	V0	0.0002885	V0
Iron	0.0393063	0.0365668	V0	0.0618113	V0	0.0043810	V0
Lanthanum	0.0000130	0.0000226	V0	0.0000391	V0	0.0000006	V0
Lead	0.0008577	0.0000000	V1	0.0000471	V0	0.0000000	V1
Lithium	0.0000374	0.0000496	V0	0.0001134	V0	0.0000000	V1
Magnesium	0.0091409	0.0102395	V0	0.0155960	V0	0.0010530	V0
Manganese	0.0006949	0.0007808	V0	0.0011958	V0	0.0000553	V0
Molybdenum	0.0007116	0.0000647	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000211	V0	0.0000331	V0	0.0000021	V0
Nickel	0.0005429	0.0001948	V0	0.0001796	V0	0.0001638	V0
Niobium	0.0000202	0.0000066	V0	0.0000126	V0	0.0000013	V0
Palladium	0.0000632	0.0000043	V0	0.0000028	V0	0.0000083	V0
Phosphorus	0.0459574	0.0131889	V0	0.0127255	V0	0.0095259	V0
Platinum	0.0000088	0.0000009	V0	0.0000004	V0	0.0000007	V0
Potassium	0.0061261	0.0223307	V0	0.0237379	V0	0.0012786	V0
Praseodymium	0.0000070	0.0000056	V0	0.0000088	V0	0.0000003	V0
Rubidium	0.0000184	0.0000669	V0	0.0000875	V0	0.0000016	V0
Samarium	0.0000133	0.0000040	V0	0.0000061	V0	0.0000000	V1
Selenium	0.0003366	0.0000486	V0	0.0000543	V0	0.0000000	V1
Silicon	0.7676322	0.1453522	V0	0.2188792	V0	0.0000000	V1
Silver	0.0000100	0.0000024	V0	0.0000028	V0	0.0000132	V0
Sodium	0.0169447	0.0080359	V0	0.0072702	V0	0.0016568	V0
Strontium	0.0003375	0.0001983	V0	0.0002514	V0	0.0000238	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000007	V0	0.0000007	V0	0.0000000	V1
Thorium	0.0000059	0.0000063	V0	0.0000116	V0	0.0000000	V1
Tin	0.0004414	0.0000440	V0	0.0000347	V0	0.0000000	V1
Titanium	0.0015201	0.0065739	V0	0.0036916	V0	0.0003710	V0
Tungsten	0.0000938	0.0000211	V0	0.0000117	V0	0.0000830	V0
Uranium	0.0000048	0.0000016	V0	0.0000034	V0	0.0000000	V1
Vanadium	0.0007697	0.0000904	V0	0.0001337	V0	0.0000000	V1
Zinc	0.0055897	0.0014635	V0	0.0010565	V0	0.0007496	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**03-Oct**		**03-Oct**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	6.16	V0	0.43	V0
Aluminum	0.1380326	0.1769091	V0	0.0000000	V1
Antimony	0.0001784	0.0000261	V0	0.0000111	V0
Arsenic	0.0001060	0.0000440	V0	0.0000000	V1
Barium	0.0092847	0.0017541	V0	0.0000000	V1
Beryllium	0.0000946	0.0000061	V0	0.0000000	V1
Bismuth	0.0000093	0.0000063	V0	0.0000145	V0
Cadmium	0.0000174	0.0000031	V0	0.0000012	V0
Calcium	0.4112124	0.3280368	V0	0.0000000	V1
Cerium	0.0000174	0.0002245	V0	0.0000009	V0
Cesium	0.0000100	0.0000114	V0	0.0000000	V1
Chromium	0.0022262	0.0006996	V0	0.0001002	V0
Cobalt	0.0000273	0.0000806	V0	0.0000751	V0
Copper	0.0017171	0.0006983	V0	0.0002885	V0
Iron	0.0393063	0.2557889	V0	0.0043810	V0
Lanthanum	0.0000130	0.0001082	V0	0.0000006	V0
Lead	0.0008577	0.0000855	V0	0.0000000	V1
Lithium	0.0000374	0.0002332	V0	0.0000000	V1
Magnesium	0.0091409	0.0506622	V0	0.0010530	V0
Manganese	0.0006949	0.0053301	V0	0.0000553	V0
Molybdenum	0.0007116	0.0001673	V0	0.0000000	V1
Neodymium	0.0000140	0.0000943	V0	0.0000021	V0
Nickel	0.0005429	0.0009280	V0	0.0001638	V0
Niobium	0.0000202	0.0000246	V0	0.0000013	V0
Palladium	0.0000632	0.0000036	V0	0.0000083	V0
Phosphorus	0.0459574	0.0138471	V0	0.0095259	V0
Platinum	0.0000088	0.0000009	V0	0.0000007	V0
Potassium	0.0061261	0.0498009	V0	0.0012786	V0
Praseodymium	0.0000070	0.0000245	V0	0.0000003	V0
Rubidium	0.0000184	0.0002149	V0	0.0000016	V0
Samarium	0.0000133	0.0000171	V0	0.0000000	V1
Selenium	0.0003366	0.0001458	V0	0.0000000	V1
Silicon	0.7676322	0.4922013	V0	0.0000000	V1
Silver	0.0000100	0.0000020	V0	0.0000132	V0
Sodium	0.0169447	0.0186887	V0	0.0016568	V0
Strontium	0.0003375	0.0007653	V0	0.0000238	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000021	V0	0.0000000	V1
Thorium	0.0000059	0.0000312	V0	0.0000000	V1
Tin	0.0004414	0.0000719	V0	0.0000000	V1
Titanium	0.0015201	0.0066319	V0	0.0003710	V0
Tungsten	0.0000938	0.0000470	V0	0.0000830	V0
Uranium	0.0000048	0.0000074	V0	0.0000000	V1
Vanadium	0.0007697	0.0003223	V0	0.0000000	V1
Zinc	0.0055897	0.0017048	V0	0.0007496	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**09-Oct**		**09-Oct**		**09-Oct**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**23.9**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	1.32	V0	1.69	V0	0.51	V0
Aluminum	0.1380326	0.0129983	V0	0.0158347	V0	0.0000000	V1
Antimony	0.0001784	0.0000212	V0	0.0000816	V0	0.0000000	V1
Arsenic	0.0001060	0.0000342	V0	0.0000302	V0	0.0000000	V1
Barium	0.0092847	0.0004163	V0	0.0008348	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000130	V0	0.0000096	V0	0.0000132	V0
Cadmium	0.0000174	0.0000045	V0	0.0000032	V0	0.0000000	V1
Calcium	0.4112124	0.0366479	V0	0.0382956	V0	0.0000000	V1
Cerium	0.0000174	0.0000136	V0	0.0000259	V0	0.0000000	V1
Cesium	0.0000100	0.0000010	V0	0.0000014	V0	0.0000000	V1
Chromium	0.0022262	0.0001864	V0	0.0002400	V0	0.0000000	V1
Cobalt	0.0000273	0.0000635	V0	0.0000512	V0	0.0000267	V0
Copper	0.0017171	0.0062578	V0	0.0006887	V0	0.0002006	V0
Iron	0.0393063	0.0140504	V0	0.0193761	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000066	V0	0.0000124	V0	0.0000000	V1
Lead	0.0008577	0.0001845	V0	0.0000751	V0	0.0000000	V1
Lithium	0.0000374	0.0000106	V0	0.0000120	V0	0.0000000	V1
Magnesium	0.0091409	0.0043335	V0	0.0061448	V0	0.0008623	V0
Manganese	0.0006949	0.0004379	V0	0.0004979	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000707	V0	0.0000933	V0	0.0000000	V1
Neodymium	0.0000140	0.0000052	V0	0.0000076	V0	0.0000000	V1
Nickel	0.0005429	0.0002526	V0	0.0001650	V0	0.0001080	V0
Niobium	0.0000202	0.0000031	V0	0.0000032	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000087	V0	0.0000000	V1
Phosphorus	0.0459574	0.0092329	V0	0.0095102	V0	0.0078333	V0
Platinum	0.0000088	0.0000009	V0	0.0000012	V0	0.0000012	V0
Potassium	0.0061261	0.0080613	V0	0.0103924	V0	0.0005488	V0
Praseodymium	0.0000070	0.0000016	V0	0.0000020	V0	0.0000000	V1
Rubidium	0.0000184	0.0000196	V0	0.0000283	V0	0.0000000	V1
Samarium	0.0000133	0.0000010	V0	0.0000012	V0	0.0000000	V1
Selenium	0.0003366	0.0000362	V0	0.0000341	V0	0.0000000	V1
Silicon	0.7676322	0.0662829	V0	0.0656669	V0	0.0000000	V1
Silver	0.0000100	0.0000023	V0	0.0000018	V0	0.0000017	V0
Sodium	0.0169447	0.0051338	V0	0.0051048	V0	0.0008657	V0
Strontium	0.0003375	0.0000765	V0	0.0001143	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000020	V0	0.0000023	V0	0.0000000	V1
Tin	0.0004414	0.0001048	V0	0.0000853	V0	0.0000000	V1
Titanium	0.0015201	0.0030498	V0	0.0023106	V0	0.0002829	V0
Tungsten	0.0000938	0.0000488	V0	0.0000186	V0	0.0000512	V0
Uranium	0.0000048	0.0000013	V0	0.0000012	V0	0.0000000	V1
Vanadium	0.0007697	0.0000000	V1	0.0001012	V0	0.0000686	V0
Zinc	0.0055897	0.0047553	V0	0.0015016	V0	0.0003407	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		09-Oct		09-Oct		09-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.62	V0	0.58	V0	0.51	V0
Aluminum	0.1380326	0.0196094	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0000909	V0	0.0000079	V0	0.0000000	V1
Arsenic	0.0001060	0.0000160	V0	0.0000145	V0	0.0000000	V1
Barium	0.0092847	0.0009908	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000490	V0	0.0000249	V0	0.0000132	V0
Cadmium	0.0000174	0.0000023	V0	0.0000015	V0	0.0000000	V1
Calcium	0.4112124	0.0480001	V0	0.0268347	V0	0.0000000	V1
Cerium	0.0000174	0.0000213	V0	0.0000025	V0	0.0000000	V1
Cesium	0.0000100	0.0000018	V0	0.0000005	V0	0.0000000	V1
Chromium	0.0022262	0.0002064	V0	0.0001559	V0	0.0000000	V1
Cobalt	0.0000273	0.0000433	V0	0.0000262	V0	0.0000267	V0
Copper	0.0017171	0.0007853	V0	0.0008232	V0	0.0002006	V0
Iron	0.0393063	0.0237833	V0	0.0061811	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000093	V0	0.0000014	V0	0.0000000	V1
Lead	0.0008577	0.0000647	V0	0.0000667	V0	0.0000000	V1
Lithium	0.0000374	0.0000154	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0067768	V0	0.0027883	V0	0.0008623	V0
Manganese	0.0006949	0.0006848	V0	0.0001636	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001422	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000076	V0	0.0000012	V0	0.0000000	V1
Nickel	0.0005429	0.0001999	V0	0.0002911	V0	0.0001080	V0
Niobium	0.0000202	0.0000041	V0	0.0000016	V0	0.0000000	V1
Palladium	0.0000632	0.0000029	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0088394	V0	0.0085980	V0	0.0078333	V0
Platinum	0.0000088	0.0000010	V0	0.0000011	V0	0.0000012	V0
Potassium	0.0061261	0.0166396	V0	0.0040831	V0	0.0005488	V0
Praseodymium	0.0000070	0.0000022	V0	0.0000004	V0	0.0000000	V1
Rubidium	0.0000184	0.0000418	V0	0.0000079	V0	0.0000000	V1
Samarium	0.0000133	0.0000014	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000438	V0	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0895398	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000009	V0	0.0000005	V0	0.0000017	V0
Sodium	0.0169447	0.0102444	V0	0.0026684	V0	0.0008657	V0
Strontium	0.0003375	0.0001474	V0	0.0000352	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000024	V0	0.0000005	V0	0.0000000	V1
Tin	0.0004414	0.0001706	V0	0.0000569	V0	0.0000000	V1
Titanium	0.0015201	0.0036092	V0	0.0006023	V0	0.0002829	V0
Tungsten	0.0000938	0.0000356	V0	0.0000475	V0	0.0000512	V0
Uranium	0.0000048	0.0000013	V0	0.0000006	V0	0.0000000	V1
Vanadium	0.0007697	0.0000559	V0	0.0000000	V1	0.0000686	V0
Zinc	0.0055897	0.0020981	V0	0.0019766	V0	0.0003407	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		09-Oct		09-Oct		09-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.17	V0	1.17	V0	0.51	V0
Aluminum	0.1380326	0.0091541	V0	0.0096069	V0	0.0000000	V1
Antimony	0.0001784	0.0000237	V0	0.0000144	V0	0.0000000	V1
Arsenic	0.0001060	0.0000261	V0	0.0000258	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000082	V0	0.0000340	V0	0.0000132	V0
Cadmium	0.0000174	0.0000037	V0	0.0000037	V0	0.0000000	V1
Calcium	0.4112124	0.0285662	V0	0.0223023	V0	0.0000000	V1
Cerium	0.0000174	0.0000113	V0	0.0000086	V0	0.0000000	V1
Cesium	0.0000100	0.0000009	V0	0.0000010	V0	0.0000000	V1
Chromium	0.0022262	0.0001557	V0	0.0002005	V0	0.0000000	V1
Cobalt	0.0000273	0.0000666	V0	0.0000237	V0	0.0000267	V0
Copper	0.0017171	0.0003482	V0	0.0005105	V0	0.0002006	V0
Iron	0.0393063	0.0108287	V0	0.0091110	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000052	V0	0.0000043	V0	0.0000000	V1
Lead	0.0008577	0.0000833	V0	0.0000906	V0	0.0000000	V1
Lithium	0.0000374	0.0000076	V0	0.0000057	V0	0.0000000	V1
Magnesium	0.0091409	0.0032332	V0	0.0033042	V0	0.0008623	V0
Manganese	0.0006949	0.0003312	V0	0.0001970	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000943	V0	0.0000000	V1
Neodymium	0.0000140	0.0000048	V0	0.0000036	V0	0.0000000	V1
Nickel	0.0005429	0.0001163	V0	0.0001860	V0	0.0001080	V0
Niobium	0.0000202	0.0000027	V0	0.0000027	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000029	V0	0.0000000	V1
Phosphorus	0.0459574	0.0097578	V0	0.0095256	V0	0.0078333	V0
Platinum	0.0000088	0.0000009	V0	0.0000043	V0	0.0000012	V0
Potassium	0.0061261	0.0080440	V0	0.0062520	V0	0.0005488	V0
Praseodymium	0.0000070	0.0000013	V0	0.0000012	V0	0.0000000	V1
Rubidium	0.0000184	0.0000175	V0	0.0000156	V0	0.0000000	V1
Samarium	0.0000133	0.0000007	V0	0.0000008	V0	0.0000000	V1
Selenium	0.0003366	0.0000000	V1	0.0000313	V0	0.0000000	V1
Silicon	0.7676322	0.0591371	V0	0.0668917	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000010	V0	0.0000017	V0
Sodium	0.0169447	0.0059332	V0	0.0030194	V0	0.0008657	V0
Strontium	0.0003375	0.0000710	V0	0.0000479	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000006	V0	0.0000000	V1
Thorium	0.0000059	0.0000016	V0	0.0000012	V0	0.0000000	V1
Tin	0.0004414	0.0000430	V0	0.0000441	V0	0.0000000	V1
Titanium	0.0015201	0.0006371	V0	0.0024648	V0	0.0002829	V0
Tungsten	0.0000938	0.0000881	V0	0.0000205	V0	0.0000512	V0
Uranium	0.0000048	0.0000013	V0	0.0000016	V0	0.0000000	V1
Vanadium	0.0007697	0.0000000	V1	0.0000000	V1	0.0000686	V0
Zinc	0.0055897	0.0011831	V0	0.0011103	V0	0.0003407	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**09-Oct**		**09-Oct**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	1.77	V0	0.51	V0
Aluminum	0.1380326	0.0222148	V0	0.0000000	V1
Antimony	0.0001784	0.0000168	V0	0.0000000	V1
Arsenic	0.0001060	0.0000224	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000065	V0	0.0000132	V0
Cadmium	0.0000174	0.0000034	V0	0.0000000	V1
Calcium	0.4112124	0.0307561	V0	0.0000000	V1
Cerium	0.0000174	0.0000212	V0	0.0000000	V1
Cesium	0.0000100	0.0000018	V0	0.0000000	V1
Chromium	0.0022262	0.0003491	V0	0.0000000	V1
Cobalt	0.0000273	0.0000349	V0	0.0000267	V0
Copper	0.0017171	0.0002396	V0	0.0002006	V0
Iron	0.0393063	0.0149794	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000112	V0	0.0000000	V1
Lead	0.0008577	0.0000870	V0	0.0000000	V1
Lithium	0.0000374	0.0000303	V0	0.0000000	V1
Magnesium	0.0091409	0.0046805	V0	0.0008623	V0
Manganese	0.0006949	0.0003550	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000404	V0	0.0000000	V1
Neodymium	0.0000140	0.0000083	V0	0.0000000	V1
Nickel	0.0005429	0.0003173	V0	0.0001080	V0
Niobium	0.0000202	0.0000034	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0089830	V0	0.0078333	V0
Platinum	0.0000088	0.0000009	V0	0.0000012	V0
Potassium	0.0061261	0.0081009	V0	0.0005488	V0
Praseodymium	0.0000070	0.0000023	V0	0.0000000	V1
Rubidium	0.0000184	0.0000297	V0	0.0000000	V1
Samarium	0.0000133	0.0000017	V0	0.0000000	V1
Selenium	0.0003366	0.0000181	V0	0.0000000	V1
Silicon	0.7676322	0.0622815	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000017	V0
Sodium	0.0169447	0.0056196	V0	0.0008657	V0
Strontium	0.0003375	0.0000894	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000000	V1
Thorium	0.0000059	0.0000027	V0	0.0000000	V1
Tin	0.0004414	0.0000358	V0	0.0000000	V1
Titanium	0.0015201	0.0010098	V0	0.0002829	V0
Tungsten	0.0000938	0.0000478	V0	0.0000512	V0
Uranium	0.0000048	0.0000017	V0	0.0000000	V1
Vanadium	0.0007697	0.0000408	V0	0.0000686	V0
Zinc	0.0055897	0.0014639	V0	0.0003407	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		15-Oct		15-Oct		15-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m^3)		23.9		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag	Results (µg/m^3)	QC Flag
Particulate Matter	1.00	1.48	V0	2.31	V0	0.09	V0
Aluminum	0.1380326	0.0227217	V0	0.0125985	V0	0.0000000	V1
Antimony	0.0001784	0.0000149	V0	0.0000933	V0	0.0000000	V1
Arsenic	0.0001060	0.0000134	V0	0.0000236	V0	0.0000000	V1
Barium	0.0092847	0.0004139	V0	0.0011067	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000034	V0	0.0000121	V0	0.0000180	V0
Cadmium	0.0000174	0.0000022	V0	0.0000060	V0	0.0000000	V1
Calcium	0.4112124	0.0579047	V0	0.0505804	V0	0.0000000	V1
Cerium	0.0000174	0.0000260	V0	0.0000257	V0	0.0000000	V1
Cesium	0.0000100	0.0000016	V0	0.0000009	V0	0.0000000	V1
Chromium	0.0022262	0.0003845	V0	0.0002551	V0	0.0000000	V1
Cobalt	0.0000273	0.0000183	V0	0.0003798	V0	0.0000060	V0
Copper	0.0017171	0.0004853	V0	0.0008134	V0	0.0003181	V0
Iron	0.0393063	0.0297777	V0	0.0233973	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000119	V0	0.0000090	V0	0.0000000	V1
Lead	0.0008577	0.0000475	V0	0.0000380	V0	0.0000000	V1
Lithium	0.0000374	0.0000225	V0	0.0000126	V0	0.0000000	V1
Magnesium	0.0091409	0.0063822	V0	0.0066843	V0	0.0011179	V0
Manganese	0.0006949	0.0007944	V0	0.0008910	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001020	V0	0.0000861	V0	0.0000000	V1
Neodymium	0.0000140	0.0000100	V0	0.0000072	V0	0.0000000	V1
Nickel	0.0005429	0.0002919	V0	0.0005464	V0	0.0000887	V0
Niobium	0.0000202	0.0000040	V0	0.0000046	V0	0.0000022	V0
Palladium	0.0000632	0.0000069	V0	0.0000033	V0	0.0000000	V1
Phosphorus	0.0459574	0.0091823	V0	0.0027562	V0	0.0000000	V1
Platinum	0.0000088	0.0000013	V0	0.0000016	V0	0.0000005	V0
Potassium	0.0061261	0.0083002	V0	0.0157092	V0	0.0020608	V0
Praseodymium	0.0000070	0.0000030	V0	0.0000018	V0	0.0000000	V1
Rubidium	0.0000184	0.0000297	V0	0.0000350	V0	0.0000000	V1
Samarium	0.0000133	0.0000017	V0	0.0000007	V0	0.0000000	V1
Selenium	0.0003366	0.0000305	V0	0.0000419	V0	0.0000000	V1
Silicon	0.7676322	0.0719575	V0	0.0529939	V0	0.0000000	V1
Silver	0.0000100	0.0000000	V1	0.0000008	V0	0.0000000	V1
Sodium	0.0169447	0.0141203	V0	0.0558428	V0	0.0009627	V0
Strontium	0.0003375	0.0001511	V0	0.0001692	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000007	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000030	V0	0.0000017	V0	0.0000000	V1
Tin	0.0004414	0.0000406	V0	0.0001020	V0	0.0000202	V0
Titanium	0.0015201	0.0019106	V0	0.0024987	V0	0.0007834	V0
Tungsten	0.0000938	0.0000098	V0	0.0000192	V0	0.0000059	V0
Uranium	0.0000048	0.0000115	V0	0.0000048	V0	0.0000000	V1
Vanadium	0.0007697	0.0000572	V0	0.0000335	V0	0.0000000	V1
Zinc	0.0055897	0.0015987	V0	0.0017563	V0	0.0003619	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		15-Oct		15-Oct		15-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.12	V0	0.62	V0	0.09	V0
Aluminum	0.1380326	0.0222724	V0	0.0000000	V1	0.0000000	V1
Antimony	0.0001784	0.0001347	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0000180	V0	0.0000060	V0	0.0000000	V1
Barium	0.0092847	0.0017787	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000118	V0	0.0000328	V0	0.0000180	V0
Cadmium	0.0000174	0.0000057	V0	0.0000008	V0	0.0000000	V1
Calcium	0.4112124	0.0847458	V0	0.0226693	V0	0.0000000	V1
Cerium	0.0000174	0.0000374	V0	0.0000117	V0	0.0000000	V1
Cesium	0.0000100	0.0000015	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0002971	V0	0.0001302	V0	0.0000000	V1
Cobalt	0.0000273	0.0000447	V0	0.0000355	V0	0.0000060	V0
Copper	0.0017171	0.0013914	V0	0.0002173	V0	0.0003181	V0
Iron	0.0393063	0.0372740	V0	0.0071175	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000142	V0	0.0000074	V0	0.0000000	V1
Lead	0.0008577	0.0000480	V0	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000201	V0	0.0000032	V0	0.0000000	V1
Magnesium	0.0091409	0.0128681	V0	0.0022651	V0	0.0011179	V0
Manganese	0.0006949	0.0018067	V0	0.0001665	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001550	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000097	V0	0.0000017	V0	0.0000000	V1
Nickel	0.0005429	0.0004440	V0	0.0002903	V0	0.0000887	V0
Niobium	0.0000202	0.0000058	V0	0.0000016	V0	0.0000022	V0
Palladium	0.0000632	0.0000084	V0	0.0000037	V0	0.0000000	V1
Phosphorus	0.0459574	0.0041499	V0	0.0024419	V0	0.0000000	V1
Platinum	0.0000088	0.0000018	V0	0.0000010	V0	0.0000005	V0
Potassium	0.0061261	0.0259814	V0	0.0034408	V0	0.0020608	V0
Praseodymium	0.0000070	0.0000026	V0	0.0000000	V1	0.0000000	V1
Rubidium	0.0000184	0.0000558	V0	0.0000090	V0	0.0000000	V1
Samarium	0.0000133	0.0000013	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000454	V0	0.0000000	V1	0.0000000	V1
Silicon	0.7676322	0.0993989	V0	0.0000000	V1	0.0000000	V1
Silver	0.0000100	0.0000024	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0720004	V0	0.0086671	V0	0.0009627	V0
Strontium	0.0003375	0.0002994	V0	0.0000378	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000032	V0	0.0000000	V1	0.0000000	V1
Tin	0.0004414	0.0001590	V0	0.0000226	V0	0.0000202	V0
Titanium	0.0015201	0.0028618	V0	0.0006510	V0	0.0007834	V0
Tungsten	0.0000938	0.0000295	V0	0.0000373	V0	0.0000059	V0
Uranium	0.0000048	0.0000072	V0	0.0000047	V0	0.0000000	V1
Vanadium	0.0007697	0.0000586	V0	0.0000499	V0	0.0000000	V1
Zinc	0.0055897	0.0034624	V0	0.0009389	V0	0.0003619	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		15-Oct		15-Oct		15-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.63	V0	1.09	V0	0.09	V0
Aluminum	0.1380326	0.0285921	V0	0.0131536	V0	0.0000000	V1
Antimony	0.0001784	0.0000146	V0	0.0000000	V1	0.0000000	V1
Arsenic	0.0001060	0.0000150	V0	0.0000077	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000083	V0	0.0000099	V0	0.0000180	V0
Cadmium	0.0000174	0.0000014	V0	0.0000008	V0	0.0000000	V1
Calcium	0.4112124	0.0560019	V0	0.0301855	V0	0.0000000	V1
Cerium	0.0000174	0.0000310	V0	0.0000130	V0	0.0000000	V1
Cesium	0.0000100	0.0000018	V0	0.0000006	V0	0.0000000	V1
Chromium	0.0022262	0.0003503	V0	0.0002213	V0	0.0000000	V1
Cobalt	0.0000273	0.0000249	V0	0.0000404	V0	0.0000060	V0
Copper	0.0017171	0.0007560	V0	0.0003661	V0	0.0003181	V0
Iron	0.0393063	0.0299400	V0	0.0143094	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000149	V0	0.0000057	V0	0.0000000	V1
Lead	0.0008577	0.0000416	V0	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000298	V0	0.0000117	V0	0.0000000	V1
Magnesium	0.0091409	0.0079816	V0	0.0041612	V0	0.0011179	V0
Manganese	0.0006949	0.0007705	V0	0.0004289	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001285	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000116	V0	0.0000053	V0	0.0000000	V1
Nickel	0.0005429	0.0003068	V0	0.0002891	V0	0.0000887	V0
Niobium	0.0000202	0.0000053	V0	0.0000061	V0	0.0000022	V0
Palladium	0.0000632	0.0000000	V1	0.0000047	V0	0.0000000	V1
Phosphorus	0.0459574	0.0019448	V0	0.0026506	V0	0.0000000	V1
Platinum	0.0000088	0.0000013	V0	0.0000017	V0	0.0000005	V0
Potassium	0.0061261	0.0096809	V0	0.0048933	V0	0.0020608	V0
Praseodymium	0.0000070	0.0000030	V0	0.0000012	V0	0.0000000	V1
Rubidium	0.0000184	0.0000377	V0	0.0000168	V0	0.0000000	V1
Samarium	0.0000133	0.0000021	V0	0.0000008	V0	0.0000000	V1
Selenium	0.0003366	0.0000445	V0	0.0000184	V0	0.0000000	V1
Silicon	0.7676322	0.1468469	V0	0.0689510	V0	0.0000000	V1
Silver	0.0000100	0.0000013	V0	0.0000005	V0	0.0000000	V1
Sodium	0.0169447	0.0219515	V0	0.0089738	V0	0.0009627	V0
Strontium	0.0003375	0.0001433	V0	0.0000685	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000046	V0	0.0000015	V0	0.0000000	V1
Tin	0.0004414	0.0000445	V0	0.0000255	V0	0.0000202	V0
Titanium	0.0015201	0.0031472	V0	0.0008052	V0	0.0007834	V0
Tungsten	0.0000938	0.0000186	V0	0.0000503	V0	0.0000059	V0
Uranium	0.0000048	0.0000099	V0	0.0000079	V0	0.0000000	V1
Vanadium	0.0007697	0.0000925	V0	0.0000491	V0	0.0000000	V1
Zinc	0.0055897	0.0024437	V0	0.0010967	V0	0.0003619	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**15-Oct**		**15-Oct**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	1.32	V0	0.09	V0
Aluminum	0.1380326	0.0288338	V0	0.0000000	V1
Antimony	0.0001784	0.0000984	V0	0.0000000	V1
Arsenic	0.0001060	0.0000089	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000038	V0	0.0000180	V0
Cadmium	0.0000174	0.0000012	V0	0.0000000	V1
Calcium	0.4112124	0.0474209	V0	0.0000000	V1
Cerium	0.0000174	0.0000249	V0	0.0000000	V1
Cesium	0.0000100	0.0000018	V0	0.0000000	V1
Chromium	0.0022262	0.0003527	V0	0.0000000	V1
Cobalt	0.0000273	0.0000394	V0	0.0000060	V0
Copper	0.0017171	0.0002909	V0	0.0003181	V0
Iron	0.0393063	0.0216350	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000116	V0	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0000321	V0	0.0000000	V1
Magnesium	0.0091409	0.0066282	V0	0.0011179	V0
Manganese	0.0006949	0.0004369	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0000108	V0	0.0000000	V1
Nickel	0.0005429	0.0002824	V0	0.0000887	V0
Niobium	0.0000202	0.0000046	V0	0.0000022	V0
Palladium	0.0000632	0.0000093	V0	0.0000000	V1
Phosphorus	0.0459574	0.0000000	V1	0.0000000	V1
Platinum	0.0000088	0.0000010	V0	0.0000005	V0
Potassium	0.0061261	0.0091332	V0	0.0020608	V0
Praseodymium	0.0000070	0.0000027	V0	0.0000000	V1
Rubidium	0.0000184	0.0000367	V0	0.0000000	V1
Samarium	0.0000133	0.0000020	V0	0.0000000	V1
Selenium	0.0003366	0.0000201	V0	0.0000000	V1
Silicon	0.7676322	0.1234041	V0	0.0000000	V1
Silver	0.0000100	0.0000015	V0	0.0000000	V1
Sodium	0.0169447	0.0080999	V0	0.0009627	V0
Strontium	0.0003375	0.0001100	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000005	V0	0.0000000	V1
Thorium	0.0000059	0.0000032	V0	0.0000000	V1
Tin	0.0004414	0.0000243	V0	0.0000202	V0
Titanium	0.0015201	0.0012689	V0	0.0007834	V0
Tungsten	0.0000938	0.0000370	V0	0.0000059	V0
Uranium	0.0000048	0.0000150	V0	0.0000000	V1
Vanadium	0.0007697	0.0000565	V0	0.0000000	V1
Zinc	0.0055897	0.0018576	V0	0.0003619	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		21-Oct		21-Oct		21-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		23.9		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	11.48	V0	6.49	V0	0.07	V0
Aluminum	0.1380326	0.1100125	V0	0.0342644	V0	0.0000000	V1
Antimony	0.0001784	0.0000851	V0	0.0002000	V0	0.0000000	V1
Arsenic	0.0001060	0.0001130	V0	0.0001062	V0	0.0000000	V1
Barium	0.0092847	0.0016344	V0	0.0019310	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000113	V0	0.0000143	V0	0.0000004	V0
Cadmium	0.0000174	0.0002529	V0	0.0001659	V0	0.0000000	V1
Calcium	0.4112124	0.4085440	V0	0.1306140	V0	0.0000000	V1
Cerium	0.0000174	0.0001611	V0	0.0000545	V0	0.0000000	V1
Cesium	0.0000100	0.0000087	V0	0.0000038	V0	0.0000000	V1
Chromium	0.0022262	0.0006968	V0	0.0003593	V0	0.0001450	V0
Cobalt	0.0000273	0.0001162	V0	0.0000653	V0	0.0000320	V0
Copper	0.0017171	0.0007763	V0	0.0016874	V0	0.0001924	V0
Iron	0.0393063	0.1702840	V0	0.0579759	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000969	V0	0.0000472	V0	0.0000000	V1
Lead	0.0008577	0.0002309	V0	0.0002541	V0	0.0000000	V1
Lithium	0.0000374	0.0001136	V0	0.0000698	V0	0.0000000	V1
Magnesium	0.0091409	0.0361346	V0	0.0218607	V0	0.0008971	V0
Manganese	0.0006949	0.0031094	V0	0.0012523	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000742	V0	0.0000925	V0	0.0000000	V1
Neodymium	0.0000140	0.0000655	V0	0.0000182	V0	0.0000000	V1
Nickel	0.0005429	0.0006676	V0	0.0005505	V0	0.0000996	V0
Niobium	0.0000202	0.0000156	V0	0.0000093	V0	0.0000000	V1
Palladium	0.0000632	0.0000028	V0	0.0000029	V0	0.0000000	V1
Phosphorus	0.0459574	0.0051444	V0	0.0059401	V0	0.0000000	V1
Platinum	0.0000088	0.0000017	V0	0.0000023	V0	0.0000000	V1
Potassium	0.0061261	0.0891800	V0	0.0763292	V0	0.0014144	V0
Praseodymium	0.0000070	0.0000179	V0	0.0000049	V0	0.0000000	V1
Rubidium	0.0000184	0.0002144	V0	0.0001204	V0	0.0000010	V0
Samarium	0.0000133	0.0000112	V0	0.0000029	V0	0.0000000	V1
Selenium	0.0003366	0.0001437	V0	0.0000831	V0	0.0000000	V1
Silicon	0.7676322	0.4218244	V0	0.1780131	V0	0.0000000	V1
Silver	0.0000100	0.0000052	V0	0.0000062	V0	0.0000000	V1
Sodium	0.0169447	0.0243276	V0	0.0554273	V0	0.0009901	V0
Strontium	0.0003375	0.0006923	V0	0.0004410	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000035	V0	0.0000024	V0	0.0000000	V1
Thorium	0.0000059	0.0000182	V0	0.0000055	V0	0.0000000	V1
Tin	0.0004414	0.0000652	V0	0.0001474	V0	0.0000000	V1
Titanium	0.0015201	0.0042502	V0	0.0020052	V0	0.0001738	V0
Tungsten	0.0000938	0.0001225	V0	0.0001098	V0	0.0000506	V0
Uranium	0.0000048	0.0000045	V0	0.0000020	V0	0.0000000	V1
Vanadium	0.0007697	0.0003940	V0	0.0001374	V0	0.0000000	V1
Zinc	0.0055897	0.0098240	V0	0.0100602	V0	0.0006442	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		21-Oct		21-Oct		21-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		23.6		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	14.68	V0	5.19	V0	0.07	V0
Aluminum	0.1380326	0.2199232	V0	0.0290482	V0	0.0000000	V1
Antimony	0.0001784	0.0007425	V0	0.0000454	V0	0.0000000	V1
Arsenic	0.0001060	0.0002843	V0	0.0000692	V0	0.0000000	V1
Barium	0.0092847	0.0109420	V0	0.0006606	V0	0.0000000	V1
Beryllium	0.0000946	0.0000069	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000305	V0	0.0000061	V0	0.0000004	V0
Cadmium	0.0000174	0.0000865	V0	0.0000788	V0	0.0000000	V1
Calcium	0.4112124	0.4982802	V0	0.0485607	V0	0.0000000	V1
Cerium	0.0000174	0.0003486	V0	0.0000487	V0	0.0000000	V1
Cesium	0.0000100	0.0000149	V0	0.0000032	V0	0.0000000	V1
Chromium	0.0022262	0.0006413	V0	0.0001737	V0	0.0001450	V0
Cobalt	0.0000273	0.0001359	V0	0.0000452	V0	0.0000320	V0
Copper	0.0017171	0.0053681	V0	0.0003351	V0	0.0001924	V0
Iron	0.0393063	0.4008127	V0	0.0377147	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001790	V0	0.0000397	V0	0.0000000	V1
Lead	0.0008577	0.0004020	V0	0.0001869	V0	0.0000000	V1
Lithium	0.0000374	0.0001830	V0	0.0000302	V0	0.0000000	V1
Magnesium	0.0091409	0.0991801	V0	0.0123508	V0	0.0008971	V0
Manganese	0.0006949	0.0063718	V0	0.0009725	V0	0.0000000	V1
Molybdenum	0.0007116	0.0002115	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0001357	V0	0.0000187	V0	0.0000000	V1
Nickel	0.0005429	0.0005335	V0	0.0001381	V0	0.0000996	V0
Niobium	0.0000202	0.0000358	V0	0.0000038	V0	0.0000000	V1
Palladium	0.0000632	0.0000214	V0	0.0000033	V0	0.0000000	V1
Phosphorus	0.0459574	0.0076585	V0	0.0029492	V0	0.0000000	V1
Platinum	0.0000088	0.0000020	V0	0.0000004	V0	0.0000000	V1
Potassium	0.0061261	0.1293977	V0	0.0461699	V0	0.0014144	V0
Praseodymium	0.0000070	0.0000367	V0	0.0000049	V0	0.0000000	V1
Rubidium	0.0000184	0.0003600	V0	0.0000915	V0	0.0000010	V0
Samarium	0.0000133	0.0000226	V0	0.0000029	V0	0.0000000	V1
Selenium	0.0003366	0.0002545	V0	0.0000495	V0	0.0000000	V1
Silicon	0.7676322	0.9252496	V0	0.1602055	V0	0.0000000	V1
Silver	0.0000100	0.0000064	V0	0.0000033	V0	0.0000000	V1
Sodium	0.0169447	0.4074733	V4	0.0156882	V0	0.0009901	V0
Strontium	0.0003375	0.0015994	V0	0.0001822	V0	0.0000000	V1
Tantalum	0.0000394	0.0000031	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000043	V0	0.0000018	V0	0.0000000	V1
Thorium	0.0000059	0.0000390	V0	0.0000064	V0	0.0000000	V1
Tin	0.0004414	0.0006154	V0	0.0000551	V0	0.0000000	V1
Titanium	0.0015201	0.0110809	V0	0.0014155	V0	0.0001738	V0
Tungsten	0.0000938	0.0003023	V0	0.0001178	V0	0.0000506	V0
Uranium	0.0000048	0.0000108	V0	0.0000014	V0	0.0000000	V1
Vanadium	0.0007697	0.0005812	V0	0.0001060	V0	0.0000000	V1
Zinc	0.0055897	0.0094824	V0	0.0046689	V0	0.0006442	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		21-Oct		21-Oct		21-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	7.54	V0	8.15	V0	0.07	V0
Aluminum	0.1380326	0.0328714	V0	0.0570361	V0	0.0000000	V1
Antimony	0.0001784	0.0000516	V0	0.0000676	V0	0.0000000	V1
Arsenic	0.0001060	0.0000925	V0	0.0001223	V0	0.0000000	V1
Barium	0.0092847	0.0007091	V0	0.0009224	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000170	V0	0.0000099	V0	0.0000004	V0
Cadmium	0.0000174	0.0002212	V0	0.0003122	V0	0.0000000	V1
Calcium	0.4112124	0.1374660	V0	0.1017873	V0	0.0000000	V1
Cerium	0.0000174	0.0000430	V0	0.0000733	V0	0.0000000	V1
Cesium	0.0000100	0.0000035	V0	0.0000056	V0	0.0000000	V1
Chromium	0.0022262	0.0002060	V0	0.0003610	V0	0.0001450	V0
Cobalt	0.0000273	0.0000450	V0	0.0000306	V0	0.0000320	V0
Copper	0.0017171	0.0004710	V0	0.0003501	V0	0.0001924	V0
Iron	0.0393063	0.0618195	V0	0.0795562	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000411	V0	0.0000582	V0	0.0000000	V1
Lead	0.0008577	0.0001825	V0	0.0002307	V0	0.0000000	V1
Lithium	0.0000374	0.0000417	V0	0.0000818	V0	0.0000000	V1
Magnesium	0.0091409	0.0140953	V0	0.0168290	V0	0.0008971	V0
Manganese	0.0006949	0.0012403	V0	0.0016786	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0006167	V0	0.0000000	V1
Neodymium	0.0000140	0.0000180	V0	0.0000303	V0	0.0000000	V1
Nickel	0.0005429	0.0001978	V0	0.0003279	V0	0.0000996	V0
Niobium	0.0000202	0.0000047	V0	0.0000090	V0	0.0000000	V1
Palladium	0.0000632	0.0000028	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0031471	V0	0.0039033	V0	0.0000000	V1
Platinum	0.0000088	0.0000009	V0	0.0000017	V0	0.0000000	V1
Potassium	0.0061261	0.0641998	V0	0.0809975	V0	0.0014144	V0
Praseodymium	0.0000070	0.0000046	V0	0.0000077	V0	0.0000000	V1
Rubidium	0.0000184	0.0001095	V0	0.0001555	V0	0.0000010	V0
Samarium	0.0000133	0.0000032	V0	0.0000055	V0	0.0000000	V1
Selenium	0.0003366	0.0000617	V0	0.0002284	V0	0.0000000	V1
Silicon	0.7676322	0.1804313	V0	0.2207997	V0	0.0000000	V1
Silver	0.0000100	0.0000043	V0	0.0000054	V0	0.0000000	V1
Sodium	0.0169447	0.0132412	V0	0.0168244	V0	0.0009901	V0
Strontium	0.0003375	0.0002673	V0	0.0002958	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000022	V0	0.0000030	V0	0.0000000	V1
Thorium	0.0000059	0.0000052	V0	0.0000084	V0	0.0000000	V1
Tin	0.0004414	0.0000521	V0	0.0000568	V0	0.0000000	V1
Titanium	0.0015201	0.0014128	V0	0.0156819	V0	0.0001738	V0
Tungsten	0.0000938	0.0000910	V0	0.0000284	V0	0.0000506	V0
Uranium	0.0000048	0.0000013	V0	0.0000023	V0	0.0000000	V1
Vanadium	0.0007697	0.0001440	V0	0.0002285	V0	0.0000000	V1
Zinc	0.0055897	0.0090265	V0	0.0110019	V0	0.0006442	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**21-Oct**		**21-Oct**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	9.18	V0	0.07	V0
Aluminum	0.1380326	0.0742661	V0	0.0000000	V1
Antimony	0.0001784	0.0000973	V0	0.0000000	V1
Arsenic	0.0001060	0.0001410	V0	0.0000000	V1
Barium	0.0092847	0.0013008	V0	0.0000000	V1
Beryllium	0.0000946	0.0000040	V0	0.0000000	V1
Bismuth	0.0000093	0.0000077	V0	0.0000004	V0
Cadmium	0.0000174	0.0002830	V0	0.0000000	V1
Calcium	0.4112124	0.2199280	V0	0.0000000	V1
Cerium	0.0000174	0.0001017	V0	0.0000000	V1
Cesium	0.0000100	0.0000070	V0	0.0000000	V1
Chromium	0.0022262	0.0005957	V0	0.0001450	V0
Cobalt	0.0000273	0.0000487	V0	0.0000320	V0
Copper	0.0017171	0.0007231	V0	0.0001924	V0
Iron	0.0393063	0.1525370	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000787	V0	0.0000000	V1
Lead	0.0008577	0.0002848	V0	0.0000000	V1
Lithium	0.0000374	0.0000948	V0	0.0000000	V1
Magnesium	0.0091409	0.0282886	V0	0.0008971	V0
Manganese	0.0006949	0.0036400	V0	0.0000000	V1
Molybdenum	0.0007116	0.0003395	V0	0.0000000	V1
Neodymium	0.0000140	0.0000435	V0	0.0000000	V1
Nickel	0.0005429	0.0004147	V0	0.0000996	V0
Niobium	0.0000202	0.0000124	V0	0.0000000	V1
Palladium	0.0000632	0.0000053	V0	0.0000000	V1
Phosphorus	0.0459574	0.0046092	V0	0.0000000	V1
Platinum	0.0000088	0.0000014	V0	0.0000000	V1
Potassium	0.0061261	0.0874992	V0	0.0014144	V0
Praseodymium	0.0000070	0.0000112	V0	0.0000000	V1
Rubidium	0.0000184	0.0001884	V0	0.0000010	V0
Samarium	0.0000133	0.0000078	V0	0.0000000	V1
Selenium	0.0003366	0.0001595	V0	0.0000000	V1
Silicon	0.7676322	0.2848700	V0	0.0000000	V1
Silver	0.0000100	0.0000057	V0	0.0000000	V1
Sodium	0.0169447	0.0224803	V0	0.0009901	V0
Strontium	0.0003375	0.0005020	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000034	V0	0.0000000	V1
Thorium	0.0000059	0.0000129	V0	0.0000000	V1
Tin	0.0004414	0.0000760	V0	0.0000000	V1
Titanium	0.0015201	0.0094934	V0	0.0001738	V0
Tungsten	0.0000938	0.0000598	V0	0.0000506	V0
Uranium	0.0000048	0.0000035	V0	0.0000000	V1
Vanadium	0.0007697	0.0002782	V0	0.0000000	V1
Zinc	0.0055897	0.0109586	V0	0.0006442	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		27-Oct		27-Oct		27-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.64	V0	6.78	V0	0.09	V0
Aluminum	0.1380326	0.0194254	V0	0.0905433	V0	0.0000000	V1
Antimony	0.0001784	0.0000217	V0	0.0001458	V0	0.0000000	V1
Arsenic	0.0001060	0.0000301	V0	0.0019203	V4	0.0000000	V1
Barium	0.0092847	0.0005137	V0	0.0022504	V0	0.0004238	V0
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000050	V0	0.0000344	V0	0.0000019	V0
Cadmium	0.0000174	0.0000226	V0	0.0000144	V0	0.0000009	V0
Calcium	0.4112124	0.0746908	V0	0.2144240	V0	0.0171812	V0
Cerium	0.0000174	0.0000280	V0	0.0001306	V0	0.0000008	V0
Cesium	0.0000100	0.0000024	V0	0.0000062	V0	0.0000000	V1
Chromium	0.0022262	0.0001498	V0	0.0002681	V0	0.0002300	V0
Cobalt	0.0000273	0.0000768	V0	0.0000721	V0	0.0000347	V0
Copper	0.0017171	0.0004901	V0	0.0011789	V0	0.0001627	V0
Iron	0.0393063	0.0365250	V0	0.1301758	V0	0.0020192	V0
Lanthanum	0.0000130	0.0000145	V0	0.0000638	V0	0.0000006	V0
Lead	0.0008577	0.0000000	V1	0.0000778	V0	0.0000000	V1
Lithium	0.0000374	0.0000222	V0	0.0000817	V0	0.0000000	V1
Magnesium	0.0091409	0.0090899	V0	0.0406678	V0	0.0010708	V0
Manganese	0.0006949	0.0008209	V0	0.0023834	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000335	V0	0.0000627	V0	0.0000000	V1
Neodymium	0.0000140	0.0000126	V0	0.0000534	V0	0.0000000	V1
Nickel	0.0005429	0.0002808	V0	0.0003868	V0	0.0001275	V0
Niobium	0.0000202	0.0000053	V0	0.0000177	V0	0.0000010	V0
Palladium	0.0000632	0.0000107	V0	0.0000054	V0	0.0000000	V1
Phosphorus	0.0459574	0.0066559	V0	0.0041181	V0	0.0000000	V1
Platinum	0.0000088	0.0000031	V0	0.0000013	V0	0.0000009	V0
Potassium	0.0061261	0.0218467	V0	0.0396607	V0	0.0014047	V0
Praseodymium	0.0000070	0.0000037	V0	0.0000146	V0	0.0000000	V1
Rubidium	0.0000184	0.0000412	V0	0.0001408	V0	0.0000017	V0
Samarium	0.0000133	0.0000030	V0	0.0000089	V0	0.0000000	V1
Selenium	0.0003366	0.0000273	V0	0.0001041	V0	0.0000000	V1
Silicon	0.7676322	0.1532663	V0	0.5087835	V0	0.0000000	V1
Silver	0.0000100	0.0000027	V0	0.0000009	V0	0.0000000	V1
Sodium	0.0169447	0.0037334	V0	0.0273492	V0	0.0008234	V0
Strontium	0.0003375	0.0001497	V0	0.0005516	V0	0.0000234	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000010	V0	0.0000010	V0	0.0000000	V1
Thorium	0.0000059	0.0000037	V0	0.0000158	V0	0.0000000	V1
Tin	0.0004414	0.0000516	V0	0.0001302	V0	0.0000000	V1
Titanium	0.0015201	0.0013895	V0	0.0057976	V0	0.0004122	V0
Tungsten	0.0000938	0.0000472	V0	0.0000963	V0	0.0000495	V0
Uranium	0.0000048	0.0000014	V0	0.0000045	V0	0.0000000	V1
Vanadium	0.0007697	0.0000416	V0	0.0002707	V0	0.0000000	V1
Zinc	0.0055897	0.0035174	V0	0.0036152	V0	0.0009263	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		27-Oct		27-Oct		27-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	8.62	V0	2.67	V0	0.09	V0
Aluminum	0.1380326	0.1818285	V0	0.0063221	V0	0.0000000	V1
Antimony	0.0001784	0.0002215	V0	0.0000113	V0	0.0000000	V1
Arsenic	0.0001060	0.0000695	V0	0.0000144	V0	0.0000000	V1
Barium	0.0092847	0.0046997	V0	0.0000000	V1	0.0004238	V0
Beryllium	0.0000946	0.0000059	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0001652	V0	0.0000257	V0	0.0000019	V0
Cadmium	0.0000174	0.0000188	V0	0.0000124	V0	0.0000009	V0
Calcium	0.4112124	0.3775540	V0	0.0215833	V0	0.0171812	V0
Cerium	0.0000174	0.0002609	V0	0.0000111	V0	0.0000008	V0
Cesium	0.0000100	0.0000129	V0	0.0000005	V0	0.0000000	V1
Chromium	0.0022262	0.0004000	V0	0.0001626	V0	0.0002300	V0
Cobalt	0.0000273	0.0001048	V0	0.0000127	V0	0.0000347	V0
Copper	0.0017171	0.0017169	V0	0.0002788	V0	0.0001627	V0
Iron	0.0393063	0.2569549	V0	0.0136300	V0	0.0020192	V0
Lanthanum	0.0000130	0.0001254	V0	0.0000049	V0	0.0000006	V0
Lead	0.0008577	0.0001465	V0	0.0000000	V1	0.0000000	V1
Lithium	0.0000374	0.0001486	V0	0.0000063	V0	0.0000000	V1
Magnesium	0.0091409	0.0729242	V0	0.0039997	V0	0.0010708	V0
Manganese	0.0006949	0.0046904	V0	0.0002425	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000928	V0	0.0000000	V1	0.0000000	V1
Neodymium	0.0000140	0.0001028	V0	0.0000038	V0	0.0000000	V1
Nickel	0.0005429	0.0005138	V0	0.0001709	V0	0.0001275	V0
Niobium	0.0000202	0.0000303	V0	0.0000018	V0	0.0000010	V0
Palladium	0.0000632	0.0000088	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0068066	V0	0.0029148	V0	0.0000000	V1
Platinum	0.0000088	0.0000018	V0	0.0000005	V0	0.0000009	V0
Potassium	0.0061261	0.0673078	V0	0.0114677	V0	0.0014047	V0
Praseodymium	0.0000070	0.0000280	V0	0.0000011	V0	0.0000000	V1
Rubidium	0.0000184	0.0002640	V0	0.0000200	V0	0.0000017	V0
Samarium	0.0000133	0.0000181	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0001921	V0	0.0000201	V0	0.0000000	V1
Silicon	0.7676322	0.7417291	V0	0.0633871	V0	0.0000000	V1
Silver	0.0000100	0.0000577	V4	0.0000015	V0	0.0000000	V1
Sodium	0.0169447	0.0462047	V0	0.0024598	V0	0.0008234	V0
Strontium	0.0003375	0.0010375	V0	0.0000398	V0	0.0000234	V0
Tantalum	0.0000394	0.0000032	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000032	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000308	V0	0.0000007	V0	0.0000000	V1
Tin	0.0004414	0.0001883	V0	0.0000302	V0	0.0000000	V1
Titanium	0.0015201	0.0132514	V0	0.0008888	V0	0.0004122	V0
Tungsten	0.0000938	0.0001562	V0	0.0000102	V0	0.0000495	V0
Uranium	0.0000048	0.0000098	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0004798	V0	0.0000664	V0	0.0000000	V1
Zinc	0.0055897	0.0050449	V0	0.0015819	V0	0.0009263	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		27-Oct		27-Oct		27-Oct	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	3.39	V0	1.67	V0	0.09	V0
Aluminum	0.1380326	0.0297291	V0	0.0096995	V0	0.0000000	V1
Antimony	0.0001784	0.0000317	V0	0.0000109	V0	0.0000000	V1
Arsenic	0.0001060	0.0000282	V0	0.0000487	V0	0.0000000	V1
Barium	0.0092847	0.0007831	V0	0.0000000	V1	0.0004238	V0
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000011	V0	0.0000038	V0	0.0000019	V0
Cadmium	0.0000174	0.0000175	V0	0.0000040	V0	0.0000009	V0
Calcium	0.4112124	0.1217835	V0	0.0199258	V0	0.0171812	V0
Cerium	0.0000174	0.0000407	V0	0.0000086	V0	0.0000008	V0
Cesium	0.0000100	0.0000021	V0	0.0000006	V0	0.0000000	V1
Chromium	0.0022262	0.0002435	V0	0.0002414	V0	0.0002300	V0
Cobalt	0.0000273	0.0000337	V0	0.0000106	V0	0.0000347	V0
Copper	0.0017171	0.0004057	V0	0.0003227	V0	0.0001627	V0
Iron	0.0393063	0.0651575	V0	0.0177680	V0	0.0020192	V0
Lanthanum	0.0000130	0.0000192	V0	0.0000041	V0	0.0000006	V0
Lead	0.0008577	0.0000000	V1	0.0000843	V0	0.0000000	V1
Lithium	0.0000374	0.0000315	V0	0.0000106	V0	0.0000000	V1
Magnesium	0.0091409	0.0126247	V0	0.0039240	V0	0.0010708	V0
Manganese	0.0006949	0.0013647	V0	0.0004791	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000391	V0	0.0002821	V0	0.0000000	V1
Neodymium	0.0000140	0.0000174	V0	0.0000034	V0	0.0000000	V1
Nickel	0.0005429	0.0001700	V0	0.0002278	V0	0.0001275	V0
Niobium	0.0000202	0.0000058	V0	0.0000031	V0	0.0000010	V0
Palladium	0.0000632	0.0000039	V0	0.0000032	V0	0.0000000	V1
Phosphorus	0.0459574	0.0043665	V0	0.0045509	V0	0.0000000	V1
Platinum	0.0000088	0.0000005	V0	0.0000012	V0	0.0000009	V0
Potassium	0.0061261	0.0235107	V0	0.0072205	V0	0.0014047	V0
Praseodymium	0.0000070	0.0000044	V0	0.0000008	V0	0.0000000	V1
Rubidium	0.0000184	0.0000579	V0	0.0000157	V0	0.0000017	V0
Samarium	0.0000133	0.0000030	V0	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000324	V0	0.0000804	V0	0.0000000	V1
Silicon	0.7676322	0.1920428	V0	0.0389691	V0	0.0000000	V1
Silver	0.0000100	0.0000008	V0	0.0000007	V0	0.0000000	V1
Sodium	0.0169447	0.0060036	V0	0.0024394	V0	0.0008234	V0
Strontium	0.0003375	0.0002387	V0	0.0000493	V0	0.0000234	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000046	V0	0.0000008	V0	0.0000000	V1
Tin	0.0004414	0.0000448	V0	0.0000349	V0	0.0000000	V1
Titanium	0.0015201	0.0019217	V0	0.0067684	V0	0.0004122	V0
Tungsten	0.0000938	0.0000529	V0	0.0000100	V0	0.0000495	V0
Uranium	0.0000048	0.0000012	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0000682	V0	0.0000000	V1	0.0000000	V1
Zinc	0.0055897	0.0026540	V0	0.0015557	V0	0.0009263	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**27-Oct**		**27-Oct**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	2.64	V0	0.09	V0
Aluminum	0.1380326	0.0144357	V0	0.0000000	V1
Antimony	0.0001784	0.0000100	V0	0.0000000	V1
Arsenic	0.0001060	0.0000186	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0004238	V0
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000041	V0	0.0000019	V0
Cadmium	0.0000174	0.0000168	V0	0.0000009	V0
Calcium	0.4112124	0.0352760	V0	0.0171812	V0
Cerium	0.0000174	0.0000138	V0	0.0000008	V0
Cesium	0.0000100	0.0000011	V0	0.0000000	V1
Chromium	0.0022262	0.0001896	V0	0.0002300	V0
Cobalt	0.0000273	0.0000293	V0	0.0000347	V0
Copper	0.0017171	0.0005529	V0	0.0001627	V0
Iron	0.0393063	0.0395045	V0	0.0020192	V0
Lanthanum	0.0000130	0.0000058	V0	0.0000006	V0
Lead	0.0008577	0.0000794	V0	0.0000000	V1
Lithium	0.0000374	0.0000211	V0	0.0000000	V1
Magnesium	0.0091409	0.0043251	V0	0.0010708	V0
Manganese	0.0006949	0.0011117	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000387	V0	0.0000000	V1
Neodymium	0.0000140	0.0000061	V0	0.0000000	V1
Nickel	0.0005429	0.0003217	V0	0.0001275	V0
Niobium	0.0000202	0.0000054	V0	0.0000010	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0044721	V0	0.0000000	V1
Platinum	0.0000088	0.0000007	V0	0.0000009	V0
Potassium	0.0061261	0.0181442	V0	0.0014047	V0
Praseodymium	0.0000070	0.0000012	V0	0.0000000	V1
Rubidium	0.0000184	0.0000321	V0	0.0000017	V0
Samarium	0.0000133	0.0000008	V0	0.0000000	V1
Selenium	0.0003366	0.0000249	V0	0.0000000	V1
Silicon	0.7676322	0.0872262	V0	0.0000000	V1
Silver	0.0000100	0.0000011	V0	0.0000000	V1
Sodium	0.0169447	0.0062955	V0	0.0008234	V0
Strontium	0.0003375	0.0000673	V0	0.0000234	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000014	V0	0.0000000	V1
Tin	0.0004414	0.0000298	V0	0.0000000	V1
Titanium	0.0015201	0.0014598	V0	0.0004122	V0
Tungsten	0.0000938	0.0000490	V0	0.0000495	V0
Uranium	0.0000048	0.0000004	V0	0.0000000	V1
Vanadium	0.0007697	0.0000324	V0	0.0000000	V1
Zinc	0.0055897	0.0031804	V0	0.0009263	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		02-Nov		02-Nov		02-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		23.5		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	20.77	V0	23.61	V0	0.01	V1
Aluminum	0.1380326	0.0534243	V0	0.5293838	V0	0.0000000	V1
Antimony	0.0001784	0.0000377	V0	0.0004549	V0	0.0000000	V1
Arsenic	0.0001060	0.0000810	V0	0.0002799	V0	0.0000000	V1
Barium	0.0092847	0.0009547	V0	0.0096946	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000202	V0	0.0000000	V1
Bismuth	0.0000093	0.0000267	V0	0.0000235	V0	0.0000028	V0
Cadmium	0.0000174	0.0000165	V0	0.0000213	V0	0.0000009	V0
Calcium	0.4112124	0.1282449	V0	1.2839653	V0	0.0000000	V1
Cerium	0.0000174	0.0000850	V0	0.0006971	V0	0.0000009	V0
Cesium	0.0000100	0.0000044	V0	0.0000370	V0	0.0000006	V0
Chromium	0.0022262	0.0001885	V0	0.0009213	V0	0.0000974	V0
Cobalt	0.0000273	0.0000575	V0	0.0002068	V0	0.0000453	V0
Copper	0.0017171	0.0010218	V0	0.0030478	V0	0.0001212	V0
Iron	0.0393063	0.0714221	V0	0.6951357	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000391	V0	0.0003503	V0	0.0000000	V1
Lead	0.0008577	0.0001076	V0	0.0004391	V0	0.0000000	V1
Lithium	0.0000374	0.0000550	V0	0.0004728	V0	0.0000000	V1
Magnesium	0.0091409	0.0164994	V0	0.2114087	V0	0.0006758	V0
Manganese	0.0006949	0.0018588	V0	0.0129900	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000499	V0	0.0002015	V0	0.0000000	V1
Neodymium	0.0000140	0.0000339	V0	0.0002975	V0	0.0000000	V1
Nickel	0.0005429	0.0002428	V0	0.0008365	V0	0.0000713	V0
Niobium	0.0000202	0.0000105	V0	0.0000750	V0	0.0000009	V0
Palladium	0.0000632	0.0000113	V0	0.0000172	V0	0.0000063	V0
Phosphorus	0.0459574	0.0088593	V0	0.0158141	V0	0.0064238	V0
Platinum	0.0000088	0.0000021	V0	0.0000039	V0	0.0000014	V0
Potassium	0.0061261	0.0348541	V0	0.2165686	V0	0.0021968	V0
Praseodymium	0.0000070	0.0000100	V0	0.0000784	V0	0.0000006	V0
Rubidium	0.0000184	0.0001009	V0	0.0007281	V0	0.0000018	V0
Samarium	0.0000133	0.0000055	V0	0.0000537	V0	0.0000000	V1
Selenium	0.0003366	0.0000752	V0	0.0005053	V0	0.0000141	V0
Silicon	0.7676322	0.2243807	V0	1.9656408	V0	0.0000000	V1
Silver	0.0000100	0.0000017	V0	0.0000059	V0	0.0000007	V0
Sodium	0.0169447	0.0308666	V0	0.4524483	V0	0.0009089	V0
Strontium	0.0003375	0.0003401	V0	0.0027057	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000068	V0	0.0000000	V1
Thallium	0.0000090	0.0000011	V0	0.0000079	V0	0.0000008	V0
Thorium	0.0000059	0.0000100	V0	0.0000909	V0	0.0000008	V0
Tin	0.0004414	0.0001320	V0	0.0003389	V0	0.0000000	V1
Titanium	0.0015201	0.0061275	V0	0.0324889	V0	0.0002516	V0
Tungsten	0.0000938	0.0000621	V0	0.0003267	V0	0.0000862	V0
Uranium	0.0000048	0.0000028	V0	0.0000266	V0	0.0000007	V0
Vanadium	0.0007697	0.0002607	V0	0.0013800	V0	0.0000000	V1
Zinc	0.0055897	0.0038060	V0	0.0066561	V0	0.0010965	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		02-Nov		02-Nov		02-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	16.39	V0	7.27	V0	0.01	V1
Aluminum	0.1380326	0.3995749	V0	0.1244515	V0	0.0000000	V1
Antimony	0.0001784	0.0003921	V0	0.0000302	V0	0.0000000	V1
Arsenic	0.0001060	0.0002862	V0	0.0000732	V0	0.0000000	V1
Barium	0.0092847	0.0082923	V0	0.0019373	V0	0.0000000	V1
Beryllium	0.0000946	0.0000160	V0	0.0000069	V0	0.0000000	V1
Bismuth	0.0000093	0.0000897	V0	0.0000062	V0	0.0000028	V0
Cadmium	0.0000174	0.0000218	V0	0.0000150	V0	0.0000009	V0
Calcium	0.4112124	0.8689528	V0	0.2712829	V0	0.0000000	V1
Cerium	0.0000174	0.0005658	V0	0.0001911	V0	0.0000009	V0
Cesium	0.0000100	0.0000273	V0	0.0000086	V0	0.0000006	V0
Chromium	0.0022262	0.0007732	V0	0.0002559	V0	0.0000974	V0
Cobalt	0.0000273	0.0001793	V0	0.0000622	V0	0.0000453	V0
Copper	0.0017171	0.0027773	V0	0.0004119	V0	0.0001212	V0
Iron	0.0393063	0.5523489	V0	0.1747684	V0	0.0000000	V1
Lanthanum	0.0000130	0.0002722	V0	0.0001055	V0	0.0000000	V1
Lead	0.0008577	0.0003506	V0	0.0001695	V0	0.0000000	V1
Lithium	0.0000374	0.0003320	V0	0.0000995	V0	0.0000000	V1
Magnesium	0.0091409	0.1551650	V0	0.0544680	V0	0.0006758	V0
Manganese	0.0006949	0.0099137	V0	0.0041864	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001571	V0	0.0001407	V0	0.0000000	V1
Neodymium	0.0000140	0.0002346	V0	0.0000783	V0	0.0000000	V1
Nickel	0.0005429	0.0006393	V0	0.0002741	V0	0.0000713	V0
Niobium	0.0000202	0.0000590	V0	0.0000180	V0	0.0000009	V0
Palladium	0.0000632	0.0000208	V0	0.0000057	V0	0.0000063	V0
Phosphorus	0.0459574	0.0130549	V0	0.0087048	V0	0.0064238	V0
Platinum	0.0000088	0.0000027	V0	0.0000013	V0	0.0000014	V0
Potassium	0.0061261	0.1686661	V0	0.0544177	V0	0.0021968	V0
Praseodymium	0.0000070	0.0000628	V0	0.0000213	V0	0.0000006	V0
Rubidium	0.0000184	0.0005597	V0	0.0002014	V0	0.0000018	V0
Samarium	0.0000133	0.0000421	V0	0.0000136	V0	0.0000000	V1
Selenium	0.0003366	0.0003981	V0	0.0001561	V0	0.0000141	V0
Silicon	0.7676322	1.3089473	V0	0.5143725	V0	0.0000000	V1
Silver	0.0000100	0.0000067	V0	0.0000018	V0	0.0000007	V0
Sodium	0.0169447	0.4677229	V0	0.0263494	V0	0.0009089	V0
Strontium	0.0003375	0.0020952	V0	0.0006092	V0	0.0000000	V1
Tantalum	0.0000394	0.0000056	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000073	V0	0.0000029	V0	0.0000008	V0
Thorium	0.0000059	0.0000694	V0	0.0000246	V0	0.0000008	V0
Tin	0.0004414	0.0003084	V0	0.0000485	V0	0.0000000	V1
Titanium	0.0015201	0.0222810	V0	0.0081456	V0	0.0002516	V0
Tungsten	0.0000938	0.0002585	V0	0.0000642	V0	0.0000862	V0
Uranium	0.0000048	0.0000193	V0	0.0000079	V0	0.0000007	V0
Vanadium	0.0007697	0.0009788	V0	0.0003202	V0	0.0000000	V1
Zinc	0.0055897	0.0064229	V0	0.0022476	V0	0.0010965	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		02-Nov		02-Nov		02-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	15.05	V0	11.88	V0	0.01	V1
Aluminum	0.1380326	0.4798072	V0	0.3594689	V0	0.0000000	V1
Antimony	0.0001784	0.0000545	V0	0.0000181	V0	0.0000000	V1
Arsenic	0.0001060	0.0001254	V0	0.0000806	V0	0.0000000	V1
Barium	0.0092847	0.0047551	V0	0.0034825	V0	0.0000000	V1
Beryllium	0.0000946	0.0000196	V0	0.0000144	V0	0.0000000	V1
Bismuth	0.0000093	0.0000181	V0	0.0000046	V0	0.0000028	V0
Cadmium	0.0000174	0.0000124	V0	0.0000070	V0	0.0000009	V0
Calcium	0.4112124	0.8513597	V0	0.4159032	V0	0.0000000	V1
Cerium	0.0000174	0.0005788	V0	0.0004150	V0	0.0000009	V0
Cesium	0.0000100	0.0000346	V0	0.0000261	V0	0.0000006	V0
Chromium	0.0022262	0.0007600	V0	0.0005075	V0	0.0000974	V0
Cobalt	0.0000273	0.0002022	V0	0.0001162	V0	0.0000453	V0
Copper	0.0017171	0.0007450	V0	0.0005371	V0	0.0001212	V0
Iron	0.0393063	0.4737734	V0	0.3674472	V0	0.0000000	V1
Lanthanum	0.0000130	0.0002823	V0	0.0002043	V0	0.0000000	V1
Lead	0.0008577	0.0002448	V0	0.0001694	V0	0.0000000	V1
Lithium	0.0000374	0.0004627	V0	0.0003435	V0	0.0000000	V1
Magnesium	0.0091409	0.1097303	V0	0.0844912	V0	0.0006758	V0
Manganese	0.0006949	0.0089405	V0	0.0062278	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001003	V0	0.0005467	V0	0.0000000	V1
Neodymium	0.0000140	0.0002534	V0	0.0001820	V0	0.0000000	V1
Nickel	0.0005429	0.0008675	V0	0.0005816	V0	0.0000713	V0
Niobium	0.0000202	0.0000671	V0	0.0000465	V0	0.0000009	V0
Palladium	0.0000632	0.0000098	V0	0.0000082	V0	0.0000063	V0
Phosphorus	0.0459574	0.0115796	V0	0.0102139	V0	0.0064238	V0
Platinum	0.0000088	0.0000042	V0	0.0000015	V0	0.0000014	V0
Potassium	0.0061261	0.1439352	V0	0.0970214	V0	0.0021968	V0
Praseodymium	0.0000070	0.0000687	V0	0.0000471	V0	0.0000006	V0
Rubidium	0.0000184	0.0006154	V0	0.0004631	V0	0.0000018	V0
Samarium	0.0000133	0.0000485	V0	0.0000330	V0	0.0000000	V1
Selenium	0.0003366	0.0003371	V0	0.0004139	V0	0.0000141	V0
Silicon	0.7676322	1.4271125	V0	1.2290547	V0	0.0000000	V1
Silver	0.0000100	0.0000052	V0	0.0000020	V0	0.0000007	V0
Sodium	0.0169447	0.0762773	V0	0.0612914	V0	0.0009089	V0
Strontium	0.0003375	0.0021681	V0	0.0013327	V0	0.0000000	V1
Tantalum	0.0000394	0.0000069	V0	0.0000032	V0	0.0000000	V1
Thallium	0.0000090	0.0000084	V0	0.0000041	V0	0.0000008	V0
Thorium	0.0000059	0.0000754	V0	0.0000550	V0	0.0000008	V0
Tin	0.0004414	0.0000863	V0	0.0000443	V0	0.0000000	V1
Titanium	0.0015201	0.0226270	V0	0.0249192	V0	0.0002516	V0
Tungsten	0.0000938	0.0001252	V0	0.0000608	V0	0.0000862	V0
Uranium	0.0000048	0.0000226	V0	0.0000149	V0	0.0000007	V0
Vanadium	0.0007697	0.0013277	V0	0.0008966	V0	0.0000000	V1
Zinc	0.0055897	0.0037573	V0	0.0017661	V0	0.0010965	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**02-Nov**		**02-Nov**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	25.09	V0	0.01	V1
Aluminum	0.1380326	0.6882136	V0	0.0000000	V1
Antimony	0.0001784	0.0000348	V0	0.0000000	V1
Arsenic	0.0001060	0.0001696	V0	0.0000000	V1
Barium	0.0092847	0.0065107	V0	0.0000000	V1
Beryllium	0.0000946	0.0000277	V0	0.0000000	V1
Bismuth	0.0000093	0.0000167	V0	0.0000028	V0
Cadmium	0.0000174	0.0000095	V0	0.0000009	V0
Calcium	0.4112124	1.5396956	V0	0.0000000	V1
Cerium	0.0000174	0.0007718	V0	0.0000009	V0
Cesium	0.0000100	0.0000509	V0	0.0000006	V0
Chromium	0.0022262	0.0012122	V0	0.0000974	V0
Cobalt	0.0000273	0.0002768	V0	0.0000453	V0
Copper	0.0017171	0.0016000	V0	0.0001212	V0
Iron	0.0393063	0.8658228	V0	0.0000000	V1
Lanthanum	0.0000130	0.0003705	V0	0.0000000	V1
Lead	0.0008577	0.0002984	V0	0.0000000	V1
Lithium	0.0000374	0.0007072	V0	0.0000000	V1
Magnesium	0.0091409	0.1759473	V0	0.0006758	V0
Manganese	0.0006949	0.0181785	V0	0.0000000	V1
Molybdenum	0.0007116	0.0002428	V0	0.0000000	V1
Neodymium	0.0000140	0.0003358	V0	0.0000000	V1
Nickel	0.0005429	0.0012480	V0	0.0000713	V0
Niobium	0.0000202	0.0000939	V0	0.0000009	V0
Palladium	0.0000632	0.0000109	V0	0.0000063	V0
Phosphorus	0.0459574	0.0145305	V0	0.0064238	V0
Platinum	0.0000088	0.0000014	V0	0.0000014	V0
Potassium	0.0061261	0.2252554	V0	0.0021968	V0
Praseodymium	0.0000070	0.0000883	V0	0.0000006	V0
Rubidium	0.0000184	0.0009521	V0	0.0000018	V0
Samarium	0.0000133	0.0000624	V0	0.0000000	V1
Selenium	0.0003366	0.0004856	V0	0.0000141	V0
Silicon	0.7676322	2.2131129	V0	0.0000000	V1
Silver	0.0000100	0.0000034	V0	0.0000007	V0
Sodium	0.0169447	0.0744834	V0	0.0009089	V0
Strontium	0.0003375	0.0029989	V0	0.0000000	V1
Tantalum	0.0000394	0.0000058	V0	0.0000000	V1
Thallium	0.0000090	0.0000093	V0	0.0000008	V0
Thorium	0.0000059	0.0001002	V0	0.0000008	V0
Tin	0.0004414	0.0000675	V0	0.0000000	V1
Titanium	0.0015201	0.0318372	V0	0.0002516	V0
Tungsten	0.0000938	0.0001416	V0	0.0000862	V0
Uranium	0.0000048	0.0000318	V0	0.0000007	V0
Vanadium	0.0007697	0.0023613	V0	0.0000000	V1
Zinc	0.0055897	0.0040528	V0	0.0010965	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**08-Nov**		**08-Nov**		**08-Nov**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	14.50	V0	10.67	V0	0.18	V0
Aluminum	0.1380326	0.0993967	V0	0.0790497	V0	0.0000000	V1
Antimony	0.0001784	0.0001892	V0	0.0008761	V0	0.0000000	V1
Arsenic	0.0001060	0.0001419	V0	0.0002473	V0	0.0000000	V1
Barium	0.0092847	0.0032256	V0	0.0081021	V0	0.0000000	V1
Beryllium	0.0000946	0.0000064	V0	0.0000045	V0	0.0000000	V1
Bismuth	0.0000093	0.0000240	V0	0.0000398	V0	0.0000024	V0
Cadmium	0.0000174	0.0000319	V0	0.0000531	V0	0.0000000	V1
Calcium	0.4112124	0.4124903	V0	0.2030827	V0	0.0000000	V1
Cerium	0.0000174	0.0001484	V0	0.0001662	V0	0.0000000	V1
Cesium	0.0000100	0.0000086	V0	0.0000065	V0	0.0000000	V1
Chromium	0.0022262	0.0004279	V0	0.0005407	V0	0.0001282	V0
Cobalt	0.0000273	0.0000782	V0	0.0000825	V0	0.0001786	V0
Copper	0.0017171	0.0015761	V0	0.0056080	V0	0.0001748	V0
Iron	0.0393063	0.1837775	V0	0.1757480	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001092	V0	0.0001506	V0	0.0000000	V1
Lead	0.0008577	0.0002305	V0	0.0003289	V0	0.0000000	V1
Lithium	0.0000374	0.0001151	V0	0.0000688	V0	0.0000000	V1
Magnesium	0.0091409	0.0393634	V0	0.0364044	V0	0.0013728	V0
Manganese	0.0006949	0.0056089	V0	0.0029850	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001523	V0	0.0002078	V0	0.0000940	V0
Neodymium	0.0000140	0.0000580	V0	0.0000501	V0	0.0000000	V1
Nickel	0.0005429	0.0004953	V0	0.0009764	V0	0.0002949	V0
Niobium	0.0000202	0.0000195	V0	0.0000183	V0	0.0000012	V0
Palladium	0.0000632	0.0000068	V0	0.0000284	V0	0.0000055	V0
Phosphorus	0.0459574	0.0138901	V0	0.0121550	V0	0.0081760	V0
Platinum	0.0000088	0.0000015	V0	0.0000024	V0	0.0000012	V0
Potassium	0.0061261	0.0760988	V0	0.0629412	V0	0.0008491	V0
Praseodymium	0.0000070	0.0000164	V0	0.0000141	V0	0.0000000	V1
Rubidium	0.0000184	0.0002128	V0	0.0001747	V0	0.0000012	V0
Samarium	0.0000133	0.0000101	V0	0.0000079	V0	0.0000000	V1
Selenium	0.0003366	0.0001763	V0	0.0002034	V0	0.0000170	V0
Silicon	0.7676322	0.4809141	V0	0.3791265	V0	0.0000000	V1
Silver	0.0000100	0.0000075	V0	0.0000066	V0	0.0000000	V1
Sodium	0.0169447	0.0348332	V0	0.1026269	V0	0.0020743	V0
Strontium	0.0003375	0.0009624	V0	0.0006895	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000030	V0	0.0000025	V0	0.0000000	V1
Thorium	0.0000059	0.0000144	V0	0.0000152	V0	0.0000000	V1
Tin	0.0004414	0.0001640	V0	0.0007778	V0	0.0000000	V1
Titanium	0.0015201	0.0048689	V0	0.0063116	V0	0.0012877	V0
Tungsten	0.0000938	0.0000933	V0	0.0001175	V0	0.0000086	V0
Uranium	0.0000048	0.0000060	V0	0.0000057	V0	0.0000000	V1
Vanadium	0.0007697	0.0004527	V0	0.0002983	V0	0.0000422	V0
Zinc	0.0055897	0.0075478	V0	0.0065174	V0	0.0008765	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		08-Nov		08-Nov		08-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	6.94	V0	4.17	V0	0.18	V0
Aluminum	0.1380326	0.0742625	V0	0.0491989	V0	0.0000000	V1
Antimony	0.0001784	0.0010006	V0	0.0000657	V0	0.0000000	V1
Arsenic	0.0001060	0.0001588	V0	0.0001002	V0	0.0000000	V1
Barium	0.0092847	0.0122832	V0	0.0015550	V0	0.0000000	V1
Beryllium	0.0000946	0.0000050	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000611	V0	0.0000039	V0	0.0000024	V0
Cadmium	0.0000174	0.0000176	V0	0.0000190	V0	0.0000000	V1
Calcium	0.4112124	0.1953179	V0	0.1209522	V0	0.0000000	V1
Cerium	0.0000174	0.0002922	V0	0.0000655	V0	0.0000000	V1
Cesium	0.0000100	0.0000054	V0	0.0000041	V0	0.0000000	V1
Chromium	0.0022262	0.0005867	V0	0.0002426	V0	0.0001282	V0
Cobalt	0.0000273	0.0000651	V0	0.0000304	V0	0.0001786	V0
Copper	0.0017171	0.0066676	V0	0.0004995	V0	0.0001748	V0
Iron	0.0393063	0.1961824	V0	0.0636063	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001203	V0	0.0001486	V0	0.0000000	V1
Lead	0.0008577	0.0003061	V0	0.0001981	V0	0.0000000	V1
Lithium	0.0000374	0.0000712	V0	0.0000328	V0	0.0000000	V1
Magnesium	0.0091409	0.0344636	V0	0.0204204	V0	0.0013728	V0
Manganese	0.0006949	0.0030557	V0	0.0016056	V0	0.0000000	V1
Molybdenum	0.0007116	0.0002219	V0	0.0002549	V0	0.0000940	V0
Neodymium	0.0000140	0.0000685	V0	0.0000284	V0	0.0000000	V1
Nickel	0.0005429	0.0010363	V0	0.0003167	V0	0.0002949	V0
Niobium	0.0000202	0.0000410	V0	0.0000102	V0	0.0000012	V0
Palladium	0.0000632	0.0000264	V0	0.0000000	V1	0.0000055	V0
Phosphorus	0.0459574	0.0111994	V0	0.0134005	V0	0.0081760	V0
Platinum	0.0000088	0.0000034	V0	0.0000011	V0	0.0000012	V0
Potassium	0.0061261	0.0377863	V0	0.0317333	V0	0.0008491	V0
Praseodymium	0.0000070	0.0000281	V0	0.0000071	V0	0.0000000	V1
Rubidium	0.0000184	0.0001192	V0	0.0000877	V0	0.0000012	V0
Samarium	0.0000133	0.0000077	V0	0.0000049	V0	0.0000000	V1
Selenium	0.0003366	0.0002238	V0	0.0001744	V0	0.0000170	V0
Silicon	0.7676322	0.3687136	V0	0.2545705	V0	0.0000000	V1
Silver	0.0000100	0.0000034	V0	0.0000029	V0	0.0000000	V1
Sodium	0.0169447	0.1028848	V0	0.0175500	V0	0.0020743	V0
Strontium	0.0003375	0.0009623	V0	0.0003206	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000018	V0	0.0000018	V0	0.0000000	V1
Thorium	0.0000059	0.0000148	V0	0.0000093	V0	0.0000000	V1
Tin	0.0004414	0.0007562	V0	0.0001011	V0	0.0000000	V1
Titanium	0.0015201	0.0107096	V0	0.0062517	V0	0.0012877	V0
Tungsten	0.0000938	0.0001159	V0	0.0000388	V0	0.0000086	V0
Uranium	0.0000048	0.0000053	V0	0.0000034	V0	0.0000000	V1
Vanadium	0.0007697	0.0003480	V0	0.0002680	V0	0.0000422	V0
Zinc	0.0055897	0.0046558	V0	0.0021642	V0	0.0008765	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		08-Nov		08-Nov		08-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	7.65	V0	5.16	V0	0.18	V0
Aluminum	0.1380326	0.0691088	V0	0.0410335	V0	0.0000000	V1
Antimony	0.0001784	0.0000991	V0	0.0000559	V0	0.0000000	V1
Arsenic	0.0001060	0.0001958	V0	0.0001052	V0	0.0000000	V1
Barium	0.0092847	0.0021512	V0	0.0010283	V0	0.0000000	V1
Beryllium	0.0000946	0.0000046	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000104	V0	0.0000059	V0	0.0000024	V0
Cadmium	0.0000174	0.0000124	V0	0.0000104	V0	0.0000000	V1
Calcium	0.4112124	0.2438012	V0	0.0801840	V0	0.0000000	V1
Cerium	0.0000174	0.0000956	V0	0.0000511	V0	0.0000000	V1
Cesium	0.0000100	0.0000056	V0	0.0000034	V0	0.0000000	V1
Chromium	0.0022262	0.0004393	V0	0.0002211	V0	0.0001282	V0
Cobalt	0.0000273	0.0000506	V0	0.0000325	V0	0.0001786	V0
Copper	0.0017171	0.0010485	V0	0.0005215	V0	0.0001748	V0
Iron	0.0393063	0.1277383	V0	0.0512225	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000895	V0	0.0000798	V0	0.0000000	V1
Lead	0.0008577	0.0001719	V0	0.0001369	V0	0.0000000	V1
Lithium	0.0000374	0.0000693	V0	0.0000373	V0	0.0000000	V1
Magnesium	0.0091409	0.0265744	V0	0.0141595	V0	0.0013728	V0
Manganese	0.0006949	0.0036881	V0	0.0013287	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001551	V0	0.0004528	V0	0.0000940	V0
Neodymium	0.0000140	0.0000406	V0	0.0000219	V0	0.0000000	V1
Nickel	0.0005429	0.0007151	V0	0.0003268	V0	0.0002949	V0
Niobium	0.0000202	0.0000129	V0	0.0000082	V0	0.0000012	V0
Palladium	0.0000632	0.0000139	V0	0.0000031	V0	0.0000055	V0
Phosphorus	0.0459574	0.0115847	V0	0.0106395	V0	0.0081760	V0
Platinum	0.0000088	0.0000013	V0	0.0000010	V0	0.0000012	V0
Potassium	0.0061261	0.0407680	V0	0.0228362	V0	0.0008491	V0
Praseodymium	0.0000070	0.0000107	V0	0.0000057	V0	0.0000000	V1
Rubidium	0.0000184	0.0001229	V0	0.0000727	V0	0.0000012	V0
Samarium	0.0000133	0.0000076	V0	0.0000038	V0	0.0000000	V1
Selenium	0.0003366	0.0001533	V0	0.0001807	V0	0.0000170	V0
Silicon	0.7676322	0.3138339	V0	0.2654498	V0	0.0000000	V1
Silver	0.0000100	0.0000023	V0	0.0000019	V0	0.0000000	V1
Sodium	0.0169447	0.0246200	V0	0.0164579	V0	0.0020743	V0
Strontium	0.0003375	0.0005826	V0	0.0002435	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000016	V0	0.0000010	V0	0.0000000	V1
Thorium	0.0000059	0.0000109	V0	0.0000064	V0	0.0000000	V1
Tin	0.0004414	0.0001326	V0	0.0000738	V0	0.0000000	V1
Titanium	0.0015201	0.0036507	V0	0.0101963	V0	0.0012877	V0
Tungsten	0.0000938	0.0000643	V0	0.0000278	V0	0.0000086	V0
Uranium	0.0000048	0.0000038	V0	0.0000024	V0	0.0000000	V1
Vanadium	0.0007697	0.0003789	V0	0.0001980	V0	0.0000422	V0
Zinc	0.0055897	0.0042417	V0	0.0024750	V0	0.0008765	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**08-Nov**		**08-Nov**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	14.69	V0	0.18	V0
Aluminum	0.1380326	0.2653694	V0	0.0000000	V1
Antimony	0.0001784	0.0001860	V0	0.0000000	V1
Arsenic	0.0001060	0.0001723	V0	0.0000000	V1
Barium	0.0092847	0.0048331	V0	0.0000000	V1
Beryllium	0.0000946	0.0000099	V0	0.0000000	V1
Bismuth	0.0000093	0.0000190	V0	0.0000024	V0
Cadmium	0.0000174	0.0000170	V0	0.0000000	V1
Calcium	0.4112124	0.8118202	V0	0.0000000	V1
Cerium	0.0000174	0.0003125	V0	0.0000000	V1
Cesium	0.0000100	0.0000197	V0	0.0000000	V1
Chromium	0.0022262	0.0005887	V0	0.0001282	V0
Cobalt	0.0000273	0.0001346	V0	0.0001786	V0
Copper	0.0017171	0.0014522	V0	0.0001748	V0
Iron	0.0393063	0.3903257	V0	0.0000000	V1
Lanthanum	0.0000130	0.0002189	V0	0.0000000	V1
Lead	0.0008577	0.0002925	V0	0.0000000	V1
Lithium	0.0000374	0.0002490	V0	0.0000000	V1
Magnesium	0.0091409	0.0881228	V0	0.0013728	V0
Manganese	0.0006949	0.0091800	V0	0.0000000	V1
Molybdenum	0.0007116	0.0003956	V0	0.0000940	V0
Neodymium	0.0000140	0.0001343	V0	0.0000000	V1
Nickel	0.0005429	0.0007437	V0	0.0002949	V0
Niobium	0.0000202	0.0000309	V0	0.0000012	V0
Palladium	0.0000632	0.0000084	V0	0.0000055	V0
Phosphorus	0.0459574	0.0183509	V0	0.0081760	V0
Platinum	0.0000088	0.0000011	V0	0.0000012	V0
Potassium	0.0061261	0.1236245	V0	0.0008491	V0
Praseodymium	0.0000070	0.0000343	V0	0.0000000	V1
Rubidium	0.0000184	0.0004228	V0	0.0000012	V0
Samarium	0.0000133	0.0000229	V0	0.0000000	V1
Selenium	0.0003366	0.0003417	V0	0.0000170	V0
Silicon	0.7676322	0.7932247	V0	0.0000000	V1
Silver	0.0000100	0.0000075	V0	0.0000000	V1
Sodium	0.0169447	0.0479027	V0	0.0020743	V0
Strontium	0.0003375	0.0016822	V0	0.0000000	V1
Tantalum	0.0000394	0.0000020	V0	0.0000000	V1
Thallium	0.0000090	0.0000045	V0	0.0000000	V1
Thorium	0.0000059	0.0000408	V0	0.0000000	V1
Tin	0.0004414	0.0001585	V0	0.0000000	V1
Titanium	0.0015201	0.0093168	V0	0.0012877	V0
Tungsten	0.0000938	0.0001225	V0	0.0000086	V0
Uranium	0.0000048	0.0000122	V0	0.0000000	V1
Vanadium	0.0007697	0.0023794	V0	0.0000422	V0
Zinc	0.0055897	0.0092782	V0	0.0008765	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**14-Nov**		**14-Nov**		**14-Nov**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m^3)		**24**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	3.49	V0	2.17	V0	0.07	V0
Aluminum	0.1380326	0.0211108	V0	0.0085357	V0	0.0000000	V1
Antimony	0.0001784	0.0000517	V0	0.0000677	V0	0.0000000	V1
Arsenic	0.0001060	0.0000391	V0	0.0000486	V0	0.0000000	V1
Barium	0.0092847	0.0007066	V0	0.0008870	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000121	V0	0.0000168	V0	0.0000048	V0
Cadmium	0.0000174	0.0000140	V0	0.0000101	V0	0.0000000	V1
Calcium	0.4112124	0.0656523	V0	0.0210519	V0	0.0000000	V1
Cerium	0.0000174	0.0000282	V0	0.0000145	V0	0.0000000	V1
Cesium	0.0000100	0.0000020	V0	0.0000008	V0	0.0000000	V1
Chromium	0.0022262	0.0002519	V0	0.0001571	V0	0.0000955	V0
Cobalt	0.0000273	0.0000304	V0	0.0003245	V0	0.0000343	V0
Copper	0.0017171	0.0004814	V0	0.0004876	V0	0.0001410	V0
Iron	0.0393063	0.0311409	V0	0.0114790	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000183	V0	0.0000167	V0	0.0000000	V1
Lead	0.0008577	0.0000580	V0	0.0000610	V0	0.0000000	V1
Lithium	0.0000374	0.0000220	V0	0.0000041	V0	0.0000000	V1
Magnesium	0.0091409	0.0072280	V0	0.0038609	V0	0.0004821	V0
Manganese	0.0006949	0.0010318	V0	0.0002729	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000580	V0	0.0000325	V0	0.0000000	V1
Neodymium	0.0000140	0.0000098	V0	0.0000035	V0	0.0000000	V1
Nickel	0.0005429	0.0002780	V0	0.0004092	V0	0.0001124	V0
Niobium	0.0000202	0.0000048	V0	0.0000019	V0	0.0000009	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0096817	V0	0.0092442	V0	0.0056315	V0
Platinum	0.0000088	0.0000013	V0	0.0000014	V0	0.0000010	V0
Potassium	0.0061261	0.0256174	V0	0.0128279	V0	0.0005641	V0
Praseodymium	0.0000070	0.0000027	V0	0.0000010	V0	0.0000000	V1
Rubidium	0.0000184	0.0000604	V0	0.0000256	V0	0.0000009	V0
Samarium	0.0000133	0.0000017	V0	0.0000007	V0	0.0000000	V1
Selenium	0.0003366	0.0000444	V0	0.0000347	V0	0.0000166	V0
Silicon	0.7676322	0.1406332	V0	0.0469650	V0	0.0000000	V1
Silver	0.0000100	0.0000018	V0	0.0000008	V0	0.0000000	V1
Sodium	0.0169447	0.0090570	V0	0.0092061	V0	0.0007256	V0
Strontium	0.0003375	0.0002048	V0	0.0000743	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000006	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000030	V0	0.0000011	V0	0.0000000	V1
Tin	0.0004414	0.0000875	V0	0.0000831	V0	0.0000000	V1
Titanium	0.0015201	0.0012033	V0	0.0006694	V0	0.0002355	V0
Tungsten	0.0000938	0.0000186	V0	0.0000523	V0	0.0000462	V0
Uranium	0.0000048	0.0000009	V0	0.0000003	V0	0.0000000	V1
Vanadium	0.0007697	0.0001855	V0	0.0000988	V0	0.0001255	V0
Zinc	0.0055897	0.0027104	V0	0.0015320	V0	0.0003500	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		14-Nov		14-Nov		14-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.26	V0	2.05	V0	0.07	V0
Aluminum	0.1380326	0.0820091	V0	0.0084369	V0	0.0000000	V1
Antimony	0.0001784	0.0005077	V0	0.0000188	V0	0.0000000	V1
Arsenic	0.0001060	0.0000620	V0	0.0000362	V0	0.0000000	V1
Barium	0.0092847	0.0044285	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000054	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000444	V0	0.0000024	V0	0.0000048	V0
Cadmium	0.0000174	0.0000145	V0	0.0000114	V0	0.0000000	V1
Calcium	0.4112124	0.1888224	V0	0.0178706	V0	0.0000000	V1
Cerium	0.0000174	0.0001473	V0	0.0000111	V0	0.0000000	V1
Cesium	0.0000100	0.0000061	V0	0.0000021	V0	0.0000000	V1
Chromium	0.0022262	0.0003921	V0	0.0001528	V0	0.0000955	V0
Cobalt	0.0000273	0.0000488	V0	0.0002271	V0	0.0000343	V0
Copper	0.0017171	0.0022397	V0	0.0002410	V0	0.0001410	V0
Iron	0.0393063	0.1414320	V0	0.0066879	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000781	V0	0.0000445	V0	0.0000000	V1
Lead	0.0008577	0.0001296	V0	0.0000654	V0	0.0000000	V1
Lithium	0.0000374	0.0000703	V0	0.0000035	V0	0.0000000	V1
Magnesium	0.0091409	0.0352556	V0	0.0032262	V0	0.0004821	V0
Manganese	0.0006949	0.0024328	V0	0.0002171	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001104	V0	0.0000307	V0	0.0000000	V1
Neodymium	0.0000140	0.0000522	V0	0.0000043	V0	0.0000000	V1
Nickel	0.0005429	0.0002358	V0	0.0003302	V0	0.0001124	V0
Niobium	0.0000202	0.0000146	V0	0.0000029	V0	0.0000009	V0
Palladium	0.0000632	0.0000084	V0	0.0000069	V0	0.0000000	V1
Phosphorus	0.0459574	0.0095359	V0	0.0098207	V0	0.0056315	V0
Platinum	0.0000088	0.0000022	V0	0.0000019	V0	0.0000010	V0
Potassium	0.0061261	0.0392125	V0	0.0115388	V0	0.0005641	V0
Praseodymium	0.0000070	0.0000152	V0	0.0000019	V0	0.0000000	V1
Rubidium	0.0000184	0.0001320	V0	0.0000236	V0	0.0000009	V0
Samarium	0.0000133	0.0000088	V0	0.0000016	V0	0.0000000	V1
Selenium	0.0003366	0.0001105	V0	0.0000439	V0	0.0000166	V0
Silicon	0.7676322	0.3647056	V0	0.0432455	V0	0.0000000	V1
Silver	0.0000100	0.0000020	V0	0.0000027	V0	0.0000000	V1
Sodium	0.0169447	0.0746762	V0	0.0063763	V0	0.0007256	V0
Strontium	0.0003375	0.0006266	V0	0.0000577	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000016	V0	0.0000017	V0	0.0000000	V1
Thorium	0.0000059	0.0000148	V0	0.0000019	V0	0.0000000	V1
Tin	0.0004414	0.0002518	V0	0.0000532	V0	0.0000000	V1
Titanium	0.0015201	0.0053225	V0	0.0007467	V0	0.0002355	V0
Tungsten	0.0000938	0.0000804	V0	0.0000128	V0	0.0000462	V0
Uranium	0.0000048	0.0000045	V0	0.0000011	V0	0.0000000	V1
Vanadium	0.0007697	0.0004868	V0	0.0001230	V0	0.0001255	V0
Zinc	0.0055897	0.0033468	V0	0.0012991	V0	0.0003500	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		14-Nov		14-Nov		14-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.02	V0	2.29	V0	0.07	V0
Aluminum	0.1380326	0.0107023	V0	0.0540992	V0	0.0000000	V1
Antimony	0.0001784	0.0000153	V0	0.0000126	V0	0.0000000	V1
Arsenic	0.0001060	0.0000317	V0	0.0000344	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0005674	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000044	V0	0.0000000	V1
Bismuth	0.0000093	0.0000046	V0	0.0000068	V0	0.0000048	V0
Cadmium	0.0000174	0.0000090	V0	0.0000106	V0	0.0000000	V1
Calcium	0.4112124	0.0226316	V0	0.0331128	V0	0.0000000	V1
Cerium	0.0000174	0.0000108	V0	0.0000521	V0	0.0000000	V1
Cesium	0.0000100	0.0000010	V0	0.0000051	V0	0.0000000	V1
Chromium	0.0022262	0.0001255	V0	0.0002516	V0	0.0000955	V0
Cobalt	0.0000273	0.0000389	V0	0.0000248	V0	0.0000343	V0
Copper	0.0017171	0.0001974	V0	0.0002593	V0	0.0001410	V0
Iron	0.0393063	0.0109144	V0	0.0304353	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000058	V0	0.0000267	V0	0.0000000	V1
Lead	0.0008577	0.0000000	V1	0.0000560	V0	0.0000000	V1
Lithium	0.0000374	0.0000129	V0	0.0000441	V0	0.0000000	V1
Magnesium	0.0091409	0.0038694	V0	0.0118989	V0	0.0004821	V0
Manganese	0.0006949	0.0004242	V0	0.0005470	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000000	V1	0.0003608	V0	0.0000000	V1
Neodymium	0.0000140	0.0000043	V0	0.0000240	V0	0.0000000	V1
Nickel	0.0005429	0.0002190	V0	0.0002375	V0	0.0001124	V0
Niobium	0.0000202	0.0000022	V0	0.0000083	V0	0.0000009	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0090537	V0	0.0091332	V0	0.0056315	V0
Platinum	0.0000088	0.0000012	V0	0.0000010	V0	0.0000010	V0
Potassium	0.0061261	0.0109192	V0	0.0237010	V0	0.0005641	V0
Praseodymium	0.0000070	0.0000011	V0	0.0000063	V0	0.0000000	V1
Rubidium	0.0000184	0.0000243	V0	0.0000849	V0	0.0000009	V0
Samarium	0.0000133	0.0000007	V0	0.0000050	V0	0.0000000	V1
Selenium	0.0003366	0.0000326	V0	0.0001214	V0	0.0000166	V0
Silicon	0.7676322	0.0432615	V0	0.2323495	V0	0.0000000	V1
Silver	0.0000100	0.0000010	V0	0.0000013	V0	0.0000000	V1
Sodium	0.0169447	0.0049677	V0	0.0105581	V0	0.0007256	V0
Strontium	0.0003375	0.0000620	V0	0.0001751	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000011	V0	0.0000000	V1
Thorium	0.0000059	0.0000015	V0	0.0000074	V0	0.0000000	V1
Tin	0.0004414	0.0000396	V0	0.0000497	V0	0.0000000	V1
Titanium	0.0015201	0.0007142	V0	0.0096237	V0	0.0002355	V0
Tungsten	0.0000938	0.0000684	V0	0.0000115	V0	0.0000462	V0
Uranium	0.0000048	0.0000003	V0	0.0000021	V0	0.0000000	V1
Vanadium	0.0007697	0.0001322	V0	0.0001791	V0	0.0001255	V0
Zinc	0.0055897	0.0014017	V0	0.0017155	V0	0.0003500	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**14-Nov**		**14-Nov**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	4.74	V0	0.07	V0
Aluminum	0.1380326	0.0540515	V0	0.0000000	V1
Antimony	0.0001784	0.0000673	V0	0.0000000	V1
Arsenic	0.0001060	0.0000667	V0	0.0000000	V1
Barium	0.0092847	0.0014482	V0	0.0000000	V1
Beryllium	0.0000946	0.0000043	V0	0.0000000	V1
Bismuth	0.0000093	0.0000446	V0	0.0000048	V0
Cadmium	0.0000174	0.0000160	V0	0.0000000	V1
Calcium	0.4112124	0.1492833	V0	0.0000000	V1
Cerium	0.0000174	0.0000808	V0	0.0000000	V1
Cesium	0.0000100	0.0000054	V0	0.0000000	V1
Chromium	0.0022262	0.0007156	V0	0.0000955	V0
Cobalt	0.0000273	0.0000640	V0	0.0000343	V0
Copper	0.0017171	0.0008948	V0	0.0001410	V0
Iron	0.0393063	0.0827976	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000440	V0	0.0000000	V1
Lead	0.0008577	0.0001045	V0	0.0000000	V1
Lithium	0.0000374	0.0000537	V0	0.0000000	V1
Magnesium	0.0091409	0.0161738	V0	0.0004821	V0
Manganese	0.0006949	0.0031286	V0	0.0000000	V1
Molybdenum	0.0007116	0.0003343	V0	0.0000000	V1
Neodymium	0.0000140	0.0000313	V0	0.0000000	V1
Nickel	0.0005429	0.0011347	V0	0.0001124	V0
Niobium	0.0000202	0.0000094	V0	0.0000009	V0
Palladium	0.0000632	0.0000049	V0	0.0000000	V1
Phosphorus	0.0459574	0.0110791	V0	0.0056315	V0
Platinum	0.0000088	0.0000044	V0	0.0000010	V0
Potassium	0.0061261	0.0404775	V0	0.0005641	V0
Praseodymium	0.0000070	0.0000087	V0	0.0000000	V1
Rubidium	0.0000184	0.0001146	V0	0.0000009	V0
Samarium	0.0000133	0.0000056	V0	0.0000000	V1
Selenium	0.0003366	0.0000841	V0	0.0000166	V0
Silicon	0.7676322	0.2259436	V0	0.0000000	V1
Silver	0.0000100	0.0000029	V0	0.0000000	V1
Sodium	0.0169447	0.0149290	V0	0.0007256	V0
Strontium	0.0003375	0.0003787	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000016	V0	0.0000000	V1
Thorium	0.0000059	0.0000093	V0	0.0000000	V1
Tin	0.0004414	0.0001814	V0	0.0000000	V1
Titanium	0.0015201	0.0028516	V0	0.0002355	V0
Tungsten	0.0000938	0.0001018	V0	0.0000462	V0
Uranium	0.0000048	0.0000029	V0	0.0000000	V1
Vanadium	0.0007697	0.0004619	V0	0.0001255	V0
Zinc	0.0055897	0.0060199	V0	0.0003500	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		20-Nov		20-Nov		20-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	21.98	V0	5.11	V0	0.02	V1
Aluminum	0.1380326	0.6751240	V0	0.0506451	V0	0.0000000	V1
Antimony	0.0001784	0.0000400	V0	0.0001446	V0	0.0000000	V1
Arsenic	0.0001060	0.0001313	V0	0.0004118	V0	0.0000000	V1
Barium	0.0092847	0.0055538	V0	0.0016743	V0	0.0000000	V1
Beryllium	0.0000946	0.0000238	V0	0.0000040	V0	0.0000000	V1
Bismuth	0.0000093	0.0000292	V0	0.0000091	V0	0.0000081	V0
Cadmium	0.0000174	0.0000093	V0	0.0000087	V0	0.0000000	V1
Calcium	0.4112124	2.0559446	V0	0.1016242	V0	0.0000000	V1
Cerium	0.0000174	0.0007397	V0	0.0000834	V0	0.0000000	V1
Cesium	0.0000100	0.0000553	V0	0.0000032	V0	0.0000000	V1
Chromium	0.0022262	0.0009236	V0	0.0001974	V0	0.0001852	V0
Cobalt	0.0000273	0.0001967	V0	0.0000629	V0	0.0000346	V0
Copper	0.0017171	0.0007987	V0	0.0009416	V0	0.0002908	V0
Iron	0.0393063	0.5136782	V0	0.0676952	V0	0.0018239	V0
Lanthanum	0.0000130	0.0003605	V0	0.0000419	V0	0.0000000	V1
Lead	0.0008577	0.0002823	V0	0.0000968	V0	0.0000000	V1
Lithium	0.0000374	0.0006528	V0	0.0000390	V0	0.0000000	V1
Magnesium	0.0091409	0.1560026	V0	0.0240214	V0	0.0012136	V0
Manganese	0.0006949	0.0097334	V0	0.0013278	V0	0.0000302	V0
Molybdenum	0.0007116	0.0001974	V0	0.0000463	V0	0.0001357	V0
Neodymium	0.0000140	0.0003305	V0	0.0000321	V0	0.0000000	V1
Nickel	0.0005429	0.0010263	V0	0.0002921	V0	0.0001709	V0
Niobium	0.0000202	0.0000893	V0	0.0000094	V0	0.0000014	V0
Palladium	0.0000632	0.0000108	V0	0.0000040	V0	0.0000000	V1
Phosphorus	0.0459574	0.0131653	V0	0.0074760	V0	0.0062269	V0
Platinum	0.0000088	0.0000018	V0	0.0000018	V0	0.0000007	V0
Potassium	0.0061261	0.2277867	V0	0.0297210	V0	0.0016693	V0
Praseodymium	0.0000070	0.0000851	V0	0.0000091	V0	0.0000000	V1
Rubidium	0.0000184	0.0009658	V0	0.0000916	V0	0.0000016	V0
Samarium	0.0000133	0.0000606	V0	0.0000056	V0	0.0000000	V1
Selenium	0.0003366	0.0006084	V0	0.0000848	V0	0.0000474	V0
Silicon	0.7676322	1.7561654	V0	0.2587064	V0	0.0000000	V1
Silver	0.0000100	0.0000039	V0	0.0000017	V0	0.0000000	V1
Sodium	0.0169447	0.0977140	V0	0.0661106	V0	0.0009065	V0
Strontium	0.0003375	0.0032677	V0	0.0003216	V0	0.0000000	V1
Tantalum	0.0000394	0.0000074	V0	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000081	V0	0.0000010	V0	0.0000000	V1
Thorium	0.0000059	0.0000972	V0	0.0000102	V0	0.0000000	V1
Tin	0.0004414	0.0000631	V0	0.0001143	V0	0.0000000	V1
Titanium	0.0015201	0.0278232	V0	0.0027939	V0	0.0032389	V0
Tungsten	0.0000938	0.0001138	V0	0.0001032	V0	0.0000062	V0
Uranium	0.0000048	0.0000294	V0	0.0000027	V0	0.0000000	V1
Vanadium	0.0007697	0.0023826	V0	0.0002017	V0	0.0000000	V1
Zinc	0.0055897	0.0030359	V0	0.0017413	V0	0.0003686	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		20-Nov		20-Nov		20-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	7.69	V0	4.07	V0	0.02	V1
Aluminum	0.1380326	0.1026622	V0	0.0470257	V0	0.0000000	V1
Antimony	0.0001784	0.0001612	V0	0.0000179	V0	0.0000000	V1
Arsenic	0.0001060	0.0000414	V0	0.0000289	V0	0.0000000	V1
Barium	0.0092847	0.0026143	V0	0.0008418	V0	0.0000000	V1
Beryllium	0.0000946	0.0000055	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000160	V0	0.0000209	V0	0.0000081	V0
Cadmium	0.0000174	0.0000087	V0	0.0000059	V0	0.0000000	V1
Calcium	0.4112124	0.2194692	V0	0.1374389	V0	0.0000000	V1
Cerium	0.0000174	0.0001428	V0	0.0000731	V0	0.0000000	V1
Cesium	0.0000100	0.0000062	V0	0.0000028	V0	0.0000000	V1
Chromium	0.0022262	0.0002651	V0	0.0001477	V0	0.0001852	V0
Cobalt	0.0000273	0.0000710	V0	0.0000269	V0	0.0000346	V0
Copper	0.0017171	0.0013246	V0	0.0004556	V0	0.0002908	V0
Iron	0.0393063	0.1369162	V0	0.0476746	V0	0.0018239	V0
Lanthanum	0.0000130	0.0000695	V0	0.0000390	V0	0.0000000	V1
Lead	0.0008577	0.0001133	V0	0.0000643	V0	0.0000000	V1
Lithium	0.0000374	0.0000768	V0	0.0000328	V0	0.0000000	V1
Magnesium	0.0091409	0.0476515	V0	0.0271893	V0	0.0012136	V0
Manganese	0.0006949	0.0025635	V0	0.0013510	V0	0.0000302	V0
Molybdenum	0.0007116	0.0000913	V0	0.0000482	V0	0.0001357	V0
Neodymium	0.0000140	0.0000584	V0	0.0000306	V0	0.0000000	V1
Nickel	0.0005429	0.0002395	V0	0.0001673	V0	0.0001709	V0
Niobium	0.0000202	0.0000165	V0	0.0000078	V0	0.0000014	V0
Palladium	0.0000632	0.0000042	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0083078	V0	0.0065303	V0	0.0062269	V0
Platinum	0.0000088	0.0000010	V0	0.0000006	V0	0.0000007	V0
Potassium	0.0061261	0.0487660	V0	0.0270059	V0	0.0016693	V0
Praseodymium	0.0000070	0.0000154	V0	0.0000080	V0	0.0000000	V1
Rubidium	0.0000184	0.0001486	V0	0.0000802	V0	0.0000016	V0
Samarium	0.0000133	0.0000097	V0	0.0000050	V0	0.0000000	V1
Selenium	0.0003366	0.0001213	V0	0.0000780	V0	0.0000474	V0
Silicon	0.7676322	0.4341576	V0	0.2481199	V0	0.0000000	V1
Silver	0.0000100	0.0000019	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.4971544	V0	0.0125072	V0	0.0009065	V0
Strontium	0.0003375	0.0005909	V0	0.0002635	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000018	V0	0.0000008	V0	0.0000000	V1
Thorium	0.0000059	0.0000174	V0	0.0000104	V0	0.0000000	V1
Tin	0.0004414	0.0001505	V0	0.0000581	V0	0.0000000	V1
Titanium	0.0015201	0.0053125	V0	0.0072339	V0	0.0032389	V0
Tungsten	0.0000938	0.0001102	V0	0.0000939	V0	0.0000062	V0
Uranium	0.0000048	0.0000049	V0	0.0000027	V0	0.0000000	V1
Vanadium	0.0007697	0.0003157	V0	0.0001677	V0	0.0000000	V1
Zinc	0.0055897	0.0022609	V0	0.0018441	V0	0.0003686	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		20-Nov		20-Nov		20-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	19.89	V0	25.86	V0	0.02	V1
Aluminum	0.1380326	0.5544197	V0	0.4782477	V0	0.0000000	V1
Antimony	0.0001784	0.0000448	V0	0.0000321	V0	0.0000000	V1
Arsenic	0.0001060	0.0001073	V0	0.0001414	V0	0.0000000	V1
Barium	0.0092847	0.0044456	V0	0.0049612	V0	0.0000000	V1
Beryllium	0.0000946	0.0000174	V0	0.0000206	V0	0.0000000	V1
Bismuth	0.0000093	0.0000337	V0	0.0000120	V0	0.0000081	V0
Cadmium	0.0000174	0.0000121	V0	0.0000086	V0	0.0000000	V1
Calcium	0.4112124	1.6805193	V0	1.0327661	V0	0.0000000	V1
Cerium	0.0000174	0.0005863	V0	0.0005720	V0	0.0000000	V1
Cesium	0.0000100	0.0000436	V0	0.0000339	V0	0.0000000	V1
Chromium	0.0022262	0.0007857	V0	0.0009033	V0	0.0001852	V0
Cobalt	0.0000273	0.0002338	V0	0.0002271	V0	0.0000346	V0
Copper	0.0017171	0.0005349	V0	0.0006690	V0	0.0002908	V0
Iron	0.0393063	0.4389523	V0	0.7848423	V0	0.0018239	V0
Lanthanum	0.0000130	0.0002851	V0	0.0002735	V0	0.0000000	V1
Lead	0.0008577	0.0002055	V0	0.0003281	V0	0.0000000	V1
Lithium	0.0000374	0.0005075	V0	0.0004719	V0	0.0000000	V1
Magnesium	0.0091409	0.1201502	V0	0.1284908	V0	0.0012136	V0
Manganese	0.0006949	0.0080181	V0	0.0127967	V0	0.0000302	V0
Molybdenum	0.0007116	0.0001808	V0	0.0002765	V0	0.0001357	V0
Neodymium	0.0000140	0.0002640	V0	0.0002549	V0	0.0000000	V1
Nickel	0.0005429	0.0010689	V0	0.0013995	V0	0.0001709	V0
Niobium	0.0000202	0.0000594	V0	0.0000642	V0	0.0000014	V0
Palladium	0.0000632	0.0000079	V0	0.0000165	V0	0.0000000	V1
Phosphorus	0.0459574	0.0110881	V0	0.0126098	V0	0.0062269	V0
Platinum	0.0000088	0.0000014	V0	0.0000019	V0	0.0000007	V0
Potassium	0.0061261	0.1906998	V0	0.1598842	V0	0.0016693	V0
Praseodymium	0.0000070	0.0000665	V0	0.0000649	V0	0.0000000	V1
Rubidium	0.0000184	0.0008123	V0	0.0006224	V0	0.0000016	V0
Samarium	0.0000133	0.0000472	V0	0.0000466	V0	0.0000000	V1
Selenium	0.0003366	0.0003598	V0	0.0004321	V0	0.0000474	V0
Silicon	0.7676322	1.4658224	V0	1.8033766	V0	0.0000000	V1
Silver	0.0000100	0.0000018	V0	0.0000040	V0	0.0000000	V1
Sodium	0.0169447	0.0895147	V0	0.0649811	V0	0.0009065	V0
Strontium	0.0003375	0.0026528	V0	0.0021834	V0	0.0000000	V1
Tantalum	0.0000394	0.0000049	V0	0.0000041	V0	0.0000000	V1
Thallium	0.0000090	0.0000059	V0	0.0000071	V0	0.0000000	V1
Thorium	0.0000059	0.0000742	V0	0.0000732	V0	0.0000000	V1
Tin	0.0004414	0.0000866	V0	0.0000621	V0	0.0000000	V1
Titanium	0.0015201	0.0169192	V0	0.0197640	V0	0.0032389	V0
Tungsten	0.0000938	0.0002258	V0	0.0001439	V0	0.0000062	V0
Uranium	0.0000048	0.0000209	V0	0.0000248	V0	0.0000000	V1
Vanadium	0.0007697	0.0025267	V0	0.0034143	V0	0.0000000	V1
Zinc	0.0055897	0.0021918	V0	0.0027130	V0	0.0003686	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**20-Nov**		**20-Nov**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	12.04	V0	0.02	V1
Aluminum	0.1380326	0.3129911	V0	0.0000000	V1
Antimony	0.0001784	0.0000189	V0	0.0000000	V1
Arsenic	0.0001060	0.0000983	V0	0.0000000	V1
Barium	0.0092847	0.0027870	V0	0.0000000	V1
Beryllium	0.0000946	0.0000129	V0	0.0000000	V1
Bismuth	0.0000093	0.0000056	V0	0.0000081	V0
Cadmium	0.0000174	0.0000071	V0	0.0000000	V1
Calcium	0.4112124	0.8662575	V0	0.0000000	V1
Cerium	0.0000174	0.0003549	V0	0.0000000	V1
Cesium	0.0000100	0.0000248	V0	0.0000000	V1
Chromium	0.0022262	0.0005056	V0	0.0001852	V0
Cobalt	0.0000273	0.0001093	V0	0.0000346	V0
Copper	0.0017171	0.0007505	V0	0.0002908	V0
Iron	0.0393063	0.3743497	V0	0.0018239	V0
Lanthanum	0.0000130	0.0001741	V0	0.0000000	V1
Lead	0.0008577	0.0001483	V0	0.0000000	V1
Lithium	0.0000374	0.0003232	V0	0.0000000	V1
Magnesium	0.0091409	0.0773658	V0	0.0012136	V0
Manganese	0.0006949	0.0072092	V0	0.0000302	V0
Molybdenum	0.0007116	0.0002537	V0	0.0001357	V0
Neodymium	0.0000140	0.0001551	V0	0.0000000	V1
Nickel	0.0005429	0.0005461	V0	0.0001709	V0
Niobium	0.0000202	0.0000401	V0	0.0000014	V0
Palladium	0.0000632	0.0000052	V0	0.0000000	V1
Phosphorus	0.0459574	0.0094102	V0	0.0062269	V0
Platinum	0.0000088	0.0000017	V0	0.0000007	V0
Potassium	0.0061261	0.1098287	V0	0.0016693	V0
Praseodymium	0.0000070	0.0000405	V0	0.0000000	V1
Rubidium	0.0000184	0.0004671	V0	0.0000016	V0
Samarium	0.0000133	0.0000300	V0	0.0000000	V1
Selenium	0.0003366	0.0002574	V0	0.0000474	V0
Silicon	0.7676322	1.0158257	V0	0.0000000	V1
Silver	0.0000100	0.0000025	V0	0.0000000	V1
Sodium	0.0169447	0.0313634	V0	0.0009065	V0
Strontium	0.0003375	0.0014607	V0	0.0000000	V1
Tantalum	0.0000394	0.0000033	V0	0.0000000	V1
Thallium	0.0000090	0.0000047	V0	0.0000000	V1
Thorium	0.0000059	0.0000465	V0	0.0000000	V1
Tin	0.0004414	0.0000669	V0	0.0000000	V1
Titanium	0.0015201	0.0136875	V0	0.0032389	V0
Tungsten	0.0000938	0.0000640	V0	0.0000062	V0
Uranium	0.0000048	0.0000168	V0	0.0000000	V1
Vanadium	0.0007697	0.0011841	V0	0.0000000	V1
Zinc	0.0055897	0.0021909	V0	0.0003686	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		26-Nov		26-Nov		26-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	12.55	V0	10.34	V0	0.09	V0
Aluminum	0.1380326	0.0163743	V0	0.0117369	V0	0.0000000	V1
Antimony	0.0001784	0.0000368	V0	0.0001703	V0	0.0000000	V1
Arsenic	0.0001060	0.0000791	V0	0.0001647	V0	0.0000000	V1
Barium	0.0092847	0.0003992	V0	0.0016211	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000091	V0	0.0000131	V0	0.0000068	V0
Cadmium	0.0000174	0.0001494	V0	0.0001545	V0	0.0000000	V1
Calcium	0.4112124	0.0414224	V0	0.0405907	V0	0.0198165	V0
Cerium	0.0000174	0.0000183	V0	0.0000262	V0	0.0000183	V0
Cesium	0.0000100	0.0000028	V0	0.0000023	V0	0.0000000	V1
Chromium	0.0022262	0.0001477	V0	0.0001924	V0	0.0001181	V0
Cobalt	0.0000273	0.0000305	V0	0.0000241	V0	0.0000327	V0
Copper	0.0017171	0.0009082	V0	0.0011967	V0	0.0001765	V0
Iron	0.0393063	0.0148331	V0	0.0234525	V0	0.0016978	V0
Lanthanum	0.0000130	0.0000197	V0	0.0000197	V0	0.0000086	V0
Lead	0.0008577	0.0001727	V0	0.0001863	V0	0.0000000	V1
Lithium	0.0000374	0.0000166	V0	0.0000156	V0	0.0000000	V1
Magnesium	0.0091409	0.0063706	V0	0.0061241	V0	0.0018779	V0
Manganese	0.0006949	0.0006464	V0	0.0006192	V0	0.0000315	V0
Molybdenum	0.0007116	0.0008419	V0	0.0000590	V0	0.0000000	V1
Neodymium	0.0000140	0.0000067	V0	0.0000061	V0	0.0000060	V0
Nickel	0.0005429	0.0001150	V0	0.0001700	V0	0.0001786	V0
Niobium	0.0000202	0.0000026	V0	0.0000037	V0	0.0000012	V0
Palladium	0.0000632	0.0000081	V0	0.0000041	V0	0.0000037	V0
Phosphorus	0.0459574	0.0062295	V0	0.0062862	V0	0.0053834	V0
Platinum	0.0000088	0.0000008	V0	0.0000014	V0	0.0000009	V0
Potassium	0.0061261	0.0822001	V0	0.0830603	V0	0.0025953	V0
Praseodymium	0.0000070	0.0000019	V0	0.0000016	V0	0.0000019	V0
Rubidium	0.0000184	0.0001210	V0	0.0001159	V0	0.0000017	V0
Samarium	0.0000133	0.0000015	V0	0.0000010	V0	0.0000010	V0
Selenium	0.0003366	0.0000503	V0	0.0000658	V0	0.0000280	V0
Silicon	0.7676322	0.0865398	V0	0.0448557	V0	0.0000000	V1
Silver	0.0000100	0.0000077	V0	0.0000076	V0	0.0000005	V0
Sodium	0.0169447	0.0140710	V0	0.0321691	V0	0.0012880	V0
Strontium	0.0003375	0.0000926	V0	0.0001455	V0	0.0000172	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000024	V0	0.0000021	V0	0.0000000	V1
Thorium	0.0000059	0.0000024	V0	0.0000020	V0	0.0000004	V0
Tin	0.0004414	0.0000606	V0	0.0001554	V0	0.0000000	V1
Titanium	0.0015201	0.0008513	V0	0.0014925	V0	0.0007678	V0
Tungsten	0.0000938	0.0000550	V0	0.0000334	V0	0.0000364	V0
Uranium	0.0000048	0.0000009	V0	0.0000007	V0	0.0000000	V1
Vanadium	0.0007697	0.0000786	V0	0.0000589	V0	0.0000000	V1
Zinc	0.0055897	0.0088353	V0	0.0089219	V0	0.0005752	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		26-Nov		26-Nov		26-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	10.07	V0	6.44	V0	0.09	V0
Aluminum	0.1380326	0.0161343	V0	0.0123567	V0	0.0000000	V1
Antimony	0.0001784	0.0000365	V0	0.0003129	V0	0.0000000	V1
Arsenic	0.0001060	0.0000938	V0	0.0001141	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0033232	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000186	V0	0.0000421	V0	0.0000068	V0
Cadmium	0.0000174	0.0001635	V0	0.0001036	V0	0.0000000	V1
Calcium	0.4112124	0.0357355	V0	0.0473133	V0	0.0198165	V0
Cerium	0.0000174	0.0000181	V0	0.0000292	V0	0.0000183	V0
Cesium	0.0000100	0.0000024	V0	0.0000017	V0	0.0000000	V1
Chromium	0.0022262	0.0003473	V0	0.0002730	V0	0.0001181	V0
Cobalt	0.0000273	0.0003114	V0	0.0000353	V0	0.0000327	V0
Copper	0.0017171	0.0003098	V0	0.0020561	V0	0.0001765	V0
Iron	0.0393063	0.0150387	V0	0.0368769	V0	0.0016978	V0
Lanthanum	0.0000130	0.0000196	V0	0.0000131	V0	0.0000086	V0
Lead	0.0008577	0.0001561	V0	0.0001367	V0	0.0000000	V1
Lithium	0.0000374	0.0000148	V0	0.0000111	V0	0.0000000	V1
Magnesium	0.0091409	0.0049507	V0	0.0066382	V0	0.0018779	V0
Manganese	0.0006949	0.0004545	V0	0.0006244	V0	0.0000315	V0
Molybdenum	0.0007116	0.0000349	V0	0.0000795	V0	0.0000000	V1
Neodymium	0.0000140	0.0000071	V0	0.0000074	V0	0.0000060	V0
Nickel	0.0005429	0.0012563	V0	0.0002938	V0	0.0001786	V0
Niobium	0.0000202	0.0000035	V0	0.0000126	V0	0.0000012	V0
Palladium	0.0000632	0.0000066	V0	0.0000123	V0	0.0000037	V0
Phosphorus	0.0459574	0.0067757	V0	0.0059194	V0	0.0053834	V0
Platinum	0.0000088	0.0000010	V0	0.0000019	V0	0.0000009	V0
Potassium	0.0061261	0.0913041	V0	0.0602753	V0	0.0025953	V0
Praseodymium	0.0000070	0.0000018	V0	0.0000023	V0	0.0000019	V0
Rubidium	0.0000184	0.0001289	V0	0.0000844	V0	0.0000017	V0
Samarium	0.0000133	0.0000014	V0	0.0000008	V0	0.0000010	V0
Selenium	0.0003366	0.0000682	V0	0.0000676	V0	0.0000280	V0
Silicon	0.7676322	0.1290684	V0	0.1402114	V0	0.0000000	V1
Silver	0.0000100	0.0000078	V0	0.0000058	V0	0.0000005	V0
Sodium	0.0169447	0.0095821	V0	0.0334842	V0	0.0012880	V0
Strontium	0.0003375	0.0000903	V0	0.0002230	V0	0.0000172	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000021	V0	0.0000014	V0	0.0000000	V1
Thorium	0.0000059	0.0000022	V0	0.0000017	V0	0.0000004	V0
Tin	0.0004414	0.0000817	V0	0.0002601	V0	0.0000000	V1
Titanium	0.0015201	0.0012179	V0	0.0027903	V0	0.0007678	V0
Tungsten	0.0000938	0.0001272	V0	0.0000591	V0	0.0000364	V0
Uranium	0.0000048	0.0000006	V0	0.0000011	V0	0.0000000	V1
Vanadium	0.0007697	0.0000641	V0	0.0000408	V0	0.0000000	V1
Zinc	0.0055897	0.0090979	V0	0.0065931	V0	0.0005752	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		26-Nov		26-Nov		26-Nov	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	10.78	V0	0.22	V0	0.09	V0
Aluminum	0.1380326	0.0105982	V0	0.0020540	V1	0.0000000	V1
Antimony	0.0001784	0.0000737	V0	0.0000053	V1	0.0000000	V1
Arsenic	0.0001060	0.0001410	V0	0.0000120	V0	0.0000000	V1
Barium	0.0092847	0.0004837	V0	0.0000626	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000033	V1	0.0000000	V1
Bismuth	0.0000093	0.0000073	V0	0.0000132	V0	0.0000068	V0
Cadmium	0.0000174	0.0000832	V0	0.0000017	V0	0.0000000	V1
Calcium	0.4112124	0.0523007	V0	0.0220328	V0	0.0198165	V0
Cerium	0.0000174	0.0000111	V0	0.0000005	V1	0.0000183	V0
Cesium	0.0000100	0.0000013	V0	0.0000000	V1	0.0000000	V1
Chromium	0.0022262	0.0002251	V0	0.0004621	V0	0.0001181	V0
Cobalt	0.0000273	0.0002452	V0	0.0000536	V0	0.0000327	V0
Copper	0.0017171	0.0002999	V0	0.0009747	V0	0.0001765	V0
Iron	0.0393063	0.0187889	V0	0.0039659	V0	0.0016978	V0
Lanthanum	0.0000130	0.0000078	V0	0.0000000	V1	0.0000086	V0
Lead	0.0008577	0.0001754	V0	0.0000605	V0	0.0000000	V1
Lithium	0.0000374	0.0000058	V0	0.0000000	V1	0.0000000	V1
Magnesium	0.0091409	0.0056983	V0	0.0019085	V0	0.0018779	V0
Manganese	0.0006949	0.0004362	V0	0.0000568	V0	0.0000315	V0
Molybdenum	0.0007116	0.0004554	V0	0.0000951	V0	0.0000000	V1
Neodymium	0.0000140	0.0000032	V0	0.0000001	V1	0.0000060	V0
Nickel	0.0005429	0.0004884	V0	0.0005095	V0	0.0001786	V0
Niobium	0.0000202	0.0000033	V0	0.0000017	V0	0.0000012	V0
Palladium	0.0000632	0.0000029	V0	0.0000022	V1	0.0000037	V0
Phosphorus	0.0459574	0.0064188	V0	0.0057959	V0	0.0053834	V0
Platinum	0.0000088	0.0000010	V0	0.0000011	V0	0.0000009	V0
Potassium	0.0061261	0.0512084	V0	0.0035901	V0	0.0025953	V0
Praseodymium	0.0000070	0.0000008	V0	0.0000000	V1	0.0000019	V0
Rubidium	0.0000184	0.0000749	V0	0.0000028	V0	0.0000017	V0
Samarium	0.0000133	0.0000007	V0	0.0000000	V1	0.0000010	V0
Selenium	0.0003366	0.0001345	V0	0.0000448	V0	0.0000280	V0
Silicon	0.7676322	0.1437510	V0	0.0310768	V1	0.0000000	V1
Silver	0.0000100	0.0000058	V0	0.0000002	V1	0.0000005	V0
Sodium	0.0169447	0.0147843	V0	0.0015009	V0	0.0012880	V0
Strontium	0.0003375	0.0001070	V0	0.0000221	V0	0.0000172	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000013	V0	0.0000000	V1	0.0000000	V1
Thorium	0.0000059	0.0000012	V0	0.0000000	V1	0.0000004	V0
Tin	0.0004414	0.0000869	V0	0.0000278	V0	0.0000000	V1
Titanium	0.0015201	0.0101389	V0	0.0026603	V0	0.0007678	V0
Tungsten	0.0000938	0.0000238	V0	0.0000106	V0	0.0000364	V0
Uranium	0.0000048	0.0000003	V0	0.0000000	V1	0.0000000	V1
Vanadium	0.0007697	0.0000000	V1	0.0000097	V1	0.0000000	V1
Zinc	0.0055897	0.0048868	V0	0.0013685	V0	0.0005752	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**26-Nov**		**26-Nov**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	15.80	V0	0.09	V0
Aluminum	0.1380326	0.0356068	V0	0.0000000	V1
Antimony	0.0001784	0.0000407	V0	0.0000000	V1
Arsenic	0.0001060	0.0001047	V0	0.0000000	V1
Barium	0.0092847	0.0007073	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000429	V0	0.0000068	V0
Cadmium	0.0000174	0.0001433	V0	0.0000000	V1
Calcium	0.4112124	0.1054758	V0	0.0198165	V0
Cerium	0.0000174	0.0000424	V0	0.0000183	V0
Cesium	0.0000100	0.0000037	V0	0.0000000	V1
Chromium	0.0022262	0.0028026	V0	0.0001181	V0
Cobalt	0.0000273	0.0001244	V0	0.0000327	V0
Copper	0.0017171	0.0005819	V0	0.0001765	V0
Iron	0.0393063	0.0756202	V0	0.0016978	V0
Lanthanum	0.0000130	0.0000300	V0	0.0000086	V0
Lead	0.0008577	0.0001629	V0	0.0000000	V1
Lithium	0.0000374	0.0000369	V0	0.0000000	V1
Magnesium	0.0091409	0.0119571	V0	0.0018779	V0
Manganese	0.0006949	0.0018541	V0	0.0000315	V0
Molybdenum	0.0007116	0.0004038	V0	0.0000000	V1
Neodymium	0.0000140	0.0000182	V0	0.0000060	V0
Nickel	0.0005429	0.0018285	V0	0.0001786	V0
Niobium	0.0000202	0.0000143	V0	0.0000012	V0
Palladium	0.0000632	0.0000071	V0	0.0000037	V0
Phosphorus	0.0459574	0.0077276	V0	0.0053834	V0
Platinum	0.0000088	0.0000012	V0	0.0000009	V0
Potassium	0.0061261	0.0862835	V0	0.0025953	V0
Praseodymium	0.0000070	0.0000045	V0	0.0000019	V0
Rubidium	0.0000184	0.0001428	V0	0.0000017	V0
Samarium	0.0000133	0.0000029	V0	0.0000010	V0
Selenium	0.0003366	0.0000983	V0	0.0000280	V0
Silicon	0.7676322	0.2086421	V0	0.0000000	V1
Silver	0.0000100	0.0000066	V0	0.0000005	V0
Sodium	0.0169447	0.0179013	V0	0.0012880	V0
Strontium	0.0003375	0.0002059	V0	0.0000172	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000022	V0	0.0000000	V1
Thorium	0.0000059	0.0000065	V0	0.0000004	V0
Tin	0.0004414	0.0000648	V0	0.0000000	V1
Titanium	0.0015201	0.0028723	V0	0.0007678	V0
Tungsten	0.0000938	0.0001117	V0	0.0000364	V0
Uranium	0.0000048	0.0000017	V0	0.0000000	V1
Vanadium	0.0007697	0.0002176	V0	0.0000000	V1
Zinc	0.0055897	0.0094987	V0	0.0005752	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		02-Dec		02-Dec		02-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	24.35	V0	18.63	V0	0.25	V0
Aluminum	0.1380326	0.1140073	V0	0.0444793	V0	0.0000000	V1
Antimony	0.0001784	0.0001341	V0	0.0007652	V0	0.0000000	V1
Arsenic	0.0001060	0.0002227	V0	0.0002804	V0	0.0000000	V1
Barium	0.0092847	0.0027208	V0	0.0033564	V0	0.0000000	V1
Beryllium	0.0000946	0.0000059	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000249	V0	0.0000165	V0	0.0000254	V0
Cadmium	0.0000174	0.0000611	V0	0.0000835	V0	0.0000000	V1
Calcium	0.4112124	0.2382336	V0	0.0585969	V0	0.0000000	V1
Cerium	0.0000174	0.0001494	V0	0.0000792	V0	0.0000011	V0
Cesium	0.0000100	0.0000085	V0	0.0000040	V0	0.0000000	V1
Chromium	0.0022262	0.0005170	V0	0.0003695	V0	0.0000000	V1
Cobalt	0.0000273	0.0000831	V0	0.0000429	V0	0.0000194	V0
Copper	0.0017171	0.0009476	V0	0.0019734	V0	0.0003873	V0
Iron	0.0393063	0.1087746	V0	0.0583165	V0	0.0048143	V0
Lanthanum	0.0000130	0.0001906	V0	0.0001700	V0	0.0000006	V0
Lead	0.0008577	0.0005455	V0	0.0003566	V0	0.0000000	V1
Lithium	0.0000374	0.0001015	V0	0.0000321	V0	0.0000000	V1
Magnesium	0.0091409	0.0269157	V0	0.0110854	V0	0.0012738	V0
Manganese	0.0006949	0.0037521	V0	0.0012632	V0	0.0000340	V0
Molybdenum	0.0007116	0.0003193	V0	0.0001634	V0	0.0000406	V0
Neodymium	0.0000140	0.0000626	V0	0.0000211	V0	0.0000000	V1
Nickel	0.0005429	0.0012702	V0	0.0004407	V0	0.0001367	V0
Niobium	0.0000202	0.0000198	V0	0.0000093	V0	0.0000011	V0
Palladium	0.0000632	0.0000101	V0	0.0000091	V0	0.0000041	V0
Phosphorus	0.0459574	0.0095161	V0	0.0075908	V0	0.0045410	V0
Platinum	0.0000088	0.0000009	V0	0.0000014	V0	0.0000009	V0
Potassium	0.0061261	0.1226496	V0	0.1037103	V0	0.0008591	V0
Praseodymium	0.0000070	0.0000162	V0	0.0000069	V0	0.0000000	V1
Rubidium	0.0000184	0.0002521	V0	0.0001819	V0	0.0000010	V0
Samarium	0.0000133	0.0000107	V0	0.0000030	V0	0.0000000	V1
Selenium	0.0003366	0.0001743	V0	0.0001285	V0	0.0000000	V1
Silicon	0.7676322	0.3072572	V0	0.1381663	V0	0.0376990	V0
Silver	0.0000100	0.0000063	V0	0.0000077	V0	0.0000000	V1
Sodium	0.0169447	0.0362838	V0	0.0360192	V0	0.0011053	V0
Strontium	0.0003375	0.0007633	V0	0.0003397	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000030	V0	0.0000025	V0	0.0000000	V1
Thorium	0.0000059	0.0000182	V0	0.0000071	V0	0.0000000	V1
Tin	0.0004414	0.0001643	V0	0.0003773	V0	0.0000000	V1
Titanium	0.0015201	0.0054237	V0	0.0025900	V0	0.0002470	V0
Tungsten	0.0000938	0.0001009	V0	0.0000681	V0	0.0000429	V0
Uranium	0.0000048	0.0000068	V0	0.0000036	V0	0.0000000	V1
Vanadium	0.0007697	0.0028978	V0	0.0002872	V0	0.0000409	V0
Zinc	0.0055897	0.0110637	V0	0.0088758	V0	0.0005201	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		02-Dec		02-Dec		02-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	16.43	V0	14.51	V0	0.25	V0
Aluminum	0.1380326	0.0379329	V0	0.0360905	V0	0.0000000	V1
Antimony	0.0001784	0.0003896	V0	0.0000977	V0	0.0000000	V1
Arsenic	0.0001060	0.0002132	V0	0.0001659	V0	0.0000000	V1
Barium	0.0092847	0.0041352	V0	0.0011906	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000742	V0	0.0000254	V0	0.0000254	V0
Cadmium	0.0000174	0.0000713	V0	0.0000687	V0	0.0000000	V1
Calcium	0.4112124	0.0753358	V0	0.0510564	V0	0.0000000	V1
Cerium	0.0000174	0.0000779	V0	0.0000351	V0	0.0000011	V0
Cesium	0.0000100	0.0000033	V0	0.0000028	V0	0.0000000	V1
Chromium	0.0022262	0.0003365	V0	0.0004308	V0	0.0000000	V1
Cobalt	0.0000273	0.0000640	V0	0.0000313	V0	0.0000194	V0
Copper	0.0017171	0.0021326	V0	0.0016279	V0	0.0003873	V0
Iron	0.0393063	0.0606227	V0	0.0392504	V0	0.0048143	V0
Lanthanum	0.0000130	0.0001455	V0	0.0001068	V0	0.0000006	V0
Lead	0.0008577	0.0002956	V0	0.0002708	V0	0.0000000	V1
Lithium	0.0000374	0.0000262	V0	0.0000188	V0	0.0000000	V1
Magnesium	0.0091409	0.0120991	V0	0.0094334	V0	0.0012738	V0
Manganese	0.0006949	0.0010957	V0	0.0009933	V0	0.0000340	V0
Molybdenum	0.0007116	0.0001380	V0	0.0012130	V0	0.0000406	V0
Neodymium	0.0000140	0.0000212	V0	0.0000141	V0	0.0000000	V1
Nickel	0.0005429	0.0005055	V0	0.0005396	V0	0.0001367	V0
Niobium	0.0000202	0.0000086	V0	0.0000069	V0	0.0000011	V0
Palladium	0.0000632	0.0000094	V0	0.0000046	V0	0.0000041	V0
Phosphorus	0.0459574	0.0076211	V0	0.0060974	V0	0.0045410	V0
Platinum	0.0000088	0.0000012	V0	0.0000009	V0	0.0000009	V0
Potassium	0.0061261	0.0814989	V0	0.0749938	V0	0.0008591	V0
Praseodymium	0.0000070	0.0000071	V0	0.0000038	V0	0.0000000	V1
Rubidium	0.0000184	0.0001333	V0	0.0001237	V0	0.0000010	V0
Samarium	0.0000133	0.0000031	V0	0.0000023	V0	0.0000000	V1
Selenium	0.0003366	0.0001249	V0	0.0002506	V0	0.0000000	V1
Silicon	0.7676322	0.1721853	V0	0.0705001	V0	0.0376990	V0
Silver	0.0000100	0.0000067	V0	0.0000049	V0	0.0000000	V1
Sodium	0.0169447	0.0340003	V0	0.0235500	V0	0.0011053	V0
Strontium	0.0003375	0.0004079	V0	0.0002164	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000024	V0	0.0000020	V0	0.0000000	V1
Thorium	0.0000059	0.0000070	V0	0.0000052	V0	0.0000000	V1
Tin	0.0004414	0.0003134	V0	0.0001014	V0	0.0000000	V1
Titanium	0.0015201	0.0029974	V0	0.0249324	V0	0.0002470	V0
Tungsten	0.0000938	0.0001235	V0	0.0001049	V0	0.0000429	V0
Uranium	0.0000048	0.0000034	V0	0.0000020	V0	0.0000000	V1
Vanadium	0.0007697	0.0002409	V0	0.0001711	V0	0.0000409	V0
Zinc	0.0055897	0.0078943	V0	0.0069498	V0	0.0005201	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		02-Dec		02-Dec		02-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	17.09	V0	15.98	V0	0.25	V0
Aluminum	0.1380326	0.0804428	V0	0.1079583	V0	0.0000000	V1
Antimony	0.0001784	0.0001289	V0	0.0000644	V0	0.0000000	V1
Arsenic	0.0001060	0.0001882	V0	0.0001652	V0	0.0000000	V1
Barium	0.0092847	0.0021038	V0	0.0013678	V0	0.0000000	V1
Beryllium	0.0000946	0.0000045	V0	0.0000044	V0	0.0000000	V1
Bismuth	0.0000093	0.0000900	V0	0.0000206	V0	0.0000254	V0
Cadmium	0.0000174	0.0000625	V0	0.0000484	V0	0.0000000	V1
Calcium	0.4112124	0.1146981	V0	0.0635564	V0	0.0000000	V1
Cerium	0.0000174	0.0000934	V0	0.0001033	V0	0.0000011	V0
Cesium	0.0000100	0.0000060	V0	0.0000083	V0	0.0000000	V1
Chromium	0.0022262	0.0002863	V0	0.0002933	V0	0.0000000	V1
Cobalt	0.0000273	0.0000605	V0	0.0001012	V0	0.0000194	V0
Copper	0.0017171	0.0008442	V0	0.0005927	V0	0.0003873	V0
Iron	0.0393063	0.0677340	V0	0.0815376	V0	0.0048143	V0
Lanthanum	0.0000130	0.0001624	V0	0.0001257	V0	0.0000006	V0
Lead	0.0008577	0.0002714	V0	0.0001992	V0	0.0000000	V1
Lithium	0.0000374	0.0000673	V0	0.0001110	V0	0.0000000	V1
Magnesium	0.0091409	0.0177305	V0	0.0192527	V0	0.0012738	V0
Manganese	0.0006949	0.0020587	V0	0.0019181	V0	0.0000340	V0
Molybdenum	0.0007116	0.0001718	V0	0.0001132	V0	0.0000406	V0
Neodymium	0.0000140	0.0000374	V0	0.0000456	V0	0.0000000	V1
Nickel	0.0005429	0.0004714	V0	0.0003428	V0	0.0001367	V0
Niobium	0.0000202	0.0000115	V0	0.0000140	V0	0.0000011	V0
Palladium	0.0000632	0.0000032	V0	0.0000053	V0	0.0000041	V0
Phosphorus	0.0459574	0.0074479	V0	0.0071213	V0	0.0045410	V0
Platinum	0.0000088	0.0000014	V0	0.0000012	V0	0.0000009	V0
Potassium	0.0061261	0.0941162	V0	0.0829879	V0	0.0008591	V0
Praseodymium	0.0000070	0.0000103	V0	0.0000116	V0	0.0000000	V1
Rubidium	0.0000184	0.0001941	V0	0.0002051	V0	0.0000010	V0
Samarium	0.0000133	0.0000061	V0	0.0000086	V0	0.0000000	V1
Selenium	0.0003366	0.0001341	V0	0.0001284	V0	0.0000000	V1
Silicon	0.7676322	0.2080869	V0	0.3378470	V0	0.0376990	V0
Silver	0.0000100	0.0000052	V0	0.0000041	V0	0.0000000	V1
Sodium	0.0169447	0.0315526	V0	0.0310417	V0	0.0011053	V0
Strontium	0.0003375	0.0004453	V0	0.0003671	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000024	V0	0.0000021	V0	0.0000000	V1
Thorium	0.0000059	0.0000119	V0	0.0000146	V0	0.0000000	V1
Tin	0.0004414	0.0001699	V0	0.0001244	V0	0.0000000	V1
Titanium	0.0015201	0.0034027	V0	0.0045032	V0	0.0002470	V0
Tungsten	0.0000938	0.0000899	V0	0.0001295	V0	0.0000429	V0
Uranium	0.0000048	0.0000043	V0	0.0000045	V0	0.0000000	V1
Vanadium	0.0007697	0.0007780	V0	0.0003880	V0	0.0000409	V0
Zinc	0.0055897	0.0078577	V0	0.0060280	V0	0.0005201	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**02-Dec**		**02-Dec**	
Particulate Size		**PM10**			
Total Air Volume (m³)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	16.92	V0	0.25	V0
Aluminum	0.1380326	0.1181914	V0	0.0000000	V1
Antimony	0.0001784	0.0000943	V0	0.0000000	V1
Arsenic	0.0001060	0.0001656	V0	0.0000000	V1
Barium	0.0092847	0.0021660	V0	0.0000000	V1
Beryllium	0.0000946	0.0000064	V0	0.0000000	V1
Bismuth	0.0000093	0.0000217	V0	0.0000254	V0
Cadmium	0.0000174	0.0000535	V0	0.0000000	V1
Calcium	0.4112124	0.2247556	V0	0.0000000	V1
Cerium	0.0000174	0.0002405	V0	0.0000011	V0
Cesium	0.0000100	0.0000089	V0	0.0000000	V1
Chromium	0.0022262	0.0054620	V4	0.0000000	V1
Cobalt	0.0000273	0.0001330	V0	0.0000194	V0
Copper	0.0017171	0.0006630	V0	0.0003873	V0
Iron	0.0393063	0.1676504	V0	0.0048143	V0
Lanthanum	0.0000130	0.0002099	V0	0.0000006	V0
Lead	0.0008577	0.0002687	V0	0.0000000	V1
Lithium	0.0000374	0.0001016	V0	0.0000000	V1
Magnesium	0.0091409	0.0290677	V0	0.0012738	V0
Manganese	0.0006949	0.0038060	V0	0.0000340	V0
Molybdenum	0.0007116	0.0007170	V0	0.0000406	V0
Neodymium	0.0000140	0.0000550	V0	0.0000000	V1
Nickel	0.0005429	0.0031895	V0	0.0001367	V0
Niobium	0.0000202	0.0000153	V0	0.0000011	V0
Palladium	0.0000632	0.0000049	V0	0.0000041	V0
Phosphorus	0.0459574	0.0062137	V0	0.0045410	V0
Platinum	0.0000088	0.0000011	V0	0.0000009	V0
Potassium	0.0061261	0.0839589	V0	0.0008591	V0
Praseodymium	0.0000070	0.0000147	V0	0.0000000	V1
Rubidium	0.0000184	0.0002192	V0	0.0000010	V0
Samarium	0.0000133	0.0000096	V0	0.0000000	V1
Selenium	0.0003366	0.0001727	V0	0.0000000	V1
Silicon	0.7676322	0.3799170	V0	0.0376990	V0
Silver	0.0000100	0.0000056	V0	0.0000000	V1
Sodium	0.0169447	0.0296852	V0	0.0011053	V0
Strontium	0.0003375	0.0005806	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000028	V0	0.0000000	V1
Thorium	0.0000059	0.0000173	V0	0.0000000	V1
Tin	0.0004414	0.0001444	V0	0.0000000	V1
Titanium	0.0015201	0.0041380	V0	0.0002470	V0
Tungsten	0.0000938	0.0000930	V0	0.0000429	V0
Uranium	0.0000048	0.0000056	V0	0.0000000	V1
Vanadium	0.0007697	0.0005802	V0	0.0000409	V0
Zinc	0.0055897	0.0081389	V0	0.0005201	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station #		**AMS 1**		**AMS 6**			
Sample Date		**08-Dec**		**08-Dec**		**08-Dec**	
Particulate Size		**PM10**		**PM10**			
Total Air Volume (m³)		**23.9**		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**	**Results (µg/m³)**	**QC Flag**
Particulate Matter	1.00	3.36	V0	4.42	V0	0.05	V0
Aluminum	0.1380326	0.0188058	V0	0.0140911	V0	0.0000000	V1
Antimony	0.0001784	0.0000457	V0	0.0000253	V0	0.0000000	V1
Arsenic	0.0001060	0.0007861	V0	0.0000226	V0	0.0000000	V1
Barium	0.0092847	0.0004515	V0	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000040	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000045	V0	0.0000175	V0	0.0000120	V0
Cadmium	0.0000174	0.0000074	V0	0.0000030	V0	0.0000000	V1
Calcium	0.4112124	0.0489174	V0	0.0423746	V0	0.0000000	V1
Cerium	0.0000174	0.0000325	V0	0.0000300	V0	0.0000013	V0
Cesium	0.0000100	0.0000013	V0	0.0000012	V0	0.0000000	V1
Chromium	0.0022262	0.0002500	V0	0.0004038	V0	0.0002500	V0
Cobalt	0.0000273	0.0000387	V0	0.0000738	V0	0.0000151	V0
Copper	0.0017171	0.0006428	V0	0.0009346	V0	0.0001647	V0
Iron	0.0393063	0.0320136	V0	0.0217031	V0	0.0019522	V0
Lanthanum	0.0000130	0.0000117	V0	0.0000152	V0	0.0000000	V1
Lead	0.0008577	0.0000621	V0	0.0000682	V0	0.0000000	V1
Lithium	0.0000374	0.0000166	V0	0.0000155	V0	0.0000000	V1
Magnesium	0.0091409	0.0161514	V0	0.0159862	V0	0.0016105	V0
Manganese	0.0006949	0.0010617	V0	0.0008190	V0	0.0000346	V0
Molybdenum	0.0007116	0.0000760	V0	0.0001408	V0	0.0000000	V1
Neodymium	0.0000140	0.0000098	V0	0.0000091	V0	0.0000000	V1
Nickel	0.0005429	0.0002068	V0	0.0008492	V0	0.0001746	V0
Niobium	0.0000202	0.0000033	V0	0.0000062	V0	0.0000013	V0
Palladium	0.0000632	0.0000053	V0	0.0000050	V0	0.0000000	V1
Phosphorus	0.0459574	0.0064367	V0	0.0061144	V0	0.0042297	V0
Platinum	0.0000088	0.0000006	V0	0.0000010	V0	0.0000007	V0
Potassium	0.0061261	0.0250521	V0	0.0118555	V0	0.0011753	V0
Praseodymium	0.0000070	0.0000034	V0	0.0000021	V0	0.0000000	V1
Rubidium	0.0000184	0.0000441	V0	0.0000255	V0	0.0000011	V0
Samarium	0.0000133	0.0000012	V0	0.0000010	V0	0.0000000	V1
Selenium	0.0003366	0.0000272	V0	0.0000479	V0	0.0000000	V1
Silicon	0.7676322	0.0953256	V4	0.1294285	V4	-9999	M2
Silver	0.0000100	0.0000028	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0713433	V0	0.0616193	V0	0.0011464	V0
Strontium	0.0003375	0.0001661	V0	0.0001679	V0	0.0000167	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000004	V0	0.0000004	V0	0.0000000	V1
Thorium	0.0000059	0.0000021	V0	0.0000022	V0	0.0000000	V1
Tin	0.0004414	0.0000452	V0	0.0000496	V0	0.0000000	V1
Titanium	0.0015201	0.0009830	V0	0.0008635	V0	0.0002324	V0
Tungsten	0.0000938	0.0001112	V0	0.0005469	V0	0.0000262	V0
Uranium	0.0000048	0.0000008	V0	0.0000010	V0	0.0000000	V1
Vanadium	0.0007697	0.0000563	V0	0.0005552	V0	0.0000000	V1
Zinc	0.0055897	0.0044021	V0	0.0015683	V0	0.0003980	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		08-Dec		08-Dec		08-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	-9999	M2	2.38	V0	0.05	V0
Aluminum	0.1380326	0.0108032	V0	0.0104561	V0	0.0000000	V1
Antimony	0.0001784	0.0000448	V0	0.0000288	V0	0.0000000	V1
Arsenic	0.0001060	0.0000507	V0	0.0000306	V0	0.0000000	V1
Barium	0.0092847	0.0005500	V0	0.0004084	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000833	V0	0.0000084	V0	0.0000120	V0
Cadmium	0.0000174	0.0000041	V0	0.0000080	V0	0.0000000	V1
Calcium	0.4112124	0.0351308	V0	0.0326369	V0	0.0000000	V1
Cerium	0.0000174	0.0000085	V0	0.0000187	V0	0.0000013	V0
Cesium	0.0000100	0.0000008	V0	0.0000009	V0	0.0000000	V1
Chromium	0.0022262	0.0003929	V0	0.0003449	V0	0.0002500	V0
Cobalt	0.0000273	0.0000275	V0	0.0000126	V0	0.0000151	V0
Copper	0.0017171	0.0005586	V0	0.0003499	V0	0.0001647	V0
Iron	0.0393063	0.0142101	V0	0.0179295	V0	0.0019522	V0
Lanthanum	0.0000130	0.0000033	V0	0.0000078	V0	0.0000000	V1
Lead	0.0008577	0.0000624	V0	0.0000634	V0	0.0000000	V1
Lithium	0.0000374	0.0000084	V0	0.0000088	V0	0.0000000	V1
Magnesium	0.0091409	0.0121128	V0	0.0210082	V0	0.0016105	V0
Manganese	0.0006949	0.0010474	V0	0.0003689	V0	0.0000346	V0
Molybdenum	0.0007116	0.0003802	V0	0.0002489	V0	0.0000000	V1
Neodymium	0.0000140	0.0000023	V0	0.0000047	V0	0.0000000	V1
Nickel	0.0005429	0.0003740	V0	0.0001891	V0	0.0001746	V0
Niobium	0.0000202	0.0000021	V0	0.0000021	V0	0.0000013	V0
Palladium	0.0000632	0.0000030	V0	0.0000041	V0	0.0000000	V1
Phosphorus	0.0459574	0.0066329	V0	0.0060055	V0	0.0042297	V0
Platinum	0.0000088	0.0000011	V0	0.0000007	V0	0.0000007	V0
Potassium	0.0061261	0.0292731	V0	0.0148667	V0	0.0011753	V0
Praseodymium	0.0000070	0.0000006	V0	0.0000014	V0	0.0000000	V1
Rubidium	0.0000184	0.0000406	V0	0.0000229	V0	0.0000011	V0
Samarium	0.0000133	0.0000000	V1	0.0000000	V1	0.0000000	V1
Selenium	0.0003366	0.0000660	V0	0.0000526	V0	0.0000000	V1
Silicon	0.7676322	0.0864824	V4	0.0470994	V4	-9999	M2
Silver	0.0000100	0.0000011	V0	0.0000022	V0	0.0000000	V1
Sodium	0.0169447	0.0536588	V0	0.1040931	V0	0.0011464	V0
Strontium	0.0003375	0.0001250	V0	0.0001804	V0	0.0000167	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000004	V0	0.0000005	V0	0.0000000	V1
Thorium	0.0000059	0.0000011	V0	0.0000010	V0	0.0000000	V1
Tin	0.0004414	0.0000829	V0	0.0000423	V0	0.0000000	V1
Titanium	0.0015201	0.0066761	V0	0.0053316	V0	0.0002324	V0
Tungsten	0.0000938	0.0000238	V0	0.0000312	V0	0.0000262	V0
Uranium	0.0000048	0.0000005	V0	0.0000005	V0	0.0000000	V1
Vanadium	0.0007697	0.0001933	V0	0.0001350	V0	0.0000000	V1
Zinc	0.0055897	0.0046257	V0	0.0013351	V0	0.0003980	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		08-Dec		08-Dec		08-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	1.35	V0	2.55	V0	0.05	V0
Aluminum	0.1380326	0.0135417	V0	0.0233970	V0	0.0000000	V1
Antimony	0.0001784	0.0000268	V0	0.0000150	V0	0.0000000	V1
Arsenic	0.0001060	0.0000111	V0	0.0000208	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0000000	V1	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000092	V0	0.0000050	V0	0.0000120	V0
Cadmium	0.0000174	0.0000000	V1	0.0000017	V0	0.0000000	V1
Calcium	0.4112124	0.0306767	V0	0.0348406	V0	0.0000000	V1
Cerium	0.0000174	0.0000176	V0	0.0000261	V0	0.0000013	V0
Cesium	0.0000100	0.0000008	V0	0.0000015	V0	0.0000000	V1
Chromium	0.0022262	0.0006117	V0	0.0003482	V0	0.0002500	V0
Cobalt	0.0000273	0.0000162	V0	0.0000621	V0	0.0000151	V0
Copper	0.0017171	0.0008726	V0	0.0004971	V0	0.0001647	V0
Iron	0.0393063	0.0206588	V0	0.0241181	V0	0.0019522	V0
Lanthanum	0.0000130	0.0000077	V0	0.0000116	V0	0.0000000	V1
Lead	0.0008577	0.0000556	V0	0.0000430	V0	0.0000000	V1
Lithium	0.0000374	0.0000115	V0	0.0000250	V0	0.0000000	V1
Magnesium	0.0091409	0.0116889	V0	0.0198836	V0	0.0016105	V0
Manganese	0.0006949	0.0008493	V0	0.0006989	V0	0.0000346	V0
Molybdenum	0.0007116	0.0000852	V0	0.0002243	V0	0.0000000	V1
Neodymium	0.0000140	0.0000066	V0	0.0000108	V0	0.0000000	V1
Nickel	0.0005429	0.0002991	V0	0.0003378	V0	0.0001746	V0
Niobium	0.0000202	0.0000034	V0	0.0000041	V0	0.0000013	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0058334	V0	0.0073555	V0	0.0042297	V0
Platinum	0.0000088	0.0000006	V0	0.0000008	V0	0.0000007	V0
Potassium	0.0061261	0.0077769	V0	0.0131405	V0	0.0011753	V0
Praseodymium	0.0000070	0.0000018	V0	0.0000029	V0	0.0000000	V1
Rubidium	0.0000184	0.0000160	V0	0.0000289	V0	0.0000011	V0
Samarium	0.0000133	0.0000011	V0	0.0000018	V0	0.0000000	V1
Selenium	0.0003366	0.0000231	V0	0.0000520	V0	0.0000000	V1
Silicon	0.7676322	0.1032120	V4	0.1066781	V4	-9999	M2
Silver	0.0000100	0.0000006	V0	0.0000000	V1	0.0000000	V1
Sodium	0.0169447	0.0475445	V0	0.0900579	V0	0.0011464	V0
Strontium	0.0003375	0.0001055	V0	0.0001762	V0	0.0000167	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000000	V1	0.0000004	V0	0.0000000	V1
Thorium	0.0000059	0.0000018	V0	0.0000034	V0	0.0000000	V1
Tin	0.0004414	0.0000445	V0	0.0000307	V0	0.0000000	V1
Titanium	0.0015201	0.0016160	V0	0.0045104	V0	0.0002324	V0
Tungsten	0.0000938	0.0000307	V0	0.0000271	V0	0.0000262	V0
Uranium	0.0000048	0.0000007	V0	0.0000009	V0	0.0000000	V1
Vanadium	0.0007697	0.0000807	V0	0.0001198	V0	0.0000000	V1
Zinc	0.0055897	0.0014972	V0	0.0016253	V0	0.0003980	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**08-Dec**		**08-Dec**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	3.39	V0	0.05	V0
Aluminum	0.1380326	0.0405350	V0	0.0000000	V1
Antimony	0.0001784	0.0000452	V0	0.0000000	V1
Arsenic	0.0001060	0.0000553	V0	0.0000000	V1
Barium	0.0092847	0.0006010	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000074	V0	0.0000120	V0
Cadmium	0.0000174	0.0000024	V0	0.0000000	V1
Calcium	0.4112124	0.0472137	V0	0.0000000	V1
Cerium	0.0000174	0.0000560	V0	0.0000013	V0
Cesium	0.0000100	0.0000026	V0	0.0000000	V1
Chromium	0.0022262	0.0006812	V0	0.0002500	V0
Cobalt	0.0000273	0.0000914	V0	0.0000151	V0
Copper	0.0017171	0.0013166	V0	0.0001647	V0
Iron	0.0393063	0.0663318	V0	0.0019522	V0
Lanthanum	0.0000130	0.0000221	V0	0.0000000	V1
Lead	0.0008577	0.0000656	V0	0.0000000	V1
Lithium	0.0000374	0.0000449	V0	0.0000000	V1
Magnesium	0.0091409	0.0216057	V0	0.0016105	V0
Manganese	0.0006949	0.0012963	V0	0.0000346	V0
Molybdenum	0.0007116	0.0003372	V0	0.0000000	V1
Neodymium	0.0000140	0.0000218	V0	0.0000000	V1
Nickel	0.0005429	0.0012433	V0	0.0001746	V0
Niobium	0.0000202	0.0000062	V0	0.0000013	V0
Palladium	0.0000632	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0079159	V0	0.0042297	V0
Platinum	0.0000088	0.0000015	V0	0.0000007	V0
Potassium	0.0061261	0.0179737	V0	0.0011753	V0
Praseodymium	0.0000070	0.0000056	V0	0.0000000	V1
Rubidium	0.0000184	0.0000489	V0	0.0000011	V0
Samarium	0.0000133	0.0000031	V0	0.0000000	V1
Selenium	0.0003366	0.0000448	V0	0.0000000	V1
Silicon	0.7676322	0.1177571	V4	-9999	M2
Silver	0.0000100	0.0000017	V0	0.0000000	V1
Sodium	0.0169447	0.0843220	V0	0.0011464	V0
Strontium	0.0003375	0.0002180	V0	0.0000167	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000007	V0	0.0000000	V1
Thorium	0.0000059	0.0000051	V0	0.0000000	V1
Tin	0.0004414	0.0001018	V0	0.0000000	V1
Titanium	0.0015201	0.0020802	V0	0.0002324	V0
Tungsten	0.0000938	0.0001233	V0	0.0000262	V0
Uranium	0.0000048	0.0000015	V0	0.0000000	V1
Vanadium	0.0007697	0.0001079	V0	0.0000000	V1
Zinc	0.0055897	0.0021758	V0	0.0003980	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		14-Dec		14-Dec		14-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	11.82	V0	5.10	V0	0.03	V1
Aluminum	0.1380326	0.0790763	V0	0.0444819	V0	0.0000000	V1
Antimony	0.0001784	0.0002616	V0	0.0001350	V0	0.0000000	V1
Arsenic	0.0001060	0.0000914	V0	0.0000745	V0	0.0000000	V1
Barium	0.0092847	0.0026060	V0	0.0017092	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000140	V0	0.0000132	V0	0.0000053	V0
Cadmium	0.0000174	0.0000259	V0	0.0000249	V0	0.0000000	V1
Calcium	0.4112124	0.1709484	V0	0.1146434	V0	0.0000000	V1
Cerium	0.0000174	0.0001230	V0	0.0000658	V0	0.0000000	V1
Cesium	0.0000100	0.0000085	V0	0.0000063	V0	0.0000000	V1
Chromium	0.0022262	0.0005236	V0	0.0002489	V0	0.0000000	V1
Cobalt	0.0000273	0.0000722	V0	0.0000506	V0	0.0000284	V0
Copper	0.0017171	0.0026051	V0	0.0010789	V0	0.0002070	V0
Iron	0.0393063	0.1046787	V0	0.0511929	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000534	V0	0.0000296	V0	0.0000011	V0
Lead	0.0008577	0.0004799	V0	0.0004473	V0	0.0000000	V1
Lithium	0.0000374	0.0000854	V0	0.0000417	V0	0.0000000	V1
Magnesium	0.0091409	0.0374595	V0	0.0244224	V0	0.0013703	V0
Manganese	0.0006949	0.0039759	V0	0.0019710	V0	0.0000000	V1
Molybdenum	0.0007116	0.0003331	V0	0.0000728	V0	0.0000000	V1
Neodymium	0.0000140	0.0000431	V0	0.0000223	V0	0.0000000	V1
Nickel	0.0005429	0.0008253	V0	0.0003261	V0	0.0000897	V0
Niobium	0.0000202	0.0000122	V0	0.0000065	V0	0.0000000	V1
Palladium	0.0000632	0.0000087	V0	0.0000057	V0	0.0000000	V1
Phosphorus	0.0459574	0.0091297	V0	0.0063945	V0	0.0040411	V0
Platinum	0.0000088	0.0000010	V0	0.0000006	V0	0.0000008	V0
Potassium	0.0061261	0.1036307	V0	0.0672538	V0	0.0030501	V0
Praseodymium	0.0000070	0.0000109	V0	0.0000065	V0	0.0000000	V1
Rubidium	0.0000184	0.0002124	V0	0.0001273	V0	0.0000015	V0
Samarium	0.0000133	0.0000070	V0	0.0000035	V0	0.0000000	V1
Selenium	0.0003366	0.0000932	V0	0.0000690	V0	0.0000000	V1
Silicon	0.7676322	0.1628407	V0	0.0788382	V0	0.0000000	V1
Silver	0.0000100	0.0000079	V0	0.0000082	V0	0.0000000	V1
Sodium	0.0169447	0.1122391	V0	0.0620436	V0	0.0011127	V0
Strontium	0.0003375	0.0006982	V0	0.0004889	V0	0.0000155	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000040	V0	0.0000052	V0	0.0000000	V1
Thorium	0.0000059	0.0000112	V0	0.0000066	V0	0.0000000	V1
Tin	0.0004414	0.0004874	V0	0.0001819	V0	0.0000000	V1
Titanium	0.0015201	0.0038771	V0	0.0022687	V0	0.0005468	V0
Tungsten	0.0000938	0.0001067	V0	0.0000530	V0	0.0000562	V0
Uranium	0.0000048	0.0000035	V0	0.0000023	V0	0.0000000	V1
Vanadium	0.0007697	0.0005057	V0	0.0002824	V0	0.0000000	V1
Zinc	0.0055897	0.0113233	V0	0.0058696	V0	0.0005296	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		14-Dec		14-Dec		14-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	-9999	M2	4.37	V0	0.03	V1
Aluminum	0.1380326	0.0206104	V0	0.0230517	V0	0.0000000	V1
Antimony	0.0001784	0.0001298	V0	0.0000324	V0	0.0000000	V1
Arsenic	0.0001060	0.0000688	V0	0.0000652	V0	0.0000000	V1
Barium	0.0092847	0.0014582	V0	0.0004284	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000117	V0	0.0000116	V0	0.0000053	V0
Cadmium	0.0000174	0.0000290	V0	0.0000199	V0	0.0000000	V1
Calcium	0.4112124	0.0606304	V0	0.0467056	V0	0.0000000	V1
Cerium	0.0000174	0.0000406	V0	0.0000236	V0	0.0000000	V1
Cesium	0.0000100	0.0000027	V0	0.0000038	V0	0.0000000	V1
Chromium	0.0022262	0.0001948	V0	0.0009342	V0	0.0000000	V1
Cobalt	0.0000273	0.0000360	V0	0.0000936	V0	0.0000284	V0
Copper	0.0017171	0.0010362	V0	0.0003535	V0	0.0002070	V0
Iron	0.0393063	0.0259739	V0	0.0267118	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000155	V0	0.0000119	V0	0.0000011	V0
Lead	0.0008577	0.0004957	V0	0.0002958	V0	0.0000000	V1
Lithium	0.0000374	0.0000244	V0	0.0000219	V0	0.0000000	V1
Magnesium	0.0091409	0.0287627	V0	0.0133134	V0	0.0013703	V0
Manganese	0.0006949	0.0006902	V0	0.0005384	V0	0.0000000	V1
Molybdenum	0.0007116	0.0002531	V0	0.0001280	V0	0.0000000	V1
Neodymium	0.0000140	0.0000106	V0	0.0000097	V0	0.0000000	V1
Nickel	0.0005429	0.0002922	V0	0.0003306	V0	0.0000897	V0
Niobium	0.0000202	0.0000057	V0	0.0000049	V0	0.0000000	V1
Palladium	0.0000632	0.0000064	V0	0.0000037	V0	0.0000000	V1
Phosphorus	0.0459574	0.0086057	V0	0.0060791	V0	0.0040411	V0
Platinum	0.0000088	0.0000011	V0	0.0000012	V0	0.0000008	V0
Potassium	0.0061261	0.0493421	V0	0.0382929	V0	0.0030501	V0
Praseodymium	0.0000070	0.0000030	V0	0.0000025	V0	0.0000000	V1
Rubidium	0.0000184	0.0000728	V0	0.0000681	V0	0.0000015	V0
Samarium	0.0000133	0.0000020	V0	0.0000016	V0	0.0000000	V1
Selenium	0.0003366	0.0000736	V0	0.0000541	V0	0.0000000	V1
Silicon	0.7676322	0.0000000	V1	0.1107605	V0	0.0000000	V1
Silver	0.0000100	0.0000055	V0	0.0000033	V0	0.0000000	V1
Sodium	0.0169447	0.1511676	V0	0.0428167	V0	0.0011127	V0
Strontium	0.0003375	0.0004639	V0	0.0001740	V0	0.0000155	V0
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000027	V0	0.0000035	V0	0.0000000	V1
Thorium	0.0000059	0.0000031	V0	0.0000032	V0	0.0000000	V1
Tin	0.0004414	0.0001749	V0	0.0000785	V0	0.0000000	V1
Titanium	0.0015201	0.0047396	V0	0.0016160	V0	0.0005468	V0
Tungsten	0.0000938	0.0000259	V0	0.0004957	V0	0.0000562	V0
Uranium	0.0000048	0.0000015	V0	0.0000013	V0	0.0000000	V1
Vanadium	0.0007697	0.0001047	V0	0.0001623	V0	0.0000000	V1
Zinc	0.0055897	0.0083606	V0	0.0029346	V0	0.0005296	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		14-Dec		14-Dec		14-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.51	V0	12.16	V0	0.03	V1
Aluminum	0.1380326	0.0379196	V0	0.2775228	V0	0.0000000	V1
Antimony	0.0001784	0.0000830	V0	0.0000260	V0	0.0000000	V1
Arsenic	0.0001060	0.0000525	V0	0.0000639	V0	0.0000000	V1
Barium	0.0092847	0.0014732	V0	0.0020386	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000117	V0	0.0000000	V1
Bismuth	0.0000093	0.0000162	V0	0.0000070	V0	0.0000053	V0
Cadmium	0.0000174	0.0000099	V0	0.0000102	V0	0.0000000	V1
Calcium	0.4112124	0.0941676	V0	0.0676298	V0	0.0000000	V1
Cerium	0.0000174	0.0000453	V0	0.0002511	V0	0.0000000	V1
Cesium	0.0000100	0.0000038	V0	0.0000214	V0	0.0000000	V1
Chromium	0.0022262	0.0002593	V0	0.0010663	V0	0.0000000	V1
Cobalt	0.0000273	0.0000925	V0	0.0000966	V0	0.0000284	V0
Copper	0.0017171	0.0006786	V0	0.0008793	V0	0.0002070	V0
Iron	0.0393063	0.0505390	V0	0.1688975	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000195	V0	0.0001176	V0	0.0000011	V0
Lead	0.0008577	0.0001836	V0	0.0002510	V0	0.0000000	V1
Lithium	0.0000374	0.0000362	V0	0.0003333	V0	0.0000000	V1
Magnesium	0.0091409	0.0179875	V0	0.0396682	V0	0.0013703	V0
Manganese	0.0006949	0.0021954	V0	0.0038476	V0	0.0000000	V1
Molybdenum	0.0007116	0.0002042	V0	0.0004429	V0	0.0000000	V1
Neodymium	0.0000140	0.0000171	V0	0.0001058	V0	0.0000000	V1
Nickel	0.0005429	0.0005117	V0	0.0004561	V0	0.0000897	V0
Niobium	0.0000202	0.0000064	V0	0.0000346	V0	0.0000000	V1
Palladium	0.0000632	0.0000089	V0	0.0000078	V0	0.0000000	V1
Phosphorus	0.0459574	0.0075028	V0	0.0061922	V0	0.0040411	V0
Platinum	0.0000088	0.0000014	V0	0.0000009	V0	0.0000008	V0
Potassium	0.0061261	0.0483741	V0	0.0851303	V0	0.0030501	V0
Praseodymium	0.0000070	0.0000048	V0	0.0000276	V0	0.0000000	V1
Rubidium	0.0000184	0.0000897	V0	0.0003424	V0	0.0000015	V0
Samarium	0.0000133	0.0000028	V0	0.0000206	V0	0.0000000	V1
Selenium	0.0003366	0.0000543	V0	0.0002023	V0	0.0000000	V1
Silicon	0.7676322	0.1583353	V0	1.1521510	V0	0.0000000	V1
Silver	0.0000100	0.0000021	V0	0.0000020	V0	0.0000000	V1
Sodium	0.0169447	0.0623914	V0	0.0546379	V0	0.0011127	V0
Strontium	0.0003375	0.0004139	V0	0.0007022	V0	0.0000155	V0
Tantalum	0.0000394	0.0000000	V1	0.0000024	V0	0.0000000	V1
Thallium	0.0000090	0.0000021	V0	0.0000042	V0	0.0000000	V1
Thorium	0.0000059	0.0000050	V0	0.0000338	V0	0.0000000	V1
Tin	0.0004414	0.0001151	V0	0.0000671	V0	0.0000000	V1
Titanium	0.0015201	0.0030515	V0	0.0183847	V0	0.0005468	V0
Tungsten	0.0000938	0.0000258	V0	0.0000651	V0	0.0000562	V0
Uranium	0.0000048	0.0000017	V0	0.0000105	V0	0.0000000	V1
Vanadium	0.0007697	0.0005458	V0	0.0006086	V0	0.0000000	V1
Zinc	0.0055897	0.0044866	V0	0.0026736	V0	0.0005296	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**14-Dec**		**14-Dec**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	12.64	V0	0.03	V1
Aluminum	0.1380326	0.2995440	V0	0.0000000	V1
Antimony	0.0001784	0.0001090	V0	0.0000000	V1
Arsenic	0.0001060	0.0002982	V0	0.0000000	V1
Barium	0.0092847	0.0023557	V0	0.0000000	V1
Beryllium	0.0000946	0.0000092	V0	0.0000000	V1
Bismuth	0.0000093	0.0000156	V0	0.0000053	V0
Cadmium	0.0000174	0.0000322	V0	0.0000000	V1
Calcium	0.4112124	0.1900296	V0	0.0000000	V1
Cerium	0.0000174	0.0002990	V0	0.0000000	V1
Cesium	0.0000100	0.0000208	V0	0.0000000	V1
Chromium	0.0022262	0.0010207	V0	0.0000000	V1
Cobalt	0.0000273	0.0003342	V0	0.0000284	V0
Copper	0.0017171	0.0037238	V0	0.0002070	V0
Iron	0.0393063	0.2979268	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001372	V0	0.0000011	V0
Lead	0.0008577	0.0004738	V0	0.0000000	V1
Lithium	0.0000374	0.0004286	V0	0.0000000	V1
Magnesium	0.0091409	0.0529722	V0	0.0013703	V0
Manganese	0.0006949	0.0082796	V0	0.0000000	V1
Molybdenum	0.0007116	0.0003234	V0	0.0000000	V1
Neodymium	0.0000140	0.0001249	V0	0.0000000	V1
Nickel	0.0005429	0.0013969	V0	0.0000897	V0
Niobium	0.0000202	0.0000399	V0	0.0000000	V1
Palladium	0.0000632	0.0000130	V0	0.0000000	V1
Phosphorus	0.0459574	0.0116575	V0	0.0040411	V0
Platinum	0.0000088	0.0000013	V0	0.0000008	V0
Potassium	0.0061261	0.1054314	V0	0.0030501	V0
Praseodymium	0.0000070	0.0000325	V0	0.0000000	V1
Rubidium	0.0000184	0.0003615	V0	0.0000015	V0
Samarium	0.0000133	0.0000224	V0	0.0000000	V1
Selenium	0.0003366	0.0001927	V0	0.0000000	V1
Silicon	0.7676322	0.7386102	V0	0.0000000	V1
Silver	0.0000100	0.0000089	V0	0.0000000	V1
Sodium	0.0169447	0.1012304	V0	0.0011127	V0
Strontium	0.0003375	0.0008452	V0	0.0000155	V0
Tantalum	0.0000394	0.0000024	V0	0.0000000	V1
Thallium	0.0000090	0.0000056	V0	0.0000000	V1
Thorium	0.0000059	0.0000401	V0	0.0000000	V1
Tin	0.0004414	0.0003919	V0	0.0000000	V1
Titanium	0.0015201	0.0145541	V0	0.0005468	V0
Tungsten	0.0000938	0.0000807	V0	0.0000562	V0
Uranium	0.0000048	0.0000107	V0	0.0000000	V1
Vanadium	0.0007697	0.0007970	V0	0.0000000	V1
Zinc	0.0055897	0.0147347	V0	0.0005296	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		20-Dec		20-Dec		20-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	5.31	V0	-9999	M2	0.26	V0
Aluminum	0.1380326	0.0209274	V0	0.0123647	V6	0.0000000	V1
Antimony	0.0001784	0.0004266	V0	0.0004891	V6	0.0000000	V1
Arsenic	0.0001060	0.0000249	V0	0.0000256	V6	0.0000000	V1
Barium	0.0092847	0.0003887	V0	0.0010161	V6	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V6	0.0000000	V1
Bismuth	0.0000093	0.0000084	V0	0.0000089	V6	0.0000007	V0
Cadmium	0.0000174	0.0000295	V0	0.0000671	V6	0.0000000	V1
Calcium	0.4112124	0.0342800	V0	0.0607414	V6	0.0000000	V1
Cerium	0.0000174	0.0000254	V0	0.0000269	V6	0.0000000	V1
Cesium	0.0000100	0.0000022	V0	0.0000018	V6	0.0000000	V1
Chromium	0.0022262	0.0002378	V0	0.0002317	V6	0.0000000	V1
Cobalt	0.0000273	0.0002766	V0	0.0000084	V6	0.0000151	V0
Copper	0.0017171	0.0005995	V0	0.0011833	V6	0.0000000	V1
Iron	0.0393063	0.0218887	V0	0.0190102	V6	0.0000000	V1
Lanthanum	0.0000130	0.0000148	V0	0.0001165	V6	0.0000000	V1
Lead	0.0008577	0.0002539	V0	0.0001129	V6	0.0000000	V1
Lithium	0.0000374	0.0000211	V0	0.0000107	V6	0.0000000	V1
Magnesium	0.0091409	0.0070466	V0	0.0128921	V6	0.0011235	V0
Manganese	0.0006949	0.0005427	V0	0.0004943	V6	0.0000000	V1
Molybdenum	0.0007116	0.0002895	V0	0.0000504	V6	0.0000000	V1
Neodymium	0.0000140	0.0000095	V0	0.0000061	V6	0.0000000	V1
Nickel	0.0005429	0.0004993	V0	0.0001527	V6	0.0000877	V0
Niobium	0.0000202	0.0000038	V0	0.0000025	V6	0.0000000	V1
Palladium	0.0000632	0.0000033	V0	0.0000055	V6	0.0000000	V1
Phosphorus	0.0459574	0.0051415	V0	0.0053969	V6	0.0041794	V0
Platinum	0.0000088	0.0000008	V0	0.0000009	V6	0.0000000	V1
Potassium	0.0061261	0.0247934	V0	0.0695410	V6	0.0006906	V0
Praseodymium	0.0000070	0.0000027	V0	0.0000014	V6	0.0000000	V1
Rubidium	0.0000184	0.0000542	V0	0.0001109	V6	0.0000009	V0
Samarium	0.0000133	0.0000013	V0	0.0000000	V6	0.0000000	V1
Selenium	0.0003366	0.0000619	V0	0.0000310	V6	0.0000000	V1
Silicon	0.7676322	0.0801203	V0	0.0404463	V6	0.0000000	V1
Silver	0.0000100	0.0000019	V0	0.0000061	V6	0.0000000	V1
Sodium	0.0169447	0.0301912	V0	0.0684042	V6	0.0007292	V0
Strontium	0.0003375	0.0001019	V0	0.0001374	V6	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V6	0.0000000	V1
Thallium	0.0000090	0.0000012	V0	0.0000014	V6	0.0000000	V1
Thorium	0.0000059	0.0000026	V0	0.0000012	V6	0.0000000	V1
Tin	0.0004414	0.0001308	V0	0.0002971	V6	0.0000000	V1
Titanium	0.0015201	0.0063202	V0	0.0015602	V6	0.0003737	V0
Tungsten	0.0000938	0.0000204	V0	0.0000120	V6	0.0000137	V0
Uranium	0.0000048	0.0000009	V0	0.0000005	V6	0.0000000	V1
Vanadium	0.0007697	0.0001249	V0	0.0000556	V6	0.0000431	V0
Zinc	0.0055897	0.0038083	V0	0.0073963	V6	0.0005213	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		20-Dec		20-Dec		20-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	10.37	V0	3.88	V0	0.26	V0
Aluminum	0.1380326	0.0342175	V0	0.0318752	V0	0.0000000	V1
Antimony	0.0001784	0.0011220	V0	0.0000255	V0	0.0000000	V1
Arsenic	0.0001060	0.0002960	V0	0.0000398	V0	0.0000000	V1
Barium	0.0092847	0.0077783	V0	0.0005271	V0	0.0000000	V1
Beryllium	0.0000946	0.0000049	V0	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000318	V0	0.0000093	V0	0.0000007	V0
Cadmium	0.0000174	0.0007249	V4	0.0000349	V0	0.0000000	V1
Calcium	0.4112124	0.0902773	V0	0.0874422	V0	0.0000000	V1
Cerium	0.0000174	0.0001647	V0	0.0000316	V0	0.0000000	V1
Cesium	0.0000100	0.0000041	V0	0.0000031	V0	0.0000000	V1
Chromium	0.0022262	0.0004944	V0	0.0007484	V0	0.0000000	V1
Cobalt	0.0000273	0.0000348	V0	0.0001001	V0	0.0000151	V0
Copper	0.0017171	0.0050413	V0	0.0005021	V0	0.0000000	V1
Iron	0.0393063	0.1233104	V0	0.0284702	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000574	V0	0.0000196	V0	0.0000000	V1
Lead	0.0008577	0.0005417	V0	0.0001146	V0	0.0000000	V1
Lithium	0.0000374	0.0000393	V0	0.0000187	V0	0.0000000	V1
Magnesium	0.0091409	0.0159678	V0	0.0158076	V0	0.0011235	V0
Manganese	0.0006949	0.0022143	V0	0.0007035	V0	0.0000000	V1
Molybdenum	0.0007116	0.0004312	V0	0.0001178	V0	0.0000000	V1
Neodymium	0.0000140	0.0000323	V0	0.0000119	V0	0.0000000	V1
Nickel	0.0005429	0.0003329	V0	0.0003002	V0	0.0000877	V0
Niobium	0.0000202	0.0000157	V0	0.0000066	V0	0.0000000	V1
Palladium	0.0000632	0.0000235	V0	0.0000046	V0	0.0000000	V1
Phosphorus	0.0459574	0.0090153	V0	0.0060853	V0	0.0041794	V0
Platinum	0.0000088	0.0000024	V0	0.0000015	V0	0.0000000	V1
Potassium	0.0061261	0.0608231	V0	0.0438910	V0	0.0006906	V0
Praseodymium	0.0000070	0.0000113	V0	0.0000031	V0	0.0000000	V1
Rubidium	0.0000184	0.0001125	V0	0.0000953	V0	0.0000009	V0
Samarium	0.0000133	0.0000042	V0	0.0000019	V0	0.0000000	V1
Selenium	0.0003366	0.0001229	V0	0.0000458	V0	0.0000000	V1
Silicon	0.7676322	0.0868478	V0	0.1625249	V0	0.0000000	V1
Silver	0.0000100	0.0000077	V0	0.0000059	V0	0.0000000	V1
Sodium	0.0169447	0.1288196	V0	0.0578777	V0	0.0007292	V0
Strontium	0.0003375	0.0006960	V0	0.0001836	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000035	V0	0.0000014	V0	0.0000000	V1
Thorium	0.0000059	0.0000081	V0	0.0000044	V0	0.0000000	V1
Tin	0.0004414	0.0005261	V0	0.0000883	V0	0.0000000	V1
Titanium	0.0015201	0.0053651	V0	0.0019338	V0	0.0003737	V0
Tungsten	0.0000938	0.0000565	V0	0.0004785	V0	0.0000137	V0
Uranium	0.0000048	0.0000040	V0	0.0000013	V0	0.0000000	V1
Vanadium	0.0007697	0.0003270	V0	0.0001899	V0	0.0000431	V0
Zinc	0.0055897	0.0104119	V0	0.0040685	V0	0.0005213	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		20-Dec		20-Dec		20-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	2.39	V0	3.01	V0	0.26	V0
Aluminum	0.1380326	0.0293727	V0	0.0373118	V0	0.0000000	V1
Antimony	0.0001784	0.0000156	V0	0.0000598	V0	0.0000000	V1
Arsenic	0.0001060	0.0000242	V0	0.0000956	V0	0.0000000	V1
Barium	0.0092847	0.0000000	V1	0.0007968	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000084	V0	0.0000122	V0	0.0000007	V0
Cadmium	0.0000174	0.0000156	V0	0.0000200	V0	0.0000000	V1
Calcium	0.4112124	0.0260374	V0	0.0401995	V0	0.0000000	V1
Cerium	0.0000174	0.0000214	V0	0.0000393	V0	0.0000000	V1
Cesium	0.0000100	0.0000022	V0	0.0000045	V0	0.0000000	V1
Chromium	0.0022262	0.0001917	V0	0.0004200	V0	0.0000000	V1
Cobalt	0.0000273	0.0000489	V0	0.0000374	V0	0.0000151	V0
Copper	0.0017171	0.0003254	V0	0.0003021	V0	0.0000000	V1
Iron	0.0393063	0.0194395	V0	0.0273944	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000135	V0	0.0001120	V0	0.0000000	V1
Lead	0.0008577	0.0001017	V0	0.0004415	V0	0.0000000	V1
Lithium	0.0000374	0.0000216	V0	0.0000304	V0	0.0000000	V1
Magnesium	0.0091409	0.0070649	V0	0.0118902	V0	0.0011235	V0
Manganese	0.0006949	0.0005112	V0	0.0006268	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000391	V0	0.0000862	V0	0.0000000	V1
Neodymium	0.0000140	0.0000094	V0	0.0000170	V0	0.0000000	V1
Nickel	0.0005429	0.0001959	V0	0.0004065	V0	0.0000877	V0
Niobium	0.0000202	0.0000032	V0	0.0000125	V0	0.0000000	V1
Palladium	0.0000632	0.0000000	V1	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0055955	V0	0.0066787	V0	0.0041794	V0
Platinum	0.0000088	0.0000010	V0	0.0000009	V0	0.0000000	V1
Potassium	0.0061261	0.0222790	V0	0.0302687	V0	0.0006906	V0
Praseodymium	0.0000070	0.0000024	V0	0.0000043	V0	0.0000000	V1
Rubidium	0.0000184	0.0000523	V0	0.0000735	V0	0.0000009	V0
Samarium	0.0000133	0.0000018	V0	0.0000030	V0	0.0000000	V1
Selenium	0.0003366	0.0000293	V0	0.0000668	V0	0.0000000	V1
Silicon	0.7676322	0.1200225	V0	0.1019235	V0	0.0000000	V1
Silver	0.0000100	0.0000027	V0	0.0000010	V0	0.0000000	V1
Sodium	0.0169447	0.0261884	V0	0.0363438	V0	0.0007292	V0
Strontium	0.0003375	0.0000941	V0	0.0002247	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000011	V0	0.0000033	V0	0.0000000	V1
Thorium	0.0000059	0.0000029	V0	0.0000059	V0	0.0000000	V1
Tin	0.0004414	0.0000535	V0	0.0001165	V0	0.0000000	V1
Titanium	0.0015201	0.0009943	V0	0.0022204	V0	0.0003737	V0
Tungsten	0.0000938	0.0000966	V0	0.0000567	V0	0.0000137	V0
Uranium	0.0000048	0.0000008	V0	0.0000038	V0	0.0000000	V1
Vanadium	0.0007697	0.0001697	V0	0.0002458	V0	0.0000431	V0
Zinc	0.0055897	0.0021551	V0	0.0022759	V0	0.0005213	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**20-Dec**		**20-Dec**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	4.68	V0	0.26	V0
Aluminum	0.1380326	0.1130650	V0	0.0000000	V1
Antimony	0.0001784	0.0000648	V0	0.0000000	V1
Arsenic	0.0001060	0.0001041	V0	0.0000000	V1
Barium	0.0092847	0.0017312	V0	0.0000000	V1
Beryllium	0.0000946	0.0000052	V0	0.0000000	V1
Bismuth	0.0000093	0.0000095	V0	0.0000007	V0
Cadmium	0.0000174	0.0000180	V0	0.0000000	V1
Calcium	0.4112124	0.1672658	V0	0.0000000	V1
Cerium	0.0000174	0.0001270	V0	0.0000000	V1
Cesium	0.0000100	0.0000094	V0	0.0000000	V1
Chromium	0.0022262	0.0004307	V0	0.0000000	V1
Cobalt	0.0000273	0.0000504	V0	0.0000151	V0
Copper	0.0017171	0.0007090	V0	0.0000000	V1
Iron	0.0393063	0.1019438	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001366	V0	0.0000000	V1
Lead	0.0008577	0.0004211	V0	0.0000000	V1
Lithium	0.0000374	0.0001075	V0	0.0000000	V1
Magnesium	0.0091409	0.0260893	V0	0.0011235	V0
Manganese	0.0006949	0.0022102	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001780	V0	0.0000000	V1
Neodymium	0.0000140	0.0000574	V0	0.0000000	V1
Nickel	0.0005429	0.0006597	V0	0.0000877	V0
Niobium	0.0000202	0.0000217	V0	0.0000000	V1
Palladium	0.0000632	0.0000058	V0	0.0000000	V1
Phosphorus	0.0459574	0.0076619	V0	0.0041794	V0
Platinum	0.0000088	0.0000016	V0	0.0000000	V1
Potassium	0.0061261	0.0599016	V0	0.0006906	V0
Praseodymium	0.0000070	0.0000143	V0	0.0000000	V1
Rubidium	0.0000184	0.0001693	V0	0.0000009	V0
Samarium	0.0000133	0.0000099	V0	0.0000000	V1
Selenium	0.0003366	0.0001327	V0	0.0000000	V1
Silicon	0.7676322	0.3598705	V0	0.0000000	V1
Silver	0.0000100	0.0000022	V0	0.0000000	V1
Sodium	0.0169447	0.0386532	V0	0.0007292	V0
Strontium	0.0003375	0.0005592	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000040	V0	0.0000000	V1
Thorium	0.0000059	0.0000167	V0	0.0000000	V1
Tin	0.0004414	0.0001081	V0	0.0000000	V1
Titanium	0.0015201	0.0057557	V0	0.0003737	V0
Tungsten	0.0000938	0.0000538	V0	0.0000137	V0
Uranium	0.0000048	0.0000073	V0	0.0000000	V1
Vanadium	0.0007697	0.0012592	V0	0.0000431	V0
Zinc	0.0055897	0.0041966	V0	0.0005213	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station #		AMS 1		AMS 6			
Sample Date		26-Dec		26-Dec		26-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	9.41	V0	6.82	V0	0.57	V0
Aluminum	0.1380326	0.1174209	V0	0.0353914	V0	0.0000000	V1
Antimony	0.0001784	0.0001475	V0	0.0002837	V0	0.0000000	V1
Arsenic	0.0001060	0.0004583	V0	0.0001664	V0	0.0000000	V1
Barium	0.0092847	0.0019731	V0	0.0024953	V0	0.0000000	V1
Beryllium	0.0000946	0.0000064	V0	0.0000045	V0	0.0000000	V1
Bismuth	0.0000093	0.0000128	V0	0.0000192	V0	0.0000000	V1
Cadmium	0.0000174	0.0000299	V0	0.0000306	V0	0.0000000	V1
Calcium	0.4112124	0.1202228	V0	0.0694149	V0	0.0000000	V1
Cerium	0.0000174	0.0001294	V0	0.0000594	V0	0.0000000	V1
Cesium	0.0000100	0.0000112	V0	0.0000041	V0	0.0000000	V1
Chromium	0.0022262	0.0003056	V0	0.0002786	V0	0.0000982	V0
Cobalt	0.0000273	0.0000542	V0	0.0000371	V0	0.0000070	V0
Copper	0.0017171	0.0014266	V0	0.0017436	V0	0.0001095	V0
Iron	0.0393063	0.0847546	V0	0.0460480	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001617	V0	0.0000860	V0	0.0000000	V1
Lead	0.0008577	0.0006409	V0	0.0005683	V0	0.0000000	V1
Lithium	0.0000374	0.0001041	V0	0.0000278	V0	0.0000000	V1
Magnesium	0.0091409	0.0274397	V0	0.0157593	V0	0.0005653	V0
Manganese	0.0006949	0.0022574	V0	0.0008404	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001724	V0	0.0001769	V0	0.0000000	V1
Neodymium	0.0000140	0.0000570	V0	0.0000167	V0	0.0000000	V1
Nickel	0.0005429	0.0006293	V0	0.0001948	V0	0.0000706	V0
Niobium	0.0000202	0.0000144	V0	0.0000064	V0	0.0000000	V1
Palladium	0.0000632	0.0000042	V0	0.0000083	V0	0.0000000	V1
Phosphorus	0.0459574	0.0088443	V0	0.0084046	V0	0.0048292	V0
Platinum	0.0000088	0.0000010	V0	0.0000010	V0	0.0000005	V0
Potassium	0.0061261	0.0779855	V0	0.0460987	V0	0.0009301	V0
Praseodymium	0.0000070	0.0000146	V0	0.0000052	V0	0.0000000	V1
Rubidium	0.0000184	0.0002117	V0	0.0000842	V0	0.0000000	V1
Samarium	0.0000133	0.0000104	V0	0.0000025	V0	0.0000000	V1
Selenium	0.0003366	0.0001170	V0	0.0000730	V0	0.0000000	V1
Silicon	0.7676322	0.3599059	V0	0.1654825	V0	0.0000000	V1
Silver	0.0000100	0.0000034	V0	0.0000044	V0	0.0000000	V1
Sodium	0.0169447	0.0617994	V0	0.0509922	V0	0.0007402	V0
Strontium	0.0003375	0.0006163	V0	0.0004036	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000050	V0	0.0000037	V0	0.0000000	V1
Thorium	0.0000059	0.0000183	V0	0.0000062	V0	0.0000000	V1
Tin	0.0004414	0.0004447	V0	0.0003701	V0	0.0000000	V1
Titanium	0.0015201	0.0044872	V0	0.0020248	V0	0.0002959	V0
Tungsten	0.0000938	0.0000708	V0	0.0000918	V0	0.0000084	V0
Uranium	0.0000048	0.0000071	V0	0.0000047	V0	0.0000000	V1
Vanadium	0.0007697	0.0013223	V0	0.0001841	V0	0.0000000	V1
Zinc	0.0055897	0.0113581	V0	0.0059808	V0	0.0004875	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station #		AMS 7		AMS 14			
Sample Date		26-Dec		26-Dec		26-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	4.63	V0	4.44	V0	0.57	V0
Aluminum	0.1380326	0.0197537	V0	0.0407147	V0	0.0000000	V1
Antimony	0.0001784	0.0001915	V0	0.0000665	V0	0.0000000	V1
Arsenic	0.0001060	0.0001062	V0	0.0000853	V0	0.0000000	V1
Barium	0.0092847	0.0018793	V0	0.0015961	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000115	V0	0.0000223	V0	0.0000000	V1
Cadmium	0.0000174	0.0000269	V0	0.0000198	V0	0.0000000	V1
Calcium	0.4112124	0.0376847	V0	0.0704808	V0	0.0000000	V1
Cerium	0.0000174	0.0000309	V0	0.0000423	V0	0.0000000	V1
Cesium	0.0000100	0.0000032	V0	0.0000043	V0	0.0000000	V1
Chromium	0.0022262	0.0002229	V0	0.0008922	V0	0.0000982	V0
Cobalt	0.0000273	0.0000394	V0	0.0000534	V0	0.0000070	V0
Copper	0.0017171	0.0010555	V0	0.0003146	V0	0.0001095	V0
Iron	0.0393063	0.0319998	V0	0.0276282	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000500	V0	0.0000972	V0	0.0000000	V1
Lead	0.0008577	0.0003994	V0	0.0004310	V0	0.0000000	V1
Lithium	0.0000374	0.0000141	V0	0.0000275	V0	0.0000000	V1
Magnesium	0.0091409	0.0097250	V0	0.0175064	V0	0.0005653	V0
Manganese	0.0006949	0.0005395	V0	0.0007290	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001052	V0	0.0001506	V0	0.0000000	V1
Neodymium	0.0000140	0.0000104	V0	0.0000179	V0	0.0000000	V1
Nickel	0.0005429	0.0002903	V0	0.0006583	V0	0.0000706	V0
Niobium	0.0000202	0.0000057	V0	0.0000105	V0	0.0000000	V1
Palladium	0.0000632	0.0000088	V0	0.0000033	V0	0.0000000	V1
Phosphorus	0.0459574	0.0062832	V0	0.0053758	V0	0.0048292	V0
Platinum	0.0000088	0.0000014	V0	0.0000008	V0	0.0000005	V0
Potassium	0.0061261	0.0337943	V0	0.0333378	V0	0.0009301	V0
Praseodymium	0.0000070	0.0000031	V0	0.0000048	V0	0.0000000	V1
Rubidium	0.0000184	0.0000569	V0	0.0000688	V0	0.0000000	V1
Samarium	0.0000133	0.0000017	V0	0.0000032	V0	0.0000000	V1
Selenium	0.0003366	0.0000648	V0	0.0000663	V0	0.0000000	V1
Silicon	0.7676322	0.0905388	V0	0.0715119	V0	0.0000000	V1
Silver	0.0000100	0.0000020	V0	0.0000016	V0	0.0000000	V1
Sodium	0.0169447	0.0465882	V0	0.0387745	V0	0.0007402	V0
Strontium	0.0003375	0.0002352	V0	0.0003458	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000028	V0	0.0000032	V0	0.0000000	V1
Thorium	0.0000059	0.0000033	V0	0.0000076	V0	0.0000000	V1
Tin	0.0004414	0.0002107	V0	0.0000946	V0	0.0000000	V1
Titanium	0.0015201	0.0023183	V0	0.0020502	V0	0.0002959	V0
Tungsten	0.0000938	0.0000378	V0	0.0000440	V0	0.0000084	V0
Uranium	0.0000048	0.0000034	V0	0.0000050	V0	0.0000000	V1
Vanadium	0.0007697	0.0001155	V0	0.0001534	V0	0.0000000	V1
Zinc	0.0055897	0.0029587	V0	0.0022186	V0	0.0004875	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name		Fort McKay South		CNRL Horizon		Travel Blank	
Station #		AMS 13		AMS 15			
Sample Date		26-Dec		26-Dec		26-Dec	
Particulate Size		PM10		PM10			
Total Air Volume (m³)		24		24		24	
Compound Name	MDL (µg/sample)	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag	Results (µg/m³)	QC Flag
Particulate Matter	1.00	6.81	V0	4.71	V0	0.57	V0
Aluminum	0.1380326	0.0618629	V0	0.0373118	V0	0.0000000	V1
Antimony	0.0001784	0.0000507	V0	0.0000598	V0	0.0000000	V1
Arsenic	0.0001060	0.0003372	V0	0.0000956	V0	0.0000000	V1
Barium	0.0092847	0.0010820	V0	0.0007968	V0	0.0000000	V1
Beryllium	0.0000946	0.0000000	V1	0.0000000	V1	0.0000000	V1
Bismuth	0.0000093	0.0000071	V0	0.0000123	V0	0.0000000	V1
Cadmium	0.0000174	0.0000194	V0	0.0000200	V0	0.0000000	V1
Calcium	0.4112124	0.0532068	V0	0.0401995	V0	0.0000000	V1
Cerium	0.0000174	0.0000709	V0	0.0000393	V0	0.0000000	V1
Cesium	0.0000100	0.0000060	V0	0.0000045	V0	0.0000000	V1
Chromium	0.0022262	0.0003759	V0	0.0004200	V0	0.0000982	V0
Cobalt	0.0000273	0.0000708	V0	0.0000374	V0	0.0000070	V0
Copper	0.0017171	0.0003275	V0	0.0003021	V0	0.0001095	V0
Iron	0.0393063	0.0475424	V0	0.0273944	V0	0.0000000	V1
Lanthanum	0.0000130	0.0000991	V0	0.0001120	V0	0.0000000	V1
Lead	0.0008577	0.0004201	V0	0.0004415	V0	0.0000000	V1
Lithium	0.0000374	0.0000525	V0	0.0000304	V0	0.0000000	V1
Magnesium	0.0091409	0.0140650	V0	0.0118902	V0	0.0005653	V0
Manganese	0.0006949	0.0010739	V0	0.0006268	V0	0.0000000	V1
Molybdenum	0.0007116	0.0000892	V0	0.0000862	V0	0.0000000	V1
Neodymium	0.0000140	0.0000303	V0	0.0000170	V0	0.0000000	V1
Nickel	0.0005429	0.0006888	V0	0.0004065	V0	0.0000706	V0
Niobium	0.0000202	0.0000083	V0	0.0001250	V4	0.0000000	V1
Palladium	0.0000632	0.0000043	V0	0.0000000	V1	0.0000000	V1
Phosphorus	0.0459574	0.0065758	V0	0.0066788	V0	0.0048292	V0
Platinum	0.0000088	0.0000008	V0	0.0000009	V0	0.0000005	V0
Potassium	0.0061261	0.0392922	V0	0.0302688	V0	0.0009301	V0
Praseodymium	0.0000070	0.0000081	V0	0.0000043	V0	0.0000000	V1
Rubidium	0.0000184	0.0001065	V0	0.0000735	V0	0.0000000	V1
Samarium	0.0000133	0.0000055	V0	0.0000030	V0	0.0000000	V1
Selenium	0.0003366	0.0000681	V0	0.0000668	V0	0.0000000	V1
Silicon	0.7676322	0.1914147	V0	0.1019235	V0	0.0000000	V1
Silver	0.0000100	0.0000020	V0	0.0000010	V0	0.0000000	V1
Sodium	0.0169447	0.0354434	V0	0.0363438	V0	0.0007402	V0
Strontium	0.0003375	0.0003106	V0	0.0002247	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000033	V0	0.0000033	V0	0.0000000	V1
Thorium	0.0000059	0.0000098	V0	0.0000059	V0	0.0000000	V1
Tin	0.0004414	0.0001879	V0	0.0001165	V0	0.0000000	V1
Titanium	0.0015201	0.0023281	V0	0.0022204	V0	0.0002959	V0
Tungsten	0.0000938	0.0000952	V0	0.0000567	V0	0.0000084	V0
Uranium	0.0000048	0.0000041	V0	0.0000038	V0	0.0000000	V1
Vanadium	0.0007697	0.0004677	V0	0.0002458	V0	0.0000000	V1
Zinc	0.0055897	0.0061336	V0	0.0022759	V0	0.0004875	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

		Albian Muskeg			
Station Name		**River**		**Travel Blank**	
Station #		**AMS 16**			
Sample Date		**26-Dec**		**26-Dec**	
Particulate Size		**PM10**			
Total Air Volume (m^3)		**24**		**24**	
Compound Name	**MDL (µg/sample)**	**Results (µg/m^3)**	**QC Flag**	**Results (µg/m^3)**	**QC Flag**
Particulate Matter	1.00	9.76	V0	0.57	V0
Aluminum	0.1380326	0.1130650	V0	0.0000000	V1
Antimony	0.0001784	0.0000648	V0	0.0000000	V1
Arsenic	0.0001060	0.0001041	V0	0.0000000	V1
Barium	0.0092847	0.0017312	V0	0.0000000	V1
Beryllium	0.0000946	0.0000052	V0	0.0000000	V1
Bismuth	0.0000093	0.0000095	V0	0.0000000	V1
Cadmium	0.0000174	0.0000180	V0	0.0000000	V1
Calcium	0.4112124	0.1672658	V0	0.0000000	V1
Cerium	0.0000174	0.0001270	V0	0.0000000	V1
Cesium	0.0000100	0.0000094	V0	0.0000000	V1
Chromium	0.0022262	0.0004307	V0	0.0000982	V0
Cobalt	0.0000273	0.0000504	V0	0.0000070	V0
Copper	0.0017171	0.0007090	V0	0.0001095	V0
Iron	0.0393063	0.1019438	V0	0.0000000	V1
Lanthanum	0.0000130	0.0001366	V0	0.0000000	V1
Lead	0.0008577	0.0004211	V0	0.0000000	V1
Lithium	0.0000374	0.0001075	V0	0.0000000	V1
Magnesium	0.0091409	0.0260893	V0	0.0005653	V0
Manganese	0.0006949	0.0022103	V0	0.0000000	V1
Molybdenum	0.0007116	0.0001780	V0	0.0000000	V1
Neodymium	0.0000140	0.0000574	V0	0.0000000	V1
Nickel	0.0005429	0.0006597	V0	0.0000706	V0
Niobium	0.0000202	0.0000217	V0	0.0000000	V1
Palladium	0.0000632	0.0000058	V0	0.0000000	V1
Phosphorus	0.0459574	0.0076619	V0	0.0048292	V0
Platinum	0.0000088	0.0000016	V0	0.0000005	V0
Potassium	0.0061261	0.0599016	V0	0.0009301	V0
Praseodymium	0.0000070	0.0000143	V0	0.0000000	V1
Rubidium	0.0000184	0.0001693	V0	0.0000000	V1
Samarium	0.0000133	0.0000099	V0	0.0000000	V1
Selenium	0.0003366	0.0001327	V0	0.0000000	V1
Silicon	0.7676322	0.3598705	V0	0.0000000	V1
Silver	0.0000100	0.0000022	V0	0.0000000	V1
Sodium	0.0169447	0.0386532	V0	0.0007402	V0
Strontium	0.0003375	0.0005592	V0	0.0000000	V1
Tantalum	0.0000394	0.0000000	V1	0.0000000	V1
Thallium	0.0000090	0.0000040	V0	0.0000000	V1
Thorium	0.0000059	0.0000167	V0	0.0000000	V1
Tin	0.0004414	0.0001081	V0	0.0000000	V1
Titanium	0.0015201	0.0057557	V0	0.0002959	V0
Tungsten	0.0000938	0.0000538	V0	0.0000084	V0
Uranium	0.0000048	0.0000073	V0	0.0000000	V1
Vanadium	0.0007697	0.0012592	V0	0.0000000	V1
Zinc	0.0055897	0.0041966	V0	0.0004875	V0

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name	Bertha Ganter - Fort McKay	Bertha Ganter - Fort McKay	Bertha Ganter - Fort McKay	Bertha Ganter - Fort McKay
Station #	AMS 1	AMS 1	AMS 1	AMS 1
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM10	PM10	PM10	PM10
Compound Name	Average µg/m³	Std Dev µg/m³	Total Samples (#)	Total ≥ MDL (#)
Particulate Matter	17.29	15.38	61	61
Aluminum	0.3713193	0.4907018	61	61
Antimony	0.0000628	0.0000717	61	58
Arsenic	0.0001387	0.0001430	61	60
Barium	0.0034134	0.0037127	61	57
Beryllium	0.0000104	0.0000135	61	34
Bismuth	0.0000266	0.0000439	61	59
Cadmium	0.0000281	0.0000514	61	60
Calcium	0.7402008	0.9324520	61	60
Cerium	0.0003822	0.0004662	61	61
Cesium	0.0000262	0.0000301	61	61
Chromium	0.0006225	0.0004913	61	61
Cobalt	0.0001478	0.0001291	61	61
Copper	0.0011811	0.0009411	61	61
Iron	0.3044851	0.3896158	61	61
Lanthanum	0.0001864	0.0002122	61	61
Lead	0.0003195	0.0003081	61	57
Lithium	0.0003759	0.0004555	61	58
Magnesium	0.0778772	0.0892485	61	61
Manganese	0.0064548	0.0073610	61	61
Molybdenum	0.0001390	0.0001760	61	53
Neodymium	0.0001616	0.0001953	61	61
Nickel	0.0006703	0.0005345	61	61
Niobium	0.0000420	0.0000490	61	61
Palladium	0.0000107	0.0000124	61	51
Phosphorus	0.0186479	0.0155153	61	61
Platinum	0.0000010	0.0000007	61	51
Potassium	0.1325356	0.1305547	61	61
Praseodymium	0.0000421	0.0000507	61	61
Rubidium	0.0005076	0.0005483	61	61
Samarium	0.0000302	0.0000371	61	60
Selenium	0.0002464	0.0002541	61	59
Silicon	1.1261631	1.3759905	61	60
Silver	0.0000039	0.0000032	61	56
Sodium	0.0771544	0.0983537	61	61
Strontium	0.0015815	0.0017669	61	61
Tantalum	0.0000024	0.0000037	61	25
Thallium	0.0000050	0.0000056	61	56
Thorium	0.0000479	0.0000568	61	61
Tin	0.0000855	0.0000838	61	57
Titanium	0.0135969	0.0160264	61	61
Tungsten	0.0001016	0.0001171	61	61
Uranium	0.0000149	0.0000166	61	61
Vanadium	0.0011641	0.0015820	61	60
Zinc	0.0043764	0.0035543	61	61

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name	Patricia McInnes	Patricia McInnes	Patricia McInnes	Patricia McInnes
Station #	AMS 6	AMS 6	AMS 6	AMS 6
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM10	PM10	PM10	PM10
Compound Name	Average µg/m³	Std Dev µg/m³	Total Samples (#)	Total ≥ MDL (#)
Particulate Matter	17.80	27.93	58	58
Aluminum	0.1899795	0.2528833	59	58
Antimony	0.0004040	0.0016452	59	58
Arsenic	0.0002718	0.0004920	59	59
Barium	0.0035909	0.0038309	59	56
Beryllium	0.0000052	0.0000078	59	26
Bismuth	0.0000271	0.0000305	59	58
Cadmium	0.0000378	0.0000883	59	58
Calcium	0.3998113	0.5211316	59	58
Cerium	0.0002248	0.0002704	59	59
Cesium	0.0000140	0.0000172	59	57
Chromium	0.0005021	0.0003319	59	59
Cobalt	0.0001319	0.0001320	59	59
Copper	0.0014260	0.0010371	59	59
Iron	0.2063190	0.2375122	59	59
Lanthanum	0.0001198	0.0001318	59	59
Lead	0.0003348	0.0005259	59	57
Lithium	0.0001652	0.0002288	59	55
Magnesium	0.0718535	0.0782250	59	59
Manganese	0.0058844	0.0133311	59	59
Molybdenum	0.0001352	0.0001637	59	53
Neodymium	0.0000939	0.0001187	59	59
Nickel	0.0005327	0.0003657	59	59
Niobium	0.0000243	0.0000285	59	59
Palladium	0.0000112	0.0000129	59	51
Phosphorus	0.0188695	0.0227564	59	59
Platinum	0.0000013	0.0000009	59	49
Potassium	0.0953538	0.1080697	59	59
Praseodymium	0.0000247	0.0000312	59	59
Rubidium	0.0003029	0.0003482	59	59
Samarium	0.0000168	0.0000217	59	55
Selenium	0.0001652	0.0001568	59	56
Silicon	0.6930441	0.8179806	59	56
Silver	0.0000054	0.0000121	59	55
Sodium	0.0940149	0.1123401	59	59
Strontium	0.0011658	0.0014650	59	59
Tantalum	0.0000013	0.0000023	59	16
Thallium	0.0000037	0.0000042	59	50
Thorium	0.0000280	0.0000352	59	59
Tin	0.0001699	0.0001256	59	59
Titanium	0.0085033	0.0102125	59	59
Tungsten	0.0001433	0.0001491	59	59
Uranium	0.0000091	0.0000106	59	58
Vanadium	0.0006821	0.0009819	59	59
Zinc	0.0049672	0.0041198	59	59

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name	Athabasca Valley	Athabasca Valley	Athabasca Valley	Athabasca Valley
Station #	AMS 7	AMS 7	AMS 7	AMS 7
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM10	PM10	PM10	PM10
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	µg/m³	µg/m³		
Particulate Matter	27.04	64.47	59	59
Aluminum	0.2448806	0.2938907	61	61
Antimony	0.0003589	0.0003852	61	61
Arsenic	0.0002918	0.0008840	61	61
Barium	0.0066335	0.0076924	61	60
Beryllium	0.0000074	0.0000090	61	36
Bismuth	0.0000377	0.0000458	61	61
Cadmium	0.0000941	0.0003655	61	60
Calcium	0.5980379	0.8226126	61	61
Cerium	0.0003142	0.0003293	61	61
Cesium	0.0000173	0.0000200	61	61
Chromium	0.0006359	0.0004367	61	61
Cobalt	0.0001672	0.0001634	61	61
Copper	0.0028045	0.0030482	61	61
Iron	0.3238153	0.3800763	61	61
Lanthanum	0.0001496	0.0001530	61	61
Lead	0.0005903	0.0020304	61	61
Lithium	0.0002017	0.0002273	61	61
Magnesium	0.1007008	0.1196892	61	61
Manganese	0.0090668	0.0174805	61	61
Molybdenum	0.0001701	0.0001238	61	58
Neodymium	0.0001224	0.0001354	61	61
Nickel	0.0006568	0.0005601	61	61
Niobium	0.0000327	0.0000342	61	61
Palladium	0.0000154	0.0000204	61	56
Phosphorus	0.0249106	0.0459559	61	61
Platinum	0.0000016	0.0000012	61	56
Potassium	0.1357873	0.1843836	61	61
Praseodymium	0.0000325	0.0000350	61	61
Rubidium	0.0003874	0.0004473	61	61
Samarium	0.0000221	0.0000251	61	60
Selenium	0.0002127	0.0001893	61	61
Silicon	0.8951421	1.0290216	61	58
Silver	0.0000077	0.0000162	61	57
Sodium	0.2037583	0.4069312	61	61
Strontium	0.0018474	0.0028878	61	61
Tantalum	0.0000023	0.0000037	61	24
Thallium	0.0000047	0.0000063	61	57
Thorium	0.0000355	0.0000398	61	61
Tin	0.0002719	0.0003244	61	61
Titanium	0.0109898	0.0107149	61	61
Tungsten	0.0002946	0.0005816	61	61
Uranium	0.0000113	0.0000116	61	61
Vanadium	0.0007894	0.0008278	61	61
Zinc	0.0081501	0.0115980	61	61

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name	Anzac	Anzac	Anzac	Anzac
Station #	AMS 14	AMS 14	AMS 14	AMS 14
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM10	PM10	PM10	PM10
Compound Name	Average µg/m³	Std Dev µg/m³	Total Samples (#)	Total ≥ MDL (#)
Particulate Matter	8.91	13.45	58	58
Aluminum	0.0703617	0.0958841	58	55
Antimony	0.0000434	0.0000639	58	54
Arsenic	0.0000813	0.0000780	58	57
Barium	0.0014562	0.0027984	58	40
Beryllium	0.0000023	0.0000042	58	17
Bismuth	0.0000509	0.0001415	58	56
Cadmium	0.0000181	0.0000243	58	57
Calcium	0.1435190	0.2287985	58	57
Cerium	0.0000775	0.0000888	58	58
Cesium	0.0000054	0.0000064	58	55
Chromium	0.0003167	0.0002112	58	55
Cobalt	0.0000683	0.0000577	58	58
Copper	0.0005584	0.0003987	58	58
Iron	0.0732132	0.0932271	58	58
Lanthanum	0.0000485	0.0000482	58	57
Lead	0.0001531	0.0001424	58	54
Lithium	0.0000506	0.0000644	58	50
Magnesium	0.0265910	0.0306797	58	58
Manganese	0.0026542	0.0059275	58	58
Molybdenum	0.0001297	0.0003493	58	41
Neodymium	0.0000327	0.0000392	58	58
Nickel	0.0003209	0.0002076	58	58
Niobium	0.0000093	0.0000096	58	58
Palladium	0.0000067	0.0000196	58	36
Phosphorus	0.0151996	0.0167997	58	58
Platinum	0.0000008	0.0000008	58	40
Potassium	0.0477372	0.0525533	58	58
Praseodymium	0.0000088	0.0000104	58	54
Rubidium	0.0001282	0.0001417	58	58
Samarium	0.0000060	0.0000074	58	49
Selenium	0.0000778	0.0000655	58	52
Silicon	0.2557892	0.2844705	58	51
Silver	0.0000025	0.0000045	58	45
Sodium	0.0302561	0.0302214	58	58
Strontium	0.0004245	0.0006712	58	58
Tantalum	0.0000002	0.0000006	58	4
Thallium	0.0000019	0.0000023	58	44
Thorium	0.0000104	0.0000123	58	55
Tin	0.0000601	0.0000376	58	56
Titanium	0.0036367	0.0041142	58	58
Tungsten	0.0000834	0.0001087	58	58
Uranium	0.0000037	0.0000039	58	55
Vanadium	0.0002459	0.0001999	58	57
Zinc	0.0024290	0.0021703	58	58

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name	Fort McKay South	Fort McKay South	Fort McKay South	Fort McKay South
Station #	AMS 13	AMS 13	AMS 13	AMS 13
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM10	PM10	PM10	PM10
Compound Name	Average µg/m³	Std Dev µg/m³	Total Samples (#)	Total ≥ MDL (#)
Particulate Matter	14.22	13.58	61	61
Aluminum	0.3257354	0.4399143	61	61
Antimony	0.0000429	0.0000349	61	59
Arsenic	0.0001105	0.0000999	61	59
Barium	0.0029919	0.0038460	61	50
Beryllium	0.0000092	0.0000123	61	35
Bismuth	0.0000215	0.0000299	61	60
Cadmium	0.0000231	0.0000513	61	59
Calcium	0.3256161	0.3640883	61	60
Cerium	0.0003162	0.0004187	61	61
Cesium	0.0000240	0.0000348	61	61
Chromium	0.0005613	0.0004748	61	59
Cobalt	0.0001344	0.0001060	61	61
Copper	0.0010955	0.0019752	61	61
Iron	0.2271714	0.2535208	61	61
Lanthanum	0.0001575	0.0001974	61	61
Lead	0.0002395	0.0002436	61	55
Lithium	0.0003354	0.0005043	61	59
Magnesium	0.0604151	0.0660404	61	61
Manganese	0.0048452	0.0053505	61	61
Molybdenum	0.0001038	0.0001157	61	50
Neodymium	0.0001398	0.0001899	61	61
Nickel	0.0005767	0.0004464	61	61
Niobium	0.0000380	0.0000508	61	61
Palladium	0.0000085	0.0000108	61	44
Phosphorus	0.0180044	0.0157113	61	60
Platinum	0.0000010	0.0000008	61	51
Potassium	0.1138467	0.1205828	61	61
Praseodymium	0.0000361	0.0000487	61	60
Rubidium	0.0004421	0.0005629	61	61
Samarium	0.0000264	0.0000363	61	58
Selenium	0.0002115	0.0002556	61	57
Silicon	1.0434986	1.4000835	61	59
Silver	0.0000029	0.0000027	61	54
Sodium	0.0646168	0.0639607	61	61
Strontium	0.0011084	0.0012515	61	61
Tantalum	0.0000022	0.0000036	61	26
Thallium	0.0000043	0.0000050	61	49
Thorium	0.0000415	0.0000561	61	61
Tin	0.0000730	0.0000398	61	59
Titanium	0.0119718	0.0154277	61	61
Tungsten	0.0000958	0.0000802	61	60
Uranium	0.0000131	0.0000169	61	60
Vanadium	0.0009858	0.0012781	61	59
Zinc	0.0033971	0.0030648	61	61

Station Name	CNRL Horizon	CNRL Horizon	CNRL Horizon	CNRL Horizon
Station #	AMS 15	AMS 15	AMS 15	AMS 15
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM10	PM10	PM10	PM10
Compound Name	Average µg/m³	Std Dev µg/m³	Total Samples (#)	Total ≥ MDL (#)
Particulate Matter	15.94	15.22	61	61
Aluminum	0.4276513	0.5437508	61	60
Antimony	0.0000300	0.0000226	61	59
Arsenic	0.0001242	0.0001062	61	61
Barium	0.0040741	0.0048640	61	51
Beryllium	0.0000134	0.0000181	61	35
Bismuth	0.0000245	0.0000244	61	60
Cadmium	0.0000200	0.0000422	61	59
Calcium	0.3754601	0.4607494	61	60
Cerium	0.0004336	0.0005318	61	60
Cesium	0.0000301	0.0000350	61	60
Chromium	0.0006847	0.0005563	61	61
Cobalt	0.0001523	0.0001286	61	61
Copper	0.0006128	0.0002929	61	61
Iron	0.4262156	0.5374024	61	61
Lanthanum	0.0002100	0.0002332	61	60
Lead	0.0002647	0.0002521	61	59
Lithium	0.0004237	0.0005474	61	58
Magnesium	0.0952993	0.1157686	61	61
Manganese	0.0073906	0.0083395	61	61
Molybdenum	0.0001277	0.0001498	61	50
Neodymium	0.0001874	0.0002258	61	60
Nickel	0.0006380	0.0004833	61	61
Niobium	0.0000500	0.0000561	61	61
Palladium	0.0000128	0.0000190	61	43
Phosphorus	0.0182995	0.0154755	61	61
Platinum	0.0000011	0.0000011	61	49
Potassium	0.1308233	0.1329414	61	61
Praseodymium	0.0000484	0.0000582	61	60
Rubidium	0.0005370	0.0005910	61	61
Samarium	0.0000357	0.0000435	61	57
Selenium	0.0002747	0.0002752	61	60
Silicon	1.3491071	1.6314894	61	60
Silver	0.0000037	0.0000045	61	56
Sodium	0.0659072	0.0606215	61	61
Strontium	0.0014570	0.0016393	61	61
Tantalum	0.0000028	0.0000040	61	27
Thallium	0.0000055	0.0000061	61	54
Thorium	0.0000559	0.0000663	61	60
Tin	0.0000651	0.0000311	61	61
Titanium	0.0158379	0.0174541	61	61
Tungsten	0.0000729	0.0000580	61	61
Uranium	0.0000177	0.0000196	61	59
Vanadium	0.0011320	0.0013681	61	58
Zinc	0.0030307	0.0022190	61	61

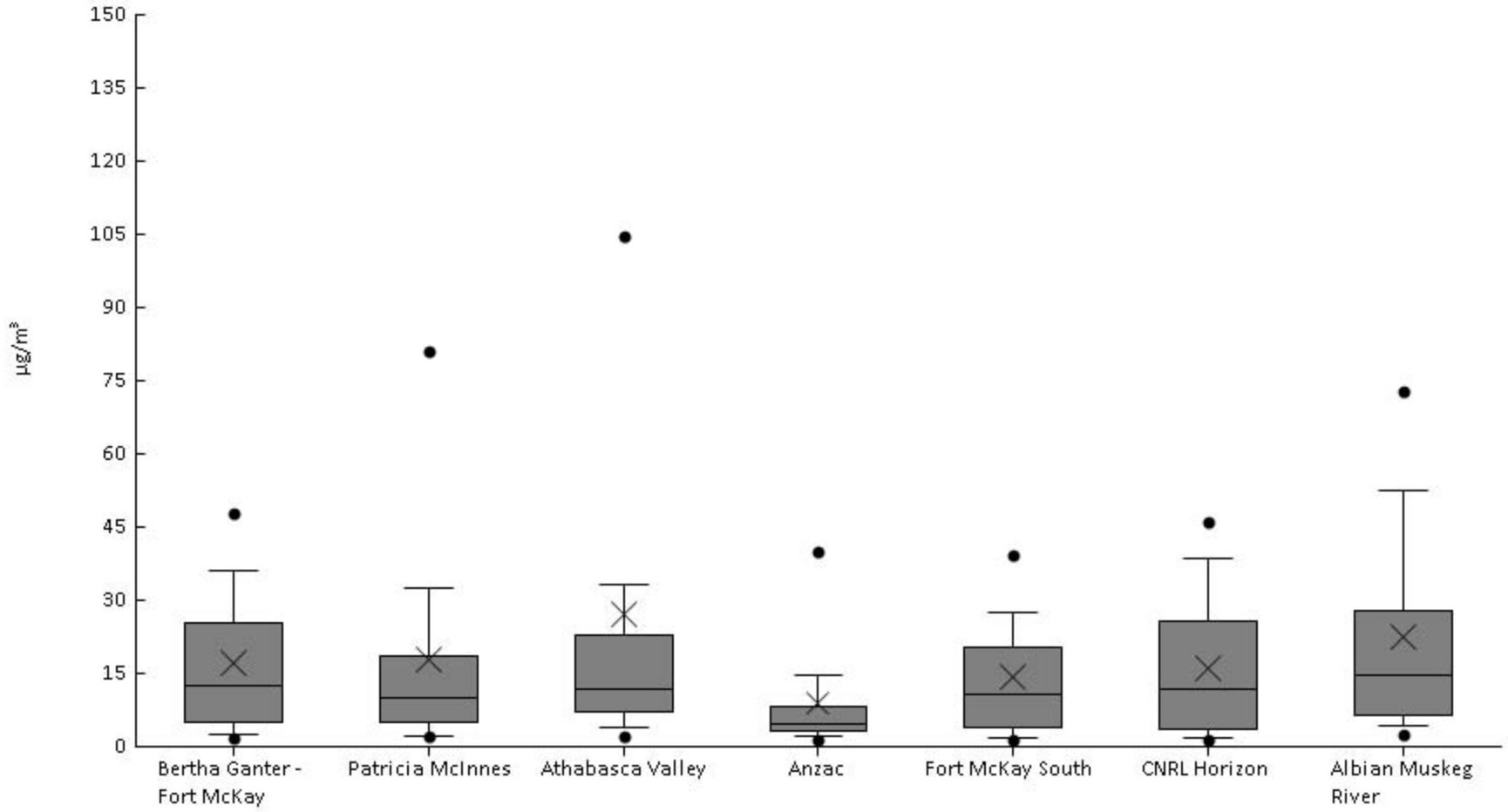
WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Particulate Matter (PM10) - METALS **Indicated Sites and Dates**

Station Name	Albian Muskeg River	Albian Muskeg River	Albian Muskeg River	Albian Muskeg River
Station #	AMS 16	AMS 16	AMS 16	AMS 16
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
Particulate Size	PM10	PM10	PM10	PM10
Compound Name	Average µg/m³	Std Dev µg/m³	Total Samples (#)	Total ≥ MDL (#)
Particulate Matter	22.57	23.71	61	61
Aluminum	0.7250443	0.9918882	61	61
Antimony	0.0000501	0.0000441	61	61
Arsenic	0.0001548	0.0001694	61	61
Barium	0.0057132	0.0073125	61	58
Beryllium	0.0000220	0.0000314	61	46
Bismuth	0.0000217	0.0000267	61	60
Cadmium	0.0000281	0.0000642	61	59
Calcium	0.7555675	0.9318170	61	61
Cerium	0.0007807	0.0011305	61	61
Cesium	0.0000469	0.0000629	61	61
Chromium	0.0011459	0.0011008	61	61
Cobalt	0.0002374	0.0002443	61	61
Copper	0.0009831	0.0007287	61	61
Iron	0.6660300	0.8963356	61	61
Lanthanum	0.0003794	0.0005316	61	61
Lead	0.0003747	0.0003766	61	60
Lithium	0.0008887	0.0012839	61	61
Magnesium	0.1328837	0.1610784	61	61
Manganese	0.0134495	0.0172943	61	61
Molybdenum	0.0001812	0.0002322	61	58
Neodymium	0.0003384	0.0004988	61	61
Nickel	0.0010397	0.0008582	61	61
Niobium	0.0000869	0.0001179	61	61
Palladium	0.0000197	0.0000300	61	52
Phosphorus	0.0204731	0.0183123	61	59
Platinum	0.0000012	0.0000012	61	49
Potassium	0.2006835	0.2370140	61	61
Praseodymium	0.0000884	0.0001304	61	61
Rubidium	0.0008590	0.0010952	61	61
Samarium	0.0000629	0.0000938	61	61
Selenium	0.0004460	0.0005972	61	61
Silicon	1.9171184	2.4429216	61	61
Silver	0.0000047	0.0000051	61	56
Sodium	0.1023850	0.1678726	61	61
Strontium	0.0023356	0.0029914	61	61
Tantalum	0.0000054	0.0000084	61	37
Thallium	0.0000082	0.0000101	61	58
Thorium	0.0001002	0.0001414	61	61
Tin	0.0000922	0.0000609	61	61
Titanium	0.0263629	0.0353584	61	61
Tungsten	0.0001137	0.0001233	61	61
Uranium	0.0000286	0.0000381	61	61
Vanadium	0.0016295	0.0022699	61	61
Zinc	0.0048609	0.0039516	61	61

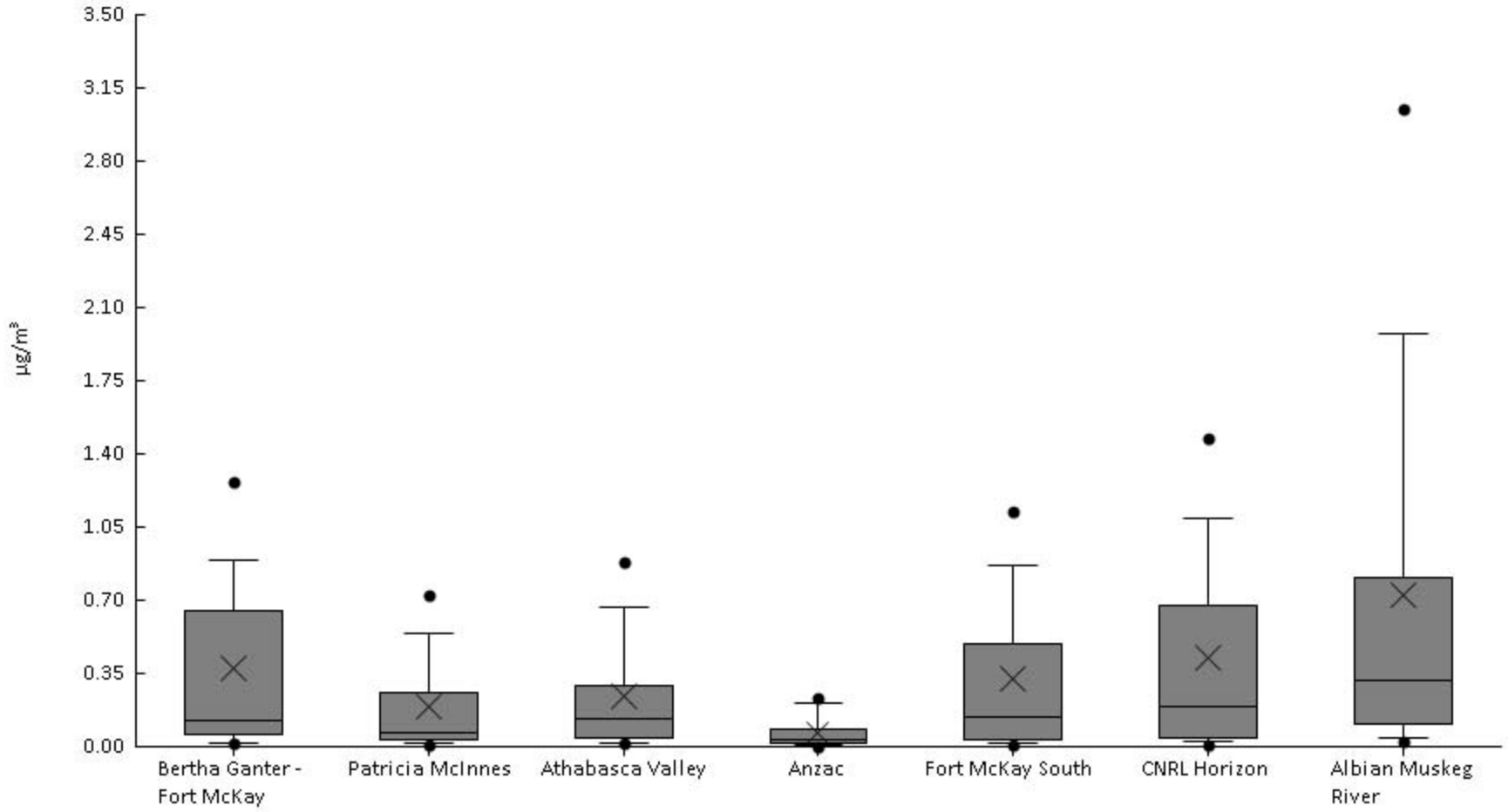
Particulate Matter (PM10 METALS) - Particulate Matter (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	1.3	1.8	2.6	5.1	13	25	36	48	79	17	15
AMS 6	Patricia McInnes	58	100%	1.7	2	2.3	5.1	10	19	32	81	154	18	28
AMS 7	Athabasca Valley	59	100%	1.6	2.3	4.1	7.1	12	23	33	105	472	27	64
AMS 14	Anzac	58	100%	0.58	1.4	2.1	3.1	4.8	8.4	15	40	74	8.9	13
AMS 13	Fort McKay South	61	100%	1.1	1.5	1.9	3.8	11	20	28	39	73	14	14
AMS 15	CNRL Horizon	61	100%	0.22	1.3	1.8	3.5	12	26	39	46	68	16	15
AMS 16	Albian Muskeg River	61	100%	1.3	2.7	4.4	6.3	15	28	53	73	116	23	24



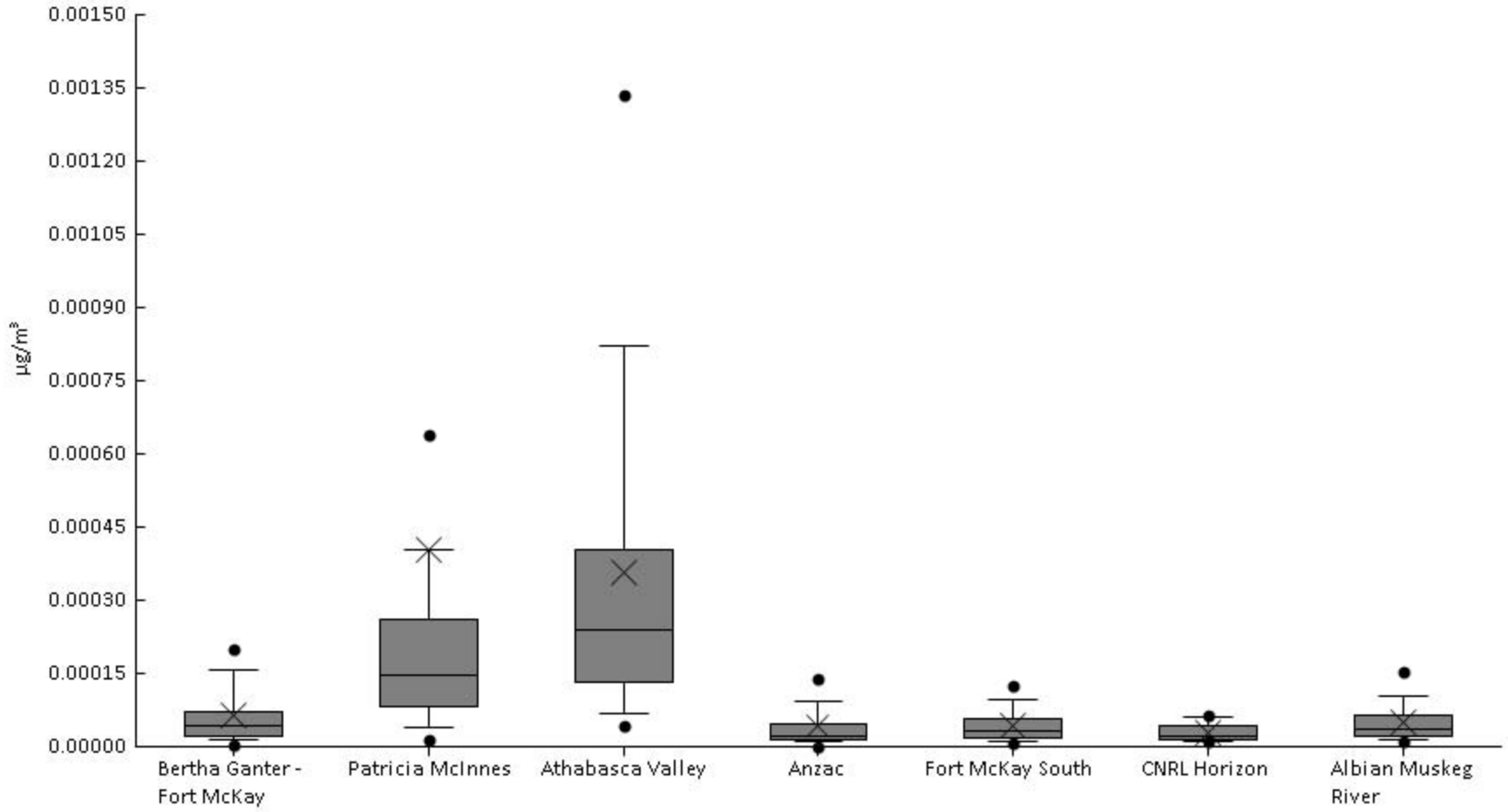
Particulate Matter (PM10 METALS) - Aluminum (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	0.012	0.014	0.018	0.056	0.12	0.65	0.89	1.3	2.7	0.37	0.49
AMS 6	Patricia McInnes	59	98%	0	0.01	0.013	0.031	0.068	0.26	0.54	0.72	1.2	0.19	0.25
AMS 7	Athabasca Valley	61	100%	8.5E-3	0.015	0.02	0.041	0.13	0.29	0.67	0.88	1.4	0.24	0.29
AMS 14	Anzac	58	95%	0	2.5E-3	7.2E-3	0.015	0.031	0.082	0.21	0.23	0.57	0.07	0.096
AMS 13	Fort McKay South	61	100%	9.2E-3	0.011	0.013	0.034	0.14	0.49	0.86	1.1	2.6	0.33	0.44
AMS 15	CNRL Horizon	61	98%	2.1E-3	0.011	0.024	0.039	0.19	0.67	1.1	1.5	2.7	0.43	0.54
AMS 16	Albian Muskeg River	61	100%	0.014	0.029	0.043	0.11	0.31	0.81	2	3	4.5	0.73	0.99



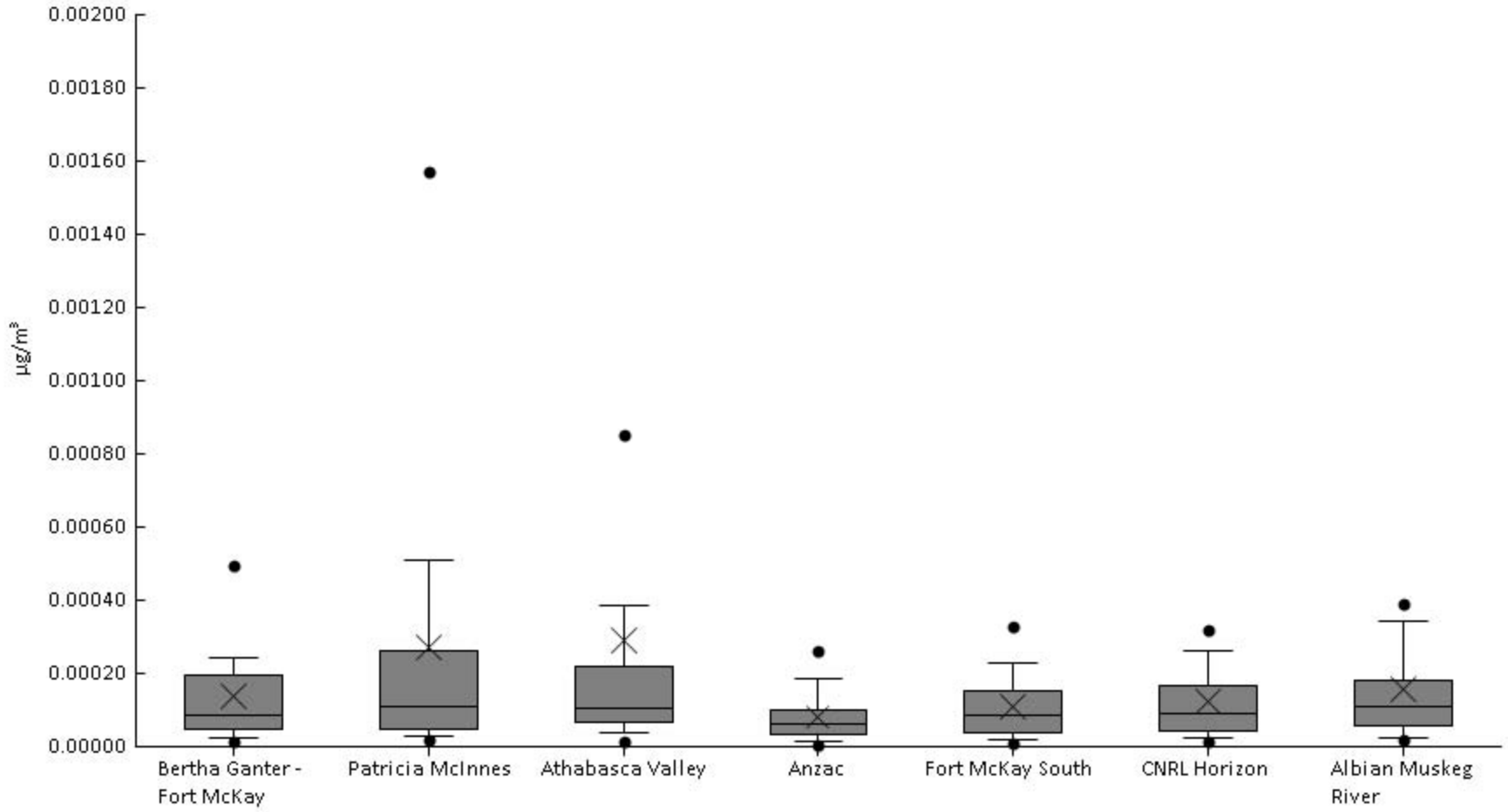
Particulate Matter (PM10 METALS) - Antimony (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	95%	0	5.2E-6	1.3E-5	2.2E-5	4.2E-5	7.1E-5	1.6E-4	2E-4	4.3E-4	6.3E-5	7.2E-5
AMS 6	Patricia McInnes	59	98%	0	1.6E-5	3.8E-5	8.2E-5	1.5E-4	2.6E-4	4E-4	6.4E-4	0.013	4E-4	1.6E-3
AMS 7	Athabasca Valley	61	100%	3.6E-5	4.4E-5	7E-5	1.3E-4	2.4E-4	4E-4	8.2E-4	1.3E-3	1.8E-3	3.6E-4	3.9E-4
AMS 14	Anzac	58	93%	0	0	1.1E-5	1.5E-5	2.2E-5	4.5E-5	9.3E-5	1.4E-4	3.6E-4	4.3E-5	6.4E-5
AMS 13	Fort McKay South	61	97%	0	8.7E-6	1.1E-5	1.8E-5	3.3E-5	5.7E-5	9.5E-5	1.2E-4	1.5E-4	4.3E-5	3.5E-5
AMS 15	CNRL Horizon	61	97%	0	9.4E-6	9.6E-6	1.4E-5	2.1E-5	4.1E-5	6E-5	6.6E-5	1.3E-4	3E-5	2.3E-5
AMS 16	Albian Muskeg River	61	100%	1E-5	1.2E-5	1.6E-5	2.2E-5	3.5E-5	6.4E-5	1E-4	1.5E-4	2.3E-4	5E-5	4.4E-5



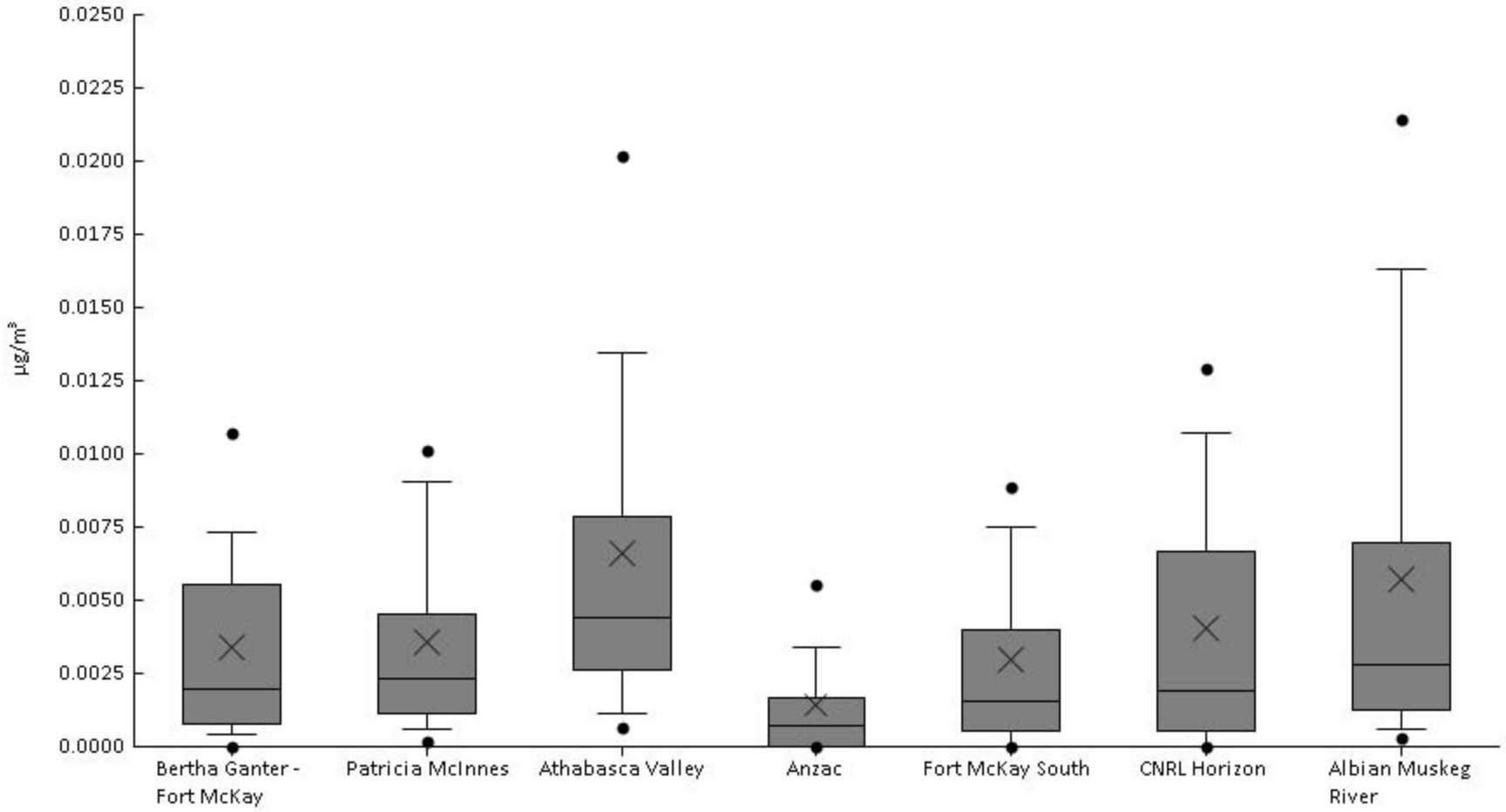
Particulate Matter (PM10 METALS) - Arsenic (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	98%	0	1.5E-5	2.6E-5	4.8E-5	8.8E-5	1.9E-4	2.4E-4	4.9E-4	7.9E-4	1.4E-4	1.4E-4
AMS 6	Patricia McInnes	59	100%	5.8E-6	1.7E-5	2.7E-5	5E-5	1.1E-4	2.6E-4	5.1E-4	1.6E-3	2.7E-3	2.7E-4	4.9E-4
AMS 7	Athabasca Valley	61	100%	1E-5	1.6E-5	3.9E-5	6.8E-5	1E-4	2.2E-4	3.9E-4	8.5E-4	6.8E-3	2.9E-4	8.8E-4
AMS 14	Anzac	58	98%	0	7E-6	1.4E-5	3.1E-5	6.4E-5	1E-4	1.8E-4	2.6E-4	3.7E-4	8.1E-5	7.8E-5
AMS 13	Fort McKay South	61	97%	0	1.2E-5	1.7E-5	3.6E-5	8.7E-5	1.5E-4	2.3E-4	3.3E-4	4.5E-4	1.1E-4	1E-4
AMS 15	CNRL Horizon	61	100%	7.7E-6	1.6E-5	2.2E-5	4.4E-5	8.8E-5	1.7E-4	2.6E-4	3.2E-4	5.7E-4	1.2E-4	1.1E-4
AMS 16	Albian Muskeg River	61	100%	8.9E-6	2E-5	2.6E-5	5.5E-5	1.1E-4	1.8E-4	3.4E-4	3.9E-4	1.1E-3	1.5E-4	1.7E-4



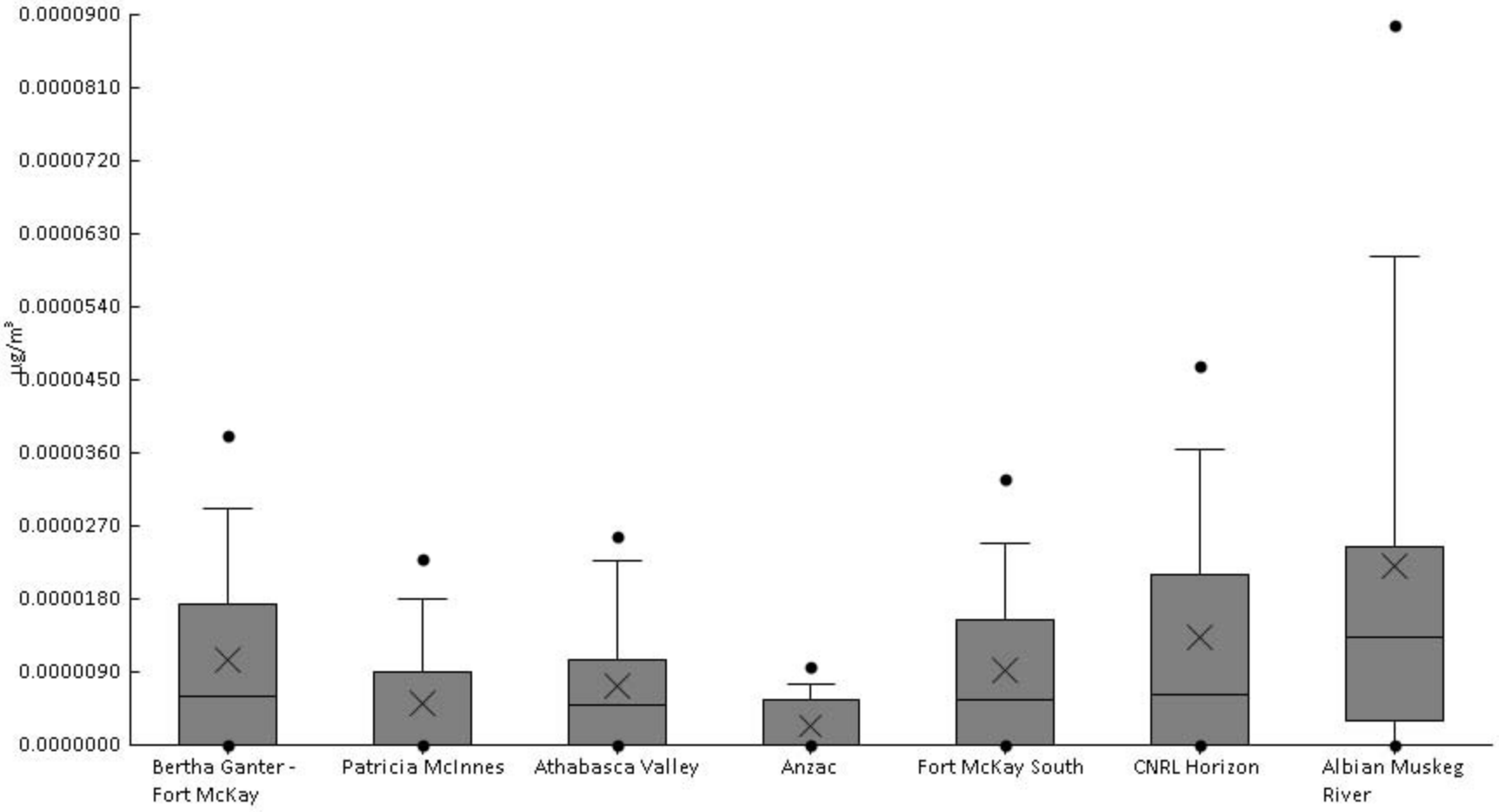
Particulate Matter (PM10 METALS) - Barium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	93%	0	0	4.1E-4	7.8E-4	2E-3	5.5E-3	7.3E-3	0.011	0.02	3.4E-3	3.7E-3
AMS 6	Patricia McInnes	59	95%	0	1.8E-4	5.8E-4	1.1E-3	2.3E-3	4.5E-3	9.1E-3	0.01	0.019	3.6E-3	3.8E-3
AMS 7	Athabasca Valley	61	98%	0	6.6E-4	1.1E-3	2.6E-3	4.4E-3	7.9E-3	0.013	0.02	0.046	6.6E-3	7.7E-3
AMS 14	Anzac	58	69%	0	0	0	0	6.9E-4	1.6E-3	3.4E-3	5.5E-3	0.019	1.5E-3	2.8E-3
AMS 13	Fort McKay South	61	82%	0	0	0	5.5E-4	1.5E-3	4E-3	7.5E-3	8.9E-3	0.021	3E-3	3.8E-3
AMS 15	CNRL Horizon	61	84%	0	0	0	5.6E-4	1.9E-3	6.7E-3	0.011	0.013	0.023	4.1E-3	4.9E-3
AMS 16	Albian Muskeg River	61	95%	0	2.8E-4	5.8E-4	1.3E-3	2.8E-3	7E-3	0.016	0.021	0.036	5.7E-3	7.3E-3



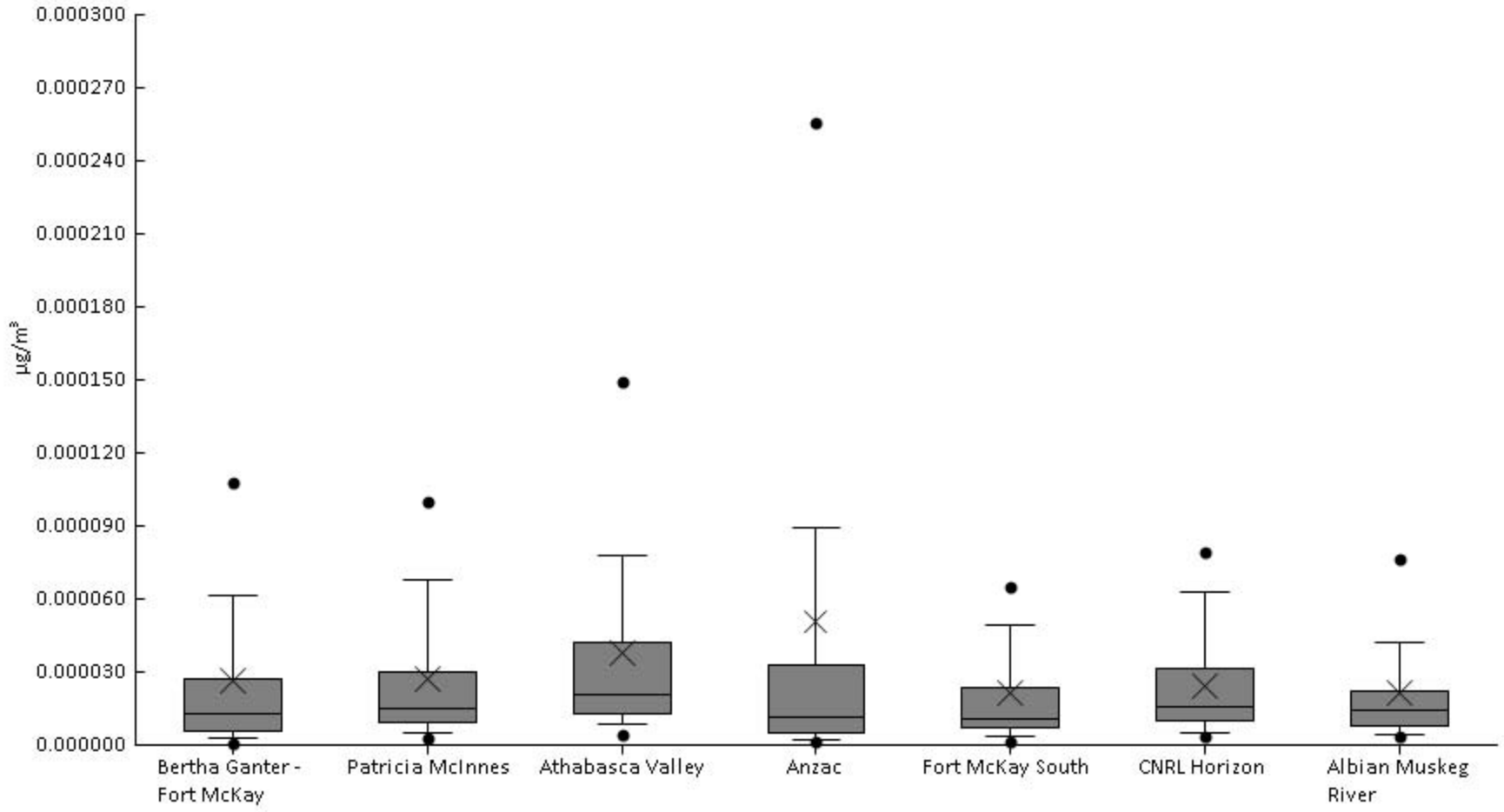
Particulate Matter (PM10 METALS) - Beryllium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	56%	0	0	0	0	6E-6	1.7E-5	2.9E-5	3.8E-5	5.9E-5	1E-5	1.4E-5
AMS 6	Patricia McInnes	59	44%	0	0	0	0	0	9E-6	1.8E-5	2.3E-5	3.1E-5	5.2E-6	7.8E-6
AMS 7	Athabasca Valley	61	59%	0	0	0	0	5E-6	1E-5	2.3E-5	2.6E-5	3.6E-5	7.4E-6	9E-6
AMS 14	Anzac	58	29%	0	0	0	0	0	5.5E-6	7.5E-6	9.6E-6	2E-5	2.3E-6	4.2E-6
AMS 13	Fort McKay South	61	57%	0	0	0	0	5.6E-6	1.5E-5	2.5E-5	3.3E-5	6.7E-5	9.2E-6	1.2E-5
AMS 15	CNRL Horizon	61	57%	0	0	0	0	6.2E-6	2.1E-5	3.6E-5	4.7E-5	8.6E-5	1.3E-5	1.8E-5
AMS 16	Albian Muskeg River	61	75%	0	0	0	3E-6	1.3E-5	2.4E-5	6E-5	8.9E-5	1.7E-4	2.2E-5	3.1E-5



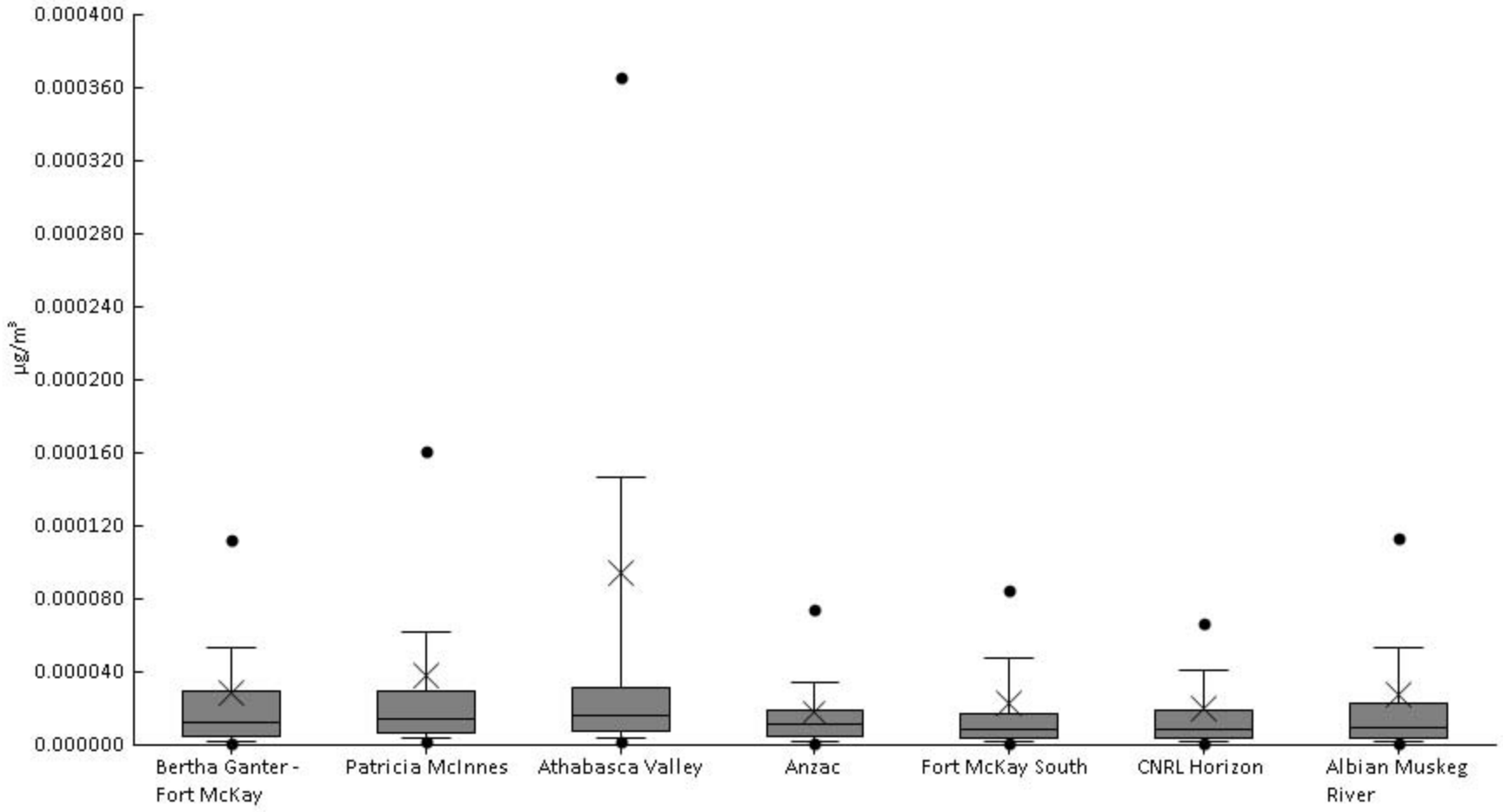
Particulate Matter (PM10 METALS) - Bismuth (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	97%	0	8.7E-7	3E-6	5.6E-6	1.3E-5	2.7E-5	6.1E-5	1.1E-4	2.4E-4	2.7E-5	4.4E-5
AMS 6	Patricia McInnes	59	98%	0	2.9E-6	5.3E-6	9.3E-6	1.5E-5	3E-5	6.8E-5	1E-4	1.5E-4	2.7E-5	3E-5
AMS 7	Athabasca Valley	61	100%	1.5E-6	4.4E-6	8.2E-6	1.3E-5	2.1E-5	4.2E-5	7.8E-5	1.5E-4	2.4E-4	3.8E-5	4.6E-5
AMS 14	Anzac	58	97%	0	1.6E-6	2.4E-6	5.3E-6	1.2E-5	3.3E-5	8.9E-5	2.6E-4	9.5E-4	5.1E-5	1.4E-4
AMS 13	Fort McKay South	61	98%	0	1.7E-6	3.3E-6	6.9E-6	1.1E-5	2.4E-5	4.9E-5	6.5E-5	2E-4	2.1E-5	3E-5
AMS 15	CNRL Horizon	61	98%	0	3.7E-6	4.9E-6	9.7E-6	1.5E-5	3.1E-5	6.3E-5	8E-5	1.1E-4	2.5E-5	2.4E-5
AMS 16	Albian Muskeg River	61	98%	0	3.9E-6	4.2E-6	7.6E-6	1.4E-5	2.2E-5	4.2E-5	7.7E-5	1.4E-4	2.2E-5	2.7E-5



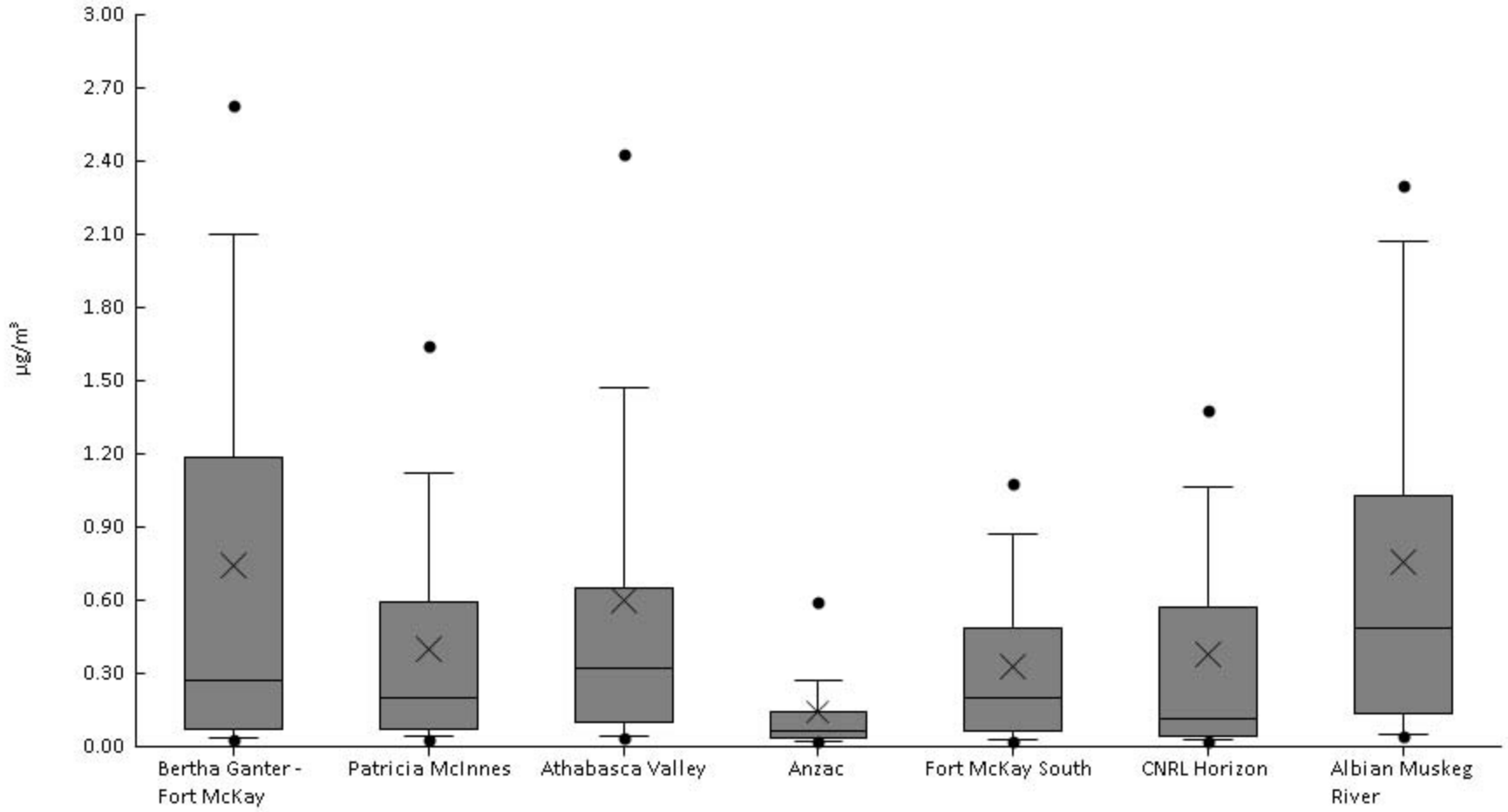
Particulate Matter (PM10 METALS) - Cadmium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	98%	0	1.1E-6	1.8E-6	5.2E-6	1.2E-5	3E-5	5.3E-5	1.1E-4	2.9E-4	2.8E-5	5.1E-5
AMS 6	Patricia McInnes	59	98%	0	2.2E-6	3.4E-6	7.1E-6	1.4E-5	3E-5	6.1E-5	1.6E-4	6.1E-4	3.8E-5	8.8E-5
AMS 7	Athabasca Valley	61	98%	0	1.9E-6	3.5E-6	7.1E-6	1.6E-5	3.1E-5	1.5E-4	3.7E-4	2.8E-3	9.4E-5	3.7E-4
AMS 14	Anzac	58	98%	0	1.3E-6	2.3E-6	4.8E-6	1.1E-5	1.9E-5	3.4E-5	7.5E-5	1.3E-4	1.8E-5	2.4E-5
AMS 13	Fort McKay South	61	97%	0	1E-6	2E-6	3.7E-6	9E-6	1.8E-5	4.8E-5	8.5E-5	3.3E-4	2.3E-5	5.1E-5
AMS 15	CNRL Horizon	61	97%	0	1.1E-6	1.7E-6	3.9E-6	8.6E-6	1.9E-5	4.1E-5	6.6E-5	3.1E-4	2E-5	4.2E-5
AMS 16	Albian Muskeg River	61	97%	0	1.1E-6	2E-6	3.7E-6	9.6E-6	2.2E-5	5.4E-5	1.1E-4	4.1E-4	2.8E-5	6.4E-5



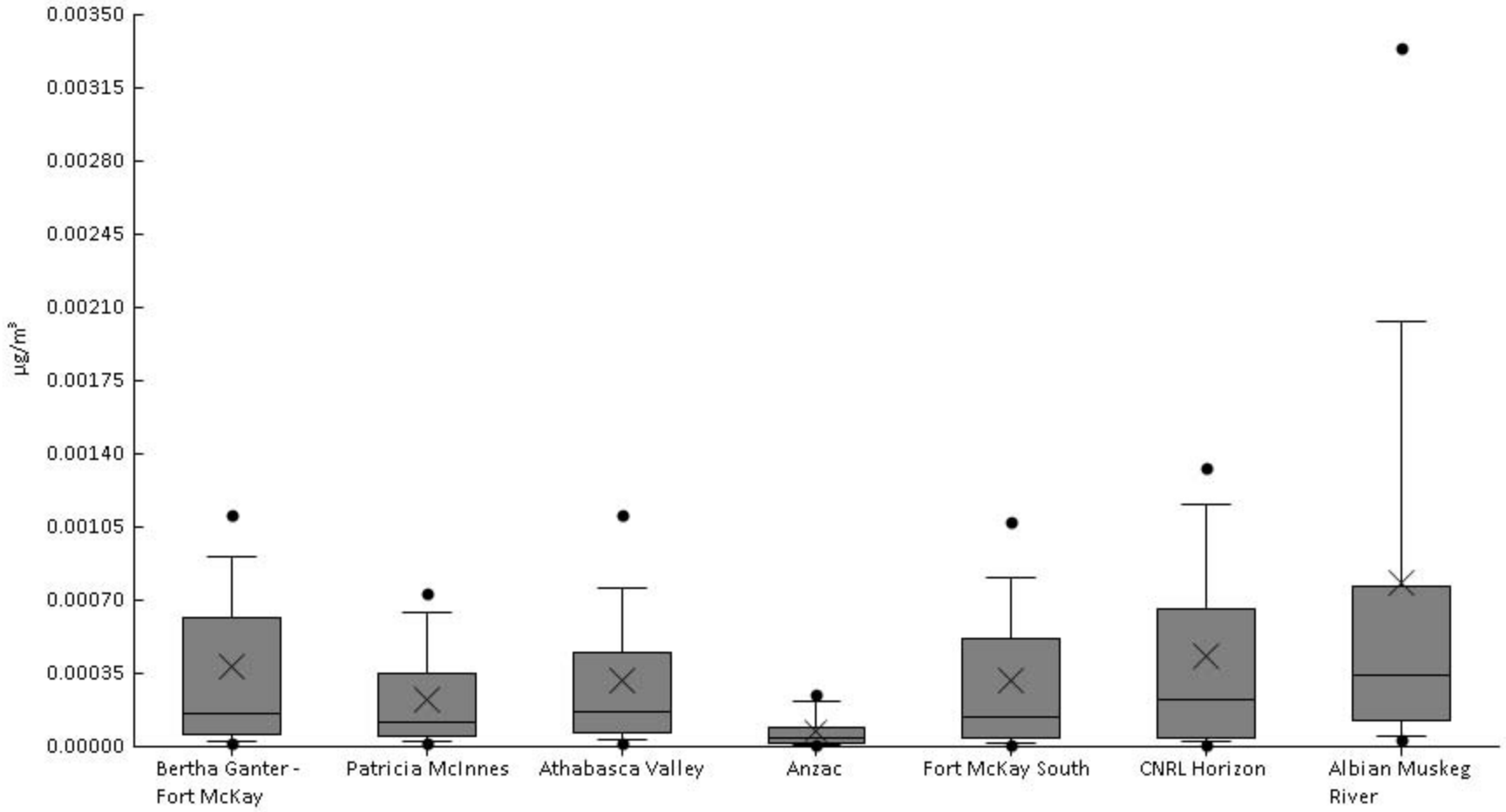
Particulate Matter (PM10 METALS) - Calcium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	98%	0	0.031	0.036	0.074	0.27	1.2	2.1	2.6	4.2	0.74	0.93
AMS 6	Patricia McInnes	59	98%	0	0.028	0.041	0.071	0.2	0.6	1.1	1.6	2.4	0.4	0.52
AMS 7	Athabasca Valley	61	100%	0.031	0.035	0.046	0.097	0.32	0.65	1.5	2.4	4.5	0.6	0.82
AMS 14	Anzac	58	98%	0	0.019	0.022	0.033	0.065	0.14	0.27	0.59	1.2	0.14	0.23
AMS 13	Fort McKay South	61	98%	0	0.022	0.026	0.061	0.2	0.48	0.87	1.1	1.7	0.33	0.36
AMS 15	CNRL Horizon	61	98%	0	0.022	0.026	0.04	0.12	0.57	1.1	1.4	1.9	0.38	0.46
AMS 16	Albian Muskeg River	61	100%	0.031	0.043	0.048	0.14	0.49	1	2.1	2.3	5.2	0.76	0.93



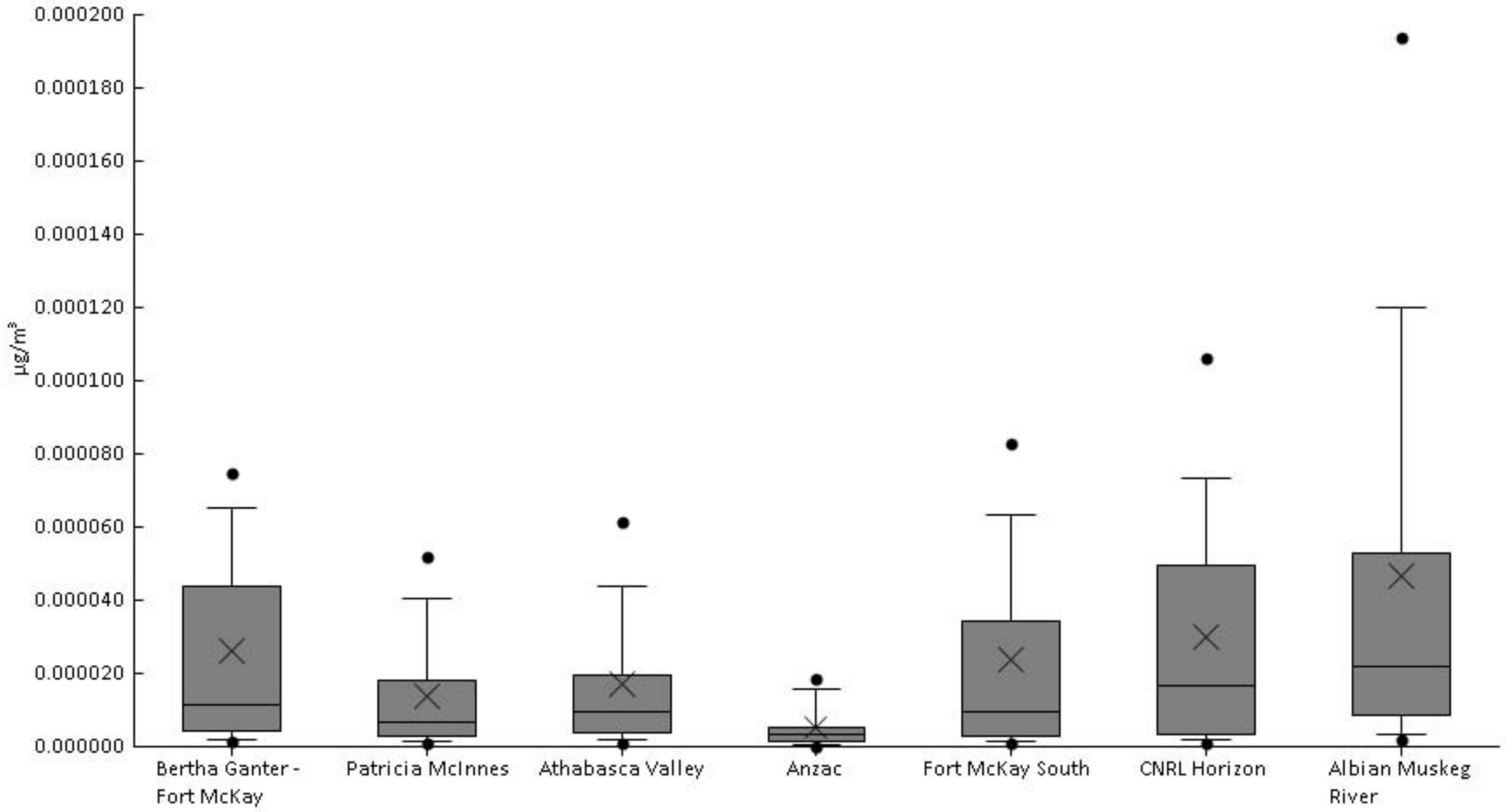
Particulate Matter (PM10 METALS) - Cerium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	1E-5	1.3E-5	2.2E-5	5.9E-5	1.6E-4	6.2E-4	9.1E-4	1.1E-3	2.3E-3	3.8E-4	4.7E-4
AMS 6	Patricia McInnes	59	100%	3.4E-6	1.5E-5	2.6E-5	4.7E-5	1.2E-4	3.5E-4	6.4E-4	7.3E-4	1.2E-3	2.2E-4	2.7E-4
AMS 7	Athabasca Valley	61	100%	8.5E-6	2E-5	3.4E-5	6.6E-5	1.7E-4	4.5E-4	7.6E-4	1.1E-3	1.3E-3	3.1E-4	3.3E-4
AMS 14	Anzac	58	100%	2E-6	6.5E-6	1.1E-5	1.9E-5	3.9E-5	9.5E-5	2.2E-4	2.5E-4	4.4E-4	7.7E-5	8.9E-5
AMS 13	Fort McKay South	61	100%	6E-6	1.1E-5	1.5E-5	4.2E-5	1.4E-4	5.1E-4	8.1E-4	1.1E-3	2.5E-3	3.2E-4	4.2E-4
AMS 15	CNRL Horizon	61	98%	5.1E-7	1.1E-5	2.2E-5	3.9E-5	2.3E-4	6.6E-4	1.2E-3	1.3E-3	2.4E-3	4.3E-4	5.3E-4
AMS 16	Albian Muskeg River	61	100%	1.4E-5	3.2E-5	5.1E-5	1.3E-4	3.4E-4	7.6E-4	2E-3	3.3E-3	5.6E-3	7.8E-4	1.1E-3



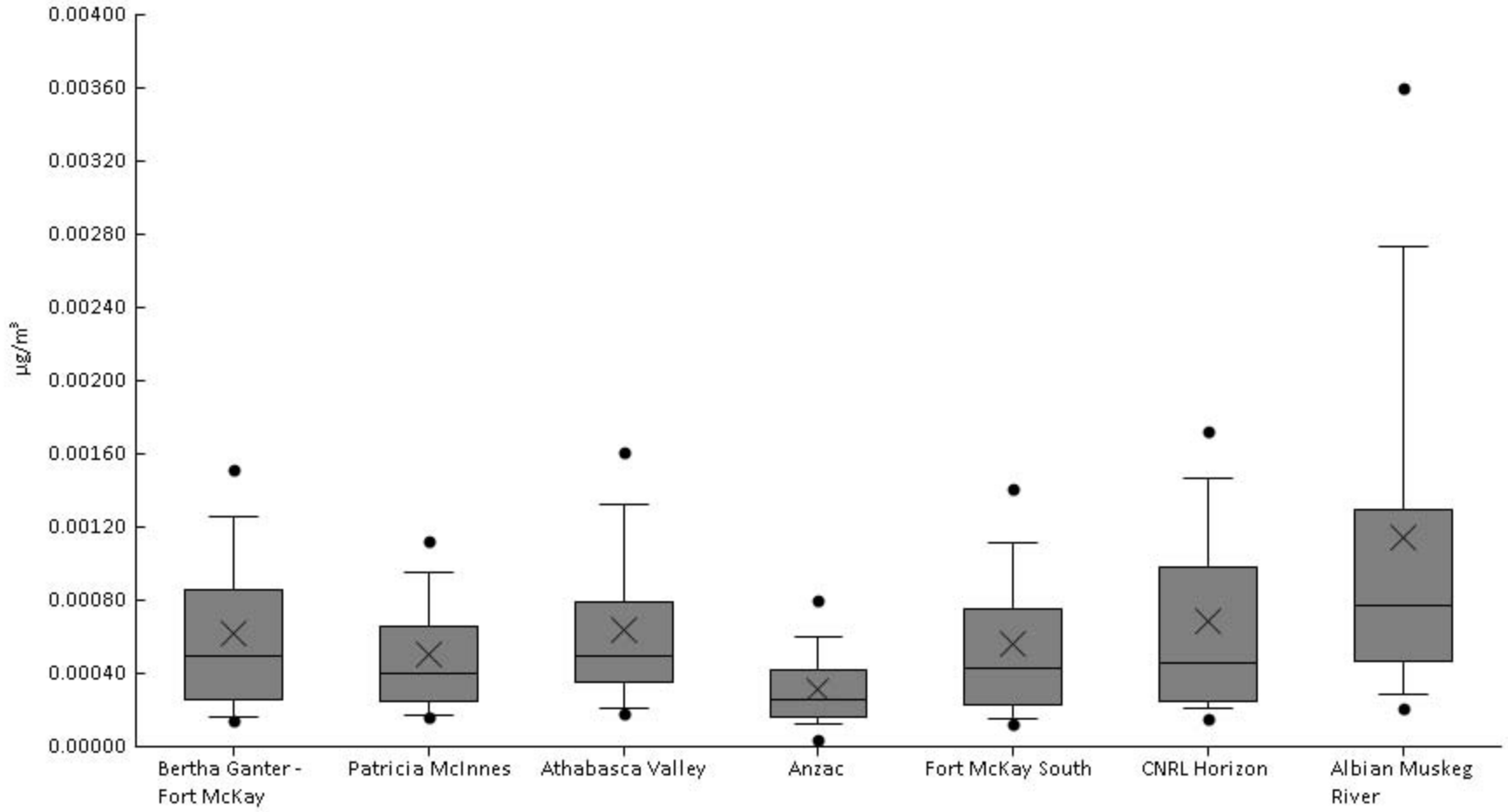
Particulate Matter (PM10 METALS) - Cesium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	9.4E-7	1.3E-6	1.7E-6	4.3E-6	1.1E-5	4.4E-5	6.5E-5	7.5E-5	1.5E-4	2.6E-5	3E-5
AMS 6	Patricia McInnes	59	97%	0	8.6E-7	1.3E-6	2.8E-6	6.5E-6	1.8E-5	4E-5	5.2E-5	7E-5	1.4E-5	1.7E-5
AMS 7	Athabasca Valley	61	100%	8.2E-7	1.2E-6	2.1E-6	4E-6	9.5E-6	2E-5	4.4E-5	6.1E-5	8.7E-5	1.7E-5	2E-5
AMS 14	Anzac	58	95%	0	1.7E-7	6.1E-7	1.7E-6	3.2E-6	5.2E-6	1.5E-5	1.8E-5	3.1E-5	5.4E-6	6.4E-6
AMS 13	Fort McKay South	61	100%	7E-7	9.3E-7	1.3E-6	3.1E-6	9.6E-6	3.4E-5	6.3E-5	8.3E-5	2.2E-4	2.4E-5	3.5E-5
AMS 15	CNRL Horizon	61	98%	0	8.4E-7	2.1E-6	3.5E-6	1.7E-5	5E-5	7.3E-5	1.1E-4	1.5E-4	3E-5	3.5E-5
AMS 16	Albian Muskeg River	61	100%	1.1E-6	2.1E-6	3.5E-6	8.5E-6	2.2E-5	5.3E-5	1.2E-4	1.9E-4	3E-4	4.7E-5	6.3E-5



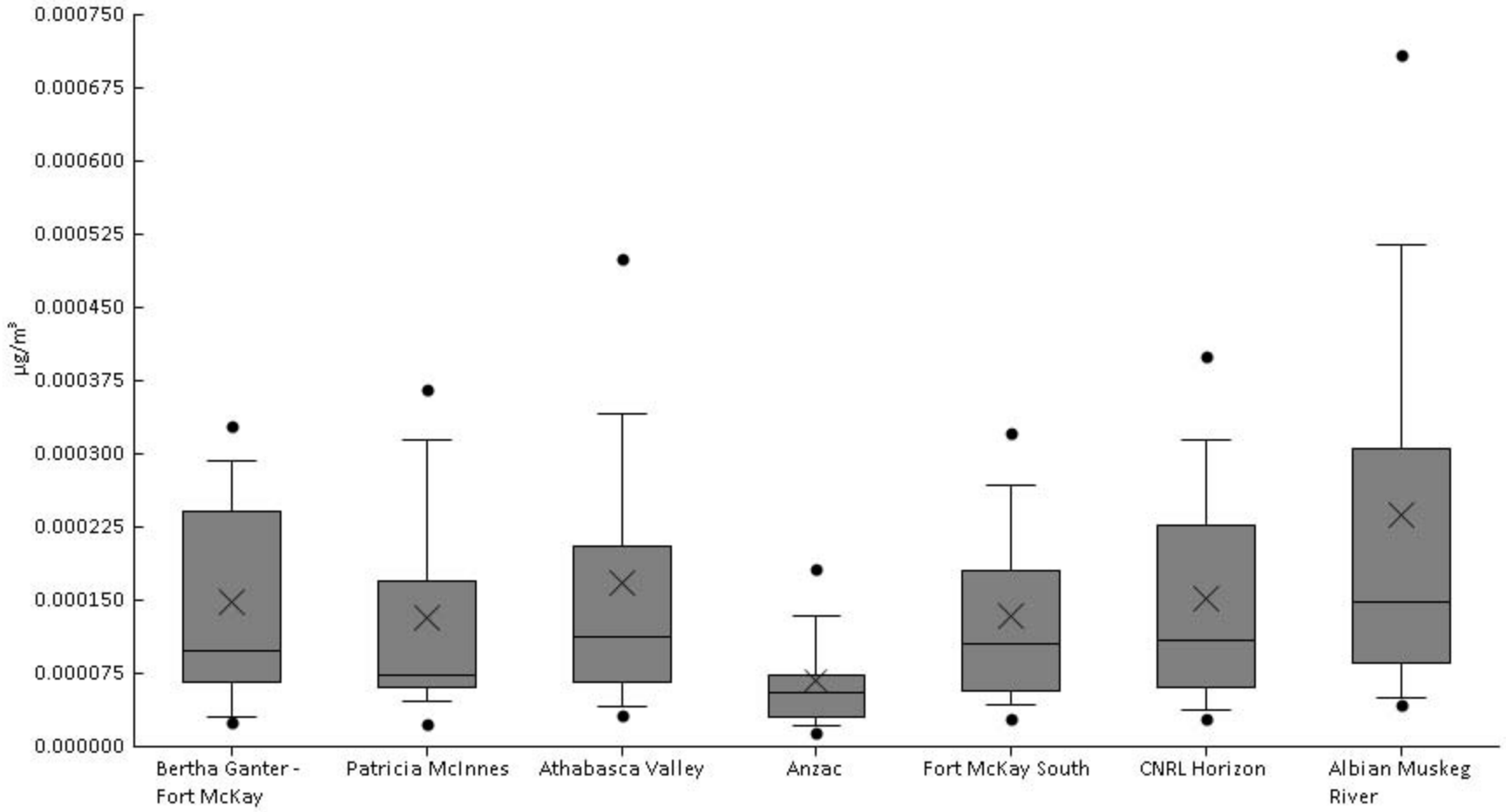
Particulate Matter (PM10 METALS) - Chromium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	9.5E-5	1.5E-4	1.6E-4	2.6E-4	5E-4	8.5E-4	1.3E-3	1.5E-3	2.6E-3	6.2E-4	4.9E-4
AMS 6	Patricia McInnes	59	100%	1.3E-4	1.6E-4	1.8E-4	2.5E-4	4E-4	6.5E-4	9.6E-4	1.1E-3	1.6E-3	5E-4	3.3E-4
AMS 7	Athabasca Valley	61	100%	1.6E-4	1.8E-4	2.1E-4	3.5E-4	4.9E-4	7.9E-4	1.3E-3	1.6E-3	2.1E-3	6.4E-4	4.4E-4
AMS 14	Anzac	58	95%	0	3.9E-5	1.2E-4	1.6E-4	2.6E-4	4.1E-4	6E-4	8E-4	9.3E-4	3.2E-4	2.1E-4
AMS 13	Fort McKay South	61	97%	0	1.2E-4	1.5E-4	2.3E-4	4.3E-4	7.5E-4	1.1E-3	1.4E-3	2.9E-3	5.6E-4	4.7E-4
AMS 15	CNRL Horizon	61	100%	1E-4	1.5E-4	2.1E-4	2.4E-4	4.5E-4	9.8E-4	1.5E-3	1.7E-3	2.6E-3	6.8E-4	5.6E-4
AMS 16	Albian Muskeg River	61	100%	1.7E-4	2.1E-4	2.9E-4	4.7E-4	7.8E-4	1.3E-3	2.7E-3	3.6E-3	5.5E-3	1.1E-3	1.1E-3



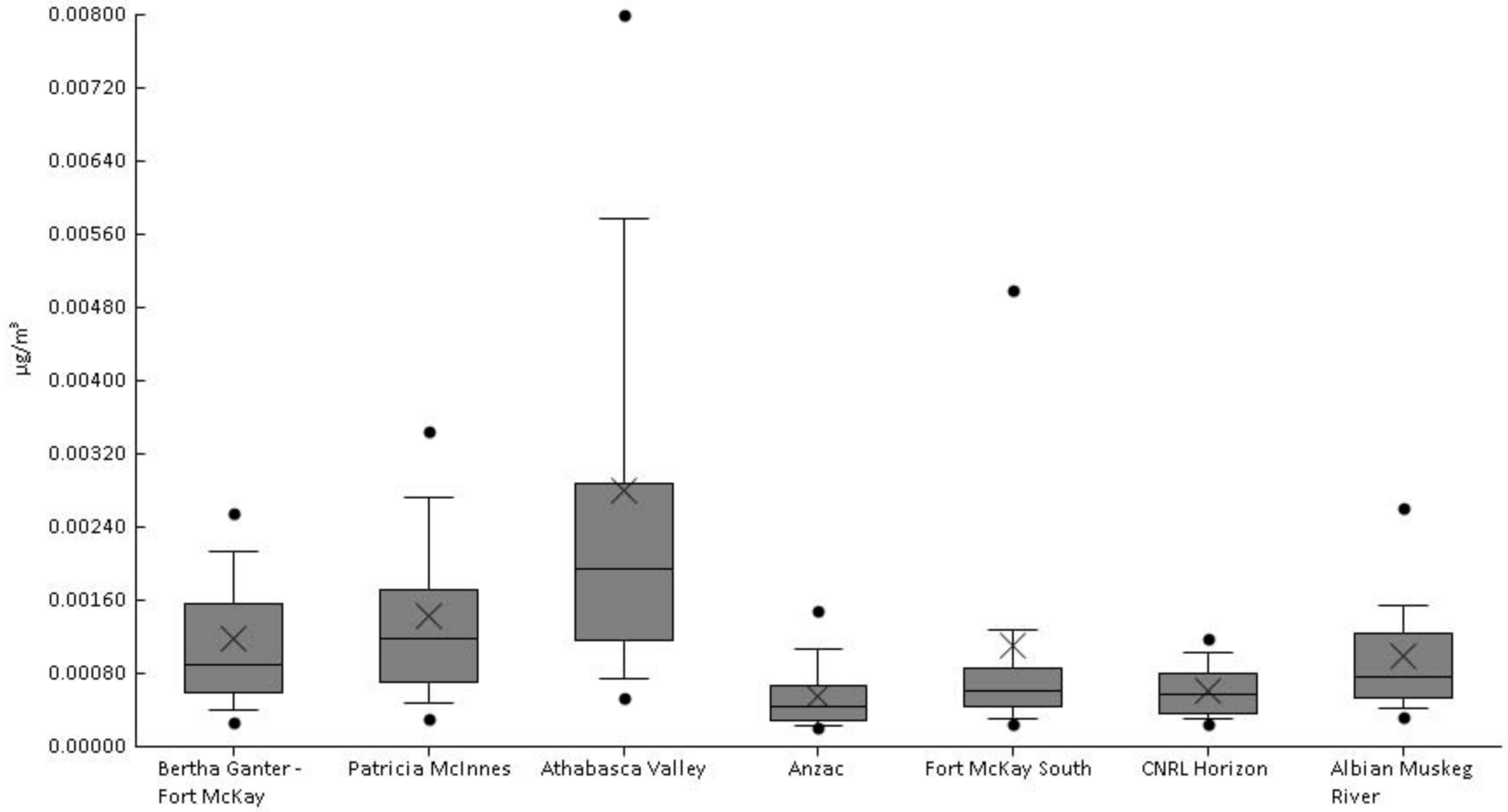
Particulate Matter (PM10 METALS) - Cobalt (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	9.1E-6	2.5E-5	3.1E-5	6.7E-5	9.7E-5	2.4E-4	2.9E-4	3.3E-4	7E-4	1.5E-4	1.3E-4
AMS 6	Patricia McInnes	59	100%	8.4E-6	2.4E-5	4.6E-5	6.1E-5	7.4E-5	1.7E-4	3.1E-4	3.7E-4	8.2E-4	1.3E-4	1.3E-4
AMS 7	Athabasca Valley	61	100%	1E-5	3.2E-5	4.2E-5	6.6E-5	1.1E-4	2.1E-4	3.4E-4	5E-4	9.3E-4	1.7E-4	1.6E-4
AMS 14	Anzac	58	100%	6.9E-6	1.4E-5	2.1E-5	3E-5	5.5E-5	7.4E-5	1.3E-4	1.8E-4	3.3E-4	6.8E-5	5.8E-5
AMS 13	Fort McKay South	61	100%	1.6E-5	2.9E-5	4.3E-5	5.7E-5	1.1E-4	1.8E-4	2.7E-4	3.2E-4	6.3E-4	1.3E-4	1.1E-4
AMS 15	CNRL Horizon	61	100%	1.1E-5	2.8E-5	3.7E-5	6.1E-5	1.1E-4	2.3E-4	3.1E-4	4E-4	5.9E-4	1.5E-4	1.3E-4
AMS 16	Albian Muskeg River	61	100%	2.9E-5	4.2E-5	5E-5	8.7E-5	1.5E-4	3.1E-4	5.2E-4	7.1E-4	1.3E-3	2.4E-4	2.4E-4



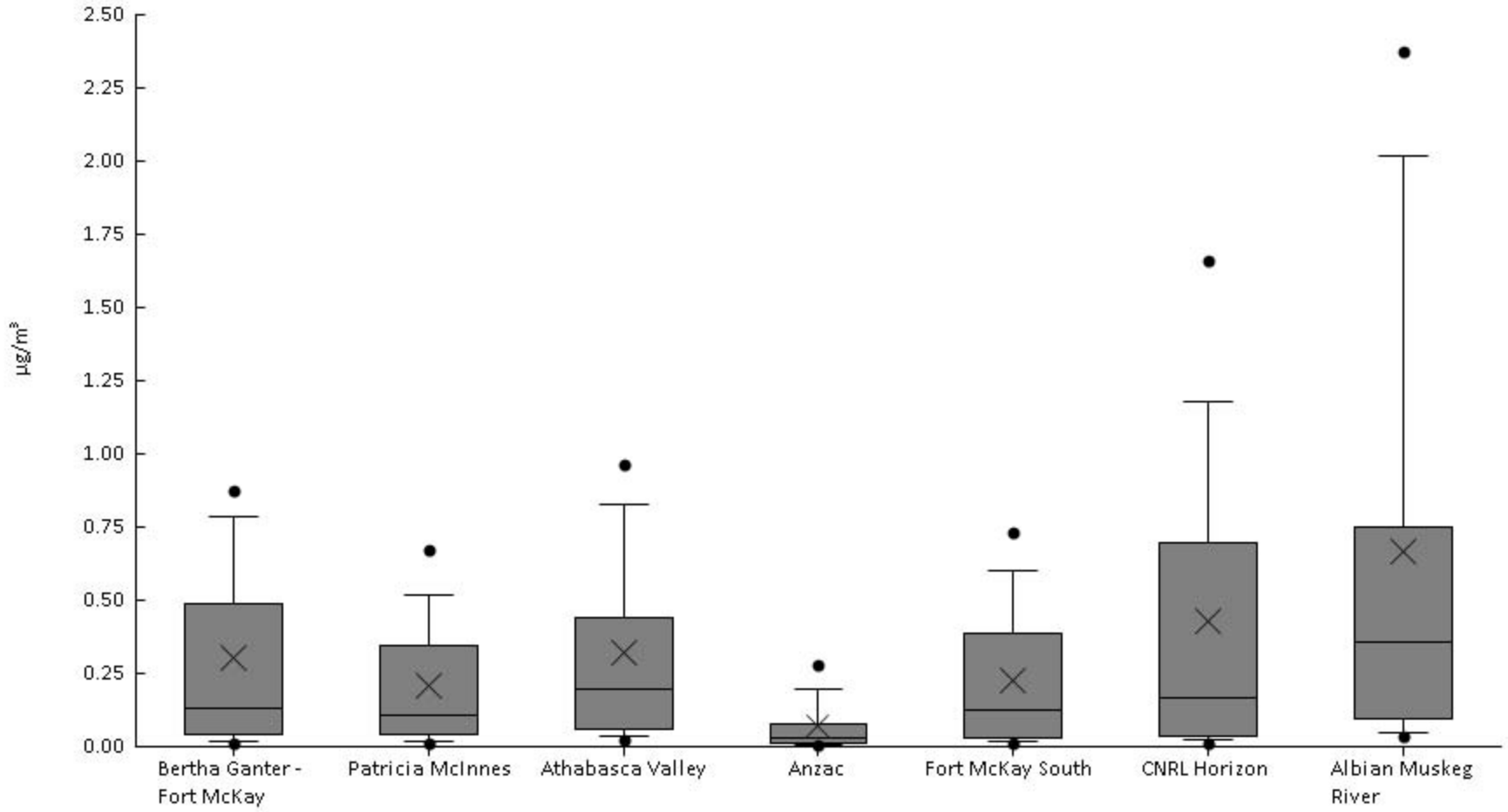
Particulate Matter (PM10 METALS) - Copper (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	1.2E-4	2.6E-4	4.1E-4	5.8E-4	9E-4	1.6E-3	2.1E-3	2.6E-3	6.3E-3	1.2E-3	9.4E-4
AMS 6	Patricia McInnes	59	100%	2.7E-4	3E-4	4.8E-4	7.1E-4	1.2E-3	1.7E-3	2.7E-3	3.4E-3	5.6E-3	1.4E-3	1E-3
AMS 7	Athabasca Valley	61	100%	3.1E-4	5.4E-4	7.4E-4	1.2E-3	1.9E-3	2.9E-3	5.8E-3	8E-3	0.02	2.8E-3	3E-3
AMS 14	Anzac	58	100%	1.9E-4	2E-4	2.2E-4	2.8E-4	4.5E-4	6.7E-4	1.1E-3	1.5E-3	2.1E-3	5.6E-4	4E-4
AMS 13	Fort McKay South	61	100%	2E-4	2.4E-4	3E-4	4.4E-4	6.1E-4	8.5E-4	1.3E-3	5E-3	0.011	1.1E-3	2E-3
AMS 15	CNRL Horizon	61	100%	1.5E-4	2.6E-4	3.1E-4	3.6E-4	5.6E-4	8E-4	1E-3	1.2E-3	1.5E-3	6.1E-4	2.9E-4
AMS 16	Albian Muskeg River	61	100%	2.4E-4	3.2E-4	4.2E-4	5.3E-4	7.6E-4	1.2E-3	1.5E-3	2.6E-3	4E-3	9.8E-4	7.3E-4



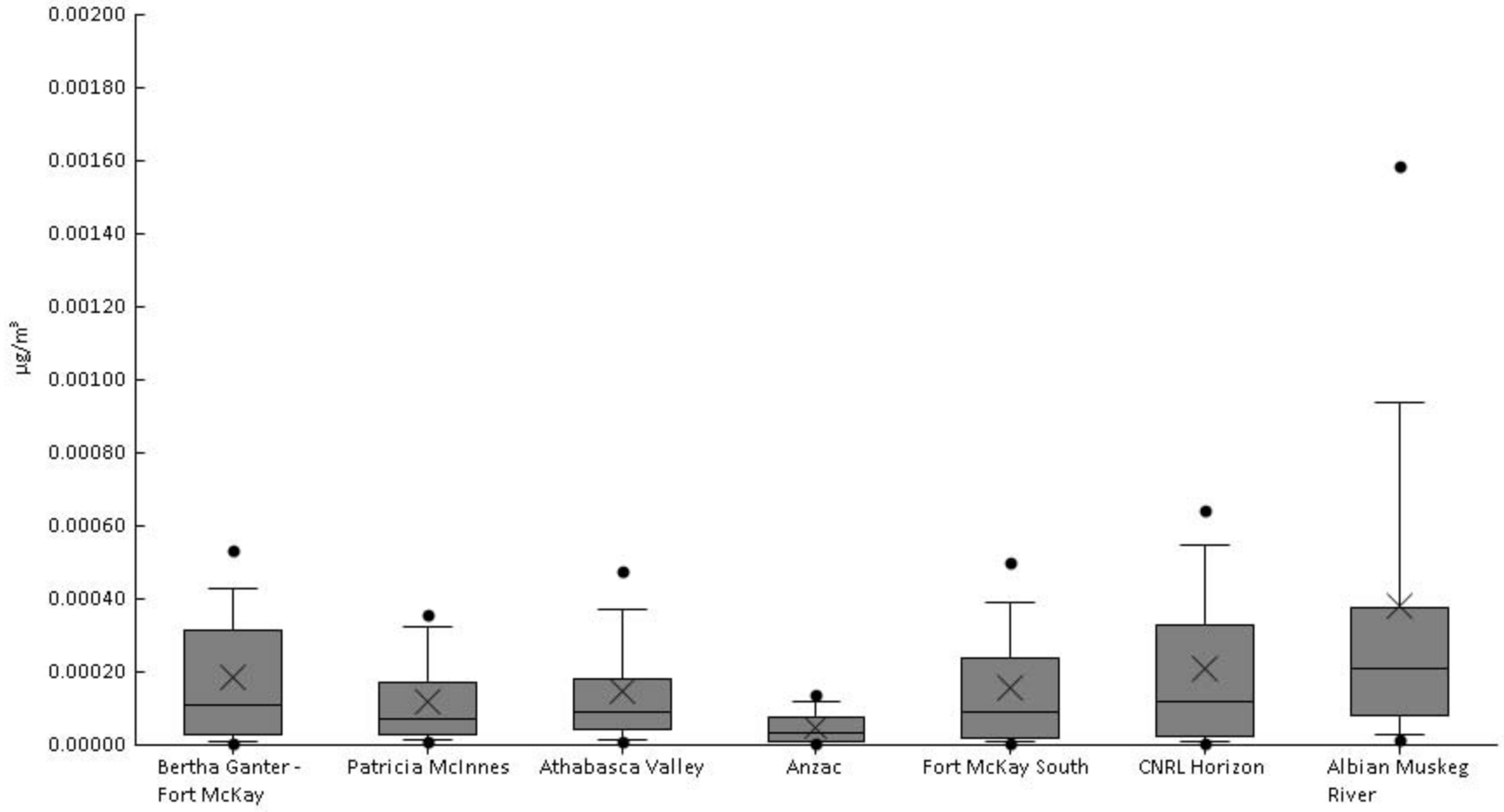
Particulate Matter (PM10 METALS) - Iron (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	0.01	0.013	0.019	0.039	0.13	0.49	0.78	0.87	2.2	0.3	0.39
AMS 6	Patricia McInnes	59	100%	3.5E-3	0.013	0.02	0.042	0.11	0.34	0.52	0.67	1.1	0.21	0.24
AMS 7	Athabasca Valley	61	100%	0.014	0.021	0.034	0.06	0.19	0.44	0.83	0.96	2	0.32	0.38
AMS 14	Anzac	58	100%	6.2E-3	6.9E-3	8.4E-3	0.015	0.032	0.079	0.2	0.28	0.44	0.073	0.093
AMS 13	Fort McKay South	61	100%	7.7E-3	0.011	0.017	0.033	0.13	0.39	0.6	0.73	1.2	0.23	0.25
AMS 15	CNRL Horizon	61	100%	4E-3	0.013	0.022	0.034	0.17	0.69	1.2	1.7	2.3	0.43	0.54
AMS 16	Albian Muskeg River	61	100%	0.015	0.036	0.049	0.093	0.36	0.75	2	2.4	4.9	0.67	0.9



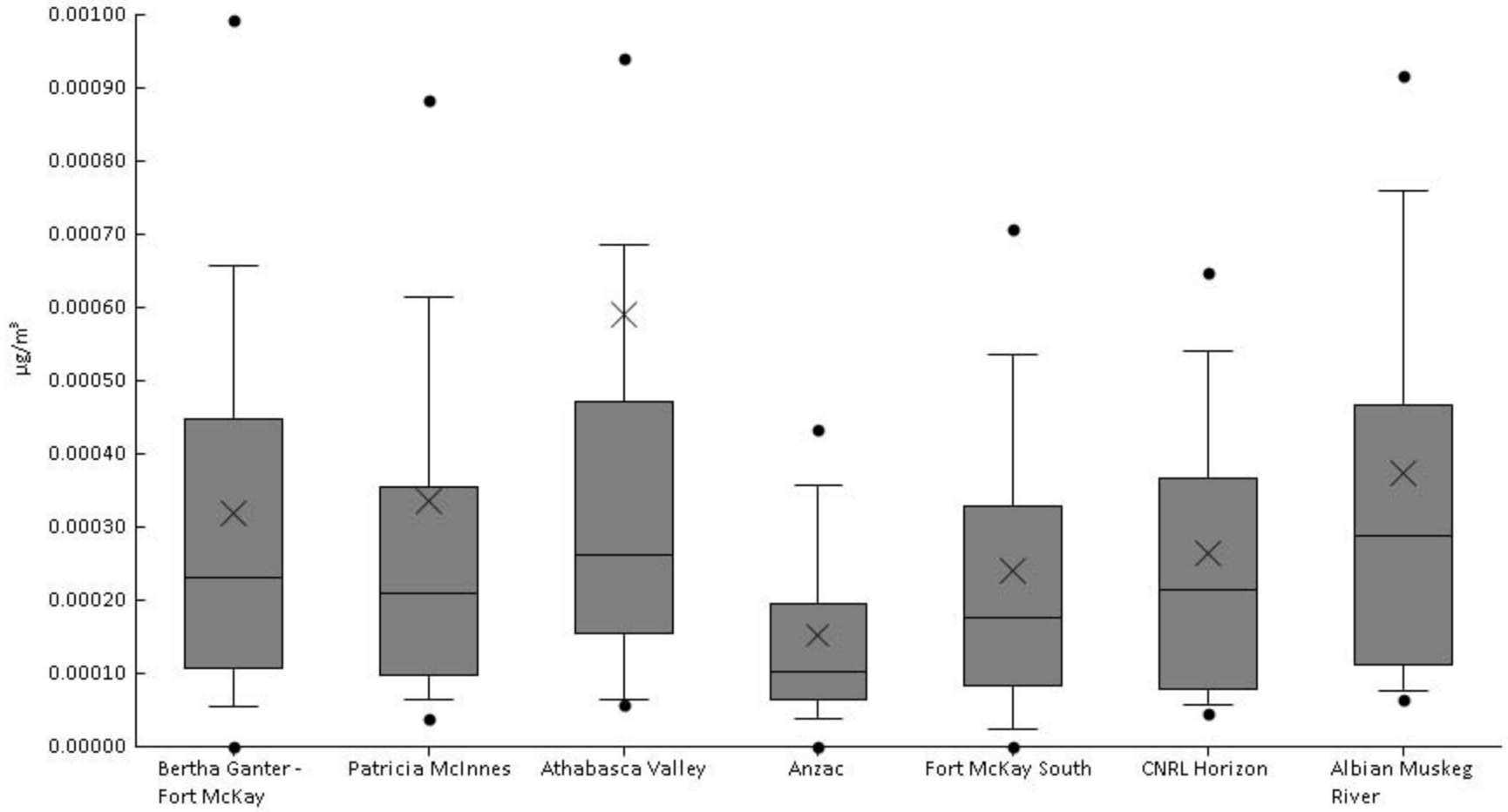
Particulate Matter (PM10 METALS) - Lanthanum (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	4.8E-6	6.3E-6	1.2E-5	2.9E-5	1.1E-4	3.1E-4	4.3E-4	5.4E-4	1.1E-3	1.9E-4	2.1E-4
AMS 6	Patricia McInnes	59	100%	1.2E-6	9.7E-6	1.4E-5	3E-5	7E-5	1.7E-4	3.2E-4	3.6E-4	5.9E-4	1.2E-4	1.3E-4
AMS 7	Athabasca Valley	61	100%	3.3E-6	1E-5	1.5E-5	4.1E-5	9.1E-5	1.8E-4	3.7E-4	4.8E-4	6.3E-4	1.5E-4	1.5E-4
AMS 14	Anzac	58	98%	0	3.6E-6	7.4E-6	1.1E-5	3.5E-5	7.4E-5	1.2E-4	1.4E-4	2.3E-4	4.9E-5	4.8E-5
AMS 13	Fort McKay South	61	100%	2.4E-6	5.6E-6	7.8E-6	1.9E-5	8.9E-5	2.4E-4	3.9E-4	5E-4	1.2E-3	1.6E-4	2E-4
AMS 15	CNRL Horizon	61	98%	0	5.1E-6	1.1E-5	2.5E-5	1.2E-4	3.3E-4	5.5E-4	6.4E-4	1.1E-3	2.1E-4	2.3E-4
AMS 16	Albian Muskeg River	61	100%	5.8E-6	1.6E-5	2.6E-5	8.2E-5	2.1E-4	3.8E-4	9.4E-4	1.6E-3	2.6E-3	3.8E-4	5.3E-4



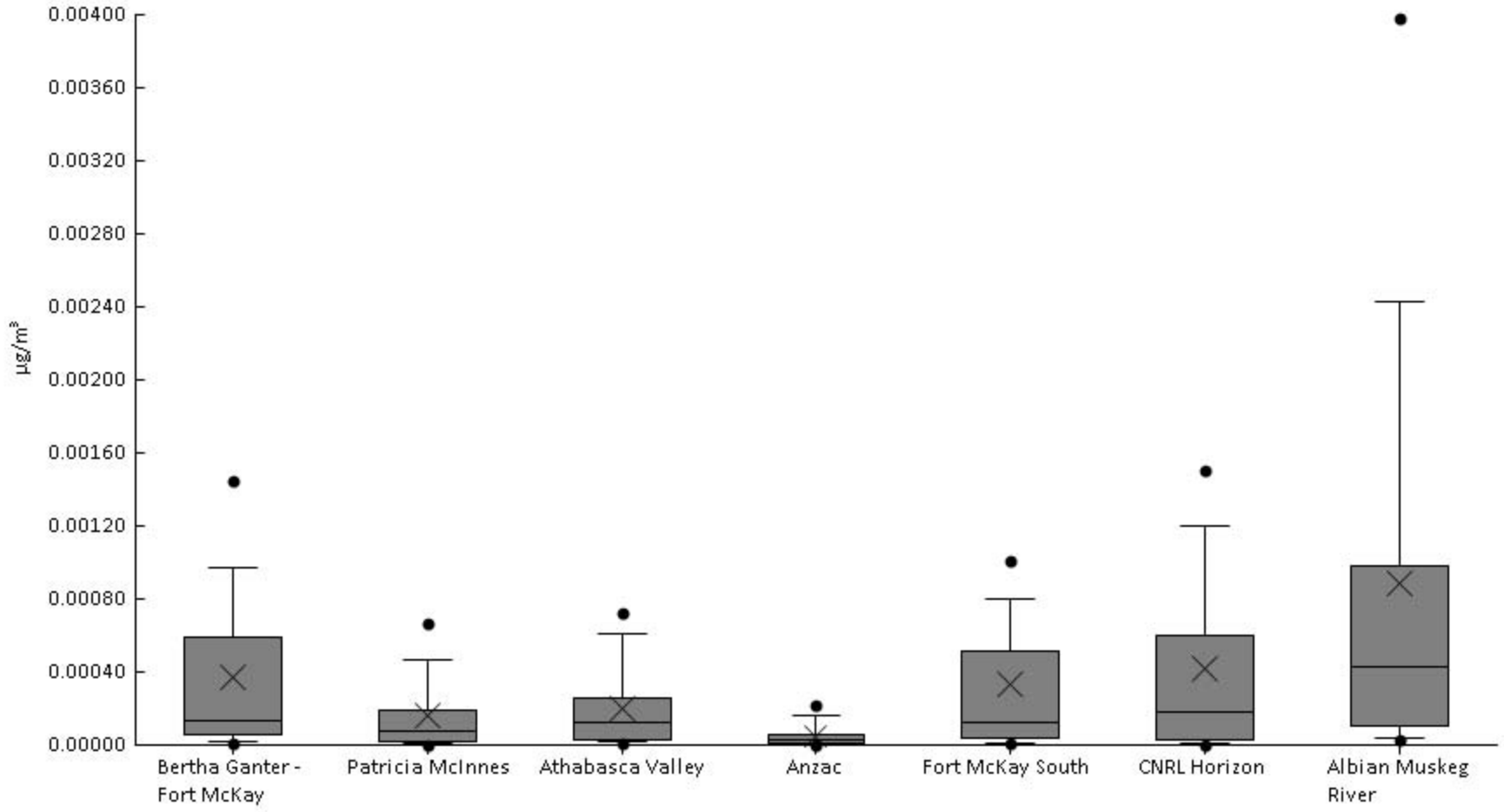
Particulate Matter (PM10 METALS) - Lead (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	93%	0	0	5.6E-5	1.1E-4	2.3E-4	4.5E-4	6.6E-4	9.9E-4	1.5E-3	3.2E-4	3.1E-4
AMS 6	Patricia McInnes	59	97%	0	3.8E-5	6.4E-5	9.7E-5	2.1E-4	3.5E-4	6.2E-4	8.8E-4	3.9E-3	3.3E-4	5.3E-4
AMS 7	Athabasca Valley	61	100%	3.7E-5	5.7E-5	6.4E-5	1.6E-4	2.6E-4	4.7E-4	6.9E-4	9.4E-4	0.016	5.9E-4	2E-3
AMS 14	Anzac	58	93%	0	0	3.8E-5	6.4E-5	1E-4	1.9E-4	3.6E-4	4.3E-4	6.7E-4	1.5E-4	1.4E-4
AMS 13	Fort McKay South	61	90%	0	0	2.3E-5	8.3E-5	1.8E-4	3.3E-4	5.4E-4	7.1E-4	1.3E-3	2.4E-4	2.4E-4
AMS 15	CNRL Horizon	61	97%	0	4.4E-5	5.7E-5	7.9E-5	2.1E-4	3.7E-4	5.4E-4	6.5E-4	1.6E-3	2.6E-4	2.5E-4
AMS 16	Albian Muskeg River	61	98%	0	6.5E-5	7.5E-5	1.1E-4	2.9E-4	4.7E-4	7.6E-4	9.2E-4	2.3E-3	3.7E-4	3.8E-4



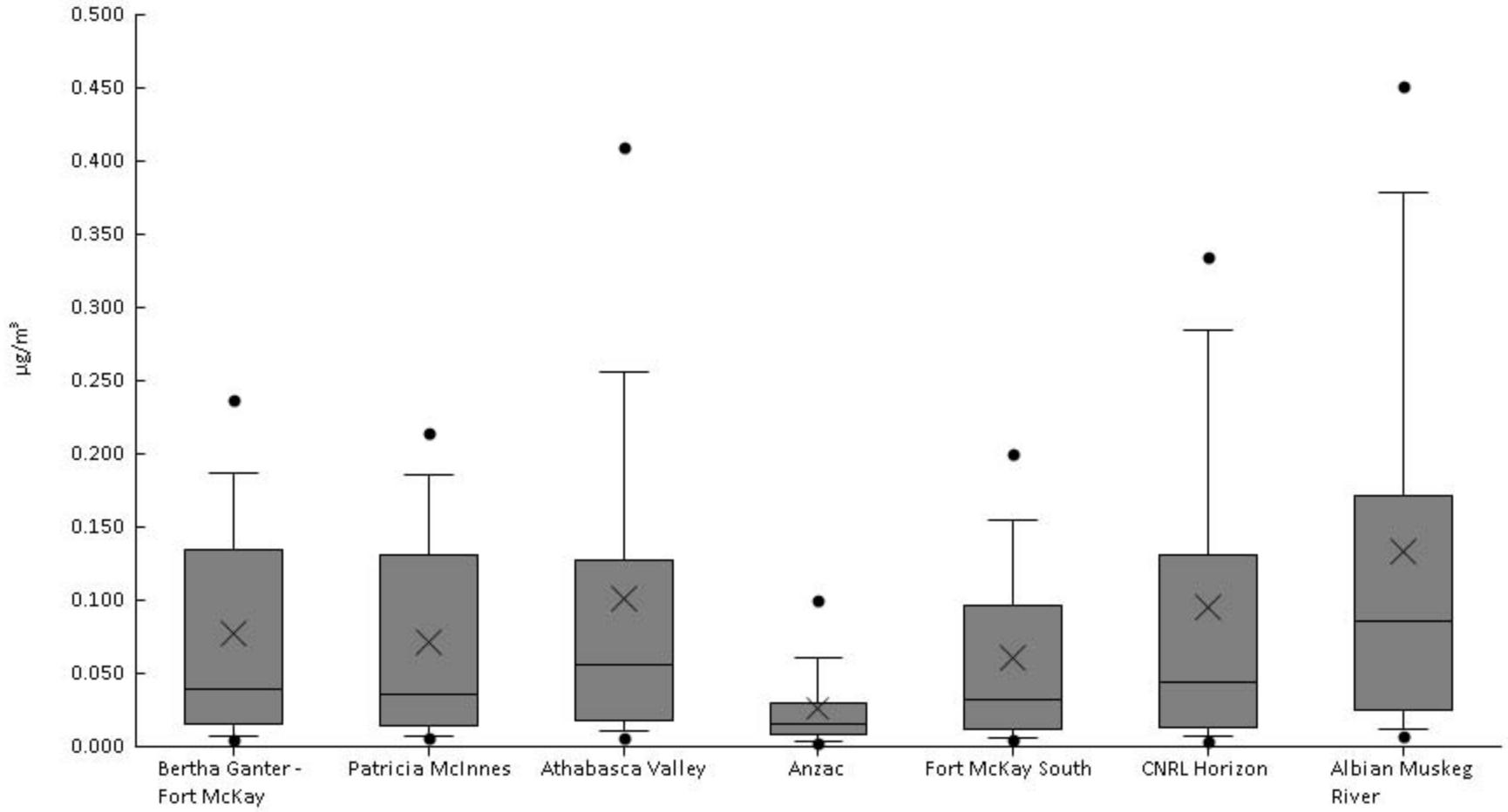
Particulate Matter (PM10 METALS) - Lithium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	95%	0	5.8E-6	1.7E-5	5.5E-5	1.3E-4	6E-4	9.7E-4	1.4E-3	1.8E-3	3.8E-4	4.6E-4
AMS 6	Patricia McInnes	59	93%	0	0	4.8E-6	2.2E-5	7.5E-5	1.9E-4	4.6E-4	6.7E-4	1.1E-3	1.7E-4	2.3E-4
AMS 7	Athabasca Valley	61	100%	1.7E-6	9.4E-6	1.5E-5	3.2E-5	1.3E-4	2.6E-4	6.1E-4	7.2E-4	8.5E-4	2E-4	2.3E-4
AMS 14	Anzac	58	86%	0	0	0	1.1E-5	2.5E-5	5.5E-5	1.6E-4	2.2E-4	2.4E-4	5.1E-5	6.4E-5
AMS 13	Fort McKay South	61	97%	0	5.1E-6	9.9E-6	3.3E-5	1.2E-4	5.1E-4	8E-4	1E-3	3.4E-3	3.4E-4	5E-4
AMS 15	CNRL Horizon	61	95%	0	3.2E-6	1.1E-5	3.3E-5	1.8E-4	6E-4	1.2E-3	1.5E-3	2.6E-3	4.2E-4	5.5E-4
AMS 16	Albian Muskeg River	61	100%	2.1E-5	3E-5	4.2E-5	1.1E-4	4.3E-4	9.8E-4	2.4E-3	4E-3	5.8E-3	8.9E-4	1.3E-3



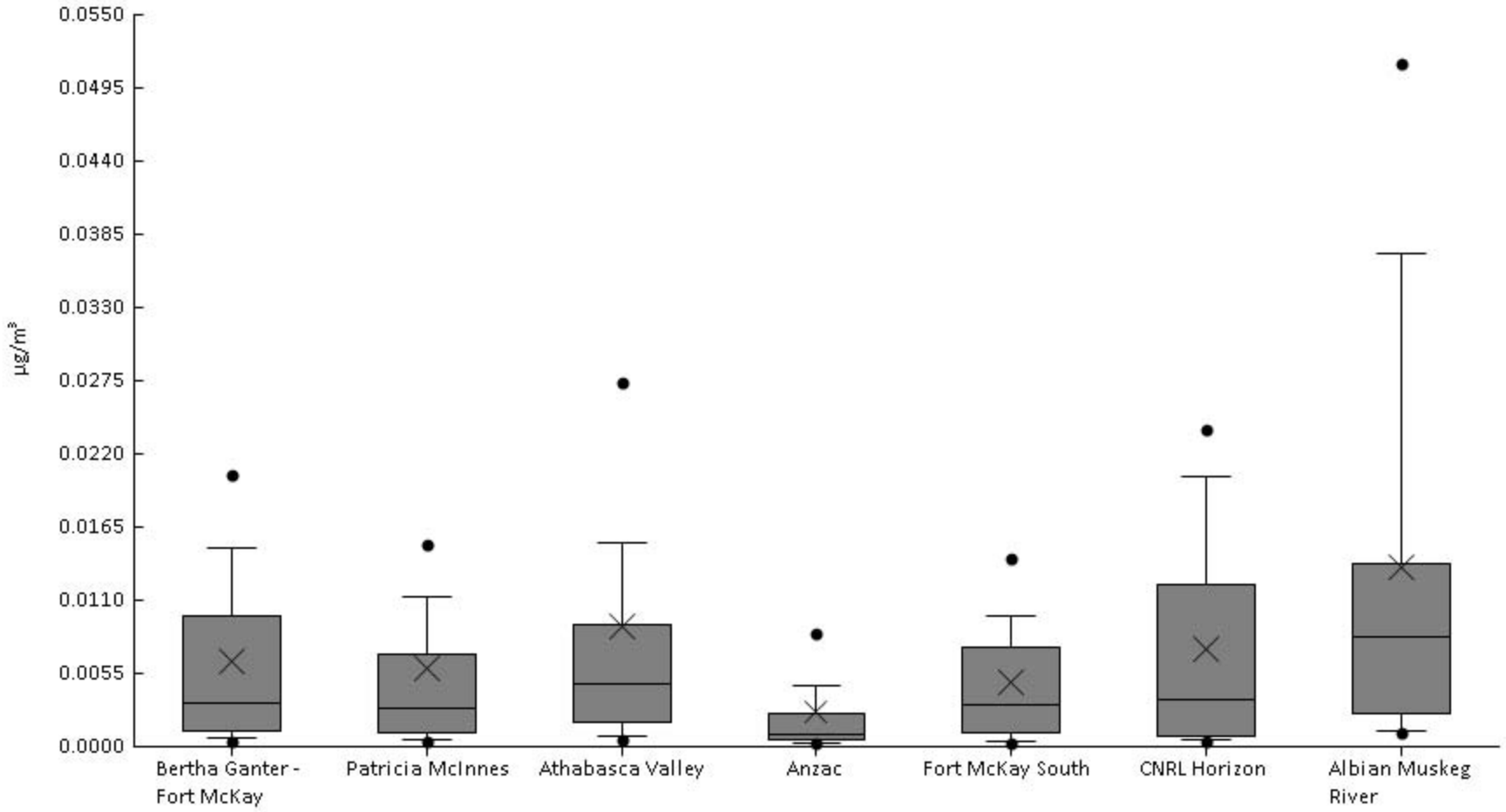
Particulate Matter (PM10 METALS) - Magnesium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	4.1E-3	5E-3	6.8E-3	0.016	0.039	0.13	0.19	0.24	0.44	0.078	0.089
AMS 6	Patricia McInnes	59	100%	3E-3	5.9E-3	7E-3	0.014	0.036	0.13	0.19	0.21	0.34	0.072	0.078
AMS 7	Athabasca Valley	61	100%	5E-3	6.4E-3	0.011	0.018	0.056	0.13	0.26	0.41	0.52	0.1	0.12
AMS 14	Anzac	58	100%	2.3E-3	3E-3	3.3E-3	8.1E-3	0.015	0.03	0.06	0.099	0.16	0.027	0.031
AMS 13	Fort McKay South	61	100%	3.2E-3	4.3E-3	5.4E-3	0.012	0.032	0.096	0.15	0.2	0.31	0.06	0.066
AMS 15	CNRL Horizon	61	100%	1.9E-3	3.8E-3	7.1E-3	0.013	0.044	0.13	0.28	0.34	0.56	0.095	0.12
AMS 16	Albian Muskeg River	61	100%	4.3E-3	7.1E-3	0.012	0.025	0.086	0.17	0.38	0.45	0.89	0.13	0.16



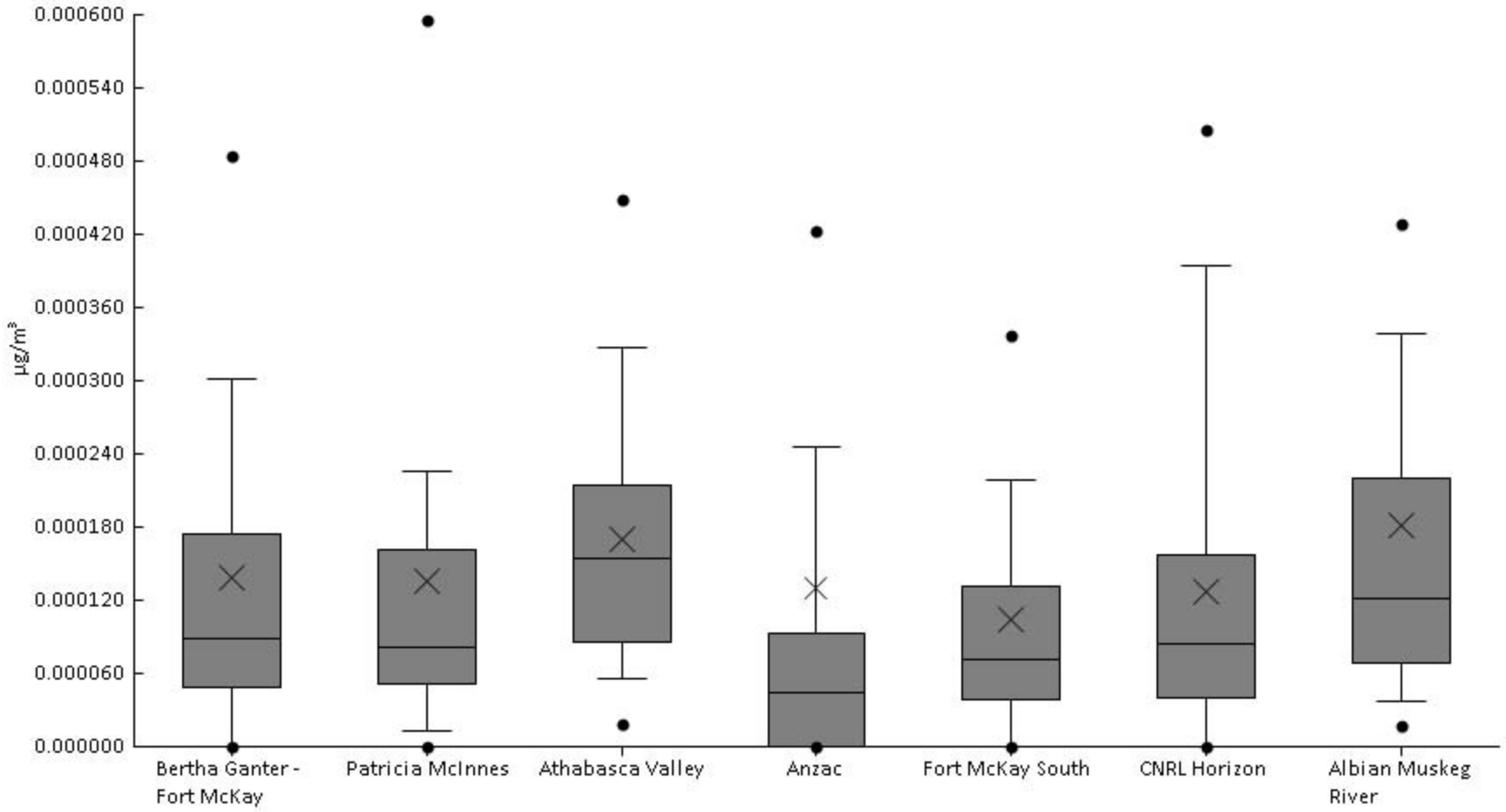
Particulate Matter (PM10 METALS) - Manganese (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	2.1E-4	4.1E-4	6E-4	1.2E-3	3.3E-3	9.9E-3	0.015	0.02	0.037	6.5E-3	7.4E-3
AMS 6	Patricia McInnes	59	100%	2.5E-4	3.5E-4	5.1E-4	1E-3	2.9E-3	7E-3	0.011	0.015	0.1	5.9E-3	0.013
AMS 7	Athabasca Valley	61	100%	3.3E-4	5.7E-4	8.3E-4	1.8E-3	4.7E-3	9.1E-3	0.015	0.027	0.11	9.1E-3	0.017
AMS 14	Anzac	58	100%	1.6E-4	2.1E-4	2.6E-4	4.6E-4	9.4E-4	2.5E-3	4.6E-3	8.5E-3	0.041	2.7E-3	5.9E-3
AMS 13	Fort McKay South	61	100%	1.5E-4	3.2E-4	4.2E-4	1E-3	3.1E-3	7.5E-3	9.8E-3	0.014	0.028	4.8E-3	5.4E-3
AMS 15	CNRL Horizon	61	100%	5.7E-5	4.1E-4	5.3E-4	8E-4	3.5E-3	0.012	0.02	0.024	0.035	7.4E-3	8.3E-3
AMS 16	Albian Muskeg River	61	100%	3.5E-4	1.1E-3	1.2E-3	2.5E-3	8.3E-3	0.014	0.037	0.051	0.08	0.013	0.017



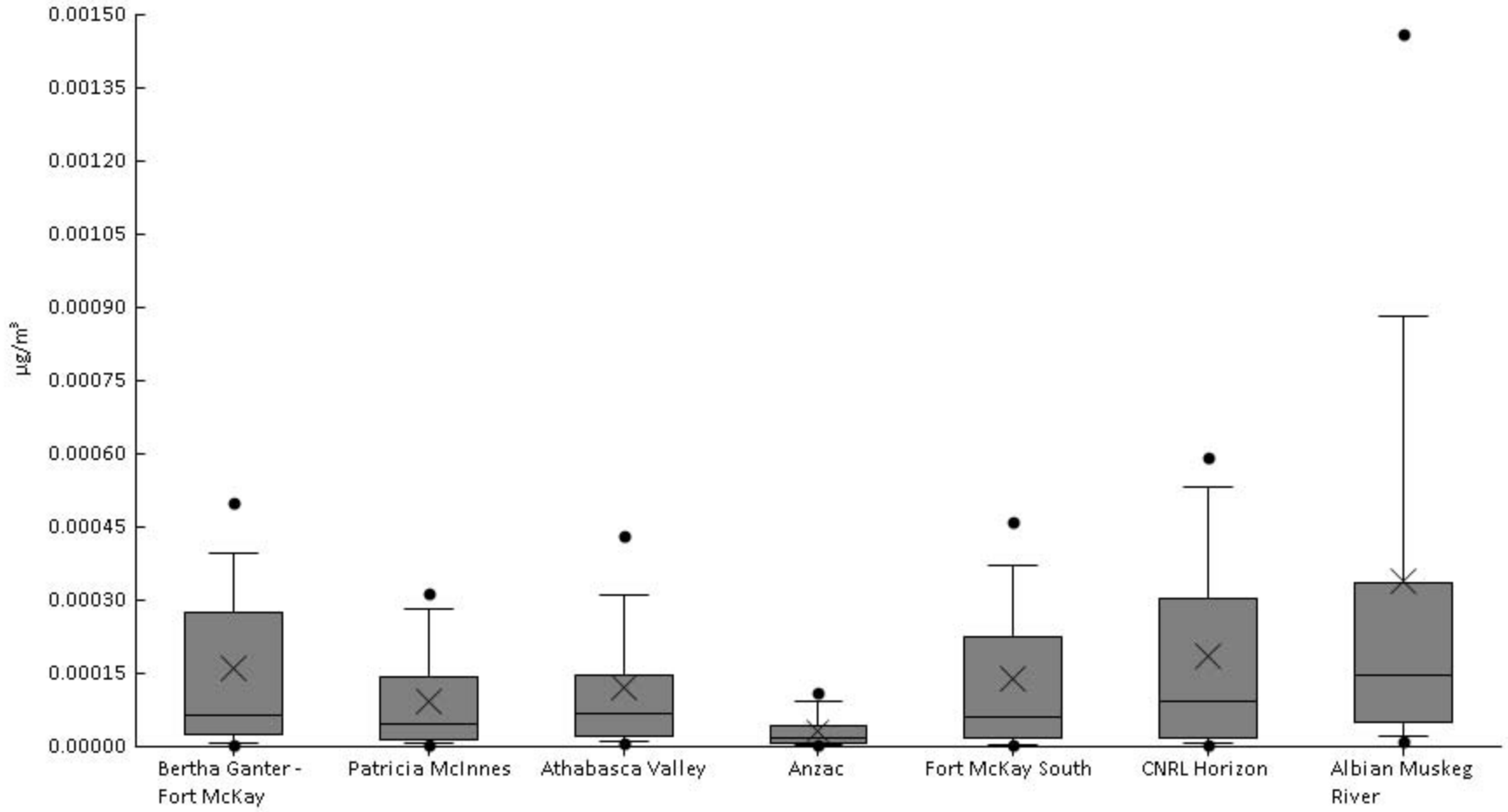
Particulate Matter (PM10 METALS) - Molybdenum (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	87%	0	0	0	4.9E-5	8.9E-5	1.7E-4	3E-4	4.8E-4	9.5E-4	1.4E-4	1.8E-4
AMS 6	Patricia McInnes	59	90%	0	0	1.2E-5	5.2E-5	8.1E-5	1.6E-4	2.3E-4	6E-4	7.7E-4	1.4E-4	1.6E-4
AMS 7	Athabasca Valley	61	95%	0	1.9E-5	5.6E-5	8.6E-5	1.5E-4	2.1E-4	3.3E-4	4.5E-4	6.2E-4	1.7E-4	1.2E-4
AMS 14	Anzac	58	71%	0	0	0	0	4.4E-5	9.2E-5	2.5E-4	4.2E-4	2.4E-3	1.3E-4	3.5E-4
AMS 13	Fort McKay South	61	82%	0	0	0	3.9E-5	7.1E-5	1.3E-4	2.2E-4	3.4E-4	6.5E-4	1E-4	1.2E-4
AMS 15	CNRL Horizon	61	82%	0	0	0	3.9E-5	8.4E-5	1.6E-4	3.9E-4	5.1E-4	6.2E-4	1.3E-4	1.5E-4
AMS 16	Albian Muskeg River	61	95%	0	1.7E-5	3.7E-5	6.9E-5	1.2E-4	2.2E-4	3.4E-4	4.3E-4	1.6E-3	1.8E-4	2.3E-4



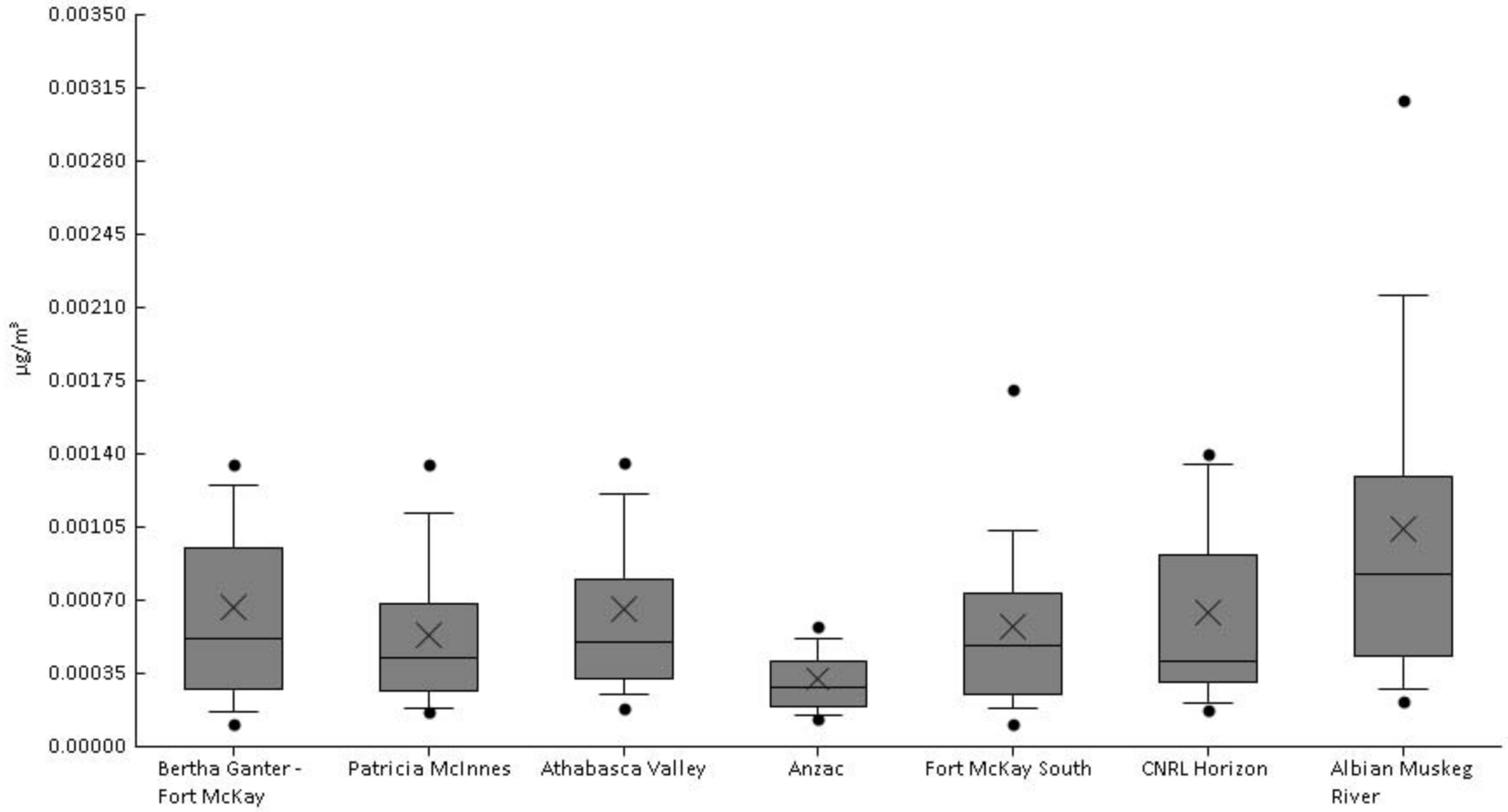
Particulate Matter (PM10 METALS) - Neodymium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	2.4E-6	4.5E-6	8.4E-6	2.4E-5	6.5E-5	2.8E-4	4E-4	5E-4	1E-3	1.6E-4	2E-4
AMS 6	Patricia McInnes	59	100%	9.6E-7	4.6E-6	6.2E-6	1.5E-5	4.7E-5	1.4E-4	2.8E-4	3.1E-4	5.3E-4	9.4E-5	1.2E-4
AMS 7	Athabasca Valley	61	100%	2.3E-6	7.3E-6	9.9E-6	2.1E-5	6.9E-5	1.5E-4	3.1E-4	4.3E-4	5.4E-4	1.2E-4	1.4E-4
AMS 14	Anzac	58	100%	6.3E-7	2E-6	3.7E-6	5.5E-6	1.7E-5	4.2E-5	9.2E-5	1.1E-4	1.9E-4	3.3E-5	3.9E-5
AMS 13	Fort McKay South	61	100%	1.3E-6	3.1E-6	4.7E-6	1.7E-5	6.1E-5	2.2E-4	3.7E-4	4.6E-4	1.2E-3	1.4E-4	1.9E-4
AMS 15	CNRL Horizon	61	98%	7.5E-8	4.5E-6	7.3E-6	1.7E-5	9.5E-5	3E-4	5.3E-4	5.9E-4	1.1E-3	1.9E-4	2.3E-4
AMS 16	Albian Muskeg River	61	100%	6.1E-6	1.2E-5	2E-5	5E-5	1.5E-4	3.3E-4	8.8E-4	1.5E-3	2.5E-3	3.4E-4	5E-4



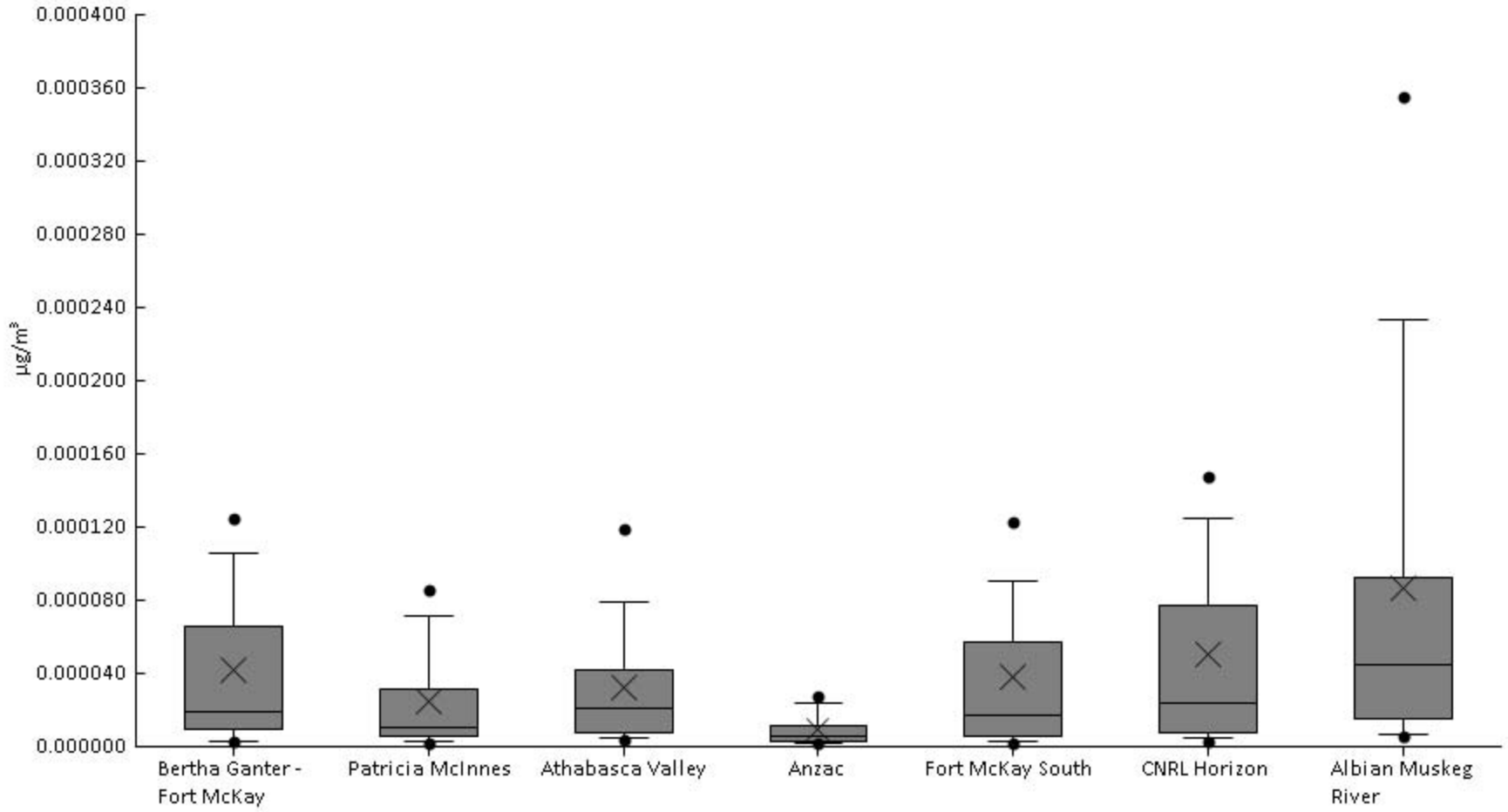
Particulate Matter (PM10 METALS) - Nickel (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	9.8E-5	1.1E-4	1.6E-4	2.8E-4	5.2E-4	9.5E-4	1.3E-3	1.4E-3	2.9E-3	6.7E-4	5.3E-4
AMS 6	Patricia McInnes	59	100%	1.2E-4	1.7E-4	1.8E-4	2.7E-4	4.2E-4	6.8E-4	1.1E-3	1.3E-3	1.7E-3	5.3E-4	3.7E-4
AMS 7	Athabasca Valley	61	100%	1.3E-4	1.8E-4	2.5E-4	3.3E-4	5E-4	8E-4	1.2E-3	1.4E-3	4E-3	6.6E-4	5.6E-4
AMS 14	Anzac	58	100%	1.1E-4	1.3E-4	1.5E-4	1.9E-4	2.8E-4	4.1E-4	5.1E-4	5.7E-4	1.5E-3	3.2E-4	2.1E-4
AMS 13	Fort McKay South	61	100%	7.2E-5	1.1E-4	1.9E-4	2.5E-4	4.8E-4	7.3E-4	1E-3	1.7E-3	2.2E-3	5.8E-4	4.5E-4
AMS 15	CNRL Horizon	61	100%	1.2E-4	1.8E-4	2.1E-4	3.1E-4	4.1E-4	9.1E-4	1.3E-3	1.4E-3	2.2E-3	6.4E-4	4.8E-4
AMS 16	Albian Muskeg River	61	100%	1.5E-4	2.2E-4	2.8E-4	4.3E-4	8.2E-4	1.3E-3	2.2E-3	3.1E-3	4.1E-3	1E-3	8.6E-4



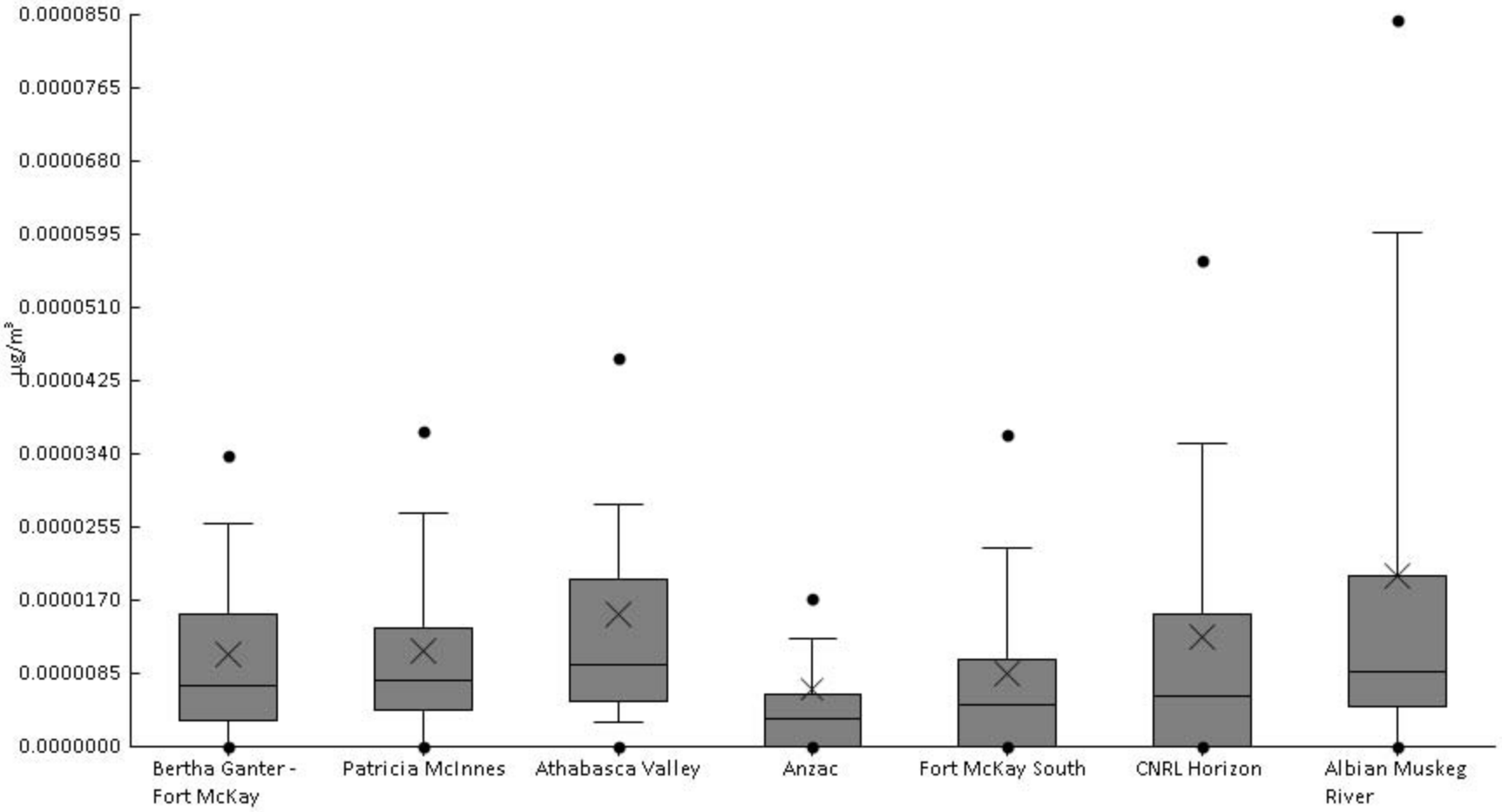
Particulate Matter (PM10 METALS) - Niobium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	2.4E-6	2.5E-6	3.1E-6	9.4E-6	2E-5	6.6E-5	1.1E-4	1.2E-4	2.5E-4	4.2E-5	4.9E-5
AMS 6	Patricia McInnes	59	100%	1.3E-6	2E-6	3.1E-6	5.8E-6	1E-5	3.2E-5	7.1E-5	8.6E-5	1.2E-4	2.4E-5	2.9E-5
AMS 7	Athabasca Valley	61	100%	2.1E-6	3.8E-6	4.8E-6	7.9E-6	2.1E-5	4.2E-5	7.9E-5	1.2E-4	1.3E-4	3.3E-5	3.4E-5
AMS 14	Anzac	58	100%	9.4E-7	1.6E-6	1.8E-6	2.9E-6	5.8E-6	1.1E-5	2.3E-5	2.8E-5	5.2E-5	9.3E-6	9.6E-6
AMS 13	Fort McKay South	61	100%	1.3E-6	2.1E-6	3E-6	5.5E-6	1.7E-5	5.7E-5	9E-5	1.2E-4	3.1E-4	3.8E-5	5.1E-5
AMS 15	CNRL Horizon	61	100%	1.7E-6	2.9E-6	4.3E-6	7.5E-6	2.4E-5	7.7E-5	1.2E-4	1.5E-4	2.6E-4	5E-5	5.6E-5
AMS 16	Albian Muskeg River	61	100%	3.4E-6	5.8E-6	7E-6	1.5E-5	4.4E-5	9.3E-5	2.3E-4	3.6E-4	5.7E-4	8.7E-5	1.2E-4



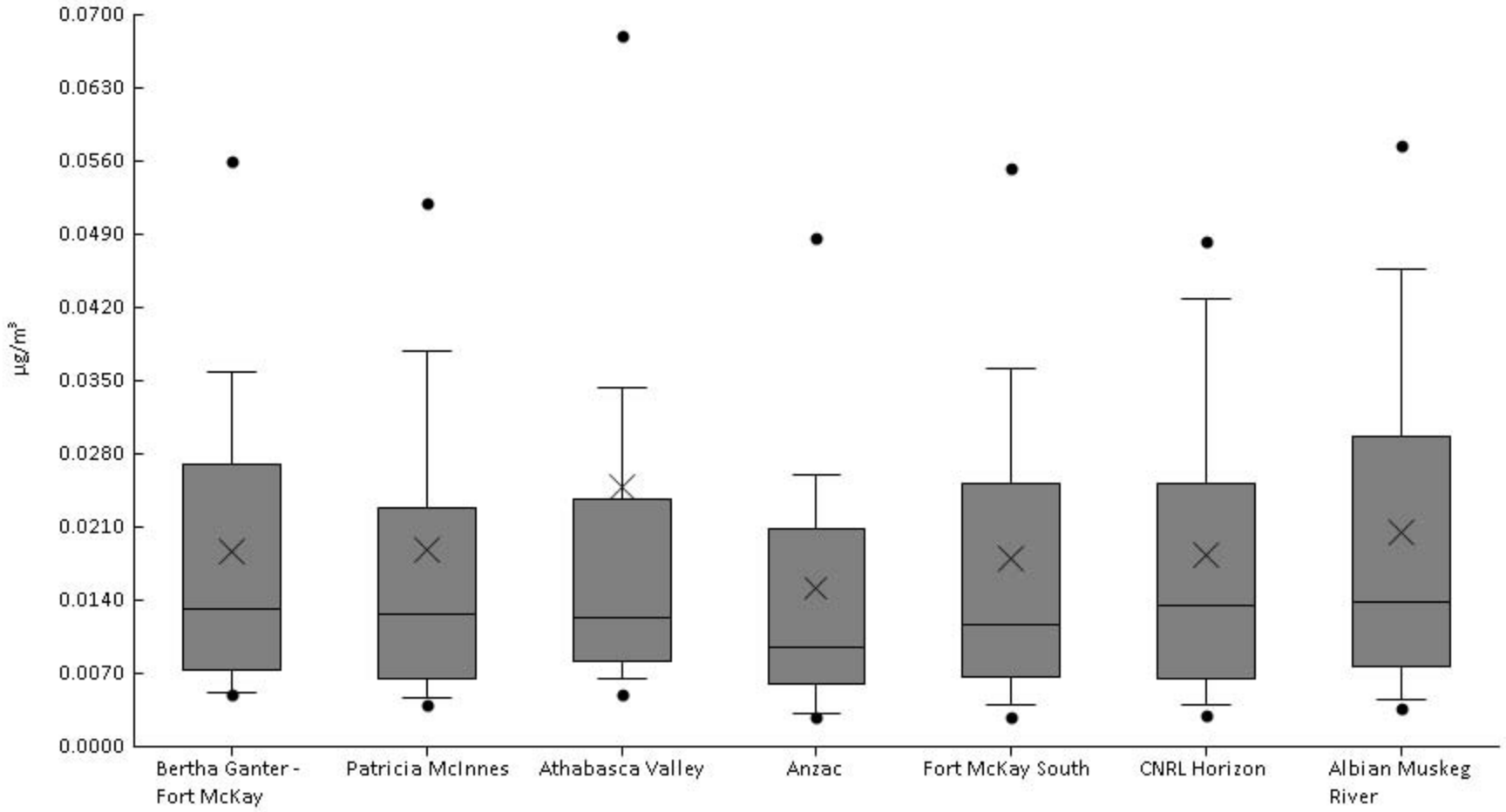
Particulate Matter (PM10 METALS) - Palladium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	84%	0	0	0	3.1E-6	7.2E-6	1.5E-5	2.6E-5	3.4E-5	7.6E-5	1.1E-5	1.2E-5
AMS 6	Patricia McInnes	59	86%	0	0	0	4.2E-6	7.7E-6	1.4E-5	2.7E-5	3.7E-5	7.3E-5	1.1E-5	1.3E-5
AMS 7	Athabasca Valley	61	92%	0	0	2.8E-6	5.2E-6	9.4E-6	1.9E-5	2.8E-5	4.5E-5	1.4E-4	1.5E-5	2E-5
AMS 14	Anzac	58	62%	0	0	0	0	3.3E-6	6E-6	1.2E-5	1.7E-5	1.5E-4	6.7E-6	2E-5
AMS 13	Fort McKay South	61	72%	0	0	0	0	4.9E-6	1E-5	2.3E-5	3.6E-5	4.6E-5	8.5E-6	1.1E-5
AMS 15	CNRL Horizon	61	70%	0	0	0	0	5.8E-6	1.5E-5	3.5E-5	5.6E-5	9.6E-5	1.3E-5	1.9E-5
AMS 16	Albian Muskeg River	61	85%	0	0	0	4.6E-6	8.7E-6	2E-5	6E-5	8.4E-5	1.7E-4	2E-5	3E-5



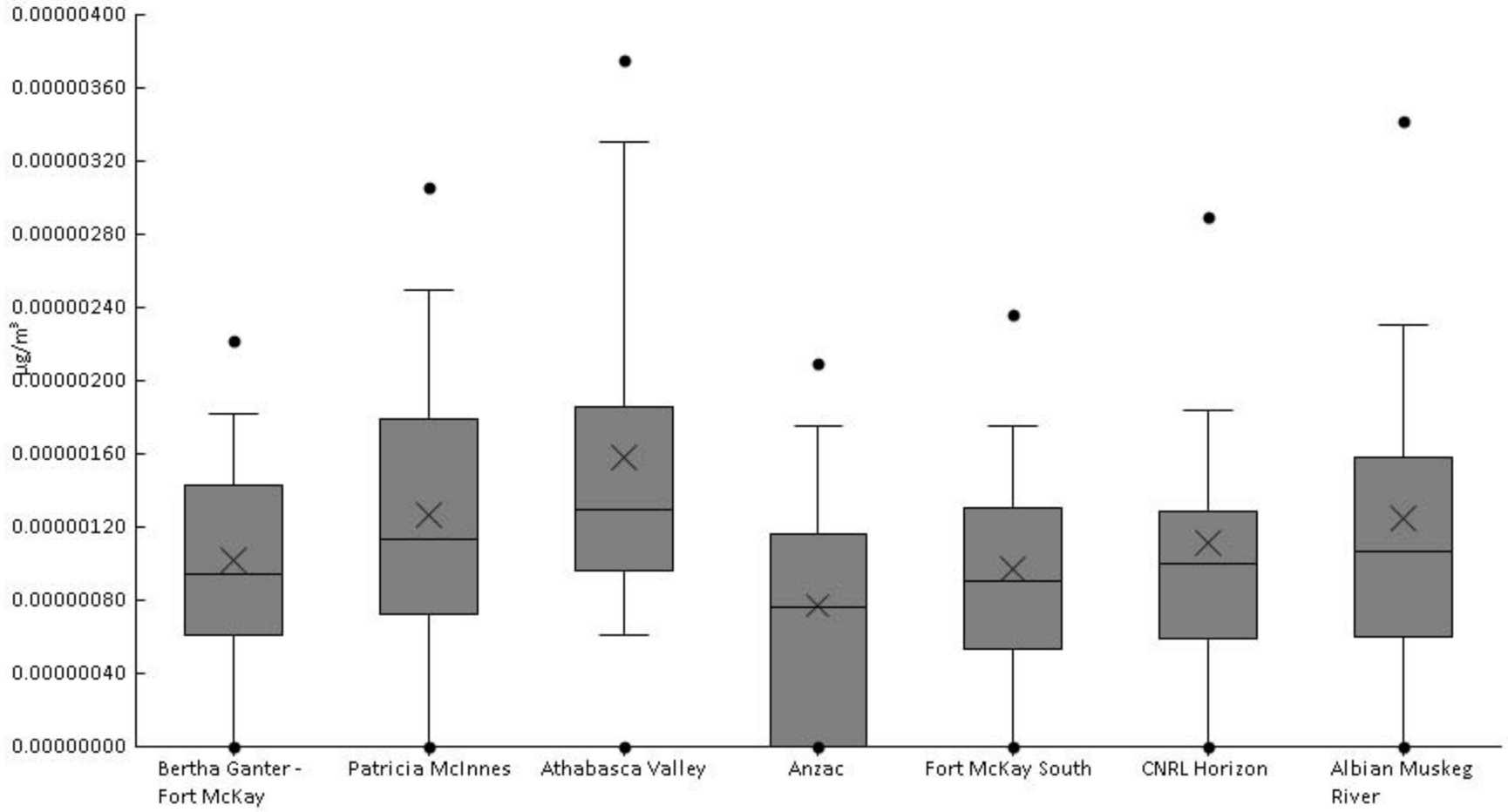
Particulate Matter (PM10 METALS) - Phosphorus (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	2.1E-3	5E-3	5.1E-3	7.4E-3	0.013	0.027	0.036	0.056	0.073	0.019	0.016
AMS 6	Patricia McInnes	59	100%	2.8E-3	4E-3	4.6E-3	6.6E-3	0.013	0.023	0.038	0.052	0.15	0.019	0.023
AMS 7	Athabasca Valley	61	100%	2.9E-3	5.1E-3	6.5E-3	8.2E-3	0.012	0.024	0.034	0.068	0.31	0.025	0.046
AMS 14	Anzac	58	100%	2.4E-3	2.9E-3	3.1E-3	5.9E-3	9.4E-3	0.021	0.026	0.049	0.1	0.015	0.017
AMS 13	Fort McKay South	61	98%	1.2E-3	2.9E-3	3.9E-3	6.6E-3	0.012	0.025	0.036	0.055	0.072	0.018	0.016
AMS 15	CNRL Horizon	61	100%	2.7E-3	3.1E-3	4.1E-3	6.6E-3	0.014	0.025	0.043	0.048	0.068	0.018	0.015
AMS 16	Albian Muskeg River	61	97%	0	3.7E-3	4.5E-3	7.7E-3	0.014	0.03	0.046	0.057	0.091	0.02	0.018



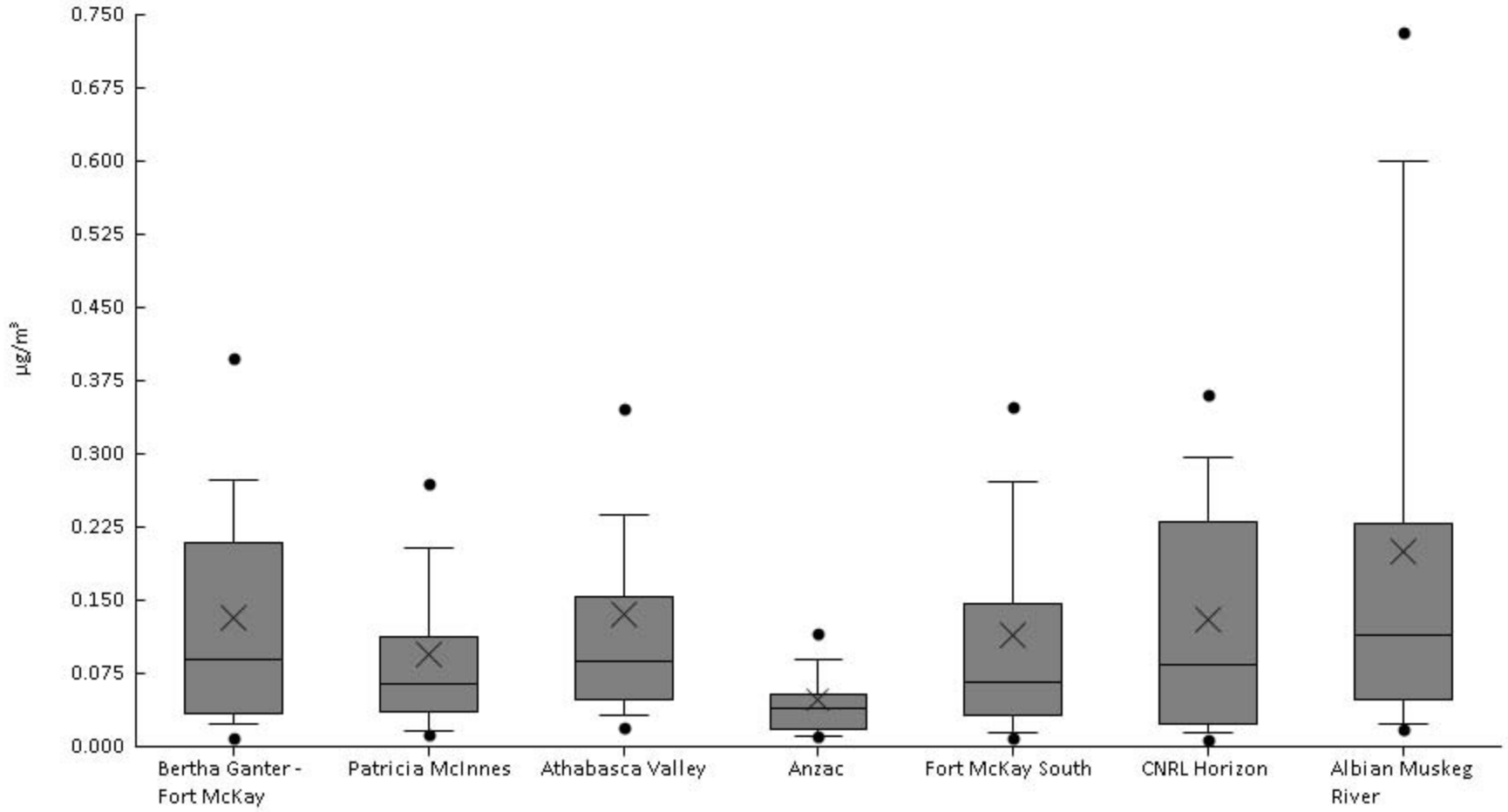
Particulate Matter (PM10 METALS) - Platinum (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	84%	0	0	0	6.1E-7	9.4E-7	1.4E-6	1.8E-6	2.2E-6	3.1E-6	1E-6	7E-7
AMS 6	Patricia McInnes	59	83%	0	0	0	7.2E-7	1.1E-6	1.8E-6	2.5E-6	3.1E-6	3.9E-6	1.3E-6	9.3E-7
AMS 7	Athabasca Valley	61	92%	0	0	6.1E-7	9.6E-7	1.3E-6	1.9E-6	3.3E-6	3.8E-6	6.9E-6	1.6E-6	1.2E-6
AMS 14	Anzac	58	69%	0	0	0	0	7.7E-7	1.2E-6	1.8E-6	2.1E-6	3.2E-6	7.7E-7	7.5E-7
AMS 13	Fort McKay South	61	84%	0	0	0	5.4E-7	9E-7	1.3E-6	1.7E-6	2.4E-6	4.2E-6	9.7E-7	7.7E-7
AMS 15	CNRL Horizon	61	80%	0	0	0	5.9E-7	1E-6	1.3E-6	1.8E-6	2.9E-6	7.2E-6	1.1E-6	1.1E-6
AMS 16	Albian Muskeg River	61	80%	0	0	0	6E-7	1.1E-6	1.6E-6	2.3E-6	3.4E-6	7.4E-6	1.2E-6	1.2E-6



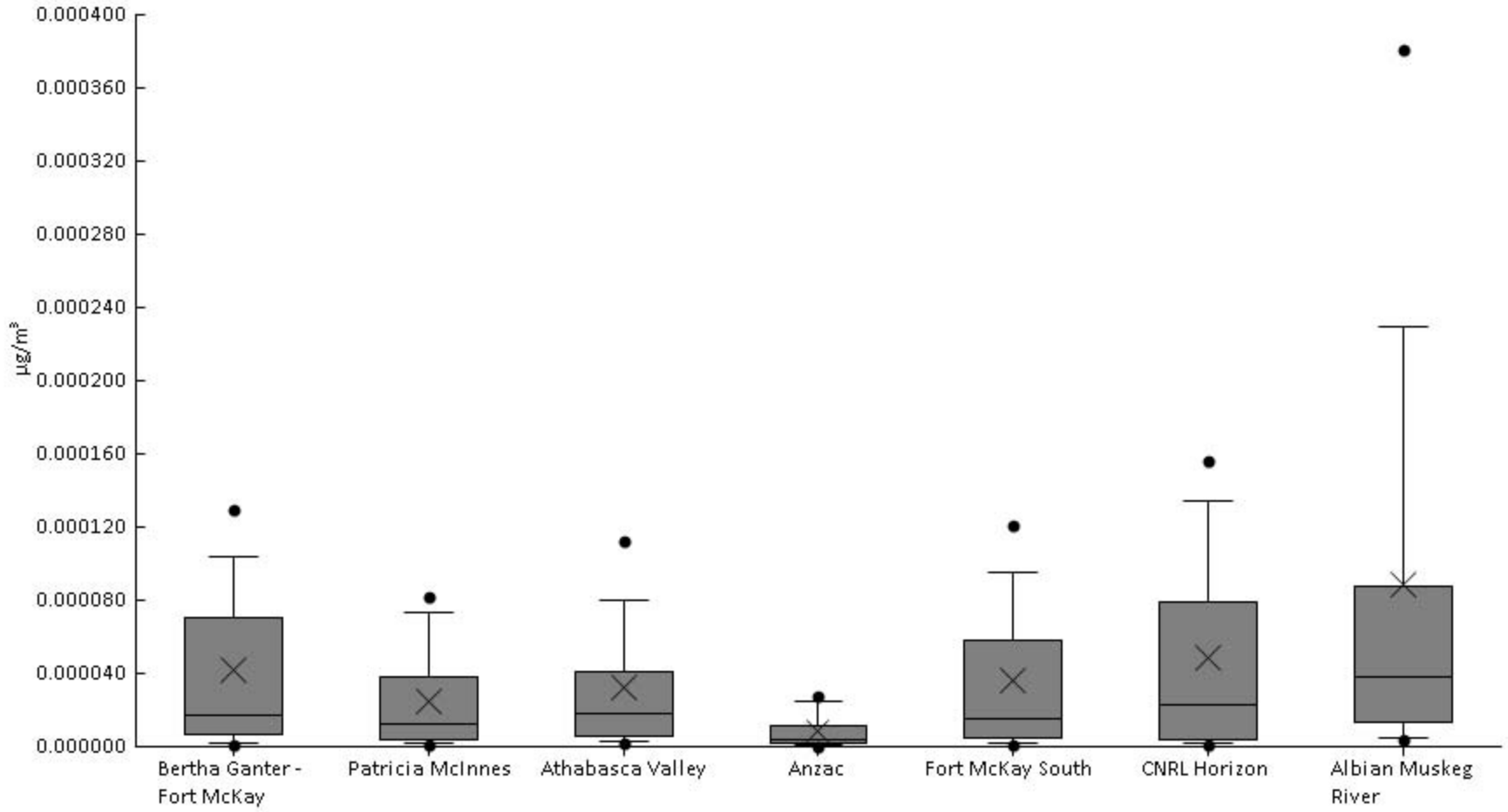
Particulate Matter (PM10 METALS) - Potassium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	8.1E-3	9.5E-3	0.023	0.035	0.089	0.21	0.27	0.4	0.67	0.13	0.13
AMS 6	Patricia McInnes	59	100%	8E-3	0.012	0.017	0.036	0.064	0.11	0.2	0.27	0.7	0.095	0.11
AMS 7	Athabasca Valley	61	100%	0.015	0.02	0.031	0.049	0.087	0.15	0.24	0.35	1.2	0.14	0.18
AMS 14	Anzac	58	100%	3.4E-3	0.011	0.011	0.018	0.039	0.054	0.09	0.12	0.37	0.048	0.053
AMS 13	Fort McKay South	61	100%	7.8E-3	8.4E-3	0.014	0.032	0.066	0.15	0.27	0.35	0.67	0.11	0.12
AMS 15	CNRL Horizon	61	100%	3.6E-3	6.8E-3	0.013	0.024	0.084	0.23	0.3	0.36	0.64	0.13	0.13
AMS 16	Albian Muskeg River	61	100%	8.1E-3	0.017	0.023	0.048	0.11	0.23	0.6	0.73	1.1	0.2	0.24



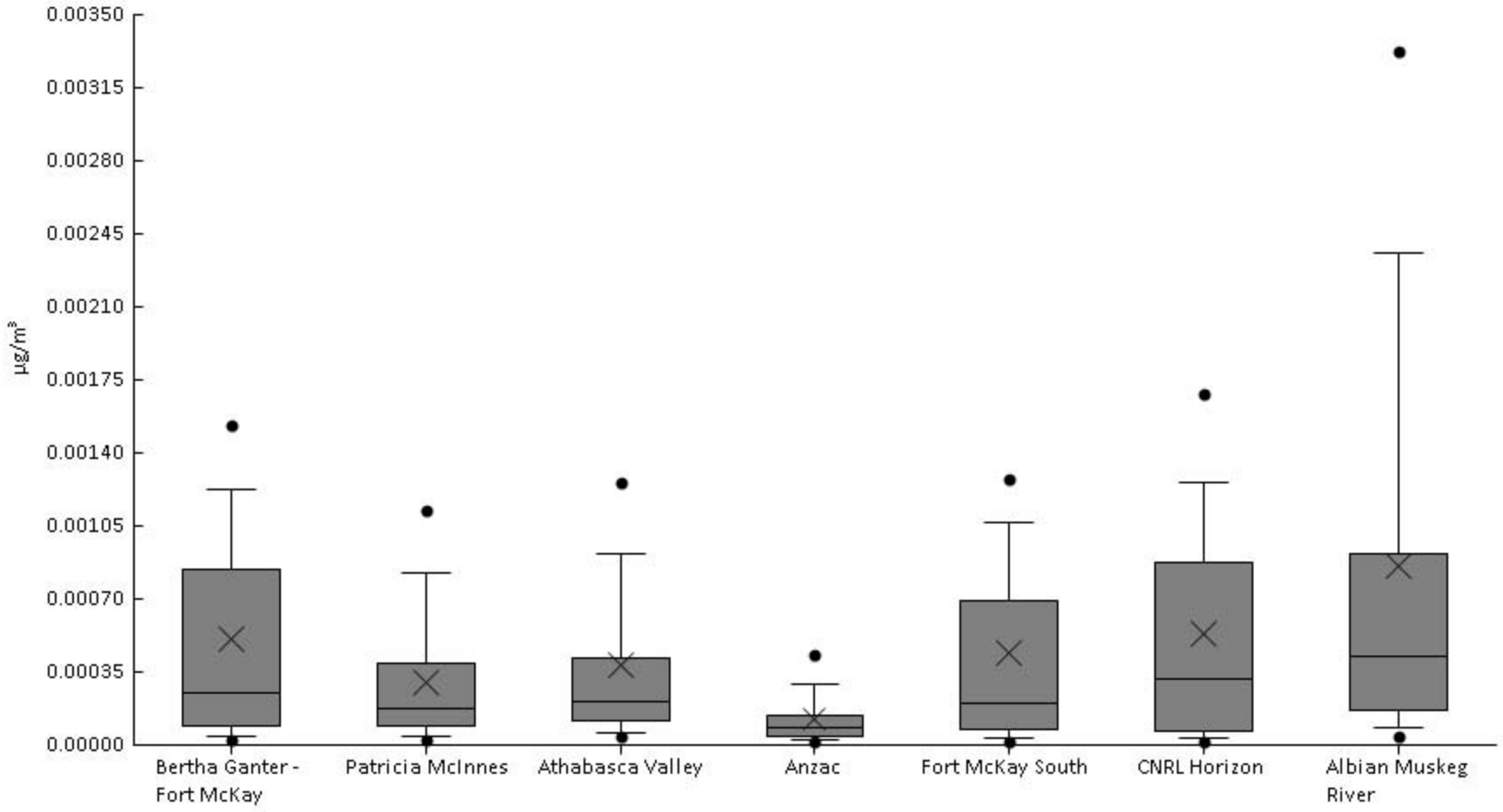
Particulate Matter (PM10 METALS) - Praseodymium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	5.9E-7	1.4E-6	2.3E-6	6.6E-6	1.8E-5	7.1E-5	1E-4	1.3E-4	2.6E-4	4.2E-5	5.1E-5
AMS 6	Patricia McInnes	59	100%	3.8E-7	1E-6	1.7E-6	4E-6	1.3E-5	3.8E-5	7.3E-5	8.2E-5	1.4E-4	2.5E-5	3.1E-5
AMS 7	Athabasca Valley	61	100%	5.9E-7	1.9E-6	2.8E-6	5.7E-6	1.8E-5	4.1E-5	8E-5	1.1E-4	1.4E-4	3.2E-5	3.5E-5
AMS 14	Anzac	58	93%	0	0	9E-7	1.9E-6	4.2E-6	1.1E-5	2.5E-5	2.8E-5	5E-5	8.8E-6	1E-5
AMS 13	Fort McKay South	61	98%	0	9.8E-7	1.8E-6	4.3E-6	1.6E-5	5.8E-5	9.5E-5	1.2E-4	3E-4	3.6E-5	4.9E-5
AMS 15	CNRL Horizon	61	98%	0	1.2E-6	2.1E-6	4.3E-6	2.3E-5	7.9E-5	1.3E-4	1.6E-4	2.7E-4	4.8E-5	5.8E-5
AMS 16	Albian Muskeg River	61	100%	1.2E-6	3.4E-6	5.2E-6	1.3E-5	3.8E-5	8.8E-5	2.3E-4	3.8E-4	6.5E-4	8.8E-5	1.3E-4



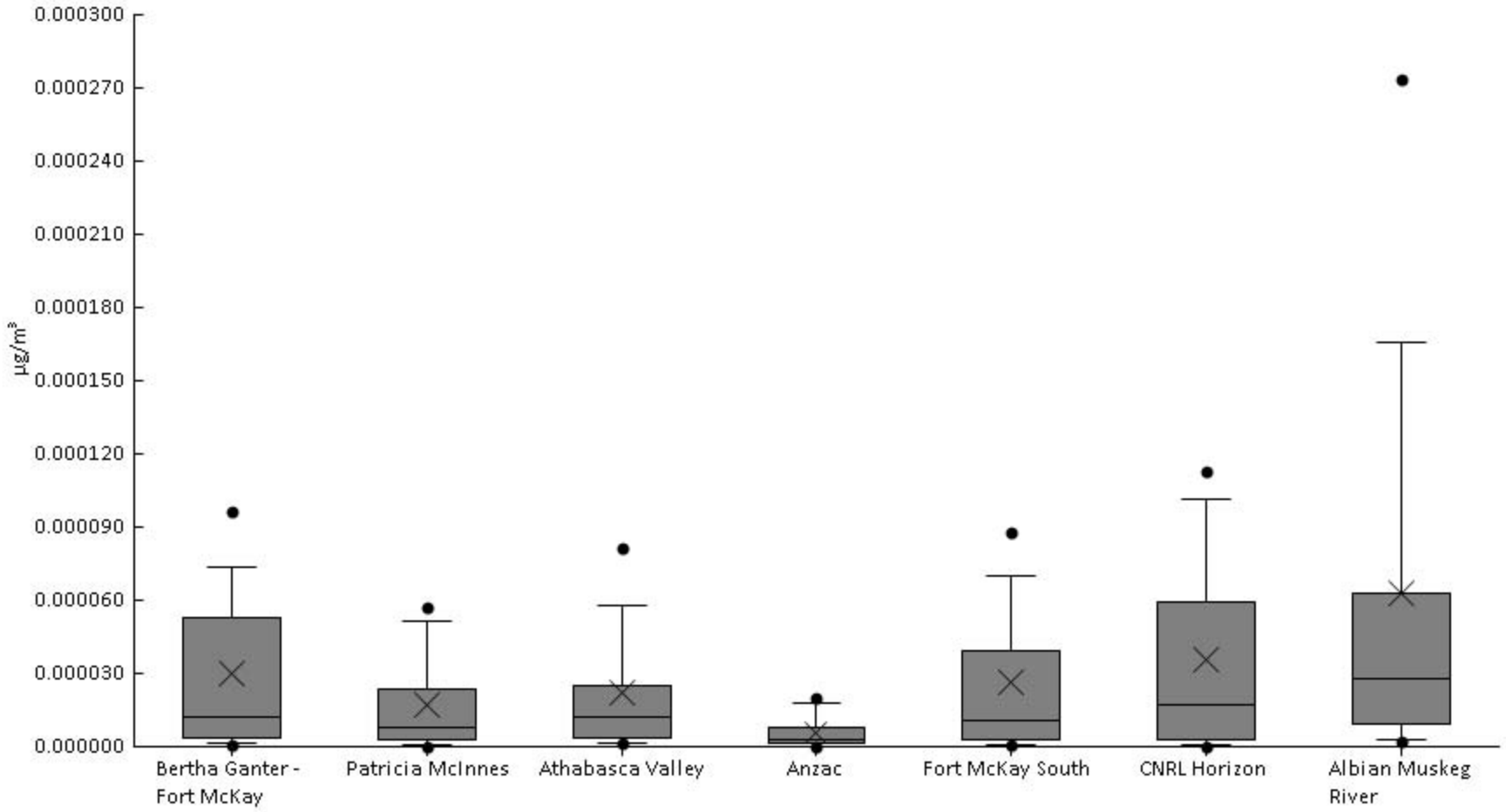
Particulate Matter (PM10 METALS) - Rubidium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	1.8E-5	2.7E-5	4.1E-5	8.9E-5	2.5E-4	8.4E-4	1.2E-3	1.5E-3	2.7E-3	5.1E-4	5.5E-4
AMS 6	Patricia McInnes	59	100%	1.3E-5	2.6E-5	3.9E-5	9.2E-5	1.7E-4	3.9E-4	8.3E-4	1.1E-3	1.5E-3	3E-4	3.5E-4
AMS 7	Athabasca Valley	61	100%	2.5E-5	4.1E-5	5.9E-5	1.1E-4	2.1E-4	4.2E-4	9.1E-4	1.3E-3	2.2E-3	3.9E-4	4.5E-4
AMS 14	Anzac	58	100%	7.9E-6	1.6E-5	2.2E-5	4.3E-5	8.5E-5	1.4E-4	3E-4	4.3E-4	7.8E-4	1.3E-4	1.4E-4
AMS 13	Fort McKay South	61	100%	1.6E-5	1.8E-5	3.6E-5	7.3E-5	2E-4	6.9E-4	1.1E-3	1.3E-3	3.5E-3	4.4E-4	5.6E-4
AMS 15	CNRL Horizon	61	100%	2.8E-6	1.6E-5	3.7E-5	6.6E-5	3.2E-4	8.8E-4	1.3E-3	1.7E-3	2.6E-3	5.4E-4	5.9E-4
AMS 16	Albian Muskeg River	61	100%	3E-5	4.3E-5	8E-5	1.7E-4	4.2E-4	9.2E-4	2.4E-3	3.3E-3	5E-3	8.6E-4	1.1E-3



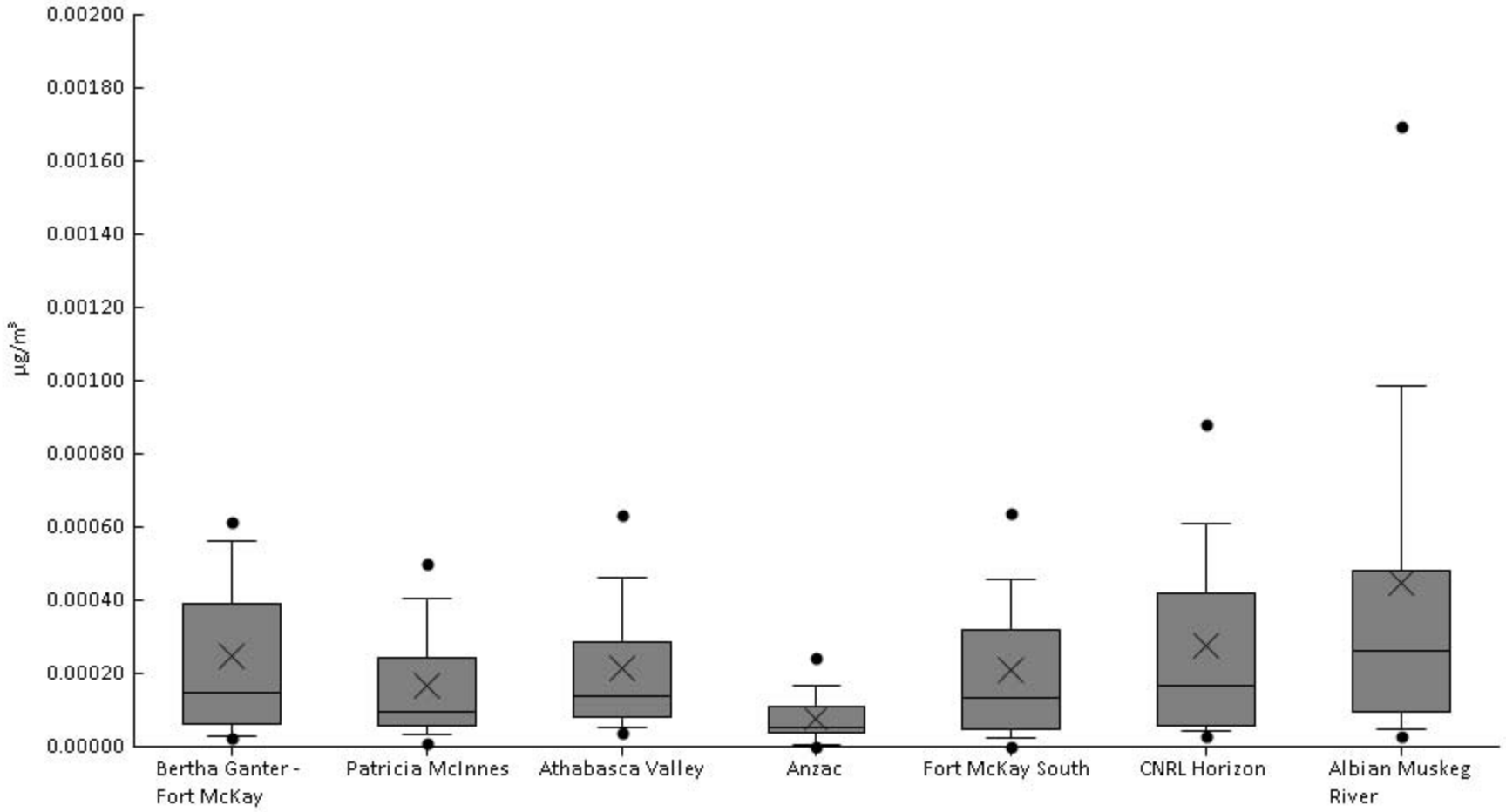
Particulate Matter (PM10 METALS) - Samarium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	98%	0	8.1E-7	1.3E-6	3.7E-6	1.2E-5	5.3E-5	7.3E-5	9.6E-5	1.9E-4	3E-5	3.7E-5
AMS 6	Patricia McInnes	59	93%	0	0	8.3E-7	2.8E-6	7.9E-6	2.4E-5	5.1E-5	5.7E-5	9.8E-5	1.7E-5	2.2E-5
AMS 7	Athabasca Valley	61	98%	0	1.2E-6	1.4E-6	3.3E-6	1.2E-5	2.5E-5	5.8E-5	8.2E-5	1E-4	2.2E-5	2.5E-5
AMS 14	Anzac	58	84%	0	0	0	1.2E-6	2.9E-6	7.9E-6	1.8E-5	2E-5	3.5E-5	6E-6	7.4E-6
AMS 13	Fort McKay South	61	95%	0	3.6E-7	9E-7	3.2E-6	1.1E-5	4E-5	7E-5	8.8E-5	2.3E-4	2.6E-5	3.6E-5
AMS 15	CNRL Horizon	61	93%	0	0	8.1E-7	3.2E-6	1.7E-5	5.9E-5	1E-4	1.1E-4	2.1E-4	3.6E-5	4.4E-5
AMS 16	Albian Muskeg River	61	100%	7.8E-7	2.5E-6	3E-6	9.1E-6	2.8E-5	6.3E-5	1.7E-4	2.7E-4	4.7E-4	6.3E-5	9.4E-5



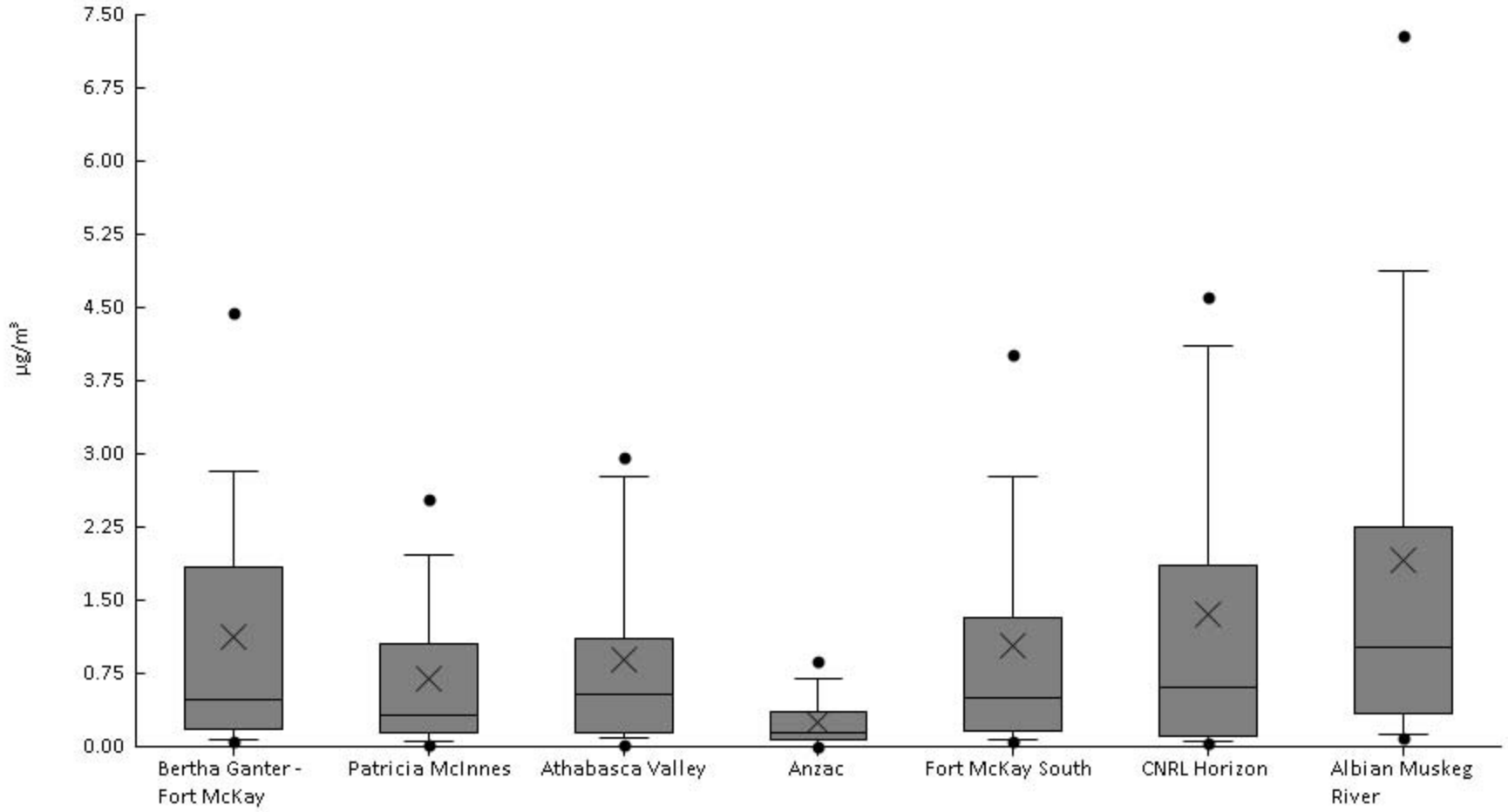
Particulate Matter (PM10 METALS) - Selenium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	97%	0	2.3E-5	2.9E-5	6.4E-5	1.5E-4	3.9E-4	5.6E-4	6.1E-4	1.2E-3	2.5E-4	2.5E-4
AMS 6	Patricia McInnes	59	95%	0	1.1E-5	3.2E-5	5.9E-5	9.4E-5	2.4E-4	4E-4	5E-4	6.6E-4	1.7E-4	1.6E-4
AMS 7	Athabasca Valley	61	100%	1.7E-5	3.8E-5	5.2E-5	8.3E-5	1.4E-4	2.9E-4	4.6E-4	6.3E-4	9.4E-4	2.1E-4	1.9E-4
AMS 14	Anzac	58	90%	0	0	4.7E-6	3.8E-5	5.4E-5	1.1E-4	1.7E-4	2.4E-4	2.5E-4	7.8E-5	6.5E-5
AMS 13	Fort McKay South	61	93%	0	0	2.5E-5	4.9E-5	1.3E-4	3.2E-4	4.6E-4	6.4E-4	1.6E-3	2.1E-4	2.6E-4
AMS 15	CNRL Horizon	61	98%	0	3E-5	4.2E-5	5.8E-5	1.7E-4	4.2E-4	6.1E-4	8.8E-4	1.2E-3	2.7E-4	2.8E-4
AMS 16	Albian Muskeg River	61	100%	1.8E-5	2.9E-5	4.6E-5	9.8E-5	2.6E-4	4.8E-4	9.9E-4	1.7E-3	3.3E-3	4.5E-4	6E-4



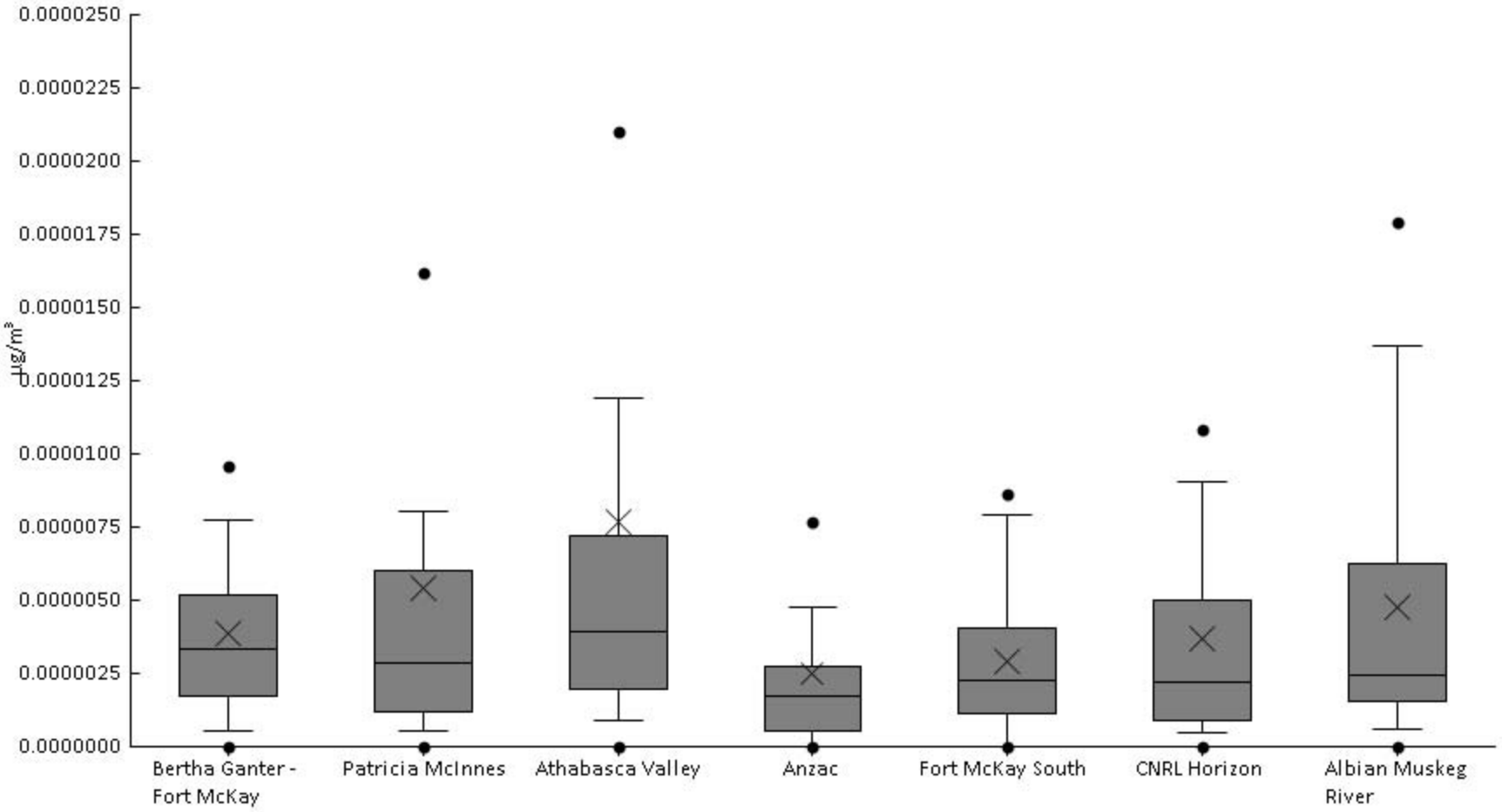
Particulate Matter (PM10 METALS) - Silicon (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	98%	0	0.056	0.076	0.17	0.48	1.8	2.8	4.4	6.7	1.1	1.4
AMS 6	Patricia McInnes	59	95%	0	0.018	0.046	0.14	0.33	1.1	2	2.5	3.3	0.69	0.82
AMS 7	Athabasca Valley	61	95%	0	0.02	0.082	0.14	0.53	1.1	2.8	3	4.7	0.9	1
AMS 14	Anzac	58	88%	0	0	0	0.063	0.14	0.36	0.7	0.88	1.3	0.26	0.28
AMS 13	Fort McKay South	61	97%	0	0.05	0.068	0.16	0.5	1.3	2.8	4	7.1	1	1.4
AMS 15	CNRL Horizon	61	98%	0.031	0.037	0.061	0.11	0.62	1.8	4.1	4.6	6.9	1.3	1.6
AMS 16	Albian Muskeg River	61	100%	0.044	0.094	0.12	0.34	1	2.2	4.9	7.3	13	1.9	2.4



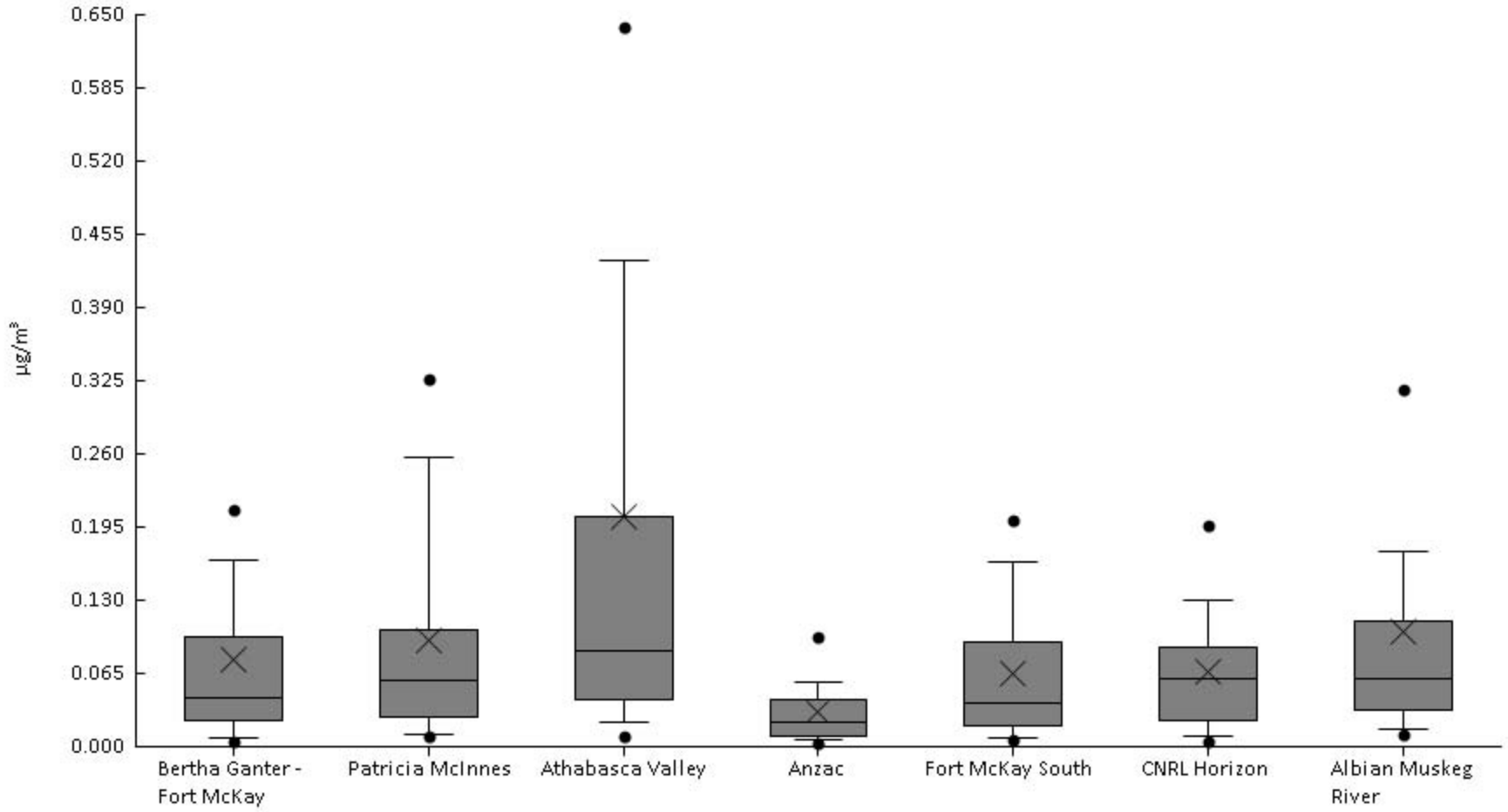
Particulate Matter (PM10 METALS) - Silver (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	92%	0	0	5.4E-7	1.7E-6	3.3E-6	5.2E-6	7.8E-6	9.6E-6	1.5E-5	3.9E-6	3.2E-6
AMS 6	Patricia McInnes	59	93%	0	0	5.5E-7	1.2E-6	2.8E-6	6E-6	8E-6	1.6E-5	9E-5	5.4E-6	1.2E-5
AMS 7	Athabasca Valley	61	93%	0	0	8.8E-7	2E-6	3.9E-6	7.2E-6	1.2E-5	2.1E-5	1.2E-4	7.7E-6	1.6E-5
AMS 14	Anzac	58	78%	0	0	0	5.3E-7	1.7E-6	2.7E-6	4.8E-6	7.7E-6	3.2E-5	2.5E-6	4.5E-6
AMS 13	Fort McKay South	61	89%	0	0	0	1.1E-6	2.3E-6	4.1E-6	7.9E-6	8.6E-6	1.2E-5	2.9E-6	2.7E-6
AMS 15	CNRL Horizon	61	92%	0	0	5E-7	8.7E-7	2.2E-6	5E-6	9E-6	1.1E-5	2.9E-5	3.7E-6	4.5E-6
AMS 16	Albian Muskeg River	61	92%	0	0	6.1E-7	1.6E-6	2.5E-6	6.3E-6	1.4E-5	1.8E-5	2.1E-5	4.7E-6	5.1E-6



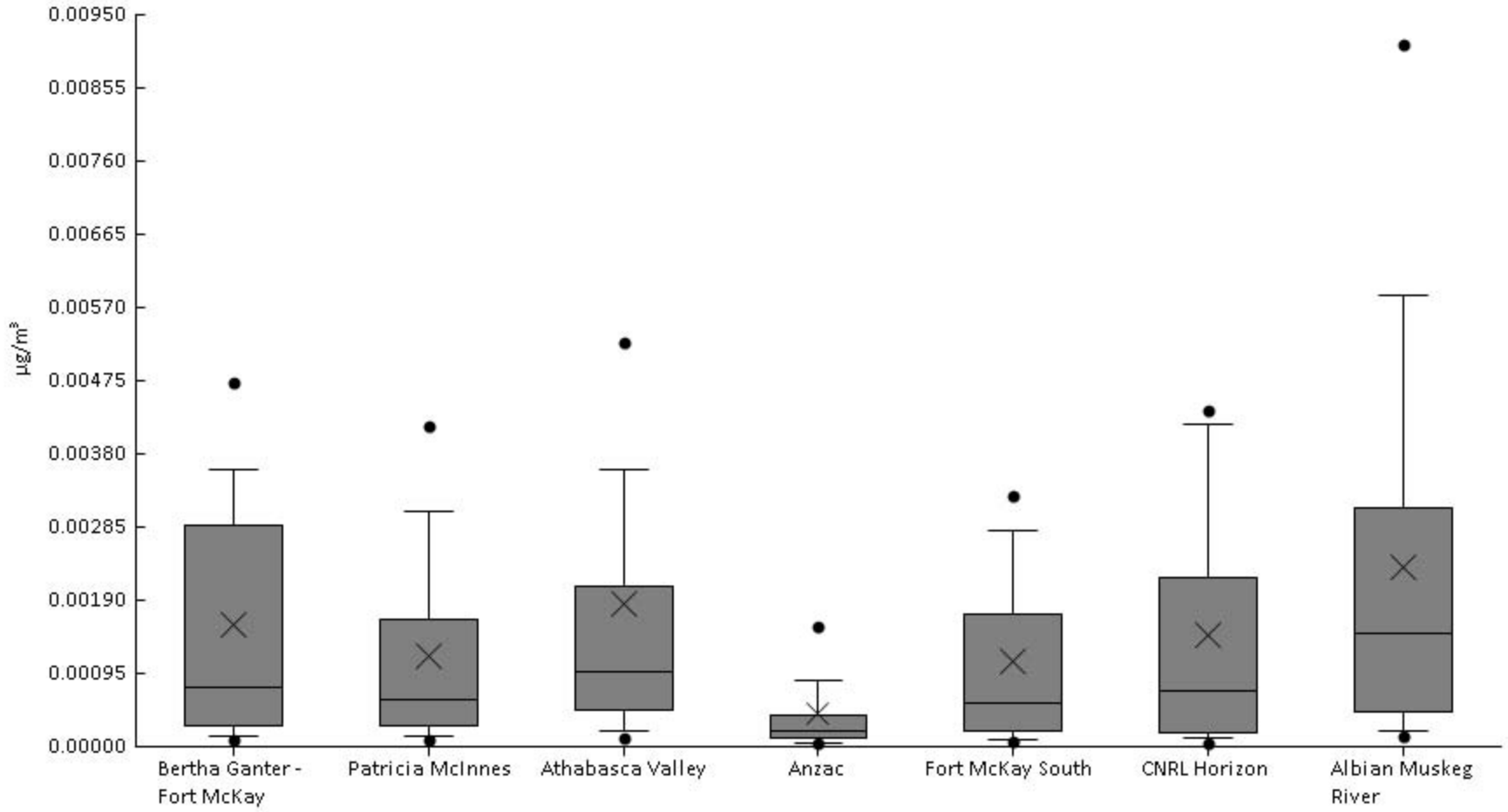
Particulate Matter (PM10 METALS) - Sodium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	3.2E-3	5.3E-3	8.2E-3	0.024	0.043	0.097	0.17	0.21	0.59	0.077	0.098
AMS 6	Patricia McInnes	59	100%	2.7E-3	9.6E-3	0.011	0.026	0.059	0.1	0.26	0.33	0.59	0.094	0.11
AMS 7	Athabasca Valley	61	100%	5.2E-3	9.9E-3	0.021	0.042	0.084	0.2	0.43	0.64	2.9	0.2	0.41
AMS 14	Anzac	58	100%	2.5E-3	2.8E-3	5.9E-3	9.5E-3	0.022	0.042	0.057	0.097	0.17	0.03	0.03
AMS 13	Fort McKay South	61	100%	3.2E-3	5.7E-3	8.1E-3	0.018	0.038	0.093	0.16	0.2	0.28	0.065	0.064
AMS 15	CNRL Horizon	61	100%	1.5E-3	5.3E-3	8.6E-3	0.023	0.06	0.088	0.13	0.2	0.28	0.066	0.061
AMS 16	Albian Muskeg River	61	100%	5.6E-3	0.011	0.016	0.032	0.061	0.11	0.17	0.32	1.2	0.1	0.17



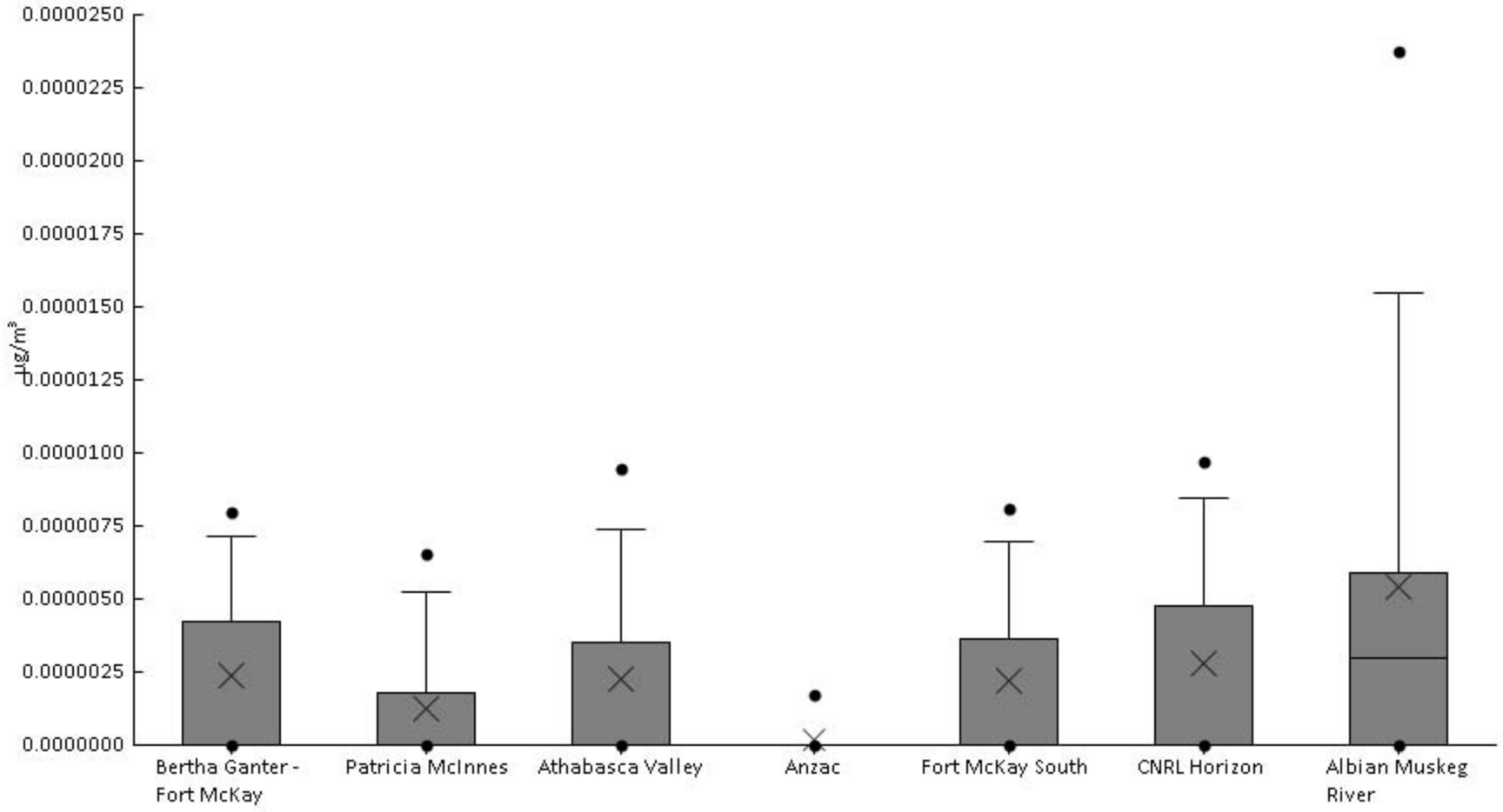
Particulate Matter (PM10 METALS) - Strontium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	5.4E-5	8.5E-5	1.4E-4	2.8E-4	7.6E-4	2.9E-3	3.6E-3	4.7E-3	9.3E-3	1.6E-3	1.8E-3
AMS 6	Patricia McInnes	59	100%	4E-5	9.9E-5	1.3E-4	2.8E-4	6E-4	1.6E-3	3.1E-3	4.2E-3	7.8E-3	1.2E-3	1.5E-3
AMS 7	Athabasca Valley	61	100%	9E-5	1.2E-4	2.1E-4	4.8E-4	9.8E-4	2.1E-3	3.6E-3	5.2E-3	0.018	1.8E-3	2.9E-3
AMS 14	Anzac	58	100%	3.1E-5	3.9E-5	4.9E-5	1E-4	2.1E-4	4.1E-4	8.6E-4	1.6E-3	4.3E-3	4.2E-4	6.7E-4
AMS 13	Fort McKay South	61	100%	5.1E-5	6.5E-5	9.2E-5	2.1E-4	5.7E-4	1.7E-3	2.8E-3	3.3E-3	6.7E-3	1.1E-3	1.3E-3
AMS 15	CNRL Horizon	61	100%	2.2E-5	5.3E-5	1.1E-4	1.9E-4	7.2E-4	2.2E-3	4.2E-3	4.4E-3	7.8E-3	1.5E-3	1.6E-3
AMS 16	Albian Muskeg River	61	100%	6.7E-5	1.3E-4	2.1E-4	4.6E-4	1.5E-3	3.1E-3	5.9E-3	9.1E-3	0.015	2.3E-3	3E-3



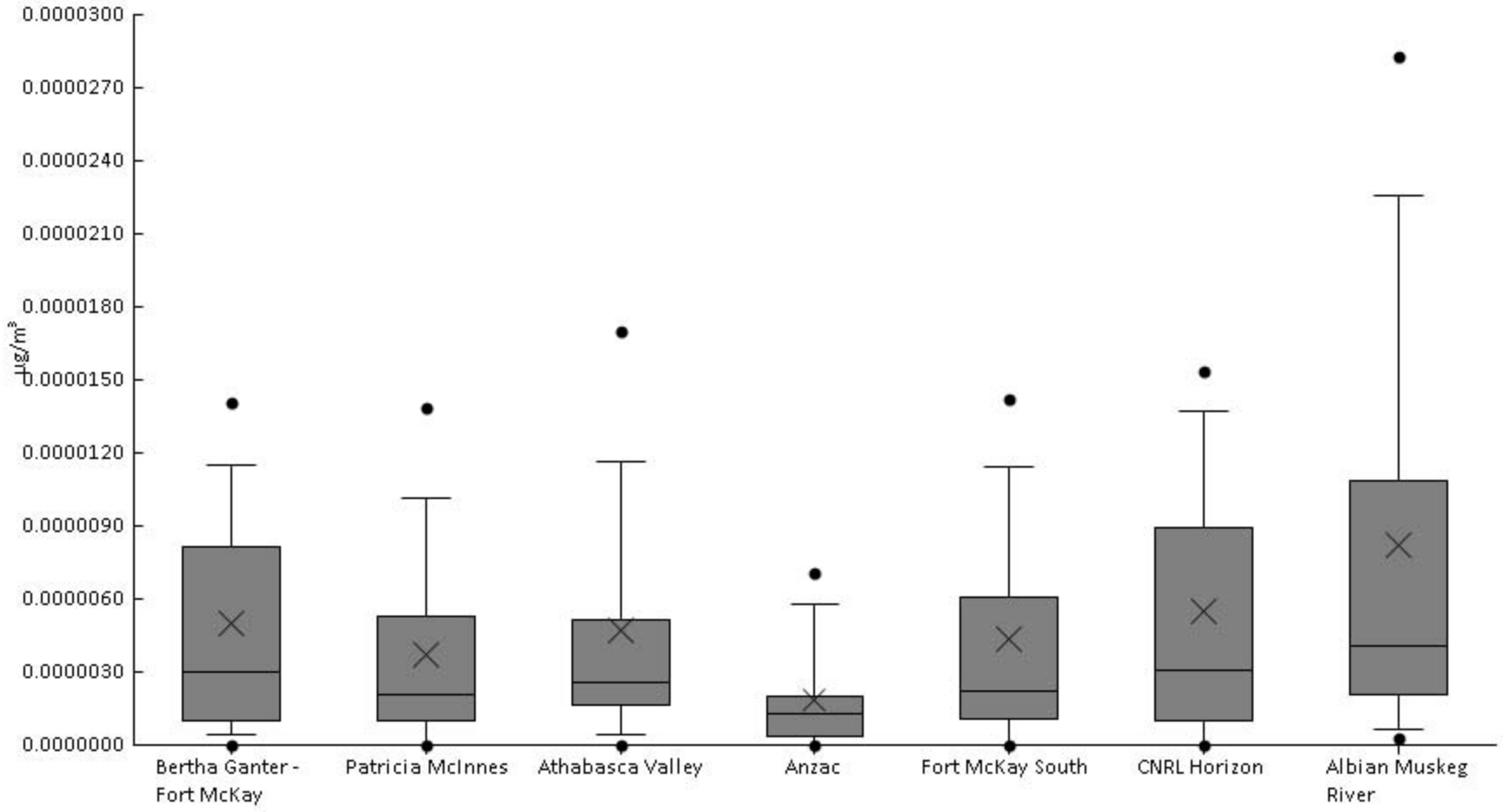
Particulate Matter (PM10 METALS) - Tantalum (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	41%	0	0	0	0	0	4.2E-6	7.2E-6	8E-6	1.9E-5	2.4E-6	3.7E-6
AMS 6	Patricia McInnes	59	27%	0	0	0	0	0	1.8E-6	5.2E-6	6.5E-6	8.9E-6	1.3E-6	2.3E-6
AMS 7	Athabasca Valley	61	39%	0	0	0	0	0	3.5E-6	7.4E-6	9.4E-6	1.8E-5	2.3E-6	3.7E-6
AMS 14	Anzac	58	7%	0	0	0	0	0	0	0	1.7E-6	3.6E-6	1.6E-7	6.3E-7
AMS 13	Fort McKay South	61	43%	0	0	0	0	0	3.6E-6	7E-6	8.1E-6	2E-5	2.2E-6	3.6E-6
AMS 15	CNRL Horizon	61	44%	0	0	0	0	0	4.8E-6	8.5E-6	9.7E-6	1.7E-5	2.8E-6	4E-6
AMS 16	Albian Muskeg River	61	61%	0	0	0	0	3E-6	5.9E-6	1.5E-5	2.4E-5	3.9E-5	5.4E-6	8.4E-6



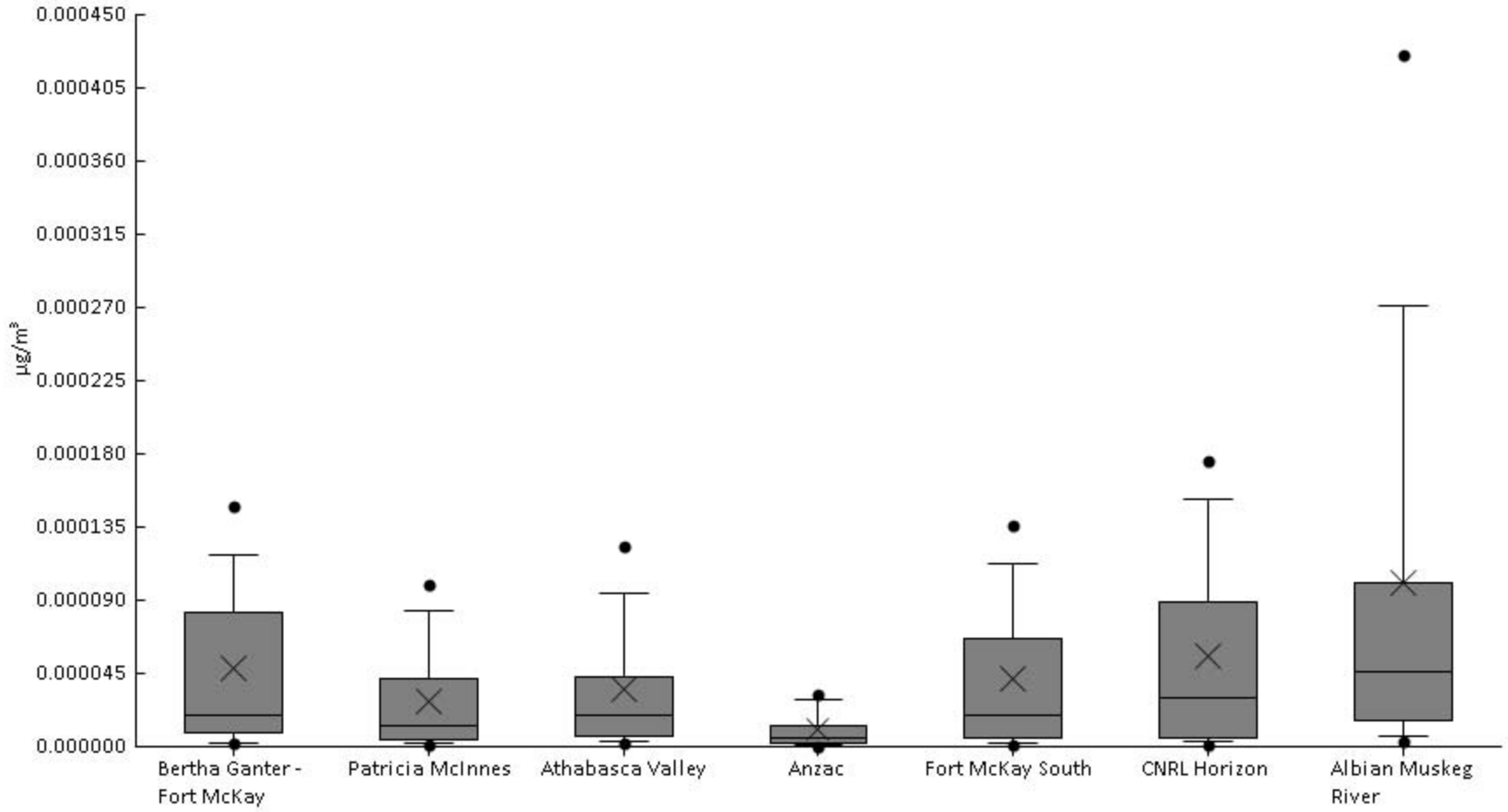
Particulate Matter (PM10 METALS) - Thallium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	92%	0	0	4E-7	1E-6	3E-6	8.1E-6	1.2E-5	1.4E-5	2.7E-5	5E-6	5.6E-6
AMS 6	Patricia McInnes	59	85%	0	0	0	9.7E-7	2.1E-6	5.3E-6	1E-5	1.4E-5	1.8E-5	3.7E-6	4.2E-6
AMS 7	Athabasca Valley	61	93%	0	0	4.5E-7	1.7E-6	2.6E-6	5.2E-6	1.2E-5	1.7E-5	3.8E-5	4.7E-6	6.3E-6
AMS 14	Anzac	58	76%	0	0	0	3.9E-7	1.3E-6	2E-6	5.8E-6	7.1E-6	1.1E-5	1.9E-6	2.3E-6
AMS 13	Fort McKay South	61	80%	0	0	0	1.1E-6	2.2E-6	6.1E-6	1.1E-5	1.4E-5	2.3E-5	4.3E-6	5E-6
AMS 15	CNRL Horizon	61	89%	0	0	0	1E-6	3E-6	9E-6	1.4E-5	1.5E-5	3.1E-5	5.5E-6	6.1E-6
AMS 16	Albian Muskeg River	61	95%	0	2.8E-7	6.2E-7	2.1E-6	4.1E-6	1.1E-5	2.3E-5	2.8E-5	5.4E-5	8.2E-6	1E-5



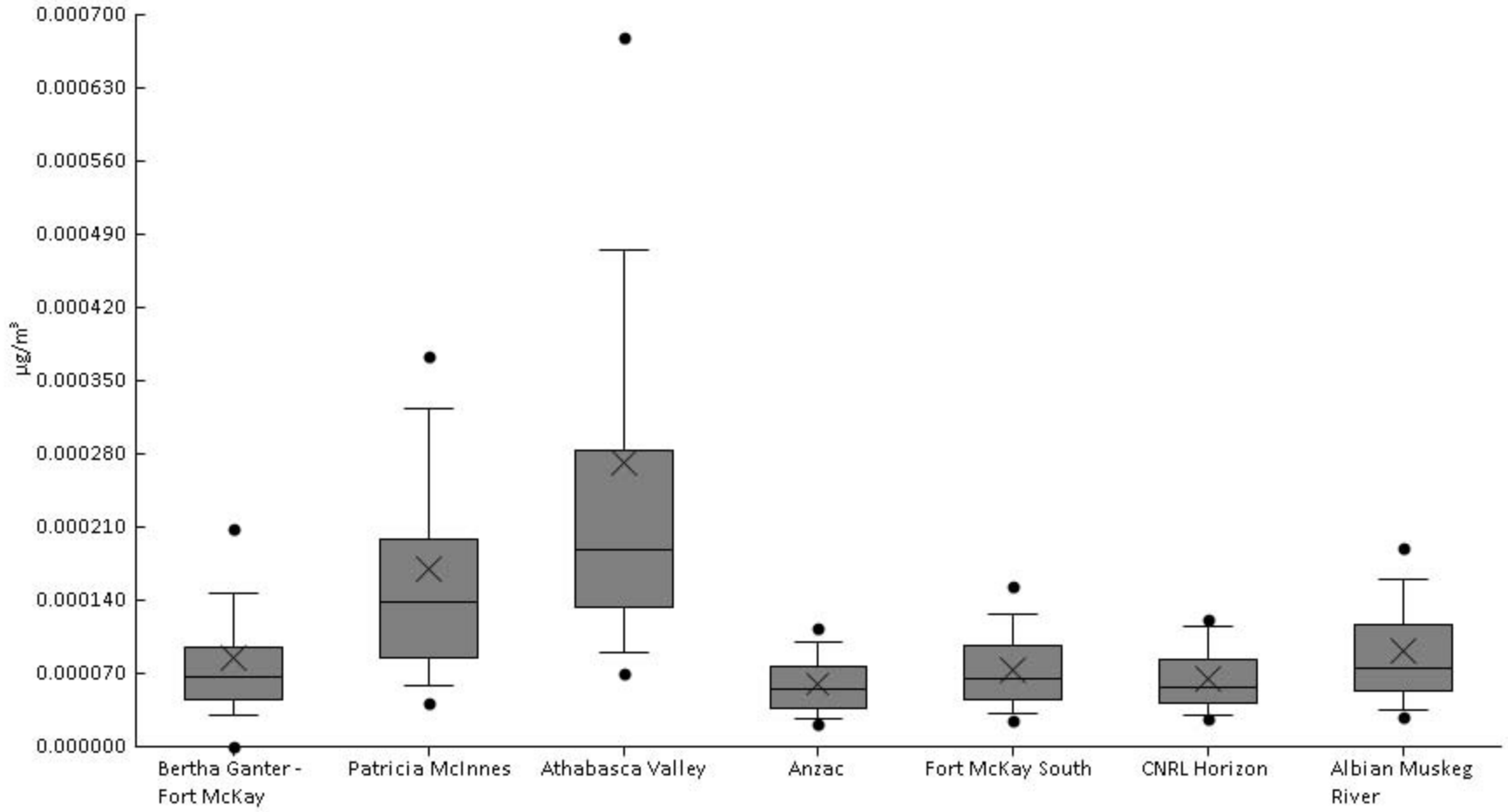
Particulate Matter (PM10 METALS) - Thorium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	1.2E-6	1.8E-6	2.3E-6	8.1E-6	1.9E-5	8.3E-5	1.2E-4	1.5E-4	2.9E-4	4.8E-5	5.7E-5
AMS 6	Patricia McInnes	59	100%	3.5E-7	1.2E-6	1.9E-6	4.8E-6	1.3E-5	4.2E-5	8.4E-5	1E-4	1.5E-4	2.8E-5	3.5E-5
AMS 7	Athabasca Valley	61	100%	1.1E-6	1.8E-6	2.8E-6	6.4E-6	2E-5	4.3E-5	9.4E-5	1.2E-4	1.7E-4	3.6E-5	4E-5
AMS 14	Anzac	58	95%	0	1.8E-7	7.7E-7	2.1E-6	5.2E-6	1.3E-5	2.9E-5	3.2E-5	6.1E-5	1E-5	1.2E-5
AMS 13	Fort McKay South	61	100%	7.8E-7	1.3E-6	1.8E-6	4.9E-6	1.9E-5	6.6E-5	1.1E-4	1.4E-4	3.4E-4	4.1E-5	5.6E-5
AMS 15	CNRL Horizon	61	98%	0	1.3E-6	2.7E-6	5.7E-6	3E-5	8.9E-5	1.5E-4	1.8E-4	3.1E-4	5.6E-5	6.6E-5
AMS 16	Albian Muskeg River	61	100%	1.4E-6	3.7E-6	6E-6	1.6E-5	4.6E-5	1E-4	2.7E-4	4.3E-4	6.6E-4	1E-4	1.4E-4



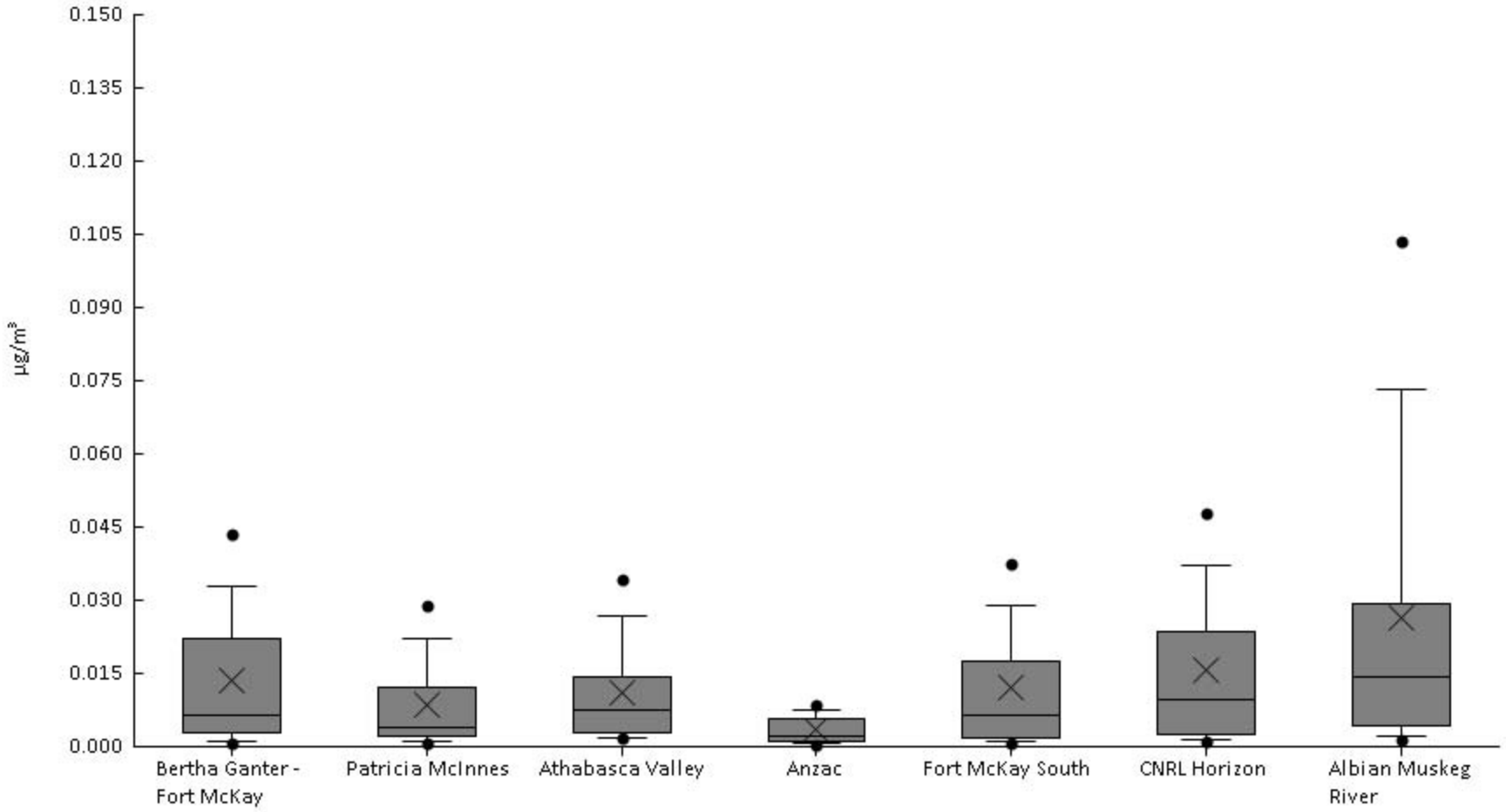
Particulate Matter (PM10 METALS) - Tin (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	93%	0	0	3E-5	4.6E-5	6.6E-5	9.5E-5	1.5E-4	2.1E-4	4.9E-4	8.5E-5	8.4E-5
AMS 6	Patricia McInnes	59	100%	1.9E-5	4.2E-5	5.9E-5	8.6E-5	1.4E-4	2E-4	3.2E-4	3.7E-4	7.8E-4	1.7E-4	1.3E-4
AMS 7	Athabasca Valley	61	100%	5.5E-5	7.1E-5	9E-5	1.3E-4	1.9E-4	2.8E-4	4.8E-4	6.8E-4	2.4E-3	2.7E-4	3.2E-4
AMS 14	Anzac	58	97%	0	2.2E-5	2.7E-5	3.6E-5	5.5E-5	7.7E-5	9.9E-5	1.1E-4	2.6E-4	6E-5	3.8E-5
AMS 13	Fort McKay South	61	97%	0	2.4E-5	3.1E-5	4.4E-5	6.5E-5	9.6E-5	1.3E-4	1.5E-4	1.9E-4	7.3E-5	4E-5
AMS 15	CNRL Horizon	61	100%	2E-5	2.6E-5	3E-5	4.2E-5	5.7E-5	8.3E-5	1.1E-4	1.2E-4	1.5E-4	6.5E-5	3.1E-5
AMS 16	Albian Muskeg River	61	100%	2.4E-5	2.8E-5	3.5E-5	5.3E-5	7.4E-5	1.2E-4	1.6E-4	1.9E-4	3.9E-4	9.2E-5	6.1E-5



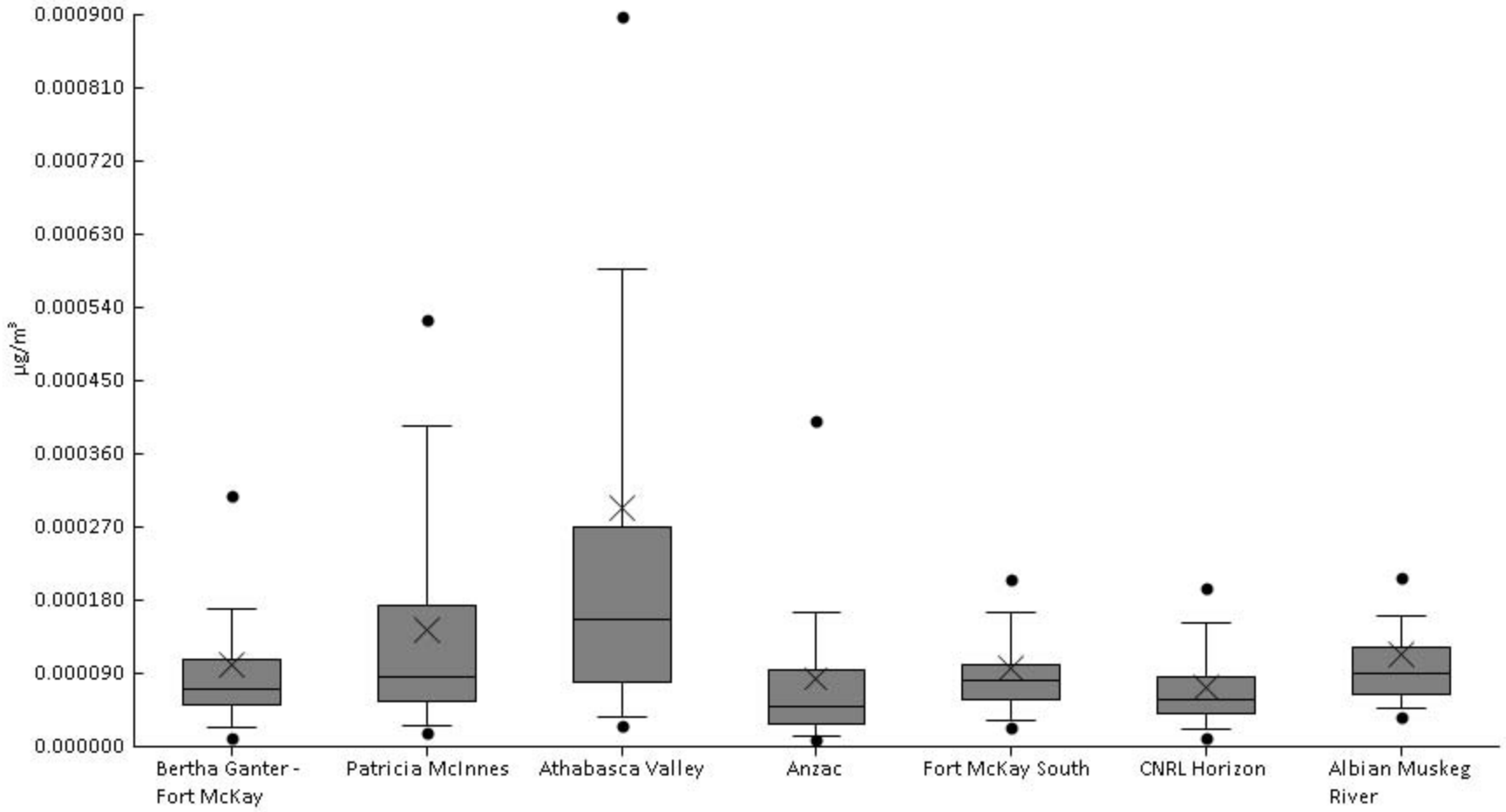
Particulate Matter (PM10 METALS) - Titanium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	4.9E-4	8.1E-4	1E-3	3E-3	6.3E-3	0.022	0.033	0.043	0.073	0.014	0.016
AMS 6	Patricia McInnes	59	100%	2.5E-4	6.8E-4	1.2E-3	2E-3	4E-3	0.012	0.022	0.029	0.046	8.5E-3	0.01
AMS 7	Athabasca Valley	61	100%	7.5E-4	1.6E-3	1.8E-3	2.9E-3	7.4E-3	0.014	0.027	0.034	0.045	0.011	0.011
AMS 14	Anzac	58	100%	4.1E-4	5.3E-4	6E-4	1E-3	2E-3	5.7E-3	7.7E-3	8.7E-3	0.025	3.6E-3	4.1E-3
AMS 13	Fort McKay South	61	100%	4E-4	6.4E-4	9.4E-4	1.9E-3	6.6E-3	0.018	0.029	0.038	0.096	0.012	0.015
AMS 15	CNRL Horizon	61	100%	5.8E-4	1E-3	1.5E-3	2.4E-3	9.6E-3	0.024	0.037	0.048	0.087	0.016	0.017
AMS 16	Albian Muskeg River	61	100%	1E-3	1.5E-3	2E-3	4.4E-3	0.014	0.029	0.073	0.1	0.17	0.026	0.035



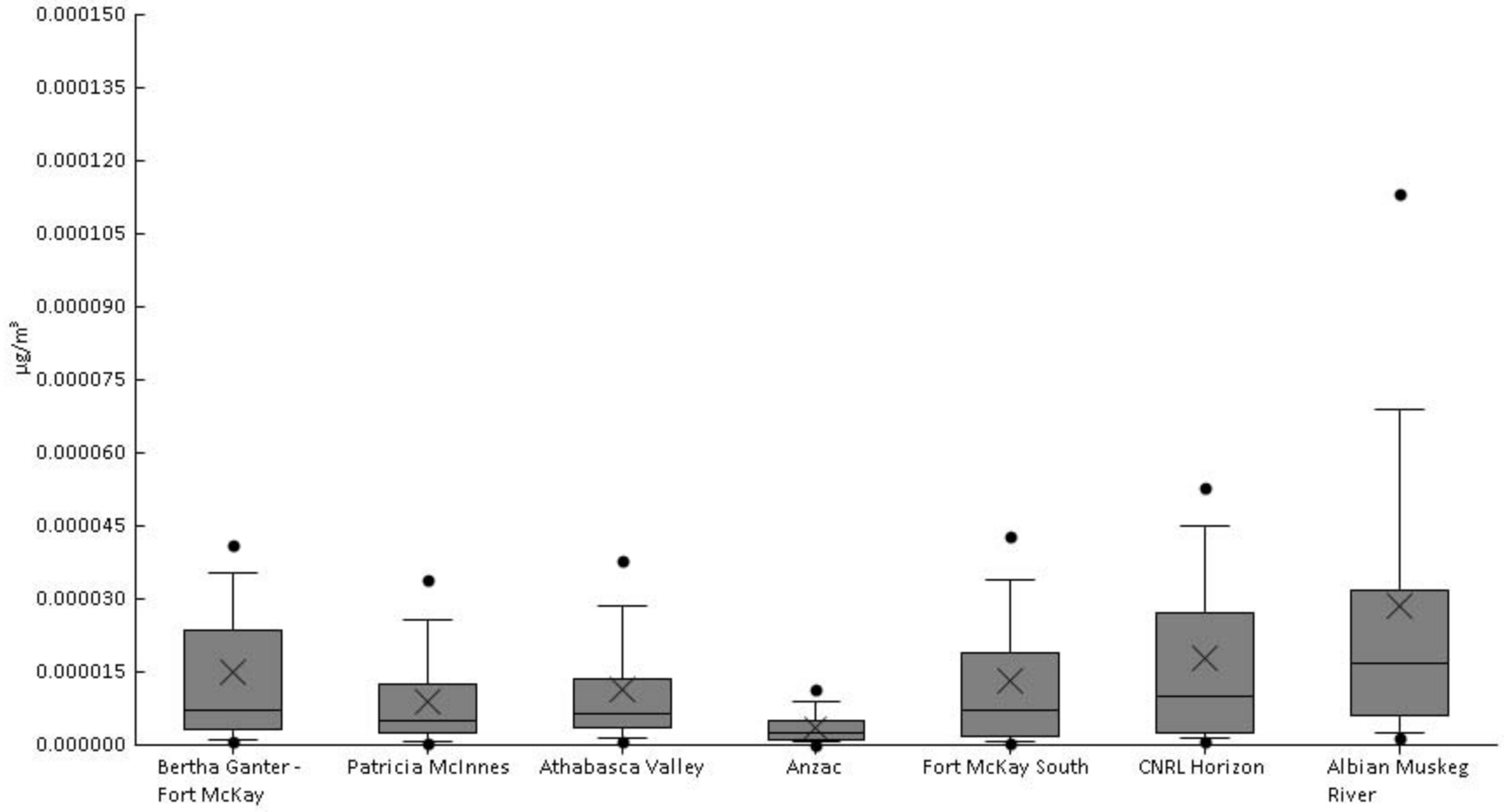
Particulate Matter (PM10 METALS) - Tungsten (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	8.8E-6	1E-5	2.4E-5	5.1E-5	7.1E-5	1.1E-4	1.7E-4	3.1E-4	6.5E-4	1E-4	1.2E-4
AMS 6	Patricia McInnes	59	100%	1.2E-5	1.6E-5	2.5E-5	5.5E-5	8.5E-5	1.7E-4	4E-4	5.2E-4	6.2E-4	1.4E-4	1.5E-4
AMS 7	Athabasca Valley	61	100%	1.3E-5	2.5E-5	3.7E-5	7.9E-5	1.6E-4	2.7E-4	5.9E-4	9E-4	4.3E-3	2.9E-4	5.8E-4
AMS 14	Anzac	58	100%	8.3E-6	9.5E-6	1.4E-5	2.8E-5	4.9E-5	9.4E-5	1.6E-4	4E-4	5.1E-4	8.3E-5	1.1E-4
AMS 13	Fort McKay South	61	98%	0	2.3E-5	3.2E-5	5.8E-5	8.1E-5	1E-4	1.6E-4	2.1E-4	5.5E-4	9.6E-5	8E-5
AMS 15	CNRL Horizon	61	100%	6.3E-6	1.1E-5	2.1E-5	4.1E-5	5.7E-5	8.6E-5	1.5E-4	1.9E-4	3.3E-4	7.3E-5	5.8E-5
AMS 16	Albian Muskeg River	61	100%	2.1E-5	3.7E-5	4.8E-5	6.5E-5	9.1E-5	1.2E-4	1.6E-4	2.1E-4	9.9E-4	1.1E-4	1.2E-4



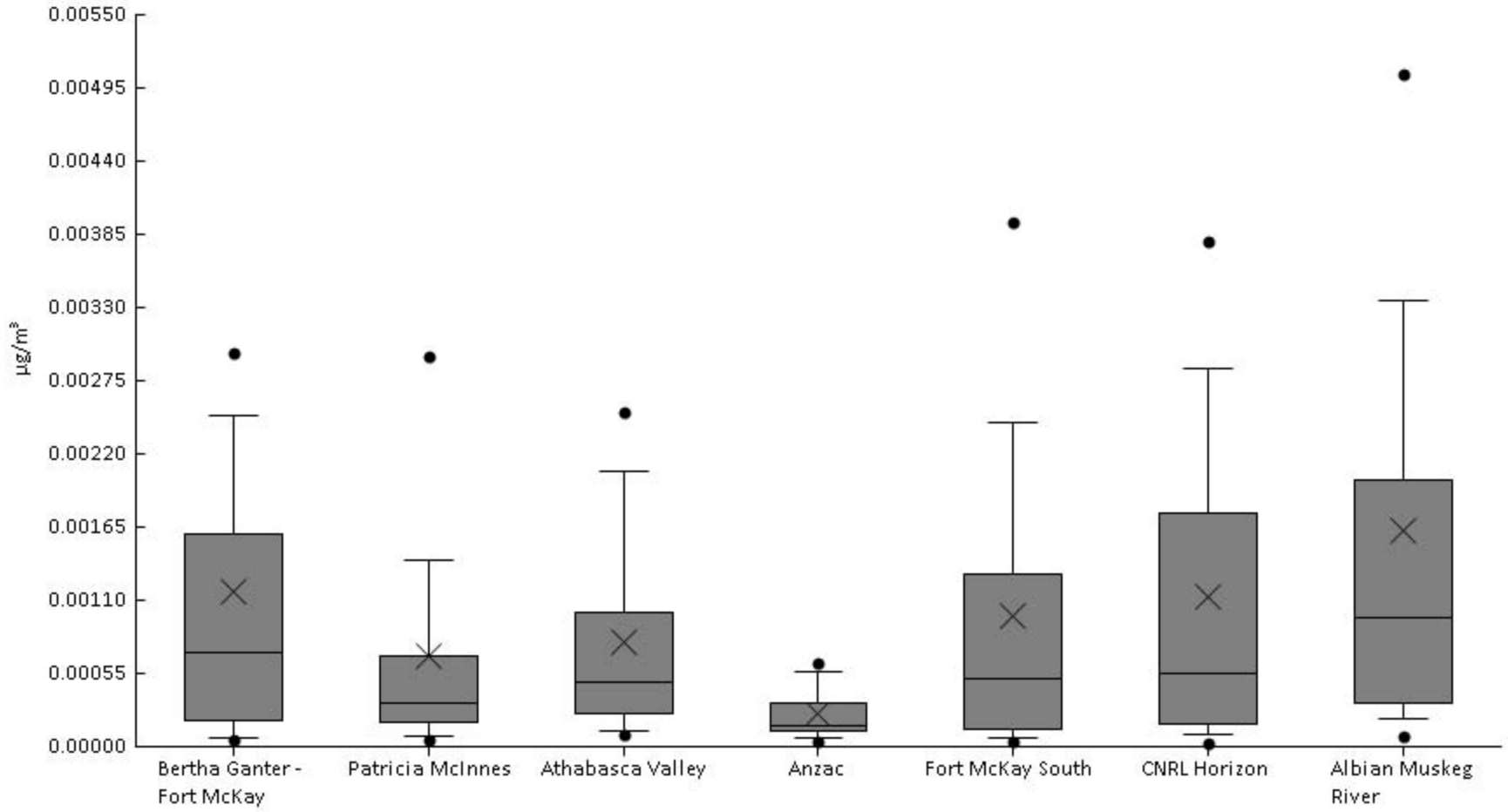
Particulate Matter (PM10 METALS) - Uranium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	3.6E-7	6.5E-7	9E-7	3E-6	7.1E-6	2.4E-5	3.5E-5	4.1E-5	8.8E-5	1.5E-5	1.7E-5
AMS 6	Patricia McInnes	59	98%	0	4.5E-7	7.3E-7	2.5E-6	5E-6	1.2E-5	2.6E-5	3.4E-5	4.4E-5	9.1E-6	1.1E-5
AMS 7	Athabasca Valley	61	100%	4.6E-7	8E-7	1.3E-6	3.4E-6	6.6E-6	1.4E-5	2.8E-5	3.8E-5	4.6E-5	1.1E-5	1.2E-5
AMS 14	Anzac	58	95%	0	1.4E-7	6.2E-7	1.1E-6	2.5E-6	5.2E-6	8.8E-6	1.2E-5	2E-5	3.7E-6	3.9E-6
AMS 13	Fort McKay South	61	98%	0	3.9E-7	6.5E-7	1.7E-6	7.3E-6	1.9E-5	3.4E-5	4.3E-5	1E-4	1.3E-5	1.7E-5
AMS 15	CNRL Horizon	61	97%	0	6.9E-7	1.3E-6	2.6E-6	1E-5	2.7E-5	4.5E-5	5.3E-5	8.8E-5	1.8E-5	2E-5
AMS 16	Albian Muskeg River	61	100%	4.1E-7	1.6E-6	2.7E-6	6.2E-6	1.7E-5	3.2E-5	6.9E-5	1.1E-4	1.8E-4	2.9E-5	3.8E-5



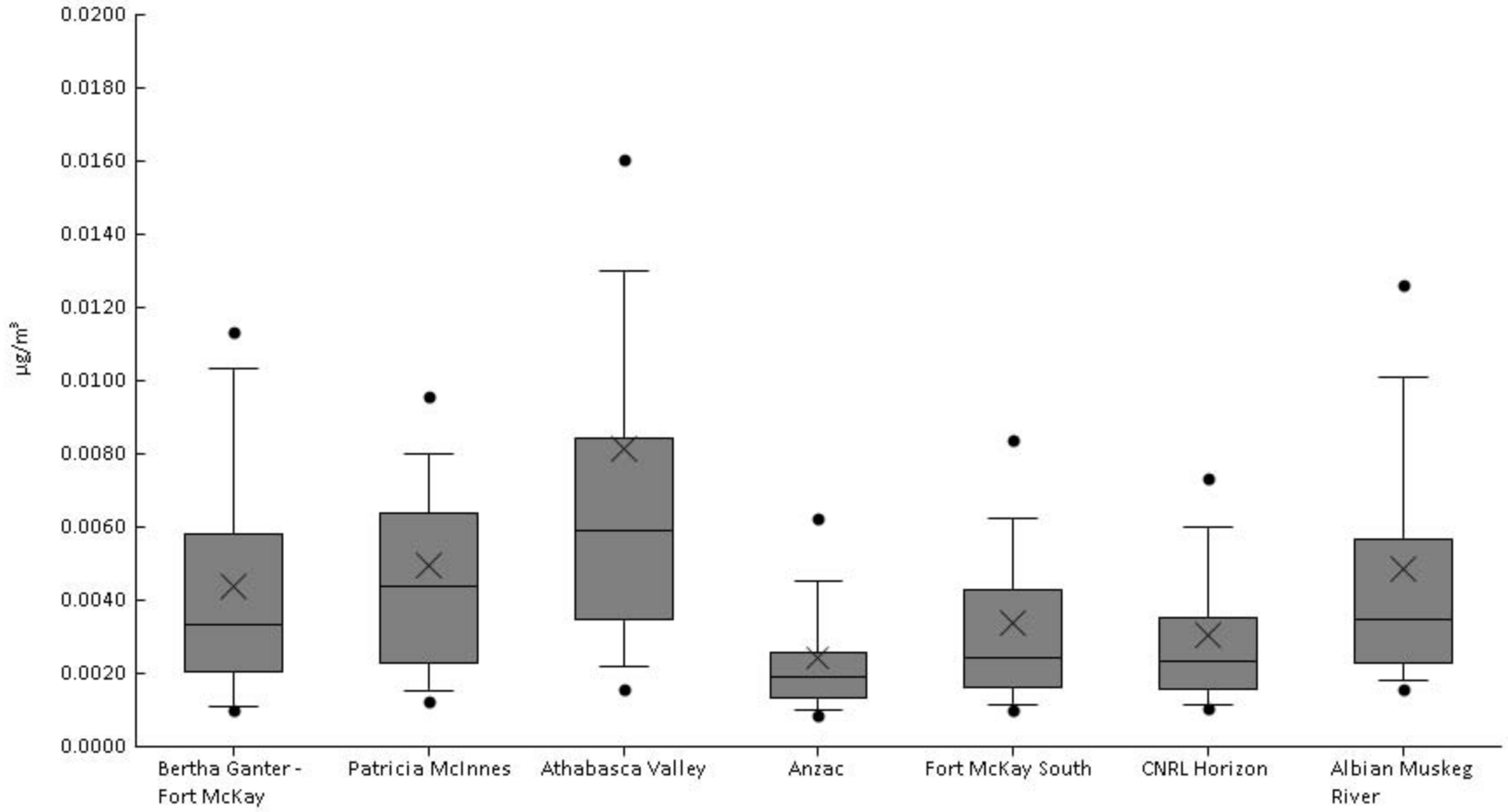
Particulate Matter (PM10 METALS) - Vanadium (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	98%	0	5.5E-5	6.6E-5	2E-4	7.1E-4	1.6E-3	2.5E-3	3E-3	9.2E-3	1.2E-3	1.6E-3
AMS 6	Patricia McInnes	59	100%	3.4E-5	5.8E-5	7.3E-5	1.8E-4	3.3E-4	6.8E-4	1.4E-3	2.9E-3	5.3E-3	6.8E-4	9.8E-4
AMS 7	Athabasca Valley	61	100%	5.6E-5	8.6E-5	1.2E-4	2.5E-4	4.9E-4	1E-3	2.1E-3	2.5E-3	3.8E-3	7.9E-4	8.3E-4
AMS 14	Anzac	58	98%	0	4.4E-5	6.2E-5	1.2E-4	1.6E-4	3.3E-4	5.7E-4	6.3E-4	8.3E-4	2.5E-4	2E-4
AMS 13	Fort McKay South	61	97%	0	4.5E-5	7E-5	1.3E-4	5.2E-4	1.3E-3	2.4E-3	3.9E-3	6.3E-3	9.9E-4	1.3E-3
AMS 15	CNRL Horizon	61	95%	0	3.1E-5	8.9E-5	1.7E-4	5.4E-4	1.8E-3	2.8E-3	3.8E-3	6.3E-3	1.1E-3	1.4E-3
AMS 16	Albian Muskeg River	61	100%	3.2E-5	7.7E-5	2.1E-4	3.3E-4	9.7E-4	2E-3	3.4E-3	5.1E-3	0.015	1.6E-3	2.3E-3



Particulate Matter (PM10 METALS) - Zinc (µg/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	61	100%	6.8E-4	9.8E-4	1.1E-3	2.1E-3	3.4E-3	5.8E-3	0.01	0.011	0.019	4.4E-3	3.6E-3
AMS 6	Patricia McInnes	59	100%	4.4E-4	1.3E-3	1.5E-3	2.3E-3	4.4E-3	6.4E-3	8E-3	9.5E-3	0.028	5E-3	4.1E-3
AMS 7	Athabasca Valley	61	100%	1.2E-3	1.6E-3	2.2E-3	3.5E-3	5.9E-3	8.4E-3	0.013	0.016	0.086	8.2E-3	0.012
AMS 14	Anzac	58	100%	7.6E-4	8.7E-4	1E-3	1.3E-3	1.9E-3	2.6E-3	4.5E-3	6.2E-3	0.015	2.4E-3	2.2E-3
AMS 13	Fort McKay South	61	100%	5.4E-4	9.9E-4	1.2E-3	1.6E-3	2.4E-3	4.3E-3	6.2E-3	8.4E-3	0.02	3.4E-3	3.1E-3
AMS 15	CNRL Horizon	61	100%	8.1E-4	1.1E-3	1.1E-3	1.6E-3	2.3E-3	3.5E-3	6E-3	7.3E-3	0.012	3E-3	2.2E-3
AMS 16	Albian Muskeg River	61	100%	1.2E-3	1.6E-3	1.8E-3	2.3E-3	3.5E-3	5.7E-3	0.01	0.013	0.023	4.9E-3	4E-3



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

INTEGRATED MONITORING PROGRAM
ANNUAL REPORT

POLYCYCLIC AROMATIC HYDROCARBONS
DATA SUMMARY
2016

March 2017

SAMPLE COLLECTION AND DATA COMPILATION BY:

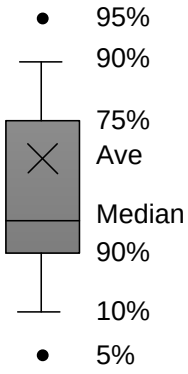
Wood Buffalo Environmental Association
Fort McMurray, Alberta

LABORATORY ANALYSIS BY:

PAHs: Airzone One Ltd
Mississauga, Ontario

FILE CONTENTS DESCRIPTION	PAH - Speciated PAH Gas + Particle Phase Measurements
SAMPLING INTERVAL	24 hour
SAMPLING FREQUENCY OF DATA	Once every 6 days
UNITS	ng/m^3 (nanogram per cubic meter)
OBSERVATION TYPE	Particles + gas
FIELD SAMPLING OR MEASUREMENT PRINCIPLE	filtration and adsorbent
PARTICLE DIAMETER	TSP (total suspended particle)
MEDIUM	a glass fiber filter + PUF/XAD-2/PUF
ANALYTICALMETHOD	Gas Chromatograph/Mass Spectrometer (GC/MS)
SAMPLE PREPARATION	Solvent Extraction
ANALYTICAL LABORATORY	AIRZONE One Inc.
USER NOTE 1	Data are recovery corrected
USER NOTE 2	Volume is given at actual conditions of temperature and pressure during sampling as measured by the sampler
USER NOTE 3	Blank sample concentration (ng/m^3) is calculated using expected actual volume of sampler
VOLUME STANDARDIZATION	Actual Volume at Ambient Conditions
SAMPLING INSTRUMENT TYPE	Tisch TE-1000 High-Volume Sampler
FLAGS USED	
V0	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
V4	Valid value despite failing to meet some QC or statistical criteria
V5	Valid value but qualified because of possible contamination
V6	Valid value but qualified due to non-standard sampling conditions
M1	Missing value because no value is available
M2	Missing value because invalidated by Data Originator

Legend description



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		01-Jan		01-Jan		01-Jan	
Total Air Volume (m^3)		315.99		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	34.003	V0	27.611	V0	0.055	V0
Acenaphthylene	0.011	0.290	V0	0.701	V0	0.010	V1
Acenaphthene	0.006	1.739	V0	0.244	V0	0.021	V0
Fluorene	0.007	2.395	V0	1.570	V0	0.016	V0
Phenanthrene	0.007	4.428	V0	2.765	V0	0.018	V0
Anthracene	0.017	0.436	V0	0.323	V0	0.002	V1
Acridine	0.019	0.072	V0	0.036	V0	0.004	V1
Fluoranthene	0.007	0.569	V0	0.615	V0	0.003	V1
Pyrene	0.008	0.460	V0	0.498	V0	0.005	V1
Benzo(c)phenanthrene	0.015	0.044	V0	0.067	V0	0.003	V1
Benz(a)anthracene	0.014	0.056	V0	0.054	V0	<0.001	V1
Chrysene	0.013	0.112	V0	0.104	V0	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.061	V0	0.051	V0	<0.001	V1
Benzo(b)fluoranthene	0.020	0.058	V0	0.065	V0	0.001	V1
Benzo(k)fluoranthene	0.013	0.053	V0	0.067	V0	0.002	V1
Benzo(a)pyrene	0.016	0.045	V0	0.046	V0	0.002	V1
3-Methylcholanthrene	0.022	0.024	V0	0.067	V0	<0.001	V1
Indeno(123-cd)pyrene	0.017	0.047	V0	0.049	V0	<0.001	V1
Dibenz(a,h)anthracene	0.020	0.020	V0	0.018	V1	0.001	V1
Benzo(ghi)perylene	0.020	0.048	V0	0.061	V0	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.021	V1	0.016	V1	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.034	V0	0.012	V1	0.018	V1
Dibenzo(a,h)pyrene	0.020	0.026	V0	0.019	V1	0.016	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		01-Jan		01-Jan		01-Jan	
Total Air Volume (m^3)		316		315.97		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	44.323	V0	16.947	V0	0.055	V0
Acenaphthylene	0.011	0.844	V0	0.147	V0	0.010	V1
Acenaphthene	0.006	0.596	V0	0.962	V0	0.021	V0
Fluorene	0.007	3.815	V0	1.517	V0	0.016	V0
Phenanthrene	0.007	8.151	V0	2.656	V0	0.018	V0
Anthracene	0.017	0.995	V0	0.244	V0	0.002	V1
Acridine	0.019	0.056	V0	0.028	V0	0.004	V1
Fluoranthene	0.007	1.751	V0	0.446	V0	0.003	V1
Pyrene	0.008	1.758	V0	0.263	V0	0.005	V1
Benzo(c)phenanthrene	0.015	0.132	V0	0.048	V0	0.003	V1
Benz(a)anthracene	0.014	0.221	V0	0.056	V0	<0.001	V1
Chrysene	0.013	0.392	V0	0.075	V0	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.077	V0	0.054	V0	<0.001	V1
Benzo(b)fluoranthene	0.020	0.240	V0	0.078	V0	0.001	V1
Benzo(k)fluoranthene	0.013	0.272	V0	0.070	V0	0.002	V1
Benzo(a)pyrene	0.016	0.108	V0	0.031	V0	0.002	V1
3-Methylcholanthrene	0.022	0.015	V1	0.048	V0	<0.001	V1
Indeno(123-cd)pyrene	0.017	0.092	V0	0.035	V0	<0.001	V1
Dibenz(a,h)anthracene	0.020	0.043	V0	0.016	V1	0.001	V1
Benzo(ghi)perylene	0.020	0.068	V0	0.040	V0	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.020	V1	0.021	V1	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.026	V0	0.022	V1	0.018	V1
Dibenzo(a,h)pyrene	0.020	0.030	V0	0.025	V0	0.016	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		07-Jan		07-Jan		07-Jan	
Total Air Volume (m^3)		359.32		313.15		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	2.355	V0	2.712	V0	0.077	V0
Acenaphthylene	0.011	0.068	V0	0.174	V0	0.009	V1
Acenaphthene	0.006	0.408	V0	0.318	V0	0.014	V0
Fluorene	0.007	0.211	V0	0.479	V0	0.006	V1
Phenanthrene	0.007	0.399	V0	0.756	V0	0.009	V0
Anthracene	0.017	0.038	V0	0.078	V0	0.003	V1
Acridine	0.019	0.013	V1	0.009	V1	0.003	V1
Fluoranthene	0.007	0.034	V0	0.123	V0	0.006	V1
Pyrene	0.008	0.039	V0	0.129	V0	0.005	V1
Benzo(c)phenanthrene	0.015	0.007	V1	0.010	V1	0.002	V1
Benz(a)anthracene	0.014	0.005	V1	0.012	V1	<0.001	V1
Chrysene	0.013	0.006	V1	0.017	V0	0.001	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.028	V0	0.018	V0	0.001	V1
Benzo(b)fluoranthene	0.020	0.007	V1	0.015	V1	0.002	V1
Benzo(k)fluoranthene	0.013	0.008	V1	0.016	V0	0.002	V1
Benzo(a)pyrene	0.016	0.006	V1	0.007	V1	<0.001	V1
3-Methylcholanthrene	0.022	0.005	V1	0.006	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.005	V1	0.009	V1	0.001	V1
Dibenz(a,h)anthracene	0.020	0.011	V1	0.003	V1	<0.001	V1
Benzo(ghi)perylene	0.020	0.006	V1	0.005	V1	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.006	V1	0.006	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.006	V1	0.006	V1	0.001	V1
Dibenzo(a,h)pyrene	0.020	0.006	V1	0.005	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		07-Jan		07-Jan		07-Jan	
Total Air Volume (m^3)		316		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	4.344	V0	3.482	V0	0.077	V0
Acenaphthylene	0.011	0.068	V0	0.089	V0	0.009	V1
Acenaphthene	0.006	0.400	V0	0.358	V0	0.014	V0
Fluorene	0.007	0.166	V0	0.247	V0	0.006	V1
Phenanthrene	0.007	0.300	V0	0.337	V0	0.009	V0
Anthracene	0.017	0.023	V0	0.026	V0	0.003	V1
Acridine	0.019	0.007	V1	0.004	V1	0.003	V1
Fluoranthene	0.007	0.022	V0	0.047	V0	0.006	V1
Pyrene	0.008	0.028	V0	0.033	V0	0.005	V1
Benzo(c)phenanthrene	0.015	0.018	V0	0.005	V1	0.002	V1
Benz(a)anthracene	0.014	0.009	V1	0.004	V1	<0.001	V1
Chrysene	0.013	0.007	V1	0.004	V1	0.001	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.019	V0	0.013	V1	0.001	V1
Benzo(b)fluoranthene	0.020	0.006	V1	0.006	V1	0.002	V1
Benzo(k)fluoranthene	0.013	0.006	V1	0.007	V1	0.002	V1
Benzo(a)pyrene	0.016	0.006	V1	0.005	V1	<0.001	V1
3-Methylcholanthrene	0.022	0.009	V1	0.006	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.006	V1	0.004	V1	0.001	V1
Dibenz(a,h)anthracene	0.020	0.007	V1	0.004	V1	<0.001	V1
Benzo(ghi)perylene	0.020	0.006	V1	0.004	V1	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.010	V1	0.005	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.011	V1	0.004	V1	0.001	V1
Dibenzo(a,h)pyrene	0.020	0.009	V1	0.005	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		13-Jan		13-Jan		13-Jan	
Total Air Volume (m^3)		316		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	13.211	V0	4.331	V0	0.057	V0
Acenaphthylene	0.011	0.376	V0	0.435	V0	0.009	V1
Acenaphthene	0.006	0.923	V0	0.496	V0	0.016	V0
Fluorene	0.007	1.134	V0	0.508	V0	0.014	V0
Phenanthrene	0.007	2.072	V0	1.012	V0	0.010	V0
Anthracene	0.017	0.220	V0	0.089	V0	0.003	V1
Acridine	0.019	0.054	V0	0.013	V1	0.001	V1
Fluoranthene	0.007	0.228	V0	0.211	V0	0.003	V1
Pyrene	0.008	0.253	V0	0.204	V0	0.002	V1
Benzo(c)phenanthrene	0.015	0.039	V0	0.027	V0	<0.001	V1
Benz(a)anthracene	0.014	0.065	V0	0.034	V0	<0.001	V1
Chrysene	0.013	0.084	V0	0.023	V0	0.002	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.032	V0	0.035	V0	<0.001	V1
Benzo(b)fluoranthene	0.020	0.084	V0	0.062	V0	0.001	V1
Benzo(k)fluoranthene	0.013	0.095	V0	0.063	V0	0.002	V1
Benzo(a)pyrene	0.016	0.045	V0	0.025	V0	<0.001	V1
3-Methylcholanthrene	0.022	0.004	V1	0.008	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.035	V0	0.017	V0	<0.001	V1
Dibenz(a,h)anthracene	0.020	0.019	V1	0.015	V1	0.002	V1
Benzo(ghi)perylene	0.020	0.055	V0	0.018	V1	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.006	V1	0.010	V1	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.004	V1	0.006	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.004	V1	0.011	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		13-Jan		13-Jan		13-Jan	
Total Air Volume (m^3)		315.99		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	5.167	V0	4.188	V0	0.057	V0
Acenaphthylene	0.011	2.845	V0	0.308	V0	0.009	V1
Acenaphthene	0.006	1.613	V0	0.324	V0	0.016	V0
Fluorene	0.007	1.776	V0	0.304	V0	0.014	V0
Phenanthrene	0.007	2.728	V0	0.424	V0	0.010	V0
Anthracene	0.017	0.703	V0	0.041	V0	0.003	V1
Acridine	0.019	0.141	V0	0.009	V1	0.001	V1
Fluoranthene	0.007	0.632	V0	0.086	V0	0.003	V1
Pyrene	0.008	0.591	V0	0.056	V0	0.002	V1
Benzo(c)phenanthrene	0.015	0.271	V0	0.007	V1	<0.001	V1
Benz(a)anthracene	0.014	0.100	V0	0.030	V0	<0.001	V1
Chrysene	0.013	0.065	V0	0.026	V0	0.002	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.529	V4	0.014	V0	<0.001	V1
Benzo(b)fluoranthene	0.020	0.101	V0	0.024	V0	0.001	V1
Benzo(k)fluoranthene	0.013	0.093	V0	0.028	V0	0.002	V1
Benzo(a)pyrene	0.016	0.050	V0	0.008	V1	<0.001	V1
3-Methylcholanthrene	0.022	0.016	V1	0.009	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.041	V0	0.011	V1	<0.001	V1
Dibenz(a,h)anthracene	0.020	0.033	V0	0.006	V1	0.002	V1
Benzo(ghi)perylene	0.020	0.034	V0	0.007	V1	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.019	V1	<0.001	V1	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.016	V1	0.009	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.007	V1	0.009	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		19-Jan		19-Jan		19-Jan	
Total Air Volume (m^3)		316		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	4.546	V0	6.189	V0	0.079	V0
Acenaphthylene	0.011	0.303	V0	0.471	V0	0.019	V0
Acenaphthene	0.006	0.364	V0	0.716	V0	0.009	V0
Fluorene	0.007	0.443	V0	0.991	V0	0.017	V0
Phenanthrene	0.007	0.699	V0	1.836	V0	0.007	V0
Anthracene	0.017	0.074	V0	0.159	V0	0.003	V1
Acridine	0.019	0.031	V0	0.029	V0	0.001	V1
Fluoranthene	0.007	0.095	V0	0.341	V0	0.004	V1
Pyrene	0.008	0.112	V0	0.342	V0	0.003	V1
Benzo(c)phenanthrene	0.015	0.025	V0	0.032	V0	0.003	V1
Benz(a)anthracene	0.014	0.051	V0	0.061	V0	<0.001	V1
Chrysene	0.013	0.037	V0	0.078	V0	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.029	V0	0.019	V0	<0.001	V1
Benzo(b)fluoranthene	0.020	0.032	V0	0.086	V0	0.002	V1
Benzo(k)fluoranthene	0.013	0.037	V0	0.097	V0	0.001	V1
Benzo(a)pyrene	0.016	0.026	V0	0.045	V0	0.002	V1
3-Methylcholanthrene	0.022	0.012	V1	0.004	V1	<0.001	V1
Indeno(123-cd)pyrene	0.017	0.016	V1	0.038	V0	<0.001	V1
Dibenz(a,h)anthracene	0.020	0.009	V1	0.010	V1	0.001	V1
Benzo(ghi)perylene	0.020	0.026	V0	0.037	V0	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.007	V1	0.010	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.005	V1	0.004	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.004	V1	0.005	V1	<0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		19-Jan		19-Jan		19-Jan	
Total Air Volume (m^3)		315.99		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	17.984	V0	3.360	V0	0.079	V0
Acenaphthylene	0.011	1.356	V0	0.166	V0	0.019	V0
Acenaphthene	0.006	1.291	V0	0.394	V0	0.009	V0
Fluorene	0.007	1.844	V0	0.427	V0	0.017	V0
Phenanthrene	0.007	2.887	V0	0.668	V0	0.007	V0
Anthracene	0.017	0.261	V0	0.071	V0	0.003	V1
Acridine	0.019	0.039	V0	0.006	V1	0.001	V1
Fluoranthene	0.007	0.253	V0	0.122	V0	0.004	V1
Pyrene	0.008	0.266	V0	0.081	V0	0.003	V1
Benzo(c)phenanthrene	0.015	0.008	V1	0.016	V0	0.003	V1
Benz(a)anthracene	0.014	0.011	V1	0.031	V0	<0.001	V1
Chrysene	0.013	0.026	V0	0.031	V0	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.016	V0	0.017	V0	<0.001	V1
Benzo(b)fluoranthene	0.020	0.020	V1	0.036	V0	0.002	V1
Benzo(k)fluoranthene	0.013	0.022	V0	0.040	V0	0.001	V1
Benzo(a)pyrene	0.016	0.020	V0	0.021	V0	0.002	V1
3-Methylcholanthrene	0.022	0.006	V1	0.006	V1	<0.001	V1
Indeno(123-cd)pyrene	0.017	0.014	V1	0.013	V1	<0.001	V1
Dibenz(a,h)anthracene	0.020	0.005	V1	0.005	V1	0.001	V1
Benzo(ghi)perylene	0.020	0.015	V1	0.019	V1	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.008	V1	0.008	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.005	V1	0.008	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.007	V1	0.007	V1	<0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		25-Jan		25-Jan		25-Jan	
Total Air Volume (m^3)		316		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	7.832	V0	7.378	V0	0.056	V0
Acenaphthylene	0.011	0.448	V0	0.927	V0	0.010	V1
Acenaphthene	0.006	0.598	V0	0.490	V0	0.005	V1
Fluorene	0.007	0.592	V0	1.013	V0	0.005	V1
Phenanthrene	0.007	0.903	V0	1.226	V0	0.006	V1
Anthracene	0.017	0.073	V0	0.106	V0	0.002	V1
Acridine	0.019	0.022	V0	0.022	V0	0.002	V1
Fluoranthene	0.007	0.126	V0	0.226	V0	0.004	V1
Pyrene	0.008	0.125	V0	0.252	V0	0.004	V1
Benzo(c)phenanthrene	0.015	0.012	V1	0.027	V0	<0.001	V1
Benz(a)anthracene	0.014	0.036	V0	0.057	V0	<0.001	V1
Chrysene	0.013	0.016	V0	0.054	V0	<0.001	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.023	V0	0.034	V0	<0.001	V1
Benzo(b)fluoranthene	0.020	0.047	V0	0.102	V0	<0.001	V1
Benzo(k)fluoranthene	0.013	0.051	V0	0.115	V0	0.001	V1
Benzo(a)pyrene	0.016	0.025	V0	0.048	V0	<0.001	V1
3-Methylcholanthrene	0.022	0.035	V0	0.006	V1	<0.001	V1
Indeno(123-cd)pyrene	0.017	0.014	V1	0.050	V0	<0.001	V1
Dibenz(a,h)anthracene	0.020	0.019	V1	0.015	V1	0.001	V1
Benzo(ghi)perylene	0.020	0.019	V1	0.082	V0	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.005	V1	0.007	V1	<0.001	V1
Dibenzo(a,i)pyrene	0.025	<0.001	V1	0.002	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.003	V1	0.004	V1	<0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Travel Blank**	
Station Number		**AMS 7**			
Sample Date		**25-Jan**		**25-Jan**	
Total Air Volume (m^3)		**315.98**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	6.867	V0	0.056	V0
Acenaphthylene	0.011	0.358	V0	0.010	V1
Acenaphthene	0.006	0.406	V0	0.005	V1
Fluorene	0.007	0.587	V0	0.005	V1
Phenanthrene	0.007	1.042	V0	0.006	V1
Anthracene	0.017	0.107	V0	0.002	V1
Acridine	0.019	0.020	V0	0.002	V1
Fluoranthene	0.007	0.222	V0	0.004	V1
Pyrene	0.008	0.220	V0	0.004	V1
Benzo(c)phenanthrene	0.015	0.022	V0	<0.001	V1
Benz(a)anthracene	0.014	0.018	V0	<0.001	V1
Chrysene	0.013	0.029	V0	<0.001	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.032	V0	<0.001	V1
Benzo(b)fluoranthene	0.020	0.037	V0	<0.001	V1
Benzo(k)fluoranthene	0.013	0.050	V0	0.001	V1
Benzo(a)pyrene	0.016	0.015	V1	<0.001	V1
3-Methylcholanthrene	0.022	0.005	V1	<0.001	V1
Indeno(123-cd)pyrene	0.017	0.017	V0	<0.001	V1
Dibenz(a,h)anthracene	0.020	0.057	V0	0.001	V1
Benzo(ghi)perylene	0.020	0.028	V0	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.009	V1	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.004	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.005	V1	<0.001	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		31-Jan		31-Jan		31-Jan	
Total Air Volume (m^3)		315.99		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	4.320	V0	6.314	V0	0.051	V0
Acenaphthylene	0.011	0.197	V0	0.351	V0	0.006	V1
Acenaphthene	0.006	0.406	V0	0.338	V0	0.013	V0
Fluorene	0.007	0.311	V0	0.693	V0	0.009	V0
Phenanthrene	0.007	0.556	V0	1.037	V0	0.006	V1
Anthracene	0.017	0.053	V0	0.093	V0	0.002	V1
Acridine	0.019	0.027	V0	0.021	V0	0.002	V1
Fluoranthene	0.007	0.111	V0	0.166	V0	0.003	V1
Pyrene	0.008	0.141	V0	0.180	V0	0.003	V1
Benzo(c)phenanthrene	0.015	0.023	V0	0.028	V0	<0.001	V1
Benz(a)anthracene	0.014	0.048	V0	0.036	V0	<0.001	V1
Chrysene	0.013	0.043	V0	0.047	V0	<0.001	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.042	V0	0.056	V0	<0.001	V1
Benzo(b)fluoranthene	0.020	0.039	V0	0.035	V0	0.001	V1
Benzo(k)fluoranthene	0.013	0.045	V0	0.040	V0	0.001	V1
Benzo(a)pyrene	0.016	0.023	V0	0.019	V0	<0.001	V1
3-Methylcholanthrene	0.022	0.008	V1	0.009	V1	<0.001	V1
Indeno(123-cd)pyrene	0.017	0.013	V1	0.013	V1	0.001	V1
Dibenz(a,h)anthracene	0.020	0.026	V0	0.073	V0	0.001	V1
Benzo(ghi)perylene	0.020	0.018	V1	0.024	V0	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.005	V1	0.009	V1	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.004	V1	0.007	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.005	V1	0.006	V1	0.003	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		31-Jan		31-Jan		31-Jan	
Total Air Volume (m^3)		315.98		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	4.052	V0	3.941	V0	0.051	V0
Acenaphthylene	0.011	0.187	V0	0.170	V0	0.006	V1
Acenaphthene	0.006	0.177	V0	0.063	V0	0.013	V0
Fluorene	0.007	0.433	V0	0.326	V0	0.009	V0
Phenanthrene	0.007	0.592	V0	0.252	V0	0.006	V1
Anthracene	0.017	0.051	V0	0.020	V0	0.002	V1
Acridine	0.019	0.028	V0	0.033	V0	0.002	V1
Fluoranthene	0.007	0.107	V0	0.080	V0	0.003	V1
Pyrene	0.008	0.104	V0	0.068	V0	0.003	V1
Benzo(c)phenanthrene	0.015	0.013	V1	0.009	V1	<0.001	V1
Benz(a)anthracene	0.014	0.020	V0	0.006	V1	<0.001	V1
Chrysene	0.013	0.033	V0	0.015	V0	<0.001	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.040	V0	0.013	V0	<0.001	V1
Benzo(b)fluoranthene	0.020	0.023	V0	0.009	V1	0.001	V1
Benzo(k)fluoranthene	0.013	0.026	V0	0.011	V1	0.001	V1
Benzo(a)pyrene	0.016	0.013	V1	0.006	V1	<0.001	V1
3-Methylcholanthrene	0.022	0.013	V1	0.005	V1	<0.001	V1
Indeno(123-cd)pyrene	0.017	0.009	V1	0.004	V1	0.001	V1
Dibenz(a,h)anthracene	0.020	0.111	V0	0.031	V0	0.001	V1
Benzo(ghi)perylene	0.020	0.012	V1	0.011	V1	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.006	V1	0.010	V1	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.004	V1	0.006	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.004	V1	0.006	V1	0.003	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		06-Feb		06-Feb		06-Feb	
Total Air Volume (m^3)		315.99		323.23		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	32.880	V0	20.080	V0	0.064	V0
Acenaphthylene	0.011	0.921	V0	0.802	V0	0.013	V0
Acenaphthene	0.006	0.698	V0	0.258	V0	0.015	V0
Fluorene	0.007	1.665	V0	1.158	V0	0.012	V0
Phenanthrene	0.007	2.941	V0	2.559	V0	0.011	V0
Anthracene	0.017	0.383	V0	0.261	V0	0.004	V1
Acridine	0.019	0.064	V0	0.027	V0	0.001	V1
Fluoranthene	0.007	0.302	V0	0.569	V0	0.003	V1
Pyrene	0.008	0.318	V0	0.345	V0	0.003	V1
Benzo(c)phenanthrene	0.015	0.034	V0	0.061	V0	0.001	V1
Benz(a)anthracene	0.014	0.097	V0	0.055	V0	0.002	V1
Chrysene	0.013	0.190	V0	0.126	V0	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.021	V0	0.021	V0	0.006	V1
Benzo(b)fluoranthene	0.020	0.039	V0	0.033	V0	0.004	V1
Benzo(k)fluoranthene	0.013	0.032	V0	0.035	V0	0.005	V1
Benzo(a)pyrene	0.016	0.045	V0	0.027	V0	0.001	V1
3-Methylcholanthrene	0.022	0.009	V1	0.003	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.037	V0	0.042	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.037	V0	0.019	V1	0.002	V1
Benzo(ghi)perylene	0.020	0.047	V0	0.041	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.019	V1	0.009	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.019	V1	0.006	V1	0.001	V1
Dibenzo(a,h)pyrene	0.020	0.022	V0	0.010	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		06-Feb		06-Feb		06-Feb	
Total Air Volume (m^3)		315.99		315.97		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	31.661	V0	28.206	V0	0.064	V0
Acenaphthylene	0.011	0.221	V0	0.433	V0	0.013	V0
Acenaphthene	0.006	0.513	V0	0.288	V0	0.015	V0
Fluorene	0.007	0.816	V0	1.371	V0	0.012	V0
Phenanthrene	0.007	1.575	V0	1.751	V0	0.011	V0
Anthracene	0.017	0.140	V0	0.145	V0	0.004	V1
Acridine	0.019	0.023	V0	0.017	V1	0.001	V1
Fluoranthene	0.007	0.321	V0	0.291	V0	0.003	V1
Pyrene	0.008	0.262	V0	0.176	V0	0.003	V1
Benzo(c)phenanthrene	0.015	0.022	V0	0.014	V1	0.001	V1
Benz(a)anthracene	0.014	0.010	V1	0.007	V1	0.002	V1
Chrysene	0.013	0.062	V0	0.046	V0	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.011	V1	0.011	V1	0.006	V1
Benzo(b)fluoranthene	0.020	0.018	V1	0.011	V1	0.004	V1
Benzo(k)fluoranthene	0.013	0.012	V1	0.006	V1	0.005	V1
Benzo(a)pyrene	0.016	0.021	V0	0.016	V0	0.001	V1
3-Methylcholanthrene	0.022	0.011	V1	0.006	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.017	V1	0.007	V1	0.002	V1
Dibenz(a,h)anthracene	0.020	0.004	V1	0.003	V1	0.002	V1
Benzo(ghi)perylene	0.020	0.019	V1	0.009	V1	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.004	V1	0.004	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.010	V1	0.013	V1	0.001	V1
Dibenzo(a,h)pyrene	0.020	0.013	V1	0.008	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		12-Feb		12-Feb		12-Feb	
Total Air Volume (m^3)		316		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	24.395	V0	22.342	V0	0.056	V0
Acenaphthylene	0.011	0.854	V0	0.468	V0	0.016	V0
Acenaphthene	0.006	0.536	V0	0.354	V0	0.021	V0
Fluorene	0.007	0.719	V0	0.774	V0	0.012	V0
Phenanthrene	0.007	0.205	V0	1.458	V0	0.016	V0
Anthracene	0.017	0.034	V0	0.115	V0	0.007	V1
Acridine	0.019	0.030	V0	0.009	V1	0.005	V1
Fluoranthene	0.007	0.351	V0	0.395	V0	0.006	V1
Pyrene	0.008	0.302	V0	0.296	V0	0.006	V1
Benzo(c)phenanthrene	0.015	0.039	V0	0.021	V0	0.003	V1
Benz(a)anthracene	0.014	0.090	V0	0.024	V0	0.002	V1
Chrysene	0.013	0.240	V0	0.103	V0	0.004	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.020	V0	0.034	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.031	V0	0.043	V0	0.003	V1
Benzo(k)fluoranthene	0.013	0.020	V0	0.048	V0	0.003	V1
Benzo(a)pyrene	0.016	0.042	V0	0.015	V1	0.001	V1
3-Methylcholanthrene	0.022	0.007	V1	0.007	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.028	V0	0.025	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.018	V1	0.003	V1	0.003	V1
Benzo(ghi)perylene	0.020	0.046	V0	0.027	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.010	V1	0.008	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.024	V1	0.009	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.016	V1	0.012	V1	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		12-Feb		12-Feb		12-Feb	
Total Air Volume (m^3)		316		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	39.257	V0	4.786	V0	0.056	V0
Acenaphthylene	0.011	0.590	V0	0.058	V0	0.016	V0
Acenaphthene	0.006	0.555	V0	0.087	V0	0.021	V0
Fluorene	0.007	0.575	V0	0.110	V0	0.012	V0
Phenanthrene	0.007	1.078	V0	0.256	V0	0.016	V0
Anthracene	0.017	0.098	V0	0.033	V0	0.007	V1
Acridine	0.019	0.003	V1	0.002	V1	0.005	V1
Fluoranthene	0.007	0.335	V0	0.036	V0	0.006	V1
Pyrene	0.008	0.263	V0	0.027	V0	0.006	V1
Benzo(c)phenanthrene	0.015	0.030	V0	0.005	V1	0.003	V1
Benz(a)anthracene	0.014	0.018	V0	0.014	V1	0.002	V1
Chrysene	0.013	0.073	V0	0.016	V0	0.004	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.024	V0	0.010	V1	0.004	V1
Benzo(b)fluoranthene	0.020	0.032	V0	0.005	V1	0.003	V1
Benzo(k)fluoranthene	0.013	0.019	V0	0.006	V1	0.003	V1
Benzo(a)pyrene	0.016	0.016	V0	0.012	V1	0.001	V1
3-Methylcholanthrene	0.022	0.007	V1	0.005	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.021	V0	0.004	V1	0.003	V1
Dibenz(a,h)anthracene	0.020	0.003	V1	0.003	V1	0.003	V1
Benzo(ghi)perylene	0.020	0.029	V0	0.004	V1	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.009	V1	0.017	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.009	V1	0.030	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.010	V1	0.016	V1	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		18-Feb		18-Feb		18-Feb	
Total Air Volume (m^3)		315.99		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	28.163	V0	48.168	V0	0.097	V0
Acenaphthylene	0.011	0.548	V0	0.479	V0	0.019	V0
Acenaphthene	0.006	0.503	V0	0.455	V0	0.015	V0
Fluorene	0.007	0.732	V0	0.914	V0	0.019	V0
Phenanthrene	0.007	1.539	V0	1.456	V0	0.010	V0
Anthracene	0.017	0.170	V0	0.144	V0	0.006	V1
Acridine	0.019	0.022	V0	0.015	V1	0.015	V1
Fluoranthene	0.007	0.308	V0	0.301	V0	0.006	V1
Pyrene	0.008	0.256	V0	0.247	V0	0.006	V1
Benzo(c)phenanthrene	0.015	0.033	V0	0.017	V0	0.002	V1
Benz(a)anthracene	0.014	0.032	V0	0.025	V0	0.001	V1
Chrysene	0.013	0.069	V0	0.048	V0	0.001	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.007	V1	0.017	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.024	V0	0.019	V1	<0.001	V1
Benzo(k)fluoranthene	0.013	0.027	V0	0.012	V1	<0.001	V1
Benzo(a)pyrene	0.016	0.014	V1	0.017	V0	<0.001	V1
3-Methylcholanthrene	0.022	0.005	V1	0.005	V1	0.006	V1
Indeno(123-cd)pyrene	0.017	0.023	V0	0.019	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.004	V1	0.004	V1	0.003	V1
Benzo(ghi)perylene	0.020	0.032	V0	0.033	V0	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.024	V1	0.011	V1	0.004	V1
Dibenzo(a,i)pyrene	0.025	0.008	V1	0.010	V1	0.001	V1
Dibenzo(a,h)pyrene	0.020	0.011	V1	0.020	V1	0.002	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		18-Feb		18-Feb		18-Feb	
Total Air Volume (m^3)		315.99		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	9.663	V0	4.883	V0	0.097	V0
Acenaphthylene	0.011	0.624	V0	0.266	V0	0.019	V0
Acenaphthene	0.006	0.693	V0	0.074	V0	0.015	V0
Fluorene	0.007	0.898	V0	0.451	V0	0.019	V0
Phenanthrene	0.007	0.980	V0	0.429	V0	0.010	V0
Anthracene	0.017	0.131	V0	0.036	V0	0.006	V1
Acridine	0.019	0.028	V0	0.010	V1	0.015	V1
Fluoranthene	0.007	0.104	V0	0.069	V0	0.006	V1
Pyrene	0.008	0.113	V0	0.040	V0	0.006	V1
Benzo(c)phenanthrene	0.015	0.007	V1	0.005	V1	0.002	V1
Benz(a)anthracene	0.014	0.016	V0	0.010	V1	0.001	V1
Chrysene	0.013	0.044	V0	0.018	V0	0.001	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.009	V1	0.028	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.002	V1	0.005	V1	<0.001	V1
Benzo(k)fluoranthene	0.013	0.005	V1	0.006	V1	<0.001	V1
Benzo(a)pyrene	0.016	0.017	V0	0.010	V1	<0.001	V1
3-Methylcholanthrene	0.022	0.007	V1	0.005	V1	0.006	V1
Indeno(123-cd)pyrene	0.017	0.005	V1	0.013	V1	0.003	V1
Dibenz(a,h)anthracene	0.020	0.006	V1	0.028	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.006	V1	0.009	V1	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.017	V1	0.007	V1	0.004	V1
Dibenzo(a,i)pyrene	0.025	0.008	V1	0.008	V1	0.001	V1
Dibenzo(a,h)pyrene	0.020	0.010	V1	0.011	V1	0.002	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station Number		**AMS 1**		**AMS 6**			
Sample Date		**24-Feb**		**24-Feb**		**24-Feb**	
Total Air Volume (m^3)		**316**		**315.98**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	60.841	V0	21.340	V0	0.074	V0
Acenaphthylene	0.011	0.780	V0	0.682	V0	0.019	V0
Acenaphthene	0.006	1.785	V0	0.199	V0	0.013	V0
Fluorene	0.007	1.663	V0	0.748	V0	0.018	V0
Phenanthrene	0.007	2.504	V0	1.284	V0	0.009	V0
Anthracene	0.017	0.219	V0	0.108	V0	0.003	V1
Acridine	0.019	0.072	V0	0.014	V1	0.002	V1
Fluoranthene	0.007	0.200	V0	0.305	V0	0.005	V1
Pyrene	0.008	0.185	V0	0.251	V0	0.002	V1
Benzo(c)phenanthrene	0.015	0.023	V0	0.028	V0	<0.001	V1
Benz(a)anthracene	0.014	0.084	V0	0.019	V0	0.002	V1
Chrysene	0.013	0.100	V0	0.041	V0	0.001	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.037	V0	0.009	V1	0.002	V1
Benzo(b)fluoranthene	0.020	0.029	V0	0.019	V1	<0.001	V1
Benzo(k)fluoranthene	0.013	0.019	V0	0.015	V0	<0.001	V1
Benzo(a)pyrene	0.016	0.043	V0	0.019	V0	<0.001	V1
3-Methylcholanthrene	0.022	0.005	V1	0.004	V1	0.005	V1
Indeno(123-cd)pyrene	0.017	0.025	V0	0.019	V0	0.001	V1
Dibenz(a,h)anthracene	0.020	0.013	V1	0.004	V1	0.002	V1
Benzo(ghi)perylene	0.020	0.047	V0	0.021	V0	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.056	V0	0.016	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.035	V0	0.008	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.033	V0	0.012	V1	0.001	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station Number		**AMS 7**		**AMS 14**			
Sample Date		**24-Feb**		**24-Feb**		**24-Feb**	
Total Air Volume (m^3)		**316**		**315.98**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	79.922	V0	6.847	V0	0.074	V0
Acenaphthylene	0.011	2.083	V0	0.122	V0	0.019	V0
Acenaphthene	0.006	0.640	V0	0.053	V0	0.013	V0
Fluorene	0.007	1.808	V0	0.247	V0	0.018	V0
Phenanthrene	0.007	3.055	V0	0.449	V0	0.009	V0
Anthracene	0.017	0.250	V0	0.040	V0	0.003	V1
Acridine	0.019	0.042	V0	0.019	V0	0.002	V1
Fluoranthene	0.007	0.685	V0	0.085	V0	0.005	V1
Pyrene	0.008	0.649	V0	0.056	V0	0.002	V1
Benzo(c)phenanthrene	0.015	0.071	V0	0.003	V1	<0.001	V1
Benz(a)anthracene	0.014	0.132	V0	0.013	V1	0.002	V1
Chrysene	0.013	0.217	V0	0.010	V1	0.001	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.057	V0	0.008	V1	0.002	V1
Benzo(b)fluoranthene	0.020	0.081	V0	0.003	V1	<0.001	V1
Benzo(k)fluoranthene	0.013	0.087	V0	0.004	V1	<0.001	V1
Benzo(a)pyrene	0.016	0.067	V0	0.011	V1	<0.001	V1
3-Methylcholanthrene	0.022	0.009	V1	0.005	V1	0.005	V1
Indeno(123-cd)pyrene	0.017	0.043	V0	0.003	V1	0.001	V1
Dibenz(a,h)anthracene	0.020	0.020	V0	0.012	V1	0.002	V1
Benzo(ghi)perylene	0.020	0.042	V0	0.005	V1	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.014	V1	0.010	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.012	V1	0.007	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.008	V1	0.008	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		01-Mar		01-Mar		01-Mar	
Total Air Volume (m^3)		303.16		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	32.892	V0	1.158	V0	0.067	V0
Acenaphthylene	0.011	0.492	V0	0.085	V0	0.015	V0
Acenaphthene	0.006	0.910	V0	0.097	V0	0.019	V0
Fluorene	0.007	1.063	V0	0.056	V0	0.008	V0
Phenanthrene	0.007	1.310	V0	0.125	V0	0.006	V1
Anthracene	0.017	0.101	V0	0.019	V0	0.004	V1
Acridine	0.019	0.029	V0	0.016	V1	0.005	V1
Fluoranthene	0.007	0.076	V0	0.037	V0	0.005	V1
Pyrene	0.008	0.058	V0	0.038	V0	0.003	V1
Benzo(c)phenanthrene	0.015	0.009	V1	0.008	V1	0.004	V1
Benz(a)anthracene	0.014	0.014	V0	0.023	V0	0.004	V1
Chrysene	0.013	0.017	V0	0.021	V0	0.002	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.006	V1	0.035	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.007	V1	0.007	V1	0.002	V1
Benzo(k)fluoranthene	0.013	0.008	V1	0.008	V1	0.003	V1
Benzo(a)pyrene	0.016	0.014	V1	0.010	V1	<0.001	V1
3-Methylcholanthrene	0.022	0.004	V1	0.004	V1	<0.001	V1
Indeno(123-cd)pyrene	0.017	0.005	V1	0.005	V1	0.001	V1
Dibenz(a,h)anthracene	0.020	0.011	V1	0.013	V1	0.001	V1
Benzo(ghi)perylene	0.020	0.005	V1	0.008	V1	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.012	V1	0.013	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.017	V1	0.020	V1	0.001	V1
Dibenzo(a,h)pyrene	0.020	0.023	V0	0.013	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		01-Mar		01-Mar		01-Mar	
Total Air Volume (m^3)		315.98		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	37.299	V0	4.867	V0	0.067	V0
Acenaphthylene	0.011	1.119	V0	0.272	V0	0.015	V0
Acenaphthene	0.006	0.102	V0	0.075	V0	0.019	V0
Fluorene	0.007	1.210	V0	0.348	V0	0.008	V0
Phenanthrene	0.007	2.617	V0	0.406	V0	0.006	V1
Anthracene	0.017	0.161	V0	0.041	V0	0.004	V1
Acridine	0.019	0.023	V0	0.064	V0	0.005	V1
Fluoranthene	0.007	0.558	V0	0.062	V0	0.005	V1
Pyrene	0.008	0.489	V0	0.046	V0	0.003	V1
Benzo(c)phenanthrene	0.015	0.039	V0	0.012	V1	0.004	V1
Benz(a)anthracene	0.014	0.041	V0	0.017	V0	0.004	V1
Chrysene	0.013	0.121	V0	0.014	V0	0.002	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.038	V0	0.016	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.034	V0	0.007	V1	0.002	V1
Benzo(k)fluoranthene	0.013	0.028	V0	0.011	V1	0.003	V1
Benzo(a)pyrene	0.016	0.018	V0	0.011	V1	<0.001	V1
3-Methylcholanthrene	0.022	0.005	V1	0.016	V1	<0.001	V1
Indeno(123-cd)pyrene	0.017	0.034	V0	0.016	V1	0.001	V1
Dibenz(a,h)anthracene	0.020	0.011	V1	0.010	V1	0.001	V1
Benzo(ghi)perylene	0.020	0.026	V0	0.007	V1	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.012	V1	0.022	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.006	V1	0.018	V1	0.001	V1
Dibenzo(a,h)pyrene	0.020	0.012	V1	0.021	V0	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		07-Mar		07-Mar		07-Mar	
Total Air Volume (m^3)		315.99		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	4.044	V0	7.543	V0	0.041	V0
Acenaphthylene	0.011	0.282	V0	0.134	V0	0.019	V0
Acenaphthene	0.006	0.501	V0	0.865	V0	0.022	V0
Fluorene	0.007	0.613	V0	1.010	V0	0.012	V0
Phenanthrene	0.007	1.655	V0	1.620	V0	0.016	V0
Anthracene	0.017	0.135	V0	0.117	V0	0.003	V1
Acridine	0.019	0.053	V0	0.038	V0	0.002	V1
Fluoranthene	0.007	0.267	V0	0.174	V0	0.004	V1
Pyrene	0.008	0.318	V0	0.128	V0	0.006	V1
Benzo(c)phenanthrene	0.015	0.021	V0	0.015	V0	0.001	V1
Benz(a)anthracene	0.014	0.022	V0	0.006	V1	0.002	V1
Chrysene	0.013	0.062	V0	0.027	V0	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.038	V0	0.031	V0	0.001	V1
Benzo(b)fluoranthene	0.020	0.037	V0	0.016	V1	0.002	V1
Benzo(k)fluoranthene	0.013	0.042	V0	0.024	V0	0.002	V1
Benzo(a)pyrene	0.016	0.017	V0	0.012	V1	0.002	V1
3-Methylcholanthrene	0.022	0.004	V1	0.005	V1	<0.001	V1
Indeno(123-cd)pyrene	0.017	0.013	V1	0.008	V1	0.001	V1
Dibenz(a,h)anthracene	0.020	0.009	V1	0.007	V1	0.001	V1
Benzo(ghi)perylene	0.020	0.024	V0	0.020	V0	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.005	V1	0.009	V1	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.012	V1	0.011	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.010	V1	0.043	V0	<0.001	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station Number		**AMS 7**		**AMS 14**			
Sample Date		**07-Mar**		**07-Mar**		**07-Mar**	
Total Air Volume (m^3)		**315.99**		**315.98**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	9.557	V0	1.963	V0	0.041	V0
Acenaphthylene	0.011	0.552	V0	0.125	V0	0.019	V0
Acenaphthene	0.006	0.406	V0	0.099	V0	0.022	V0
Fluorene	0.007	0.622	V0	0.219	V0	0.012	V0
Phenanthrene	0.007	0.639	V0	0.392	V0	0.016	V0
Anthracene	0.017	0.065	V0	0.031	V0	0.003	V1
Acridine	0.019	0.042	V0	0.052	V0	0.002	V1
Fluoranthene	0.007	0.127	V0	0.041	V0	0.004	V1
Pyrene	0.008	0.134	V0	0.055	V0	0.006	V1
Benzo(c)phenanthrene	0.015	0.015	V0	0.005	V1	0.001	V1
Benz(a)anthracene	0.014	0.018	V0	0.006	V1	0.002	V1
Chrysene	0.013	0.034	V0	0.015	V0	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.023	V0	0.027	V0	0.001	V1
Benzo(b)fluoranthene	0.020	0.018	V1	0.005	V1	0.002	V1
Benzo(k)fluoranthene	0.013	0.020	V0	0.006	V1	0.002	V1
Benzo(a)pyrene	0.016	0.010	V1	0.010	V1	0.002	V1
3-Methylcholanthrene	0.022	0.006	V1	0.007	V1	<0.001	V1
Indeno(123-cd)pyrene	0.017	0.019	V0	0.010	V1	0.001	V1
Dibenz(a,h)anthracene	0.020	0.020	V0	0.010	V1	0.001	V1
Benzo(ghi)perylene	0.020	0.011	V1	0.009	V1	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.011	V1	0.008	V1	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.012	V1	0.007	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.006	V1	0.010	V1	<0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		13-Mar		13-Mar		13-Mar	
Total Air Volume (m^3)		315.99		315.98			
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	3.984	V0	12.526	V0	-9999	M1
Acenaphthylene	0.011	0.195	V0	0.466	V0	-9999	M1
Acenaphthene	0.006	0.221	V0	1.021	V0	-9999	M1
Fluorene	0.007	0.752	V0	1.049	V0	-9999	M1
Phenanthrene	0.007	1.589	V0	1.942	V0	-9999	M1
Anthracene	0.017	0.092	V0	0.200	V0	-9999	M1
Acridine	0.019	0.027	V0	0.046	V0	-9999	M1
Fluoranthene	0.007	0.091	V0	0.231	V0	-9999	M1
Pyrene	0.008	0.078	V0	0.187	V0	-9999	M1
Benzo(c)phenanthrene	0.015	0.003	V1	0.014	V1	-9999	M1
Benz(a)anthracene	0.014	0.007	V1	0.009	V1	-9999	M1
Chrysene	0.013	0.032	V0	0.043	V0	-9999	M1
7,12-Dimethylbenz(a)anthracene	0.013	0.015	V0	0.020	V0	-9999	M1
Benzo(b)fluoranthene	0.020	0.013	V1	0.010	V1	-9999	M1
Benzo(k)fluoranthene	0.013	0.015	V0	0.011	V1	-9999	M1
Benzo(a)pyrene	0.016	0.014	V1	0.009	V1	-9999	M1
3-Methylcholanthrene	0.022	0.009	V1	0.010	V1	-9999	M1
Indeno(123-cd)pyrene	0.017	0.011	V1	0.009	V1	-9999	M1
Dibenz(a,h)anthracene	0.020	0.035	V0	0.017	V1	-9999	M1
Benzo(ghi)perylene	0.020	0.010	V1	0.007	V1	-9999	M1
Dibenzo(a,l)pyrene	0.024	0.012	V1	0.007	V1	-9999	M1
Dibenzo(a,i)pyrene	0.025	0.010	V1	0.006	V1	-9999	M1
Dibenzo(a,h)pyrene	0.020	0.006	V1	0.006	V1	-9999	M1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		13-Mar		13-Mar		13-Mar	
Total Air Volume (m^3)		315.99		315.98			
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	11.210	V0	7.468	V0	-9999	M1
Acenaphthylene	0.011	0.584	V0	0.248	V0	-9999	M1
Acenaphthene	0.006	0.595	V0	0.741	V0	-9999	M1
Fluorene	0.007	1.021	V0	0.821	V0	-9999	M1
Phenanthrene	0.007	2.141	V0	1.160	V0	-9999	M1
Anthracene	0.017	0.251	V0	0.082	V0	-9999	M1
Acridine	0.019	0.027	V0	0.009	V1	-9999	M1
Fluoranthene	0.007	0.220	V0	0.133	V0	-9999	M1
Pyrene	0.008	0.202	V0	0.075	V0	-9999	M1
Benzo(c)phenanthrene	0.015	0.007	V1	0.019	V0	-9999	M1
Benz(a)anthracene	0.014	0.008	V1	0.004	V1	-9999	M1
Chrysene	0.013	0.034	V0	0.032	V0	-9999	M1
7,12-Dimethylbenz(a)anthracene	0.013	0.021	V0	0.050	V0	-9999	M1
Benzo(b)fluoranthene	0.020	0.018	V1	0.015	V1	-9999	M1
Benzo(k)fluoranthene	0.013	0.020	V0	0.017	V0	-9999	M1
Benzo(a)pyrene	0.016	0.008	V1	0.009	V1	-9999	M1
3-Methylcholanthrene	0.022	0.019	V1	0.005	V1	-9999	M1
Indeno(123-cd)pyrene	0.017	0.009	V1	0.006	V1	-9999	M1
Dibenz(a,h)anthracene	0.020	0.008	V1	0.013	V1	-9999	M1
Benzo(ghi)perylene	0.020	0.007	V1	0.008	V1	-9999	M1
Dibenzo(a,l)pyrene	0.024	0.004	V1	0.003	V1	-9999	M1
Dibenzo(a,i)pyrene	0.025	0.006	V1	0.011	V1	-9999	M1
Dibenzo(a,h)pyrene	0.020	0.006	V1	0.004	V1	-9999	M1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station Number		**AMS 1**		**AMS 6**			
Sample Date		**19-Mar**		**19-Mar**		**19-Mar**	
Total Air Volume (m^3)		**315.99**		**315.98**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	3.704	V0	17.377	V0	0.055	V0
Acenaphthylene	0.011	0.193	V0	0.659	V0	0.018	V0
Acenaphthene	0.006	0.684	V0	0.903	V0	0.024	V0
Fluorene	0.007	0.362	V0	1.149	V0	0.013	V0
Phenanthrene	0.007	0.710	V0	1.923	V0	0.024	V0
Anthracene	0.017	0.017	V1	0.166	V0	0.002	V1
Acridine	0.019	0.026	V0	0.026	V0	0.003	V1
Fluoranthene	0.007	0.047	V0	0.299	V0	0.008	V0
Pyrene	0.008	0.049	V0	0.281	V0	0.007	V1
Benzo(c)phenanthrene	0.015	0.017	V0	0.031	V0	0.001	V1
Benz(a)anthracene	0.014	0.008	V1	0.018	V0	0.003	V1
Chrysene	0.013	0.020	V0	0.085	V0	0.002	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.032	V0	0.094	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.021	V0	0.044	V0	0.002	V1
Benzo(k)fluoranthene	0.013	0.024	V0	0.050	V0	0.002	V1
Benzo(a)pyrene	0.016	0.012	V1	0.020	V0	0.002	V1
3-Methylcholanthrene	0.022	0.011	V1	0.037	V0	0.002	V1
Indeno(123-cd)pyrene	0.017	0.015	V1	0.016	V1	0.001	V1
Dibenz(a,h)anthracene	0.020	0.008	V1	0.020	V1	<0.001	V1
Benzo(ghi)perylene	0.020	0.016	V1	0.024	V0	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.012	V1	0.049	V0	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.014	V1	0.006	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.017	V1	0.015	V1	<0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		19-Mar		19-Mar		19-Mar	
Total Air Volume (m^3)		315.99		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	20.886	V0	4.025	V0	0.055	V0
Acenaphthylene	0.011	1.251	V0	0.220	V0	0.018	V0
Acenaphthene	0.006	0.511	V0	0.273	V0	0.024	V0
Fluorene	0.007	1.498	V0	0.234	V0	0.013	V0
Phenanthrene	0.007	2.326	V0	0.362	V0	0.024	V0
Anthracene	0.017	0.296	V0	0.046	V0	0.002	V1
Acridine	0.019	0.031	V0	0.042	V0	0.003	V1
Fluoranthene	0.007	0.336	V0	0.070	V0	0.008	V0
Pyrene	0.008	0.311	V0	0.057	V0	0.007	V1
Benzo(c)phenanthrene	0.015	0.050	V0	0.011	V1	0.001	V1
Benz(a)anthracene	0.014	0.039	V0	0.029	V0	0.003	V1
Chrysene	0.013	0.141	V0	0.025	V0	0.002	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.179	V0	0.130	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.079	V0	0.012	V1	0.002	V1
Benzo(k)fluoranthene	0.013	0.089	V0	0.014	V0	0.002	V1
Benzo(a)pyrene	0.016	0.025	V0	0.012	V1	0.002	V1
3-Methylcholanthrene	0.022	0.043	V0	0.030	V0	0.002	V1
Indeno(123-cd)pyrene	0.017	0.045	V0	0.011	V1	0.001	V1
Dibenz(a,h)anthracene	0.020	0.042	V0	0.012	V1	<0.001	V1
Benzo(ghi)perylene	0.020	0.044	V0	0.022	V0	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.055	V0	0.037	V0	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.036	V0	0.013	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.035	V0	0.016	V1	<0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		25-Mar		25-Mar		25-Mar	
Total Air Volume (m^3)		315.98		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	13.378	V0	18.836	V0	0.068	V0
Acenaphthylene	0.011	0.731	V0	1.456	V0	0.011	V0
Acenaphthene	0.006	1.058	V0	0.438	V0	0.029	V0
Fluorene	0.007	1.057	V0	0.877	V0	0.015	V0
Phenanthrene	0.007	2.297	V0	2.431	V0	0.022	V0
Anthracene	0.017	0.208	V0	0.273	V0	0.003	V1
Acridine	0.019	0.059	V0	0.027	V0	0.004	V1
Fluoranthene	0.007	0.205	V0	0.478	V0	0.010	V0
Pyrene	0.008	0.364	V0	0.363	V0	0.005	V1
Benzo(c)phenanthrene	0.015	0.013	V1	0.043	V0	0.002	V1
Benz(a)anthracene	0.014	0.048	V0	0.048	V0	0.002	V1
Chrysene	0.013	0.180	V0	0.170	V0	0.002	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.089	V0	0.098	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.032	V0	0.059	V0	0.002	V1
Benzo(k)fluoranthene	0.013	0.036	V0	0.052	V0	0.002	V1
Benzo(a)pyrene	0.016	0.038	V0	0.034	V0	0.003	V1
3-Methylcholanthrene	0.022	0.020	V1	0.005	V1	<0.001	V1
Indeno(123-cd)pyrene	0.017	0.026	V0	0.027	V0	0.001	V1
Dibenz(a,h)anthracene	0.020	0.029	V0	0.016	V1	0.002	V1
Benzo(ghi)perylene	0.020	0.023	V0	0.063	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.047	V0	0.014	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.059	V0	0.012	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.021	V0	0.004	V1	<0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		25-Mar		25-Mar		25-Mar	
Total Air Volume (m^3)		315.99		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	19.146	V0	4.866	V0	0.068	V0
Acenaphthylene	0.011	0.823	V0	0.162	V0	0.011	V0
Acenaphthene	0.006	0.258	V0	0.733	V0	0.029	V0
Fluorene	0.007	0.586	V0	0.527	V0	0.015	V0
Phenanthrene	0.007	1.562	V0	0.414	V0	0.022	V0
Anthracene	0.017	0.135	V0	0.039	V0	0.003	V1
Acridine	0.019	0.038	V0	0.008	V1	0.004	V1
Fluoranthene	0.007	0.318	V0	0.071	V0	0.010	V0
Pyrene	0.008	0.298	V0	0.062	V0	0.005	V1
Benzo(c)phenanthrene	0.015	0.033	V0	0.031	V0	0.002	V1
Benz(a)anthracene	0.014	0.036	V0	0.010	V1	0.002	V1
Chrysene	0.013	0.110	V0	0.070	V0	0.002	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.048	V0	0.042	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.062	V0	0.008	V1	0.002	V1
Benzo(k)fluoranthene	0.013	0.070	V0	0.009	V1	0.002	V1
Benzo(a)pyrene	0.016	0.028	V0	0.011	V1	0.003	V1
3-Methylcholanthrene	0.022	0.020	V1	0.018	V1	<0.001	V1
Indeno(123-cd)pyrene	0.017	0.025	V0	0.057	V0	0.001	V1
Dibenz(a,h)anthracene	0.020	0.017	V1	0.033	V0	0.002	V1
Benzo(ghi)perylene	0.020	0.041	V0	0.006	V1	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.051	V0	0.075	V0	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.046	V0	0.064	V0	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.029	V0	0.027	V0	<0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		31-Mar		31-Mar		31-Mar	
Total Air Volume (m^3)		315.99		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	14.710	V0	13.927	V0	0.082	V0
Acenaphthylene	0.011	1.478	V0	1.277	V0	0.012	V0
Acenaphthene	0.006	1.671	V0	1.567	V0	0.024	V0
Fluorene	0.007	0.823	V0	1.625	V0	0.009	V0
Phenanthrene	0.007	1.871	V0	0.491	V0	0.015	V0
Anthracene	0.017	0.180	V0	0.045	V0	0.003	V1
Acridine	0.019	0.087	V0	0.052	V0	0.005	V1
Fluoranthene	0.007	0.184	V0	0.218	V0	0.006	V1
Pyrene	0.008	0.185	V0	0.200	V0	0.004	V1
Benzo(c)phenanthrene	0.015	0.037	V0	0.027	V0	0.002	V1
Benz(a)anthracene	0.014	0.070	V0	0.036	V0	0.003	V1
Chrysene	0.013	0.167	V0	0.118	V0	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.124	V0	0.068	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.070	V0	0.032	V0	0.002	V1
Benzo(k)fluoranthene	0.013	0.079	V0	0.036	V0	0.002	V1
Benzo(a)pyrene	0.016	0.049	V0	0.031	V0	0.002	V1
3-Methylcholanthrene	0.022	0.036	V0	0.012	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.024	V0	0.026	V0	<0.001	V1
Dibenz(a,h)anthracene	0.020	0.032	V0	0.019	V1	<0.001	V1
Benzo(ghi)perylene	0.020	0.040	V0	0.041	V0	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.044	V0	0.033	V0	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.018	V1	0.017	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.019	V1	0.013	V1	<0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		31-Mar		31-Mar		31-Mar	
Total Air Volume (m^3)		315.99		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	9.253	V0	2.527	V0	0.082	V0
Acenaphthylene	0.011	0.531	V0	0.226	V0	0.012	V0
Acenaphthene	0.006	0.872	V0	0.848	V0	0.024	V0
Fluorene	0.007	0.637	V0	0.591	V0	0.009	V0
Phenanthrene	0.007	0.500	V0	0.696	V0	0.015	V0
Anthracene	0.017	0.041	V0	0.110	V0	0.003	V1
Acridine	0.019	0.009	V1	0.030	V0	0.005	V1
Fluoranthene	0.007	0.169	V0	0.133	V0	0.006	V1
Pyrene	0.008	0.188	V0	0.163	V0	0.004	V1
Benzo(c)phenanthrene	0.015	0.010	V1	0.007	V1	0.002	V1
Benz(a)anthracene	0.014	0.022	V0	0.007	V1	0.003	V1
Chrysene	0.013	0.103	V0	0.045	V0	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.104	V0	0.028	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.043	V0	0.014	V1	0.002	V1
Benzo(k)fluoranthene	0.013	0.049	V0	0.016	V0	0.002	V1
Benzo(a)pyrene	0.016	0.031	V0	0.014	V1	0.002	V1
3-Methylcholanthrene	0.022	0.048	V0	0.014	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.034	V0	0.013	V1	<0.001	V1
Dibenz(a,h)anthracene	0.020	0.019	V1	0.036	V0	<0.001	V1
Benzo(ghi)perylene	0.020	0.048	V0	0.009	V1	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.010	V1	0.015	V1	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.018	V1	0.023	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.016	V1	0.018	V1	<0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		06-Apr		06-Apr		06-Apr	
Total Air Volume (m^3)		315.89		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	1.740	V0	2.774	V0	0.095	V0
Acenaphthylene	0.011	0.056	V0	0.068	V0	0.005	V1
Acenaphthene	0.006	0.272	V0	0.165	V0	0.005	V1
Fluorene	0.007	0.820	V0	0.485	V0	0.006	V1
Phenanthrene	0.007	2.793	V0	1.542	V0	0.016	V0
Anthracene	0.017	0.224	V0	0.094	V0	0.003	V1
Acridine	0.019	0.053	V0	0.011	V1	0.002	V1
Fluoranthene	0.007	0.205	V0	0.156	V0	0.009	V0
Pyrene	0.008	0.209	V0	0.105	V0	0.008	V0
Benzo(c)phenanthrene	0.015	0.012	V1	0.011	V1	0.001	V1
Benz(a)anthracene	0.014	0.010	V1	0.035	V0	0.002	V1
Chrysene	0.013	0.062	V0	0.041	V0	0.006	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.010	V1	0.011	V1	0.002	V1
Benzo(b)fluoranthene	0.020	0.024	V0	0.016	V1	0.004	V1
Benzo(k)fluoranthene	0.013	0.024	V0	0.015	V0	0.005	V1
Benzo(a)pyrene	0.016	0.014	V1	0.009	V1	0.002	V1
3-Methylcholanthrene	0.022	0.007	V1	0.007	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.025	V0	0.019	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.032	V0	0.020	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.011	V1	0.013	V1	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.006	V1	0.007	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.026	V0	0.025	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.016	V1	0.014	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		06-Apr		06-Apr		06-Apr	
Total Air Volume (m^3)		298.79		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	2.429	V0	1.090	V0	0.095	V0
Acenaphthylene	0.011	0.029	V0	0.013	V0	0.005	V1
Acenaphthene	0.006	0.183	V0	0.180	V0	0.005	V1
Fluorene	0.007	0.512	V0	0.523	V0	0.006	V1
Phenanthrene	0.007	1.595	V0	1.181	V0	0.016	V0
Anthracene	0.017	0.118	V0	0.088	V0	0.003	V1
Acridine	0.019	0.018	V1	0.008	V1	0.002	V1
Fluoranthene	0.007	0.182	V0	0.104	V0	0.009	V0
Pyrene	0.008	0.226	V0	0.054	V0	0.008	V0
Benzo(c)phenanthrene	0.015	0.008	V1	0.004	V1	0.001	V1
Benz(a)anthracene	0.014	0.011	V1	0.009	V1	0.002	V1
Chrysene	0.013	0.034	V0	0.021	V0	0.006	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.007	V1	0.008	V1	0.002	V1
Benzo(b)fluoranthene	0.020	0.013	V1	0.011	V1	0.004	V1
Benzo(k)fluoranthene	0.013	0.013	V1	0.010	V1	0.005	V1
Benzo(a)pyrene	0.016	0.007	V1	0.009	V1	0.002	V1
3-Methylcholanthrene	0.022	0.006	V1	0.005	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.010	V1	0.010	V1	0.003	V1
Dibenz(a,h)anthracene	0.020	0.013	V1	0.014	V1	0.003	V1
Benzo(ghi)perylene	0.020	0.009	V1	0.006	V1	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.005	V1	0.005	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.015	V1	0.016	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.008	V1	0.008	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		12-Apr		12-Apr		12-Apr	
Total Air Volume (m^3)		315.99		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	1.704	V0	11.327	V0	0.070	V0
Acenaphthylene	0.011	0.105	V0	0.158	V0	0.006	V1
Acenaphthene	0.006	0.393	V0	0.179	V0	0.009	V0
Fluorene	0.007	0.495	V0	0.787	V0	0.009	V0
Phenanthrene	0.007	3.414	V0	3.060	V0	0.017	V0
Anthracene	0.017	0.224	V0	0.241	V0	0.003	V1
Acridine	0.019	0.137	V0	0.039	V0	0.002	V1
Fluoranthene	0.007	0.094	V0	0.298	V0	0.007	V0
Pyrene	0.008	0.087	V0	0.262	V0	0.007	V1
Benzo(c)phenanthrene	0.015	0.014	V1	0.013	V1	0.002	V1
Benz(a)anthracene	0.014	0.026	V0	0.051	V0	0.003	V1
Chrysene	0.013	0.090	V0	0.143	V0	0.012	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.041	V0	0.027	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.036	V0	0.045	V0	0.006	V1
Benzo(k)fluoranthene	0.013	0.021	V0	0.025	V0	0.006	V1
Benzo(a)pyrene	0.016	0.007	V1	0.025	V0	0.003	V1
3-Methylcholanthrene	0.022	0.004	V1	0.010	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.011	V1	0.023	V0	0.001	V1
Dibenz(a,h)anthracene	0.020	0.010	V1	0.025	V0	0.001	V1
Benzo(ghi)perylene	0.020	0.011	V1	0.031	V0	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.006	V1	0.005	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.007	V1	0.011	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.007	V1	0.009	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		12-Apr		12-Apr		12-Apr	
Total Air Volume (m^3)		315.98		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	5.602	V0	7.287	V0	0.070	V0
Acenaphthylene	0.011	0.154	V0	0.078	V0	0.006	V1
Acenaphthene	0.006	0.209	V0	0.844	V0	0.009	V0
Fluorene	0.007	0.689	V0	2.433	V0	0.009	V0
Phenanthrene	0.007	2.407	V0	3.670	V0	0.017	V0
Anthracene	0.017	0.162	V0	0.205	V0	0.003	V1
Acridine	0.019	0.049	V0	0.008	V1	0.002	V1
Fluoranthene	0.007	0.279	V0	0.274	V0	0.007	V0
Pyrene	0.008	0.234	V0	0.092	V0	0.007	V1
Benzo(c)phenanthrene	0.015	0.018	V0	0.006	V1	0.002	V1
Benz(a)anthracene	0.014	0.043	V0	0.004	V1	0.003	V1
Chrysene	0.013	0.134	V0	0.036	V0	0.012	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.039	V0	0.015	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.063	V0	0.020	V0	0.006	V1
Benzo(k)fluoranthene	0.013	0.034	V0	0.013	V1	0.006	V1
Benzo(a)pyrene	0.016	0.027	V0	0.006	V1	0.003	V1
3-Methylcholanthrene	0.022	0.014	V1	0.006	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.031	V0	0.020	V0	0.001	V1
Dibenz(a,h)anthracene	0.020	0.032	V0	0.029	V0	0.001	V1
Benzo(ghi)perylene	0.020	0.036	V0	0.008	V1	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.006	V1	0.009	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.014	V1	0.008	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.009	V1	0.017	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station Number		**AMS 1**		**AMS 6**			
Sample Date		**18-Apr**		**18-Apr**		**18-Apr**	
Total Air Volume (m^3)		**315.98**		**315.97**		**315.99**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	10.562	V0	13.240	V0	0.072	V0
Acenaphthylene	0.011	0.561	V0	0.267	V0	0.007	V1
Acenaphthene	0.006	0.789	V0	0.198	V0	0.008	V0
Fluorene	0.007	4.012	V0	0.915	V0	0.009	V0
Phenanthrene	0.007	8.718	V0	2.825	V0	0.018	V0
Anthracene	0.017	0.925	V0	0.183	V0	0.004	V1
Acridine	0.019	0.289	V0	0.017	V1	0.004	V1
Fluoranthene	0.007	0.632	V0	0.545	V0	0.006	V1
Pyrene	0.008	0.603	V0	0.392	V0	0.004	V1
Benzo(c)phenanthrene	0.015	0.028	V0	0.014	V1	0.002	V1
Benz(a)anthracene	0.014	0.169	V0	0.059	V0	0.003	V1
Chrysene	0.013	0.416	V0	0.157	V0	0.007	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.054	V0	0.029	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.170	V0	0.128	V0	0.006	V1
Benzo(k)fluoranthene	0.013	0.101	V0	0.097	V0	0.007	V1
Benzo(a)pyrene	0.016	0.097	V0	0.051	V0	0.001	V1
3-Methylcholanthrene	0.022	0.005	V1	0.013	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.084	V0	0.063	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.062	V0	0.025	V0	0.002	V1
Benzo(ghi)perylene	0.020	0.091	V0	0.081	V0	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.012	V1	0.011	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.012	V1	0.010	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.004	V1	0.013	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station Number		**AMS 7**		**AMS 14**			
Sample Date		**18-Apr**		**18-Apr**		**18-Apr**	
Total Air Volume (m^3)		**315.99**		**315.98**		**315.99**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	5.196	V0	12.835	V0	0.072	V0
Acenaphthylene	0.011	0.164	V0	0.075	V0	0.007	V1
Acenaphthene	0.006	0.092	V0	2.210	V0	0.008	V0
Fluorene	0.007	0.485	V0	6.011	V0	0.009	V0
Phenanthrene	0.007	1.642	V0	6.514	V0	0.018	V0
Anthracene	0.017	0.147	V0	0.476	V0	0.004	V1
Acridine	0.019	0.034	V0	0.011	V1	0.004	V1
Fluoranthene	0.007	0.283	V0	0.330	V0	0.006	V1
Pyrene	0.008	0.229	V0	0.131	V0	0.004	V1
Benzo(c)phenanthrene	0.015	0.024	V0	0.018	V0	0.002	V1
Benz(a)anthracene	0.014	0.017	V0	0.015	V0	0.003	V1
Chrysene	0.013	0.097	V0	0.042	V0	0.007	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.049	V0	0.020	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.051	V0	0.019	V1	0.006	V1
Benzo(k)fluoranthene	0.013	0.048	V0	0.017	V0	0.007	V1
Benzo(a)pyrene	0.016	0.018	V0	0.006	V1	0.001	V1
3-Methylcholanthrene	0.022	0.007	V1	0.013	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.044	V0	0.014	V1	0.002	V1
Dibenz(a,h)anthracene	0.020	0.027	V0	0.036	V0	0.002	V1
Benzo(ghi)perylene	0.020	0.032	V0	0.012	V1	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.010	V1	0.006	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.010	V1	0.017	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.009	V1	0.013	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		24-Apr		24-Apr		24-Apr	
Total Air Volume (m^3)		315.98		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	3.161	V0	6.706	V0	0.089	V0
Acenaphthylene	0.011	0.475	V0	0.414	V0	0.011	V0
Acenaphthene	0.006	0.411	V0	0.085	V0	0.018	V0
Fluorene	0.007	0.738	V0	0.582	V0	0.010	V0
Phenanthrene	0.007	1.558	V0	1.618	V0	0.012	V0
Anthracene	0.017	0.088	V0	0.246	V0	0.002	V1
Acridine	0.019	0.056	V0	0.010	V1	0.006	V1
Fluoranthene	0.007	0.153	V0	0.405	V0	0.005	V1
Pyrene	0.008	0.103	V0	0.261	V0	0.007	V1
Benzo(c)phenanthrene	0.015	0.011	V1	0.016	V0	0.002	V1
Benz(a)anthracene	0.014	0.036	V0	0.033	V0	0.004	V1
Chrysene	0.013	0.101	V0	0.107	V0	0.006	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.051	V0	0.020	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.035	V0	0.079	V0	0.009	V1
Benzo(k)fluoranthene	0.013	0.031	V0	0.054	V0	0.007	V1
Benzo(a)pyrene	0.016	0.013	V1	0.030	V0	0.003	V1
3-Methylcholanthrene	0.022	0.008	V1	0.004	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.023	V0	0.036	V0	0.004	V1
Dibenz(a,h)anthracene	0.020	0.009	V1	0.030	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.014	V1	0.055	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.029	V0	0.008	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.026	V0	0.001	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.025	V0	0.020	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		24-Apr		24-Apr		24-Apr	
Total Air Volume (m^3)		315.99		315.97		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	5.539	V0	2.762	V0	0.089	V0
Acenaphthylene	0.011	0.231	V0	0.143	V0	0.011	V0
Acenaphthene	0.006	0.151	V0	0.779	V0	0.018	V0
Fluorene	0.007	0.408	V0	1.429	V0	0.010	V0
Phenanthrene	0.007	1.231	V0	1.719	V0	0.012	V0
Anthracene	0.017	0.127	V0	0.106	V0	0.002	V1
Acridine	0.019	0.022	V0	0.011	V1	0.006	V1
Fluoranthene	0.007	0.310	V0	0.197	V0	0.005	V1
Pyrene	0.008	0.256	V0	0.069	V0	0.007	V1
Benzo(c)phenanthrene	0.015	0.022	V0	0.002	V1	0.002	V1
Benz(a)anthracene	0.014	0.034	V0	0.001	V1	0.004	V1
Chrysene	0.013	0.135	V0	0.022	V0	0.006	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.062	V0	0.025	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.076	V0	0.023	V0	0.009	V1
Benzo(k)fluoranthene	0.013	0.070	V0	0.016	V0	0.007	V1
Benzo(a)pyrene	0.016	0.035	V0	0.008	V1	0.003	V1
3-Methylcholanthrene	0.022	0.024	V0	0.008	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.062	V0	0.015	V1	0.004	V1
Dibenz(a,h)anthracene	0.020	0.063	V0	0.031	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.068	V0	0.003	V1	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.021	V1	0.004	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.020	V1	0.004	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.009	V1	0.009	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station Number		**AMS 1**		**AMS 6**			
Sample Date		**30-Apr**		**30-Apr**		**30-Apr**	
Total Air Volume (m^3)		**315.98**		**315.97**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	2.893	V0	11.962	V0	0.096	V0
Acenaphthylene	0.011	1.066	V0	2.367	V0	0.013	V0
Acenaphthene	0.006	0.670	V0	0.093	V0	0.016	V0
Fluorene	0.007	1.262	V0	1.056	V0	0.012	V0
Phenanthrene	0.007	2.159	V0	2.720	V0	0.011	V0
Anthracene	0.017	0.174	V0	0.331	V0	0.005	V1
Acridine	0.019	0.043	V0	0.020	V0	0.005	V1
Fluoranthene	0.007	0.166	V0	0.669	V0	0.005	V1
Pyrene	0.008	0.181	V0	0.464	V0	0.008	V1
Benzo(c)phenanthrene	0.015	0.018	V0	0.024	V0	0.003	V1
Benz(a)anthracene	0.014	0.040	V0	0.075	V0	0.003	V1
Chrysene	0.013	0.124	V0	0.173	V0	0.006	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.032	V0	0.049	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.047	V0	0.110	V0	0.007	V1
Benzo(k)fluoranthene	0.013	0.021	V0	0.081	V0	0.007	V1
Benzo(a)pyrene	0.016	0.023	V0	0.075	V0	0.004	V1
3-Methylcholanthrene	0.022	0.004	V1	0.007	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.021	V0	0.063	V0	0.004	V1
Dibenz(a,h)anthracene	0.020	0.017	V1	0.045	V0	0.004	V1
Benzo(ghi)perylene	0.020	0.035	V0	0.076	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.010	V1	0.013	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.009	V1	0.012	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.008	V1	0.022	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		30-Apr		30-Apr		30-Apr	
Total Air Volume (m^3)		315.99		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	4.918	V0	33.054	V0	0.096	V0
Acenaphthylene	0.011	0.478	V0	0.644	V0	0.013	V0
Acenaphthene	0.006	0.238	V0	4.682	V0	0.016	V0
Fluorene	0.007	0.798	V0	5.860	V0	0.012	V0
Phenanthrene	0.007	1.858	V0	5.239	V0	0.011	V0
Anthracene	0.017	0.105	V0	0.266	V0	0.005	V1
Acridine	0.019	0.010	V1	0.011	V1	0.005	V1
Fluoranthene	0.007	0.364	V0	0.353	V0	0.005	V1
Pyrene	0.008	0.285	V0	0.172	V0	0.008	V1
Benzo(c)phenanthrene	0.015	0.021	V0	0.012	V1	0.003	V1
Benz(a)anthracene	0.014	0.028	V0	0.012	V1	0.003	V1
Chrysene	0.013	0.093	V0	0.061	V0	0.006	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.026	V0	0.023	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.065	V0	0.023	V0	0.007	V1
Benzo(k)fluoranthene	0.013	0.046	V0	0.026	V0	0.007	V1
Benzo(a)pyrene	0.016	0.026	V0	0.017	V0	0.004	V1
3-Methylcholanthrene	0.022	0.018	V1	0.015	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.032	V0	0.028	V0	0.004	V1
Dibenz(a,h)anthracene	0.020	0.015	V1	0.039	V0	0.004	V1
Benzo(ghi)perylene	0.020	0.044	V0	0.040	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.008	V1	0.020	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.014	V1	0.016	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.008	V1	0.023	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Patricia McInnes		Athabasca Valley		Travel Blank	
Station Number		AMS 6		AMS 7			
Sample Date		06-May		06-May		06-May	
Total Air Volume (m^3)		261.31		104.44		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	93.535	V0	1110.000	V6	0.082	V0
Acenaphthylene	0.011	79.223	V4	486.348	V6	0.012	V0
Acenaphthene	0.006	5.483	V0	84.251	V6	0.024	V0
Fluorene	0.007	16.302	V0	404.154	V6	0.009	V0
Phenanthrene	0.007	14.095	V0	435.179	V6	0.015	V0
Anthracene	0.017	2.137	V0	57.405	V6	0.003	V1
Acridine	0.019	0.281	V0	8.443	V6	0.005	V1
Fluoranthene	0.007	1.451	V0	81.782	V6	0.006	V1
Pyrene	0.008	1.232	V0	72.193	V6	0.004	V1
Benzo(c)phenanthrene	0.015	0.142	V0	7.322	V6	0.002	V1
Benz(a)anthracene	0.014	0.305	V0	25.926	V6	0.003	V1
Chrysene	0.013	0.756	V0	50.864	V6	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.217	V0	10.485	V6	0.003	V1
Benzo(b)fluoranthene	0.020	0.238	V0	14.998	V6	0.002	V1
Benzo(k)fluoranthene	0.013	0.182	V0	9.595	V6	0.002	V1
Benzo(a)pyrene	0.016	0.157	V4	9.360	V6	0.002	V1
3-Methylcholanthrene	0.022	0.029	V0	0.818	V6	0.002	V1
Indeno(123-cd)pyrene	0.017	0.117	V0	4.612	V6	<0.001	V1
Dibenz(a,h)anthracene	0.020	0.094	V0	2.976	V6	<0.001	V1
Benzo(ghi)perylene	0.020	0.113	V0	4.732	V6	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.042	V0	0.874	V6	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.053	V0	0.195	V6	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.044	V0	0.182	V6	<0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		12-May		12-May		12-May	
Total Air Volume (m^3)		315.99		315.89		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	1.392	V0	274.175	V4	0.092	V0
Acenaphthylene	0.011	0.041	V0	12.024	V0	0.017	V0
Acenaphthene	0.006	0.088	V0	0.878	V0	0.005	V1
Fluorene	0.007	0.227	V0	10.164	V0	0.035	V0
Phenanthrene	0.007	1.196	V0	23.261	V0	0.028	V0
Anthracene	0.017	0.054	V0	3.777	V4	0.011	V1
Acridine	0.019	0.028	V0	0.524	V0	0.003	V1
Fluoranthene	0.007	0.114	V0	1.833	V0	0.012	V0
Pyrene	0.008	0.060	V0	1.856	V0	0.012	V0
Benzo(c)phenanthrene	0.015	0.009	V1	0.214	V0	0.001	V1
Benz(a)anthracene	0.014	0.007	V1	0.934	V4	0.004	V1
Chrysene	0.013	0.048	V0	1.386	V4	0.013	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.015	V0	0.476	V4	0.008	V1
Benzo(b)fluoranthene	0.020	0.015	V1	0.336	V0	0.008	V1
Benzo(k)fluoranthene	0.013	0.011	V1	0.247	V0	0.003	V1
Benzo(a)pyrene	0.016	0.006	V1	0.238	V4	0.003	V1
3-Methylcholanthrene	0.022	0.002	V1	0.092	V0	0.002	V1
Indeno(123-cd)pyrene	0.017	0.008	V1	0.089	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.012	V1	0.140	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.004	V1	0.037	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.005	V1	0.031	V0	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.007	V1	0.037	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.008	V1	0.039	V0	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Travel Blank**	
Station Number		**AMS 7**			
Sample Date		**12-May**		**12-May**	
Total Air Volume (m^3)		**312.35**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	736.138	V4	0.092	V0
Acenaphthylene	0.011	37.737	V4	0.017	V0
Acenaphthene	0.006	1.820	V0	0.005	V1
Fluorene	0.007	15.580	V0	0.035	V0
Phenanthrene	0.007	55.106	V4	0.028	V0
Anthracene	0.017	9.763	V4	0.011	V1
Acridine	0.019	1.068	V4	0.003	V1
Fluoranthene	0.007	13.950	V4	0.012	V0
Pyrene	0.008	11.863	V4	0.012	V0
Benzo(c)phenanthrene	0.015	1.649	V4	0.001	V1
Benz(a)anthracene	0.014	5.636	V4	0.004	V1
Chrysene	0.013	9.008	V4	0.013	V1
7,12-Dimethylbenz(a)anthracene	0.013	3.483	V4	0.008	V1
Benzo(b)fluoranthene	0.020	2.332	V4	0.008	V1
Benzo(k)fluoranthene	0.013	2.103	V4	0.003	V1
Benzo(a)pyrene	0.016	1.825	V4	0.003	V1
3-Methylcholanthrene	0.022	0.422	V4	0.002	V1
Indeno(123-cd)pyrene	0.017	0.927	V4	0.002	V1
Dibenz(a,h)anthracene	0.020	0.908	V4	0.003	V1
Benzo(ghi)perylene	0.020	0.255	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.155	V4	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.214	V4	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.055	V0	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		18-May		18-May		18-May	
Total Air Volume (m^3)		315.98		315.97			
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	8.234	V0	492.332	V4	-9999	M1
Acenaphthylene	0.011	0.839	V0	90.227	V4	-9999	M1
Acenaphthene	0.006	0.072	V0	3.319	V0	-9999	M1
Fluorene	0.007	0.502	V0	18.250	V4	-9999	M1
Phenanthrene	0.007	2.162	V0	86.900	V4	-9999	M1
Anthracene	0.017	0.194	V0	9.339	V4	-9999	M1
Acridine	0.019	0.035	V0	1.141	V4	-9999	M1
Fluoranthene	0.007	0.182	V0	6.577	V4	-9999	M1
Pyrene	0.008	0.091	V0	6.925	V4	-9999	M1
Benzo(c)phenanthrene	0.015	0.010	V1	1.031	V4	-9999	M1
Benz(a)anthracene	0.014	0.009	V1	3.197	V4	-9999	M1
Chrysene	0.013	0.036	V0	4.031	V4	-9999	M1
7,12-Dimethylbenz(a)anthracene	0.013	0.008	V1	2.110	V4	-9999	M1
Benzo(b)fluoranthene	0.020	0.018	V1	1.519	V4	-9999	M1
Benzo(k)fluoranthene	0.013	0.013	V1	1.174	V4	-9999	M1
Benzo(a)pyrene	0.016	0.007	V1	0.964	V4	-9999	M1
3-Methylcholanthrene	0.022	0.008	V1	0.292	V4	-9999	M1
Indeno(123-cd)pyrene	0.017	0.014	V1	0.671	V4	-9999	M1
Dibenz(a,h)anthracene	0.020	0.019	V1	0.331	V0	-9999	M1
Benzo(ghi)perylene	0.020	0.007	V1	0.226	V0	-9999	M1
Dibenzo(a,l)pyrene	0.024	0.005	V1	0.275	V4	-9999	M1
Dibenzo(a,i)pyrene	0.025	0.008	V1	0.140	V4	-9999	M1
Dibenzo(a,h)pyrene	0.020	0.012	V1	0.059	V0	-9999	M1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		18-May		18-May		18-May	
Total Air Volume (m^3)		315.98		315.97			
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	323.773	V4	42.948	V0	-9999	M1
Acenaphthylene	0.011	68.377	V4	5.043	V0	-9999	M1
Acenaphthene	0.006	3.255	V0	0.886	V0	-9999	M1
Fluorene	0.007	9.723	V0	3.026	V0	-9999	M1
Phenanthrene	0.007	54.758	V4	10.524	V0	-9999	M1
Anthracene	0.017	5.876	V4	1.381	V0	-9999	M1
Acridine	0.019	0.745	V0	0.088	V0	-9999	M1
Fluoranthene	0.007	3.731	V4	1.031	V0	-9999	M1
Pyrene	0.008	3.864	V4	0.705	V0	-9999	M1
Benzo(c)phenanthrene	0.015	0.579	V4	0.063	V0	-9999	M1
Benz(a)anthracene	0.014	1.157	V4	0.244	V0	-9999	M1
Chrysene	0.013	2.905	V4	0.371	V0	-9999	M1
7,12-Dimethylbenz(a)anthracene	0.013	0.987	V4	0.158	V0	-9999	M1
Benzo(b)fluoranthene	0.020	0.810	V4	0.113	V0	-9999	M1
Benzo(k)fluoranthene	0.013	0.622	V4	0.073	V0	-9999	M1
Benzo(a)pyrene	0.016	0.585	V4	0.086	V0	-9999	M1
3-Methylcholanthrene	0.022	0.311	V4	0.065	V0	-9999	M1
Indeno(123-cd)pyrene	0.017	0.510	V4	0.034	V0	-9999	M1
Dibenz(a,h)anthracene	0.020	0.338	V0	0.034	V0	-9999	M1
Benzo(ghi)perylene	0.020	0.331	V4	0.059	V0	-9999	M1
Dibenzo(a,l)pyrene	0.024	0.214	V4	0.021	V1	-9999	M1
Dibenzo(a,i)pyrene	0.025	0.381	V4	0.057	V0	-9999	M1
Dibenzo(a,h)pyrene	0.020	0.078	V0	0.031	V0	-9999	M1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Travel Blank**	
Station Number		**AMS 7**			
Sample Date		**24-May**		**24-May**	
Total Air Volume (m^3)		**315.98**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	547.445	V4	0.049	V0
Acenaphthylene	0.011	483.417	V4	0.022	V0
Acenaphthene	0.006	23.385	V4	0.013	V0
Fluorene	0.007	20.265	V4	0.008	V0
Phenanthrene	0.007	80.424	V4	0.020	V0
Anthracene	0.017	6.218	V4	0.005	V1
Acridine	0.019	0.697	V0	0.004	V1
Fluoranthene	0.007	7.001	V4	0.009	V0
Pyrene	0.008	7.069	V4	0.005	V1
Benzo(c)phenanthrene	0.015	0.827	V4	0.003	V1
Benz(a)anthracene	0.014	1.964	V4	0.005	V1
Chrysene	0.013	4.689	V4	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	1.873	V4	0.002	V1
Benzo(b)fluoranthene	0.020	0.619	V4	0.005	V1
Benzo(k)fluoranthene	0.013	0.648	V4	0.005	V1
Benzo(a)pyrene	0.016	0.669	V4	0.004	V1
3-Methylcholanthrene	0.022	0.152	V4	0.002	V1
Indeno(123-cd)pyrene	0.017	0.322	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.453	V4	0.002	V1
Benzo(ghi)perylene	0.020	0.158	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.053	V0	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.044	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.055	V0	0.003	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station Number		**AMS 1**		**AMS 6**			
Sample Date		**30-May**		**30-May**		**30-May**	
Total Air Volume (m^3)		**315.98**		**315.98**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	4.819	V0	4.285	V0	0.084	V0
Acenaphthylene	0.011	1.905	V0	21.428	V0	0.014	V0
Acenaphthene	0.006	2.430	V0	2.945	V0	0.014	V0
Fluorene	0.007	2.117	V0	2.503	V0	0.010	V0
Phenanthrene	0.007	3.845	V0	6.790	V0	0.023	V0
Anthracene	0.017	0.301	V0	0.491	V0	0.004	V1
Acridine	0.019	0.005	V1	0.083	V0	0.006	V1
Fluoranthene	0.007	0.261	V0	0.671	V0	0.007	V0
Pyrene	0.008	0.224	V0	0.401	V0	0.005	V1
Benzo(c)phenanthrene	0.015	0.026	V0	0.033	V0	0.002	V1
Benz(a)anthracene	0.014	0.010	V1	0.014	V0	0.004	V1
Chrysene	0.013	0.101	V0	0.158	V0	0.005	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.022	V0	0.038	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.033	V0	0.041	V0	0.004	V1
Benzo(k)fluoranthene	0.013	0.032	V0	0.040	V0	0.003	V1
Benzo(a)pyrene	0.016	0.012	V1	0.017	V0	0.003	V1
3-Methylcholanthrene	0.022	0.009	V1	0.005	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.002	V1	0.028	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.058	V0	0.064	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.006	V1	0.025	V0	0.004	V1
Dibenzo(a,l)pyrene	0.024	0.028	V0	0.015	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.020	V1	0.019	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.021	V0	0.016	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		30-May		30-May		30-May	
Total Air Volume (m^3)		315.99		315.97		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	16.041	V0	352.258	V4	0.084	V0
Acenaphthylene	0.011	22.391	V0	20.945	V0	0.014	V0
Acenaphthene	0.006	3.378	V0	21.571	V4	0.014	V0
Fluorene	0.007	3.268	V0	12.810	V0	0.010	V0
Phenanthrene	0.007	9.119	V0	21.512	V0	0.023	V0
Anthracene	0.017	0.776	V0	1.291	V0	0.004	V1
Acridine	0.019	0.088	V0	0.187	V0	0.006	V1
Fluoranthene	0.007	0.858	V0	1.515	V0	0.007	V0
Pyrene	0.008	0.475	V0	0.842	V0	0.005	V1
Benzo(c)phenanthrene	0.015	0.034	V0	0.075	V0	0.002	V1
Benz(a)anthracene	0.014	0.028	V0	0.079	V0	0.004	V1
Chrysene	0.013	0.200	V0	0.202	V0	0.005	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.045	V0	0.076	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.051	V0	0.043	V0	0.004	V1
Benzo(k)fluoranthene	0.013	0.050	V0	0.042	V0	0.003	V1
Benzo(a)pyrene	0.016	0.030	V0	0.032	V0	0.003	V1
3-Methylcholanthrene	0.022	0.015	V1	0.042	V0	0.001	V1
Indeno(123-cd)pyrene	0.017	0.043	V0	0.125	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.080	V0	0.106	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.029	V0	0.081	V0	0.004	V1
Dibenzo(a,l)pyrene	0.024	0.018	V1	0.058	V0	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.017	V1	0.202	V4	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.025	V0	0.084	V0	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		05-Jun		05-Jun		05-Jun	
Total Air Volume (m^3)		315.98		315.97		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	6.813	V0	4.333	V0	0.059	V0
Acenaphthylene	0.011	2.742	V0	3.771	V0	0.010	V1
Acenaphthene	0.006	4.470	V0	0.454	V0	0.006	V1
Fluorene	0.007	1.562	V0	0.800	V0	0.012	V0
Phenanthrene	0.007	3.224	V0	2.603	V0	0.016	V0
Anthracene	0.017	0.572	V0	0.265	V0	0.004	V1
Acridine	0.019	0.056	V0	0.094	V0	0.009	V1
Fluoranthene	0.007	0.199	V0	0.379	V0	0.010	V0
Pyrene	0.008	0.183	V0	0.235	V0	0.003	V1
Benzo(c)phenanthrene	0.015	0.002	V1	0.025	V0	0.002	V1
Benz(a)anthracene	0.014	0.063	V0	0.062	V0	0.003	V1
Chrysene	0.013	0.131	V0	0.107	V0	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.043	V0	0.071	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.040	V0	0.043	V0	0.003	V1
Benzo(k)fluoranthene	0.013	0.039	V0	0.042	V0	0.002	V1
Benzo(a)pyrene	0.016	0.019	V0	0.048	V0	0.004	V1
3-Methylcholanthrene	0.022	0.010	V1	0.033	V0	0.002	V1
Indeno(123-cd)pyrene	0.017	0.049	V0	0.067	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.060	V0	0.070	V0	0.004	V1
Benzo(ghi)perylene	0.020	0.018	V1	0.026	V0	0.006	V1
Dibenzo(a,l)pyrene	0.024	0.013	V1	0.042	V0	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.022	V1	0.025	V0	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.022	V0	0.024	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		**Anzac**		**Travel Blank**	
Station Number		**AMS 14**			
Sample Date		**05-Jun**		**05-Jun**	
Total Air Volume (m^3)		**315.96**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	8.519	V0	0.059	V0
Acenaphthylene	0.011	6.506	V0	0.010	V1
Acenaphthene	0.006	21.465	V4	0.006	V1
Fluorene	0.007	11.388	V0	0.012	V0
Phenanthrene	0.007	12.159	V0	0.016	V0
Anthracene	0.017	0.036	V0	0.004	V1
Acridine	0.019	0.105	V0	0.009	V1
Fluoranthene	0.007	1.337	V0	0.010	V0
Pyrene	0.008	0.692	V0	0.003	V1
Benzo(c)phenanthrene	0.015	0.478	V4	0.002	V1
Benz(a)anthracene	0.014	0.084	V0	0.003	V1
Chrysene	0.013	0.078	V0	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.103	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.102	V0	0.003	V1
Benzo(k)fluoranthene	0.013	0.102	V0	0.002	V1
Benzo(a)pyrene	0.016	0.082	V0	0.004	V1
3-Methylcholanthrene	0.022	0.080	V0	0.002	V1
Indeno(123-cd)pyrene	0.017	0.145	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.164	V0	0.004	V1
Benzo(ghi)perylene	0.020	0.096	V0	0.006	V1
Dibenzo(a,l)pyrene	0.024	0.266	V4	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.035	V0	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.065	V0	0.002	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		11-Jun		11-Jun		11-Jun	
Total Air Volume (m^3)		315.97		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	9.746	V0	89.338	V0	0.079	V0
Acenaphthylene	0.011	4.103	V0	26.793	V0	0.062	V0
Acenaphthene	0.006	2.717	V0	5.392	V0	0.020	V0
Fluorene	0.007	2.402	V0	10.151	V0	0.034	V0
Phenanthrene	0.007	4.479	V0	24.136	V0	0.042	V0
Anthracene	0.017	0.369	V0	1.634	V0	0.013	V1
Acridine	0.019	0.324	V0	0.299	V0	0.003	V1
Fluoranthene	0.007	0.691	V0	2.500	V0	0.022	V0
Pyrene	0.008	0.170	V0	2.344	V0	0.012	V0
Benzo(c)phenanthrene	0.015	0.044	V0	0.086	V0	0.005	V1
Benz(a)anthracene	0.014	0.056	V0	0.298	V0	0.010	V1
Chrysene	0.013	0.148	V0	0.597	V0	0.006	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.012	V1	0.010	V1	0.005	V1
Benzo(b)fluoranthene	0.020	0.116	V0	0.282	V0	0.004	V1
Benzo(k)fluoranthene	0.013	0.116	V0	0.282	V0	0.004	V1
Benzo(a)pyrene	0.016	0.031	V0	0.036	V0	0.002	V1
3-Methylcholanthrene	0.022	0.013	V1	0.029	V0	0.003	V1
Indeno(123-cd)pyrene	0.017	0.102	V0	0.065	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.134	V0	0.171	V0	0.004	V1
Benzo(ghi)perylene	0.020	0.057	V0	0.095	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.032	V0	0.044	V0	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.041	V0	0.072	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.024	V0	0.037	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		11-Jun		11-Jun		11-Jun	
Total Air Volume (m^3)		316.29		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	70.458	V0	90.093	V0	0.079	V0
Acenaphthylene	0.011	23.669	V0	81.874	V4	0.062	V0
Acenaphthene	0.006	3.140	V0	32.387	V4	0.020	V0
Fluorene	0.007	5.984	V0	30.188	V4	0.034	V0
Phenanthrene	0.007	15.463	V0	31.911	V4	0.042	V0
Anthracene	0.017	0.994	V0	2.173	V0	0.013	V1
Acridine	0.019	0.297	V0	0.258	V0	0.003	V1
Fluoranthene	0.007	1.032	V0	3.136	V4	0.022	V0
Pyrene	0.008	0.750	V0	1.406	V0	0.012	V0
Benzo(c)phenanthrene	0.015	0.072	V0	0.092	V0	0.005	V1
Benz(a)anthracene	0.014	0.187	V0	0.106	V0	0.010	V1
Chrysene	0.013	0.310	V0	0.230	V0	0.006	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.030	V0	0.018	V0	0.005	V1
Benzo(b)fluoranthene	0.020	0.241	V0	0.108	V0	0.004	V1
Benzo(k)fluoranthene	0.013	0.240	V0	0.108	V0	0.004	V1
Benzo(a)pyrene	0.016	0.043	V0	0.068	V0	0.002	V1
3-Methylcholanthrene	0.022	0.022	V0	0.014	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.070	V0	0.060	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.140	V0	0.125	V0	0.004	V1
Benzo(ghi)perylene	0.020	0.064	V0	0.059	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.033	V0	0.033	V0	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.022	V1	0.029	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.026	V0	0.024	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		17-Jun		17-Jun		17-Jun	
Total Air Volume (m^3)		315.97		315.98			
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	5.020	V0	7.498	V0	-9999	M1
Acenaphthylene	0.011	1.167	V0	1.235	V0	-9999	M1
Acenaphthene	0.006	1.484	V0	0.854	V0	-9999	M1
Fluorene	0.007	2.382	V0	1.943	V0	-9999	M1
Phenanthrene	0.007	4.879	V0	3.445	V0	-9999	M1
Anthracene	0.017	0.357	V0	0.318	V0	-9999	M1
Acridine	0.019	0.264	V0	0.095	V0	-9999	M1
Fluoranthene	0.007	0.371	V0	0.497	V0	-9999	M1
Pyrene	0.008	0.176	V0	0.238	V0	-9999	M1
Benzo(c)phenanthrene	0.015	0.135	V0	0.115	V0	-9999	M1
Benz(a)anthracene	0.014	0.204	V0	0.049	V0	-9999	M1
Chrysene	0.013	0.256	V0	0.176	V0	-9999	M1
7,12-Dimethylbenz(a)anthracene	0.013	0.027	V0	0.030	V0	-9999	M1
Benzo(b)fluoranthene	0.020	0.081	V0	0.134	V0	-9999	M1
Benzo(k)fluoranthene	0.013	0.047	V0	0.134	V0	-9999	M1
Benzo(a)pyrene	0.016	0.058	V0	0.035	V0	-9999	M1
3-Methylcholanthrene	0.022	0.007	V1	0.037	V0	-9999	M1
Indeno(123-cd)pyrene	0.017	0.095	V0	0.084	V0	-9999	M1
Dibenz(a,h)anthracene	0.020	0.110	V0	0.167	V0	-9999	M1
Benzo(ghi)perylene	0.020	0.039	V0	0.056	V0	-9999	M1
Dibenzo(a,l)pyrene	0.024	0.035	V0	0.021	V1	-9999	M1
Dibenzo(a,i)pyrene	0.025	0.032	V0	0.021	V1	-9999	M1
Dibenzo(a,h)pyrene	0.020	0.094	V0	0.049	V0	-9999	M1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		17-Jun		17-Jun		17-Jun	
Total Air Volume (m^3)		315.98		315.98			
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	10.664	V0	17.269	V0	-9999	M1
Acenaphthylene	0.011	2.630	V0	7.441	V0	-9999	M1
Acenaphthene	0.006	1.625	V0	1.076	V0	-9999	M1
Fluorene	0.007	1.534	V0	2.360	V0	-9999	M1
Phenanthrene	0.007	3.537	V0	4.507	V0	-9999	M1
Anthracene	0.017	0.292	V0	0.339	V0	-9999	M1
Acridine	0.019	0.377	V0	0.224	V0	-9999	M1
Fluoranthene	0.007	0.647	V0	0.459	V0	-9999	M1
Pyrene	0.008	0.420	V0	0.418	V0	-9999	M1
Benzo(c)phenanthrene	0.015	0.235	V0	0.141	V0	-9999	M1
Benz(a)anthracene	0.014	0.085	V0	0.079	V0	-9999	M1
Chrysene	0.013	0.788	V0	0.136	V0	-9999	M1
7,12-Dimethylbenz(a)anthracene	0.013	0.089	V0	0.025	V0	-9999	M1
Benzo(b)fluoranthene	0.020	0.165	V0	0.084	V0	-9999	M1
Benzo(k)fluoranthene	0.013	0.165	V0	0.084	V0	-9999	M1
Benzo(a)pyrene	0.016	0.095	V0	0.064	V0	-9999	M1
3-Methylcholanthrene	0.022	0.028	V0	0.046	V0	-9999	M1
Indeno(123-cd)pyrene	0.017	0.179	V0	0.141	V0	-9999	M1
Dibenz(a,h)anthracene	0.020	0.220	V0	0.164	V0	-9999	M1
Benzo(ghi)perylene	0.020	0.123	V0	0.046	V0	-9999	M1
Dibenzo(a,l)pyrene	0.024	0.055	V0	0.021	V1	-9999	M1
Dibenzo(a,i)pyrene	0.025	0.028	V0	0.025	V0	-9999	M1
Dibenzo(a,h)pyrene	0.020	0.049	V0	0.047	V0	-9999	M1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		23-Jun		23-Jun		23-Jun	
Total Air Volume (m^3)		315.97		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	39.801	V0	25.017	V0	0.088	V0
Acenaphthylene	0.011	8.945	V0	13.836	V0	0.058	V0
Acenaphthene	0.006	5.702	V0	4.213	V0	0.027	V0
Fluorene	0.007	1.370	V0	2.660	V0	0.020	V0
Phenanthrene	0.007	11.626	V0	9.378	V0	0.030	V0
Anthracene	0.017	0.790	V0	0.748	V0	0.008	V1
Acridine	0.019	0.423	V0	0.185	V0	0.005	V1
Fluoranthene	0.007	0.144	V0	1.253	V0	0.018	V0
Pyrene	0.008	0.575	V0	1.341	V0	0.008	V1
Benzo(c)phenanthrene	0.015	0.075	V0	0.140	V0	0.004	V1
Benz(a)anthracene	0.014	0.123	V0	0.137	V0	0.010	V1
Chrysene	0.013	0.328	V0	0.276	V0	0.005	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.051	V0	0.019	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.195	V0	0.187	V0	0.007	V1
Benzo(k)fluoranthene	0.013	0.194	V0	0.187	V0	0.002	V1
Benzo(a)pyrene	0.016	0.037	V0	0.051	V0	0.002	V1
3-Methylcholanthrene	0.022	0.025	V0	0.025	V0	0.003	V1
Indeno(123-cd)pyrene	0.017	0.103	V0	0.157	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.171	V0	0.178	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.065	V0	0.135	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.011	V1	0.071	V0	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.010	V1	0.043	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.048	V0	0.034	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		23-Jun		23-Jun		23-Jun	
Total Air Volume (m^3)		316		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	23.007	V0	88.069	V0	0.088	V0
Acenaphthylene	0.011	8.650	V0	26.955	V0	0.058	V0
Acenaphthene	0.006	1.242	V0	33.640	V4	0.027	V0
Fluorene	0.007	3.777	V0	38.397	V4	0.020	V0
Phenanthrene	0.007	8.845	V0	26.144	V0	0.030	V0
Anthracene	0.017	0.771	V0	2.765	V4	0.008	V1
Acridine	0.019	0.463	V0	0.370	V0	0.005	V1
Fluoranthene	0.007	0.346	V0	6.944	V4	0.018	V0
Pyrene	0.008	1.078	V0	1.801	V0	0.008	V1
Benzo(c)phenanthrene	0.015	0.158	V0	0.244	V0	0.004	V1
Benz(a)anthracene	0.014	0.067	V0	0.085	V0	0.010	V1
Chrysene	0.013	0.085	V0	0.326	V0	0.005	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.036	V0	0.097	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.147	V0	0.127	V0	0.007	V1
Benzo(k)fluoranthene	0.013	0.161	V0	0.127	V0	0.002	V1
Benzo(a)pyrene	0.016	0.044	V0	0.054	V0	0.002	V1
3-Methylcholanthrene	0.022	0.084	V0	0.035	V0	0.003	V1
Indeno(123-cd)pyrene	0.017	0.201	V0	0.252	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.261	V0	0.095	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.109	V0	0.210	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.037	V0	0.040	V0	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.101	V0	0.050	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.063	V0	0.053	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		29-Jun		29-Jun		29-Jun	
Total Air Volume (m^3)		315.97		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	26.203	V0	72.200	V0	0.078	V0
Acenaphthylene	0.011	9.265	V0	8.221	V0	0.042	V0
Acenaphthene	0.006	4.183	V0	16.630	V4	0.015	V0
Fluorene	0.007	2.497	V0	3.253	V0	0.018	V0
Phenanthrene	0.007	5.495	V0	11.666	V0	0.018	V0
Anthracene	0.017	0.517	V0	0.824	V0	0.004	V1
Acridine	0.019	0.686	V0	0.434	V0	0.004	V1
Fluoranthene	0.007	0.391	V0	2.246	V0	0.006	V1
Pyrene	0.008	0.706	V0	0.837	V0	0.004	V1
Benzo(c)phenanthrene	0.015	0.349	V0	0.085	V0	0.003	V1
Benz(a)anthracene	0.014	0.129	V0	0.206	V0	0.005	V1
Chrysene	0.013	0.495	V0	0.653	V0	0.008	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.093	V0	0.073	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.263	V0	0.043	V0	0.004	V1
Benzo(k)fluoranthene	0.013	0.263	V0	0.070	V0	0.001	V1
Benzo(a)pyrene	0.016	0.070	V0	0.056	V0	0.003	V1
3-Methylcholanthrene	0.022	0.069	V0	0.062	V0	0.002	V1
Indeno(123-cd)pyrene	0.017	0.234	V0	0.196	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.163	V0	0.092	V0	0.002	V1
Benzo(ghi)perylene	0.020	0.200	V0	0.392	V4	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.074	V0	0.106	V0	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.065	V0	0.091	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.078	V0	0.146	V4	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		29-Jun		29-Jun		29-Jun	
Total Air Volume (m^3)		316		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	22.374	V0	59.164	V0	0.078	V0
Acenaphthylene	0.011	2.010	V0	9.259	V0	0.042	V0
Acenaphthene	0.006	0.480	V0	30.848	V4	0.015	V0
Fluorene	0.007	2.671	V0	22.966	V4	0.018	V0
Phenanthrene	0.007	5.371	V0	28.106	V0	0.018	V0
Anthracene	0.017	0.304	V0	1.997	V0	0.004	V1
Acridine	0.019	0.372	V0	0.632	V0	0.004	V1
Fluoranthene	0.007	1.907	V0	4.574	V4	0.006	V1
Pyrene	0.008	2.121	V0	2.778	V4	0.004	V1
Benzo(c)phenanthrene	0.015	0.355	V0	0.257	V0	0.003	V1
Benz(a)anthracene	0.014	0.201	V0	0.108	V0	0.005	V1
Chrysene	0.013	0.810	V0	0.408	V0	0.008	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.206	V0	0.149	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.273	V0	0.298	V0	0.004	V1
Benzo(k)fluoranthene	0.013	0.273	V0	0.165	V0	0.001	V1
Benzo(a)pyrene	0.016	0.128	V0	0.117	V0	0.003	V1
3-Methylcholanthrene	0.022	0.083	V0	0.078	V0	0.002	V1
Indeno(123-cd)pyrene	0.017	0.101	V0	0.195	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.182	V0	0.122	V0	0.002	V1
Benzo(ghi)perylene	0.020	0.208	V0	0.101	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.115	V0	0.092	V0	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.099	V0	0.094	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.127	V0	0.129	V0	0.002	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		05-Jul		05-Jul		05-Jul	
Total Air Volume (m^3)		315.97		315.9		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	9.705	V0	39.589	V0	0.068	V0
Acenaphthylene	0.011	3.466	V0	4.868	V0	0.040	V0
Acenaphthene	0.006	1.203	V0	3.505	V0	0.039	V0
Fluorene	0.007	1.926	V0	4.999	V0	0.031	V0
Phenanthrene	0.007	5.811	V0	11.935	V0	0.021	V0
Anthracene	0.017	0.471	V0	0.659	V0	0.010	V1
Acridine	0.019	0.376	V0	0.705	V0	0.006	V1
Fluoranthene	0.007	0.516	V0	1.278	V0	0.014	V0
Pyrene	0.008	1.293	V0	1.519	V0	0.007	V1
Benzo(c)phenanthrene	0.015	0.244	V0	0.315	V0	0.005	V1
Benz(a)anthracene	0.014	0.214	V0	0.194	V0	0.008	V1
Chrysene	0.013	0.670	V0	0.479	V0	0.010	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.026	V0	0.151	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.198	V0	0.220	V0	0.006	V1
Benzo(k)fluoranthene	0.013	0.245	V0	0.178	V0	0.004	V1
Benzo(a)pyrene	0.016	0.086	V0	0.074	V0	0.006	V1
3-Methylcholanthrene	0.022	0.034	V0	0.069	V0	0.004	V1
Indeno(123-cd)pyrene	0.017	0.189	V0	0.140	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.147	V0	0.121	V0	0.005	V1
Benzo(ghi)perylene	0.020	0.158	V0	0.173	V0	0.005	V1
Dibenzo(a,l)pyrene	0.024	0.072	V0	0.095	V0	0.008	V1
Dibenzo(a,i)pyrene	0.025	0.126	V0	0.089	V0	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.029	V0	0.070	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		05-Jul		05-Jul		05-Jul	
Total Air Volume (m^3)		316.01		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	18.205	V0	10.439	V0	0.068	V0
Acenaphthylene	0.011	3.361	V0	1.849	V0	0.040	V0
Acenaphthene	0.006	1.498	V0	1.163	V0	0.039	V0
Fluorene	0.007	2.333	V0	2.324	V0	0.031	V0
Phenanthrene	0.007	7.867	V0	8.387	V0	0.021	V0
Anthracene	0.017	0.725	V0	0.652	V0	0.010	V1
Acridine	0.019	0.569	V0	0.389	V0	0.006	V1
Fluoranthene	0.007	4.493	V0	2.098	V0	0.014	V0
Pyrene	0.008	3.539	V0	1.317	V0	0.007	V1
Benzo(c)phenanthrene	0.015	0.242	V0	0.098	V0	0.005	V1
Benz(a)anthracene	0.014	0.178	V0	0.132	V0	0.008	V1
Chrysene	0.013	0.517	V0	0.300	V0	0.010	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.201	V0	0.052	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.206	V0	0.091	V0	0.006	V1
Benzo(k)fluoranthene	0.013	0.240	V0	0.057	V0	0.004	V1
Benzo(a)pyrene	0.016	0.082	V0	0.035	V0	0.006	V1
3-Methylcholanthrene	0.022	0.024	V0	0.034	V0	0.004	V1
Indeno(123-cd)pyrene	0.017	0.097	V0	0.119	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.164	V0	0.101	V0	0.005	V1
Benzo(ghi)perylene	0.020	0.093	V0	0.055	V0	0.005	V1
Dibenzo(a,l)pyrene	0.024	0.019	V1	0.036	V0	0.008	V1
Dibenzo(a,i)pyrene	0.025	0.061	V0	0.069	V0	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.069	V0	0.074	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		11-Jul		11-Jul		11-Jul	
Total Air Volume (m^3)		315.97		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	4.039	V0	7.763	V0	0.086	V0
Acenaphthylene	0.011	0.660	V0	0.592	V0	0.024	V0
Acenaphthene	0.006	0.776	V0	0.818	V0	0.027	V0
Fluorene	0.007	0.769	V0	0.926	V0	0.033	V0
Phenanthrene	0.007	1.353	V0	3.446	V0	0.042	V0
Anthracene	0.017	0.121	V0	0.252	V0	0.014	V1
Acridine	0.019	0.077	V0	0.141	V0	0.007	V1
Fluoranthene	0.007	0.104	V0	0.270	V0	0.026	V0
Pyrene	0.008	0.248	V0	0.253	V0	0.021	V0
Benzo(c)phenanthrene	0.015	0.028	V0	0.030	V0	0.006	V1
Benz(a)anthracene	0.014	0.048	V0	0.043	V0	0.009	V1
Chrysene	0.013	0.076	V0	0.168	V0	0.019	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.011	V1	0.016	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.046	V0	0.031	V0	0.005	V1
Benzo(k)fluoranthene	0.013	0.046	V0	0.031	V0	0.004	V1
Benzo(a)pyrene	0.016	0.016	V1	0.021	V0	0.003	V1
3-Methylcholanthrene	0.022	0.018	V1	0.020	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.041	V0	0.075	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.066	V0	0.098	V0	0.002	V1
Benzo(ghi)perylene	0.020	0.017	V1	0.029	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.011	V1	0.015	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.014	V1	0.012	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.016	V1	0.022	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		11-Jul		11-Jul		11-Jul	
Total Air Volume (m^3)		316		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	9.226	V0	33.289	V0	0.086	V0
Acenaphthylene	0.011	0.631	V0	1.388	V0	0.024	V0
Acenaphthene	0.006	0.526	V0	9.296	V0	0.027	V0
Fluorene	0.007	0.812	V0	9.313	V0	0.033	V0
Phenanthrene	0.007	2.482	V0	10.177	V0	0.042	V0
Anthracene	0.017	0.175	V0	0.492	V0	0.014	V1
Acridine	0.019	0.223	V0	0.025	V0	0.007	V1
Fluoranthene	0.007	0.134	V0	0.806	V0	0.026	V0
Pyrene	0.008	0.197	V0	0.726	V0	0.021	V0
Benzo(c)phenanthrene	0.015	0.021	V0	0.034	V0	0.006	V1
Benz(a)anthracene	0.014	0.034	V0	0.043	V0	0.009	V1
Chrysene	0.013	0.102	V0	0.124	V0	0.019	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.020	V0	0.023	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.052	V0	0.015	V1	0.005	V1
Benzo(k)fluoranthene	0.013	0.051	V0	0.015	V0	0.004	V1
Benzo(a)pyrene	0.016	0.014	V1	0.017	V0	0.003	V1
3-Methylcholanthrene	0.022	0.023	V0	0.014	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.056	V0	0.038	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.070	V0	0.084	V0	0.002	V1
Benzo(ghi)perylene	0.020	0.025	V0	0.015	V1	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.010	V1	0.012	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.015	V1	0.010	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.011	V1	0.010	V1	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		17-Jul		17-Jul		17-Jul	
Total Air Volume (m^3)		315.97		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	5.022	V0	15.415	V0	0.094	V0
Acenaphthylene	0.011	1.414	V0	1.001	V0	0.012	V0
Acenaphthene	0.006	0.314	V0	0.345	V0	0.015	V0
Fluorene	0.007	0.850	V0	1.459	V0	0.044	V0
Phenanthrene	0.007	1.337	V0	2.931	V0	0.016	V0
Anthracene	0.017	0.080	V0	0.195	V0	0.008	V1
Acridine	0.019	0.118	V0	0.139	V0	0.017	V1
Fluoranthene	0.007	0.112	V0	0.241	V0	0.022	V0
Pyrene	0.008	0.119	V0	0.280	V0	0.015	V0
Benzo(c)phenanthrene	0.015	0.023	V0	0.012	V1	0.005	V1
Benz(a)anthracene	0.014	0.018	V0	0.058	V0	0.015	V0
Chrysene	0.013	0.086	V0	0.176	V0	0.026	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.017	V0	0.042	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.040	V0	0.072	V0	0.002	V1
Benzo(k)fluoranthene	0.013	0.040	V0	0.072	V0	0.002	V1
Benzo(a)pyrene	0.016	0.022	V0	0.027	V0	0.005	V1
3-Methylcholanthrene	0.022	0.012	V1	0.012	V1	0.014	V1
Indeno(123-cd)pyrene	0.017	0.069	V0	0.048	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.107	V0	0.078	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.016	V1	0.058	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.014	V1	0.014	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.026	V0	0.026	V0	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.011	V1	0.021	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		17-Jul		17-Jul		17-Jul	
Total Air Volume (m^3)		316		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	20.437	V0	26.185	V0	0.094	V0
Acenaphthylene	0.011	1.053	V0	1.184	V0	0.012	V0
Acenaphthene	0.006	0.546	V0	12.895	V0	0.015	V0
Fluorene	0.007	1.474	V0	9.506	V0	0.044	V0
Phenanthrene	0.007	2.208	V0	11.230	V0	0.016	V0
Anthracene	0.017	0.122	V0	0.634	V0	0.008	V1
Acridine	0.019	0.221	V0	0.060	V0	0.017	V1
Fluoranthene	0.007	0.208	V0	0.977	V0	0.022	V0
Pyrene	0.008	0.185	V0	0.844	V0	0.015	V0
Benzo(c)phenanthrene	0.015	0.022	V0	0.026	V0	0.005	V1
Benz(a)anthracene	0.014	0.137	V0	0.029	V0	0.015	V0
Chrysene	0.013	0.115	V0	0.090	V0	0.026	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.021	V0	0.021	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.024	V0	0.019	V1	0.002	V1
Benzo(k)fluoranthene	0.013	0.024	V0	0.019	V0	0.002	V1
Benzo(a)pyrene	0.016	0.024	V0	0.019	V0	0.005	V1
3-Methylcholanthrene	0.022	0.016	V1	0.011	V1	0.014	V1
Indeno(123-cd)pyrene	0.017	0.063	V0	0.092	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.090	V0	0.115	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.036	V0	0.023	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.014	V1	0.029	V0	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.016	V1	0.016	V1	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.012	V1	0.037	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		23-Jul		23-Jul		23-Jul	
Total Air Volume (m^3)		315.97		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	7.725	V0	7.302	V0	0.071	V0
Acenaphthylene	0.011	1.265	V0	1.282	V0	0.025	V0
Acenaphthene	0.006	0.490	V0	0.091	V0	0.024	V0
Fluorene	0.007	0.935	V0	0.668	V0	0.039	V0
Phenanthrene	0.007	2.654	V0	2.135	V0	0.045	V0
Anthracene	0.017	0.216	V0	0.136	V0	0.012	V1
Acridine	0.019	0.060	V0	0.030	V0	0.014	V1
Fluoranthene	0.007	0.143	V0	0.308	V0	0.036	V0
Pyrene	0.008	0.252	V0	0.250	V0	0.051	V0
Benzo(c)phenanthrene	0.015	0.031	V0	0.042	V0	0.012	V1
Benz(a)anthracene	0.014	0.031	V0	0.098	V0	0.014	V0
Chrysene	0.013	0.098	V0	0.117	V0	0.018	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.018	V0	0.016	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.092	V0	0.039	V0	0.005	V1
Benzo(k)fluoranthene	0.013	0.075	V0	0.038	V0	0.005	V1
Benzo(a)pyrene	0.016	0.048	V0	0.039	V0	0.004	V1
3-Methylcholanthrene	0.022	0.030	V0	0.010	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.070	V0	0.072	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.084	V0	0.063	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.057	V0	0.024	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.015	V1	0.018	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.043	V0	0.031	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.012	V1	0.031	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		23-Jul		23-Jul		23-Jul	
Total Air Volume (m^3)		316		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	17.792	V0	7.640	V0	0.071	V0
Acenaphthylene	0.011	0.840	V0	0.581	V0	0.025	V0
Acenaphthene	0.006	0.242	V0	2.445	V0	0.024	V0
Fluorene	0.007	1.127	V0	2.717	V0	0.039	V0
Phenanthrene	0.007	3.322	V0	4.967	V0	0.045	V0
Anthracene	0.017	0.245	V0	0.245	V0	0.012	V1
Acridine	0.019	0.041	V0	0.152	V0	0.014	V1
Fluoranthene	0.007	0.358	V0	0.440	V0	0.036	V0
Pyrene	0.008	0.497	V0	0.617	V0	0.051	V0
Benzo(c)phenanthrene	0.015	0.032	V0	0.504	V0	0.012	V1
Benz(a)anthracene	0.014	0.026	V0	0.695	V0	0.014	V0
Chrysene	0.013	0.128	V0	0.813	V0	0.018	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.048	V0	0.017	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.056	V0	0.015	V1	0.005	V1
Benzo(k)fluoranthene	0.013	0.056	V0	0.015	V0	0.005	V1
Benzo(a)pyrene	0.016	0.021	V0	0.017	V0	0.004	V1
3-Methylcholanthrene	0.022	0.008	V1	0.049	V0	0.003	V1
Indeno(123-cd)pyrene	0.017	0.035	V0	0.163	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.076	V0	0.083	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.067	V0	0.043	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.016	V1	0.024	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.020	V1	0.042	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.014	V1	0.018	V1	0.002	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		29-Jul		29-Jul		29-Jul	
Total Air Volume (m^3)		315.97		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	3.381	V0	9.047	V0	0.080	V0
Acenaphthylene	0.011	1.568	V0	1.471	V0	0.018	V0
Acenaphthene	0.006	0.736	V0	0.265	V0	0.017	V0
Fluorene	0.007	0.899	V0	1.096	V0	0.018	V0
Phenanthrene	0.007	1.945	V0	4.165	V0	0.021	V0
Anthracene	0.017	0.121	V0	0.302	V0	0.016	V1
Acridine	0.019	0.230	V0	0.002	V1	0.007	V1
Fluoranthene	0.007	0.431	V0	0.567	V0	0.015	V0
Pyrene	0.008	0.340	V0	0.484	V0	0.006	V1
Benzo(c)phenanthrene	0.015	0.033	V0	0.016	V0	0.019	V0
Benz(a)anthracene	0.014	0.041	V0	0.051	V0	0.011	V1
Chrysene	0.013	0.111	V0	0.090	V0	0.012	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.051	V0	0.015	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.117	V0	0.045	V0	0.004	V1
Benzo(k)fluoranthene	0.013	0.117	V0	0.045	V0	0.002	V1
Benzo(a)pyrene	0.016	0.021	V0	0.021	V0	0.001	V1
3-Methylcholanthrene	0.022	0.041	V0	0.012	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.236	V0	0.156	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.074	V0	0.027	V0	0.002	V1
Benzo(ghi)perylene	0.020	0.046	V0	0.044	V0	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.012	V1	0.018	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.030	V0	0.050	V0	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.052	V0	0.041	V0	0.003	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		29-Jul		29-Jul		29-Jul	
Total Air Volume (m^3)		316		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	6.982	V0	10.641	V0	0.080	V0
Acenaphthylene	0.011	1.049	V0	0.963	V0	0.018	V0
Acenaphthene	0.006	0.116	V0	7.001	V0	0.017	V0
Fluorene	0.007	0.833	V0	5.704	V0	0.018	V0
Phenanthrene	0.007	2.110	V0	10.321	V0	0.021	V0
Anthracene	0.017	0.159	V0	0.534	V0	0.016	V1
Acridine	0.019	0.057	V0	0.076	V0	0.007	V1
Fluoranthene	0.007	0.491	V0	0.866	V0	0.015	V0
Pyrene	0.008	0.256	V0	0.492	V0	0.006	V1
Benzo(c)phenanthrene	0.015	0.041	V0	0.057	V0	0.019	V0
Benz(a)anthracene	0.014	0.034	V0	0.031	V0	0.011	V1
Chrysene	0.013	0.076	V0	0.113	V0	0.012	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.038	V0	0.015	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.161	V0	0.026	V0	0.004	V1
Benzo(k)fluoranthene	0.013	0.160	V0	0.022	V0	0.002	V1
Benzo(a)pyrene	0.016	0.028	V0	0.022	V0	0.001	V1
3-Methylcholanthrene	0.022	0.018	V1	0.024	V0	0.002	V1
Indeno(123-cd)pyrene	0.017	0.066	V0	0.140	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.079	V0	0.065	V0	0.002	V1
Benzo(ghi)perylene	0.020	0.093	V0	0.046	V0	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.019	V1	0.018	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.006	V1	0.050	V0	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.013	V1	0.023	V0	0.003	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		04-Aug		04-Aug		04-Aug	
Total Air Volume (m^3)		315.97		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	8.502	V0	14.213	V0	0.075	V0
Acenaphthylene	0.011	7.257	V0	5.645	V0	0.020	V0
Acenaphthene	0.006	2.853	V0	2.671	V0	0.026	V0
Fluorene	0.007	1.217	V0	1.789	V0	0.017	V0
Phenanthrene	0.007	1.341	V0	2.400	V0	0.032	V0
Anthracene	0.017	0.089	V0	0.148	V0	0.019	V0
Acridine	0.019	0.078	V0	0.032	V0	0.013	V1
Fluoranthene	0.007	0.030	V0	0.174	V0	0.006	V1
Pyrene	0.008	0.117	V0	0.229	V0	0.003	V1
Benzo(c)phenanthrene	0.015	0.013	V1	0.022	V0	0.013	V1
Benz(a)anthracene	0.014	0.013	V1	0.030	V0	0.013	V1
Chrysene	0.013	0.059	V0	0.151	V0	0.010	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.006	V1	0.022	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.024	V0	0.046	V0	0.004	V1
Benzo(k)fluoranthene	0.013	0.024	V0	0.045	V0	0.003	V1
Benzo(a)pyrene	0.016	0.020	V0	0.022	V0	0.002	V1
3-Methylcholanthrene	0.022	0.010	V1	0.010	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.052	V0	0.087	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.014	V1	0.023	V0	0.001	V1
Benzo(ghi)perylene	0.020	0.023	V0	0.033	V0	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.016	V1	0.015	V1	0.014	V1
Dibenzo(a,i)pyrene	0.025	0.014	V1	0.015	V1	0.001	V1
Dibenzo(a,h)pyrene	0.020	0.016	V1	0.015	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		04-Aug		04-Aug		04-Aug	
Total Air Volume (m^3)		316		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	18.961	V0	23.069	V0	0.075	V0
Acenaphthylene	0.011	3.438	V0	4.442	V0	0.020	V0
Acenaphthene	0.006	1.304	V0	4.684	V0	0.026	V0
Fluorene	0.007	2.855	V0	9.923	V0	0.017	V0
Phenanthrene	0.007	3.272	V0	8.387	V0	0.032	V0
Anthracene	0.017	0.218	V0	0.492	V0	0.019	V0
Acridine	0.019	0.046	V0	0.089	V0	0.013	V1
Fluoranthene	0.007	0.342	V0	1.759	V0	0.006	V1
Pyrene	0.008	0.645	V0	0.910	V0	0.003	V1
Benzo(c)phenanthrene	0.015	0.024	V0	0.023	V0	0.013	V1
Benz(a)anthracene	0.014	0.047	V0	0.038	V0	0.013	V1
Chrysene	0.013	0.110	V0	0.090	V0	0.010	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.012	V1	0.020	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.039	V0	0.019	V1	0.004	V1
Benzo(k)fluoranthene	0.013	0.038	V0	0.019	V0	0.003	V1
Benzo(a)pyrene	0.016	0.021	V0	0.023	V0	0.002	V1
3-Methylcholanthrene	0.022	0.011	V1	0.012	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.053	V0	0.100	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.020	V0	0.038	V0	0.001	V1
Benzo(ghi)perylene	0.020	0.030	V0	0.028	V0	0.001	V1
Dibenzo(a,l)pyrene	0.024	0.015	V1	0.018	V1	0.014	V1
Dibenzo(a,i)pyrene	0.025	0.018	V1	0.020	V1	0.001	V1
Dibenzo(a,h)pyrene	0.020	0.015	V1	0.016	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		10-Aug		10-Aug		10-Aug	
Total Air Volume (m^3)		315.98		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	19.570	V0	27.312	V0	0.109	V0
Acenaphthylene	0.011	3.925	V0	1.246	V0	0.040	V0
Acenaphthene	0.006	0.739	V0	0.236	V0	0.019	V0
Fluorene	0.007	0.389	V0	0.514	V0	0.021	V0
Phenanthrene	0.007	2.284	V0	3.665	V0	0.015	V0
Anthracene	0.017	0.149	V0	0.212	V0	0.009	V1
Acridine	0.019	0.170	V0	0.062	V0	0.008	V1
Fluoranthene	0.007	0.065	V0	0.382	V0	0.009	V0
Pyrene	0.008	0.193	V0	0.419	V0	0.005	V1
Benzo(c)phenanthrene	0.015	0.022	V0	0.011	V1	0.005	V1
Benz(a)anthracene	0.014	0.018	V0	0.022	V0	0.010	V1
Chrysene	0.013	0.082	V0	0.056	V0	0.012	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.015	V0	0.010	V1	0.002	V1
Benzo(b)fluoranthene	0.020	0.055	V0	0.047	V0	0.006	V1
Benzo(k)fluoranthene	0.013	0.055	V0	0.047	V0	0.003	V1
Benzo(a)pyrene	0.016	0.019	V0	0.025	V0	0.002	V1
3-Methylcholanthrene	0.022	0.013	V1	0.014	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.057	V0	0.055	V0	0.004	V1
Dibenz(a,h)anthracene	0.020	0.108	V0	0.036	V0	0.005	V1
Benzo(ghi)perylene	0.020	0.035	V0	0.040	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.012	V1	0.014	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.010	V1	0.014	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.014	V1	0.015	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		10-Aug		10-Aug		10-Aug	
Total Air Volume (m^3)		315.99		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	11.501	V0	10.771	V0	0.109	V0
Acenaphthylene	0.011	1.066	V0	0.724	V0	0.040	V0
Acenaphthene	0.006	0.198	V0	3.687	V0	0.019	V0
Fluorene	0.007	0.553	V0	3.029	V0	0.021	V0
Phenanthrene	0.007	2.548	V0	11.849	V0	0.015	V0
Anthracene	0.017	0.175	V0	0.645	V0	0.009	V1
Acridine	0.019	0.064	V0	0.109	V0	0.008	V1
Fluoranthene	0.007	0.383	V0	0.830	V0	0.009	V0
Pyrene	0.008	0.274	V0	0.478	V0	0.005	V1
Benzo(c)phenanthrene	0.015	0.020	V0	0.005	V1	0.005	V1
Benz(a)anthracene	0.014	0.034	V0	0.017	V0	0.010	V1
Chrysene	0.013	0.079	V0	0.145	V0	0.012	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.052	V0	0.029	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.068	V0	0.022	V0	0.006	V1
Benzo(k)fluoranthene	0.013	0.081	V0	0.024	V0	0.003	V1
Benzo(a)pyrene	0.016	0.026	V0	0.019	V0	0.002	V1
3-Methylcholanthrene	0.022	0.021	V1	0.018	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.049	V0	0.042	V0	0.004	V1
Dibenz(a,h)anthracene	0.020	0.012	V1	0.159	V0	0.005	V1
Benzo(ghi)perylene	0.020	0.029	V0	0.020	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.016	V1	0.011	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.014	V1	0.012	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.011	V1	0.017	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		16-Aug		16-Aug		16-Aug	
Total Air Volume (m^3)		315.98		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	4.219	V0	3.815	V0	0.092	V0
Acenaphthylene	0.011	1.046	V0	0.809	V0	0.029	V0
Acenaphthene	0.006	0.391	V0	0.365	V0	0.017	V0
Fluorene	0.007	0.310	V0	0.425	V0	0.019	V0
Phenanthrene	0.007	1.076	V0	0.858	V0	0.016	V0
Anthracene	0.017	0.105	V0	0.072	V0	0.006	V1
Acridine	0.019	0.063	V0	0.081	V0	0.003	V1
Fluoranthene	0.007	0.201	V0	0.186	V0	0.007	V0
Pyrene	0.008	0.115	V0	0.134	V0	0.004	V1
Benzo(c)phenanthrene	0.015	0.009	V1	0.062	V0	0.003	V1
Benz(a)anthracene	0.014	0.034	V0	0.037	V0	0.007	V1
Chrysene	0.013	0.065	V0	0.119	V0	0.007	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.030	V0	0.043	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.200	V0	0.170	V0	0.004	V1
Benzo(k)fluoranthene	0.013	0.199	V0	0.169	V0	0.003	V1
Benzo(a)pyrene	0.016	0.022	V0	0.078	V0	0.003	V1
3-Methylcholanthrene	0.022	0.020	V1	0.022	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.049	V0	0.066	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.168	V0	0.083	V0	0.002	V1
Benzo(ghi)perylene	0.020	0.033	V0	0.030	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.032	V0	0.021	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.031	V0	0.021	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.033	V0	0.023	V0	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		16-Aug		16-Aug		16-Aug	
Total Air Volume (m^3)		306.46		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	31.713	V0	14.269	V0	0.092	V0
Acenaphthylene	0.011	1.781	V0	1.268	V0	0.029	V0
Acenaphthene	0.006	0.408	V0	3.835	V0	0.017	V0
Fluorene	0.007	0.689	V0	2.374	V0	0.019	V0
Phenanthrene	0.007	2.120	V0	5.608	V0	0.016	V0
Anthracene	0.017	0.144	V0	0.549	V0	0.006	V1
Acridine	0.019	0.140	V0	0.068	V0	0.003	V1
Fluoranthene	0.007	0.509	V0	0.252	V0	0.007	V0
Pyrene	0.008	0.300	V0	0.202	V0	0.004	V1
Benzo(c)phenanthrene	0.015	0.010	V1	0.007	V1	0.003	V1
Benz(a)anthracene	0.014	0.034	V0	0.009	V1	0.007	V1
Chrysene	0.013	0.053	V0	0.059	V0	0.007	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.040	V0	0.021	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.031	V0	0.028	V0	0.004	V1
Benzo(k)fluoranthene	0.013	0.031	V0	0.036	V0	0.003	V1
Benzo(a)pyrene	0.016	0.025	V0	0.020	V0	0.003	V1
3-Methylcholanthrene	0.022	0.019	V1	0.016	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.071	V0	0.072	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.036	V0	0.019	V1	0.002	V1
Benzo(ghi)perylene	0.020	0.061	V0	0.032	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.017	V1	0.011	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.035	V0	0.033	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.036	V0	0.032	V0	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		22-Aug		22-Aug		22-Aug	
Total Air Volume (m^3)		315.98		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	3.251	V0	14.130	V0	0.104	V0
Acenaphthylene	0.011	3.527	V0	3.789	V0	0.015	V0
Acenaphthene	0.006	1.321	V0	0.548	V0	0.018	V0
Fluorene	0.007	0.684	V0	0.827	V0	0.012	V0
Phenanthrene	0.007	1.848	V0	3.098	V0	0.010	V0
Anthracene	0.017	0.109	V0	0.181	V0	0.008	V1
Acridine	0.019	0.125	V0	0.088	V0	0.004	V1
Fluoranthene	0.007	0.133	V0	0.923	V0	0.006	V1
Pyrene	0.008	0.145	V0	0.348	V0	0.005	V1
Benzo(c)phenanthrene	0.015	0.043	V0	0.050	V0	0.004	V1
Benz(a)anthracene	0.014	0.021	V0	0.097	V0	0.010	V1
Chrysene	0.013	0.084	V0	0.123	V0	0.006	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.022	V0	0.024	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.057	V0	0.058	V0	0.006	V1
Benzo(k)fluoranthene	0.013	0.057	V0	0.058	V0	0.004	V1
Benzo(a)pyrene	0.016	0.018	V0	0.017	V0	0.004	V1
3-Methylcholanthrene	0.022	0.022	V1	0.008	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.071	V0	0.067	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.097	V0	0.084	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.022	V0	0.043	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.019	V1	0.013	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.026	V0	0.010	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.019	V1	0.022	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		22-Aug		22-Aug		22-Aug	
Total Air Volume (m^3)		315.99		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	27.917	V0	15.017	V0	0.104	V0
Acenaphthylene	0.011	6.898	V0	1.459	V0	0.015	V0
Acenaphthene	0.006	2.898	V0	5.872	V0	0.018	V0
Fluorene	0.007	1.226	V0	3.698	V0	0.012	V0
Phenanthrene	0.007	2.619	V0	11.338	V0	0.010	V0
Anthracene	0.017	0.207	V0	0.703	V0	0.008	V1
Acridine	0.019	0.105	V0	0.008	V1	0.004	V1
Fluoranthene	0.007	0.180	V0	1.201	V0	0.006	V1
Pyrene	0.008	0.288	V0	0.437	V0	0.005	V1
Benzo(c)phenanthrene	0.015	0.026	V0	0.025	V0	0.004	V1
Benz(a)anthracene	0.014	0.032	V0	0.011	V1	0.010	V1
Chrysene	0.013	0.103	V0	0.090	V0	0.006	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.037	V0	0.048	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.060	V0	0.058	V0	0.006	V1
Benzo(k)fluoranthene	0.013	0.059	V0	0.057	V0	0.004	V1
Benzo(a)pyrene	0.016	0.031	V0	0.020	V0	0.004	V1
3-Methylcholanthrene	0.022	0.012	V1	0.012	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.063	V0	0.075	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.119	V0	0.025	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.055	V0	0.048	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.031	V0	0.012	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.012	V1	0.009	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.016	V1	0.003	V1	0.002	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		28-Aug		28-Aug		28-Aug	
Total Air Volume (m^3)		315.98		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	3.626	V0	1.973	V0	0.086	V0
Acenaphthylene	0.011	0.598	V0	1.018	V0	0.018	V0
Acenaphthene	0.006	1.204	V0	0.451	V0	0.019	V0
Fluorene	0.007	0.374	V0	0.397	V0	0.016	V0
Phenanthrene	0.007	0.960	V0	0.449	V0	0.017	V0
Anthracene	0.017	0.159	V0	0.067	V0	0.007	V1
Acridine	0.019	0.082	V0	0.030	V0	0.008	V1
Fluoranthene	0.007	0.538	V0	0.171	V0	0.012	V0
Pyrene	0.008	0.084	V0	0.045	V0	0.005	V1
Benzo(c)phenanthrene	0.015	0.060	V0	0.031	V0	0.008	V1
Benz(a)anthracene	0.014	0.163	V0	0.003	V1	0.005	V1
Chrysene	0.013	0.168	V0	0.094	V0	0.005	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.052	V0	0.024	V0	0.005	V1
Benzo(b)fluoranthene	0.020	0.078	V0	0.043	V0	0.003	V1
Benzo(k)fluoranthene	0.013	0.078	V0	0.043	V0	0.002	V1
Benzo(a)pyrene	0.016	0.022	V0	0.022	V0	0.004	V1
3-Methylcholanthrene	0.022	0.013	V1	0.017	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.073	V0	0.071	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.024	V0	0.045	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.030	V0	0.014	V1	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.022	V1	0.001	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.017	V1	0.010	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.012	V1	0.015	V1	0.003	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		28-Aug		28-Aug		28-Aug	
Total Air Volume (m^3)		316		316		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	4.251	V0	8.285	V0	0.086	V0
Acenaphthylene	0.011	1.838	V0	1.400	V0	0.018	V0
Acenaphthene	0.006	0.383	V0	0.391	V0	0.019	V0
Fluorene	0.007	0.546	V0	0.921	V0	0.016	V0
Phenanthrene	0.007	0.811	V0	0.921	V0	0.017	V0
Anthracene	0.017	0.087	V0	0.113	V0	0.007	V1
Acridine	0.019	0.051	V0	0.045	V0	0.008	V1
Fluoranthene	0.007	0.084	V0	0.390	V0	0.012	V0
Pyrene	0.008	0.208	V0	0.096	V0	0.005	V1
Benzo(c)phenanthrene	0.015	0.058	V0	0.040	V0	0.008	V1
Benz(a)anthracene	0.014	0.054	V0	0.041	V0	0.005	V1
Chrysene	0.013	0.189	V0	0.083	V0	0.005	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.016	V0	0.031	V0	0.005	V1
Benzo(b)fluoranthene	0.020	0.044	V0	0.055	V0	0.003	V1
Benzo(k)fluoranthene	0.013	0.044	V0	0.059	V0	0.002	V1
Benzo(a)pyrene	0.016	0.023	V0	0.032	V0	0.004	V1
3-Methylcholanthrene	0.022	0.013	V1	0.028	V0	0.002	V1
Indeno(123-cd)pyrene	0.017	0.067	V0	0.082	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.035	V0	0.038	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.011	V1	0.040	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.002	V1	0.015	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.009	V1	0.015	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.011	V1	0.032	V0	0.003	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		03-Sep		03-Sep		03-Sep	
Total Air Volume (m^3)		315.98		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	5.340	V0	2.077	V0	0.123	V0
Acenaphthylene	0.011	1.826	V0	1.026	V0	0.015	V0
Acenaphthene	0.006	1.349	V0	0.346	V0	0.022	V0
Fluorene	0.007	1.326	V0	0.276	V0	0.008	V0
Phenanthrene	0.007	0.950	V0	0.410	V0	0.007	V1
Anthracene	0.017	0.076	V0	0.044	V0	0.006	V1
Acridine	0.019	0.040	V0	0.084	V0	0.009	V1
Fluoranthene	0.007	0.120	V0	0.134	V0	0.004	V1
Pyrene	0.008	0.058	V0	0.032	V0	0.007	V1
Benzo(c)phenanthrene	0.015	0.044	V0	0.037	V0	0.007	V1
Benz(a)anthracene	0.014	0.039	V0	0.025	V0	0.005	V1
Chrysene	0.013	0.050	V0	0.022	V0	0.007	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.022	V0	0.016	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.031	V0	0.027	V0	0.003	V1
Benzo(k)fluoranthene	0.013	0.040	V0	0.014	V0	0.003	V1
Benzo(a)pyrene	0.016	0.026	V0	0.018	V0	0.005	V1
3-Methylcholanthrene	0.022	0.015	V1	0.021	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.066	V0	0.047	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.040	V0	0.060	V0	0.002	V1
Benzo(ghi)perylene	0.020	0.034	V0	0.020	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.015	V1	0.013	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.011	V1	0.027	V0	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.028	V0	0.023	V0	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station Number		**AMS 7**		**AMS 14**			
Sample Date		**03-Sep**		**03-Sep**		**03-Sep**	
Total Air Volume (m^3)		**315.99**		**315.99**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	2.344	V0	3.402	V0	0.123	V0
Acenaphthylene	0.011	1.540	V0	1.701	V0	0.015	V0
Acenaphthene	0.006	1.006	V0	0.504	V0	0.022	V0
Fluorene	0.007	0.370	V0	0.480	V0	0.008	V0
Phenanthrene	0.007	0.574	V0	0.640	V0	0.007	V1
Anthracene	0.017	0.058	V0	0.052	V0	0.006	V1
Acridine	0.019	0.016	V1	0.023	V0	0.009	V1
Fluoranthene	0.007	0.198	V0	0.124	V0	0.004	V1
Pyrene	0.008	0.096	V0	0.062	V0	0.007	V1
Benzo(c)phenanthrene	0.015	0.035	V0	0.037	V0	0.007	V1
Benz(a)anthracene	0.014	0.029	V0	0.036	V0	0.005	V1
Chrysene	0.013	0.087	V0	0.035	V0	0.007	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.017	V0	0.016	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.028	V0	0.035	V0	0.003	V1
Benzo(k)fluoranthene	0.013	0.028	V0	0.035	V0	0.003	V1
Benzo(a)pyrene	0.016	0.020	V0	0.017	V0	0.005	V1
3-Methylcholanthrene	0.022	0.012	V1	0.013	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.017	V0	0.049	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.027	V0	0.019	V1	0.002	V1
Benzo(ghi)perylene	0.020	0.027	V0	0.024	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.011	V1	0.014	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.043	V0	0.055	V0	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.012	V1	0.020	V0	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station Number		**AMS 1**		**AMS 6**			
Sample Date		**09-Sep**		**09-Sep**		**09-Sep**	
Total Air Volume (m³)		**315.98**		**315.98**		**315.99**	
Compound Name	**MDL (ng/m³)**	**Results (ng/m³)**	**QC Flag**	**Results (ng/m³)**	**QC Flag**	**Results (ng/m³)**	**QC Flag**
Naphthalene	0.008	8.129	V0	10.822	V0	0.095	V0
Acenaphthylene	0.011	1.056	V0	1.079	V0	0.012	V0
Acenaphthene	0.006	1.421	V0	0.441	V0	0.017	V0
Fluorene	0.007	2.975	V0	1.990	V0	0.013	V0
Phenanthrene	0.007	1.805	V0	1.937	V0	0.009	V0
Anthracene	0.017	0.088	V0	0.164	V0	0.007	V1
Acridine	0.019	0.029	V0	0.065	V0	0.005	V1
Fluoranthene	0.007	0.030	V0	0.215	V0	0.003	V1
Pyrene	0.008	0.139	V0	0.206	V0	0.002	V1
Benzo(c)phenanthrene	0.015	0.032	V0	0.036	V0	0.006	V1
Benz(a)anthracene	0.014	0.024	V0	0.025	V0	0.004	V1
Chrysene	0.013	0.088	V0	0.049	V0	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.017	V0	0.011	V1	0.002	V1
Benzo(b)fluoranthene	0.020	0.051	V0	0.049	V0	0.002	V1
Benzo(k)fluoranthene	0.013	0.051	V0	0.049	V0	0.002	V1
Benzo(a)pyrene	0.016	0.016	V0	0.015	V1	0.003	V1
3-Methylcholanthrene	0.022	0.014	V1	0.009	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.023	V0	0.030	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.019	V1	0.021	V0	0.001	V1
Benzo(ghi)perylene	0.020	0.020	V1	0.021	V0	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.014	V1	0.012	V1	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.008	V1	0.012	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.004	V1	0.009	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		09-Sep		09-Sep		09-Sep	
Total Air Volume (m^3)		316		316		315.99	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	18.960	V0	5.023	V0	0.095	V0
Acenaphthylene	0.011	0.755	V0	0.439	V0	0.012	V0
Acenaphthene	0.006	0.689	V0	1.283	V0	0.017	V0
Fluorene	0.007	2.357	V0	2.329	V0	0.013	V0
Phenanthrene	0.007	2.112	V0	3.517	V0	0.009	V0
Anthracene	0.017	0.210	V0	0.192	V0	0.007	V1
Acridine	0.019	0.072	V0	0.038	V0	0.005	V1
Fluoranthene	0.007	0.243	V0	0.223	V0	0.003	V1
Pyrene	0.008	0.199	V0	0.132	V0	0.002	V1
Benzo(c)phenanthrene	0.015	0.019	V0	0.027	V0	0.006	V1
Benz(a)anthracene	0.014	0.028	V0	0.028	V0	0.004	V1
Chrysene	0.013	0.031	V0	0.025	V0	0.003	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.021	V0	0.015	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.021	V0	0.018	V1	0.002	V1
Benzo(k)fluoranthene	0.013	0.021	V0	0.019	V0	0.002	V1
Benzo(a)pyrene	0.016	0.016	V0	0.017	V0	0.003	V1
3-Methylcholanthrene	0.022	0.012	V1	0.011	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.028	V0	0.026	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.058	V0	0.066	V0	0.001	V1
Benzo(ghi)perylene	0.020	0.032	V0	0.017	V1	<0.001	V1
Dibenzo(a,l)pyrene	0.024	0.015	V1	0.013	V1	<0.001	V1
Dibenzo(a,i)pyrene	0.025	0.012	V1	0.014	V1	<0.001	V1
Dibenzo(a,h)pyrene	0.020	0.009	V1	0.011	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		15-Sep		15-Sep		15-Sep	
Total Air Volume (m^3)		315.99		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	16.043	V0	20.928	V0	0.262	V0
Acenaphthylene	0.011	1.186	V0	2.539	V0	0.036	V0
Acenaphthene	0.006	0.665	V0	0.297	V0	0.034	V0
Fluorene	0.007	0.308	V0	0.416	V0	0.026	V0
Phenanthrene	0.007	0.569	V0	0.984	V0	0.028	V0
Anthracene	0.017	0.122	V0	0.291	V0	0.022	V0
Acridine	0.019	0.199	V0	0.085	V0	0.022	V0
Fluoranthene	0.007	0.166	V0	0.516	V0	0.051	V0
Pyrene	0.008	0.187	V0	0.474	V0	0.022	V0
Benzo(c)phenanthrene	0.015	0.038	V0	0.086	V0	0.019	V0
Benz(a)anthracene	0.014	0.082	V0	0.101	V0	0.030	V0
Chrysene	0.013	0.068	V0	0.135	V0	0.030	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.010	V1	0.012	V1	0.005	V1
Benzo(b)fluoranthene	0.020	0.073	V0	0.092	V0	0.009	V1
Benzo(k)fluoranthene	0.013	0.072	V0	0.091	V0	0.011	V1
Benzo(a)pyrene	0.016	0.019	V0	0.026	V0	0.004	V1
3-Methylcholanthrene	0.022	0.008	V1	0.007	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.059	V0	0.061	V0	0.005	V1
Dibenz(a,h)anthracene	0.020	0.036	V0	0.030	V0	0.004	V1
Benzo(ghi)perylene	0.020	0.026	V0	0.050	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.010	V1	0.013	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.010	V1	0.012	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.009	V1	0.008	V1	0.003	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		15-Sep		15-Sep		15-Sep	
Total Air Volume (m^3)		316		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	39.454	V0	22.301	V0	0.262	V0
Acenaphthylene	0.011	1.657	V0	1.324	V0	0.036	V0
Acenaphthene	0.006	0.404	V0	1.576	V0	0.034	V0
Fluorene	0.007	0.411	V0	1.440	V0	0.026	V0
Phenanthrene	0.007	0.728	V0	2.209	V0	0.028	V0
Anthracene	0.017	0.131	V0	0.326	V0	0.022	V0
Acridine	0.019	0.211	V0	0.099	V0	0.022	V0
Fluoranthene	0.007	0.220	V0	0.468	V0	0.051	V0
Pyrene	0.008	0.371	V0	0.276	V0	0.022	V0
Benzo(c)phenanthrene	0.015	0.040	V0	0.061	V0	0.019	V0
Benz(a)anthracene	0.014	0.069	V0	0.015	V0	0.030	V0
Chrysene	0.013	0.122	V0	0.073	V0	0.030	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.008	V1	0.018	V0	0.005	V1
Benzo(b)fluoranthene	0.020	0.042	V0	0.056	V0	0.009	V1
Benzo(k)fluoranthene	0.013	0.053	V0	0.056	V0	0.011	V1
Benzo(a)pyrene	0.016	0.019	V0	0.015	V1	0.004	V1
3-Methylcholanthrene	0.022	0.010	V1	0.007	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.128	V0	0.017	V0	0.005	V1
Dibenz(a,h)anthracene	0.020	0.034	V0	0.043	V0	0.004	V1
Benzo(ghi)perylene	0.020	0.038	V0	0.010	V1	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.010	V1	0.006	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.008	V1	0.018	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.009	V1	0.009	V1	0.003	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		21-Sep		21-Sep		21-Sep	
Total Air Volume (m^3)		315.98		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	9.643	V0	17.703	V0	0.153	V0
Acenaphthylene	0.011	3.062	V0	1.014	V0	0.044	V0
Acenaphthene	0.006	0.554	V0	0.300	V0	0.034	V0
Fluorene	0.007	0.401	V0	0.325	V0	0.028	V0
Phenanthrene	0.007	0.684	V0	0.340	V0	0.024	V0
Anthracene	0.017	0.195	V0	0.070	V0	0.019	V0
Acridine	0.019	0.181	V0	0.083	V0	0.016	V1
Fluoranthene	0.007	0.179	V0	0.359	V0	0.021	V0
Pyrene	0.008	0.265	V0	0.358	V0	0.022	V0
Benzo(c)phenanthrene	0.015	0.051	V0	0.023	V0	0.014	V1
Benz(a)anthracene	0.014	0.051	V0	0.027	V0	0.026	V0
Chrysene	0.013	0.098	V0	0.122	V0	0.019	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.018	V0	0.018	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.093	V0	0.092	V0	0.009	V1
Benzo(k)fluoranthene	0.013	0.093	V0	0.092	V0	0.005	V1
Benzo(a)pyrene	0.016	0.016	V1	0.023	V0	0.003	V1
3-Methylcholanthrene	0.022	0.007	V1	0.026	V0	0.002	V1
Indeno(123-cd)pyrene	0.017	0.035	V0	0.044	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.034	V0	0.052	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.050	V0	0.052	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.011	V1	0.010	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.005	V1	0.027	V0	0.004	V1
Dibenzo(a,h)pyrene	0.020	0.019	V1	0.012	V1	0.003	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station Number		**AMS 7**		**AMS 14**			
Sample Date		**21-Sep**		**21-Sep**		**21-Sep**	
Total Air Volume (m^3)		**315.99**		**315.99**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	67.283	V0	26.078	V0	0.153	V0
Acenaphthylene	0.011	2.934	V0	1.418	V0	0.044	V0
Acenaphthene	0.006	0.794	V0	2.779	V0	0.034	V0
Fluorene	0.007	0.826	V0	1.833	V0	0.028	V0
Phenanthrene	0.007	0.895	V0	1.639	V0	0.024	V0
Anthracene	0.017	0.143	V0	0.219	V0	0.019	V0
Acridine	0.019	0.119	V0	0.125	V0	0.016	V1
Fluoranthene	0.007	0.363	V0	0.332	V0	0.021	V0
Pyrene	0.008	0.638	V0	0.301	V0	0.022	V0
Benzo(c)phenanthrene	0.015	0.018	V0	0.081	V0	0.014	V1
Benz(a)anthracene	0.014	0.079	V0	0.328	V0	0.026	V0
Chrysene	0.013	0.108	V0	0.110	V0	0.019	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.061	V0	0.091	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.106	V0	0.204	V0	0.009	V1
Benzo(k)fluoranthene	0.013	0.108	V0	0.204	V0	0.005	V1
Benzo(a)pyrene	0.016	0.025	V0	0.044	V0	0.003	V1
3-Methylcholanthrene	0.022	0.007	V1	0.013	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.133	V0	0.136	V0	0.002	V1
Dibenz(a,h)anthracene	0.020	0.040	V0	0.097	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.086	V0	0.141	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.008	V1	0.024	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.018	V1	0.035	V0	0.004	V1
Dibenzo(a,h)pyrene	0.020	0.026	V0	0.042	V0	0.003	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		27-Sep		27-Sep		27-Sep	
Total Air Volume (m^3)		315.97		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	17.108	V0	5.688	V0	0.084	V0
Acenaphthylene	0.011	2.537	V0	1.051	V0	0.030	V0
Acenaphthene	0.006	1.265	V0	0.334	V0	0.019	V0
Fluorene	0.007	0.631	V0	0.315	V0	0.014	V0
Phenanthrene	0.007	0.716	V0	0.213	V0	0.021	V0
Anthracene	0.017	0.155	V0	0.052	V0	0.020	V0
Acridine	0.019	0.019	V0	0.182	V0	0.014	V1
Fluoranthene	0.007	0.394	V0	0.123	V0	0.020	V0
Pyrene	0.008	0.289	V0	0.203	V0	0.023	V0
Benzo(c)phenanthrene	0.015	0.040	V0	0.057	V0	0.013	V1
Benz(a)anthracene	0.014	0.089	V0	0.020	V0	0.020	V0
Chrysene	0.013	0.188	V0	0.087	V0	0.012	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.031	V0	0.022	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.103	V0	0.119	V0	0.003	V1
Benzo(k)fluoranthene	0.013	0.103	V0	0.119	V0	0.005	V1
Benzo(a)pyrene	0.016	0.035	V0	0.019	V0	0.003	V1
3-Methylcholanthrene	0.022	0.023	V0	0.020	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.074	V0	0.094	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.063	V0	0.049	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.074	V0	0.028	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.017	V1	0.014	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.014	V1	0.012	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.009	V1	0.009	V1	0.003	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		27-Sep		27-Sep		27-Sep	
Total Air Volume (m^3)		316		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	6.332	V0	5.133	V0	0.084	V0
Acenaphthylene	0.011	1.735	V0	1.401	V0	0.030	V0
Acenaphthene	0.006	0.143	V0	0.199	V0	0.019	V0
Fluorene	0.007	0.476	V0	0.581	V0	0.014	V0
Phenanthrene	0.007	0.291	V0	0.379	V0	0.021	V0
Anthracene	0.017	0.033	V0	0.046	V0	0.020	V0
Acridine	0.019	0.047	V0	0.037	V0	0.014	V1
Fluoranthene	0.007	0.346	V0	0.303	V0	0.020	V0
Pyrene	0.008	0.280	V0	0.288	V0	0.023	V0
Benzo(c)phenanthrene	0.015	0.005	V1	0.006	V1	0.013	V1
Benz(a)anthracene	0.014	0.021	V0	0.129	V0	0.020	V0
Chrysene	0.013	0.078	V0	0.105	V0	0.012	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.103	V0	0.004	V1	0.004	V1
Benzo(b)fluoranthene	0.020	0.143	V0	0.029	V0	0.003	V1
Benzo(k)fluoranthene	0.013	0.159	V0	0.041	V0	0.005	V1
Benzo(a)pyrene	0.016	0.014	V1	0.016	V1	0.003	V1
3-Methylcholanthrene	0.022	0.007	V1	0.010	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.055	V0	0.079	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.045	V0	0.078	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.033	V0	0.050	V0	0.002	V1
Dibenzo(a,l)pyrene	0.024	0.009	V1	0.009	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.033	V0	0.047	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.021	V0	0.009	V1	0.003	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		03-Oct		03-Oct		03-Oct	
Total Air Volume (m^3)		315.98		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	4.904	V0	23.712	V0	0.070	V0
Acenaphthylene	0.011	1.782	V0	1.747	V0	0.037	V0
Acenaphthene	0.006	0.566	V0	0.437	V0	0.024	V0
Fluorene	0.007	0.647	V0	0.507	V0	0.022	V0
Phenanthrene	0.007	0.232	V0	0.357	V0	0.019	V0
Anthracene	0.017	0.081	V0	0.071	V0	0.019	V0
Acridine	0.019	0.050	V0	0.013	V1	0.018	V1
Fluoranthene	0.007	0.616	V0	0.209	V0	0.010	V0
Pyrene	0.008	0.304	V0	0.227	V0	0.018	V0
Benzo(c)phenanthrene	0.015	0.066	V0	0.036	V0	0.017	V0
Benz(a)anthracene	0.014	0.214	V0	0.048	V0	0.016	V0
Chrysene	0.013	0.264	V0	0.066	V0	0.014	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.040	V0	0.005	V1	0.007	V1
Benzo(b)fluoranthene	0.020	0.140	V0	0.054	V0	0.005	V1
Benzo(k)fluoranthene	0.013	0.154	V0	0.061	V0	0.004	V1
Benzo(a)pyrene	0.016	0.050	V0	0.013	V1	0.004	V1
3-Methylcholanthrene	0.022	0.078	V0	0.005	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.130	V0	0.054	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.122	V0	0.063	V0	0.005	V1
Benzo(ghi)perylene	0.020	0.071	V0	0.040	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.007	V1	0.007	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.002	V1	0.038	V0	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.010	V1	0.007	V1	0.004	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		03-Oct		03-Oct		03-Oct	
Total Air Volume (m^3)		316		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	28.546	V0	17.509	V0	0.070	V0
Acenaphthylene	0.011	3.932	V0	2.075	V0	0.037	V0
Acenaphthene	0.006	0.290	V0	4.356	V0	0.024	V0
Fluorene	0.007	0.687	V0	1.859	V0	0.022	V0
Phenanthrene	0.007	0.356	V0	1.269	V0	0.019	V0
Anthracene	0.017	0.091	V0	0.206	V0	0.019	V0
Acridine	0.019	0.030	V0	0.037	V0	0.018	V1
Fluoranthene	0.007	0.149	V0	0.492	V0	0.010	V0
Pyrene	0.008	0.268	V0	0.247	V0	0.018	V0
Benzo(c)phenanthrene	0.015	0.002	V1	0.040	V0	0.017	V0
Benz(a)anthracene	0.014	0.041	V0	0.244	V0	0.016	V0
Chrysene	0.013	0.121	V0	0.238	V0	0.014	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.010	V1	0.036	V0	0.007	V1
Benzo(b)fluoranthene	0.020	0.079	V0	0.126	V0	0.005	V1
Benzo(k)fluoranthene	0.013	0.079	V0	0.126	V0	0.004	V1
Benzo(a)pyrene	0.016	0.017	V0	0.020	V0	0.004	V1
3-Methylcholanthrene	0.022	0.009	V1	0.013	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.050	V0	0.062	V0	0.003	V1
Dibenz(a,h)anthracene	0.020	0.035	V0	0.083	V0	0.005	V1
Benzo(ghi)perylene	0.020	0.058	V0	0.014	V1	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.013	V1	0.008	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.063	V0	0.023	V1	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.042	V0	0.009	V1	0.004	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		09-Oct		09-Oct		09-Oct	
Total Air Volume (m^3)		315.99		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	8.005	V0	16.498	V0	0.054	V0
Acenaphthylene	0.011	2.435	V0	1.886	V0	0.038	V0
Acenaphthene	0.006	2.041	V0	0.657	V0	0.027	V0
Fluorene	0.007	0.881	V0	0.309	V0	0.014	V0
Phenanthrene	0.007	0.336	V0	1.333	V0	0.011	V0
Anthracene	0.017	0.070	V0	0.185	V0	0.017	V1
Acridine	0.019	0.085	V0	0.076	V0	0.015	V1
Fluoranthene	0.007	0.162	V0	0.684	V0	0.018	V0
Pyrene	0.008	0.257	V0	0.335	V0	0.011	V0
Benzo(c)phenanthrene	0.015	0.072	V0	0.075	V0	0.015	V0
Benz(a)anthracene	0.014	0.025	V0	0.289	V0	0.019	V0
Chrysene	0.013	0.150	V0	0.301	V0	0.016	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.037	V0	0.106	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.079	V0	0.181	V0	0.003	V1
Benzo(k)fluoranthene	0.013	0.060	V0	0.196	V0	0.006	V1
Benzo(a)pyrene	0.016	0.021	V0	0.068	V0	0.005	V1
3-Methylcholanthrene	0.022	0.037	V0	0.007	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.063	V0	0.054	V0	0.004	V1
Dibenz(a,h)anthracene	0.020	0.093	V0	0.069	V0	0.004	V1
Benzo(ghi)perylene	0.020	0.072	V0	0.017	V1	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.008	V1	0.009	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.029	V0	0.022	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.035	V0	0.017	V1	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		09-Oct		09-Oct		09-Oct	
Total Air Volume (m^3)		316		316		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	6.562	V0	2.929	V0	0.054	V0
Acenaphthylene	0.011	0.946	V0	1.065	V0	0.038	V0
Acenaphthene	0.006	0.832	V0	0.663	V0	0.027	V0
Fluorene	0.007	0.360	V0	0.622	V0	0.014	V0
Phenanthrene	0.007	0.315	V0	0.158	V0	0.011	V0
Anthracene	0.017	0.050	V0	0.055	V0	0.017	V1
Acridine	0.019	0.014	V1	0.062	V0	0.015	V1
Fluoranthene	0.007	0.183	V0	0.350	V0	0.018	V0
Pyrene	0.008	0.243	V0	0.140	V0	0.011	V0
Benzo(c)phenanthrene	0.015	0.012	V1	0.020	V0	0.015	V0
Benz(a)anthracene	0.014	0.108	V0	0.193	V0	0.019	V0
Chrysene	0.013	0.153	V0	0.180	V0	0.016	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.006	V1	0.030	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.046	V0	0.061	V0	0.003	V1
Benzo(k)fluoranthene	0.013	0.045	V0	0.073	V0	0.006	V1
Benzo(a)pyrene	0.016	0.017	V0	0.019	V0	0.005	V1
3-Methylcholanthrene	0.022	0.009	V1	0.019	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.079	V0	0.029	V0	0.004	V1
Dibenz(a,h)anthracene	0.020	0.080	V0	0.046	V0	0.004	V1
Benzo(ghi)perylene	0.020	0.015	V1	0.056	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.013	V1	0.021	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.029	V0	0.069	V0	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.014	V1	0.024	V0	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station Number		**AMS 1**		**AMS 6**			
Sample Date		**15-Oct**		**15-Oct**		**15-Oct**	
Total Air Volume (m^3)		**315.98**		**315.98**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	7.501	V0	12.492	V0	0.181	V0
Acenaphthylene	0.011	0.227	V0	0.766	V0	0.049	V0
Acenaphthene	0.006	0.307	V0	0.443	V0	0.040	V0
Fluorene	0.007	0.286	V0	0.567	V0	0.019	V0
Phenanthrene	0.007	0.424	V0	1.498	V0	0.036	V0
Anthracene	0.017	0.039	V0	0.110	V0	0.008	V1
Acridine	0.019	0.011	V1	0.006	V1	0.008	V1
Fluoranthene	0.007	0.067	V0	0.292	V0	0.040	V0
Pyrene	0.008	0.033	V0	0.204	V0	0.015	V0
Benzo(c)phenanthrene	0.015	0.019	V0	0.014	V1	0.008	V1
Benz(a)anthracene	0.014	0.009	V1	0.011	V1	0.012	V1
Chrysene	0.013	0.043	V0	0.072	V0	0.017	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.002	V1	0.010	V1	0.003	V1
Benzo(b)fluoranthene	0.020	0.016	V1	0.026	V0	0.007	V1
Benzo(k)fluoranthene	0.013	0.015	V0	0.024	V0	0.004	V1
Benzo(a)pyrene	0.016	0.007	V1	0.009	V1	0.003	V1
3-Methylcholanthrene	0.022	0.004	V1	0.005	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.028	V0	0.016	V1	0.008	V1
Dibenz(a,h)anthracene	0.020	0.028	V0	0.032	V0	0.008	V1
Benzo(ghi)perylene	0.020	0.008	V1	0.016	V1	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.006	V1	0.007	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.005	V1	0.009	V1	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.006	V1	0.006	V1	0.003	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		15-Oct		15-Oct		15-Oct	
Total Air Volume (m^3)		316		316		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	13.480	V0	1.369	V0	0.181	V0
Acenaphthylene	0.011	0.898	V0	0.184	V0	0.049	V0
Acenaphthene	0.006	0.269	V0	0.129	V0	0.040	V0
Fluorene	0.007	0.426	V0	0.221	V0	0.019	V0
Phenanthrene	0.007	0.750	V0	0.202	V0	0.036	V0
Anthracene	0.017	0.071	V0	0.018	V0	0.008	V1
Acridine	0.019	0.023	V0	0.020	V0	0.008	V1
Fluoranthene	0.007	0.290	V0	0.154	V0	0.040	V0
Pyrene	0.008	0.112	V0	0.033	V0	0.015	V0
Benzo(c)phenanthrene	0.015	0.025	V0	0.009	V1	0.008	V1
Benz(a)anthracene	0.014	0.015	V0	0.012	V1	0.012	V1
Chrysene	0.013	0.050	V0	0.058	V0	0.017	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.006	V1	0.005	V1	0.003	V1
Benzo(b)fluoranthene	0.020	0.029	V0	0.038	V0	0.007	V1
Benzo(k)fluoranthene	0.013	0.028	V0	0.036	V0	0.004	V1
Benzo(a)pyrene	0.016	0.012	V1	0.009	V1	0.003	V1
3-Methylcholanthrene	0.022	0.005	V1	0.005	V1	0.001	V1
Indeno(123-cd)pyrene	0.017	0.024	V0	0.012	V1	0.008	V1
Dibenz(a,h)anthracene	0.020	0.022	V0	0.023	V0	0.008	V1
Benzo(ghi)perylene	0.020	0.013	V1	0.014	V1	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.008	V1	0.006	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.010	V1	0.010	V1	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.009	V1	0.008	V1	0.003	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		21-Oct		21-Oct		21-Oct	
Total Air Volume (m^3)		315.98		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	44.616	V0	41.740	V0	0.276	V0
Acenaphthylene	0.011	1.845	V0	0.759	V0	0.070	V0
Acenaphthene	0.006	0.721	V0	0.355	V0	0.019	V0
Fluorene	0.007	0.935	V0	0.734	V0	0.025	V0
Phenanthrene	0.007	1.467	V0	1.004	V0	0.019	V0
Anthracene	0.017	0.115	V0	0.072	V0	0.011	V1
Acridine	0.019	0.030	V0	0.013	V1	0.012	V1
Fluoranthene	0.007	0.132	V0	0.199	V0	0.033	V0
Pyrene	0.008	0.122	V0	0.162	V0	0.022	V0
Benzo(c)phenanthrene	0.015	0.017	V0	0.027	V0	0.009	V1
Benz(a)anthracene	0.014	0.039	V0	0.023	V0	0.014	V0
Chrysene	0.013	0.144	V0	0.091	V0	0.014	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.007	V1	0.015	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.072	V0	0.034	V0	0.009	V1
Benzo(k)fluoranthene	0.013	0.070	V0	0.029	V0	0.007	V1
Benzo(a)pyrene	0.016	0.015	V1	0.012	V1	0.004	V1
3-Methylcholanthrene	0.022	0.008	V1	0.005	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.035	V0	0.040	V0	0.007	V1
Dibenz(a,h)anthracene	0.020	0.053	V0	0.050	V0	0.005	V1
Benzo(ghi)perylene	0.020	0.037	V0	0.042	V0	0.006	V1
Dibenzo(a,l)pyrene	0.024	0.007	V1	0.007	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.010	V1	0.008	V1	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.008	V1	0.009	V1	0.003	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station Number		**AMS 7**		**AMS 14**			
Sample Date		**21-Oct**		**21-Oct**		**21-Oct**	
Total Air Volume (m^3)		**315.99**		**315.99**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	44.909	V0	13.113	V0	0.276	V0
Acenaphthylene	0.011	2.170	V0	0.429	V0	0.070	V0
Acenaphthene	0.006	0.596	V0	1.860	V0	0.019	V0
Fluorene	0.007	1.091	V0	1.007	V0	0.025	V0
Phenanthrene	0.007	2.790	V0	1.174	V0	0.019	V0
Anthracene	0.017	0.250	V0	0.101	V0	0.011	V1
Acridine	0.019	0.055	V0	0.013	V1	0.012	V1
Fluoranthene	0.007	0.303	V0	0.163	V0	0.033	V0
Pyrene	0.008	0.408	V0	0.084	V0	0.022	V0
Benzo(c)phenanthrene	0.015	0.032	V0	0.016	V0	0.009	V1
Benz(a)anthracene	0.014	0.067	V0	0.027	V0	0.014	V0
Chrysene	0.013	0.184	V0	0.058	V0	0.014	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.005	V1	0.018	V0	0.004	V1
Benzo(b)fluoranthene	0.020	0.069	V0	0.028	V0	0.009	V1
Benzo(k)fluoranthene	0.013	0.047	V0	0.022	V0	0.007	V1
Benzo(a)pyrene	0.016	0.028	V0	0.014	V1	0.004	V1
3-Methylcholanthrene	0.022	0.005	V1	0.006	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.042	V0	0.024	V0	0.007	V1
Dibenz(a,h)anthracene	0.020	0.068	V0	0.027	V0	0.005	V1
Benzo(ghi)perylene	0.020	0.055	V0	0.009	V1	0.006	V1
Dibenzo(a,l)pyrene	0.024	0.012	V1	0.010	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.008	V1	0.013	V1	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.008	V1	0.010	V1	0.003	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		27-Oct		27-Oct		27-Oct	
Total Air Volume (m^3)		315.99		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	6.425	V0	10.932	V0	0.182	V0
Acenaphthylene	0.011	0.503	V0	3.461	V0	0.060	V0
Acenaphthene	0.006	0.906	V0	1.112	V0	0.026	V0
Fluorene	0.007	0.584	V0	1.221	V0	0.009	V0
Phenanthrene	0.007	0.987	V0	2.947	V0	0.037	V0
Anthracene	0.017	0.092	V0	0.310	V0	0.015	V1
Acridine	0.019	0.016	V1	0.016	V1	0.008	V1
Fluoranthene	0.007	0.115	V0	0.535	V0	0.032	V0
Pyrene	0.008	0.122	V0	0.442	V0	0.021	V0
Benzo(c)phenanthrene	0.015	0.034	V0	0.019	V0	0.010	V1
Benz(a)anthracene	0.014	0.006	V1	0.112	V0	0.011	V1
Chrysene	0.013	0.084	V0	0.188	V0	0.020	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.012	V1	0.005	V1	0.004	V1
Benzo(b)fluoranthene	0.020	0.028	V0	0.063	V0	0.008	V1
Benzo(k)fluoranthene	0.013	0.020	V0	0.055	V0	0.006	V1
Benzo(a)pyrene	0.016	0.029	V0	0.065	V0	0.003	V1
3-Methylcholanthrene	0.022	0.005	V1	0.010	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.045	V0	0.042	V0	0.006	V1
Dibenz(a,h)anthracene	0.020	0.040	V0	0.049	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.028	V0	0.057	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.025	V0	0.008	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.011	V1	0.012	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.013	V1	0.009	V1	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		27-Oct		27-Oct		27-Oct	
Total Air Volume (m^3)		316		316		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	9.481	V0	4.313	V0	0.182	V0
Acenaphthylene	0.011	0.618	V0	0.832	V0	0.060	V0
Acenaphthene	0.006	0.715	V0	0.700	V0	0.026	V0
Fluorene	0.007	0.725	V0	0.832	V0	0.009	V0
Phenanthrene	0.007	0.906	V0	1.026	V0	0.037	V0
Anthracene	0.017	0.078	V0	0.074	V0	0.015	V1
Acridine	0.019	0.042	V0	0.028	V0	0.008	V1
Fluoranthene	0.007	0.280	V0	0.194	V0	0.032	V0
Pyrene	0.008	0.175	V0	0.230	V0	0.021	V0
Benzo(c)phenanthrene	0.015	0.013	V1	0.028	V0	0.010	V1
Benz(a)anthracene	0.014	0.040	V0	0.018	V0	0.011	V1
Chrysene	0.013	0.110	V0	0.067	V0	0.020	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.014	V0	0.007	V1	0.004	V1
Benzo(b)fluoranthene	0.020	0.039	V0	0.025	V0	0.008	V1
Benzo(k)fluoranthene	0.013	0.035	V0	0.022	V0	0.006	V1
Benzo(a)pyrene	0.016	0.021	V0	0.027	V0	0.003	V1
3-Methylcholanthrene	0.022	0.011	V1	0.005	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.044	V0	0.035	V0	0.006	V1
Dibenz(a,h)anthracene	0.020	0.059	V0	0.024	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.044	V0	0.020	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.015	V1	0.005	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.018	V1	0.020	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.019	V1	0.008	V1	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		02-Nov		02-Nov		02-Nov	
Total Air Volume (m^3)		315.98		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	16.617	V0	33.658	V0	0.230	V0
Acenaphthylene	0.011	5.792	V0	5.464	V0	0.026	V0
Acenaphthene	0.006	0.930	V0	0.880	V0	0.036	V0
Fluorene	0.007	1.221	V0	1.468	V0	0.024	V0
Phenanthrene	0.007	4.405	V0	3.870	V0	0.017	V0
Anthracene	0.017	0.412	V0	0.344	V0	0.010	V1
Acridine	0.019	0.017	V1	0.039	V0	0.009	V1
Fluoranthene	0.007	0.501	V0	0.836	V0	0.035	V0
Pyrene	0.008	0.801	V0	0.724	V0	0.020	V0
Benzo(c)phenanthrene	0.015	0.041	V0	0.027	V0	0.005	V1
Benz(a)anthracene	0.014	0.319	V0	0.163	V0	0.010	V1
Chrysene	0.013	0.304	V0	0.236	V0	0.013	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.025	V0	0.008	V1	0.004	V1
Benzo(b)fluoranthene	0.020	0.116	V0	0.097	V0	0.006	V1
Benzo(k)fluoranthene	0.013	0.130	V0	0.083	V0	0.005	V1
Benzo(a)pyrene	0.016	0.075	V0	0.054	V0	0.003	V1
3-Methylcholanthrene	0.022	0.014	V1	0.009	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.092	V0	0.051	V0	0.008	V1
Dibenz(a,h)anthracene	0.020	0.084	V0	0.041	V0	0.004	V1
Benzo(ghi)perylene	0.020	0.035	V0	0.020	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.040	V0	0.014	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.021	V1	0.015	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.008	V1	0.016	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		02-Nov		02-Nov		02-Nov	
Total Air Volume (m^3)		316		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	14.253	V0	2.337	V0	0.230	V0
Acenaphthylene	0.011	1.955	V0	1.599	V0	0.026	V0
Acenaphthene	0.006	0.357	V0	0.750	V0	0.036	V0
Fluorene	0.007	0.769	V0	0.737	V0	0.024	V0
Phenanthrene	0.007	1.687	V0	0.944	V0	0.017	V0
Anthracene	0.017	0.125	V0	0.079	V0	0.010	V1
Acridine	0.019	0.027	V0	0.012	V1	0.009	V1
Fluoranthene	0.007	0.208	V0	0.207	V0	0.035	V0
Pyrene	0.008	0.305	V0	0.126	V0	0.020	V0
Benzo(c)phenanthrene	0.015	0.012	V1	0.005	V1	0.005	V1
Benz(a)anthracene	0.014	0.055	V0	0.028	V0	0.010	V1
Chrysene	0.013	0.228	V0	0.083	V0	0.013	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.022	V0	0.007	V1	0.004	V1
Benzo(b)fluoranthene	0.020	0.038	V0	0.025	V0	0.006	V1
Benzo(k)fluoranthene	0.013	0.033	V0	0.023	V0	0.005	V1
Benzo(a)pyrene	0.016	0.048	V0	0.019	V0	0.003	V1
3-Methylcholanthrene	0.022	0.008	V1	0.006	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.054	V0	0.033	V0	0.008	V1
Dibenz(a,h)anthracene	0.020	0.044	V0	0.024	V0	0.004	V1
Benzo(ghi)perylene	0.020	0.017	V1	0.020	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.008	V1	0.007	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.020	V1	0.015	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.012	V1	0.014	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		08-Nov		08-Nov		08-Nov	
Total Air Volume (m^3)		315.98		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	15.181	V0	17.579	V0	0.132	V0
Acenaphthylene	0.011	2.775	V0	3.496	V0	0.033	V0
Acenaphthene	0.006	1.570	V0	0.446	V0	0.032	V0
Fluorene	0.007	2.655	V0	3.276	V0	0.042	V0
Phenanthrene	0.007	7.005	V0	6.474	V0	0.015	V0
Anthracene	0.017	0.722	V0	1.000	V0	0.003	V1
Acridine	0.019	0.064	V0	0.095	V0	0.020	V0
Fluoranthene	0.007	0.573	V0	1.496	V0	0.012	V0
Pyrene	0.008	0.947	V0	1.117	V0	0.009	V0
Benzo(c)phenanthrene	0.015	0.067	V0	0.079	V0	0.008	V1
Benz(a)anthracene	0.014	0.411	V0	0.259	V0	0.003	V1
Chrysene	0.013	0.488	V0	0.443	V0	0.010	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.029	V0	0.022	V0	0.001	V1
Benzo(b)fluoranthene	0.020	0.355	V0	0.384	V0	0.010	V1
Benzo(k)fluoranthene	0.013	0.355	V0	0.384	V0	0.011	V1
Benzo(a)pyrene	0.016	0.086	V0	0.055	V0	0.004	V1
3-Methylcholanthrene	0.022	0.009	V1	0.018	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.031	V0	0.023	V0	0.006	V1
Dibenz(a,h)anthracene	0.020	0.040	V0	0.054	V0	0.007	V1
Benzo(ghi)perylene	0.020	0.110	V0	0.123	V0	0.004	V1
Dibenzo(a,l)pyrene	0.024	0.028	V0	0.020	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.009	V1	0.010	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.009	V1	0.007	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		08-Nov		08-Nov		08-Nov	
Total Air Volume (m^3)		316		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	11.930	V0	5.697	V0	0.132	V0
Acenaphthylene	0.011	1.371	V0	0.889	V0	0.033	V0
Acenaphthene	0.006	0.568	V0	1.210	V0	0.032	V0
Fluorene	0.007	1.785	V0	2.522	V0	0.042	V0
Phenanthrene	0.007	3.390	V0	4.223	V0	0.015	V0
Anthracene	0.017	0.268	V0	0.236	V0	0.003	V1
Acridine	0.019	0.058	V0	0.022	V0	0.020	V0
Fluoranthene	0.007	0.471	V0	0.331	V0	0.012	V0
Pyrene	0.008	0.568	V0	0.165	V0	0.009	V0
Benzo(c)phenanthrene	0.015	0.070	V0	0.055	V0	0.008	V1
Benz(a)anthracene	0.014	0.065	V0	0.011	V1	0.003	V1
Chrysene	0.013	0.151	V0	0.070	V0	0.010	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.007	V1	0.009	V1	0.001	V1
Benzo(b)fluoranthene	0.020	0.108	V0	0.066	V0	0.010	V1
Benzo(k)fluoranthene	0.013	0.109	V0	0.066	V0	0.011	V1
Benzo(a)pyrene	0.016	0.038	V0	0.015	V1	0.004	V1
3-Methylcholanthrene	0.022	0.010	V1	0.010	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.039	V0	0.032	V0	0.006	V1
Dibenz(a,h)anthracene	0.020	0.038	V0	0.056	V0	0.007	V1
Benzo(ghi)perylene	0.020	0.082	V0	0.034	V0	0.004	V1
Dibenzo(a,l)pyrene	0.024	0.010	V1	0.007	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.009	V1	0.023	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.008	V1	0.012	V1	0.001	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		14-Nov		14-Nov		14-Nov	
Total Air Volume (m^3)		315.98		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	6.782	V0	9.550	V0	0.140	V0
Acenaphthylene	0.011	1.202	V0	0.486	V0	0.030	V0
Acenaphthene	0.006	0.930	V0	0.613	V0	0.043	V0
Fluorene	0.007	1.602	V0	0.905	V0	0.032	V0
Phenanthrene	0.007	4.186	V0	2.022	V0	0.015	V0
Anthracene	0.017	0.351	V0	0.119	V0	0.007	V1
Acridine	0.019	0.035	V0	0.048	V0	0.020	V0
Fluoranthene	0.007	0.409	V0	0.312	V0	0.023	V0
Pyrene	0.008	0.473	V0	0.313	V0	0.014	V0
Benzo(c)phenanthrene	0.015	0.059	V0	0.045	V0	0.009	V1
Benz(a)anthracene	0.014	0.076	V0	0.042	V0	0.003	V1
Chrysene	0.013	0.182	V0	0.079	V0	0.005	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.009	V1	0.010	V1	0.002	V1
Benzo(b)fluoranthene	0.020	0.096	V0	0.085	V0	0.008	V1
Benzo(k)fluoranthene	0.013	0.096	V0	0.085	V0	0.008	V1
Benzo(a)pyrene	0.016	0.040	V0	0.017	V0	0.004	V1
3-Methylcholanthrene	0.022	0.011	V1	0.009	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.022	V0	0.029	V0	0.007	V1
Dibenz(a,h)anthracene	0.020	0.038	V0	0.039	V0	0.005	V1
Benzo(ghi)perylene	0.020	0.039	V0	0.037	V0	0.006	V1
Dibenzo(a,l)pyrene	0.024	0.027	V0	0.010	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.017	V1	0.017	V1	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.008	V1	0.012	V1	0.002	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		14-Nov		14-Nov		14-Nov	
Total Air Volume (m^3)		316		316		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	11.382	V0	5.904	V0	0.140	V0
Acenaphthylene	0.011	0.384	V0	0.918	V0	0.030	V0
Acenaphthene	0.006	0.618	V0	1.281	V0	0.043	V0
Fluorene	0.007	1.113	V0	1.194	V0	0.032	V0
Phenanthrene	0.007	2.496	V0	2.318	V0	0.015	V0
Anthracene	0.017	0.134	V0	0.212	V0	0.007	V1
Acridine	0.019	0.049	V0	0.036	V0	0.020	V0
Fluoranthene	0.007	0.397	V0	0.471	V0	0.023	V0
Pyrene	0.008	0.500	V0	0.411	V0	0.014	V0
Benzo(c)phenanthrene	0.015	0.022	V0	0.014	V1	0.009	V1
Benz(a)anthracene	0.014	0.064	V0	0.032	V0	0.003	V1
Chrysene	0.013	0.099	V0	0.090	V0	0.005	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.004	V1	0.016	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.084	V0	0.084	V0	0.008	V1
Benzo(k)fluoranthene	0.013	0.084	V0	0.084	V0	0.008	V1
Benzo(a)pyrene	0.016	0.032	V0	0.023	V0	0.004	V1
3-Methylcholanthrene	0.022	0.007	V1	0.012	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.024	V0	0.039	V0	0.007	V1
Dibenz(a,h)anthracene	0.020	0.044	V0	0.039	V0	0.005	V1
Benzo(ghi)perylene	0.020	0.052	V0	0.027	V0	0.006	V1
Dibenzo(a,l)pyrene	0.024	0.014	V1	0.006	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.015	V1	0.016	V1	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.015	V1	0.014	V1	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		20-Nov		20-Nov		20-Nov	
Total Air Volume (m^3)		315.99		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	7.008	V0	9.251	V0	0.168	V0
Acenaphthylene	0.011	0.567	V0	0.801	V0	0.042	V0
Acenaphthene	0.006	0.584	V0	0.387	V0	0.042	V0
Fluorene	0.007	0.889	V0	0.733	V0	0.056	V0
Phenanthrene	0.007	3.898	V0	1.868	V0	0.021	V0
Anthracene	0.017	0.214	V0	0.123	V0	0.007	V1
Acridine	0.019	0.149	V0	0.032	V0	0.025	V0
Fluoranthene	0.007	0.238	V0	0.379	V0	0.019	V0
Pyrene	0.008	0.307	V0	0.379	V0	0.007	V1
Benzo(c)phenanthrene	0.015	0.063	V0	0.050	V0	0.006	V1
Benz(a)anthracene	0.014	0.082	V0	0.037	V0	0.003	V1
Chrysene	0.013	0.165	V0	0.084	V0	0.007	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.039	V0	0.042	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.089	V0	0.040	V0	0.006	V1
Benzo(k)fluoranthene	0.013	0.090	V0	0.051	V0	0.006	V1
Benzo(a)pyrene	0.016	0.042	V0	0.037	V0	0.004	V1
3-Methylcholanthrene	0.022	0.010	V1	0.007	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.034	V0	0.043	V0	0.004	V1
Dibenz(a,h)anthracene	0.020	0.043	V0	0.030	V0	0.006	V1
Benzo(ghi)perylene	0.020	0.034	V0	0.051	V0	0.006	V1
Dibenzo(a,l)pyrene	0.024	0.022	V1	0.010	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.021	V1	0.009	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.012	V1	0.006	V1	0.001	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		20-Nov		20-Nov		20-Nov	
Total Air Volume (m^3)		316.01		316		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	6.251	V0	2.405	V0	0.168	V0
Acenaphthylene	0.011	0.410	V0	0.089	V0	0.042	V0
Acenaphthene	0.006	0.788	V0	0.278	V0	0.042	V0
Fluorene	0.007	0.615	V0	0.514	V0	0.056	V0
Phenanthrene	0.007	1.111	V0	0.518	V0	0.021	V0
Anthracene	0.017	0.070	V0	0.029	V0	0.007	V1
Acridine	0.019	0.030	V0	0.017	V1	0.025	V0
Fluoranthene	0.007	0.250	V0	0.182	V0	0.019	V0
Pyrene	0.008	0.250	V0	0.060	V0	0.007	V1
Benzo(c)phenanthrene	0.015	0.018	V0	0.056	V0	0.006	V1
Benz(a)anthracene	0.014	0.041	V0	0.004	V1	0.003	V1
Chrysene	0.013	0.074	V0	0.013	V1	0.007	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.013	V0	0.003	V1	0.002	V1
Benzo(b)fluoranthene	0.020	0.117	V0	0.138	V0	0.006	V1
Benzo(k)fluoranthene	0.013	0.118	V0	0.138	V0	0.006	V1
Benzo(a)pyrene	0.016	0.019	V0	0.012	V1	0.004	V1
3-Methylcholanthrene	0.022	0.004	V1	0.008	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.021	V0	0.032	V0	0.004	V1
Dibenz(a,h)anthracene	0.020	0.029	V0	0.049	V0	0.006	V1
Benzo(ghi)perylene	0.020	0.038	V0	0.063	V0	0.006	V1
Dibenzo(a,l)pyrene	0.024	0.018	V1	0.015	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.016	V1	0.010	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.011	V1	0.007	V1	0.001	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

		Bertha Ganter -					
Station Name		**Fort McKay**		**Patricia McInnes**		**Travel Blank**	
Station Number		**AMS 1**		**AMS 6**			
Sample Date		**26-Nov**		**26-Nov**		**26-Nov**	
Total Air Volume (m^3)		**315.98**		**315.98**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	28.934	V0	12.428	V0	0.159	V0
Acenaphthylene	0.011	1.320	V0	0.583	V0	0.055	V0
Acenaphthene	0.006	0.941	V0	0.180	V0	0.047	V0
Fluorene	0.007	1.770	V0	1.418	V0	0.051	V0
Phenanthrene	0.007	4.255	V0	2.219	V0	0.026	V0
Anthracene	0.017	0.264	V0	0.115	V0	0.007	V1
Acridine	0.019	0.039	V0	0.045	V0	0.015	V1
Fluoranthene	0.007	0.355	V0	0.308	V0	0.012	V0
Pyrene	0.008	0.451	V0	0.277	V0	0.016	V0
Benzo(c)phenanthrene	0.015	0.039	V0	0.022	V0	0.008	V1
Benz(a)anthracene	0.014	0.062	V0	0.016	V0	0.005	V1
Chrysene	0.013	0.438	V0	0.390	V0	0.010	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.055	V0	0.062	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.266	V0	0.244	V0	0.013	V1
Benzo(k)fluoranthene	0.013	0.266	V0	0.344	V0	0.009	V1
Benzo(a)pyrene	0.016	0.047	V0	0.043	V0	0.003	V1
3-Methylcholanthrene	0.022	0.010	V1	0.018	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.057	V0	0.046	V0	0.006	V1
Dibenz(a,h)anthracene	0.020	0.050	V0	0.034	V0	0.004	V1
Benzo(ghi)perylene	0.020	0.083	V0	0.067	V0	0.004	V1
Dibenzo(a,l)pyrene	0.024	0.024	V1	0.019	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.008	V1	0.008	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.011	V1	0.007	V1	0.001	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		26-Nov		26-Nov		26-Nov	
Total Air Volume (m^3)		316		316		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	21.729	V0	7.327	V0	0.159	V0
Acenaphthylene	0.011	1.097	V0	0.714	V0	0.055	V0
Acenaphthene	0.006	0.650	V0	0.397	V0	0.047	V0
Fluorene	0.007	3.076	V0	1.313	V0	0.051	V0
Phenanthrene	0.007	2.444	V0	2.703	V0	0.026	V0
Anthracene	0.017	0.193	V0	0.120	V0	0.007	V1
Acridine	0.019	0.206	V0	0.106	V0	0.015	V1
Fluoranthene	0.007	0.328	V0	0.590	V0	0.012	V0
Pyrene	0.008	0.366	V0	0.135	V0	0.016	V0
Benzo(c)phenanthrene	0.015	0.027	V0	0.034	V0	0.008	V1
Benz(a)anthracene	0.014	0.081	V0	0.031	V0	0.005	V1
Chrysene	0.013	0.253	V0	0.130	V0	0.010	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.013	V1	0.011	V1	0.002	V1
Benzo(b)fluoranthene	0.020	0.170	V0	0.099	V0	0.013	V1
Benzo(k)fluoranthene	0.013	0.170	V0	0.100	V0	0.009	V1
Benzo(a)pyrene	0.016	0.080	V0	0.021	V0	0.003	V1
3-Methylcholanthrene	0.022	0.035	V0	0.008	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.064	V0	0.056	V0	0.006	V1
Dibenz(a,h)anthracene	0.020	0.106	V0	0.091	V0	0.004	V1
Benzo(ghi)perylene	0.020	0.087	V0	0.037	V0	0.004	V1
Dibenzo(a,l)pyrene	0.024	0.038	V0	0.011	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.029	V0	0.007	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.011	V1	0.009	V1	0.001	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		02-Dec		02-Dec		02-Dec	
Total Air Volume (m^3)		315.98		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	6.566	V0	17.609	V0	0.108	V0
Acenaphthylene	0.011	2.097	V0	3.849	V0	0.028	V0
Acenaphthene	0.006	0.601	V0	0.497	V0	0.041	V0
Fluorene	0.007	1.920	V0	1.792	V0	0.047	V0
Phenanthrene	0.007	4.463	V0	4.805	V0	0.013	V0
Anthracene	0.017	0.430	V0	0.436	V0	0.007	V1
Acridine	0.019	0.048	V0	0.038	V0	0.026	V0
Fluoranthene	0.007	0.461	V0	0.512	V0	0.018	V0
Pyrene	0.008	0.553	V0	0.961	V0	0.013	V0
Benzo(c)phenanthrene	0.015	0.028	V0	0.044	V0	0.006	V1
Benz(a)anthracene	0.014	0.088	V0	0.096	V0	0.006	V1
Chrysene	0.013	0.263	V0	0.104	V0	0.005	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.023	V0	0.020	V0	0.002	V1
Benzo(b)fluoranthene	0.020	0.140	V0	0.205	V0	0.008	V1
Benzo(k)fluoranthene	0.013	0.140	V0	0.206	V0	0.008	V1
Benzo(a)pyrene	0.016	0.050	V0	0.043	V0	0.003	V1
3-Methylcholanthrene	0.022	0.009	V1	0.008	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.040	V0	0.045	V0	0.005	V1
Dibenz(a,h)anthracene	0.020	0.067	V0	0.052	V0	0.005	V1
Benzo(ghi)perylene	0.020	0.059	V0	0.079	V0	0.004	V1
Dibenzo(a,l)pyrene	0.024	0.019	V1	0.010	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.023	V1	0.018	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.017	V1	0.009	V1	0.002	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station Number		**AMS 7**		**AMS 14**			
Sample Date		**02-Dec**		**02-Dec**		**02-Dec**	
Total Air Volume (m^3)		**316.01**		**316**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	25.570	V0	12.333	V0	0.108	V0
Acenaphthylene	0.011	2.979	V0	0.575	V0	0.028	V0
Acenaphthene	0.006	0.921	V0	0.454	V0	0.041	V0
Fluorene	0.007	1.589	V0	1.397	V0	0.047	V0
Phenanthrene	0.007	3.951	V0	1.702	V0	0.013	V0
Anthracene	0.017	0.207	V0	0.104	V0	0.007	V1
Acridine	0.019	0.044	V0	0.030	V0	0.026	V0
Fluoranthene	0.007	0.621	V0	0.283	V0	0.018	V0
Pyrene	0.008	0.590	V0	0.144	V0	0.013	V0
Benzo(c)phenanthrene	0.015	0.028	V0	0.027	V0	0.006	V1
Benz(a)anthracene	0.014	0.045	V0	0.027	V0	0.006	V1
Chrysene	0.013	0.124	V0	0.082	V0	0.005	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.014	V0	0.008	V1	0.002	V1
Benzo(b)fluoranthene	0.020	0.134	V0	0.080	V0	0.008	V1
Benzo(k)fluoranthene	0.013	0.135	V0	0.080	V0	0.008	V1
Benzo(a)pyrene	0.016	0.023	V0	0.022	V0	0.003	V1
3-Methylcholanthrene	0.022	0.008	V1	0.008	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.065	V0	0.060	V0	0.005	V1
Dibenz(a,h)anthracene	0.020	0.068	V0	0.059	V0	0.005	V1
Benzo(ghi)perylene	0.020	0.077	V0	0.023	V0	0.004	V1
Dibenzo(a,l)pyrene	0.024	0.012	V1	0.012	V1	0.003	V1
Dibenzo(a,i)pyrene	0.025	0.009	V1	0.008	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.013	V1	0.011	V1	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		08-Dec		08-Dec		08-Dec	
Total Air Volume (m^3)		316		316		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	23.683	V0	9.336	V0	0.067	V0
Acenaphthylene	0.011	0.891	V0	0.825	V0	0.033	V0
Acenaphthene	0.006	1.381	V0	0.811	V0	0.049	V0
Fluorene	0.007	1.322	V0	1.791	V0	0.056	V0
Phenanthrene	0.007	2.213	V0	1.032	V0	0.010	V0
Anthracene	0.017	0.200	V0	0.052	V0	0.005	V1
Acridine	0.019	0.062	V0	0.049	V0	0.015	V1
Fluoranthene	0.007	0.522	V0	0.227	V0	0.013	V0
Pyrene	0.008	0.460	V0	0.196	V0	0.007	V1
Benzo(c)phenanthrene	0.015	0.110	V0	0.037	V0	0.005	V1
Benz(a)anthracene	0.014	0.121	V0	0.053	V0	0.005	V1
Chrysene	0.013	0.269	V0	0.123	V0	0.004	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.007	V1	0.010	V1	0.001	V1
Benzo(b)fluoranthene	0.020	0.193	V0	0.071	V0	0.004	V1
Benzo(k)fluoranthene	0.013	0.193	V0	0.071	V0	0.004	V1
Benzo(a)pyrene	0.016	0.047	V0	0.043	V0	0.001	V1
3-Methylcholanthrene	0.022	0.008	V1	0.009	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.082	V0	0.039	V0	0.004	V1
Dibenz(a,h)anthracene	0.020	0.062	V0	0.052	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.067	V0	0.026	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.008	V1	0.007	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.014	V1	0.011	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.010	V1	0.009	V1	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		08-Dec		08-Dec		08-Dec	
Total Air Volume (m^3)		316.03		316.01		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	9.408	V0	5.982	V0	0.067	V0
Acenaphthylene	0.011	1.036	V0	1.066	V0	0.033	V0
Acenaphthene	0.006	1.174	V0	1.597	V0	0.049	V0
Fluorene	0.007	2.026	V0	1.394	V0	0.056	V0
Phenanthrene	0.007	1.231	V0	0.891	V0	0.010	V0
Anthracene	0.017	0.047	V0	0.027	V0	0.005	V1
Acridine	0.019	0.079	V0	0.021	V0	0.015	V1
Fluoranthene	0.007	0.375	V0	0.109	V0	0.013	V0
Pyrene	0.008	0.413	V0	0.110	V0	0.007	V1
Benzo(c)phenanthrene	0.015	0.030	V0	0.056	V0	0.005	V1
Benz(a)anthracene	0.014	0.089	V0	0.021	V0	0.005	V1
Chrysene	0.013	0.147	V0	0.119	V0	0.004	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.023	V0	0.008	V1	0.001	V1
Benzo(b)fluoranthene	0.020	0.088	V0	0.039	V0	0.004	V1
Benzo(k)fluoranthene	0.013	0.087	V0	0.039	V0	0.004	V1
Benzo(a)pyrene	0.016	0.069	V0	0.033	V0	0.001	V1
3-Methylcholanthrene	0.022	0.010	V1	0.010	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.072	V0	0.019	V0	0.004	V1
Dibenz(a,h)anthracene	0.020	0.056	V0	0.081	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.073	V0	0.060	V0	0.003	V1
Dibenzo(a,l)pyrene	0.024	0.010	V1	0.008	V1	0.001	V1
Dibenzo(a,i)pyrene	0.025	0.009	V1	0.011	V1	0.002	V1
Dibenzo(a,h)pyrene	0.020	0.007	V1	0.009	V1	0.002	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		14-Dec		14-Dec		14-Dec	
Total Air Volume (m^3)		316		315.98		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	68.331	V6	21.998	V0	0.061	V0
Acenaphthylene	0.011	8.063	V6	2.875	V0	0.028	V0
Acenaphthene	0.006	1.545	V6	1.913	V0	0.018	V0
Fluorene	0.007	1.458	V6	0.844	V0	0.026	V0
Phenanthrene	0.007	11.232	V6	2.859	V0	0.017	V0
Anthracene	0.017	0.899	V6	0.283	V0	0.003	V1
Acridine	0.019	0.114	V6	0.015	V1	0.008	V1
Fluoranthene	0.007	1.501	V6	0.475	V0	0.005	V1
Pyrene	0.008	1.566	V6	0.474	V0	0.015	V0
Benzo(c)phenanthrene	0.015	0.223	V6	0.024	V0	0.012	V1
Benz(a)anthracene	0.014	0.742	V6	0.090	V0	0.006	V1
Chrysene	0.013	1.352	V6	0.163	V0	0.005	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.009	V6	0.009	V1	0.003	V1
Benzo(b)fluoranthene	0.020	0.426	V6	0.061	V0	0.007	V1
Benzo(k)fluoranthene	0.013	0.409	V6	0.069	V0	0.001	V1
Benzo(a)pyrene	0.016	0.332	V6	0.033	V0	0.002	V1
3-Methylcholanthrene	0.022	0.015	V6	0.012	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.234	V6	0.071	V0	0.005	V1
Dibenz(a,h)anthracene	0.020	0.163	V6	0.084	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.515	V6	0.145	V0	0.004	V1
Dibenzo(a,l)pyrene	0.024	0.045	V6	0.016	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.010	V6	0.009	V1	0.001	V1
Dibenzo(a,h)pyrene	0.020	0.007	V6	0.007	V1	0.003	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		14-Dec		14-Dec		14-Dec	
Total Air Volume (m^3)		316.01		316.01		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	74.234	V0	25.067	V0	0.061	V0
Acenaphthylene	0.011	16.280	V0	3.261	V0	0.028	V0
Acenaphthene	0.006	8.525	V0	0.208	V0	0.018	V0
Fluorene	0.007	2.292	V0	0.749	V0	0.026	V0
Phenanthrene	0.007	17.719	V0	3.088	V0	0.017	V0
Anthracene	0.017	1.546	V0	0.146	V0	0.003	V1
Acridine	0.019	0.076	V0	0.082	V0	0.008	V1
Fluoranthene	0.007	3.185	V0	0.504	V0	0.005	V1
Pyrene	0.008	4.662	V0	0.317	V0	0.015	V0
Benzo(c)phenanthrene	0.015	0.279	V0	0.064	V0	0.012	V1
Benz(a)anthracene	0.014	0.873	V0	0.054	V0	0.006	V1
Chrysene	0.013	1.480	V0	0.245	V0	0.005	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.014	V0	0.009	V1	0.003	V1
Benzo(b)fluoranthene	0.020	0.556	V0	0.071	V0	0.007	V1
Benzo(k)fluoranthene	0.013	0.315	V0	0.084	V0	0.001	V1
Benzo(a)pyrene	0.016	0.573	V0	0.068	V0	0.002	V1
3-Methylcholanthrene	0.022	0.013	V1	0.009	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.270	V0	0.083	V0	0.005	V1
Dibenz(a,h)anthracene	0.020	0.178	V0	0.225	V0	0.003	V1
Benzo(ghi)perylene	0.020	0.794	V0	0.110	V0	0.004	V1
Dibenzo(a,l)pyrene	0.024	0.091	V0	0.018	V1	0.002	V1
Dibenzo(a,i)pyrene	0.025	0.012	V1	0.006	V1	0.001	V1
Dibenzo(a,h)pyrene	0.020	0.010	V1	0.006	V1	0.003	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		20-Dec		20-Dec		20-Dec	
Total Air Volume (m^3)		315.98		315.99		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	58.676	V0	42.983	V0	0.150	V0
Acenaphthylene	0.011	8.502	V0	7.723	V0	0.033	V0
Acenaphthene	0.006	2.784	V0	4.499	V0	0.020	V0
Fluorene	0.007	1.474	V0	1.602	V0	0.029	V0
Phenanthrene	0.007	10.694	V0	7.833	V0	0.021	V0
Anthracene	0.017	0.762	V0	0.650	V0	0.004	V1
Acridine	0.019	0.078	V0	0.073	V0	0.009	V1
Fluoranthene	0.007	1.142	V0	0.969	V0	0.023	V0
Pyrene	0.008	1.166	V0	0.978	V0	0.018	V0
Benzo(c)phenanthrene	0.015	0.119	V0	0.080	V0	0.012	V1
Benz(a)anthracene	0.014	0.314	V0	0.244	V0	0.014	V0
Chrysene	0.013	0.432	V0	0.473	V0	0.012	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.013	V0	0.016	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.241	V0	0.199	V0	0.008	V1
Benzo(k)fluoranthene	0.013	0.231	V0	0.182	V0	0.006	V1
Benzo(a)pyrene	0.016	0.230	V0	0.142	V0	0.005	V1
3-Methylcholanthrene	0.022	0.009	V1	0.007	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.172	V0	0.242	V0	0.006	V1
Dibenz(a,h)anthracene	0.020	0.140	V0	0.166	V0	0.008	V1
Benzo(ghi)perylene	0.020	0.280	V0	0.271	V0	0.006	V1
Dibenzo(a,l)pyrene	0.024	0.040	V0	0.019	V1	0.005	V1
Dibenzo(a,i)pyrene	0.025	0.008	V1	0.012	V1	0.004	V1
Dibenzo(a,h)pyrene	0.020	0.007	V1	0.012	V1	0.009	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		**Athabasca Valley**		**Anzac**		**Travel Blank**	
Station Number		**AMS 7**		**AMS 14**			
Sample Date		**20-Dec**		**20-Dec**		**20-Dec**	
Total Air Volume (m^3)		**316.02**		**315.99**		**316**	
Compound Name	**MDL (ng/m^3)**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**	**Results (ng/m^3)**	**QC Flag**
Naphthalene	0.008	76.533	V0	17.210	V0	0.150	V0
Acenaphthylene	0.011	14.901	V0	1.595	V0	0.033	V0
Acenaphthene	0.006	6.338	V0	3.429	V0	0.020	V0
Fluorene	0.007	3.536	V0	1.014	V0	0.029	V0
Phenanthrene	0.007	14.399	V0	3.136	V0	0.021	V0
Anthracene	0.017	0.955	V0	0.184	V0	0.004	V1
Acridine	0.019	0.098	V0	0.040	V0	0.009	V1
Fluoranthene	0.007	2.174	V0	0.458	V0	0.023	V0
Pyrene	0.008	3.584	V0	0.284	V0	0.018	V0
Benzo(c)phenanthrene	0.015	0.162	V0	0.057	V0	0.012	V1
Benz(a)anthracene	0.014	0.506	V0	0.043	V0	0.014	V0
Chrysene	0.013	0.704	V0	0.174	V0	0.012	V1
7,12-Dimethylbenz(a)anthracene	0.013	0.042	V0	0.038	V0	0.003	V1
Benzo(b)fluoranthene	0.020	0.510	V0	0.141	V0	0.008	V1
Benzo(k)fluoranthene	0.013	0.409	V0	0.138	V0	0.006	V1
Benzo(a)pyrene	0.016	0.424	V0	0.045	V0	0.005	V1
3-Methylcholanthrene	0.022	0.008	V1	0.008	V1	0.002	V1
Indeno(123-cd)pyrene	0.017	0.300	V0	0.063	V0	0.006	V1
Dibenz(a,h)anthracene	0.020	0.245	V0	0.224	V0	0.008	V1
Benzo(ghi)perylene	0.020	0.729	V0	0.080	V0	0.006	V1
Dibenzo(a,l)pyrene	0.024	0.085	V0	0.023	V1	0.005	V1
Dibenzo(a,i)pyrene	0.025	0.011	V1	0.012	V1	0.004	V1
Dibenzo(a,h)pyrene	0.020	0.021	V0	0.026	V0	0.009	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Bertha Ganter - Fort McKay		Patricia McInnes		Travel Blank	
Station Number		AMS 1		AMS 6			
Sample Date		26-Dec		26-Dec		26-Dec	
Total Air Volume (m^3)		315.99		316		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	26.405	V0	74.834	V0	0.126	V0
Acenaphthylene	0.011	7.384	V0	9.282	V0	0.061	V0
Acenaphthene	0.006	3.746	V0	3.381	V0	0.044	V0
Fluorene	0.007	1.668	V0	1.809	V0	0.007	V1
Phenanthrene	0.007	6.023	V0	10.110	V0	0.031	V0
Anthracene	0.017	0.567	V0	1.611	V0	0.006	V1
Acridine	0.019	0.098	V0	0.341	V0	0.014	V1
Fluoranthene	0.007	0.828	V0	1.710	V0	0.016	V0
Pyrene	0.008	0.918	V0	1.570	V0	0.020	V0
Benzo(c)phenanthrene	0.015	0.085	V0	0.090	V0	0.021	V0
Benz(a)anthracene	0.014	0.238	V0	0.738	V0	0.012	V1
Chrysene	0.013	0.399	V0	1.105	V0	0.017	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.013	V1	0.122	V0	0.006	V1
Benzo(b)fluoranthene	0.020	0.171	V0	0.681	V0	0.008	V1
Benzo(k)fluoranthene	0.013	0.119	V0	0.422	V0	0.005	V1
Benzo(a)pyrene	0.016	0.171	V0	0.234	V0	0.003	V1
3-Methylcholanthrene	0.022	0.015	V1	0.084	V0	0.003	V1
Indeno(123-cd)pyrene	0.017	0.244	V0	0.461	V0	0.006	V1
Dibenz(a,h)anthracene	0.020	0.139	V0	0.361	V0	0.001	V1
Benzo(ghi)perylene	0.020	0.218	V0	0.701	V0	0.007	V1
Dibenzo(a,l)pyrene	0.024	0.016	V1	0.019	V1	0.006	V1
Dibenzo(a,i)pyrene	0.025	0.011	V1	0.010	V1	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.009	V1	0.013	V1	0.006	V1

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Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name		Athabasca Valley		Anzac		Travel Blank	
Station Number		AMS 7		AMS 14			
Sample Date		26-Dec		26-Dec		26-Dec	
Total Air Volume (m^3)		316.02		316		316	
Compound Name	MDL (ng/m^3)	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag	Results (ng/m^3)	QC Flag
Naphthalene	0.008	24.411	V0	6.753	V0	0.126	V0
Acenaphthylene	0.011	3.336	V0	0.656	V0	0.061	V0
Acenaphthene	0.006	2.918	V0	0.717	V0	0.044	V0
Fluorene	0.007	0.863	V0	0.595	V0	0.007	V1
Phenanthrene	0.007	4.835	V0	0.450	V0	0.031	V0
Anthracene	0.017	0.487	V0	0.035	V0	0.006	V1
Acridine	0.019	0.066	V0	0.004	V1	0.014	V1
Fluoranthene	0.007	0.737	V0	0.165	V0	0.016	V0
Pyrene	0.008	0.734	V0	0.071	V0	0.020	V0
Benzo(c)phenanthrene	0.015	0.080	V0	0.018	V0	0.021	V0
Benz(a)anthracene	0.014	0.129	V0	0.033	V0	0.012	V1
Chrysene	0.013	0.389	V0	0.030	V0	0.017	V0
7,12-Dimethylbenz(a)anthracene	0.013	0.019	V0	0.013	V0	0.006	V1
Benzo(b)fluoranthene	0.020	0.166	V0	0.055	V0	0.008	V1
Benzo(k)fluoranthene	0.013	0.135	V0	0.053	V0	0.005	V1
Benzo(a)pyrene	0.016	0.089	V0	0.018	V0	0.003	V1
3-Methylcholanthrene	0.022	0.010	V1	0.014	V1	0.003	V1
Indeno(123-cd)pyrene	0.017	0.133	V0	0.015	V1	0.006	V1
Dibenz(a,h)anthracene	0.020	0.183	V0	0.070	V0	0.001	V1
Benzo(ghi)perylene	0.020	0.169	V0	0.024	V0	0.007	V1
Dibenzo(a,l)pyrene	0.024	0.018	V1	0.016	V1	0.006	V1
Dibenzo(a,i)pyrene	0.025	0.043	V0	0.018	V1	0.003	V1
Dibenzo(a,h)pyrene	0.020	0.030	V0	0.013	V1	0.006	V1

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION **2016**

Polycyclic Aromatic Hydrocarbons (PAHs) **Indicated Sites and Dates**

Station Name Station Number Sample Date Compound Name	Bertha Ganter - Fort McKay AMS 1 Jan 01 - Dec 26 Average ng/m³	Bertha Ganter - Fort McKay AMS 1 Jan 01 - Dec 26 Std Dev ng/m³	Bertha Ganter - Fort McKay AMS 1 Jan 01 - Dec 26 Total Samples (#)	Bertha Ganter - Fort McKay AMS 1 Jan 01 - Dec 26 Total ≥ MDL (#)
Naphthalene	14.6	15.3	59	59
Acenaphthylene	2.0	2.4	59	59
Acenaphthene	1.2	1.1	59	59
Fluorene	1.2	0.8	59	59
Phenanthrene	2.9	2.7	59	59
Anthracene	0.2	0.2	59	58
Acridine	0.1	0.1	59	54
Fluoranthene	0.3	0.3	59	59
Pyrene	0.3	0.3	59	59
Benzo(c)phenanthrene	0.0	0.1	59	46
Benz(a)anthracene	0.1	0.1	59	49
Chrysene	0.2	0.2	59	58
7,12-Dimethylbenz(a)anthracene	0.0	0.0	59	44
Benzo(b)fluoranthene	0.1	0.1	59	53
Benzo(k)fluoranthene	0.1	0.1	59	55
Benzo(a)pyrene	0.0	0.1	59	44
3-Methylcholanthrene	0.0	0.0	59	11
Indeno(123-cd)pyrene	0.1	0.1	59	47
Dibenz(a,h)anthracene	0.1	0.0	59	42
Benzo(ghi)perylene	0.1	0.1	59	42
Dibenzo(a,l)pyrene	0.0	0.0	59	16
Dibenzo(a,i)pyrene	0.0	0.0	59	15
Dibenzo(a,h)pyrene	0.0	0.0	59	17

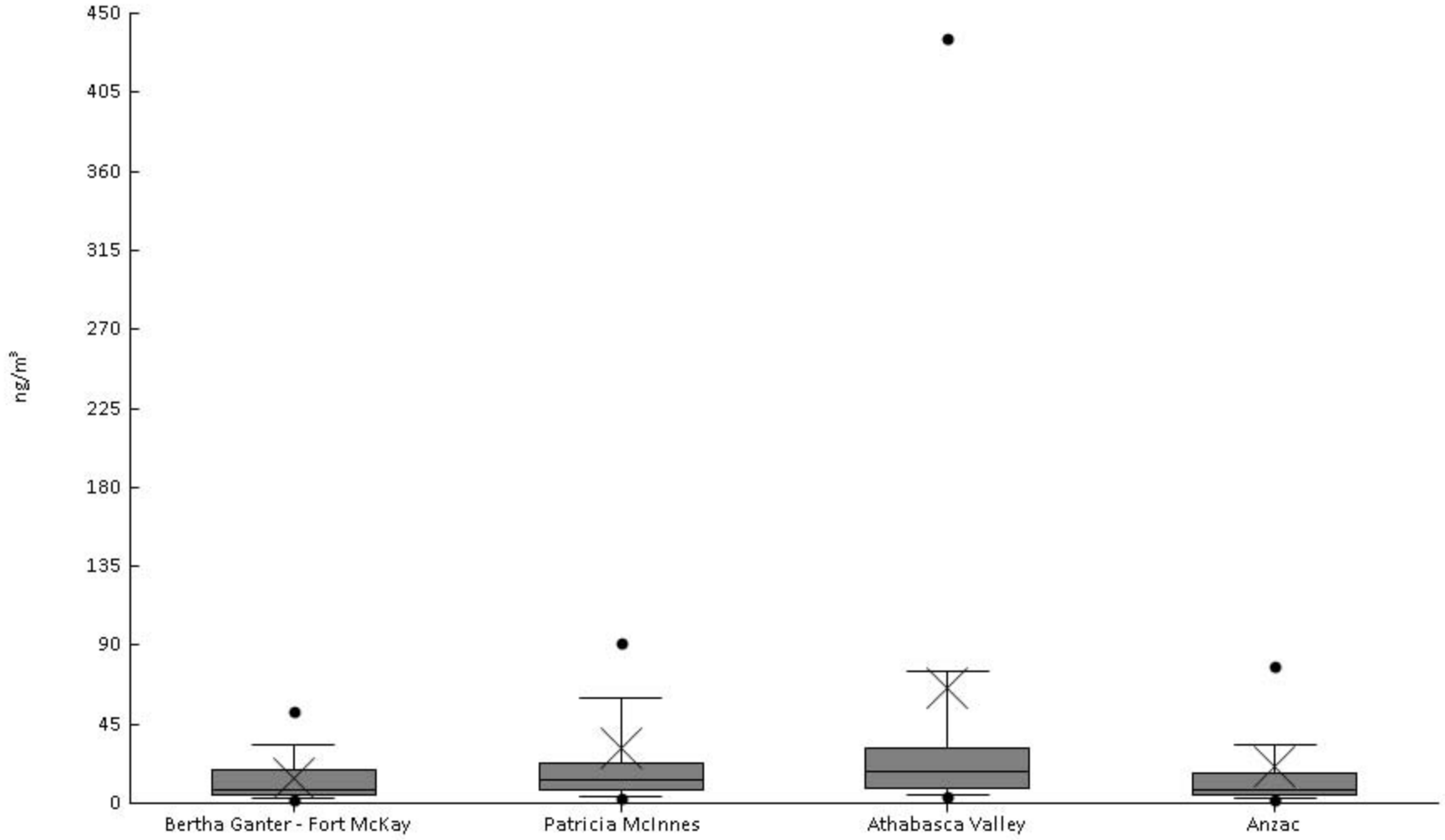
Station Name Station Number Sample Date Compound Name	Patricia McInnes AMS 6 Jan 01 - Dec 26 Average ng/m³	Patricia McInnes AMS 6 Jan 01 - Dec 26 Std Dev ng/m³	Patricia McInnes AMS 6 Jan 01 - Dec 26 Total Samples (#)	Patricia McInnes AMS 6 Jan 01 - Dec 26 Total ≥ MDL (#)
Naphthalene	31.6	71.7	60	60
Acenaphthylene	5.7	15.6	60	60
Acenaphthene	1.3	2.4	60	60
Fluorene	2.0	3.4	60	60
Phenanthrene	5.1	11.8	60	60
Anthracene	0.5	1.3	60	60
Acridine	0.1	0.2	60	45
Fluoranthene	0.7	0.9	60	60
Pyrene	0.6	1.0	60	60
Benzo(c)phenanthrene	0.1	0.1	60	51
Benz(a)anthracene	0.2	0.4	60	55
Chrysene	0.3	0.6	60	60
7,12-Dimethylbenz(a)anthracene	0.1	0.3	60	47
Benzo(b)fluoranthene	0.1	0.2	60	53
Benzo(k)fluoranthene	0.1	0.2	60	57
Benzo(a)pyrene	0.1	0.1	60	50
3-Methylcholanthrene	0.0	0.0	60	13
Indeno(123-cd)pyrene	0.1	0.1	60	53
Dibenz(a,h)anthracene	0.1	0.1	60	45
Benzo(ghi)perylene	0.1	0.1	60	52
Dibenzo(a,l)pyrene	0.0	0.0	60	10
Dibenzo(a,i)pyrene	0.0	0.0	60	15
Dibenzo(a,h)pyrene	0.0	0.0	60	18

Station Name	Athabasca Valley	Athabasca Valley	Athabasca Valley	Athabasca Valley
Station Number	AMS 7	AMS 7	AMS 7	AMS 7
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	ng/m³	ng/m³		
Naphthalene	65.2	182.7	60	60
Acenaphthylene	20.6	87.6	60	60
Acenaphthene	2.8	11.2	60	60
Fluorene	8.8	52.0	60	60
Phenanthrene	13.4	57.1	60	60
Anthracene	1.6	7.5	60	60
Acridine	0.3	1.1	60	53
Fluoranthene	2.3	10.6	60	60
Pyrene	2.1	9.4	60	60
Benzo(c)phenanthrene	0.2	1.0	60	48
Benz(a)anthracene	0.7	3.4	60	55
Chrysene	1.3	6.6	60	59
7,12-Dimethylbenz(a)anthracene	0.3	1.4	60	48
Benzo(b)fluoranthene	0.4	1.9	60	53
Benzo(k)fluoranthene	0.3	1.3	60	56
Benzo(a)pyrene	0.3	1.2	60	51
3-Methylcholanthrene	0.0	0.1	60	14
Indeno(123-cd)pyrene	0.2	0.6	60	53
Dibenz(a,h)anthracene	0.1	0.4	60	48
Benzo(ghi)perylene	0.2	0.6	60	48
Dibenzo(a,l)pyrene	0.0	0.1	60	14
Dibenzo(a,i)pyrene	0.0	0.1	60	18
Dibenzo(a,h)pyrene	0.0	0.0	60	19

Station Name	Anzac	Anzac	Anzac	Anzac
Station Number	AMS 14	AMS 14	AMS 14	AMS 14
Sample Date	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26	Jan 01 - Dec 26
	Average	Std Dev	Total Samples (#)	Total ≥ MDL (#)
Compound Name	ng/m³	ng/m³		
Naphthalene	20.5	48.3	57	57
Acenaphthylene	3.5	11.5	57	57
Acenaphthene	4.1	8.0	57	57
Fluorene	3.8	7.1	57	57
Phenanthrene	4.9	7.1	57	57
Anthracene	0.3	0.6	57	57
Acridine	0.1	0.1	57	39
Fluoranthene	0.7	1.2	57	57
Pyrene	0.4	0.5	57	57
Benzo(c)phenanthrene	0.1	0.1	57	36
Benz(a)anthracene	0.1	0.1	57	38
Chrysene	0.1	0.1	57	54
7,12-Dimethylbenz(a)anthracene	0.0	0.0	57	42
Benzo(b)fluoranthene	0.1	0.1	57	38
Benzo(k)fluoranthene	0.0	0.0	57	46
Benzo(a)pyrene	0.0	0.0	57	35
3-Methylcholanthrene	0.0	0.0	57	12
Indeno(123-cd)pyrene	0.1	0.1	57	39
Dibenz(a,h)anthracene	0.1	0.1	57	43
Benzo(ghi)perylene	0.0	0.0	57	34
Dibenzo(a,l)pyrene	0.0	0.0	57	9
Dibenzo(a,i)pyrene	0.0	0.0	57	17
Dibenzo(a,h)pyrene	0.0	0.0	57	20

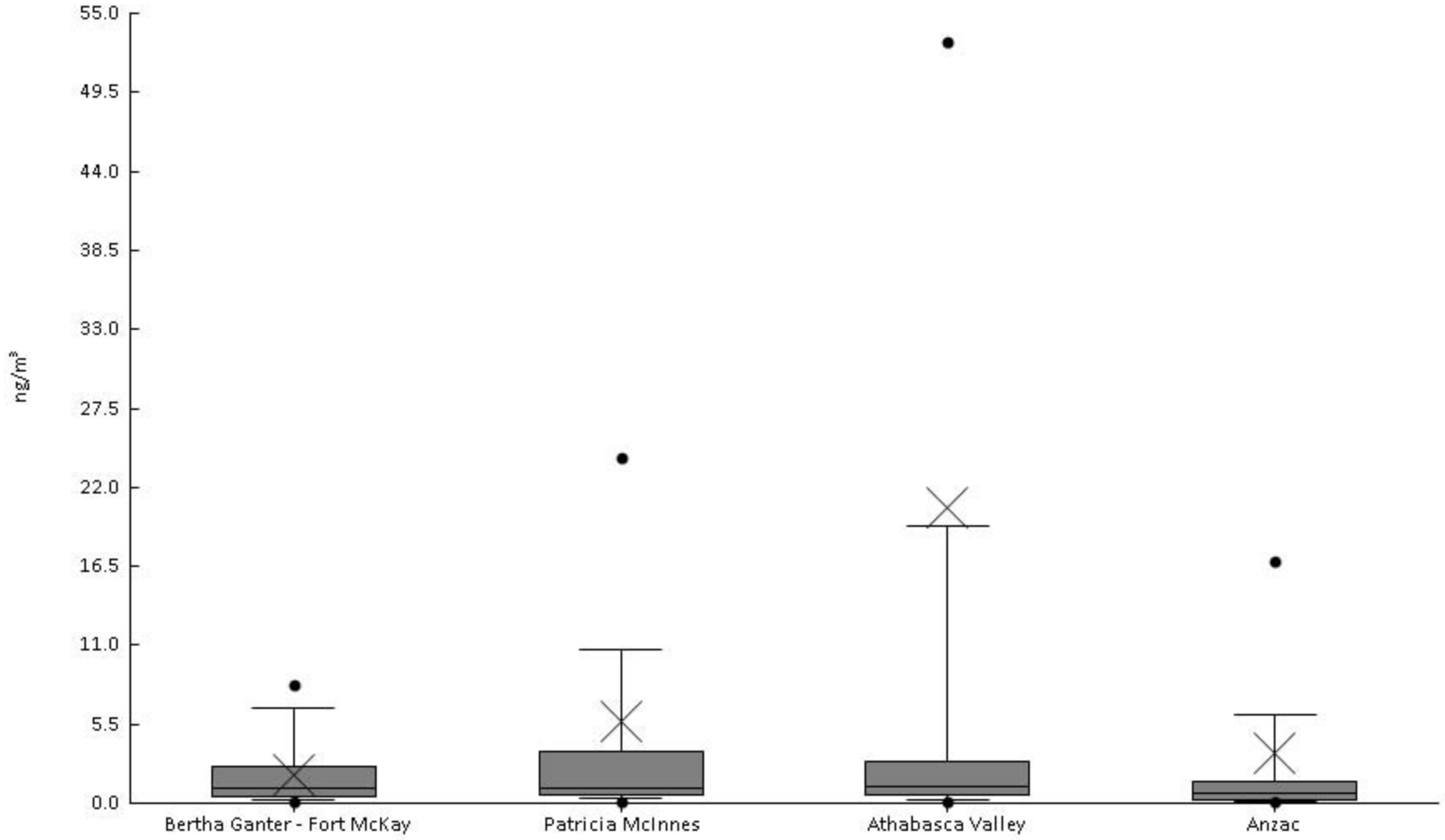
Polycyclic Aromatic Hydrocarbons - Naphthalene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	100%	1.4	2	3.2	4.4	8	19	34	52	68	15	15
AMS 6	Patricia McInnes	60	100%	1.2	2.4	4	7.4	14	23	60	91	492	32	72
AMS 7	Athabasca Valley	60	100%	2.3	4.2	5	8.1	18	32	75	436	1110	65	183
AMS 14	Anzac	57	100%	1.1	2.1	2.6	4.3	7.5	17	33	78	352	21	48



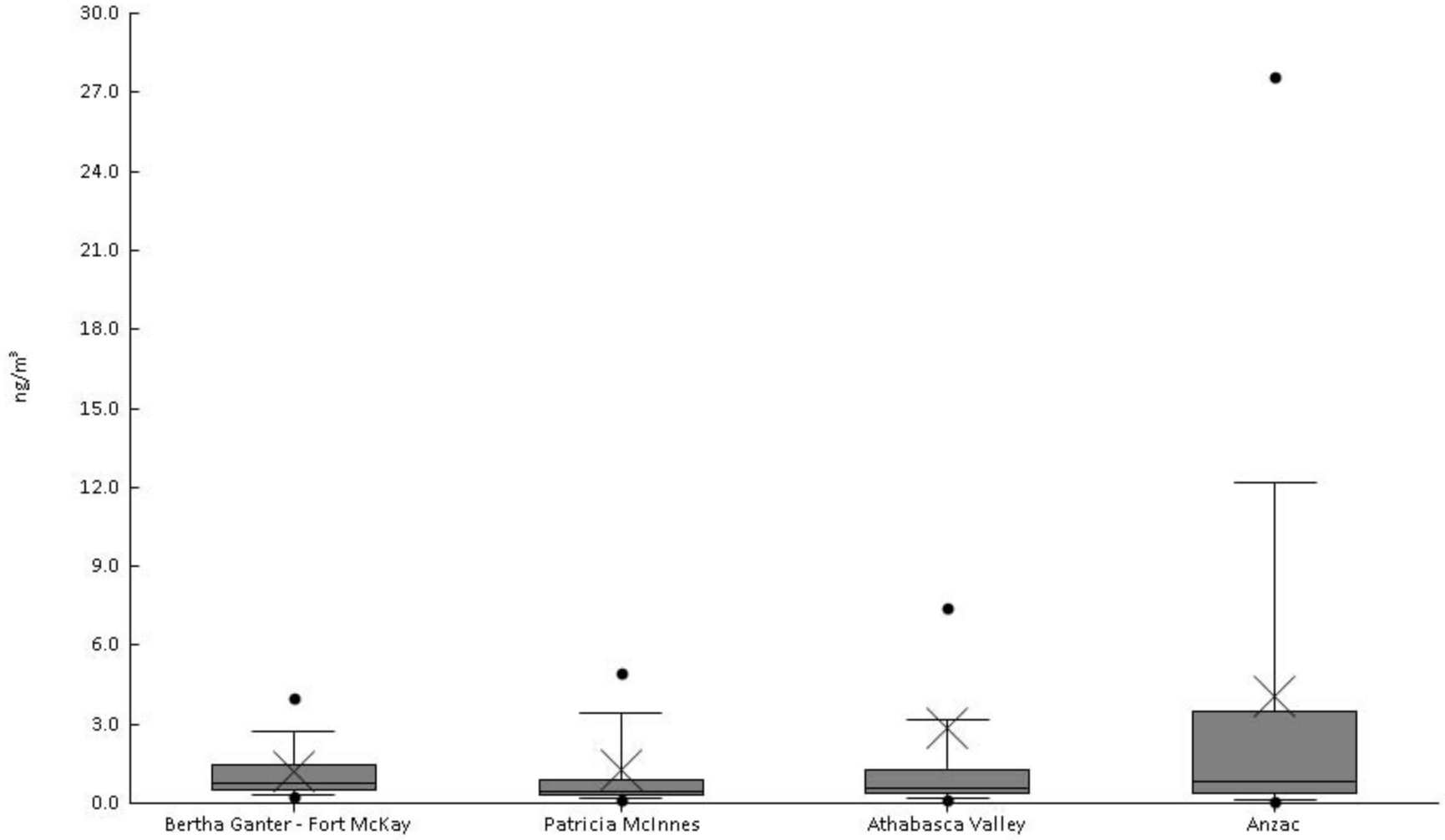
Polycyclic Aromatic Hydrocarbons - Acenaphthylene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	100%	0.041	0.085	0.2	0.49	1.1	2.5	6.7	8.3	9.3	2	2.4
AMS 6	Patricia McInnes	60	100%	0.068	0.15	0.31	0.59	1	3.6	11	24	90	5.7	16
AMS 7	Athabasca Valley	60	100%	0.029	0.16	0.23	0.6	1.2	3	19	53	486	21	88
AMS 14	Anzac	57	100%	0.013	0.076	0.096	0.21	0.72	1.5	6.2	17	82	3.5	12



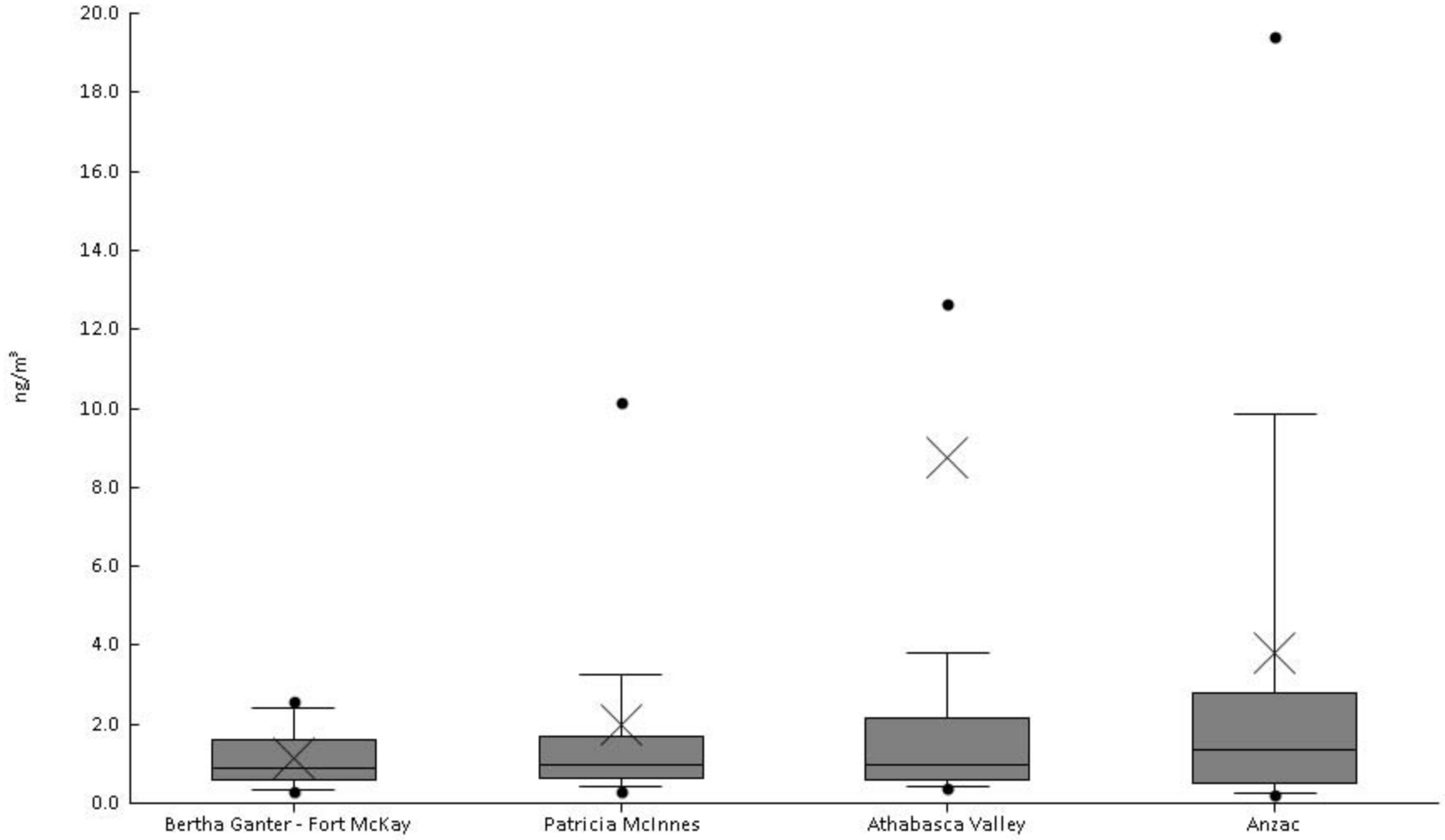
Polycyclic Aromatic Hydrocarbons - Acenaphthene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	100%	0.072	0.24	0.33	0.51	0.79	1.5	2.8	4	5.7	1.2	1.1
AMS 6	Patricia McInnes	60	100%	0.085	0.095	0.18	0.31	0.45	0.89	3.4	4.9	17	1.3	2.4
AMS 7	Athabasca Valley	60	100%	0.092	0.13	0.18	0.37	0.6	1.3	3.2	7.4	84	2.8	11
AMS 14	Anzac	57	100%	0.053	0.074	0.11	0.35	0.85	3.5	12	28	34	4.1	8



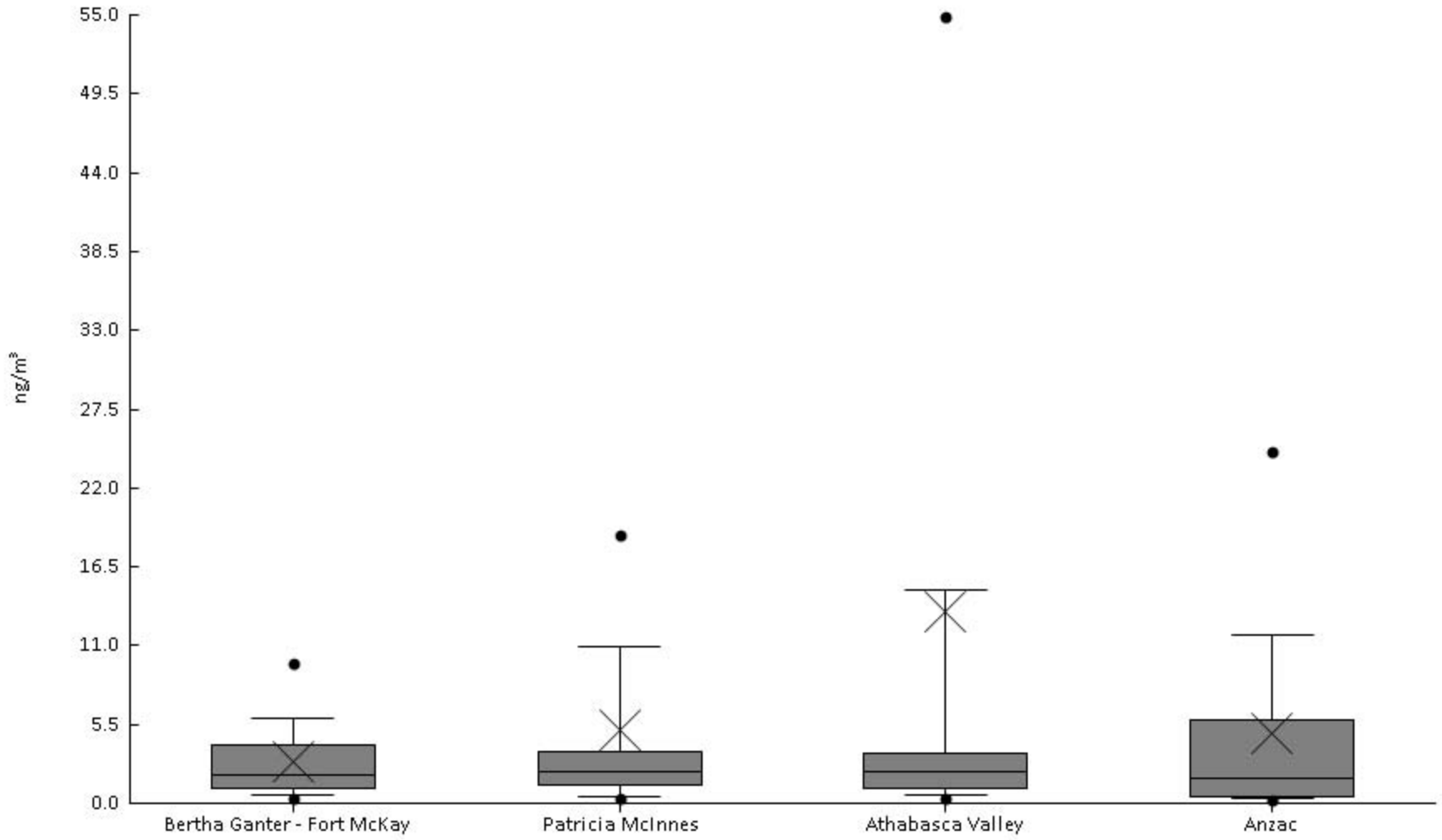
Polycyclic Aromatic Hydrocarbons - Fluorene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	100%	0.21	0.3	0.33	0.6	0.9	1.6	2.4	2.6	4	1.2	0.78
AMS 6	Patricia McInnes	60	100%	0.056	0.31	0.41	0.62	0.96	1.7	3.3	10	18	2	3.4
AMS 7	Athabasca Valley	60	100%	0.17	0.39	0.43	0.6	0.96	2.2	3.8	13	404	8.8	52
AMS 14	Anzac	57	100%	0.11	0.23	0.26	0.53	1.4	2.8	9.8	19	38	3.8	7.1



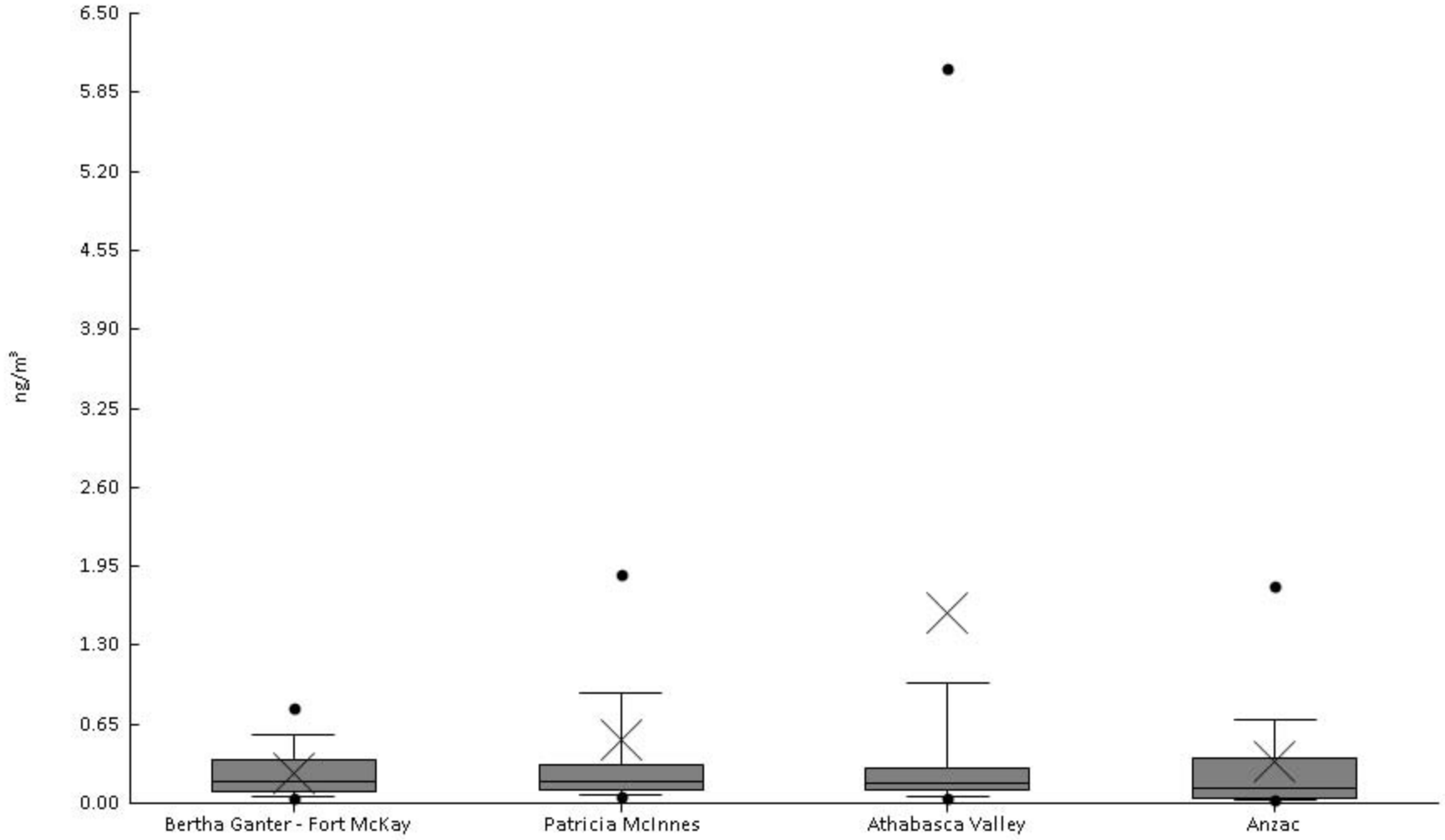
Polycyclic Aromatic Hydrocarbons - Phenanthrene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	100%	0.2	0.36	0.56	1	1.9	4.1	5.9	9.8	12	2.9	2.7
AMS 6	Patricia McInnes	60	100%	0.12	0.35	0.47	1.3	2.2	3.6	11	19	87	5.1	12
AMS 7	Athabasca Valley	60	100%	0.29	0.34	0.58	1.1	2.3	3.5	15	55	435	13	57
AMS 14	Anzac	57	100%	0.16	0.25	0.37	0.5	1.7	5.8	12	25	32	4.9	7.1



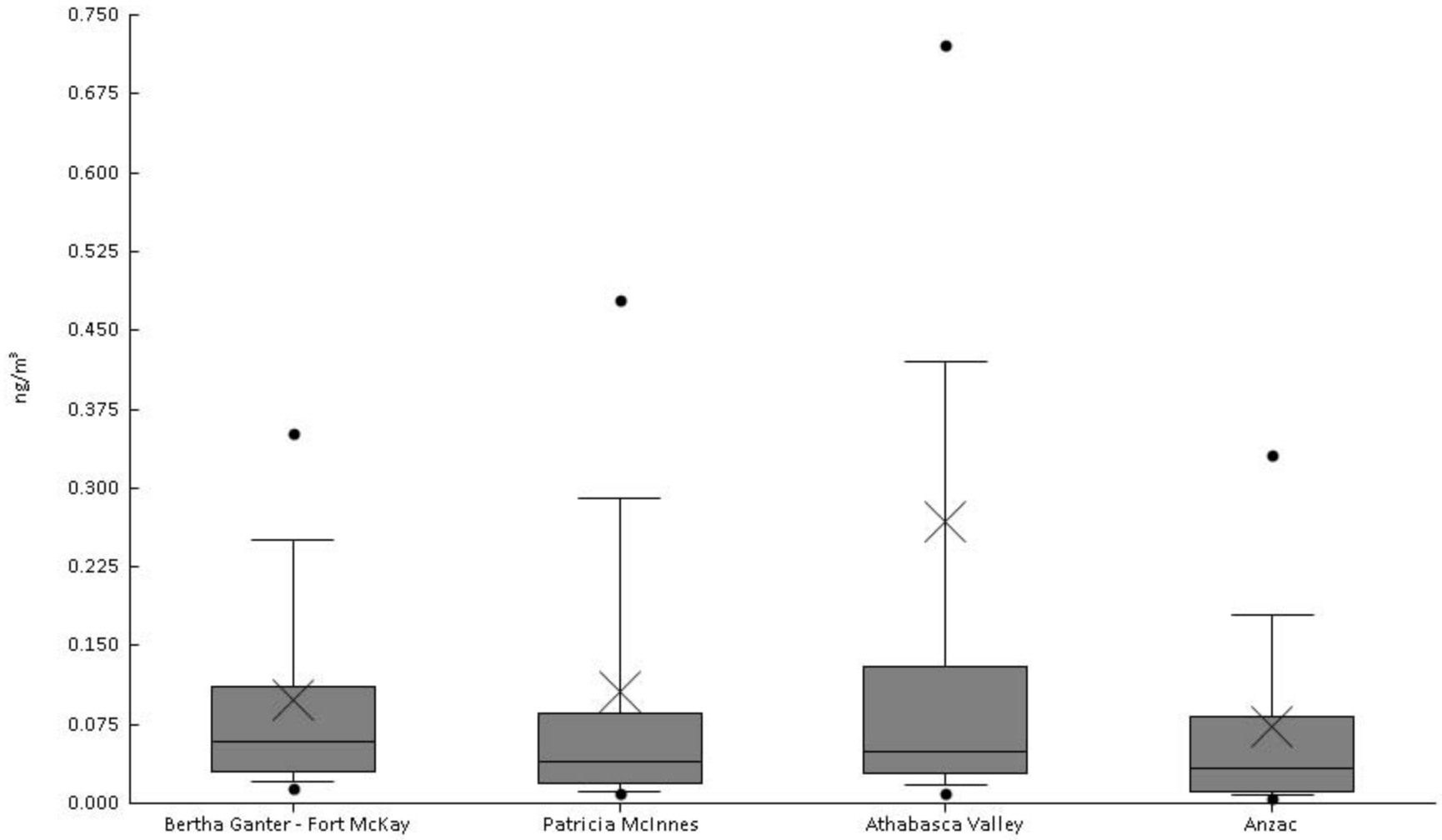
Polycyclic Aromatic Hydrocarbons - Anthracene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	98%	0.017	0.038	0.06	0.09	0.17	0.36	0.57	0.78	0.92	0.25	0.22
AMS 6	Patricia McInnes	60	100%	0.019	0.048	0.068	0.11	0.18	0.32	0.91	1.9	9.3	0.52	1.3
AMS 7	Athabasca Valley	60	100%	0.023	0.044	0.054	0.11	0.16	0.29	0.99	6	57	1.6	7.5
AMS 14	Anzac	57	100%	0.018	0.026	0.031	0.045	0.12	0.37	0.69	1.8	2.8	0.34	0.55



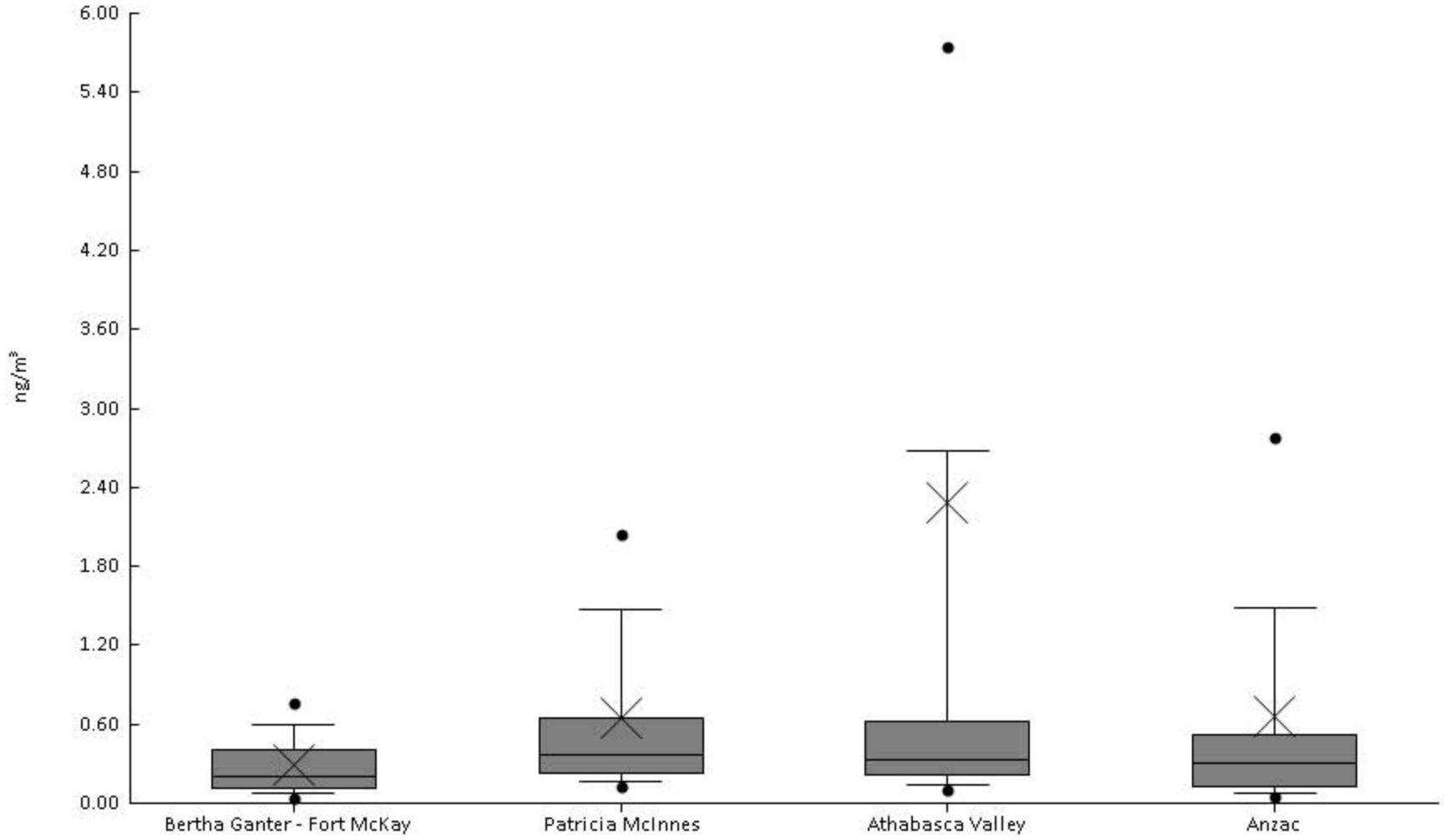
Polycyclic Aromatic Hydrocarbons - Acridine (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	92%	4.6E-3	0.015	0.02	0.03	0.059	0.11	0.25	0.35	0.69	0.099	0.12
AMS 6	Patricia McInnes	60	75%	2E-3	8.9E-3	0.012	0.019	0.039	0.086	0.29	0.48	1.1	0.11	0.19
AMS 7	Athabasca Valley	60	88%	2.9E-3	9.3E-3	0.017	0.028	0.049	0.13	0.42	0.72	8.4	0.27	1.1
AMS 14	Anzac	57	68%	2.1E-3	4.6E-3	7.9E-3	0.012	0.033	0.083	0.18	0.33	0.63	0.072	0.11



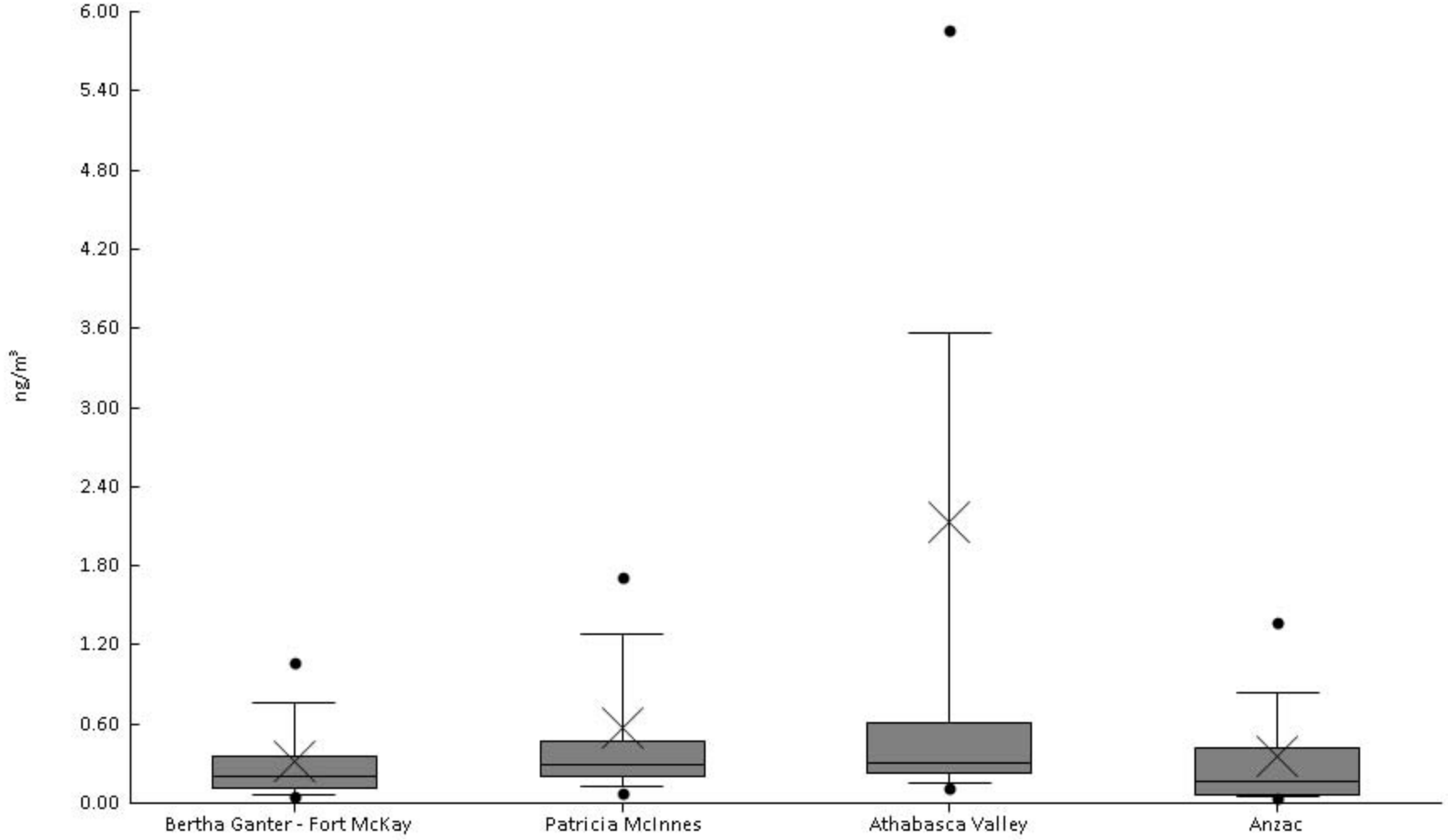
Polycyclic Aromatic Hydrocarbons - Fluoranthene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	100%	0.03	0.04	0.071	0.12	0.2	0.41	0.6	0.77	1.5	0.3	0.27
AMS 6	Patricia McInnes	60	100%	0.037	0.13	0.17	0.22	0.37	0.64	1.5	2	6.6	0.65	0.94
AMS 7	Athabasca Valley	60	100%	0.022	0.11	0.14	0.22	0.34	0.63	2.7	5.7	82	2.3	11
AMS 14	Anzac	57	100%	0.036	0.053	0.071	0.13	0.3	0.53	1.5	2.8	6.9	0.66	1.2



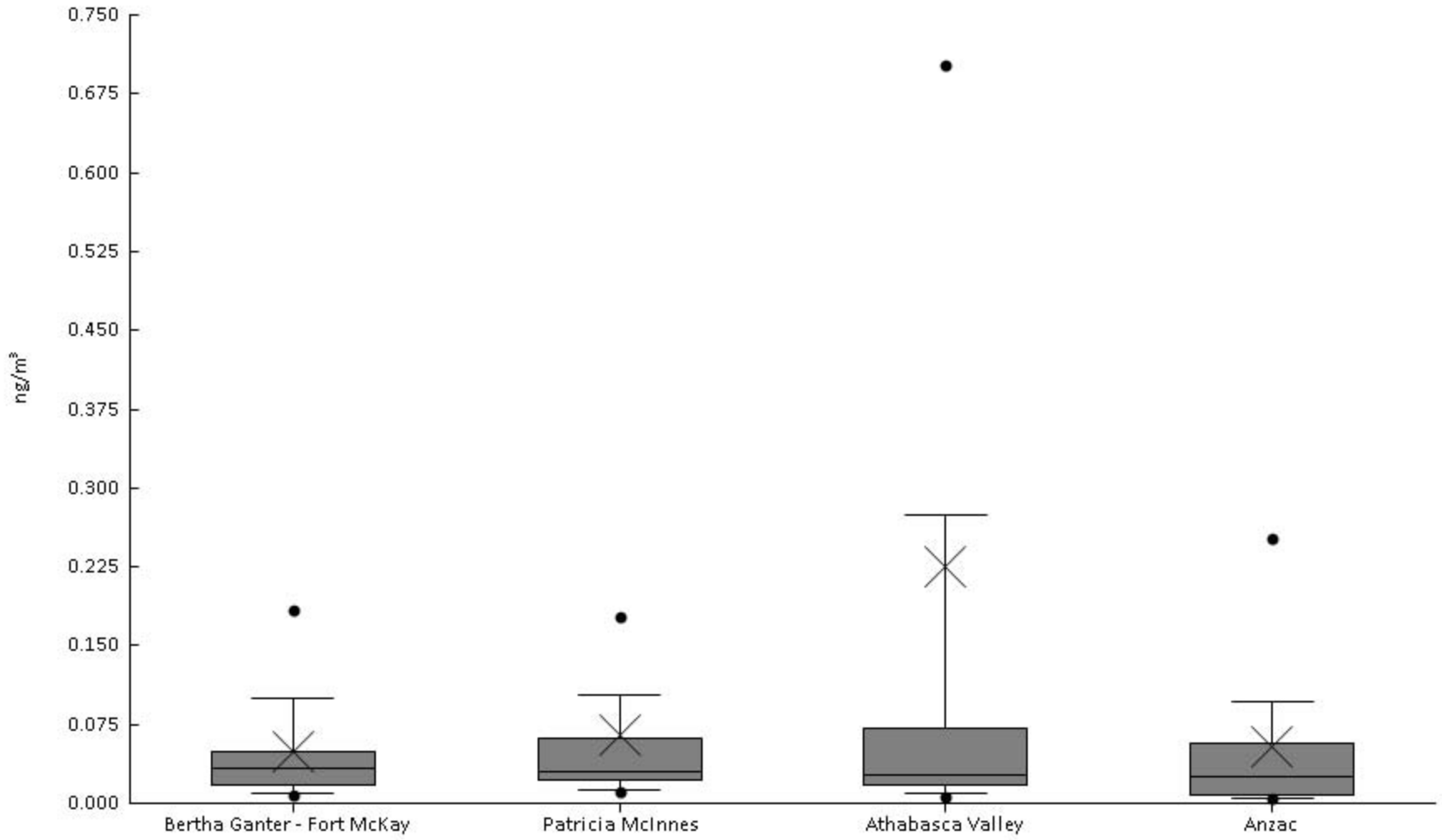
Polycyclic Aromatic Hydrocarbons - Pyrene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	100%	0.033	0.053	0.067	0.12	0.21	0.36	0.76	1.1	1.6	0.32	0.32
AMS 6	Patricia McInnes	60	100%	0.032	0.075	0.13	0.21	0.29	0.47	1.3	1.7	6.9	0.57	0.95
AMS 7	Athabasca Valley	60	100%	0.028	0.11	0.15	0.23	0.3	0.61	3.6	5.9	72	2.1	9.4
AMS 14	Anzac	57	100%	0.027	0.036	0.054	0.069	0.16	0.42	0.84	1.4	2.8	0.35	0.49



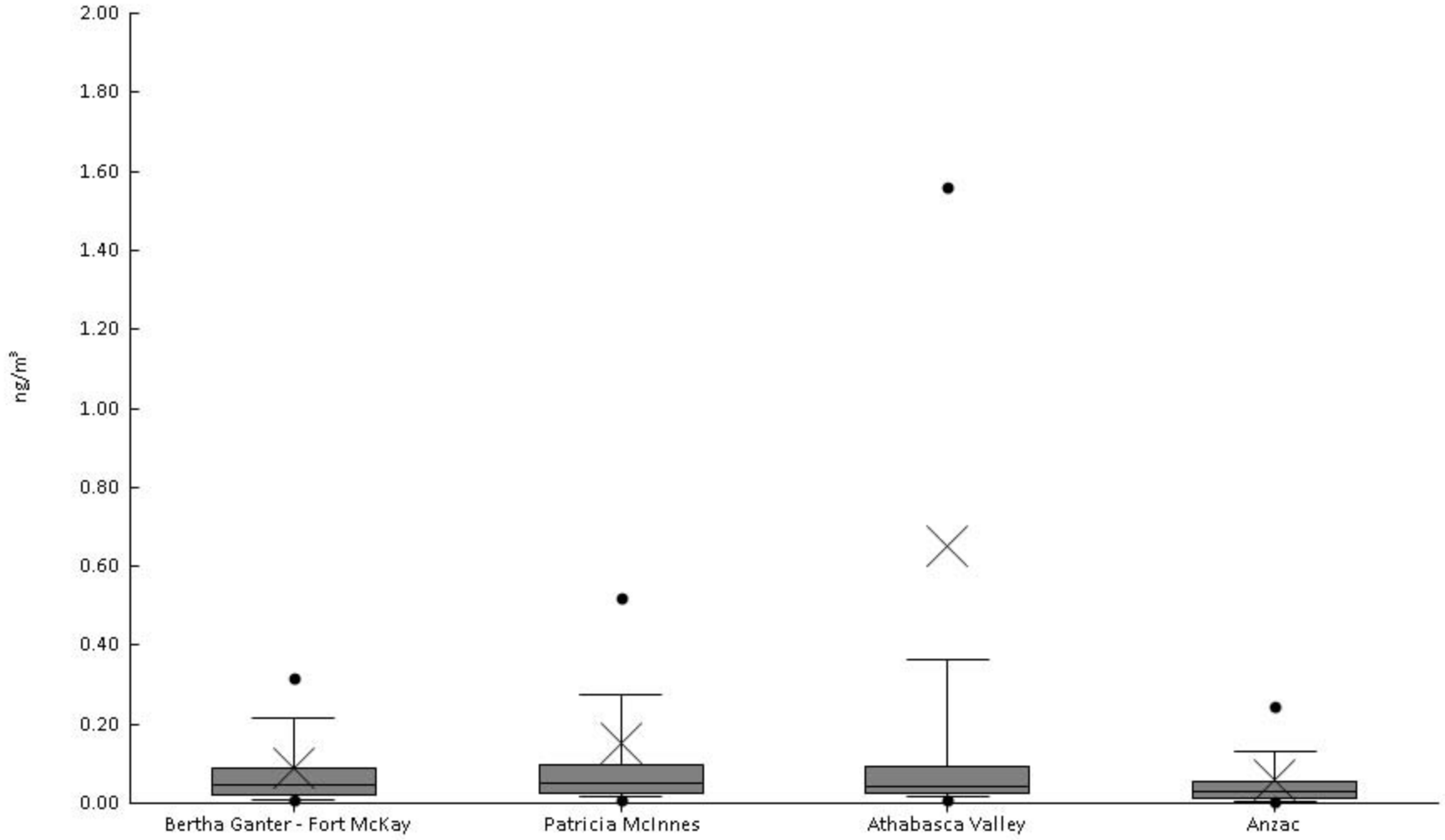
Polycyclic Aromatic Hydrocarbons - Benzo(c)phenanthrene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	78%	2.2E-3	7.8E-3	9.3E-3	0.017	0.033	0.049	0.1	0.18	0.35	0.049	0.06
AMS 6	Patricia McInnes	60	85%	8.3E-3	0.011	0.013	0.022	0.031	0.062	0.1	0.18	1	0.065	0.14
AMS 7	Athabasca Valley	60	80%	2.3E-3	6.9E-3	8.8E-3	0.018	0.026	0.071	0.27	0.7	7.3	0.22	0.96
AMS 14	Anzac	57	63%	1.5E-3	4.4E-3	5E-3	8.5E-3	0.025	0.056	0.096	0.25	0.5	0.055	0.098



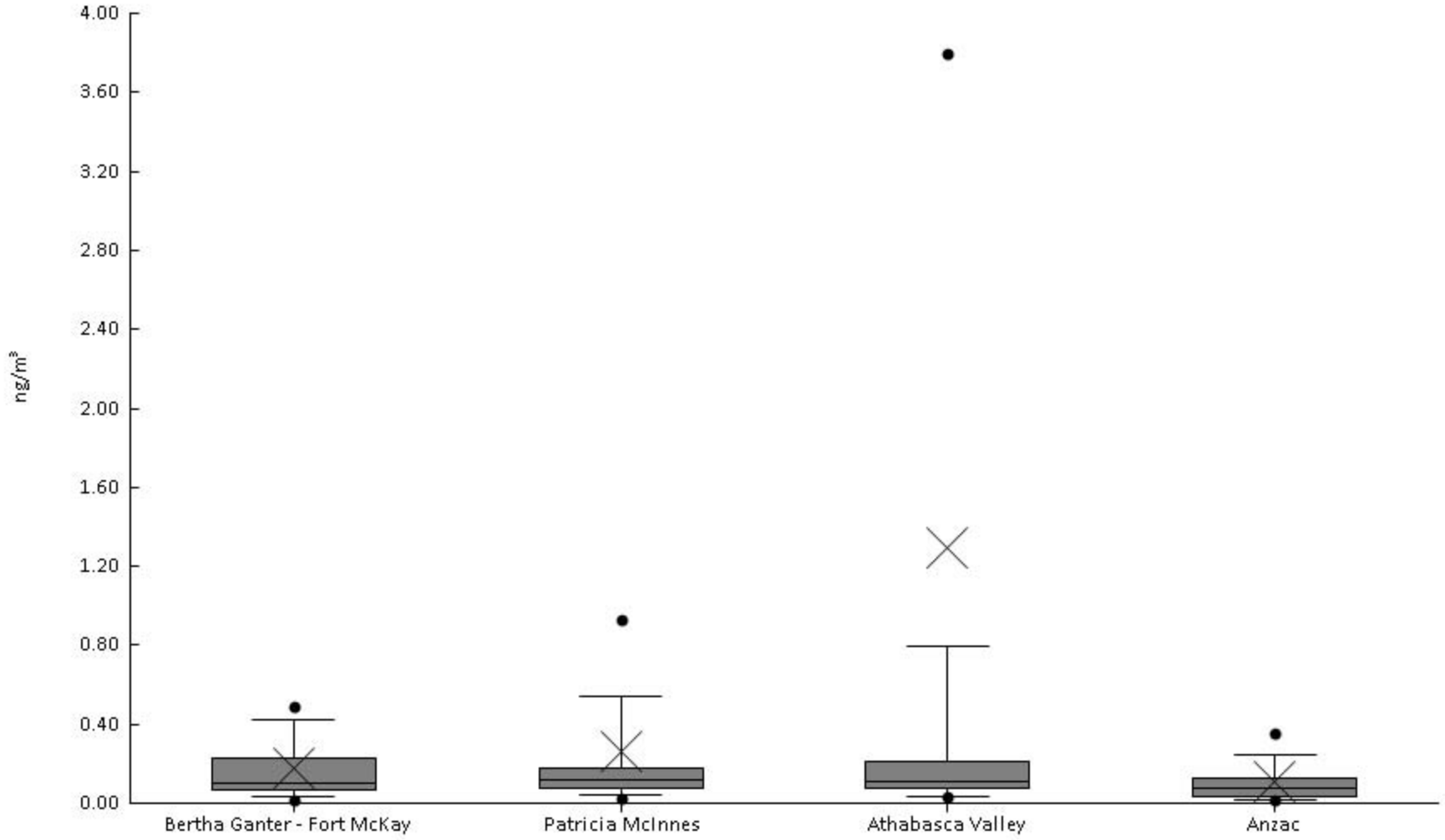
Polycyclic Aromatic Hydrocarbons - Benz(a)anthracene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	83%	4.9E-3	7.3E-3	9.1E-3	0.022	0.048	0.09	0.21	0.32	0.74	0.089	0.12
AMS 6	Patricia McInnes	60	92%	3.2E-3	9.9E-3	0.015	0.025	0.049	0.097	0.27	0.52	3.2	0.15	0.43
AMS 7	Athabasca Valley	60	92%	8.3E-3	0.01	0.016	0.027	0.041	0.094	0.36	1.6	26	0.65	3.4
AMS 14	Anzac	57	67%	1.1E-3	3.9E-3	5.8E-3	0.011	0.028	0.055	0.13	0.24	0.69	0.06	0.11



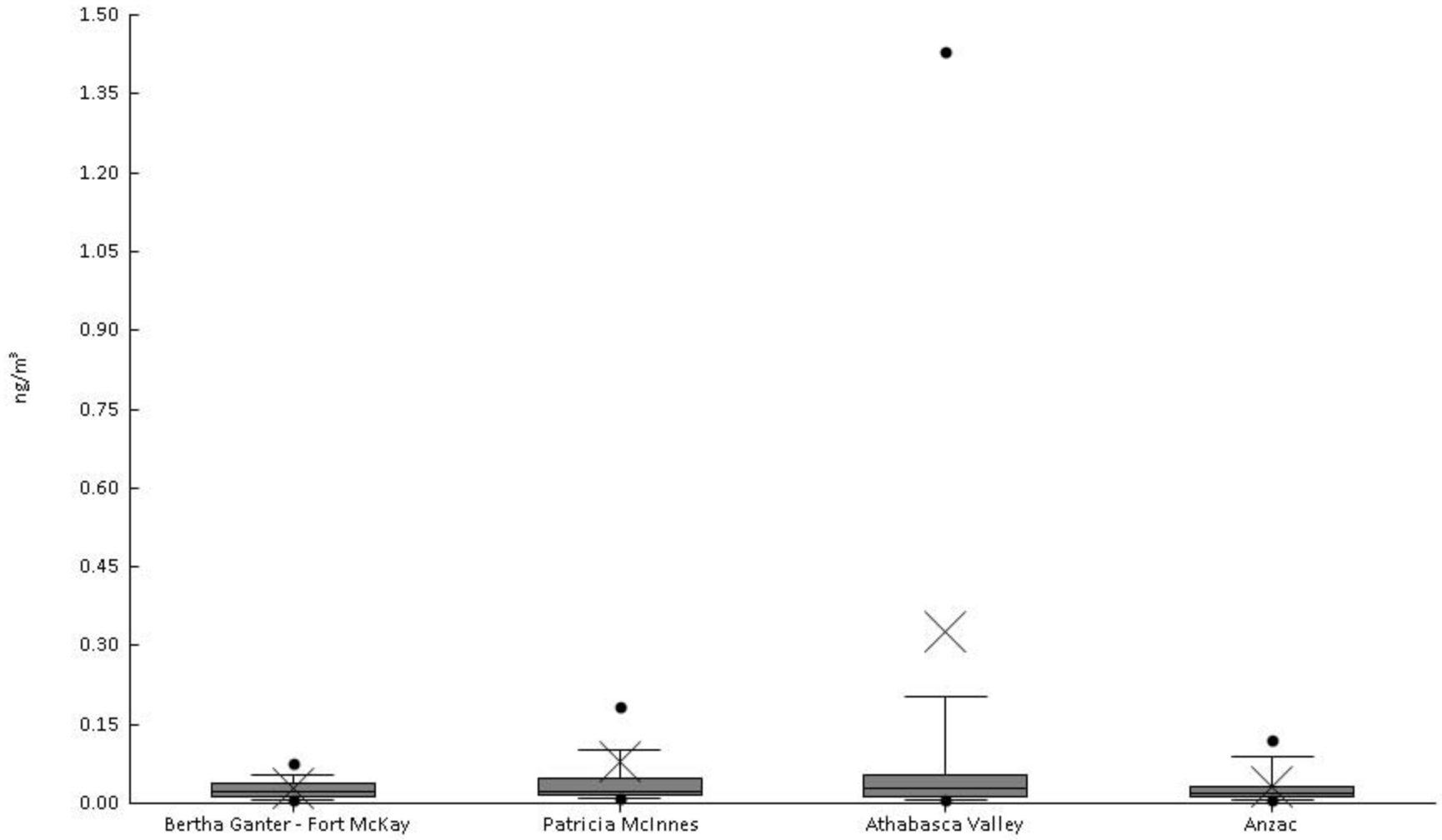
Polycyclic Aromatic Hydrocarbons - Chrysene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	98%	6E-3	0.018	0.036	0.066	0.1	0.23	0.43	0.49	1.4	0.18	0.21
AMS 6	Patricia McInnes	60	100%	0.017	0.023	0.041	0.075	0.12	0.18	0.54	0.93	4	0.26	0.56
AMS 7	Athabasca Valley	60	98%	6.6E-3	0.03	0.034	0.075	0.11	0.21	0.8	3.8	51	1.3	6.6
AMS 14	Anzac	57	95%	3.9E-3	0.013	0.015	0.031	0.073	0.13	0.24	0.36	0.81	0.11	0.13



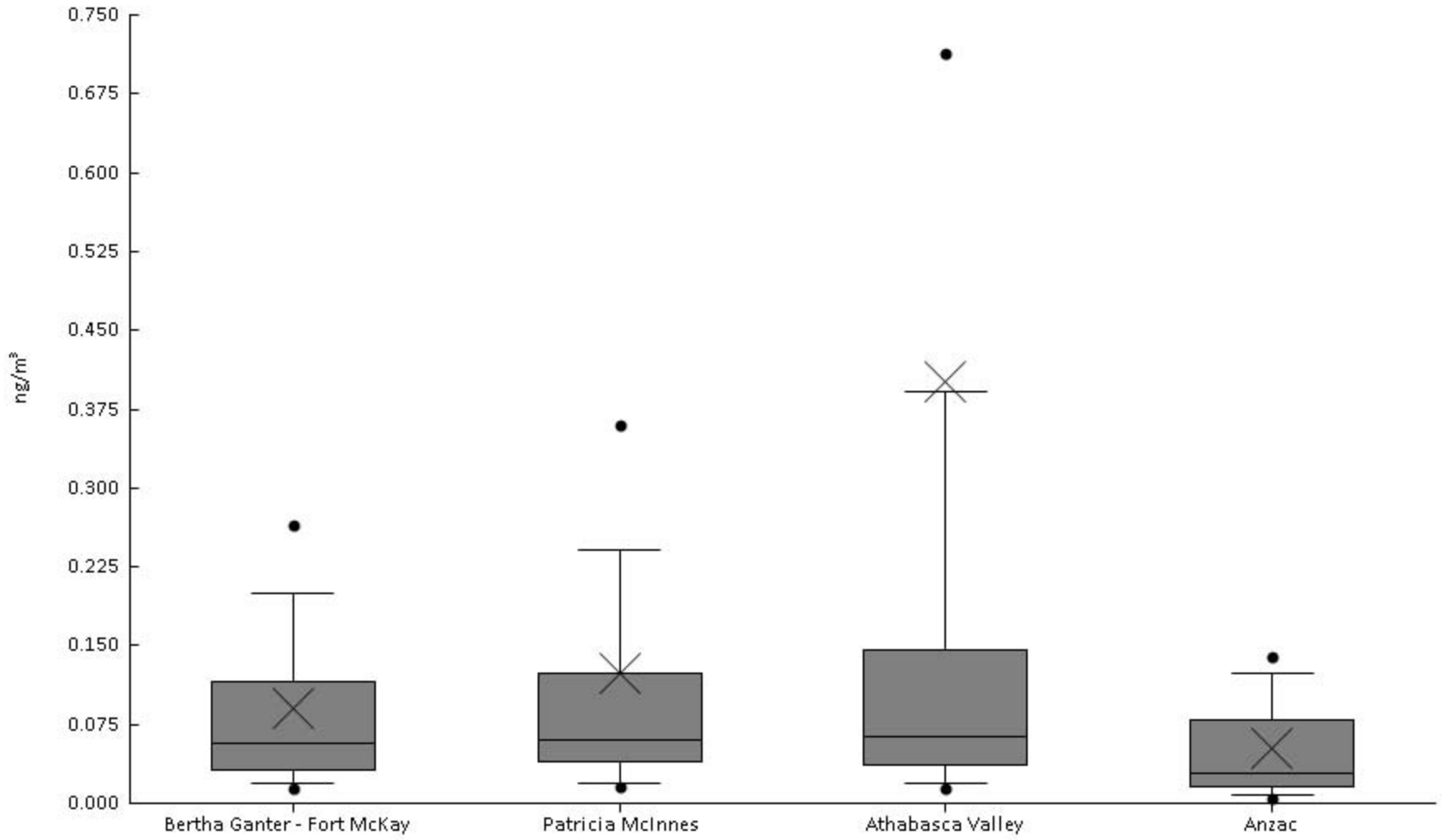
Polycyclic Aromatic Hydrocarbons - 7,12-Dimethylbenz(a)anthracene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	75%	2.2E-3	6.6E-3	7.5E-3	0.013	0.023	0.039	0.053	0.076	0.12	0.029	0.023
AMS 6	Patricia McInnes	60	78%	4.5E-3	8.6E-3	9.9E-3	0.015	0.022	0.046	0.1	0.18	2.1	0.079	0.28
AMS 7	Athabasca Valley	60	80%	4.2E-3	6E-3	7.7E-3	0.014	0.028	0.054	0.2	1.4	10	0.33	1.4
AMS 14	Anzac	57	74%	3E-3	5.6E-3	7.7E-3	0.012	0.018	0.032	0.088	0.12	0.16	0.032	0.035



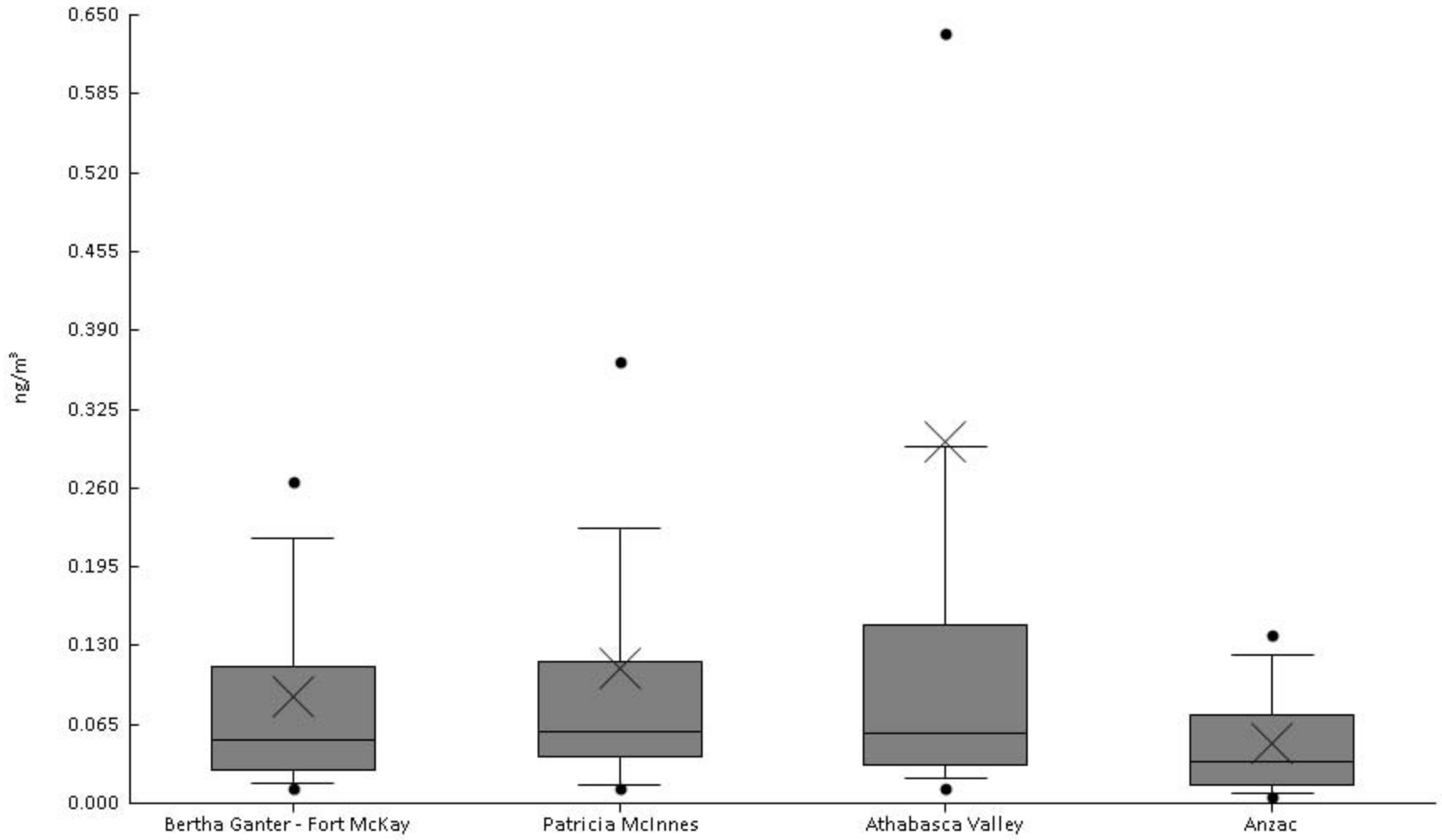
Polycyclic Aromatic Hydrocarbons - Benzo(b)fluoranthene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	90%	6.6E-3	0.014	0.02	0.032	0.057	0.12	0.2	0.26	0.43	0.09	0.087
AMS 6	Patricia McInnes	60	88%	7.4E-3	0.015	0.019	0.039	0.06	0.12	0.24	0.36	1.5	0.12	0.21
AMS 7	Athabasca Valley	60	88%	1.9E-3	0.015	0.019	0.036	0.064	0.15	0.39	0.71	15	0.4	1.9
AMS 14	Anzac	57	67%	3.4E-3	5.1E-3	7.5E-3	0.015	0.028	0.079	0.12	0.14	0.3	0.052	0.055



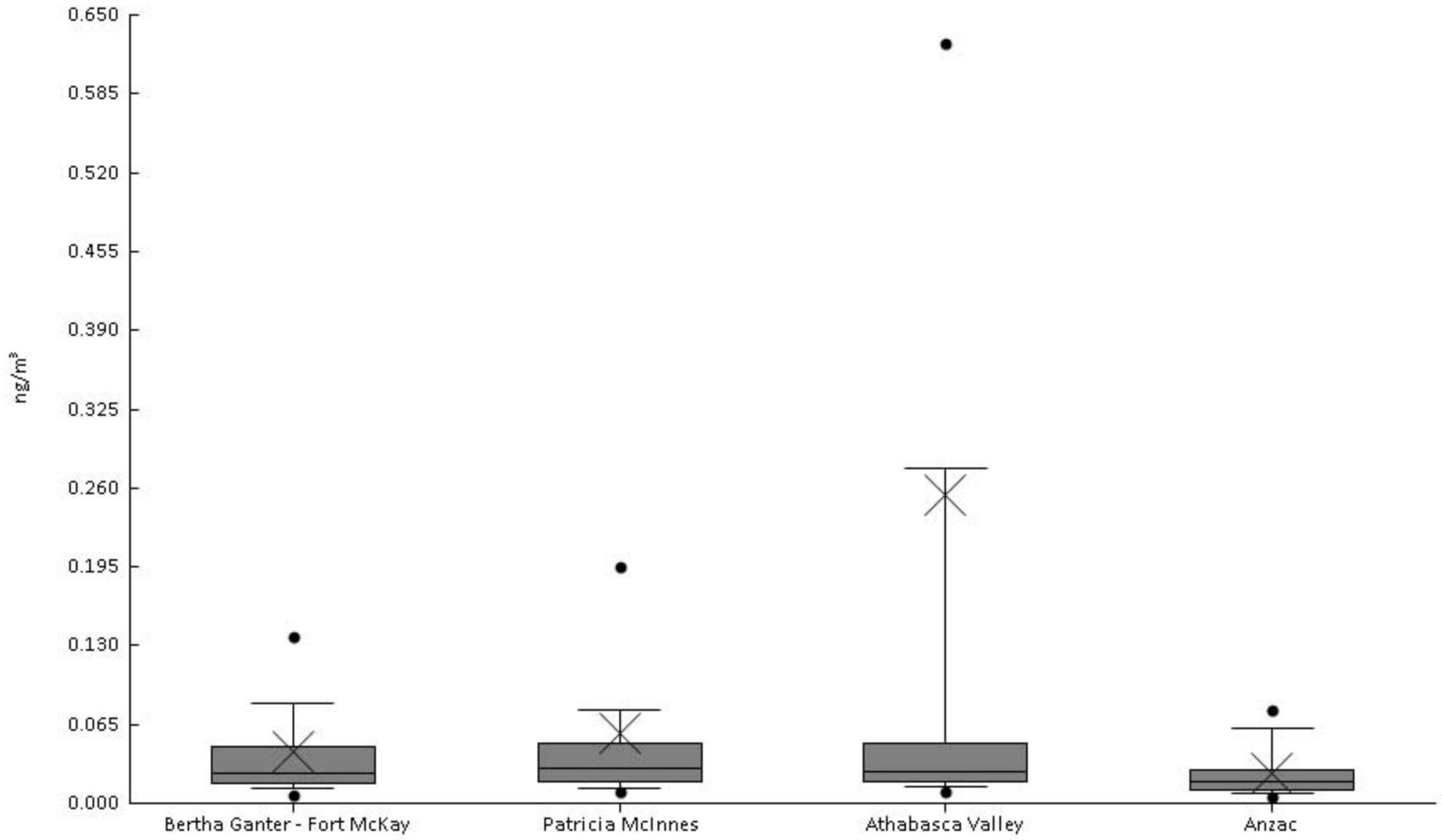
Polycyclic Aromatic Hydrocarbons - Benzo(k)fluoranthene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	93%	7.8E-3	0.012	0.017	0.028	0.053	0.11	0.22	0.26	0.41	0.087	0.087
AMS 6	Patricia McInnes	60	95%	8.3E-3	0.013	0.016	0.039	0.06	0.12	0.23	0.36	1.2	0.11	0.17
AMS 7	Athabasca Valley	60	93%	5.4E-3	0.012	0.02	0.032	0.058	0.15	0.29	0.64	9.6	0.3	1.3
AMS 14	Anzac	57	81%	4E-3	5.8E-3	7.7E-3	0.016	0.035	0.073	0.12	0.14	0.2	0.049	0.045



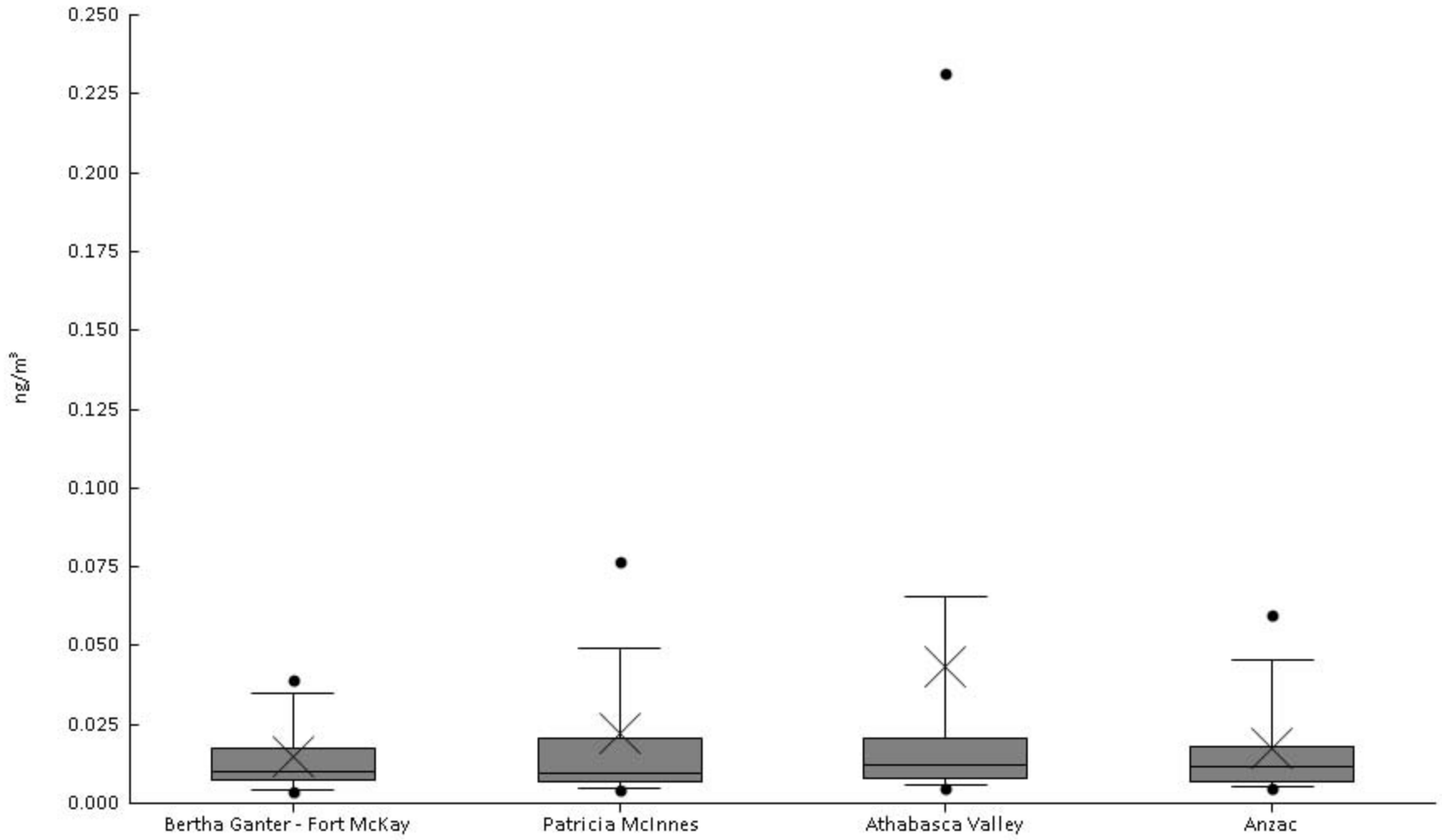
Polycyclic Aromatic Hydrocarbons - Benzo(a)pyrene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	75%	5.5E-3	7E-3	0.012	0.016	0.025	0.047	0.082	0.14	0.33	0.042	0.054
AMS 6	Patricia McInnes	60	83%	7.3E-3	9.1E-3	0.012	0.018	0.028	0.05	0.077	0.2	0.96	0.058	0.13
AMS 7	Athabasca Valley	60	85%	6E-3	9.3E-3	0.013	0.018	0.026	0.049	0.28	0.63	9.4	0.25	1.2
AMS 14	Anzac	57	61%	4.9E-3	6.1E-3	8.4E-3	0.012	0.018	0.028	0.062	0.077	0.12	0.025	0.022



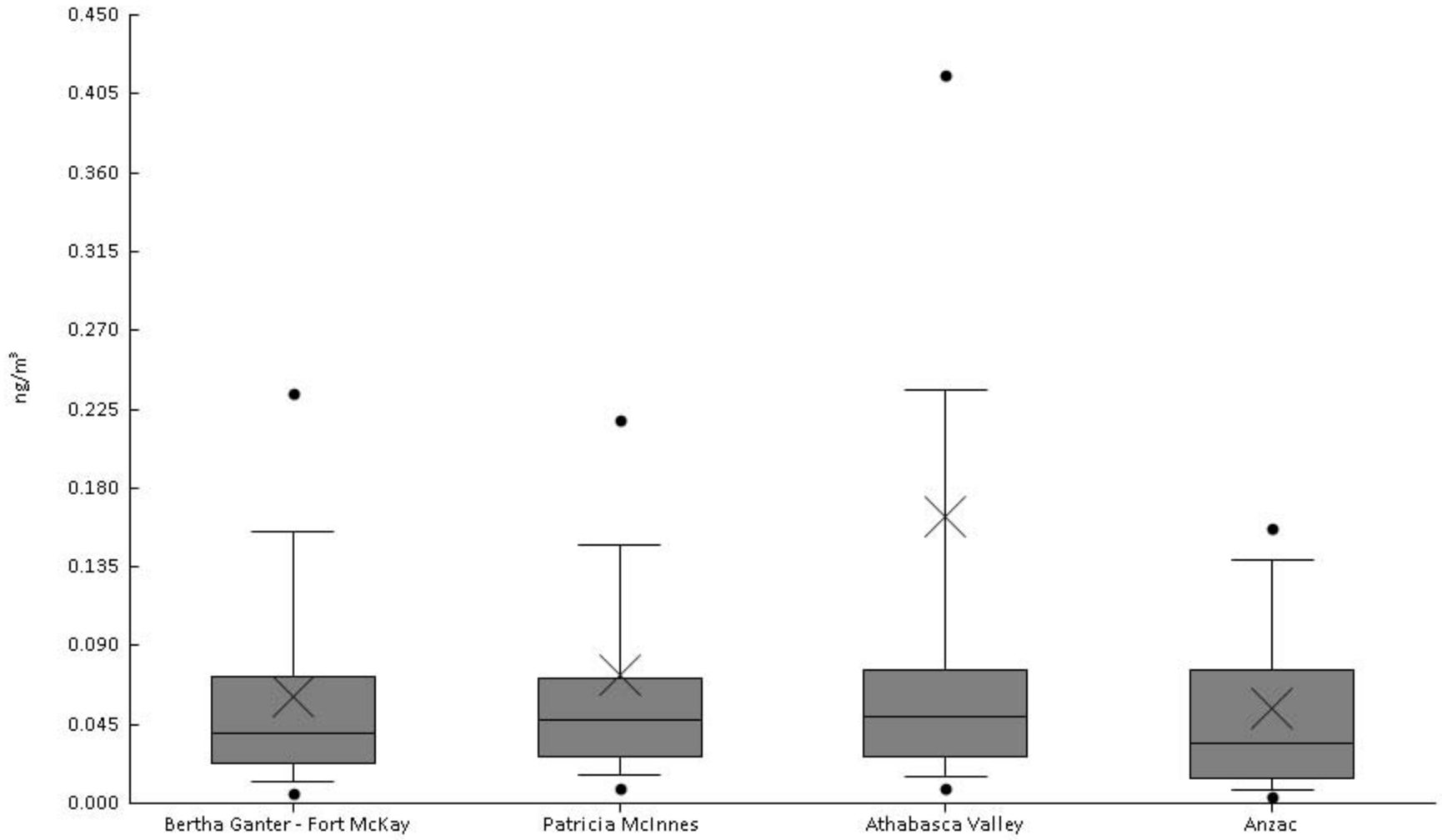
Polycyclic Aromatic Hydrocarbons - 3-Methylcholanthrene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	19%	2.3E-3	3.7E-3	4.4E-3	7.2E-3	9.9E-3	0.017	0.035	0.039	0.078	0.015	0.014
AMS 6	Patricia McInnes	60	22%	3.3E-3	4.2E-3	4.8E-3	6.7E-3	9.6E-3	0.021	0.049	0.077	0.29	0.022	0.04
AMS 7	Athabasca Valley	60	23%	3.5E-3	5E-3	5.6E-3	8E-3	0.012	0.021	0.066	0.23	0.82	0.043	0.12
AMS 14	Anzac	57	21%	4.5E-3	4.8E-3	5.1E-3	6.7E-3	0.012	0.018	0.045	0.06	0.08	0.018	0.018



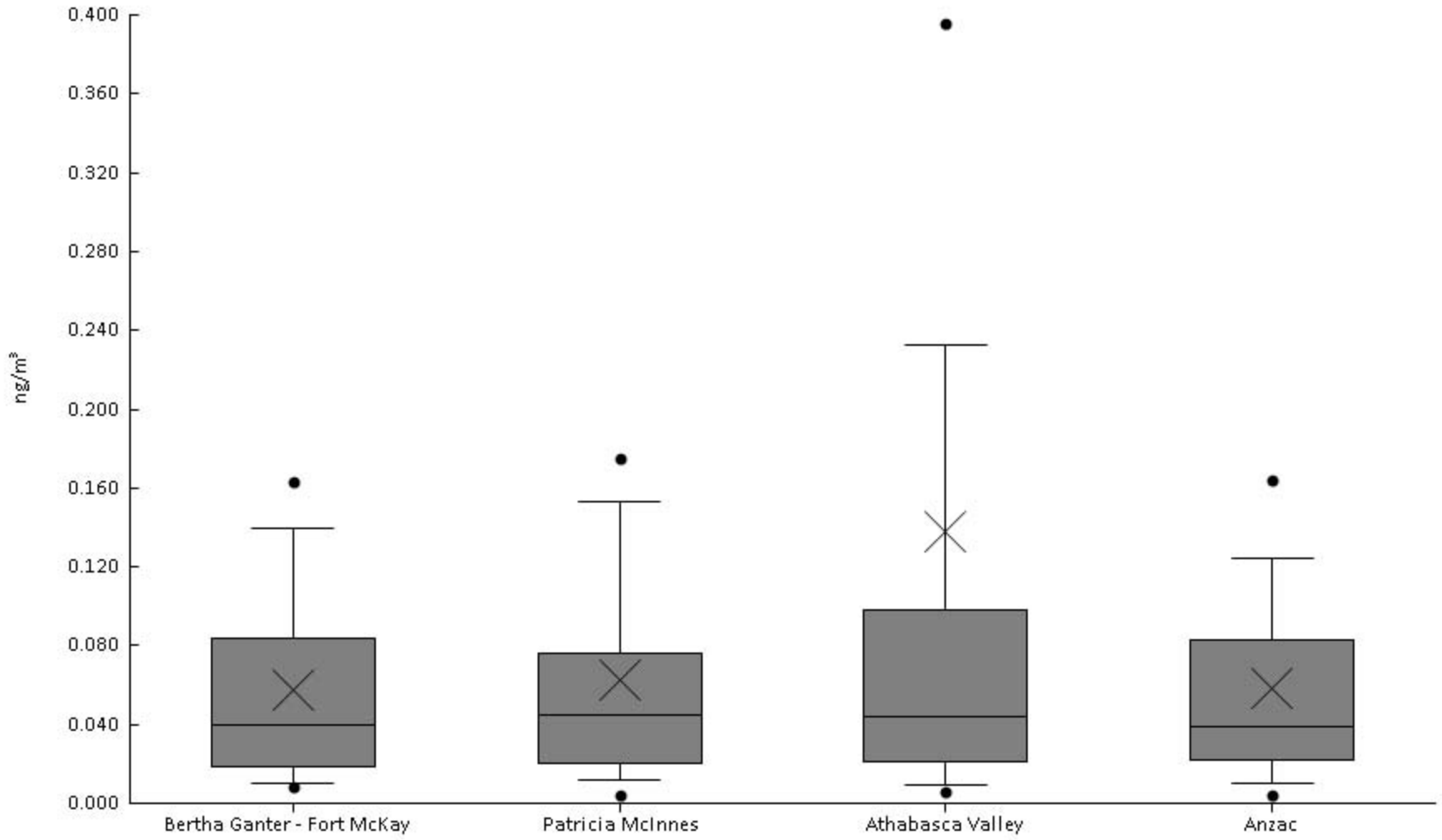
Polycyclic Aromatic Hydrocarbons - Indeno(123-cd)pyrene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	80%	1.8E-3	6.2E-3	0.012	0.023	0.04	0.073	0.15	0.23	0.24	0.061	0.061
AMS 6	Patricia McInnes	60	88%	4.8E-3	8.6E-3	0.016	0.026	0.048	0.071	0.15	0.22	0.67	0.074	0.1
AMS 7	Athabasca Valley	60	88%	5.5E-3	9E-3	0.015	0.027	0.05	0.076	0.24	0.42	4.6	0.16	0.6
AMS 14	Anzac	57	68%	2.9E-3	3.9E-3	7.4E-3	0.014	0.034	0.076	0.14	0.16	0.25	0.054	0.054



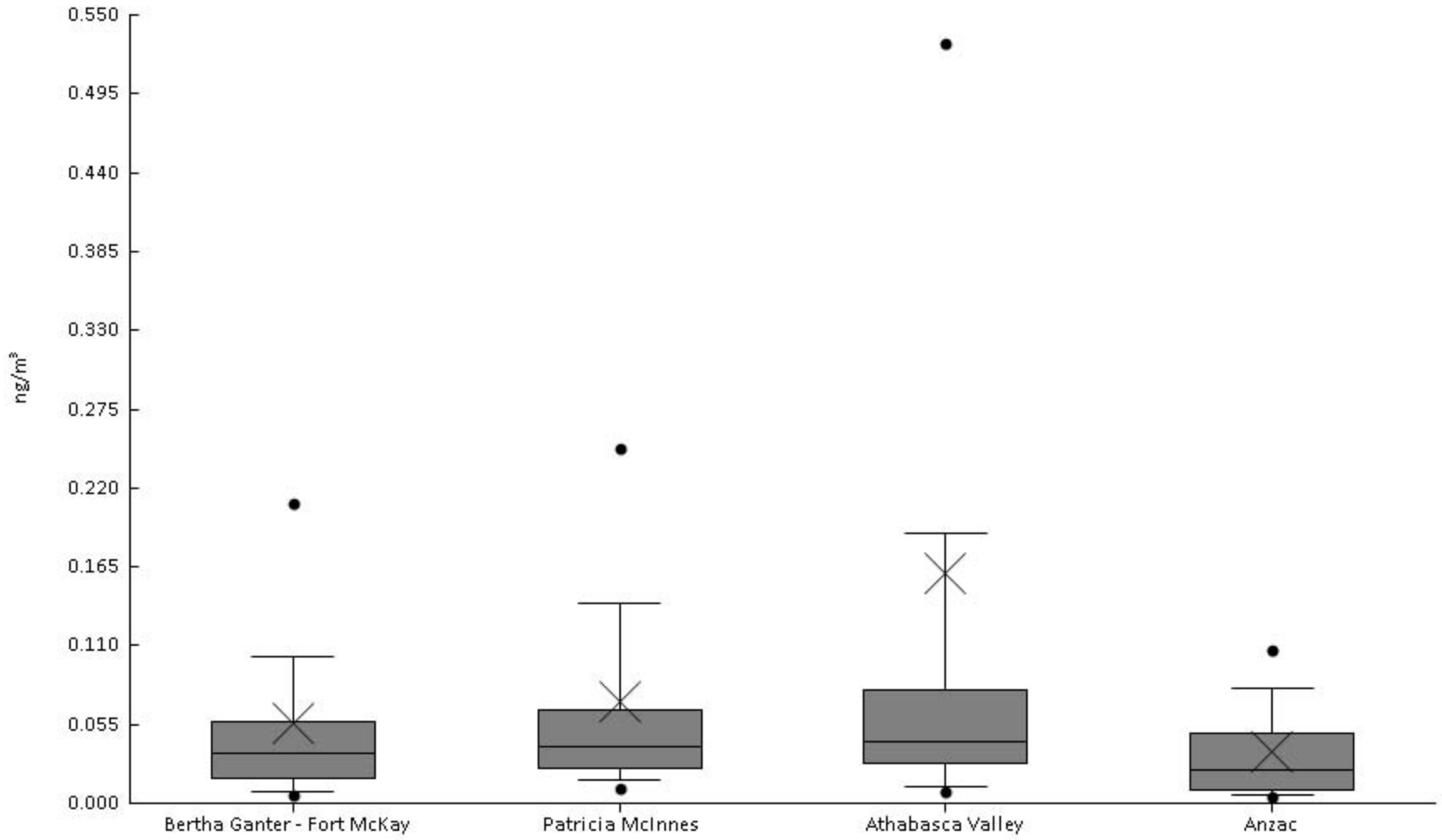
Polycyclic Aromatic Hydrocarbons - Dibenz(a,h)anthracene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	71%	3.9E-3	8.7E-3	0.01	0.019	0.04	0.084	0.14	0.16	0.17	0.058	0.048
AMS 6	Patricia McInnes	60	75%	2.8E-3	4.2E-3	0.012	0.02	0.045	0.076	0.15	0.17	0.36	0.063	0.069
AMS 7	Athabasca Valley	60	80%	2.7E-3	5.7E-3	9.2E-3	0.021	0.044	0.098	0.23	0.4	3	0.14	0.4
AMS 14	Anzac	57	75%	3.2E-3	4.3E-3	0.01	0.022	0.038	0.083	0.12	0.16	0.22	0.058	0.053



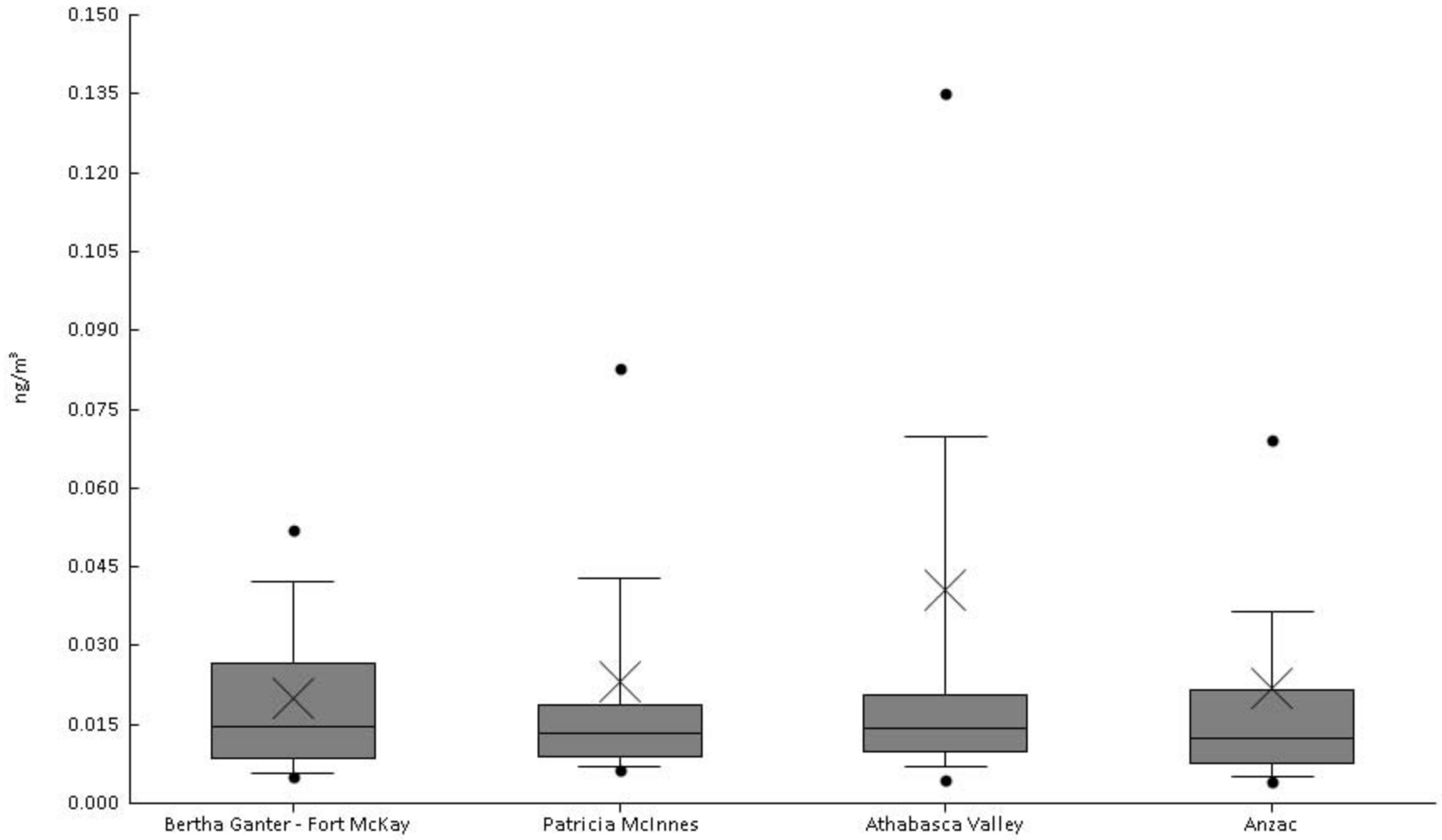
Polycyclic Aromatic Hydrocarbons - Benzo(ghi)perylene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	71%	4E-3	5.7E-3	8.5E-3	0.018	0.035	0.057	0.1	0.21	0.51	0.056	0.08
AMS 6	Patricia McInnes	60	87%	4.9E-3	0.011	0.017	0.024	0.04	0.065	0.14	0.25	0.7	0.07	0.11
AMS 7	Athabasca Valley	60	80%	6E-3	8.1E-3	0.011	0.028	0.043	0.079	0.19	0.53	4.7	0.16	0.62
AMS 14	Anzac	57	60%	3.4E-3	4.2E-3	6E-3	9.4E-3	0.023	0.049	0.081	0.11	0.21	0.036	0.038



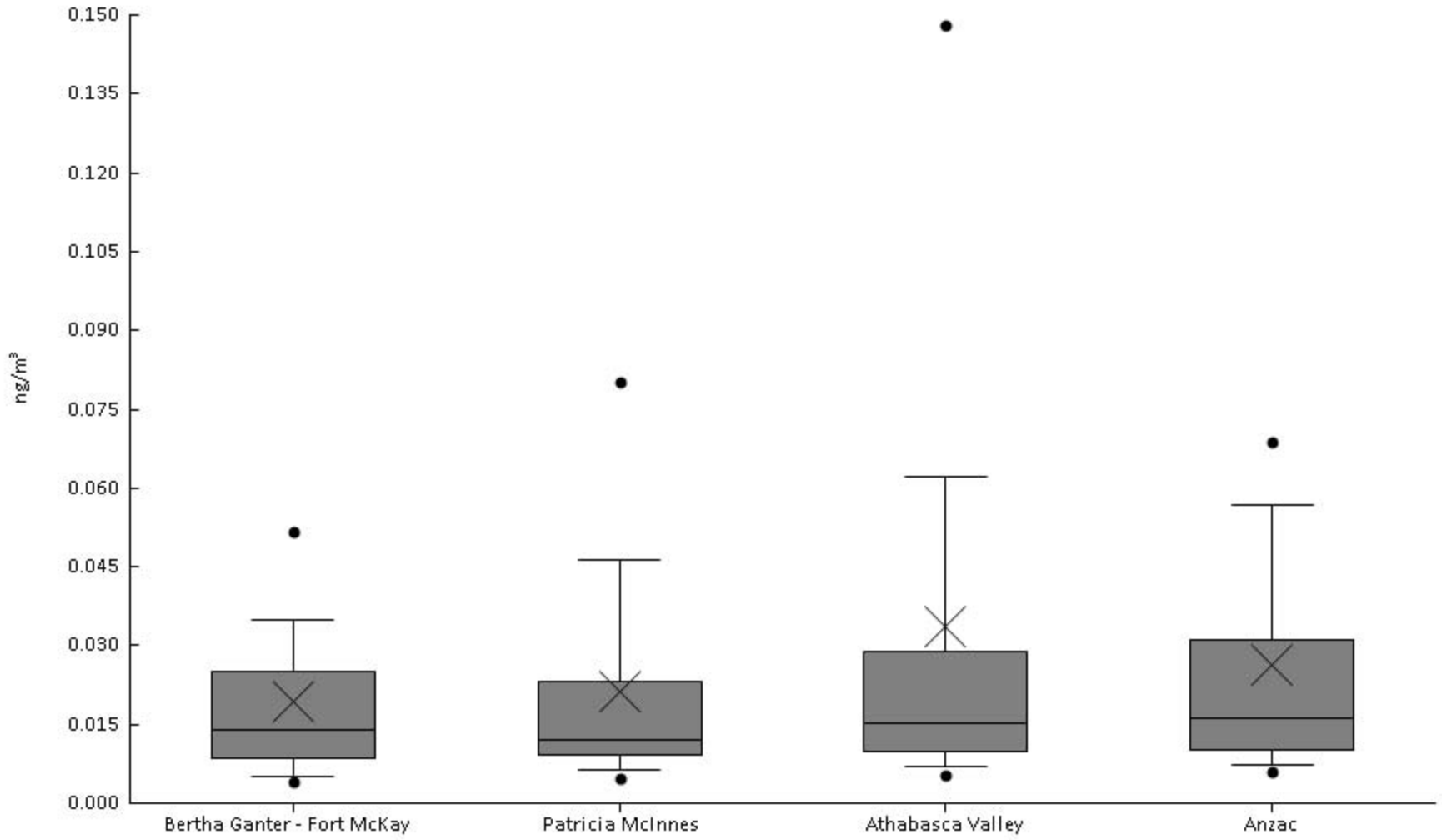
Polycyclic Aromatic Hydrocarbons - Dibenzo(a,l)pyrene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	27%	4.8E-3	5.1E-3	5.8E-3	8.4E-3	0.014	0.027	0.042	0.052	0.074	0.02	0.016
AMS 6	Patricia McInnes	60	17%	1.3E-3	6.5E-3	6.9E-3	9E-3	0.013	0.019	0.043	0.083	0.28	0.023	0.038
AMS 7	Athabasca Valley	60	23%	1.9E-3	4.5E-3	7E-3	9.9E-3	0.014	0.021	0.07	0.14	0.87	0.041	0.12
AMS 14	Anzac	57	16%	0	4E-3	5.1E-3	7.5E-3	0.012	0.021	0.036	0.069	0.27	0.022	0.037



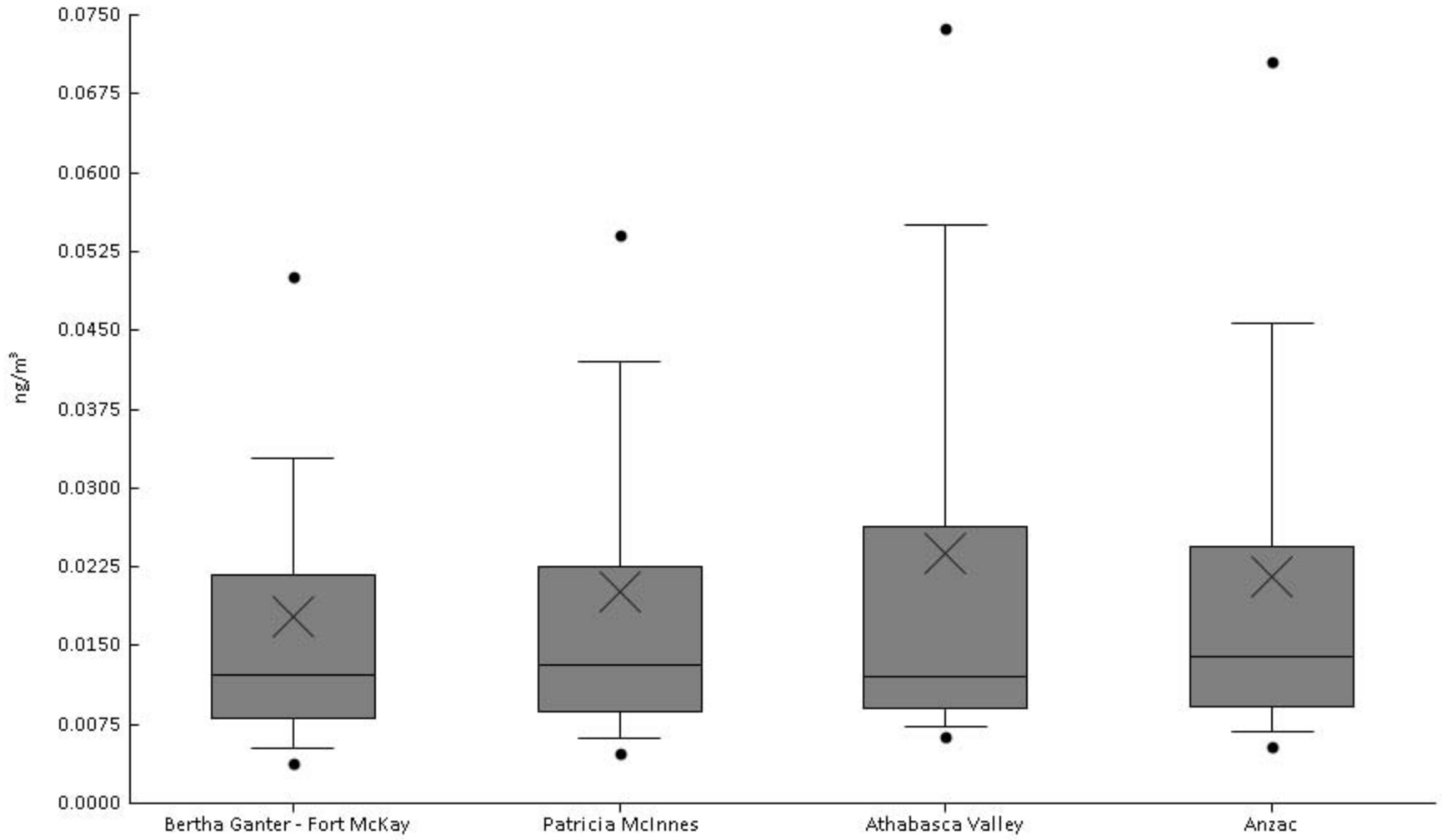
Polycyclic Aromatic Hydrocarbons - Dibenzo(a,i)pyrene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	25%	0	4.2E-3	5E-3	8.5E-3	0.014	0.025	0.035	0.052	0.13	0.019	0.019
AMS 6	Patricia McInnes	60	25%	1.3E-3	4.8E-3	6.2E-3	9.4E-3	0.012	0.023	0.046	0.08	0.14	0.021	0.024
AMS 7	Athabasca Valley	60	30%	3.6E-3	5.5E-3	7E-3	9.7E-3	0.015	0.029	0.062	0.15	0.38	0.034	0.06
AMS 14	Anzac	57	30%	3.9E-3	5.9E-3	7.3E-3	0.01	0.016	0.031	0.057	0.069	0.2	0.026	0.031



Polycyclic Aromatic Hydrocarbons - Dibenzo(a,h)pyrene (ng/m³) - 2016

Station #	Station	#	% ≥ MDL	Min	5%	10%	25%	Med	75%	90%	95%	Max	Ave	Std Dev
AMS 1	Bertha Ganter - Fort McKay	59	29%	3.2E-3	3.8E-3	5.2E-3	8E-3	0.012	0.022	0.033	0.05	0.094	0.018	0.017
AMS 6	Patricia McInnes	60	30%	3.6E-3	4.7E-3	6.2E-3	8.7E-3	0.013	0.022	0.042	0.054	0.15	0.02	0.022
AMS 7	Athabasca Valley	60	32%	4.3E-3	6.3E-3	7.3E-3	9.1E-3	0.012	0.026	0.055	0.074	0.18	0.024	0.03
AMS 14	Anzac	57	35%	3.2E-3	5.3E-3	6.8E-3	9.2E-3	0.014	0.024	0.046	0.071	0.13	0.022	0.022



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

INTEGRATED MONITORING PROGRAM
ANNUAL REPORT

PRECIPITATION
DATA SUMMARY
2016

March 2017

SAMPLE COLLECTION AND DATA COMPILATION BY:

Wood Buffalo Environmental Association
Fort McMurray, Alberta

LABORATORY ANALYSIS BY:

Precipitation: InnoTech Alberta, Inc.
Vegreville, Alberta

FILE CONTENTS DESCRIPTION	Precipitation Measurement of ions, pH and conductivity	
SAMPLING INTERVAL	A week	
SAMPLING FREQUENCY OF DATA	Weekly	
EXPLANATION OF ZERO VALUES	Zero values are contained in this file and should be treated as values below Method Detection Limit (MDL)	
UNITS	mg/L (milligram per liter)	
OBSERVATION TYPE	Wet Precipitation Measurement of ions, pH and conductivity	
FIELD SAMPLING OR MEASUREMENT PRINCIPLE	moveable cover with precipitation sensors	
MEDIUM	Polyethylene Collection bucket	
ANALYTICALMETHODS	pH by pH meter	
	Conductivity by Conductivity meter	
	IONS by Ion Chromatography (IC)	
ANALYTICAL LABORATORY	Alberta Innovates Technology Futures (now InnoTech Alberta Inc)	
USER NOTE 1	Data are not blank corrected	
SAMPLING INSTRUMENT TYPE	2000-2016 March	MIC precipitation collector
	2016 March- 2016 Sep	NTN Precip N-CON Sampler
	2016 Sep- current	Total Precipitation Collector (TPC-3000)

FLAGS USED	
M1	Missing value because no value is available
M2	Missing value because invalidated by Data Originator

		Compound		Acidity	Ammonium	Bicarbonate	Calcium	Chloride	Conductivity (25°C)	Magnesium	Nitrate	pH	Phosphate	Potassium	Sodium	Sulfate
			unit	µeq/L	mg/L	µeq/L	mg/L	mg/L	µS/cm	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L
START DATE	END DATE	DRY WEEK	PRECIP													
5-Jan-16	13-Jan-16		X	13	0.7	146.0	3.0	6.7	M1	0.6	1.9	7.5	< 0.015	1.4	4.4	2.4
12-Jan-16	20-Jan-16		X		0.0	91.1	9.8	17.5	M1	0.3	2.0	7.3	< 0.015	0.6	8.6	13.1
20-Jan-16	27-Jan-16	X														
27-Jan-16	3-Feb-16	X														
4-Feb-16	10-Feb-16		X	16	0.0	24.4	0.4	0.2	5.0	0.0	0.4	6.7	< 0.015	0.1	0.1	0.5
10-Feb-16	17-Feb-16		X	17	0.1	85.0	1.7	0.9	M1	0.2	1.5	7.2	< 0.015	0.2	0.6	1.2
17-Feb-16	25-Feb-16	X														
25-Feb-16	2-Mar-16	X														
2-Mar-16	11-Mar-16		X	55	0.0	32.3	2.9	0.8	22.0	0.3	1.1	6.8	< 0.015	0.2	0.6	1.5
11-Mar-16	17-Mar-16		X	17	0.0	14.4	0.2	0.2	5.0	0.1	0.4	6.5	< 0.015	0.0	0.1	0.4
17-Mar-16	23-Mar-16	X														
23-Mar-16	29-Mar-16	X														
29-Mar-16	5-Apr-16	X														
5-Apr-16	14-Apr-16		X	12	0.1	268.0	5.8	0.6	28.0	0.4	1.8	7.7	< 0.015	0.1	0.4	4.4
14-Apr-16	19-Apr-16	X														
19-Apr-16	26-Apr-16	X														
26-Apr-16	12-May-16		X		0.1	16.9	38.7	9.6	M1	1.6	11.3	6.5	<0.015	2.7	9.1	23.8
12-May-16	17-May-16	X														
17-May-16	25-May-16		X	< 2	3.3	425.0	17.5	1.3	M1	1.7	10.2	7.9	< 0.015	2.4	1.4	12.0
25-May-16	1-Jun-16		X	17	1.2	30.7	0.2	0.1	11.0	0.1	0.8	6.8	< 0.015	0.1	0.0	0.7
1-Jun-16	8-Jun-16		X	19	0.3	48.6	0.9	0.1	12.0	0.1	1.0	7.0	0.1	0.3	0.1	2.4
8-Jun-16	15-Jun-16		X	21	0.0	4.1	0.2	0.0	2.0	0.0	0.2	5.9	< 0.015	0.0	0.0	0.2
15-Jun-16	22-Jun-16		X	15	0.0	111.0	1.9	0.2	15.0	0.2	0.7	7.3	<0.015	0.1	0.2	2.1
22-Jun-16	28-Jun-16		X	15	<0.003	18.5	0.5	0.1	4.0	0.1	0.4	6.6	<0.015	0.0	0.0	0.5
28-Jun-16	8-Jul-16		X	16	0.1	15.5	0.5	0.2	6.0	0.1	0.7	6.5	< 0.015	0.1	0.1	1.2
8-Jul-16	12-Jul-16	X														
12-Jul-16	19-Jul-16	X														
19-Jul-16	27-Jul-16		X	17	0.1	232.0	5.7	0.3	33.0	0.5	1.8	7.7	< 0.015	0.2	0.1	2.2
27-Jul-16	2-Aug-16		X	14	< 0.003	23.2	0.3	0.1	4.0	0.0	0.4	6.7	< 0.015	0.0	< 0.006	0.3
2-Aug-16	9-Aug-16	X														
9-Aug-16	17-Aug-16		X		0.0	53.1	8.1	1.0	51.9	0.5	4.4	7.0	< 0.015	0.5	0.8	8.0
17-Aug-16	24-Aug-16		X	17	< 0.003	44.7	1.1	1.1	14.0	0.2	0.6	6.9	< 0.015	0.2	0.7	1.2
24-Aug-16	30-Aug-16		X	18	0.2	1.2	0.4	0.0	7.0	0.1	0.3	5.4	< 0.015	0.0	< 0.006	1.2
30-Aug-16	7-Sep-16		X	15	0.1	27.3	0.5	0.1	6.0	0.1	0.3	6.7	0.1	0.1	0.0	0.9
7-Sep-16	13-Sep-16		X	17	0.1	18.0	0.8	0.1	9.0	0.1	0.5	6.6	< 0.015	0.1	0.1	1.9
13-Sep-16	20-Sep-16		X	15	< 0.003	54.8	0.9	0.3	10.0	0.2	0.4	7.0	< 0.015	0.2	0.3	1.0
20-Sep-16	28-Sep-16	X														
28-Sep-16	5-Oct-16		X	19	0.0	5.4	0.2	0.0	3.0	0.1	0.1	6.0	< 0.015	0.0	< 0.006	0.4
5-Oct-16	11-Oct-16		X	14	0.0	8.1	0.1	0.1	2.0	0.0	0.3	6.2	< 0.015	0.1	0.1	0.1
11-Oct-16	18-Oct-16		X	15	0.0	12.2	0.3	0.3	5.0	0.1	0.5	6.4	< 0.015	0.1	0.2	0.3
18-Oct-16	26-Oct-16		X	16	0.3	47.2	1.7	0.5	14.4	0.3	2.3	7.0	< 0.015	0.2	0.4	2.1
25-Oct-16	31-Oct-16		X	14	0.8	64.6	1.1	0.3	16.0	0.3	2.3	7.1	0.0	0.2	0.2	1.6
31-Oct-16	7-Nov-16		X	15	0.0	50.0	1.2	0.1	10.0	0.1	1.4	7.0	< 0.015	0.2	0.1	0.8
7-Nov-16	15-Nov-16		X	M1	M1	M1	M1	M1	M1	M1	M1	6.1	M1	M1	M1	M1
15-Nov-16	22-Nov-16		X	23	0.2	1.2	6.1	0.3	29.1	0.4	2.5	5.4	< 0.015	0.2	0.4	1.6
22-Nov-16	30-Nov-16		X	15	0.2	32.9	0.8	0.1	8.0	0.1	1.2	6.8	< 0.015	0.1	0.1	0.7
30-Nov-16	6-Dec-16		X	16	0.0	14.7	0.5	0.1	4.0	0.0	0.5	6.5	< 0.015	0.1	0.0	0.3
6-Dec-16	13-Dec-16		X	14	0.1	28.2	0.8	0.3	8.0	0.1	1.1	6.7	< 0.015	0.1	0.2	0.6
13-Dec-16	19-Dec-16		X	26	0.1	4.2	0.4	0.2	5.0	0.0	0.9	5.9	< 0.015	0.1	0.1	0.5
19-Dec-16	28-Dec-16		X	27	0.1	11.5	0.6	0.2	7.0	0.1	1.3	6.4	< 0.015	0.1	0.1	0.4
28-Dec-16	3-Jan-17		X	M1	M1	M1	M1	M1	M1	M1	M1	6.5	M1	M1	M1	M1