

APPENDIX E.2

INCINERATOR ASH TESTING RESULTS 2015 (HISTORICAL AND CURRENT)

September 30, 2015

Resource Management Officer
Nunavut Field Operations
Aboriginal Affairs and Northern Development Canada
Box 100
Iqaluit, NU X0A 0H0
Justin Hack Justin.Hack@aandc-aadnc.gc.ca

Re: Historical Ash Summary Report
Mary River Project – Water Licence No. 2AM-MRY1325 Amendment No. 1

1. History

In August of 2012, EBA Engineering Consultants Ltd. (EBA) was contracted to conduct a sampling program and assessment of the stockpiled barrels of ash and waste on the Mine Site (EBA, 2013).

In 2014, approximately 730 ash barrels were disposed of at the Mine Site landfill. As of summer 2014, approximately 425 barrels were being stored at the 2007 laydown area on the east side of the airstrip at the Mine Site

As of summer 2014, approximately 366 barrels were being stored in Milne Port beside the hazardous waste berms.

2. 2014 Sampling Program

Mine Site

A temporary berm was constructed for the barrels and all barrels were moved inside. 149 of the approximate 425 barrels were inspected for their contents and sampled if applicable.

On September 18, 2014, approximately 120, (the compliant sampled, and landfill categorised) barrels were disposed of in the Mine Site Landfill covered with one metre of material, followed by geo-membrane liner and an additional two metres of material. Approximately 305 barrels remained in the constructed berm at the end of 2014.

Milne Port

A temporary berm was constructed for the barrels and all barrels were moved inside. Approximately 366 barrels were inspected for their contents and sampled if applicable. All 366 barrels remained in the constructed berm at the end of the 2014 program.

3. 2015 Sampling Program

Mine Site

In early July 2015, an Historical Ash Identification and Evaluation Program was performed on the remaining ash drums in Hazardous Waste Berm 6 (MS-HWB-6). A count yielded 251 historical ash drums remaining to evaluate. This was less than the 305 remaining previously estimated at the end of the 2014 program. These remaining drums were inspected for their contents and sampled if applicable, yielding the following categories of drums remaining in the berm:

- 85 barrels sampled: All of which tested below the Process Residuals Discharge Minimum (GN,2011)
- Remaining drums characterized by contents:
 - o 12 barrels of landfill waste
 - o 68 barrels of unidentifiable waste
 - o 63 barrels of hazardous waste
 - o 14 barrels of re-burnable waste
 - o 9 barrels of contaminated water

On July 28, 2015 approximately 97 barrels (the compliant sampled (85), and landfill (12) categorised), were disposed of in the Mine Site landfill. This left 154 barrels in Hazardous Waste Berm 6. The 14 re-burn barrels were moved and stored in Hazardous Waste Berm 2 (MS-HWB-2), and remain there currently. The 140 barrels of unidentifiable waste (68), hazardous waste (63), and contaminated water (9) were packed into c-cans and are to be backhauled from site on the 2015 sealift. Currently no historical ash drums remain in Hazardous Waste Berm 6 (MS-HWB-6).

Hazardous Waste Berm 6 Reclamation

As stated in the letter sent September 7, 2015, "Historical Ash Deliverables", Baffinland requested that the remediation of the Mine Site containment area (MS-HWB-6) be deferred for 12 months (Appendix A) for reasons stated in the letter. The analytical metals results of the four soil samples taken from immediately adjacent and outside the berms of MS-HWB-6 are currently outstanding.

Milne Port

In early July 2015, an Historical Ash Identification and Evaluation Program was performed on the remaining ash drums in the Temporary Historical Ash Berm (MP-HWP-5). A count yielded 367 historical ash drums remaining in the berm. The drums were inspected for their contents to verify the program from 2014 and sampled if applicable, yielding the following categories of drums remaining in the berm:

- 135 barrels sampled: all of which tested below the Process Residuals Discharge Minimum (GN,2011)
- Remaining drums characterized by contents:
 - o 27 barrels of landfill waste
 - o 15 barrels of unidentifiable waste
 - o 104 barrels of hazardous waste
 - o 68 barrels of re-burnable waste
 - o 18 barrels of contaminated water

In Late July, 2015 approximately 162 barrels (the compliant sampled (135), and landfill (27) categorised) were transported by truck to the Mary River Mine Site and disposed of in the Mine Site Landfill. This left 205 barrels in the Temporary Historical Ash Berm. All 205 of these barrels were packed into c-cans and are to be backhauled from the site by sealift. Currently no historical ash drums remain in the Temporary Ash Berm (MP-HWP-5).

Temporary Historical Ash Berm (MP-HWP-5) Reclamation

In late July, 2015 the Temporary Historical Ash Berm at Milne was decommissioned. All soil on top of the liner was excavated and moved to the Milne Port Landfarm Facility for remediation. Two inches of soil under the liner was also removed and sent to the Landfarm. The liner is currently being stored in the Landfarm to be disposed of on the 2016 sealift backhaul

On August 17, nine discrete samples were taken from the soil below the liner in a grid format comprehensively covering the berm footprint (Figure 1). The samples were analysed for metals, PHC fractions and volatile organic compounds associated with PHCs. Sample analyses was conducted by ALS Environmental Laboratories. There were no exceedances of the Canadian Guideline for Contaminated Site Remediation Industrial Landuse criteria for all metals, volatile organic compounds, and hydrocarbons. The Results Summary Table for these samples is provided in Appendix B.

4. Closure

As of September 30, 2015 there are no barrels remaining in the two temporary historical ash containment berms at either site (MS-HWB-6 & MP-HWP-5). In total, 259 landfill compliant ash barrels were disposed of in the Mine Site Landfill. Additionally, 345 barrels were/will be backhauled during the 2015 Sealift for disposal at a certified facility in Southern Canada. Fourteen remaining drums are being stored in MS-HWB-2 at the Mine Site to be re-burned. The reclaimed area in Milne Port (MP-HWP-5) and the berm at the Mine Site (MS-HWB-6).

5. References

EBA (EBA Engineering Consultants Ltd.), 2013. Incinerator Ash Drum Sampling Report. EBA Engineering Consultants Ltd: March 2013.

Government of Nunavut, (2011). Environmental Guideline for Industrial Waste Discharges into Municipal Solid Waste and Sewage Treatment Facilities, Department of the Environment, Government of Nunavut: Revised April 2011.

Government of Nunavut, 1999. Environmental Guideline for Contaminated Site Remediation. Department of the Environment, Government of Nunavut: Revised April 2009

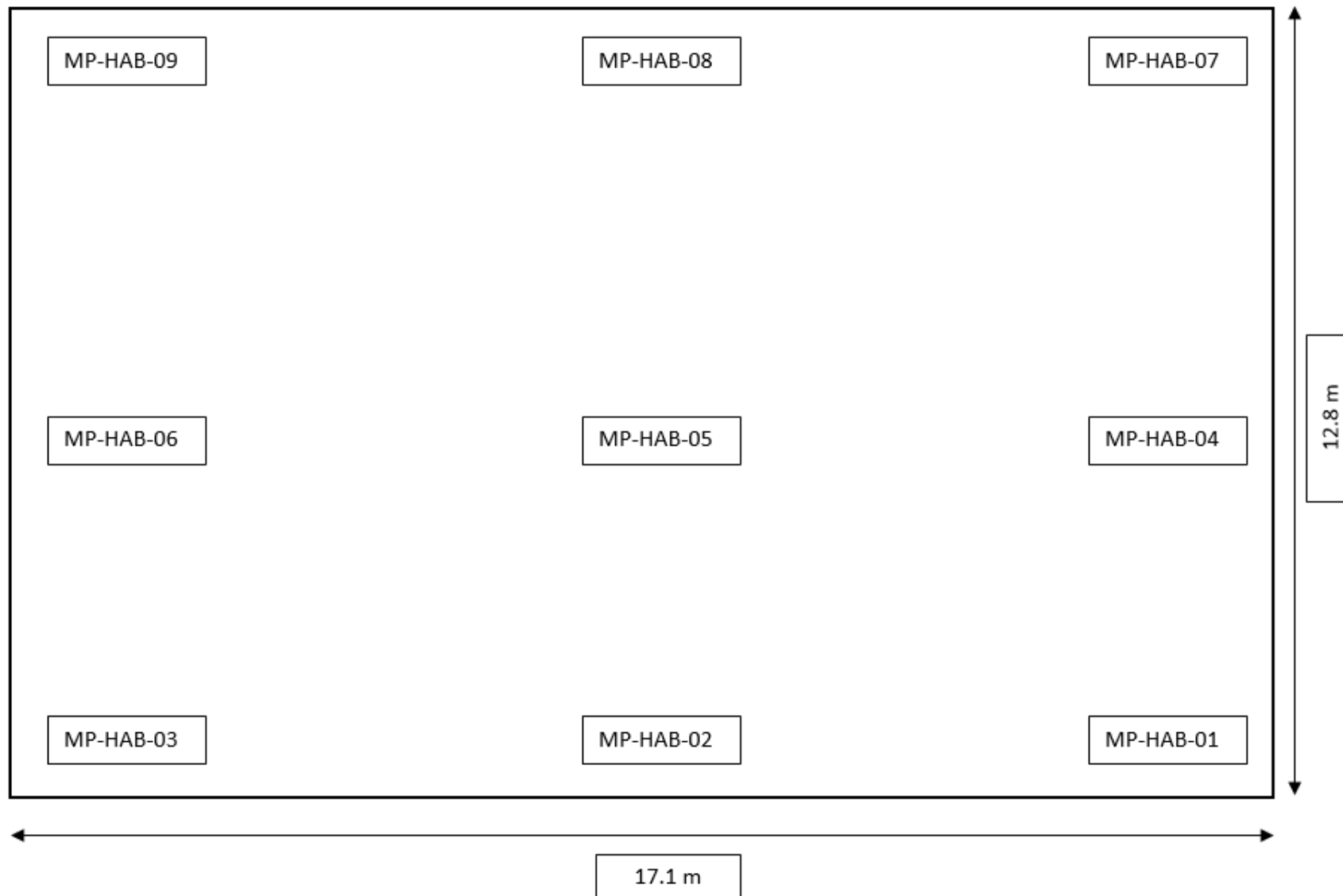


Figure 1 - MP-HWP-5 Sampling Map

APPENDIX A
HISTORICAL ASH DELIVERABLES – SEPTEMBER 7, 2015



September 7, 2015

Acting Director Major Projects
Nunavut Field Operations
Aboriginal Affairs and Northern Development Canada
Box 100
Iqaluit, NU X0A 0H0
Justin.Hack@aandc-aadnc.gc.ca

Re: Historical Ash Deliverables
Mary River Project - Water Licence No. 2AM-MRY1325

Dear Mr. Hack,

In the letter sent February 2, 2015, "*Historical Ash Deliverables*", Baffinland requested an extension of the disposal historical ash and the submission of the final summary report. The Category 1 ash that was stored in Milne Port Site has been transported to and disposed of in the Mary River Mine Site Landfill; Drums assessed as hazardous have been prepared to be backhauled; Drums to be reburned are in the process of such and at the Mine Site are stored in a permanent storage berm (MS-HWB-2) and at Milne Port the drums to be reburned are stored in a berm adjacent to the Waste Management Building (MP-HWP-2).

While the temporary berm at Milne Port Site has been remediated and removed, the reason for this letter is to request that the temporary containment berm at the Mary River Mine Site (MS-HWB-6) be retained for use through to next summer 2016. It is our opinion that this berm remains in adequate condition and we feel that it would be appropriate to utilize it again for another year for the purpose of general hazardous waste storage.

As stated in the February 2, 2015, "*Historical Ash Deliverables*", a soil sample program was to be completed and a final summary of the findings of this program and notification of the completion of the Disposal Plan for the Waste Ash in Barrels will be submitted to AANDC Water Inspectors on or before September 30, 2015. While this will include the remediation of the Milne Port Site temporary storage area, it is requested that the remediation of the Mary River Mine Site containment area (MS-HWB-6) be deferred for 12 months. As an interim measure, we would be pleased to collect four soil samples immediately adjacent and outside the berms of MS-HWB-06 for analyses of metals and hydrocarbon parameters.

Should you require further information or clarification, please feel free to contact the undersigned at (647) 253-0596 x6010 or Jim Millard at (902) 403-1337.

Sincerely,

A handwritten signature in black ink that reads "Allan Knight".

Allan Knight, B.Sc.
Environmental Superintendent

Reviewed by:

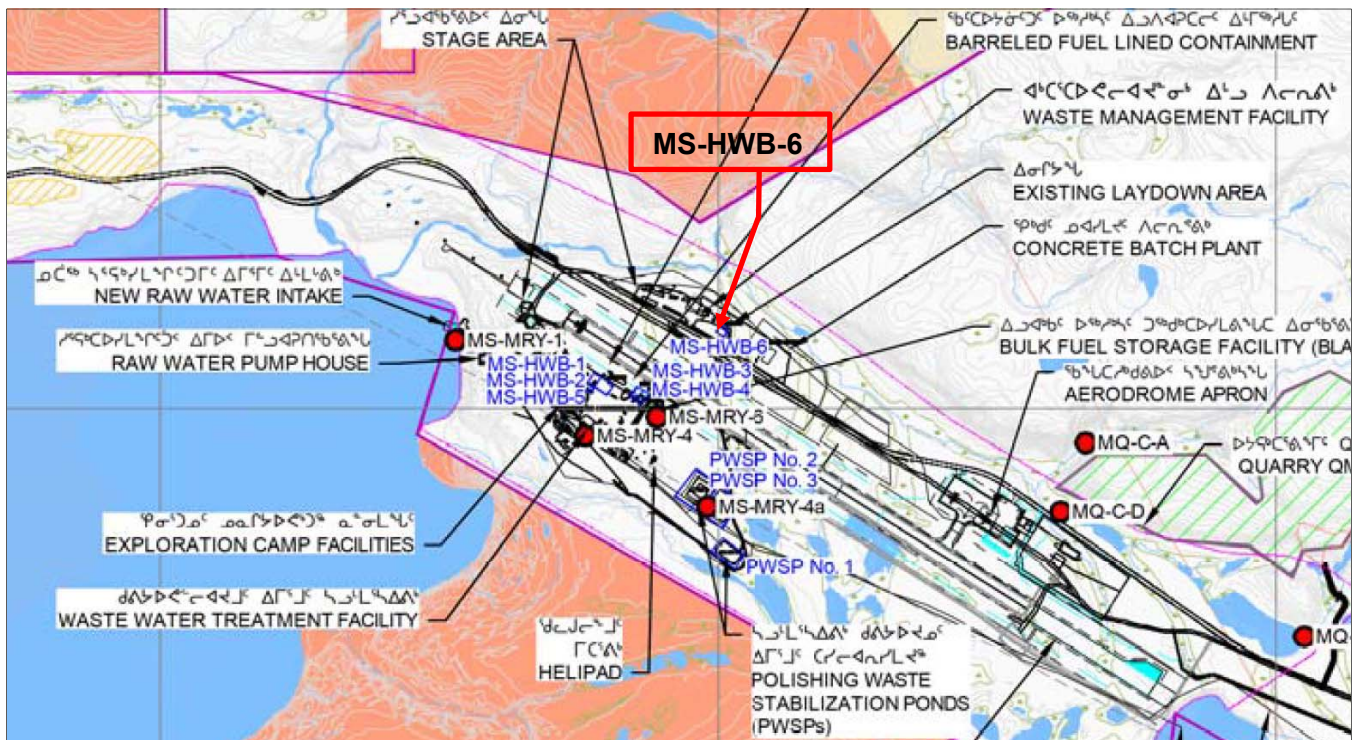
James Millard, M.Sc., P.Geo.
Environmental Manager

Attach: Map, Photos

cc. Michael Anderson, Erik Madsen, Bikash Paul, Tony Woodfine, Jim Millard, Trevor Myers (Baffinland), Erik Allain (AANDC), Manager of Licencing (NWB).



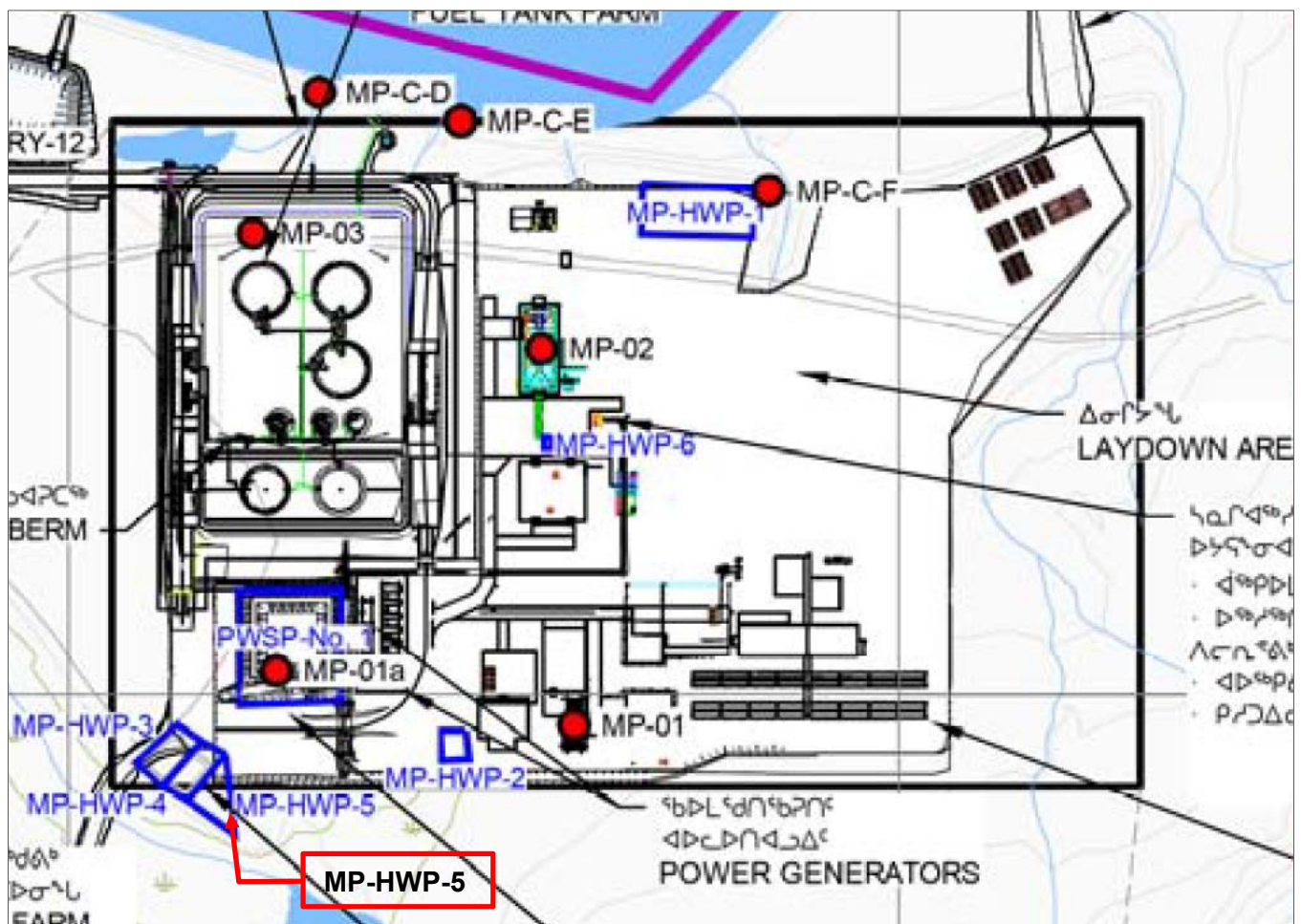
MS-HWB-6 (Sept 4, 2015)



Location of MS-HWB-6 at the Mary River Mine Site



MP-HWP-5 (August 17, 2015)



Location of MP-HWP-5 at the Milne Inlet Port Site

APPENDIX B
RESULTS SUMMARY TABLE

Results Summary L1659744

Job Reference HISTORICAL ASH BERM DECOMM
Report To Jim Millard, BAFFINLAND IRON MINES CORPORATION
Date Received 18-Aug-2015 9:30
Report Date 25-Aug-2015 11:40
Report Revision 1

Client Sample ID	MP-HAB-01	MP-HAB-02	MP-HAB-0201	MP-HAB-03	MP-HAB-04	MP-HAB-05	MP-HAB-06	MP-HAB-07	MP-HAB-08	MP-HAB-09
Date Sampled	17-Aug-2015	17-Aug-2015	17-Aug-2015	17-Aug-2015	17-Aug-2015	17-Aug-2015	17-Aug-2015	17-Aug-2015	17-Aug-2015	17-Aug-2015
Time Sampled	16:00	16:05	16:10	16:10	16:15	16:20	16:25	16:30	16:35	16:40
ALS Sample ID	L1659744-1	L1659744-2	L1659744-3	L1659744-4	L1659744-5	L1659744-6	L1659744-7	L1659744-8	L1659744-9	L1659744-10

Parameter	Lowest Detection Limit	Units	Candian Soil Quality Guidelines (mg/kg soil) Industrial Landuse	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
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Physical Tests (Soil)													
% Moisture	0.10	%		3.69	4.24	3.68	9.67	10.6	5.98	4.77	3.97	4.82	5.16

Metals (Soil)													
Aluminum (Al)	50	ug/g		1540	2960	2410	2620	2460	2290	2230	1890	1760	1930
Antimony (Sb)	0.10	ug/g		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10
Arsenic (As)	0.10	ug/g	12	0.97	1.44	1.35	1.08	0.92	1.10	1.09	1.05	1.14	1.26
Barium (Ba)	0.50	ug/g	2000	4.23	8.58	6.99	7.21	6.87	6.39	6.56	5.35	5.31	5.55
Beryllium (Be)	0.10	ug/g		0.14	0.20	0.18	0.18	0.18	0.17	0.18	0.16	0.16	0.21
Bismuth (Bi)	0.20	ug/g		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Boron (B)	5.0	ug/g		13.9	22.9	20.1	19.4	17.9	18.4	17.2	14.6	12.9	12.9
Cadmium (Cd)	0.020	ug/g	22	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Calcium (Ca)	50	ug/g		31200	63600	54900	54800	36500	49100	41700	36300	35000	33400
Chromium (Cr)	0.50	ug/g	87	15.2	19.7	19.1	13.7	10.6	12.9	16.3	18.9	18.2	26.8
Cobalt (Co)	0.10	ug/g		2.11	2.91	2.69	2.24	1.82	1.85	2.24	2.40	2.36	3.99
Copper (Cu)	0.50	ug/g	91	1.92	3.57	2.99	2.95	2.79	2.60	3.83	2.52	2.64	2.95
Iron (Fe)	50	ug/g		20700	18800	19400	10400	8410	10600	17800	19900	19300	36300
Lead (Pb)	0.50	ug/g	600	2.34	3.03	2.61	2.70	2.50	2.55	2.76	2.61	2.88	3.53
Lithium (Li)	2.0	ug/g		7.5	13.6	11.7	12.5	10.8	11.3	10.5	8.8	8.3	8.3
Magnesium (Mg)	20	ug/g		16300	33200	29200	28100	20600	23800	21300	19300	18300	16800
Manganese (Mn)	1.0	ug/g		63.8	111	99.8	90.3	73.4	82.2	88.1	83.8	85.4	115
Molybdenum (Mo)	0.10	ug/g		0.17	0.24	0.20	0.22	0.18	0.19	0.22	0.20	0.20	0.26
Nickel (Ni)	0.50	ug/g	50	4.28	7.28	5.89	5.95	5.22	4.86	5.58	5.35	4.97	6.15
Phosphorus (P)	50	ug/g		228	295	319	291	244	253	267	189	238	299
Potassium (K)	100	ug/g		580	1190	980	1010	890	890	850	720	570	590
Selenium (Se)	0.20	ug/g	2.9	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Silver (Ag)	0.10	ug/g		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sodium (Na)	50	ug/g		<50	91	80	81	68	77	73	<50	<50	<50
Strontium (Sr)	0.50	ug/g		15.8	31.1	28.0	26.2	19.2	24.6	20.1	18.0	17.5	16.1
Sulfur (S)	5000	ug/g		<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000
Thallium (Tl)	0.050	ug/g	1	<0.050	0.052	<0.050	0.052	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Tin (Sn)	2.0	ug/g		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Titanium (Ti)	1.0	ug/g		122	217	173	190	167	164	160	156	134	164
Uranium (U)	0.050	ug/g	300	0.512	0.548	0.504	0.435	0.427	0.456	0.642	0.609	0.633	0.856
Vanadium (V)	0.20	ug/g	130	25.3	25.9	26.2	14.2	11.7	14.0	21.9	23.7	22.3	47.7
Zinc (Zn)	2.0	ug/g	360	4.4	7.7	6.9	7.5	6.7	6.2	7.9	5.5	5.0	7.7
Zirconium (Zr)	1.0	ug/g		2.3	3.8	3.5	2.0	1.1	2.4	1.5	3.9	1.5	1.7

Volatile Organic Compounds (Soil)													
Benzene	0.020	ug/g	0.03	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Ethylbenzene	0.050	ug/g	0.082	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Toluene	0.050	ug/g	0.37	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
o-Xylene	0.050	ug/g		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
m+p-Xylenes	0.10	ug/g		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Xylenes (Total)	0.11	ug/g	11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
4-Bromofluorobenzene		%		108.8	107.4	110.3	105.3	104.8	109.3	109.7	106.4	106.8	107.9
1,4-Difluorobenzene		%		107.5	103.4	105.8	105	104.5	105.8	104.1	104.6	105.4	106.7

Hydrocarbons (Soil)													
F1 (C6-C10)	5.0	ug/g	320	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
F1-BTEX	5.0	ug/g		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
F2 (C10-C16)	10	ug/g	260	<10	119	26	<10	<10	75	109	18	29	<10
F3 (C16-C34)	50	ug/g	1700	<50	60	<50	<50	<50	<50	<50	<50	<50	<50
F4 (C34-C50)	50	ug/g	3300	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Total Hydrocarbons (C6-C50)	72	ug/g		<72	178	<72	<72	<72	75	109	<72	<72	<72
Chrom. to baseline at nC50		-		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
2-Bromobenzotrifluoride		%		83.1	90.3	77	83.6	85.7	85.8	88.9	84.9	87.4	87.2
3,4-Dichlorotoluene		%		85.9	85.9	82.6	81.2	79.4	85.3	88.9	77.4	88.8	78.6

Qualifier Legend VTHS Volatile test was conducted on sample with headspace. Results may be biased low.

APPENDIX E.2.1
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 QIA AND NWB ANNUAL REPORT
ANNUAL INVENTORY AND STATUS OF 2015 PRODUCED INCINERATOR ASH

Category	Mine Site Barrels	Mine Site ~Volume m ³	Mine Site Status	Milne Port Barrels	Milne Port ~Volume m ³	Milne Port Status
Landfill	72 + 1 bin	20.33	Landfilled	105	27.03	Landfilled
Hazardous	2	0.51	Reburned	9	2.32	Reburned
Total	74 + 1 bin	20.84	N/A	63	29.34	N/A

2015 QIA AND NWB ANNUAL REPORT
ANNUAL INVENTORY AND STATUS OF HISTORICALLY PRODUCED INCINERATOR ASH

Category	Mine Site Barrels	Mine Site ~Volume m ³	Mine Site Status	Milne Port Barrels	Milne Port ~Volume m ³	Milne Port Status
Landfill	97	13.22	Landfilled	162	22.08	Landfilled
Unidentifiable	68	9.27	Off site disposal	15	2.04	Off site disposal
Reburnable	14	1.91	Off site disposal	68	9.27	Off site disposal
Hazardous	63	8.59	Off site disposal	104	14.17	Off site disposal
Contaminated Water	9	1.23	Off site disposal	18	2.45	Off site disposal
Total	251	34.20	N/A	367	50.01	N/A

2015 QIA AND NWB ANNUAL REPORT
ANNUAL EXCEEDANCES OF 2015 PRODUCED INCINERATOR ASH

Sample ID	Sample Date	Analyte	Minimum Detection Limit	Guideline	Result	Status
MP-ASH-61	2015-02-12	Cr	0.05 mg/L	5 mg/L	5.5 mg/L	Reburned
MP-ASH-COMP2	2015-07-29	Cr	0.05 mg/L	5 mg/L	1.28*4 mg/L	Reburned
MP-ASH-COMP4	2015-07-29	Cr	0.05 mg/L	5 mg/L	2.56*4 mg/L	Reburned
MS-ASH-65	2015-03-25	Cd	0.005 mg/L	0.05 mg/L	0.602 mg/L	Reburned
MS-ASH-73	2015-03-25	Cr	0.05 mg/L	5 mg/L	5.36 mg/L	Reburned

Note: TCLP residual analysis tests were performed by ALS Laboratories and compared to Process Residuals Discharge Minimum (GN, 2011) to determine if ash was Landfill compliant. 2015 produced incinerator ash volume: 85 Gal per barrel *0.8, historically produced incinerator ash volume: 45 Gal per barrel *0.8. Volumes converted to m³. Bin = 1.8 m³



BAFFINLAND IRON MINES CORPORATION

ATTN: Jim Millard

2275 Upper Middle Rd. E.

Suite #300

Oakville ON L6H 0C3

Date Received: 04-FEB-15

Report Date: 10-FEB-15 08:47 (MT)

Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: **L1574236**

Project P.O. #: 4500005452

Job Reference:

C of C Numbers:

Legal Site Desc:

Austin Paterson
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047

ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1574236-1 MS-ASH-055 Sampled By: NICK KUZYK on 04-FEB-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		11.40		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Final pH		6.79		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Physical Tests								
% Moisture		0.40		0.10	%	06-FEB-15	07-FEB-15	R3144335
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Barium (Ba)		<0.50		0.50	mg/L		09-FEB-15	R3145072
Boron (B)		<2.5		2.5	mg/L		09-FEB-15	R3145072
Cadmium (Cd)		<0.0050		0.0050	mg/L		09-FEB-15	R3145072
Chromium (Cr)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Lead (Pb)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Mercury (Hg)		<0.00010		0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
Selenium (Se)		<0.25		0.25	mg/L		09-FEB-15	R3145072
Silver (Ag)		<0.0050		0.0050	mg/L		09-FEB-15	R3145072
Uranium (U)		<0.25		0.25	mg/L		09-FEB-15	R3145072
Zinc (Zn)-Total		0.25		0.15	mg/L		09-FEB-15	R3145072
L1574236-2 MS-ASH-056 Sampled By: NICK KUZYK on 04-FEB-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		11.02		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Final pH		5.56		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Physical Tests								
% Moisture		0.85		0.10	%	06-FEB-15	07-FEB-15	R3144335
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Barium (Ba)		<0.50		0.50	mg/L		09-FEB-15	R3145072
Boron (B)		29.1		2.5	mg/L		09-FEB-15	R3145072
Cadmium (Cd)		<0.0050		0.0050	mg/L		09-FEB-15	R3145072
Chromium (Cr)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Lead (Pb)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Mercury (Hg)		<0.00010		0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
Selenium (Se)		<0.25		0.25	mg/L		09-FEB-15	R3145072
Silver (Ag)		<0.0050		0.0050	mg/L		09-FEB-15	R3145072
Uranium (U)		<0.25		0.25	mg/L		09-FEB-15	R3145072
Zinc (Zn)-Total		4.95		0.15	mg/L		09-FEB-15	R3145072
L1574236-3 MS-ASH-057 Sampled By: NICK KUZYK on 04-FEB-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		11.02		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Final pH		8.47		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Physical Tests								

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1574236-3 MS-ASH-057 Sampled By: NICK KUZYK on 04-FEB-15 @ 10:00 Matrix: SOIL								
Physical Tests								
% Moisture		0.51		0.10	%	06-FEB-15	07-FEB-15	R3144335
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Barium (Ba)		<0.50		0.50	mg/L		09-FEB-15	R3145072
Boron (B)		4.7		2.5	mg/L		09-FEB-15	R3145072
Cadmium (Cd)		<0.0050		0.0050	mg/L		09-FEB-15	R3145072
Chromium (Cr)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Lead (Pb)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Mercury (Hg)		<0.00010		0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
Selenium (Se)		<0.25		0.25	mg/L		09-FEB-15	R3145072
Silver (Ag)		<0.0050		0.0050	mg/L		09-FEB-15	R3145072
Uranium (U)		<0.25		0.25	mg/L		09-FEB-15	R3145072
Zinc (Zn)-Total		<0.15		0.15	mg/L		09-FEB-15	R3145072
L1574236-4 MS-ASH-058 Sampled By: NICK KUZYK on 04-FEB-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		10.92		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Final pH		4.86		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Physical Tests								
% Moisture		0.20		0.10	%	06-FEB-15	07-FEB-15	R3144335
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Barium (Ba)		<0.50		0.50	mg/L		09-FEB-15	R3145072
Boron (B)		<2.5		2.5	mg/L		09-FEB-15	R3145072
Cadmium (Cd)		0.0075		0.0050	mg/L		09-FEB-15	R3145072
Chromium (Cr)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Lead (Pb)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Mercury (Hg)		<0.00010		0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
Selenium (Se)		<0.25		0.25	mg/L		09-FEB-15	R3145072
Silver (Ag)		<0.0050		0.0050	mg/L		09-FEB-15	R3145072
Uranium (U)		<0.25		0.25	mg/L		09-FEB-15	R3145072
Zinc (Zn)-Total		9.26		0.15	mg/L		09-FEB-15	R3145072
L1574236-5 MS-ASH-059 Sampled By: NICK KUZYK on 04-FEB-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		11.07		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Final pH		7.06		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Physical Tests								
% Moisture		0.39		0.10	%	06-FEB-15	07-FEB-15	R3144335
TCLP Metals								
Arsenic (As)		0.060		0.050	mg/L		09-FEB-15	R3145072

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1574236-5 MS-ASH-059 Sampled By: NICK KUZYK on 04-FEB-15 @ 10:00 Matrix: SOIL								
TCLP Metals								
Barium (Ba)		<0.50		0.50	mg/L		09-FEB-15	R3145072
Boron (B)		4.3		2.5	mg/L		09-FEB-15	R3145072
Cadmium (Cd)		<0.0050		0.0050	mg/L		09-FEB-15	R3145072
Chromium (Cr)		0.679		0.050	mg/L		09-FEB-15	R3145072
Lead (Pb)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Mercury (Hg)		<0.00010		0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
Selenium (Se)		<0.25		0.25	mg/L		09-FEB-15	R3145072
Silver (Ag)		<0.0050		0.0050	mg/L		09-FEB-15	R3145072
Uranium (U)		<0.25		0.25	mg/L		09-FEB-15	R3145072
Zinc (Zn)-Total		<0.15		0.15	mg/L		09-FEB-15	R3145072
L1574236-6 MS-ASH-060 Sampled By: NICK KUZYK on 04-FEB-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		11.10		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Final pH		6.93		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Physical Tests								
% Moisture		0.33		0.10	%	06-FEB-15	07-FEB-15	R3144335
TCLP Metals								
Arsenic (As)		0.237		0.050	mg/L		09-FEB-15	R3145072
Barium (Ba)		<0.50		0.50	mg/L		09-FEB-15	R3145072
Boron (B)		6.0		2.5	mg/L		09-FEB-15	R3145072
Cadmium (Cd)		0.0059		0.0050	mg/L		09-FEB-15	R3145072
Chromium (Cr)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Lead (Pb)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Mercury (Hg)		<0.00010		0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
Selenium (Se)		<0.25		0.25	mg/L		09-FEB-15	R3145072
Silver (Ag)		<0.0050		0.0050	mg/L		09-FEB-15	R3145072
Uranium (U)		<0.25		0.25	mg/L		09-FEB-15	R3145072
Zinc (Zn)-Total		<0.15		0.15	mg/L		09-FEB-15	R3145072
L1574236-7 MS-ASH-061 Sampled By: NICK KUZYK on 04-FEB-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		10.76		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Final pH		4.96		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Physical Tests								
% Moisture		0.16		0.10	%	06-FEB-15	07-FEB-15	R3144335
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		09-FEB-15	R3145072
Barium (Ba)		<0.50		0.50	mg/L		09-FEB-15	R3145072
Boron (B)		<2.5		2.5	mg/L		09-FEB-15	R3145072
Cadmium (Cd)		0.0103		0.0050	mg/L		09-FEB-15	R3145072

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1574236-7 Sampled By: Matrix:	MS-ASH-061 NICK KUZYK on 04-FEB-15 @ 10:00 SOIL							
TCLP Metals								
Chromium (Cr)	0.328			0.050	mg/L		09-FEB-15	R3145072
Lead (Pb)	<0.050			0.050	mg/L		09-FEB-15	R3145072
Mercury (Hg)	<0.00010			0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
Selenium (Se)	<0.25			0.25	mg/L		09-FEB-15	R3145072
Silver (Ag)	<0.0050			0.0050	mg/L		09-FEB-15	R3145072
Uranium (U)	<0.25			0.25	mg/L		09-FEB-15	R3145072
Zinc (Zn)-Total	9.00			0.15	mg/L		09-FEB-15	R3145072
L1574236-8 Sampled By: Matrix:	MS-ASH-048 NICK KUZYK on 04-FEB-15 @ 10:00 SOIL							
Sample Preparation								
Initial pH	11.32			0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Final pH	8.38			0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Physical Tests								
% Moisture	0.37			0.10	%	06-FEB-15	07-FEB-15	R3144335
TCLP Metals								
Arsenic (As)	<0.050			0.050	mg/L		09-FEB-15	R3145072
Barium (Ba)	<0.50			0.50	mg/L		09-FEB-15	R3145072
Boron (B)	4.3			2.5	mg/L		09-FEB-15	R3145072
Cadmium (Cd)	<0.0050			0.0050	mg/L		09-FEB-15	R3145072
Chromium (Cr)	0.416			0.050	mg/L		09-FEB-15	R3145072
Lead (Pb)	<0.050			0.050	mg/L		09-FEB-15	R3145072
Mercury (Hg)	<0.00010			0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
Selenium (Se)	<0.25			0.25	mg/L		09-FEB-15	R3145072
Silver (Ag)	<0.0050			0.0050	mg/L		09-FEB-15	R3145072
Uranium (U)	<0.25			0.25	mg/L		09-FEB-15	R3145072
Zinc (Zn)-Total	<0.15			0.15	mg/L		09-FEB-15	R3145072

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Zinc (Zn)-Total	MS-B	L1574236-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Cadmium (Cd)	MS-B	L1574236-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Lead (Pb)	MS-B	L1574236-1, -2, -3, -4, -5, -6, -7, -8

Sample Parameter Qualifier key listed:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg ww - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Environmental

Quality Control Report

Workorder: L1574236

Report Date: 10-FEB-15

Page 1 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3144335							
WG2037481-3	DUP	L1575183-39						
% Moisture		14.2	13.4		%	6.1	30	07-FEB-15
WG2037481-2	LCS							
% Moisture			92.6		%		70-130	07-FEB-15
WG2037481-1	MB							
% Moisture			<0.10		%		0.1	07-FEB-15
HG-TCLP-WT		Waste						
Batch	R3145084							
WG2038416-3	DUP	L1574236-1						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	09-FEB-15
WG2038416-2	LCS							
Mercury (Hg)			96.5		%		70-130	09-FEB-15
WG2038416-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	09-FEB-15
WG2038416-4	MS	L1575017-1						
Mercury (Hg)			90.3		%		70-130	09-FEB-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3145072							
WG2038358-6	CVS							
Zinc (Zn)-Total			94.9		%		70-130	09-FEB-15
WG2038358-4	DUP	WG2038358-3						
Zinc (Zn)-Total		331	332		mg/L	0.5	30	09-FEB-15
WG2038358-2	LCS							
Zinc (Zn)-Total			98.6		%		70-130	09-FEB-15
WG2038358-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	09-FEB-15
WG2038358-5	MS	WG2038358-3						
Zinc (Zn)-Total			N/A	MS-B	%		-	09-FEB-15
MET-TCLP-WT		Waste						
Batch	R3145072							
WG2038358-6	CVS							
Silver (Ag)			99.0		%		70-130	09-FEB-15
Arsenic (As)			99.4		%		70-130	09-FEB-15
Boron (B)			94.4		%		70-130	09-FEB-15
Barium (Ba)			96.4		%		70-130	09-FEB-15
Cadmium (Cd)			98.5		%		70-130	09-FEB-15
Chromium (Cr)			98.7		%		70-130	09-FEB-15



Quality Control Report

Workorder: L1574236

Report Date: 10-FEB-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3145072							
WG2038358-6	CVS							
Lead (Pb)			98.6		%		70-130	09-FEB-15
Selenium (Se)			100.7		%		70-130	09-FEB-15
Uranium (U)			97.4		%		70-130	09-FEB-15
WG2038358-4	DUP	WG2038358-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	09-FEB-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	09-FEB-15
Boron (B)		<2.5	<2.5	RPD-NA	mg/L	N/A	40	09-FEB-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	09-FEB-15
Cadmium (Cd)		0.619	0.608		mg/L	1.9	40	09-FEB-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	09-FEB-15
Lead (Pb)		48.2	46.8		mg/L	3.0	40	09-FEB-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	09-FEB-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	09-FEB-15
WG2038358-2	LCS							
Silver (Ag)			95.3		%		70-130	09-FEB-15
Arsenic (As)			99.2		%		70-130	09-FEB-15
Boron (B)			89.7		%		70-130	09-FEB-15
Barium (Ba)			97.3		%		70-130	09-FEB-15
Cadmium (Cd)			97.2		%		70-130	09-FEB-15
Chromium (Cr)			97.5		%		70-130	09-FEB-15
Lead (Pb)			96.3		%		70-130	09-FEB-15
Selenium (Se)			99.3		%		70-130	09-FEB-15
Uranium (U)			94.4		%		70-130	09-FEB-15
WG2038358-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	09-FEB-15
Arsenic (As)			<0.050		mg/L		0.05	09-FEB-15
Boron (B)			<2.5		mg/L		2.5	09-FEB-15
Barium (Ba)			<0.50		mg/L		0.5	09-FEB-15
Cadmium (Cd)			<0.0050		mg/L		0.005	09-FEB-15
Chromium (Cr)			<0.050		mg/L		0.05	09-FEB-15
Lead (Pb)			<0.050		mg/L		0.05	09-FEB-15
Selenium (Se)			<0.25		mg/L		0.25	09-FEB-15
Uranium (U)			<0.25		mg/L		0.25	09-FEB-15
WG2038358-5	MS	WG2038358-3						



Quality Control Report

Workorder: L1574236

Report Date: 10-FEB-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3145072							
WG2038358-5	MS	WG2038358-3						
Silver (Ag)			89.2		%		50-140	09-FEB-15
Arsenic (As)			98.4		%		50-140	09-FEB-15
Boron (B)			89.7		%		50-140	09-FEB-15
Barium (Ba)			99.6		%		50-140	09-FEB-15
Cadmium (Cd)			N/A	MS-B	%	-		09-FEB-15
Chromium (Cr)			95.5		%		50-140	09-FEB-15
Lead (Pb)			N/A	MS-B	%	-		09-FEB-15
Selenium (Se)			97.2		%		50-140	09-FEB-15
Uranium (U)			93.0		%		50-140	09-FEB-15

Quality Control Report

Workorder: L1574236

Report Date: 10-FEB-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

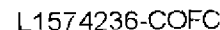
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



Canada Toll Free: 1 800 668 9878



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REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

NA-FM-0328a v09 Front04 January 2014

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



BAFFINLAND IRON MINES CORPORATION

ATTN: Jim Millard

2275 Upper Middle Rd. E.

Suite #300

Oakville ON L6H 0C3

Date Received: 12-MAR-15

Report Date: 20-MAR-15 08:04 (MT)

Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: L1587076

Project P.O. #: 4500007003

Job Reference: MINE SITE

C of C Numbers:

Legal Site Desc:

Austin Paterson
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1587076-1 MS-ASH-062 Sampled By: NICK KUZYK on 12-MAR-15 @ 15:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.53		0.10	pH units	16-MAR-15	16-MAR-15	R3160448
		6.50		0.10	pH units	16-MAR-15	16-MAR-15	R3160448
		<0.10		0.10	%	16-MAR-15	17-MAR-15	R3160363
		0.055		0.050	mg/L		18-MAR-15	R3160972
		<0.50		0.50	mg/L		18-MAR-15	R3160972
		4.6		2.5	mg/L		18-MAR-15	R3160972
		<0.0050		0.0050	mg/L		18-MAR-15	R3160972
		<0.050		0.050	mg/L		18-MAR-15	R3160972
		<0.050		0.050	mg/L		18-MAR-15	R3160972
		<0.00010		0.00010	mg/L	19-MAR-15	19-MAR-15	R3161771
		<0.25		0.25	mg/L		18-MAR-15	R3160972
		<0.0050		0.0050	mg/L		18-MAR-15	R3160972
		<0.25		0.25	mg/L		18-MAR-15	R3160972
		1.68		0.15	mg/L		18-MAR-15	R3160972
L1587076-2 MS-ASH-063 Sampled By: NICK KUZYK on 12-MAR-15 @ 15:05 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.10		0.10	pH units	16-MAR-15	16-MAR-15	R3160448
		6.74		0.10	pH units	16-MAR-15	16-MAR-15	R3160448
		0.16		0.10	%	16-MAR-15	17-MAR-15	R3160363
		0.057		0.050	mg/L		18-MAR-15	R3160972
		<0.50		0.50	mg/L		18-MAR-15	R3160972
		4.3		2.5	mg/L		18-MAR-15	R3160972
		<0.0050		0.0050	mg/L		18-MAR-15	R3160972
		<0.050		0.050	mg/L		18-MAR-15	R3160972
		<0.050		0.050	mg/L		18-MAR-15	R3160972
		<0.00010		0.00010	mg/L	19-MAR-15	19-MAR-15	R3161771
		<0.25		0.25	mg/L		18-MAR-15	R3160972
		<0.0050		0.0050	mg/L		18-MAR-15	R3160972
		<0.25		0.25	mg/L		18-MAR-15	R3160972
		0.29		0.15	mg/L		18-MAR-15	R3160972
L1587076-3 MS-ASH-064 Sampled By: NICK KUZYK on 12-MAR-15 @ 15:10 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests								
		11.17		0.10	pH units	16-MAR-15	16-MAR-15	R3160448
		6.43		0.10	pH units	16-MAR-15	16-MAR-15	R3160448

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1587076-3 Sampled By: NICK KUZYK on 12-MAR-15 @ 15:10 Matrix: SOIL Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total	MS-ASH-064							
		0.14		0.10	%	16-MAR-15	17-MAR-15	R3160363
		<0.050		0.050	mg/L		18-MAR-15	R3160972
		<0.50		0.50	mg/L		18-MAR-15	R3160972
		5.3		2.5	mg/L		18-MAR-15	R3160972
		0.0061		0.0050	mg/L		18-MAR-15	R3160972
		<0.050		0.050	mg/L		18-MAR-15	R3160972
		<0.050		0.050	mg/L		18-MAR-15	R3160972
		<0.00010		0.00010	mg/L	19-MAR-15	19-MAR-15	R3161771
		<0.25		0.25	mg/L		18-MAR-15	R3160972
		<0.0050		0.0050	mg/L		18-MAR-15	R3160972
		<0.25		0.25	mg/L		18-MAR-15	R3160972
		1.17		0.15	mg/L		18-MAR-15	R3160972

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1587076

Report Date: 20-MAR-15

Page 1 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3160363							
WG2054892-3	DUP	L1587640-1						
% Moisture		21.9	21.0		%	3.9	30	17-MAR-15
WG2054892-2	LCS							
% Moisture			93.7		%		70-130	17-MAR-15
WG2054892-1	MB							
% Moisture			<0.10		%		0.1	17-MAR-15
HG-TCLP-WT		Waste						
Batch	R3161771							
WG2056186-3	DUP	L1587073-1						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	19-MAR-15
WG2056186-2	LCS							
Mercury (Hg)			106.0		%		70-130	19-MAR-15
WG2056186-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	19-MAR-15
WG2056186-4	MS	L1587073-1						
Mercury (Hg)			110.0		%		70-130	19-MAR-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3160972							
WG2055868-6	CVS							
Zinc (Zn)-Total			88.6		%		70-130	18-MAR-15
WG2055868-4	DUP	WG2055868-3						
Zinc (Zn)-Total		<0.15	<0.15	RPD-NA	mg/L	N/A	30	18-MAR-15
WG2055868-2	LCS							
Zinc (Zn)-Total			98.6		%		70-130	18-MAR-15
WG2055868-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	18-MAR-15
WG2055868-5	MS	WG2055868-3						
Zinc (Zn)-Total			92.1		%		70-130	18-MAR-15
MET-TCLP-WT		Waste						
Batch	R3160972							
WG2055868-6	CVS							
Silver (Ag)			101.2		%		70-130	18-MAR-15
Arsenic (As)			92.7		%		70-130	18-MAR-15
Boron (B)			97.3		%		70-130	18-MAR-15
Barium (Ba)			93.9		%		70-130	18-MAR-15
Cadmium (Cd)			92.2		%		70-130	18-MAR-15
Chromium (Cr)			91.6		%		70-130	18-MAR-15



Quality Control Report

Workorder: L1587076

Report Date: 20-MAR-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3160972							
WG2055868-6	CVS							
Lead (Pb)			99.4		%		70-130	18-MAR-15
Selenium (Se)			98.4		%		70-130	18-MAR-15
Uranium (U)			98.1		%		70-130	18-MAR-15
WG2055868-4	DUP	WG2055868-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	18-MAR-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	18-MAR-15
Boron (B)		<2.5	<2.5	RPD-NA	mg/L	N/A	40	18-MAR-15
Barium (Ba)		0.79	0.80		mg/L	0.6	40	18-MAR-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	18-MAR-15
Chromium (Cr)		0.060	0.060		mg/L	0.3	40	18-MAR-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	18-MAR-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	18-MAR-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	18-MAR-15
WG2055868-2	LCS							
Silver (Ag)			99.7		%		70-130	18-MAR-15
Arsenic (As)			97.1		%		70-130	18-MAR-15
Boron (B)			97.3		%		70-130	18-MAR-15
Barium (Ba)			95.5		%		70-130	18-MAR-15
Cadmium (Cd)			96.5		%		70-130	18-MAR-15
Chromium (Cr)			96.7		%		70-130	18-MAR-15
Lead (Pb)			96.1		%		70-130	18-MAR-15
Selenium (Se)			99.9		%		70-130	18-MAR-15
Uranium (U)			93.7		%		70-130	18-MAR-15
WG2055868-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	18-MAR-15
Arsenic (As)			<0.050		mg/L		0.05	18-MAR-15
Boron (B)			<2.5		mg/L		2.5	18-MAR-15
Barium (Ba)			<0.50		mg/L		0.5	18-MAR-15
Cadmium (Cd)			<0.0050		mg/L		0.005	18-MAR-15
Chromium (Cr)			<0.050		mg/L		0.05	18-MAR-15
Lead (Pb)			<0.050		mg/L		0.05	18-MAR-15
Selenium (Se)			<0.25		mg/L		0.25	18-MAR-15
Uranium (U)			<0.25		mg/L		0.25	18-MAR-15
WG2055868-5	MS	WG2055868-3						



Quality Control Report

Workorder: L1587076

Report Date: 20-MAR-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3160972							
WG2055868-5	MS	WG2055868-3						
Silver (Ag)			88.7		%		50-140	18-MAR-15
Arsenic (As)			95.5		%		50-140	18-MAR-15
Boron (B)			95.3		%		50-140	18-MAR-15
Barium (Ba)			91.8		%		50-140	18-MAR-15
Cadmium (Cd)			94.7		%		50-140	18-MAR-15
Chromium (Cr)			93.9		%		50-140	18-MAR-15
Lead (Pb)			90.6		%		50-140	18-MAR-15
Selenium (Se)			99.1		%		50-140	18-MAR-15
Uranium (U)			91.4		%		50-140	18-MAR-15

Quality Control Report

Workorder: L1587076

Report Date: 20-MAR-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

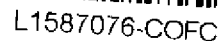
The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



Canada Toll Free: 1 800 668 9878

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Page 1 of 1

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW CQC form**.

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

NA-FM-0328a-01 (Rev. 04-10-2004)



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 26-MAR-15
Report Date: 31-MAR-15 14:03 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: **L1591769**
Project P.O. #: 4500007003
Job Reference: MINE SITE
C of C Numbers:
Legal Site Desc:

Comments: ADDITIONAL 31-MAR-15 09:35

Austin Paterson
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1591769-1 MS-ASH-065 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.22		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
		6.34		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
		<0.10		0.10	%	28-MAR-15	29-MAR-15	R3166384
		<0.050		0.050	mg/L		30-MAR-15	R3166575
		<0.50		0.50	mg/L		30-MAR-15	R3166575
		4.5		2.5	mg/L		30-MAR-15	R3166575
		0.602		0.0050	mg/L		30-MAR-15	R3166575
		<0.050		0.050	mg/L		30-MAR-15	R3166575
		<0.050		0.050	mg/L		30-MAR-15	R3166575
		<0.00010		0.00010	mg/L	30-MAR-15	30-MAR-15	R3166635
		<0.25		0.25	mg/L		30-MAR-15	R3166575
		<0.0050		0.0050	mg/L		30-MAR-15	R3166575
		<0.25		0.25	mg/L		30-MAR-15	R3166575
		4.88		0.15	mg/L		30-MAR-15	R3166575
L1591769-2 MS-ASH-066 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.34		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
		5.38		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
		1.05		0.10	%	28-MAR-15	29-MAR-15	R3166384
		<0.050		0.050	mg/L		30-MAR-15	R3166575
		<0.50		0.50	mg/L		30-MAR-15	R3166575
		3.9		2.5	mg/L		30-MAR-15	R3166575
		0.0222		0.0050	mg/L		30-MAR-15	R3166575
		<0.050		0.050	mg/L		30-MAR-15	R3166575
		<0.050		0.050	mg/L		30-MAR-15	R3166575
		<0.00010		0.00010	mg/L	30-MAR-15	30-MAR-15	R3166635
		<0.25		0.25	mg/L		30-MAR-15	R3166575
		<0.0050		0.0050	mg/L		30-MAR-15	R3166575
		<0.25		0.25	mg/L		30-MAR-15	R3166575
		6.20		0.15	mg/L		30-MAR-15	R3166575
L1591769-3 MS-ASH-067 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests								
		10.07		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
		5.37		0.10	pH units	27-MAR-15	27-MAR-15	R3166323

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1591769-3 MS-ASH-067 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		15.1		0.10	%	28-MAR-15	29-MAR-15	R3166384
		0.078		0.050	mg/L		30-MAR-15	R3166575
		<0.50		0.50	mg/L		30-MAR-15	R3166575
		5.0		2.5	mg/L		30-MAR-15	R3166575
		<0.0050		0.0050	mg/L		30-MAR-15	R3166575
		0.111		0.050	mg/L		30-MAR-15	R3166575
		<0.050		0.050	mg/L		30-MAR-15	R3166575
		<0.00010		0.00010	mg/L	30-MAR-15	30-MAR-15	R3166635
		<0.25		0.25	mg/L		30-MAR-15	R3166575
		<0.0050		0.0050	mg/L		30-MAR-15	R3166575
		<0.25		0.25	mg/L		30-MAR-15	R3166575
		5.51		0.15	mg/L		30-MAR-15	R3166575
L1591769-4 MS-ASH-068 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.54		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
		8.40		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
		0.50		0.10	%	28-MAR-15	29-MAR-15	R3166384
		<0.050		0.050	mg/L		30-MAR-15	R3166575
		<0.50		0.50	mg/L		30-MAR-15	R3166575
		2.8		2.5	mg/L		30-MAR-15	R3166575
		<0.0050		0.0050	mg/L		30-MAR-15	R3166575
		<0.050		0.050	mg/L		30-MAR-15	R3166575
		<0.050		0.050	mg/L		30-MAR-15	R3166575
		<0.00010		0.00010	mg/L	30-MAR-15	30-MAR-15	R3166635
		<0.25		0.25	mg/L		30-MAR-15	R3166575
		<0.0050		0.0050	mg/L		30-MAR-15	R3166575
		<0.25		0.25	mg/L		30-MAR-15	R3166575
		<0.15		0.15	mg/L		30-MAR-15	R3166575
L1591769-5 MS-ASH-069 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As)								
		10.53		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
		5.19		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
		25.4		0.10	%	28-MAR-15	29-MAR-15	R3166384
		<0.050		0.050	mg/L		30-MAR-15	R3166575

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1591769-5 MS-ASH-069 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL TCLP Metals	Barium (Ba)	<0.50		0.50	mg/L		30-MAR-15	R3166575
	Boron (B)	<2.5		2.5	mg/L		30-MAR-15	R3166575
	Cadmium (Cd)	<0.0050		0.0050	mg/L		30-MAR-15	R3166575
	Chromium (Cr)	<0.050		0.050	mg/L		30-MAR-15	R3166575
	Lead (Pb)	<0.050		0.050	mg/L		30-MAR-15	R3166575
	Mercury (Hg)	<0.00010		0.00010	mg/L	30-MAR-15	30-MAR-15	R3166635
	Selenium (Se)	<0.25		0.25	mg/L		30-MAR-15	R3166575
	Silver (Ag)	<0.0050		0.0050	mg/L		30-MAR-15	R3166575
	Uranium (U)	<0.25		0.25	mg/L		30-MAR-15	R3166575
	Zinc (Zn)-Total	5.78		0.15	mg/L		30-MAR-15	R3166575
L1591769-6 MS-ASH-070 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL Sample Preparation	Initial pH	11.43		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
	Final pH	6.28		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
	Physical Tests							
	% Moisture	0.84		0.10	%	28-MAR-15	29-MAR-15	R3166384
	TCLP Metals							
	Arsenic (As)	0.069		0.050	mg/L		30-MAR-15	R3166575
	Barium (Ba)	<0.50		0.50	mg/L		30-MAR-15	R3166575
	Boron (B)	6.1		2.5	mg/L		30-MAR-15	R3166575
	Cadmium (Cd)	<0.0050		0.0050	mg/L		30-MAR-15	R3166575
	Chromium (Cr)	<0.050		0.050	mg/L		30-MAR-15	R3166575
	Lead (Pb)	<0.050		0.050	mg/L		30-MAR-15	R3166575
	Mercury (Hg)	<0.00010		0.00010	mg/L	30-MAR-15	30-MAR-15	R3166635
	Selenium (Se)	<0.25		0.25	mg/L		30-MAR-15	R3166575
	Silver (Ag)	<0.0050		0.0050	mg/L		30-MAR-15	R3166575
	Uranium (U)	<0.25		0.25	mg/L		30-MAR-15	R3166575
	Zinc (Zn)-Total	2.38		0.15	mg/L		30-MAR-15	R3166575
L1591769-7 MS-ASH-071 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL Sample Preparation	Initial pH	11.27		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
	Final pH	8.52		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
	Physical Tests							
	% Moisture	0.78		0.10	%	28-MAR-15	29-MAR-15	R3166384
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		30-MAR-15	R3166575
	Barium (Ba)	<0.50		0.50	mg/L		30-MAR-15	R3166575
	Boron (B)	4.5		2.5	mg/L		30-MAR-15	R3166575
	Cadmium (Cd)	<0.0050		0.0050	mg/L		30-MAR-15	R3166575

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1591769-7 MS-ASH-071 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL TCLP Metals Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		0.102		0.050	mg/L		30-MAR-15	R3166575
		<0.050		0.050	mg/L		30-MAR-15	R3166575
		<0.00010		0.00010	mg/L	30-MAR-15	30-MAR-15	R3166635
		<0.25		0.25	mg/L		30-MAR-15	R3166575
		<0.0050		0.0050	mg/L		30-MAR-15	R3166575
		<0.25		0.25	mg/L		30-MAR-15	R3166575
		<0.15		0.15	mg/L		30-MAR-15	R3166575
L1591769-8 MS-ASH-072 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		10.36		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
		5.48		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
		6.48		0.10	%	28-MAR-15	29-MAR-15	R3166384
		0.051		0.050	mg/L		30-MAR-15	R3166575
		<0.50		0.50	mg/L		30-MAR-15	R3166575
		2.9		2.5	mg/L		30-MAR-15	R3166575
		<0.0050		0.0050	mg/L		30-MAR-15	R3166575
		<0.050		0.050	mg/L		30-MAR-15	R3166575
		<0.050		0.050	mg/L		30-MAR-15	R3166575
		<0.00010		0.00010	mg/L	30-MAR-15	30-MAR-15	R3166635
		<0.25		0.25	mg/L		30-MAR-15	R3166575
		<0.0050		0.0050	mg/L		30-MAR-15	R3166575
		<0.25		0.25	mg/L		30-MAR-15	R3166575
		5.99		0.15	mg/L		30-MAR-15	R3166575
L1591769-9 MS-ASH-073 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg)								
		11.16		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
		5.83		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
		<0.10		0.10	%	28-MAR-15	29-MAR-15	R3166384
		0.079		0.050	mg/L		30-MAR-15	R3166575
		<0.50		0.50	mg/L		30-MAR-15	R3166575
		3.9		2.5	mg/L		30-MAR-15	R3166575
		0.0068		0.0050	mg/L		30-MAR-15	R3166575
		5.36		0.050	mg/L		30-MAR-15	R3166575
		<0.050		0.050	mg/L		30-MAR-15	R3166575
		<0.00010		0.00010	mg/L	30-MAR-15	30-MAR-15	R3166635

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1591769-9 MS-ASH-073 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL TCLP Metals								
	Selenium (Se)	<0.25		0.25	mg/L		30-MAR-15	R3166575
	Silver (Ag)	<0.0050		0.0050	mg/L		30-MAR-15	R3166575
	Uranium (U)	<0.25		0.25	mg/L		30-MAR-15	R3166575
	Zinc (Zn)-Total	5.21		0.15	mg/L		30-MAR-15	R3166575
L1591769-10 MS-ASH-074 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL Sample Preparation								
	Initial pH	11.21		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
	Final pH	6.40		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
	Physical Tests							
	% Moisture	0.49		0.10	%	28-MAR-15	29-MAR-15	R3166384
	TCLP Metals							
	Arsenic (As)	0.057		0.050	mg/L		30-MAR-15	R3166575
	Barium (Ba)	<0.50		0.50	mg/L		30-MAR-15	R3166575
	Boron (B)	4.3		2.5	mg/L		30-MAR-15	R3166575
	Cadmium (Cd)	<0.0050		0.0050	mg/L		30-MAR-15	R3166575
	Chromium (Cr)	<0.050		0.050	mg/L		30-MAR-15	R3166575
	Lead (Pb)	<0.050		0.050	mg/L		30-MAR-15	R3166575
	Mercury (Hg)	<0.00010		0.00010	mg/L	30-MAR-15	30-MAR-15	R3166635
	Selenium (Se)	<0.25		0.25	mg/L		30-MAR-15	R3166575
	Silver (Ag)	<0.0050		0.0050	mg/L		30-MAR-15	R3166575
	Uranium (U)	<0.25		0.25	mg/L		30-MAR-15	R3166575
	Zinc (Zn)-Total	0.41		0.15	mg/L		30-MAR-15	R3166575
L1591769-11 MS-ASH-075 Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00 Matrix: SOIL Sample Preparation								
	Initial pH	10.72		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
	Final pH	6.72		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
	Physical Tests							
	% Moisture	<0.10		0.10	%	28-MAR-15	29-MAR-15	R3166384
	TCLP Metals							
	Arsenic (As)	0.056		0.050	mg/L		30-MAR-15	R3166575
	Barium (Ba)	<0.50		0.50	mg/L		30-MAR-15	R3166575
	Boron (B)	4.5		2.5	mg/L		30-MAR-15	R3166575
	Cadmium (Cd)	0.0054		0.0050	mg/L		30-MAR-15	R3166575
	Chromium (Cr)	<0.050		0.050	mg/L		30-MAR-15	R3166575
	Lead (Pb)	<0.050		0.050	mg/L		30-MAR-15	R3166575
	Mercury (Hg)	<0.00010		0.00010	mg/L	30-MAR-15	30-MAR-15	R3166635

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1591769-11	MS-ASH-075							
	Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00							
Matrix: SOIL								
TCLP Metals								
Zinc (Zn)-Total		0.40		0.15	mg/L		30-MAR-15	R3166575
L1591769-12	MS-ASH-076							
	Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00							
	Matrix: SOIL							
	Sample Preparation							
	Initial pH	10.67		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
	Final pH	5.97		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
	Physical Tests							
	% Moisture	1.21		0.10	%	27-MAR-15	28-MAR-15	R3166037
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		30-MAR-15	R3166575
	Barium (Ba)	<0.50		0.50	mg/L		30-MAR-15	R3166575
	Boron (B)	3.3		2.5	mg/L		30-MAR-15	R3166575
	Cadmium (Cd)	0.0062		0.0050	mg/L		30-MAR-15	R3166575
	Chromium (Cr)	<0.050		0.050	mg/L		30-MAR-15	R3166575
	Lead (Pb)	<0.050		0.050	mg/L		30-MAR-15	R3166575
	Mercury (Hg)	<0.00010		0.00010	mg/L	30-MAR-15	30-MAR-15	R3166635
	Selenium (Se)	<0.25		0.25	mg/L		30-MAR-15	R3166575
	Silver (Ag)	<0.0050		0.0050	mg/L		30-MAR-15	R3166575
	Uranium (U)	<0.25		0.25	mg/L		30-MAR-15	R3166575
	Zinc (Zn)-Total	7.30		0.15	mg/L		30-MAR-15	R3166575
L1591769-13	MS-ASH-077							
	Sampled By: BILL BOWDEN on 25-MAR-15 @ 17:00							
	Matrix: SOIL							
	Sample Preparation							
	Initial pH	11.72		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
	Final pH	6.47		0.10	pH units	27-MAR-15	27-MAR-15	R3166323
	Physical Tests							
	% Moisture	0.76		0.10	%	28-MAR-15	29-MAR-15	R3166384
	TCLP Metals							
	Arsenic (As)	0.106		0.050	mg/L		30-MAR-15	R3166575
	Barium (Ba)	<0.50		0.50	mg/L		30-MAR-15	R3166575
	Boron (B)	4.3		2.5	mg/L		30-MAR-15	R3166575
	Cadmium (Cd)	0.0089		0.0050	mg/L		30-MAR-15	R3166575
	Chromium (Cr)	0.480		0.050	mg/L		30-MAR-15	R3166575
	Lead (Pb)	<0.050		0.050	mg/L		30-MAR-15	R3166575
	Mercury (Hg)	<0.00010		0.00010	mg/L	30-MAR-15	30-MAR-15	R3166635
	Selenium (Se)	<0.25		0.25	mg/L		30-MAR-15	R3166575
	Silver (Ag)	<0.0050		0.0050	mg/L		30-MAR-15	R3166575
	Uranium (U)	<0.25		0.25	mg/L		30-MAR-15	R3166575
	Zinc (Zn)-Total	0.84		0.15	mg/L		30-MAR-15	R3166575

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Cadmium (Cd)	MS-B	L1591769-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -8, -9

Sample Parameter Qualifier key listed:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).			
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1591769

Report Date: 31-MAR-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3166575							
WG2061897-6	CVS							
Silver (Ag)			103.9		%		70-130	30-MAR-15
Arsenic (As)			98.4		%		70-130	30-MAR-15
Boron (B)			104.4		%		70-130	30-MAR-15
Barium (Ba)			100.3		%		70-130	30-MAR-15
Cadmium (Cd)			100.1		%		70-130	30-MAR-15
Chromium (Cr)			98.6		%		70-130	30-MAR-15
Lead (Pb)			100.4		%		70-130	30-MAR-15
Selenium (Se)			97.6		%		70-130	30-MAR-15
Uranium (U)			100.6		%		70-130	30-MAR-15
WG2061897-4	DUP	WG2061897-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	30-MAR-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	30-MAR-15
Boron (B)		4.5	4.6		mg/L	1.7	40	30-MAR-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	30-MAR-15
Cadmium (Cd)		0.602	0.620		mg/L	3.0	40	30-MAR-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	30-MAR-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	30-MAR-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	30-MAR-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	30-MAR-15
WG2061897-2	LCS							
Silver (Ag)			98.9		%		70-130	30-MAR-15
Arsenic (As)			94.7		%		70-130	30-MAR-15
Boron (B)			98.9		%		70-130	30-MAR-15
Barium (Ba)			95.8		%		70-130	30-MAR-15
Cadmium (Cd)			95.8		%		70-130	30-MAR-15
Chromium (Cr)			94.3		%		70-130	30-MAR-15
Lead (Pb)			98.6		%		70-130	30-MAR-15
Selenium (Se)			94.3		%		70-130	30-MAR-15
Uranium (U)			96.6		%		70-130	30-MAR-15
WG2061897-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	30-MAR-15
Arsenic (As)			<0.050		mg/L		0.05	30-MAR-15
Boron (B)			<2.5		mg/L		2.5	30-MAR-15
Barium (Ba)			<0.50		mg/L		0.5	30-MAR-15



Quality Control Report

Workorder: L1591769

Report Date: 31-MAR-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3166575							
WG2061897-1	MB							
Cadmium (Cd)			<0.0050		mg/L		0.005	30-MAR-15
Chromium (Cr)			<0.050		mg/L		0.05	30-MAR-15
Lead (Pb)			<0.050		mg/L		0.05	30-MAR-15
Selenium (Se)			<0.25		mg/L		0.25	30-MAR-15
Uranium (U)			<0.25		mg/L		0.25	30-MAR-15
WG2061897-5	MS	WG2061897-3						
Silver (Ag)			93.4		%		50-140	30-MAR-15
Arsenic (As)			99.8		%		50-140	30-MAR-15
Boron (B)			97.8		%		50-140	30-MAR-15
Barium (Ba)			98.4		%		50-140	30-MAR-15
Cadmium (Cd)			N/A	MS-B	%		-	30-MAR-15
Chromium (Cr)			97.4		%		50-140	30-MAR-15
Lead (Pb)			95.5		%		50-140	30-MAR-15
Selenium (Se)			99.0		%		50-140	30-MAR-15
Uranium (U)			97.9		%		50-140	30-MAR-15

Quality Control Report

Workorder: L1591769

Report Date: 31-MAR-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



L1591769-COFC

Page 1 of 2

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Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.



Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com



COC Number: 14 -

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Report To		Report Format / Distribution				Analysis Request																	
Company: Baffinland Iron Mines Corp. - ALS ENV Account 23642		Select Report Format: ☒ PDF ☒ EXCEL ☒ EDD (DIGITAL)		Quality Control (QC) Report with Report ☒ Yes ☐ No		(Rush Turnaround Time (TAT) is not available for all tests)																	
Contact: Jim Millard, Trevor Myers, Allan Knight		Criteria on Report - provide details below if box checked		Select Distribution: ☐ EMAIL ☐ MAIL ☐ FAX		R ☒ Regular (shipped by 3 pm - business days)																	
Address: 2275 Upper Middle Rd. E., Suite #300 Oakville, ON, L6H 0C3		Email 1 or Fax bimcore@alsglobal.com		Email 2		P ☐ Priority (2-4 bus. days if received by 3pm) 50% surcharge - contact ALS to confirm TAT																	
Phone: 647-253-0596 EXT 6010		Invoice To Same as Report To ☒ Yes ☐ No		Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX		E ☐ Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT																	
Copy of Invoice with Report ☐ Yes ☒ No		Company:		Email 1 or Fax ap@baffinland.com		E2 ☐ Same day or weekend emergency - contact ALS to confirm TAT and surcharge																	
Contact:		Project Information		Oil and Gas Required Fields (client use)		Specify Date Required for E2, E or P:																	
ALS Quote #: Q42455		ALS Lab Work Order # (lab use only)		ALS Contact: Wayne Smith		Sampler: Bill Bowden		Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below															
Job #: MINE SITE		ALS Sample # (lab use only)		Sample Identification and/or Coordinates (This description will appear on the report)		Date (dd-mm-yy)		Time (hh:mm)		Sample Type		Number of Containers											
PO / AFE: 4500007003		MS-ASH-077		25-Mar-15		17:00		Soil		R		2											
LSD:																							
Drinking Water (DW) Samples ¹ (client use)		Special Instructions / Specify Criteria to add on report (client use)		Frozen ☐		SIF Observations Yes ☐ No ☐		Ice packs Yes ☐ No ☐		Custody seal intact Yes ☐ No ☐		Cooling Initiated ☐		INITIAL COOLER TEMPERATURES °C		FINAL COOLER TEMPERATURES °C							
Are samples taken from a Regulated DW System? ☐ Yes ☒ No		Site Specific Criteria - Account Manager to update as required.														10.3							
Are samples for human drinking water use? ☐ Yes ☒ No																							
SHIPMENT RELEASE (client use)		INITIAL SHIPMENT RECEPTION (lab use only)		Received by: [Signature]		Date: 27 MAR 15		Time: 9:00															
Released by: Bill Bowden		Date: 2015-03-26 Time: 8:00		Received by:		Date:		Time:															

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 06-MAY-15
Report Date: 14-MAY-15 09:57 (MT)
Version: FINAL REV. 2

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: **L1607692**
Project P.O. #: 4500007003
Job Reference: MINE SITE
C of C Numbers:
Legal Site Desc:

Austin Paterson
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1607692-1 MS-ASH-078 Sampled By: BILL BOWDEN on 02-MAY-15 @ 15:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		10.99		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
		5.45		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
		<0.10		0.10	%	06-MAY-15	07-MAY-15	R3185910
		0.154		0.050	mg/L		11-MAY-15	R3188259
		<0.50		0.50	mg/L		11-MAY-15	R3188259
		12.3		2.5	mg/L		11-MAY-15	R3188259
		0.0069		0.0050	mg/L		11-MAY-15	R3188259
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.00010		0.00010	mg/L	11-MAY-15	11-MAY-15	R3187834
		<0.25		0.25	mg/L		11-MAY-15	R3188259
		<0.0050		0.0050	mg/L		11-MAY-15	R3188259
		<0.25		0.25	mg/L		11-MAY-15	R3188259
		170	DLM	1.5	mg/L		12-MAY-15	R3188259
L1607692-2 MS-ASH-079 Sampled By: BILL BOWDEN on 02-MAY-15 @ 15:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.05		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
		6.45		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
		<0.10		0.10	%	06-MAY-15	07-MAY-15	R3185910
		0.507		0.050	mg/L		11-MAY-15	R3188259
		<0.50		0.50	mg/L		11-MAY-15	R3188259
		16.2		2.5	mg/L		11-MAY-15	R3188259
		<0.0050		0.0050	mg/L		11-MAY-15	R3188259
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.00010		0.00010	mg/L	11-MAY-15	11-MAY-15	R3187834
		<0.25		0.25	mg/L		11-MAY-15	R3188259
		<0.0050		0.0050	mg/L		11-MAY-15	R3188259
		<0.25		0.25	mg/L		11-MAY-15	R3188259
		0.80		0.15	mg/L		11-MAY-15	R3188259
L1607692-3 MS-ASH-080 Sampled By: BILL BOWDEN on 02-MAY-15 @ 15:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests								
		10.92		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
		6.26		0.10	pH units	08-MAY-15	08-MAY-15	R3188100

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1607692-3 MS-ASH-080 Sampled By: BILL BOWDEN on 02-MAY-15 @ 15:00 Matrix: SOIL Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		<0.10		0.10	%	06-MAY-15	07-MAY-15	R3185910
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.50		0.50	mg/L		11-MAY-15	R3188259
		6.2		2.5	mg/L		11-MAY-15	R3188259
		<0.0050		0.0050	mg/L		11-MAY-15	R3188259
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.00010		0.00010	mg/L	11-MAY-15	11-MAY-15	R3187834
		<0.25		0.25	mg/L		11-MAY-15	R3188259
		<0.0050		0.0050	mg/L		11-MAY-15	R3188259
		<0.25		0.25	mg/L		11-MAY-15	R3188259
		1.45		0.15	mg/L		11-MAY-15	R3188259
L1607692-4 MS-ASH-081 Sampled By: BILL BOWDEN on 02-MAY-15 @ 15:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.30		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
		6.18		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
		<0.10		0.10	%	06-MAY-15	07-MAY-15	R3185910
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.50		0.50	mg/L		11-MAY-15	R3188259
		5.2		2.5	mg/L		11-MAY-15	R3188259
		<0.0050		0.0050	mg/L		11-MAY-15	R3188259
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.00010		0.00010	mg/L	11-MAY-15	11-MAY-15	R3187834
		<0.25		0.25	mg/L		11-MAY-15	R3188259
		<0.0050		0.0050	mg/L		11-MAY-15	R3188259
		<0.25		0.25	mg/L		11-MAY-15	R3188259
		0.99		0.15	mg/L		11-MAY-15	R3188259
L1607692-5 MS-ASH-082 Sampled By: BILL BOWDEN on 02-MAY-15 @ 15:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As)								
		11.38		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
		8.41		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
		<0.10		0.10	%	06-MAY-15	07-MAY-15	R3185910
		<0.050		0.050	mg/L		11-MAY-15	R3188259

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1607692-5 MS-ASH-082 Sampled By: BILL BOWDEN on 02-MAY-15 @ 15:00 Matrix: SOIL TCLP Metals	Barium (Ba)	<0.50		0.50	mg/L		11-MAY-15	R3188259
	Boron (B)	10.4		2.5	mg/L		11-MAY-15	R3188259
	Cadmium (Cd)	<0.0050		0.0050	mg/L		11-MAY-15	R3188259
	Chromium (Cr)	0.270		0.050	mg/L		11-MAY-15	R3188259
	Lead (Pb)	<0.050		0.050	mg/L		11-MAY-15	R3188259
	Mercury (Hg)	<0.00010		0.00010	mg/L	11-MAY-15	11-MAY-15	R3187834
	Selenium (Se)	<0.25		0.25	mg/L		11-MAY-15	R3188259
	Silver (Ag)	<0.0050		0.0050	mg/L		11-MAY-15	R3188259
	Uranium (U)	<0.25		0.25	mg/L		11-MAY-15	R3188259
	Zinc (Zn)-Total	<0.15		0.15	mg/L		11-MAY-15	R3188259
L1607692-6 MS-ASH-083 Sampled By: BILL BOWDEN on 02-MAY-15 @ 15:00 Matrix: SOIL Sample Preparation	Initial pH	10.73		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
	Final pH	7.31		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
	Physical Tests							
	% Moisture	<0.10		0.10	%	06-MAY-15	07-MAY-15	R3185910
	TCLP Metals							
	Arsenic (As)	<0.50	DLM	0.50	mg/L		12-MAY-15	R3188259
	Barium (Ba)	<5.0	DLM	5.0	mg/L		12-MAY-15	R3188259
	Boron (B)	134	DLM	25	mg/L		12-MAY-15	R3188259
	Cadmium (Cd)	<0.050	DLM	0.050	mg/L		12-MAY-15	R3188259
	Chromium (Cr)	<0.50	DLM	0.50	mg/L		12-MAY-15	R3188259
	Lead (Pb)	<0.50	DLM	0.50	mg/L		12-MAY-15	R3188259
	Mercury (Hg)	<0.00010		0.00010	mg/L	12-MAY-15	12-MAY-15	R3188504
	Selenium (Se)	<1.0	DLM	1.0	mg/L		12-MAY-15	R3188259
	Silver (Ag)	<0.050	DLM	0.050	mg/L		12-MAY-15	R3188259
	Uranium (U)	<2.5	DLM	2.5	mg/L		12-MAY-15	R3188259
	Zinc (Zn)-Total	<1.5	DLM	1.5	mg/L		12-MAY-15	R3188259
L1607692-7 MS-ASH-084 Sampled By: BILL BOWDEN on 02-MAY-15 @ 15:00 Matrix: SOIL Sample Preparation	Initial pH	10.62		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
	Final pH	5.92		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
	Physical Tests							
	% Moisture	<0.10		0.10	%	06-MAY-15	07-MAY-15	R3185910
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		11-MAY-15	R3188259
	Barium (Ba)	<0.50		0.50	mg/L		11-MAY-15	R3188259
	Boron (B)	27.6		2.5	mg/L		12-MAY-15	R3188259
	Cadmium (Cd)	0.0058		0.0050	mg/L		11-MAY-15	R3188259

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1607692-7 MS-ASH-084 Sampled By: BILL BOWDEN on 02-MAY-15 @ 15:00 Matrix: SOIL TCLP Metals Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.00010		0.00010	mg/L	12-MAY-15	12-MAY-15	R3188504
		<0.25		0.25	mg/L		11-MAY-15	R3188259
		<0.0050		0.0050	mg/L		11-MAY-15	R3188259
		<0.25		0.25	mg/L		11-MAY-15	R3188259
		5.43		0.15	mg/L		11-MAY-15	R3188259
L1607692-8 MS-ASH-085 Sampled By: BILL BOWDEN on 02-MAY-15 @ 15:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		10.69		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
		7.60		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
		<0.10		0.10	%	06-MAY-15	07-MAY-15	R3185910
		<0.50	DLM	0.50	mg/L		12-MAY-15	R3188259
		<5.0	DLM	5.0	mg/L		12-MAY-15	R3188259
		82	DLM	25	mg/L		12-MAY-15	R3188259
		<0.050	DLM	0.050	mg/L		12-MAY-15	R3188259
		<0.50	DLM	0.50	mg/L		12-MAY-15	R3188259
		<0.50	DLM	0.50	mg/L		12-MAY-15	R3188259
		<0.00010		0.00010	mg/L	12-MAY-15	12-MAY-15	R3188504
		<1.0	DLM	1.0	mg/L		12-MAY-15	R3188259
		<0.050	DLM	0.050	mg/L		12-MAY-15	R3188259
		<2.5	DLM	2.5	mg/L		12-MAY-15	R3188259
		<1.5	DLM	1.5	mg/L		12-MAY-15	R3188259
L1607692-9 MS-ASH-086 Sampled By: BILL BOWDEN on 02-MAY-15 @ 15:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg)								
		11.96		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
		5.90		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
		0.39		0.10	%	06-MAY-15	07-MAY-15	R3185916
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.50		0.50	mg/L		11-MAY-15	R3188259
		4.5		2.5	mg/L		12-MAY-15	R3188259
		0.0100		0.0050	mg/L		11-MAY-15	R3188259
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.050		0.050	mg/L		11-MAY-15	R3188259
		<0.00010		0.00010	mg/L	12-MAY-15	12-MAY-15	R3188504

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1607692-9 MS-ASH-086 Sampled By: BILL BOWDEN on 02-MAY-15 @ 15:00 Matrix: SOIL TCLP Metals								
	Selenium (Se)	<0.25		0.25	mg/L		11-MAY-15	R3188259
	Silver (Ag)	<0.0050		0.0050	mg/L		11-MAY-15	R3188259
	Uranium (U)	<0.25		0.25	mg/L		11-MAY-15	R3188259
	Zinc (Zn)-Total	32.4		0.15	mg/L		11-MAY-15	R3188259
L1607692-10 MS-ASH-087 Sampled By: BILL BOWDEN on 02-MAY-15 @ 18:00 Matrix: SOIL Sample Preparation								
	Initial pH	11.19		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
	Final pH	5.11		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
	Physical Tests							
	% Moisture	<0.10		0.10	%	06-MAY-15	07-MAY-15	R3185916
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		11-MAY-15	R3188259
	Barium (Ba)	<0.50		0.50	mg/L		11-MAY-15	R3188259
	Boron (B)	<2.5		2.5	mg/L		12-MAY-15	R3188259
	Cadmium (Cd)	0.0084		0.0050	mg/L		11-MAY-15	R3188259
	Chromium (Cr)	1.46		0.050	mg/L		11-MAY-15	R3188259
	Lead (Pb)	<0.050		0.050	mg/L		11-MAY-15	R3188259
	Mercury (Hg)	<0.00010		0.00010	mg/L	12-MAY-15	12-MAY-15	R3188504
	Selenium (Se)	<0.25		0.25	mg/L		11-MAY-15	R3188259
	Silver (Ag)	<0.0050		0.0050	mg/L		11-MAY-15	R3188259
	Uranium (U)	<0.25		0.25	mg/L		11-MAY-15	R3188259
	Zinc (Zn)-Total	17.0		0.15	mg/L		11-MAY-15	R3188259
L1607692-11 MS-ASH-088 Sampled By: BILL BOWDEN on 02-MAY-15 @ 18:00 Matrix: SOIL Sample Preparation								
	Initial pH	11.60		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
	Final pH	6.16		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
	Physical Tests							
	% Moisture	<0.10		0.10	%	06-MAY-15	07-MAY-15	R3185916
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		11-MAY-15	R3188259
	Barium (Ba)	<0.50		0.50	mg/L		11-MAY-15	R3188259
	Boron (B)	5.9		2.5	mg/L		11-MAY-15	R3188259
	Cadmium (Cd)	0.0060		0.0050	mg/L		11-MAY-15	R3188259
	Chromium (Cr)	<0.050		0.050	mg/L		11-MAY-15	R3188259
	Lead (Pb)	<0.050		0.050	mg/L		11-MAY-15	R3188259
	Mercury (Hg)	<0.00010		0.00010	mg/L	12-MAY-15	12-MAY-15	R3188504
	Selenium (Se)	<0.25		0.25	mg/L		11-MAY-15	R3188259
	Silver (Ag)	<0.0050		0.0050	mg/L		11-MAY-15	R3188259
	Uranium (U)	<0.25		0.25	mg/L		11-MAY-15	R3188259

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1607692-11	MS-ASH-088							
	Sampled By: BILL BOWDEN on 02-MAY-15 @ 18:00							
Matrix: SOIL								
TCLP Metals								
Zinc (Zn)-Total		0.80		0.15	mg/L		11-MAY-15	R3188259
L1607692-12	MS-ASH-089							
	Sampled By: BILL BOWDEN on 02-MAY-15 @ 18:00							
	Matrix: SOIL							
	Sample Preparation							
	Initial pH	11.60		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
	Final pH	8.97		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
	Physical Tests							
	% Moisture	<0.10		0.10	%	06-MAY-15	07-MAY-15	R3185916
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		11-MAY-15	R3188259
	Barium (Ba)	<0.50		0.50	mg/L		11-MAY-15	R3188259
	Boron (B)	4.3		2.5	mg/L		11-MAY-15	R3188259
	Cadmium (Cd)	<0.0050		0.0050	mg/L		11-MAY-15	R3188259
	Chromium (Cr)	<0.050		0.050	mg/L		11-MAY-15	R3188259
	Lead (Pb)	<0.050		0.050	mg/L		11-MAY-15	R3188259
	Mercury (Hg)	<0.00010		0.00010	mg/L	12-MAY-15	12-MAY-15	R3188504
	Selenium (Se)	<0.25		0.25	mg/L		11-MAY-15	R3188259
	Silver (Ag)	<0.0050		0.0050	mg/L		11-MAY-15	R3188259
	Uranium (U)	<0.25		0.25	mg/L		11-MAY-15	R3188259
	Zinc (Zn)-Total	<0.15		0.15	mg/L		11-MAY-15	R3188259
L1607692-13	MS-ASH-090							
	Sampled By: BILL BOWDEN on 02-MAY-15 @ 18:00							
	Matrix: SOIL							
	Sample Preparation							
	Initial pH	11.47		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
	Final pH	6.18		0.10	pH units	08-MAY-15	08-MAY-15	R3188100
	Physical Tests							
	% Moisture	0.18		0.10	%	06-MAY-15	07-MAY-15	R3185916
	TCLP Metals							
	Arsenic (As)	0.058		0.050	mg/L		11-MAY-15	R3188259
	Barium (Ba)	<0.50		0.50	mg/L		11-MAY-15	R3188259
	Boron (B)	3.3		2.5	mg/L		11-MAY-15	R3188259
	Cadmium (Cd)	<0.0050		0.0050	mg/L		11-MAY-15	R3188259
	Chromium (Cr)	<0.050		0.050	mg/L		11-MAY-15	R3188259
	Lead (Pb)	<0.050		0.050	mg/L		11-MAY-15	R3188259
	Mercury (Hg)	<0.00010		0.00010	mg/L	12-MAY-15	12-MAY-15	R3188504
	Selenium (Se)	<0.25		0.25	mg/L		11-MAY-15	R3188259
	Silver (Ag)	<0.0050		0.0050	mg/L		11-MAY-15	R3188259
	Uranium (U)	<0.25		0.25	mg/L		11-MAY-15	R3188259
	Zinc (Zn)-Total	1.29		0.15	mg/L		11-MAY-15	R3188259

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Zinc (Zn)-Total	MS-B	L1607692-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Boron (B)	MS-B	L1607692-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -8, -9

Sample Parameter Qualifier key listed:

Qualifier	Description
DLM	Detection Limit Adjusted due to sample matrix effects.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).			
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS
Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid weight of sample
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1607692

Report Date: 14-MAY-15

Page 2 of 5

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-EXTRA-WT		Waste						
Batch	R3188259							
WG2085679-7	CVS							
Zinc (Zn)-Total			97.7		%		70-130	12-MAY-15
WG2085679-4	DUP	WG2085679-3						
Zinc (Zn)-Total		163	162		mg/L	0.7	30	11-MAY-15
WG2085679-2	LCS							
Zinc (Zn)-Total			94.0		%		70-130	11-MAY-15
WG2085679-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	11-MAY-15
WG2085679-5	MS	WG2085679-3						
Zinc (Zn)-Total			N/A	MS-B	%		-	11-MAY-15
MET-TCLP-WT		Waste						
Batch	R3188259							
WG2085679-6	CVS							
Silver (Ag)			100.2		%		70-130	11-MAY-15
Arsenic (As)			96.6		%		70-130	11-MAY-15
Boron (B)			102.7		%		70-130	11-MAY-15
Barium (Ba)			94.8		%		70-130	11-MAY-15
Cadmium (Cd)			96.7		%		70-130	11-MAY-15
Chromium (Cr)			94.9		%		70-130	11-MAY-15
Lead (Pb)			102.8		%		70-130	11-MAY-15
Selenium (Se)			90.5		%		70-130	11-MAY-15
Uranium (U)			103.0		%		70-130	11-MAY-15
WG2085679-7	CVS							
Silver (Ag)			100.4		%		70-130	12-MAY-15
Arsenic (As)			100.9		%		70-130	12-MAY-15
Boron (B)			98.1		%		70-130	12-MAY-15
Barium (Ba)			98.1		%		70-130	12-MAY-15
Cadmium (Cd)			102.0		%		70-130	12-MAY-15
Chromium (Cr)			102.3		%		70-130	12-MAY-15
Lead (Pb)			100.6		%		70-130	12-MAY-15
Selenium (Se)			98.5		%		70-130	12-MAY-15
Uranium (U)			98.5		%		70-130	12-MAY-15
WG2085679-4	DUP	WG2085679-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	11-MAY-15
Arsenic (As)		0.154	0.151		mg/L	1.8	40	11-MAY-15
Boron (B)		12.3	13.3		mg/L	7.2	40	11-MAY-15



Quality Control Report

Workorder: L1607692

Report Date: 14-MAY-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3188259							
WG2085679-4	DUP	WG2085679-3						
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	11-MAY-15
Cadmium (Cd)		0.0069	0.0072		mg/L	3.5	40	11-MAY-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	11-MAY-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	11-MAY-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	11-MAY-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	11-MAY-15
WG2085679-2	LCS							
Silver (Ag)			95.6		%		70-130	11-MAY-15
Arsenic (As)			92.8		%		70-130	11-MAY-15
Boron (B)			99.6		%		70-130	11-MAY-15
Barium (Ba)			95.2		%		70-130	11-MAY-15
Cadmium (Cd)			93.4		%		70-130	11-MAY-15
Chromium (Cr)			90.7		%		70-130	11-MAY-15
Lead (Pb)			96.3		%		70-130	11-MAY-15
Selenium (Se)			86.8		%		70-130	11-MAY-15
Uranium (U)			96.8		%		70-130	11-MAY-15
WG2085679-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	11-MAY-15
Arsenic (As)			<0.050		mg/L		0.05	11-MAY-15
Boron (B)			<2.5		mg/L		2.5	11-MAY-15
Barium (Ba)			<0.50		mg/L		0.5	11-MAY-15
Cadmium (Cd)			<0.0050		mg/L		0.005	11-MAY-15
Chromium (Cr)			<0.050		mg/L		0.05	11-MAY-15
Lead (Pb)			<0.050		mg/L		0.05	11-MAY-15
Selenium (Se)			<0.25		mg/L		0.25	11-MAY-15
Uranium (U)			<0.25		mg/L		0.25	11-MAY-15
WG2085679-5	MS	WG2085679-3						
Silver (Ag)			89.5		%		50-140	11-MAY-15
Arsenic (As)			95.4		%		50-140	11-MAY-15
Boron (B)			N/A	MS-B	%		-	11-MAY-15
Barium (Ba)			96.2		%		50-140	11-MAY-15
Cadmium (Cd)			94.6		%		50-140	11-MAY-15
Chromium (Cr)			94.4		%		50-140	11-MAY-15
Lead (Pb)			94.5		%		50-140	11-MAY-15



Quality Control Report

Workorder: L1607692 Report Date: 14-MAY-15 Page 4 of 5

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT	Waste							
Batch	R3188259							
WG2085679-5	MS	WG2085679-3						
Selenium (Se)			91.6		%		50-140	11-MAY-15
Uranium (U)			97.2		%		50-140	11-MAY-15

Quality Control Report

Workorder: L1607692

Report Date: 14-MAY-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Page 5 of 5

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

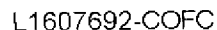
The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



Canada Toll Free: 1 800 668 9878

www.alsglobal.com



COC Number: 14 -

Page 1 of 2

[illegible]

REFER TO BACK PAGE FOR ALL LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY

YELLOW - CLIENT COPY

NA-FM-0326e v03 From 04 January 2011

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



Canada Toll Free: 1 800 668 9878

L1607692-COFC

Page 2 of 2

REFER TO BACK PAGE FOR AIS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

NS-EM-0328 v00 Final/EM January 2014

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW CQC form**.



BAFFINLAND IRON MINES CORPORATION

ATTN: Jim Millard

2275 Upper Middle Rd. E.

Suite #300

Oakville ON L6H 0C3

Date Received: 21-MAY-15

Report Date: 27-MAY-15 10:25 (MT)

Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: L1614430

Project P.O. #: 4500007003

Job Reference: MINE SITE

C of C Numbers:

Legal Site Desc:

Austin Paterson
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047

ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1614430-1 MS-ASH-091 Sampled By: KB/DR on 14-MAY-15 @ 14:16 Matrix: SOIL								
Sample Preparation								
Initial pH		11.22		0.10	pH units	21-MAY-15	21-MAY-15	R3195155
Final pH		6.58		0.10	pH units	21-MAY-15	21-MAY-15	R3195155
Physical Tests								
% Moisture		0.14		0.10	%	21-MAY-15	22-MAY-15	R3193523
TCLP Metals								
Arsenic (As)		0.056		0.050	mg/L		25-MAY-15	R3195049
Barium (Ba)		<0.50		0.50	mg/L		25-MAY-15	R3195049
Boron (B)		4.4		2.5	mg/L		25-MAY-15	R3195049
Cadmium (Cd)		<0.0050		0.0050	mg/L		25-MAY-15	R3195049
Chromium (Cr)		<0.050		0.050	mg/L		25-MAY-15	R3195049
Lead (Pb)		<0.050		0.050	mg/L		25-MAY-15	R3195049
Mercury (Hg)		<0.00010		0.00010	mg/L	25-MAY-15	25-MAY-15	R3195104
Selenium (Se)		<0.25		0.25	mg/L		25-MAY-15	R3195049
Silver (Ag)		<0.0050		0.0050	mg/L		25-MAY-15	R3195049
Uranium (U)		<0.25		0.25	mg/L		25-MAY-15	R3195049
Zinc (Zn)-Total		1.06		0.15	mg/L		25-MAY-15	R3195049
L1614430-2 MS-ASH-092 Sampled By: KB/DR on 14-MAY-15 @ 14:20 Matrix: SOIL								
Sample Preparation								
Initial pH		11.18		0.10	pH units	21-MAY-15	21-MAY-15	R3195155
Final pH		9.47		0.10	pH units	21-MAY-15	21-MAY-15	R3195155
Physical Tests								
% Moisture		0.15		0.10	%	21-MAY-15	22-MAY-15	R3193523
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		25-MAY-15	R3195049
Barium (Ba)		<0.50		0.50	mg/L		25-MAY-15	R3195049
Boron (B)		8.2		2.5	mg/L		25-MAY-15	R3195049
Cadmium (Cd)		<0.0050		0.0050	mg/L		25-MAY-15	R3195049
Chromium (Cr)		0.642		0.050	mg/L		25-MAY-15	R3195049
Lead (Pb)		<0.050		0.050	mg/L		25-MAY-15	R3195049
Mercury (Hg)		<0.00010		0.00010	mg/L	25-MAY-15	25-MAY-15	R3195104
Selenium (Se)		<0.25		0.25	mg/L		25-MAY-15	R3195049
Silver (Ag)		<0.0050		0.0050	mg/L		25-MAY-15	R3195049
Uranium (U)		<0.25		0.25	mg/L		25-MAY-15	R3195049
Zinc (Zn)-Total		<0.15		0.15	mg/L		25-MAY-15	R3195049
L1614430-3 MS-ASH-093 Sampled By: KB/DR on 14-MAY-15 @ 14:25 Matrix: SOIL								
Sample Preparation								
Initial pH		11.57		0.10	pH units	21-MAY-15	21-MAY-15	R3195155
Final pH		5.54		0.10	pH units	21-MAY-15	21-MAY-15	R3195155
Physical Tests								

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1614430-3 MS-ASH-093 Sampled By: KB/DR on 14-MAY-15 @ 14:25 Matrix: SOIL								
Physical Tests								
% Moisture		0.49		0.10	%	21-MAY-15	22-MAY-15	R3193523
TCLP Metals								
Arsenic (As)		0.054		0.050	mg/L		25-MAY-15	R3195049
Barium (Ba)		<0.50		0.50	mg/L		25-MAY-15	R3195049
Boron (B)		6.3		2.5	mg/L		25-MAY-15	R3195049
Cadmium (Cd)		0.0121		0.0050	mg/L		25-MAY-15	R3195049
Chromium (Cr)		<0.050		0.050	mg/L		25-MAY-15	R3195049
Lead (Pb)		<0.050		0.050	mg/L		25-MAY-15	R3195049
Mercury (Hg)		<0.00010		0.00010	mg/L	25-MAY-15	25-MAY-15	R3195104
Selenium (Se)		<0.25		0.25	mg/L		25-MAY-15	R3195049
Silver (Ag)		<0.0050		0.0050	mg/L		25-MAY-15	R3195049
Uranium (U)		<0.25		0.25	mg/L		25-MAY-15	R3195049
Zinc (Zn)-Total		12.9		0.15	mg/L		25-MAY-15	R3195049
L1614430-4 MS-ASH-094 Sampled By: KB/DR on 14-MAY-15 @ 14:30 Matrix: SOIL								
Sample Preparation								
Initial pH		11.27		0.10	pH units	21-MAY-15	21-MAY-15	R3195155
Final pH		7.55		0.10	pH units	21-MAY-15	21-MAY-15	R3195155
Physical Tests								
% Moisture		0.16		0.10	%	21-MAY-15	22-MAY-15	R3193523
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		25-MAY-15	R3195049
Barium (Ba)		<0.50		0.50	mg/L		25-MAY-15	R3195049
Boron (B)		5.4		2.5	mg/L		25-MAY-15	R3195049
Cadmium (Cd)		<0.0050		0.0050	mg/L		25-MAY-15	R3195049
Chromium (Cr)		<0.050		0.050	mg/L		25-MAY-15	R3195049
Lead (Pb)		<0.050		0.050	mg/L		25-MAY-15	R3195049
Mercury (Hg)		<0.00010		0.00010	mg/L	25-MAY-15	25-MAY-15	R3195104
Selenium (Se)		<0.25		0.25	mg/L		25-MAY-15	R3195049
Silver (Ag)		<0.0050		0.0050	mg/L		25-MAY-15	R3195049
Uranium (U)		<0.25		0.25	mg/L		25-MAY-15	R3195049
Zinc (Zn)-Total		<0.15		0.15	mg/L		25-MAY-15	R3195049

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1614430

Report Date: 27-MAY-15

Page 1 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3193523							
WG2091835-3	DUP	L1613973-1						
% Moisture		34.0	33.7		%	0.9	20	22-MAY-15
WG2091835-2	LCS							
% Moisture			100.9		%		70-130	22-MAY-15
WG2091835-1	MB							
% Moisture			<0.10		%		0.1	22-MAY-15
HG-TCLP-WT		Waste						
Batch	R3195104							
WG2093968-3	DUP	L1614430-2						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	50	25-MAY-15
WG2093968-2	LCS							
Mercury (Hg)			106.0		%		70-130	25-MAY-15
WG2093968-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	25-MAY-15
WG2093968-4	MS	L1614430-1						
Mercury (Hg)			115.0		%		50-140	25-MAY-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3195049							
WG2093784-6	CVS							
Zinc (Zn)-Total			91.3		%		70-130	25-MAY-15
WG2093784-4	DUP	WG2093784-3						
Zinc (Zn)-Total		1.06	1.05		mg/L	0.6	30	25-MAY-15
WG2093784-2	LCS							
Zinc (Zn)-Total			99.3		%		70-130	25-MAY-15
WG2093784-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	25-MAY-15
WG2093784-5	MS	WG2093784-3						
Zinc (Zn)-Total			83.6		%		70-130	25-MAY-15
MET-TCLP-WT		Waste						
Batch	R3195049							
WG2093784-6	CVS							
Silver (Ag)			105.6		%		70-130	25-MAY-15
Arsenic (As)			98.0		%		70-130	25-MAY-15
Boron (B)			101.2		%		70-130	25-MAY-15
Barium (Ba)			101.4		%		70-130	25-MAY-15
Cadmium (Cd)			99.2		%		70-130	25-MAY-15
Chromium (Cr)			99.97		%		70-130	25-MAY-15



Quality Control Report

Workorder: L1614430

Report Date: 27-MAY-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3195049							
WG2093784-6	CVS							
Lead (Pb)			101.9		%		70-130	25-MAY-15
Selenium (Se)			99.5		%		70-130	25-MAY-15
Uranium (U)			98.2		%		70-130	25-MAY-15
WG2093784-4	DUP	WG2093784-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	25-MAY-15
Arsenic (As)		0.056	0.054		mg/L	3.3	40	25-MAY-15
Boron (B)		4.4	4.5		mg/L	0.9	40	25-MAY-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	25-MAY-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	25-MAY-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	25-MAY-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	25-MAY-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	25-MAY-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	25-MAY-15
WG2093784-2	LCS							
Silver (Ag)			101.0		%		70-130	25-MAY-15
Arsenic (As)			98.2		%		70-130	25-MAY-15
Boron (B)			99.3		%		70-130	25-MAY-15
Barium (Ba)			99.7		%		70-130	25-MAY-15
Cadmium (Cd)			96.1		%		70-130	25-MAY-15
Chromium (Cr)			98.2		%		70-130	25-MAY-15
Lead (Pb)			96.5		%		70-130	25-MAY-15
Selenium (Se)			95.7		%		70-130	25-MAY-15
Uranium (U)			91.0		%		70-130	25-MAY-15
WG2093784-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	25-MAY-15
Arsenic (As)			<0.050		mg/L		0.05	25-MAY-15
Boron (B)			<2.5		mg/L		2.5	25-MAY-15
Barium (Ba)			<0.50		mg/L		0.5	25-MAY-15
Cadmium (Cd)			<0.0050		mg/L		0.005	25-MAY-15
Chromium (Cr)			<0.050		mg/L		0.05	25-MAY-15
Lead (Pb)			<0.050		mg/L		0.05	25-MAY-15
Selenium (Se)			<0.25		mg/L		0.25	25-MAY-15
Uranium (U)			<0.25		mg/L		0.25	25-MAY-15
WG2093784-5	MS	WG2093784-3						



Quality Control Report

Workorder: L1614430

Report Date: 27-MAY-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3195049							
WG2093784-5	MS	WG2093784-3						
Silver (Ag)			85.4		%		50-140	25-MAY-15
Arsenic (As)			96.3		%		50-140	25-MAY-15
Boron (B)			93.5		%		50-140	25-MAY-15
Barium (Ba)			95.0		%		50-140	25-MAY-15
Cadmium (Cd)			94.0		%		50-140	25-MAY-15
Chromium (Cr)			94.6		%		50-140	25-MAY-15
Lead (Pb)			91.6		%		50-140	25-MAY-15
Selenium (Se)			94.7		%		50-140	25-MAY-15
Uranium (U)			94.2		%		50-140	25-MAY-15

Quality Control Report

Workorder: L1614430

Report Date: 27-MAY-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



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NA-EM-0125a v09 Empl/04 January 2014

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 12-JUN-15
Report Date: 17-JUN-15 10:24 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: **L1625901**
Project P.O. #: 4500007003
Job Reference: MINE SITE
C of C Numbers:
Legal Site Desc:

Austin Paterson
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1625901-1 MS-ASH-095 Sampled By: JT/AQ on 08-JUN-15 @ 09:30 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.26		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
		5.86		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
		0.16		0.10	%	12-JUN-15	13-JUN-15	R3207005
		<0.050		0.050	mg/L		15-JUN-15	R3208469
		<0.50		0.50	mg/L		15-JUN-15	R3208469
		3.3		2.5	mg/L		15-JUN-15	R3208469
		0.0119		0.0050	mg/L		15-JUN-15	R3208469
		<0.050		0.050	mg/L		15-JUN-15	R3208469
		<0.050		0.050	mg/L		15-JUN-15	R3208469
		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207650
		<0.25		0.25	mg/L		15-JUN-15	R3208469
		<0.0050		0.0050	mg/L		15-JUN-15	R3208469
		<0.25		0.25	mg/L		15-JUN-15	R3208469
		1.29		0.15	mg/L		15-JUN-15	R3208469
L1625901-2 MS-ASH-096 Sampled By: JT/AQ on 08-JUN-15 @ 09:45 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.27		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
		6.26		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
		0.29		0.10	%	12-JUN-15	13-JUN-15	R3207005
		<0.050		0.050	mg/L		15-JUN-15	R3208469
		<0.50		0.50	mg/L		15-JUN-15	R3208469
		4.6		2.5	mg/L		15-JUN-15	R3208469
		0.0115		0.0050	mg/L		15-JUN-15	R3208469
		<0.050		0.050	mg/L		15-JUN-15	R3208469
		<0.050		0.050	mg/L		15-JUN-15	R3208469
		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207650
		<0.25		0.25	mg/L		15-JUN-15	R3208469
		<0.0050		0.0050	mg/L		15-JUN-15	R3208469
		<0.25		0.25	mg/L		15-JUN-15	R3208469
		2.24		0.15	mg/L		15-JUN-15	R3208469
L1625901-3 MS-ASH-097 Sampled By: JT/AQ on 09-JUN-15 @ 08:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests								
		11.27		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
		6.57		0.10	pH units	12-JUN-15	12-JUN-15	R3208444

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1625901-3	MS-ASH-097							
Sampled By:	JT/AQ on 09-JUN-15 @ 08:00							
Matrix:	SOIL							
Physical Tests								
% Moisture		0.36		0.10	%	12-JUN-15	13-JUN-15	R3207005
TCLP Metals								
Arsenic (As)		0.105		0.050	mg/L		15-JUN-15	R3208469
Barium (Ba)		<0.50		0.50	mg/L		15-JUN-15	R3208469
Boron (B)		3.8		2.5	mg/L		15-JUN-15	R3208469
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208469
Chromium (Cr)		<0.050		0.050	mg/L		15-JUN-15	R3208469
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208469
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207650
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208469
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208469
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208469
Zinc (Zn)-Total		1.51		0.15	mg/L		15-JUN-15	R3208469
L1625901-4	MS-ASH-098							
Sampled By:	JT/AQ on 09-JUN-15 @ 08:00							
Matrix:	SOIL							
Sample Preparation								
Initial pH		11.41		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Final pH		6.06		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Physical Tests								
% Moisture		<0.10		0.10	%	12-JUN-15	13-JUN-15	R3207005
TCLP Metals								
Arsenic (As)		0.063		0.050	mg/L		15-JUN-15	R3208469
Barium (Ba)		<0.50		0.50	mg/L		15-JUN-15	R3208469
Boron (B)		<2.5		2.5	mg/L		15-JUN-15	R3208469
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208469
Chromium (Cr)		<0.050		0.050	mg/L		15-JUN-15	R3208469
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208469
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207650
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208469
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208469
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208469
Zinc (Zn)-Total		1.21		0.15	mg/L		15-JUN-15	R3208469
L1625901-5	MS-ASH-099							
Sampled By:	JT/AQ on 09-JUN-15 @ 08:00							
Matrix:	SOIL							
Sample Preparation								
Initial pH		11.57		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Final pH		4.78		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Physical Tests								
% Moisture		<0.10		0.10	%	12-JUN-15	13-JUN-15	R3207005
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		15-JUN-15	R3208469

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1625901-5 MS-ASH-099 Sampled By: JT/AQ on 09-JUN-15 @ 08:00 Matrix: SOIL TCLP Metals	Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total							
L1625901-6 MS-ASH-100 Sampled By: JT/AQ on 09-JUN-15 @ 08:00 Matrix: SOIL Sample Preparation	Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total							
L1625901-7 MS-ASH-101 Sampled By: JT/AQ on 09-JUN-15 @ 08:00 Matrix: SOIL Sample Preparation	Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd)							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1625901-7 MS-ASH-101 Sampled By: JT/AQ on 09-JUN-15 @ 08:00 Matrix: SOIL								
TCLP Metals								
Chromium (Cr)		<0.050		0.050	mg/L	15-JUN-15	15-JUN-15	R3208469
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208469
Mercury (Hg)		<0.00010		0.00010	mg/L		15-JUN-15	R3207650
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208469
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208469
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208469
Zinc (Zn)-Total		1.67		0.15	mg/L		15-JUN-15	R3208469
L1625901-8 MS-ASH-102 Sampled By: JT/AQ on 09-JUN-15 @ 08:00 Matrix: SOIL								
Sample Preparation								
Initial pH		11.52		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Final pH		5.54		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Physical Tests								
% Moisture		1.94		0.10	%	12-JUN-15	13-JUN-15	R3207005
TCLP Metals								
Arsenic (As)		0.051		0.050	mg/L	15-JUN-15	15-JUN-15	R3208469
Barium (Ba)		<0.50		0.50	mg/L		15-JUN-15	R3208469
Boron (B)		<2.5		2.5	mg/L		15-JUN-15	R3208469
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208469
Chromium (Cr)		<0.050		0.050	mg/L		15-JUN-15	R3208469
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208469
Mercury (Hg)		<0.00010		0.00010	mg/L		15-JUN-15	R3207650
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208469
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208469
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208469
Zinc (Zn)-Total		6.21		0.15	mg/L		15-JUN-15	R3208469
L1625901-9 MS-ASH-103 Sampled By: JT/AQ on 09-JUN-15 @ 08:00 Matrix: SOIL								
Sample Preparation								
Initial pH		11.40		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Final pH		5.50		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Physical Tests								
% Moisture		0.26		0.10	%	12-JUN-15	13-JUN-15	R3207005
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L	15-JUN-15	15-JUN-15	R3208469
Barium (Ba)		<0.50		0.50	mg/L		15-JUN-15	R3208469
Boron (B)		5.9		2.5	mg/L		15-JUN-15	R3208469
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208469
Chromium (Cr)		<0.050		0.050	mg/L		15-JUN-15	R3208469
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208469
Mercury (Hg)		<0.00010		0.00010	mg/L		15-JUN-15	R3207650

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

[illegible]

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1625901

Report Date: 17-JUN-15

Page 1 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3207005							
WG2107203-3	DUP	L1625901-7						
% Moisture		0.46	0.43		%	7.0	20	13-JUN-15
WG2107203-2	LCS							
% Moisture			104.6		%		70-130	13-JUN-15
WG2107203-1	MB							
% Moisture			<0.10		%		0.1	13-JUN-15
HG-TCLP-WT		Waste						
Batch	R3207650							
WG2108253-3	DUP	L1625892-18						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	50	15-JUN-15
WG2108253-2	LCS							
Mercury (Hg)			103.0		%		70-130	15-JUN-15
WG2108253-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	15-JUN-15
WG2108253-4	MS	L1625901-1						
Mercury (Hg)			98.7		%		50-140	15-JUN-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3208469							
WG2108279-6	CVS							
Zinc (Zn)-Total			94.8		%		70-130	15-JUN-15
WG2108279-4	DUP	WG2108279-3						
Zinc (Zn)-Total		1.29	1.17		mg/L	9.8	30	15-JUN-15
WG2108279-2	LCS							
Zinc (Zn)-Total			97.6		%		70-130	15-JUN-15
WG2108279-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	15-JUN-15
WG2108279-5	MS	WG2108279-3						
Zinc (Zn)-Total			93.9		%		70-130	15-JUN-15
MET-TCLP-WT		Waste						
Batch	R3208469							
WG2108279-6	CVS							
Silver (Ag)			100.9		%		70-130	15-JUN-15
Arsenic (As)			98.3		%		70-130	15-JUN-15
Boron (B)			101.5		%		70-130	15-JUN-15
Barium (Ba)			100.3		%		70-130	15-JUN-15
Cadmium (Cd)			98.1		%		70-130	15-JUN-15
Chromium (Cr)			98.9		%		70-130	15-JUN-15



Quality Control Report

Workorder: L1625901

Report Date: 17-JUN-15

Page 2 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3208469							
WG2108279-6	CVS							
Lead (Pb)			104.6		%		70-130	15-JUN-15
Selenium (Se)			96.9		%		70-130	15-JUN-15
Uranium (U)			102.0		%		70-130	15-JUN-15
WG2108279-4	DUP	WG2108279-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	15-JUN-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	15-JUN-15
Boron (B)		3.3	3.3		mg/L	0.0	40	15-JUN-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	15-JUN-15
Cadmium (Cd)		0.0119	0.0111		mg/L	6.5	40	15-JUN-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	15-JUN-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	15-JUN-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	15-JUN-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	15-JUN-15
WG2108279-2	LCS							
Silver (Ag)			102.1		%		70-130	15-JUN-15
Arsenic (As)			97.1		%		70-130	15-JUN-15
Boron (B)			97.2		%		70-130	15-JUN-15
Barium (Ba)			101.4		%		70-130	15-JUN-15
Cadmium (Cd)			101.0		%		70-130	15-JUN-15
Chromium (Cr)			95.8		%		70-130	15-JUN-15
Lead (Pb)			105.4		%		70-130	15-JUN-15
Selenium (Se)			98.4		%		70-130	15-JUN-15
Uranium (U)			101.3		%		70-130	15-JUN-15
WG2108279-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	15-JUN-15
Arsenic (As)			<0.050		mg/L		0.05	15-JUN-15
Boron (B)			<2.5		mg/L		2.5	15-JUN-15
Barium (Ba)			<0.50		mg/L		0.5	15-JUN-15
Cadmium (Cd)			<0.0050		mg/L		0.005	15-JUN-15
Chromium (Cr)			<0.050		mg/L		0.05	15-JUN-15
Lead (Pb)			<0.050		mg/L		0.05	15-JUN-15
Selenium (Se)			<0.25		mg/L		0.25	15-JUN-15
Uranium (U)			<0.25		mg/L		0.25	15-JUN-15
WG2108279-5	MS	WG2108279-3						



Quality Control Report

Workorder: L1625901

Report Date: 17-JUN-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3208469							
WG2108279-5	MS	WG2108279-3						
Silver (Ag)			91.0		%		50-140	15-JUN-15
Arsenic (As)			101.3		%		50-140	15-JUN-15
Boron (B)			93.9		%		50-140	15-JUN-15
Barium (Ba)			100.9		%		50-140	15-JUN-15
Cadmium (Cd)			98.6		%		50-140	15-JUN-15
Chromium (Cr)			98.5		%		50-140	15-JUN-15
Lead (Pb)			99.9		%		50-140	15-JUN-15
Selenium (Se)			100.5		%		50-140	15-JUN-15
Uranium (U)			100.0		%		50-140	15-JUN-15

Quality Control Report

Workorder: L1625901

Report Date: 17-JUN-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

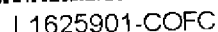
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



Canada Toll Free: 1 800 668 9878



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REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

doi:10.1371/journal.pone.0176644.g001

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 04-JUL-15
Report Date: 09-JUL-15 13:12 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: L1636894
Project P.O. #: 4500007003
Job Reference: MINE SITE
C of C Numbers:
Legal Site Desc:



Austin Paterson
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1636894-1 MS-ASH-104 Sampled By: DR on 02-JUL-15 @ 12:15 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		10.77		0.10	pH units	06-JUL-15	06-JUL-15	R3221328
		5.72		0.10	pH units	06-JUL-15	06-JUL-15	R3221328
		0.47		0.10	%	04-JUL-15	05-JUL-15	R3219919
		<0.050		0.050	mg/L		08-JUL-15	R3221811
		<0.50		0.50	mg/L		08-JUL-15	R3221811
		6.3		2.5	mg/L		08-JUL-15	R3221811
		<0.0050		0.0050	mg/L		08-JUL-15	R3221811
		<0.050		0.050	mg/L		08-JUL-15	R3221811
		<0.050		0.050	mg/L		08-JUL-15	R3221811
		<0.00010		0.00010	mg/L		08-JUL-15	R3221725
		<0.25		0.25	mg/L		08-JUL-15	R3221811
		<0.0050		0.0050	mg/L		08-JUL-15	R3221811
		<0.25		0.25	mg/L		08-JUL-15	R3221811
		<1.0		1.0	mg/L		08-JUL-15	R3221811
L1636894-2 MS-ASH-105 Sampled By: DR on 02-JUL-15 @ 12:22 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.16		0.10	pH units	06-JUL-15	06-JUL-15	R3221328
		5.78		0.10	pH units	06-JUL-15	06-JUL-15	R3221328
		0.59		0.10	%	04-JUL-15	05-JUL-15	R3219919
		<0.050		0.050	mg/L		08-JUL-15	R3221811
		<0.50		0.50	mg/L		08-JUL-15	R3221811
		8.6		2.5	mg/L		08-JUL-15	R3221811
		<0.0050		0.0050	mg/L		08-JUL-15	R3221811
		<0.050		0.050	mg/L		08-JUL-15	R3221811
		<0.050		0.050	mg/L		08-JUL-15	R3221811
		<0.00010		0.00010	mg/L		08-JUL-15	R3221725
		<0.25		0.25	mg/L		08-JUL-15	R3221811
		<0.0050		0.0050	mg/L		08-JUL-15	R3221811
		<0.25		0.25	mg/L		08-JUL-15	R3221811
		<1.0		1.0	mg/L		08-JUL-15	R3221811
L1636894-3 MS-ASH-106 Sampled By: DR on 02-JUL-15 @ 12:30 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests								
		11.00		0.10	pH units	06-JUL-15	06-JUL-15	R3221328
		5.49		0.10	pH units	06-JUL-15	06-JUL-15	R3221328

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1636894-3MS-ASH-106 Sampled By: DR on 02-JUL-15 @ 12:30 Matrix: SOIL								
Physical Tests								
% Moisture		0.20		0.10	%	04-JUL-15	05-JUL-15	R3219919
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		08-JUL-15	R3221811
Barium (Ba)		<0.50		0.50	mg/L		08-JUL-15	R3221811
Boron (B)		<2.5		2.5	mg/L		08-JUL-15	R3221811
Cadmium (Cd)		0.0085		0.0050	mg/L		08-JUL-15	R3221811
Chromium (Cr)		0.055		0.050	mg/L		08-JUL-15	R3221811
Lead (Pb)		<0.050		0.050	mg/L		08-JUL-15	R3221811
Mercury (Hg)		<0.00010		0.00010	mg/L		08-JUL-15	R3221725
Selenium (Se)		<0.25		0.25	mg/L		08-JUL-15	R3221811
Silver (Ag)		<0.0050		0.0050	mg/L		08-JUL-15	R3221811
Uranium (U)		<0.25		0.25	mg/L		08-JUL-15	R3221811
Zinc (Zn)-Total		9.02		1.0	mg/L		08-JUL-15	R3221811
L1636894-4MS-ASH-107 Sampled By: DR on 02-JUL-15 @ 12:35 Matrix: SOIL								
Sample Preparation								
Initial pH		11.18		0.10	pH units	06-JUL-15	06-JUL-15	R3221328
Final pH		6.08		0.10	pH units	06-JUL-15	06-JUL-15	R3221328
Physical Tests								
% Moisture		0.28		0.10	%	04-JUL-15	05-JUL-15	R3219919
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		08-JUL-15	R3221811
Barium (Ba)		<0.50		0.50	mg/L		08-JUL-15	R3221811
Boron (B)		3.9		2.5	mg/L		08-JUL-15	R3221811
Cadmium (Cd)		0.0134		0.0050	mg/L		08-JUL-15	R3221811
Chromium (Cr)		<0.050		0.050	mg/L		08-JUL-15	R3221811
Lead (Pb)		<0.050		0.050	mg/L		08-JUL-15	R3221811
Mercury (Hg)		<0.00010		0.00010	mg/L		08-JUL-15	R3221725
Selenium (Se)		<0.25		0.25	mg/L		08-JUL-15	R3221811
Silver (Ag)		<0.0050		0.0050	mg/L		08-JUL-15	R3221811
Uranium (U)		<0.25		0.25	mg/L		08-JUL-15	R3221811
Zinc (Zn)-Total		<1.0		1.0	mg/L		08-JUL-15	R3221811
L1636894-5MS-ASH-108 Sampled By: DR on 02-JUL-15 @ 12:41 Matrix: SOIL								
Sample Preparation								
Initial pH		11.05		0.10	pH units	06-JUL-15	06-JUL-15	R3221328
Final pH		5.14		0.10	pH units	06-JUL-15	06-JUL-15	R3221328
Physical Tests								
% Moisture		0.24		0.10	%	04-JUL-15	05-JUL-15	R3219919
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		08-JUL-15	R3221811

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1636894-5 MS-ASH-108 Sampled By: DR on 02-JUL-15 @ 12:41 Matrix: SOIL TCLP Metals Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		<0.50		0.50	mg/L		08-JUL-15	R3221811
		<2.5		2.5	mg/L		08-JUL-15	R3221811
		<0.0050		0.0050	mg/L		08-JUL-15	R3221811
		<0.050		0.050	mg/L		08-JUL-15	R3221811
		<0.050		0.050	mg/L		08-JUL-15	R3221811
		<0.00010		0.00010	mg/L		08-JUL-15	R3221725
		<0.25		0.25	mg/L		08-JUL-15	R3221811
		<0.0050		0.0050	mg/L		08-JUL-15	R3221811
		<0.25		0.25	mg/L		08-JUL-15	R3221811
		14.9		1.0	mg/L		08-JUL-15	R3221811
L1636894-6 MS-ASH-109 Sampled By: DR on 02-JUL-15 @ 12:50 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.11		0.10	pH units	06-JUL-15	06-JUL-15	R3221328
		5.53		0.10	pH units	06-JUL-15	06-JUL-15	R3221328
		0.23		0.10	%	04-JUL-15	05-JUL-15	R3219919
		<0.050		0.050	mg/L		08-JUL-15	R3221811
		<0.50		0.50	mg/L		08-JUL-15	R3221811
		<2.5		2.5	mg/L		08-JUL-15	R3221811
		0.0059		0.0050	mg/L		08-JUL-15	R3221811
		<0.050		0.050	mg/L		08-JUL-15	R3221811
		<0.050		0.050	mg/L		08-JUL-15	R3221811
		<0.00010		0.00010	mg/L		08-JUL-15	R3221725
		<0.25		0.25	mg/L		08-JUL-15	R3221811
		<0.0050		0.0050	mg/L		08-JUL-15	R3221811
		<0.25		0.25	mg/L		08-JUL-15	R3221811
		6.60		1.0	mg/L		08-JUL-15	R3221811

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1636894

Report Date: 09-JUL-15

Page 1 of 3

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3219919							
WG2121837-3	DUP	L1636607-2						
% Moisture		22.3	22.6		%	1.7	20	05-JUL-15
WG2121837-2	LCS							
% Moisture			100.1		%		70-130	05-JUL-15
WG2121837-1	MB							
% Moisture			<0.10		%		0.1	05-JUL-15
HG-TCLP-WT		Waste						
Batch	R3221725							
WG2124250-3	DUP	L1636894-1						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	50	08-JUL-15
WG2124250-2	LCS							
Mercury (Hg)			98.9		%		70-130	08-JUL-15
WG2124250-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	08-JUL-15
WG2124250-4	MS	L1636894-1						
Mercury (Hg)			90.7		%		50-140	08-JUL-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3221811							
WG2124005-4	DUP	WG2124005-3						
Zinc (Zn)-Total		<1.0	0.62		mg/L	12	30	08-JUL-15
WG2124005-2	LCS							
Zinc (Zn)-Total			91.2		%		70-130	08-JUL-15
WG2124005-1	MB							
Zinc (Zn)-Total			<1.0		mg/L		0.15	08-JUL-15
WG2124005-5	MS	WG2124005-3						
Zinc (Zn)-Total			96.1		%		70-130	08-JUL-15
MET-TCLP-WT		Waste						
Batch	R3221811							
WG2124005-4	DUP	WG2124005-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	08-JUL-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	08-JUL-15
Boron (B)		6.3	6.9		mg/L	8.8	40	08-JUL-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	08-JUL-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	08-JUL-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	08-JUL-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	08-JUL-15



Quality Control Report

Workorder: L1636894

Report Date: 09-JUL-15

Page 2 of 3

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3221811							
WG2124005-4	DUP	WG2124005-3						
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	08-JUL-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	08-JUL-15
WG2124005-2	LCS							
Silver (Ag)			95.4		%		70-130	08-JUL-15
Arsenic (As)			93.3		%		70-130	08-JUL-15
Boron (B)			98.8		%		70-130	08-JUL-15
Barium (Ba)			100.3		%		70-130	08-JUL-15
Cadmium (Cd)			92.3		%		70-130	08-JUL-15
Chromium (Cr)			95.2		%		70-130	08-JUL-15
Lead (Pb)			94.6		%		70-130	08-JUL-15
Selenium (Se)			91.2		%		70-130	08-JUL-15
Uranium (U)			93.7		%		70-130	08-JUL-15
WG2124005-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	08-JUL-15
Arsenic (As)			<0.050		mg/L		0.05	08-JUL-15
Boron (B)			<2.5		mg/L		2.5	08-JUL-15
Barium (Ba)			<0.50		mg/L		0.5	08-JUL-15
Cadmium (Cd)			<0.0050		mg/L		0.005	08-JUL-15
Chromium (Cr)			<0.050		mg/L		0.05	08-JUL-15
Lead (Pb)			<0.050		mg/L		0.05	08-JUL-15
Selenium (Se)			<0.25		mg/L		0.25	08-JUL-15
Uranium (U)			<0.25		mg/L		0.25	08-JUL-15
WG2124005-5	MS	WG2124005-3						
Silver (Ag)			94.9		%		50-140	08-JUL-15
Arsenic (As)			98.7		%		50-140	08-JUL-15
Boron (B)			99.5		%		50-140	08-JUL-15
Barium (Ba)			108.9		%		50-140	08-JUL-15
Cadmium (Cd)			96.9		%		50-140	08-JUL-15
Chromium (Cr)			96.6		%		50-140	08-JUL-15
Lead (Pb)			98.1		%		50-140	08-JUL-15
Selenium (Se)			98.9		%		50-140	08-JUL-15
Uranium (U)			97.8		%		50-140	08-JUL-15

Quality Control Report

Workorder: L1636894

Report Date: 09-JUL-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Page 3 of 3

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

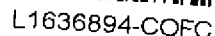
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



Canada Toll Free: 1 800 668 9878



Page 1 of 1

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REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

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YELLOW - CLIENT COPY

NA-FM-5325a v09 Form 04 January 2014

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 27-JUL-15
Report Date: 04-AUG-15 12:14 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: L1648595
Project P.O. #: 4500007003
Job Reference: MINE SITE
C of C Numbers:
Legal Site Desc:



Austin Paterson
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1648595-11 COMPOSITE 1 (MS-ASH-110/111/112/113) Sampled By: KB on 24-JUL-15 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total		11.89 7.23 <0.10 <0.050 <0.50 3.3 <0.0050 <0.050 <0.050 <0.00010 <0.25 <0.0050 <0.25 <1.0		0.10 0.10 0.10 0.050 0.50 2.5 0.0050 0.050 0.050 0.00010 0.25 0.0050 0.25 1.0	pH units pH units % mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	29-JUL-15 29-JUL-15 29-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15	29-JUL-15 29-JUL-15 30-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15	R3235714 R3235714 R3235240 R3236429 R3236429 R3236429 R3236429 R3236429 R3236429 R3236429 R3236429 R3236429 R3236429 R3236429 R3236429
L1648595-12 COMPOSITE 2 (MS-ASH-114/115/116/117) Sampled By: KB on 24-JUL-15 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total		11.26 5.25 <0.10 <0.050 <0.50 3.0 0.115 <0.050 <0.050 <0.00010 <0.25 <0.0050 <0.25 16.7		0.10 0.10 0.10 0.050 0.50 2.5 0.0050 0.050 0.050 0.00010 0.25 0.0050 0.25 1.0	pH units pH units % mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	29-JUL-15 29-JUL-15 29-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15	29-JUL-15 29-JUL-15 30-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15 31-JUL-15	R3235714 R3235714 R3235240 R3236429 R3236429 R3236429 R3236429 R3236429 R3236429 R3236429 R3236429 R3236429 R3236429 R3236429 R3236429
L1648595-13 COMPOSITE 3 (MS-ASH-118/119) Sampled By: KB on 24-JUL-15 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests		11.34 5.92		0.10 0.10	pH units pH units	29-JUL-15 29-JUL-15	29-JUL-15 29-JUL-15	R3235714 R3235714

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1648595

Report Date: 04-AUG-15

Page 1 of 3

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3235240							
WG2138795-3	DUP	L1648519-1						
% Moisture		12.1	13.0		%	6.8	20	30-JUL-15
WG2138795-2	LCS							
% Moisture			99.9		%		90-110	30-JUL-15
WG2138795-1	MB							
% Moisture			<0.10		%		0.1	30-JUL-15
HG-TCLP-WT		Waste						
Batch	R3236263							
WG2140759-3	DUP	L1648595-11						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	50	31-JUL-15
WG2140759-2	LCS							
Mercury (Hg)			101.0		%		70-130	31-JUL-15
WG2140759-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	31-JUL-15
WG2140759-4	MS	L1648595-11						
Mercury (Hg)			91.3		%		50-140	31-JUL-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3236429							
WG2140435-4	DUP	WG2140435-3						
Zinc (Zn)-Total		<1.0	<1.0	RPD-NA	mg/L	N/A	30	31-JUL-15
WG2140435-2	LCS							
Zinc (Zn)-Total			105.7		%		70-130	31-JUL-15
WG2140435-1	MB							
Zinc (Zn)-Total			<1.0		mg/L		1	31-JUL-15
WG2140435-5	MS	WG2140435-3						
Zinc (Zn)-Total			91.3		%		70-130	31-JUL-15
MET-TCLP-WT		Waste						
Batch	R3236429							
WG2140435-4	DUP	WG2140435-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	31-JUL-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	31-JUL-15
Boron (B)		3.3	3.3		mg/L	2.0	40	31-JUL-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	31-JUL-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	31-JUL-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	31-JUL-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	31-JUL-15



Quality Control Report

Workorder: L1648595

Report Date: 04-AUG-15

Page 2 of 3

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3236429							
WG2140435-4	DUP	WG2140435-3						
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	31-JUL-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	31-JUL-15
WG2140435-2	LCS							
Silver (Ag)			110.3		%		70-130	31-JUL-15
Arsenic (As)			108.4		%		70-130	31-JUL-15
Boron (B)			103.6		%		70-130	31-JUL-15
Barium (Ba)			107.8		%		70-130	31-JUL-15
Cadmium (Cd)			110.6		%		70-130	31-JUL-15
Chromium (Cr)			108.7		%		70-130	31-JUL-15
Lead (Pb)			108.6		%		70-130	31-JUL-15
Selenium (Se)			111.0		%		70-130	31-JUL-15
Uranium (U)			106.4		%		70-130	31-JUL-15
WG2140435-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	31-JUL-15
Arsenic (As)			<0.050		mg/L		0.05	31-JUL-15
Boron (B)			<2.5		mg/L		2.5	31-JUL-15
Barium (Ba)			<0.50		mg/L		0.5	31-JUL-15
Cadmium (Cd)			<0.0050		mg/L		0.005	31-JUL-15
Chromium (Cr)			<0.050		mg/L		0.05	31-JUL-15
Lead (Pb)			<0.050		mg/L		0.05	31-JUL-15
Selenium (Se)			<0.25		mg/L		0.25	31-JUL-15
Uranium (U)			<0.25		mg/L		0.25	31-JUL-15
WG2140435-5	MS	WG2140435-3						
Silver (Ag)			85.3		%		50-140	31-JUL-15
Arsenic (As)			95.8		%		50-140	31-JUL-15
Boron (B)			87.5		%		50-140	31-JUL-15
Barium (Ba)			94.1		%		50-140	31-JUL-15
Cadmium (Cd)			96.5		%		50-140	31-JUL-15
Chromium (Cr)			93.1		%		50-140	31-JUL-15
Lead (Pb)			92.5		%		50-140	31-JUL-15
Selenium (Se)			97.9		%		50-140	31-JUL-15
Uranium (U)			94.1		%		50-140	31-JUL-15

Quality Control Report

Workorder: L1648595

Report Date: 04-AUG-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Page 3 of 3

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

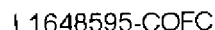
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



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Page 1 of 1

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2025 Release Under E.O. 14176

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1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

Austin Paterson

From: William Bowden <William.Bowden@baffinland.com>
Sent: Tuesday, July 28, 2015 8:03 AM
To: Farhad Khalili; Wayne Smith; Austin Paterson
Cc: Trevor Meyers; Andrew Vermeer
Subject: RE: 15 07 24 ALS MS-ASH-110-119

Hello,

Please have these Ash samples analysed as a composites. The composites are as follows:

Composite 1: MS-ASH-110, MS-ASH-111, MS-ASH-112, MS-ASH-113

Composite 2: MS-ASH-114, MS-ASH-115, MS-ASH-116, MS-ASH-117

Composite 3: MS-ASH-118, MS-ASH-119

Please let me know if you have any questions.

Thanks,
Bill



William Bowden | Environmental Coordinator

2275 Upper Middle Road East, Suite 300, Oakville, ON, Canada, L6H 0C3
T: +1.416-364.8820 x6039
www.baffinland.com

L1648595-COFC



From: Farhad Khalili [<mailto:Farhad.Khalili@ALSGlobal.com>]
Sent: July 28, 2015 7:36 AM
To: William Bowden; Wayne Smith; Austin Paterson
Subject: 15 07 24 ALS MS-ASH-110-119

Hello Bill,

As per our discussion this morning, we will hold the analysis for these samples until you provide us with instruction.

Regards,

Farhad Khalili B.Sc., MASC.

Mine Site Lab Manager – Baffinland
ALS Minerals Division | Geochemistry



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 18-AUG-15
Report Date: 24-AUG-15 11:28 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: L1658983
Project P.O. #: 4500007003
Job Reference: MINE SITE
C of C Numbers:
Legal Site Desc:



Austin Paterson
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Qualifiers for Sample Submission Listed:

Qualifier	Description
CINT	Cooling initiated. Samples were received packed with ice or ice packs and were sampled the same day as received.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1658983

Report Date: 24-AUG-15

Page 1 of 3

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3249515							
WG2152637-3	DUP	L1659541-4						
% Moisture		31.3	31.5		%	0.8	20	20-AUG-15
WG2152637-2	LCS							
% Moisture			98.4		%		90-110	20-AUG-15
WG2152637-1	MB							
% Moisture			<0.10		%		0.1	20-AUG-15
HG-TCLP-WT		Waste						
Batch	R3250978							
WG2154396-3	DUP	L1659088-1						
Mercury (Hg)		0.00012	0.00012		mg/L	0.8	50	21-AUG-15
WG2154396-2	LCS							
Mercury (Hg)			99.6		%		70-130	21-AUG-15
WG2154396-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	21-AUG-15
WG2154396-4	MS	L1658525-3						
Mercury (Hg)			90.7		%		50-140	21-AUG-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3250931							
WG2154288-4	DUP	WG2154288-3						
Zinc (Zn)-Total		<1.0	<1.0	RPD-NA	mg/L	N/A	30	21-AUG-15
WG2154288-2	LCS							
Zinc (Zn)-Total			97.1		%		70-130	21-AUG-15
WG2154288-1	MB							
Zinc (Zn)-Total			<1.0		mg/L		1	21-AUG-15
WG2154288-5	MS	WG2154288-3						
Zinc (Zn)-Total			103.1		%		70-130	21-AUG-15
MET-TCLP-WT		Waste						
Batch	R3250931							
WG2154288-4	DUP	WG2154288-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	21-AUG-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	21-AUG-15
Boron (B)		<2.5	<2.5	RPD-NA	mg/L	N/A	40	21-AUG-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	21-AUG-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	21-AUG-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	21-AUG-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	21-AUG-15



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Page 2 of 3

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3250931							
WG2154288-4	DUP	WG2154288-3						
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	21-AUG-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	21-AUG-15
WG2154288-2	LCS							
Silver (Ag)			96.8		%		70-130	21-AUG-15
Arsenic (As)			98.3		%		70-130	21-AUG-15
Boron (B)			93.1		%		70-130	21-AUG-15
Barium (Ba)			99.7		%		70-130	21-AUG-15
Cadmium (Cd)			98.4		%		70-130	21-AUG-15
Chromium (Cr)			98.2		%		70-130	21-AUG-15
Lead (Pb)			96.9		%		70-130	21-AUG-15
Selenium (Se)			95.8		%		70-130	21-AUG-15
Uranium (U)			93.1		%		70-130	21-AUG-15
WG2154288-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	21-AUG-15
Arsenic (As)			<0.050		mg/L		0.05	21-AUG-15
Boron (B)			<2.5		mg/L		2.5	21-AUG-15
Barium (Ba)			<0.50		mg/L		0.5	21-AUG-15
Cadmium (Cd)			<0.0050		mg/L		0.005	21-AUG-15
Chromium (Cr)			<0.050		mg/L		0.05	21-AUG-15
Lead (Pb)			<0.050		mg/L		0.05	21-AUG-15
Selenium (Se)			<0.25		mg/L		0.25	21-AUG-15
Uranium (U)			<0.25		mg/L		0.25	21-AUG-15
WG2154288-5	MS	WG2154288-3						
Silver (Ag)			99.1		%		50-150	21-AUG-15
Arsenic (As)			104.9		%		50-150	21-AUG-15
Boron (B)			104.0		%		50-150	21-AUG-15
Barium (Ba)			106.8		%		50-150	21-AUG-15
Cadmium (Cd)			105.6		%		50-150	21-AUG-15
Chromium (Cr)			104.3		%		50-150	21-AUG-15
Lead (Pb)			102.4		%		50-150	21-AUG-15
Selenium (Se)			105.2		%		50-150	21-AUG-15
Uranium (U)			102.8		%		50-150	21-AUG-15

Quality Control Report

Workorder: L1658983

Report Date: 24-AUG-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Page 3 of 3

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



Canada Toll Free: 1 800 668 9878



COC Number: 14 -

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REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY

YELLOW - CLIENT COPY

NA-414 0126a 001 HSTSD January 30

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 17-DEC-15
Report Date: 22-DEC-15 09:07 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: L1716253
Project P.O. #: 4500007003
Job Reference: MINE SITE - ASH
C of C Numbers:
Legal Site Desc:

Austin Paterson
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1716253-1	MS-ASH-129							
Sampled By:	BILL BOWDEN on 16-DEC-15 @ 17:00							
Matrix:	SOIL							
Sample Preparation								
Initial pH		11.44		0.10	pH units	18-DEC-15	18-DEC-15	R3340975
Final pH		6.23		0.10	pH units	18-DEC-15	18-DEC-15	R3340975
Physical Tests								
% Moisture		1.75		0.10	%	18-DEC-15	19-DEC-15	R3340400
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		21-DEC-15	R3342902
Barium (Ba)		<0.50		0.50	mg/L		21-DEC-15	R3342902
Boron (B)		4.4		2.5	mg/L		21-DEC-15	R3342902
Cadmium (Cd)		0.0099		0.0050	mg/L		21-DEC-15	R3342902
Chromium (Cr)		<0.050		0.050	mg/L		21-DEC-15	R3342902
Lead (Pb)		<0.050		0.050	mg/L		21-DEC-15	R3342902
Mercury (Hg)		<0.00010		0.00010	mg/L		21-DEC-15	R3341684
Selenium (Se)		<0.25		0.25	mg/L		21-DEC-15	R3342902
Silver (Ag)		<0.0050		0.0050	mg/L		21-DEC-15	R3342902
Uranium (U)		<0.25		0.25	mg/L		21-DEC-15	R3342902
Zinc (Zn)-Total		4.9		1.0	mg/L		21-DEC-15	R3342902

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1716253

Report Date: 22-DEC-15

Page 1 of 3

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3340400							
WG2235040-3	DUP	L1715608-25						
% Moisture		18.3	17.6		%	3.6	20	19-DEC-15
WG2235040-2	LCS							
% Moisture			101.4		%		90-110	19-DEC-15
WG2235040-1	MB							
% Moisture			<0.10		%		0.1	19-DEC-15
HG-TCLP-WT		Waste						
Batch	R3341684							
WG2235833-3	DUP	L1715690-4						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	50	21-DEC-15
WG2235833-2	LCS							
Mercury (Hg)			93.3		%		70-130	21-DEC-15
WG2235833-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	21-DEC-15
WG2235833-4	MS	L1715690-4						
Mercury (Hg)			89.0		%		50-140	21-DEC-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3342902							
WG2235819-4	DUP	WG2235819-3						
Zinc (Zn)-Total		<1.0	<1.0	RPD-NA	mg/L	N/A	30	21-DEC-15
WG2235819-2	LCS							
Zinc (Zn)-Total			87.3		%		70-130	21-DEC-15
WG2235819-1	MB							
Zinc (Zn)-Total			<1.0		mg/L		1	21-DEC-15
WG2235819-5	MS	WG2235819-3						
Zinc (Zn)-Total			100.9		%		70-130	21-DEC-15
MET-TCLP-WT		Waste						
Batch	R3342902							
WG2235819-4	DUP	WG2235819-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	21-DEC-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	21-DEC-15
Boron (B)		<2.5	<2.5	RPD-NA	mg/L	N/A	40	21-DEC-15
Barium (Ba)		<0.50	0.51	RPD-NA	mg/L	N/A	40	21-DEC-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	21-DEC-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	21-DEC-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	21-DEC-15



Quality Control Report

Workorder: L1716253

Report Date: 22-DEC-15

Page 2 of 3

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3342902							
WG2235819-4	DUP	WG2235819-3						
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	21-DEC-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	21-DEC-15
WG2235819-2	LCS							
Silver (Ag)			88.1		%		70-130	21-DEC-15
Arsenic (As)			91.8		%		70-130	21-DEC-15
Boron (B)			91.1		%		70-130	21-DEC-15
Barium (Ba)			90.4		%		70-130	21-DEC-15
Cadmium (Cd)			91.1		%		70-130	21-DEC-15
Chromium (Cr)			96.2		%		70-130	21-DEC-15
Lead (Pb)			98.9		%		70-130	21-DEC-15
Selenium (Se)			91.7		%		70-130	21-DEC-15
Uranium (U)			100.7		%		70-130	21-DEC-15
WG2235819-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	21-DEC-15
Arsenic (As)			<0.050		mg/L		0.05	21-DEC-15
Boron (B)			<2.5		mg/L		2.5	21-DEC-15
Barium (Ba)			<0.50		mg/L		0.5	21-DEC-15
Cadmium (Cd)			<0.0050		mg/L		0.005	21-DEC-15
Chromium (Cr)			<0.050		mg/L		0.05	21-DEC-15
Lead (Pb)			<0.050		mg/L		0.05	21-DEC-15
Selenium (Se)			<0.25		mg/L		0.25	21-DEC-15
Uranium (U)			<0.25		mg/L		0.25	21-DEC-15
WG2235819-5	MS	WG2235819-3						
Silver (Ag)			114.7		%		50-150	21-DEC-15
Arsenic (As)			103.6		%		50-150	21-DEC-15
Boron (B)			100.0		%		50-150	21-DEC-15
Barium (Ba)			108.5		%		50-150	21-DEC-15
Cadmium (Cd)			100.8		%		50-150	21-DEC-15
Chromium (Cr)			102.2		%		50-150	21-DEC-15
Lead (Pb)			107.2		%		50-150	21-DEC-15
Selenium (Se)			105.9		%		50-150	21-DEC-15
Uranium (U)			108.8		%		50-150	21-DEC-15

Quality Control Report

Workorder: L1716253

Report Date: 22-DEC-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Page 3 of 3

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

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Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



Page 1 of 1

NA-FRM-0128a v09 Form/Ed. January 2011

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1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 22-JAN-15
Report Date: 05-FEB-15 13:41 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: **L1571629**

Project P.O. #: 4500005452

Job Reference:

C of C Numbers:

Legal Site Desc:

Comments: ADDITIONAL 04-FEB-15 10:16

Austin Paterson
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1571629-1 MP-ASH-42 Sampled By: BILL BOWDEN on 20-JAN-15 @ 14:00 Matrix: ASH								
Sample Preparation								
Initial pH		11.93	LTIS	0.10	pH units	30-JAN-15	30-JAN-15	R3142250
Final pH		12.34	LTIS	0.10	pH units	30-JAN-15	30-JAN-15	R3142250
Physical Tests								
% Moisture		<0.10		0.10	%	29-JAN-15	29-JAN-15	R3140713
TCLP Metals								
Arsenic (As)		<0.050	LTIS	0.050	mg/L		02-FEB-15	R3142117
Barium (Ba)		1.63	LTIS	0.50	mg/L		02-FEB-15	R3142117
Boron (B)		<2.5	LTIS	2.5	mg/L		02-FEB-15	R3142117
Cadmium (Cd)		<0.0050	LTIS	0.0050	mg/L		02-FEB-15	R3142117
Chromium (Cr)		0.545	LTIS	0.050	mg/L		02-FEB-15	R3142117
Lead (Pb)		<0.050	LTIS	0.050	mg/L		02-FEB-15	R3142117
Mercury (Hg)		<0.00010		0.00010	mg/L	03-FEB-15	03-FEB-15	R3142621
Selenium (Se)		<0.25	LTIS	0.25	mg/L		02-FEB-15	R3142117
Silver (Ag)		<0.0050	LTIS	0.0050	mg/L		02-FEB-15	R3142117
Uranium (U)		<0.25	LTIS	0.25	mg/L		02-FEB-15	R3142117
Zinc (Zn)-Total		<0.15		0.15	mg/L		02-FEB-15	R3142117
L1571629-2 MP-ASH-43 Sampled By: BILL BOWDEN on 20-JAN-15 @ 14:00 Matrix: ASH								
Sample Preparation								
Initial pH		12.07		0.10	pH units	30-JAN-15	30-JAN-15	R3142250
Final pH		12.07		0.10	pH units	30-JAN-15	30-JAN-15	R3142250
Physical Tests								
% Moisture		<0.10		0.10	%	29-JAN-15	29-JAN-15	R3140713
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		02-FEB-15	R3142117
Barium (Ba)		0.93		0.50	mg/L		02-FEB-15	R3142117
Boron (B)		<2.5		2.5	mg/L		02-FEB-15	R3142117
Cadmium (Cd)		<0.0050		0.0050	mg/L		02-FEB-15	R3142117
Chromium (Cr)		0.672		0.050	mg/L		02-FEB-15	R3142117
Lead (Pb)		<0.050		0.050	mg/L		02-FEB-15	R3142117
Mercury (Hg)		<0.00010		0.00010	mg/L	03-FEB-15	03-FEB-15	R3142621
Selenium (Se)		<0.25		0.25	mg/L		02-FEB-15	R3142117
Silver (Ag)		<0.0050		0.0050	mg/L		02-FEB-15	R3142117
Uranium (U)		<0.25		0.25	mg/L		02-FEB-15	R3142117
Zinc (Zn)-Total		<0.15		0.15	mg/L		02-FEB-15	R3142117

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Boron (B)	MS-B	L1571629-1, -2

Sample Parameter Qualifier key listed:

Qualifier	Description
LTIS	Limited sample was available for TCLP inorganics and semi-volatiles extraction (< 100 grams). Extraction fluid volume and/or other elements of the TCLP method were scaled down proportionately to permit analysis. Test results from modified TCLP procedures may be unsuitable for regulatory purposes.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1571629

Report Date: 05-FEB-15

Page 1 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3140713							
WG2033502-3	DUP	L1572152-8						
% Moisture		11.2	11.7		%	4.3	30	29-JAN-15
WG2033502-2	LCS							
% Moisture			107.0		%		70-130	29-JAN-15
WG2033502-1	MB							
% Moisture			<0.10		%		0.1	29-JAN-15
HG-TCLP-WT		Waste						
Batch	R3142621							
WG2035651-8	DUP	WG2035651-7						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	03-FEB-15
WG2035651-6	LCS							
Mercury (Hg)			108.0		%		70-130	03-FEB-15
WG2035651-5	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	03-FEB-15
WG2035651-10	MS	WG2035651-9						
Mercury (Hg)			108.0		%		70-130	03-FEB-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3142117							
WG2035108-6	CVS							
Zinc (Zn)-Total			96.1		%		70-130	02-FEB-15
WG2035108-4	DUP	WG2035108-3						
Zinc (Zn)-Total		8.86	8.72		mg/L	1.5	30	02-FEB-15
WG2035108-2	LCS							
Zinc (Zn)-Total			99.98		%		70-130	02-FEB-15
WG2035108-5	MS	WG2035108-3						
Zinc (Zn)-Total			103.3		%		70-130	02-FEB-15
MET-TCLP-WT		Waste						
Batch	R3142117							
WG2035108-6	CVS							
Silver (Ag)			102.5		%		70-130	02-FEB-15
Arsenic (As)			101.0		%		70-130	02-FEB-15
Boron (B)			114.1		%		70-130	02-FEB-15
Barium (Ba)			104.7		%		70-130	02-FEB-15
Cadmium (Cd)			105.1		%		70-130	02-FEB-15
Chromium (Cr)			100.0		%		70-130	02-FEB-15
Lead (Pb)			100.4		%		70-130	02-FEB-15
Selenium (Se)			100.4				70-130	

Quality Control Report

Workorder: L1571629

Report Date: 05-FEB-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3142117							
WG2035108-6	CVS							
Selenium (Se)			100.4		%		70-130	02-FEB-15
Uranium (U)			96.8		%		70-130	02-FEB-15
WG2035108-4	DUP	WG2035108-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	02-FEB-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	02-FEB-15
Boron (B)		12.6	12.3		mg/L	2.9	40	02-FEB-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	02-FEB-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	02-FEB-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	02-FEB-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	02-FEB-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	02-FEB-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	02-FEB-15
WG2035108-2	LCS							
Silver (Ag)			103.3		%		70-130	02-FEB-15
Arsenic (As)			99.3		%		70-130	02-FEB-15
Boron (B)			101.3		%		70-130	02-FEB-15
Barium (Ba)			95.7		%		70-130	02-FEB-15
Cadmium (Cd)			95.9		%		70-130	02-FEB-15
Chromium (Cr)			95.3		%		70-130	02-FEB-15
Lead (Pb)			93.0		%		70-130	02-FEB-15
Selenium (Se)			99.2		%		70-130	02-FEB-15
Uranium (U)			92.7		%		70-130	02-FEB-15
WG2035108-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	02-FEB-15
Arsenic (As)			<0.050		mg/L		0.05	02-FEB-15
Boron (B)			<2.5		mg/L		2.5	02-FEB-15
Barium (Ba)			<0.50		mg/L		0.5	02-FEB-15
Cadmium (Cd)			<0.0050		mg/L		0.005	02-FEB-15
Chromium (Cr)			<0.050		mg/L		0.05	02-FEB-15
Lead (Pb)			<0.050		mg/L		0.05	02-FEB-15
Selenium (Se)			<0.25		mg/L		0.25	02-FEB-15
Uranium (U)			<0.25		mg/L		0.25	02-FEB-15
WG2035108-5	MS	WG2035108-3						
Silver (Ag)			87.3		%		50-140	02-FEB-15



Quality Control Report

Workorder: L1571629

Report Date: 05-FEB-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT	Waste							
Batch	R3142117							
WG2035108-5	MS	WG2035108-3						
Arsenic (As)			101.7		%		50-140	02-FEB-15
Boron (B)			N/A	MS-B	%		-	02-FEB-15
Barium (Ba)			104.9		%		50-140	02-FEB-15
Cadmium (Cd)			95.9		%		50-140	02-FEB-15
Chromium (Cr)			97.4		%		50-140	02-FEB-15
Lead (Pb)			91.0		%		50-140	02-FEB-15
Selenium (Se)			99.0		%		50-140	02-FEB-15
Uranium (U)			89.0		%		50-140	02-FEB-15

Quality Control Report

Workorder: L1571629

Report Date: 05-FEB-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

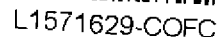
The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



Canada Toll Free: 1 800 668 9878

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COC Number: 14 -

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REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY

YELLOW - CLIENT COPY

NA-BM-0325a v09 Enroll/Id January 2011

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 06-FEB-15
Report Date: 13-FEB-15 09:35 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: **L1575326**
Project P.O. #: 4500005452
Job Reference: MINE SITE
C of C Numbers:
Legal Site Desc:

Austin Paterson
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1575326-1 MP-ASH-025 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE								
Sample Preparation								
Initial pH		11.44		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Final pH		9.52		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Physical Tests								
% Moisture		0.16		0.10	%	06-FEB-15	07-FEB-15	R3144587
TCLP Metals								
Arsenic (As)		0.169		0.050	mg/L		09-FEB-15	R3145115
Barium (Ba)		1.05		0.50	mg/L		09-FEB-15	R3145115
Boron (B)		6.6		2.5	mg/L		09-FEB-15	R3145115
Cadmium (Cd)		<0.0050		0.0050	mg/L		09-FEB-15	R3145115
Chromium (Cr)		0.804		0.050	mg/L		09-FEB-15	R3145115
Lead (Pb)		<0.050		0.050	mg/L		09-FEB-15	R3145115
Mercury (Hg)		<0.00010		0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
Selenium (Se)		<0.25		0.25	mg/L		09-FEB-15	R3145115
Silver (Ag)		<0.0050		0.0050	mg/L		09-FEB-15	R3145115
Uranium (U)		<0.25		0.25	mg/L		09-FEB-15	R3145115
Zinc (Zn)-Total		<0.15		0.15	mg/L		09-FEB-15	R3145115
L1575326-2 MP-ASH-026 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE								
Sample Preparation								
Initial pH		11.72		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Final pH		12.51		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Physical Tests								
% Moisture		<0.10		0.10	%	06-FEB-15	07-FEB-15	R3144587
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		09-FEB-15	R3145115
Barium (Ba)		1.74		0.50	mg/L		09-FEB-15	R3145115
Boron (B)		<2.5		2.5	mg/L		09-FEB-15	R3145115
Cadmium (Cd)		<0.0050		0.0050	mg/L		09-FEB-15	R3145115
Chromium (Cr)		1.55		0.050	mg/L		09-FEB-15	R3145115
Lead (Pb)		<0.050		0.050	mg/L		09-FEB-15	R3145115
Mercury (Hg)		<0.00010		0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
Selenium (Se)		<0.25		0.25	mg/L		09-FEB-15	R3145115
Silver (Ag)		<0.0050		0.0050	mg/L		09-FEB-15	R3145115
Uranium (U)		<0.25		0.25	mg/L		09-FEB-15	R3145115
Zinc (Zn)-Total		0.40		0.15	mg/L		09-FEB-15	R3145115
L1575326-3 MP-ASH-027 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE								
Sample Preparation								
Initial pH		12.21		0.10	pH units	09-FEB-15	09-FEB-15	R3145779
Final pH		11.50		0.10	pH units	09-FEB-15	09-FEB-15	R3145779
Physical Tests								

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1575326-3 MP-ASH-027 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE								
Physical Tests								
% Moisture		0.63		0.10	%	06-FEB-15	07-FEB-15	R3144583
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		11-FEB-15	R3146484
Barium (Ba)		<0.50		0.50	mg/L		11-FEB-15	R3146484
Boron (B)		<2.5		2.5	mg/L		11-FEB-15	R3146484
Cadmium (Cd)		<0.0050		0.0050	mg/L		11-FEB-15	R3146484
Chromium (Cr)		0.817		0.050	mg/L		11-FEB-15	R3146484
Lead (Pb)		<0.050		0.050	mg/L		11-FEB-15	R3146484
Mercury (Hg)		<0.00010		0.00010	mg/L	11-FEB-15	11-FEB-15	R3146154
Selenium (Se)		<0.25		0.25	mg/L		11-FEB-15	R3146484
Silver (Ag)		<0.0050		0.0050	mg/L		11-FEB-15	R3146484
Uranium (U)		<0.25		0.25	mg/L		11-FEB-15	R3146484
Zinc (Zn)-Total		<0.15		0.15	mg/L		11-FEB-15	R3146484
L1575326-4 MP-ASH-030 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE								
Sample Preparation								
Initial pH		11.83		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Final pH		12.11		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Physical Tests								
% Moisture		0.16		0.10	%	06-FEB-15	07-FEB-15	R3144587
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		09-FEB-15	R3145115
Barium (Ba)		0.50		0.50	mg/L		09-FEB-15	R3145115
Boron (B)		2.6		2.5	mg/L		09-FEB-15	R3145115
Cadmium (Cd)		<0.0050		0.0050	mg/L		09-FEB-15	R3145115
Chromium (Cr)		2.66		0.050	mg/L		09-FEB-15	R3145115
Lead (Pb)		<0.050		0.050	mg/L		09-FEB-15	R3145115
Mercury (Hg)		<0.00010		0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
Selenium (Se)		<0.25		0.25	mg/L		09-FEB-15	R3145115
Silver (Ag)		<0.0050		0.0050	mg/L		09-FEB-15	R3145115
Uranium (U)		<0.25		0.25	mg/L		09-FEB-15	R3145115
Zinc (Zn)-Total		0.56		0.15	mg/L		09-FEB-15	R3145115
L1575326-5 MP-ASH-031 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE								
Sample Preparation								
Initial pH		11.54		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Final pH		8.92		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
Physical Tests								
% Moisture		0.23		0.10	%	06-FEB-15	07-FEB-15	R3144587
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		09-FEB-15	R3145115

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1575326-5 MP-ASH-031 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE TCLP Metals								
	Barium (Ba)	<0.50		0.50	mg/L		09-FEB-15	R3145115
	Boron (B)	5.7		2.5	mg/L		09-FEB-15	R3145115
	Cadmium (Cd)	<0.0050		0.0050	mg/L		09-FEB-15	R3145115
	Chromium (Cr)	0.063		0.050	mg/L		09-FEB-15	R3145115
	Lead (Pb)	<0.050		0.050	mg/L		09-FEB-15	R3145115
	Mercury (Hg)	<0.00010		0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
	Selenium (Se)	<0.25		0.25	mg/L		09-FEB-15	R3145115
	Silver (Ag)	<0.0050		0.0050	mg/L		09-FEB-15	R3145115
	Uranium (U)	<0.25		0.25	mg/L		09-FEB-15	R3145115
	Zinc (Zn)-Total	<0.15		0.15	mg/L		09-FEB-15	R3145115
L1575326-6 MP-ASH-034 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE Sample Preparation								
	Initial pH	11.67		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
	Final pH	12.47		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
	Physical Tests							
	% Moisture	<0.10		0.10	%	06-FEB-15	07-FEB-15	R3144587
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		09-FEB-15	R3145115
	Barium (Ba)	1.76		0.50	mg/L		09-FEB-15	R3145115
	Boron (B)	4.5		2.5	mg/L		09-FEB-15	R3145115
	Cadmium (Cd)	<0.0050		0.0050	mg/L		09-FEB-15	R3145115
	Chromium (Cr)	1.46		0.050	mg/L		09-FEB-15	R3145115
	Lead (Pb)	<0.050		0.050	mg/L		09-FEB-15	R3145115
	Mercury (Hg)	<0.00010		0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
	Selenium (Se)	<0.25		0.25	mg/L		09-FEB-15	R3145115
	Silver (Ag)	<0.0050		0.0050	mg/L		09-FEB-15	R3145115
	Uranium (U)	<0.25		0.25	mg/L		09-FEB-15	R3145115
	Zinc (Zn)-Total	<0.15		0.15	mg/L		09-FEB-15	R3145115
L1575326-7 MP-ASH-035 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE Sample Preparation								
	Initial pH	11.39		0.10	pH units	09-FEB-15	09-FEB-15	R3145779
	Final pH	11.13		0.10	pH units	09-FEB-15	09-FEB-15	R3145779
	Physical Tests							
	% Moisture	0.53		0.10	%	06-FEB-15	07-FEB-15	R3144583
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		11-FEB-15	R3146484
	Barium (Ba)	<0.50		0.50	mg/L		11-FEB-15	R3146484
	Boron (B)	10.6		2.5	mg/L		11-FEB-15	R3146484
	Cadmium (Cd)	<0.0050		0.0050	mg/L		11-FEB-15	R3146484

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1575326-7 MP-ASH-035 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE TCLP Metals Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		0.905		0.050	mg/L		11-FEB-15	R3146484
		<0.050		0.050	mg/L		11-FEB-15	R3146484
		<0.00010		0.00010	mg/L	11-FEB-15	11-FEB-15	R3146154
		<0.25		0.25	mg/L		11-FEB-15	R3146484
		<0.0050		0.0050	mg/L		11-FEB-15	R3146484
		<0.25		0.25	mg/L		11-FEB-15	R3146484
		<0.15		0.15	mg/L		11-FEB-15	R3146484
L1575326-8 MP-ASH-036 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.78		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
		11.48		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
		<0.10		0.10	%	06-FEB-15	07-FEB-15	R3144587
		<0.050		0.050	mg/L		09-FEB-15	R3145115
		0.71		0.50	mg/L		09-FEB-15	R3145115
		<2.5		2.5	mg/L		09-FEB-15	R3145115
		<0.0050		0.0050	mg/L		09-FEB-15	R3145115
		2.26		0.050	mg/L		09-FEB-15	R3145115
		<0.050		0.050	mg/L		09-FEB-15	R3145115
		<0.00010		0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
		<0.25		0.25	mg/L		09-FEB-15	R3145115
		<0.0050		0.0050	mg/L		09-FEB-15	R3145115
		<0.25		0.25	mg/L		09-FEB-15	R3145115
		<0.15		0.15	mg/L		09-FEB-15	R3145115
L1575326-9 MP-ASH-037 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg)								
		11.33		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
		6.54		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
		9.06		0.10	%	06-FEB-15	07-FEB-15	R3144587
		0.055		0.050	mg/L		09-FEB-15	R3145115
		<0.50		0.50	mg/L		09-FEB-15	R3145115
		4.9		2.5	mg/L		09-FEB-15	R3145115
		<0.0050		0.0050	mg/L		09-FEB-15	R3145115
		<0.050		0.050	mg/L		09-FEB-15	R3145115
		<0.050		0.050	mg/L		09-FEB-15	R3145115
		<0.00010		0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1575326-9 MP-ASH-037 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE TCLP Metals	Selenium (Se)	<0.25		0.25	mg/L		09-FEB-15	R3145115
	Silver (Ag)	<0.0050		0.0050	mg/L		09-FEB-15	R3145115
	Uranium (U)	<0.25		0.25	mg/L		09-FEB-15	R3145115
	Zinc (Zn)-Total	1.09		0.15	mg/L		09-FEB-15	R3145115
L1575326-10 MP-ASH-038 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE Sample Preparation	Initial pH	11.62		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
	Final pH	12.35		0.10	pH units	08-FEB-15	08-FEB-15	R3145014
	Physical Tests							
	% Moisture	<0.10		0.10	%	06-FEB-15	07-FEB-15	R3144587
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		09-FEB-15	R3145115
	Barium (Ba)	1.17		0.50	mg/L		09-FEB-15	R3145115
	Boron (B)	<2.5		2.5	mg/L		09-FEB-15	R3145115
	Cadmium (Cd)	0.0100		0.0050	mg/L		09-FEB-15	R3145115
	Chromium (Cr)	1.47		0.050	mg/L		09-FEB-15	R3145115
	Lead (Pb)	<0.050		0.050	mg/L		09-FEB-15	R3145115
	Mercury (Hg)	<0.00010		0.00010	mg/L	09-FEB-15	09-FEB-15	R3145084
	Selenium (Se)	<0.25		0.25	mg/L		09-FEB-15	R3145115
	Silver (Ag)	<0.0050		0.0050	mg/L		09-FEB-15	R3145115
	Uranium (U)	<0.25		0.25	mg/L		09-FEB-15	R3145115
	Zinc (Zn)-Total	<0.15		0.15	mg/L		09-FEB-15	R3145115
L1575326-11 MP-ASH-039 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE Sample Preparation	Initial pH	11.63		0.10	pH units	09-FEB-15	09-FEB-15	R3145779
	Final pH	12.06		0.10	pH units	09-FEB-15	09-FEB-15	R3145779
	Physical Tests							
	% Moisture	<0.10		0.10	%	06-FEB-15	07-FEB-15	R3144587
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		11-FEB-15	R3146484
	Barium (Ba)	1.18		0.50	mg/L		11-FEB-15	R3146484
	Boron (B)	<2.5		2.5	mg/L		11-FEB-15	R3146484
	Cadmium (Cd)	<0.0050		0.0050	mg/L		11-FEB-15	R3146484
	Chromium (Cr)	2.41		0.050	mg/L		11-FEB-15	R3146484
	Lead (Pb)	<0.050		0.050	mg/L		11-FEB-15	R3146484
	Mercury (Hg)	<0.00010		0.00010	mg/L	11-FEB-15	11-FEB-15	R3146154
	Selenium (Se)	<0.25		0.25	mg/L		11-FEB-15	R3146484
	Silver (Ag)	<0.0050		0.0050	mg/L		11-FEB-15	R3146484
	Uranium (U)	<0.25		0.25	mg/L		11-FEB-15	R3146484

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1575326-11 MP-ASH-039 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE TCLP Metals Zinc (Zn)-Total		<0.15		0.15	mg/L		11-FEB-15	R3146484
L1575326-12 MP-ASH-040 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total		11.66 11.10 <0.10 <0.050 <0.50 <2.5 <0.0050 1.10 <0.050 <0.00010 <0.25 <0.0050 <0.25 <0.15		0.10 0.10 0.10 0.050 0.50 2.5 0.0050 0.050 0.050 0.00010 0.25 0.0050 0.25 0.15	pH units pH units % mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	09-FEB-15 09-FEB-15 06-FEB-15 11-FEB-15 11-FEB-15	09-FEB-15 09-FEB-15 07-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15	R3145779 R3145779 R3144587 R3146484 R3146484 R3146484 R3146484 R3146484 R3146484 R3146154 R3146484 R3146484 R3146484 R3146484 R3146484
L1575326-13 MP-ASH-041 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total		11.67 12.41 <0.10 <0.050 0.81 <2.5 <0.0050 3.06 <0.050 <0.00010 <0.25 <0.0050 <0.25 <0.15		0.10 0.10 0.10 0.050 0.50 2.5 0.0050 0.050 0.050 0.00010 0.25 0.0050 0.25 0.15	pH units pH units % mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	09-FEB-15 09-FEB-15 06-FEB-15 11-FEB-15 11-FEB-15	09-FEB-15 09-FEB-15 07-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15 11-FEB-15	R3145779 R3145779 R3144587 R3146484 R3146484 R3146484 R3146484 R3146484 R3146484 R3146154 R3146484 R3146484 R3146484 R3146484
L1575326-14 MP-ASH-044 Sampled By: I.K. on 03-FEB-15 @ 12:00								

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch	
L1575326-14 MP-ASH-044 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total									
		11.89		0.10	pH units	09-FEB-15	09-FEB-15	R3145779	
		12.41		0.10	pH units	09-FEB-15	09-FEB-15	R3145779	
		<0.10		0.10	%	06-FEB-15	07-FEB-15	R3144587	
		<0.050		0.050	mg/L		11-FEB-15	R3146484	
		1.75		0.50	mg/L		11-FEB-15	R3146484	
		<2.5		2.5	mg/L		11-FEB-15	R3146484	
		<0.0050		0.0050	mg/L		11-FEB-15	R3146484	
		0.253		0.050	mg/L		11-FEB-15	R3146484	
		<0.050		0.050	mg/L		11-FEB-15	R3146484	
		<0.00010		0.00010	mg/L	11-FEB-15	11-FEB-15	R3146154	
		<0.25		0.25	mg/L		11-FEB-15	R3146484	
		<0.0050		0.0050	mg/L		11-FEB-15	R3146484	
		<0.25		0.25	mg/L		11-FEB-15	R3146484	
		<0.15		0.15	mg/L		11-FEB-15	R3146484	
	L1575326-15 MP-ASH-045 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
			11.79		0.10	pH units	09-FEB-15	09-FEB-15	R3145779
		12.37		0.10	pH units	09-FEB-15	09-FEB-15	R3145779	
		<0.10		0.10	%	06-FEB-15	07-FEB-15	R3144587	
		<0.050		0.050	mg/L		11-FEB-15	R3146484	
		1.78		0.50	mg/L		11-FEB-15	R3146484	
		<2.5		2.5	mg/L		11-FEB-15	R3146484	
		<0.0050		0.0050	mg/L		11-FEB-15	R3146484	
		0.093		0.050	mg/L		11-FEB-15	R3146484	
		<0.050		0.050	mg/L		11-FEB-15	R3146484	
		<0.00010		0.00010	mg/L	11-FEB-15	11-FEB-15	R3146154	
		<0.25		0.25	mg/L		11-FEB-15	R3146484	
		<0.0050		0.0050	mg/L		11-FEB-15	R3146484	
		<0.25		0.25	mg/L		11-FEB-15	R3146484	
		<0.15		0.15	mg/L		11-FEB-15	R3146484	
L1575326-16 MP-ASH-046 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE Sample Preparation Initial pH Final pH Physical Tests									
			11.75		0.10	pH units	09-FEB-15	09-FEB-15	R3145779
		6.38		0.10	pH units	09-FEB-15	09-FEB-15	R3145779	

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1575326-16	MP-ASH-046							
Sampled By:	I.K. on 03-FEB-15 @ 12:00							
Matrix:	WASTE							
Physical Tests								
% Moisture		0.54		0.10	%	06-FEB-15	07-FEB-15	R3144587
TCLP Metals								
Arsenic (As)		0.109		0.050	mg/L		11-FEB-15	R3146484
Barium (Ba)		<0.50		0.50	mg/L		11-FEB-15	R3146484
Boron (B)		4.6		2.5	mg/L		11-FEB-15	R3146484
Cadmium (Cd)		<0.0050		0.0050	mg/L		11-FEB-15	R3146484
Chromium (Cr)		<0.050		0.050	mg/L		11-FEB-15	R3146484
Lead (Pb)		<0.050		0.050	mg/L		11-FEB-15	R3146484
Mercury (Hg)		<0.00010		0.00010	mg/L	11-FEB-15	11-FEB-15	R3146154
Selenium (Se)		<0.25		0.25	mg/L		11-FEB-15	R3146484
Silver (Ag)		<0.0050		0.0050	mg/L		11-FEB-15	R3146484
Uranium (U)		<0.25		0.25	mg/L		11-FEB-15	R3146484
Zinc (Zn)-Total		14.2		0.15	mg/L		11-FEB-15	R3146484
L1575326-17	MP-ASH-047							
Sampled By:	I.K. on 03-FEB-15 @ 12:00							
Matrix:	WASTE							
Sample Preparation								
Initial pH		11.39		0.10	pH units	09-FEB-15	09-FEB-15	R3145779
Final pH		6.67		0.10	pH units	09-FEB-15	09-FEB-15	R3145779
Physical Tests								
% Moisture		2.08		0.10	%	06-FEB-15	07-FEB-15	R3144587
TCLP Metals								
Arsenic (As)		0.051		0.050	mg/L		11-FEB-15	R3146484
Barium (Ba)		<0.50		0.50	mg/L		11-FEB-15	R3146484
Boron (B)		3.9		2.5	mg/L		11-FEB-15	R3146484
Cadmium (Cd)		<0.0050		0.0050	mg/L		11-FEB-15	R3146484
Chromium (Cr)		<0.050		0.050	mg/L		11-FEB-15	R3146484
Lead (Pb)		<0.050		0.050	mg/L		11-FEB-15	R3146484
Mercury (Hg)		<0.00010		0.00010	mg/L	11-FEB-15	11-FEB-15	R3146154
Selenium (Se)		<0.25		0.25	mg/L		11-FEB-15	R3146484
Silver (Ag)		<0.0050		0.0050	mg/L		11-FEB-15	R3146484
Uranium (U)		<0.25		0.25	mg/L		11-FEB-15	R3146484
Zinc (Zn)-Total		0.19		0.15	mg/L		11-FEB-15	R3146484
L1575326-18	MP-ASH-048							
Sampled By:	I.K. on 03-FEB-15 @ 12:00							
Matrix:	WASTE							
Sample Preparation								
Initial pH		11.92		0.10	pH units	09-FEB-15	09-FEB-15	R3145779
Final pH		11.51		0.10	pH units	09-FEB-15	09-FEB-15	R3145779
Physical Tests								
% Moisture		<0.10		0.10	%	06-FEB-15	07-FEB-15	R3144587
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		11-FEB-15	R3146484

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1575326-18 MP-ASH-048 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE								
TCLP Metals								
Barium (Ba)		0.64		0.50	mg/L		11-FEB-15	R3146484
Boron (B)		<2.5		2.5	mg/L		11-FEB-15	R3146484
Cadmium (Cd)		<0.0050		0.0050	mg/L		11-FEB-15	R3146484
Chromium (Cr)		0.147		0.050	mg/L		11-FEB-15	R3146484
Lead (Pb)		<0.050		0.050	mg/L		11-FEB-15	R3146484
Mercury (Hg)		<0.00010		0.00010	mg/L	11-FEB-15	11-FEB-15	R3146154
Selenium (Se)		<0.25		0.25	mg/L		11-FEB-15	R3146484
Silver (Ag)		<0.0050		0.0050	mg/L		11-FEB-15	R3146484
Uranium (U)		<0.25		0.25	mg/L		11-FEB-15	R3146484
Zinc (Zn)-Total		<0.15		0.15	mg/L		11-FEB-15	R3146484
L1575326-19 MP-ASH-049 Sampled By: I.K. on 03-FEB-15 @ 12:00 Matrix: WASTE								
Sample Preparation								
Initial pH		11.47		0.10	pH units	09-FEB-15	09-FEB-15	R3145779
Final pH		10.07		0.10	pH units	09-FEB-15	09-FEB-15	R3145779
Physical Tests								
% Moisture		<0.10		0.10	%	06-FEB-15	07-FEB-15	R3144587
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		11-FEB-15	R3146484
Barium (Ba)		<0.50		0.50	mg/L		11-FEB-15	R3146484
Boron (B)		6.4		2.5	mg/L		11-FEB-15	R3146484
Cadmium (Cd)		<0.0050		0.0050	mg/L		11-FEB-15	R3146484
Chromium (Cr)		1.05		0.050	mg/L		11-FEB-15	R3146484
Lead (Pb)		<0.050		0.050	mg/L		11-FEB-15	R3146484
Mercury (Hg)		<0.00010		0.00010	mg/L	11-FEB-15	11-FEB-15	R3146154
Selenium (Se)		<0.25		0.25	mg/L		11-FEB-15	R3146484
Silver (Ag)		<0.0050		0.0050	mg/L		11-FEB-15	R3146484
Uranium (U)		<0.25		0.25	mg/L		11-FEB-15	R3146484
Zinc (Zn)-Total		<0.15		0.15	mg/L		11-FEB-15	R3146484

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Chromium (Cr)	MS-B	L1575326-11, -12, -13, -14, -15, -16, -17, -18, -19, -3, -7

Qualifiers for Sample Submission Listed:

Qualifier	Description
CINT	Cooling initiated. Samples were received packed with ice or ice packs and were sampled the same day as received.

Sample Parameter Qualifier key listed:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS
Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid weight of sample
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1575326

Report Date: 13-FEB-15

Page 1 of 6

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3144583							
WG2037678-3	DUP	L1575343-2						
% Moisture		12.6	12.9		%	1.8	30	07-FEB-15
WG2037678-2	LCS							
% Moisture			100.1		%		70-130	07-FEB-15
WG2037678-1	MB							
% Moisture			<0.10		%		0.1	07-FEB-15
Batch	R3144587							
WG2037628-3	DUP	L1575326-19						
% Moisture		<0.10	<0.10	RPD-NA	%	N/A	30	07-FEB-15
WG2037628-2	LCS							
% Moisture			103.6		%		70-130	07-FEB-15
WG2037628-1	MB							
% Moisture			<0.10		%		0.1	07-FEB-15
HG-TCLP-WT		Waste						
Batch	R3145084							
WG2038416-3	DUP	L1574236-1						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	09-FEB-15
WG2038416-2	LCS							
Mercury (Hg)			96.5		%		70-130	09-FEB-15
WG2038416-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	09-FEB-15
WG2038416-4	MS	L1575017-1						
Mercury (Hg)			90.3		%		70-130	09-FEB-15
Batch	R3146154							
WG2039425-4	DUP	WG2039425-3						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	11-FEB-15
WG2039425-2	LCS							
Mercury (Hg)			100.0		%		70-130	11-FEB-15
WG2039425-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	11-FEB-15
WG2039425-6	MS	WG2039425-5						
Mercury (Hg)			118.0		%		70-130	11-FEB-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3145115							
WG2038359-6	CVS							
Zinc (Zn)-Total			94.9		%		70-130	09-FEB-15
WG2038359-4	DUP	WG2038359-3						



Quality Control Report

Workorder: L1575326

Report Date: 13-FEB-15

Page 2 of 6

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-EXTRA-WT		Waste						
Batch	R3145115							
WG2038359-4	DUP	WG2038359-3						
Zinc (Zn)-Total		<0.15	<0.15	RPD-NA	mg/L	N/A	30	09-FEB-15
WG2038359-2	LCS							
Zinc (Zn)-Total			95.6		%		70-130	09-FEB-15
WG2038359-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	09-FEB-15
WG2038359-5	MS	WG2038359-3						
Zinc (Zn)-Total			91.2		%		70-130	09-FEB-15
Batch	R3146484							
WG2039352-6	CVS							
Zinc (Zn)-Total			97.7		%		70-130	11-FEB-15
WG2039352-4	DUP	WG2039352-3						
Zinc (Zn)-Total		<0.15	<0.15	RPD-NA	mg/L	N/A	30	11-FEB-15
WG2039352-2	LCS							
Zinc (Zn)-Total			104.3		%		70-130	11-FEB-15
WG2039352-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	11-FEB-15
WG2039352-5	MS	WG2039352-3						
Zinc (Zn)-Total			95.4		%		70-130	11-FEB-15
MET-TCLP-WT		Waste						
Batch	R3145115							
WG2038359-6	CVS							
Silver (Ag)			99.0		%		70-130	09-FEB-15
Arsenic (As)			99.4		%		70-130	09-FEB-15
Boron (B)			94.4		%		70-130	09-FEB-15
Barium (Ba)			96.4		%		70-130	09-FEB-15
Cadmium (Cd)			98.5		%		70-130	09-FEB-15
Chromium (Cr)			98.7		%		70-130	09-FEB-15
Lead (Pb)			98.6		%		70-130	09-FEB-15
Selenium (Se)			100.7		%		70-130	09-FEB-15
Uranium (U)			97.4		%		70-130	09-FEB-15
WG2038359-4	DUP	WG2038359-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	09-FEB-15
Arsenic (As)		0.176	0.182		mg/L	2.9	40	09-FEB-15
Boron (B)		7.1	7.0		mg/L	1.7	40	09-FEB-15
Barium (Ba)		1.14	1.17		mg/L	2.2	40	09-FEB-15



Quality Control Report

Workorder: L1575326

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3145115							
WG2038359-4	DUP	WG2038359-3						
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	09-FEB-15
Chromium (Cr)		0.865	0.874		mg/L	1.0	40	09-FEB-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	09-FEB-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	09-FEB-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	09-FEB-15
WG2038359-2	LCS							
Silver (Ag)			95.0		%		70-130	09-FEB-15
Arsenic (As)			96.9		%		70-130	09-FEB-15
Boron (B)			90.4		%		70-130	09-FEB-15
Barium (Ba)			95.9		%		70-130	09-FEB-15
Cadmium (Cd)			97.3		%		70-130	09-FEB-15
Chromium (Cr)			95.7		%		70-130	09-FEB-15
Lead (Pb)			94.9		%		70-130	09-FEB-15
Selenium (Se)			98.4		%		70-130	09-FEB-15
Uranium (U)			93.7		%		70-130	09-FEB-15
WG2038359-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	09-FEB-15
Arsenic (As)			<0.050		mg/L		0.05	09-FEB-15
Boron (B)			<2.5		mg/L		2.5	09-FEB-15
Barium (Ba)			<0.50		mg/L		0.5	09-FEB-15
Cadmium (Cd)			<0.0050		mg/L		0.005	09-FEB-15
Chromium (Cr)			<0.050		mg/L		0.05	09-FEB-15
Lead (Pb)			<0.050		mg/L		0.05	09-FEB-15
Selenium (Se)			<0.25		mg/L		0.25	09-FEB-15
Uranium (U)			<0.25		mg/L		0.25	09-FEB-15
WG2038359-5	MS	WG2038359-3						
Silver (Ag)			89.0		%		50-140	09-FEB-15
Arsenic (As)			96.2		%		50-140	09-FEB-15
Boron (B)			85.1		%		50-140	09-FEB-15
Barium (Ba)			96.7		%		50-140	09-FEB-15
Cadmium (Cd)			94.8		%		50-140	09-FEB-15
Chromium (Cr)			94.9		%		50-140	09-FEB-15
Lead (Pb)			92.2		%		50-140	09-FEB-15
Selenium (Se)			96.6		%		50-140	09-FEB-15



Quality Control Report

Workorder: L1575326

Report Date: 13-FEB-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3146484							
WG2039352-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	11-FEB-15
Arsenic (As)			<0.050		mg/L		0.05	11-FEB-15
Boron (B)			<2.5		mg/L		2.5	11-FEB-15
Barium (Ba)			<0.50		mg/L		0.5	11-FEB-15
Cadmium (Cd)			<0.0050		mg/L		0.005	11-FEB-15
Chromium (Cr)			<0.050		mg/L		0.05	11-FEB-15
Lead (Pb)			<0.050		mg/L		0.05	11-FEB-15
Selenium (Se)			<0.25		mg/L		0.25	11-FEB-15
Uranium (U)			<0.25		mg/L		0.25	11-FEB-15
WG2039352-5	MS	WG2039352-3						
Silver (Ag)			88.4		%		50-140	11-FEB-15
Arsenic (As)			99.4		%		50-140	11-FEB-15
Boron (B)			118.5		%		50-140	11-FEB-15
Barium (Ba)			95.1		%		50-140	11-FEB-15
Cadmium (Cd)			96.4		%		50-140	11-FEB-15
Chromium (Cr)			N/A	MS-B	%		-	11-FEB-15
Lead (Pb)			93.9		%		50-140	11-FEB-15
Selenium (Se)			100.5		%		50-140	11-FEB-15
Uranium (U)			95.0		%		50-140	11-FEB-15

Quality Control Report

Workorder: L1575326

Report Date: 13-FEB-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

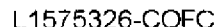
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



Canada Toll Free: 1 800 668 9878



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1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

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L1575326-COFC

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Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

NA-FM-0326-008 Edition 1 January 2011



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 13-FEB-15
Report Date: 19-FEB-15 10:35 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: **L1577534**
Project P.O. #: 4500005452
Job Reference: MILNE PORT
C of C Numbers:
Legal Site Desc:

Austin Paterson
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1577534-1 MP-ASH-01 Sampled By: EZRA ARREAK on 07-FEB-15 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.06		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
		7.06		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
		0.16		0.10	%	13-FEB-15	14-FEB-15	R3148057
		<0.050		0.050	mg/L		17-FEB-15	R3148580
		<0.50		0.50	mg/L		17-FEB-15	R3148580
		3.4		2.5	mg/L		17-FEB-15	R3148580
		<0.0050		0.0050	mg/L		17-FEB-15	R3148580
		<0.050		0.050	mg/L		17-FEB-15	R3148580
		<0.050		0.050	mg/L		17-FEB-15	R3148580
		<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
		<0.25		0.25	mg/L		17-FEB-15	R3148580
		<0.0050		0.0050	mg/L		17-FEB-15	R3148580
		<0.25		0.25	mg/L		17-FEB-15	R3148580
		<0.15		0.15	mg/L		17-FEB-15	R3148580
L1577534-2 MP-ASH-02 Sampled By: EZRA ARREAK on 07-FEB-15 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		12.06		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
		6.80		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
		2.04		0.10	%	13-FEB-15	14-FEB-15	R3148057
		0.063		0.050	mg/L		17-FEB-15	R3148580
		<0.50		0.50	mg/L		17-FEB-15	R3148580
		3.7		2.5	mg/L		17-FEB-15	R3148580
		0.0050		0.0050	mg/L		17-FEB-15	R3148580
		<0.050		0.050	mg/L		17-FEB-15	R3148580
		<0.050		0.050	mg/L		17-FEB-15	R3148580
		<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
		<0.25		0.25	mg/L		17-FEB-15	R3148580
		<0.0050		0.0050	mg/L		17-FEB-15	R3148580
		<0.25		0.25	mg/L		17-FEB-15	R3148580
		0.63		0.15	mg/L		17-FEB-15	R3148580
L1577534-3 MP-ASH-03 Sampled By: EZRA ARREAK on 07-FEB-15 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests								
		11.84		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
		7.68		0.10	pH units	13-FEB-15	13-FEB-15	R3148497

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1577534-3 MP-ASH-03 Sampled By: EZRA ARREAK on 07-FEB-15 Matrix: SOIL								
Physical Tests								
% Moisture		4.73		0.10	%	13-FEB-15	14-FEB-15	R3148057
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		17-FEB-15	R3148582
Barium (Ba)		<0.50		0.50	mg/L		17-FEB-15	R3148582
Boron (B)		5.8		2.5	mg/L		17-FEB-15	R3148582
Cadmium (Cd)		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
Chromium (Cr)		0.099		0.050	mg/L		17-FEB-15	R3148582
Lead (Pb)		<0.050		0.050	mg/L		17-FEB-15	R3148582
Mercury (Hg)		<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
Selenium (Se)		<0.25		0.25	mg/L		17-FEB-15	R3148582
Silver (Ag)		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
Uranium (U)		<0.25		0.25	mg/L		17-FEB-15	R3148582
Zinc (Zn)-Total		<0.15		0.15	mg/L		17-FEB-15	R3148582
L1577534-4 MP-ASH-04 Sampled By: EZRA ARREAK on 07-FEB-15 Matrix: SOIL								
Sample Preparation								
Initial pH		11.86		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
Final pH		11.10		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
Physical Tests								
% Moisture		0.13		0.10	%	13-FEB-15	14-FEB-15	R3148057
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		17-FEB-15	R3148582
Barium (Ba)		<0.50		0.50	mg/L		17-FEB-15	R3148582
Boron (B)		<2.5		2.5	mg/L		17-FEB-15	R3148582
Cadmium (Cd)		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
Chromium (Cr)		0.061		0.050	mg/L		17-FEB-15	R3148582
Lead (Pb)		<0.050		0.050	mg/L		17-FEB-15	R3148582
Mercury (Hg)		<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
Selenium (Se)		<0.25		0.25	mg/L		17-FEB-15	R3148582
Silver (Ag)		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
Uranium (U)		<0.25		0.25	mg/L		17-FEB-15	R3148582
Zinc (Zn)-Total		<0.15		0.15	mg/L		17-FEB-15	R3148582
L1577534-5 MP-ASH-05 Sampled By: EZRA ARREAK on 07-FEB-15 Matrix: SOIL								
Sample Preparation								
Initial pH		12.63		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
Final pH		8.95		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
Physical Tests								
% Moisture		12.1		0.10	%	13-FEB-15	14-FEB-15	R3148057
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		17-FEB-15	R3148582

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1577534-5 MP-ASH-05 Sampled By: EZRA ARREAK on 07-FEB-15 Matrix: SOIL TCLP Metals	Barium (Ba)	1.39		0.50	mg/L		17-FEB-15	R3148582
	Boron (B)	<2.5		2.5	mg/L		17-FEB-15	R3148582
	Cadmium (Cd)	<0.0050		0.0050	mg/L		17-FEB-15	R3148582
	Chromium (Cr)	0.084		0.050	mg/L		17-FEB-15	R3148582
	Lead (Pb)	<0.050		0.050	mg/L		17-FEB-15	R3148582
	Mercury (Hg)	<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
	Selenium (Se)	<0.25		0.25	mg/L		17-FEB-15	R3148582
	Silver (Ag)	<0.0050		0.0050	mg/L		17-FEB-15	R3148582
	Uranium (U)	<0.25		0.25	mg/L		17-FEB-15	R3148582
	Zinc (Zn)-Total	<0.15		0.15	mg/L		17-FEB-15	R3148582
L1577534-6 MP-ASH-06 Sampled By: EZRA ARREAK on 07-FEB-15 Matrix: SOIL Sample Preparation	Initial pH	11.63		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
	Final pH	11.34		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
	Physical Tests							
	% Moisture	0.34		0.10	%	13-FEB-15	14-FEB-15	R3148057
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		17-FEB-15	R3148582
	Barium (Ba)	0.83		0.50	mg/L		17-FEB-15	R3148582
	Boron (B)	<2.5		2.5	mg/L		17-FEB-15	R3148582
	Cadmium (Cd)	<0.0050		0.0050	mg/L		17-FEB-15	R3148582
	Chromium (Cr)	2.48		0.050	mg/L		17-FEB-15	R3148582
	Lead (Pb)	<0.050		0.050	mg/L		17-FEB-15	R3148582
	Mercury (Hg)	<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
	Selenium (Se)	<0.25		0.25	mg/L		17-FEB-15	R3148582
	Silver (Ag)	<0.0050		0.0050	mg/L		17-FEB-15	R3148582
	Uranium (U)	<0.25		0.25	mg/L		17-FEB-15	R3148582
	Zinc (Zn)-Total	<0.15		0.15	mg/L		17-FEB-15	R3148582
L1577534-7 MP-ASH-07 Sampled By: EZRA ARREAK on 07-FEB-15 Matrix: SOIL Sample Preparation	Initial pH	12.10		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
	Final pH	9.27		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
	Physical Tests							
	% Moisture	2.28		0.10	%	13-FEB-15	14-FEB-15	R3148057
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		17-FEB-15	R3148582
	Barium (Ba)	<0.50		0.50	mg/L		17-FEB-15	R3148582
	Boron (B)	5.6		2.5	mg/L		17-FEB-15	R3148582
	Cadmium (Cd)	<0.0050		0.0050	mg/L		17-FEB-15	R3148582

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1577534-7 MP-ASH-07 Sampled By: EZRA ARREAK on 07-FEB-15 Matrix: SOIL TCLP Metals Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		0.163		0.050	mg/L		17-FEB-15	R3148582
		<0.050		0.050	mg/L		17-FEB-15	R3148582
		<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
		<0.25		0.25	mg/L		17-FEB-15	R3148582
		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
		<0.25		0.25	mg/L		17-FEB-15	R3148582
		<0.15		0.15	mg/L		17-FEB-15	R3148582
L1577534-8 MP-ASH-08 Sampled By: EZRA ARREAK on 07-FEB-15 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.68		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
		6.97		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
		4.10		0.10	%	13-FEB-15	14-FEB-15	R3148057
		0.051		0.050	mg/L		17-FEB-15	R3148582
		<0.50		0.50	mg/L		17-FEB-15	R3148582
		4.7		2.5	mg/L		17-FEB-15	R3148582
		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
		<0.050		0.050	mg/L		17-FEB-15	R3148582
		<0.050		0.050	mg/L		17-FEB-15	R3148582
		<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
		<0.25		0.25	mg/L		17-FEB-15	R3148582
		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
		<0.25		0.25	mg/L		17-FEB-15	R3148582
		0.17		0.15	mg/L		17-FEB-15	R3148582
L1577534-9 MP-ASH-09 Sampled By: EZRA ARREAK on 09-FEB-15 @ 09:40 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg)								
		11.78		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
		7.75		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
		6.41		0.10	%	13-FEB-15	14-FEB-15	R3148057
		<0.050		0.050	mg/L		17-FEB-15	R3148582
		<0.50		0.50	mg/L		17-FEB-15	R3148582
		5.9		2.5	mg/L		17-FEB-15	R3148582
		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
		0.555		0.050	mg/L		17-FEB-15	R3148582
		<0.050		0.050	mg/L		17-FEB-15	R3148582
		<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1577534-9 MP-ASH-09 Sampled By: EZRA ARREAK on 09-FEB-15 @ 09:40 Matrix: SOIL TCLP Metals								
	Selenium (Se)	<0.25		0.25	mg/L		17-FEB-15	R3148582
	Silver (Ag)	<0.0050		0.0050	mg/L		17-FEB-15	R3148582
	Uranium (U)	<0.25		0.25	mg/L		17-FEB-15	R3148582
	Zinc (Zn)-Total	<0.15		0.15	mg/L		17-FEB-15	R3148582
L1577534-10 MP-ASH-10 Sampled By: EZRA ARREAK on 09-FEB-15 @ 11:24 Matrix: SOIL Sample Preparation								
	Initial pH	12.59		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
	Final pH	11.70		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
	Physical Tests							
	% Moisture	0.54		0.10	%	13-FEB-15	14-FEB-15	R3148057
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		17-FEB-15	R3148582
	Barium (Ba)	<0.50		0.50	mg/L		17-FEB-15	R3148582
	Boron (B)	<2.5		2.5	mg/L		17-FEB-15	R3148582
	Cadmium (Cd)	<0.0050		0.0050	mg/L		17-FEB-15	R3148582
	Chromium (Cr)	0.356		0.050	mg/L		17-FEB-15	R3148582
	Lead (Pb)	<0.050		0.050	mg/L		17-FEB-15	R3148582
	Mercury (Hg)	<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
	Selenium (Se)	<0.25		0.25	mg/L		17-FEB-15	R3148582
	Silver (Ag)	<0.0050		0.0050	mg/L		17-FEB-15	R3148582
	Uranium (U)	<0.25		0.25	mg/L		17-FEB-15	R3148582
	Zinc (Zn)-Total	<0.15		0.15	mg/L		17-FEB-15	R3148582
L1577534-11 MP-ASH-11 Sampled By: EZRA ARREAK on 09-FEB-15 @ 09:21 Matrix: SOIL Sample Preparation								
	Initial pH	12.60		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
	Final pH	11.13		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
	Physical Tests							
	% Moisture	6.58		0.10	%	13-FEB-15	14-FEB-15	R3148057
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		17-FEB-15	R3148582
	Barium (Ba)	<0.50		0.50	mg/L		17-FEB-15	R3148582
	Boron (B)	3.3		2.5	mg/L		17-FEB-15	R3148582
	Cadmium (Cd)	<0.0050		0.0050	mg/L		17-FEB-15	R3148582
	Chromium (Cr)	0.472		0.050	mg/L		17-FEB-15	R3148582
	Lead (Pb)	<0.050		0.050	mg/L		17-FEB-15	R3148582
	Mercury (Hg)	<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
	Selenium (Se)	<0.25		0.25	mg/L		17-FEB-15	R3148582
	Silver (Ag)	<0.0050		0.0050	mg/L		17-FEB-15	R3148582
	Uranium (U)	<0.25		0.25	mg/L		17-FEB-15	R3148582

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1577534-11	MP-ASH-11							
	Sampled By: EZRA ARREAK on 09-FEB-15 @ 09:21							
Matrix: SOIL								
TCLP Metals								
Zinc (Zn)-Total		<0.15		0.15	mg/L		17-FEB-15	R3148582
L1577534-12	MP-ASH-12							
	Sampled By: EZRA ARREAK on 09-FEB-15 @ 11:31							
	Matrix: SOIL							
	Sample Preparation							
	Initial pH	12.06		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
	Final pH	11.07		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
	Physical Tests							
	% Moisture	<0.10		0.10	%	13-FEB-15	14-FEB-15	R3148057
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		17-FEB-15	R3148582
	Barium (Ba)	0.51		0.50	mg/L		17-FEB-15	R3148582
	Boron (B)	<2.5		2.5	mg/L		17-FEB-15	R3148582
	Cadmium (Cd)	<0.0050		0.0050	mg/L		17-FEB-15	R3148582
	Chromium (Cr)	4.12		0.050	mg/L		17-FEB-15	R3148582
	Lead (Pb)	<0.050		0.050	mg/L		17-FEB-15	R3148582
	Mercury (Hg)	<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
	Selenium (Se)	<0.25		0.25	mg/L		17-FEB-15	R3148582
	Silver (Ag)	<0.0050		0.0050	mg/L		17-FEB-15	R3148582
	Uranium (U)	<0.25		0.25	mg/L		17-FEB-15	R3148582
	Zinc (Zn)-Total	<0.15		0.15	mg/L		17-FEB-15	R3148582
L1577534-13	MP-ASH-13							
	Sampled By: EZRA ARREAK on 09-FEB-15 @ 16:04							
	Matrix: SOIL							
	Sample Preparation							
	Initial pH	12.29		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
	Final pH	8.39		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
	Physical Tests							
	% Moisture	1.63		0.10	%	13-FEB-15	14-FEB-15	R3148057
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		17-FEB-15	R3148582
	Barium (Ba)	<0.50		0.50	mg/L		17-FEB-15	R3148582
	Boron (B)	3.2		2.5	mg/L		17-FEB-15	R3148582
	Cadmium (Cd)	<0.0050		0.0050	mg/L		17-FEB-15	R3148582
	Chromium (Cr)	<0.050		0.050	mg/L		17-FEB-15	R3148582
	Lead (Pb)	<0.050		0.050	mg/L		17-FEB-15	R3148582
	Mercury (Hg)	<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
	Selenium (Se)	<0.25		0.25	mg/L		17-FEB-15	R3148582
	Silver (Ag)	<0.0050		0.0050	mg/L		17-FEB-15	R3148582
	Uranium (U)	<0.25		0.25	mg/L		17-FEB-15	R3148582
	Zinc (Zn)-Total	<0.15		0.15	mg/L		17-FEB-15	R3148582
L1577534-14	MP-ASH-14							
	Sampled By: EZRA ARREAK on 09-FEB-15 @ 16:28							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1577534-14 MP-ASH-14 Sampled By: EZRA ARREAK on 09-FEB-15 @ 16:28 Matrix: SOIL								
Sample Preparation								
Initial pH		11.41		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
Final pH		10.38		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
Physical Tests								
% Moisture		0.33		0.10	%	13-FEB-15	13-FEB-15	R3147378
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		17-FEB-15	R3148582
Barium (Ba)		<0.50		0.50	mg/L		17-FEB-15	R3148582
Boron (B)		3.3		2.5	mg/L		17-FEB-15	R3148582
Cadmium (Cd)		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
Chromium (Cr)		<0.050		0.050	mg/L		17-FEB-15	R3148582
Lead (Pb)		<0.050		0.050	mg/L		17-FEB-15	R3148582
Mercury (Hg)		<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
Selenium (Se)		<0.25		0.25	mg/L		17-FEB-15	R3148582
Silver (Ag)		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
Uranium (U)		<0.25		0.25	mg/L		17-FEB-15	R3148582
Zinc (Zn)-Total		<0.15		0.15	mg/L		17-FEB-15	R3148582
L1577534-15 MP-ASH-15 Sampled By: EZRA ARREAK on 09-FEB-15 @ 16:44 Matrix: SOIL								
Sample Preparation								
Initial pH		12.37		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
Final pH		8.68		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
Physical Tests								
% Moisture		3.36		0.10	%	13-FEB-15	13-FEB-15	R3147378
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		17-FEB-15	R3148582
Barium (Ba)		<0.50		0.50	mg/L		17-FEB-15	R3148582
Boron (B)		4.0		2.5	mg/L		17-FEB-15	R3148582
Cadmium (Cd)		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
Chromium (Cr)		0.188		0.050	mg/L		17-FEB-15	R3148582
Lead (Pb)		<0.050		0.050	mg/L		17-FEB-15	R3148582
Mercury (Hg)		<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
Selenium (Se)		<0.25		0.25	mg/L		17-FEB-15	R3148582
Silver (Ag)		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
Uranium (U)		<0.25		0.25	mg/L		17-FEB-15	R3148582
Zinc (Zn)-Total		<0.15		0.15	mg/L		17-FEB-15	R3148582
L1577534-16 MP-ASH-16 Sampled By: EZRA ARREAK on 10-FEB-15 @ 14:30 Matrix: SOIL								
Sample Preparation								
Initial pH		12.26		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
Final pH		12.46		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
Physical Tests								

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1577534-16 MP-ASH-16 Sampled By: EZRA ARREAK on 10-FEB-15 @ 14:30 Matrix: SOIL								
Physical Tests								
% Moisture		<0.10		0.10	%	13-FEB-15	13-FEB-15	R3147378
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		17-FEB-15	R3148582
Barium (Ba)		1.69		0.50	mg/L		17-FEB-15	R3148582
Boron (B)		<2.5		2.5	mg/L		17-FEB-15	R3148582
Cadmium (Cd)		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
Chromium (Cr)		0.543		0.050	mg/L		17-FEB-15	R3148582
Lead (Pb)		<0.050		0.050	mg/L		17-FEB-15	R3148582
Mercury (Hg)		<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
Selenium (Se)		<0.25		0.25	mg/L		17-FEB-15	R3148582
Silver (Ag)		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
Uranium (U)		<0.25		0.25	mg/L		17-FEB-15	R3148582
Zinc (Zn)-Total		0.39		0.15	mg/L		17-FEB-15	R3148582
L1577534-17 MP-ASH-28 Sampled By: EZRA ARREAK on 07-FEB-15 Matrix: SOIL								
Sample Preparation								
Initial pH		11.66		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
Final pH		11.85		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
Physical Tests								
% Moisture		<0.10		0.10	%	13-FEB-15	13-FEB-15	R3147378
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		17-FEB-15	R3148582
Barium (Ba)		1.06		0.50	mg/L		17-FEB-15	R3148582
Boron (B)		5.4		2.5	mg/L		17-FEB-15	R3148582
Cadmium (Cd)		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
Chromium (Cr)		0.498		0.050	mg/L		17-FEB-15	R3148582
Lead (Pb)		<0.050		0.050	mg/L		17-FEB-15	R3148582
Mercury (Hg)		<0.00010		0.00010	mg/L	17-FEB-15	17-FEB-15	R3148295
Selenium (Se)		<0.25		0.25	mg/L		17-FEB-15	R3148582
Silver (Ag)		<0.0050		0.0050	mg/L		17-FEB-15	R3148582
Uranium (U)		<0.25		0.25	mg/L		17-FEB-15	R3148582
Zinc (Zn)-Total		<0.15		0.15	mg/L		17-FEB-15	R3148582
L1577534-18 MP-ASH-29 Sampled By: EZRA ARREAK on 07-FEB-15 Matrix: SOIL								
Sample Preparation								
Initial pH		11.67		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
Final pH		10.65		0.10	pH units	13-FEB-15	13-FEB-15	R3148497
Physical Tests								
% Moisture		0.26		0.10	%	13-FEB-15	13-FEB-15	R3147378
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		17-FEB-15	R3148582

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1577534

Report Date: 19-FEB-15

Page 1 of 6

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3147378							
WG2040832-3	DUP	L1576751-1						
% Moisture		53.0	52.6		%	0.6	30	13-FEB-15
WG2040832-2	LCS							
% Moisture			95.5		%		70-130	13-FEB-15
WG2040832-1	MB							
% Moisture			<0.10		%		0.1	13-FEB-15
Batch	R3148057							
WG2040799-3	DUP	L1576315-1						
% Moisture		75.6	74.4		%	1.6	30	14-FEB-15
WG2040799-2	LCS							
% Moisture			94.5		%		70-130	14-FEB-15
WG2040799-1	MB							
% Moisture			<0.10		%		0.1	14-FEB-15
HG-TCLP-WT		Waste						
Batch	R3148295							
WG2041930-3	DUP	L1576815-1						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	17-FEB-15
WG2041930-7	DUP	L1577534-4						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	17-FEB-15
WG2041930-2	LCS							
Mercury (Hg)			109.5		%		70-130	17-FEB-15
WG2041930-6	LCS							
Mercury (Hg)			102.5		%		70-130	17-FEB-15
WG2041930-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	17-FEB-15
WG2041930-5	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	17-FEB-15
WG2041930-4	MS	L1576815-2						
Mercury (Hg)			124.0		%		70-130	17-FEB-15
WG2041930-8	MS	L1577534-3						
Mercury (Hg)			116.0		%		70-130	17-FEB-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3148580							
WG2041752-6	CVS							
Zinc (Zn)-Total			96.2		%		70-130	17-FEB-15
WG2041752-7	CVS							
Zinc (Zn)-Total			100.0		%		70-130	18-FEB-15
WG2041752-4	DUP	WG2041752-3						



Quality Control Report

Workorder: L1577534

Report Date: 19-FEB-15

Page 2 of 6

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-EXTRA-WT		Waste						
Batch	R3148580							
WG2041752-4	DUP	WG2041752-3						
Zinc (Zn)-Total		<0.15	<0.15	RPD-NA	mg/L	N/A	30	17-FEB-15
WG2041752-2	LCS							
Zinc (Zn)-Total			98.1		%		70-130	17-FEB-15
WG2041752-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	17-FEB-15
WG2041752-5	MS	WG2041752-3						
Zinc (Zn)-Total			95.2		%		70-130	18-FEB-15
Batch	R3148582							
WG2041753-6	CVS							
Zinc (Zn)-Total			96.2		%		70-130	17-FEB-15
WG2041753-4	DUP	WG2041753-3						
Zinc (Zn)-Total		<0.15	<0.15	RPD-NA	mg/L	N/A	30	17-FEB-15
WG2041753-2	LCS							
Zinc (Zn)-Total			96.7		%		70-130	17-FEB-15
WG2041753-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	17-FEB-15
WG2041753-5	MS	WG2041753-3						
Zinc (Zn)-Total			93.5		%		70-130	17-FEB-15
MET-TCLP-WT		Waste						
Batch	R3148580							
WG2041752-6	CVS							
Silver (Ag)			101.5		%		70-130	17-FEB-15
Arsenic (As)			101.5		%		70-130	17-FEB-15
Boron (B)			99.5		%		70-130	17-FEB-15
Barium (Ba)			99.8		%		70-130	17-FEB-15
Cadmium (Cd)			100.2		%		70-130	17-FEB-15
Chromium (Cr)			101.0		%		70-130	17-FEB-15
Lead (Pb)			100.1		%		70-130	17-FEB-15
Selenium (Se)			99.1		%		70-130	17-FEB-15
Uranium (U)			97.0		%		70-130	17-FEB-15
WG2041752-7	CVS							
Silver (Ag)			102.6		%		70-130	18-FEB-15
Arsenic (As)			99.0		%		70-130	18-FEB-15
Boron (B)			108.5		%		70-130	18-FEB-15
Barium (Ba)			99.2		%		70-130	18-FEB-15



Quality Control Report

Workorder: L1577534

Report Date: 19-FEB-15

Page 3 of 6

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3148580							
WG2041752-7	CVS							
Cadmium (Cd)			99.1		%		70-130	18-FEB-15
Chromium (Cr)			98.1		%		70-130	18-FEB-15
Lead (Pb)			98.9		%		70-130	18-FEB-15
Selenium (Se)			100.2		%		70-130	18-FEB-15
Uranium (U)			97.9		%		70-130	18-FEB-15
WG2041752-4	DUP	WG2041752-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	17-FEB-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	17-FEB-15
Boron (B)		<2.5	<2.5	RPD-NA	mg/L	N/A	40	17-FEB-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	17-FEB-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	17-FEB-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	17-FEB-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	17-FEB-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	17-FEB-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	17-FEB-15
WG2041752-2	LCS							
Silver (Ag)			96.9		%		70-130	17-FEB-15
Arsenic (As)			100.4		%		70-130	17-FEB-15
Boron (B)			89.5		%		70-130	17-FEB-15
Barium (Ba)			95.8		%		70-130	17-FEB-15
Cadmium (Cd)			96.7		%		70-130	17-FEB-15
Chromium (Cr)			98.6		%		70-130	17-FEB-15
Lead (Pb)			94.1		%		70-130	17-FEB-15
Selenium (Se)			100.6		%		70-130	17-FEB-15
Uranium (U)			90.9		%		70-130	17-FEB-15
WG2041752-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	17-FEB-15
Arsenic (As)			<0.050		mg/L		0.05	17-FEB-15
Boron (B)			<2.5		mg/L		2.5	17-FEB-15
Barium (Ba)			<0.50		mg/L		0.5	17-FEB-15
Cadmium (Cd)			<0.0050		mg/L		0.005	17-FEB-15
Chromium (Cr)			<0.050		mg/L		0.05	17-FEB-15
Lead (Pb)			<0.050		mg/L		0.05	17-FEB-15
Selenium (Se)			<0.25		mg/L		0.25	17-FEB-15



Quality Control Report

Workorder: L1577534

Report Date: 19-FEB-15

Page 4 of 6

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3148580							
WG2041752-1	MB							
Uranium (U)			<0.25		mg/L		0.25	17-FEB-15
WG2041752-5	MS	WG2041752-3						
Silver (Ag)			90.7		%		50-140	18-FEB-15
Arsenic (As)			97.8		%		50-140	18-FEB-15
Boron (B)			93.2		%		50-140	18-FEB-15
Barium (Ba)			103.8		%		50-140	18-FEB-15
Cadmium (Cd)			97.3		%		50-140	18-FEB-15
Chromium (Cr)			94.4		%		50-140	18-FEB-15
Lead (Pb)			91.2		%		50-140	18-FEB-15
Selenium (Se)			98.6		%		50-140	18-FEB-15
Uranium (U)			94.6		%		50-140	18-FEB-15
Batch	R3148582							
WG2041753-6	CVS							
Silver (Ag)			101.5		%		70-130	17-FEB-15
Arsenic (As)			101.5		%		70-130	17-FEB-15
Boron (B)			99.5		%		70-130	17-FEB-15
Barium (Ba)			99.8		%		70-130	17-FEB-15
Cadmium (Cd)			100.2		%		70-130	17-FEB-15
Chromium (Cr)			101.0		%		70-130	17-FEB-15
Lead (Pb)			100.1		%		70-130	17-FEB-15
Selenium (Se)			99.1		%		70-130	17-FEB-15
Uranium (U)			97.0		%		70-130	17-FEB-15
WG2041753-4	DUP	WG2041753-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	17-FEB-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	17-FEB-15
Boron (B)		6.2	5.8		mg/L	5.8	40	17-FEB-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	17-FEB-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	17-FEB-15
Chromium (Cr)		0.102	0.105		mg/L	2.7	40	17-FEB-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	17-FEB-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	17-FEB-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	17-FEB-15
WG2041753-2	LCS							
Silver (Ag)			98.7		%		70-130	17-FEB-15



Quality Control Report

Workorder: L1577534

Report Date: 19-FEB-15

Page 5 of 6

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3148582							
WG2041753-2	LCS							
Arsenic (As)			99.5		%		70-130	17-FEB-15
Boron (B)			89.7		%		70-130	17-FEB-15
Barium (Ba)			95.2		%		70-130	17-FEB-15
Cadmium (Cd)			95.4		%		70-130	17-FEB-15
Chromium (Cr)			97.0		%		70-130	17-FEB-15
Lead (Pb)			97.3		%		70-130	17-FEB-15
Selenium (Se)			100.8		%		70-130	17-FEB-15
Uranium (U)			95.2		%		70-130	17-FEB-15
WG2041753-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	17-FEB-15
Arsenic (As)			<0.050		mg/L		0.05	17-FEB-15
Boron (B)			<2.5		mg/L		2.5	17-FEB-15
Barium (Ba)			<0.50		mg/L		0.5	17-FEB-15
Cadmium (Cd)			<0.0050		mg/L		0.005	17-FEB-15
Chromium (Cr)			<0.050		mg/L		0.05	17-FEB-15
Lead (Pb)			<0.050		mg/L		0.05	17-FEB-15
Selenium (Se)			<0.25		mg/L		0.25	17-FEB-15
Uranium (U)			<0.25		mg/L		0.25	17-FEB-15
WG2041753-5	MS	WG2041753-3						
Silver (Ag)			91.5		%		50-140	17-FEB-15
Arsenic (As)			101.0		%		50-140	17-FEB-15
Boron (B)			90.2		%		50-140	17-FEB-15
Barium (Ba)			100.3		%		50-140	17-FEB-15
Cadmium (Cd)			96.5		%		50-140	17-FEB-15
Chromium (Cr)			95.4		%		50-140	17-FEB-15
Lead (Pb)			93.4		%		50-140	17-FEB-15
Selenium (Se)			101.7		%		50-140	17-FEB-15
Uranium (U)			95.8		%		50-140	17-FEB-15

Quality Control Report

Workorder: L1577534

Report Date: 19-FEB-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



L1577534-COFC

COC Number: 14 -

Page ____ of ____

Report To			Report Format / Distribution			Select Service Level Below (Rush Turnaround Time (TAT) is not available for all tests)														
Company: Baffinland Iron Mines Corp. - ALS ENV Account 23642			Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)			R ☒ Regular (Standard TAT if received by 3 pm - business days)														
Contact: Jim Millard			Quality Control (QC) Report with Report ☒ Yes ☐ No			P ☐ Priority (2-4 bus. days if received by 3pm) 50% surcharge - contact ALS to confirm TAT														
Address: 2275 Upper Middle Rd. E., Suite #300 Oakville, ON, L6H 0C3			☒ Criteria on Report - provide details below if box checked			E ☐ Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT														
Phone: 647-253-0596 EXT 6010			Select Distribution: ☐ EMAIL ☐ MAIL ☐ FAX			E2 ☐ Same day or weekend emergency - contact ALS to confirm TAT and surcharge														
			Email 1 or Fax bimcore@alsglobal.com			Specify Date Required for E2, E or P: _____														
			Email 2 bimwww@alsglobal.com			Analysis Request														
Invoice To Same as Report To ☒ Yes ☐ No			Invoice Distribution			Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below														
Copy of Invoice with Report ☐ Yes ☒ No			Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX																	
Company:			Email 1 or Fax ap@baffinland.com																	
Contact:			Email 2																	
Project Information			Oil and Gas Required Fields (client use)			BIM-TCLP-MET1-WT (TCLP Hg, Ag, As, Ba, Cd, Cr, Pb, Se, Zn) Number of Containers														
ALS Quote #: Q42455			Approver ID:															Cost Center:		
Job #: MILNE PORT			GL Account:															Routing Code:		
PO / AFE: 4500005452			Activity Code:																	
LSD:			Location:																	
ALS Lab Work Order # (lab use only) <u>L1577534 B446</u>			ALS Contact: Wayne Smith		Sampler: Ezra Arreak															
ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)		Date (dd-mm-yy)	Time (hh:mm)	Sample Type															
1	MP-ASH-01		7-Feb-15		Soil	R											2			
2	MP-ASH-02		7-Feb-15		Soil	R											2			
3	MP-ASH-03		7-Feb-15		Soil	R											2			
4	MP-ASH-04		7-Feb-15		Soil	R											2			
5	MP-ASH-05		7-Feb-15		Soil	R											2			
6	MP-ASH-06		7-Feb-15		Soil	R											2			
7	MP-ASH-07		7-Feb-15		Soil	R											2			
8	MP-ASH-08		7-Feb-15		Soil	R											2			
9	MP-ASH-09		9-Feb-15	9:40	Soil	R											2			
10	MP-ASH-10		9-Feb-15	11:24	Soil	R											2			
11	MP-ASH-11		9-Feb-15	9:21	Soil	R											2			
12	MP-ASH-12		9-Feb-15	11:31	Soil	R											2			
Drinking Water (DW) Samples¹ (client use)			Special Instructions / Specify Criteria to add on report (client Use)			SAMPLE CONDITION AS RECEIVED (lab use only)														
Are samples taken from a Regulated DW System? ☐ Yes ☒ No			Site Specific Criteria - Account Manager to update as required.			Frozen ☐ SIF Observations Yes ☐ No ☐														
Are samples for human drinking water use? ☐ Yes ☒ No						Ice packs Yes ☒ No ☐ Custody seal intact Yes ☐ No ☐														
						Cooling Initiated ☐														
						INITIAL COOLER TEMPERATURES °C _____ FINAL COOLER TEMPERATURES °C <u>15.47</u>														
SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)														
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:												
									<u>14</u>				<u>13 Feb 15 0930</u>							

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY

YELLOW - CLIENT COPY

NA-PH-0226 v09 Form04 January 2014

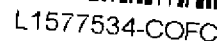
Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.



Canada Toll Free: 1 800 668 9878

Canada Toll Free: 1 800 668 9878



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NA-FM-0325a v09 Filed 01/20/20

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



BAFFINLAND IRON MINES CORPORATION

ATTN: Jim Millard

2275 Upper Middle Rd. E.

Suite #300

Oakville ON L6H 0C3

Date Received: 25-FEB-15

Report Date: 01-APR-15 05:58 (MT)

Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: L1581030

Project P.O. #: 4500007003

Job Reference: MILNE PORT

C of C Numbers:

Legal Site Desc:

Austin Paterson
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047

ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1581030-1	MP-ASH-057							
Sampled By:	CLIENT on 12-FEB-15 @ 10:02							
Matrix:	SOIL							
Sample Preparation								
Initial pH		12.19		0.10	pH units	28-FEB-15	28-FEB-15	R3153649
Final pH		12.35		0.10	pH units	28-FEB-15	28-FEB-15	R3153649
Physical Tests								
% Moisture		<0.10		0.10	%	26-FEB-15	27-FEB-15	R3152775
TCLP Extractables								
Aroclor 1242		<0.00020		0.00020	mg/L	02-MAR-15	03-MAR-15	R3153954
Aroclor 1248		<0.00020		0.00020	mg/L	02-MAR-15	03-MAR-15	R3153954
Aroclor 1254		<0.00020		0.00020	mg/L	02-MAR-15	03-MAR-15	R3153954
Aroclor 1260		<0.00020		0.00020	mg/L	02-MAR-15	03-MAR-15	R3153954
Total PCBs		<0.00040		0.00040	mg/L	02-MAR-15	03-MAR-15	R3153954
Surrogate: d14-Terphenyl		88.9		50-150	%	02-MAR-15	03-MAR-15	R3153954
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		02-MAR-15	R3153794
Barium (Ba)		3.28		0.50	mg/L		02-MAR-15	R3153794
Boron (B)		<2.5		2.5	mg/L		02-MAR-15	R3153794
Cadmium (Cd)		<0.0050		0.0050	mg/L		02-MAR-15	R3153794
Chromium (Cr)		0.560		0.050	mg/L		02-MAR-15	R3153794
Lead (Pb)		<0.050		0.050	mg/L		02-MAR-15	R3153794
Mercury (Hg)		<0.00010		0.00010	mg/L	02-MAR-15	02-MAR-15	R3153796
Selenium (Se)		<0.25		0.25	mg/L		02-MAR-15	R3153794
Silver (Ag)		<0.0050		0.0050	mg/L		02-MAR-15	R3153794
Uranium (U)		<0.25		0.25	mg/L		02-MAR-15	R3153794
Zinc (Zn)-Total		<0.15		0.15	mg/L		02-MAR-15	R3153794
TCLP VOCs								
1,1-Dichloroethylene		<0.025		0.025	mg/L		04-MAR-15	R3154681
1,2-Dichlorobenzene		<0.025		0.025	mg/L		04-MAR-15	R3154681
1,2-Dichloroethane		<0.025		0.025	mg/L		04-MAR-15	R3154681
1,4-Dichlorobenzene		<0.025		0.025	mg/L		04-MAR-15	R3154681
Benzene		<0.025		0.025	mg/L		04-MAR-15	R3154681
Dichlorobromomethane		<0.025		0.025	mg/L		04-MAR-15	R3154681
Bromoform		<0.025		0.025	mg/L		04-MAR-15	R3154681
Carbon tetrachloride		<0.025		0.025	mg/L		04-MAR-15	R3154681
Chlorobenzene		<0.025		0.025	mg/L		04-MAR-15	R3154681
Dibromochloromethane		<0.025		0.025	mg/L		04-MAR-15	R3154681
Chloroform		<0.10		0.10	mg/L		04-MAR-15	R3154681
Chloroform		<0.10		0.10	mg/L		04-MAR-15	R3154681
Dichloromethane		<0.50		0.50	mg/L		04-MAR-15	R3154681
Methyl Ethyl Ketone		<1.0		1.0	mg/L		04-MAR-15	R3154681
Tetrachloroethylene		<0.025		0.025	mg/L		04-MAR-15	R3154681
Total THMs		<0.18		0.18	mg/L		04-MAR-15	R3154681
Trichloroethylene		<0.025		0.025	mg/L		04-MAR-15	R3154681
Vinyl chloride		<0.050		0.050	mg/L		04-MAR-15	R3154681

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1581030-1	MP-ASH-057							
Sampled By:	CLIENT on 12-FEB-15 @ 10:02							
Matrix:	SOIL							
TCLP VOCs								
Surrogate: 4-Bromofluorobenzene		92.5		70-130	%		04-MAR-15	R3154681
Surrogate: 4-Bromofluorobenzene		92.5		70-130	%		04-MAR-15	R3154681
Volatile Organic Compounds								
Surrogate: 1,4-Difluorobenzene		100.6		50-150	%		04-MAR-15	R3154681
Dioxins and Furans								
2,3,7,8-TCDD		<2.1	[U]	2.1	pg/L	26-MAR-15	30-MAR-15	R3167320
1,2,3,7,8-PeCDD		<1.4	[U]	1.4	pg/L	26-MAR-15	30-MAR-15	R3167320
1,2,3,4,7,8-HxCDD		<0.50	[U]	0.50	pg/L	26-MAR-15	30-MAR-15	R3167320
1,2,3,6,7,8-HxCDD		<0.43	[U]	0.43	pg/L	26-MAR-15	30-MAR-15	R3167320
1,2,3,7,8,9-HxCDD		<0.44	[U]	0.44	pg/L	26-MAR-15	30-MAR-15	R3167320
1,2,3,4,6,7,8-HpCDD		<0.91	[U]	0.91	pg/L	26-MAR-15	30-MAR-15	R3167320
OCDD		5.0	J,B	1.1	pg/L	26-MAR-15	30-MAR-15	R3167320
Total-TCDD		<2.1	[U]	2.1	pg/L	26-MAR-15	30-MAR-15	R3167320
Total TCDD # Homologues		0				26-MAR-15	30-MAR-15	R3167320
Total-PeCDD		<1.4	[U]	1.4	pg/L	26-MAR-15	30-MAR-15	R3167320
Total PeCDD # Homologues		0				26-MAR-15	30-MAR-15	R3167320
Total-HxCDD		<0.50	[U]	0.50	pg/L	26-MAR-15	30-MAR-15	R3167320
Total HxCDD # Homologues		0				26-MAR-15	30-MAR-15	R3167320
Total-HpCDD		<0.91	[U]	0.91	pg/L	26-MAR-15	30-MAR-15	R3167320
Total HpCDD # Homologues		0				26-MAR-15	30-MAR-15	R3167320
2,3,7,8-TCDF		<1.4	[U]	1.4	pg/L	26-MAR-15	30-MAR-15	R3167320
1,2,3,7,8-PeCDF		<1.0	[U]	1.0	pg/L	26-MAR-15	30-MAR-15	R3167320
2,3,4,7,8-PeCDF		<0.86	[U]	0.86	pg/L	26-MAR-15	30-MAR-15	R3167320
1,2,3,4,7,8-HxCDF		<0.48	[U]	0.48	pg/L	26-MAR-15	30-MAR-15	R3167320
1,2,3,6,7,8-HxCDF		<0.44	[U]	0.44	pg/L	26-MAR-15	30-MAR-15	R3167320
1,2,3,7,8,9-HxCDF		<0.74	[U]	0.74	pg/L	26-MAR-15	30-MAR-15	R3167320
2,3,4,6,7,8-HxCDF		<0.51	[U]	0.51	pg/L	26-MAR-15	30-MAR-15	R3167320
1,2,3,4,6,7,8-HpCDF		<0.52	[U]	0.52	pg/L	26-MAR-15	30-MAR-15	R3167320
1,2,3,4,7,8,9-HpCDF		<0.86	[U]	0.86	pg/L	26-MAR-15	30-MAR-15	R3167320
OCDF		<1.4	[U]	1.4	pg/L	26-MAR-15	30-MAR-15	R3167320
Total-TCDF		<1.4	[U]	1.4	pg/L	26-MAR-15	30-MAR-15	R3167320
Total TCDF # Homologues		0				26-MAR-15	30-MAR-15	R3167320
Total-PeCDF		<1.0	[U]	1.0	pg/L	26-MAR-15	30-MAR-15	R3167320
Total PeCDF # Homologues		0				26-MAR-15	30-MAR-15	R3167320
Total-HxCDF		<0.74	[U]	0.74	pg/L	26-MAR-15	30-MAR-15	R3167320
Total HxCDF # Homologues		0				26-MAR-15	30-MAR-15	R3167320
Total-HpCDF		<0.86	[U]	0.86	pg/L	26-MAR-15	30-MAR-15	R3167320
Total HpCDF # Homologues		0				26-MAR-15	30-MAR-15	R3167320
Surrogate: 13C12-2,3,7,8-TCDD		74.0		20-175	%	26-MAR-15	30-MAR-15	R3167320
Surrogate: 13C12-1,2,3,7,8-PeCDD		73.0		21-227	%	26-MAR-15	30-MAR-15	R3167320
Surrogate: 13C12-1,2,3,4,7,8-HxCDD		67.0		21-193	%	26-MAR-15	30-MAR-15	R3167320

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1581030-1 MP-ASH-057 Sampled By: CLIENT on 12-FEB-15 @ 10:02 Matrix: SOIL Dioxins and Furans Surrogate: 13C12-1,2,3,6,7,8-HxCDD Surrogate: 13C12-1,2,3,4,6,7,8-HpCDD Surrogate: 13C12-OCDD Surrogate: 13C12-2,3,7,8-TCDF Surrogate: 13C12-1,2,3,7,8-PeCDF Surrogate: 13C12-2,3,4,7,8-PeCDF Surrogate: 13C12-1,2,3,4,7,8-HxCDF Surrogate: 13C12-1,2,3,6,7,8-HxCDF Surrogate: 13C12-2,3,4,6,7,8-HxCDF Surrogate: 13C12-1,2,3,7,8,9-HxCDF Surrogate: 13C12-1,2,3,4,6,7,8-HpCDF Surrogate: 13C12-1,2,3,4,7,8,9-HpCDF Surrogate: 37Cl4-2,3,7,8-TCDD (Cleanup) Toxic Equivalency Lower Bound PCDD/F TEQ (WHO 2005) Mid Point PCDD/F TEQ (WHO 2005) Upper Bound PCDD/F TEQ (WHO 2005)								
		80.0		25-163	%	26-MAR-15	30-MAR-15	R3167320
		76.0		23-166	%	26-MAR-15	30-MAR-15	R3167320
		73.0		13-138	%	26-MAR-15	30-MAR-15	R3167320
		71.0		22-152	%	26-MAR-15	30-MAR-15	R3167320
		76.0		24-185	%	26-MAR-15	30-MAR-15	R3167320
		77.0		21-178	%	26-MAR-15	30-MAR-15	R3167320
		68.0		26-152	%	26-MAR-15	30-MAR-15	R3167320
		78.0		21-159	%	26-MAR-15	30-MAR-15	R3167320
		72.0		17-205	%	26-MAR-15	30-MAR-15	R3167320
		74.0		28-136	%	26-MAR-15	30-MAR-15	R3167320
		73.0		21-158	%	26-MAR-15	30-MAR-15	R3167320
		74.0		20-186	%	26-MAR-15	30-MAR-15	R3167320
		64.0		31-191	%	26-MAR-15	30-MAR-15	R3167320
		0.00149			pg/L	26-MAR-15	30-MAR-15	R3167320
		2.15			pg/L	26-MAR-15	30-MAR-15	R3167320
		4.31			pg/L	26-MAR-15	30-MAR-15	R3167320
L1581030-2 MP-ASH-058 Sampled By: CLIENT on 12-FEB-15 @ 11:10 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.62		0.10	pH units	28-FEB-15	28-FEB-15	R3153649
		12.30		0.10	pH units	28-FEB-15	28-FEB-15	R3153649
		0.15		0.10	%	26-FEB-15	27-FEB-15	R3152775
		<0.050		0.050	mg/L		02-MAR-15	R3153794
		8.41		0.50	mg/L		02-MAR-15	R3153794
		<2.5		2.5	mg/L		02-MAR-15	R3153794
		<0.0050		0.0050	mg/L		02-MAR-15	R3153794
		0.219		0.050	mg/L		02-MAR-15	R3153794
		<0.050		0.050	mg/L		02-MAR-15	R3153794
		<0.00010		0.00010	mg/L	02-MAR-15	02-MAR-15	R3153796
		<0.25		0.25	mg/L		02-MAR-15	R3153794
		<0.0050		0.0050	mg/L		02-MAR-15	R3153794
		<0.25		0.25	mg/L		02-MAR-15	R3153794
		<0.15		0.15	mg/L		02-MAR-15	R3153794
L1581030-3 MP-ASH-059 Sampled By: CLIENT on 12-FEB-15 @ 11:30 Matrix: SOIL Sample Preparation Initial pH								
		11.75		0.10	pH units	28-FEB-15	28-FEB-15	R3153649

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1581030-3 MP-ASH-059 Sampled By: CLIENT on 12-FEB-15 @ 11:30 Matrix: SOIL Sample Preparation Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		5.67		0.10	pH units	28-FEB-15	28-FEB-15	R3153649
		3.55		0.10	%	26-FEB-15	27-FEB-15	R3152775
		0.132		0.050	mg/L		02-MAR-15	R3153794
		<0.50		0.50	mg/L		02-MAR-15	R3153794
		3.1		2.5	mg/L		02-MAR-15	R3153794
		0.0089		0.0050	mg/L		02-MAR-15	R3153794
		<0.050		0.050	mg/L		02-MAR-15	R3153794
		<0.050		0.050	mg/L		02-MAR-15	R3153794
		<0.00010		0.00010	mg/L	02-MAR-15	02-MAR-15	R3153796
		<0.25		0.25	mg/L		02-MAR-15	R3153794
		<0.0050		0.0050	mg/L		02-MAR-15	R3153794
		<0.25		0.25	mg/L		02-MAR-15	R3153794
		3.72		0.15	mg/L		02-MAR-15	R3153794
L1581030-4 MP-ASH-060 Sampled By: CLIENT on 12-FEB-15 @ 13:25 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.74		0.10	pH units	28-FEB-15	28-FEB-15	R3153649
		10.61		0.10	pH units	28-FEB-15	28-FEB-15	R3153649
		<0.10		0.10	%	26-FEB-15	27-FEB-15	R3152775
		<0.050		0.050	mg/L		02-MAR-15	R3153794
		0.59		0.50	mg/L		02-MAR-15	R3153794
		9.0		2.5	mg/L		02-MAR-15	R3153794
		<0.0050		0.0050	mg/L		02-MAR-15	R3153794
		1.13		0.050	mg/L		02-MAR-15	R3153794
		<0.050		0.050	mg/L		02-MAR-15	R3153794
		<0.00010		0.00010	mg/L	02-MAR-15	02-MAR-15	R3153796
		<0.25		0.25	mg/L		02-MAR-15	R3153794
		<0.0050		0.0050	mg/L		02-MAR-15	R3153794
		<0.25		0.25	mg/L		02-MAR-15	R3153794
		<0.15		0.15	mg/L		02-MAR-15	R3153794
L1581030-5 MP-ASH-061 Sampled By: CLIENT on 12-FEB-15 @ 13:31 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture								
		11.60		0.10	pH units	28-FEB-15	28-FEB-15	R3153649
		10.01		0.10	pH units	28-FEB-15	28-FEB-15	R3153649
		0.28		0.10	%	26-FEB-15	27-FEB-15	R3152775

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1581030-5 MP-ASH-061 Sampled By: CLIENT on 12-FEB-15 @ 13:31 Matrix: SOIL Physical Tests TCLP Metals Arsenic (As) <0.050 0.050 mg/L 02-MAR-15 R3153794 Barium (Ba) <0.50 0.50 mg/L 02-MAR-15 R3153794 Boron (B) 5.2 2.5 mg/L 02-MAR-15 R3153794 Cadmium (Cd) <0.0050 0.0050 mg/L 02-MAR-15 R3153794 Chromium (Cr) 5.50 0.050 mg/L 02-MAR-15 R3153794 Lead (Pb) <0.050 0.050 mg/L 02-MAR-15 R3153794 Mercury (Hg) <0.00010 0.00010 mg/L 02-MAR-15 R3153796 Selenium (Se) <0.25 0.25 mg/L 02-MAR-15 R3153794 Silver (Ag) <0.0050 0.0050 mg/L 02-MAR-15 R3153794 Uranium (U) <0.25 0.25 mg/L 02-MAR-15 R3153794 Zinc (Zn)-Total <0.15 0.15 mg/L 02-MAR-15 R3153794							
L1581030-6 MP-ASH-062 Sampled By: CLIENT on 12-FEB-15 @ 13:33 Matrix: SOIL Sample Preparation Initial pH 11.52 0.10 pH units 28-FEB-15 28-FEB-15 R3153649 Final pH 10.93 0.10 pH units 28-FEB-15 28-FEB-15 R3153649 Physical Tests % Moisture 0.12 0.10 % 26-FEB-15 27-FEB-15 R3152775 TCLP Metals Arsenic (As) <0.050 0.050 mg/L 02-MAR-15 R3153794 Barium (Ba) <0.50 0.50 mg/L 02-MAR-15 R3153794 Boron (B) 6.9 2.5 mg/L 02-MAR-15 R3153794 Cadmium (Cd) <0.0050 0.0050 mg/L 02-MAR-15 R3153794 Chromium (Cr) 0.561 0.050 mg/L 02-MAR-15 R3153794 Lead (Pb) <0.050 0.050 mg/L 02-MAR-15 R3153794 Mercury (Hg) <0.00010 0.00010 mg/L 02-MAR-15 R3153796 Selenium (Se) <0.25 0.25 mg/L 02-MAR-15 R3153794 Silver (Ag) <0.0050 0.0050 mg/L 02-MAR-15 R3153794 Uranium (U) <0.25 0.25 mg/L 02-MAR-15 R3153794 Zinc (Zn)-Total <0.15 0.15 mg/L 02-MAR-15 R3153794							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type	Description	Parameter	Qualifier	Applies to Sample Number(s)
Method Blank		Total-HxCDD	A	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		1,2,3,4,6,7,8-HpCDD	J,R	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		1,2,3,7,8,9-HxCDD	J,R	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		1,2,3,7,8,9-HxCDF	J,R	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		1,2,3,4,7,8-HxCDD	[J]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		OCDD	[J]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		1,2,3,4,6,7,8-HpCDF	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		1,2,3,4,7,8,9-HpCDF	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		1,2,3,4,7,8-HxCDF	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		1,2,3,6,7,8-HxCDD	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		1,2,3,6,7,8-HxCDF	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		1,2,3,7,8-PeCDD	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		1,2,3,7,8-PeCDF	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		2,3,4,6,7,8-HxCDF	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		2,3,4,7,8-PeCDF	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		2,3,7,8-TCDD	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		2,3,7,8-TCDF	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		OCDF	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		Total-HpCDD	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		Total-HpCDF	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		Total-HxCDF	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		Total-PeCDD	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		Total-PeCDF	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		Total-TCDD	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		
Method Blank		Total-TCDF	[U]	L1581030-1
	Comments:	Method Blank contains low levels of targets but well within the method specifications		

Sample Parameter Qualifier key listed:

Qualifier	Description
A	Method Blank exceeds ALS DQO. Refer to narrative comments for further information.
J,B	The analyte was detected below the calibrated range but above the EDL, and was detected in the Method Blank at >10% of the sample

	concentration.
J,R	The analyte was detected below the calibrated range but above the EDL, and the ion abundance ratio(s) did not meet the acceptance criteria. Value is an estimated maximum.
[J]	The analyte was detected below the calibrated range but above the EDL.
[U]	The analyte was not detected above the EDL.

Test Method References:			
ALS Test Code	Matrix	Test Description	Method Reference**
DX-1613B-HRMS-BU	Waste	Dioxins and Furans by method 1631B	USEPA 1613B
Samples filtered if required. The solid portion is extracted by Soxhlet, the liquid portion is liquid/liquid extracted with dichloromethane. The extracts are prepared using column chromatography, reduced in volume and analyzed by isotope-dilution GC/HRMS.			
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).			
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried
PCB-TCLP-WT	Waste	PCBs for O. Reg 347	SW846 8270
THM-TCLP-WT	Waste	Trihalomethanes for O. Reg 347	SW846 8260
A sample of waste is leached in a zero headspace extractor at 30–2 rpm for 18–2.0 hours with the appropriate leaching solution. After tumbling the leachate is analyzed directly by purge and trap technology, followed by GC/MS using internal standard quantitation.			
VOC-TCLP-WT	Waste	VOC for O. Reg 347	SW846 8260
A sample of waste is leached in a zero headspace extractor at 30–2 rpm for 18–2.0 hours with the appropriate leaching solution. After tumbling the leachate is analyzed directly by headspace technology, followed by GC/MS using internal standard quantitation.			

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA
BU	ALS ENVIRONMENTAL - BURLINGTON, ONTARIO, CANADA

Chain of Custody Numbers:
GLOSSARY OF REPORT TERMS Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there. mg/kg - milligrams per kilogram based on dry weight of sample mg/kg wwt - milligrams per kilogram based on wet weight of sample mg/kg lwt - milligrams per kilogram based on lipid weight of sample mg/L - unit of concentration based on volume, parts per million. < - Less than. D.L. - The reporting limit. N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1581030

Report Date: 01-APR-15

Page 1 of 11

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3152775							
WG2046589-4	DUP	L1580410-3						
% Moisture		23.9	21.5		%	11	30	27-FEB-15
WG2046589-2	LCS							
% Moisture			100.9		%		70-130	27-FEB-15
WG2046589-1	MB							
% Moisture			<0.10		%		0.1	27-FEB-15
DX-1613B-HRMS-BU		Waste						
Batch	R3167320							
WG2056259-2	LCS							
2,3,7,8-TCDD			99.0		%		67-158	30-MAR-15
1,2,3,7,8-PeCDD			105.0		%		70-142	30-MAR-15
1,2,3,4,7,8-HxCDD			84.0		%		70-164	30-MAR-15
1,2,3,6,7,8-HxCDD			98.0		%		76-134	30-MAR-15
1,2,3,7,8,9-HxCDD			111.0		%		64-162	30-MAR-15
1,2,3,4,6,7,8-HpCDD			101.0		%		70-140	30-MAR-15
OCDD			94.0		%		78-144	30-MAR-15
2,3,7,8-TCDF			91.0		%		75-158	30-MAR-15
1,2,3,7,8-PeCDF			101.0		%		80-134	30-MAR-15
2,3,4,7,8-PeCDF			95.0		%		68-160	30-MAR-15
1,2,3,4,7,8-HxCDF			101.0		%		72-134	30-MAR-15
1,2,3,6,7,8-HxCDF			98.0		%		84-130	30-MAR-15
2,3,4,6,7,8-HxCDF			102.0		%		78-130	30-MAR-15
1,2,3,7,8,9-HxCDF			97.0		%		70-156	30-MAR-15
1,2,3,4,6,7,8-HpCDF			94.0		%		82-122	30-MAR-15
1,2,3,4,7,8,9-HpCDF			100.0		%		78-138	30-MAR-15
OCDF			96.0		%		63-170	30-MAR-15
WG2056259-1	MB							
2,3,7,8-TCDD			<2.3	[U]	pg/L		2.3	30-MAR-15
1,2,3,7,8-PeCDD			<0.75	[U]	pg/L		0.75	30-MAR-15
1,2,3,4,7,8-HxCDD			0.77	[J]	pg/L		0.52	30-MAR-15
1,2,3,6,7,8-HxCDD			<0.46	[U]	pg/L		0.46	30-MAR-15
1,2,3,7,8,9-HxCDD			0.52	J,R	pg/L		0.47	30-MAR-15
1,2,3,4,6,7,8-HpCDD			1.30	J,R	pg/L		0.73	30-MAR-15
OCDD			3.03	[J]	pg/L		0.58	30-MAR-15
2,3,7,8-TCDF			<1.1	[U]	pg/L		1.1	30-MAR-15



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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
DX-1613B-HRMS-BU		Waste						
Batch	R3167320							
WG2056259-1 MB								
1,2,3,7,8-PeCDF			<0.58	[U]	pg/L		0.58	30-MAR-15
2,3,4,7,8-PeCDF			<0.66	[U]	pg/L		0.66	30-MAR-15
1,2,3,4,7,8-HxCDF			<0.55	[U]	pg/L		0.55	30-MAR-15
1,2,3,6,7,8-HxCDF			<0.50	[U]	pg/L		0.5	30-MAR-15
2,3,4,6,7,8-HxCDF			<0.56	[U]	pg/L		0.56	30-MAR-15
1,2,3,7,8,9-HxCDF			0.88	J,R	pg/L		0.79	30-MAR-15
1,2,3,4,6,7,8-HpCDF			<0.57	[U]	pg/L		0.57	30-MAR-15
1,2,3,4,7,8,9-HpCDF			<0.85	[U]	pg/L		0.85	30-MAR-15
OCDF			<0.79	[U]	pg/L		0.79	30-MAR-15
Total-TCDD			<2.3	[U]	pg/L		2.3	30-MAR-15
Total-PeCDD			<0.75	[U]	pg/L		0.75	30-MAR-15
Total-HxCDD			1.25	A	pg/L		0.52	30-MAR-15
Total-HpCDD			<0.73	[U]	pg/L		0.73	30-MAR-15
Total-TCDF			<1.1	[U]	pg/L		1.1	30-MAR-15
Total-PeCDF			<0.66	[U]	pg/L		0.66	30-MAR-15
Total-HxCDF			<0.79	[U]	pg/L		0.79	30-MAR-15
Total-HpCDF			<0.85	[U]	pg/L		0.85	30-MAR-15
Surrogate: 13C12-2,3,7,8-TCDD			77.0		%		20-175	30-MAR-15
Surrogate: 13C12-1,2,3,7,8-PeCDD			59.0		%		21-227	30-MAR-15
Surrogate: 13C12-1,2,3,4,7,8-HxCDD			63.0		%		21-193	30-MAR-15
Surrogate: 13C12-1,2,3,6,7,8-HxCDD			80.0		%		25-163	30-MAR-15
Surrogate: 13C12-1,2,3,4,6,7,8-HpCDD			72.0		%		23-166	30-MAR-15
Surrogate: 13C12-OCDD			84.0		%		13-138	30-MAR-15
Surrogate: 13C12-2,3,7,8-TCDF			72.0		%		22-152	30-MAR-15
Surrogate: 13C12-1,2,3,7,8-PeCDF			65.0		%		24-185	30-MAR-15
Surrogate: 13C12-2,3,4,7,8-PeCDF			58.0		%		21-178	30-MAR-15
Surrogate: 13C12-1,2,3,4,7,8-HxCDF			73.0		%		26-152	30-MAR-15
Surrogate: 13C12-1,2,3,6,7,8-HxCDF			73.0		%		21-159	30-MAR-15
Surrogate: 13C12-2,3,4,6,7,8-HxCDF			68.0		%		17-205	30-MAR-15
Surrogate: 13C12-1,2,3,7,8,9-HxCDF			72.0		%		28-136	30-MAR-15
Surrogate: 13C12-1,2,3,4,6,7,8-HpCDF			69.0		%		21-158	30-MAR-15
Surrogate: 13C12-1,2,3,4,7,8,9-HpCDF			73.0		%		20-186	30-MAR-15
Surrogate: 37Cl4-2,3,7,8-TCDD (Cleanup)			75.0		%		31-191	30-MAR-15

COMMENTS: Method Blank contains low levels of targets but well within the method specifications



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2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
HG-TCLP-WT		Waste						
Batch	R3153796							
WG2047942-3	DUP	L1580157-1						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	02-MAR-15
WG2047942-2	LCS							
Mercury (Hg)			101.0		%		70-130	02-MAR-15
WG2047942-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	02-MAR-15
WG2047942-4	MS	L1580903-2						
Mercury (Hg)			114.0		%		70-130	02-MAR-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3153794							
WG2047861-6	CVS							
Zinc (Zn)-Total			100.1		%		70-130	02-MAR-15
WG2047861-4	DUP	WG2047861-3						
Zinc (Zn)-Total		<0.15	<0.15	RPD-NA	mg/L	N/A	30	02-MAR-15
WG2047861-2	LCS							
Zinc (Zn)-Total			96.9		%		70-130	02-MAR-15
WG2047861-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	02-MAR-15
WG2047861-5	MS	WG2047861-3						
Zinc (Zn)-Total			95.9		%		70-130	02-MAR-15
MET-TCLP-WT		Waste						
Batch	R3153794							
WG2047861-6	CVS							
Silver (Ag)			104.1		%		70-130	02-MAR-15
Arsenic (As)			98.4		%		70-130	02-MAR-15
Boron (B)			104.8		%		70-130	02-MAR-15
Barium (Ba)			98.8		%		70-130	02-MAR-15
Cadmium (Cd)			98.6		%		70-130	02-MAR-15
Chromium (Cr)			99.2		%		70-130	02-MAR-15
Lead (Pb)			99.5		%		70-130	02-MAR-15
Selenium (Se)			102.8		%		70-130	02-MAR-15
Uranium (U)			98.4		%		70-130	02-MAR-15
WG2047861-4	DUP	WG2047861-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	02-MAR-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	02-MAR-15
Boron (B)		<2.5	<2.5	RPD-NA	mg/L	N/A	40	02-MAR-15



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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3153794							
WG2047861-4	DUP	WG2047861-3						
Barium (Ba)		8.12	8.30		mg/L	2.3	40	02-MAR-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	02-MAR-15
Chromium (Cr)		0.209	0.217		mg/L	4.0	40	02-MAR-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	02-MAR-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	02-MAR-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	02-MAR-15
WG2047861-2	LCS							
Silver (Ag)			97.7		%		70-130	02-MAR-15
Arsenic (As)			97.8		%		70-130	02-MAR-15
Boron (B)			92.7		%		70-130	02-MAR-15
Barium (Ba)			96.9		%		70-130	02-MAR-15
Cadmium (Cd)			95.3		%		70-130	02-MAR-15
Chromium (Cr)			96.8		%		70-130	02-MAR-15
Lead (Pb)			95.4		%		70-130	02-MAR-15
Selenium (Se)			96.7		%		70-130	02-MAR-15
Uranium (U)			93.0		%		70-130	02-MAR-15
WG2047861-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	02-MAR-15
Arsenic (As)			<0.050		mg/L		0.05	02-MAR-15
Boron (B)			<2.5		mg/L		2.5	02-MAR-15
Barium (Ba)			<0.50		mg/L		0.5	02-MAR-15
Cadmium (Cd)			<0.0050		mg/L		0.005	02-MAR-15
Chromium (Cr)			<0.050		mg/L		0.05	02-MAR-15
Lead (Pb)			<0.050		mg/L		0.05	02-MAR-15
Selenium (Se)			<0.25		mg/L		0.25	02-MAR-15
Uranium (U)			<0.25		mg/L		0.25	02-MAR-15
WG2047861-5	MS	WG2047861-3						
Silver (Ag)			85.3		%		50-140	02-MAR-15
Arsenic (As)			98.2		%		50-140	02-MAR-15
Boron (B)			116.9		%		50-140	02-MAR-15
Barium (Ba)			94.3		%		50-140	02-MAR-15
Cadmium (Cd)			94.0		%		50-140	02-MAR-15
Chromium (Cr)			96.4		%		50-140	02-MAR-15
Lead (Pb)			91.9		%		50-140	02-MAR-15



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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT	Waste							
Batch	R3153794							
WG2047861-5	MS	WG2047861-3						
Selenium (Se)			99.0		%		50-140	02-MAR-15
Uranium (U)			93.8		%		50-140	02-MAR-15
PCB-TCLP-WT	Waste							
Batch	R3153954							
WG2048199-1	CVS							
Aroclor 1242			106.9		%		65-130	02-MAR-15
Aroclor 1248			94.7		%		65-130	02-MAR-15
Aroclor 1254			91.0		%		65-130	02-MAR-15
Aroclor 1260			98.3		%		70-130	02-MAR-15
WG2047860-4	DUP	L1581004-1						
Aroclor 1242		<0.00020	<0.00020	RPD-NA	mg/L	N/A	50	02-MAR-15
Aroclor 1248		<0.00020	<0.00020	RPD-NA	mg/L	N/A	50	02-MAR-15
Aroclor 1254		<0.00020	<0.00020	RPD-NA	mg/L	N/A	50	02-MAR-15
Aroclor 1260		<0.00020	<0.00020	RPD-NA	mg/L	N/A	50	02-MAR-15
WG2047860-2	LCS							
Aroclor 1242			102.1		%		65-130	02-MAR-15
Aroclor 1248			96.1		%		65-130	02-MAR-15
Aroclor 1254			93.0		%		65-130	02-MAR-15
Aroclor 1260			99.8		%		65-130	02-MAR-15
WG2047860-1	MB							
Aroclor 1242			<0.00020		mg/L		0.0002	02-MAR-15
Aroclor 1248			<0.00020		mg/L		0.0002	02-MAR-15
Aroclor 1254			<0.00020		mg/L		0.0002	02-MAR-15
Aroclor 1260			<0.00020		mg/L		0.0002	02-MAR-15
Surrogate: d14-Terphenyl			93.6		%		50-150	02-MAR-15
WG2047860-3	MS	L1581004-1						
Aroclor 1242			102.3		%		50-150	02-MAR-15
Aroclor 1254			94.0		%		50-150	02-MAR-15
Aroclor 1260			98.5		%		50-150	02-MAR-15
THM-TCLP-WT	Waste							
Batch	R3154681							
WG2048394-1	CVS							
Bromoform			91.3		%		50-150	04-MAR-15
Chloroform			106.6		%		70-130	04-MAR-15



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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
THM-TCLP-WT		Waste						
Batch	R3154681							
WG2048394-1	CVS							
Dibromochloromethane			96.7		%		50-150	04-MAR-15
Dichlorobromomethane			100.1		%		50-150	04-MAR-15
WG2048394-4	DUP	L1581030-1						
Bromoform		<0.025	<0.025	RPD-NA	mg/L	N/A	50	04-MAR-15
Chloroform		<0.10	<0.10	RPD-NA	mg/L	N/A	50	04-MAR-15
Dibromochloromethane		<0.025	<0.025	RPD-NA	mg/L	N/A	50	04-MAR-15
Dichlorobromomethane		<0.025	<0.025	RPD-NA	mg/L	N/A	50	04-MAR-15
WG2048394-2	MB							
Bromoform			<0.025		mg/L		0.025	04-MAR-15
Chloroform			<0.10		mg/L		0.1	04-MAR-15
Dibromochloromethane			<0.025		mg/L		0.025	04-MAR-15
Dichlorobromomethane			<0.025		mg/L		0.025	04-MAR-15
Surrogate: 4-Bromofluorobenzene			91.9		%		70-130	04-MAR-15
COMMENTS: 28-FEB-15								
WG2048394-6	MB							
Bromoform			<0.025		mg/L		0.025	04-MAR-15
Chloroform			<0.10		mg/L		0.1	04-MAR-15
Dibromochloromethane			<0.025		mg/L		0.025	04-MAR-15
Dichlorobromomethane			<0.025		mg/L		0.025	04-MAR-15
Surrogate: 4-Bromofluorobenzene			91.2		%		70-130	04-MAR-15
COMMENTS: 29-FEB-15								
WG2048394-5	MS	L1581030-1						
Bromoform			88.1		%		50-150	04-MAR-15
Chloroform			106.1		%		50-140	04-MAR-15
Dibromochloromethane			94.9		%		50-150	04-MAR-15
Dichlorobromomethane			98.7		%		50-150	04-MAR-15
VOC-TCLP-WT		Waste						
Batch	R3154681							
WG2048394-1	CVS							
1,1-Dichloroethylene			95.0		%		70-130	04-MAR-15
1,2-Dichlorobenzene			102.0		%		70-130	04-MAR-15
1,2-Dichloroethane			103.8		%		70-130	04-MAR-15
1,4-Dichlorobenzene			103.9		%		70-130	04-MAR-15
Benzene			105.1		%		70-130	04-MAR-15
Carbon tetrachloride			106.2		%		60-140	04-MAR-15



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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-TCLP-WT		Waste						
Batch	R3154681							
WG2048394-2 MB								
Trichloroethylene			<0.025		mg/L		0.025	04-MAR-15
Vinyl chloride			<0.050		mg/L		0.05	04-MAR-15
Surrogate: 1,4-Difluorobenzene			100.4		%		50-150	04-MAR-15
Surrogate: 4-Bromofluorobenzene			91.9		%		70-130	04-MAR-15
COMMENTS: 28-FEB-15								
WG2048394-6 MB								
1,1-Dichloroethylene			<0.025		mg/L		0.025	04-MAR-15
1,2-Dichlorobenzene			<0.025		mg/L		0.025	04-MAR-15
1,2-Dichloroethane			<0.025		mg/L		0.025	04-MAR-15
1,4-Dichlorobenzene			<0.025		mg/L		0.025	04-MAR-15
Benzene			<0.025		mg/L		0.025	04-MAR-15
Carbon tetrachloride			<0.025		mg/L		0.025	04-MAR-15
Chlorobenzene			<0.025		mg/L		0.025	04-MAR-15
Chloroform			<0.10		mg/L		0.1	04-MAR-15
Dichloromethane			<0.50		mg/L		0.5	04-MAR-15
Methyl Ethyl Ketone			<1.0		mg/L		1	04-MAR-15
Tetrachloroethylene			<0.025		mg/L		0.025	04-MAR-15
Trichloroethylene			<0.025		mg/L		0.025	04-MAR-15
Vinyl chloride			<0.050		mg/L		0.05	04-MAR-15
Surrogate: 1,4-Difluorobenzene			101.3		%		50-150	04-MAR-15
Surrogate: 4-Bromofluorobenzene			91.2		%		70-130	04-MAR-15
COMMENTS: 29-FEB-15								
WG2048394-5 MS		L1581030-1						
1,1-Dichloroethylene			96.2		%		50-140	04-MAR-15
1,2-Dichlorobenzene			102.4		%		50-140	04-MAR-15
1,2-Dichloroethane			101.6		%		50-140	04-MAR-15
1,4-Dichlorobenzene			104.6		%		50-140	04-MAR-15
Benzene			105.7		%		50-140	04-MAR-15
Carbon tetrachloride			107.6		%		50-140	04-MAR-15
Chlorobenzene			101.9		%		50-140	04-MAR-15
Chloroform			106.1		%		50-140	04-MAR-15
Dichloromethane			104.3		%		50-140	04-MAR-15
Methyl Ethyl Ketone			97.6		%		50-140	04-MAR-15
Tetrachloroethylene			106.9		%		50-140	04-MAR-15



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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-TCLP-WT	Waste							
Batch	R3154681							
WG2048394-5	MS	L1581030-1						
Trichloroethylene			105.8		%		50-140	04-MAR-15
Vinyl chloride			105.8		%		50-140	04-MAR-15

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Client: BAFFINLAND IRON MINES CORPORATION
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Contact: Jim Millard

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
A	Method Blank exceeds ALS DQO. Refer to narrative comments for further information.
J,R	The analyte was detected below the calibrated range but above the EDL, and the ion abundance ratio(s) did not meet the acceptance criteria. Value is an estimated maximum.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.
[J]	The analyte was detected below the calibrated range but above the EDL.
[U]	The analyte was not detected above the EDL.

Quality Control Report

Workorder: L1581030

Report Date: 01-APR-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

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Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Dioxins and Furans							
Dioxins and Furans by method 1613B	1	12-FEB-15 10:02	26-MAR-15	30	42	days	EHT

Legend & Qualifier Definitions:

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.
EHTR: Exceeded ALS recommended hold time prior to sample receipt.
EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.
EHT: Exceeded ALS recommended hold time prior to analysis.
Rec. HT: ALS recommended hold time (see units).

Notes*:
Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes.
Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L1581030 were received on 25-FEB-15 09:27.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



Canada Toll Free: 1-800 668 9878



L1581030-COFC

Page of

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY

YELLOW - CLIENT COPY

NA-FM-0326-009 From: 04 January 2011

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 06-MAR-15
Report Date: 16-MAR-15 10:13 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: **L1584962**
Project P.O. #: 4500007003
Job Reference: MILINE PORT
C of C Numbers:
Legal Site Desc:

Austin Paterson
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1584962-1 MP-ASH-063 Sampled By: CLIENT on 22-FEB-15 @ 12:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.83		0.10	pH units	08-MAR-15	08-MAR-15	R3156771
		12.20		0.10	pH units	08-MAR-15	08-MAR-15	R3156771
		<0.10		0.10	%	06-MAR-15	07-MAR-15	R3156233
		<0.050		0.050	mg/L		10-MAR-15	R3157284
		1.11		0.50	mg/L		10-MAR-15	R3157284
		2.8		2.5	mg/L		10-MAR-15	R3157284
		<0.0050		0.0050	mg/L		10-MAR-15	R3157284
		0.699		0.050	mg/L		10-MAR-15	R3157284
		<0.050		0.050	mg/L		10-MAR-15	R3157284
		<0.00010		0.00010	mg/L	10-MAR-15	10-MAR-15	R3157339
		<0.25		0.25	mg/L		10-MAR-15	R3157284
		<0.0050		0.0050	mg/L		10-MAR-15	R3157284
		<0.25		0.25	mg/L		10-MAR-15	R3157284
		<0.15		0.15	mg/L		10-MAR-15	R3157284
L1584962-2 MP-ASH-064 Sampled By: CLIENT on 22-FEB-15 @ 12:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.40		0.10	pH units	08-MAR-15	08-MAR-15	R3156771
		7.11		0.10	pH units	08-MAR-15	08-MAR-15	R3156771
		0.99		0.10	%	06-MAR-15	07-MAR-15	R3156233
		0.069		0.050	mg/L		10-MAR-15	R3157284
		<0.50		0.50	mg/L		10-MAR-15	R3157284
		5.0		2.5	mg/L		10-MAR-15	R3157284
		<0.0050		0.0050	mg/L		10-MAR-15	R3157284
		<0.050		0.050	mg/L		10-MAR-15	R3157284
		<0.050		0.050	mg/L		10-MAR-15	R3157284
		<0.00010		0.00010	mg/L	10-MAR-15	10-MAR-15	R3157339
		<0.25		0.25	mg/L		10-MAR-15	R3157284
		<0.0050		0.0050	mg/L		10-MAR-15	R3157284
		<0.25		0.25	mg/L		10-MAR-15	R3157284
		<0.15		0.15	mg/L		10-MAR-15	R3157284
L1584962-3 MP-ASH-065 Sampled By: CLIENT on 22-FEB-15 @ 12:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests								
		11.90		0.10	pH units	08-MAR-15	08-MAR-15	R3156771
		11.80		0.10	pH units	08-MAR-15	08-MAR-15	R3156771

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1584962-3	MP-ASH-065							
Sampled By:	CLIENT on 22-FEB-15 @ 12:00							
Matrix:	SOIL							
Physical Tests								
% Moisture		<0.10		0.10	%	06-MAR-15	07-MAR-15	R3156233
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		10-MAR-15	R3157284
Barium (Ba)		1.80		0.50	mg/L		10-MAR-15	R3157284
Boron (B)		<2.5		2.5	mg/L		10-MAR-15	R3157284
Cadmium (Cd)		<0.0050		0.0050	mg/L		10-MAR-15	R3157284
Chromium (Cr)		<0.050		0.050	mg/L		10-MAR-15	R3157284
Lead (Pb)		<0.050		0.050	mg/L		10-MAR-15	R3157284
Mercury (Hg)		<0.00010		0.00010	mg/L	10-MAR-15	10-MAR-15	R3157339
Selenium (Se)		<0.25		0.25	mg/L		10-MAR-15	R3157284
Silver (Ag)		<0.0050		0.0050	mg/L		10-MAR-15	R3157284
Uranium (U)		<0.25		0.25	mg/L		10-MAR-15	R3157284
Zinc (Zn)-Total		<0.15		0.15	mg/L		10-MAR-15	R3157284

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Qualifiers for Sample Submission Listed:

Qualifier	Description
CINT	Cooling initiated. Samples were received packed with ice or ice packs and were sampled the same day as received.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1584962

Report Date: 16-MAR-15

Page 1 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3156233							
WG2050709-3	DUP	L1584762-2						
% Moisture		16.8	16.3		%	3.0	30	07-MAR-15
WG2050709-2	LCS							
% Moisture			99.2		%		70-130	07-MAR-15
WG2050709-1	MB							
% Moisture			<0.10		%		0.1	07-MAR-15
HG-TCLP-WT		Waste						
Batch	R3157339							
WG2051690-3	DUP	L1584881-1						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	10-MAR-15
WG2051690-2	LCS							
Mercury (Hg)			95.0		%		70-130	10-MAR-15
WG2051690-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	10-MAR-15
WG2051690-4	MS	L1584962-1						
Mercury (Hg)			118.0		%		70-130	10-MAR-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3157284							
WG2051609-6	CVS							
Zinc (Zn)-Total			96.1		%		70-130	10-MAR-15
WG2051609-4	DUP	WG2051609-3						
Zinc (Zn)-Total		<0.15	<0.15	RPD-NA	mg/L	N/A	30	10-MAR-15
WG2051609-2	LCS							
Zinc (Zn)-Total			97.6		%		70-130	10-MAR-15
WG2051609-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	10-MAR-15
WG2051609-5	MS	WG2051609-3						
Zinc (Zn)-Total			95.6		%		70-130	10-MAR-15
MET-TCLP-WT		Waste						
Batch	R3157284							
WG2051609-6	CVS							
Silver (Ag)			105.2		%		70-130	10-MAR-15
Arsenic (As)			101.2		%		70-130	10-MAR-15
Boron (B)			96.6		%		70-130	10-MAR-15
Barium (Ba)			99.95		%		70-130	10-MAR-15
Cadmium (Cd)			102.2		%		70-130	10-MAR-15
Chromium (Cr)			102.4		%		70-130	10-MAR-15



Quality Control Report

Workorder: L1584962

Report Date: 16-MAR-15

Page 2 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3157284							
WG2051609-6	CVS							
Lead (Pb)			98.5		%		70-130	10-MAR-15
Selenium (Se)			98.8		%		70-130	10-MAR-15
Uranium (U)			97.1		%		70-130	10-MAR-15
WG2051609-4	DUP	WG2051609-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	10-MAR-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	10-MAR-15
Boron (B)		2.8	2.9		mg/L	3.9	40	10-MAR-15
Barium (Ba)		1.11	1.06		mg/L	4.3	40	10-MAR-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	10-MAR-15
Chromium (Cr)		0.699	0.703		mg/L	0.6	40	10-MAR-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	10-MAR-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	10-MAR-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	10-MAR-15
WG2051609-2	LCS							
Silver (Ag)			98.4		%		70-130	10-MAR-15
Arsenic (As)			97.5		%		70-130	10-MAR-15
Boron (B)			88.5		%		70-130	10-MAR-15
Barium (Ba)			92.7		%		70-130	10-MAR-15
Cadmium (Cd)			97.8		%		70-130	10-MAR-15
Chromium (Cr)			96.9		%		70-130	10-MAR-15
Lead (Pb)			96.1		%		70-130	10-MAR-15
Selenium (Se)			97.0		%		70-130	10-MAR-15
Uranium (U)			96.9		%		70-130	10-MAR-15
WG2051609-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	10-MAR-15
Arsenic (As)			<0.050		mg/L		0.05	10-MAR-15
Boron (B)			<2.5		mg/L		2.5	10-MAR-15
Barium (Ba)			<0.50		mg/L		0.5	10-MAR-15
Cadmium (Cd)			<0.0050		mg/L		0.005	10-MAR-15
Chromium (Cr)			<0.050		mg/L		0.05	10-MAR-15
Lead (Pb)			<0.050		mg/L		0.05	10-MAR-15
Selenium (Se)			<0.25		mg/L		0.25	10-MAR-15
Uranium (U)			<0.25		mg/L		0.25	10-MAR-15
WG2051609-5	MS	WG2051609-3						



Quality Control Report

Workorder: L1584962

Report Date: 16-MAR-15

Page 3 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3157284							
WG2051609-5	MS	WG2051609-3						
Silver (Ag)			93.4		%		50-140	10-MAR-15
Arsenic (As)			98.7		%		50-140	10-MAR-15
Boron (B)			86.8		%		50-140	10-MAR-15
Barium (Ba)			94.5		%		50-140	10-MAR-15
Cadmium (Cd)			98.0		%		50-140	10-MAR-15
Chromium (Cr)			99.4		%		50-140	10-MAR-15
Lead (Pb)			93.1		%		50-140	10-MAR-15
Selenium (Se)			100.4		%		50-140	10-MAR-15
Uranium (U)			93.5		%		50-140	10-MAR-15

Quality Control Report

Workorder: L1584962

Report Date: 16-MAR-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Page 4 of 4

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



L1584962-COFC

Report To Company: Baffinland Iron Mines Corp. - ALS ENV Account 23642 Contact: Jim Millard Address: 2275 Upper Middle Rd. E., Suite #300 Oakville, ON, L6H 0C3 Phone: 647-253-0596 EXT 6010			Report Format / Distribution Select Report Format: ☒ PDF ☒ EXCEL ☒ EDD (DIGITAL) Quality Control (QC) Report with Report ☒ Yes ☐ No ☒ Criteria on Report - provide details below if box checked Select Distribution: ☐ EMAIL ☐ MAIL ☐ FAX Email 1 or Fax bimcore@alsglobal.com Email 2 bimww@alsglobal.com			Select Service Level Below (Rush Turnaround Time (TAT) is not available for all tests) R ☒ Regular (Standard TAT if received by 3 pm - business days) P ☐ Priority (2-4 bus. days if received by 3pm) 50% surcharge - contact ALS to confirm TAT E ☐ Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT E2 ☐ Same day or weekend emergency - contact ALS to confirm TAT and surcharge Specify Date Required for E2, E or P:		
Invoice To Same as Report To ☒ Yes ☐ No Copy of Invoice with Report ☐ Yes ☒ No Company: Contact:			Invoice Distribution Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX Email 1 or Fax ap@baffinland.com Email 2			Analysis Request Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below		
Project Information ALS Quote #: Q42455 Job #: MILNE PORT PO / AFE: 4500007003 LSD:			Oil and Gas Required Fields (client use) Approver ID: Cost Center: GL Account: Routing Code: Activity Code: Location:			BIM-TCLP-MET1-WT (TCLP Hg, Ag, As, Ba, Cd, Cr, Pb, Se, Zn) -		
ALS Lab Work Order # (lab use only) L1584962 B233			ALS Contact: Wayne Smith Sampler:					
ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mm-yy)	Time (hh:mm)	Sample Type		Number of Containers		
1	MP-ASH-063	22-Feb-15	12:00	Soil	R			
2	MP-ASH-064	22-Feb-15	12:00	Soil	R			
3	MP-ASH-065	22-Feb-15	12:00	Soil	R			
Drinking Water (DW) Samples¹ (client use) Are samples taken from a Regulated DW System? ☐ Yes ☒ No Are samples for human drinking water use? ☐ Yes ☒ No			Special Instructions / Specify Criteria to add on report (client Use) Site Specific Criteria - Account Manager to update as required.			SAMPLE CONDITION AS RECEIVED (lab use only) Frozen ☐ SIF Observations Yes ☐ No ☐ Ice packs Yes ☒ No ☐ Custody seal intact Yes ☐ No ☐ Cooling Initiated ☐ INITIAL COOLER TEMPERATURES °C FINAL COOLER TEMPERATURES °C 11.4		
SHIPMENT RELEASE (client use) Released by: Bill Bowden Date: 05-Mar-15 Time:			INITIAL SHIPMENT RECEPTION (lab use only) Received by: Date: Time:			FINAL SHIPMENT RECEPTION (lab use only) Received by: <i>[Signature]</i> Date: Mar 6/15 Time: 16:20		



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 12-MAR-15
Report Date: 20-MAR-15 07:53 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: **L1587073**
Project P.O. #: 4500007003
Job Reference: MILNE PORT
C of C Numbers:
Legal Site Desc:

Austin Paterson
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1587073-1 Sampled By: EZRA ARREAK on 09-MAR-15 @ 17:10 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total	MP-ASH-066							
		11.74		0.10	pH units	16-MAR-15	16-MAR-15	R3160448
		12.17		0.10	pH units	16-MAR-15	16-MAR-15	R3160448
		0.11		0.10	%	16-MAR-15	17-MAR-15	R3160363
		<0.050		0.050	mg/L		18-MAR-15	R3160972
		0.79		0.50	mg/L		18-MAR-15	R3160972
		<2.5		2.5	mg/L		18-MAR-15	R3160972
		<0.0050		0.0050	mg/L		18-MAR-15	R3160972
		0.060		0.050	mg/L		18-MAR-15	R3160972
		<0.050		0.050	mg/L		18-MAR-15	R3160972
		<0.00010		0.00010	mg/L	19-MAR-15	19-MAR-15	R3161771
		<0.25		0.25	mg/L		18-MAR-15	R3160972
		<0.0050		0.0050	mg/L		18-MAR-15	R3160972
		<0.25		0.25	mg/L		18-MAR-15	R3160972
		<0.15		0.15	mg/L		18-MAR-15	R3160972

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Environmental

Quality Control Report

Workorder: L1587073

Report Date: 20-MAR-15

Page 1 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3160363							
WG2054892-3	DUP	L1587640-1						
% Moisture		21.9	21.0		%	3.9	30	17-MAR-15
WG2054892-2	LCS							
% Moisture			93.7		%		70-130	17-MAR-15
WG2054892-1	MB							
% Moisture			<0.10		%		0.1	17-MAR-15
HG-TCLP-WT		Waste						
Batch	R3161771							
WG2056186-3	DUP	L1587073-1						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	19-MAR-15
WG2056186-2	LCS							
Mercury (Hg)			106.0		%		70-130	19-MAR-15
WG2056186-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	19-MAR-15
WG2056186-4	MS	L1587073-1						
Mercury (Hg)			110.0		%		70-130	19-MAR-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3160972							
WG2055868-6	CVS							
Zinc (Zn)-Total			88.6		%		70-130	18-MAR-15
WG2055868-4	DUP	WG2055868-3						
Zinc (Zn)-Total		<0.15	<0.15	RPD-NA	mg/L	N/A	30	18-MAR-15
WG2055868-2	LCS							
Zinc (Zn)-Total			98.6		%		70-130	18-MAR-15
WG2055868-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	18-MAR-15
WG2055868-5	MS	WG2055868-3						
Zinc (Zn)-Total			92.1		%		70-130	18-MAR-15
MET-TCLP-WT		Waste						
Batch	R3160972							
WG2055868-6	CVS							
Silver (Ag)			101.2		%		70-130	18-MAR-15
Arsenic (As)			92.7		%		70-130	18-MAR-15
Boron (B)			97.3		%		70-130	18-MAR-15
Barium (Ba)			93.9		%		70-130	18-MAR-15
Cadmium (Cd)			92.2		%		70-130	18-MAR-15
Chromium (Cr)			91.6		%		70-130	18-MAR-15



Quality Control Report

Workorder: L1587073

Report Date: 20-MAR-15

Page 2 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3160972							
WG2055868-6	CVS							
Lead (Pb)			99.4		%		70-130	18-MAR-15
Selenium (Se)			98.4		%		70-130	18-MAR-15
Uranium (U)			98.1		%		70-130	18-MAR-15
WG2055868-4	DUP	WG2055868-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	18-MAR-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	18-MAR-15
Boron (B)		<2.5	<2.5	RPD-NA	mg/L	N/A	40	18-MAR-15
Barium (Ba)		0.79	0.80		mg/L	0.6	40	18-MAR-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	18-MAR-15
Chromium (Cr)		0.060	0.060		mg/L	0.3	40	18-MAR-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	18-MAR-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	18-MAR-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	18-MAR-15
WG2055868-2	LCS							
Silver (Ag)			99.7		%		70-130	18-MAR-15
Arsenic (As)			97.1		%		70-130	18-MAR-15
Boron (B)			97.3		%		70-130	18-MAR-15
Barium (Ba)			95.5		%		70-130	18-MAR-15
Cadmium (Cd)			96.5		%		70-130	18-MAR-15
Chromium (Cr)			96.7		%		70-130	18-MAR-15
Lead (Pb)			96.1		%		70-130	18-MAR-15
Selenium (Se)			99.9		%		70-130	18-MAR-15
Uranium (U)			93.7		%		70-130	18-MAR-15
WG2055868-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	18-MAR-15
Arsenic (As)			<0.050		mg/L		0.05	18-MAR-15
Boron (B)			<2.5		mg/L		2.5	18-MAR-15
Barium (Ba)			<0.50		mg/L		0.5	18-MAR-15
Cadmium (Cd)			<0.0050		mg/L		0.005	18-MAR-15
Chromium (Cr)			<0.050		mg/L		0.05	18-MAR-15
Lead (Pb)			<0.050		mg/L		0.05	18-MAR-15
Selenium (Se)			<0.25		mg/L		0.25	18-MAR-15
Uranium (U)			<0.25		mg/L		0.25	18-MAR-15
WG2055868-5	MS	WG2055868-3						



Quality Control Report

Workorder: L1587073

Report Date: 20-MAR-15

Page 3 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT	Waste							
Batch	R3160972							
WG2055868-5	MS	WG2055868-3						
Silver (Ag)			88.7		%		50-140	18-MAR-15
Arsenic (As)			95.5		%		50-140	18-MAR-15
Boron (B)			95.3		%		50-140	18-MAR-15
Barium (Ba)			91.8		%		50-140	18-MAR-15
Cadmium (Cd)			94.7		%		50-140	18-MAR-15
Chromium (Cr)			93.9		%		50-140	18-MAR-15
Lead (Pb)			90.6		%		50-140	18-MAR-15
Selenium (Se)			99.1		%		50-140	18-MAR-15
Uranium (U)			91.4		%		50-140	18-MAR-15

Quality Control Report

Workorder: L1587073

Report Date: 20-MAR-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Page 4 of 4

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



Canada Toll Free: 1 800 668 9878

L1587073-COFC

Page 1 of 1

NA-FM-3329a v02 Front54 January 2014

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



BAFFINLAND IRON MINES CORPORATION

ATTN: Jim Millard

2275 Upper Middle Rd. E.

Suite #300

Oakville ON L6H 0C3

Date Received: 18-MAR-15

Report Date: 26-MAR-15 12:23 (MT)

Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: L1588789

Project P.O. #: 4500007003

Job Reference:

C of C Numbers:

Legal Site Desc:

Austin Paterson
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047

ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1588789-1 MP-ASH-67 Sampled By: EZRA ARREAK on 14-MAR-15 @ 09:35 Matrix: SOIL								
Sample Preparation								
Initial pH		11.69		0.10	pH units	23-MAR-15	23-MAR-15	R3163947
Final pH		9.80		0.10	pH units	23-MAR-15	23-MAR-15	R3163947
Physical Tests								
% Moisture		<0.10		0.10	%	23-MAR-15	24-MAR-15	R3163554
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		25-MAR-15	R3164399
Barium (Ba)		<0.50		0.50	mg/L		25-MAR-15	R3164399
Boron (B)		3.0		2.5	mg/L		25-MAR-15	R3164399
Cadmium (Cd)		<0.0050		0.0050	mg/L		25-MAR-15	R3164399
Chromium (Cr)		<0.050		0.050	mg/L		25-MAR-15	R3164399
Lead (Pb)		<0.050		0.050	mg/L		25-MAR-15	R3164399
Mercury (Hg)		<0.00010		0.00010	mg/L	25-MAR-15	25-MAR-15	R3164369
Selenium (Se)		<0.25		0.25	mg/L		25-MAR-15	R3164399
Silver (Ag)		<0.0050		0.0050	mg/L		25-MAR-15	R3164399
Uranium (U)		<0.25		0.25	mg/L		25-MAR-15	R3164399
Zinc (Zn)-Total		<0.15		0.15	mg/L		25-MAR-15	R3164399
L1588789-2 MP-ASH-68 Sampled By: EZRA ARREAK on 14-MAR-15 @ 09:30 Matrix: SOIL								
Sample Preparation								
Initial pH		11.53		0.10	pH units	23-MAR-15	23-MAR-15	R3163947
Final pH		10.30		0.10	pH units	23-MAR-15	23-MAR-15	R3163947
Physical Tests								
% Moisture		<0.10		0.10	%	23-MAR-15	24-MAR-15	R3163554
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		25-MAR-15	R3164399
Barium (Ba)		<0.50		0.50	mg/L		25-MAR-15	R3164399
Boron (B)		<2.5		2.5	mg/L		25-MAR-15	R3164399
Cadmium (Cd)		<0.0050		0.0050	mg/L		25-MAR-15	R3164399
Chromium (Cr)		0.181		0.050	mg/L		25-MAR-15	R3164399
Lead (Pb)		<0.050		0.050	mg/L		25-MAR-15	R3164399
Mercury (Hg)		<0.00010		0.00010	mg/L	25-MAR-15	25-MAR-15	R3164369
Selenium (Se)		<0.25		0.25	mg/L		25-MAR-15	R3164399
Silver (Ag)		<0.0050		0.0050	mg/L		25-MAR-15	R3164399
Uranium (U)		<0.25		0.25	mg/L		25-MAR-15	R3164399
Zinc (Zn)-Total		<0.15		0.15	mg/L		25-MAR-15	R3164399

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1588789

Report Date: 26-MAR-15

Page 1 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3163554							
WG2058413-3	DUP	L1590030-1						
% Moisture		11.2	11.7		%	3.8	30	24-MAR-15
WG2058413-2	LCS							
% Moisture			105.4		%		70-130	24-MAR-15
WG2058413-1	MB							
% Moisture			<0.10		%		0.1	24-MAR-15
HG-TCLP-WT		Waste						
Batch	R3164369							
WG2059639-3	DUP	L1588962-1						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	25-MAR-15
WG2059639-2	LCS							
Mercury (Hg)			100.5		%		70-130	25-MAR-15
WG2059639-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	25-MAR-15
WG2059639-4	MS	L1590181-1						
Mercury (Hg)			116.0		%		70-130	25-MAR-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3164399							
WG2059454-6	CVS							
Zinc (Zn)-Total			93.1		%		70-130	25-MAR-15
WG2059454-4	DUP	WG2059454-3						
Zinc (Zn)-Total		<0.15	<0.15	RPD-NA	mg/L	N/A	30	25-MAR-15
WG2059454-2	LCS							
Zinc (Zn)-Total			95.7		%		70-130	25-MAR-15
WG2059454-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	25-MAR-15
WG2059454-5	MS	WG2059454-3						
Zinc (Zn)-Total			93.0		%		70-130	25-MAR-15
MET-TCLP-WT		Waste						
Batch	R3164399							
WG2059454-6	CVS							
Silver (Ag)			100.8		%		70-130	25-MAR-15
Arsenic (As)			97.6		%		70-130	25-MAR-15
Boron (B)			101.0		%		70-130	25-MAR-15
Barium (Ba)			95.9		%		70-130	25-MAR-15
Cadmium (Cd)			101.4		%		70-130	25-MAR-15
Chromium (Cr)			98.0		%		70-130	25-MAR-15



Quality Control Report

Workorder: L1588789

Report Date: 26-MAR-15

Page 2 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3164399							
WG2059454-6	CVS							
Lead (Pb)			99.6		%		70-130	25-MAR-15
Selenium (Se)			98.2		%		70-130	25-MAR-15
Uranium (U)			98.8		%		70-130	25-MAR-15
WG2059454-4	DUP	WG2059454-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	25-MAR-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	25-MAR-15
Boron (B)		4.7	4.9		mg/L	5.2	40	25-MAR-15
Barium (Ba)		1.86	1.90		mg/L	1.9	40	25-MAR-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	25-MAR-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	25-MAR-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	25-MAR-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	25-MAR-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	25-MAR-15
WG2059454-2	LCS							
Silver (Ag)			96.8		%		70-130	25-MAR-15
Arsenic (As)			95.6		%		70-130	25-MAR-15
Boron (B)			93.6		%		70-130	25-MAR-15
Barium (Ba)			98.2		%		70-130	25-MAR-15
Cadmium (Cd)			100.0		%		70-130	25-MAR-15
Chromium (Cr)			96.6		%		70-130	25-MAR-15
Lead (Pb)			95.4		%		70-130	25-MAR-15
Selenium (Se)			96.7		%		70-130	25-MAR-15
Uranium (U)			94.6		%		70-130	25-MAR-15
WG2059454-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	25-MAR-15
Arsenic (As)			<0.050		mg/L		0.05	25-MAR-15
Boron (B)			<2.5		mg/L		2.5	25-MAR-15
Barium (Ba)			<0.50		mg/L		0.5	25-MAR-15
Cadmium (Cd)			<0.0050		mg/L		0.005	25-MAR-15
Chromium (Cr)			<0.050		mg/L		0.05	25-MAR-15
Lead (Pb)			<0.050		mg/L		0.05	25-MAR-15
Selenium (Se)			<0.25		mg/L		0.25	25-MAR-15
Uranium (U)			<0.25		mg/L		0.25	25-MAR-15
WG2059454-5	MS	WG2059454-3						



Quality Control Report

Workorder: L1588789

Report Date: 26-MAR-15

Page 3 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT	Waste							
Batch	R3164399							
WG2059454-5	MS	WG2059454-3						
Silver (Ag)			94.2		%		50-140	25-MAR-15
Arsenic (As)			94.7		%		50-140	25-MAR-15
Boron (B)			88.2		%		50-140	25-MAR-15
Barium (Ba)			98.1		%		50-140	25-MAR-15
Cadmium (Cd)			98.9		%		50-140	25-MAR-15
Chromium (Cr)			94.0		%		50-140	25-MAR-15
Lead (Pb)			89.5		%		50-140	25-MAR-15
Selenium (Se)			95.4		%		50-140	25-MAR-15
Uranium (U)			94.1		%		50-140	25-MAR-15

Quality Control Report

Workorder: L1588789

Report Date: 26-MAR-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Page 4 of 4

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

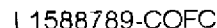
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



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14. Page 36, (C) Error: Line 20

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1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 02-APR-15
Report Date: 10-APR-15 07:23 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: **L1594435**
Project P.O. #: 4500007003
Job Reference: MILNE PORT
C of C Numbers:
Legal Site Desc:

Austin Paterson
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1594435-1 MP-ASH-66 Sampled By: E. ARREAK/N. KUZYK on 28-MAR-15 @ Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total	15:42							
		11.82		0.10	pH units	06-APR-15	06-APR-15	R3170124
		12.31		0.10	pH units	06-APR-15	06-APR-15	R3170124
		<0.10		0.10	%	02-APR-15	03-APR-15	R3168837
		<0.050		0.050	mg/L		08-APR-15	R3170592
		1.54		0.50	mg/L		08-APR-15	R3170592
		<2.5		2.5	mg/L		08-APR-15	R3170592
		<0.0050		0.0050	mg/L		08-APR-15	R3170592
		1.71		0.050	mg/L		08-APR-15	R3170592
		<0.050		0.050	mg/L		08-APR-15	R3170592
		<0.00010		0.00010	mg/L	08-APR-15	08-APR-15	R3170513
		<0.25		0.25	mg/L		08-APR-15	R3170592
		<0.0050		0.0050	mg/L		08-APR-15	R3170592
		<0.25		0.25	mg/L		08-APR-15	R3170592
		0.23		0.15	mg/L		08-APR-15	R3170592
L1594435-2 MP-ASH-69 Sampled By: E. ARREAK/N. KUZYK on 28-MAR-15 @ Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total	15:50							
		11.94		0.10	pH units	06-APR-15	06-APR-15	R3170124
		12.25		0.10	pH units	06-APR-15	06-APR-15	R3170124
		<0.10		0.10	%	02-APR-15	03-APR-15	R3168837
		<0.050		0.050	mg/L		08-APR-15	R3170592
		0.61		0.50	mg/L		08-APR-15	R3170592
		<2.5		2.5	mg/L		08-APR-15	R3170592
		<0.0050		0.0050	mg/L		08-APR-15	R3170592
		0.296		0.050	mg/L		08-APR-15	R3170592
		<0.050		0.050	mg/L		08-APR-15	R3170592
		<0.00010		0.00010	mg/L	08-APR-15	08-APR-15	R3170513
		<0.25		0.25	mg/L		08-APR-15	R3170592
		<0.0050		0.0050	mg/L		08-APR-15	R3170592
		<0.25		0.25	mg/L		08-APR-15	R3170592
		<0.15		0.15	mg/L		08-APR-15	R3170592
L1594435-3 MP-ASH-70 Sampled By: E. ARREAK/N. KUZYK on 28-MAR-15 @ Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests	15:53							
		12.51		0.10	pH units	06-APR-15	06-APR-15	R3170124
		10.93		0.10	pH units	06-APR-15	06-APR-15	R3170124

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1594435-3	MP-ASH-70	15:53				02-APR-15	03-APR-15	R3168837
Sampled By:	E. ARREAK/N. KUZYK on 28-MAR-15 @							
Matrix:	SOIL							
Physical Tests								
% Moisture								
TCLP Metals								
Arsenic (As)								
Barium (Ba)								
Boron (B)								
Cadmium (Cd)								
Chromium (Cr)								
Lead (Pb)								
Mercury (Hg)								
Selenium (Se)								
Silver (Ag)								
Uranium (U)								
Zinc (Zn)-Total								
L1594435-4	MP-ASH-71	15:56				06-APR-15	06-APR-15	R3170124
Sampled By:	E. ARREAK/N. KUZYK on 28-MAR-15 @							
Matrix:	SOIL							
Sample Preparation								
Initial pH								
Final pH								
Physical Tests								
% Moisture								
TCLP Metals								
Arsenic (As)								
Barium (Ba)								
Boron (B)								
Cadmium (Cd)								
Chromium (Cr)								
Lead (Pb)								
Mercury (Hg)								
Selenium (Se)								
Silver (Ag)								
Uranium (U)								
Zinc (Zn)-Total								
L1594435-5	MP-ASH-72	16:00				06-APR-15	06-APR-15	R3170124
Sampled By:	E. ARREAK/N. KUZYK on 28-MAR-15 @							
Matrix:	SOIL							
Sample Preparation								
Initial pH								
Final pH								
Physical Tests								
% Moisture								
TCLP Metals								
Arsenic (As)								

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Chromium (Cr)	MS-B	L1594435-1, -2, -3, -4, -5

Sample Parameter Qualifier key listed:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).			
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Environmental

Quality Control Report

Workorder: L1594435

Report Date: 10-APR-15

Page 1 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3168837							
WG2064027-3	DUP	L1594401-3						
% Moisture		96.4	96.4		%	0.0	20	03-APR-15
WG2064027-2	LCS							
% Moisture			109.1		%		70-130	03-APR-15
WG2064027-1	MB							
% Moisture			<0.10		%		0.1	03-APR-15
HG-TCLP-WT		Waste						
Batch	R3170513							
WG2066338-4	DUP	WG2066338-3						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	08-APR-15
WG2066338-2	LCS							
Mercury (Hg)			100.5		%		70-130	08-APR-15
WG2066338-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	08-APR-15
WG2066338-6	MS	WG2066338-5						
Mercury (Hg)			116.0		%		70-130	08-APR-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3170592							
WG2066151-6	CVS							
Zinc (Zn)-Total			95.4		%		70-130	08-APR-15
WG2066151-7	CVS							
Zinc (Zn)-Total			93.5		%		70-130	08-APR-15
WG2066151-4	DUP	WG2066151-3						
Zinc (Zn)-Total		0.23	0.20		mg/L	14	30	08-APR-15
WG2066151-2	LCS							
Zinc (Zn)-Total			99.7		%		70-130	08-APR-15
WG2066151-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	08-APR-15
WG2066151-5	MS	WG2066151-3						
Zinc (Zn)-Total			100.3		%		70-130	08-APR-15
MET-TCLP-WT		Waste						
Batch	R3170592							
WG2066151-6	CVS							
Silver (Ag)			101.6		%		70-130	08-APR-15
Arsenic (As)			98.4		%		70-130	08-APR-15
Boron (B)			102.8		%		70-130	08-APR-15
Barium (Ba)			98.2		%		70-130	08-APR-15



Quality Control Report

Workorder: L1594435

Report Date: 10-APR-15

Page 2 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3170592							
WG2066151-6	CVS							
Cadmium (Cd)			97.0		%		70-130	08-APR-15
Chromium (Cr)			99.0		%		70-130	08-APR-15
Lead (Pb)			101.7		%		70-130	08-APR-15
Selenium (Se)			99.7		%		70-130	08-APR-15
Uranium (U)			101.3		%		70-130	08-APR-15
WG2066151-7	CVS							
Silver (Ag)			100.8		%		70-130	08-APR-15
Arsenic (As)			99.6		%		70-130	08-APR-15
Boron (B)			103.8		%		70-130	08-APR-15
Barium (Ba)			97.6		%		70-130	08-APR-15
Cadmium (Cd)			98.1		%		70-130	08-APR-15
Chromium (Cr)			99.0		%		70-130	08-APR-15
Lead (Pb)			99.0		%		70-130	08-APR-15
Selenium (Se)			96.0		%		70-130	08-APR-15
Uranium (U)			96.4		%		70-130	08-APR-15
WG2066151-4	DUP	WG2066151-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	08-APR-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	08-APR-15
Boron (B)		<2.5	<2.5	RPD-NA	mg/L	N/A	40	08-APR-15
Barium (Ba)		1.54	1.36		mg/L	13	40	08-APR-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	08-APR-15
Chromium (Cr)		1.71	1.47		mg/L	15	40	08-APR-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	08-APR-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	08-APR-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	08-APR-15
WG2066151-2	LCS							
Silver (Ag)			100.4		%		70-130	08-APR-15
Arsenic (As)			97.9		%		70-130	08-APR-15
Boron (B)			97.2		%		70-130	08-APR-15
Barium (Ba)			99.1		%		70-130	08-APR-15
Cadmium (Cd)			99.4		%		70-130	08-APR-15
Chromium (Cr)			98.9		%		70-130	08-APR-15
Lead (Pb)			95.8		%		70-130	08-APR-15
Selenium (Se)			97.2		%		70-130	08-APR-15



Environmental

Quality Control Report

Workorder: L1594435

Report Date: 10-APR-15

Page 3 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3170592							
WG2066151-2	LCS							
Uranium (U)			97.8		%		70-130	08-APR-15
WG2066151-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	08-APR-15
Arsenic (As)			<0.050		mg/L		0.05	08-APR-15
Boron (B)			<2.5		mg/L		2.5	08-APR-15
Barium (Ba)			<0.50		mg/L		0.5	08-APR-15
Cadmium (Cd)			<0.0050		mg/L		0.005	08-APR-15
Chromium (Cr)			<0.050		mg/L		0.05	08-APR-15
Lead (Pb)			<0.050		mg/L		0.05	08-APR-15
Selenium (Se)			<0.25		mg/L		0.25	08-APR-15
Uranium (U)			<0.25		mg/L		0.25	08-APR-15
WG2066151-5	MS	WG2066151-3						
Silver (Ag)			98.6		%		50-140	08-APR-15
Arsenic (As)			102.7		%		50-140	08-APR-15
Boron (B)			113.0		%		50-140	08-APR-15
Barium (Ba)			93.8		%		50-140	08-APR-15
Cadmium (Cd)			95.7		%		50-140	08-APR-15
Chromium (Cr)			N/A	MS-B	%		-	08-APR-15
Lead (Pb)			96.5		%		50-140	08-APR-15
Selenium (Se)			105.6		%		50-140	08-APR-15
Uranium (U)			95.9		%		50-140	08-APR-15

Quality Control Report

Workorder: L1594435

Report Date: 10-APR-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Page 4 of 4

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

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Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

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1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



BAFFINLAND IRON MINES CORPORATION

ATTN: Jim Millard

2275 Upper Middle Rd. E.

Suite #300

Oakville ON L6H 0C3

Date Received: 06-APR-15

Report Date: 13-APR-15 12:13 (MT)

Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: L1595070

Project P.O. #: 4500007003

Job Reference: MILNE PORT

C of C Numbers:

Legal Site Desc:

Austin Paterson
Account Manager

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ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1595070-1 MP-ASH-73 Sampled By: EZRA ARREAK on 01-APR-15 @ 16:23 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.40		0.10	pH units	07-APR-15	07-APR-15	R3171464
		6.73		0.10	pH units	07-APR-15	07-APR-15	R3171464
		<0.10		0.10	%	06-APR-15	07-APR-15	R3169583
		<0.050		0.050	mg/L		09-APR-15	R3171005
		<0.50		0.50	mg/L		09-APR-15	R3171005
		4.6		2.5	mg/L		09-APR-15	R3171005
		<0.0050		0.0050	mg/L		09-APR-15	R3171005
		<0.050		0.050	mg/L		09-APR-15	R3171005
		<0.050		0.050	mg/L		09-APR-15	R3171005
		<0.00010		0.00010	mg/L	09-APR-15	09-APR-15	R3171158
		<0.25		0.25	mg/L		09-APR-15	R3171005
		<0.0050		0.0050	mg/L		09-APR-15	R3171005
		<0.25		0.25	mg/L		09-APR-15	R3171005
		0.35		0.15	mg/L		09-APR-15	R3171005
L1595070-2 MP-ASH-74 Sampled By: EZRA ARREAK on 01-APR-15 @ 16:35 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.74		0.10	pH units	07-APR-15	07-APR-15	R3171464
		12.39		0.10	pH units	07-APR-15	07-APR-15	R3171464
		<0.10		0.10	%	06-APR-15	07-APR-15	R3169583
		<0.050		0.050	mg/L		09-APR-15	R3171005
		1.12		0.50	mg/L		09-APR-15	R3171005
		5.7		2.5	mg/L		09-APR-15	R3171005
		<0.0050		0.0050	mg/L		09-APR-15	R3171005
		0.386		0.050	mg/L		09-APR-15	R3171005
		<0.050		0.050	mg/L		09-APR-15	R3171005
		<0.00010		0.00010	mg/L	09-APR-15	09-APR-15	R3171158
		<0.25		0.25	mg/L		09-APR-15	R3171005
		<0.0050		0.0050	mg/L		09-APR-15	R3171005
		<0.25		0.25	mg/L		09-APR-15	R3171005
		<0.15		0.15	mg/L		09-APR-15	R3171005
L1595070-3 MP-ASH-75 Sampled By: EZRA ARREAK on 01-APR-15 @ 16:37 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests								
		11.55		0.10	pH units	07-APR-15	07-APR-15	R3171464
		11.17		0.10	pH units	07-APR-15	07-APR-15	R3171464

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Zinc (Zn)-Total	MS-B	L1595070-1, -2, -3

Sample Parameter Qualifier key listed:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).			
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1595070

Report Date: 13-APR-15

Page 1 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3169583							
WG2065097-3	DUP	L1594793-1						
% Moisture		18.4	20.5		%	11	20	07-APR-15
WG2065097-2	LCS							
% Moisture			108.8		%		70-130	07-APR-15
WG2065097-1	MB							
% Moisture			<0.10		%		0.1	07-APR-15
HG-TCLP-WT		Waste						
Batch	R3171158							
WG2067056-3	DUP	L1594430-1						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	09-APR-15
WG2067056-2	LCS							
Mercury (Hg)			101.5		%		70-130	09-APR-15
WG2067056-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	09-APR-15
WG2067056-4	MS	L1590034-1						
Mercury (Hg)			114.0		%		70-130	09-APR-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3171005							
WG2066897-6	CVS							
Zinc (Zn)-Total			93.6		%		70-130	09-APR-15
WG2066897-4	DUP	WG2066897-3						
Zinc (Zn)-Total		27.0	27.1		mg/L	0.5	30	09-APR-15
WG2066897-2	LCS							
Zinc (Zn)-Total			96.0		%		70-130	09-APR-15
WG2066897-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	09-APR-15
WG2066897-5	MS	WG2066897-3						
Zinc (Zn)-Total			N/A	MS-B	%		-	09-APR-15
MET-TCLP-WT		Waste						
Batch	R3171005							
WG2066897-6	CVS							
Silver (Ag)			105.4		%		70-130	09-APR-15
Arsenic (As)			98.8		%		70-130	09-APR-15
Boron (B)			105.9		%		70-130	09-APR-15
Barium (Ba)			103.1		%		70-130	09-APR-15
Cadmium (Cd)			99.5		%		70-130	09-APR-15
Chromium (Cr)			96.9		%		70-130	09-APR-15



Quality Control Report

Workorder: L1595070

Report Date: 13-APR-15

Page 2 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3171005							
WG2066897-6	CVS							
Lead (Pb)			104.3		%		70-130	09-APR-15
Selenium (Se)			93.0		%		70-130	09-APR-15
Uranium (U)			103.0		%		70-130	09-APR-15
WG2066897-4	DUP	WG2066897-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	09-APR-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	09-APR-15
Boron (B)		<2.5	<2.5	RPD-NA	mg/L	N/A	40	09-APR-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	09-APR-15
Cadmium (Cd)		0.0879	0.0885		mg/L	0.7	40	09-APR-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	09-APR-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	09-APR-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	09-APR-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	09-APR-15
WG2066897-2	LCS							
Silver (Ag)			103.1		%		70-130	09-APR-15
Arsenic (As)			96.0		%		70-130	09-APR-15
Boron (B)			104.1		%		70-130	09-APR-15
Barium (Ba)			97.8		%		70-130	09-APR-15
Cadmium (Cd)			96.6		%		70-130	09-APR-15
Chromium (Cr)			95.5		%		70-130	09-APR-15
Lead (Pb)			100.3		%		70-130	09-APR-15
Selenium (Se)			95.6		%		70-130	09-APR-15
Uranium (U)			99.7		%		70-130	09-APR-15
WG2066897-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	09-APR-15
Arsenic (As)			<0.050		mg/L		0.05	09-APR-15
Boron (B)			<2.5		mg/L		2.5	09-APR-15
Barium (Ba)			<0.50		mg/L		0.5	09-APR-15
Cadmium (Cd)			<0.0050		mg/L		0.005	09-APR-15
Chromium (Cr)			<0.050		mg/L		0.05	09-APR-15
Lead (Pb)			<0.050		mg/L		0.05	09-APR-15
Selenium (Se)			<0.25		mg/L		0.25	09-APR-15
Uranium (U)			<0.25		mg/L		0.25	09-APR-15
WG2066897-5	MS	WG2066897-3						



Quality Control Report

Workorder: L1595070

Report Date: 13-APR-15

Page 3 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3171005							
WG2066897-5	MS	WG2066897-3						
Silver (Ag)			101.3		%		50-140	09-APR-15
Arsenic (As)			104.6		%		50-140	09-APR-15
Boron (B)			109.4		%		50-140	09-APR-15
Barium (Ba)			104.7		%		50-140	09-APR-15
Cadmium (Cd)			103.7		%		50-140	09-APR-15
Chromium (Cr)			101.4		%		50-140	09-APR-15
Lead (Pb)			101.7		%		50-140	09-APR-15
Selenium (Se)			102.4		%		50-140	09-APR-15
Uranium (U)			105.6		%		50-140	09-APR-15

Quality Control Report

Workorder: L1595070

Report Date: 13-APR-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Page 4 of 4

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



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NA-FM-0326g v09 Front/04 January 2014

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 22-APR-15
Report Date: 28-APR-15 12:04 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: **L1601685**
Project P.O. #: 4500007003
Job Reference: MILNE PORT
C of C Numbers:
Legal Site Desc:

Austin Paterson
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1601685-1 MP-ASH-076 Sampled By: CLIENT on 14-APR-15 @ 15:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.73		0.10	pH units	23-APR-15	23-APR-15	R3180484
		12.02		0.10	pH units	23-APR-15	23-APR-15	R3180484
		0.18		0.10	%	23-APR-15	24-APR-15	R3178911
		<0.050		0.050	mg/L		27-APR-15	R3180084
		<0.50		0.50	mg/L		27-APR-15	R3180084
		<2.5		2.5	mg/L		27-APR-15	R3180084
		<0.0050		0.0050	mg/L		27-APR-15	R3180084
		0.188		0.050	mg/L		27-APR-15	R3180084
		<0.050		0.050	mg/L		27-APR-15	R3180084
		<0.00010		0.00010	mg/L	27-APR-15	27-APR-15	R3180311
		<0.25		0.25	mg/L		27-APR-15	R3180084
		<0.0050		0.0050	mg/L		27-APR-15	R3180084
		<0.25		0.25	mg/L		27-APR-15	R3180084
		<0.15		0.15	mg/L		27-APR-15	R3180084
L1601685-2 MP-ASH-077 Sampled By: CLIENT on 14-APR-15 @ 15:10 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.74		0.10	pH units	23-APR-15	23-APR-15	R3180484
		11.67		0.10	pH units	23-APR-15	23-APR-15	R3180484
		<0.10		0.10	%	23-APR-15	24-APR-15	R3178911
		<0.050		0.050	mg/L		27-APR-15	R3180084
		0.53		0.50	mg/L		27-APR-15	R3180084
		4.6		2.5	mg/L		27-APR-15	R3180084
		<0.0050		0.0050	mg/L		27-APR-15	R3180084
		3.33		0.050	mg/L		27-APR-15	R3180084
		<0.050		0.050	mg/L		27-APR-15	R3180084
		<0.00010		0.00010	mg/L	27-APR-15	27-APR-15	R3180311
		<0.25		0.25	mg/L		27-APR-15	R3180084
		<0.0050		0.0050	mg/L		27-APR-15	R3180084
		<0.25		0.25	mg/L		27-APR-15	R3180084
		<0.15		0.15	mg/L		27-APR-15	R3180084

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1601685

Report Date: 28-APR-15

Page 1 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3178911							
WG2075225-3	DUP	L1599620-6						
% Moisture		24.3	23.1		%	4.9	20	24-APR-15
WG2075225-2	LCS							
% Moisture			91.4		%		70-130	24-APR-15
WG2075225-1	MB							
% Moisture			<0.10		%		0.1	24-APR-15
HG-TCLP-WT		Waste						
Batch	R3180311							
WG2077200-3	DUP	L1601685-1						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	27-APR-15
WG2077200-2	LCS							
Mercury (Hg)			92.0		%		70-130	27-APR-15
WG2077200-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	27-APR-15
WG2077200-4	MS	L1601685-1						
Mercury (Hg)			122.0		%		70-130	27-APR-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3180084							
WG2077068-6	CVS							
Zinc (Zn)-Total			90.5		%		70-130	27-APR-15
WG2077068-4	DUP	WG2077068-3						
Zinc (Zn)-Total		<0.15	<0.15	RPD-NA	mg/L	N/A	30	27-APR-15
WG2077068-2	LCS							
Zinc (Zn)-Total			95.3		%		70-130	27-APR-15
WG2077068-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	27-APR-15
WG2077068-5	MS	WG2077068-3						
Zinc (Zn)-Total			91.2		%		70-130	27-APR-15
MET-TCLP-WT		Waste						
Batch	R3180084							
WG2077068-6	CVS							
Silver (Ag)			100.8		%		70-130	27-APR-15
Arsenic (As)			97.4		%		70-130	27-APR-15
Boron (B)			115.8		%		70-130	27-APR-15
Barium (Ba)			97.9		%		70-130	27-APR-15
Cadmium (Cd)			96.3		%		70-130	27-APR-15
Chromium (Cr)			97.7		%		70-130	27-APR-15



Quality Control Report

Workorder: L1601685

Report Date: 28-APR-15

Page 2 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3180084							
WG2077068-6	CVS							
Lead (Pb)			99.96		%		70-130	27-APR-15
Selenium (Se)			94.6		%		70-130	27-APR-15
Uranium (U)			100.9		%		70-130	27-APR-15
WG2077068-4	DUP	WG2077068-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	27-APR-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	27-APR-15
Boron (B)		<2.5	<2.5	RPD-NA	mg/L	N/A	40	27-APR-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	27-APR-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	27-APR-15
Chromium (Cr)		0.188	0.183		mg/L	2.8	40	27-APR-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	27-APR-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	27-APR-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	27-APR-15
WG2077068-2	LCS							
Silver (Ag)			96.6		%		70-130	27-APR-15
Arsenic (As)			96.8		%		70-130	27-APR-15
Boron (B)			97.1		%		70-130	27-APR-15
Barium (Ba)			94.7		%		70-130	27-APR-15
Cadmium (Cd)			93.5		%		70-130	27-APR-15
Chromium (Cr)			98.0		%		70-130	27-APR-15
Lead (Pb)			96.3		%		70-130	27-APR-15
Selenium (Se)			92.5		%		70-130	27-APR-15
Uranium (U)			94.2		%		70-130	27-APR-15
WG2077068-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	27-APR-15
Arsenic (As)			<0.050		mg/L		0.05	27-APR-15
Boron (B)			<2.5		mg/L		2.5	27-APR-15
Barium (Ba)			<0.50		mg/L		0.5	27-APR-15
Cadmium (Cd)			<0.0050		mg/L		0.005	27-APR-15
Chromium (Cr)			<0.050		mg/L		0.05	27-APR-15
Lead (Pb)			<0.050		mg/L		0.05	27-APR-15
Selenium (Se)			<0.25		mg/L		0.25	27-APR-15
Uranium (U)			<0.25		mg/L		0.25	27-APR-15
WG2077068-5	MS	WG2077068-3						



Quality Control Report

Workorder: L1601685

Report Date: 28-APR-15

Page 3 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3180084							
WG2077068-5	MS	WG2077068-3						
Silver (Ag)			82.9		%		50-140	27-APR-15
Arsenic (As)			94.6		%		50-140	27-APR-15
Boron (B)			98.8		%		50-140	27-APR-15
Barium (Ba)			95.3		%		50-140	27-APR-15
Cadmium (Cd)			90.6		%		50-140	27-APR-15
Chromium (Cr)			90.8		%		50-140	27-APR-15
Lead (Pb)			90.3		%		50-140	27-APR-15
Selenium (Se)			92.2		%		50-140	27-APR-15
Uranium (U)			90.1		%		50-140	27-APR-15

Quality Control Report

Workorder: L1601685

Report Date: 28-APR-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Page 4 of 4

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

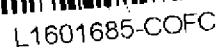
The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



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COC Number: 14 -

Page 1 of 1

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NA-EN-03276 x09 Emv154 January 201

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1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 13-MAY-15
Report Date: 20-MAY-15 14:26 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: **L1610417**
Project P.O. #: 4500007003
Job Reference: MILNE PORT
C of C Numbers:
Legal Site Desc:

Austin Paterson
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1610417-1 MP-ASH-078 Sampled By: EZRA ARREAK on 04-MAY-15 @ 14:20 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.65		0.10	pH units	13-MAY-15	13-MAY-15	R3190178
		11.48		0.10	pH units	13-MAY-15	13-MAY-15	R3190178
		0.18		0.10	%	13-MAY-15	14-MAY-15	R3189700
		<0.050		0.050	mg/L		15-MAY-15	R3190601
		<0.50		0.50	mg/L		15-MAY-15	R3190601
		<2.5		2.5	mg/L		15-MAY-15	R3190601
		<0.0050		0.0050	mg/L		15-MAY-15	R3190601
		1.54		0.050	mg/L		15-MAY-15	R3190601
		<0.050		0.050	mg/L		15-MAY-15	R3190601
		<0.00010		0.00010	mg/L	15-MAY-15	15-MAY-15	R3190695
		<0.25		0.25	mg/L		15-MAY-15	R3190601
		<0.0050		0.0050	mg/L		15-MAY-15	R3190601
		<0.25		0.25	mg/L		15-MAY-15	R3190601
		<0.15		0.15	mg/L		15-MAY-15	R3190601
L1610417-2 MP-ASH-079 Sampled By: EZRA ARREAK on 04-MAY-15 @ 14:25 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.66		0.10	pH units	13-MAY-15	13-MAY-15	R3190178
		12.13		0.10	pH units	13-MAY-15	13-MAY-15	R3190178
		<0.10		0.10	%	13-MAY-15	14-MAY-15	R3189710
		<0.050		0.050	mg/L		15-MAY-15	R3190601
		<0.50		0.50	mg/L		15-MAY-15	R3190601
		<2.5		2.5	mg/L		15-MAY-15	R3190601
		<0.0050		0.0050	mg/L		15-MAY-15	R3190601
		0.116		0.050	mg/L		15-MAY-15	R3190601
		<0.050		0.050	mg/L		15-MAY-15	R3190601
		<0.00010		0.00010	mg/L	15-MAY-15	15-MAY-15	R3190695
		<0.25		0.25	mg/L		15-MAY-15	R3190601
		<0.0050		0.0050	mg/L		15-MAY-15	R3190601
		<0.25		0.25	mg/L		15-MAY-15	R3190601
		<0.15		0.15	mg/L		15-MAY-15	R3190601
L1610417-3 MP-ASH-080 Sampled By: EZRA ARREAK on 07-MAY-15 @ 15:00 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests								
		11.05		0.10	pH units	13-MAY-15	13-MAY-15	R3190178
		11.34		0.10	pH units	13-MAY-15	13-MAY-15	R3190178

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1610417-3 MP-ASH-080 Sampled By: EZRA ARREAK on 07-MAY-15 @ 15:00 Matrix: SOIL Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		0.20		0.10	%	13-MAY-15	14-MAY-15	R3189710
		<0.050		0.050	mg/L		15-MAY-15	R3190601
		1.19		0.50	mg/L		15-MAY-15	R3190601
		<2.5		2.5	mg/L		15-MAY-15	R3190601
		<0.0050		0.0050	mg/L		15-MAY-15	R3190601
		0.082		0.050	mg/L		15-MAY-15	R3190601
		<0.050		0.050	mg/L		15-MAY-15	R3190601
		<0.00010		0.00010	mg/L	15-MAY-15	15-MAY-15	R3190695
		<0.25		0.25	mg/L		15-MAY-15	R3190601
		<0.0050		0.0050	mg/L		15-MAY-15	R3190601
		<0.25		0.25	mg/L		15-MAY-15	R3190601
		<0.15		0.15	mg/L		15-MAY-15	R3190601
L1610417-4 MP-ASH-081 Sampled By: EZRA ARREAK on 07-MAY-15 @ 15:05 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		11.04		0.10	pH units	13-MAY-15	13-MAY-15	R3190178
		9.11		0.10	pH units	13-MAY-15	13-MAY-15	R3190178
		<0.10		0.10	%	13-MAY-15	14-MAY-15	R3189710
		<0.050		0.050	mg/L		15-MAY-15	R3190601
		<0.50		0.50	mg/L		15-MAY-15	R3190601
		4.5		2.5	mg/L		15-MAY-15	R3190601
		<0.0050		0.0050	mg/L		15-MAY-15	R3190601
		0.522		0.050	mg/L		15-MAY-15	R3190601
		<0.050		0.050	mg/L		15-MAY-15	R3190601
		<0.00010		0.00010	mg/L	15-MAY-15	15-MAY-15	R3190695
		<0.25		0.25	mg/L		15-MAY-15	R3190601
		<0.0050		0.0050	mg/L		15-MAY-15	R3190601
		<0.25		0.25	mg/L		15-MAY-15	R3190601
		<0.15		0.15	mg/L		15-MAY-15	R3190601
L1610417-5 MP-ASH-082 Sampled By: EZRA ARREAK on 07-MAY-15 @ 15:10 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As)								
		10.84		0.10	pH units	13-MAY-15	13-MAY-15	R3190178
		5.64		0.10	pH units	13-MAY-15	13-MAY-15	R3190178
		<0.10		0.10	%	13-MAY-15	14-MAY-15	R3189710
		0.066		0.050	mg/L		15-MAY-15	R3190601

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1610417-5 MP-ASH-082 Sampled By: EZRA ARREAK on 07-MAY-15 @ 15:10 Matrix: SOIL TCLP Metals Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
		<0.50		0.50	mg/L		15-MAY-15	R3190601
		7.7		2.5	mg/L		15-MAY-15	R3190601
		<0.0050		0.0050	mg/L		15-MAY-15	R3190601
		<0.050		0.050	mg/L		15-MAY-15	R3190601
		<0.050		0.050	mg/L		15-MAY-15	R3190601
		<0.00010		0.00010	mg/L	15-MAY-15	15-MAY-15	R3190695
		<0.25		0.25	mg/L		15-MAY-15	R3190601
		<0.0050		0.0050	mg/L		15-MAY-15	R3190601
		<0.25		0.25	mg/L		15-MAY-15	R3190601
		3.15		0.15	mg/L		15-MAY-15	R3190601

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3189700							
WG2087772-3	DUP	L1610997-1	5.71		%	5.1	20	14-MAY-15
% Moisture								
WG2087772-2	LCS		101.2		%		70-130	14-MAY-15
% Moisture								
WG2087772-1	MB		<0.10		%		0.1	14-MAY-15
% Moisture								
Batch	R3189710							
WG2087451-4	DUP	L1611338-7	7.93		%	0.8	20	14-MAY-15
% Moisture								
WG2087451-2	LCS		101.6		%		70-130	14-MAY-15
% Moisture								
WG2087451-1	MB		<0.10		%		0.1	14-MAY-15
% Moisture								
HG-TCLP-WT		Waste						
Batch	R3190695							
WG2089181-3	DUP	L1611008-1	<0.00010	RPD-NA	mg/L	N/A	50	15-MAY-15
Mercury (Hg)								
WG2089181-2	LCS		105.5		%		70-130	15-MAY-15
Mercury (Hg)								
WG2089181-1	MB		<0.00010		mg/L		0.0001	15-MAY-15
Mercury (Hg)								
WG2089181-4	MS	L1610800-2	107.0		%		50-140	15-MAY-15
Mercury (Hg)								
MET-TCLP-EXTRA-WT		Waste						
Batch	R3190601							
WG2088824-6	CVS		93.7		%		70-130	15-MAY-15
Zinc (Zn)-Total								
WG2088824-4	DUP	WG2088824-3	<0.15	RPD-NA	mg/L	N/A	30	15-MAY-15
Zinc (Zn)-Total								
WG2088824-2	LCS		96.3		%		70-130	15-MAY-15
Zinc (Zn)-Total								
WG2088824-1	MB		<0.15		mg/L		0.15	15-MAY-15
Zinc (Zn)-Total								
WG2088824-5	MS	WG2088824-3	95.9		%		70-130	15-MAY-15
Zinc (Zn)-Total								
MET-TCLP-WT		Waste						



Quality Control Report

Workorder: L1610417

Report Date: 20-MAY-15

Page 2 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3190601							
WG2088824-6	CVS							
Silver (Ag)			103.2		%		70-130	15-MAY-15
Arsenic (As)			99.2		%		70-130	15-MAY-15
Boron (B)			97.7		%		70-130	15-MAY-15
Barium (Ba)			99.8		%		70-130	15-MAY-15
Cadmium (Cd)			101.7		%		70-130	15-MAY-15
Chromium (Cr)			100.5		%		70-130	15-MAY-15
Lead (Pb)			99.2		%		70-130	15-MAY-15
Selenium (Se)			99.0		%		70-130	15-MAY-15
Uranium (U)			100.8		%		70-130	15-MAY-15
WG2088824-4	DUP	WG2088824-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	15-MAY-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	15-MAY-15
Boron (B)		<2.5	<2.5	RPD-NA	mg/L	N/A	40	15-MAY-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	15-MAY-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	15-MAY-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	15-MAY-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	15-MAY-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	15-MAY-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	15-MAY-15
WG2088824-2	LCS							
Silver (Ag)			102.5		%		70-130	15-MAY-15
Arsenic (As)			98.2		%		70-130	15-MAY-15
Boron (B)			95.6		%		70-130	15-MAY-15
Barium (Ba)			98.5		%		70-130	15-MAY-15
Cadmium (Cd)			97.9		%		70-130	15-MAY-15
Chromium (Cr)			98.3		%		70-130	15-MAY-15
Lead (Pb)			96.2		%		70-130	15-MAY-15
Selenium (Se)			96.3		%		70-130	15-MAY-15
Uranium (U)			95.4		%		70-130	15-MAY-15
WG2088824-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	15-MAY-15
Arsenic (As)			<0.050		mg/L		0.05	15-MAY-15
Boron (B)			<2.5		mg/L		2.5	15-MAY-15
Barium (Ba)			<0.50		mg/L		0.5	15-MAY-15



Quality Control Report

Workorder: L1610417 Report Date: 20-MAY-15 Page 3 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3190601							
WG2088824-1	MB							
Cadmium (Cd)			<0.0050		mg/L		0.005	15-MAY-15
Chromium (Cr)			<0.050		mg/L		0.05	15-MAY-15
Lead (Pb)			<0.050		mg/L		0.05	15-MAY-15
Selenium (Se)			<0.25		mg/L		0.25	15-MAY-15
Uranium (U)			<0.25		mg/L		0.25	15-MAY-15
WG2088824-5	MS	WG2088824-3						
Silver (Ag)			92.7		%		50-140	15-MAY-15
Arsenic (As)			98.9		%		50-140	15-MAY-15
Boron (B)			94.8		%		50-140	15-MAY-15
Barium (Ba)			99.2		%		50-140	15-MAY-15
Cadmium (Cd)			98.4		%		50-140	15-MAY-15
Chromium (Cr)			98.7		%		50-140	15-MAY-15
Lead (Pb)			95.1		%		50-140	15-MAY-15
Selenium (Se)			97.4		%		50-140	15-MAY-15
Uranium (U)			96.6		%		50-140	15-MAY-15

Quality Control Report

Workorder: L1610417

Report Date: 20-MAY-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Page 4 of 4

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

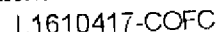
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



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Page 1 of 1

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NA-EM-0020a-09 Front/04 January 2014

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1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 12-JUN-15
Report Date: 17-JUN-15 10:21 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: **L1625892**
Project P.O. #: 4500007003
Job Reference: MILNE PORT
C of C Numbers:
Legal Site Desc:

Austin Paterson
Account Manager

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1625892-1 MP-ASH-83 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		11.38		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Final pH		7.35		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Physical Tests								
% Moisture		1.50		0.10	%	12-JUN-15	13-JUN-15	R3207006
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Barium (Ba)		<0.50		0.50	mg/L		15-JUN-15	R3208466
Boron (B)		9.9		2.5	mg/L		15-JUN-15	R3208466
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Chromium (Cr)		0.067		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Zinc (Zn)-Total		<0.15		0.15	mg/L		15-JUN-15	R3208466
L1625892-2 MP-ASH-84 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		12.41		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Final pH		9.40		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Physical Tests								
% Moisture		12.6		0.10	%	12-JUN-15	13-JUN-15	R3207006
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Barium (Ba)		<0.50		0.50	mg/L		15-JUN-15	R3208466
Boron (B)		<2.5		2.5	mg/L		15-JUN-15	R3208466
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Chromium (Cr)		0.389		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Zinc (Zn)-Total		<0.15		0.15	mg/L		15-JUN-15	R3208466
L1625892-3 MP-ASH-85 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		12.52		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Final pH		12.37		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Physical Tests								

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1625892-3 MP-ASH-85 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL								
Physical Tests								
% Moisture		<0.10		0.10	%	12-JUN-15	13-JUN-15	R3207006
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Barium (Ba)		1.89		0.50	mg/L		15-JUN-15	R3208466
Boron (B)		<2.5		2.5	mg/L		15-JUN-15	R3208466
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Chromium (Cr)		1.03		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Zinc (Zn)-Total		0.19		0.15	mg/L		15-JUN-15	R3208466
L1625892-4 MP-ASH-86 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		10.19		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Final pH		6.17		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Physical Tests								
% Moisture		45.6		0.10	%	12-JUN-15	13-JUN-15	R3207006
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Barium (Ba)		<0.50		0.50	mg/L		15-JUN-15	R3208466
Boron (B)		5.1		2.5	mg/L		15-JUN-15	R3208466
Cadmium (Cd)		0.0095		0.0050	mg/L		15-JUN-15	R3208466
Chromium (Cr)		2.46		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Zinc (Zn)-Total		2.24		0.15	mg/L		15-JUN-15	R3208466
L1625892-5 MP-ASH-87 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		11.55		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Final pH		6.30		0.10	pH units	12-JUN-15	12-JUN-15	R3208444
Physical Tests								
% Moisture		<0.10		0.10	%	12-JUN-15	13-JUN-15	R3207006
TCLP Metals								
Arsenic (As)		0.115		0.050	mg/L		15-JUN-15	R3208466

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1625892-5 MP-ASH-87 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL TCLP Metals	Barium (Ba)	<0.50		0.50	mg/L		15-JUN-15	R3208466
	Boron (B)	3.6		2.5	mg/L		15-JUN-15	R3208466
	Cadmium (Cd)	<0.0050		0.0050	mg/L		15-JUN-15	R3208466
	Chromium (Cr)	<0.050		0.050	mg/L		15-JUN-15	R3208466
	Lead (Pb)	<0.050		0.050	mg/L		15-JUN-15	R3208466
	Mercury (Hg)	<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648
	Selenium (Se)	<0.25		0.25	mg/L		15-JUN-15	R3208466
	Silver (Ag)	<0.0050		0.0050	mg/L		15-JUN-15	R3208466
	Uranium (U)	<0.25		0.25	mg/L		15-JUN-15	R3208466
	Zinc (Zn)-Total	<0.15		0.15	mg/L		15-JUN-15	R3208466
L1625892-6 MP-ASH-88 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL Sample Preparation	Initial pH	12.12		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
	Final pH	8.43		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
	Physical Tests							
	% Moisture	3.18		0.10	%	12-JUN-15	13-JUN-15	R3207006
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		15-JUN-15	R3208466
	Barium (Ba)	<0.50		0.50	mg/L		15-JUN-15	R3208466
	Boron (B)	4.7		2.5	mg/L		15-JUN-15	R3208466
	Cadmium (Cd)	<0.0050		0.0050	mg/L		15-JUN-15	R3208466
	Chromium (Cr)	<0.050		0.050	mg/L		15-JUN-15	R3208466
	Lead (Pb)	<0.050		0.050	mg/L		15-JUN-15	R3208466
	Mercury (Hg)	<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648
	Selenium (Se)	<0.25		0.25	mg/L		15-JUN-15	R3208466
	Silver (Ag)	<0.0050		0.0050	mg/L		15-JUN-15	R3208466
	Uranium (U)	<0.25		0.25	mg/L		15-JUN-15	R3208466
	Zinc (Zn)-Total	<0.15		0.15	mg/L		15-JUN-15	R3208466
L1625892-7 MP-ASH-89 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL Sample Preparation	Initial pH	11.57		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
	Final pH	11.27		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
	Physical Tests							
	% Moisture	<0.10		0.10	%	12-JUN-15	13-JUN-15	R3207006
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		15-JUN-15	R3208466
	Barium (Ba)	1.10		0.50	mg/L		15-JUN-15	R3208466
	Boron (B)	<2.5		2.5	mg/L		15-JUN-15	R3208466
	Cadmium (Cd)	<0.0050		0.0050	mg/L		15-JUN-15	R3208466

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1625892-7	MP-ASH-89							
Sampled By:	E.A. / A.D. on 04-JUN-15 @ 10:00							
Matrix:	SOIL							
TCLP Metals								
Chromium (Cr)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Zinc (Zn)-Total		<0.15		0.15	mg/L		15-JUN-15	R3208466
L1625892-8	MP-ASH-90							
Sampled By:	E.A. / A.D. on 04-JUN-15 @ 10:00							
Matrix:	SOIL							
Sample Preparation								
Initial pH		12.04		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Final pH		10.31		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Physical Tests								
% Moisture		2.39		0.10	%	12-JUN-15	13-JUN-15	R3207006
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Barium (Ba)		1.10		0.50	mg/L		15-JUN-15	R3208466
Boron (B)		2.8		2.5	mg/L		15-JUN-15	R3208466
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Chromium (Cr)		0.222		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Zinc (Zn)-Total		<0.15		0.15	mg/L		15-JUN-15	R3208466
L1625892-9	MP-ASH-91							
Sampled By:	E.A. / A.D. on 04-JUN-15 @ 10:00							
Matrix:	SOIL							
Sample Preparation								
Initial pH		12.53		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Final pH		12.37		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Physical Tests								
% Moisture		<0.10		0.10	%	12-JUN-15	13-JUN-15	R3207006
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Barium (Ba)		2.00		0.50	mg/L		15-JUN-15	R3208466
Boron (B)		<2.5		2.5	mg/L		15-JUN-15	R3208466
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Chromium (Cr)		0.183		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1625892-9 MP-ASH-91 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL TCLP Metals	Selenium (Se)	<0.25		0.25	mg/L		15-JUN-15	R3208466
		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
		<0.25		0.25	mg/L		15-JUN-15	R3208466
		0.37		0.15	mg/L		15-JUN-15	R3208466
L1625892-10 MP-ASH-92 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL Sample Preparation	Initial pH	11.88		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
		11.73		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
	Physical Tests							
	% Moisture	<0.10		0.10	%	12-JUN-15	13-JUN-15	R3207006
	TCLP Metals							
	Arsenic (As)	<0.050		0.050	mg/L		15-JUN-15	R3208466
		0.71		0.50	mg/L		15-JUN-15	R3208466
	Barium (Ba)	<2.5		2.5	mg/L		15-JUN-15	R3208466
		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
	Chromium (Cr)	0.840		0.050	mg/L		15-JUN-15	R3208466
		<0.050		0.050	mg/L		15-JUN-15	R3208466
	Lead (Pb)	<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648
		<0.25		0.25	mg/L		15-JUN-15	R3208466
	Silver (Ag)	<0.0050		0.0050	mg/L		15-JUN-15	R3208466
		<0.25		0.25	mg/L		15-JUN-15	R3208466
	Uranium (U)	<0.15		0.15	mg/L		15-JUN-15	R3208466
L1625892-11 MP-ASH-93 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL Sample Preparation	Initial pH	11.81		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
		5.81		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
	Physical Tests							
	% Moisture	2.65		0.10	%	12-JUN-15	13-JUN-15	R3207006
	TCLP Metals							
	Arsenic (As)	0.133		0.050	mg/L		15-JUN-15	R3208466
		<0.50		0.50	mg/L		15-JUN-15	R3208466
	Barium (Ba)	2.7		2.5	mg/L		15-JUN-15	R3208466
		0.0065		0.0050	mg/L		15-JUN-15	R3208466
	Chromium (Cr)	<0.050		0.050	mg/L		15-JUN-15	R3208466
		<0.050		0.050	mg/L		15-JUN-15	R3208466
	Lead (Pb)	<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648
		<0.25		0.25	mg/L		15-JUN-15	R3208466
	Silver (Ag)	<0.0050		0.0050	mg/L		15-JUN-15	R3208466
		<0.25		0.25	mg/L		15-JUN-15	R3208466

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1625892-11	MP-ASH-93							
	Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00							
Matrix: SOIL								
TCLP Metals								
Zinc (Zn)-Total		2.54		0.15	mg/L		15-JUN-15	R3208466
L1625892-12	MP-ASH-94							
	Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00							
Matrix: SOIL								
Sample Preparation								
Initial pH		11.46		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Final pH		10.68		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Physical Tests								
% Moisture		<0.10		0.10	%	12-JUN-15	13-JUN-15	R3207006
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Barium (Ba)		0.71		0.50	mg/L		15-JUN-15	R3208466
Boron (B)		7.3		2.5	mg/L		15-JUN-15	R3208466
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Chromium (Cr)		0.736		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Zinc (Zn)-Total		<0.15		0.15	mg/L		15-JUN-15	R3208466
L1625892-13	MP-ASH-95							
	Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00							
Matrix: SOIL								
Sample Preparation								
Initial pH		12.07		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Final pH		6.61		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Physical Tests								
% Moisture		12.9		0.10	%	12-JUN-15	13-JUN-15	R3207006
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Barium (Ba)		<0.50		0.50	mg/L		15-JUN-15	R3208466
Boron (B)		4.2		2.5	mg/L		15-JUN-15	R3208466
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Chromium (Cr)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Zinc (Zn)-Total		<0.15		0.15	mg/L		15-JUN-15	R3208466
L1625892-14	MP-ASH-96							
	Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1625892-14 MP-ASH-96 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		12.19		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Final pH		7.58		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Physical Tests								
% Moisture		9.91		0.10	%	12-JUN-15	13-JUN-15	R3207005
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Barium (Ba)		<0.50		0.50	mg/L		15-JUN-15	R3208466
Boron (B)		4.1		2.5	mg/L		15-JUN-15	R3208466
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Chromium (Cr)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Zinc (Zn)-Total		<0.15		0.15	mg/L		15-JUN-15	R3208466
L1625892-15 MP-ASH-97 Sampled By: E.A. / A.D. on 05-JUN-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		12.29		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Final pH		7.85		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Physical Tests								
% Moisture		12.6		0.10	%	12-JUN-15	13-JUN-15	R3207005
TCLP Metals								
Arsenic (As)		0.063		0.050	mg/L		15-JUN-15	R3208466
Barium (Ba)		<0.50		0.50	mg/L		15-JUN-15	R3208466
Boron (B)		3.3		2.5	mg/L		15-JUN-15	R3208466
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Chromium (Cr)		0.252		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207648
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Zinc (Zn)-Total		<0.15		0.15	mg/L		15-JUN-15	R3208466
L1625892-16 MP-ASH-98 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		12.40		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Final pH		11.37		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Physical Tests								

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1625892-18 MP-ASH-100 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL								
TCLP Metals								
Barium (Ba)		1.29		0.50	mg/L		15-JUN-15	R3208466
Boron (B)		2.7		2.5	mg/L		15-JUN-15	R3208466
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Chromium (Cr)		0.868		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207650
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Zinc (Zn)-Total		<0.15		0.15	mg/L		15-JUN-15	R3208466
L1625892-19 MP-ASH-101 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		12.49		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Final pH		8.21		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Physical Tests								
% Moisture		19.8		0.10	%	12-JUN-15	13-JUN-15	R3207005
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Barium (Ba)		<0.50		0.50	mg/L		15-JUN-15	R3208466
Boron (B)		4.1		2.5	mg/L		15-JUN-15	R3208466
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Chromium (Cr)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207650
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Silver (Ag)		0.0051		0.0050	mg/L		15-JUN-15	R3208466
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Zinc (Zn)-Total		<0.15		0.15	mg/L		15-JUN-15	R3208466
L1625892-20 MP-ASH-102 Sampled By: E.A. / A.D. on 04-JUN-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		11.98		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Final pH		7.34		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Physical Tests								
% Moisture		2.96		0.10	%	12-JUN-15	13-JUN-15	R3207005
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Barium (Ba)		<0.50		0.50	mg/L		15-JUN-15	R3208466
Boron (B)		3.7		2.5	mg/L		15-JUN-15	R3208466
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1625892-20	MP-ASH-102							
Sampled By:	E.A. / A.D. on 04-JUN-15 @ 10:00							
Matrix:	SOIL							
TCLP Metals								
Chromium (Cr)		1.59		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207650
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Zinc (Zn)-Total		<0.15		0.15	mg/L		15-JUN-15	R3208466
L1625892-21	MP-ASH-103							
Sampled By:	E.A. / A.D. on 08-JUN-15 @ 16:00							
Matrix:	SOIL							
Sample Preparation								
Initial pH		11.69		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Final pH		7.48		0.10	pH units	13-JUN-15	13-JUN-15	R3208042
Physical Tests								
% Moisture		<0.10		0.10	%	12-JUN-15	13-JUN-15	R3207005
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Barium (Ba)		<0.50		0.50	mg/L		15-JUN-15	R3208466
Boron (B)		2.7		2.5	mg/L		15-JUN-15	R3208466
Cadmium (Cd)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Chromium (Cr)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Lead (Pb)		<0.050		0.050	mg/L		15-JUN-15	R3208466
Mercury (Hg)		<0.00010		0.00010	mg/L	15-JUN-15	15-JUN-15	R3207650
Selenium (Se)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Silver (Ag)		<0.0050		0.0050	mg/L		15-JUN-15	R3208466
Uranium (U)		<0.25		0.25	mg/L		15-JUN-15	R3208466
Zinc (Zn)-Total		<0.15		0.15	mg/L		15-JUN-15	R3208466

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1625892

Report Date: 17-JUN-15

Page 1 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3207005							
WG2107203-3	DUP	L1625901-7						
% Moisture		0.46	0.43		%	7.0	20	13-JUN-15
WG2107203-2	LCS							
% Moisture			104.6		%		70-130	13-JUN-15
WG2107203-1	MB							
% Moisture			<0.10		%		0.1	13-JUN-15
Batch	R3207006							
WG2107200-3	DUP	L1625876-1						
% Moisture		8.23	9.14		%	10	20	13-JUN-15
WG2107200-2	LCS							
% Moisture			94.7		%		70-130	13-JUN-15
WG2107200-1	MB							
% Moisture			<0.10		%		0.1	13-JUN-15
HG-TCLP-WT		Waste						
Batch	R3207648							
WG2108252-3	DUP	L1625792-1						
Mercury (Hg)		0.00011	<0.00010	RPD-NA	mg/L	N/A	50	15-JUN-15
WG2108252-2	LCS							
Mercury (Hg)			98.9		%		70-130	15-JUN-15
WG2108252-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	15-JUN-15
WG2108252-4	MS	L1625892-6						
Mercury (Hg)			94.7		%		50-140	15-JUN-15
Batch	R3207650							
WG2108253-3	DUP	L1625892-18						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	50	15-JUN-15
WG2108253-2	LCS							
Mercury (Hg)			103.0		%		70-130	15-JUN-15
WG2108253-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	15-JUN-15
WG2108253-4	MS	L1625901-1						
Mercury (Hg)			98.7		%		50-140	15-JUN-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3208466							
WG2108274-6	CVS							
Zinc (Zn)-Total			94.8		%		70-130	15-JUN-15
WG2108274-4	DUP	WG2108274-3						



Quality Control Report

Workorder: L1625892

Report Date: 17-JUN-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-EXTRA-WT		Waste						
Batch	R3208466							
WG2108274-4	DUP	WG2108274-3						
Zinc (Zn)-Total		<0.15	<0.15	RPD-NA	mg/L	N/A	30	15-JUN-15
WG2108274-2	LCS							
Zinc (Zn)-Total			97.9		%		70-130	15-JUN-15
WG2108274-1	MB							
Zinc (Zn)-Total			<0.15		mg/L		0.15	15-JUN-15
WG2108274-5	MS	WG2108274-3						
Zinc (Zn)-Total			75.1		%		70-130	15-JUN-15
MET-TCLP-WT		Waste						
Batch	R3208466							
WG2108274-6	CVS							
Silver (Ag)			100.9		%		70-130	15-JUN-15
Arsenic (As)			98.3		%		70-130	15-JUN-15
Boron (B)			101.5		%		70-130	15-JUN-15
Barium (Ba)			100.3		%		70-130	15-JUN-15
Cadmium (Cd)			98.1		%		70-130	15-JUN-15
Chromium (Cr)			98.9		%		70-130	15-JUN-15
Lead (Pb)			104.6		%		70-130	15-JUN-15
Selenium (Se)			96.9		%		70-130	15-JUN-15
Uranium (U)			102.0		%		70-130	15-JUN-15
WG2108274-4	DUP	WG2108274-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	15-JUN-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	15-JUN-15
Boron (B)		4.7	4.7		mg/L	1.7	40	15-JUN-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	15-JUN-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	15-JUN-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	15-JUN-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	15-JUN-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	15-JUN-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	15-JUN-15
WG2108274-2	LCS							
Silver (Ag)			100.6		%		70-130	15-JUN-15
Arsenic (As)			97.5		%		70-130	15-JUN-15
Boron (B)			96.9		%		70-130	15-JUN-15
Barium (Ba)			101.2		%		70-130	15-JUN-15



Quality Control Report

Workorder: L1625892

Report Date: 17-JUN-15

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Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3208466							
WG2108274-2	LCS							
Cadmium (Cd)			99.0		%		70-130	15-JUN-15
Chromium (Cr)			97.6		%		70-130	15-JUN-15
Lead (Pb)			100.8		%		70-130	15-JUN-15
Selenium (Se)			97.9		%		70-130	15-JUN-15
Uranium (U)			99.4		%		70-130	15-JUN-15
WG2108274-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	15-JUN-15
Arsenic (As)			<0.050		mg/L		0.05	15-JUN-15
Boron (B)			<2.5		mg/L		2.5	15-JUN-15
Barium (Ba)			<0.50		mg/L		0.5	15-JUN-15
Cadmium (Cd)			<0.0050		mg/L		0.005	15-JUN-15
Chromium (Cr)			<0.050		mg/L		0.05	15-JUN-15
Lead (Pb)			<0.050		mg/L		0.05	15-JUN-15
Selenium (Se)			<0.25		mg/L		0.25	15-JUN-15
Uranium (U)			<0.25		mg/L		0.25	15-JUN-15
WG2108274-5	MS	WG2108274-3						
Silver (Ag)			71.7		%		50-140	15-JUN-15
Arsenic (As)			78.4		%		50-140	15-JUN-15
Boron (B)			67.2		%		50-140	15-JUN-15
Barium (Ba)			82.6		%		50-140	15-JUN-15
Cadmium (Cd)			76.6		%		50-140	15-JUN-15
Chromium (Cr)			78.2		%		50-140	15-JUN-15
Lead (Pb)			76.5		%		50-140	15-JUN-15
Selenium (Se)			78.1		%		50-140	15-JUN-15
Uranium (U)			77.9		%		50-140	15-JUN-15

Quality Control Report

Workorder: L1625892

Report Date: 17-JUN-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

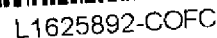
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



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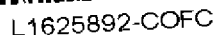
NA-EM-0326a v09 Ercolli-04 January 2014

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1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



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1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 11-JUL-15
Report Date: 20-JUL-15 12:00 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: L1640429
Project P.O. #: 4500007003
Job Reference: MILNE PORT
C of C Numbers:
Legal Site Desc:

Austin Paterson
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1640429-1 MP-ASH-104 Sampled By: AD on 29-JUN-15 @ 10:00 Matrix: SOIL								
Sample Preparation								
Initial pH		11.56		0.10	pH units	16-JUL-15	16-JUL-15	R3228848
Final pH		8.08		0.10	pH units	16-JUL-15	16-JUL-15	R3228848
Physical Tests								
% Moisture		0.24		0.10	%	13-JUL-15	14-JUL-15	R3224844
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		20-JUL-15	R3228873
Barium (Ba)		<0.50		0.50	mg/L		20-JUL-15	R3228873
Boron (B)		3.9		2.5	mg/L		20-JUL-15	R3228873
Cadmium (Cd)		<0.0050		0.0050	mg/L		20-JUL-15	R3228873
Chromium (Cr)		<0.050		0.050	mg/L		20-JUL-15	R3228873
Lead (Pb)		<0.050		0.050	mg/L		20-JUL-15	R3228873
Mercury (Hg)		<0.00010		0.00010	mg/L		17-JUL-15	R3227662
Selenium (Se)		<0.25		0.25	mg/L		20-JUL-15	R3228873
Silver (Ag)		<0.0050		0.0050	mg/L		20-JUL-15	R3228873
Uranium (U)		<0.25		0.25	mg/L		20-JUL-15	R3228873
Zinc (Zn)-Total		<1.0		1.0	mg/L		20-JUL-15	R3228873
L1640429-2 MP-ASH-105 Sampled By: AD on 03-JUL-15 @ 16:13 Matrix: SOIL								
Sample Preparation								
Initial pH		11.99		0.10	pH units	16-JUL-15	16-JUL-15	R3228848
Final pH		7.01		0.10	pH units	16-JUL-15	16-JUL-15	R3228848
Physical Tests								
% Moisture		0.14		0.10	%	13-JUL-15	14-JUL-15	R3224851
TCLP Metals								
Arsenic (As)		0.148		0.050	mg/L		20-JUL-15	R3228873
Barium (Ba)		<0.50		0.50	mg/L		20-JUL-15	R3228873
Boron (B)		3.1		2.5	mg/L		20-JUL-15	R3228873
Cadmium (Cd)		<0.0050		0.0050	mg/L		20-JUL-15	R3228873
Chromium (Cr)		<0.050		0.050	mg/L		20-JUL-15	R3228873
Lead (Pb)		<0.050		0.050	mg/L		20-JUL-15	R3228873
Mercury (Hg)		<0.00010		0.00010	mg/L		17-JUL-15	R3227662
Selenium (Se)		<0.25		0.25	mg/L		20-JUL-15	R3228873
Silver (Ag)		<0.0050		0.0050	mg/L		20-JUL-15	R3228873
Uranium (U)		<0.25		0.25	mg/L		20-JUL-15	R3228873
Zinc (Zn)-Total		<1.0		1.0	mg/L		20-JUL-15	R3228873

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1640429

Report Date: 20-JUL-15

Page 2 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3228873							
WG2132050-4	DUP	WG2132050-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	20-JUL-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	20-JUL-15
Boron (B)		<2.5	<2.5	RPD-NA	mg/L	N/A	40	20-JUL-15
Barium (Ba)		0.81	0.80		mg/L	0.2	40	20-JUL-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	20-JUL-15
Chromium (Cr)		0.086	<0.050	RPD-NA	mg/L	N/A	40	20-JUL-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	20-JUL-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	20-JUL-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	20-JUL-15
WG2132050-2	LCS							
Silver (Ag)			98.2		%		70-130	20-JUL-15
Arsenic (As)			90.2		%		70-130	20-JUL-15
Boron (B)			94.1		%		70-130	20-JUL-15
Barium (Ba)			92.0		%		70-130	20-JUL-15
Cadmium (Cd)			90.9		%		70-130	20-JUL-15
Chromium (Cr)			92.4		%		70-130	20-JUL-15
Lead (Pb)			94.4		%		70-130	20-JUL-15
Selenium (Se)			90.8		%		70-130	20-JUL-15
Uranium (U)			96.2		%		70-130	20-JUL-15
WG2132050-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	20-JUL-15
Arsenic (As)			<0.050		mg/L		0.05	20-JUL-15
Boron (B)			<2.5		mg/L		2.5	20-JUL-15
Barium (Ba)			<0.50		mg/L		0.5	20-JUL-15
Cadmium (Cd)			<0.0050		mg/L		0.005	20-JUL-15
Chromium (Cr)			<0.050		mg/L		0.05	20-JUL-15
Lead (Pb)			<0.050		mg/L		0.05	20-JUL-15
Selenium (Se)			<0.25		mg/L		0.25	20-JUL-15
Uranium (U)			<0.25		mg/L		0.25	20-JUL-15
WG2132050-5	MS	WG2132050-3						
Silver (Ag)			91.5		%		50-140	20-JUL-15
Arsenic (As)			96.1		%		50-140	20-JUL-15
Boron (B)			115.9		%		50-140	20-JUL-15
Barium (Ba)			94.6		%		50-140	20-JUL-15



Quality Control Report

Workorder: L1640429

Report Date: 20-JUL-15

Page 3 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT	Waste							
Batch	R3228873							
WG2132050-5	MS	WG2132050-3						
Cadmium (Cd)			97.1		%		50-140	20-JUL-15
Chromium (Cr)			87.8		%		50-140	20-JUL-15
Lead (Pb)			95.4		%		50-140	20-JUL-15
Selenium (Se)			100.0		%		50-140	20-JUL-15
Uranium (U)			96.8		%		50-140	20-JUL-15

Quality Control Report

Workorder: L1640429

Report Date: 20-JUL-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Page 4 of 4

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

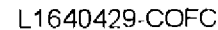
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



Canada Toll Free: 1 800 668 9878



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Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white-report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

NA-FM-1126a v09 Form 04 January 2014



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 01-AUG-15
Report Date: 10-AUG-15 14:40 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: L1651469
Project P.O. #: 4500007003
Job Reference: MILNE PORT
C of C Numbers:
Legal Site Desc:



Austin Paterson
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1651469-1 MP-ASH-COMP1 Sampled By: AVERY DROUILLARD on 29-JUL-15 @ 16:10 Matrix: SOIL								
Sample Preparation								
Initial pH		11.27	LTIS	0.10	pH units	04-AUG-15	04-AUG-15	R3239451
Final pH		7.43	LTIS	0.10	pH units	04-AUG-15	04-AUG-15	R3239451
Physical Tests								
% Moisture		0.32		0.10	%	04-AUG-15	05-AUG-15	R3238049
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		06-AUG-15	R3241169
Barium (Ba)		<0.50		0.50	mg/L		06-AUG-15	R3241169
Boron (B)		8.3		2.5	mg/L		06-AUG-15	R3241169
Cadmium (Cd)		<0.0050		0.0050	mg/L		06-AUG-15	R3241169
Chromium (Cr)		0.233		0.050	mg/L		06-AUG-15	R3241169
Lead (Pb)		<0.050		0.050	mg/L		06-AUG-15	R3241169
Mercury (Hg)		<0.00010		0.00010	mg/L		06-AUG-15	R3241055
Selenium (Se)		<0.25		0.25	mg/L		06-AUG-15	R3241169
Silver (Ag)		<0.0050		0.0050	mg/L		06-AUG-15	R3241169
Uranium (U)		<0.25		0.25	mg/L		06-AUG-15	R3241169
Zinc (Zn)-Total		<1.0		1.0	mg/L		06-AUG-15	R3241169
L1651469-2 MP-ASH-COMP2 Sampled By: AVERY DROUILLARD on 29-JUL-15 @ 16:35 Matrix: SOIL								
Sample Preparation								
Initial pH		12.10		0.10	pH units	04-AUG-15	04-AUG-15	R3239451
Final pH		11.11		0.10	pH units	04-AUG-15	04-AUG-15	R3239451
Physical Tests								
% Moisture		0.73		0.10	%	04-AUG-15	05-AUG-15	R3238049
TCLP Metals								
Arsenic (As)		<0.050		0.050	mg/L		06-AUG-15	R3241169
Barium (Ba)		0.78		0.50	mg/L		06-AUG-15	R3241169
Boron (B)		<2.5		2.5	mg/L		06-AUG-15	R3241169
Cadmium (Cd)		<0.0050		0.0050	mg/L		06-AUG-15	R3241169
Chromium (Cr)		1.28		0.050	mg/L		06-AUG-15	R3241169
Lead (Pb)		<0.050		0.050	mg/L		06-AUG-15	R3241169
Mercury (Hg)		<0.00010		0.00010	mg/L		06-AUG-15	R3241055
Selenium (Se)		<0.25		0.25	mg/L		06-AUG-15	R3241169
Silver (Ag)		<0.0050		0.0050	mg/L		06-AUG-15	R3241169
Uranium (U)		<0.25		0.25	mg/L		06-AUG-15	R3241169
Zinc (Zn)-Total		<1.0		1.0	mg/L		06-AUG-15	R3241169
L1651469-3 MP-ASH-COMP3 Sampled By: AVERY DROUILLARD on 29-JUL-15 @ 17:00 Matrix: SOIL								
Sample Preparation								
Initial pH		12.00		0.10	pH units	04-AUG-15	04-AUG-15	R3239451
Final pH		11.01		0.10	pH units	04-AUG-15	04-AUG-15	R3239451
Physical Tests								

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier key listed:

Qualifier	Description
LTIS	Limited sample was available for TCLP inorganics and semi-volatiles extraction (< 100 grams). Extraction fluid volume and/or other elements of the TCLP method were scaled down proportionately to permit analysis. Test results from modified TCLP procedures may be unsuitable for regulatory purposes.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).			
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg ww - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

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Quality Control Report

Workorder: L1651469

Report Date: 10-AUG-15

Page 1 of 3

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3238049							
WG2141973-3	DUP	L1650689-1						
% Moisture		8.38	8.09		%	3.5	20	05-AUG-15
WG2141973-2	LCS							
% Moisture			105.0		%		90-110	05-AUG-15
WG2141973-1	MB							
% Moisture			<0.10		%		0.1	05-AUG-15
HG-TCLP-WT		Waste						
Batch	R3241055							
WG2143567-3	DUP	L1652079-1						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	50	06-AUG-15
WG2143567-2	LCS							
Mercury (Hg)			100.0		%		70-130	06-AUG-15
WG2143567-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	06-AUG-15
WG2143567-4	MS	L1651469-1						
Mercury (Hg)			90.7		%		50-140	06-AUG-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3241169							
WG2143517-4	DUP	WG2143517-3						
Zinc (Zn)-Total		<1.0	<1.0	RPD-NA	mg/L	N/A	30	06-AUG-15
WG2143517-2	LCS							
Zinc (Zn)-Total			89.0		%		70-130	06-AUG-15
WG2143517-1	MB							
Zinc (Zn)-Total			<1.0		mg/L		1	06-AUG-15
WG2143517-5	MS	WG2143517-3						
Zinc (Zn)-Total			112.1		%		70-130	06-AUG-15
MET-TCLP-WT		Waste						
Batch	R3241169							
WG2143517-4	DUP	WG2143517-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	06-AUG-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	06-AUG-15
Boron (B)		8.3	8.7		mg/L	4.1	40	06-AUG-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	06-AUG-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	06-AUG-15
Chromium (Cr)		0.233	0.240		mg/L	2.9	40	06-AUG-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	06-AUG-15



Quality Control Report

Workorder: L1651469

Report Date: 10-AUG-15

Page 2 of 3

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3241169							
WG2143517-4	DUP	WG2143517-3						
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	06-AUG-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	06-AUG-15
WG2143517-2	LCS							
Silver (Ag)			97.0		%		70-130	06-AUG-15
Arsenic (As)			95.2		%		70-130	06-AUG-15
Boron (B)			92.5		%		70-130	06-AUG-15
Barium (Ba)			99.97		%		70-130	06-AUG-15
Cadmium (Cd)			94.6		%		70-130	06-AUG-15
Chromium (Cr)			95.3		%		70-130	06-AUG-15
Lead (Pb)			97.6		%		70-130	06-AUG-15
Selenium (Se)			95.5		%		70-130	06-AUG-15
Uranium (U)			96.3		%		70-130	06-AUG-15
WG2143517-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	06-AUG-15
Arsenic (As)			<0.050		mg/L		0.05	06-AUG-15
Boron (B)			<2.5		mg/L		2.5	06-AUG-15
Barium (Ba)			<0.50		mg/L		0.5	06-AUG-15
Cadmium (Cd)			<0.0050		mg/L		0.005	06-AUG-15
Chromium (Cr)			<0.050		mg/L		0.05	06-AUG-15
Lead (Pb)			<0.050		mg/L		0.05	06-AUG-15
Selenium (Se)			<0.25		mg/L		0.25	06-AUG-15
Uranium (U)			<0.25		mg/L		0.25	06-AUG-15
WG2143517-5	MS	WG2143517-3						
Silver (Ag)			104.9		%		50-150	06-AUG-15
Arsenic (As)			117.4		%		50-150	06-AUG-15
Boron (B)			131.1		%		50-150	06-AUG-15
Barium (Ba)			118.0		%		50-150	06-AUG-15
Cadmium (Cd)			114.5		%		50-150	06-AUG-15
Chromium (Cr)			119.7		%		50-150	06-AUG-15
Lead (Pb)			114.1		%		50-150	06-AUG-15
Selenium (Se)			116.2		%		50-150	06-AUG-15
Uranium (U)			116.8		%		50-150	06-AUG-15

Quality Control Report

Workorder: L1651469

Report Date: 10-AUG-15

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3
Contact: Jim Millard

Page 3 of 3

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

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COC Number: 14 -

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REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

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NA-EJ-0376-09-50004-JRDUNY 20



BAFFINLAND IRON MINES CORPORATION
ATTN: Jim Millard
2275 Upper Middle Rd. E.
Suite #300
Oakville ON L6H 0C3

Date Received: 27-AUG-15
Report Date: 01-SEP-15 13:44 (MT)
Version: FINAL

Client Phone: 416-364-8820

Certificate of Analysis

Lab Work Order #: L1664694
Project P.O. #: 4500007003
Job Reference: MILNE PORT
C of C Numbers:
Legal Site Desc:



Austin Paterson
Account Manager

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ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1664694-1 MP-ASH-COMP4 Sampled By: AVERY DROUILLARD on 06-AUG-15 @ 16:56 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
L1664694-2 MP-ASH-COMP5 Sampled By: AVERY DROUILLARD on 25-AUG-15 @ 16:50 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests % Moisture TCLP Metals Arsenic (As) Barium (Ba) Boron (B) Cadmium (Cd) Chromium (Cr) Lead (Pb) Mercury (Hg) Selenium (Se) Silver (Ag) Uranium (U) Zinc (Zn)-Total								
L1664694-3 MP-ASH-COMP6 Sampled By: AVERY DROUILLARD on 25-AUG-15 @ 17:14 Matrix: SOIL Sample Preparation Initial pH Final pH Physical Tests								

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1664694-3	MP-ASH-COMP6	17:14				29-AUG-15	30-AUG-15	R3256599
Sampled By:	AVERY DROUILLARD on 25-AUG-15 @							
Matrix:	SOIL							
Physical Tests								
% Moisture	<0.10							
TCLP Metals								
Arsenic (As)	<0.050							
Barium (Ba)	<0.50							
Boron (B)	4.2							
Cadmium (Cd)	<0.0050							
Chromium (Cr)	<0.050							
Lead (Pb)	<0.050							
Mercury (Hg)	<0.00010							
Selenium (Se)	<0.25							
Silver (Ag)	<0.0050							
Uranium (U)	<0.25							
Zinc (Zn)-Total	<1.0							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	SW846 7470A
LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311
		Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).	
MET-TCLP-EXTRA-WT	Waste	O. Reg 347 Extra Metals on TCLP Leachate	EPA 200.8
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 200.8
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid weight of sample

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1664694

Report Date: 01-SEP-15

Page 1 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3256599							
WG2160397-3	DUP	L1664476-6						
% Moisture		3.78	3.96		%	4.7	20	30-AUG-15
WG2160397-2	LCS							
% Moisture			100.1		%		90-110	30-AUG-15
WG2160397-1	MB							
% Moisture			<0.10		%		0.1	30-AUG-15
HG-TCLP-WT		Waste						
Batch	R3257128							
WG2160954-3	DUP	L1664900-1						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	50	31-AUG-15
WG2160954-2	LCS							
Mercury (Hg)			101.0		%		70-130	31-AUG-15
WG2160954-1	MB							
Mercury (Hg)			<0.00010		mg/L		0.0001	31-AUG-15
WG2160954-4	MS	L1663560-1						
Mercury (Hg)			107.0		%		50-140	31-AUG-15
MET-TCLP-EXTRA-WT		Waste						
Batch	R3256768							
WG2160765-4	DUP	WG2160765-3						
Zinc (Zn)-Total		<1.0	<1.0	RPD-NA	mg/L	N/A	30	31-AUG-15
WG2160765-2	LCS							
Zinc (Zn)-Total			94.3		%		70-130	31-AUG-15
WG2160765-1	MB							
Zinc (Zn)-Total			<1.0		mg/L		1	31-AUG-15
MET-TCLP-WT		Waste						
Batch	R3256768							
WG2160765-4	DUP	WG2160765-3						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	31-AUG-15
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	31-AUG-15
Boron (B)		<2.5	<2.5	RPD-NA	mg/L	N/A	40	31-AUG-15
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	40	31-AUG-15
Cadmium (Cd)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	40	31-AUG-15
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	31-AUG-15
Lead (Pb)		<0.050	<0.050	RPD-NA	mg/L	N/A	40	31-AUG-15
Selenium (Se)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	31-AUG-15
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	40	31-AUG-15



Quality Control Report

Workorder: L1664694

Report Date: 01-SEP-15

Page 2 of 4

Client: BAFFINLAND IRON MINES CORPORATION
2275 Upper Middle Rd. E. Suite #300
Oakville ON L6H 0C3

Contact: Jim Millard

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT		Waste						
Batch	R3256768							
WG2160765-2	LCS							
Silver (Ag)			98.9		%		70-130	31-AUG-15
Arsenic (As)			95.7		%		70-130	31-AUG-15
Boron (B)			88.6		%		70-130	31-AUG-15
Barium (Ba)			97.0		%		70-130	31-AUG-15
Cadmium (Cd)			98.0		%		70-130	31-AUG-15
Chromium (Cr)			96.0		%		70-130	31-AUG-15
Lead (Pb)			100.9		%		70-130	31-AUG-15
Selenium (Se)			97.1		%		70-130	31-AUG-15
Uranium (U)			101.8		%		70-130	31-AUG-15
WG2160765-1	MB							
Silver (Ag)			<0.0050		mg/L		0.005	31-AUG-15
Arsenic (As)			<0.050		mg/L		0.05	31-AUG-15
Boron (B)			<2.5		mg/L		2.5	31-AUG-15
Barium (Ba)			<0.50		mg/L		0.5	31-AUG-15
Cadmium (Cd)			<0.0050		mg/L		0.005	31-AUG-15
Chromium (Cr)			<0.050		mg/L		0.05	31-AUG-15
Lead (Pb)			<0.050		mg/L		0.05	31-AUG-15
Selenium (Se)			<0.25		mg/L		0.25	31-AUG-15
Uranium (U)			<0.25		mg/L		0.25	31-AUG-15
WG2160765-5	MS	WG2160765-3						
Silver (Ag)			102.4		%		50-150	31-AUG-15
Arsenic (As)			104.4		%		50-150	31-AUG-15
Boron (B)			99.2		%		50-150	31-AUG-15
Barium (Ba)			102.8		%		50-150	31-AUG-15
Cadmium (Cd)			106.0		%		50-150	31-AUG-15
Chromium (Cr)			101.9		%		50-150	31-AUG-15
Lead (Pb)			103.7		%		50-150	31-AUG-15
Selenium (Se)			105.4		%		50-150	31-AUG-15
Uranium (U)			105.6		%		50-150	31-AUG-15

Quality Control Report

Workorder: L1664694

Report Date: 01-SEP-15

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Quality Control Report

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Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
% Moisture	1	06-AUG-15 16:56	30-AUG-15 13:34	14	24	days	EHTR

Legend & Qualifier Definitions:

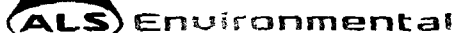
EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.
EHTR: Exceeded ALS recommended hold time prior to sample receipt.
EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.
EHT: Exceeded ALS recommended hold time prior to analysis.
Rec. HT: ALS recommended hold time (see units).

Notes*:
Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes.
Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L1664694 were received on 27-AUG-15 09:20.

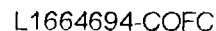
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