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# **Assessment Work Report**

## **Geographic Township of Afton**

### **MLAS Boundary Claims:**

**106368, 106369, 123496, 250868, 283289, 283290, 298578, 320162**

(Legacy Claim IDs: S3004077 and S4261950)

## **NTS Map Sheet 41-I/16**

July 21, 2019

Prepared By:  
BaseLine Geomaterials Inc.

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## **Overview**

This assessment work report details procedures and results for a Field Project Area Layout and Sampling Program undertaken for continued evaluation of a quartz deposit.

## **Project Team**

The project team was comprised of:  
Eglon Rose, Prospector (#2000282)  
Steve Gossling, OLS, Prospector (#1014133)  
Marc Gaudreau, Prospector (#1009179)  
Douglas Miller, Assistant  
Javad Samii, Assistant

## **Purpose**

The purpose of this project was to follow up on earlier work on the site from 2016 and continue with evaluation of a large high purity quartz body and to investigate nearby structural features for possible other minerals.

Market investigations suggest that several distinct markets exist for different quartz products subject to purity and end use requirements. Market opportunities vary from wafer material (99.99% SiO<sub>2</sub> – raw or semi-processed lasca) to flux material (89% (+/-)SiO<sub>2</sub>). Preliminary market research suggested that further field and laboratory work should be carried out to index the deposit in terms of quantity and quality to satisfy end user requirements.

## **Access**

The property is located in Afton Township and can be accessed by travelling east from Sudbury, ON following Highway 17 to Warren; then northerly along Highway 539 and 539A to River Valley. From River Valley take Highway 805 north for approximately 35 km to a single lane bridge at the north end of Brightwater Lake. Cross the bridge and turn left at the T-intersection and proceed along a forest access road in a northwesterly direction for 21 km to where a road intersects from the north, turn right and proceed northerly for 1 km, turn right again and follow this logging road easterly and southeasterly for an additional 2.5 km to the site.

## **Project Area**

Work was performed on MLAS boundary cells: 106368, 106369, 123496, 250868, 283289, 283290, 298578, and 320162 (Legacy Claim IDs: S3004077 and S4261950) the registered holder of the legacy claims is Daniel Ankomah, P. Eng.

## **Historical Review**

Details of the project area were reconfirmed and are as set out in previous assessment reports.

## **Topography**

The topography features elevated areas of weathered outcrops and lower drift covered areas. Vegetation is second growth, mixed forest (jack pine, white pine, spruce, oak and poplar).

## **Preliminary Geology**

In terms of preliminary geology, the quartz body occurs in an area underlain by metavolcanics, metasediments, nipissing diabase and fine-grained gabbro. The area shows faulting; folding and dips are flat to moderate.

The metavolcanics are felsic to mafic and appear as massive flows. Metasediments are granitic with a matrix of some dark rock types. The diabase is gabbroic, mostly fine grained and with areas of green stone.

Prior to sampling, reconnaissance of the visible quartz contact boundary was carried out to establish the hanging wall and footwall. The contact points were marked with red flagging tape and representative samples of approximately .4kg each were taken at the individual sampling locations.

All of the sampling was performed using hand tools only.

## **Applicable Exploration Permits**

The project consisted of grassroots prospecting and so no exploration permit was required.

## **Daily Log of Activities**

BaseLine Geomaterials Inc. and a team of independent contractors completed work for this assignment over several days during the late summer and fall of 2018 on behalf of the registered holder of the claims.

August 11, 2018 (5.5hrs)

Steve Gosling, Ed Rose and Douglas Miller. Preparatory work consisted of document review, project planning, securing the required tools & supplies and prepare field sketches outlining areas of interest.

August 18, 2018 (7.5hrs)

Ed Rose, Steve Gossling and Javad Samii. Fieldwork consisted of travel to the site, confirmation of access and obtaining three (3) samples (A-1, A-2 and A-3) at various outcrop locations.

October 27, 2018 (8.0hrs)

Ed Rose, Steve Gossling, Marc Gaudreau and Douglas Miller. Travel to the site, field investigations and obtain multiple samples ( A4, A5 and SA-1..... SA-11 (see Table below and Appendices 1 - 3 for details). Map approximately 300m of hangingwall and determine approximate offset distance to the footwall, where visible.

November 9, 2018 (3hrs)

Ed Rose. Sample preparation for laboratory testing.

November 9, 2018 (3hrs)

Ed Rose. Sample preparation for laboratory testing.

November 11, 2018 (1.5hrs)

Ed Rose. Sample preparation for laboratory testing.

November 12, 2018 (4hrs)

Ed Rose and Steve Gossling Sample preparation for laboratory testing. Deliver to AGAT laboratory's Sudbury location

November 18, 2018 to July 21, 2019 (40hrs)

Ed Rose and Steve Gossling. Report compilation, review, edit and filing in MLAS

## Sampling

Count	Sample ID	Comments/Observations	Northing	Easting
1	A-1	Hand strip area; subvertical wall 5m long by 1.5m high; quartz white to milky grey; massive to locally sheared; recrystallised; gas(volatle) inclusions; sample in linear fashion at scattered locations.	5198685	545959
2	A-2	At base of wall at Sample A-1 location; large angular boulder; milky white with minor alteration and chlorite inclusions; random chip sample with chlorite inclusions.	5198685	545959
3	A-3	Hand strip 12m long outcrop striking 320 deg and 3m high(subvertical); white-grey with scattered blue tinge; spotty brecciated section and narrow chlorite areas; random chip sample.	5198684	545972
4	A-4	Hand strip area 9m long by 1m high (subvertical wall); white quartz with spotty milky grey areas; minor scattered hornblende clusters and some sections interlayered with chlorite; coarse to medium grain; segmented chip sample taken.	5198668	545981
5	A-5	Hand strip 10m long by 4m white to smoky quartz; grain size varies sporadically from medium to fine; chip sample taken at intervals and averaged to closely represent the quartz composition.	5198667	545942
6	SA-1	Altered diabase outcrop; weakly sheared; vertical face striking 340 deg; quartz breccia sections; north-south fractures; minor pyrite, chalco and epidote; random chip sample.	5198729	545751
7	SA-2	Hand strip moss from area 15m-20m strike and 5m high; milky to grey quartz with small and isolated diorite blebs and patches; some blue tinge; random chip sample.	5198710	545835
8	SA-3	Hand strip area 12m long by 2m high; clean white quartz with narrow diabase and chlorite veins and white mica specks; composite chip sample.	5198713	545886
9	SA-4	Hand strip area from 8m high by 8m high	5198679	545936

		quartz; milky to grey zones of silification, chlorite seams; fine to medium grain; liquid & gas inclusions; composite chip sample.		
10	SA-5	Hand strip areas 6m long by 5m high and at 15m gap (covered diabase)more hand stripping 8m long by 5m high; grey quartz, gas, liquid and chlorite inclusions; mixed fine grain homogeneous and heterogeneous sections; bulk composite sample - equally spaced chips.	5198657	545956
11	SA-6	Hand strip moss from area 14m by 6m face height; milky white to grey quartz, crystalline and microcrystalline texture; liquid and gas inclusions; well shared and blocky; chips taken randomly on horizontal and vertical centres.	5198673	545972
12	SA-7	Hand strip from 5m by 3m high area; mixed crystallation, gritty in places; signs of crystal regrowth; fractional sample taken (horizontally and vertically) along separate 0.5m fractions.	5198663	545987
13	SA-8	Hand strip moss from area 15m by 2m high; quartz approximately 60% dark grey and 40% dark blue; several micro fractures; random chip sample.	5198637	545984
14	SA-9	Quartz blebs, altered diabase; shared laminated calcite veins; scattered pyrite grains; chip sample.	5198582	545990
15	SA-10	Milky to grey quartz with blue tinging; altered with tension cracks; disseminated sulphide grains; random chip sample.	5198630	546035
16	SA-10A	Not sampled due to time constraints.	5198630	546035
17	SA-11	Hand strip 2m by 3m area; altered blue-grey quartz with angular medium grain diabase and pyrite specks; chip sample	5198621	546023

### Sample Preparation & Delivery

After photographing and cataloging the individual sample locations the samples were placed in sample bags in preparation for lab testing. Subsequent preparation included



washing, cleaning and scrubbing with a bristle brush to remove any surface soil. Samples were then split in half and bagged, with half of each sample being hand delivered to AGAT Laboratories in Sudbury. The claimholder will store the remaining one half of each sample.

### **Conclusions/Recommendations**

The project was successfully completed with a total of 16 chip and composite samples taken and delivered to the lab for analysis. The lab results will be evaluated to determine, among other factors, the specific requirements to satisfy the different market segments. The surface expression of this deposit is not yet fully determined.

This project was designed to follow up on sampling done in 2016 and although limited work was carried out along some quartz wall rock, enough was not done to define the full shape and extents of the deposit.

Lab results suggest follow up work on this project should be conducted to include but not be limited to sampling, stripping, grid design and layout, mapping and grid sampling bulk sampling and beneficiation tests.

This report respectfully submitted July 21, 2019.

*Ed Rose*

Eglon (Ed) A. Rose

*SJ Gossling*

Steve J. Gossling

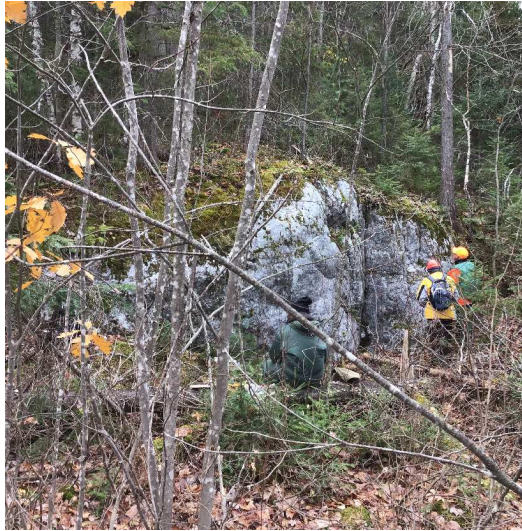
## **Appendix 1 – Photographs**



Sample ID – SA#1



Sample ID – SA#2





Sample ID – SA#3



Sample ID – SA#4



Sample ID – SA#5



Sample ID – SA#6





Sample ID – SA#7



Sample ID – SA#8



Sample ID – SA#9

## **Appendix 2 – Assay Results**





**CLIENT NAME: BASELINE GEOMATERIALS INC.  
492 SECOND AVE. S  
SUDBURY, ON P3B 3L5  
705-988-4500**

**ATTENTION TO: STEVE GOSSLING**

**PROJECT: AF**

**AGAT WORK ORDER: 18T409217**

**SOLID ANALYSIS REVIEWED BY: Adel Mina, Mining Chief Chemist**

**DATE REPORTED: Jan 15, 2019**

**PAGES (INCLUDING COVER): 11**

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

**\*NOTES**

VERSION 1: Revised Reports Issued on 01/15/2019. Please note: Samples were pulverized using ceramic bowl and 201-676 was repeated. This version supersedes the previous version reported on 12/19/2018

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.



## Certificate of Analysis

AGAT WORK ORDER: 18T409217

PROJECT: AF

5623 McADAM ROAD  
 MISSISSAUGA, ONTARIO  
 CANADA L4Z 1N9  
 TEL (905)501-9998  
 FAX (905)501-0589  
<http://www.agatlabs.com>

CLIENT NAME: BASELINE GEOMATERIALS INC.

ATTENTION TO: STEVE GOSSLING

### (200-) Sample Login Weight

DATE SAMPLED: Nov 25, 2018      DATE RECEIVED: Nov 14, 2018      DATE REPORTED: Jan 15, 2019      SAMPLE TYPE: Other

Sample ID (AGAT ID)	Analyte:	Sample Login Weight
	Unit:	kg
	RDL:	0.01
AF#1 (9738059)		0.513
AF#2 (9738060)		0.778
AF#3 (9738061)		0.465
AF#4 (9738062)		0.640
AF#5 (9738063)		0.821
SA#1 (9738064)		1.371
SA#2 (9738065)		0.649
SA#3 (9738066)		0.492
SA#4 (9738067)		0.609
SA#5 (9738068)		1.040
SA#6 (9738069)		0.400
SA#7 (9738070)		0.708
SA#8 (9738071)		0.441
SA#9 (9738072)		0.754
SA#10 (9738073)		0.650
SA#11 (9742703)		0.870

Comments: RDL - Reported Detection Limit

**Certified By:**



## Certificate of Analysis

AGAT WORK ORDER: 18T409217

PROJECT: AF

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CLIENT NAME: BASELINE GEOMATERIALS INC.

ATTENTION TO: STEVE GOSSLING

### (201-079) Sodium Peroxide Fusion - ICP-OES finish

DATE SAMPLED: Nov 25, 2018		DATE RECEIVED: Nov 14, 2018					DATE REPORTED: Jan 15, 2019					SAMPLE TYPE: Other				
	<b>Analyte:</b>	Al	As	B	Ba	Ca	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo	
	<b>Unit:</b>	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
<b>Sample ID (AGAT ID)</b>	<b>RDL:</b>	0.01	0.005	0.01	0.001	0.05	0.001	0.005	0.001	0.01	0.05	0.01	0.005	0.005	0.005	
SA#1 (9738064)		7.90	<0.005	<0.01	0.003	5.91	0.005	0.011	0.005	9.56	0.09	<0.01	3.01	0.133	0.007	
SA#2 (9738065)		0.04	<0.005	<0.01	<0.001	<0.05	<0.001	0.044	<0.001	0.38	<0.05	<0.01	<0.005	0.006	<0.005	
SA#3 (9738066)		7.03	<0.005	<0.01	0.006	7.33	0.006	0.009	0.012	8.21	0.19	<0.01	4.64	0.148	0.007	
SA#9 (9738072)		8.84	0.006	<0.01	0.023	0.76	0.004	0.009	0.006	7.23	1.30	<0.01	4.71	0.097	0.009	
SA#10 (9738073)		0.34	0.006	<0.01	0.005	<0.05	<0.001	0.028	<0.001	0.73	0.10	<0.01	0.051	0.024	<0.005	
	<b>Analyte:</b>	Ni	Pb	S	Si	Sn	Ti	V	W	Zn						
	<b>Unit:</b>	%	%	%	%	%	%	%	%	%						
<b>Sample ID (AGAT ID)</b>	<b>RDL:</b>	0.001	0.005	0.01	0.005	0.005	0.005	0.005	0.01	0.005						
SA#1 (9738064)		0.006	<0.005	0.10	23.8	0.028	0.578	0.024	<0.01	0.011						
SA#2 (9738065)		<0.001	0.006	<0.01	46.2	<0.005	<0.005	<0.005	<0.01	<0.005						
SA#3 (9738066)		0.009	<0.005	0.08	23.7	0.015	0.380	0.024	<0.01	0.008						
SA#9 (9738072)		0.010	0.006	0.06	25.9	<0.005	0.357	0.020	<0.01	0.012						
SA#10 (9738073)		0.001	<0.005	0.04	45.6	<0.005	0.019	<0.005	<0.01	<0.005						

Comments: RDL - Reported Detection Limit

**Certified By:**



## Certificate of Analysis

AGAT WORK ORDER: 18T409217

PROJECT: AF

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<http://www.agatlabs.com>

CLIENT NAME: BASELINE GEOMATERIALS INC.

ATTENTION TO: STEVE GOSSLING

### (201-676) Lithium Borate Fusion - Summation of Oxides, XRF finish

DATE SAMPLED: Nov 25, 2018		DATE RECEIVED: Nov 14, 2018						DATE REPORTED: Jan 15, 2019				SAMPLE TYPE: Other				
Analyte:	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O	P2O5	SiO2	TiO2	SrO	V2O5		
Unit:	%	%	%	%	%	%	%	%	%	%	%	%	%	%		
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		
AF#1 (9738059)		0.09	<0.01	0.05	0.08	0.57	0.02	0.03	<0.01	0.11	<0.01	98.7	<0.01	<0.01	<0.01	
AF#2 (9738060)		0.04	<0.01	0.04	0.06	0.44	<0.01	0.02	<0.01	0.09	<0.01	99.4	<0.01	<0.01	<0.01	
AF#3 (9738061)		0.07	<0.01	0.04	0.06	0.42	0.02	0.01	<0.01	0.13	<0.01	99.0	<0.01	<0.01	<0.01	
AF#4 (9738062)		0.01	<0.01	0.03	0.06	0.40	<0.01	<0.01	<0.01	0.09	<0.01	99.6	<0.01	<0.01	<0.01	
AF#5 (9738063)		0.11	<0.01	0.04	0.06	0.42	0.03	0.02	<0.01	0.12	<0.01	99.2	<0.01	<0.01	<0.01	
SA#4 (9738067)		0.16	<0.01	0.05	0.05	0.47	0.03	0.03	0.01	0.12	<0.01	98.9	<0.01	<0.01	<0.01	
SA#5 (9738068)		0.17	<0.01	0.07	0.05	0.40	0.04	0.03	0.01	0.12	<0.01	99.3	<0.01	<0.01	<0.01	
SA#6 (9738069)		0.08	<0.01	0.07	0.05	0.44	<0.01	0.05	<0.01	0.10	<0.01	99.1	<0.01	<0.01	<0.01	
SA#7 (9738070)		0.05	<0.01	0.03	0.06	0.47	0.02	0.02	<0.01	0.11	<0.01	99.7	<0.01	<0.01	<0.01	
SA#8 (9738071)		0.10	<0.01	0.04	0.07	0.48	0.03	0.01	<0.01	0.11	<0.01	99.9	<0.01	<0.01	<0.01	
SA#11 (9742703)		0.03	<0.01	0.03	0.06	0.46	0.01	0.02	<0.01	0.11	<0.01	99.1	<0.01	<0.01	<0.01	
Analyte:	LOI	Total														
Unit:	%	%														
Sample ID (AGAT ID)	RDL:	0.01	0.01													
AF#1 (9738059)		0.10	99.8													
AF#2 (9738060)		0.27	100													
AF#3 (9738061)		0.33	100													
AF#4 (9738062)		0.21	100													
AF#5 (9738063)		0.35	100													
SA#4 (9738067)		0.39	100													
SA#5 (9738068)		0.32	101													
SA#6 (9738069)		0.27	100													
SA#7 (9738070)		0.24	101													
SA#8 (9738071)		0.33	101													
SA#11 (9742703)		0.24	100													

Comments: RDL - Reported Detection Limit

**Certified By:**



## Certificate of Analysis

AGAT WORK ORDER: 18T409217

PROJECT: AF

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<http://www.agatlabs.com>

CLIENT NAME: BASELINE GEOMATERIALS INC.

ATTENTION TO: STEVE GOSSLING

### (201-676) Lithium Borate Fusion - Summation of Oxides, XRF finish - REPEAT

DATE SAMPLED: Nov 25, 2018		DATE RECEIVED: Nov 14, 2018						DATE REPORTED: Jan 15, 2019					SAMPLE TYPE: Other			
Analyte:	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O	P2O5	SiO2	TiO2	SrO	V2O5		
Unit:	%	%	%	%	%	%	%	%	%	%	%	%	%	%		
Sample ID (AGAT ID)	RDL:	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		
AF#1 (9738059)	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS		
AF#2 (9738060)	0.27	<0.01	0.04	<0.01	0.03	0.02	0.01	<0.01	0.10	<0.01	98.6	<0.01	<0.01	<0.01		
AF#3 (9738061)	0.23	<0.01	0.03	<0.01	0.01	0.01	0.01	<0.01	0.08	<0.01	98.7	<0.01	<0.01	<0.01		
AF#4 (9738062)	0.19	<0.01	0.02	<0.01	0.02	<0.01	<0.01	<0.01	0.09	<0.01	98.3	<0.01	<0.01	<0.01		
AF#5 (9738063)	0.22	<0.01	0.03	<0.01	0.04	0.02	<0.01	<0.01	0.11	<0.01	98.9	<0.01	<0.01	<0.01		
SA#4 (9738067)	0.29	<0.01	0.03	<0.01	0.03	0.02	0.01	<0.01	0.11	<0.01	98.7	<0.01	<0.01	<0.01		
SA#5 (9738068)	0.32	<0.01	0.04	<0.01	0.06	0.03	0.01	<0.01	0.11	<0.01	98.7	<0.01	<0.01	<0.01		
SA#6 (9738069)	0.26	<0.01	0.02	<0.01	0.05	<0.01	0.01	<0.01	0.09	<0.01	97.6	<0.01	<0.01	<0.01		
SA#7 (9738070)	0.21	<0.01	0.03	<0.01	0.03	0.01	0.01	<0.01	0.09	<0.01	97.9	<0.01	<0.01	<0.01		
SA#8 (9738071)	0.26	<0.01	0.04	<0.01	0.03	0.02	0.01	<0.01	0.11	<0.01	97.4	0.01	<0.01	<0.01		
SA#11 (9742703)	0.20	<0.01	0.03	<0.01	0.03	0.01	<0.01	<0.01	0.10	<0.01	99.1	<0.01	<0.01	<0.01		
Analyte:	LOI	Total														
Unit:	%	%														
Sample ID (AGAT ID)	RDL:	0.01	0.01													
AF#1 (9738059)	NSS	<0.01														
AF#2 (9738060)	1.67	101														
AF#3 (9738061)	1.73	101														
AF#4 (9738062)	1.64	100														
AF#5 (9738063)	1.75	101														
SA#4 (9738067)	1.26	100														
SA#5 (9738068)	1.85	101														
SA#6 (9738069)	1.51	99.5														
SA#7 (9738070)	1.34	99.6														
SA#8 (9738071)	1.62	99.5														
SA#11 (9742703)	1.90	101														

Comments: RDL - Reported Detection Limit

**Certified By:**



# Certificate of Analysis

AGAT WORK ORDER: 18T409217

PROJECT: AF

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<http://www.agatlabs.com>

CLIENT NAME: BASELINE GEOMATERIALS INC.

ATTENTION TO: STEVE GOSSLING

**(202-552) Fire Assay - Trace Au, ICP-OES finish (50g charge) (ppm)**

DATE SAMPLED: Nov 25, 2018	DATE RECEIVED: Nov 14, 2018	DATE REPORTED: Jan 15, 2019	SAMPLE TYPE: Other
<b>Analyte:</b> Au			
<b>Unit:</b> ppm			
<b>Sample ID (AGAT ID)</b>	<b>RDL:</b> 0.001		
SA#1 (9738064)	0.002		
SA#2 (9738065)	<0.001		
SA#3 (9738066)	0.010		
SA#9 (9738072)	0.004		
SA#10 (9738073)	0.002		

Comments: RDL - Reported Detection Limit

**Certified By:**



CLIENT NAME: BASELINE GEOMATERIALS INC.

ATTENTION TO: STEVE GOSSLING

**(201-079) Sodium Peroxide Fusion - ICP-OES finish**

Parameter	REPLICATE #1				RPD												
	Sample ID	Original	Replicate	RPD													
Al	9738073	0.34	0.34	0.0%													
As	9738073	0.0065	0.0080	20.7%													
B	9738073	< 0.01	< 0.01	0.0%													
Ba	9738073	0.005	0.005	0.0%													
Ca	9738073	< 0.05	< 0.05	0.0%													
Co	9738073	< 0.001	< 0.001	0.0%													
Cr	9738073	0.028	0.028	0.0%													
Cu	9738073	< 0.001	< 0.001	0.0%													
Fe	9738073	0.73	0.73	0.0%													
K	9738073	0.101	0.129	24.3%													
Li	9738073	< 0.01	< 0.01	0.0%													
Mg	9738073	0.051	0.053	3.8%													
Mn	9738073	0.024	0.024	0.0%													
Mo	9738073	< 0.005	< 0.005	0.0%													
Ni	9738073	0.001	< 0.001														
Pb	9738073	< 0.005	< 0.005	0.0%													
S	9738073	0.04	0.02	66.7%													
Si	9738073	45.6	47.2	3.4%													
Sn	9738073	< 0.005	< 0.005	0.0%													
Ti	9738073	0.0190	0.0227	17.7%													
V	9738073	< 0.005	< 0.005	0.0%													
W	9738073	< 0.01	< 0.01	0.0%													
Zn	9738073	< 0.005	< 0.005	0.0%													

**(201-676) Lithium Borate Fusion - Summation of Oxides, XRF finish**

Parameter	REPLICATE #1				REPLICATE #2				RPD								
	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD									
Al2O3	9738059	0.089	0.097	8.6%	9738070	0.05	0.06	18.2%									
BaO	9738059	< 0.01	< 0.01	0.0%	9738070	< 0.01	< 0.01	0.0%									
CaO	9738059	0.05	0.05	0.0%	9738070	0.03	0.03	0.0%									
Cr2O3	9738059	0.08	0.07	13.3%	9738070	0.06	0.06	0.0%									
Fe2O3	9738059	0.57	0.53	7.3%	9738070	0.47	0.46	2.2%									



**CLIENT NAME: BASELINE GEOMATERIALS INC.**

**ATTENTION TO: STEVE GOSSLING**

K2O	9738059	0.02	0.02	0.0%	9738070	0.02	0.02	0.0%										
MgO	9742703	< 0.01	0.01		9738070	0.02	0.02	0.0%										
MnO	9738059	< 0.01	< 0.01	0.0%	9738070	< 0.01	< 0.01	0.0%										
Na2O	9738059	0.108	0.101	6.7%	9738070	0.11	0.12	8.7%										
P2O5	9738059	< 0.01	< 0.01	0.0%	9738070	< 0.01	< 0.01	0.0%										
SiO2	9738059	98.7	97.6	1.1%	9738070	99.7	99.7	0.0%										
TiO2	9738059	< 0.01	< 0.01	0.0%	9738070	< 0.01	< 0.01	0.0%										
SrO	9738059	< 0.01	< 0.01	0.0%	9738070	< 0.01	< 0.01	0.0%										
V2O5	9738059	< 0.01	< 0.01	0.0%	9738070	< 0.01	< 0.01	0.0%										
LOI	9738059	0.10	0.15	40.0%	9738070	0.24	0.19	23.3%										

**(201-676) Lithium Borate Fusion - Summation of Oxides, XRF finish - REPEAT**

		REPLICATE #1																	
Parameter	Sample ID	Original	Replicate	RPD															
Al2O3	9742703	0.20	0.20	0.0%															
BaO	9742703	< 0.01	< 0.01	0.0%															
CaO	9742703	0.03	0.03	0.0%															
Cr2O3	9742703	< 0.01	< 0.01	0.0%															
Fe2O3	9742703	0.03	0.03	0.0%															
K2O	9742703	0.01	< 0.01																
MgO	9742703	< 0.01	0.01																
MnO	9742703	< 0.01	< 0.01	0.0%															
Na2O	9742703	0.100	0.107	6.8%															
P2O5	9742703	< 0.01	< 0.01	0.0%															
SiO2	9742703	99.1	98.8	0.3%															
TiO2	9742703	< 0.01	< 0.01	0.0%															
SrO	9742703	< 0.01	< 0.01	0.0%															
V2O5	9742703	< 0.01	< 0.01	0.0%															
LOI	9738070	1.34	1.37	2.2%															

**(202-552) Fire Assay - Trace Au, ICP-OES finish (50g charge) (ppm)**

		REPLICATE #1																	
Parameter	Sample ID	Original	Replicate	RPD															
Au	9738073	0.002	0.002	0.0%															





CLIENT NAME: BASELINE GEOMATERIALS INC.

ATTENTION TO: STEVE GOSSLING

**(201-079) Sodium Peroxide Fusion - ICP-OES finish**

Parameter	CRM #1 (ref.SY-4)				CRM #2				CRM #3 (REF.SY-4)				CRM #4			
	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al	10.95	10.77	98%	90% - 110%												
Ca	5.72	5.56	97%	90% - 110%												
Fe	4.34	4.3	99%	90% - 110%												
K	1.37	1.36	99%	90% - 110%												
Mg	0.325	0.294	90%	90% - 110%												
Si	23.3	23.1	99%	90% - 110%												
Ti	0.172	0.172	100%	90% - 110%												

**(201-676) Lithium Borate Fusion - Summation of Oxides, XRF finish**

Parameter	CRM #1 (REF.SY-4)				CRM #2				CRM #3 (REF.SY-4)				CRM #4			
	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al2O3	20.7	20.6	100%	90% - 110%					20.7	20.6	100%	90% - 110%				
BaO	0.038	0.041	108%	90% - 110%					0.038	0.04	105%	90% - 110%				
CaO	8.05	7.99	99%	90% - 110%					8.05	7.96	99%	90% - 110%				
Fe2O3	6.21	6.18	100%	90% - 110%					6.21	6.18	100%	90% - 110%				
K2O	1.66	1.65	99%	90% - 110%					1.66	1.64	99%	90% - 110%				
MgO	0.54	0.51	95%	90% - 110%					0.54	0.52	96%	90% - 110%				
MnO	0.108	0.112	103%	90% - 110%					0.108	0.113	105%	90% - 110%				
Na2O	7.1	7.2	101%	90% - 110%					7.1	7.1	101%	90% - 110%				
P2O5	0.131	0.128	98%	90% - 110%					0.131	0.13	99%	90% - 110%				
SiO2	49.9	49.6	99%	90% - 110%					49.9	49.8	100%	90% - 110%				
TiO2	0.287	0.283	99%	90% - 110%					0.287	0.28	98%	90% - 110%				
SrO	0.141	0.132	94%	90% - 110%					0.141	0.133	94%	90% - 110%				
LOI					4.56	4.40	96%	90% - 110%					4.56	4.40	96%	90% - 110%

**(201-676) Lithium Borate Fusion - Summation of Oxides, XRF finish - REPEAT**

Parameter	CRM #1 (ref.sy-4)				CRM #2				CRM #3 (REF.SY-4)				CRM #4			
	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Al2O3	20.7	21	101%	90% - 110%												
BaO	0.038	0.049	129%	90% - 110%												
CaO	8.05	7.96	99%	90% - 110%												
Fe2O3	6.21	6.24	100%	90% - 110%												



**CLIENT NAME: BASELINE GEOMATERIALS INC.**

**ATTENTION TO: STEVE GOSSLING**

K2O	1.66	1.67	100%	90% - 110%													
MgO	0.54	0.52	95%	90% - 110%													
MnO	0.108	0.108	100%	90% - 110%													
Na2O	7.1	7.22	102%	90% - 110%													
P2O5	0.131	0.13	99%	90% - 110%													
SiO2	49.9	49.9	100%	90% - 110%													
TiO2	0.287	0.291	101%	90% - 110%													
SrO	0.141	0.137	97%	90% - 110%													
LOI					4.56	4.71	103%	90% - 110%									

**(202-552) Fire Assay - Trace Au, ICP-OES finish (50g charge) (ppm)**

Parameter	CRM #1 (ref.GS6E)				CRM #2				CRM #3 (REF.SY-4)				CRM #4			
	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits
Au	6.06	6	99%	90% - 110%												



## Method Summary

CLIENT NAME: BASELINE GEOMATERIALS INC.

AGAT WORK ORDER: 18T409217

PROJECT: AF

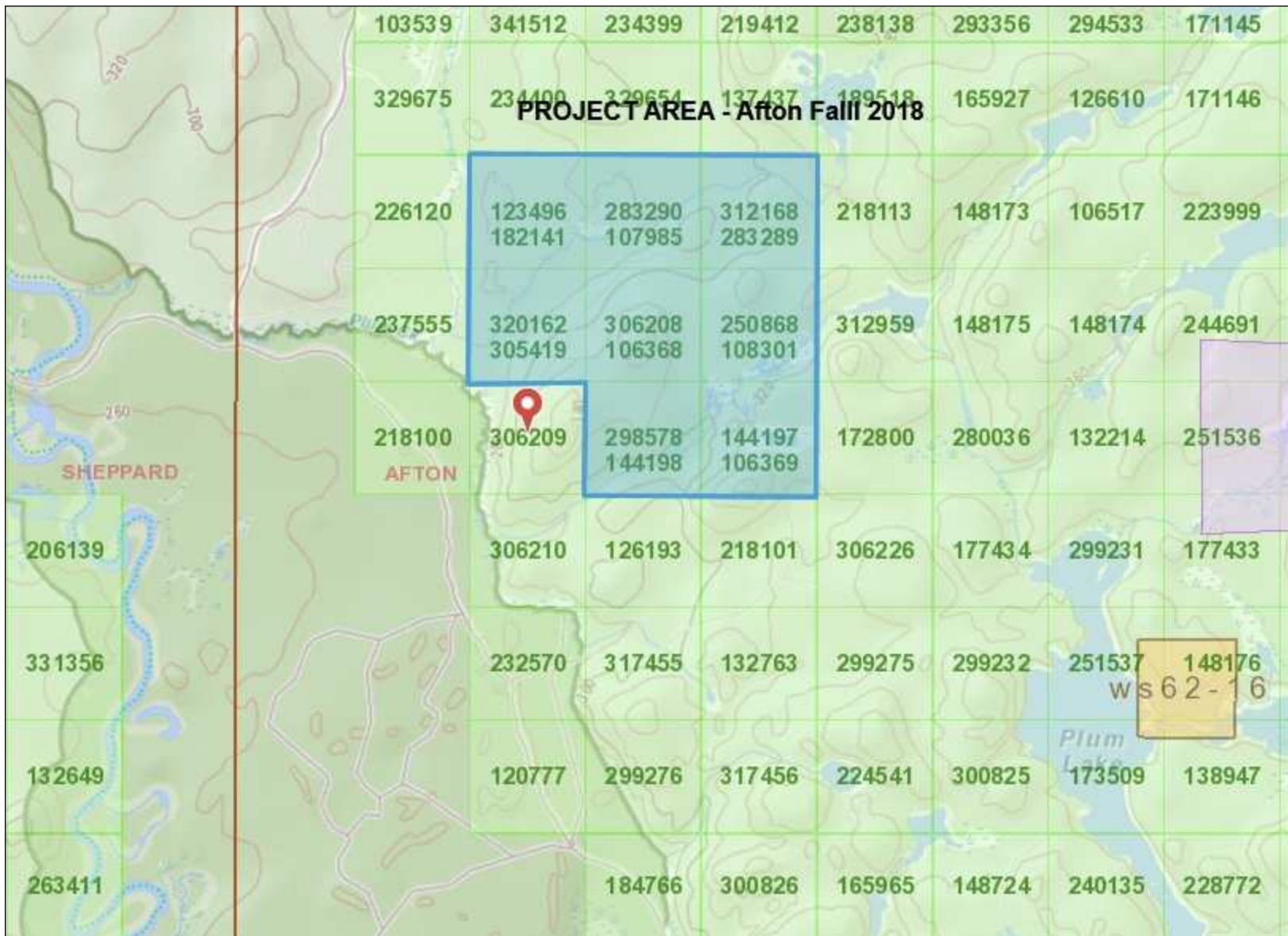
ATTENTION TO: STEVE GOSSLING

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
<b>Solid Analysis</b>			
Sample Login Weight	MIN-12009		BALANCE
Al	MIN-200-12001		ICP/OES
As	MIN-200-12001		ICP/OES
B	MIN-200-12001		ICP/OES
Ba	MIN-200-12001		ICP/OES
Ca	MIN-200-12001		ICP/OES
Co	MIN-200-12001		ICP/OES
Cr	MIN-200-12001		ICP/OES
Cu	MIN-200-12001		ICP/OES
Fe	MIN-200-12001		ICP/OES
K	MIN-200-12001		ICP/OES
Li	MIN-200-12001		ICP/OES
Mg	MIN-200-12001		ICP/OES
Mn	MIN-200-12001		ICP/OES
Mo	MIN-200-12001		ICP/OES
Ni	MIN-200-12001		ICP/OES
Pb	MIN-200-12001		ICP/OES
S	MIN-200-12001		ICP/OES
Si	MIN-200-12001		ICP/OES
Sn	MIN-200-12001		ICP/OES
Ti	MIN-200-12001		ICP/OES
V	MIN-200-12001		ICP/OES
W			ICP/OES
Zn	MIN-200-12001		ICP/OES
Al <sub>2</sub> O <sub>3</sub>	MIN-200-12027		XRF
BaO	MIN-200-12027		XRF
CaO	MIN-200-12027		XRF
Cr <sub>2</sub> O <sub>3</sub>	MIN-200-12027		XRF
Fe <sub>2</sub> O <sub>3</sub>	MIN-200-12027		XRF
K <sub>2</sub> O	MIN-200-12027		XRF
MgO	MIN-200-12027		XRF
MnO	MIN-200-12027		XRF
Na <sub>2</sub> O	MIN-200-12027		XRF
P <sub>2</sub> O <sub>5</sub>	MIN-200-12027		XRF
SiO <sub>2</sub>	MIN-200-12027		XRF
TiO <sub>2</sub>	MIN-200-12027		XRF
SrO	MIN-200-12027		XRF
V <sub>2</sub> O <sub>5</sub>	MIN-200-12027		XRF
LOI	MIN-200-12021		GRAVIMETRIC
Total	MIN-200-12027		CALCULATION
Au	MIN-200-12006	BUGBEE, E: A Textbook of Fire Assaying	ICP-OES

## **Appendix 3 – Maps**



### Legend

- Provincial Grid Cell**
  - Available
  - Pending
  - Unavailable
- Mining Claim**
  - Mining Claim
  - Boundary Claim
- Alienation**
  - Withdrawal
  - Notice
- ENDM Administrative Boundaries**
  - ENDM Townships and Areas
  - Geographic Lot Fabric
  - UTM Grid 1K
  - UTM Grid 10K
  - Mining Division
  - Mineral Exploration and Development Region
  - CLUPA Protected Area - Far North
  - Resident Geologist District
  - Federal Land Other
  - Native Reserves
- AMIS Sites**
  - AMIS Sites
  - AMIS Features
  - Drill Hole
  - Mineral Occurrences
- MLAS Mining History**
  - Withdrawal - History
  - Notice - History
  - Mining Claim - History
  - Mining Land Tenure - History
  - Legacy Claim
- Provincial Grid**
  - Provincial Grid 250K
  - Provincial Grid 50K
  - Provincial Grid Group
- Land Tenure**
  - Surface Rights
  - Mining Rights
  - Mining and Surface Rights
  - Order-in-Council



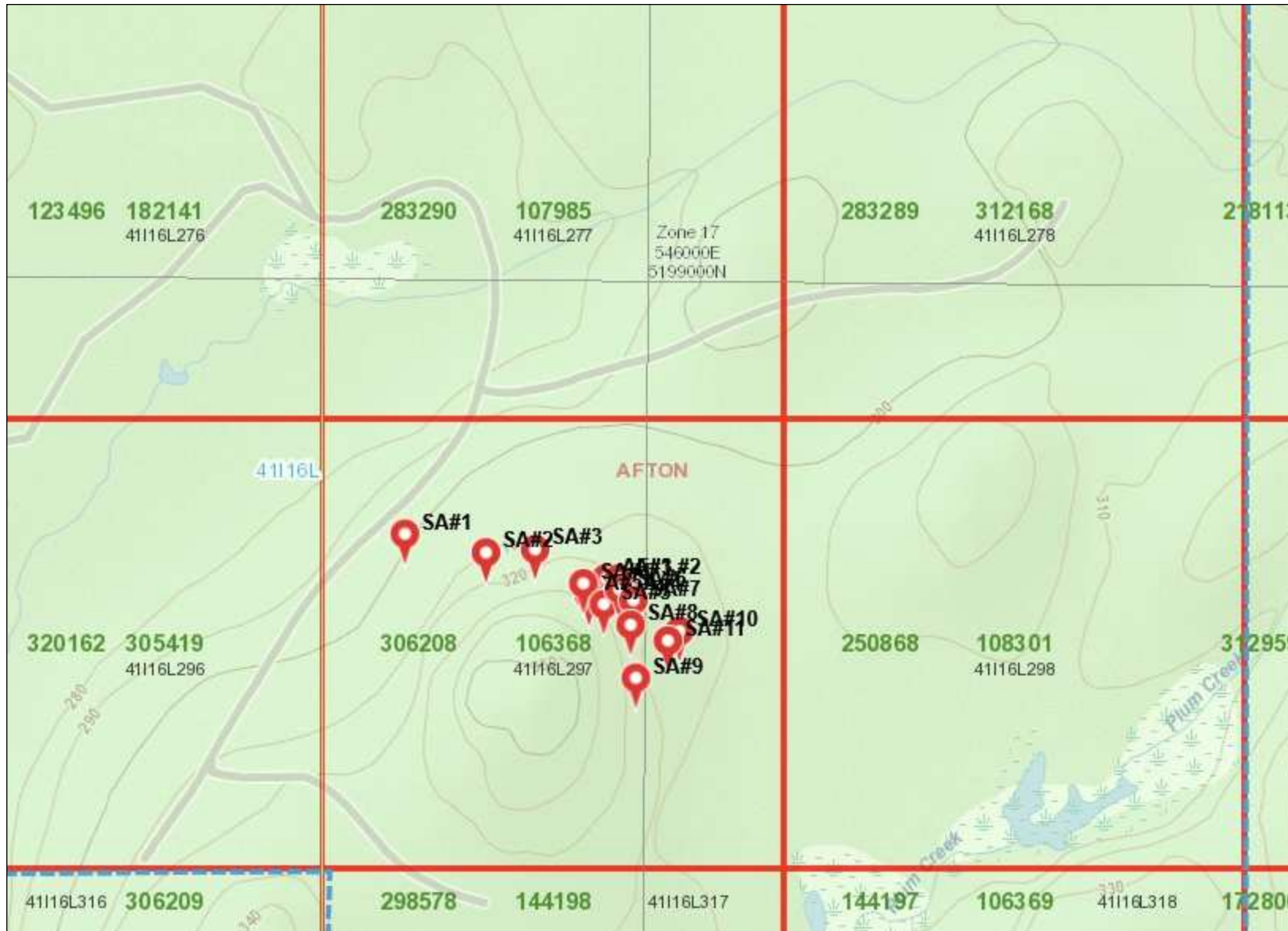
Projection: Web Mercator



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### Legend

- Provincial Grid Cell**
  - Available
  - Pending
  - Unavailable
- Mining Claim**
  - Mining Claim
  - Boundary Claim
- Alienation**
  - Withdrawal
  - Notice
- ENDM Administrative Boundaries**
  - ENDM Townships and Areas
  - Geographic Lot Fabric
  - UTM Grid 1K
  - UTM Grid 10K
  - Mining Division
  - Mineral Exploration and Development Region
  - CLUPA Protected Area - Far North
  - Resident Geologist District
  - Federal Land Other
  - Native Reserves
- AMIS Sites**
  - AMIS Sites
  - AMIS Features
  - Drill Hole
  - Mineral Occurrences
- MLAS Mining History**
  - Withdrawal - History
  - Notice - History
  - Mining Claim - History
  - Mining Land Tenure - History
  - Legacy Claim
- Provincial Grid**
  - Provincial Grid 250K
  - Provincial Grid 50K
  - Provincial Grid Group
- Land Tenure**
  - Surface Rights
  - Mining Rights
  - Mining and Surface Rights
  - Order-in-Council



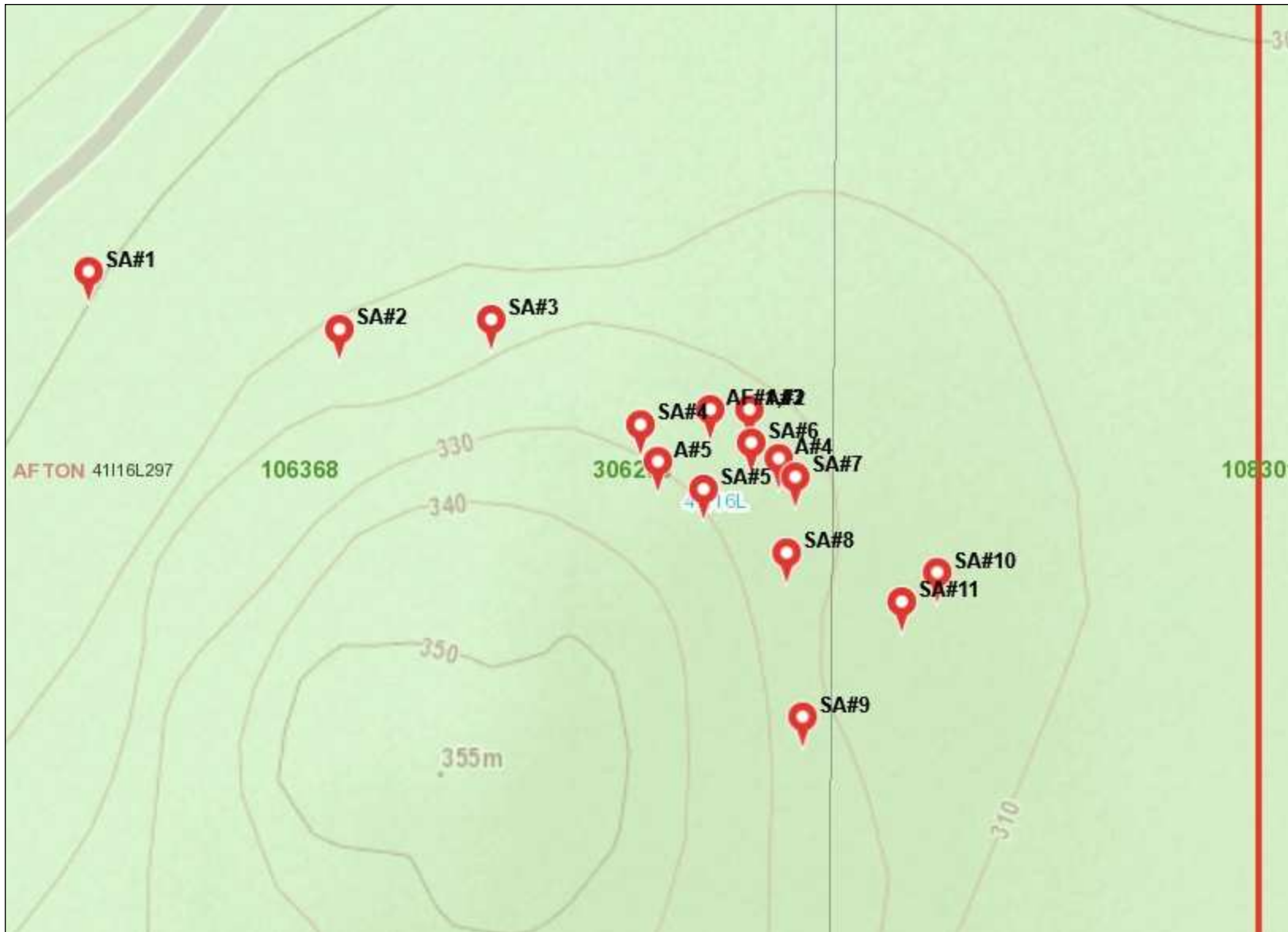
Projection: Web Mercator



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### Legend

- Provincial Grid Cell**
  - Available
  - Pending
  - Unavailable
- Mining Claim**
  - Mining Claim
  - Boundary Claim
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  - Withdrawal
  - Notice
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  - UTM Grid 1K
  - UTM Grid 10K
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  - Native Reserves
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  - AMIS Sites
  - AMIS Features
  - Drill Hole
  - Mineral Occurrences
- MLAS Mining History**
  - Withdrawal - History
  - Notice - History
  - Mining Claim - History
  - Mining Land Tenure - History
  - Legacy Claim
- Provincial Grid**
  - Provincial Grid 250K
  - Provincial Grid 50K
  - Provincial Grid Group
- Land Tenure**
  - Surface Rights
  - Mining Rights
  - Mining and Surface Rights
  - Order-in-Council



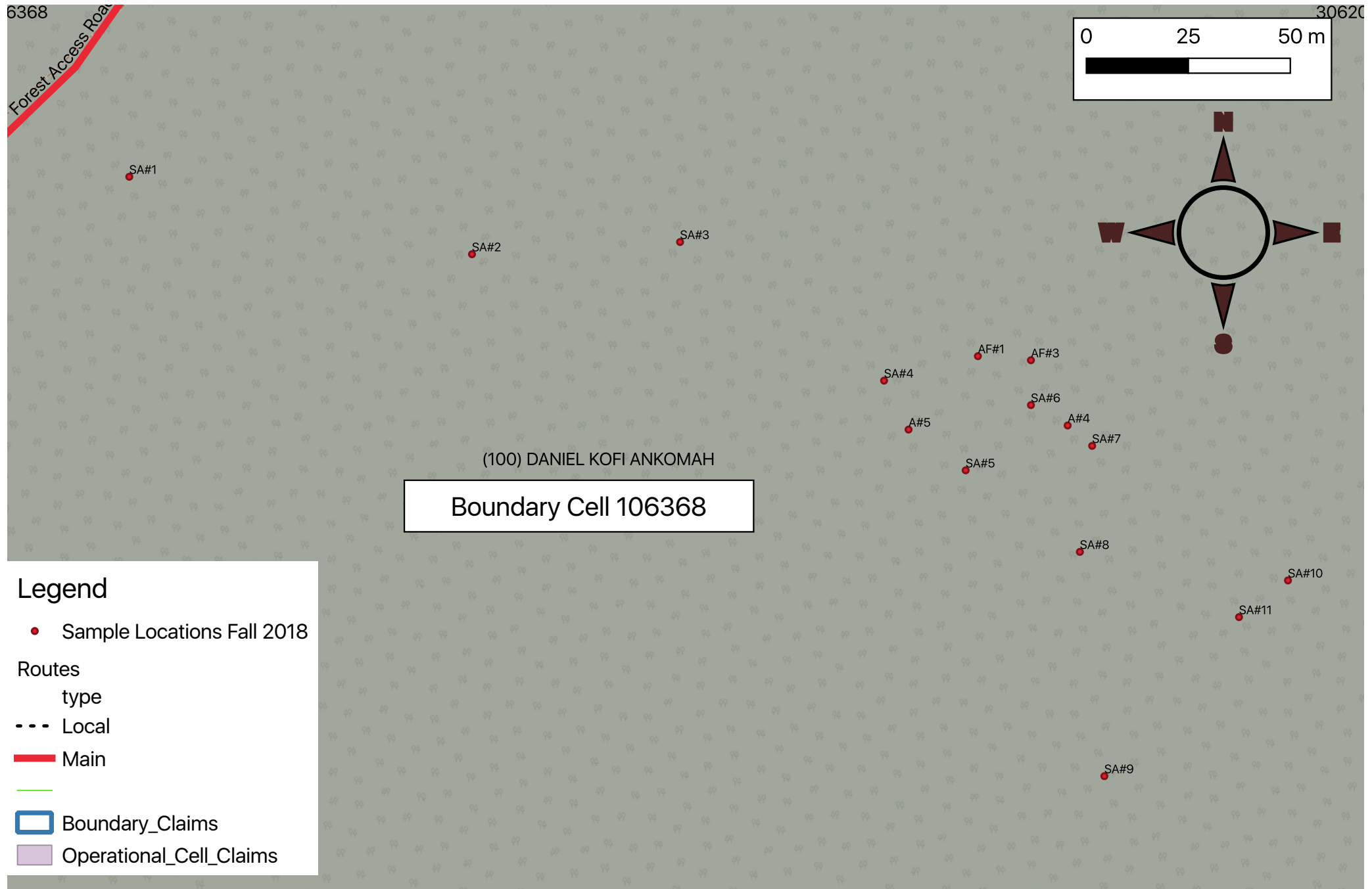
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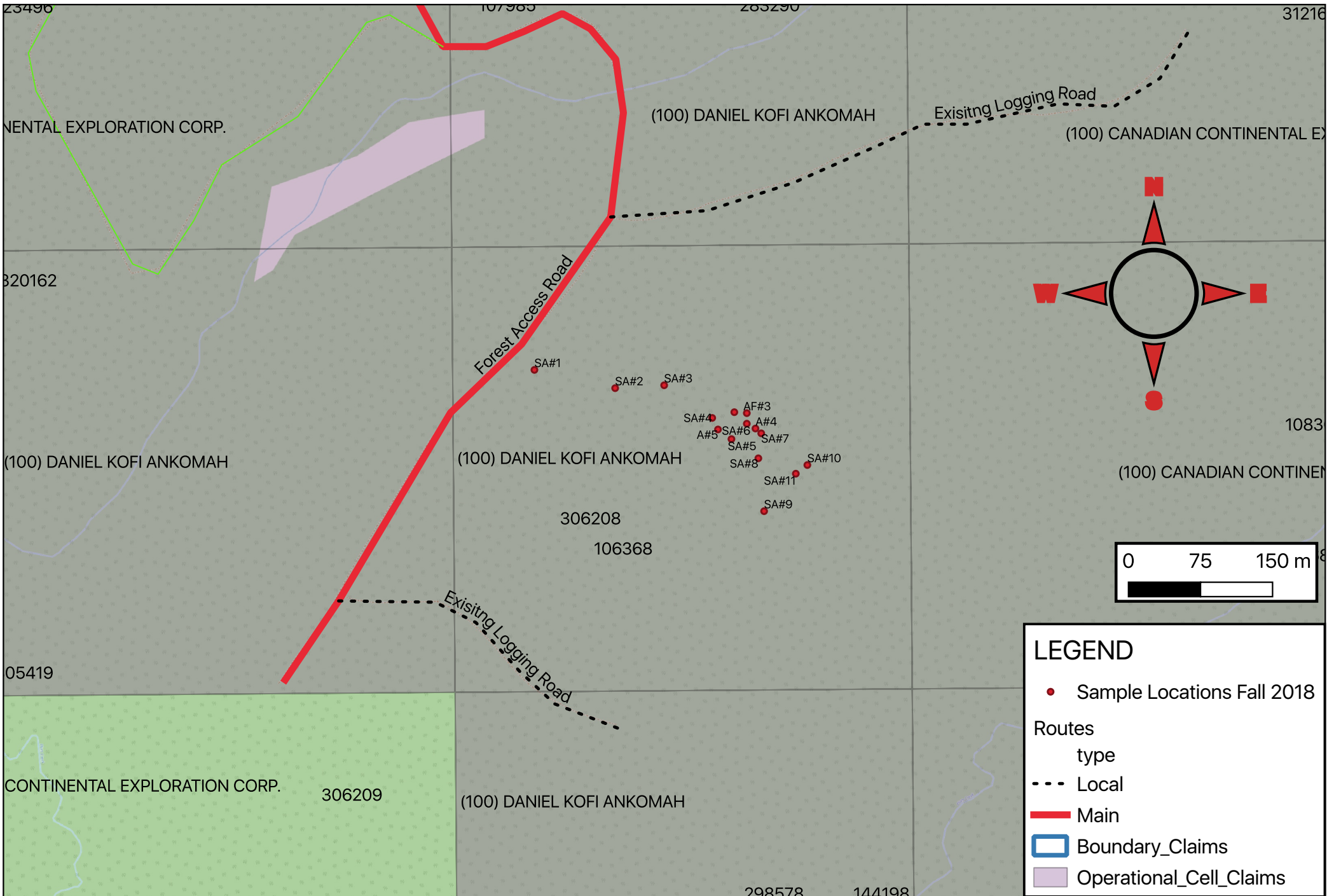
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Count	Sample ID	AGAT Sample Testing ID	Sample Locations - Detail Map-2 ID	Northing	Easting	Comments
1	A-1	AF#1	AF#1	5198685	545959	Obscured on Detail Map-2(Original submission) - same location as AF#2
2	A-2	AF#2	AF#2	5198685	545959	(see above)
3	A-3	AF#3	AF#3	5198684	545972	
4	A-4	AF#4	A#4	5198668	545981	
5	A-5	AF#5	A#5	5198667	545942	
6	SA-1	SA#1	SA#1	5198729	545751	
7	SA-2	SA#2	SA#2	52198710	545835	
8	SA-3	SA#3	SA#3	52198713	545886	
9	SA-4	SA#4	SA#4	52198679	545936	
10	SA-5	SA#5	SA#5	52198657	545956	
11	SA-6	SA#6	SA#6	52198673	545972	
12	SA-7	SA#7	SA#7	52198663	545987	
13	SA-8	SA#8	SA#8	52198637	545984	
14	SA-9	SA#9	SA#9	52198582	545990	
15	SA-10	SA#10	SA#10	52198630	546035	
16	SA-10A	N/A	N/A			Same location as SA#10 - No sample taken
17	SA-11	SA#11	SA#11	52198621	546023	

**Appendix 4 – Costs**  
(see separate submission)