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**Assessment Report  
On the  
Kupfer Property  
Thunder Bay Mining Division  
Ontario, Canada**

**Maun Lake Area  
042L07  
Claim 517661**

**Prepared for  
Noronex Ltd**

**By  
Cathy Salo  
March 20, 2020**

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## 1. SUMMARY

Clark Exploration Consulting of Thunder Bay, Ontario was contracted by Noronex Limited (the 'Company'), to review historic data for their Kupfer Property (the "Property"), identify its merits, propose an appropriate exploration program and budget for base metal exploration on the property, and prepare a Technical Report (the "Report") compliant with NI 43-101 and suitable for inclusion in a prospectus document for the purposes of a financing or listing application by Noronex Ltd. This report was edited with minor additions to conform to the requirements for an assessment report.

The Kupfer property in Maun Lake Area approximately 300km northeast of Thunder Bay, Ontario and 75km north of Geraldton in the Thunder Bay Mining Division. The approximate UTM co-ordinates for the centre of the property are 510167m E, 5589950m N (Datum NAD 83 UTM Zone 16N), NTS 42 E 07. The property consists of 111 unpatented mining claims comprising an area of 2281 hectares.

The Kupfer Property lies within the northern most part of the Onaman-Tashota greenstone belt which forms the eastern section of the Wabigoon Subprovince. The work done on the property in the past has identified area of base metals mineralization concordant to Cu-Zn-Au-Ag VMS-style mineralization and numerous EM anomalies.

Massive sulphide mineralization is present at a number of localities across the Kupfer property. According to Carter 2003 this mineralization is in large measure volcanogenic in origin. Sulphide mineralization is exposed in numerous areas, these include; the Holland-Chellew occurrence, the J.J. Perry Trench, the Kindle trench, Galena Vein trench, and the Galena Vein Extension. Historical sampling at these localities returned values as follows:

- Holland-Chellew occurrence 12% Cu, 185g/t Ag, 3g/t Au and 33% Pb, 5.7% Zn, 1540/t Ag (Kindle 1932).
- J.J Perry Trench: 16.22% Cu, 221.5g/t Ag (Kindle 1932), 2.11% Cu, 125ppb Au, 857ppm Co and 1.53% Cu, 1185ppm Co (Carter 2001).
- Galena Vein trench 5.8% Zn, 52.1 g/t Ag, 0.34g/t Au (Eveleigh 1994).
- The Galena Vein Extension; 0.05 % Cu, 0.01% Zn (Eveleigh 1994) and the Kindle trench 2.51%Cu, 0.04% Zn, 31.5g/t Ag (Kindle 1932)

Recent sampling by Noronex field crews in 2018 confirmed the presence of base metals mineralization and anomalous precious metals at the J.J Perry trench, Galena trench, and Kindle Trench. Sampling returned values of 12.4% Cu, 1560ppb Au, 813ppb Zn, 145ppm Ag and 5.08 % Cu, 5610 ppb Au, 53.3ppm Ag (J.J. Perry), 10 ppm Cu, 2060ppb Pb, 440ppm Zn (Galena Trench), and 4.23% Cu, 3880ppb Au, 43.1ppm Ag (Kindle Trench).

A program of mapping, prospecting, and sampling of any mineralization should be carried out to ground truth the numerous EM anomalies across the property as well as confirm the location of Holland-Chellew occurrence. This should be followed up with mechanical stripping, trenching, and channel sampling. The new logging roads will allow for easier and quicker access to more locations around the Property.

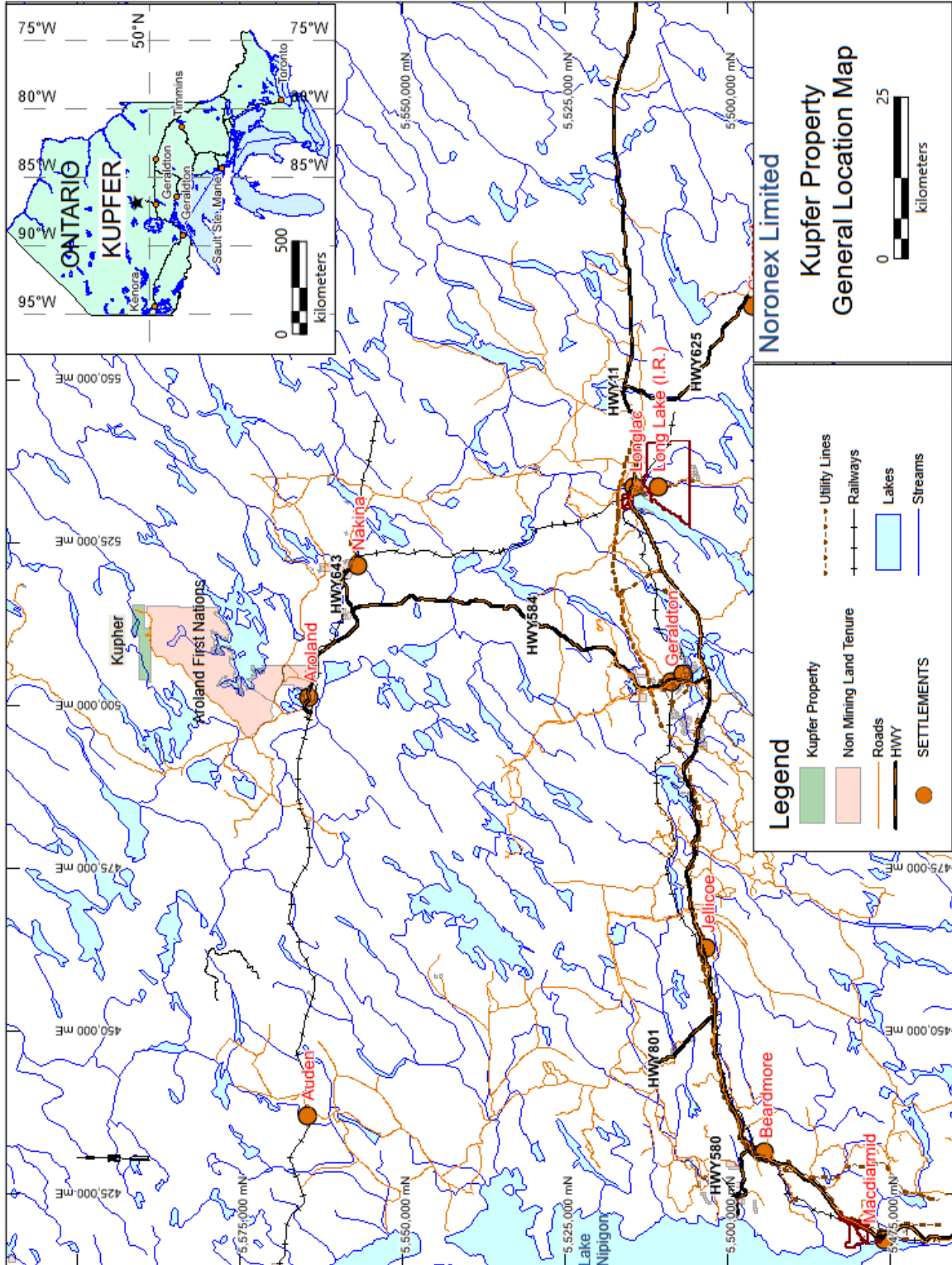
## **2. Introduction**

The Kupfer Property is located approximately 300km Northeast of Thunder Bay, Ontario and 70 km due north of the city of Geraldton Ontario, in the Thunder Bay Mining Division. The Kupfer Project consists of 111 cell claims with a total area of 2281 hectares.

The Kupfer Property lies within the northern most part of the Onaman-Tashota greenstone belt which forms the eastern section of the Wabigoon Subprovince. The work done on the property in the past has identified area of base metals mineralization concordant to Cu-Zn VMS-style mineralization and numerous EM anomalies.

## **3. Property Description and Location**

The Kupfer Lake property is 300 kilometers northeast of Thunder Bay and 75 kilometers north of Geraldton in northwestern Ontario. The property is situated north of Esnagami Lake and east of O'Sullivan Lake some 33 kilometers north-northwest of Nakina. The claims are all located within the Maun Lake township within the Thunder Bay Mining Division. The approximate UTM co-ordinates for the centre of the property are 510167m E, 5589950m N (Datum NAD 83 UTM Zone 16N), NTS 42 E 07. The property consists of 111 cell claims with a total area of 2281 hectares. All claims are held by Noronex Ltd, the claim dispositions are listed in Appendix I (Figure 1).



#### **4: Accessibility, Climate, Local Resources, Infrastructure and Physiography**

The Kupfer Lake property is 300 kilometers northeast of Thunder Bay and 75 kilometers north of Geraldton in northwestern Ontario. Nakina is 67 kilometers by paved highway north of the town of Geraldton which is on the northern Trans-Canada highway. Excellent secondary logging roads, including the Maun Road, provide access to the property from either of these communities. From Geraldton, access is via the Nakina highway 584 62 kilometers to highway 643 (O'Sullivan Lake road) and then 30 kilometers to the Maun Road. A short access road to the center of the claim package extends north off the Maun Road about 24 kilometers from the O'Sullivan Lake road. Total road distance from Geraldton is approximately 115 kilometers; driving time is 1.5 to 2 hours.

The municipality of Greenstone, population 4,636, is located along Trans-Canada Highway 11, 40km southeast of the property. The local population includes skilled tradesmen and experienced labourers. All necessary supplies are available in Thunder Bay, with basic supplies being available locally. Water is abundant in the area of the claims. Both communities in the area; Nakina and Geraldton, are supportive of the mining industries and could supply personnel and supplies to further exploration projects.

The claim area remains forest covered with black spruce and lesser poplar. Sandy ridges (eskers), marginal to Maun Road immediately south of the claim, feature stands of jack pine. Bedrock is reasonably well exposed throughout the claim area. Low rocky ridges are separated by narrow, swampy areas (Carter 2003)



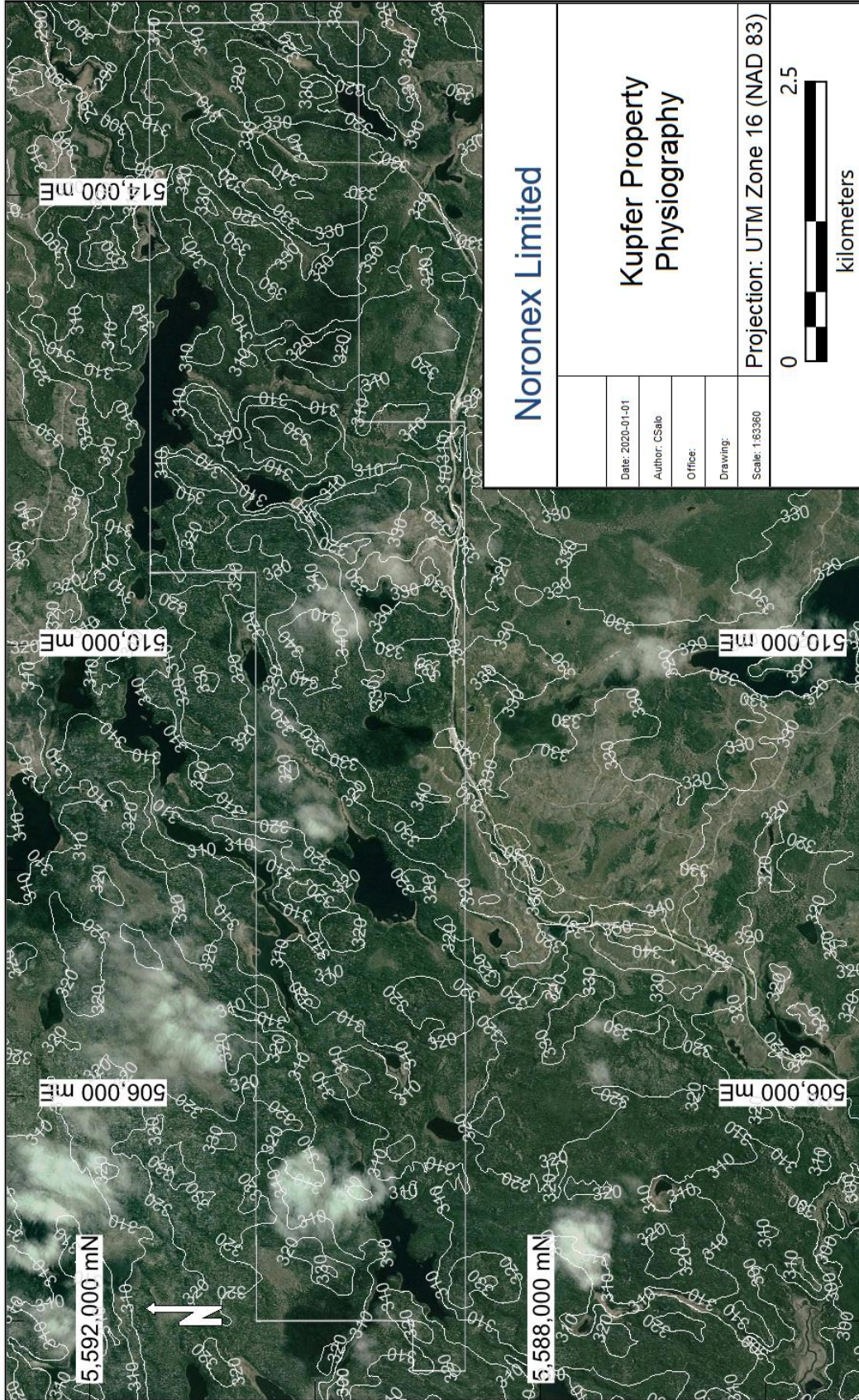
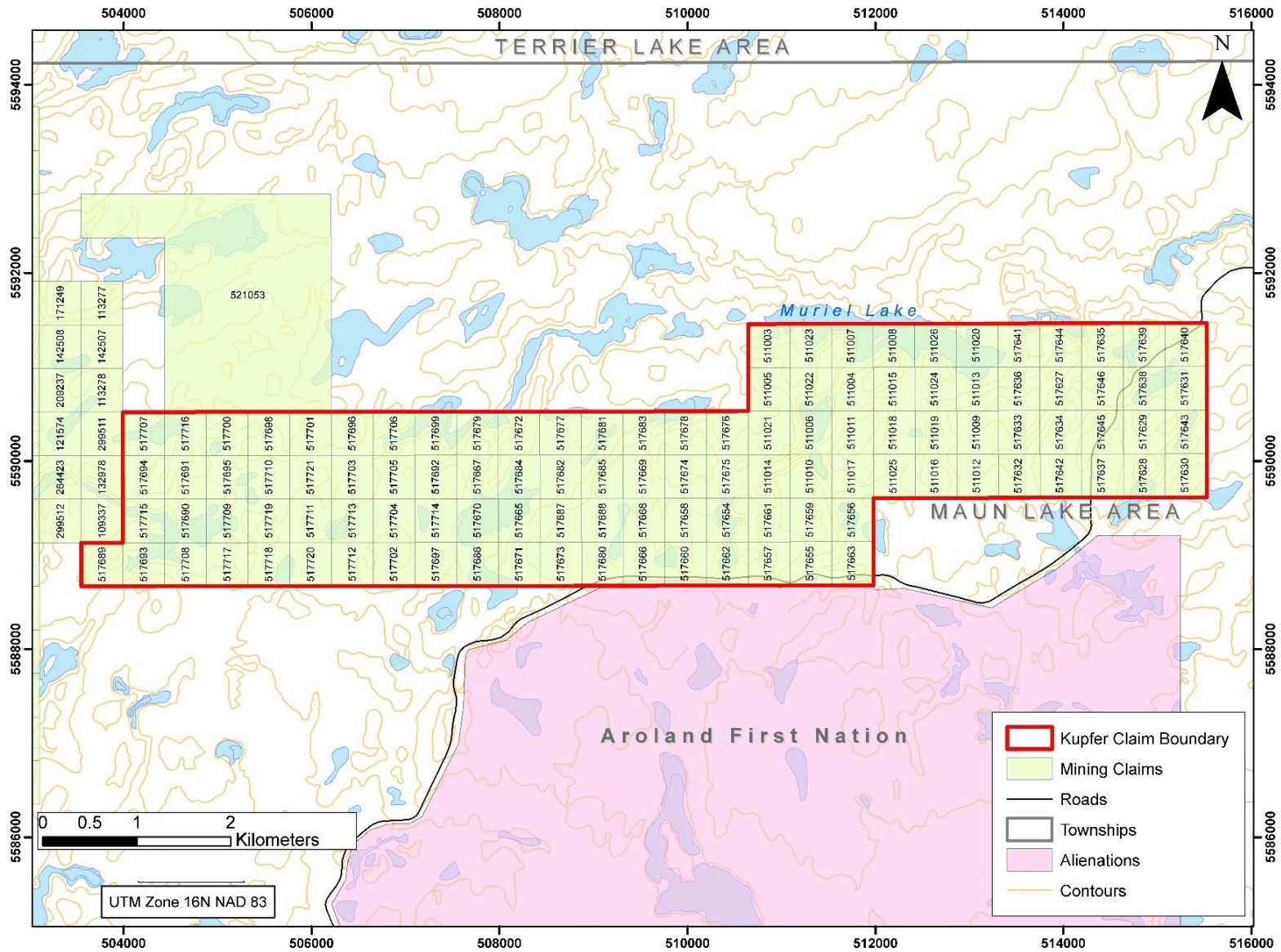


Figure 1: Kupfer Property Location



Figure 2: Kupfer Property Claims



## 5: History

History summarized from Carter 2003.

- 1929: Copper (+ zinc, silver, gold) - bearing sulphide mineralization was discovered at a number of localities south of Muriel Lake. The northernmost of these, the Holland-Chellew occurrence (1 kilometer south of Muriel Lake), consists of two east-west parallel zones 120 meters apart which were initially explored by hand trenching over apparent strike lengths in excess of 200 meters. Results of two selected samples (Kindle, 1932) included values of 12% copper, 185 g/t silver, 3 g/t gold and 33% lead, 5.7% zinc and 1540 g/t silver. A second cluster of sulphide showings, 1.5 km southwest of the Holland-Chellew occurrence, include the J.J. Perry trench, the Kindle trench, Galena Vein trench and the Galena Vein extension. These were explored by trenching and stripping in the early 1930s; results of previous sampling included 0.05% to 16.22% copper, 0.01 % to 5.80% zinc, 1.17% lead, 31.5 to 221.5 grams/tonne silver and 0.03 to 1.71 grams/tonne gold.
- 1955: Quebec Chibougamau Gold Fields drilled 12 holes of which several targeted the J.J. Perry and Galena Vein trench areas. The first hole reportedly intersected 0.6 metre of sphalerite while several other holes were reported to contain significant mineralized sections. No assays were reported.
- 1976: Texasgulf Inc. detected a strong, near surface conductor during an airborne geophysical survey over the Holland-Chellew occurrence; no follow-up work was reported.
- 1980: Amax Minerals Exploration Limited completed a similar airborne survey over a larger area south of Muriel Lake. A large block of claims was staked to cover all the known sulphide showings and geological mapping was undertaken.
- 1989: An airborne electromagnetic and magnetic survey of the Tashota-Geraldton-Longlac area, conducted on behalf of the Ministry of Northern Development and Mines, included the O'sullivan Lake - Muriel Lake area.
- 1992-2000: Claims encompassing 15 square kilometers were held by Garry Clark, Aubrey Eveleigh and Pierre Gagne. Work done during this period included geological mapping, surface geophysics, trenching and sampling and limited diamond drilling of EM conductors away from the known showings. Sampling from the J.J Perry trench returned 1.53% Cu (1994, TM-3). The trenching program at the J.J Perry Trench established copper mineralization for approximately 2km. See tables below for summary of results.

Sample_ID	Cu_ppm	Zn_ppm	Location	Year
TM-1	6558	441	J.J. Perry	1994
TM-2	2385	51	J.J. Perry	1994
TM-3	<b>1.53%</b>	76	J.J. Perry	1994
TM-4	2673	43	J.J. Perry	1994
TM-5	5712	256	J.J. Perry	1994
TM-6	6904	258	J.J. Perry	1994
TM-7	1192	113	J.J. Perry	1994
TM-8	136	123		1994
TM-9	96	34		1994
TM-10	1923	14	Crystal Showing	1994
TM-11	6038	45	Crystal Showing	1994
TM-12	1673	171	Crystal Showing	1994
TM-13	3654	49	Crystal Showing	1994
TM-14	304	16		1994
TM-15	223	1173		1994
TM-16	98	5		1994
TM-17	113	22		1994
TM-18	23	3		1994

Sample_ID	Cu_ppm	Zn_ppm	Location	Year
PG-1	4328	98	J.J. Perry Extension	1994
PG-2	2448	151	J.J. Perry Extension	1994
PG-3	1196	63	J.J. Perry Extension	1994
PG-4	345	36	J.J. Perry Extension	1994
PG-5	1164	66	J.J. Perry Extension	1994
PG-6	333	13	J.J. Perry Extension	1994
PG-7	1160	80	J.J. Perry Extension	1994
PG-8	19	<1	J.J. Perry Extension	1994
PG-9	3128	7	J.J. Perry Extension	1994
PG-10	3072	40	J.J. Perry Extension	1994
PG-11	768	21	J.J. Perry Extension	1994
PG-12	572	28	J.J. Perry Extension	1994
PG-13	171	5	J.J. Perry Extension	1994
PG-14	228	162	J.J. Perry Extension	1994

1997 Diamond drilling results summary

**Table 1 Previous Drilling Results**

Sample_ID	Au_ppb	Cu_ppm	Zn_ppm	Length (m)	Location	Year
93456	73	779	1061	0.5	ML97-1	1997
93457	263	2512	44	0.46	ML97-1	1997
93423	376	3993	24	0.36	ML97-1	1997

2001-2003: Consulting geologist Nicholas Carter published a report specifically on the mineralized showings south of Muriel Lake (Galena Vein Trench, J.J. Perry Trench, etc.) which were staked at the time. Investigation of the historic trenches and regional mapping were done. Five rock samples were taken. Samples 60557-59 were taken from the J.J Perry Trench.

**Table 2 Mineralized showings south Muriel Lake**

Sample_ID	Au_ppb	Ag_ppm	Co_ppm	Cr_ppm	Cu_ppm	Cu_%	Ni_ppm	Zn_ppm
60557	<5	23.2	1185	19	>10000	1.53	374	96
60558	125	33.6	857	13	>10000	2.11	255	102
60559	5	0.8	27	73	468	-	51	18
60560	30	1.4	71	122	206	-	46	16
60561	5	2	78	119	87	-	56	50

2004: Claims held by Carter and Heard were optioned to Nuinsco Resources. Lamontagne Geophysics performs UTEM 3 survey on Muriel Lake property for Nuinsco Resources. The survey identified numerous east-west trending AEM conductors, some along trend with known sulphide showings on the property. The anomalies that don't correspond with known sulphide showings warrant ground truthing and follow-up work.

## 6: GEOLOGICAL SETTING AND MINERALIZATION

### 6.1 Regional Geology

The following Regional Geology description is summarized from Carter, 2003:

The O'sullivan Lake - Muriel Lake area is within the northern part of the Onaman -Tashota greenstone belt which forms the eastern part of the Wabigoon Subprovince. This part of the greenstone belt is bounded on the north by metasedimentary rocks of the English River Subprovince and on the south by the Esnagami granitic pluton (Stott and Parker, 1997).

This area is underlain mainly by mafic metavolcanic rocks, usually pillowed to massive basaltic flows and tuffs; less common are felsic metavolcanic flows and tuffs and interflow metasedimentary rocks. The layered rocks are intruded by granitic rocks, mafic (gabbro, diorite) sills and narrow felsic dykes and sills, thought by Stott and Parker (1997) to be related to the Esnagami pluton. Youngest intrusions are northwest-trending diabase dykes.

The layered rocks are intensely deformed with a pronounced east to east-northeast structural grain.

The O'sullivan Lake - Muriel Lake area features a number of gold and base metal occurrences. Past production from the Consolidated Louanna gold deposit at O'sullivan Lake included the milling of approximately 70,000 tons of ore grading 0.22 ounces Au per ton was milled during 1983-1984 (G. Macdonald, Manager, Mining Corporation of Canada Limited, Nakina, personal communication, 1984).

Sulphide mineralization containing base metals values in the area south of Muriel Lake is stratigraphically controlled and is associated with horizons of felsic tuffs and interflow sediments within the predominant mafic metavolcanic sequence. As noted by Kindle (1932), "the mineralization is best developed in the rhyolite-greenstone contact zones."

## 6.2 Property Geology

The following description of the Property Geology is taken from Eveleigh (1995).

The Muriel Lake property contains all the units desirable for a base metal deposit. Although the property has not received a proper geological mapping survey, several of the main rock types have been observed on traverses and will be described as follows:

### Mafic Metavolcanics

Most of the property is made up of this rock type, with the greatest percentage being pillowed metavolcanics. Quite often the pillow selvages are silicified, carbonatized and mineralized with sulphides. A number of outcrops were observed to be very coarse, suggesting either coarse flow centres or gabbroic units. Other mafic metavolcanics units observed were amphibolites, chlorite schists and massive flows. Thin section work by Inco Exploration Inc. on the altered pillow basalt revealed a strongly foliated, very fine-grained assemblage of actinolite, quartz, epidote, carbonate and albite.

### Felsic Metavolcanics

These rock types are represented by tuffs, lapilli tuffs, rhyolite and dacite. The fragments observed in the tuff units range in size from 1cm to 10cm with the majority of the rock unit being comprised of ash size particles. The rhyolite displays a spotted texture, units occur in close proximity to the mineralized zones on the property. It has been observed, in the past, that Muriel Lake itself seems to contain a felsic intrusive/extrusive body of limited extent, now highly elongated along the strike of the greenstone belt (Waddington, 1982).

### Metasedimentary Rocks

These occur as interflow units ranging in width from 1m to 5m wide. They are quite often altered to the point of being undistinguishable from some of the felsic metavolcanic units. The metasediments are usually altered to a biotite-garnet and garnet-staurolite schists. Thin section also revealed the presence of actinolite.

### Mafic Intrusives

These are comprised of gabbro and diabase. The gabbro can be very coarse with the finer grained material being similar to the coarse mafic metavolcanics flows. The diabase dykes are usually narrow (5m wide) and run north-south across the property.



### North Zone (Holland-Chellew Occurrence)

This horizon is a massive sulphide zone of pyrite, pyrrhotite and traces of chalcopyrite from 2m to 4m in width. It has a series of regional airborne EM conductors associated with it that stretches for approximately 9km.

### Galena Vein Zone

This horizon consists of a chert with massive to disseminated pyrite, sphalerite, chalcopyrite and galena. The sphalerite, chalcopyrite and galena can be traced at times along what appears to be bedding planes in the cherty exhalative unit. This zone is up to 20m wide and intensely folded at the trenched location. The cherty horizon is bounded on the north by pillowed volcanics and on the south by felsic metavolcanics (tuffs, dacite and rhyolite) and coarse mafic flows or gabbro. This horizon has been traced for approximately 2km on strike to the west. Assays from the Galena Vein Zone have returned values as high as 5.8% Zn, .86% Cu, 1.17% Pb, 1.52 oz/ton Ag and .01 oz/ton Au.

### J.J. Perry Zone

The J.J. Perry occurrence is hosted by a limestone (marble) unit striking 85° and dipping 86° north in contact with mafic to felsic metavolcanics rocks and gabbro. The zone is bounded on the north by a rhyolite and on the south by a gabbro or coarse flow. The limestone unit is recrystallized and up to 2m wide. Chalcopyrite, pyrrhotite and minor sphalerite occurs as massive patches and fracture filling within the limestone and proximal to the limestone along the contacts. This zone has been traced for approximately 1km. Assay values up to 16.22% Cu, .2% Zn, 6.46 oz/t Ag and .05 oz/ton Au were obtained from this horizon.

### Structure

The strike of the rocks on the Muriel Lake property are generally east west with dips varying from steep northwards to vertical. The pillows, mostly, indicate tops direction to be south, although there are outcrops that showed tops to be north. Folding is most prominent in the Galena Vein trench where plunge directions are vertical to 40°W.

### Alteration

Several outcrops on the property display alteration that is potentially related to hydrothermal volcanogenic massive sulphide activity. Rock types such as garnetiferous schists, garnet-staurolite schists and chlorite-amphibolite schists may be the result of base metal type alteration. The thin sections by Inco Exploration prove the existence of these minerals. There have been a number of samples taken for whole rock analysis and several of them indicate the presence of hydrothermal alteration.

### 6.3 Mineralization

The following summary of the mineralization on the Kupfer Property is summarized from Carter 2003

Massive sulphide mineralization is known at a number of localities between Muriel Lake and the Maun Lake logging road. In Carter's (2003) opinion, this mineralization is in large measure volcanogenic in origin. The style of mineralization is particularly evident in most historic trenched and stripped areas.

Sulphide mineralization is exposed in five areas in the central part of the claim block. These include the J.J. Perry trench, the Kindle trench, Galena Vein trench the Galena Vein Extension, and the Holland-Chellew occurrence. Massive and stringer pyrite and pyrrhotite, containing variable amounts of chalcopyrite and lesser sphalerite, is best developed along contacts between mafic and felsic metavolcanic rocks.

Previous sampling (Kindle, 1932; Eveleigh, 1994) of these zones returned the following results:

	<u>Copper(%)</u>	<u>Zinc(%)</u>	<u>Lead(%)</u>	<u>Silver(g/t)</u>	<u>Gold(g/t)</u>
J.J. Perry Trench	16.22	0.20	-	221.5	1.71
Galena Vein Trench	0.86	5.80	1.17	52.1	0.34
Galena Vein Extension	0.05	0.01	-	-	0.03
Kindle Trench	2.51	0.04	-	31.5	0.07
Holland-Chellew	12.00			185	3.00

**Table 3 Historical trenching results**

The J.J. Perry trench area, in the southeastern part of the claim, elongate in a northwesterly direction and measuring 50 x 15 meters, exposes an oxidized massive sulphide zone best developed in interflow metasediments and mafic metavolcanic rocks marginal to their contact with felsic metavolcanic rocks which are flow banded in part.

Mineralization consists of fine-grained, massive pyrrhotite-pyrite with streaks of chalcopyrite and some magnetite and sphalerite over observed widths of between 1.2 and 3 meters and a strike length of 25 meters. The sulphide zone trends west-northwest and is vertical to steeply south dipping. In the central and western trench area, an 18 x 2 meters lens of medium- to coarse-grained, recrystallized limestone within the mafic metavolcanics features garnet-pyroxene skarn pods containing disseminated pyrite and chalcopyrite.

The gabbro unit exposed in the southern part of the stripped area features both sharp and gradational contacts with the mafic metavolcanic rocks. Of note are 0.3 meters wide felsic sills which cut both mafic metavolcanic rocks and the gabbro unit. These are similar in composition to the apparent flow-banded felsic metavolcanic unit which also displays intrusive relationship with the mafic rocks.

Three character samples collected from the J.J. Perry trench in 2001 (N. Carter) included two from the massive sulphide zone and one from the gabbro unit. Summary results are as follows;

<u>Sample No.</u>	<u>Cu(ppm)</u>	<u>Au(ppb)</u>	<u>Ag(ppm)</u>	<u>As(ppm)</u>	<u>Co(ppm)</u>	<u>Zn(ppm)</u>	<u>Fe (%)</u>	<u>S (%)</u>
60557	1.53%	<5	23.2	<2	1185	96	>15.0	>10.0
60558	2.11%	125	33.6	<2	857	102	>15.0	>10.0
60559	468ppm	5	0.8	<2	27	18	2.24	0.40

**Table 4 J.J. 2001 Results**

The Galena Vein trench area, about 100 meters northwest of the J.J. Perry trench, includes a 45 x 20 meters stripped area exposes sulphide mineralization hosted by felsic metavolcanic rocks and intercalated cherty horizons immediately south of a relatively nonmineralized mafic metavolcanic unit. Two lenses of massive, coarse- to fine grained pyrite and lesser chalcopyrite, measuring 20 x 5-8 meters and elongate in northeast and north-northwest directions, are enveloped by stringer and disseminated sulphides. A third, smaller massive sulphide lens occurs along the northern contact between felsic and mafic units which is generally sharp. The orientation of the massive sulphide lenses reflect the complex, isoclinal folding evident throughout this exposed area; numerous minor folds have northeast axes and several stages of deformation are evident. Three 1955 diamond drill holes reportedly intersected concentrations of between 45% to 70% pyrite over intervals of between 10 and 15 meters; no assays were reported (MNMD Thunder Bay office files).

The style of sulphide mineralization in the Galena Vein and Galena Vein Extension area differs from the J.J. Perry trench the mineralization exposed in the Galena Vein and Galena Vein extension area is typical of an exhalative, sulphide iron formation hosted mainly in chert (sedimentary?) units. By contrast, the sulphide mineralization exposed in both the J.J. Perry and Kindle trench areas is at least in part typical of contact type mineralization as evidenced by the presence of sulphides in skarnified limestone, further evidence that the felsic unit at both localities may be intrusive. The chemistry of the two styles of mineralization also differs: samples from the J.J. Perry trench feature higher cobalt values and low arsenic while samples from the Galena Vein and Galena Vein Extension are characterized by elevated arsenic values. It is worthy to note that both styles of mineralization occur along contacts between mafic metavolcanic rocks and felsic units. Based on the observed distribution of felsic and metavolcanic rocks a prospective and underexplored horizon extends through the central part of the claim area.

A character sample collected from the Galena Vein in 2001 (N. Carter) from the central part of the exposed zone yielded the following results:

<u>Sample No.</u>	<u>Cu(ppm)</u>	<u>Au(ppb)</u>	<u>Ag(ppm)</u>	<u>As(ppm)</u>	<u>Co(ppm)</u>	<u>Zn(ppm)</u>	<u>Fe (%)</u>	<u>S (%)</u>
60561	87	5	2.0	82	78	50	>15.0	>10.0

**Table 5 Galean Vein 2001 Results**

The Galena Vein Extension area, 20 meters east of the western claim boundary features massive sulphide mineralization over a width of 6 meters and a length of 11 meters (N. Carter, 2003). Flow banding in the host felsic metavolcanic rocks trends east-northeast and massive, fine grained pyrite is locally developed in fine-grained, light grey cherty or siliceous zones. Style of mineralization is similar to that seen in the Galena Vein trench 250 meters to the east.

<u>Sample No.</u>	<u>Cu(ppm)</u>	<u>Au(ppb)</u>	<u>Ag(ppm)</u>	<u>As(ppm)</u>	<u>Co(ppm)</u>	<u>Zn(ppm)</u>	<u>Fe (%)</u>	<u>S (%)</u>
60560	206	30	1.4	80	71	16	>15.0	>10.0

The Kindle trench area, situated in the southwestern claim area, consists of two north-south trenches 10 meters apart. These expose massive pyrrhotite-pyrite-chalcopyrite mineralization over widths of between 0.5 and 1.5 meters along an east-west contact between a felsic unit on the north and mafic metavolcanic rocks on the south. A thin, crystalline limestone unit in the contact area is partially converted to skarn. Style of mineralization here is identical to that seen at the J.J. Perry trench 250 meters northeast. Evidence for the possible continuity of the mineralization between the two areas is supported by the comments of Waddington (1982) who identified sulphide mineralization and crystalline limestone 100 meters west of the J.J. Perry trench.

Figure 3: Regional Geology

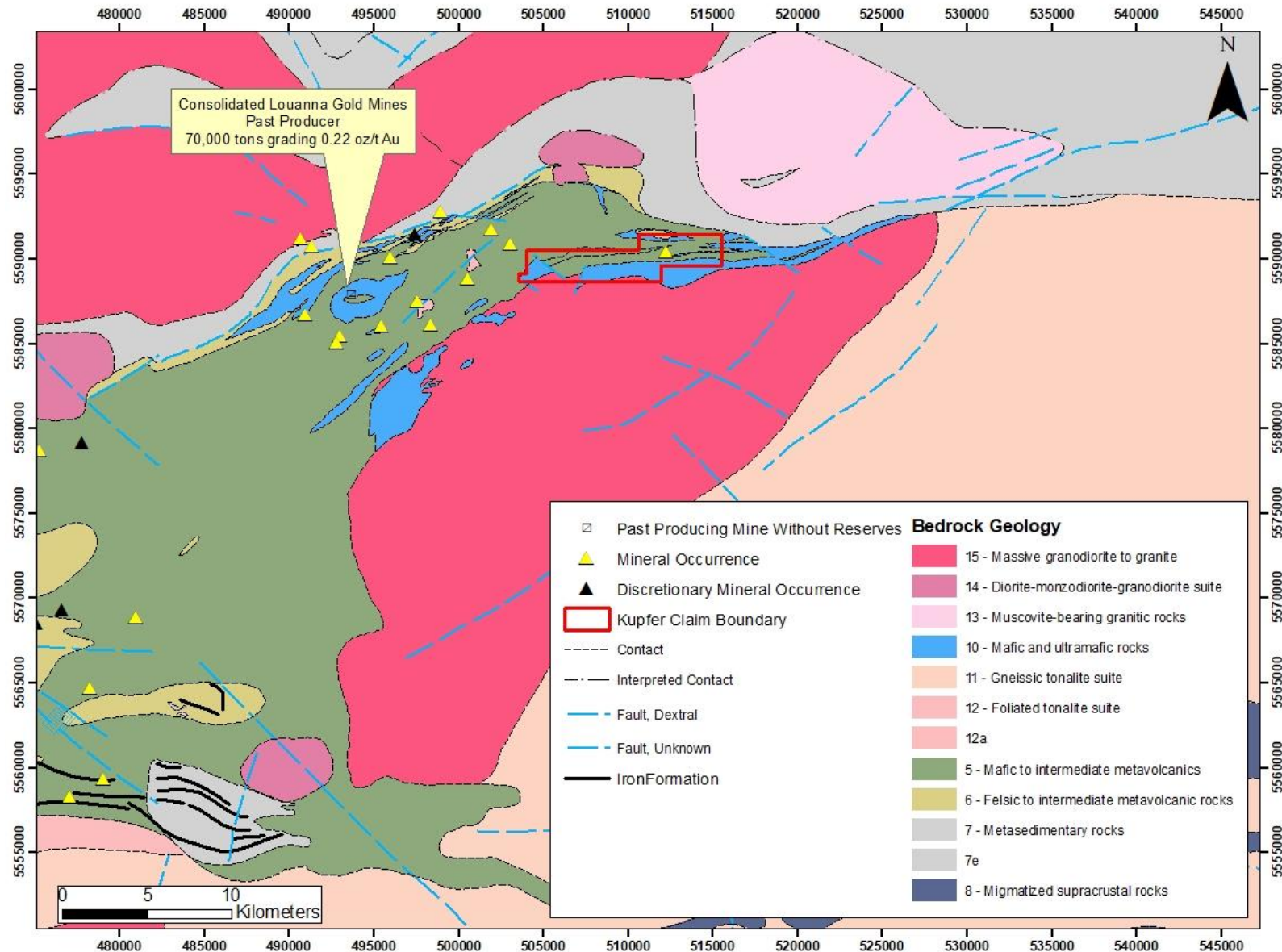
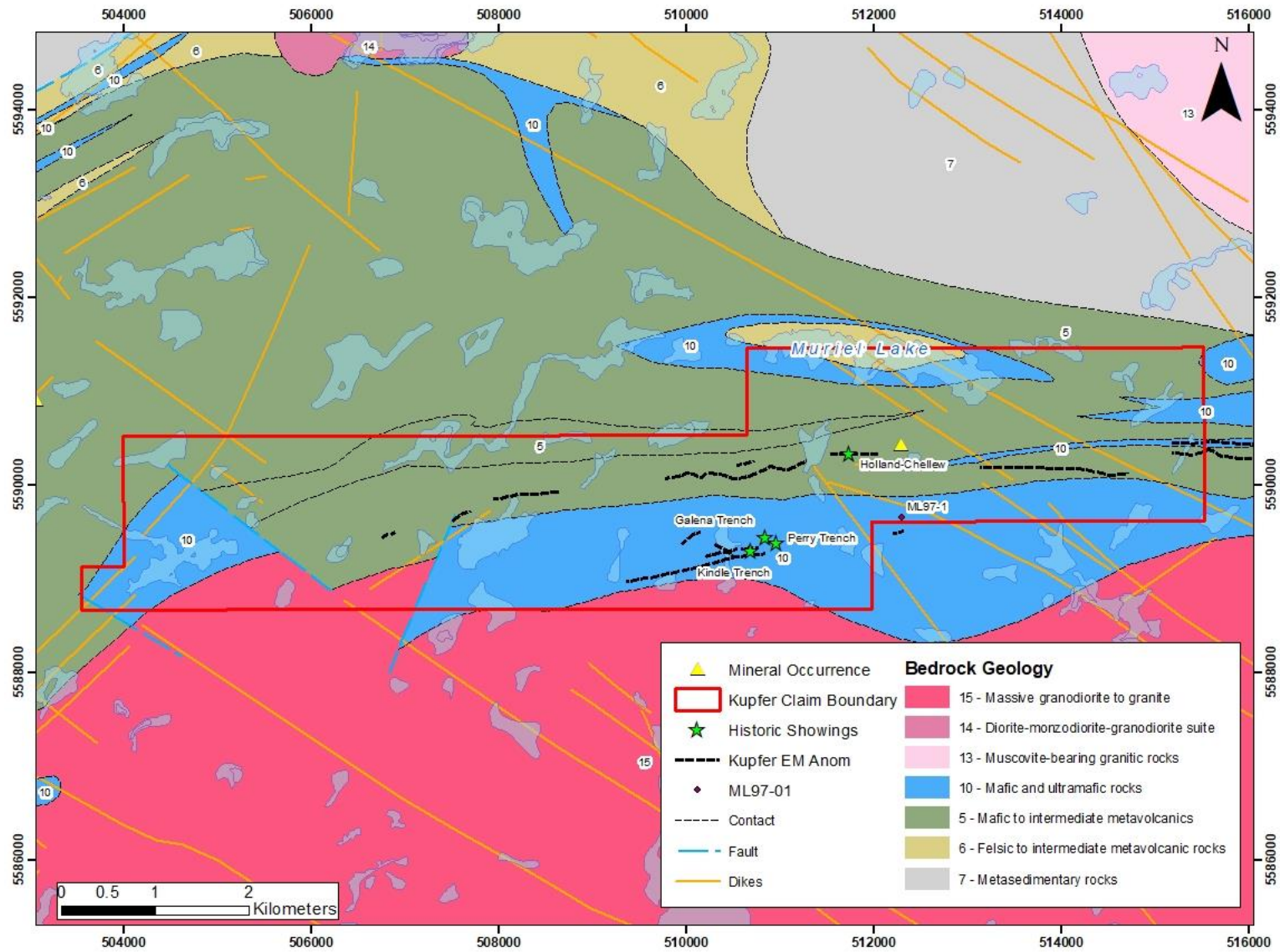


Figure 4: Property Geology



## 7: Deposit Types

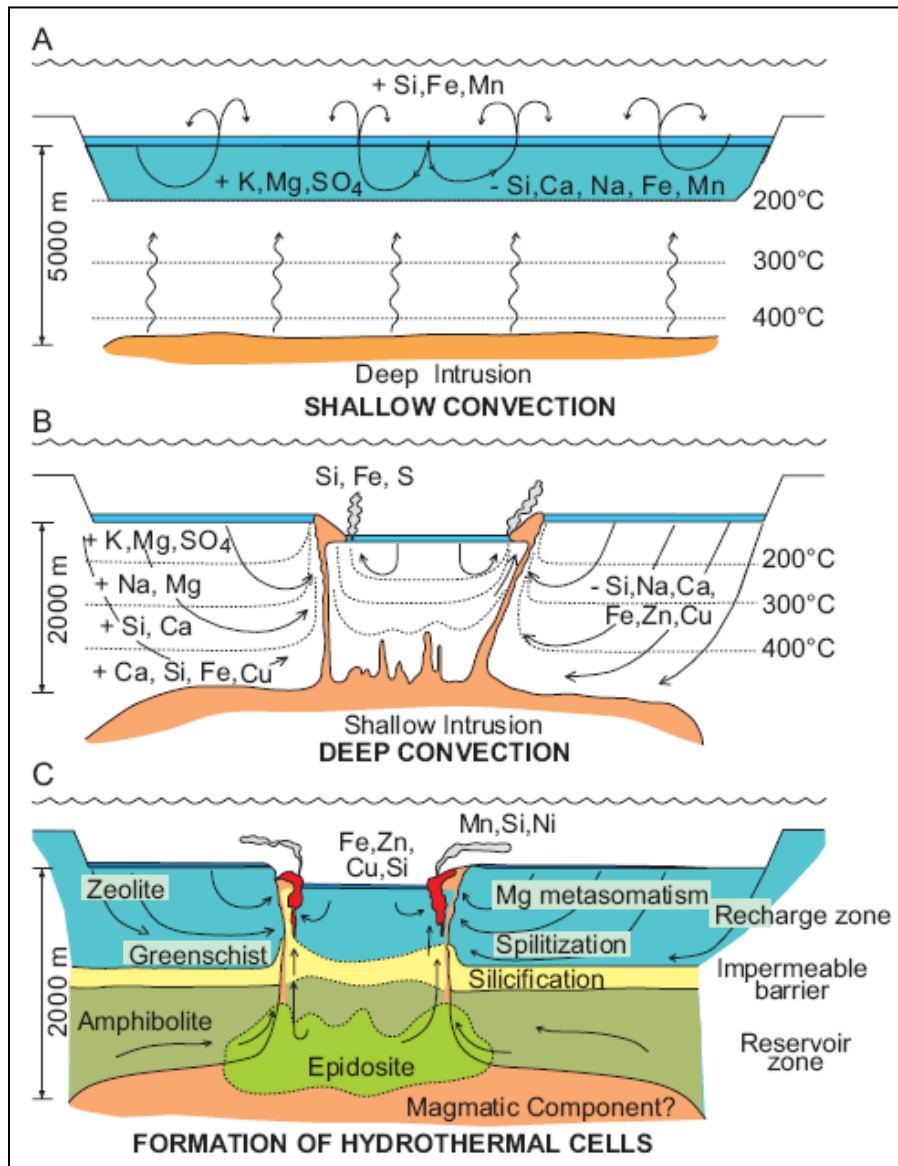
### 7.1. Volcanogenic Massive Sulphide

Volcanogenic massive sulphide (VMS) deposits are significant producers of Zn, Cu, Pb, Ag and Au globally, and may contain a number of associated elements including Co, Sn, Cd, In, Bi, Se, Mn, Te, Ga, Ge ± As, Sb and Hg (Lydon, 1988, Misra, 2000, Galley et al., 2007). VMS deposits are a class of hydrothermal ore deposits which typically occur as lenses of polymetallic massive sulphide that form at or near the seafloor in submarine volcanic environments from metal-enriched fluids associated with seafloor hydrothermal convection (Galley et al., 2007). Deposits range in age from Archean to actively forming deposits in modern seafloor spreading and oceanic arc terranes (Lydon, 1988, Misra, 2008; Galley et al., 2007).

### 7.2. Formation

The six components required for the formation of VMS deposits in a hydrothermal system are: 1) a heat source (subvolcanic intrusion) driving the hydrothermal system; 2) a water-rock interaction zone; 3) fracture/fault zones allowing fluid flow; 4) footwall and/or hanging-wall alteration zones; 5) VMS deposit(s); and 6) distal products of chemical precipitation of sediment in the water column (Figure 6). This model also shows that at different stages in the hydrothermal system, some elements are gained while other are lost. Semi conformable alteration zones (distal to VMS deposits) show increases in Ca-Si-Fe-Na-K-Mg (epidotization-silicification, actinolite-clinzoisite-magnetite, spilitization, and chlorite-sericite±K-feldspar alteration assemblages). Stockwork vein systems (proximal alteration assemblages) show increases in Fe and Mg and depletion in Na, Ca and Si reflecting feldspar destruction (chlorite-quartz-sulphide or sericite-quartz-pyrite±aluminosilicate-rich alteration assemblages; Galley et al., 2007 and Lydon, 1988). The zone overlying subvolcanic intrusions can be altered to amphibolite-facies assemblages followed by Na-Ca-rich greenschist-facies assemblages. Subsequently and in close proximity to the seafloor zeolite-clay, carbonates and sub-greenschist mineral assemblages are found (Galley et al., 2007).

Figure 5: Evolution of a VMS forming hydrothermal system



(A) Deep subvolcanic intrusion initiating a shallow convection system and initial stages of alteration. (B) Higher level intrusion subvolcanic magmas generating a deep convection system. Compositional changes illustrated by elements gained and lost from surrounding rocks controlled by temperature gradients and availability. (C) Maturation of a hydrothermal system forming hydrothermal alteration assemblages. Metal-rich fluids flow via faults/fractures and high temperature zones forming VMS deposits (from Galley, 1993; Galley et al., 2007; Franklin et al., 2005).



## 8: Exploration

Noronex crews visited the Kupfer Property in 2018 and took 20 grab samples from the Kindle, Galena and Perry historic zones. These trenches are located in claim 517661. Results of the Assaying and methods are show in the table below. See Appendix IV for assay certifications and Appendix V for methods specifications.

Sample NO	Desc	Easting	Northing	Zone	ppb		ppm		ppb		ppb	
					Au	Ag	Cu	Zn	Au	Pd	Pt	
Method	FA-AA	AR-ICP	AR-ICP	AR-ICP	FA-ICP	FA-ICP	FA-ICP					
357699	Perry trench -5 m Mas sul channel sample	510968	5589379	83/16U	45	8.1	3230	15				
357700	Perry trench -7 m channel sam 2% cpy mas sul	510969	5589382	83/16U		53.3	> 10000	244	5610	< 5	< 5	
357701	Blast rock 20% cpy Perry trench	510968	5589379	83/16U		> 100	> 10000	813	1560	< 5	< 5	
357702	GT Mas sul py tr zn 1 m wide	510840	5589444	83/16U	13	2.8	341	40				
357703	Ser sch 10% py 8 m wide tr zn	510843	5589445	83/16U	9	2.6	60	130				
357704	Mas sul py cert 3m wide tr zn	510844	5589440	83/16U	7	0.9	26	28				
357705	Ser sch 15% py 2m wide	510843	5589441	83/16U	6	0.9	62	191				
357706	Certy ser sch 5%py tr zn	510843	5589442	83/16U	< 5	0.6	2	12				
357707	Same as 705 across strike	510843	5589442	83/16U	< 5	0.7	9	38				
357708	Intense fracture ser 20%py black min zn? 2m wide	510845	5589438	83/16U	19	1.4	17	11				
357709	Same as 706	510845	5589436	83/16U	17	10	249	440				
357710	Ser sch 15% py 2m wide	510849	5589438	83/16U	5	0.9	27	48				
357711	Same as 710 across strike	510849	5589438	83/16U	10	2.5	17	33				
357712	Certy ser sch 10%py black mineral	510839	5589428	83/16U	13	2.2	126	34				
357713	Semi mass sul py 1m wide cherty	510854	5589434	83/16U	6	0.9	76	286				
357714	Intense ser sch 10% py across d strike to south	510850	5589435	83/16U	6	2.4	372	378				
357715	Ser sch 20% py black mineral 1m wide	510840	5589432	83/16U	17	1.8	84	534				
357716	Sil certy 4% po 1m wide?	510857	5589446	83/16U	8	2.4	535	414				
357717	Same as 718 qtz in rock 5% cpy old pit	510698	5589293	83/16U		12.2	> 10000	138	394	< 5	< 5	
357718	Small pit 1m 1m pit 20% cpy	510699	5589294	83/16U		43.1	> 10000	379	3880	< 5	< 5	

**Table 6 Noronex grab samples results**

## 9: Interpretation and Conclusions

Previous work on the property has proven it to be a viable host for a VMS deposit. There are numerous significant coppers, zinc, lead, silver and gold number to indicate this type of deposit with two styles of base metal mineralization on the Kupfer property. It is worthy to note that both styles of mineralization on the property occur along contacts between mafic metavolcanic rocks and felsic units. Based on the distribution of felsic and metavolcanic rocks a prospective and underexplored horizon extends through the central part of the claim area.

The rock types on the property suggest the right environment, as well as the subtle alteration noted in historic samples. The Kupfer property and surrounding area is considered to be underexplored for volcanogenic massive sulphide (VMS) mineralization.

## 10: Recommendations

Noronex has confirmed the presence of elevated base metal mineralization at some of the historic showings on parts of the Kupfer property. However, there are still numerous untested EM anomalies across the property (Figure 4). These targets should have a ground follow-up initially of detailed mapping, prospecting, and sampling of any mineralization is required to gain a better understanding of the structural settings of the sulphide mineralization. These should be followed up with ground geophysics to help delineate prospective rock units and further exploration targets and sulphide mineralization. The location and re-sampling of the Holland-Chellew occurrence should also be a priority as there is a strong EM anomaly along strike of its approximate location.

The Property has undergone continued logging since the last work was performed, it is recommended that the first thing that should be done is to thoroughly examine the cut-over areas to see if the logging and subsequent scarifying has uncovered any new outcrop. New areas of bedrock exposure should be thoroughly mapped, prospected and any mineralization sampled. The new logging roads will allow for easier and quicker access to more locations on the Property

## 11: References

- Note:** Notations listed in the references below in the format “AFRI 41P14NW0027” refer to assessment files archived with the Ontario Ministry of Northern Development and Mines on the MENDM website ([www.geologyontario.mndm.gov.on.ca/](http://www.geologyontario.mndm.gov.on.ca/)).
- Carter, N.C.(2003): Muriel Lake Property, NTS 42L07/NW, Ministry of Northern Development and Mines Assessment Report 42L07NW2003.
- Clark, J. Garry (2019): Technical Report On the Kupfer Property Thunder Bay Mining Division Ontario, Canada
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- Galley, A.G., 1993. Semi-conformable alteration zones in volcanogenic massive sulphide districts, *Journal of Geochemical Exploration*, v. 48, p. 175-200.
- Galley, A.G., Hannington, M.D., and Jonasson, I.R., 2007. Volcanogenic massive sulphide deposits. *In* Goodfellow, W.D., ed., Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods, Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 141-161.
- Kindle, L.F. (1932): Kowkash-Ogoki gold area, Ontario Department of Mines Annual Report, 1931, v.40, pt.4, p.55-104
- Lydon, J.W.,1988. Volcanogenic massive sulphide deposits, Part 2: Genetic model. *Geoscience Canada Reprints Series 3*, p. 155-182.
- Misra, K.C., 2000.Chapter 10: Volcanic-associated massive sulphide (VMS) deposits. *Understanding mineral deposits*, p. 450-496.

OFR5630, 1986; Ontario Geological Survey Open File Report 5630, Gold Occurrences, Prospects, and Deposits of the Beardmore-Geraldton Area Districts of Thunder Bay and Cochrane, Volume 1.

Stott.G.M. and Parker, J.R. (1996): Project Unit 95-13, Geology and Mineralization of the O'sullivan Lake area, Onaman-Tashota Greenstone Belt, East Wabigoon Subprovince, in Summary of Field Work and Other Activities 1997, Ontario Geological Survey Miscellaneous Report 168, p.48-56

Waddington, D.H. (1982): Geology of the Muriel Lake Group, NTS 42L/7, Ministry of Northern Development and Mines Assessment Report 42L07NW001

## 12. CERTIFICATION OF QUALIFICATIONS

I, Cathy Salo, of 475 Francis St. East, Thunder Bay, Ontario, do hereby certify that:

1. I hold a Bachelor of Science Degree in Earth Science (1989) from Memorial University of Newfoundland, St. John's, Newfoundland and Labrador.
2. I have practiced my profession in Ontario since 1989 and have been employed directing by Ontario mining exploration companies for the last 17 years as the sole proprietary of Salo Geoscience Services.



**Cathy Salo**  
**Salo Geoscience Services**  
**Date: March 15, 2020**

**Appendix I  
Personnel**

<b>Contractors/Personnel</b>	<b>Name</b>	<b>Description</b>
<b>Gary Clark Exploration</b>	<b>Gary Clark</b>	<b>Report</b>
<b>Mick Stares</b>	<b>Mick Stareds</b>	<b>Compilation of data, create Maps, determine targets and exploration program, Prospecting</b>
<b>Hickman Prospecting</b>	<b>Cliff Hickman</b>	<b>Propecting</b>
<b>Bob Heilman</b>	<b>Bob Heilman</b>	<b>Propecting</b>
<b>Salo Geoscience</b>	<b>Cathy Salo</b>	<b>GIS, report</b>

**Appendix II  
Claim Details**



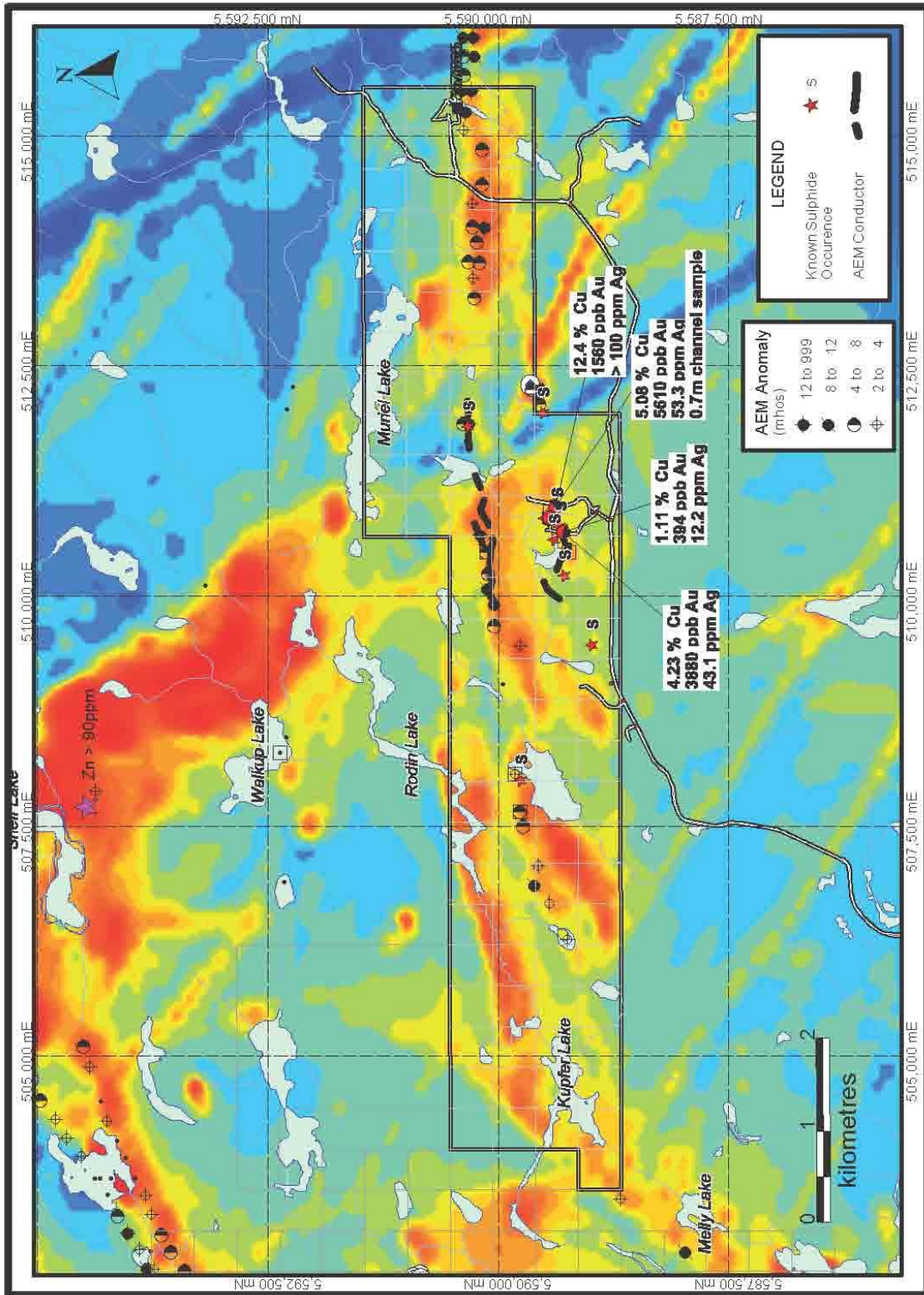
The Kupfer Project consists of 111 cell claims with a total area of 22.81 km<sup>2</sup> or 2281 hectares. All claims are held by Noronex Ltd. These claims were staked after the April 2018 conversion so there are no “legacy claims” for this property.

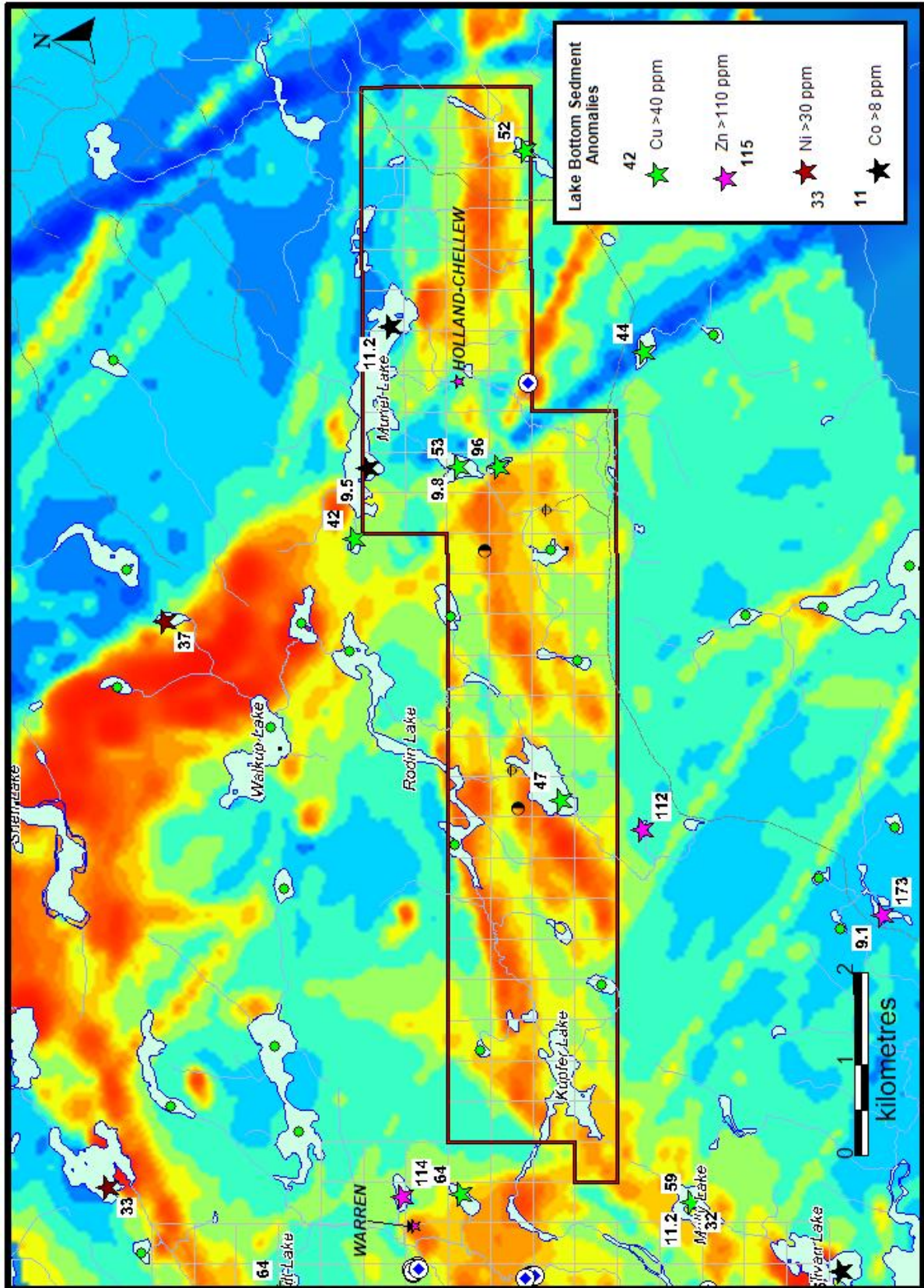
Township / Area	Tenure ID	Tenure Type	Anniversary Date	Work Required
MAUN LAKE AREA	511003	Single Cell Mining Claim	2020-04-10	400
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MAUN LAKE AREA	511005	Single Cell Mining Claim	2020-04-10	400
MAUN LAKE AREA	511006	Single Cell Mining Claim	2020-04-10	400
MAUN LAKE AREA	511007	Single Cell Mining Claim	2020-04-10	400
MAUN LAKE AREA	511008	Single Cell Mining Claim	2020-04-10	400
MAUN LAKE AREA	511009	Single Cell Mining Claim	2020-04-10	400
MAUN LAKE AREA	511010	Single Cell Mining Claim	2020-04-10	400
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MAUN LAKE AREA	511016	Single Cell Mining Claim	2020-04-10	400
MAUN LAKE AREA	511017	Single Cell Mining Claim	2020-04-10	400
MAUN LAKE AREA	511018	Single Cell Mining Claim	2020-04-10	400
MAUN LAKE AREA	511019	Single Cell Mining Claim	2020-04-10	400
MAUN LAKE AREA	511020	Single Cell Mining Claim	2020-04-10	400
MAUN LAKE AREA	511021	Single Cell Mining Claim	2020-04-10	400
MAUN LAKE AREA	511022	Single Cell Mining Claim	2020-04-10	400
MAUN LAKE AREA	511023	Single Cell Mining Claim	2020-04-10	400
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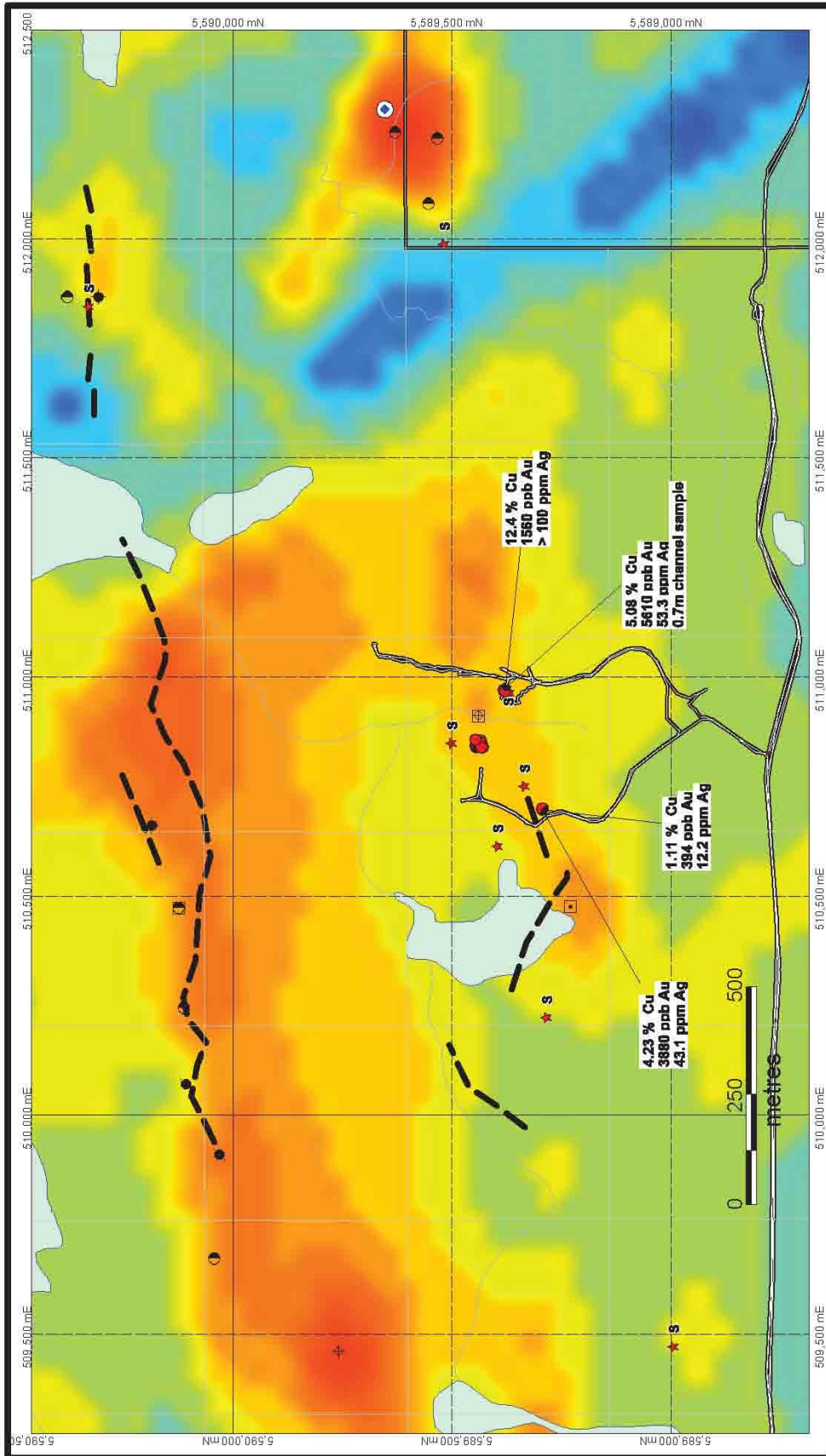
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MAUN LAKE AREA	517639	Single Cell Mining Claim	2020-04-19	400
MAUN LAKE AREA	517640	Single Cell Mining Claim	2020-04-19	400
MAUN LAKE AREA	517641	Single Cell Mining Claim	2020-04-19	400
MAUN LAKE AREA	517642	Single Cell Mining Claim	2020-04-19	400
MAUN LAKE AREA	517643	Single Cell Mining Claim	2020-04-19	400
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MAUN LAKE AREA	517683	Single Cell Mining Claim	2020-04-19	400
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MAUN LAKE AREA	517685	Single Cell Mining Claim	2020-04-19	400

<b>Township / Area</b>	<b>Tenure ID</b>	<b>Tenure Type</b>	<b>Anniversary Date</b>	<b>Work Required</b>
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MAUN LAKE AREA	517721	Single Cell Mining Claim	2020-04-19	400
<b>Total Work Required</b>				<b>\$44,400.00</b>

**Appendix III  
Michael Stares  
Maps**







KUPFER PROPERTY

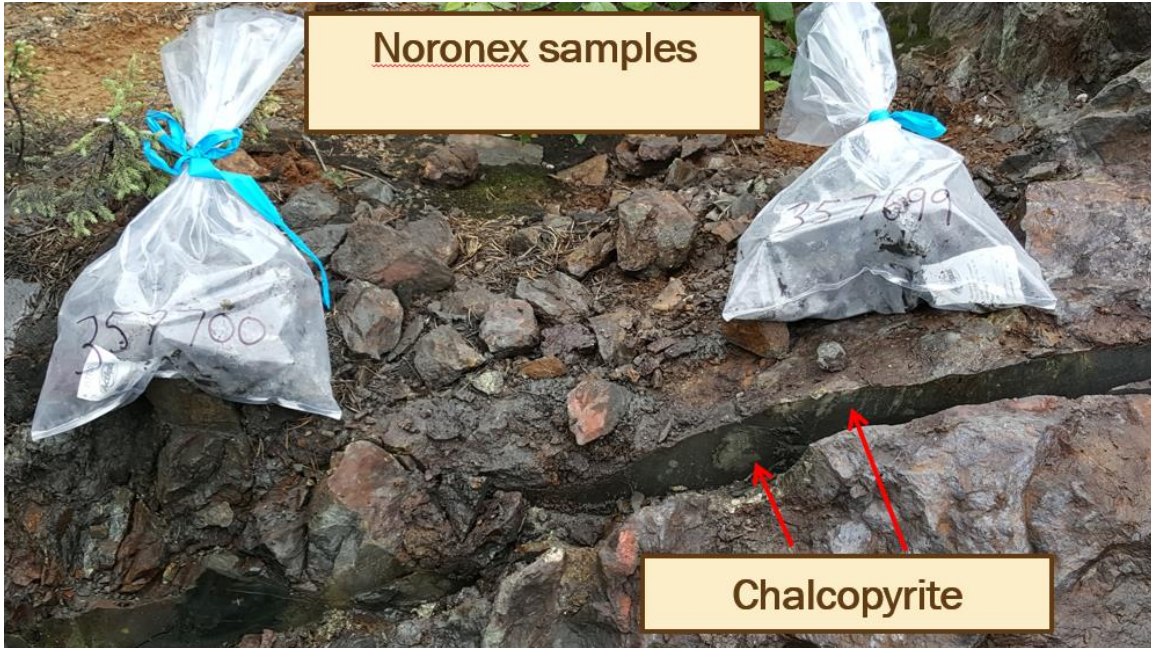
**Appendix IV - Pictures**



## Perry Trench Pictures



Massive Sulfides in Perry Trench. Noronex Channel Sample Assayed 12% Cu, 5.610 gpt/Au 53 gpt/Ag



**Galena**





**Appendix V**  
**Assay Certifications**



**Date Submitted:** 20-Jul-18  
**Invoice No.:** A18-09492  
**Invoice Date:** 30-Aug-18  
**Your Reference:** Noronex-Geraldton

**Stares Contracting**  
**684 Squier St.**  
**Thunder Bay ON P7B 4A8**  
**Canada**

**ATTN: Mick Stares**

## CERTIFICATE OF ANALYSIS

104 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-Tbay Au - Fire Assay AA (QOP Fire Assay Tbay)  
Code 1C-OES-Tbay Fire Assay ICPOES (QOP Fire Assay Tbay)  
Code 1E3-Tbay Aqua Regia ICP(AQUAGEO)

REPORT **A18-09492**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

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:

A handwritten signature in black ink, appearing to be "Emmanuel Esemé". The signature is written in a cursive, somewhat stylized font.

Emmanuel Esemé , Ph.D.  
Quality Control

**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](mailto:Tbay@actlabs.com) ACTLABS GROUP WEBSITE [www.actlabs.com](http://www.actlabs.com)

Results

Activation Laboratories Ltd.

Report: A18-09492

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

357699	45	8.1	< 0.5	3230	141	< 1	447	3	15	0.02	4	< 10	< 10	< 0.5	6	0.08	1300	< 1	> 30.0	< 10	< 1	< 0.01	< 10
357700		53.3	3.1	> 10000	332	3	181	< 2	244	0.77	< 2	< 10	< 10	< 0.5	7	0.84	511	49	24.1	< 10	2	0.15	< 10
357701		> 100	14.5	> 10000	122	< 1	135	< 2	813	0.03	< 2	< 10	< 10	< 0.5	< 2	0.06	425	< 1	> 30.0	< 10	2	< 0.01	< 10
357702	13	2.8	< 0.5	341	129	3	514	8	40	0.46	26	< 10	< 10	< 0.5	< 2	0.76	166	149	20.8	< 10	< 1	< 0.01	< 10
357703	9	2.6	1.7	60	78	5	39	87	130	0.64	38	< 10	16	< 0.5	< 2	0.86	16	260	2.86	< 10	< 1	0.06	< 10
357704	7	0.9	< 0.5	26	27	< 1	32	12	28	0.13	56	< 10	< 10	< 0.5	< 2	0.13	52	7	19.7	< 10	< 1	0.02	< 10
357705	6	0.9	1.1	62	45	3	80	26	191	0.57	76	< 10	< 10	< 0.5	< 2	0.45	61	20	18.2	< 10	< 1	0.08	< 10
357706	< 5	0.6	< 0.5	2	31	< 1	43	11	12	0.22	81	< 10	< 10	< 0.5	< 2	0.25	48	16	19.1	< 10	< 1	0.02	< 10
357707	< 5	0.7	< 0.5	9	36	< 1	50	15	38	0.30	89	< 10	< 10	< 0.5	2	0.32	41	8	19.2	< 10	< 1	0.03	< 10
357708	19	1.4	< 0.5	17	36	3	46	149	11	0.26	95	< 10	< 10	< 0.5	2	1.48	59	21	16.4	< 10	< 1	0.02	< 10
357709	17	10.0	4.8	249	173	< 1	115	2060	440	1.95	20	< 10	< 10	< 0.5	< 2	3.52	6	62	4.75	< 10	< 1	< 0.01	< 10
357710	5	0.9	0.5	27	49	4	31	38	48	0.30	50	< 10	< 10	< 0.5	< 2	1.48	67	14	10.2	< 10	2	0.02	< 10
357711	10	2.5	0.8	17	54	7	8	302	33	0.11	66	< 10	15	< 0.5	< 2	0.22	28	15	8.40	< 10	2	0.14	< 10
357712	13	2.2	< 0.5	126	51	4	19	20	34	0.29	45	< 10	38	< 0.5	< 2	0.26	2	94	4.26	< 10	< 1	0.13	< 10
357713	6	0.9	1.0	76	127	< 1	91	11	286	1.30	87	< 10	< 10	< 0.5	< 2	0.48	53	19	19.3	< 10	< 1	0.06	< 10
357714	6	2.4	< 0.5	372	459	3	276	9	378	3.43	19	18	11	0.7	< 2	1.96	29	719	10.7	10	1	0.26	< 10
357715	17	1.8	8.4	84	186	3	83	309	534	0.83	51	< 10	10	< 0.5	< 2	0.75	84	96	11.9	< 10	2	0.34	< 10
357716	8	2.4	1.8	535	675	1	139	123	414	5.33	15	15	22	0.6	2	2.35	64	166	9.62	20	< 1	1.18	< 10

Results

Activation Laboratories Ltd.

Report: A18-09492

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
257724		0.7	> 0.5	870	257	2	168	131	84	2.60	> 2	> 10	> 10	> 0.5	> 2	2.31	114	23	10.7	10	1	> 0.01	> 10



**Results**

**Activation Laboratories Ltd.**

**Report: A18-09492**

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

Results

Activation Laboratories Ltd.

Report: A18-09492

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	Au	Pd	Pt	Au
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	g/tonne
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	2	5	5	0.03
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	FA-ICP	FA-ICP	FA-ICP	FA- GRA

357699	0.06	0.016	0.004	17.6	10	< 1	< 1	< 0.01	< 20	5	3	< 10	6	< 10	< 1	8				
357700	0.53	0.094	0.021	12.2	7	4	2	0.05	< 20	2	3	< 10	36	< 10	3	7	5610	< 5	< 5	
357701	0.04	0.013	0.029	10.9	7	< 1	< 1	< 0.01	< 20	5	3	< 10	11	< 10	< 1	7	1560	< 5	< 5	
357702	0.05	0.014	0.027	> 20.0	12	3	14	0.41	< 20	1	< 2	< 10	52	< 10	3	14				
357703	0.04	0.021	0.003	2.93	3	6	14	0.21	< 20	< 1	< 2	< 10	43	< 10	1	5				
357704	0.01	0.028	0.003	> 20.0	10	< 1	2	0.05	< 20	2	< 2	< 10	9	< 10	< 1	8				
357705	0.06	0.024	0.018	> 20.0	8	2	8	0.09	< 20	< 1	< 2	< 10	19	< 10	5	26				
357706	0.01	0.017	0.003	> 20.0	8	< 1	5	0.04	< 20	2	< 2	< 10	8	< 10	1	9				
357707	0.03	0.018	0.007	> 20.0	4	< 1	8	0.05	< 20	< 1	< 2	< 10	10	< 10	2	11				
357708	0.01	0.016	0.004	> 20.0	6	< 1	12	0.12	< 20	< 1	< 2	< 10	11	< 10	1	13				
357709	0.09	0.017	0.031	3.04	12	8	38	0.39	< 20	2	< 2	< 10	92	< 10	8	7				
357710	< 0.01	0.016	0.002	14.2	4	< 1	12	0.05	< 20	< 1	< 2	< 10	6	< 10	2	11				
357711	0.16	0.027	0.005	4.74	4	< 1	2	0.19	< 20	2	< 2	< 10	16	< 10	< 1	17				
357712	0.03	0.023	0.007	1.26	3	3	4	0.20	< 20	2	< 2	< 10	55	< 10	1	12				
357713	0.12	0.065	0.021	> 20.0	8	2	8	0.09	< 20	4	< 2	< 10	23	< 10	4	25				
357714	0.58	0.057	0.023	8.62	5	11	30	0.20	< 20	< 1	< 2	< 10	70	< 10	9	17				
357715	0.25	0.027	0.023	14.1	4	3	23	0.17	< 20	2	< 2	< 10	23	< 10	6	22				
357716	1.85	0.245	0.029	6.49	5	11	33	0.36	< 20	< 1	< 2	< 10	227	< 10	11	6				

**Results**

**Activation Laboratories Ltd.**

**Report: A18-09492**

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	Au	Pd	Pt	Au
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	g/tonne
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	2	5	5	0.03
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	FA-ICP	FA-ICP	FA-ICP	FA- GRA

**Results**

**Activation Laboratories Ltd.**

**Report: A18-09492**

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	Au	Pd	Pt	Au
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	g/tonne
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	2	5	5	0.03
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	FA-ICP	FA-ICP	FA-ICP	FA- GRA

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
PK2 Meas																							
PK2 Cert																							
PK2 Meas																							
PK2 Cert																							
OREAS 904 (Aqua Regia) Meas		0.3	< 0.5	6200	421	2	34	8	25	2.04	89		74	7.4	< 2	0.05	89	27	6.31	< 10		0.93	41
OREAS 904 (Aqua Regia) Cert		0.366	0.0580	6300	410	2.02	36.6	8.49	22.4	1.25	91.0		68.0	6.54	3.74	0.0404	82.0	17.5	6.40	3.40		0.603	33.9
OREAS 904 (Aqua Regia) Meas		0.3	< 0.5	6080	420	3	33	8	24	1.86	86		72	7.2	< 2	0.05	86	25	6.15	< 10		0.85	41
OREAS 904 (Aqua Regia) Cert		0.366	0.0580	6300	410	2.02	36.6	8.49	22.4	1.25	91.0		68.0	6.54	3.74	0.0404	82.0	17.5	6.40	3.40		0.603	33.9
OREAS 904 (Aqua Regia) Meas		0.3	< 0.5	6250	430	2	34	8	25	1.91	91		75	7.4	3	0.05	92	26	6.32	< 10		0.87	41
OREAS 904 (Aqua Regia) Cert		0.366	0.0580	6300	410	2.02	36.6	8.49	22.4	1.25	91.0		68.0	6.54	3.74	0.0404	82.0	17.5	6.40	3.40		0.603	33.9
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2230	729	< 1	34	57	263	2.94	5		80	0.8	6	0.44	19	49	5.17	< 10		0.49	39
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	2250	725	< 1	33	57	260	2.89	5		79	0.8	5	0.43	20	47	5.28	< 10		0.47	40
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		1.1	< 0.5	2250	735	< 1	34	62	264	2.90	6		79	0.8	5	0.43	19	49	5.32	< 10		0.47	39
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		1.6	< 0.5	4250	813	< 1	33	74	335	2.92	5		67	0.7	20	0.44	21	45	5.82	< 10		0.42	36
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		1.7	0.6	4270	797	< 1	31	72	324	2.80	7		63	0.7	17	0.41	20	42	5.75	< 10		0.39	36
OREAS 923 (AQUA REGIA)		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

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
Cert																							
OREAS 923 (AQUA REGIA) Meas		1.5	< 0.5	4460	825	< 1	31	81	339	2.89	9		62	0.7	14	0.43	21	44	5.92	< 10		0.39	36
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 216 (Fire Assay) Meas																							
OREAS 216 (Fire Assay) Cert																							
OREAS 229 (Fire Assay) Meas																							
OREAS 229 (Fire Assay) Cert																							
OREAS 217 (Fire Assay) Meas	328																						
OREAS 217 (Fire Assay) Cert	338																						
OREAS 217 (Fire Assay) Meas	335																						
OREAS 217 (Fire Assay) Cert	338																						
OREAS 217 (Fire Assay) Meas	330																						
OREAS 217 (Fire Assay) Cert	338																						
Oreas 621 (Aqua Regia) Meas		64.7	287	3580	497	14	29	> 5000	> 10000	1.79	70			0.6	< 2	1.64	29	35	3.34	10	3	0.37	20
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		65.2	280	3510	503	13	24	> 5000	> 10000	1.70	73			0.6	2	1.67	28	30	3.32	10	4	0.35	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		66.0	286	3580	504	13	24	> 5000	> 10000	1.75	73			0.6	5	1.68	29	30	3.35	10	4	0.35	20
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 215 (Fire Assay) Meas	3580																						
OREAS 215 (Fire Assay) Cert	3540																						
OREAS 215 (Fire Assay) Meas	3530																						
OREAS 215 (Fire Assay) Cert	3540																						
OREAS 215 (Fire Assay) Meas	3510																						

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) Meas																							
OREAS 215 (Fire Assay) Cert	3540																						
357690 Orig	< 5																						
357690 Dup	< 5																						
357702 Orig	10																						
357702 Dup	16																						
357705 Orig		0.9	1.2	62	45	2	77	24	193	0.57	76	< 10	< 10	< 0.5	< 2	0.45	60	20	18.2	< 10	1	0.08	< 10
357705 Dup		0.9	1.0	61	46	4	82	28	189	0.58	75	< 10	< 10	< 0.5	< 2	0.46	62	20	18.2	< 10	< 1	0.08	< 10
357710 Orig		0.9	0.5	28	49	4	31	39	47	0.30	50	< 10	< 10	< 0.5	< 2	1.49	68	14	10.3	< 10	3	0.03	< 10
357710 Dup		0.9	0.6	27	48	3	31	38	48	0.29	50	< 10	< 10	< 0.5	< 2	1.46	67	15	10.2	< 10	2	0.02	< 10
357712 Orig	14																						
357712 Dup	12																						
357728 Orig		0.3	< 0.5	9	536	< 1	27	4	28	0.12	235	< 10	< 10	< 0.5	5	0.29	26	18	23.1	< 10	< 1	0.01	< 10
357728 Dup		0.2	< 0.5	5	536	< 1	31	3	30	0.12	248	< 10	< 10	< 0.5	5	0.29	31	18	26.1	< 10	2	0.01	< 10
357731 Orig	< 5	0.2	< 0.5	12	4920	< 1	5	< 2	6	0.72	2	< 10	35	< 0.5	< 2	2.14	4	6	13.2	< 10	< 1	0.05	11
357731 Split PREP DUP	< 5	0.3	< 0.5	13	4940	< 1	9	3	5	0.73	< 2	< 10	36	< 0.5	< 2	2.18	4	6	13.1	< 10	2	0.05	11
357735 Orig	< 5																						
357735 Dup	< 5																						
357741 Orig		0.3	< 0.5	30	1900	< 1	19	< 2	15	0.68	< 2	< 10	17	< 0.5	< 2	0.59	11	8	12.2	< 10	1	0.15	15
357741 Dup		0.3	< 0.5	31	1880	< 1	14	< 2	16	0.68	< 2	< 10	19	< 0.5	< 2	0.59	11	8	12.1	< 10	2	0.16	16
357744 Orig																							
357744 Dup																							
357746 Orig	7																						
357746 Dup	8																						
357756 Orig	< 5																						
357756 Dup	< 5																						
357813 Orig		< 0.2	< 0.5	53	968	2	52	4	39	1.11	46	< 10	15	< 0.5	< 2	0.13	41	33	10.4	< 10	2	0.11	< 10
357813 Dup		< 0.2	< 0.5	53	969	1	54	6	40	1.12	47	< 10	15	< 0.5	< 2	0.13	39	30	10.5	< 10	< 1	0.11	< 10
357816 Orig	< 5																						
357816 Dup	< 5																						
357818 Orig																							
357818 Dup																							
357825 Orig	6	0.2	0.7	36	2510	3	19	6	143	2.30	151	< 10	27	< 0.5	< 2	0.20	13	140	11.9	10	< 1	0.09	< 10
357825 Split PREP DUP	5	0.2	0.6	35	2570	3	19	6	136	2.27	150	< 10	25	< 0.5	< 2	0.20	13	136	12.2	10	3	0.09	< 10
357825 Orig		0.2	0.6	37	2520	3	19	5	147	2.31	152	< 10	26	< 0.5	< 2	0.20	13	140	12.0	10	< 1	0.09	< 10
357825 Dup		0.2	0.9	34	2510	3	20	8	140	2.29	149	< 10	27	< 0.5	< 2	0.20	12	139	11.8	10	< 1	0.09	< 10
357904 Orig	13																						
357904 Dup	14																						
Method Blank	< 5																						
Method Blank	< 5																						

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
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank																							
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
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	5	7	< 1	< 1	< 2	5	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank																							



Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	Au	Pd	Pt	Au
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	g/tonne
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	2	5	5	0.03
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	FA-ICP	FA-ICP	FA-ICP	FA- GRA
PK2 Meas																	5080	5950	5000	
PK2 Cert																	4790	5918.0 00	4749.0 00	
PK2 Meas																	4860	5790	4740	
PK2 Cert																	4790	5918.0 00	4749.0 00	
OREAS 904 (Aqua Regia) Meas	0.22		0.098	0.04	3	5	19	< 20			< 2	< 10	34		19					
OREAS 904 (Aqua Regia) Cert	0.143		0.0950	0.0340	0.780	3.83	16.5	7.56			0.150	5.20	21.7		17.2					
OREAS 904 (Aqua Regia) Meas	0.21		0.096	0.04	4	5	18	< 20			< 2	< 10	33		19					
OREAS 904 (Aqua Regia) Cert	0.143		0.0950	0.0340	0.780	3.83	16.5	7.56			0.150	5.20	21.7		17.2					
OREAS 904 (Aqua Regia) Meas	0.21		0.099	0.05	4	5	19	< 20			< 2	< 10	34		19					
OREAS 904 (Aqua Regia) Cert	0.143		0.0950	0.0340	0.780	3.83	16.5	7.56			0.150	5.20	21.7		17.2					
OREAS 922 (AQUA REGIA) Meas	1.37	0.035	0.063	0.36	3	4	16	< 20			< 2	< 10	38	< 10	22	17				
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	1.37	0.033	0.064	0.37	< 2	4	16	< 20			< 2	< 10	38	< 10	22	32				
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	1.37	0.035	0.065	0.38	3	4	16	< 20			< 2	< 10	38	< 10	22	33				
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	1.45		0.060	0.67	3	4	14	< 20			< 2	< 10	37	< 10	20	28				
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	1.43		0.060	0.65	3	4	14	< 20			< 2	< 10	35	< 10	19	36				

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	Au	Pd	Pt	Au
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	g/tonne
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	2	5	5	0.03
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	FA-ICP	FA-ICP	FA-ICP	FA- GRA
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	1.46		0.061	0.68	3	4	14		< 20		< 2	< 10	36	< 10	20	33				
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 216 (Fire Assay) Meas																				6.58
OREAS 216 (Fire Assay) Cert																				6.66
OREAS 229 (Fire Assay) Meas																				12.0
OREAS 229 (Fire Assay) Cert																				12.1
OREAS 217 (Fire Assay) Meas																				
OREAS 217 (Fire Assay) Cert																				
OREAS 217 (Fire Assay) Meas																				
OREAS 217 (Fire Assay) Cert																				
OREAS 217 (Fire Assay) Meas																				
OREAS 217 (Fire Assay) Cert																				
Oreas 621 (Aqua Regia) Meas	0.45	0.191	0.033	4.45	119	3	18		< 20		< 2	< 10	13	< 10	8	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	0.45	0.174	0.034	4.47	123	2	17		< 20		< 2	< 10	13	< 10	8	65				
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	0.45	0.181	0.034	4.53	125	2	18		< 20		< 2	< 10	13	< 10	8	66				
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 215 (Fire Assay) Meas																				
OREAS 215 (Fire Assay) Cert																				
OREAS 215 (Fire Assay) Meas																				

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	Au	Pd	Pt	Au	
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	g/tonne	
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	2	5	5	0.03	
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	FA-ICP	FA-ICP	FA-ICP	FA- GRA	
OREAS 215 (Fire Assay) Cert																					
OREAS 215 (Fire Assay) Meas																					
OREAS 215 (Fire Assay) Cert																					

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	Au	Pd	Pt	Au	
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	g/tonne	
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	2	5	5	0.03	
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	FA-ICP	FA-ICP	FA-ICP	FA- GRA	
357904 Dup																					
Method Blank																					
Method Blank																					
Method Blank																					
Method Blank																					
Method Blank																					
Method Blank																		< 2	< 5	< 5	
Method Blank	< 0.01	0.015	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 0.01	0.015	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 0.01	0.016	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 0.01	0.014	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 0.01	0.013	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 0.01	0.013	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank																					< 0.03



**Date Submitted:** 20-Jul-18  
**Invoice No.:** A18-09492 (i)  
**Invoice Date:** 10-Sep-18  
**Your Reference:** Noronex-Geraldton

**Stares Contracting**  
**684 Squier St.**  
**Thunder Bay ON P7B 4A8**  
**Canada**

**ATTN: Mick Stares**

## CERTIFICATE OF ANALYSIS

104 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-Tbay Au - Fire Assay AA (QOP Fire Assay Tbay)  
Code 1C-OES-Tbay Fire Assay ICPOES (QOP Fire Assay Tbay)  
Code 1E3-Tbay Aqua Regia ICP(AQUAGEO)

REPORT **A18-09492 (i)**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

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:

A handwritten signature in black ink, appearing to read "Elitsa Hrischeva".

Elitsa Hrischeva, Ph.D.  
Quality Control

**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](mailto:Tbay@actlabs.com) ACTLABS GROUP WEBSITE [www.actlabs.com](http://www.actlabs.com)

Analyte Symbol	Ag	Cu	Zn
Unit Symbol	ppm	%	%
Lower Limit	3	0.001	0.001
Method Code	ICP-OES	ICP-OES	ICP-OES
357683			
357685			
357687			
357700		5.08	
357701	145	12.4	

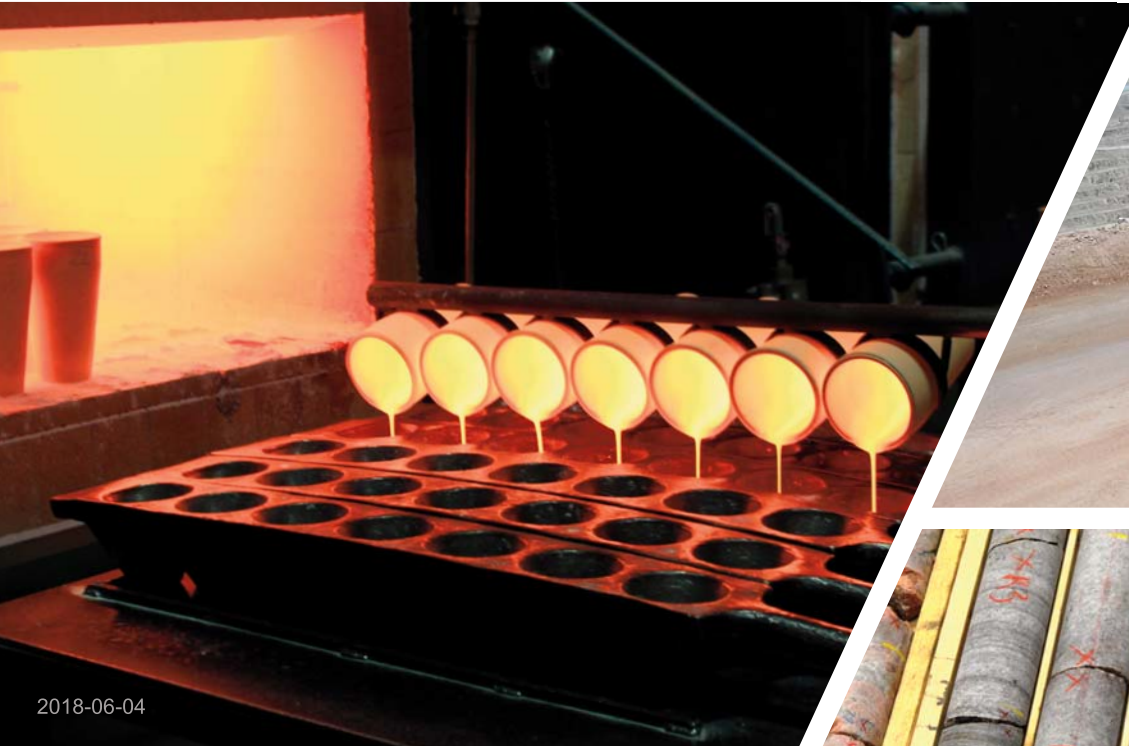
Analyte Symbol	Ag	Cu	Zn
Unit Symbol	ppm	%	%
Lower Limit	3	0.001	0.001
Method Code	ICP-OES	ICP-OES	ICP-OES
CZN-3 Meas	43	0.685	51.1
CZN-3 Cert	45	0.685	50.9
MP-1b Meas	50	3.10	16.9
MP-1b Cert	47	3.07	16.7
CCU-1d Meas	121	23.9	2.55
CCU-1d Cert	120.7	23.93	2.63
CPB-2 Meas		0.127	6.20
CPB-2 Cert		0.1213	6.04
PTC-1b Meas	50	7.86	0.219
PTC-1b Cert	53	7.97	0.2083
Method Blank	< 3	< 0.001	0.001



**Appendix VI**  
**Lab Method – Brochure**



# Activation Laboratories Ltd.



2018-06-04

## Schedule of Services and Fees Geochemistry - CDN 2018



[www.actlabs.com](http://www.actlabs.com)

## Sample Preparation Packages

To obtain meaningful analytical results, it is imperative that sample collection and preparation be done properly. Actlabs can advise on sampling protocol for your field program if requested. Once the samples arrive in the laboratory, Actlabs will ensure that they are prepared properly. As a routine practice with rock and core, the entire sample is crushed to a nominal -2 mm, mechanically split to obtain a representative sample and then pulverized to at least 95% -105 microns ( $\mu\text{m}$ ). All of our steel mills are now mild steel and do not introduce Cr or Ni contamination. Quality of crushing and pulverization is routinely checked as part of our quality assurance program. Samples submitted in an unorganized fashion will be subject to a sorting surcharge and may substantially slow turnaround time. Providing an accurate detailed sample list by e-mail will also aid in improving turnaround time and for Quality Control purposes.

### Rock, Core and Drill Cuttings

Code RX1	Crush (< 7 kg) up to 80% passing 2 mm, riffle split (250 g) and pulverize (mild steel) to 95% passing 105 $\mu\text{m}$ included cleaner sand	\$11.50
Code RX1-ORE	Crush up to 90% passing 2 mm	add \$2.10
Code RX1+500	500 grams pulverized	add \$1.25
Code RX1+800	800 grams pulverized	add \$2.25
Code RX1+1000	1000 grams pulverized	add \$2.75
Code RX1-SD	Crush (< 7 kg) up to 80% passing 2 mm, rotary split (250 g) and pulverized (mild steel) to 95% passing 105 $\mu\text{m}$	\$10.75
Code RX1-SD-ORE	Crush up to 90% passing 2 mm	add \$2.10
Code RX3	Oversize charge per kilogram for crushing	\$1.25
Code RX4	Pulverization only (mild steel) (coarse pulp or crushed rock) (< 800 g)	\$7.25
Code RX5	Pulverize ceramic (100 g)	\$18.75
Code RX6	Hand pulverize small samples (agate mortar & pestle) (<5g)	\$18.75
Code RX7	Crush and split (< 5 kg )	\$5.50
Code RX8	Sample prep only surcharge, no analyses	\$4.75
Code RX9	Compositing (per composite) dry weight	\$2.75
Code RX10	Weight (kg) as received	\$2.25
Code RX11	Checking quality of pulps or rejects prepared by other labs and issuing report	\$10.00
Code RX12	Ball Mill preparation	on request
Code RX13	Rod Mill preparation	on request
Code RX14	Core cutting	on request
Code RX15	Special Preparation/Hour	\$68.25
Code RX16	Specific Gravity on Core	\$17.00
Code RX16-W	Specific Gravity (WAX) on friable samples	\$22.75
Code RX17	Specific Gravity on the pulp	\$17.00
Code RX17-GP	Specific Gravity on the pulp by gas pycnometer	\$22.75

**Note:** Larger sample sizes than listed above can be pulverized at additional cost.

### Soils, Stream and Lake Bottom Sediments, and Heavy Minerals

Code S1	Drying (60°C) and sieving (-177 $\mu\text{m}$ ) save all portions	\$4.25
Code S1 DIS	Drying (60°C) and sieving (-177 $\mu\text{m}$ ), discard oversize	\$3.75
Code S1-230	Drying (60°C) and sieving (-63 $\mu\text{m}$ ), save oversize	\$5.75
Code S1-230 DIS	Drying (60°C) and sieving (-63 $\mu\text{m}$ ), discard oversize	\$5.50
Code S2	Lake bottom sediment preparation crush & sieve (-177 $\mu\text{m}$ )	\$9.00
Code S3	Alternate size fractions and bracket sieving, add	\$2.75
Code S4	Selective Extractions or SGH drying (40°C) & sieving (-177 $\mu\text{m}$ )	\$4.75
Code S5	Wet or damp samples submitted in plastic bags, add	\$2.10
Code S6	Separating -2 micron material	\$28.25
Code S7mi	Methylene iodide heavy mineral separation specific gravity can be customized (100 grams)	\$73.75
Code S7w	Sodium polytungstate heavy mineral separation specific gravity can be customized (100 grams)	\$73.75
Code S8	Sieve analysis (4 sieve sizes) coarser than 53 $\mu\text{m}$	\$40.00
Code S9	Particle size analysis (laser)	\$102.00

Our Sample Preparation pricing is all-inclusive including: sorting, drying, labeling, new reject bags, using cleaner sand between each sample and crushing samples up to 7 kg (for RX1 and RX1-SD).



Riffle Splitting



Sample Pulverizers

# Sample Preparation

## Sample Preparation Packages

### Biogeochemical Samples

Code B1	Drying and blending humus	\$5.50
Code B2	Drying and macerating vegetation	\$6.75
Code B3	Dry ashing	\$10.00
Code B4	Washing vegetation	\$4.75
Code B5	Samples submitted in plastic bags, add	\$2.10

### Special Digestion Procedures

Code MDI	Microwave digestion - closed vessel	\$46.00
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## Sample Submission, Storage and Return

When submitting samples, please indicate on the Request for Analysis form if you require sample storage, disposal or if you require samples to be returned after analysis. For returns, please include all necessary shipping information e.g., courier, account number, etc. Return of samples is done at cost + 15%. The reject portion of samples prepared by Actlabs will be retained for a period of not more than 60 days from the date of final report. Pulps and rejects stored at the customers request will be subject to a storage charge (see sample submittal sheet for charges) billed quarterly. Irradiated material will be discarded after 30 days unless prior arrangements are made. Return of radioactive material requires a Nuclear Safety Commission licence. Cost per shipment of radioactive materials is \$200.00 plus shipping costs. Disposal of soil, sediment or vegetation samples, which have entered Canada under a CFIA permit, will incur a disposal cost for larger sample volumes.

All soil, sediment and vegetation coming from outside Canada require incineration prior to disposal under CFIA regulations. All pulps and rejects will be returned to the client at cost + 15%. Disposal costs are additional. Pulps and rejects will incur a storage fee after the free period listed.

RTRN	Return of all reject portions and/or pulps	At cost + 15%
INCIN	Incineration of soil, sediment and vegetation samples from outside Canada (for samples up to 0.5 kg; samples over 0.5 kg will have higher incineration costs)	\$0.50
H&R	Handling and retrieval of stored sample material	\$57.75/hour
DISP	Disposal of pulps and reject to landfill site	\$0.45
STORE 1	Monthly storage of reject after 60 days	\$0.30
STORE 2	Monthly storage of pulps after 90 days	\$0.15
STORE 3	Monthly storage of sieve rejects after 3 months	\$0.20

## Gold and Silver Analyses

### Gold and Silver Analyses - Geochem

Code	Method	Sample Weight (g)	Metric Range	Price
1A1	Au Fire Assay - INAA	30	1 - 20,000 ppb	\$20.50
1A2 *	Au Fire Assay - AA	30	5 - 5,000 ppb	\$17.00
1A2-50 *	Au Fire Assay - AA	50	5 - 5,000 ppb	\$19.50
1A2-ICP	Au Fire Assay - ICP-OES	30	2 - 30,000 ppb	\$18.00
1A2-ICP-50	Au Fire Assay - ICP-OES	50	2 - 30,000 ppb	\$20.25
1A2-ICPMS	Au Fire Assay - ICP-MS	30	0.5 - 30,000 ppb	\$26.25
1A6	Au BLEG - ICP-MS	1,000	0.1 - 10,000 ppb	\$45.50
1A8	Au Aqua Regia - ICP-MS	30	0.2 - 2,000 ppb	\$18.00
1E-Ag	Ag Aqua Regia - ICP-OES	0.5	0.2 - 100 ppm	\$6.75



### Gold and Silver Analyses - Assay

Code	Method	Sample Weight (g)	Metric Range	Price
1A3-30	Au Fire Assay - Gravimetric	30	0.03 - 10,000 g/mT	\$22.75
1A3-50	Au Fire Assay - Gravimetric	50	0.02 - 10,000 g/mT	\$24.00
1A3-Ag (Au,Ag)	Au, Ag Fire Assay - Gravimetric	30	0.03 - 10,000 g/mT (Au) 3 - 10,000 g/mT (Ag)	\$26.25
1A4 **	Au Fire Assay - Metallic Screen	500	0.03 g/mT	\$79.50
1A4-1000 **	Au Fire Assay - Metallic Screen	1,000	0.03 g/mT	\$90.75
8-Ag	Ag Fire Assay - Gravimetric	30	3 - 10,000 g/mT	\$24.25

When submitting samples for Au and Ag analysis, or Au, Pt Pd and Rh analysis, please try to ensure you send two-times the listed weight.

## Gold, Platinum, Palladium and Rhodium

Code	Method	Sample Weight (g)	Range (ppb)				Price
			Au	Pt	Pd	Rh	
1C-Exploration	Fire Assay - ICP-MS	30	2 - 30,000	1 - 30,000	1 - 30,000	\$22.75	
1C-EXP 2	Fire Assay - ICP-MS	30	1 - 30,000	0.5 - 30,000	0.5 - 30,000	\$25.00	
1C-research	Fire Assay - ICP-MS	30	1 - 30,000	0.1 - 30,000	0.1 - 30,000	\$36.25	
1C-Rhodium	Fire Assay - ICP-MS	30	-	-	-	5 - 10,000	\$34.25
1C-OES	Fire Assay - ICP-OES	30	2 - 30,000	5 - 30,000	5 - 30,000	\$19.50	
8 Au Pt Pd	Fire Assay - ICP-OES	30	0.001 - 1000 g/mT	0.001 - 1000 g/mT	0.001 - 1000 g/mT	\$51.25	

## Platinum Group Elements

Code	Method	Sample Weight (g)	Range (ppb)								Price
			Os	Ir	Ru	Rh	Pt	Pd	Au	Re	
1B1	NiS Fire Assay - INAA	25	2	0.1	5	0.2	5 <sup>†</sup>	2	0.5	5	1-2 samples \$363.25 3+ samples \$181.75
1B2	NiS Fire Assay - ICP-MS	50	-	1	1	1	1	1	1	1	1-2 samples \$363.25 3+ samples \$181.75

### Organic Sample Surcharge - \$1.25/sample for Fire Assay packages

#### Notes:

Use of 50 gram sample for fire assay may not provide optimum recovery.

For proper fire assay fusion, Actlabs may reduce the sample weights to 15 g or smaller at its discretion.

\* Detection limit can be extended to 10,000 ppb if required. Please specify when required.

\*\* A representative 500 gram or 1000 gram (or customized) sample split is sieved at 150 µm, with assays performed on the entire +150 µm fraction and two splits of the -150 µm fraction. It is important not to overpulverize the sample too finely, as tests have shown gold will plate out on the mill and be lost. When assays have been completed on the coarse and fine portions of the bulk sample, a final assay is calculated based on the weight of each fraction.

† Detection limits for Pt are increased with high Au/Pt ratios and limits for other elements will be affected by abnormally high Au, Sb and Cu content.

Samples with high Au can be reanalyzed by Code 1C exploration or research. Zn concentrates are not amenable to the nickel sulphide fire assay. Au results by Code 1B1 or 1B2 can be low by nickel sulphide fire assay. For accurate Au values, please request Code 1C-exploration.

# Trace Element Geochemistry & Digestion Specific Assays

## Aqua Regia "Partial" Digestion

This leach uses a combination of concentrated hydrochloric and nitric acids to leach sulphides, some oxides and some silicates. Mineral phases which are hardly (if at all) attacked include barite, zircon, monazite, sphene, chromite, gahnite, garnet, ilmenite, rutile and cassiterite. The balance of silicates and oxides are only slightly to moderately attacked, depending on the degree of alteration. Generally, but not always, most base metals and gold are usually dissolved.

**NOTE:** Results from acid digestions may be lab dependent or lab operator dependent. Actlabs has automated this aspect of digestion using a microprocessor designed hotbox to accurately reproduce digestion conditions every time.

**NOTE:** For Code Ultratrace 1, Code Ultratrace 2 and Code UT-1M, Au is semi-quantitative due to the small sample size.

### Hg add-on by cold vapour FIMS

Code 1G (5 ppb)      add \$10.25

### Assays

Package	Code 8 - AR ICP-OES	Code 8 - AR ICP-MS
Ag	3 ppm	-
As	-	0.0004 - 1 %
Bi	-	0.0001 - 1 %
Cd	0.003 %	-
Co	0.003 %	0.0001 - 1 %
Cs	-	0.0001 - 1 %
Cu	0.001 %	0.0001 - 1 %
Fe	0.003 %	-
Ga	-	0.0001 - 1 %
Ge	-	0.0001 - 1 %
Hg	0.001 %	-
In	-	0.0001 - 1 %
Li	-	0.0001 - 1 %
Mo	-	0.0001 - 1 %
Ni	0.003 %	0.0001 - 1 %
Pb	0.003 %	0.0001 - 1 %
Re	-	0.0001 - 1 %
Se	-	0.0001 - 1 %
Sn	-	0.0003 - 1 %
Te	-	0.0001 - 1 %
Th	-	0.0001 - 1 %
Tl	-	0.0001 - 1 %
U	-	0.0001 - 1 %
W	-	0.0001 - 1 %
Zn	0.001 %	0.0001 - 1 %
<b>One Element</b>	<b>\$13.25</b>	<b>\$17.00</b>
<b>Each Additional Element</b>	<b>\$2.25</b>	<b>\$2.25</b>
<b>All Elements</b>	<b>\$19.00</b>	<b>\$22.75</b>

Package	ICP-OES		ICP-MS		ICP-OES + ICP-MS
	1E	1E3	UT-1M	Ultratrace 1	Ultratrace 2
Ag	0.2 - 100 ppm	0.2 - 100 ppm	0.1 - 100 ppm	0.002 - 100 ppm	0.002 - 100 ppm
Al	-	0.01 - 10 %	0.01 - 8 %	0.01 - 8 %	0.01 - 8 %
As	-	2 - 10,000 ppm	0.5 - 10,000 ppm	0.1 - 10,000 ppm	0.1 - 10,000 ppm
Au	-	-	0.5 - 1,000 ppb	0.5 - 10,000 ppb	0.5 - 10,000 ppb
B	-	10 - 10,000 ppm	20 - 2,000 ppm	1 - 5,000 ppm	1 - 5,000 ppm
Ba	-	10 - 10,000 ppm	1 - 10,000 ppm	0.5 - 6,000 ppm	0.5 - 6,000 ppm
Be	-	0.5 - 1,000 ppm	-	0.1 - 1,000 ppm	0.1 - 1,000 ppm
Bi	-	2 - 10,000 ppm	0.1 - 2,000 ppm	0.02 - 2,000 ppm	0.02 - 2,000 ppm
Ca	-	0.01 - 10 %	0.01 - 50 %	0.01 - 50 %	0.01 - 50 %
Cd	0.5 - 2,000 ppm	0.5 - 2,000 ppm	0.1 - 2,000 ppm	0.01 - 2,000 ppm	0.01 - 1,000 ppm
Ce	-	-	-	0.01 - 10,000 ppm	0.01 - 10,000 ppm
Co	-	1 - 10,000 ppm	0.1 - 5,000 ppm	0.1 - 5,000 ppm	0.1 - 5,000 ppm
Cr	-	1 - 10,000 ppm	1 - 10,000 ppm	1 - 10,000 ppm	1 - 10,000 ppm
Cs	-	-	-	0.02 - 500 ppm	0.02 - 500 ppm
Cu	1 - 10,000 ppm	1 - 10,000 ppm	0.2 - 10,000 ppm	0.2 - 10,000 ppm	0.2 - 10,000 ppm
Dy	-	-	-	0.1 - 1,000 ppm	0.1 - 1,000 ppm
Er	-	-	-	0.1 - 1,000 ppm	0.1 ppm
Eu	-	-	-	0.1 - 100 ppm	0.1 ppm
Fe	-	0.01 - 30 %	0.01 - 30 %	0.01 - 30 %	0.01 - 30 %
Ga	-	10 - 10,000 ppm	1 - 1,000 ppm	0.02 - 500 ppm	0.02 - 500 ppm
Gd	-	-	-	0.1 - 1,000 ppm	0.1 - 1,000 ppm
Ge	-	-	-	0.1 - 500 ppm	0.1 - 500 ppm
Hf	-	-	-	0.1 - 500 ppm	0.1 - 500 ppm
Hg	1 - 10,000 ppm	1 - 10,000 ppm	0.01 - 50 ppm	10 - 10,000 ppb	10 - 10,000 ppb
Ho	-	-	-	0.1 - 1,000 ppm	0.1 - 1,000 ppm
In	-	-	-	0.02 - 500 ppm	0.02 - 500 ppm
K	-	0.01 - 10 %	0.01 - 5 %	0.01 - 5 %	0.01 - 5 %
La	-	10 - 10,000 ppm	1 - 10,000 ppm	0.5 - 10,000 ppm	0.5 - 1,000 ppm
Li	-	-	-	0.1 - 10,000 ppm	0.1 - 10,000 ppm
Lu	-	-	-	0.1 - 100 ppm	0.1 - 100 ppm
Mg	-	0.01 - 25 %	0.01 - 10 %	0.01 - 10 %	0.01 - 10 %
Mn	2 - 100,000 ppm	5 - 100,000 ppm	1 - 10,000 ppm	1 - 10,000 ppm	1 - 10,000 ppm
Mo	2 - 10,000 ppm	1 - 10,000 ppm	0.1 - 10,000 ppm	0.01 - 10,000 ppm	0.01 - 10,000 ppm
Na	-	0.001 - 10 %	0.001 - 5 %	0.001 - 5 %	0.001 - 5 %
Nb	-	-	-	0.1 - 500 ppm	0.1 - 500 ppm
Nd	-	-	-	0.02 - 5,000 ppm	0.02 - 5,000 ppm
Ni	1 - 10,000 ppm	1 - 10,000 ppm	0.1 - 10,000 ppm	0.1 - 10,000 ppm	0.1 - 10,000 ppm
P	-	0.001 - 5 %	0.001 - 5 %	0.001 - 5 %	0.001 - 5 %
Pb	2 - 5,000 ppm	2 - 5,000 ppm	0.1 - 5,000 ppm	0.1 - 5,000 ppm	0.1 - 5,000 ppm
Pr	-	-	-	0.1 - 1,000 ppm	0.1 - 1,000 ppm
Rb	-	-	-	0.1 - 500 ppm	0.1 - 500 ppm
Re	-	-	-	0.001 - 100 ppm	0.001 - 100 ppm
S +	0.001 - 20 %	0.01 - 20 %	1 - 20 %	1 - 20 %	0.001 - 20 %
Sb	-	2 - 10,000 ppm	0.1 - 500 ppm	0.02 - 500 ppm	0.02 - 500 ppm
Sc	-	1 - 10,000 ppm	0.1 - 10,000 ppm	0.1 - 10,000 ppm	0.1 - 10,000 ppm
Se	-	-	0.5 - 10,000 ppm	0.1 - 10,000 ppm	0.1 - 10,000 ppm
Sm	-	-	-	0.1 - 100 ppm	0.1 - 100 ppm
Sn	-	-	-	0.05 - 200 ppm	0.05 - 200 ppm
Sr	-	1 - 10,000 ppm	1 - 5,000 ppm	0.5 - 5,000 ppm	0.5 - 5,000 ppm
Ta	-	-	-	0.05 - 50 ppm	0.05 - 50 ppm
Tb	-	-	-	0.1 - 100 ppm	0.1 - 100 ppm
Te	-	1 - 500 ppm	0.2 - 500 ppm	0.02 - 500 ppm	0.02 - 500 ppm
Th	-	20 - 10,000 ppm	0.1 - 200 ppm	0.1 - 200 ppm	0.1 - 200 ppm
Ti	-	0.01 - 10 %	0.001 - 10 %	0.001 - 10 %	0.01 - 10 %
Tl	-	2 - 10,000 ppm	0.1 - 500 ppm	0.02 - 500 ppm	0.02 - 500 ppm
Tm	-	-	-	0.1 - 1,000 ppm	0.1 - 1,000 ppm
U	-	10 - 10,000 ppm	-	0.1 - 10,000 ppm	0.1 - 10,000 ppm
V	-	1 - 10,000 ppm	2 - 1,000 ppm	1 - 1,000 ppm	1 - 1,000 ppm
W	-	10 - 200 ppm	0.1 - 200 ppm	0.1 - 200 ppm	0.1 - 200 ppm
Y	-	1 - 1,000 ppm	-	0.01 - 500 ppm	0.01 - 500 ppm
Yb	-	-	-	0.1 - 200 ppm	0.1 - 200 ppm
Zn	1 - 10,000 ppm	2 - 10,000 ppm	1 - 5,000 ppm	0.1 - 5,000 ppm	0.1 - 5,000 ppm
Zr	-	1 - 10,000 ppm	-	0.1 - 5,000 ppm	0.1 - 5,000 ppm
<b>Price:</b>	<b>\$12.25</b>	<b>\$14.25</b>	<b>\$17.75</b>	<b>\$24.00</b>	<b>\$26.25</b>

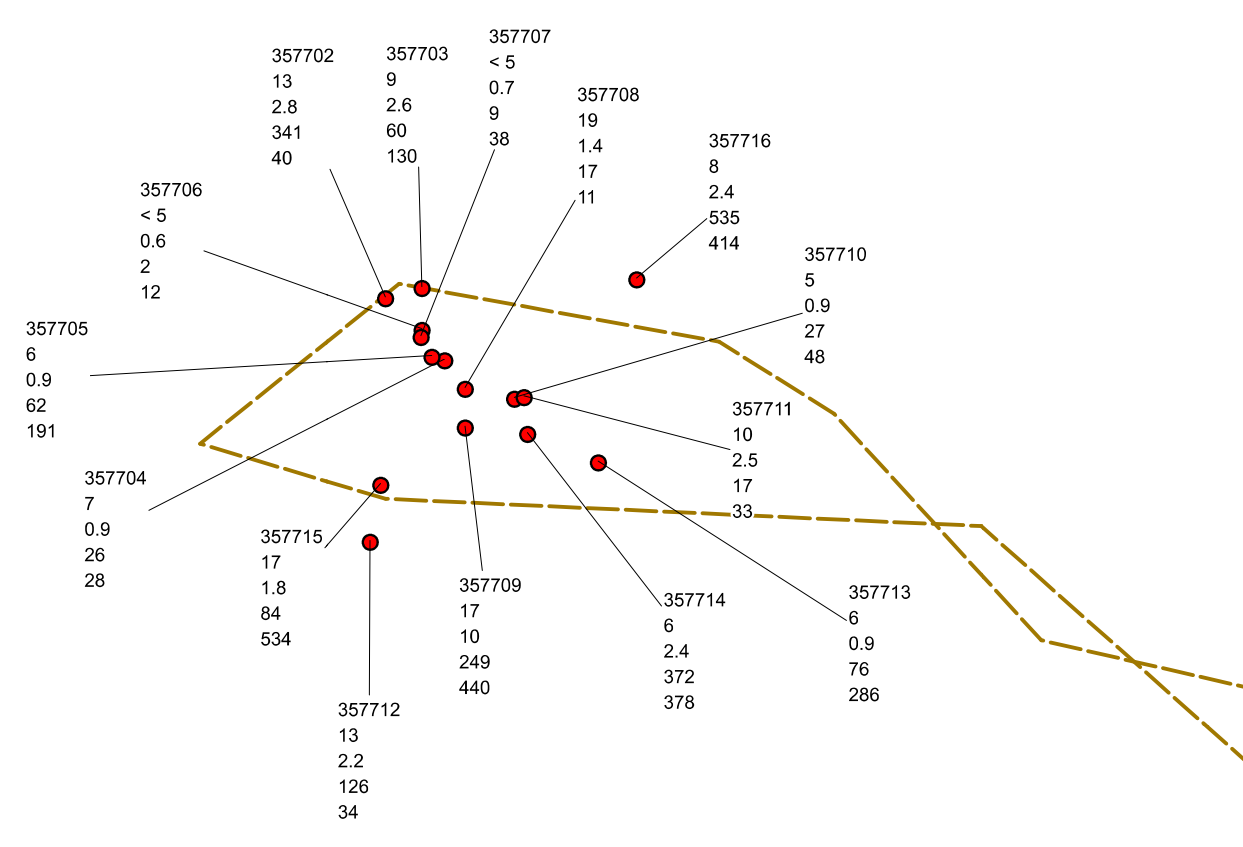
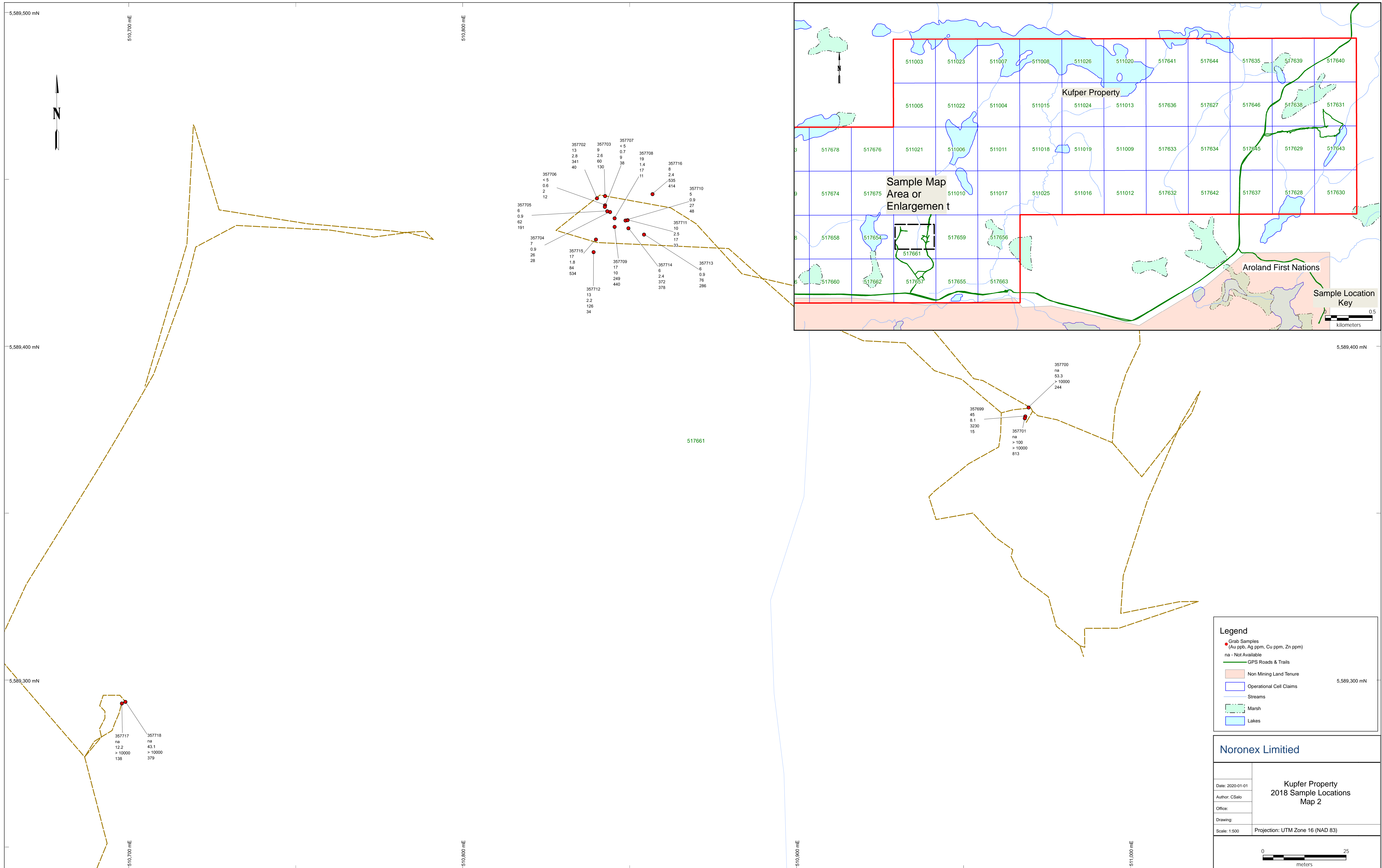
Extraction of each element by Aqua Regia Digestion is dependent on mineralogy + Sulphide sulphur and soluble sulphates are extracted

**Appendix  
VII Claim  
Map**





**Appendix VIII – Sample Map**



**Legend**

- Grab Samples (Au ppb, Ag ppm, Cu ppm, Zn ppm)
- na - Not Available
- GPS Roads & Trails
- Non Mining Land Tenure
- Operational Cell Claims
- Streams
- Marsh
- Lakes

**Noronex Limited**

**Kupfer Property  
2018 Sample Locations  
Map 2**

Date: 2020-01-01  
 Author: CSalo  
 Office:  
 Drawing:  
 Scale: 1:500  
 Projection: UTM Zone 16 (NAD 83)

0 25  
meters

