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## **Assessment Work Report**

MLAS Boundary Claims: 165301,250895, 279923 and 231915 (Legacy Claim ID: S4278189)

# **Geographic Township of Davis**

NTS Map Sheet 41-I-09

June 20, 2019

Prepared By: BaseLine Geomaterials Inc.

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## **Overview**

This report was prepared to detail sampling for precious metals and other economic mineralisation and to satisfy assessment work requirements under the Mining Act.

## **Project Team**

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

## **Purpose**

Published reports from Ministry of Energy, Northern Development and Mines (ENDM) library and Assessment Files have detailed occurrences of precious and other metals (Ag, Cu) in and around the area in which the project property is located. Based on this information a project was designed to research previous activities in the area and conduct a follow up surface rock sampling program.

## Access

The property is located in Davis Township and can be accessed by travelling east from Sudbury, ON following Highway 17 to Kukagami Lake Road. Then proceed northerly 11 km to where a now abandoned east-west railway spur crosses. Turn right on the abandoned rail bed and follow it easterly for approximately 10 km to a small gravel pit on the north side of the rail bed (N 5164835, E 537255) found near the west limit of the property.

## **Project Area**

The project area is the property covered by MLAS Boundary Claims 165301,250895, 279923 and 231915 (formerly Legacy Claim: S4278189); the registered claimholder is Steven J. Gossling.

### Vegetation

Vegetation is second growth, mixed forest with cedar, jack pine, white pine, birch, spruce and poplar.

### Physiography

The northern part of the property for the most part is occupied by dome shaped hills, which are the result of gabbroic rocks, the relief here is 40 to 60m. Argillite rocks (Gowganda formation) are found mainly in the flatter areas and close to the Ess creek fault, which forms a valley in the south part of the property. Marshes are found on the northeast portion of the property.

### Property Geology

Prospecting carried out during the sampling project indicated the presence of Huronian (greywacke conglomerates, feldspathic quartzite) and post-Huronian (Nipissing diabase-gabbro, narrow quartz veins) and argillite rocks on the property.

The intrusive gabbro rocks were noted mainly in the northwestern portion of the project area. This rock type grades into a quartzite-greywacke and is coarsely crystallined. Broken rocks found around old pits and trenches show greywacke and quartzite interbedded with conglomerate. The conglomerate contains round 0.5 - 1.0cm quartz and feldspar particles.

The (noted) shear zones observed trend at approximately 50° and in some locations are cut by younger 15-30° shears Disseminated mineralisation seems to be confined to the argullaceous muddy-chloritic-shared rocks, while sporadic amounts were found in narrow brecciated zones.

## **Applicable Exploration Permits**

The project consisted of grassroots prospecting only and consequently no permits were required.

## **Daily Log of Activities**

BaseLine Geomaterials Inc. completed work for this assignment over several days during the fall of 2018.

### November 01, 2018 (3hrs)

Ed Rose - work consisted of historical document review of access, topography and geology as well as project planning and securing of tools and supplies and preparation of a field-sampling plan.

November 3, 2018 (9hrs)

Steve Gossling, Ed Rose, Marc Gaudreau. Fieldwork consisted of travel to the site, confirmation of access, initial investigation of rock types and mineralisations and obtaining samples (SG-1, SG-2, SG-2A, SG-3, SG-4, SG-5 and SG-6) at various locations.

November 5 - 14, 2018 (8hrs) Ed Rose and Steve Gossling. Sample preparation and delivery to AGAT Laboratories Ltd. for testing.

November 18 2018 to June 20, 2019 (24hrs) Ed Rose and Steve Gossling. Report compilation, review, edit and filing.

# Sampling

All of the sampling was performed using hand tools only.

Sample ID	Comments/Observations	Northing	Easting
SG#1	Altered/sheared carbonate - sulphide grains associated with narrow quartz stringers. The attitude of the shearing is N 40-60 degrees W. A 4m by 6m section of the outcrop was hand stripped and a 3kg random sample was taken.	5164760	537280
SG#2 & SG#2A	Approximate 3m by 2m deep test pit in sheared greywacke striking at N 40 degrees W. Scattered sulphides (pyrite and chalcopyrite) was found to be associated with the sheared section of rocks found around the pit. A 2-3kg sample of the sheared greywacke was taken. Scattered narrow quartz stringers are found in the rock.	5165080	537280
SG#3	Brecciated dioritic and quartzite-greywacke rocks with rusty spots - disseminated sulphide. Sample taken from	5165230	537055

	rocks found around sides of an old 5m by 2.5m trench.		
SG#4	A coarsely crystalline gabbroic with pyroxine and hornblende blebs - scattered pyrite and chalco was found. The area occupied by an old 6m by 2m by 0.5m trench was cleaned by hand and sampled.	5165235	537080
SG#5	Interbedded sheared greywacke and quartzite with pyrite, chalcopyrite and pyrrhotite grains. Northwest	5165165	537040
SG#6	trending outcrop. Two samples were taken at either end of the outcrop.	5165100	537035

## **Sample Preparation and Delivery**

After photographing and cataloging the individual sample locations the samples were placed in sample bags for subsequent 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 claim holder will store the remaining one half of each sample.

## **Conclusions/Recommendations**

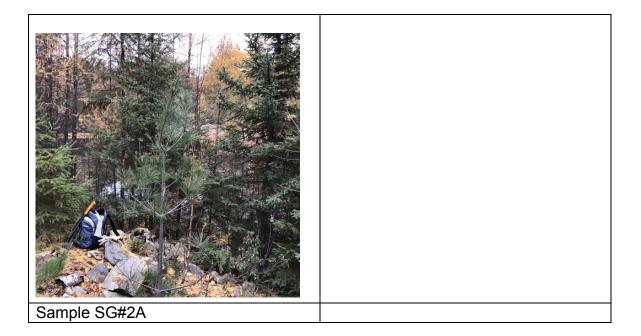
Sulphide mineralisation was found in most of the samples (see sample log) but more in the altered-shear-brecciated and chloritic rocks. The next work phase should include continued additional prospecting, sampling and stripping as dictated by outcrop occurrences and lab results, grid layout and sampling in the stripped areas.

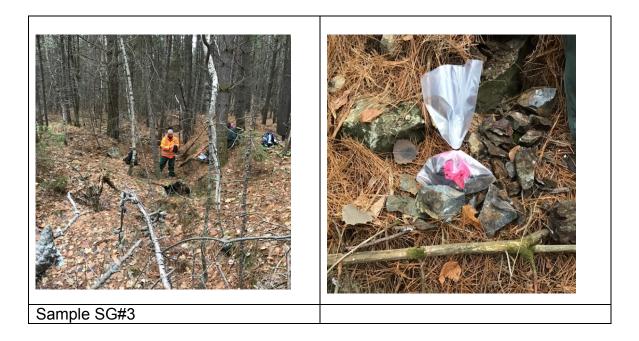
This report respectfully submitted June 20, 2019.

*SJ Gossling* Steve J. Gossling *Ed Rose* Eglon (Ed) A. Rose **APPENDIX 1 - PHOTOGRAPHS** 



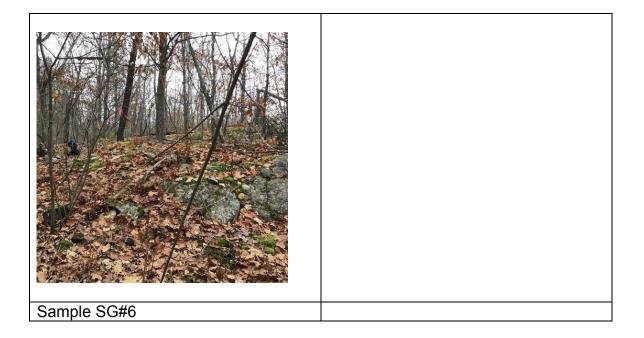












**APPENDIX 2 – ASSAY RESULTS** 



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. 492 SECOND AVE. S SUDBURY, ON P3B 3L5 705-988-4500

### **ATTENTION TO: STEVE GOSSLING**

### PROJECT: DA

### AGAT WORK ORDER: 18T409214

SOLID ANALYSIS REVIEWED BY: Sherin Moussa, Senior Technician

### DATE REPORTED: Dec 11, 2018

### PAGES (INCLUDING COVER): 9

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

\*NOTES

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: 18T409214 **PROJECT: DA** 

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: No	v 25, 2018		DATE RECEIVED: Nov 14, 2018	DATE REPORTED: Dec 11, 2018	SAMPLE TYPE: Other						
	Analyte:	Sample Login Weight									
	Unit:	kg									
Sample ID (AGAT ID)	RDL:	0.01									
SG#1 (9737944)		0.869									
SG#2 (9737945)		1.222									
SG#2A (9737946)		0.540									
SG#3 (9737947)		0.723									
SG#4 (9737948)		0.693									
SG#5 (9737949)		1.359									
SG#6 (9737950)		0.530									

Comments: **RDL** - Reported Detection Limit

Certified By:

Sherin Hou



# **Certificate of Analysis**

AGAT WORK ORDER: 18T409214 PROJECT: DA 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

	(201-079) Sodium Peroxide Fusion - ICP-OES finish														
DATE SAMPLED: No	v 25, 2018	DATE RECEIVED: Nov 14, 2018						DATE REPORTED: Dec 11, 2018				SAMPLE TYPE: Other			
	Analyte:	Al	As	В	Ва	Са	Со	Cr	Cu	Fe	К	Li	Mg	Mn	Mo
	Unit:	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Sample ID (AGAT ID)	RDL:	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
SG#1 (9737944)		8.47	0.007	<0.01	0.065	0.44	0.003	0.022	0.002	6.13	1.94	<0.01	2.65	0.056	0.010
SG#2 (9737945)		3.42	0.005	<0.01	0.003	7.44	0.020	0.010	0.060	20.3	0.06	<0.01	2.90	0.041	<0.005
SG#2A (9737946)		5.70	0.013	<0.01	0.009	7.27	0.010	0.011	0.036	8.84	0.22	<0.01	4.24	0.071	<0.005
SG#3 (9737947)		6.82	0.025	<0.01	0.004	0.36	0.003	0.007	0.094	8.13	0.60	<0.01	2.79	0.065	0.006
SG#4 (9737948)		5.04	>10	<0.01	0.006	0.13	0.117	0.006	3.68	17.8	0.40	<0.01	0.240	<0.005	0.006
SG#5 (9737949)		5.88	8.39	<0.01	0.004	0.22	0.068	0.007	3.31	13.3	0.30	<0.01	0.372	<0.005	0.007
SG#6 (9737950)		6.32	0.013	<0.01	0.031	0.60	0.001	0.017	0.009	3.65	1.27	<0.01	0.979	0.022	0.007
	Analyte:	Ni	Pb	S	Si	Sn	Ti	V	W	Zn					
	Unit:	%	%	%	%	%	%	%	%	%					
Sample ID (AGAT ID)	RDL:	0.001	0.005	0.01	0.005	0.005	0.005	0.005	0.01	0.005					
SG#1 (9737944)		0.008	<0.005	0.01	29.0	<0.005	0.406	0.014	<0.01	0.006					
SG#2 (9737945)		0.597	<0.005	11.4	18.2	<0.005	0.297	0.016	<0.01	<0.005					
SG#2A (9737946)		0.116	<0.005	2.40	25.0	0.009	0.427	0.026	<0.01	<0.005					
SG#3 (9737947)		0.002	<0.005	0.25	29.7	<0.005	0.919	0.047	<0.01	0.005					
SG#4 (9737948)		0.011	0.007	12.5	17.1	<0.005	0.139	<0.005	<0.01	<0.005					
SG#5 (9737949)		0.006	0.005	9.76	21.5	<0.005	0.292	<0.005	<0.01	<0.005					
SG#6 (9737950)		0.002	<0.005	0.09	34.8	<0.005	0.337	0.007	<0.01	<0.005					

Comments: RDL - Reported Detection Limit

Certified By:

Sherin Moo



# **Certificate of Analysis**

AGAT WORK ORDER: 18T409214 **PROJECT: DA** 

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**

(202-552) Fire Assay - Trace Au, ICP-OES finish (50g charge) (ppm)										
DATE SAMPLED: No	v 25, 2018		DATE RECEIVED: Nov 14, 2018	DATE REPORTED: Dec 11, 2018	SAMPLE TYPE: Other					
	Analyte:	Au								
	Unit:	ppm								
Sample ID (AGAT ID)	RDL:	0.001								
SG#1 (9737944)		0.005								
SG#3 (9737947)		0.416								
SG#4 (9737948)		5.00								
SG#5 (9737949)		2.79								
6G#6 (9737950)		0.009								

Comments: **RDL** - Reported Detection Limit

Certified By:

-Sherin Hou



# **Certificate of Analysis**

AGAT WORK ORDER: 18T409214 **PROJECT: DA** 

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**

	(202-555) Fire Assay - Au, Pt, Pd Trace Levels, ICP-OES finish (50g charge)											
ATE SAMPLED: Nov 25, 2018 DATE RECEIVED: Nov 14, 2018 DATE REPORTED: Dec 11, 2018 SAMPLE TYPE: Other												
	Analyte:	Au	Pd	Pt								
	Unit:	ppm	ppm	ppm								
Sample ID (AGAT ID)	RDL:	0.001	0.001	0.005								
SG#2 (9737945)		0.010	0.003	<0.005								
SG#2A (9737946)		0.007	0.001	<0.005								

**RDL** - Reported Detection Limit Comments:

Certified By:

Sherin Hou



Quality Assurance - Replicate AGAT WORK ORDER: 18T409214 PROJECT: DA 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**

				(2	201-079) So	dium Pe	roxide F	usion - I	CP-OES	finish				
		REPLIC	ATE #1											
Parameter	Sample ID	Original	Replicate	RPD										
Al	9737944	8.47	8.57	1.2%										
As	9737944	0.007	< 0.005											
В	9737944	< 0.01	< 0.01	0.0%										
Ва	9737944	0.0651	0.0666	2.3%										
Са	9737944	0.437	0.432	1.2%										
Со	9737944	0.003	0.003	0.0%										
Cr	9737944	0.0215	0.0192	11.3%										
Cu	9737944	0.002	0.002	0.0%										
Fe	9737944	6.13	6.18	0.8%										
К	9737944	1.94	1.98	2.0%										
Li	9737944	< 0.01	< 0.01	0.0%										
Mg	9737944	2.65	2.69	1.5%										
Mn	9737944	0.056	0.056	0.0%										
Мо	9737944	0.010	0.010	0.0%										
Ni	9737944	0.0085	0.0095	11.1%										
Pb	9737944	< 0.005	< 0.005	0.0%										
S	9737944	0.01	0.01	0.0%										
Si	9737944	29.0	28.8	0.7%										
Sn	9737944	< 0.005	< 0.005	0.0%										
Ti	9737944	0.406	0.411	1.2%										
V	9737944	0.014	0.014	0.0%										
W	9737944	< 0.01	< 0.01	0.0%										
Zn	9737944	0.0065	0.0068	4.5%										
			(2	02-552	) Fire Assay	/ - Trace	Au, ICP-	OES fini	sh (50g	charge	) (ppm	)		
		REPLIC	ATE #1											
Parameter	Sample ID	Original	Replicate	RPD										
Au	9737944	0.0051	0.0043	17.0%										
			(202-5	55) Fir	e Assay - A	u, Pt, Pc	I Trace L	evels, IC	P-OES	finish (5	50g cha	arge)		
		REPLIC	ATE #1											
Parameter	Sample ID	Original	Replicate	RPD										



## Quality Assurance - Replicate AGAT WORK ORDER: 18T409214 PROJECT: DA

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**

Au	9737946	0.007	0.007	0.0%						
Pd	9737946	0.001	0.001	0.0%						
Pt	9737946	< 0.005	< 0.005	0.0%						



Quality Assurance - Certified Reference materials AGAT WORK ORDER: 18T409214 PROJECT: DA 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

				(2	201-07	9) Sodi	um Per	oxide Fu	usion -	ICP-OE	S finisł	า			
		CRM #1	l (ref.SY-4)												
Parameter	Expect	Actual	Recovery	Limits											
Al	10.95	10.77	98%	90% - 110%											
Са	5.72	5.7	100%	90% - 110%											
Fe	4.34	4.32	100%	90% - 110%											
К	1.37	1.38	101%	90% - 110%											
Mg	0.325	0.301	93%	90% - 110%											
Si	23.3	24.4	105%	90% - 110%											
Ti	0.172	0.169	98%	90% - 110%											
				(202-552)	) Fire A	Assay -	Trace	Au, ICP-	OES fin	nish (50	g charg	ge) (ppm	I)		
		CRM #1	(ref.GS6E)												
Parameter	Expect	Actual	Recovery	Limits											
Au	6.06	5.97	99%	90% - 110%											
	·		(202	2-555) Fir	e Assa	iy - Au,	Pt, Pd	Trace Le	evels, I	CP-OES	finish	(50g ch	arge)		
		CRM #1	(ref.PG129)												
Parameter	Expect	Actual	Recovery	Limits											
Au	1.1	1.2	105%	90% - 110%											
Pd	0.115	0.119	104%	90% - 110%											
Pt	0.239	0.252	105%	90% - 110%											

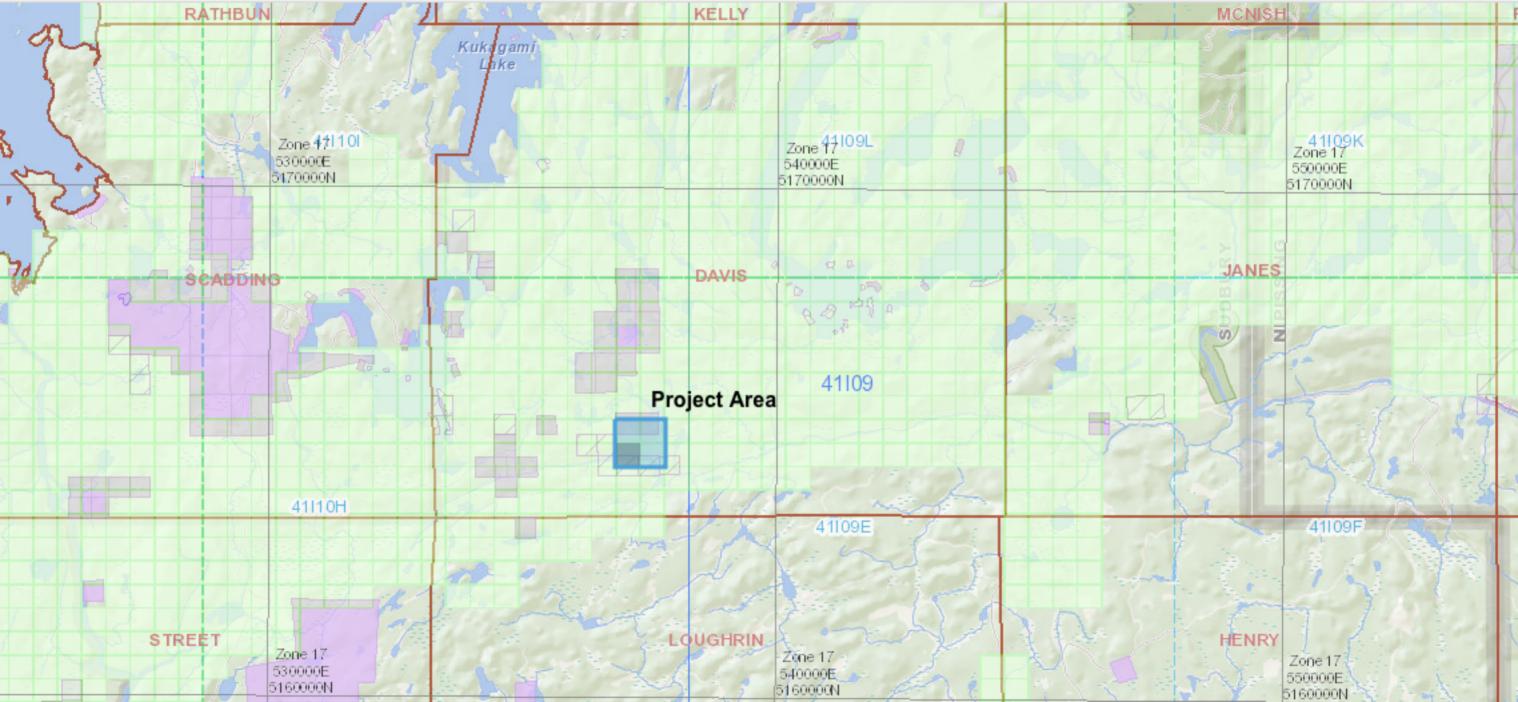


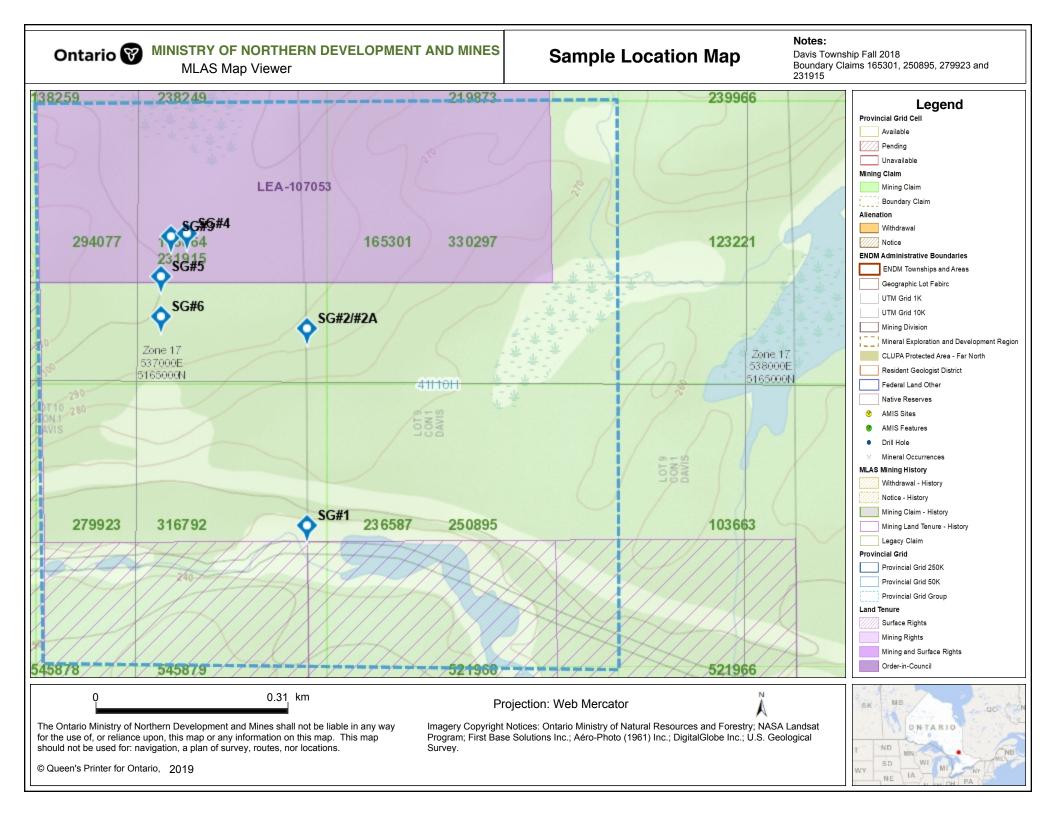
5623 McADAM ROAD MISSISSAUGA, ONTARIO CANADA L4Z 1N9 TEL (905)501-9998 FAX (905)501-0589 http://www.agatlabs.com

# **Method Summary**

CLIENT NAME: BASELINE GEOM	ATERIALS INC.	AGAT WORK OF	RDER: 18T409214
PROJECT: DA		ATTENTION TO:	STEVE GOSSLING
SAMPLING SITE:		SAMPLED BY:	
PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Sample Login Weight	MIN-12009		BALANCE
AI	MIN-200-12001		ICP/OES
As	MIN-200-12001		ICP/OES
В	MIN-200-12001		ICP/OES
Ва	MIN-200-12001		ICP/OES
Са	MIN-200-12001		ICP/OES
Со	MIN-200-12001		ICP/OES
Cr	MIN-200-12001		ICP/OES
Cu	MIN-200-12001		ICP/OES
Fe	MIN-200-12001		ICP/OES
к	MIN-200-12001		ICP/OES
Li	MIN-200-12001		ICP/OES
Mg	MIN-200-12001		ICP/OES
Mn	MIN-200-12001		ICP/OES
Мо	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
Au	MIN-200-12006	BUGBEE, E: A Textbook of Fire Assaying	ICP-OES
Au	MIN-200-12006	BUGBEE, E: A Textbook of Fire Assaying	ICP/OES
Pd	MIN-200-12006	BUGBEE, E: A Textbook of Fire Assaying	ICP/OES
Pt	MIN-200-12006	BUGBEE, E: A Textbook of Fire Assaying	ICP/OES

**APPENDIX 3 – MAPS** 





**APPENDIX 4 – COSTS** 

Item No.	Description	Total Amount	IST Portion	Net
1	Personnel (BaseLine)	\$8,367.65	\$962.65	\$7,405.00
2	Vehicle Rental (Enterprise)	\$171.99	\$19.79	\$152.20
3	Laboratory Testing (AGAT)	\$473.47	\$54.47	\$419.00
	Totals	\$9,013.11	\$1,036.91	\$7 <i>,</i> 976.20