We are committed to providing accessible customer service.
If you need accessible formats or communications supports, please contact us.

Nous tenons à améliorer l’accessibilité des services à la clientèle.
Si vous avez besoin de formats accessibles ou d’aide à la communication, veuillez nous contacter.

A REPORT

ON SOIL SAMPLING, PROPSECTING

AND DRONE MAGNETICS SURVEY

ON FORMER LEASE LEA-19618, NOW LEA-20063

OGDEN PROPERTY, TIMMINS

PORCUPINE MINING DISTRICT

NTS 42A/06

Submitted by:

Don Heerema P.Geo. (ON)
Metals Creek Resources
945 Cobalt Cres.
Thunder Bay, ON
P7B 5Z4

April 2020

TABLE OF CONTENTS

Summary 1
Terms of Reference 1
Land Title/Tenure 1
Property Access and Location 6
Physiography 9
Geology 9
Lease LEA-19618 Geology 18
Work Programs 2018-2019 18
MEK Sampling and Analytical Techniques 21
Conclusions and Recommendations 22
Statement of Qualifications 23

List of Figures

Figure 1: Claim Map. 6
Figure 2: Property Location Map 7
Figure 3: Timmins West Gold Trend 8
Figure 4: Ogden Property Highlights 8
Figure 5: Ogden Property Geology 10
Figure 6: Thomas Ogden Schematic Cross Section. 12

List of Appendices

Appendix I: Sample Data and Maps
Appendix II: Airborne Magnetics Report
Appendix III Assay Certificates
Appendix IV: Proof of Expenditures

Summary

This report summarizes work on lease LEA-19618 (P37705) which is part of the Ogden Property in Timmins Ontario. The work consisted of a drone magnetics survey in October 2018 with follow-up soil sampling and prospecting in September 2019. Because the lease is rather small in area, the magnetics survey was 13.7 line kilometers. Five rock samples as well as sixty-six soil samples were sent to AGAT Laboratories and Activation Labs in Thunder Bay for gold fire assay and 38 element ICP analysis.

Terms of Reference

Map projections are in UTM, North American Datum 83, Zone 17 unless stated otherwise. Contractions are “mm” = millimeter, “cm” = centimeter, “m” = meters, “km” = kilometers, “g” = gram, “kg” = kilogram, “in” = inch, “ft” = foot, “lb” = pound, “oz” = troy ounce, “ppm” = parts per million, “ppb” = parts per billion, “oz/ton” = troy ounce per short ton, “g/t” is grams per metric tonne, “ddh” = diamond drill hole, “TOZ” = Thomas Ogden Zone, “SZ” = South Zone, “NZ” = North Zone, “PH” = Porphyry Hill, “PDB” = Porcupine Destor Break and “MEK” = Metals Creek Resources.

Land Title/Tenure

The entire Ogden property consists of 36 patent parcels, 14 leases and 53 unpatented mining cells (post conversion) that lie within the central portion of Ogden Twp. and the west Deloro Twp., registered in the Porcupine Mining Division. The said patents, leases and unpatented mining cells are part of an option joint venture agreement between Metals Creek Resources Corp. and Goldcorp Canada Inc. and Goldcorp Inc. (now Newmont) with MEK having earned a 50% interest in the project and acts as project operator. All exploration activities discussed occurred within LEA-19618 and an exploration permit was not needed for the type of work conducted. This lease is not contiguous with the bulk of the Ogden Property and lies separately in Deloro Township.

Patents

PIN 65441-0370(LT), PIN 65441-0204(LT), PIN 65441-0369(LT) Parcel 14423SEC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
HR1007 (partially in Deloro Tp) P8555 (Deloro Tp) P8594 P8595

PIN 65441-0229(LT) - Parcel 14424SEC - Registered owners are Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
HR937 (partially in Deloro Tp) HR938 HR939

PIN 65441-0238(LT) - Parcel 8441 SEC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
HR1008

PIN 65441-0205(LT) - Parcel 4200SEC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
P8060

PIN 65441-0206(LT) - Parcel 4401 SEC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
P8061

PIN 65441-0203(LT) - Parcel 4402SEC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
P9852

PIN 65441-0190(LT) - Parcel 4114SEC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
P8948

PIN 65441-0189(LT) - Parcel 4115SEC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
P8949

PIN 65441-0187(LT) - Parcel 4116SEC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
P8044

PIN 65441-0188(LT) - Parcel 4117SEC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
P11344

PIN 65441-0183(LT) - Parcel 4118SEC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
P11483

PIN 65441-0184(LT) - Parcel 4864SEC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
P16063

PIN 65441-0185(LT) - Parcel 3851SEC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
P8459

PIN 65441-0186(LT) - Parcel 4863SEC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
P16062

PIN 65441-0237(LT) - Parcel 3895SEC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
P6465

PIN 65442-0686 (LT) - Parcel 58LC - Registered owners are Goldcorp Canada Ltd. 51 % and Goldcorp Inc. 49%
P37705

Claim #	Parcel #	Pin#	Previous Parcel #	Patent #	Recorded Holder
TRP 1995	221 SEC	65441-0172(LT)		6059 TEM	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
TRP 1407	222 SEC	65441-0173(LT)		6060 TEM	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
P 8795	41 23 SEC	65441-0177(LT)		923 Coch	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
P 8381	4951 SEC	65441-0181(LT)		2011 Coch	Goldcorp Canada Ltd. 51%

					and Goldcorp Inc. 49%
P 8383	4952 SEC	65441-0180(LT)		2012 Coch	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
P 8384	4953 SEC	65441-0179(LT)		201 3 Coch	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
ME 47/P 18122	5680 SEC SRO	65441-0182(LT)		2288 Coch	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
HR 1135	5681 SEC	65441-0178(LT)		2289 Coch	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
HR 1136	5681 SEC	65441-0178(LT)		2289 Coch	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
P 8381/P 16751	6199 SEC MRO	65441-0335(LT)	4951 SEC	2011 Coch	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
ME 47/P 18122	6199 SEC MRO	65441-0335(LT)	5680 SEC	2288 Coch	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
P 19143	9871 SEC	65441-0166(LT)		4738 Coch	Goldcorp Canada Ltd. 46% and Goldcorp Inc. 44%, Shirley Hamilton 10%
P 20073	9872 SEC	65441-0164(LT)		4739 Coch	Goldcorp Canada Ltd. 46% and Goldcorp Inc. 44%, Shirley Hamilton 10%
P 26257	9873 SEC	65441-0165(LT)		4740 Coch	Goldcorp Canada Ltd. 46% and Goldcorp Inc. 44%, Shirley Hamiton 10%
P 26258	9874 SEC	65441-0161(LT)		4741 Coch	Goldcorp Canada Ltd. 46% and Goldcorp Inc. 44%, Shirley Hamiton 10%
P 26408	9875 SEC	65441-0170(LT)		4742 Coch	Goldcorp Canada Ltd. 46% and Goldcorp Inc. 44%, Shirley Hamiton 10%
P 19144	9877 SEC	65441-0167(LT)		4747 Coch	Goldcorp Canada Ltd. 46% and Goldcorp Inc. 44%, Shirley Hamiton 10%
P 19145	9878 SEC	65441-0171(LT)		4748 Coch	Goldcorp Canada Ltd. 46% and Goldcorp Inc. 44%, Shirley Hamiton 10%
P 19147	9879 SEC	65441-0168(LT)		4749 Coch	Goldcorp Canada Ltd. 46% and Goldcorp Inc. 44%, Shirley Hamiton 10%
P 20074	9880 SEC	65441-0159(LT)		4750 Coch	Goldcorp Canada Ltd. 46% and Goldcorp Inc. 44%, Shirley Hamiton 10%
P 26259	9881 SEC	65441-0160(LT)		4751 Coch	Goldcorp Canada Ltd. 46% and Goldcorp Inc. 44%, Shirley Hamiton 10%

Claim #	Parcel #	Pin #	MRO Previous Parcel #	Patent #	Recorded Holder
PP 22 (TRP 1782)	5496 SEC Firstly	65441-0345(LT)	1804 SND	730 SND	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
PP 21 (TRP 1784)	5496 SEC Secondly	65441-0345(LT)	1826 SND	752 SND	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
PP 23 (TRP 1783)	5496 SEC Thirdly	65441-0345(LT)	1827 SND	753 SND	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
PP 24 (TRP 1785)	5496 SEC Fourthly	65441-0345(LT)	1828 SND	754 SND	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%
PP 25 (TRP 1786)	5496 SEC Fifthly	65441-0345(LT)	1829 SND	755 SND	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%

PP 26 (TRP 1787)	5496 SEC Sixthly	65441-0345(LT)	1830 SND	756 SND	Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%

Leases

PIN 65442-0686 (LT) – Parcel 58LC – LEA-19618 - Registered owners are Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49% P37705

PIN 65441-0373(LT) - Parcel 1615LC – LEA-108841 - Registered owners are Goldcorp Canada Ltd. 51% and Goldcorp Inc. 49%

P528812, P528813, P528814, P528815, P528816, P528817, P528915, P528916, P528917, P528918, P528919, P528920, P528921

Unpatented Mining Cells

Cell #	Type	Anniversary Date	$ Work Due	Cell ID
339968	Single	September 26, 2025	400	42A06E011
160138	Single	September 26, 2025	400	42A06E031
116694	Single	September 26, 2025	400	42A06E032
232858	Boundary	September 26, 2025	200	42A06E050
120981	Single	September 26, 2025	200	42A06E030
213523	Single	September 26, 2025	200	42A06E010
281033	Boundary	September 26, 2025	200	42A06L390
162155	Boundary	September 26, 2025	200	42A06L391
126327	Single	September 26, 2025	200	42A06L392
221579	Boundary	September 26, 2025	200	42A06L371
144032	Boundary	September 26, 2025	200	42A06L351
257540	Single	September 26, 2025	400	42A06L372
162154	Single	September 26, 2025	400	42A06L373
162153	Boundary	September 26, 2025	200	42A06L352
144031	Boundary	September 26, 2025	200	42A06L353
126326	Boundary	September 26, 2025	200	42A06L354
201446	Boundary	September 26, 2025	200	42A06L374
100724	Boundary	September 26, 2025	200	42A06L394
288148	Single	September 26, 2025	200	42A06L393
225533	Single	September 26, 2025	200	42A06E012
213559	Single	September 26, 2025	200	42A06E013
160137	Single	September 26, 2025	200	42A06E033
160139	Boundary	September 26, 2025	200	42A06E051
225556	Boundary	September 26, 2025	200	42A06E052
281580	Boundary	September 26, 2025	200	42A06E053
194304	Single	June 26, 2025	200	42A06L398
165533	Single	June 26, 2025	200	42A06L399
340015	Single	April 28, 2025	200	42A06L340

225595	Single	April 28, 2025	200	42A06L360
120985	Boundary	April 28, 2025	200	42A06K301
160144	Boundary	April 28, 2025	200	42A06K321
261541	Boundary	April 28, 2025	200	42A06K341
287913	Boundary	October 23, 2025	200	42A06K361
128588	Boundary	October 23, 2025	200	42A06K362
323801	Boundary	October 23, 2025	200	42A06K363
324226	Boundary	December 10, 2025	200	42A06K364
324225	Boundary	December 10, 2025	200	42A06K344
221603	Single	March 25, 2025	200	42A06K345
209520	Single	October 23, 2025	200	42A06K365
281023	Single	June 23, 2025	200	42A06E020
276074	Single	June 23, 2025	200	42A06E040
232349	Boundary	June 23, 2025	200	42A06F001
101375	Boundary	June 23, 2025	200	42A06F021
217849	Boundary	June 23, 2025	200	42A06F022
144062	Single	June 23, 2025	200	42A06E059
114912	Single	June 23, 2025	200	42A06E060
237936	Single	June 23, 2025	200	42A06F041
181987	Boundary	June 23, 2025	200	42A06F042
265977	Boundary	June 23, 2025	200	42A06F043
265976	Boundary	June 23, 2025	200	42A06F044
112817	Boundary	June 23, 2025	200	42A06F062
322604	Boundary	June 23, 2025	200	42A06F063
253913	Boundary	June 23, 2025	200	42A06F064

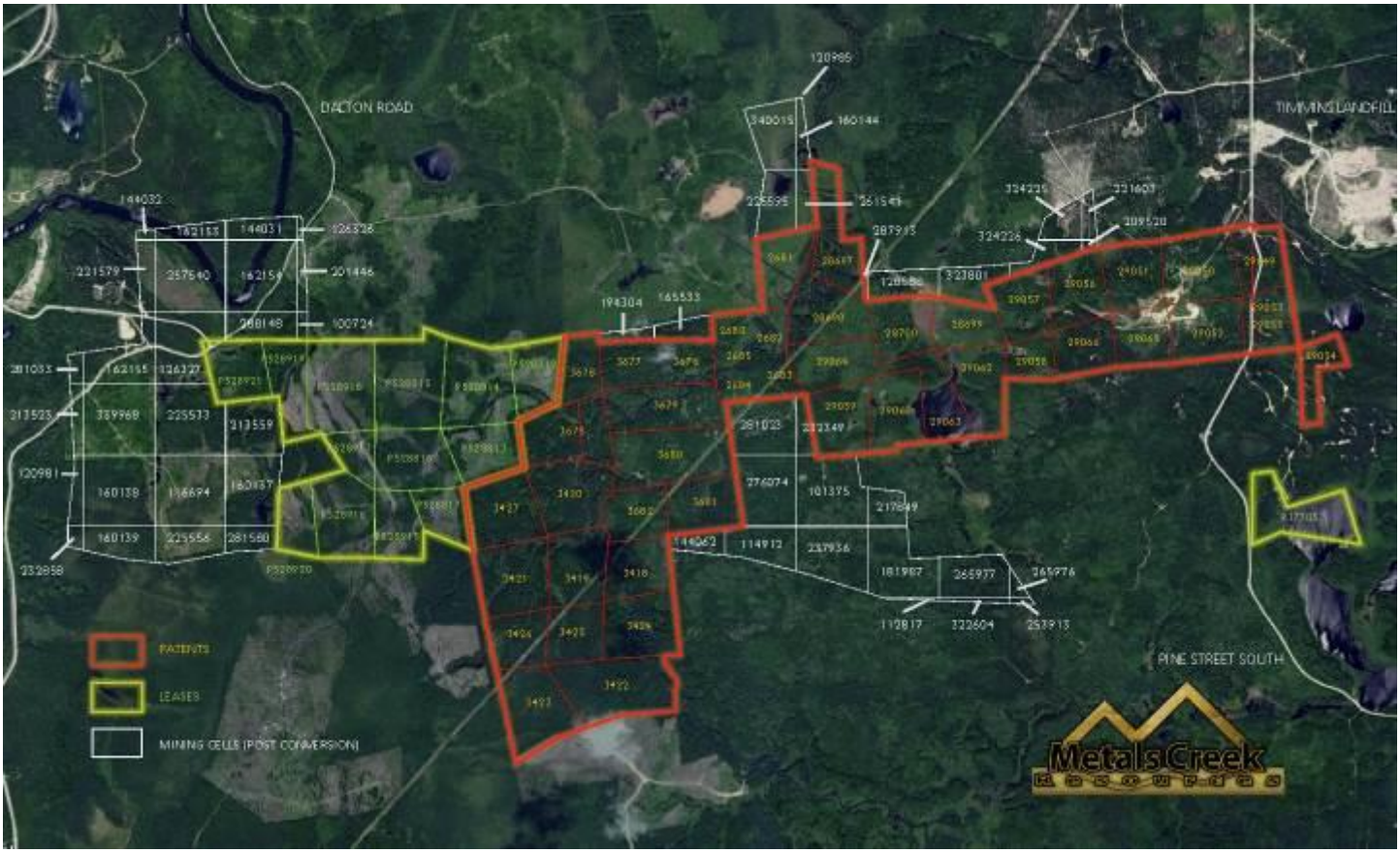


Figure 1: Claim Map

Property Location and Access

The Ogden Property is located only 5 km south of the downtown core of the City of Timmins and is centered on UTM coordinates 471,600mE / 5,362,600mN (NAD83 Zone 17) on NTS 42A/6. The property lies between Goldcorp's Dome Mine and Mine Complex and Lake Shore Gold's West Timmins Mine. See figures 2 and 3.

Access to the lease pertaining to this report, is centered on UTM coordinate 475,450mE / 5,361,755mN. The southwest corner of the lease touches Pine Street south 2.9 kilometers south of the Timmins landfill access. An old forestry or camp access road east off Pine Street South at coordinate 475,175mE / 5,361,860mN truncates the northern portion of the lease for easy access.

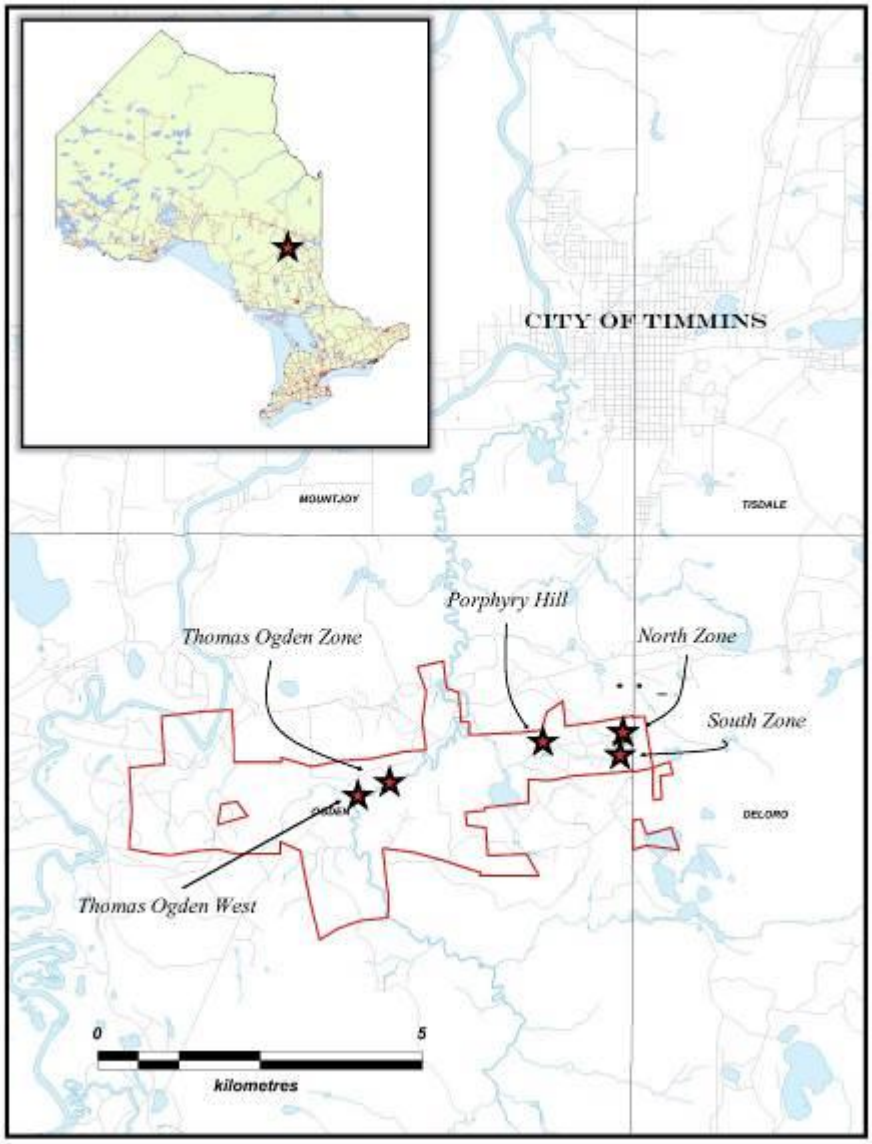


Figure 2: Property Location

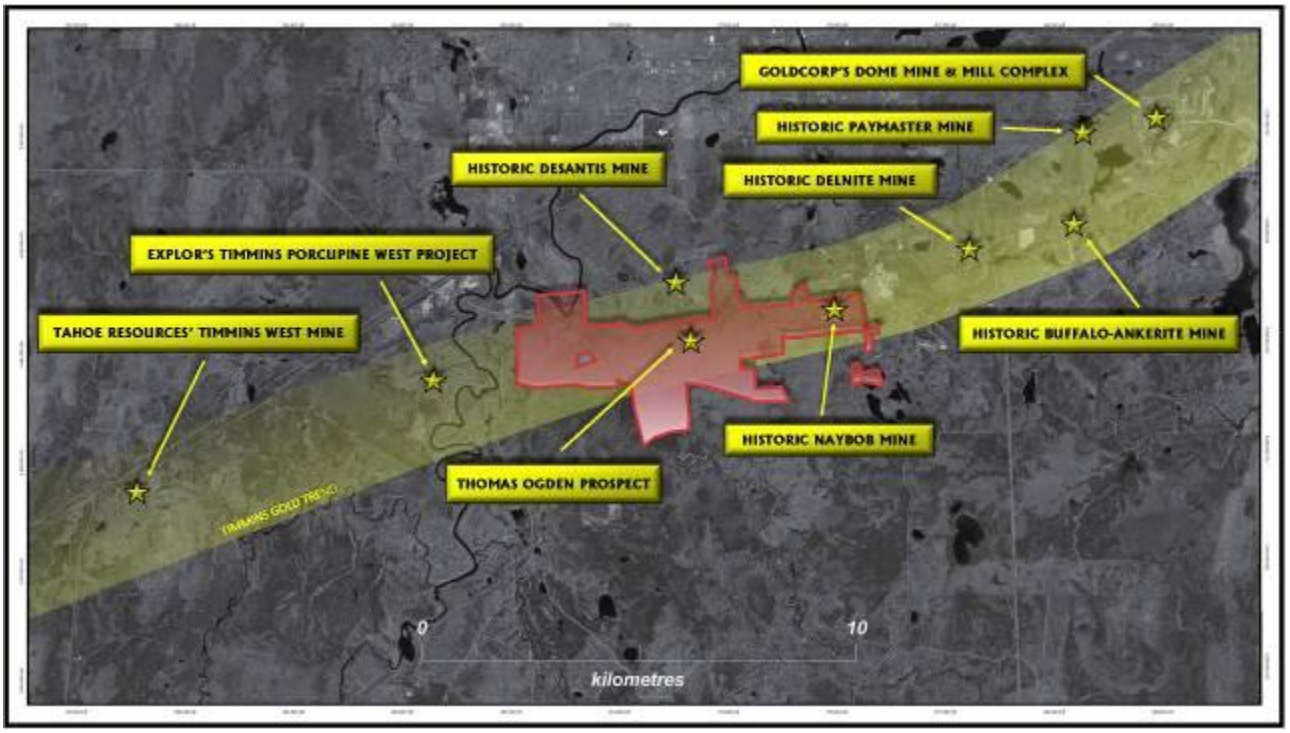


Figure 3: Timmins West Gold Trend

Figure 4: Ogden Historic Property Highlights

Physiography

The topography of the lease is relatively flat and generally covered by glacial sands resulting in very limited outcrop. The lease is largely covered by Reid Lake on the eastern half of the lease where the elevation is about 309m above the sea level with a topographic relief of about 13m. The northwest corner of the lease is at the highest elevation (322m) where outcrops are located. The topography gently slopes away south to southeast of this point where sand becomes more prevalent. The higher ground on the upper third of the lease consists of common tree species; Spruce, White Birch, Balsam Fir and Poplar. The middle portion of the lease is flat, tree covered by tall Black Spruce and patches of Jack Pine with the forest floor covered by Labrador Tea. Approaching the southern boundary is a narrow creek that flows into Reid Lake. Bounding the creek is a corridor of Alder brush that widens eastward towards the lake. The southern boundary of the lease is back on slightly higher and dryer ground with mixed vegetation of Poplar, Balsam Fir, Spruce and more sporadic Birch.

Previous Work

Very little was found in the assessment files that pertain to the lease, although historic trenches and pits are present on the property. A single assessment file 42A06NW1152 by Delnite Gold Mines was located dating back to September 1954. A drill hole was collared at post #1 and drilled 190^{o} to a length of 205ft. This drilling likely postdates the trenches that were put down immediately west of the drill hole.

Geology

The Ogden Property is located within the Abitibi Sub-province that has to date produced over 150 Million oz of gold. The Timmins area is underlain by late Archean ultramafic to mafic supracrustal rocks which comprise four major assemblages. These are transected by a major regional fault system, the east-west trending Destor-Porcupine fault. Oldest rocks in the camp are mafic, intermediate and felsic volcanic rocks and chemical sediments of the Deloro Assemblage (2730-2725 Ma), which occur to the south of the Destor-Porcupine fault system. These are overlain by dominantly tholeiitic mafic volcanic rocks of the Tisdale Assemblage (2708-2700 Ma) that are present on both sides of the fault. The Tisdale rocks in the central Timmins camp are divided into four formations, which include the Hersey Lake Formation, the Central Formation, and the Gold Center Formation. The Tisdale assemblage is unconformably overlain by a felsic

tuff sequence of the Krist Formation, which is developed in western portions of the camp. The Krist tuff unit appears associated with a suite of quartz-plagioclase porphyry (2691-2688 Ma) intrusions that form probable sub-volcanic feeders to the tuffs. Overlying the Krist is the Porcupine Assemblage, a thick sequence of turbiditic greywacke, siltstone and mudstone. Timiskaming Group clastic sediments (2673-2668 Ma, based on detrital zircons) unconformably overlie the Krist and Porcupine sequences and earlier volcanic sequences where the Krist and Porcupine sequences are not present.

The property straddles 8 km of the Porcupine Destor Fault corridor. The Porcupine Destor fault corridor separates the Deloro Group from the Tisdale Group; the latter of which hosts the gold mineralization of the Naybob Mine and Thomas Ogden Zones and the mainly prolific deposits of the Timmins camp. North of the Porcupine-Destor fault, the Tisdale volcanics vary from intermediate to carbonatized ultramafic flows. Sediment packages composed of argillites, greywackes and conglomerates are present as well of Timiskaming age. Tisdale rocks have been intruded by altered felsic to porphyritic dykes, sills and small stocks. The rocks dip steeply to the north and young south in the North Zone area of Naybob, but generally dip south and young north in the South and Thomas Ogden Zones. It is possible that a large property scale syncline exists with an east-west fold hinge. Deformation zones on the property are associated and in close proximity to the Porcupine-Destor Fault. Alteration and sulphide mineralization are commonly associated with the structures and associated gold mineralization.

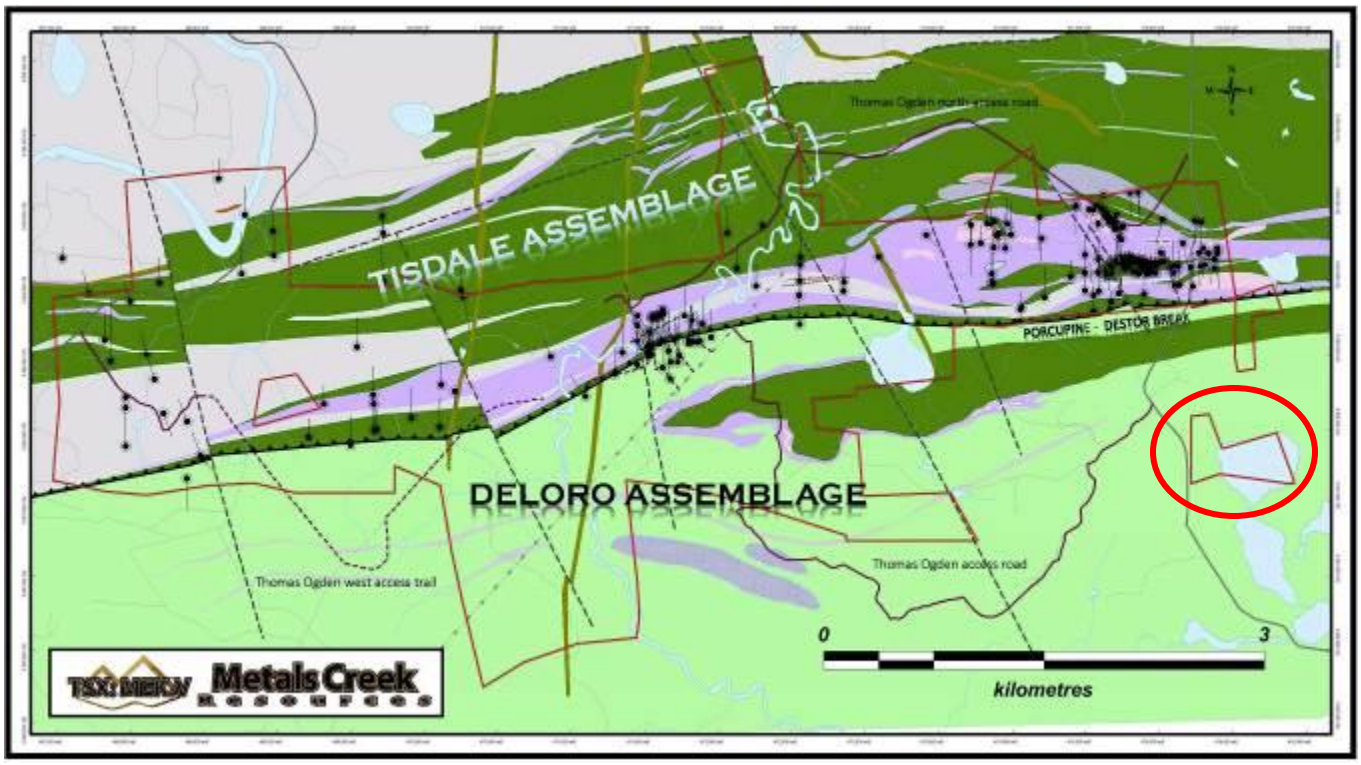


Figure 5: Ogden Property Geology

Below is an interpretation of the Thomas Ogden stratigraphy for which the Thomas Ogden Zone is located in. A transect from south to north can be seen from figure 6; a cross section illustration the stratigraphy.

Thomas Ogden Stratigraphy

A felsic to intermediate fragmental/tuffacous unit represents the top of the older Deloro Assemblage. An extremely strained chlorite schist presents the ductile Porcupine-Destor fault with local areas of strong pyritization. Capping the chlorite schist are highly deformed talc/serpentine/carbonate altered ultramafic volcanics that exhibit tremendous strain and millimeter-scale off-setting structures. Sandwiched between ultramafic volcanics are north younging sediments; an assemblage of conglomerate, greywacke and argillites with highly variable degrees of alteration. A younger and less strained package of ultramafics top the sediment package with strong talc alteration and slightly stronger magnetism. Late folding of the stratigraphy is evident and important in the deposition of the gold mineralization. Located in very close proximity to the Porcupine Destor Break like many of the deposits in the Timmins Camp, the host sediments and felsites exhibit folds that tighten and narrow westward. The folds appear to be plunging eastward at approx. 30 degrees with mineralization and diking with

higher grade gold mineralization found within the fold noses. All lithologies are folded in this manner.

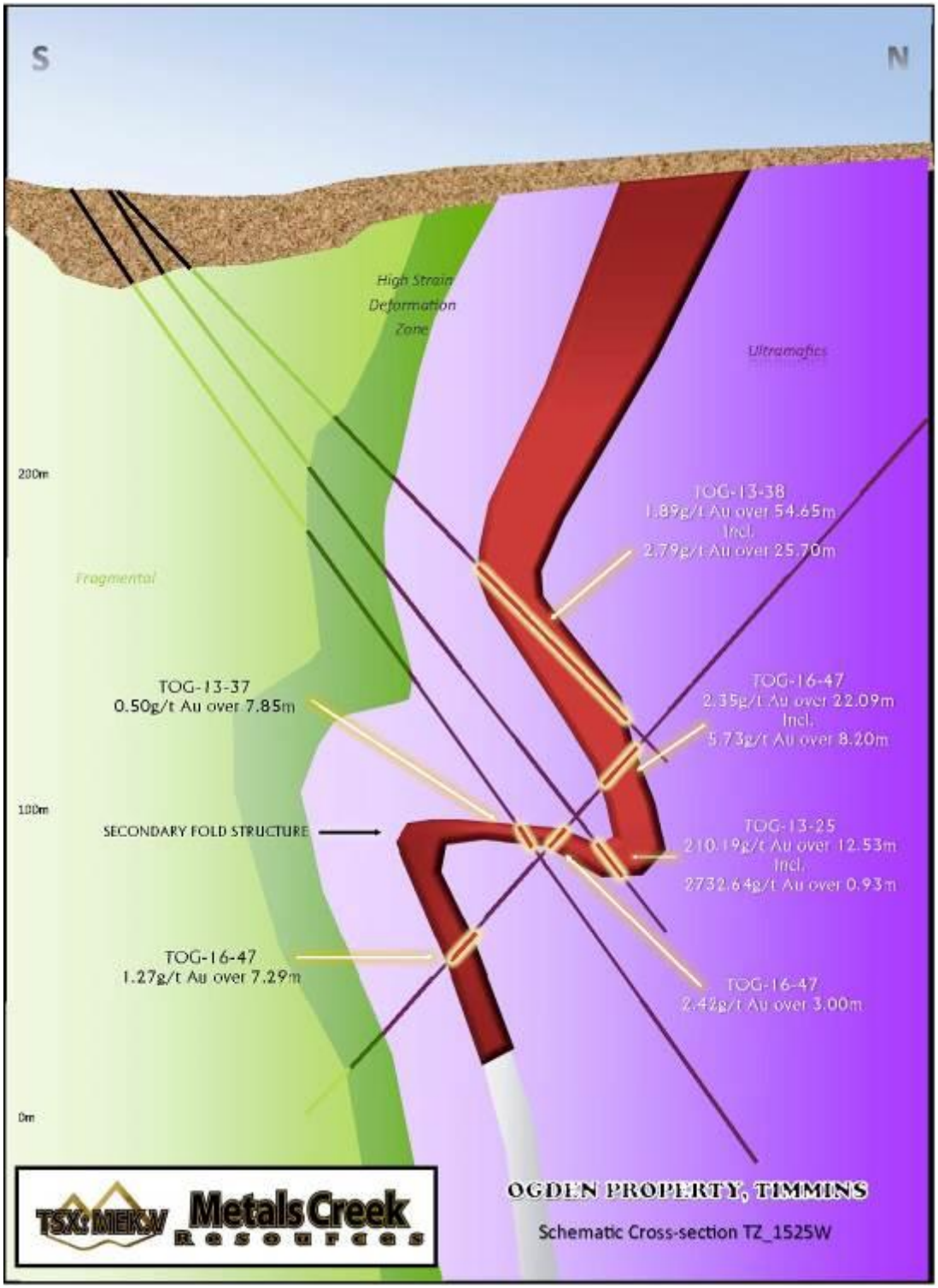
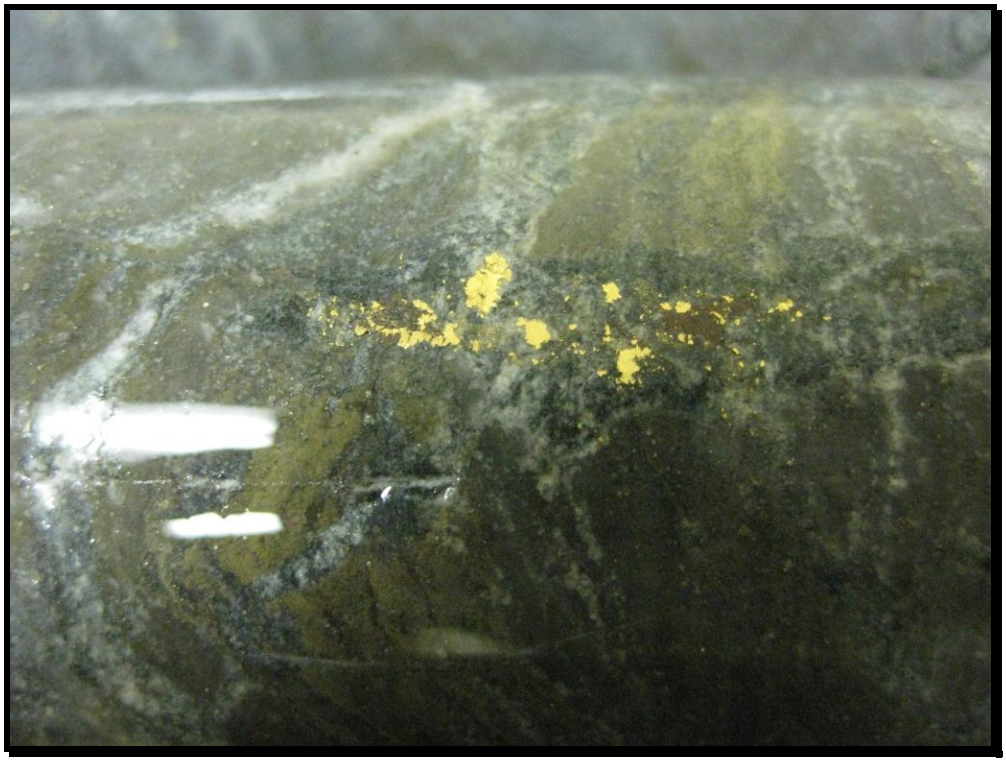
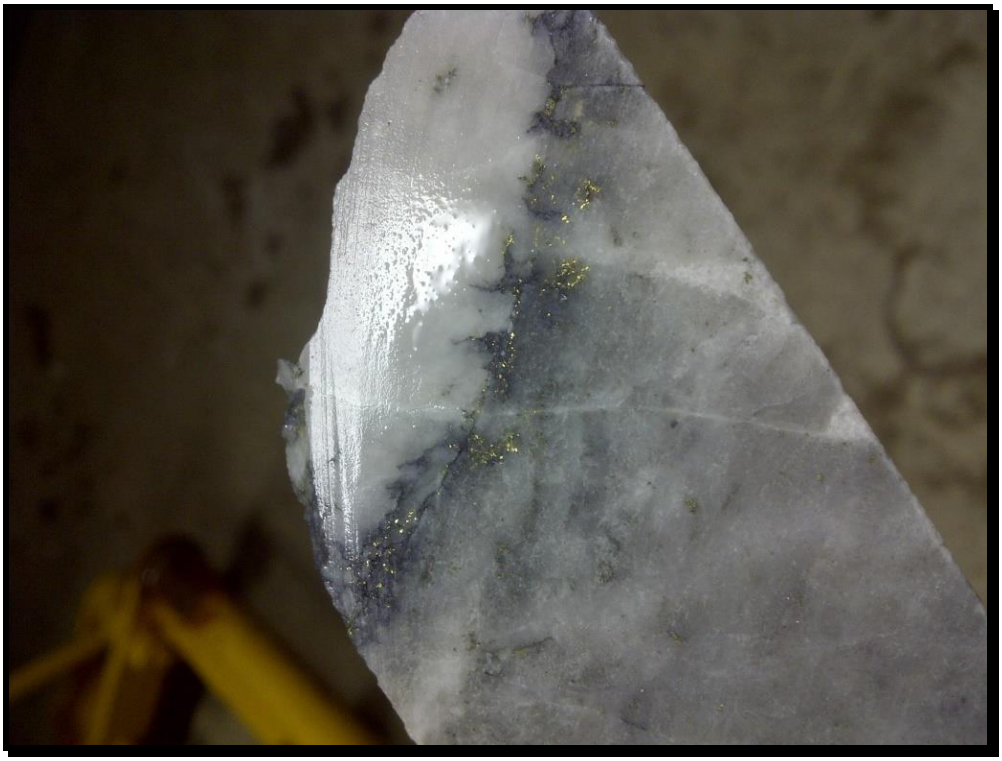


Figure 6: Thomas Ogden Schematic Cross Section

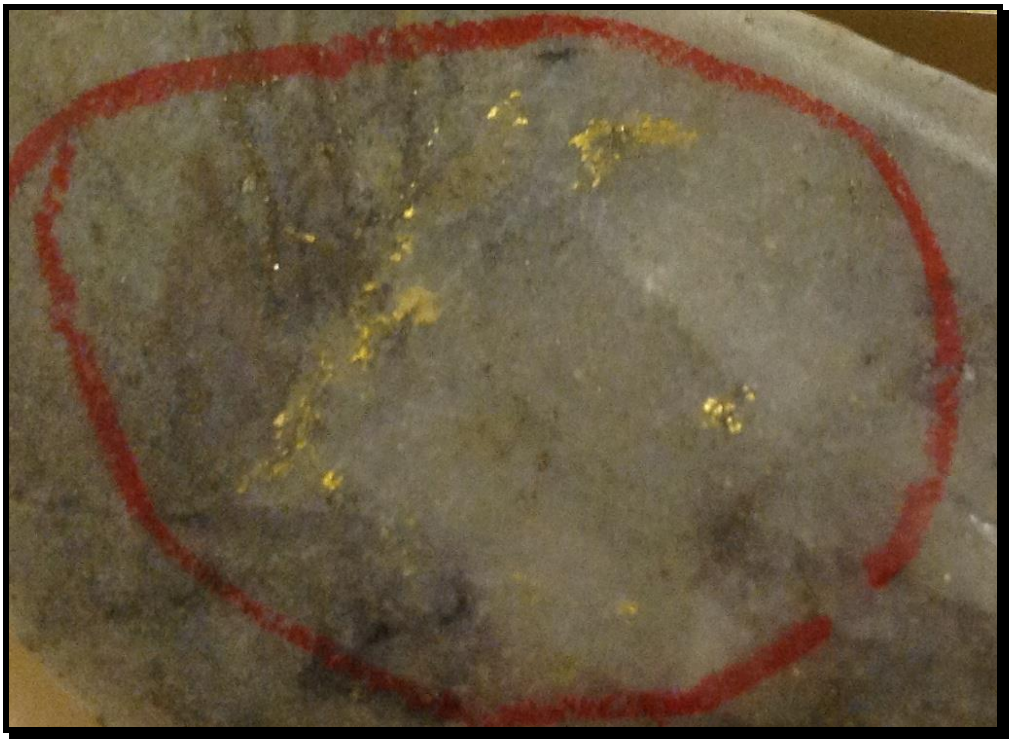
Gold within the Thomas Ogden Zone is commonly encountered in felsic dikes and altered pebble conglomerates but can certainly be located in altered wackes and argillites. The felsic dikes are extremely silicous with very little mafic content (<5%) and patchy albite alteration as well as local ankerite resulting in rusty patches and fractures. Alteration observed within the area of Thomas Ogden consists of variable amounts of silicification, albitization, sericitization as well as minor carbonate and fuchsite. The felsic dikes of TOZ are generally extremely silicous with clotty beige/peach colored albitization. Late quartz stringers and veinlets are often associated with the alteration.
The gold bearing sediments appear to be Timiskaming in age, containing occasional cherty jasperitic fragments. The gold bearing sediments are commonly well deformed and compressed with associated fuchsite, silicification, albitization and sulphides. Pyrite is the dominant sulphide with occasional arsenopyrite. Visible gold is not uncommon.



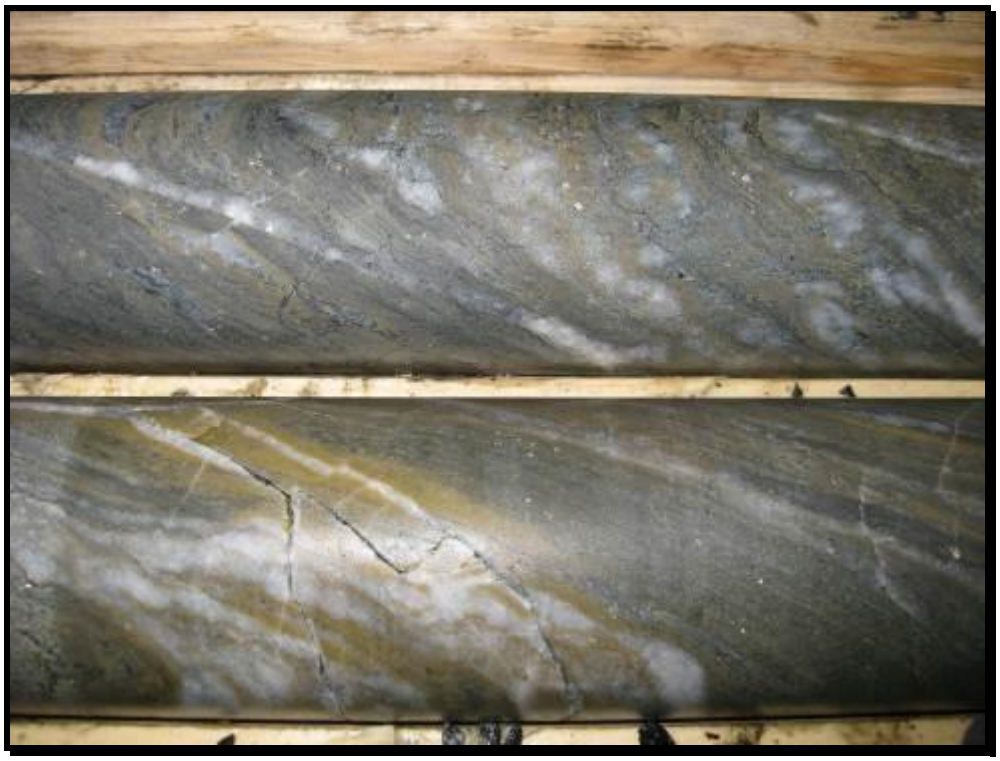
Visible gold in hole TOG-13-25 sample TOG-13-25-018 (2732.64g/t Au)



Visible gold in hole TOG-13-27 sample TOG-13-27-054 (434.77g/t Au)



Visible gold in hole TOG-12-07 sample TOG-12-07-029 (111.25g/t Au)

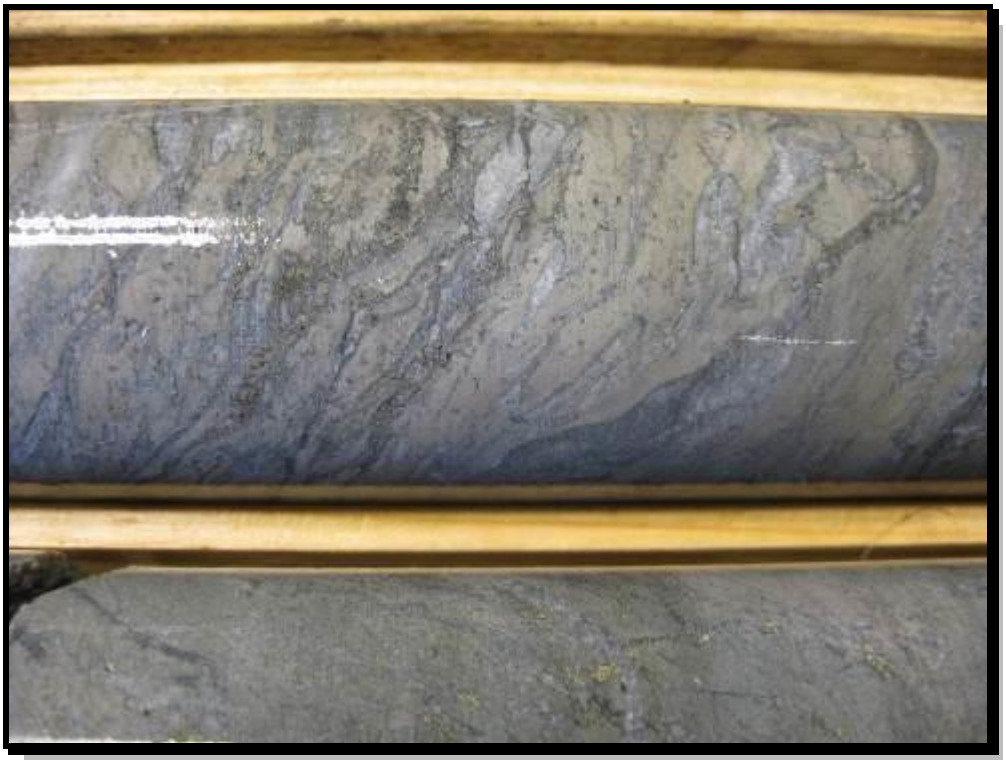


Albite-sericite-carbonate alteration typical of Thomas Ogden Zone

Albite-sericite-carbonate alteration typical of Thomas Ogden Zone with strong pyritization

South Zone

South Zone is the southern of two gold zones that saw limited historic mining and development. The South Zone lies north of and in close proximity to the PDB in weakly to moderately strained deictic-andesitic pillow lavas and thin interbedded argillites. Numerous hang-wall alteration/mineralized zones to the main zone exist ranging from 0.2 to 4m in width, consisting of albite alteration with diffuse to moderate contacts. Associated with the albitization is localized brecciation by late quartz stringers and arsenopyrite + pyrite mineralization and some free visible gold. The main targeted zone butts up against porphyry and ultramafics to the north and commonly contains minor fuchsite alteration as well. The gold bearing zones strike approximately 90^{o} and dip steeply south.



Albite alteration cut by quartz typical of South Zone with pyritization

Albite alteration cut by quartz typical of South Zone with strong arsenopyrite

North Zone

The North Zone is located in highly strained ultramafic volcanic rocks north of the Naybob Porphyry body that formed a dilation zone and a trap for gold deposition. The host rocks of NZ consist of strong green fuchsite and ankerite alteration with lesser albite and silicification. The style of mineralization is disseminated pyrite and free gold, within a quartz vein/stock-work and porphyry dikes, within or adjacent to the heavily deformed carbonate zone. Outside of the carbonate alteration zone, are intensely altered serpentinized/chloritized ultramafics.

Porphyry Hill

This is a feldspar porphyry stock located approximately 1km west of Naybob North that is rather massive and equigranular bound north and south by extremely strained and blocky ultramafic volcanics. A series of loosely spaced gold bearing quartz veins to 0.5m wide cut the intrusion with an east-west strike orientation. Grabs on surface to 64g/t have been attained with disseminated pyrite with trace chalcopyrite. The orientation of the stock is unclear at this time, but it is postulated that it may have an easterly plunge like that of the Naybob stock <1km east. Drilling to the east of the large outcropping has returned gold historically as well as within the 2018 diamond drill hole.

LEASE LEA-19618 Geology

Aside from some outcroppings on the northern end of the lease and a single drill hole in the assessment files, there is very little known of the geology underlying the lease. Based on historic mapping/assessment from the surrounding areas, the lease is dominantly underlain by intermediate to mafic volcanics of the Deloro assemblage. These volcanics are cut by minor quartz/carbonate veinlets and cherty iron formations. The outcrops encountered on the northern boundary of the claim consist of sheared volcanics @ 253-66 host to chlorite, sericite and carbonate alteration. Local lensoidal sphalerite clots present to 1cm in length. A historic pit and small trenches were located and put down on thin quartz/carbonate veins to 10cm in width.

Work Program 2018-2019

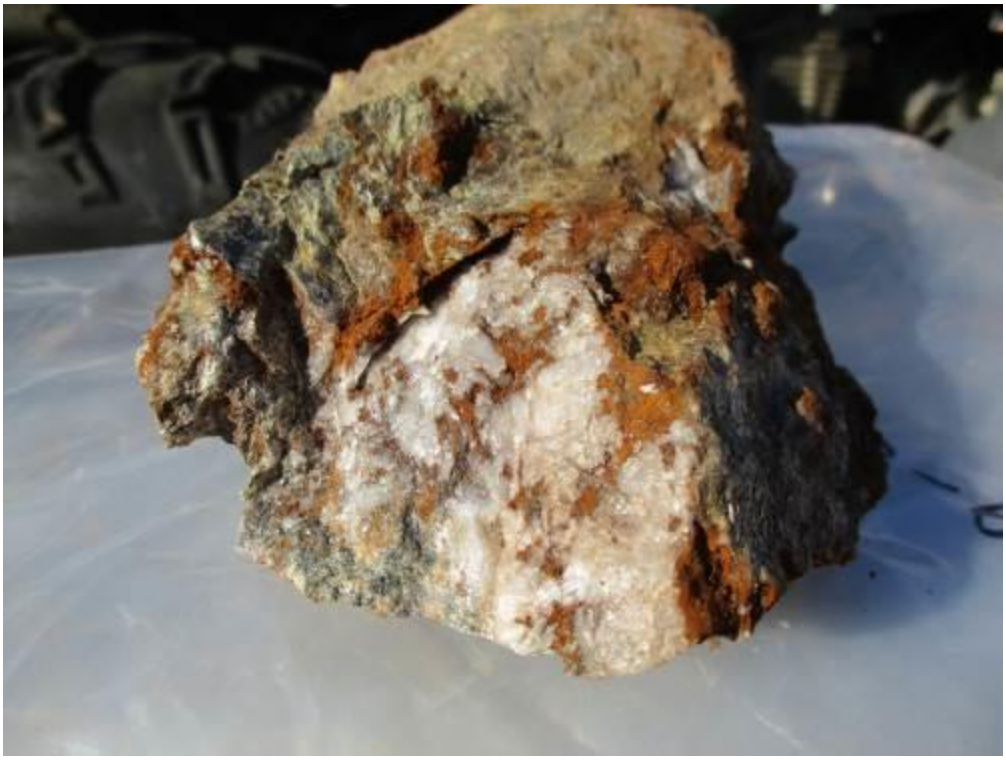
A drone magnetic survey took place on October 3, 2018 for a total of 13.7 line kilometers using a Geometrics MFAM magnetometer mounted on a DJI M600 drone. The survey was flown by Zen Geomap Inc. of Timmins Ontario. A 500ft buffer was not

flown on the northwest end of the lease as locals camp on the northwest corner of Reid Lake. See report in Appendix II for further details.

Due to the lack of outcrop on most of the lease, soil sampling took place on north-south reconnaissance lines across stratigraphy on the west side of the lease. Reid Lake encompasses the eastern half of the lease. Sixty-six (66) soils were collected ranging from sand to clays to humus with only a handful of good quality soils. GPS coordinates for each sample location were taken and plotted. The soil were placed in individually labeled paper soil bags, left to dry and then taken by MEK personnel to Actlabs in Thunder Bay for analysis. All sixty-six samples were analyzed for gold by fire-assay and 38 elements via ICP analysis. See appendix I for soil coordinates and geochemical results.

Prospecting and mapping was conducted in conjunction with soil sampling where it was noticed the only area of outcrop was the northwest portion of the lease. At the completion of the soils, time was spent looking at the outcrops, historic trenches and pits. Five (5) rock samples ranging from sphalerite bearing volcanics to carbonate altered volcanics and minor quartz/carbonate veining were attained.

Sample OGL19-1 returned 0.194% Cu and 0.508% Zn



Sample OGL19-2

Sample OGL19-3 returned 0.133% Cu and 0.791% Zn

Sample OGL19-4

Sample OGL19-5 returned 113ppb Au

MEK Sampling and Analytical Techniques

Soil samples were individually packaged in soil bags and the bag folded and often tied shut. The samples were taken to the MEK Thunder Bay office to dry out before all individual soil samples were placed into fiber bags and taken to the lab. Rock samples collected in the field were placed into individually labeled clear plastic sample bags. The samples were subsequently brought by MEK personnel to the lab for analysis.

All of the samples were brought by MEK personnel to Activation Labs in Thunder Bay, Ontario where they were analyzed for Au using a standard fire assay with atomic absorption finish (Actlab package code 1A2). In addition to the gold fire assay, all samples were analyzed for multi-elements using aqua-regia ICP finish (Actlab package code 1E3).

Conclusions and Recommendations

Due to lack of outcrop on the lease, a few outcrops were looked at resulting in the collection of five rock samples. Separate samples returned anomalous values of 113ppb gold (Au), zinc (Zn) to 7910ppm and copper (Cu) to 1940ppm. Although the grades were not of economic values in the samples collected, the alteration and sporadic quartz flooding is encouraging.

Soil sampling was used as a tool to perhaps see through the sandy overburden of the area. Sixty-six samples were collected resulting in a relatively poor result that could be attributed to the generally poor soil quality.
An anomalous gold-in-soil sample of 75ppb in close proximity to two weakly anomalous samples form a weak soil anomaly 115m south of the northern claim boundary. The anomaly coincidentally trends the same orientation as the shearing measured in outcrop to the north.
A single copper soil sample of 125ppm was attained closer to Reid Lake with a cluster of weaker but anomalous copper and sulphur values. The single copper value of 125ppm is also elevated in sulphur (0.3%) like that of the sulphide bearing rock samples collected. This weak anomaly is located on the magnetic signature from the drone magnetics survey and could be a target of future work.

I recommend trying SGH (Soil Gas Hydrocarbon) sampling that has shown success in areas of extensive overburden to follow up on the weak soil anomalies generated to date. Based on the physiography of the lease and extensive thicknesses of sand in the area, trenching is very doubtful to be successful in exposing bedrock.

Statement of Qualifications

I, Don Heerema Jr., hereby certify that:

1. I am a practicing geologist in Thunder Bay, Ontario and reside at 26 Burriss Street, Thunder Bay, Ontario, P7A 3C9.

2. I am a graduate of Lakehead University with a HBSc. in Geology.

3. I am a Canadian Citizen.

4. I have practiced my profession full time since graduation in 2002.

5. I am a practicing member of the Association of Professional Geoscientists of Ontario, registration #1528.
6.
7. I do not have, nor do I expect to receive directly or indirectly, any interest in the properties of Metals Creek Resources.

Signature: 

Date: September 08, 2020

APPENDIX I

SAMPLE DATA AND MAPS

Sample (Soils)	Easting	Northing	Date	Au ppb	Ag ppm	Cd ppm	Cu ppm	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Co ppm	Cr ppm	Fe %
				5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01
				FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
001	475217	5361650	24-Sep-19	8	< 0.2	< 0.5	9	225	< 1	17	6	27	1.32	< 2	< 10	66	< 0.5	< 2	0.67	5	36	1.43
002	475215	5361676	24-Sep-19	7	< 0.2	< 0.5	6	170	< 1	13	4	19	0.97	< 2	< 10	44	< 0.5	< 2	0.53	4	32	1.09
003	475215	5361702	24-Sep-19	6	< 0.2	< 0.5	12	163	< 1	20	4	51	1.44	3	< 10	80	< 0.5	< 2	0.82	6	42	1.47
004	475213	5361728	24-Sep-19	7	< 0.2	< 0.5	4	100	< 1	17	5	20	1.2	< 2	< 10	48	< 0.5	< 2	0.3	4	33	1.07
005	475214	5361754	24-Sep-19	9	< 0.2	< 0.5	3	51	< 1	7	6	10	1.02	< 2	< 10	25	< 0.5	< 2	0.15	1	24	0.75
006	475212	5361780	24-Sep-19	7	< 0.2	< 0.5	4	105	< 1	18	7	19	1.44	< 2	< 10	48	< 0.5	< 2	0.3	5	35	1.27
007	475210	5361808	24-Sep-19	6	< 0.2	< 0.5	3	47	< 1	5	7	9	0.59	< 2	< 10	36	< 0.5	< 2	0.1	2	13	0.43
008	475215	5361833	24-Sep-19	18	< 0.2	< 0.5	4	134	1	10	5	20	1.34	3	< 10	34	< 0.5	< 2	0.21	3	33	1.29
009	475220	5361854	24-Sep-19	6	< 0.2	< 0.5	4	163	< 1	10	5	29	1.34	< 2	< 10	36	< 0.5	< 2	0.18	3	37	1.43
010	475219	5361869	24-Sep-19	7	< 0.2	< 0.5	3	414	< 1	11	3	39	1.18	< 2	< 10	40	< 0.5	< 2	0.17	3	32	1.32
011	475218	5361893	24-Sep-19	< 5	< 0.2	< 0.5	4	309	< 1	11	5	28	1.33	< 2	< 10	35	< 0.5	< 2	0.15	4	30	1.22
012	475216	5361919	24-Sep-19	6	< 0.2	< 0.5	5	239	< 1	14	5	33	0.98	< 2	< 10	26	< 0.5	< 2	0.26	4	34	1.27
013	475213	5361944	24-Sep-19	< 5	< 0.2	< 0.5	8	268	< 1	18	7	50	1.67	3	< 10	33	< 0.5	< 2	0.16	4	57	2.13
014	475213	5361971	24-Sep-19	75	< 0.2	< 0.5	4	254	< 1	9	7	46	1.46	< 2	< 10	39	< 0.5	< 2	0.2	3	43	1.97
015	475218	5362000	24-Sep-19	6	< 0.2	< 0.5	4	255	< 1	10	3	14	0.83	< 2	< 10	35	< 0.5	< 2	0.21	3	27	1.1
016	475218	5362026	24-Sep-19	7	< 0.2	< 0.5	6	235	< 1	17	6	35	1.86	4	< 10	43	< 0.5	< 2	0.23	4	48	2.28
017	475218	5362051	24-Sep-19	5	< 0.2	< 0.5	3	79	< 1	17	3	20	1.97	< 2	< 10	38	< 0.5	< 2	0.23	5	37	1.91
018	475217	5362066	24-Sep-19	6	< 0.2	< 0.5	4	84	< 1	8	4	27	1.35	3	< 10	31	< 0.5	< 2	0.19	3	28	1.51
019	475273	5361651	24-Sep-19	< 5	< 0.2	< 0.5	5	213	< 1	12	4	21	0.94	2	< 10	38	< 0.5	< 2	0.43	5	32	1.15
020	475269	5361675	24-Sep-19	< 5	< 0.2	< 0.5	9	209	< 1	17	5	27	1.34	< 2	< 10	54	< 0.5	< 2	0.49	6	36	1.47
021	475269	5361700	24-Sep-19	5	< 0.2	< 0.5	9	261	< 1	22	7	30	1.6	< 2	< 10	77	< 0.5	< 2	0.68	6	46	1.54
022	475272	5361725	24-Sep-19	5	< 0.2	< 0.5	9	315	< 1	29	5	37	1.8	4	< 10	92	0.6	< 2	0.54	8	62	2.23
023	475274	5361748	24-Sep-19	5	< 0.2	< 0.5	5	130	< 1	12	5	17	0.95	< 2	< 10	42	< 0.5	< 2	0.35	4	32	0.97
024	475273	5361773	24-Sep-19	7	< 0.2	< 0.5	3	75	< 1	13	4	13	0.83	< 2	< 10	35	< 0.5	< 2	0.34	2	30	0.69
025	475275	5361800	24-Sep-19	6	< 0.2	< 0.5	1	42	< 1	3	5	6	0.43	< 2	< 10	19	< 0.5	< 2	0.11	< 1	20	0.27
026	475277	5361827	24-Sep-19	7	< 0.2	< 0.5	1	37	< 1	6	5	8	1.8	< 2	< 10	28	< 0.5	< 2	0.12	1	31	0.59
027	475273	5361854	24-Sep-19	8	< 0.2	< 0.5	2	55	< 1	7	6	13	1.38	< 2	< 10	32	< 0.5	< 2	0.09	1	27	1.71
028	475279	5361878	24-Sep-19	8	< 0.2	< 0.5	3	104	< 1	11	4	23	1.75	< 2	< 10	37	< 0.5	< 2	0.13	3	40	2.29
029	475273	5361900	24-Sep-19	8	< 0.2	< 0.5	22	129	< 1	7	32	28	0.53	< 2	< 10	20	< 0.5	< 2	0.19	2	22	0.77
030	475288	5361938	24-Sep-19	< 5	< 0.2	< 0.5	5	99	< 1	9	4	19	0.62	< 2	< 10	25	< 0.5	< 2	0.19	2	37	1.51
031	475280	5361957	24-Sep-19	< 5	< 0.2	< 0.5	2	110	< 1	8	4	14	1.27	< 2	< 10	31	< 0.5	< 2	0.14	2	22	0.99
032	475279	5361982	24-Sep-19	10	< 0.2	< 0.5	5	383	< 1	22	4	46	1.44	< 2	< 10	44	< 0.5	< 2	0.2	5	67	2.27
033	475274	5362006	24-Sep-19	8	< 0.2	< 0.5	3	217	< 1	11	7	23	1.01	3	< 10	36	< 0.5	< 2	0.15	2	41	1.65
034	475275	5362031	24-Sep-19	6	< 0.2	< 0.5	3	213	< 1	11	4	23	0.97	< 2	< 10	39	< 0.5	< 2	0.16	2	41	1.54
035	475270	5362057	24-Sep-19	8	< 0.2	< 0.5	6	583	< 1	14	5	81	1.15	< 2	< 10	49	< 0.5	< 2	0.24	4	46	1.57
036	475268	5362079	24-Sep-19	7	0.4	< 0.5	3	109	< 1	8	5	40	1.12	3	< 10	35	< 0.5	< 2	0.16	2	32	1.52
037	475328	5361674	24-Sep-19	5	< 0.2	< 0.5	16	319	< 1	19	5	31	1.56	3	< 10	78	0.6	< 2	0.78	6	39	1.54
038	475335	5361696	24-Sep-19	< 5	< 0.2	< 0.5	7	200	< 1	14	4	21	1.06	< 2	< 10	51	< 0.5	< 2	0.61	4	33	1.2
039	475333	5361716	24-Sep-19	5	< 0.2	< 0.5	4	139	1	13	4	16	0.77	< 2	< 10	39	< 0.5	< 2	0.38	3	27	0.93
040	475329	5361742	24-Sep-19	< 5	< 0.2	< 0.5	4	96	< 1	14	< 2	27	0.95	< 2	< 10	52	< 0.5	< 2	0.8	3	32	0.86
041	475322	5361765	24-Sep-19	13	< 0.2	< 0.5	4	132	< 1	17	16	19	0.9	< 2	< 10	40	< 0.5	< 2	0.32	4	38	1.28
042	475319	5361790	24-Sep-19	14	< 0.2	< 0.5	6	506	< 1	17	4	20	1.01	< 2	< 10	51	< 0.5	< 2	0.46	7	38	1.3
043	475322	5361819	24-Sep-19	< 5	< 0.2	< 0.5	11	199	< 1	14	3	19	0.81	2	< 10	34	< 0.5	< 2	0.67	4	49	1.28
044	475322	5361846	24-Sep-19	< 5	< 0.2	< 0.5	13	92	< 1	11	< 2	17	0.68	< 2	< 10	31	< 0.5	< 2	0.75	3	32	0.66
045	475321	5361870	24-Sep-19	< 5	< 0.2	< 0.5	6	87	< 1	13	< 2	15	1.07	< 2	< 10	39	< 0.5	< 2	0.6	4	40	0.82
046	475327	5361899	24-Sep-19	6	< 0.2	< 0.5	1	78	< 1	14	2	12	0.91	< 2	< 10	38	< 0.5	< 2	0.33	3	33	0.82
047	475324	5361923	24-Sep-19	5	< 0.2	< 0.5	2	48	< 1	4	5	9	0.69	2	< 10	28	< 0.5	< 2	0.1	1	20	1.13
048	475306	5361936	24-Sep-19	15	< 0.2	< 0.5	8	83	< 1	7	12	22	1.05	9	< 10	33	< 0.5	< 2	0.19	2	22	0.94
049	475285	5361970	24-Sep-19	< 5	< 0.2	< 0.5	2	224	< 1	7	5	18	0.94	< 2	< 10	29	< 0.5	< 2	0.15	2	22	1.03
050	475281	5361999	24-Sep-19	7	< 0.2	< 0.5	6	570	< 1	15	7	39	1.23	< 2	< 10	43	< 0.5	< 2	0.15	3	53	2.04
051	475305	5362021	24-Sep-19	< 5	< 0.2	< 0.5	6	319	< 1	28	4	32	0.88	< 2	< 10	43	< 0.5	< 2	0.32	6	52	1.36
052	475316	5362045	24-Sep-19	< 5	< 0.2	< 0.5	2	208	< 1	10	4	32	0.94	< 2	< 10	35	< 0.5	< 2	0.25	2	47	1.69
053	475329	5362069	24-Sep-19	< 5	< 0.2	< 0.5	4	435	< 1	24	4	35	1.33	< 2	< 10	43	< 0.5	< 2	0.23	5	60	2.04
054	475318	5362091	24-Sep-19	< 5	< 0.2	< 0.5	1	64	< 1	5	4	12	0.75	< 2	< 10	22	< 0.5	< 2	0.11	< 1	15	0.8
055	475371	5361683	24-Sep-19	6	< 0.2	< 0.5	6	218	1	16	18	21	0.83	< 2	< 10	53	< 0.5	< 2	0.41	3	35	0.94
056	475362	5361700	24-Sep-19	< 5	< 0.2	< 0.5	5	264	< 1	12	4	15	0.83	< 2	< 10	38	< 0.5	< 2	0.46	4	29	0.91
057	475356	5361722	24-Sep-19	< 5	< 0.2	< 0.5	4	132	< 1	11	6	15	1.11	< 2	< 10	43	< 0.5	< 2	0.24	3	25	0.91
058	475358	5361760	24-Sep-19	11	< 0.2	< 0.5	4	128	< 1	19	5	17	1.02	< 2	< 10	38	< 0.5	< 2	0.4	5	42	1.1
059	475356	5361778	24-Sep-19	8	< 0.2	< 0.5	10	98	< 1	9	13	19	0.79	< 2	< 10	36	< 0.5	< 2	0.17	2	28	0.72
060	475344	5361807	24-Sep-19	5	< 0.2	< 0.5	3	192	< 1	19	3	18	0.73	< 2	< 10	33	< 0.5	< 2	0.41	4	46	1.19
061	475345	5361837	24-Sep-19	< 5	< 0.2	< 0.5	10	102	< 1	10	< 2	18	0.65	< 2	< 10	36	< 0.5	< 2	0.81	3	29	0.65
062	475345	5361864	24-Sep-19	6	< 0.2	< 0.5	125	277	< 1	21	3	15	0.51	2	11	47	< 0.5	< 2	3.74	2	87	0.43
063	475334	5361888	24-Sep-19	< 5	< 0.2	< 0.5	3	96	< 1	12	3	18	0.66	< 2	< 10	30	< 0.5	< 2	0.53	3	35	0.76
064	475336	5361906	24-Sep-19	< 5	< 0.2	< 0.5	< 1	40	< 1	3	6	5	0.49	< 2	< 10	21	< 0.5	< 2	0.11	< 1	12	0.26
065	475327	5361944	24-Sep-19	6	< 0.2	< 0.5	3	108	< 1	17	5	14	1.08	< 2	< 10	29	< 0.5	< 2	0.18	3	40	1.48
066	475319	5361988	24-Sep-19	19	< 0.2	< 0.5	2	164	< 1	7	6	16	1.39	2	< 10	34	< 0.5	< 2	0.14	2	26	1.27

Sample (Soils)	Ga ppm	Hg ppm	K %	La ppm	Mg %	Na %	P %	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Th ppm	Te ppm	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zr ppm
	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
001	< 10	< 1	0.15	19	0.48	0.036	0.047	0.01	< 2	4	24	0.1	< 20	3	< 2	< 10	31	< 10	8	4
002	< 10	< 1	0.09	15	0.36	0.032	0.037	0.02	< 2	3	21	0.09	< 20	< 1	< 2	< 10	26	< 10	6	3
003	< 10	< 1	0.17	20	0.55	0.037	0.055	0.05	< 2	4	45	0.1	< 20	5	< 2	< 10	32	< 10	9	6
004	< 10	< 1	0.1	15	0.29	0.026	0.033	0.01	< 2	2	17	0.09	< 20	< 1	< 2	< 10	25	< 10	5	2
005	< 10	< 1	0.06	< 10	0.14	0.023	0.011	0.01	< 2	2	14	0.11	< 20	< 1	< 2	< 10	27	< 10	3	2
006	< 10	< 1	0.09	11	0.32	0.028	0.02	0.01	2	3	18	0.1	< 20	< 1	< 2	< 10	32	< 10	4	3
007	< 10	< 1	0.03	< 10	0.07	0.022	0.013	0.01	< 2	< 1	11	0.03	< 20	< 1	< 2	< 10	11	< 10	2	< 1
008	< 10	< 1	0.05	13	0.18	0.025	0.043	0.01	< 2	2	16	0.1	< 20	< 1	< 2	< 10	32	< 10	4	1
009	< 10	< 1	0.05	10	0.18	0.025	0.063	< 0.01	< 2	2	14	0.08	< 20	< 1	< 2	< 10	32	< 10	3	1
010	< 10	< 1	0.05	10	0.16	0.025	0.095	< 0.01	< 2	2	14	0.08	< 20	5	< 2	< 10	32	< 10	3	< 1
011	< 10	< 1	0.05	11	0.17	0.026	0.076	0.01	< 2	2	12	0.07	< 20	< 1	< 2	< 10	27	< 10	3	1
012	< 10	< 1	0.04	< 10	0.2	0.025	0.084	< 0.01	< 2	2	17	0.09	< 20	< 1	< 2	< 10	31	< 10	5	2
013	< 10	< 1	0.05	16	0.2	0.022	0.115	0.02	< 2	2	13	0.09	< 20	5	< 2	< 10	49	< 10	4	1
014	< 10	< 1	0.06	14	0.18	0.023	0.088	0.01	< 2	2	15	0.09	< 20	11	< 2	< 10	48	< 10	4	1
015	< 10	< 1	0.05	11	0.16	0.024	0.042	< 0.01	< 2	2	14	0.07	< 20	1	< 2	< 10	26	< 10	4	< 1
016	< 10	< 1	0.06	17	0.21	0.026	0.065	0.02	< 2	2	14	0.11	< 20	4	< 2	< 10	45	< 10	4	2
017	< 10	< 1	0.05	12	0.17	0.028	0.043	0.02	< 2	2	14	0.11	< 20	< 1	< 2	< 10	38	< 10	5	3
018	< 10	< 1	0.05	12	0.15	0.023	0.033	0.01	< 2	2	12	0.09	< 20	2	< 2	< 10	31	< 10	4	3
019	< 10	< 1	0.08	15	0.39	0.034	0.029	< 0.01	< 2	3	22	0.11	< 20	< 1	< 2	< 10	27	< 10	6	3
020	< 10	< 1	0.15	17	0.5	0.034	0.041	< 0.01	< 2	4	23	0.11	< 20	4	< 2	< 10	33	< 10	7	4
021	< 10	< 1	0.15	21	0.47	0.031	0.043	0.02	< 2	4	24	0.1	< 20	4	< 2	< 10	32	< 10	10	3
022	< 10	< 1	0.23	24	0.7	0.038	0.046	< 0.01	< 2	5	24	0.13	< 20	< 1	< 2	< 10	43	< 10	10	7
023	< 10	< 1	0.08	16	0.29	0.029	0.027	0.01	< 2	3	20	0.09	< 20	< 1	< 2	< 10	24	< 10	6	3
024	< 10	< 1	0.06	13	0.24	0.024	0.026	0.01	< 2	2	18	0.07	< 20	2	< 2	< 10	19	< 10	4	2
025	< 10	< 1	0.05	12	0.08	0.021	0.008	0.01	< 2	1	12	0.09	< 20	< 1	< 2	< 10	11	< 10	3	2
026	< 10	< 1	0.03	12	0.09	0.021	0.03	0.04	< 2	2	11	0.05	< 20	< 1	< 2	< 10	23	< 10	3	1
027	10	< 1	0.05	< 10	0.12	0.022	0.016	0.02	< 2	2	11	0.13	< 20	< 1	< 2	< 10	55	< 10	2	3
028	< 10	< 1	0.07	< 10	0.2	0.022	0.031	0.02	< 2	2	12	0.14	< 20	< 1	< 2	< 10	57	< 10	3	3
029	< 10	< 1	0.04	< 10	0.14	0.021	0.023	< 0.01	5	1	11	0.05	< 20	< 1	< 2	< 10	19	< 10	2	1
030	< 10	< 1	0.05	13	0.19	0.023	0.02	< 0.01	< 2	2	15	0.12	< 20	< 1	< 2	< 10	44	< 10	3	3
031	< 10	< 1	0.04	10	0.1	0.023	0.03	0.01	< 2	2	11	0.07	< 20	8	< 2	< 10	24	< 10	3	1
032	< 10	< 1	0.05	17	0.28	0.023	0.045	0.01	< 2	3	20	0.11	< 20	3	< 2	< 10	59	< 10	3	2
033	< 10	< 1	0.04	13	0.16	0.024	0.042	0.01	< 2	2	16	0.11	< 20	< 1	< 2	< 10	52	< 10	3	2
034	< 10	< 1	0.04	15	0.17	0.023	0.03	< 0.01	< 2	3	16	0.12	< 20	< 1	< 2	< 10	55	< 10	3	2
035	< 10	< 1	0.05	13	0.24	0.023	0.034	0.01	< 2	2	20	0.09	< 20	1	< 2	< 10	38	< 10	3	1
036	< 10	< 1	0.04	12	0.16	0.022	0.024	0.01	< 2	2	14	0.11	< 20	< 1	< 2	< 10	35	< 10	3	3
037	< 10	< 1	0.13	26	0.5	0.03	0.05	0.03	< 2	4	27	0.09	< 20	< 1	< 2	< 10	34	< 10	11	3
038	< 10	< 1	0.1	16	0.4	0.03	0.044	0.02	< 2	3	25	0.09	< 20	2	< 2	< 10	27	< 10	7	3
039	< 10	< 1	0.07	12	0.29	0.029	0.027	0.01	< 2	2	20	0.09	< 20	2	< 2	< 10	23	< 10	5	3
040	< 10	< 1	0.09	14	0.35	0.029	0.032	0.07	< 2	3	22	0.07	< 20	2	< 2	< 10	20	< 10	6	3
041	< 10	< 1	0.07	15	0.31	0.029	0.042	0.02	< 2	3	19	0.09	< 20	1	< 2	< 10	29	< 10	6	2
042	< 10	< 1	0.08	20	0.32	0.032	0.057	0.02	< 2	3	21	0.08	< 20	< 1	< 2	< 10	30	< 10	10	< 1
043	< 10	< 1	0.08	19	0.32	0.032	0.061	0.02	< 2	3	23	0.07	< 20	4	< 2	< 10	34	< 10	7	2
044	< 10	< 1	0.06	18	0.26	0.028	0.06	0.03	< 2	3	23	0.07	< 20	6	< 2	< 10	19	< 10	9	2
045	< 10	< 1	0.06	21	0.26	0.024	0.06	0.03	< 2	2	19	0.05	< 20	4	< 2	< 10	19	< 10	9	< 1
046	< 10	< 1	0.05	10	0.25	0.024	0.02	< 0.01	< 2	2	18	0.08	< 20	< 1	< 2	< 10	21	< 10	4	1
047	< 10	< 1	0.04	< 10	0.1	0.02	0.013	0.01	< 2	1	10	0.1	< 20	< 1	< 2	< 10	40	< 10	2	3
048	< 10	< 1	0.04	< 10	0.11	0.022	0.017	0.02	< 2	2	13	0.06	< 20	< 1	< 2	< 10	24	< 10	2	1
049	< 10	< 1	0.04	14	0.11	0.021	0.035	0.01	< 2	1	13	0.08	< 20	1	< 2	< 10	25	< 10	3	< 1
050	< 10	< 1	0.05	15	0.22	0.024	0.044	0.02	< 2	2	15	0.11	< 20	2	< 2	< 10	54	< 10	3	1
051	< 10	< 1	0.06	< 10	0.38	0.039	0.049	0.01	< 2	2	21	0.08	< 20	< 1	< 2	< 10	30	< 10	4	< 1
052	< 10	< 1	0.05	18	0.15	0.023	0.024	< 0.01	< 2	2	19	0.09	< 20	2	< 2	< 10	45	< 10	4	2
053	< 10	< 1	0.07	< 10	0.4	0.034	0.039	0.01	< 2	2	19	0.1	< 20	6	< 2	< 10	42	< 10	3	2
054	< 10	< 1	0.03	13	0.07	0.019	0.018	< 0.01	< 2	1	11	0.09	< 20	1	< 2	< 10	24	< 10	3	2
055	< 10	< 1	0.07	12	0.27	0.027	0.035	0.01	< 2	2	20	0.08	< 20	2	< 2	< 10	23	< 10	5	1
056	< 10	< 1	0.06	14	0.28	0.028	0.043	0.02	< 2	2	19	0.08	< 20	< 1	< 2	< 10	22	< 10	6	1
057	< 10	< 1	0.08	11	0.23	0.027	0.02	0.01	< 2	2	16	0.09	< 20	< 1	< 2	< 10	25	< 10	4	2
058	< 10	< 1	0.07	14	0.37	0.033	0.042	< 0.01	< 2	3	22	0.1	< 20	< 1	< 2	< 10	26	< 10	6	3
059	< 10	< 1	0.06	11	0.17	0.026	0.018	0.02	< 2	2	14	0.07	< 20	2	< 2	< 10	21	< 10	3	1
060	< 10	< 1	0.08	14	0.38	0.03	0.05	< 0.01	< 2	3	20	0.09	< 20	1	< 2	< 10	27	< 10	6	2
061	< 10	< 1	0.07	19	0.29	0.028	0.059	0.09	< 2	3	23	0.08	< 20	3	< 2	< 10	22	< 10	9	7
062	< 10	< 1	0.05	32	0.27	0.026	0.083	0.3	< 2	2	44	0.02	< 20	4	< 2	< 10	34	< 10	26	10
063	< 10	< 1	0.05	13	0.28	0.027	0.043	0.02	< 2	2	19	0.07	< 20	< 1	< 2	< 10	19	< 10	6	< 1
064	< 10	< 1	0.04	12	0.07	0.019	0.007	< 0.01	< 2	1	11	0.08	< 20	< 1	< 2	< 10	13	< 10	2	1
065	< 10	< 1	0.06	< 10	0.26	0.035	0.021	< 0.01	< 2	2	15	0.08	< 20	< 1	< 2	< 10	30	< 10	2	4
066	< 10	< 1	0.05	< 10	0.12	0.023	0.06	0.02	< 2	2	12	0.07	< 20	3	< 2	< 10	30	< 10	3	< 1

Rock Samples

Sample	Easting	Northing	Date	Au ppb	Ag ppm	Cd ppm	Cu ppm	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Zn ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Co ppm	Cr ppm	Fe %
OGL19-1	475220	5362067	25-Sep-19	26	15.8	12.4	1940	1820	< 1	50	9	5080	4.51	6	< 10	54	< 0.5	< 2	0.8	6	60	10.4
OGL19-2	475221	5362070	25-Sep-19	21	2.7	< 0.5	29	1530	2	17	9	83	0.29	< 2	< 10	25	< 0.5	< 2	1.43	4	24	2.98
OGL19-3	475220	5362067	25-Sep-19	31	8.9	21.2	1330	1530	< 1	60	7	7910	4.95	< 2	< 10	40	< 0.5	< 2	1.03	8	64	11.6
OGL19-4	475232	5362081	25-Sep-19	< 5	0.3	< 0.5	12	619	< 1	8	7	118	0.69	< 2	< 10	75	< 0.5	< 2	0.25	4	15	1.95
OGL19-5	475255	5362084	25-Sep-19	113	< 0.2	< 0.5	13	81	< 1	< 1	5	24	0.51	8	< 10	158	< 0.5	< 2	0.17	2	3	0.73

Sample	Ga ppm	Hg ppm	K %	La ppm	Mg %	Na %	P %	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Th ppm	Te ppm	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zr ppm
OGL19-1	10	4	0.26	12	1.49	0.088	0.065	0.22	< 2	6	21	< 0.01	< 20	< 1	< 2	< 10	52	13	4	6
OGL19-2	< 10	< 1	0.11	< 10	0.22	0.05	0.021	< 0.01	< 2	2	18	< 0.01	< 20	1	< 2	< 10	6	< 10	3	9
OGL19-3	10	< 1	0.19	< 10	1.66	0.073	0.058	0.35	4	7	20	< 0.01	< 20	< 1	< 2	< 10	55	17	4	8
OGL19-4	< 10	< 1	0.22	21	0.04	0.108	0.116	< 0.01	< 2	4	14	< 0.01	< 20	< 1	< 2	< 10	14	< 10	4	3
OGL19-5	< 10	< 1	0.27	18	0.08	0.114	0.037	0.26	< 2	< 1	22	< 0.01	< 20	< 1	< 2	< 10	6	< 10	2	9

Sample	Easting	Northing	Date	Description	Au ppb	Ag ppm	Cu ppm	Zn ppm
OGL19-1	475220	5362067	25-Sep-19	sheared mv, mod carb alt, tr - 2% cubic pyrite, local galena + sphalerite, brown patches in green chlorite alt	26	15.8	1940	5080
OGL19-2	475221	5362070	25-Sep-19	qtz/carb veining within altered mv, minor pyrite	21	2.7	29	83
OGL19-3	475220	5362067	25-Sep-19	dark green mv, fine-grained, sphalerite + minor galena lenses/veinlets, local pyrite	31	8.9	1330	7910
OGL19-4	475232	5362081	25-Sep-19	sheared fv, strongly carbonatized, silicified and aphanitic	< 5	0.3	12	118
OGL19-5	475255	5362084	25-Sep-19	strong silicified vol? 5% quartz veinlets, 1-2% pyrite, local rusty patches, subcrop	113	< 0.2	13	24

SOIL SAMPLE LOCATION MAP

475,100 mE | 475,200 mE | 475,300 mE | 475,400 mE | 475,500 mE | 475,600 mE | 475,700 mE | 475,800 mE | 475,900 mE | 476,000 mE

5,362,100 mN | 5,362,000 mN | 5,361,900 mN | 5,361,800 mN | 5,361,700 mN | 5,361,600 mN

N

001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 023 024 025 026 027 028 029 030 031 032 033 034 035 036 037 038 039 040 041 042 043 044 045 046 047 048 049 050 051 052 053 054 055 056 057 058 059 060 061 062 063 064 065 066

REID LAKE

LEA-19618

0 400

metres

METALS CREEK RESOURCES

GOLD IN SOILS

475,100 mE | 475,200 mE | 475,300 mE | 475,400 mE | 475,500 mE | 475,600 mE | 475,700 mE | 475,800 mE | 475,900 mE | 476,000 mE

5,362,100 mN | 5,362,000 mN | 5,361,900 mN | 5,361,800 mN | 5,361,700 mN | 5,361,600 mN

N

REID LAKE

LEA-19618

Soils by Au_ppb

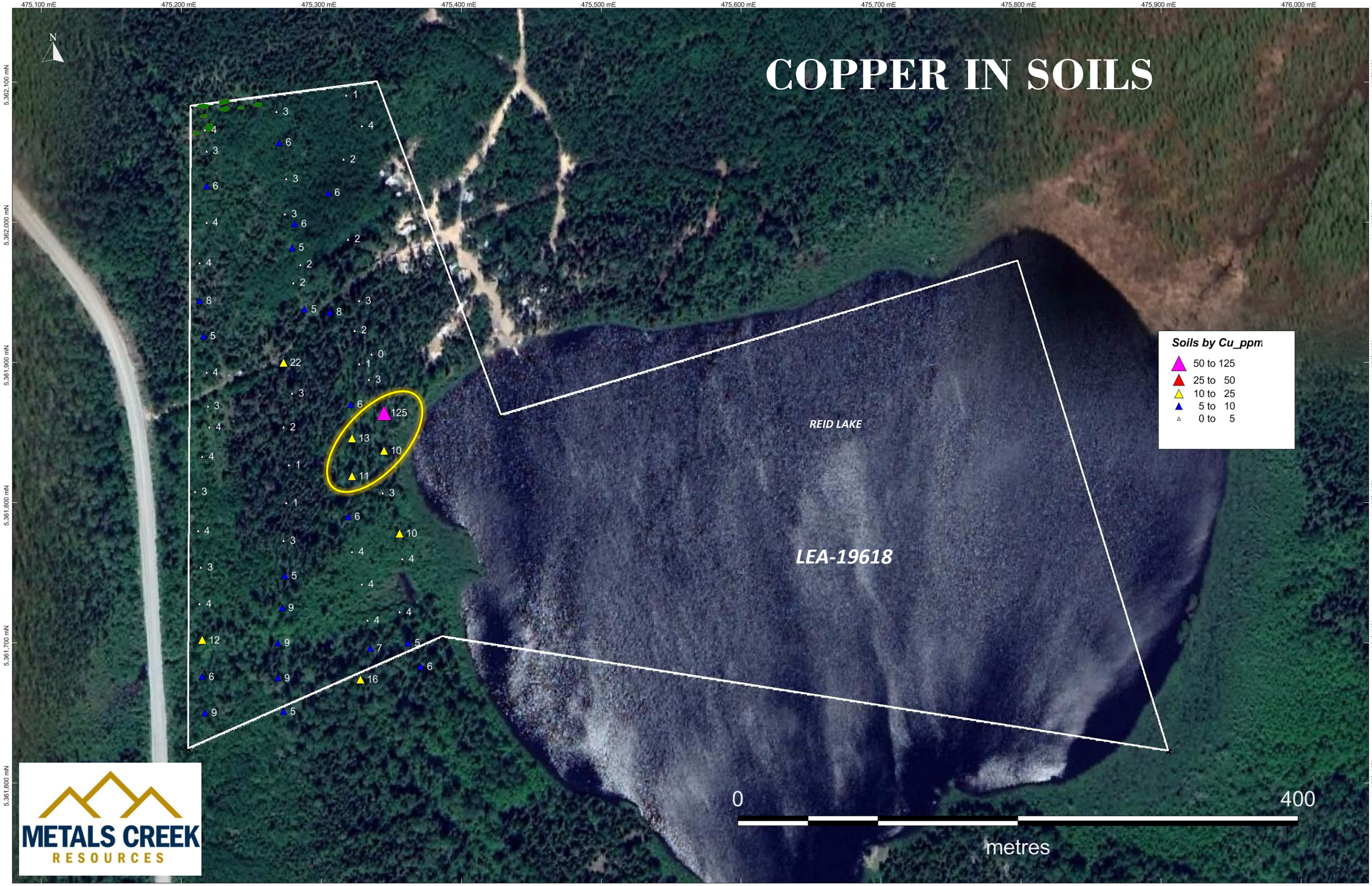
- 50 to 75
- 25 to 50
- 10 to 25
- 5 to 10
- 0 to 5

0 400

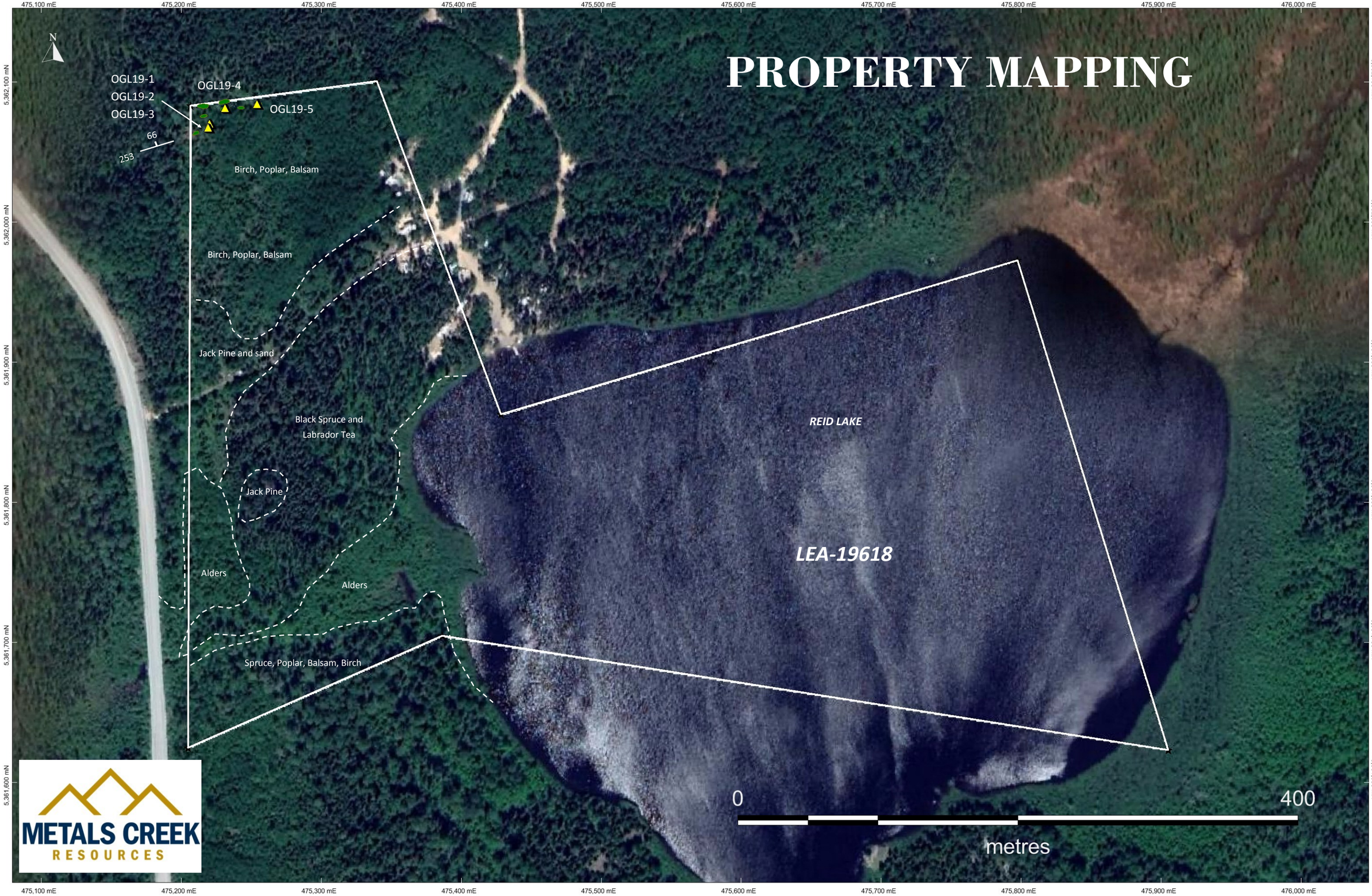
metres

METALS CREEK RESOURCES

COPPER IN SOILS



PROPERTY MAPPING



METALS CREEK RESOURCES

TRAVERSE MAP

475,100 mE | 475,200 mE | 475,300 mE | 475,400 mE | 475,500 mE | 475,600 mE | 475,700 mE | 475,800 mE | 475,900 mE | 476,000 mE

5,362,100 mN | 5,362,000 mN | 5,361,900 mN | 5,361,800 mN | 5,361,700 mN | 5,361,600 mN

N

September 24, 2019 Soil Sampling/Prospecting Traverses

September 25, 2019 Prospecting Traverses

REID LAKE

LEA-19618

0 400

metres

METALS CREEK RESOURCES

APPENDIX II

AIRBORNE

REPORT

ZEN GEOMAP INC.

Report

Drone Magnetometer Survey
for
Metals Creek Resources Corp.

Deloro Township
Porcupine Mining Division

Table of Contents

1.0 Introduction
2.0 Location and Access
3.0 Summary of 2018 drone magnetic survey
4.0 Processing
5.0 Discussion of Results
6.0 Conclusions and Recommendations

Statement of Qualifications

Appendices

Appendix I Geometrics MFAM specifications
Appendix II Geometrics G856AX specifications (base station)

List of Maps

Map

Total Field Magnetic Survey – Contours

1st Vertical Derivative – Contours

1.0 Introduction

Mining lease 19618 is located in Deloro Township, Porcupine Mining Division. This mining lease is currently under an option agreement with Metals Creek Resources Inc.

A general location and access map is presented as ***Figure 1.***

A detailed claim location map is presented as ***Figure 2***.

On October 3, 2018 , this lease was surveyed using a Geometrics MFAM magnetometer mounted on a DJI M600 drone. Zen Geomap of Timmins, Ontario, carried out the survey on a contract basis for Metals Creek Resources Corp. The survey was performed in order to map the detailed magnetic signature of the underlying lithology.

Data processing and maps were completed between Nov 21st and 27th, 2018. Assessment report was prepared between December 30th, 2018 and January 16th, 2019.

2.0 Location and Access

The mining claims are located approximately 5 kilometers south of Timmins, Ontario in Ogden Township, Porcupine Mining Division. Access was gained from Timmins by traveling 4.5 kilometers along Pine Street South and then utilizing local trails to access the grid area.

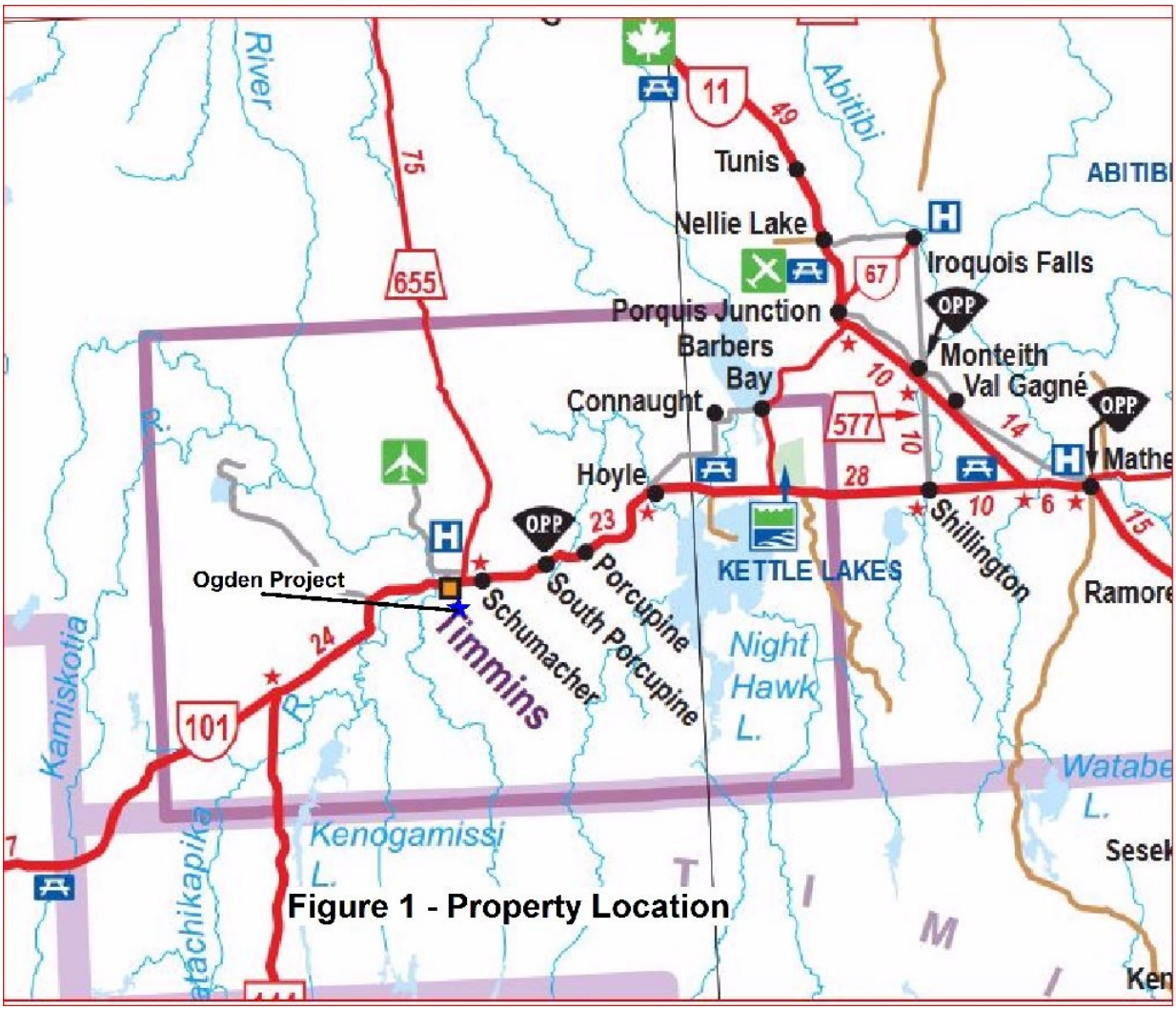


Figure 1 – Location and Access

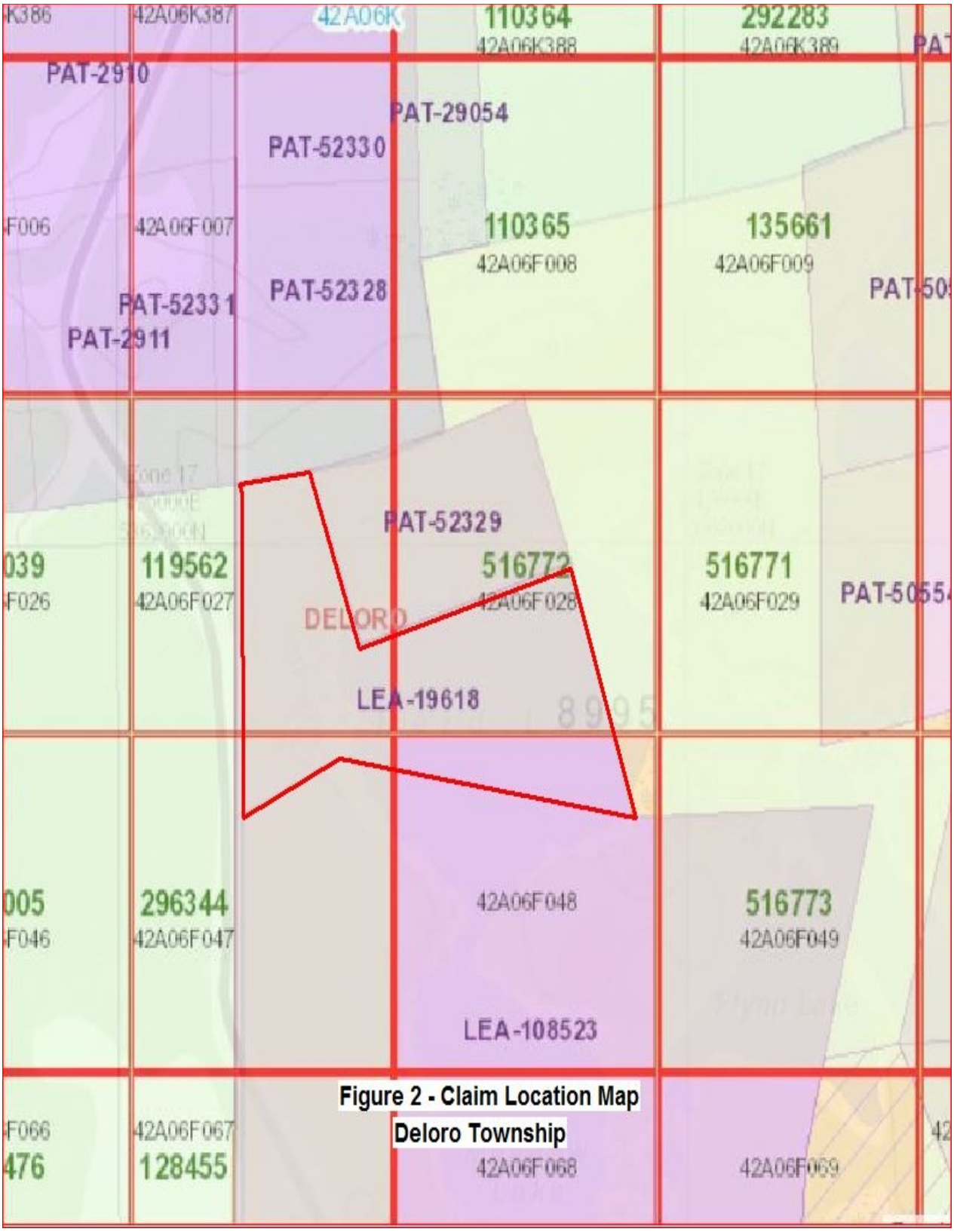


Figure 2 - Claim Location Map
Deloro Township

Figure 2 – Claim Location Map

6.0 Summary of 2018 drone magnetic survey

The program consisted of a drone magnetic survey carried out on a grid with 34 North-South lines spaced at 25 metres and 2 East-West tie lines.

Total line kilometers: **13.7**

Altitude: **35m above ground level**

A Geometrics MFAM magnetometer mounted on a DJI M600 Pro hexacopter drone was used to survey all grid lines.

A Geometrics G856AX proton procession magnetometer was operated as a base station throughout the survey to provide diurnal monitoring of the local magnetic field variations.

Equipment specifications are provided in ***Appendix 1 and 2***.

7.0 Processing

Magnetometer data was collected on 2 Geometrics MFAM sensors operating at 1000hz. The data was processed through a custom program operating in Python. This converts raw data from Geometrics MFAM into a format compatible with Geosoft Oasis Montaj.

Customized import templates were used within Geosoft, to identify and separate mag readings into organized grid and tie lines. This step eliminates extraneous mag data collected as the drone travels to and from the grid.

Grid and tie line data were corrected to remove ***heading error*** and ***lag***.
Corrected grid data was then ***leveled*** based on tie lines.

8.0 Discussion of Results

The magnetic survey on the Deloro grid indicates a relatively quiet magnetic background with magnetic values ranging between 55787 and 55929 nT. The background magnetic field strength is 55878 nT. The overall magnetic pattern is disrupted by one moderate strength linear anomalous magnetic high striking at approximately 95 degrees azimuth. This magnetic anomaly have been identified and labeled as M1, and is located in the central portion of the grid area and is easily observed on the magnetic contour map. This magnetic anomaly may represent a mafic diabase dike, common to this geologic setting or possibly mafic or ultramafic lithology.

The isomagnetic contour pattern suggests an underlying lithology striking in an east-west direction; notwithstanding the disruptive magnetic anomalies located within the grid area. All of the anomalies are easily identified and are labeled on the plan maps.

The results of the magnetic survey are presented as contoured total field and 1st vertical derivative maps.

9.0 Conclusions and Recommendations

The magnetic survey completed over the Deloro grid was successful in mapping areas of anomalous magnetic anomalies. These anomalies are thought to arise from bedrock sources, and may have implications for follow-up exploration.

Any existing geological or geochemical information for the surveyed grid area will aid in further assessing any geophysical anomalies and should be incorporated into an overall assessment of the property prior to further exploration.

Magnetic data collected by drone at high density and low altitude is ideal for 3D inversion modeling. The cost for this type of advanced modeling would start at approximately $2,000 and up to $8,000. 3D inversion modeling is recommended as the next step for evaluating Deloro Property.

Respectively Submitted,

Matthew Johnston

Statement of Qualifications

This is to certify that: MATTHEW JOHNSTON

I am a resident of Timmins; province of Ontario since June 1, 1995.

I am self-employed as a Consulting Geophysicist, based in North Bay, Ontario.

I have received a B.Sc. in geophysics from the University of Saskatchewan; Saskatoon, Saskatchewan in 1986.

I have been employed as a professional geophysicist in mining exploration, environmental and other consulting geophysical techniques since 1986.

I am a member in good standing with the Association of Professional Geoscientists of Ontario as a Practicing member; membership no. 2046

Signed in North Bay, Ontario, this January 16, 2019

Appendix I

Appendix I

Geometrics MFAM Magnetometer Specifications

System Basics

- System utilizes 2 MFAM sensors
- Sensors are controlled by 1 sensor module
- Sensor module communicates with a Texas Instruments main board
- Sensitivity: 0.00003nT
- Sensors operate at 1000Hz (collect 1000 readings per second on both sensors)

Technical Specifications

SPECIFICATIONS:

Mechanical:

Enclosure Dimensions: 9" x 6 5/8" x 1 3/16"
Sensor Cable length (Development box to Sensor): 20.5 inches

Power:

AC adapter: 13.5 to 16 Volts DC at 1.0A
Battery Pack: 12 volt 1800 mA-Hour Lithium Polymer

FEATURES:

1) **TIVA TM4C1294NCPDT Micro controller:** This is a 32 bit ARM Cortex-MF4 based microcontroller running at up to 120 MHz. It has 1024K of flash, with 256K bytes of RAM, and 6 KBytes of EEPROM.

2) **USB 2.0 Micro Connector:** USB functionality is provided by the TIVA microcontroller and TIVAWare support libraries.

3) **Four User LEDs:** Four user controlled LEDs are wired to TIVA microcontroller GPIO pins PK0, PK1, PN0, and PN1.

4) **Two User Switches:** Two user read switches are wired to the microcontroller pins PK6 and PJ1.

5) **One Microcontroller Reset Switch:** This switch is used to reset the microcontroller.

6) **Wi-Fi port for TI CC3100 Wi-Fi Booster Pack:** The Development board layout allows a TI CC3100 Wi-Fi Booster pack to be directly plugged in. Using TIVAWare libraries, software can be developed to allow Wi-Fi communication between the Development board and a computer.

7) **USB XDS110 Port for Firmware Downloading and Debugging:** This second USB port is used as a debug/firmware download interface between the TI Code Composer Studio development suite and the Development Kit.

8) **Two RS-232 Serial Ports with RJ-45 Connectors:** Two general purpose serial ports are available to the user. The first serial port is wired to TIVA microcontroller UART4, and supports RTS and CTS handshaking. The second serial port is wired to TIVA microcontroller UART5. This port supports only TxD and RxD. Both of these ports use +/- 8 volt voltage swings, and support baud rates up to 920 KBaud. Note that these two ports are wired as Data Terminal Equipment (DTE) Thus to connect either of these two ports to a computer it would need to connect through a null modem. .

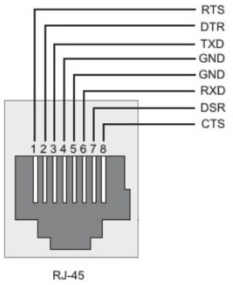


Figure 3: Serial Port Pinout

9) **On Board GPS Module:** An Adafruit GPS module is included with the Development Kit. It features 66 channels, -165 dBm sensitivity, and 3 Meter accuracy. An external GPS antenna is included so that signals can be received inside the box even with the cover in place. By default the GPS powers up to 9600 baud with several GPS sentences being output. The firmware that comes with the Development kit reconfigures the GPS to output only an RMC sentence at 115200 baud. This RMC string is sent with the output TCP data packet as described in the "Ethernet Data Format" section. The GPS is wired to UART7 on the TIVA microcontroller using 0-3.3 volt logic swings.

   The 1PPS pulse from this GPS goes to the MFAM development module and disciplines the cycle rate to exactly 1 kiloSamples per second.

10) **Micro SD Card Slot for Storing Data Locally:** A micro SD card slot is available for the user to read and write data using a SPI interface. It is connected to SPI port 1 of the TIVA microcontroller.

11) **10 MHZ Timing Reference Input Port:** This input port takes a 10 MHz reference signal from a GPS disciplined reference oscillator, buffers and squares it up, and sends it to the MFAM module. The purpose of this signal is to lock the MFAM clocking system to this reference signal so that the Larmor frequency can be measured to an absolute standard. At this time, the MFAM does not support this feature. This function will be implemented in the future.

12) **Ethernet port with Power over Ethernet Compatibility**: The Tiva microcontroller contains a fully integrated Ethernet MAC and PHY. In addition, the Ethernet port can power the Development Kit via Power over Ethernet (PoE) using an Ethernet power injector.

13) **1.8 Amp-Hour Battery pack:** Three on board lithium/polymer batteries can power the system for 2 hours. A switch on the Development board allows the battery to be turned on/off. In addition, if the battery voltage falls below 8 volts the MFAM module will automatically shut down while keeping the microcontroller alive.

14) **Integrated Battery Charging system:** A lithium/polymer battery charging system is on board. If the battery switch is turned on, and the AC power adapter is plugged in, the batteries will be charged.

15) **Four Differential Analog Input Channels:** There are four differential analog inputs available for use. Channels 0 and 1 are +/- 2.5 volts full scale, while channels 2 and 3 are 0 to +5 volts full scale. In the firmware supplied with the Development kit (which sends MFAM/GPS data to the MFAMConsole program on the computer), all four channels are sampled synchronously with the MFAM data input to the Tiva are included in the data stream.

16) **On board Power/Status LEDs:** Several Status and Power LEDs are arranged along the front edge of the board. They include the four user LEDs, Power status LEDs (which power source is powering the board, and whether the battery is charging or the voltage low). They are listed in the Front and Back Panel Connection and Indicator section below.

Appendix III - DJI Matrice 600 Pro Specifications

Specifications

• Aircraft	
Diagonal Wheelbase	1133 mm
Dimensions	1668 mm × 1518 mm × 727 mm with propellers, frame arms and GPS mount unfolded (including landing gear) 437 mm × 402 mm × 553 mm with propellers, frame arms and GPS mount folded (excluding landing gear)
Weight (with six TB47S batteries)	9.5 kg
Weight (with six TB48S batteries)	10 kg
Max Takeoff Weight Recommended	15.5 kg
Hovering Accuracy (P-GPS)	Vertical: ±0.5 m, Horizontal: ±1.5 m
Max Angular Velocity	Pitch: 300°/s, Yaw: 150°/s
Max Pitch Angle	25°
Max Wind Resistance	8 m/s
Max Ascent Speed	5 m/s
Max Descent Speed	3 m/s
Max Speed	40 mph / 65 kph (no wind)
Max Service Ceiling Above Sea Level	2170 propellers: 2500 m, 2195 propellers: 4500 m
Hovering Time* (with six TB47S batteries)	No payload: 32 min, 6 kg payload: 16 min
Hovering Time* (with six TB48S batteries)	No payload: 38 min, 5.5 kg payload: 18 min
Flight Control System	A3 Pro
Supported DJI Gimbals	Ronin-MX; ZENMUSE™ Z30, Zenmuse X5/X5R, Zenmuse X3, Zenmuse XT, Zenmuse Z15 Series HD Gimbal: Z15-A7, Z15-BMPCC, Z15-5D III, Z15-GH4
Retractable Landing Gear	Standard
Operating Temperature	14° to 104° F (-10° to 40° C)
• Remote Controller	
Operating Frequency	920.6 MHz to 928 MHz (Japan); 5.725 GHz to 5.825 GHz, 2.400 GHz to 2.483 GHz
Max Transmission Distance	FCC Compliant: 3.1 mi (5 km), CE Compliant: 2.2 mi (3.5 km) (Unobstructed, free of interference)
Transmitter Power (EIRP)	10 dBm @ 900M, 13 dBm @ 5.8G, 20 dBm @ 2.4G
Video Output Port	HDMI, SDI, USB
Operating Temperature	14° to 104° F (-10° to 40° C)
Battery	6000 mAh LiPo 2S
• Charger (Model: MC6S600)	
Voltage Output	26.1 V
Rated Power	600 W
Single Battery Port Output Power	100 W
• Standard Battery (Model: TB47S)	
Capacity	4500 mAh
Voltage	22.2 V
Battery Type	LiPo 6S
Energy	99.9 Wh
Net Weight	595 g
Operating Temperature	14° to 104° F (-10° to 40° C)
Max Charging Power	180 W
• Optional Battery (Model: TB48S)	
Capacity	5700 mAh
Voltage	22.8 V
Battery Type	LiPo 6S
Energy	129.96 Wh
Net Weight	680 g
Operating Temperature	14° to 104° F (-10° to 40° C)
Max Charging Power	180 W

* Hovering time is based on flying at 10 meters above sea level in a no-wind environment and landing with a 10% battery level.

CE 1313 RoHS

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

HDMI

DJI incorporates HDMI™ technology.
The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries

Download the detailed user manual at:
www.dji.com/matrice600-pro

※ This content is subject to change without prior notice.

Designed by DJI. Printed in China.

Appendix II

Appendix II

Geometrics G856AX
Proton procession magnetometer specifications

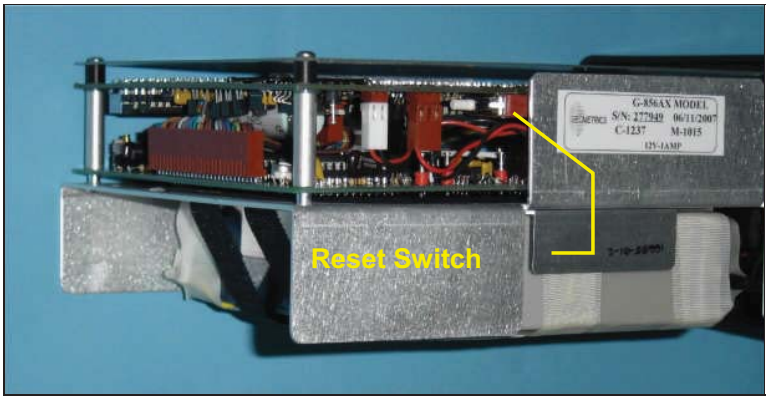


Figure 23. Internal reset switch.

Specifications

- Displays - Six digit display of magnetic field to resolution of 0.1 gamma or time to nearest second. Additional three-digit display of station, day of year, and line number.

- Resolution - Typically 0.1 gamma in average conditions. May degrade to lower resolution in weak fields, noisy conditions or high gradients.

- Absolute accuracy - One gamma, limited by remnant magnetism in sensor and crystal oscillator accuracy.

- Clock - Julian clock with stability of 5 seconds per month at room temperature and 5 seconds per day over the temperature range of -20 to +50 degrees Celsius.

- Tuning - Push button tuning from keyboard with current value displayed on request. Tuning range 20 to 90 μT.

- Gradient - Tolerates gradients to 1800 gammas/meter. When high Tolerance gradients truncate count interval, maintains partial reading to an accuracy consistent with data.

- Cycle Time - Complete field measurement in three seconds in normal operation. Internal switch selection for faster cycle (1.5 seconds) at reduced resolution or longer cycles for increased resolution.

- Manual Read - Takes reading on command. Will store data in memory on command.

- Memory - Stores more than 5700 readings in survey mode, keeping track of

time, station number, line number day and magnetic field reading. In base station operation, computes for retrieval but does not store time of recording designated by sample interval, allowing storage of up to 12,000 readings.

- Output - Plays data out in standard RS-232 format at selectable baud rates. Also outputs data in real time byte parallel, character serial BCD for use with digital recorders.

- Inputs - Will accept an external sample command.

- Special - An internal switch allows:
  - adjustment of Functions polarization time and count time to improve performance in marginal areas or to improve resolution or speed operation
  - three count averaging
  - choice of lighted displays in auto mode.

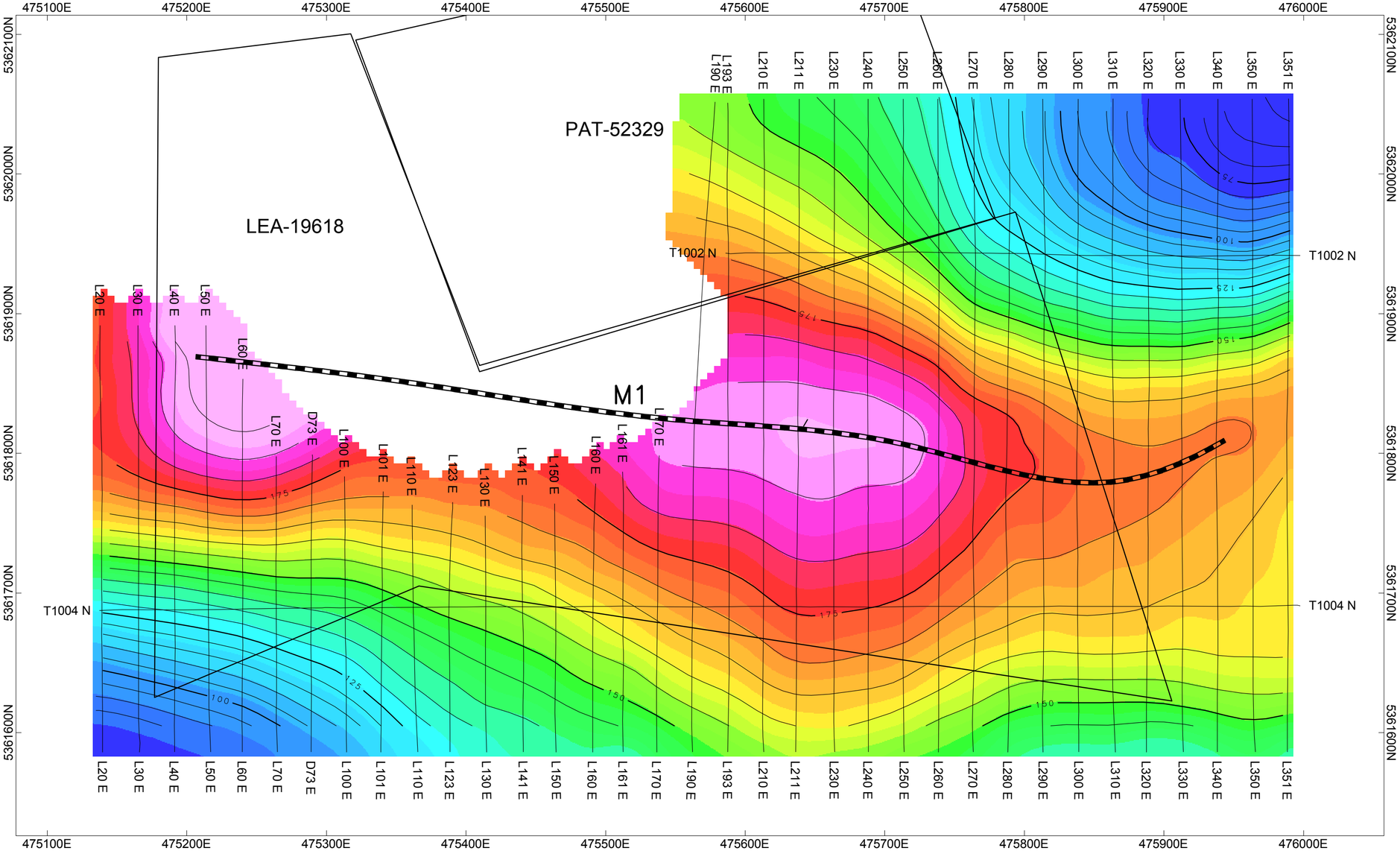
- Physical -
  - Instrument console: 7 x 10 ½ x 3 ½ inches (18 x 27 x 9 cm), 6 LB (2.7 kg)
  - Sensor: 3 1/2 x 5 inches (9 x 13 cm), 4 LB (1.8 kg)
  - Staff: 1 inch x 8 feet (3cm x 2.5m), 2 LB (1kg)

- Environmental: Meets specifications from 1 to 40°C. Operates satisfactorily from -20 to 50°C.

- Power - Depending on version, operates from internal rechargeable Gel-cells or 9 D-cell flashlight batteries . May be operated from external power ranging from 12 to 18 volts external power. Power failure or replacement of batteries will not cause loss of data stored in memory.

- Standard system (P/N 16600-02) components:
  - Sensor (P/N 16076-01) and sensor cable (P/N 16134-01)
  - Console (P/N 16601-01)
  - Staff, one top section (P/N 16535-01), two middle sections (P/N 16536-01) and 1 bottom section (P/N 16537-01)
  - Carry harness (P/N 16002-02)
  - Two sets of rechargeable batteries (P/N 16697-01) and battery charger (P/N 16699-01)
  - Carrying case (P/N 16003-01)
  - Download cable (P/N 16492-01)
  - Hardcopy operation manual (P/N 18101-02)
  - Magnetometer CD (P/N 26648-01)

- Optional accessories:
  - Tripod kit for base-station operation (P/N 16708-02)
  - Gradiometer kit (P/N 166651-01)
  - Gradiometer carry/storage case (16003-01)



180
170
160
150
140
130
120
110
100
90
80

RESIDUAL MAGNETICS
nT

iNTERPRETED MAGNETIC ANOMALY LOCATION

Scale 1:2500

50 0 50 100 150

metres

NAD83 / UTM zone 17N

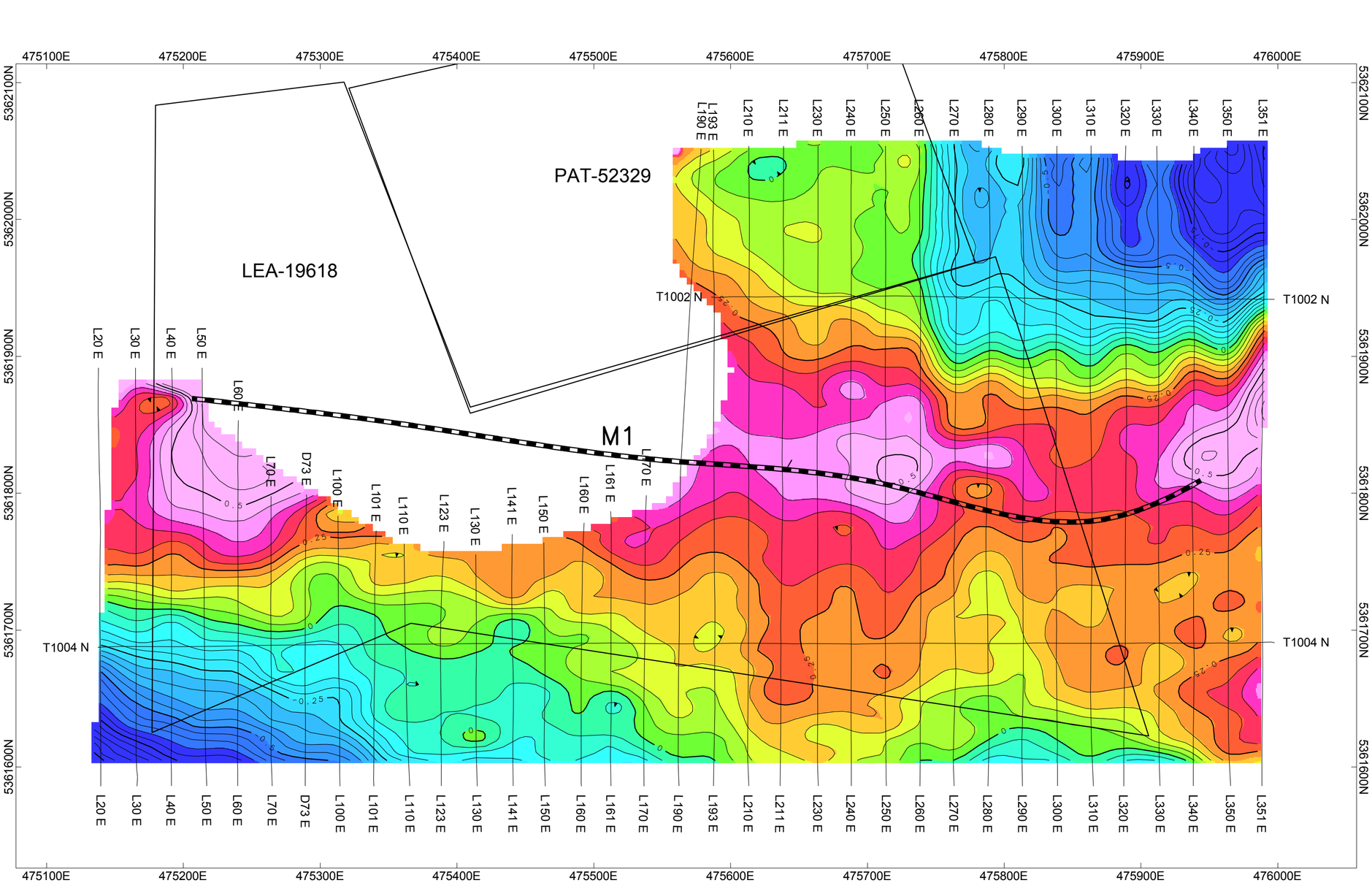
LINE KILOMETERS SURVEYED: 13.7

METALS CREEK RESOURCES CORP.

DELORO PROJECT
DRONE MAGNETIC SURVEY - MAGNETIC CONTOURS
OCTOBER 2018

DELORO TWP. PROCUPINE MINING DIVISION
LEASE # 19618
CONTOUR INTERVAL = 10, 50 nT
INSTRUMENT: GEOMETRICS MFAM MAGNETIC SENSOR

SURVEYED BY: ZEN GEOMAP INC.



0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
-0.05
-0.10
-0.15
-0.25
-0.30
-0.40
-0.50
-0.65

CALCULATED 1VD MAGNETICS
nT/M

INTERPRETED MAGNETIC ANOMALY LOCATION

Scale 1:2500

50 0 50 100 150
metres

NAD83 / UTM zone 17N

LINE KILOMETERS SURVEYED: 13.7

METALS CREEK RESOURCES CORP.

DELORO PROJECT
DRONE MAGNETIC SURVEY - 1VD MAGNETIC CONTOURS
OCTOBER 2018

DELORO TWP. PROCUPINE MINING DIVISION
LEASE # 19618
CONTOUR INTERVAL = 0.05, 0.25 nT/m
INSTRUMENT: GEOMETRICS MFAM MAGNETIC SENSOR

SURVEYED BY: ZEN GEOMAP INC.

APPENDIX III

ASSAY CERTIFICATES

Quality Analysis ... *Innovative Technologies*

Report No.: **A19-13470**
Report Date: **28-Oct-19**
Date Submitted: **03-Oct-19**
Your Reference: **Ogden**

Metals Creek Resources
1100 Memorial Ave.
Suite 329
Thunder Bay Ontario P7B 4A3
Canada

ATTN: Mike MacIsaac (Inv)

CERTIFICATE OF ANALYSIS

71 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-Tbay	QOP AA-Au (Au - Fire Assay AA)	2019-10-11 18:05:44
1E3-Tbay	QOP AquaGeo (Aqua Regia ICPOES)	2019-10-24 10:16:13

REPORT **A19-13470**

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OGL19-1	26	15.8	12.4	1940	1820	< 1	50	9	5080	4.51	6	< 10	54	< 0.5	< 2	0.80	6	60	10.4	10	4	0.26	12
OGL19-2	21	2.7	< 0.5	29	1530	2	17	9	83	0.29	< 2	< 10	25	< 0.5	< 2	1.43	4	24	2.98	< 10	< 1	0.11	< 10
OGL19-3	31	8.9	21.2	1330	1530	< 1	60	7	7910	4.95	< 2	< 10	40	< 0.5	< 2	1.03	8	64	11.6	10	< 1	0.19	< 10
OGL19-4	< 5	0.3	< 0.5	12	619	< 1	8	7	118	0.69	< 2	< 10	75	< 0.5	< 2	0.25	4	15	1.95	< 10	< 1	0.22	21
OGL19-5	113	< 0.2	< 0.5	13	81	< 1	< 1	5	24	0.51	8	< 10	158	< 0.5	< 2	0.17	2	3	0.73	< 10	< 1	0.27	18
001	8	< 0.2	< 0.5	9	225	< 1	17	6	27	1.32	< 2	< 10	66	< 0.5	< 2	0.67	5	36	1.43	< 10	< 1	0.15	19
002	7	< 0.2	< 0.5	6	170	< 1	13	4	19	0.97	< 2	< 10	44	< 0.5	< 2	0.53	4	32	1.09	< 10	< 1	0.09	15
003	6	< 0.2	< 0.5	12	163	< 1	20	4	51	1.44	3	< 10	80	< 0.5	< 2	0.82	6	42	1.47	< 10	< 1	0.17	20
004	7	< 0.2	< 0.5	4	100	< 1	17	5	20	1.20	< 2	< 10	48	< 0.5	< 2	0.30	4	33	1.07	< 10	< 1	0.10	15
005	9	< 0.2	< 0.5	3	51	< 1	7	6	10	1.02	< 2	< 10	25	< 0.5	< 2	0.15	1	24	0.75	< 10	< 1	0.06	< 10
006	7	< 0.2	< 0.5	4	105	< 1	18	7	19	1.44	< 2	< 10	48	< 0.5	< 2	0.30	5	35	1.27	< 10	< 1	0.09	11
007	6	< 0.2	< 0.5	3	47	< 1	5	7	9	0.59	< 2	< 10	36	< 0.5	< 2	0.10	2	13	0.43	< 10	< 1	0.03	< 10
008	18	< 0.2	< 0.5	4	134	1	10	5	20	1.34	3	< 10	34	< 0.5	< 2	0.21	3	33	1.29	< 10	< 1	0.05	13
009	6	< 0.2	< 0.5	4	163	< 1	10	5	29	1.34	< 2	< 10	36	< 0.5	< 2	0.18	3	37	1.43	< 10	< 1	0.05	10
010	7	< 0.2	< 0.5	3	414	< 1	11	3	39	1.18	< 2	< 10	40	< 0.5	< 2	0.17	3	32	1.32	< 10	< 1	0.05	10
011	< 5	< 0.2	< 0.5	4	309	< 1	11	5	28	1.33	< 2	< 10	35	< 0.5	< 2	0.15	4	30	1.22	< 10	< 1	0.05	11
012	6	< 0.2	< 0.5	5	239	< 1	14	5	33	0.98	< 2	< 10	26	< 0.5	< 2	0.26	4	34	1.27	< 10	< 1	0.04	< 10
013	< 5	< 0.2	< 0.5	8	268	< 1	18	7	50	1.67	3	< 10	33	< 0.5	< 2	0.16	4	57	2.13	< 10	< 1	0.05	16
014	75	< 0.2	< 0.5	4	254	< 1	9	7	46	1.46	< 2	< 10	39	< 0.5	< 2	0.20	3	43	1.97	< 10	< 1	0.06	14
015	6	< 0.2	< 0.5	4	255	< 1	10	3	14	0.83	< 2	< 10	35	< 0.5	< 2	0.21	3	27	1.10	< 10	< 1	0.05	11
016	7	< 0.2	< 0.5	6	235	< 1	17	6	35	1.86	4	< 10	43	< 0.5	< 2	0.23	4	48	2.28	< 10	< 1	0.06	17
017	5	< 0.2	< 0.5	3	79	< 1	17	3	20	1.97	< 2	< 10	38	< 0.5	< 2	0.23	5	37	1.91	< 10	< 1	0.05	12
018	6	< 0.2	< 0.5	4	84	< 1	8	4	27	1.35	3	< 10	31	< 0.5	< 2	0.19	3	28	1.51	< 10	< 1	0.05	12
019	< 5	< 0.2	< 0.5	5	213	< 1	12	4	21	0.94	2	< 10	38	< 0.5	< 2	0.43	5	32	1.15	< 10	< 1	0.08	15
020	< 5	< 0.2	< 0.5	9	209	< 1	17	5	27	1.34	< 2	< 10	54	< 0.5	< 2	0.49	6	36	1.47	< 10	< 1	0.15	17
021	5	< 0.2	< 0.5	9	261	< 1	22	7	30	1.60	< 2	< 10	77	< 0.5	< 2	0.68	6	46	1.54	< 10	< 1	0.15	21
022	5	< 0.2	< 0.5	9	315	< 1	29	5	37	1.80	4	< 10	92	0.6	< 2	0.54	8	62	2.23	< 10	< 1	0.23	24
023	5	< 0.2	< 0.5	5	130	< 1	12	5	17	0.95	< 2	< 10	42	< 0.5	< 2	0.35	4	32	0.97	< 10	< 1	0.08	16
024	7	< 0.2	< 0.5	3	75	< 1	13	4	13	0.83	< 2	< 10	35	< 0.5	< 2	0.34	2	30	0.69	< 10	< 1	0.06	13
025	6	< 0.2	< 0.5	1	42	< 1	3	5	6	0.43	< 2	< 10	19	< 0.5	< 2	0.11	< 1	20	0.27	< 10	< 1	0.05	12
026	7	< 0.2	< 0.5	1	37	< 1	6	5	8	1.80	< 2	< 10	28	< 0.5	< 2	0.12	1	31	0.59	< 10	< 1	0.03	12
027	8	< 0.2	< 0.5	2	55	< 1	7	6	13	1.38	< 2	< 10	32	< 0.5	< 2	0.09	1	27	1.71	10	< 1	0.05	< 10
028	8	< 0.2	< 0.5	3	104	< 1	11	4	23	1.75	< 2	< 10	37	< 0.5	< 2	0.13	3	40	2.29	< 10	< 1	0.07	< 10
029	8	< 0.2	< 0.5	22	129	< 1	7	32	28	0.53	< 2	< 10	20	< 0.5	< 2	0.19	2	22	0.77	< 10	< 1	0.04	< 10
030	< 5	< 0.2	< 0.5	5	99	< 1	9	4	19	0.62	< 2	< 10	25	< 0.5	< 2	0.19	2	37	1.51	< 10	< 1	0.05	13
031	< 5	< 0.2	< 0.5	2	110	< 1	8	4	14	1.27	< 2	< 10	31	< 0.5	< 2	0.14	2	22	0.99	< 10	< 1	0.04	10
032	10	< 0.2	< 0.5	5	383	< 1	22	4	46	1.44	< 2	< 10	44	< 0.5	< 2	0.20	5	67	2.27	< 10	< 1	0.05	17
033	8	< 0.2	< 0.5	3	217	< 1	11	7	23	1.01	3	< 10	36	< 0.5	< 2	0.15	2	41	1.65	< 10	< 1	0.04	13
034	6	< 0.2	< 0.5	3	213	< 1	11	4	23	0.97	< 2	< 10	39	< 0.5	< 2	0.16	2	41	1.54	< 10	< 1	0.04	15
035	8	< 0.2	< 0.5	6	583	< 1	14	5	81	1.15	< 2	< 10	49	< 0.5	< 2	0.24	4	46	1.57	< 10	< 1	0.05	13
036	7	0.4	< 0.5	3	109	< 1	8	5	40	1.12	3	< 10	35	< 0.5	< 2	0.16	2	32	1.52	< 10	< 1	0.04	12
037	5	< 0.2	< 0.5	16	319	< 1	19	5	31	1.56	3	< 10	78	0.6	< 2	0.78	6	39	1.54	< 10	< 1	0.13	26
038	< 5	< 0.2	< 0.5	7	200	< 1	14	4	21	1.06	< 2	< 10	51	< 0.5	< 2	0.61	4	33	1.20	< 10	< 1	0.10	16
039	5	< 0.2	< 0.5	4	139	1	13	4	16	0.77	< 2	< 10	39	< 0.5	< 2	0.38	3	27	0.93	< 10	< 1	0.07	12
040	< 5	< 0.2	< 0.5	4	96	< 1	14	< 2	27	0.95	< 2	< 10	52	< 0.5	< 2	0.80	3	32	0.86	< 10	< 1	0.09	14
041	13	< 0.2	< 0.5	4	132	< 1	17	16	19	0.90	< 2	< 10	40	< 0.5	< 2	0.32	4	38	1.28	< 10	< 1	0.07	15
042	14	< 0.2	< 0.5	6	506	< 1	17	4	20	1.01	< 2	< 10	51	< 0.5	< 2	0.46	7	38	1.30	< 10	< 1	0.08	20
043	< 5	< 0.2	< 0.5	11	199	< 1	14	3	19	0.81	2	< 10	34	< 0.5	< 2	0.67	4	49	1.28	< 10	< 1	0.08	19
044	< 5	< 0.2	< 0.5	13	92	< 1	11	< 2	17	0.68	< 2	< 10	31	< 0.5	< 2	0.75	3	32	0.66	< 10	< 1	0.06	18
045	< 5	< 0.2	< 0.5	6	87	< 1	13	< 2	15	1.07	< 2	< 10	39	< 0.5	< 2	0.60	4	40	0.82	< 10	< 1	0.06	21
046	6	< 0.2	< 0.5	1	78	< 1	14	2	12	0.91	< 2	< 10	38	< 0.5	< 2	0.33	3	33	0.82	< 10	< 1	0.05	10

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
047	5	< 0.2	< 0.5	2	48	< 1	4	5	9	0.69	2	< 10	28	< 0.5	< 2	0.10	1	20	1.13	< 10	< 1	0.04	< 10
048	15	< 0.2	< 0.5	8	83	< 1	7	12	22	1.05	9	< 10	33	< 0.5	< 2	0.19	2	22	0.94	< 10	< 1	0.04	< 10
049	< 5	< 0.2	< 0.5	2	224	< 1	7	5	18	0.94	< 2	< 10	29	< 0.5	< 2	0.15	2	22	1.03	< 10	< 1	0.04	14
050	7	< 0.2	< 0.5	6	570	< 1	15	7	39	1.23	< 2	< 10	43	< 0.5	< 2	0.15	3	53	2.04	< 10	< 1	0.05	15
051	< 5	< 0.2	< 0.5	6	319	< 1	28	4	32	0.88	< 2	< 10	43	< 0.5	< 2	0.32	6	52	1.36	< 10	< 1	0.06	< 10
052	< 5	< 0.2	< 0.5	2	208	< 1	10	4	32	0.94	< 2	< 10	35	< 0.5	< 2	0.25	2	47	1.69	< 10	< 1	0.05	18
053	< 5	< 0.2	< 0.5	4	435	< 1	24	4	35	1.33	< 2	< 10	43	< 0.5	< 2	0.23	5	60	2.04	< 10	< 1	0.07	< 10
054	< 5	< 0.2	< 0.5	1	64	< 1	5	4	12	0.75	< 2	< 10	22	< 0.5	< 2	0.11	< 1	15	0.80	< 10	< 1	0.03	13
055	6	< 0.2	< 0.5	6	218	1	16	18	21	0.83	< 2	< 10	53	< 0.5	< 2	0.41	3	35	0.94	< 10	< 1	0.07	12
056	< 5	< 0.2	< 0.5	5	264	< 1	12	4	15	0.83	< 2	< 10	38	< 0.5	< 2	0.46	4	29	0.91	< 10	< 1	0.06	14
057	< 5	< 0.2	< 0.5	4	132	< 1	11	6	15	1.11	< 2	< 10	43	< 0.5	< 2	0.24	3	25	0.91	< 10	< 1	0.08	11
058	11	< 0.2	< 0.5	4	128	< 1	19	5	17	1.02	< 2	< 10	38	< 0.5	< 2	0.40	5	42	1.10	< 10	< 1	0.07	14
059	8	< 0.2	< 0.5	10	98	< 1	9	13	19	0.79	< 2	< 10	36	< 0.5	< 2	0.17	2	28	0.72	< 10	< 1	0.06	11
060	5	< 0.2	< 0.5	3	192	< 1	19	3	18	0.73	< 2	< 10	33	< 0.5	< 2	0.41	4	46	1.19	< 10	< 1	0.08	14
061	< 5	< 0.2	< 0.5	10	102	< 1	10	< 2	18	0.65	< 2	< 10	36	< 0.5	< 2	0.81	3	29	0.65	< 10	< 1	0.07	19
062	6	< 0.2	< 0.5	125	277	< 1	21	3	15	0.51	2	11	47	< 0.5	< 2	3.74	2	87	0.43	< 10	< 1	0.05	32
063	< 5	< 0.2	< 0.5	3	96	< 1	12	3	18	0.66	< 2	< 10	30	< 0.5	< 2	0.53	3	35	0.76	< 10	< 1	0.05	13
064	< 5	< 0.2	< 0.5	< 1	40	< 1	3	6	5	0.49	< 2	< 10	21	< 0.5	< 2	0.11	< 1	12	0.26	< 10	< 1	0.04	12
065	6	< 0.2	< 0.5	3	108	< 1	17	5	14	1.08	< 2	< 10	29	< 0.5	< 2	0.18	3	40	1.48	< 10	< 1	0.06	< 10
066	19	< 0.2	< 0.5	2	164	< 1	7	6	16	1.39	2	< 10	34	< 0.5	< 2	0.14	2	26	1.27	< 10	< 1	0.05	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OGL19-1	1.49	0.088	0.065	0.22	< 2	6	21	< 0.01	< 20	< 1	< 2	< 10	52	13	4	6
OGL19-2	0.22	0.050	0.021	< 0.01	< 2	2	18	< 0.01	< 20	1	< 2	< 10	6	< 10	3	9
OGL19-3	1.66	0.073	0.058	0.35	4	7	20	< 0.01	< 20	< 1	< 2	< 10	55	17	4	8
OGL19-4	0.04	0.108	0.116	< 0.01	< 2	4	14	< 0.01	< 20	< 1	< 2	< 10	14	< 10	4	3
OGL19-5	0.08	0.114	0.037	0.26	< 2	< 1	22	< 0.01	< 20	< 1	< 2	< 10	6	< 10	2	9
001	0.48	0.036	0.047	0.01	< 2	4	24	0.10	< 20	3	< 2	< 10	31	< 10	8	4
002	0.36	0.032	0.037	0.02	< 2	3	21	0.09	< 20	< 1	< 2	< 10	26	< 10	6	3
003	0.55	0.037	0.055	0.05	< 2	4	45	0.10	< 20	5	< 2	< 10	32	< 10	9	6
004	0.29	0.026	0.033	0.01	< 2	2	17	0.09	< 20	< 1	< 2	< 10	25	< 10	5	2
005	0.14	0.023	0.011	0.01	< 2	2	14	0.11	< 20	< 1	< 2	< 10	27	< 10	3	2
006	0.32	0.028	0.020	0.01	2	3	18	0.10	< 20	< 1	< 2	< 10	32	< 10	4	3
007	0.07	0.022	0.013	0.01	< 2	< 1	11	0.03	< 20	< 1	< 2	< 10	11	< 10	2	< 1
008	0.18	0.025	0.043	0.01	< 2	2	16	0.10	< 20	< 1	< 2	< 10	32	< 10	4	1
009	0.18	0.025	0.063	< 0.01	< 2	2	14	0.08	< 20	< 1	< 2	< 10	32	< 10	3	1
010	0.16	0.025	0.095	< 0.01	< 2	2	14	0.08	< 20	5	< 2	< 10	32	< 10	3	< 1
011	0.17	0.026	0.076	0.01	< 2	2	12	0.07	< 20	< 1	< 2	< 10	27	< 10	3	1
012	0.20	0.025	0.084	< 0.01	< 2	2	17	0.09	< 20	< 1	< 2	< 10	31	< 10	5	2
013	0.20	0.022	0.115	0.02	< 2	2	13	0.09	< 20	5	< 2	< 10	49	< 10	4	1
014	0.18	0.023	0.088	0.01	< 2	2	15	0.09	< 20	11	< 2	< 10	48	< 10	4	1
015	0.16	0.024	0.042	< 0.01	< 2	2	14	0.07	< 20	1	< 2	< 10	26	< 10	4	< 1
016	0.21	0.026	0.065	0.02	< 2	2	14	0.11	< 20	4	< 2	< 10	45	< 10	4	2
017	0.17	0.028	0.043	0.02	< 2	2	14	0.11	< 20	< 1	< 2	< 10	38	< 10	5	3
018	0.15	0.023	0.033	0.01	< 2	2	12	0.09	< 20	2	< 2	< 10	31	< 10	4	3
019	0.39	0.034	0.029	< 0.01	< 2	3	22	0.11	< 20	< 1	< 2	< 10	27	< 10	6	3
020	0.50	0.034	0.041	< 0.01	< 2	4	23	0.11	< 20	4	< 2	< 10	33	< 10	7	4
021	0.47	0.031	0.043	0.02	< 2	4	24	0.10	< 20	4	< 2	< 10	32	< 10	10	3
022	0.70	0.038	0.046	< 0.01	< 2	5	24	0.13	< 20	< 1	< 2	< 10	43	< 10	10	7
023	0.29	0.029	0.027	0.01	< 2	3	20	0.09	< 20	< 1	< 2	< 10	24	< 10	6	3
024	0.24	0.024	0.026	0.01	< 2	2	18	0.07	< 20	2	< 2	< 10	19	< 10	4	2
025	0.08	0.021	0.008	0.01	< 2	1	12	0.09	< 20	< 1	< 2	< 10	11	< 10	3	2
026	0.09	0.021	0.030	0.04	< 2	2	11	0.05	< 20	< 1	< 2	< 10	23	< 10	3	1
027	0.12	0.022	0.016	0.02	< 2	2	11	0.13	< 20	< 1	< 2	< 10	55	< 10	2	3
028	0.20	0.022	0.031	0.02	< 2	2	12	0.14	< 20	< 1	< 2	< 10	57	< 10	3	3
029	0.14	0.021	0.023	< 0.01	5	1	11	0.05	< 20	< 1	< 2	< 10	19	< 10	2	1
030	0.19	0.023	0.020	< 0.01	< 2	2	15	0.12	< 20	< 1	< 2	< 10	44	< 10	3	3
031	0.10	0.023	0.030	0.01	< 2	2	11	0.07	< 20	8	< 2	< 10	24	< 10	3	1
032	0.28	0.023	0.045	0.01	< 2	3	20	0.11	< 20	3	< 2	< 10	59	< 10	3	2
033	0.16	0.024	0.042	0.01	< 2	2	16	0.11	< 20	< 1	< 2	< 10	52	< 10	3	2
034	0.17	0.023	0.030	< 0.01	< 2	3	16	0.12	< 20	< 1	< 2	< 10	55	< 10	3	2
035	0.24	0.023	0.034	0.01	< 2	2	20	0.09	< 20	1	< 2	< 10	38	< 10	3	1
036	0.16	0.022	0.024	0.01	< 2	2	14	0.11	< 20	< 1	< 2	< 10	35	< 10	3	3
037	0.50	0.030	0.050	0.03	< 2	4	27	0.09	< 20	< 1	< 2	< 10	34	< 10	11	3
038	0.40	0.030	0.044	0.02	< 2	3	25	0.09	< 20	2	< 2	< 10	27	< 10	7	3
039	0.29	0.029	0.027	0.01	< 2	2	20	0.09	< 20	2	< 2	< 10	23	< 10	5	3
040	0.35	0.029	0.032	0.07	< 2	3	22	0.07	< 20	2	< 2	< 10	20	< 10	6	3
041	0.31	0.029	0.042	0.02	< 2	3	19	0.09	< 20	1	< 2	< 10	29	< 10	6	2
042	0.32	0.032	0.057	0.02	< 2	3	21	0.08	< 20	< 1	< 2	< 10	30	< 10	10	< 1
043	0.32	0.032	0.061	0.02	< 2	3	23	0.07	< 20	4	< 2	< 10	34	< 10	7	2
044	0.26	0.028	0.060	0.03	< 2	3	23	0.07	< 20	6	< 2	< 10	19	< 10	9	2
045	0.26	0.024	0.060	0.03	< 2	2	19	0.05	< 20	4	< 2	< 10	19	< 10	9	< 1
046	0.25	0.024	0.020	< 0.01	< 2	2	18	0.08	< 20	< 1	< 2	< 10	21	< 10	4	1

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
047	0.10	0.020	0.013	0.01	< 2	1	10	0.10	< 20	< 1	< 2	< 10	40	< 10	2	3
048	0.11	0.022	0.017	0.02	< 2	2	13	0.06	< 20	< 1	< 2	< 10	24	< 10	2	1
049	0.11	0.021	0.035	0.01	< 2	1	13	0.08	< 20	1	< 2	< 10	25	< 10	3	< 1
050	0.22	0.024	0.044	0.02	< 2	2	15	0.11	< 20	2	< 2	< 10	54	< 10	3	1
051	0.38	0.039	0.049	0.01	< 2	2	21	0.08	< 20	< 1	< 2	< 10	30	< 10	4	< 1
052	0.15	0.023	0.024	< 0.01	< 2	2	19	0.09	< 20	2	< 2	< 10	45	< 10	4	2
053	0.40	0.034	0.039	0.01	< 2	2	19	0.10	< 20	6	< 2	< 10	42	< 10	3	2
054	0.07	0.019	0.018	< 0.01	< 2	1	11	0.09	< 20	1	< 2	< 10	24	< 10	3	2
055	0.27	0.027	0.035	0.01	< 2	2	20	0.08	< 20	2	< 2	< 10	23	< 10	5	1
056	0.28	0.028	0.043	0.02	< 2	2	19	0.08	< 20	< 1	< 2	< 10	22	< 10	6	1
057	0.23	0.027	0.020	0.01	< 2	2	16	0.09	< 20	< 1	< 2	< 10	25	< 10	4	2
058	0.37	0.033	0.042	< 0.01	< 2	3	22	0.10	< 20	< 1	< 2	< 10	26	< 10	6	3
059	0.17	0.026	0.018	0.02	< 2	2	14	0.07	< 20	2	< 2	< 10	21	< 10	3	1
060	0.38	0.030	0.050	< 0.01	< 2	3	20	0.09	< 20	1	< 2	< 10	27	< 10	6	2
061	0.29	0.028	0.059	0.09	< 2	3	23	0.08	< 20	3	< 2	< 10	22	< 10	9	7
062	0.27	0.026	0.083	0.30	< 2	2	44	0.02	< 20	4	< 2	< 10	34	< 10	26	10
063	0.28	0.027	0.043	0.02	< 2	2	19	0.07	< 20	< 1	< 2	< 10	19	< 10	6	< 1
064	0.07	0.019	0.007	< 0.01	< 2	1	11	0.08	< 20	< 1	< 2	< 10	13	< 10	2	1
065	0.26	0.035	0.021	< 0.01	< 2	2	15	0.08	< 20	< 1	< 2	< 10	30	< 10	2	4
066	0.12	0.023	0.060	0.02	< 2	2	12	0.07	< 20	3	< 2	< 10	30	< 10	3	< 1

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-6 Meas		0.2	< 0.5	68	1040	1	24	95	130	7.38	237	< 10	950	0.9	< 2	0.15	11	81	5.86	20	< 1	1.24	< 10
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9
GXR-6 Meas		0.3	< 0.5	67	1040	< 1	23	97	130	7.37	225	< 10	926	0.9	< 2	0.15	11	81	5.81	20	< 1	1.21	< 10
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9
OREAS 922 (AQUA REGIA) Meas		1.8	< 0.5	2290	761	< 1	33	59	265	3.04	5		94	0.8	< 2	0.42	16	46	5.44	< 10		0.53	37
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 922 (AQUA REGIA) Meas		0.7	< 0.5	2280	757	< 1	35	58	273	3.02	6		90	0.8	< 2	0.42	17	47	5.47	< 10		0.51	37
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 923 (AQUA REGIA) Meas		3.5	< 0.5	4450	863	< 1	32	84	358	3.04	5		77	0.7	13	0.42	18	43	6.22	< 10		0.44	34
OREAS 923 (AQUA REGIA) Cert		1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01		0.322	30.0
OREAS 923 (AQUA REGIA) Meas		1.4	< 0.5	4450	872	< 1	36	77	354	3.05	5		69	0.7	< 2	0.42	19	43	6.15	10		0.43	34
OREAS 923 (AQUA REGIA) Cert		1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01		0.322	30.0
Oreas 96 (Aqua Regia) Meas		10.5		> 10000				88	443						< 2		42						
Oreas 96 (Aqua Regia) Cert		11.50		39100.00				100	448						27.9		49.2						
Oreas 96 (Aqua Regia) Meas		10.8		> 10000				92	447						< 2		45						
Oreas 96 (Aqua Regia) Cert		11.50		39100.00				100	448						27.9		49.2						
OREAS 220 (Fire Assay) Meas	853																						
OREAS 220 (Fire Assay) Cert	866																						
OREAS 220 (Fire Assay) Meas	875																						
OREAS 220 (Fire Assay) Cert	866																						
OREAS 220 (Fire Assay) Meas	857																						
OREAS 220 (Fire Assay) Cert	866																						
Oreas 621 (Aqua Regia) Meas		67.8	286	3620	539	14	27	> 5000	> 10000	1.84	78			0.6	< 2	1.70	28	35	3.55	10	3	0.39	19
Oreas 621 (Aqua Regia) Cert		68.0	278	3660	520	13.3	25.8	13600	51700	1.60	75.0			0.530	3.85	1.65	27.9	31.3	3.43	9.29	3.93	0.333	19.4
Oreas 621 (Aqua Regia) Meas		69.4	286	3700	545	14	26	> 5000	> 10000	1.85	75			0.6	< 2	1.73	29	30	3.64	10	4	0.40	19
Oreas 621 (Aqua Regia) Cert		68.0	278	3660	520	13.3	25.8	13600	51700	1.60	75.0			0.530	3.85	1.65	27.9	31.3	3.43	9.29	3.93	0.333	19.4
OREAS 238 (Fire Assay) Meas	3000																						
OREAS 238 (Fire	3030																						

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Assay) Cert																							
OREAS 238 (Fire Assay) Meas	3060																						
OREAS 238 (Fire Assay) Cert	3030																						
OGL19-3 Orig		8.9	21.4	1340	1540	< 1	60	8	7910	4.98	< 2	< 10	40	< 0.5	< 2	1.04	8	64	11.7	10	1	0.19	< 10
OGL19-3 Dup		9.0	21.0	1320	1520	< 1	60	7	7910	4.92	2	< 10	39	< 0.5	< 2	1.03	8	63	11.5	10	< 1	0.19	< 10
010 Orig	7																						
010 Dup	7																						
012 Orig		< 0.2	< 0.5	4	240	< 1	14	6	33	0.99	< 2	< 10	28	< 0.5	< 2	0.27	4	34	1.27	< 10	< 1	0.04	< 10
012 Dup		< 0.2	< 0.5	5	237	< 1	14	4	33	0.97	< 2	< 10	25	< 0.5	< 2	0.25	3	34	1.27	< 10	< 1	0.04	14
020 Orig	< 5																						
020 Dup	6																						
026 Orig		< 0.2	< 0.5	1	35	< 1	6	5	8	1.78	2	< 10	28	< 0.5	< 2	0.11	1	31	0.58	< 10	< 1	0.03	12
026 Dup		< 0.2	< 0.5	1	38	< 1	6	5	9	1.82	< 2	< 10	28	< 0.5	< 2	0.12	1	31	0.59	< 10	< 1	0.04	13
030 Orig	8																						
030 Dup	< 5																						
042 Orig		< 0.2	< 0.5	6	520	< 1	16	4	20	1.03	3	< 10	52	< 0.5	< 2	0.47	7	39	1.33	< 10	< 1	0.08	20
042 Dup		< 0.2	< 0.5	6	493	< 1	17	3	19	0.98	< 2	< 10	50	< 0.5	< 2	0.45	7	37	1.27	< 10	< 1	0.08	20
045 Orig	6																						
045 Dup	< 5																						
055 Orig	6																						
055 Dup	6																						
056 Orig		< 0.2	< 0.5	5	263	< 1	11	5	15	0.84	< 2	< 10	39	< 0.5	< 2	0.46	4	29	0.90	< 10	< 1	0.06	14
056 Dup		< 0.2	< 0.5	5	265	< 1	12	4	15	0.83	2	< 10	37	< 0.5	< 2	0.46	3	29	0.91	< 10	< 1	0.06	14
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-6 Meas	0.43	0.094	0.036	0.01	6	20	33		< 20	< 1	< 2	< 10	176	< 10	5	12
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110
GXR-6 Meas	0.43	0.091	0.035	0.01	3	20	32		< 20	< 1	< 2	< 10	176	< 10	5	8
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110
OREAS 922 (AQUA REGIA) Meas	1.47	0.033	0.067	0.37	< 2	4	16		< 20		< 2	< 10	37	< 10	23	23
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 922 (AQUA REGIA) Meas	1.48	0.033	0.067	0.37	< 2	4	16		< 20		< 2	< 10	37	< 10	23	19
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0		14.5		0.14	1.98	29.4	1.12	16.0	22.3
OREAS 923 (AQUA REGIA) Meas	1.58		0.063	0.68	3	4	15		< 20		< 2	< 10	36	< 10	21	31
OREAS 923 (AQUA REGIA) Cert	1.43		0.061	0.684	0.58	3.09	13.6		14.3		0.12	1.80	30.6	1.96	14.3	22.5
OREAS 923 (AQUA REGIA) Meas	1.54		0.064	0.68	2	4	15		< 20		< 2	< 10	36	< 10	21	27
OREAS 923 (AQUA REGIA) Cert	1.43		0.061	0.684	0.58	3.09	13.6		14.3		0.12	1.80	30.6	1.96	14.3	22.5
Oreas 96 (Aqua Regia) Meas				3.86	6											
Oreas 96 (Aqua Regia) Cert				4.38	4.53											
Oreas 96 (Aqua Regia) Meas				4.07	6											
Oreas 96 (Aqua Regia) Cert				4.38	4.53											
OREAS 220 (Fire Assay) Meas																
OREAS 220 (Fire Assay) Cert																
OREAS 220 (Fire Assay) Meas																
OREAS 220 (Fire Assay) Cert																
OREAS 220 (Fire Assay) Meas																
OREAS 220 (Fire Assay) Cert																
Oreas 621 (Aqua Regia) Meas	0.48	0.206	0.034	4.49	110	3	18		< 20		< 2	< 10	13	< 10	9	73
Oreas 621 (Aqua Regia) Cert	0.436	0.160	0.0335	4.50	107	2.20	18.9		5.91		0.770	1.63	10.9	1.00	6.87	55.0
Oreas 621 (Aqua Regia) Meas	0.49	0.206	0.035	4.62	102	3	18		< 20		< 2	< 10	13	< 10	9	63
Oreas 621 (Aqua Regia) Cert	0.436	0.160	0.0335	4.50	107	2.20	18.9		5.91		0.770	1.63	10.9	1.00	6.87	55.0
OREAS 238 (Fire Assay) Meas																
OREAS 238 (Fire																

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Assay) Cert																
OREAS 238 (Fire Assay) Meas																
OREAS 238 (Fire Assay) Cert																
OGL19-3 Orig	1.67	0.074	0.058	0.35	6	7	20	< 0.01	< 20	< 1	< 2	< 10	55	18	4	7
OGL19-3 Dup	1.65	0.072	0.058	0.35	3	7	20	< 0.01	< 20	< 1	< 2	< 10	55	16	4	9
010 Orig																
010 Dup																
012 Orig	0.20	0.027	0.085	< 0.01	< 2	2	17	0.08	< 20	< 1	< 2	< 10	31	< 10	4	1
012 Dup	0.20	0.023	0.083	< 0.01	< 2	2	16	0.09	< 20	5	< 2	< 10	32	< 10	5	2
020 Orig																
020 Dup																
026 Orig	0.09	0.021	0.030	0.04	< 2	2	11	0.05	< 20	< 1	< 2	< 10	22	< 10	3	1
026 Dup	0.10	0.021	0.030	0.04	< 2	2	12	0.06	< 20	< 1	< 2	< 10	23	< 10	3	2
030 Orig																
030 Dup																
042 Orig	0.33	0.032	0.059	0.02	< 2	3	21	0.08	< 20	4	< 2	< 10	30	< 10	10	1
042 Dup	0.31	0.032	0.055	0.02	< 2	3	21	0.08	< 20	< 1	< 2	< 10	29	< 10	9	< 1
045 Orig																
045 Dup																
055 Orig																
055 Dup																
056 Orig	0.28	0.029	0.043	0.02	< 2	2	19	0.08	< 20	< 1	< 2	< 10	22	< 10	6	1
056 Dup	0.28	0.027	0.043	0.02	< 2	2	19	0.07	< 20	< 1	< 2	< 10	22	< 10	6	1
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank	< 0.01	0.012	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.012	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank	< 0.01	0.012	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	1	< 2	< 10	< 1	< 10	< 1	< 1