

**TECHNICAL REPORT**  
**O'CONNOR LAKE PB-ZN-AG-CU PROPERTY, NORTHWEST TERRITORIES, CANADA**

NTS: 75E/05

Mackenzie Mining District, Northwest Territories, Canada  
65° 19' 36.6" N and 111° 47' 32.7" W

PREPARED FOR:  
**Slave Lake Zinc Corp.**

PREPARED BY:  
Aurora Geosciences Ltd.

**TECHNICAL REPORT**  
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**Northwest Territories, Canada**

**Effective Date:**  
October 17, 2018

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# 1 Summary

This report was commissioned by Slave Lake Zinc Corp. (the “Company”) and was prepared by Gary Vivian, M.Sc., P.Geol. The author is a “qualified person” and “independent” of the Company within the meaning of National Instrument 43-101 – Standards of Disclosure for Mineral Projects. The author was asked to undertake a review of the available data and recommend (if warranted) further work on the O’Connor Lake property (the “Property”). The purpose of this report is to support the Company’s non-offering prospectus for listing on the CSE as part of a qualifying transaction which will result in the acquisition of the O’Connor Lake property by the Company.

The property comprises one surveyed mineral lease covering approximately 465 acres (188.18 hectares). The MWK claim lies on the east shore of O’Connor Lake on NTS claim sheet 75E05, about 195 kilometres southeast of Yellowknife, NWT. The mineral lease is registered in the name of Slave Lake Zinc Corp. and is in good standing until September 15, 2038. Documentation and fees have been filed to take the MWK claim to lease which would allow the continuation of ownership for an additional 21 year term. The MWK claim was acquired by the Company pursuant to a mineral property acquisition agreement dated for reference February 7, 2017 among the Company as purchaser, Jaskarn Singh Rai, Ritchie John Wigham, Glen Colin Macdonald and Max Braden as vendors (the “Vendors”) and 1089621 B.C. Ltd. as royalty holder (the “Royalty Holder”). Each of the Vendors is a founder and director of the Company and was a director of the Company at the time of entering into the Acquisition Agreement. Pursuant to the Acquisition Agreement, the Company acquired a 100% right, title and interest in and to the Property, subject to a 3.5 net smelter returns royalty (the “Royalty”) in favour of the Royalty Holder, by making a cash payment of one dollar (\$1.00) to each of the Vendors. Following transfer of the MWK claim to the Company on March 28, 2017, the Company is the beneficial and registered owner of a 100% interest in and to the O’Connor Lake Project subject to the Royalty.

The rocks of the O’Connor Lake map-area include sediments, paragneisses, basic intrusives and granitic rocks. Generally, sedimentary gneiss and schists occupy the basins of the larger lakes, whereas granitic rocks occupy uplands away from the lakes. The sediments are predominantly greywacke, argillite and arkose with small amounts of quartzite and shale. The rocks are metamorphosed to a considerable extent and grade into biotite and biotite-hornblende gneiss and schists. A large band of paragneiss is found on the shores of O’Connor Lake to the south and on the surrounding islands. The paragneiss is strongly metamorphosed and contains a high proportion of granitic material in many places, grading into migmatites and granite-gneiss.

The No.1 vein occurs in a shear zone within an amphibole gneiss which contains some bands of granitic material. On surface, the No.1 vein is exposed over about 180 feet (54.86 m) and varies in width from 1.5 feet (45.72 cm) to 6 feet (1.82 m). Drilling in 1951-1952 traced the vein for a length of 600 feet (182.88 m) at the 150-foot level (45.72 m). The vein was exposed by surface trenching for a strike length of one hundred and fifty feet (45.72 m). A total of 26.3 tons of cobbled ore, obtained from an open cut, was shipped to the smelter at Trail, B.C., where it assayed 55.0% lead, 13.5% zinc and 2.7 ozs silver per ton.

The No. 2 vein is exposed about one-half mile southeast of the No.1 vein, between the south bay of O'Connor Lake and Gossan Lake to the east. Most of this vein is covered by overburden, and trenching has exposed widths of up to three feet (91.44 cm) of the mineralized quartz vein for a length of four hundred feet (121.92 m). The No. 2 vein, and its extension, occurs in schistose to gneissic amphibolite rocks except for the east side of Gossan Lake where it intrudes granite. In 1951, one assay resulted in a 2 foot (60.96 cm) sample returning 0.88 ounces/ton Ag, 4.2 % Pb and 19.4% Zn. The No. 2 vein appears to be part of a larger west-northwesterly trending structure (280° Az) that may represent a mineralized corridor on the property. The No. 2 vein represents a prospective area for future exploration.

Slave Lake Zinc Corp.(SLZ) undertook a brief exploration program from September 28, 2016 to October 3, 2016. The program consisted of the collection of 29 rock samples and 22 soil samples for verification of historical analyses. The author visited the O'Connor Lake site on August 1, 2017 to verify historical sampling by SLZ and others.

The Company commissioned a quick three-day total field magnetic survey, in October of 2017, to cover the lease area. The magnetic survey was able to define lithologic contacts between amphibolite gneisses and sillimanite-garnet gneisses with a high granitic composition. The survey also revealed a W-NW trending lineament joining the two zinc-lead-silver showings on the property. There are also many E-W trending lineaments that cross-cut the more prominent W-NW trending features, which may well be introducing mineralized fluids to the area.

The author suggests a two-phase exploration program on the O'Connor Lake property. The first phase requires the establishment of a ground grid with a baseline orientation of 280° AZ. The baseline should trend from Gossan Lake to the west side of the peninsula hosting the main showing on O'Connor Lake (1 km). This grid would allow for a 1:2000 scale mapping program and fully integrated total field magnetic and resistivity survey to help delineate any extensive mineralization associated with the structures. Consideration for re-orienting a baseline in a north-northwesterly fashion to coincide with the No.1 vein structure in a northerly fashion, will have to be considered. It is likely one of the winglines could double as a baseline and new winglines established for this part of the grid.

The second phase should comprise a relatively light scale drill to complete systematic testing of the No.1 and No.2 veins as well as prospective mineralization identified from the geophysical surveying. It is estimated that a functional two-phase program will cost an estimated \$1,331,100.00.

## 2 Introduction

This report was commissioned by Slave Lake Zinc Corp. (The “Company”) and was prepared by Gary Vivian, M.Sc., P.Geol. The author is retained to complete this report in compliance with National Instrument 43-101 of the Canadian Securities Administrators (“NI 43-101”) and the guidelines in Form 43-101 F1. The author is a “Qualified Person” within the meaning of National Instrument 43-101. This report is intended to be filed with the Ontario, Alberta, and British Columbia Securities Commissions, as well as the “CSE” Canadian Securities Exchange.

As an independent geologist, the author was asked to undertake a review of the available data, visit the property and provide recommendations (if warranted) for further work on the O’Connor Lake property (the “Property”). The purpose of this report is to provide the basis for the listing of the Company shares on the Canadian Securities Exchange.

Only limited exploration activities have been conducted on the property since 2006. A detailed review of the historical exploration records pertaining to the O’Connor Lake property, available through the Northwest Territories Geological Survey (NTGS), has been undertaken. In the preparation of this report, the author has utilized geological maps, geological reports, company assessment reports filed with the NWT Geological Survey and claim maps prepared by the Northwest Territories Mining Recorder’s Office (NTMRO). Most of this information is available online.

The most significant websites, from which the author drew information, are as follows:

Northwest Territories Geological Survey: [www.nwtgeoscience.ca/](http://www.nwtgeoscience.ca/)

NWT Mining Recorder’s Office: [www.ainc-inac.gc.ca/ai/scr/nt/erd/mm/mro/index-eng.asp](http://www.ainc-inac.gc.ca/ai/scr/nt/erd/mm/mro/index-eng.asp)

NWT Government and Assessment Reports: <http://gateway.nwtgeoscience.ca/>

The author has no reason to doubt the reliability of the information provided by the Company. A test audit of the publicly available data did not reveal any discrepancies.

The author is extremely familiar with the exploration techniques needed to properly evaluate the potential of the O’Connor Lake property. The author visited the O’Connor Lake property on August 1, 2017 at which time the author reviewed the geological setting and conducted sampling. The author collected 6 samples for assay to verify the historical sampling on the property.

### 2.1 Units and Measurements

**Table 1. Table of Abbreviations: units and measurements**

asl	above sea level	ICP-MS	Inductively Coupled Plasma-Mass Spec
%	percent	in	inches
<	less than	kg	kilograms
>	greater than	kg/m <sup>2</sup>	kilograms/square metre

°	degrees	kg/t	kilograms per tonne
°C	degrees celsius	km	kilometre
µm	micrometer(micron)	km <sup>2</sup>	square kilometre
1 gram	0.3215 troy ounce	kt	thousand tonnes
1 oz/ton	28.22 grams/tonne	m	metre
1 troy ounce	31.104 grams	M	million
a	year (annum)	m <sup>2</sup>	square metre
cm	centimetre	Ma	million years ago
DDH	diamond drill hole	masl	metres above sea level
1 foot	30.48 cm	mm	millimetre(s)
DEM	digital elevation model	Mt	million tonnes
Fn, FMn	Formation	NA	not applicable/not available
g or gm	gram(s)	NI 43-101	Canadian National Instrument 43-101
g/t	grams per metric tonne	oz	troy ounce
GPS	global positioning system	P.Geol.	professional geologist
h	hour	ppb	parts per billion
ha	hectares	ppm	parts per million
QA	quality assurance	QP	qualified person
QC	quality control		

### 3 Reliance on Other Experts

As of the date of this report, the author is not aware of any material fact or material change with respect to the subject matter of this technical report and has not relied on other experts.

### 4 Property Location and Description

The O'Connor Lake property consists of one surveyed mineral lease (NT – 0008) totaling approximately 188.12 hectares (465 acres). The MWK lease is located south of great Slave Lake and is shown in Figure 1.

The mineral lease is properly described as follows:

“The whole of Lot 1068 Quad 75E05 in the South Mining District in the Northwest Territories as shown on plan or survey number 107077 in the Legal Surveys Division, Department of Natural Resources at Ottawa, said lot being otherwise known as the MWK mineral claim (F97540), containing 188.12 hectares more or less.”

The lease is in good standing for 21 years, pending annual lease payments. The lease may be renewed for successive 21 year periods. The O'Connor Lake Property is geographically centered at 61 19 36.6 N latitude and 111 47 32.7 W longitude and is shown in Figure 2. The O'Connor Lake Property is administered by Indian and Northern Affairs Canada (INAC). The site has being classified as a contaminated historical mine site by the Contaminants and Remediation Directorate of INAC using the Canadian Council of Ministers of



Environment National Classification system of contaminated sites. The site code is 00386, under the name "O'Connor Lake (American Yellowknife Mine MWK No 1 Vein)". According to the Contaminants and Remediation Directorate website, Indian and Northern Affairs Canada spent \$329,119 in assessing the environmental impact of the property. The cost of cleaning up the O'Connor Lake historical site is the responsibility of the Federal Government.

The surveyed lease is maintained by annual payments of \$2.50 per hectare for the initial 21 year period and \$5.00 per hectare thereafter.

Slave Lake Zinc has obtained a land use permit as of March 2017 under the Mackenzie Valley Land and Water Board. The land use permit is good for 5 years, or until March 2022. The land use permit can be extended for a period of 2 years as long as all requirements and regulations under the permit are followed.

The O'Connor Lake property covers a contaminated site and as such the claim is administered by the Federal Government/INAC. The author has confirmed that the mineral lease provided to SLZ specifically states that they have the exclusive license to search for, win and take all minerals within the meaning of the Northwest Territories Mining Regulations. It should also be clear that SLZ is not liable for the current state of the O'Connor Lake property but could use their best judgement in supporting the remediation of the site.

On March 28, 2017, the mineral claim was transferred to Slave Lake Zinc Corp from Max Braden 25%, Glen Colin Macdonald 25%, Ritchie John Wigham 25% and Jaskarn Singh Rai 25%. The author was notified of this transfer on July 27, 2017 by Ritch Wigham, and that the vendors sold the property for costs and expenses to maintain the claim in good standing. A net smelter royalty of 3.5% is owned by a British Columbia numbered company (1089621 BC Ltd.).

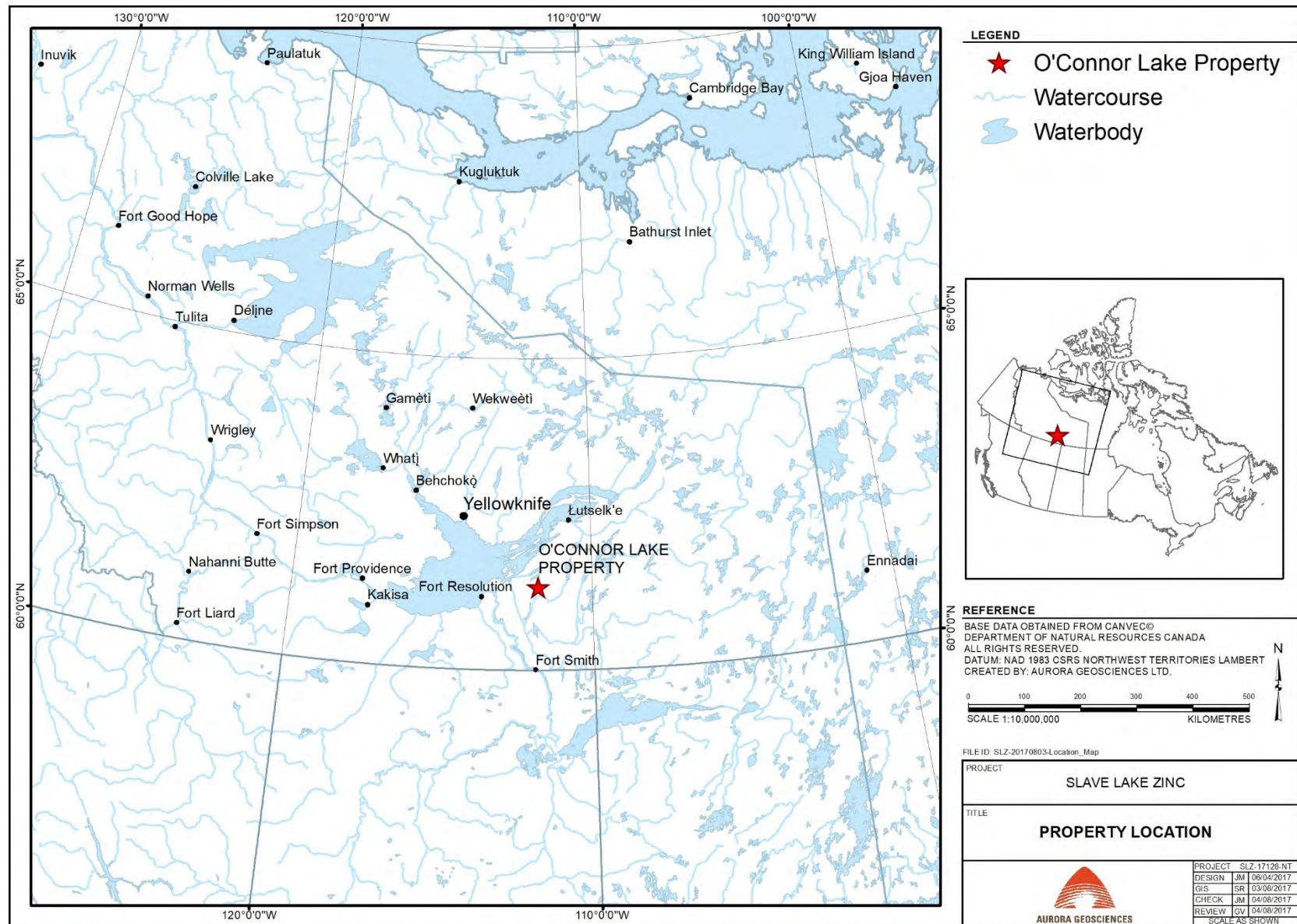


Figure 1. Property Location Map



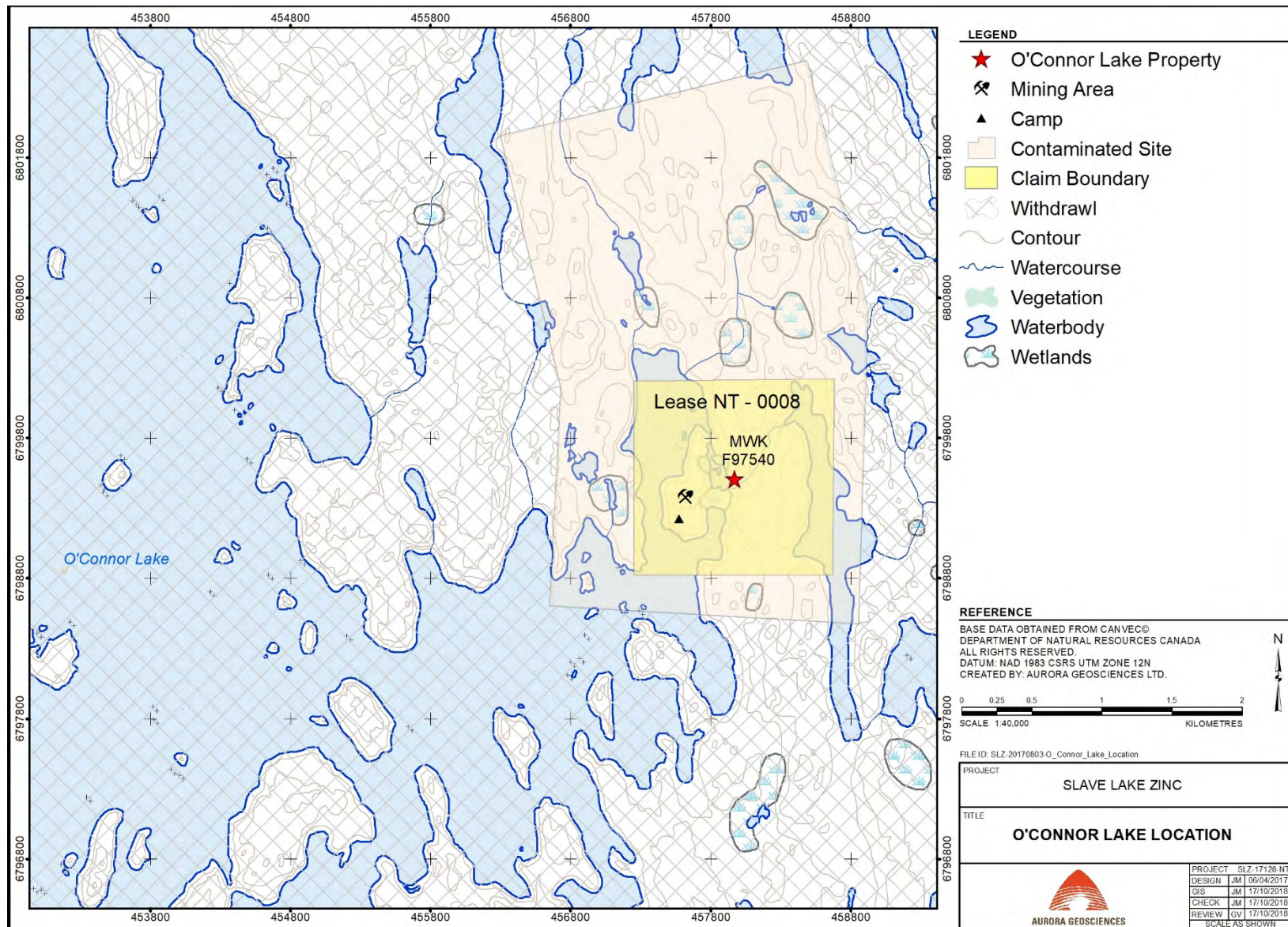


Figure 2. Claim Location Map

Historical production from mineralized zones on the property is limited. There are exploration pits, adits and a headframe on the property. Workings that are currently open could constitute a local safety hazard and may ultimately require fencing prior to any exploration on the property.

Although the property lies within the Akaitcho Interim Land Withdrawal, the Company has a 5 year land use permit and the author sees no major encumbrance at this time to complete work programs. Potential sites of archaeological significance may be present within the area, but these are both unknown and unlikely to be impacted by early stage exploration activities.

## **5 Accessibility, Climate, Local Resources, Infrastructure, and Physiography**

The Property lies on the eastern shore of O'Connor Lake, about 195 kilometres southeast from Yellowknife, NWT (the supply center for the region) and 150 kilometres east of Hay River, NWT. The former producing Pine Point Pb/Zn mines are approximately 110 kilometres west of the Property. O'Connor Lake can be reached via a 75-kilometre winter road from Ft. Resolution on Great Slave Lake where year-round gravel road access is available.

The property is currently accessed by charter air craft available from Yellowknife (Otter, Twin Otter, Beaver). All services necessary to support mineral exploration and production are available at Yellowknife which is connected by several scheduled flights daily with Edmonton, Alberta.

The Project lies on the western margin of the Canadian Shield and has topography typical of Precambrian terrane. About 30 % of the area is water-covered, and of the remaining land area, over half consists of bedrock outcrop. Intervening cover comprises muskeg flats, glacial deposits and covered talus slopes.

Maximum elevation is about 350 m above sea-level and the average hills rise about 100 meters above the levels of the larger lakes. In general, the region may be described as a rolling country, sloping gently from the granitic uplands towards the larger lake basins.

Continental glaciation originating in the northeast has eroded the lake basins from the softer rock formations. In contrast, the uplands are occupied by granitic rocks. Glacial striae, crescentic gouges, grooves and polished surfaces are present on the rock exposures and indicate the direction of the last movement of the glaciers to be from S30°W to S70°. The variation in glacial striae direction is mainly influenced by the foliation and relative hardness of the rock formations.

The erosive action of the ice sheets which spread southwestward over the area smoothed the topography, but apparently nowhere removed great quantities of rock. Hills have been rounded and depressions deepened (later to form rock-basined lakes) and fresh un-weathered rock has been exposed. The retreat of the final ice sheet left ablation deposits that are now represented by scattered boulders resting on glaciated surfaces of higher levels and thicker deposits of boulders and sands in many of the depressions and valley bottoms. Pine-covered sand-plains occur in a few places. Apart from these, extensive deposits of glacial origin are absent in the area.

The warm weather and long days of summer favour the growth of heavy stands of spruce in the sheltered valleys. The poorly drained areas support black spruce, willow and muskeg growth, whereas the granitic uplands and the talus slopes typically have small jackpine, poplar, birch, some dwarf alders. Banksian pine grows to a considerable size on sandplains and forms pleasing park-like areas. The rocky ridges and upland surfaces, although without trees, support a profusion of wild flowers, mosses and lichens.

Game in this area is not plentiful. However, moose, black bear, and wolves are occasionally encountered. During the spring and fall, migrating caribou pass in huge herds. Fur-bearing animals include beaver, red fox, wolverine and muskrat. Lake trout, white fish, northern pike and other fish thrive in great numbers in O'Connor Lake and the larger inland lakes. Arctic grayling are only found in the deep waters of O'Connor Lake and South Thubun Lake. Pestiferous insects, the black fly and mosquito, often make out-door existence miserable during July and August but are not nearly as bothersome as in other northern areas.

The ice of O'Connor Lake generally breaks up early in June, but cool weather with temperatures only slightly above the freezing point persists until the middle of the month. The latter part of June, all of July, and early August are characterized by spells of hot humid weather, when temperatures often exceed 25°C at midday. Towards the latter part of August cooler weather prevails for most of the time. Rainfall is light, consisting mainly of local thunder showers during the early part of July.

Commonly, there are only two or three days of continuous heavy rain each summer, mostly in the beginning of July. The small lakes freeze in October and the larger lakes freeze between November and December. The days are only a few hours long. The climate is typical of continental sub-Artic regions, with long, cold winters with cool to warm, dry summers. Exploration can be undertaken year-round.

## 6 History

The original exploration work on the property was concentrated on a large "gossan" area some three thousand feet (914.4 m) long and up to one hundred feet (30.48 m) wide, and containing small amounts of manganese, which is believed to have been discovered prior to 1946. In 1948, a lead-zinc-copper vein (present #1 vein) was discovered by Frank Morrison and other prospectors of Yellowknife (Figure 5). The MWK 1-49 were staked in 1948 to cover the known showings. The property was then optioned by the O'Connor Lake Lead Syndicate, who retained control up to August 1950, when it was taken over by the O'Connor Lake Lead Mining Corporation Limited. During the period 1948-50, x-ray diamond drilling was carried out on the No.1 vein and a total drilling of eight hundred feet (243.84 m) in twelve holes was completed. Ten of these holes explored the vein for a length of four hundred feet (121.92 m) and two were drilled for extensions, neither of which reached its objective. These holes cut the vein at depths ranging from twenty-five (7.62 m) to fifty feet (15.24 m). The vein was exposed by surface trenching for a strike length of one hundred and fifty feet (45.72 m). A total of 26.3 tons of hand cobbled ore, from an open cut, was shipped to the smelter at Trail, B.C., where it assayed 55.0% lead, 13.5% zinc and 2.7 ozs. silver per ton.



American Yellowknife Mines Limited optioned the property in November 1951. Diamond drilling on No.1 vein with two rigs was started in December and was continued through to April 1952. Fifty core holes were drilled intersecting the structure at depths ranging from one hundred (30.48 m) to three hundred feet (91.44 m) down the dip. Three holes were drilled to intersect the vein at 500-foot (152.4 m) level and two holes to the seven-hundred-and-fifty-foot level (228.6 m). Total footage drilled during this period was twelve thousand seven hundred and thirty-five feet (3881.62 m). Drilling has been confined to the No.1 vein only. The MWK No.2 vein and the gossan area have been explored only by pits and surface trenches.

Underground development was conducted on the No.1 vein during 1952. At the cessation of operations on December 16, 1952, upon the consequences of the lowering market prices of lead and zinc, the underground work included a three-compartment shaft to a depth of one hundred and eighty feet (54.86 m) with a station cut at the one-hundred-and-fifty-foot level (45.72 m). Lateral development on this level consists of one hundred and twenty-seven feet (38.70 m) of cross-cutting and two hundred two feet (61.57 m) of drifting along the vein.

The zinc-lead-silver mineralization occurs in shoots separated by narrower or leaner parts of the vein. These shoots vary greatly in length and together constitute a zone which has been traced for a length of six hundred feet (182.88 m) and to a depth of seven hundred and fifty feet (228.6 m) down-dip from the surface exposure. It has a pitch of fifty degrees to the north-west.

## **7 Geological Setting and Mineralization**

The Taltson Magmatic Zone straddles a portion of the contact zone between the Slave and Churchill (Rae) Structural Provinces. The Taltson Magmatic Zone is mainly the product of plutonism triggered by the 1.90 Ma eastward collision of the Slave Province onto the western Churchill (Rae) plate margin.

The main lithological domains in the area are the Taltson Magmatic Zone, the East Arm Fold Belt and the western Rae Province. These domains are separated by major mylonite belts, faults and shear zones. The Great Slave Shear Zone forms the northern and northwestern contact of the Taltson Magmatic Zone with Aphebian and Archean lithologies of the East Arm Fold Belt and Archean lithologies of the Slave Province (Figure 3).

The north striking Gagnon Shear Zone forms the eastern contact of the Taltson Magmatic Zone with the Rae Province and overlying Aphebian Nonacho Group. This shear zone extends southward from the Great Slave Shear Zone, through Gagnon Lake, west of Taltson and King Lakes, to merge with the Allen Fault zone.

Paleozoic sediments of the Western Interior Platform lie west and southwest of the map sheet and overlie the Taltson Magmatic Zone.

## **7.1 Taltson Magmatic Zone:**

Taltson Magmatic Zone underlain by granitic batholiths and intrusions of at least three distinct ages: the Deskenatlata granodiorite in the western part ( $1986 \pm 2$  Ma; Bostock 1987), the Slave monzogranite ( $1955 \pm 2$  Ma; Bostock 1987) surrounding the Konth (Fort Smith) syenogranite (1935 Ma; Bostock et al, 1991) which together occupy most of the Zone.

Within these intrusions are remnants of pelitic to quartzitic paragneiss with bands of calc-silicate rocks, mafic volcanic rocks and marble. Possible granitic orthogneiss is preserved in the Rutledge Lake and O'Connor Lake basins. Sillimanite+/-andalusite-cordierite-alkali feldspar assemblages and quartz- plagioclase-orthopyroxene indicate upper amphibolite to lower granulite facies metamorphism. The metasedimentary protoliths were deposited in an early Proterozoic basin that closed after emplacement of 2.44 – 2.27 Ga granites in the western Rae Province. Basin closure was followed by high-grade metamorphism that preceded and was unrelated to the Taltson granites (Bostock et al, 1991).



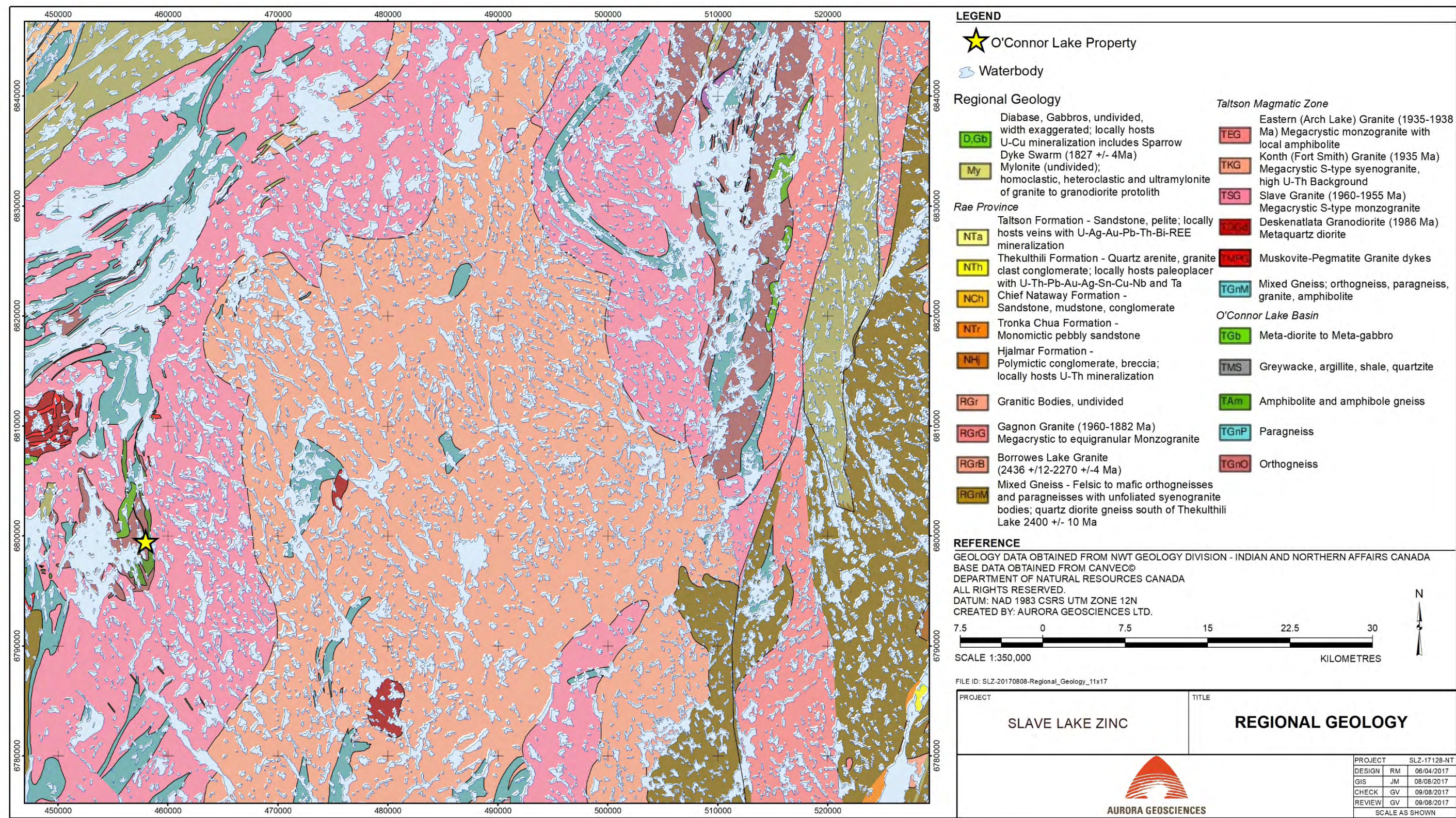


Figure 3. Regional Geology Map - NTS 75 E

Technical Report: O'Connor Lake Pb-Zn-Ag-Cu Property



## 7.2 Property Geology

After Prusti 1954

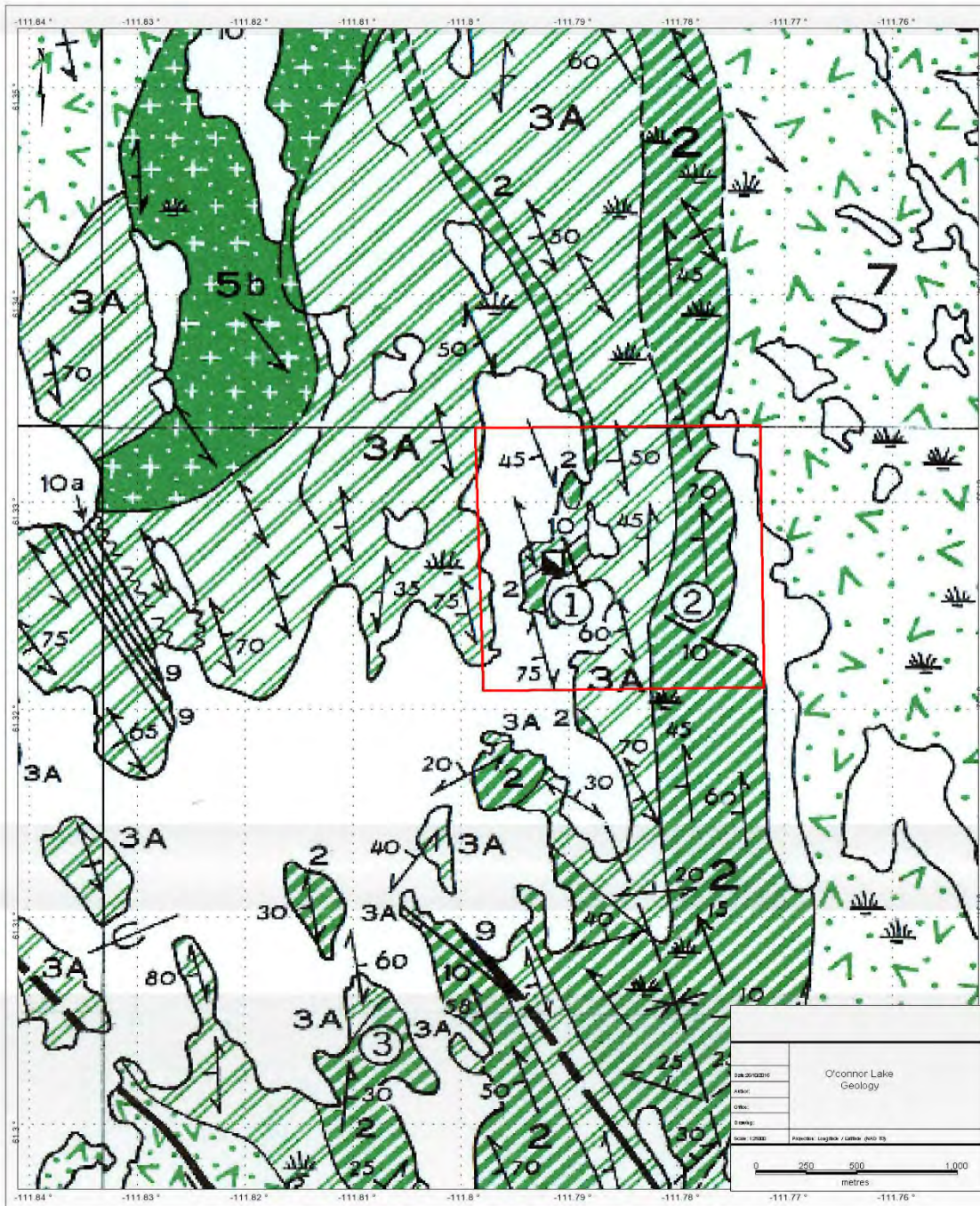
The rocks of the O'Connor Lake map-area include sediments, paragneisses, basic intrusives, and granitic rocks (Figure 4 and 5). Generally, sedimentary gneiss and schists occupy the basins of the larger lakes, whereas granitic rocks occupy uplands away from the lakes. The sediments are predominantly greywacke, argillite and arkose with small amounts of quartzite and shale. They are metamorphosed to a considerable extent and grade into biotite and biotite-hornblende gneiss and schists. A large band of paragneiss is found on the shores of O'Connor Lake to the south and on the intervening islands. This band contains rocks which are strongly metamorphosed and contain greater proportion of granitic material in many places, grading into migmatites and granite-gneiss.

The basic intrusives are gabbro and diorite and are found either as small irregular bodies, or as sills intruding the sedimentary schists and gneisses. Diabasic gabbro occurs extensively in the southwest part of the area as dykes with a persistent northwesterly trend. These dykes are sometimes traceable for long distances. They intrude all other rocks of the area and are cut by quartz-veins, some of which are mineralized.

Biotite granite and muscovite granite rocks underlie more than half of the area. They are younger than the sediments, and the contacts vary from gradational to intrusive. Biotite-granite and granite-gneiss occupy a large area between Runa Lake and Mina Lake, continuing southeast between Frank Lake and O'Connor Lake and extending south and east into the adjoining areas. Exposures of sedimentary gneiss and schist and of amphibolite, either as inclusions or as scattered outcrops in the granite are common throughout the area. The biotite-granite is strongly gneissic, is gradational into the sedimentary gneisses and is older than the muscovite-granite.

About three-quarters of the meta-sedimentary rocks in the area are gneisses and schists containing quartz and feldspar. The gneisses are fine to medium-grained, strongly crystalline, and have a light grey or green color. Foliation is distinct with light bands alternating with dark bands and lineation is common.

Sillimanite-garnet gneiss occurs as a wide band in the southern part of the area, occupying the main basin of O'Connor Lake. The greatest width of the band is exposed around North Bay, and Rusty Bay of O'Connor Lake, where it is interbedded with amphibolites. It underlies the biotite-schist and gneiss near the north end of O'Connor Lake, where it is highly migmatitic. Elsewhere, it occurs as small bands or scattered outcrops in the granite-gneiss, which contains abundant xenoliths of the sillimanite-garnet gneiss near the contact.



Modified after Irwin and Prusti,

**Figure 4. O'Connor Lake Property Geology**





Figure 5. Property Geology Legend

The gneiss is light-grey, fine to medium-grained, and well foliated. Biotite-rich bands containing pink garnets alternate with granitic bands, giving a well-developed gneissic appearance. Sillimanite is present in clusters of very fine acicular grains or locally in coarse crystals. Gneiss on the north end of O'Connor Lakes occurs as long narrow bands of quartzofeldspathic material interbanded with dark biotite-rich layers, the bands being conformable to the general trend of the gneissic rocks

in this region. Dykes and sills of granite and pegmatite are quite abundant and often appear to cut the gneiss.

Augen gneiss outcrops on the shore of O'Connor Lake (north end) and west of the banded gneiss described above. The contact between the two is gradational. The augen gneiss has a mineral composition similar to that of biotite-hornblende gneiss. Porphyroblasts of feldspar form the augen and are aligned parallel to the gneissosity. Elongate bands containing dark hornblende are characteristically devoid of porphyroblasts. The feldspar augen, which vary from rounded to rectangular in shape, are up to two inches long and about one inch across.

Quartz-biotite schists are commonly intercalated with biotite-oligoclase gneiss and grade into it in many places. The thickness of individual beds is variable, but is always less than one foot (30.48 cm). The quartz-biotite schists are fine-grained (less than 0.1mm. in diameter) and commonly contain bands and lenses of quartz conformable to the bedding which are folded into minor crenulated flexures.

The original quartz segregations seem to have developed along three main planes of weakness in the rocks and can be locally subdivided into

- (i) those which lie along planes of secondary cleavage or foliation,
- (ii) those whose formation was controlled by original bedding, and
- (iii) those which filled fissures oblique to this direction.

Veins which formed parallel to the bedding planes of the country-rocks have been folded with the stratification. Other segregations developed during the folding tend to be concentrated in the reduced pressure zones of fold axis.

Amphibolites are widely distributed in the area. The amphibolites are dark coloured basic metamorphic rocks with their chief constituents as hornblende. The hornblende is often replaced in part by pyroxene or biotite and quartz, calcite, iron-oxide and sphene are present as accessory constituents.

A small amount of felsic material is generally present in the amphibolite. Sometimes, it is present in the form of quartz and feldspar porphyroblasts. Usually, however, as in the large mass east of North Bay, O'Connor Lake, it occurs in narrow, often discontinuous stringers, as networks of stringers or as irregular patches that give the rock a peculiar spotted appearance.

This rock appears to be composed mainly of hornblende with subsidiary amounts of feldspar. It is a coarse to very coarse-grained, dark to brownish-green rock with a rough weathered

surface. It is interbedded with sillimanite-garnet gneiss and biotite-plagioclase gneiss from which it is distinguished easily by its dark color, its comparatively massive nature and its higher amphibole content. Lenses of pegmatite are commonly found, with bleached zones around them, which show a transition from coarse light-green amphibole crystals near the pegmatite to medium dark green amphibole crystals outside.

The contact between the sedimentary rocks and the granite, wherever exposed, is always gradational. The gneissosity of the granite is parallel to the schistosity and bedding of the included metasedimentary rocks in conformity with the regional trend, which indicates that the emplacement of the granite took place before the completion of regional metamorphism. The pattern produced by the foliation is consistent with the attitude of the intruded sedimentary rocks. Near the north end of O'Connor Lake, the sedimentary schists and gneisses grade into the gneissic granite through porphyroblastic (feldspathic) schists and banded gneisses or augen-gneisses. In places however, the granite shows apparent intrusive relation with the schists as in an outcrop one-half mile north of O'Connor Lake. In other places, sedimentary bands are preserved within the granite without much structural disturbance.

Diabase or gabbro dykes are quite prominent in the area of the southern O'Connor Lake basin. These dykes vary in width from a few inches to two hundred feet (60.96 m) and many of the larger ones can be traced for miles. They intrude all the other rocks and all structures. Most of the dyke's trend about north forty degrees west, but a few were observed striking a few degrees either east or west of north. They all dip steeply.

The dykes consist of massive rock varying in grain size from fine at the edges to relatively coarse in the centre, depending on the width of the dyke. The larger dykes are gabbroic at the centre and fine-grained near the margin. Weathered surfaces are dark green to brownish-black the interior and light brown to reddish-brown on chilled margins; fresh surfaces are usually dark green to black. A porphyritic variety has a characteristic brick-red weathered surface. Although most of the dykes are of rather uniform composition, some are characterized by a uniformly distributed pink to red feldspar; others are porphyritic, with feldspar phenocrysts or amygdules of white carbonate and possibly zeolites. The dykes are traversed by minor faults and quartz veins, which may carry carbonate and sulphide minerals in places. Giant quartz veins which are sometimes found along the contact are considered younger than the diabase.

Sills and dykes of pegmatite are observed cutting the meta-sedimentary rocks, gabbro, diorite, amphibolite and the gneissic granite. They are closely associated with the younger muscovite granite both in structural continuation as well as in mineralogical composition, but are seldom seen cutting the younger muscovite granite. They are usually less than one hundred feet (30.48 m) in width. The smaller dykes are characterized by frequent pinch and swell structures along their strike while the larger ones have a more or less uniform width.

## 7.3 Mineralization

### 7.3.1 No. 1 Vein Structure

After Prusti 1954

The MWK quartz-vein occurs in a band of massive amphibolite along a fault. The vein has a strike of N 40°W and dips 65° to the southwest. It is exposed on the surface for one hundred and eighty feet (24.38 m), and it has been traced for a strike length of six hundred feet (182.88) by drilling. The width varies from 1.5 feet (45.72 cm) to six feet (1.82 m), with an average of five feet (1.52 m) for most of its length. Minor quartz-veins and stringers averaging six inches in width are parallel to the main vein. The contact between vein and wall-rock is relatively sharp. A dense, fine-grained dull-green rock forms the hanging wall and shows evidence of brecciation; it is also found as inclusions inside the vein. On the footwall side, a thin seam of graphite, about four inches thick is exposed between the vein and the altered wall rock. Lead and zinc sulphides, when occurring in massive form, are confined largely to the margins of the quartz vein, or in contact with the walls, with the zinc sulphides being more concentrated towards the hanging wall. Disseminated galena and sphalerite occur throughout the vein quartz.

The vein in the drift on the one hundred and fifty-foot (45.72 m) level closely resembles the surface outcrop. The width varies from one foot (30.48 cm) to 7.1 feet (2.16 m), and possibly wider with an average width of 4.8 feet (1.46 m). Galena and sphalerite, when occurring in massive form are confined largely to the margins of the quartz-veins. Some massive lenses occur irregularly at the center of the vein. Disseminated galena and sphalerite along with minor amounts of pyrite and pyrrhotite occur throughout the vein quartz, in the hanging wall breccia and in isolated quartz-stringers and lenses. Considerable pyrite and chalcopyrite occur in veinlets and in massive form at a few places. Irregular carbonate inclusions occur intermittently.

Galena rarely constitutes more than five percent of the vein and is less abundant than sphalerite. It also shows bending and fracturing of the cleavage lines and occasionally, a secondary cleavage due to strain is noticed in some crystals. Galena crystals, about 1.5 inches across, are rather common and are, in places, veined by sphalerite along fractures and cleavages. The late stage galena is very fine-grained and is found only along fractures which cut across earlier galena, sphalerite and chalcopyrite. Veinlets of massive galena, up to six inches in width, are occasionally found.

Chalcopyrite, which occurs only in small amounts in the vein, is present as small irregular independent grains or as blebs in sphalerite and galena. Pyrrhotite seems to be associated with chalcopyrite, though its presence is only occasionally observed.

### 7.3.2 No. 2 Vein

After Prusti 1954

The MWK No. 2 vein is exposed about one-half mile southeast of the No. 1 vein, between

South bay of O'Connor Lake and Gossan Lake to the east. Most of this vein is covered by overburden, and trenching has exposed widths of up to three feet (91.44 cm) of the mineralized quartz vein for a length of four hundred feet (121.92 m). The vein strikes N70°W and dips 70° south. Fracture cleavage on the vein walls indicates a normal, left-handed slip. The No. 2 vein and its extension occurs in schistose to gneissic amphibolite except for the east side of Gossan Lake where it enters granite. In 1951 one assay result. A 2-foot (60.96 cm) sample Ag 0.88 ounces/ton, Pb 4.2%, Zn 19.4 %. Mineralization is similar to the No.1 vein. Epidotization of the amphibolite and feldspathization are the characteristic alterations associated with mineralization.

The vein minerals consist of milky white and transparent varieties of quartz, dark brown sphalerite, galena and chalcopyrite. Pyrite is present in the wall rocks in greater amounts than that observed in number 1 vein. Among the gangue minerals, a particular variety of chlorite is present, in addition to the minerals found in MWK number 1 vein, which deserves mention here. The chlorite is present as shreds or aggregates of worm-like irregular grains, and is essentially confined to the quartz vein, in association with euhedral grains of quartz and adularia.

## 8 Deposit Type

After Prusti 1954

The mineralized vein under discussion represents a typical fissure vein, formed through filling of open space by vein quartz and associated sulphide minerals, without any appreciable replacement. The mineralization in other quartz veins on the property is of the same type.

It is useful to analyze the arguments in support of an "orogenic" hydrothermal origin. The following facts favour hydrothermal origin:

1. Localization of the quartz vein along the fracture zone in the massive amphibolite.
2. Hydrothermal alteration of the wall rocks. The feldspathic alteration, though not very intense, is confined to the mineralized vein only.
3. Large quantities of coarsely crystalline quartz with cockade and comb structure resembling the epithermal deposits of Lindgren indicated magmatic affinity. The presence of zonal effects in quartz due to differences in amounts of liquid and gas inclusions implies deposition from hot waters undergoing changes in temperature during deposition.
4. Presence of bismuth, cadmium and silver in galena and sphalerite indicate magmatic affinities. These elements are not usually present in meteoric-derived waters.
5. The association of fluorite, apatite and adularia with the quartz veins is suggestive of derivation from magmatic solutions. Adularia is associated with typical

epithermal deposits.

6. The paragenesis of sphalerite-galena-chalcopyrite is characteristic of a large number of magmatic sulphide deposits.

The source of mineralization solutions is obscure as is generally the case with similar deposits found elsewhere. Granite dykes and pegmatites are present near the vein and are quite common in the area under consideration. The mineralization seems to be related to the post-granitic shearing and is apparently post-diabasic in age, implying a time interval between the emplacement of the younger granitic rocks (muscovite-granite) and the formation of the mineralized quartz-veins.

## 9 Exploration

### 9.1 Prospecting and Sampling

Only limited exploration has been completed on the O'Connor Lake property since it was originally staked in 2007. Derrick Strickland, P.Geol. visited the property in 2006, and again in 2016, and collected a total of 10 rock samples from the old trenches and waste dump piles. Slave Lake Zinc completed a small exploration program from September 28, 2016 to October 3, 2016. This program comprised the collection of 29 rock samples. Two small geophysical grids were established to help outline the vein systems in areas under overburden cover, but these cannot be included in this report due to the inconsistencies of meeting industry standards. A three-man exploration crew consisted of Guy Delorme, technician Chris Delorme, and one assistant who collected the rock samples and dug hand trenches on new targets.

On August 1 of 2017, the author visited the property to verify the historical sampling from 2006, 2015 and 2016. A total of 6 rock samples were collected and assayed using ALS Labs ME-ICP61 method.

The 2006, 2015 and 2017 programs were supported by a Cessna 185 float plane while the 2016 program was supported by a DeHavilland Beaver float plane based in Yellowknife. A small fly camp was established at the property to aid in the 2016 exploration program.

There appears to be sufficient quality control on the programs from the accredited labs and their blanks and standards. The reader is cautioned not to assume that mineralization is consistent across the property, but it is clear the mineralized quartz veins/fissures are providing examples of economic mineralization to match the historic results.

Table 2 provides the documentation of all of the rock samples collected on the property since 2006. Sample number, gps coordinates and the Cu, Pb, Zn and Ag values are shown, all in ppm, except where percentage is indicated

**Table 2. Summary Table of Rock Assay Results**

2006 Samples	X_Nad83z12	Y_Nad83Nz12	Cu-ppm or %	Pb-ppm or %	Zn-ppm or %	Ag-ppm or %
--------------	------------	-------------	-------------	-------------	-------------	-------------



OL-06-01	457588	6799358	46	752	576	2.2
OL-06-03	457727	6799392	58	364	504	3
OL-06-04	457704	6799313	79	409	783	0.7
OL-06-05	457545	6799278	64	70	94	0.4
OL-06-06	457602	6799410	307	55	268	0.4
OL-06-07	457602	6799410	1218	>10000	>10000	22
<b>2015 Samples</b>						
P692002	458187	6798960	2008.7	>10,000	>10,000	16.2
P692003	458242	6798949	115.6	598.2	458	1.9
P692004	458235	6799257	1957	>10,000	>10,000	13.8
P692005	458235	6799257	2764.1	>10,000	>10,000	5.6
P692006	458235	6799495	181.5	197.1	403	0.4
P692007	458335	6799257	138	23.8	39	0.3
P692008	458234	6799375	376.1	15.8	16	1.2
P692009	457737	6799375	101.6	625.8	207	2.5
P692011	457632	6799495	297.4	9.1	65	0.6
P692012	457656	6799495	175.1	7.3	332	0.6
<b>2016 Samples</b>						
OL-16-01	457671	6799293	8	3	55	<0.5
OL-16-02	458204	6798963	2150	>20.0 %	9.59%	55.2
OL-16-03	458166	6789861	2460	1.87%	7.68%	9.7
OCE-1	457944	6799060	5.4	18.2	5	0.2
OCE-2	458299	6798894	1060	48	5808	1.7
OCE-3	457915	6799105	14.8	8.2	31	<0.1
OCE-4	458234	6799215	205.6	6.5	135	0.2
OCE-5	458296	6799236	104.8	18.2	26	0.1
OCE-6	458295	6798947	744.1	4544.9	2.16%	1
OCE-7	458289	6798945	113	845	1.18%	0.4
OCE-8	458274	6788948	715.9	1717.4	2.56%	1.3
OCE-9	458262	6798945	1622.3	299.7	1.17%	1.7
OCE-10	458232	6798955	247.3	10.27%	18.32%	10.3
OCE-11	458220	6788960	826.9	1.63%	4.51%	8.3
OCE-12	458207	6798961	861.5	>20%	12.57%	27.9
OCE-13	458196	6798965	4486.7	15.44%	2.61%	26
LAKE-1	457879	6799148	60	1612	592	0.4
VEIN 2	458160	6798963	5269.4	8952.5	7.43%	13.1
BL 180E	458339	6799285	35.2	193.9	167	0.2
HF-1 (Hdframe)	457613	6799424	1518.5	744.3	21.64%	10.3
HF-2	457628	6799430	1391.7	277.7	6.61%	3.7
HF-3	457627	6799434	836.4	144.7	25.55%	9.4
Trench 1 Grab	457716	6799401	745.2	4.06%	26.63%	23.5
#1 Extension	457744	6799367	611.1	51	1.94%	1.6
RS-1	457505	6799361	9.1	28.2	361	<0.1

MHZ-1	457669	6799288	35.5	57.6	590	0.1
MHZ-2	457675	6799299	57.7	112.3	414	0.2
MHZ-3	457629	6799275	19.7	31.6	157	<0.1
MHZ-4	457634	6799275	44	40.9	128	0.1
MHZ-5	457611	6799279	13.7	13.7	63	0.1
MHZ-1 TR	457669	6799288	21.6	24.6	48	<0.1
RS	457702	6799415	279.3	1.57%	26.04%	13.2
<b>2017 Samples</b>						
V408052	458320	6798962	862	3.10%	2.67%	5.8
V408053	458217	6798963	3.04%	18.95%	3.12%	27.6
V408054	458204	6798965	1985	>20.0%	7.10%	39.9
V408055	458195	6798968	1420	13.15%	9.28%	20
V408056	457619	6799430	137	1050	428	0.9
V408057	457626	6799425	775	1.81%	7.67%	7.5

The sample location map (Figure 6) shows the locations of all samples taken. Figure 7 and Figure 8 represent the Pb assay values and the Zn assay values, respectively. The conclusion that can be drawn from these assay sample maps is that the historical mineralization potential exists in other places on the property and a good systematic exploration process needs to be followed to document the fissure/vein systems, their orientation and the extensiveness of the mineralization.

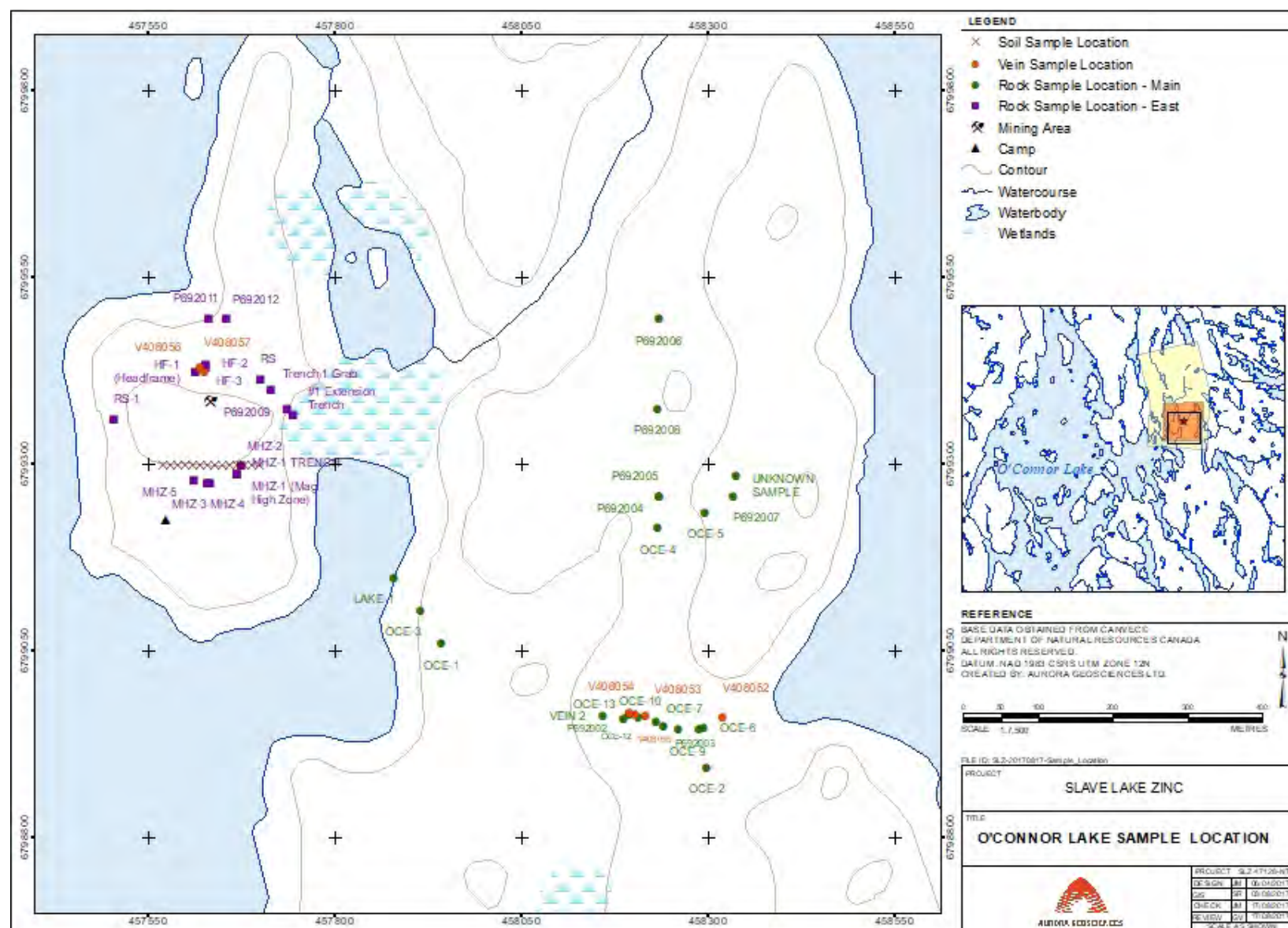


Figure 6. Sample Location Map - O'Connor Lake Property

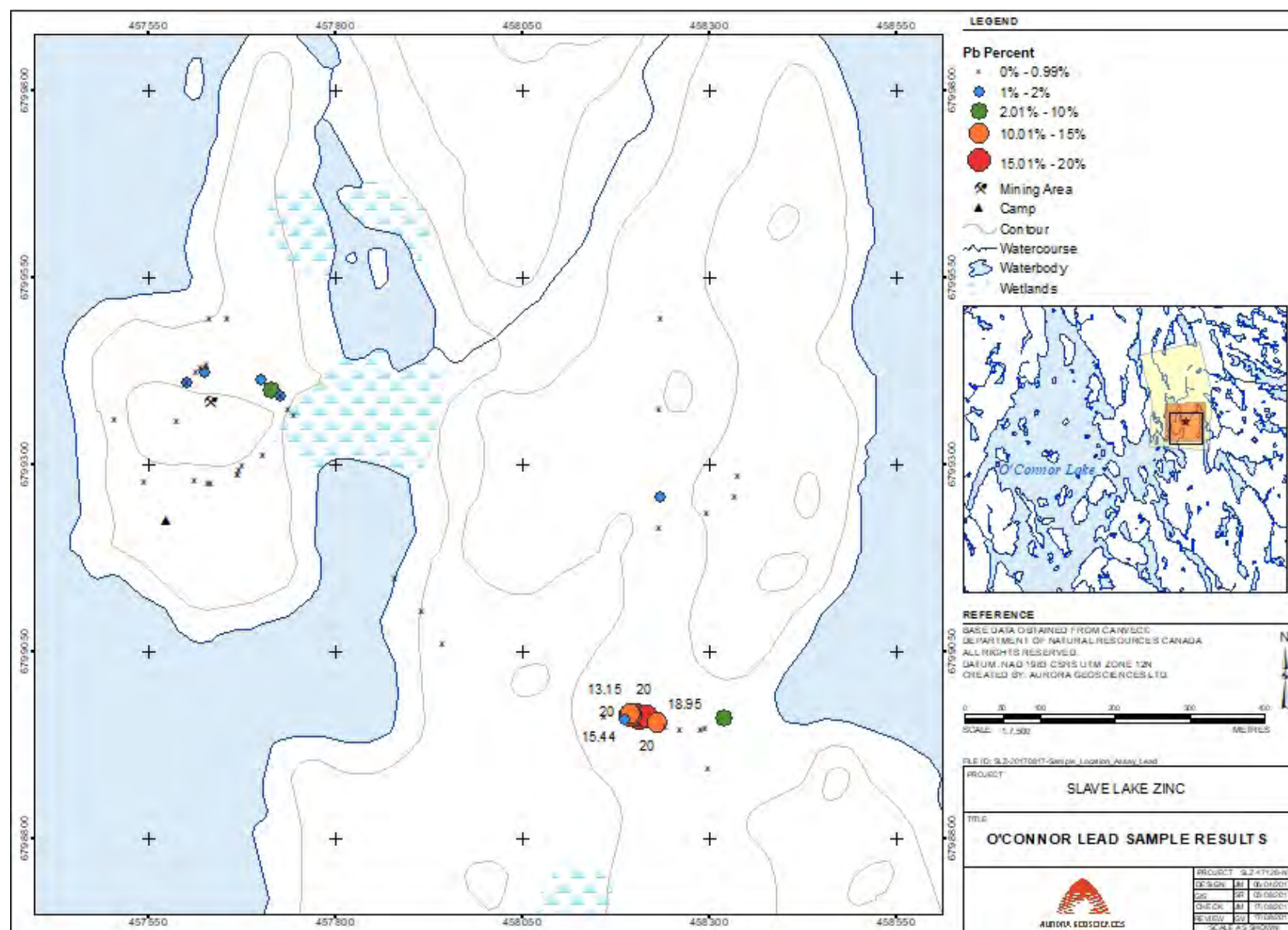


Figure 7. Pb Assay results for the O'Connor Lake Property



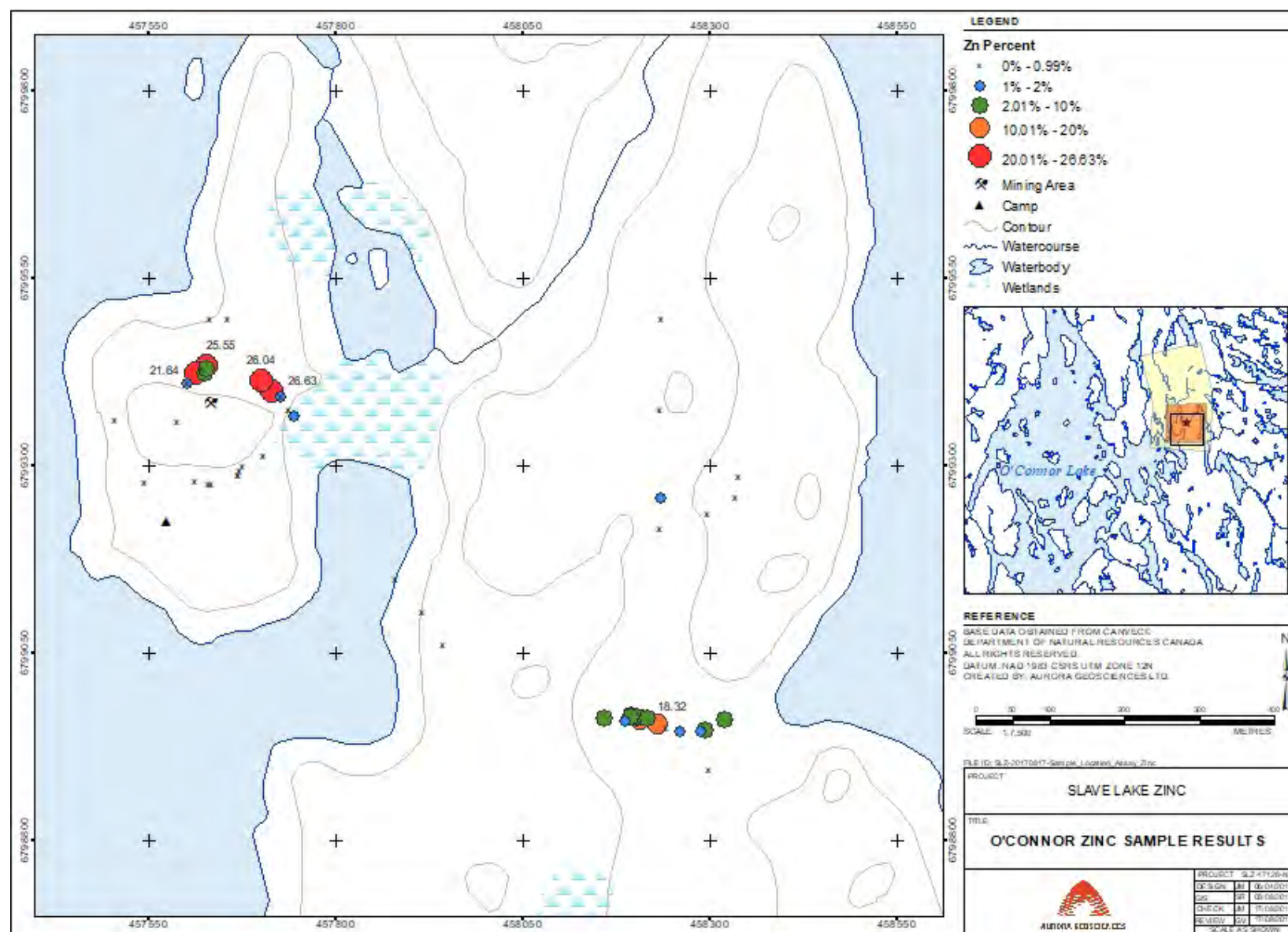


Figure 8. Zn Assay Data for the O'Connor lake Property

## 9.2 Total Field Magnetic Survey

A total field magnetic ground survey was completed over the MKW Lease between October 12-14, 2017. A total of 66.6 line kilometres were surveyed using a walkmag (continuous moving and reading) survey comprising 4 field GEM GSM 19W proton precession magnetometers and one GEM GSM-19T proton magnetometer was used as a base station.

Data were acquired at a sampling frequency of one reading per second along varying line lengths up to 2 km, spaced at 20 metres and trending due north. Data were corrected for diurnal variation using the diurnal correction utility in Gemlink software.

Four operators were used to survey the property and as such the levelling of data between operators was completed daily using a common baseline, which the operators would survey prior to initiating the grid survey. Change in sensor height can be evaluated using this common baseline and data was corrected accordingly. Daily files were merged in Geosoft's Oasis Montaj software where data quality control, additional processing and plotting were performed. Colour contour maps were created for total field magnetics.

### 9.2.1 Discussion of Magnetic Survey Results

The MKW lease overlies a structurally complex area of the Talston Magmatic Zone (Figure 10, Appendix A). The ground geophysical survey indicates at minimum two primary rock types underlying the survey area. To the west, and on the peninsula containing the old mine shaft, appears to be a more massive amphibolite gneiss (high magnetic background). The central portion of the grid comprises a less magnetic unit of sillimanite-garnet gneisses with a high granitic composition. On the east side of the survey area is a higher magnetic background unit with N-S trending magnetic low linears indicating a strong migmatitic association of amphibolite gneiss.

Of significant interest are the W-NW trending lineaments (black) which appear to be the prominent structural features underlying the grid area. One prominent lineament appears to align the two prominent zinc-lead showings on the property. The #2 Vein is located in the southeast portion of the grid while the #1 Vein is located in the west-central portion of the grid.

There are weaker or less prominent E-W trending lineaments which either cut or dissect the NW trending lineaments. It cannot be reasonably explained whether the gold mineralization is associated with the W-NW trending lineaments or the E-W trending lineaments. Suffice to say that the area is underlain with significant structure and related quartz veining amenable to the emplacement of high grade zinc-lead-silver veins.

## 10 Drilling

No drilling has been carried out on the property by Slave Lake Zinc Corp.

## 11 Sample Preparation, Analysis and Security

### 11.1 Overview

During the 2006 and then again in 2016, a property examination by Derrick Strickland, P.Geo. obtained seven samples during his 2006 visit and three samples from the 2016 visit. The samples were acquired from old trenches and old waste piles. A larger coincident program was completed during 2016, with an additional 29 rock samples collected by an exploration services crew from Yellowknife. All samples collected represent sulphide mineralization from lenses of massive sulphide and were analyzed to confirm the historical mineral content which has been reported on the property.

Then, on August 1, 2017, the author visited the O'Connor Lake site to verify previous sampling and collected 6 samples, 4 from the No. 2 vein and 2 samples from the waste rock pile located adjacent to the shaft at the No. 1 vein. The author wanted to confirm the contiguous nature of the mineralization in the No. 2 vein as there is little information existing for this structure.

At the current stage of exploration, the geological controls and true widths of mineralized zones are not known and the occurrence of any significantly higher-grade intervals within lower grade intersections has not been determined.

The next stage of exploration for this project needs to include a rigorous QA/QC program from a sampling perspective. ACME Analytical Labs and ALS Labs are accredited to ISO 9001 and ISO 17025, respectively. The standard and the internal quality control is considered acceptable at this early stage.

### 11.2 Sampling Protocol

In most cases, the sample sites were all pre-selected during the larger 29 sample program in 2016. The remaining programs were under the operatorship of an acceptable Qualified person. The author has been able to confirm that all sampling was completed using the same protocol. The geologist or sampler arrived at the site and prospected for mineralization. When samples were taken, the site was marked with a GPS location and flagging tape was wrapped around a loose sample marking the sample site. The sample number was written on the end of the flagging tape and the flagging tape was wrapped around the rock many times, preserving the writing on the flagging tape. Samples are described using lithology, structure, mineralization and alteration. A sample ticket is filled out for every sample. Samples are placed into a medium sized polymil bag (11"x18") with the sample number written on the outside of the bag. One portion of the sample ticket is placed in the sample bag with the sample and the bag is wrapped with a zap strap. The other portion of the sample ticket remains in the sample book for long term storage. Up to 10 samples can be placed into a larger rice bag (18"x36"). The lab, address, sample numbers are written on the outside of the bag and another zap strap is placed around

the top of the rice bag. All data is then digitized into an xls database for future use in plotting all sample and geochemical information.

Samples are shipped via fixed wing to Yellowknife where the samples are delivered either to ALS Labs (ALS has a prep lab in Yellowknife) or the samples were sent via bus to Vancouver in care of Glen Macdonald (a Director and shareholder of Slave Lake Zinc Corp.) who rushed them to the ACME lab.

All rock samples were crushed to -10 mesh followed by pulverizing a 250-gram split to -150 mesh (95%). A 30-gram cut of the -150-mesh material from each sample was then analyzed for AQ200 36 element ICP analysis by ACME and 33 element analysis by ALS Labs.

The 2006 samples collected by Mr. Strickland were placed into plastic sample bags with a numbered ticket and stored in a locked facility in Yellowknife until submitted for analysis at ACME Analytical Labs (ISO 9001 accredited). ACME included a standard test sample for quality control purposes.

### **11.3 Analyses**

The 2016 samples collected by the Yellowknife crew and the 2017 samples collected by the author were delivered to ALS Labs in Yellowknife (accredited ISO 17025 pursuant to NI 43-101). All the rock samples underwent an assay package comprising ME-ICP61 which includes a 33 element four acid ICP-AES analysis. An extensive quality control/quality assurance program has been developed at both Acme and the ALS labs to ensure the production of accurate and reliable data.

The Data Verification techniques employed by Acme Laboratories and ALS labs are summarized on their QA/QC certificates. In the Author's opinion, an independent data verification protocol was not required for these tertiary programs. Certainly, a more rigorous QA/QC program needs to be inserted during the next phase of work.

Both ACME Analytical Labs and ALS Labs are independent of the Vendors, the Company, and the author of this report.

## **12 Data Verification**

The author is satisfied with adequacy of sample preparation, security and the analytical procedures used in the collection of the 45 rock samples on the property. The author is of the opinion that the description of sampling methods and details of location, number, type, nature and spacing or density of samples collected, and the size of the area covered are all adequate for the current stage of exploration for the property.

The samples were acquired to test the repeatability of sample results obtained from historical sampling and mining. The author designed his 2017 program to verify the location of the structures and the mineralization documented in reports.



The author visited the property on August 1, 2017. The geological work performed in order to verify the existing data consisted of collecting rock chip samples from the trenches and dumps and visiting approachable old workings. The samples collected during site visits demonstrated mineralization with significant values in Pb, Zn, Cu and Ag.

The author is satisfied with the adequacy of the sample preparation and security, and the procedures used in the collection during the three site visits

The quality control of the assaying was completed by both ACME and ALS Labs using their internal standards and blanks. The sampling protocol for the three programs was limited as per the scale of the program. The reader is cautioned to treat the data as not being representative of the whole property but certainly can be construed to represent the mineralization along the No.1 and No.2 veins.

### **13 Mineral Processing and Metallurgical Testing**

The O'Connor Lake property is still considered an early stage exploration project and as such no mineralogical, metal processing or metallurgical testing has been conducted on mineralized material.

### **14 Mineral Resource Estimates**

No mineral resource estimates have been completed on the area presently covered by the O'Connor Lake Pb-Zn-Ag-Cu property.

### **15 Adjacent Properties**

There are no documented mineral properties adjacent to the O'Connor Lake Pb-Zn-Ag-Cu property.

### **16 Other Relevant Data and Information**

To the Company's knowledge, there is no other relevant information available on the O'Connor Lake property that has not been expressed in this report.

### **17 Interpretations and Conclusions**

The Property covers fissure quartz-vein hosted zinc-lead mineralization. The No.1 vein has been partially explored and traced for over 200 meters along strike and 250 meters to depth. The No.1 vein system is open along strike and to depth.

The Property covers a geological environment permissive to host significant fissure quartz vein zinc-lead-silver mineralization in an area not subjected to modern exploration technology.

The No.1 vein occurs in a shear zone within an amphibole gneiss which contains bands of granitic material. On surface, the No. 1 vein is exposed over about 180 feet (54.86 m) and varies in width from 1.5 to 6 feet (45.72 cm - 1.82 m). Drilling in 1951 and 1952 traced the vein for a length of 600 feet (182.88 m) at the 150-foot level (45.72 m). The vein was exposed by surface trenching for a strike length of one hundred and fifty feet (45.72 m) and 26.3 tons of cobbled ore from an open cut was shipped to the smelter at Trail, B.C. The 26.3 tons of material assayed 55.0% lead, 13.5% zinc and 2.7 ozs. silver per ton. The No. 1 vein may represent a splay fault trending northerly from the mineralized corridor hosting the No. 2 vein

The MWK No. 2 vein is exposed about one-half mile southeast of the No.1 vein, between the south bay of O'Connor Lake and Gossan Lake to the east. Most of this vein is covered by overburden, and trenching has exposed widths of up to three feet (91.44 cm) of the mineralized quartz vein for a length of four hundred feet (121.92 m). The No. 2 vein, and its extension, occurs in schistose to gneissic amphibolite except for the east side of Gossan Lake where it intrudes granite. In 1951, one assay returned an assay of 4.2% Pb, 19.4% Zn and 0.88 oz/t Ag across 2 feet (60.96 cm).

The No. 2 vein appears to be part of a larger west-northwest trending (280° AZ) structure which may represent a mineralized corridor on the property (Figure 10). This west-northwest trending structure represents an area for future exploration on the property.

The recently completed total field magnetic survey provides a corroboration of lithology and structure underlying the MKW lease. The magnetics reveal two primary lithologies underlying the lease; an amphibolite gneiss of fairly high magnetic intensity in the east and west portion of the lease, and a sillimanite-garnet gneiss with a high granitic component underlying the central portion of the grid area. The magnetic survey also reveals two primary structural trends, one trending W-NW and the other at an E-W orientation. The relationship between the W-NW and E-W trending structures is not understood at this time. It is clear that the two primary zinc-lead-silver showings can be joined along the same W-NW trending lineament but it is also apparent that in the area of the mineralization there are E-W lineaments. Further geophysical surveying and diamond drilling will be required to be able to ascertain which structures most related to the mineralizing event.

Work in the 1950's was mainly done on surface showings. The depth extent of the mineralization was not fully explored. Use of modern geophysical methods such as total field walkmag, ground resistivity and possible gravity surveys will be critical methods for evaluation of delineating economic zones of mineralization.

## 18 Recommendations

A staged approach is recommended to continue exploration on the property. Initially, it is recommended that detailed geophysical surveying comprising additional total field magnetics, resistivity and even high resolution gravity surveys be employed. Coincident with this program would be a detailed geological mapping and prospecting program. This data would be digitized and processed to develop drill targets along the vein/fissure structures. The magnetic and resistivity data can be modelled in 3-D to determine dips and locales of prospective zones of additional mineralization. It is critical to evaluate the periphery areas to the main veins as there are prominent pervasive silicification zones metres away from the primary vein structures. Gravity surveying could be considered as a very high- resolution tool to help constrain the peak zones of mineralization. The Company also proposes to test the historical Zn-Pb results with a small 250 metre diamond drill at the original shaft area.

Contingent on favorable results from the first phase, a second phase of exploration would include diamond drilling to test mineralization predicted by the geophysical modelling and geological investigation. A 1,500 metre NQ core-sized diamond drilling program should be considered concentrating at the main shaft area of the No.1 vein and along the trench area of the No. 2 vein.

### Proposed Expenditures

<b>Phase 1 - Exploration</b>	<b>Cost</b>
Prospecting/Mapping	\$ 13,500.00
Geochem/Assaying - 200 samples @ \$45/sample	\$ 9,000.00
Possible gridding - 5 days @ \$1200/day	\$ 6,000.00
HLEM/resistivity/chargeability	\$ 4,500.00
AGL- UAV mag, DTM and air photos	\$ 10,000.00
Gravity Survey - 3 days	\$ 4,800.00
Charter aircraft - 5 twins @ \$3,000/trip	\$ 15,000.00
Camp, grub and logistics - 12 days X \$550/day	\$ 6,600.00
Expediting - 20 hrs X \$85/hr	\$ 1,700.00
250 metres of drilling @ \$600/metre	\$150,000.00
<b>Subtotal Phase 1</b>	<b>\$221,100.00</b>
<b>Phase 2 - Drilling</b>	
Diamond Drilling @ \$600/m X 2000m - all-inclusive	\$1,200,000.00
<b>Subtotal Phase 2</b>	<b>\$1,200,000.00</b>
Subtotal Phase1 and Phase 2 Budget	\$1,421,100.00
Contingency 5%	\$ 70,000.00
<b>Total Phase 1 and Phase 2 Budget</b>	<b>\$1,491,100.00</b>

Respectfully submitted,

***(original signed and sealed) "Gary Vivian"***

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Gary Vivian, M.Sc., P.Geol.

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## 20 Certification of Author

I, Gary Vivian, of the City of Yellowknife, in the Northwest Territories, Canada,

HEREBY CERTIFY:

1. That my business address is 3506 McDonald Drive, Yellowknife, NT, X1A 2H1
2. This certificate applies to the report titled "Technical Report, O'Connor Lake Pb-Zn-Cu-Ag Property, Northwest Territories, Canada" and dated October 17, 2018.
3. That I am a graduate of Sir Sandford Fleming College as a Geophysical Technologist, 1976.
4. That I am a graduate of the University of Alberta in Geology:
  - a. B.Sc. – Specialization Geology, 1983.
  - b. M.Sc. – Geology, 1987, U of A – The Geology of Blackdome Ag-Au Deposit, BC
5. That I have been practicing Geology since 1983:
  - a) May 1983 – November 1986 Noranda Exploration Co. Ltd., Bathurst, NB
  - b) December 1986 – May 1988 Noranda Exploration Co. Ltd., Timmins, ON
  - c) May 1988 – Present Covello, Bryan and Associates Ltd.  
and currently Aurora Geosciences Ltd.,  
Yellowknife, NT
6. That I am a registered Professional Geologist in the Northwest Territories. I have professional designation in Manitoba, Saskatchewan, and Alberta. I am also registered with AIPG (American Institute of Professional Geologists). I have over 35 years of exploration experience concentrating in massive sulphide, magmatic sulphide, diamond, uranium and precious metal deposition. As such I am a Qualified Person for the purposes of National Instrument 43-101.
7. As a principal of Aurora, I have written this report and visited the property on August 1, 2017, to verify the historical workings and sampling on the O'Connor Lake property. I am responsible for all sections of the report titled – "Technical Report- O'Connor Lake Pb-Zn-Cu-Ag Property - Northwest Territories, Canada".
8. That I am not aware of any material fact or material change with respect to technical aspects of the report which is not reflected in the report.
9. That I am independent of the issuer as defined by the tests set out in Section 1.5, "Standards of Disclosure for Mineral Projects", National Instrument 43-101.
10. That I am independent of Slave Lake Zinc Corp.
11. That I have read "Standards of Disclosure for Mineral Projects", National Instrument 43-101 and read Form 43-101F1. This report has been prepared in compliance with this Instrument and Form 43-101F1.
12. As the Qualified Person for this Technical Report, I have had no prior involvement aside from my site visit on August 1, 2017.
13. That, as of October 17, 2018, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated, October 17, 2018 at Yellowknife, NT.

***(original signed and sealed) "Gary Vivian"***

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Gary Vivian, M.Sc., P.Geol.

## Date and Signature Page

This report titled “Technical Report, O’Connor Lake Pb-Zn-Cu-Ag Property, Northwest Territories, Canada” and dated October 17, 2018 is prepared by and signed by the following author:

***(original signed and sealed) “Gary Vivian”***

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Gary Vivian, M.Sc., P.Geol.  
Chairman, Aurora Geosciences Ltd.

Dated at Yellowknife, Northwest Territories on October 17, 2018

## APPENDIX A

Figure 10. Total Field Magnetic Survey of the MWK Lease



