

# GM 59206

GEOLOGICAL REPORT ON THE 1999 EXPLORATION PROGRAM, LEMOINE PROPERTY

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TECK EXPLORATION LTD.

NORTH BAY, ONTARIO

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**GEOLOGICAL REPORT** B-207  
**ON THE**  
**1999 EXPLORATION PROGRAM**  
**LEMOINE PROPERTY**  
**LEMOINE, RINFRET AND DOLLIER TOWNSHIPS**  
**QUEBEC**

by

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R. Stewart

MRN-GÉOINFORMATION 2002

**GM 59206**

Report No. 1331NB

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## INTRODUCTION

The Lemoine project is an exploration program for gold-rich massive sulphides in the southern portion of the Chibougamau mining camp. The property includes the exceptionally high-grade past producing Lemoine Mine, which produced 758,070 T grading 9.56% Zn, 4.20% Cu, 4.54 g/t Au and 83.38 g/t Ag between 1975 and 1983.

Teck optioned the Lemoine property from Loubel Exploration in 1999 for the following reasons:

- Presence of a high-grade historic producer on the property that combines a significant amount of gold with volcanogenic massive sulphides.
- Large land position that included 18 kilometres of favourable stratigraphy in an underexplored part of an established mining camp.
- Presence of favourable felsic volcanic rocks, known sulphide mineralization and strong hydrothermal alteration.
- Only a limited amount of previous drilling, and then generally only shallow drilling, had been completed outside of the mine area.

The 1999 exploration program consisted of a deep penetrating geophysical survey (DeepEM), which examined the area below the depth penetration of the previously completed geophysical surveys and diamond drilling. The geophysics was followed by geological mapping and whole rock geochemical sampling which identified areas with favourable geology, significant sulphide mineralization and hydrothermal alteration.

### Logistics

A fixed-loop, deep penetrating electromagnetic ("DeepEM") survey, totalling 74 line-km, was carried out on the Lemoine property between March 2<sup>nd</sup> and March 22<sup>nd</sup> 1999. The survey was carried out by crews of Geophysique TMC of Val d'Or, Quebec with planning and interpretation by consulting geophysicist Gérard Lambert of Rouyn-Noranda. The survey was

completed on lines spaced every 800 feet with station readings at 150 foot intervals, using an out-of-loop (DeepEM) configuration. A total of 15 separate loops were used for the survey. A more detailed account of the survey parameters are listed in a separate report by Lambert (1999).

The geological mapping and whole rock sampling programs were completed between May 25<sup>th</sup> and September 18<sup>th</sup> of 1999 by L. Martin and R. Stewart. Mapping, at a scale of 1:15,000 was completed over the entire property. Geological traverses were completed on grid lines at 400 foot intervals over the central part of the property, while traverses using pace and compass with airphotos for control were used to cover the area to the north, south and west of the existing grid. Prospecting and Beep-Mat surveying were completed over the most prospective areas and geophysical conductors.

During the 1999 field season, a total of 169 samples were collected for whole rock analysis. The analysis included 10 major oxides, loss on ignition and trace elements by X-Ray fluorescence spectrometry on a pressed pellet, as well as a 32 element geochemical package by acid extraction with determination by I.C.P. spectroscopy. Gold assays were done by DCP after collection by fire assay. All gold assays greater than 1000 ppb were reassayed using a gravimetric method. A total of 20 grab samples from quartz veins or mineralized outcrops were sent for gold and base metal analysis only. All sample preparation and gold analysis were done by Les Laboratoires XRAL located in Rouyn-Noranda, Quebec, while major oxides and lithochemical analysis were done by XRAL Laboratories in Toronto, Ontario. A detailed method of the analysis is included in Appendix I at the back of this report.

### **EXPENDITURES**

Exploration expenditures to December 31<sup>st</sup> 1999 by Teck Exploration Ltd. totalled \$142,333 and are summarized by category in Table 1.

**TABLE 1**  
**EXPENDITURES FOR WORK COMPLETED IN 1999**

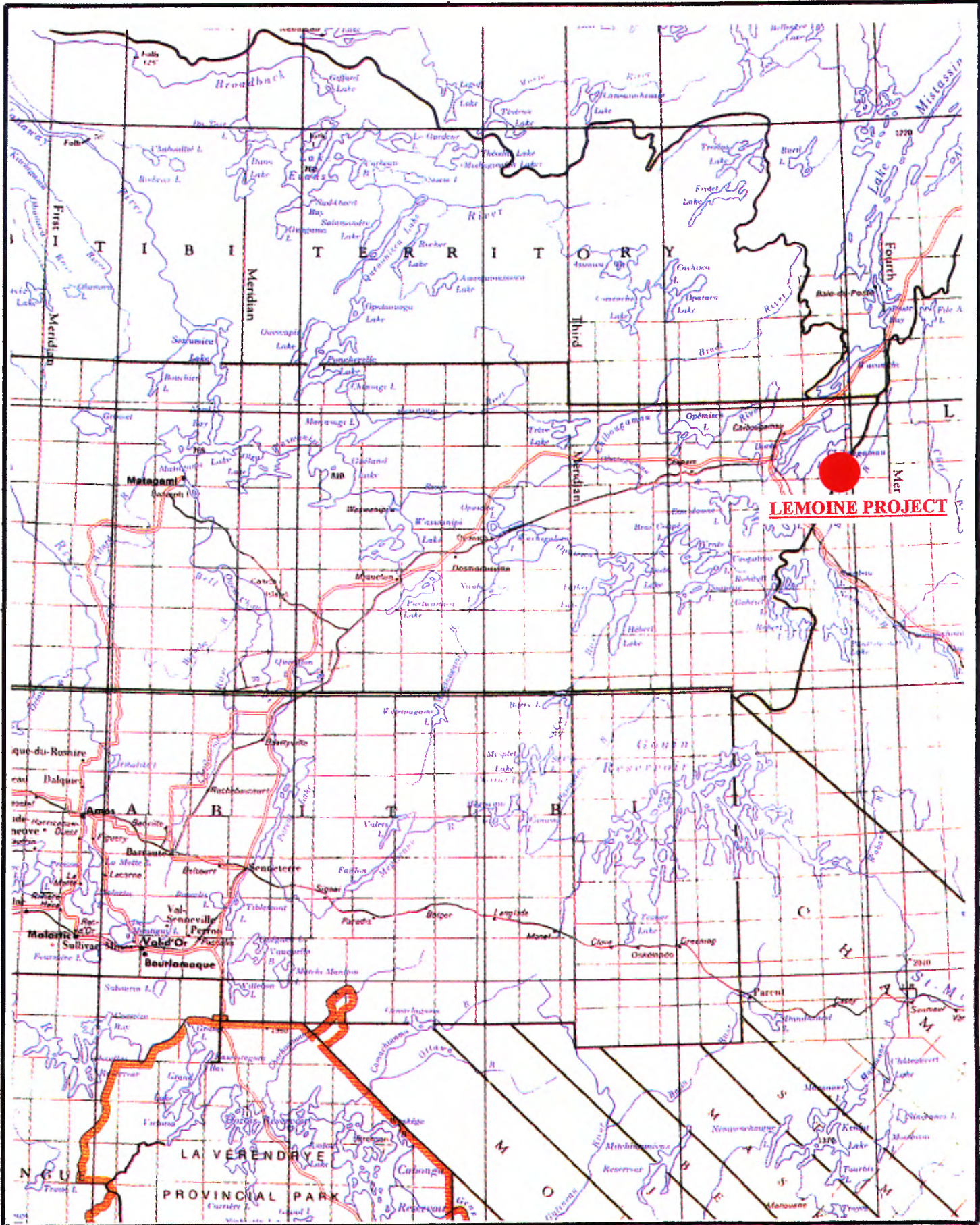
Geophysics	\$ 56,160
Assays	6,573
Geology	45,406
Transport and Accommodations	7,301
Other	26,893
<b>Total</b>	<b>\$ 142,333</b>

### LOCATION AND ACCESS

The Lemoine property is located 25 kilometres southeast of the town of Chibougamau, Quebec, in the townships of Lemoine, Rinfret and Dollier (Figure 1). The property is easily accessible with a truck by following provincial highway 167 south of the town of Chibougamau for 32 kilometres. At kilometre marker 200, follow an all weather logging road (L-210) in an easterly direction for 20 kilometres. At this point, a fork in the road leads to the northeast for 5 kilometres before arriving at the mine site. Access to most of the property is fairly easy due to the mine road and a series of logging roads that cross the property in a northeasterly direction, running slightly oblique to the strike of the rocks. The property is located 12 kilometres east of the railway and loading station which were previously used by the Lemoine mine to ship concentrate.

### LAND POSITION

The Lemoine property consists of 233 contiguous mining claims, covering a total of 3,732 hectares in Lemoine, Rinfret and Dollier Townships (Figure 2, Appendix II). The 233 claims include; 20 claims (320 ha) staked by Loubel in the SW corner of the property, 4 claims (64 ha) staked to cover the downdip extension of the DeepEM anomalies and the restaking of 4 claims (119 ha) which covered the reclamation area over the tailings and mining concession. The

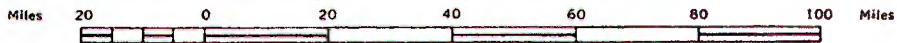


**LEMOINE PROJECT**

**LOCATION MAP**

Figure 1

1 inch equals approximately 32 miles





# Microfilm

**PAGE DE DIMENSION HORS STANDARD**

**MICROFILMÉE SUR 35 MM ET  
POSITIONNÉE À LA SUITE DES  
PRÉSENTES PAGES STANDARDS**

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## SUMMARY

The Lemoine property is located in Abitibi Greenstone Belt, 25 kilometres southeast of the mining town of Chibougamau, Quebec. It is a gold-rich massive sulphide project covering 3,732 ha, in parts of Lemoine, Rinfret and Dollier Townships. The property was optioned from Loubel Exploration Ltd. by Teck Corporation under terms of an agreement dated January 6<sup>th</sup>, 1999.

The Lemoine property includes the past producing Lemoine Mine, developed between 1975 and 1983 by Patino Mines Ltd. and Northgate Explorations. This exceptionally high-grade mine produced 758,070 tons grading 9.56% Zn, 4.20% Cu, 4.54 g/t Au and 83.38 g/t Ag. The property covers 18 kilometres of favourable Waconichi Formation stratigraphy on the southern limb of the Chibougamau anticline.

Previous exploration work outside of the Lemoine Mine area, on the southern contact of the Waconichi Formation rhyolites with Gilman Formation andesites, was considered to have tested the area to shallow depths only. A large complement of geophysical and geochemical methods had been completed on various parts of the property. No new significant sulphide mineralization was identified outside of the mine area.

The 1999 exploration program included line cutting, grid refurbishing and 74 kilometres of DeepEM surveying. The DeepEM examined the area below the depth penetration of the previously completed geophysical surveys and diamond drilling. The geophysics was followed by geological mapping and whole rock geochemical sampling which identified areas with favourable geology, significant sulphide mineralization and hydrothermal alteration.

A follow-up program of diamond drilling is recommended for 2000. The work would include 800 metres of drilling in 3 holes and cost an estimated \$100,000.

present owner of the Lemoine property, Loubel Exploration Ltd., has optioned the property to Teck Corporation under the terms of an agreement dated January 18<sup>th</sup>, 1999. Teck has the option to earn a 60% interest in the property by incurring as operator, aggregate expenditures of \$3.0 million over a period of 60 months and by purchasing, by way of private placement, \$300,000 worth of common shares of Loubel over a 24 month period.

### **REGIONAL GEOLOGY**

The Lemoine property is located in the Chibougamau-Caopatina region, within the northeastern corner of the Abitibi Belt of the Superior Province. It lies at the eastern termination of the "Northern Volcanic Zone", a greenstone unit which extends 250 km east of Matagami. The area is limited to the north by the Opatica Belt, and to the east by the Grenville Province (Figure 3).

The regional stratigraphy in the southern part of the Chibougamau camp can be divided into 2 major groups. These include volcanic rocks of the Roy Group at the base and unconformably overlying epiclastic sediments of the Opemisca Group. Intrusive rocks of the Chibougamau region include the Dore Lake Complex which is cored by the younger Chibougamau Pluton. (Figures 4,5)

The Roy Group is composed of 2 mafic-felsic volcanic cycles. Cycle 1 rocks, dated at  $2730 \pm 2$  Ma (Mortensen, 1993), are made up of a 3-4 km thick sequence of mafic volcanic rocks of the Obatogamau Formation, which is overlain by a thin (800m) yet persistent unit of felsic volcanic rocks of the Waconichi Formation. The overlying Cycle 2 rocks, dated at  $2718 \pm 2$  Ma (Krogh 1982), includes a 3-4 km thick sequence of mafic volcanic rocks of Gilman Formation, which are in turn overlain by a 2-3 km sequence of felsic and minor mafic volcanic rocks and sediments of the Blondeau Formation.

Lying unconformably above the volcanic rocks of the Roy Group are the sedimentary rocks of the Opemisca Group, which include the Stella Formation and the younger Haüy

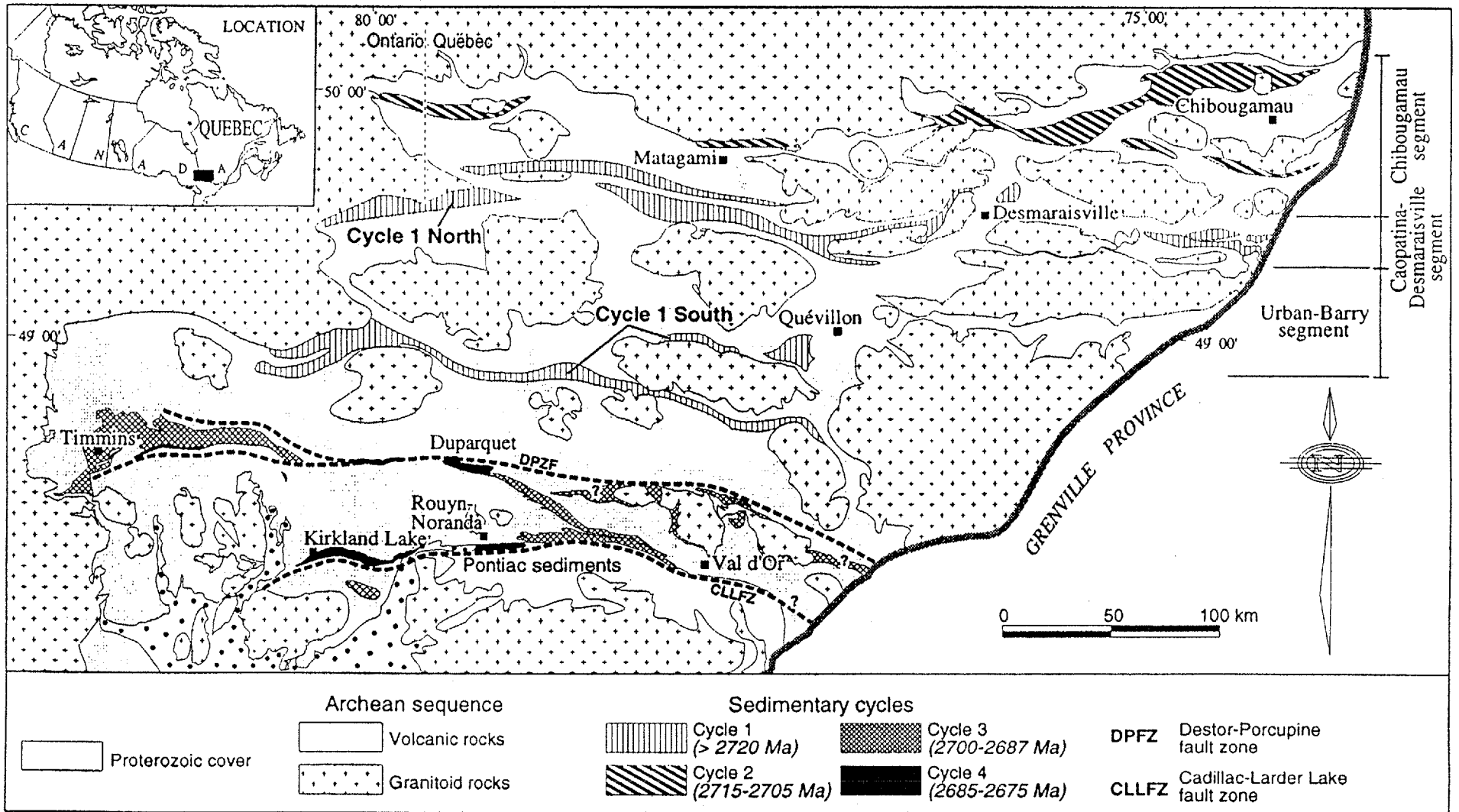
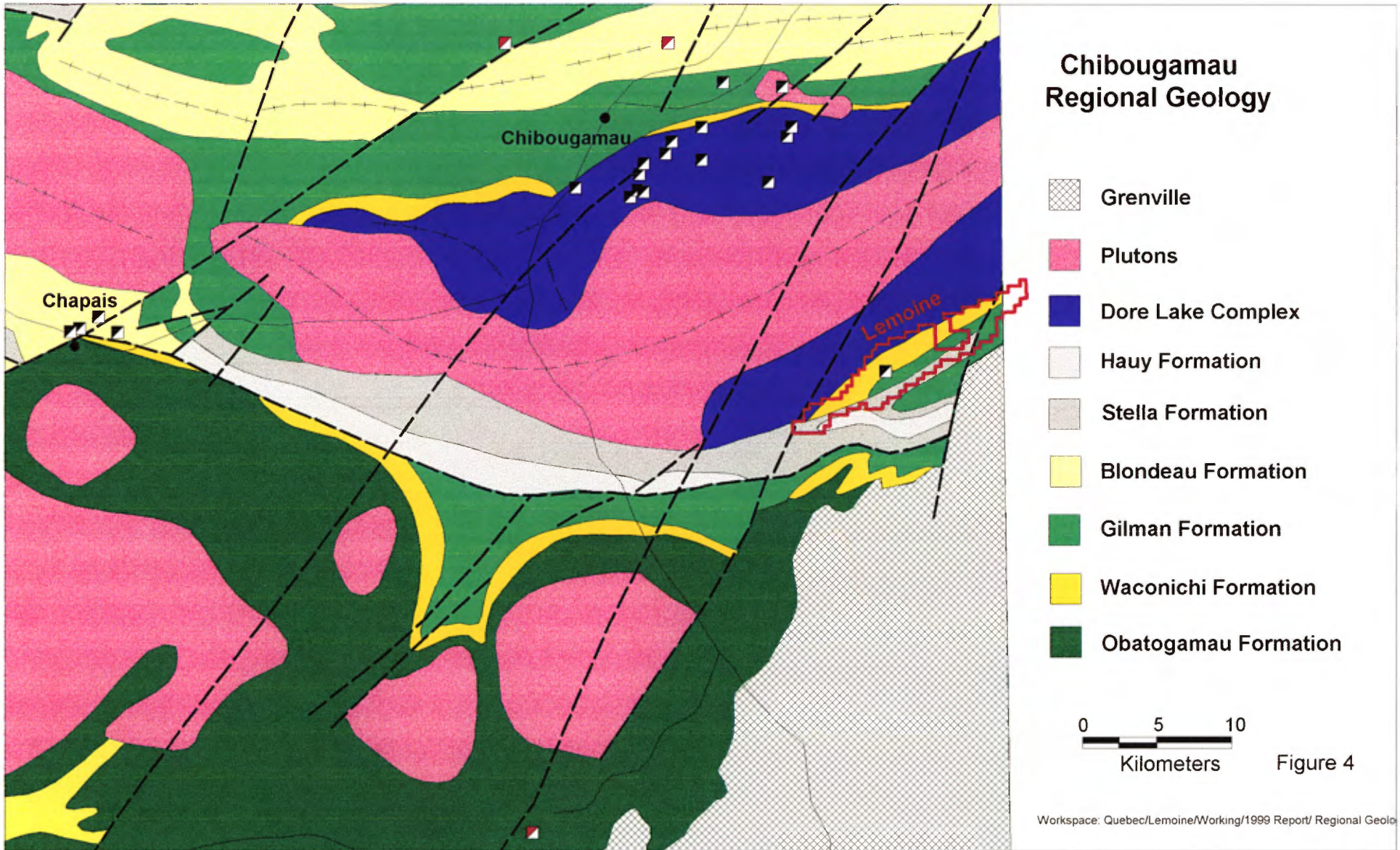


Figure 3: General geology of the Abitibi Sub-province and location of the Chibougamau area.



# Stratigraphy of the Chibougamau Area

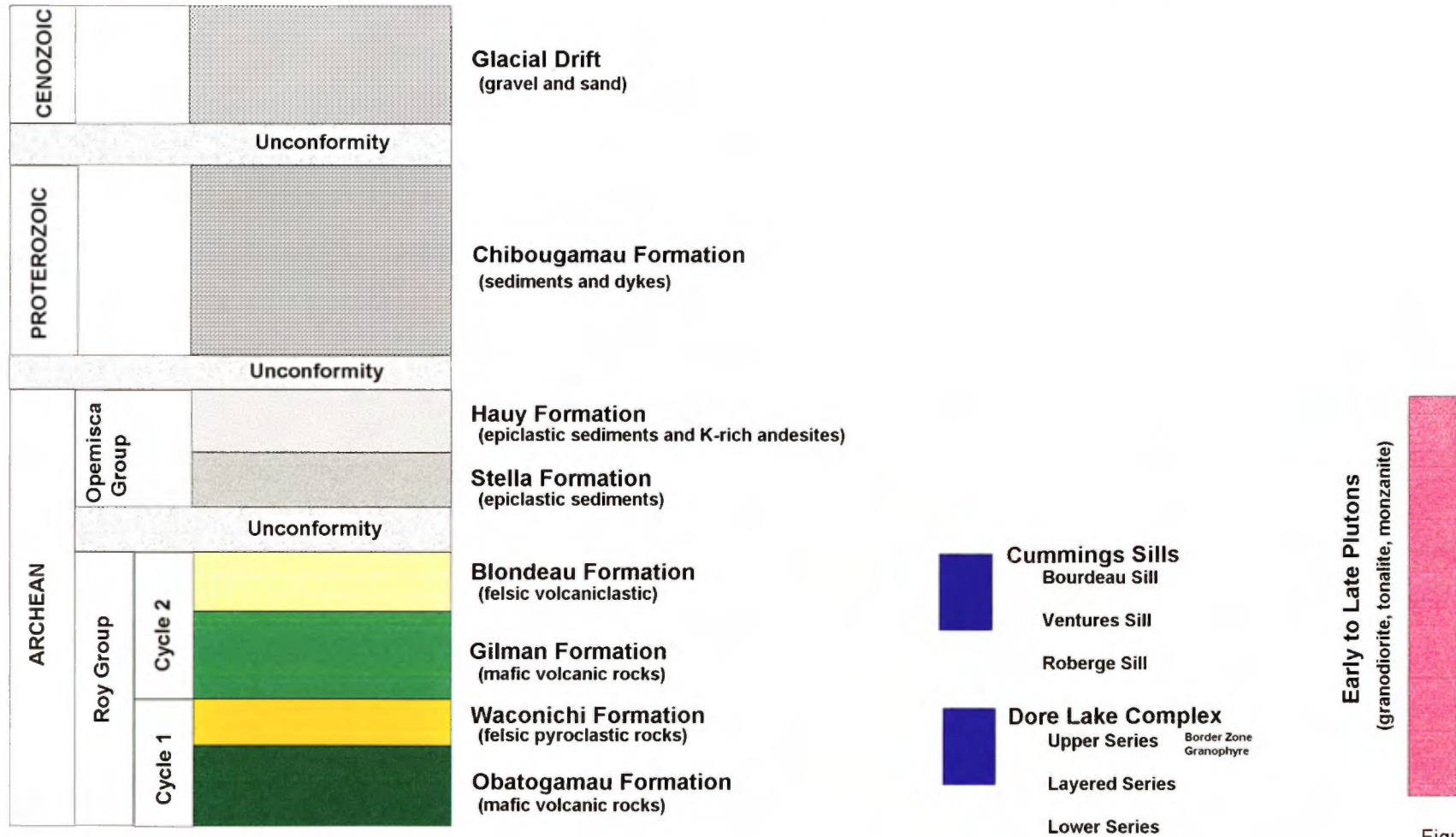


Figure 5

Formation. These sedimentary rocks include argillites, greywackes and conglomerates that have been deposited in fault controlled basins now preserved in synclinal structures.

The Dore Lake Complex, dated at 2728 Ma, is a differentiated layered intrusion emplaced at the base of the Waconichi Formation. It is made up of 3 series; the Lower Series, composed of gabbros and anorthosites, which on the north flank hosts the typical Chibougamau-type copper-gold mines. The Bedded Series or Layered Zone, contains pyroxenite and gabbro units rich in iron oxide, titanium and vanadium (Dore Lake Vanadium Deposit) alternating with anorthositic units. The Upper Series includes the more felsic Granophyre Zone and the Border Zone. Rocks of the Upper Series are only found when in contact with the felsic rocks of the Waconichi Formation.

The Chibougamau Pluton, a synvolcanic intrusion dated at 2718 Ma., is located at the core of the Chibougamau anticline and crosscuts the Lac Dore Complex. This multi-phase pluton of calc-alkaline affinity is composed of diorites and tonalites.

Structurally, the Chibougamau area has undergone regional east-west trending folding which is responsible for the steep nature of the strata. Synclinal structures are present with sediments in the basins while anticlinal structures are associated with early tonalitic to dioritic plutons within the core (Figure 6). The major deformation event, which accounts for the large scale folding and regional schistosity, occurred during the Kenoran Orogeny between 2680-2700 Ma (Corfu, 1989). Four important folding events have been identified in the Chibougamau region, three of which are Archean in age. The Chibougamau area has been crosscut by a large number of faults. Four fault populations have been recognized. The most prominent fault population is the late-stage north-northeast trending faults, which parallel the Grenville Province to the east.

The Chibougamau mining camp shares a similar regional geological setting to that of the Matagami and Joutel camps. They all contain layered mafic complexes and synvolcanic intrusions centered within broad anticlinal structures, surrounded by felsic volcanic rocks and a

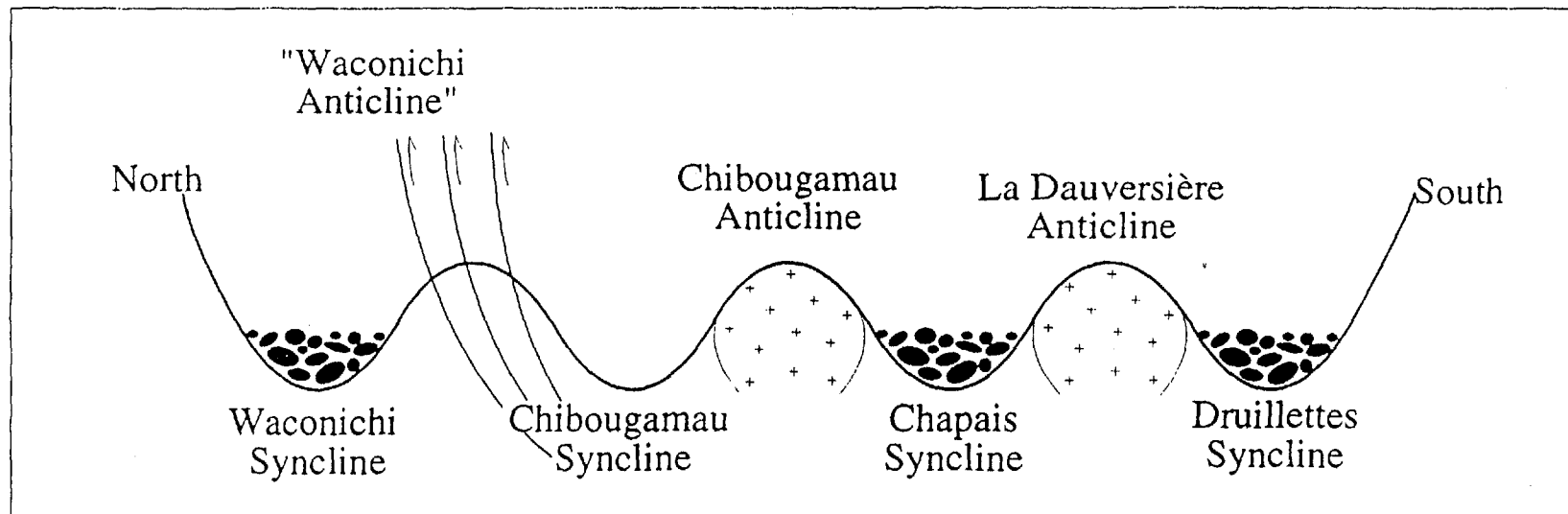


Figure 6: Schematic cross section of the Chibougamau-Caopatina region, adapted from Daigneault & Allard (1990). The Chibougamau area consist of one large synclinorium constituted by 4 major synclines. Three of them contain younging sediment in the core. Two anticlines are occupied by early plutons while the other one is destroyed by a series of E-W trending longitudinal faults.



larger envelope of tholeiitic mafic volcanic rocks. In all three camps felsic volcanic rocks host the VMS deposits. U-Pb age determinations (Mortensen, 1993) indicate that the massive sulphide forming phase of the large, mineralized, felsic-dominated, volcanic centres are very close in age; Joutel (2728 Ma), Matagami (2725 Ma), Chibougamau (2728 Ma) and Normetal (2728 Ma).

### **PREVIOUS WORK**

The geological history of the Chibougamau camp was first recorded in 1870 by J. Richardson, a geologist with the Geological Survey of Canada. Mineralization, mainly asbestos and copper, was initially discovered in the area in the early 1900's. Chibougamau's most promising deposits were discovered in the 1920's, but the area did not develop into a gold-copper mining camp until 1949 following the completion of the highway from St-Félicien. Since this time the Chibougamau-Chapais region has developed approximately 30 mines, producing more than 74 Mt of ore, including 1,3 Mt of copper, 133 t of gold, 700 t of silver, 115 000 t of zinc and 4 400 t of lead. The Lemoine mine is essentially the only volcanogenic sulphide deposit discovered in the Chibougamau area, apart from the smaller Scott Lake deposit which is located on the northern flank of the Chibougamau Pluton.

The earliest recorded exploration on the Lemoine property dates back to 1964, 1965 and 1971 when Noranda and a subsidiary carried out an airborne EM survey, followed by ground EM, magnetic surveys and diamond drilling. Some copper mineralization was identified east of the mine but it was concluded that no further work was warranted.

In 1969 Hudson Bay Mining and Smelting completed an airborne EM survey over the area and identified a number of anomalies, including a 1 line anomaly over what turned out to be the Lemoine orebody. Hudson Bay did not consider the anomaly to be of sufficient interest to warrant ground investigation.

Prospecting by Patino Mines in 1967 located several small boulders of felsic volcanic rocks with significant copper and zinc mineralization. Subsequent prospecting, soil and stream

sampling located only weak copper mineralization. Immediately prior to the release of an airborne INPUT survey by the Quebec Department of Natural Resources in 1972, Patino decided to stake all areas up-ice and around the high-grade boulders. Diamond drilling the following year intersected the Lemoine Mine when testing a weak INPUT anomaly.

Diamond drilling to a depth of 1,000 feet identified a single lens of massive sulphide, 5 to 30 feet thick and 575 feet in strike length. Shaft sinking was initiated in 1974 and mining starting in late 1975. Production spanned between 1975 and 1983, during which time Patino Mines Ltd. and Northgate Explorations produced 758,070 t grading 9.56% Zn, 4.2% Cu, 4.54 g/t Au and 83.38 g/t Ag. The Lemoine Mine was the most profitable mine in the Chibougamau camp and yielded the second highest NSR from a volcanogenic massive sulphide mine in the Canadian Shield and Cordillera (after Riverin, 1998, Figure 7).

Along with the discovery and mining of the Lemoine deposit, Patino and Northgate (1973-1985) completed 115 surface drill holes totalling 92,500 feet. Limited ground geophysical surveys included magnetic, VLF-EM, MaxMin, UTEM, DeepEM, SAMT, gravity and Beep Mat surveys along with soil and stream sediment surveys. No new significant mineralization was identified.

Westminer Canada Ltd. (1989-1993) completed a detailed compilation of the mine area along with various programs of IP, EM surveys, including Westminer's SIROTEM system and diamond drilling (3 holes, 1,857 m). Although never having mined the orebody, Westminer completed all reclamation work of the tailings pond and surrounding mine site in 1994.

Soquem (1994-1996) optioned the property from Westminer at which time they compiled the previous drilling and geophysical data. Soquem had completed Melis (70.7 km), and MaxMin (273.1 km) surveys as well as a more local seismic tomography survey and diamond drilling (21 holes, 7,640 m). Previous work by Soquem was restricted to the known felsic volcanics of the Waconichi Formation, while drilling tested the upper most part of the Waconichi Formation.

# SHIELD & CORDILLERAN VMS - NSR vs TONNES

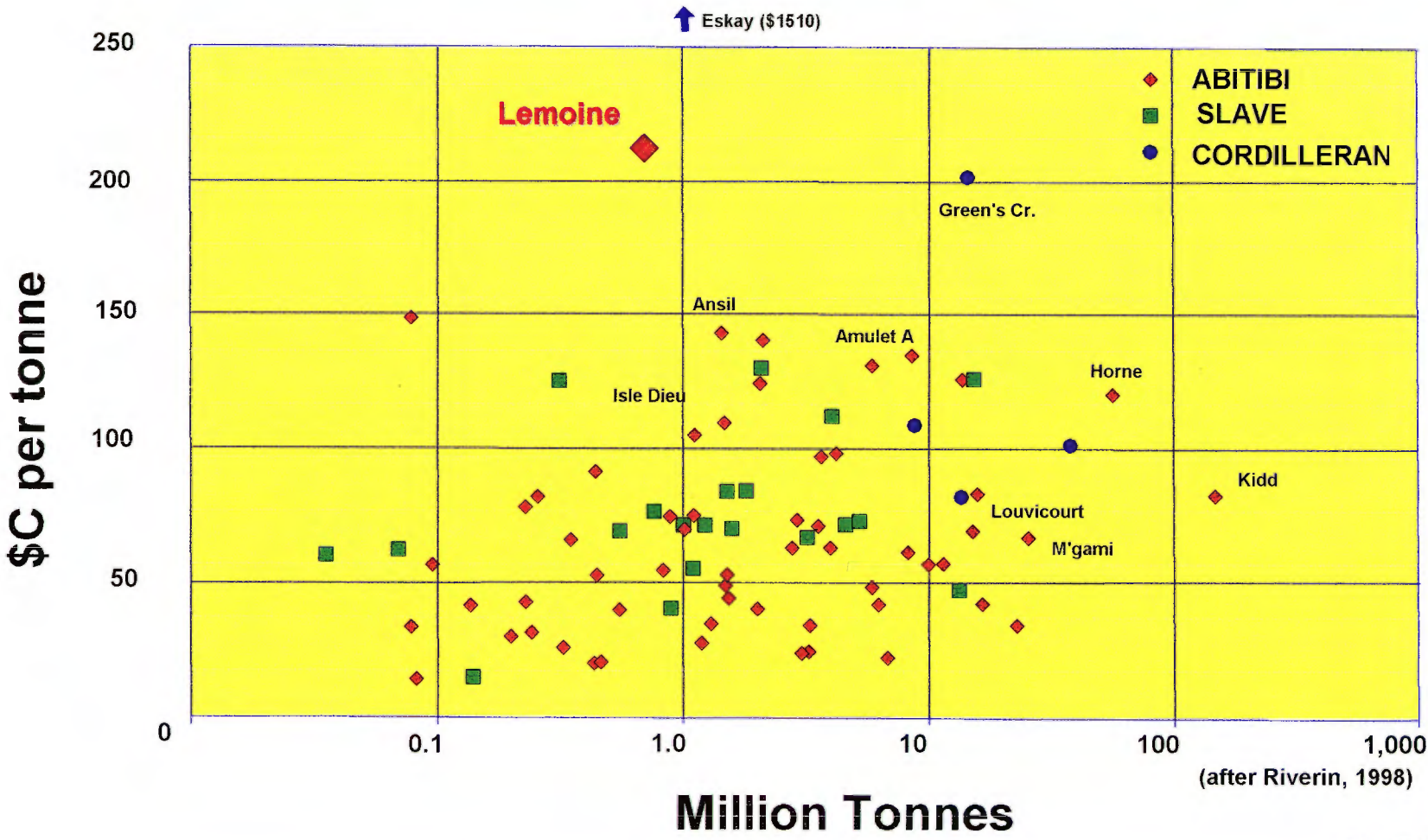


Figure 7

Surface diamond drilling to date on the property totals approximately 181,000 feet in 290 holes while underground drilling totals approximately 71,000 feet in 124 holes. The large majority of this work was concentrated close to the deposit. Over time a wide range of geophysical and geochemical surveys had been used over various portions of the property with varying effectiveness. No economic sulphide mineralization was discovered outside of the Lemoine Mine.

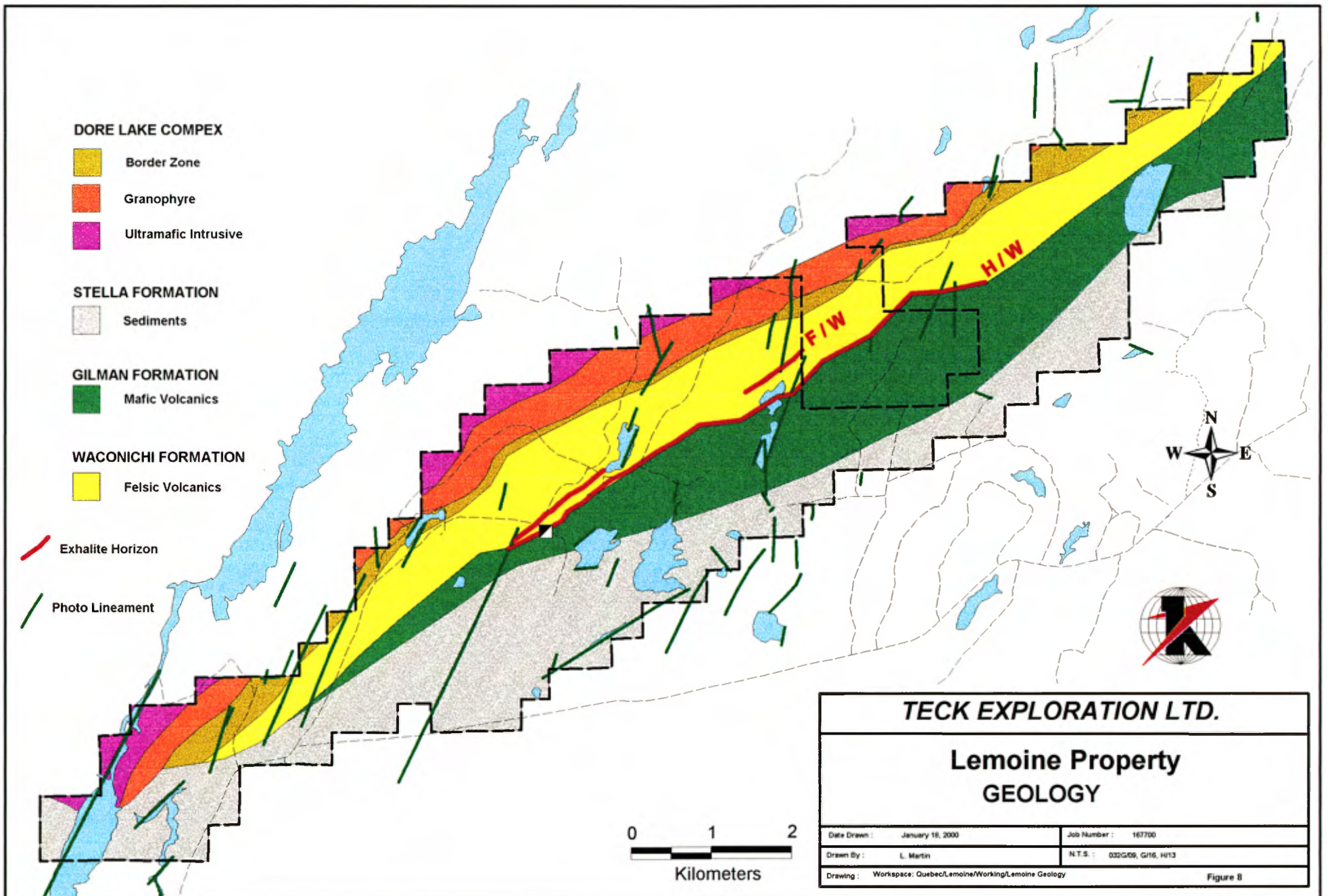
## **PROPERTY GEOLOGY**

### **Physiography**

The topography on the property varies from very low relief in the southeastern part to greater than 100 metres in the northwest due to a large rock-dominated ridge. The southern part of the property is covered by muskeg and swamp with black spruce, while the northern part is dominated by spruce, jack pine and mixed hardwoods. Overburden depths are known to be in excess of 20 metres locally.

### **Stratigraphy**

The Lemoine property is covered by felsic, mafic and volcano-sedimentary rocks that are both south facing and south dipping with an overall northeast-southwest strike (Figure 8). The property straddles the felsic volcanic and intrusive rocks of the Waconichi Formation, which is overlain by mafic volcanics of the Gilman Formation, which in turn are unconformably overlain by sediments of the Stella Formation. The base of the Waconichi Formation is intruded by the semi-conformable Dore Lake Complex. Metamorphic grade is of greenschist facies over most of the property while lower amphibolite facies rocks are present in the eastern most part of the property, closer to the Grenville Front.



### Waconichi Formation

The lower most stratigraphic units on the Lemoine property are the felsic volcanic and intrusive rocks of the Waconichi Formation. These felsic rocks mark the end of the basaltic volcanism for the first volcanic cycle in the Chibougamau area. The rocks are the most economically important since they are host to the Lemoine mine. They vary from massive aphyric to weakly porphyritic rhyolite flows, quartz-feldspar-porphyritic crystal tuffs and quartz-feldspar subvolcanic intrusions/sills. Lesser amounts of volcanoclastics (lapilli to bomb tuffs) and lobed rhyolitic flows were identified in outcrops.

Two interbedded exhalite units, as identified from underground work and diamond drilling, form stratigraphic marker units within the Waconichi Formation. The H/W exhalite is located in the Waconichi Formation at the contact with the overlying Gilman Formation. The F/W exhalite, typically 1 foot thick, is located approximately 500 feet north of the Waconichi – Gilman Formation contact, in contact with and directly overlying the Lemoine Mine sulphides (Cunningham-Dunlop, 1984). This exhalite is considered the most prospective for hosting a massive sulphide deposit.

### Lemoine Deposit

The deposit is a single lens of massive sulphide, 5 to 30 feet thick and 575 feet in strike length and with a preserved vertical extent of 1,400 feet. The Lemoine Mine occurs near the upper portion of the Waconichi Formation, at the contact between a more massive aphyric rhyolite and an overlying crystal tuff. Underground work identified a synvolcanic fault with coincident chlorite and sericite alteration. The fault is oriented parallel to the long axis of the massive sulphides, at approximately 003° to 030° with a near vertical dip. Associated in the footwall, close to the sulphide mineralization, is a distinctive unit of “garnets with green chlorite”. This unit could prove significant, as such marker horizons have also been found closely associated to other base metal deposits in the Abitibi, including Louvicourt. The Lemoine Mine is also underlain by a “Lower Zinc Zone”, located 650 feet to the north and extending for more than 1,500 feet to the northeast. This zone is characterized by anomalous zinc mineralization and strong carbonate alteration.

### Gilman Formation

Stratigraphically above the Waconichi is a 1,500 metre thick sequence of mafic volcanics. The volcanic rocks typically consist of fine-grained flows, massive to locally pillowed to pillow flow top breccias. Pillow directions are consistent with stratigraphic tops or younging direction to the south. Local small lenses of felsic volcanic material have been identified within the mafic volcanics, which may represent portions of the overlying Blondeau Formation.

### Stella Formation

The Stella Formation, a member of the Opemisca Group, lies unconformably on top of the Gilman Formation and the Waconichi Formation. The epiclastic sediments vary from a fine sequence of turbiditic wackes of intermediate composition to coarse heterolithic conglomerates containing both felsic volcanic and granitoid clasts. Graded bedding and cross bedding observed in outcrop are consistent with tops to the south. The unconformable nature of the sediments is best seen in the southwest corner of the property where it is in direct contact with the Dore Lake Complex.

### Dore Lake Complex

The rocks of the Dore Lake Complex, which include the Layered Series and Upper Series, are intruded at the base of the Waconichi volcanics. On the Lemoine property the Layered Series is characterized by massive fine to coarse grained ferrogabbro and ferropyroxenite rocks. Overlying the Layered Series are the Upper Series, which include the Granophyre Zone and the Border Zone. The Granophyre Zone resembles medium grained leucocratic tonalites that have a very distinct white weathering surface. The Border Zone includes fine-grained gabbros and anorthosites and is characterized by a more mottled and locally rusty appearance. The Border Zone is generally more sulphide rich than the surrounding rocks, commonly containing up to 5% pyrite and pyrrhotite. It was formed at the contact of the Dore Lake Complex and the Waconichi host rocks.

### Dykes and Sills

The stratigraphy is intruded by numerous multiphase sills and dykes, most commonly found in the Waconichi Formation. Most prominent are the quartz-feldspar porphyry sills found in the eastern part of the property. Also present on the property are slightly discordant gabbro/diorite sills and dykes. An abundance of smaller, later stage, fine-grained mafic dykes have been identified underground and in outcrops near the mine.

## **RESULTS OF THE 1999 EXPLORATION PROGRAM**

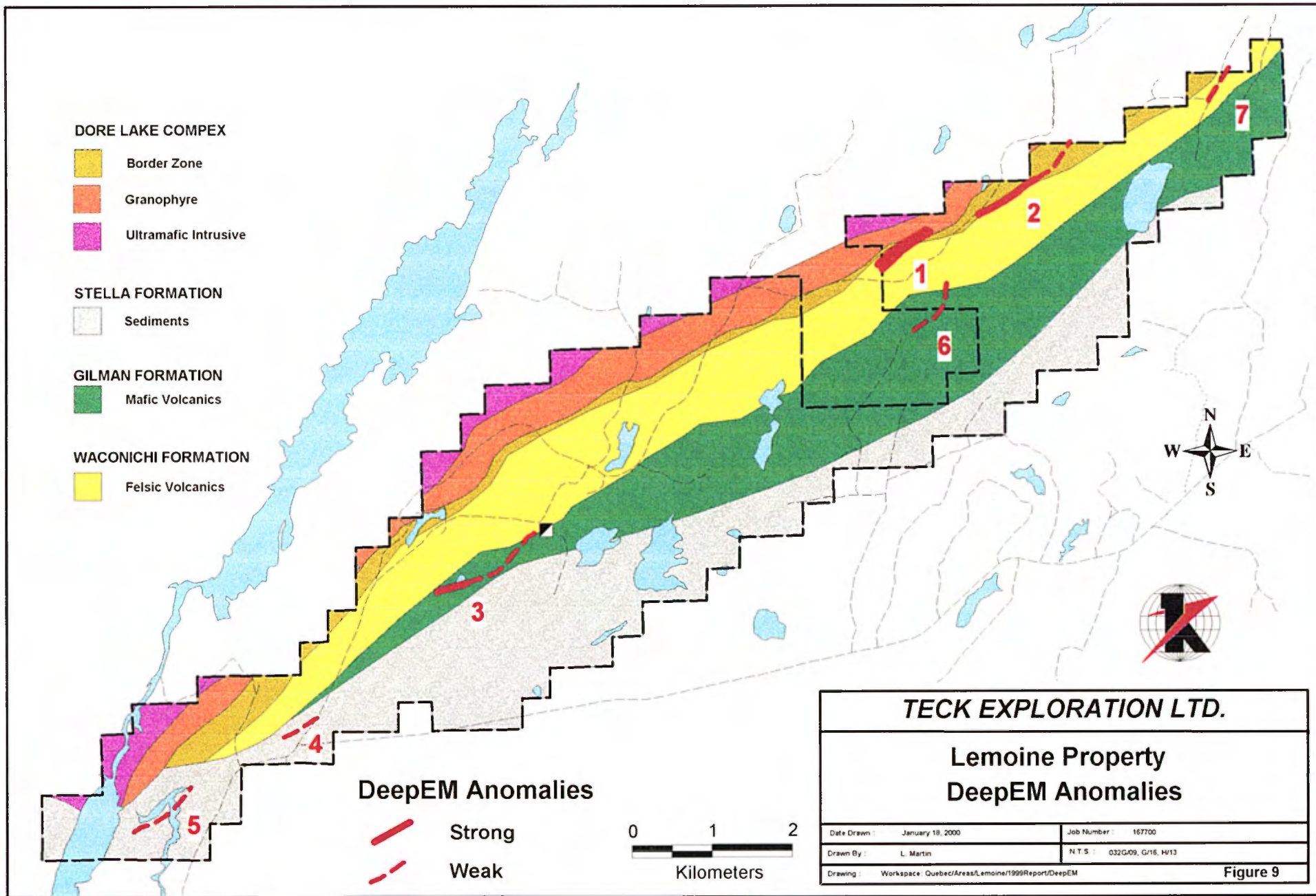
### DeepEM Survey

The Deep Pulse EM method is probably one of the most effective electromagnetic prospecting tools when exploring for large conductive base metal mineralization at great depths. As most of the existing MaxMin anomalies had been tested by diamond drilling, DeepEM was chosen in order to survey the area for large deposits at greater depths. The survey resulted in the identification of 7 conductors (Figure 9). Three of these conductors are classified as "good", while the four remaining conductors were classified as "weak.

Two of the strong conductors (#1 & #2) are located in the NE part of the property, and most likely represent a single conductor due to the gap in the lines surveyed. The conductors, measuring 2.2 km in length, are located at or near the contact of the Dore Lake Complex with the Waconichi Formation. The conductors, also identified by 6 weak INPUT anomalies, have been tested by one to possibly three drill holes. The drill holes intersected stringer sulphides, dominantly pyrrhotite and pyrite with lesser chalcopyrite, within tuffs and gabbros. The best drill hole intersection was 4,000 ppm Cu over a 2 foot interval.

The third strong DeepEM conductor (#3), with a shorter strike length of approximately 800 feet, is located approximately 1.2 km to the west and along strike of the Lemoine Mine. This conductor had been tested by 4 drill holes with limited success. Diamond drilling had intersected





up to 10% pyrrhotite with minor chalcopyrite and sphalerite over narrow intervals. The best intersection was 0.11% Cu and 0.62% Zn over 1.1 feet.

Two of the weak DeepEM conductors (#4 & #5) are located within sedimentary rocks in the SW corner of the property. The most interesting of these two conductors (#4) is located 500 metres south of the volcanic-sedimentary contact, stratigraphically above a wide zone of strong sodium depletion. The volcanic-sedimentary contact in this area includes a mineralized intersection of 1.12% Cu, 5.36% Zn over 1 foot.

The third weak DeepEM conductor (#6) is located, 5.7 km northeast of the mine, near the stratigraphic top of a felsic volcanic pile. This area has been tested with several drill holes by Soquem in 1995 with limited success, only minor stringer sulphides were intersected.

The fourth weak DeepEM conductor (#7) is located in the far northeast corner of the property, coincidental with a strong MaxMin conductor. Drill holes in the area indicate the presence of quartz-feldspar porphyries, gabbros and possible tuffs with locally up to 5% pyrrhotite plus minor pyrite and sphalerite.

### **Geological Mapping**

Several areas of interest, based on geology, sulphide mineralization and alteration, were identified from mapping this summer. These areas are summarized below and located on figure 10.

#### *Rusty Ridge (L163+00E / 31+00N)*

This ridge of outcropping Border Zone material is easily identifiable by a pronounced gossan over several hundred feet. The material exposed in a previous trench and a recently blasted pit was found to contain up to 20% disseminated to semi-massive pyrrhotite plus minor pyrite and chalcopyrite. Several grab samples, taken over a wide area, returned anomalous Cu mineralization. Best assay was 1,864 ppm Cu. The sulphide mineralization is locally conductive

# LEMOINE MINE

Production 758,070 T

9.56% Zn  
4.20% Cu  
4.54 g/t Au  
83.38 g/t Ag

## DORE LAKE COMPLEX

-  Border Zone
-  Granophyre
-  Ultramafic Intrusive

## STELLA FORMATION

-  Sediments

## GILMAN FORMATION

-  Mafic Volcanics

## WACONICHI FORMATION

-  Felsic Volcanics

Southwest Alteration Zone  
Widespread Na<sub>2</sub>O depletion  
1.12% Cu, 5.36% Zn over 0.3m  
0.95% Zn over 5.5m

Armitage Lake Zn Showing  
3.03% Zn (grab)

Cu-Ag Mineralized Boulder  
1.4% Cu, 15g/t Ag

Altered Rhyolites +  
Py mineralization

Gold Hill  
48.2 g/t Au, 2.8% Cu, 2.3% Zn (grab)  
6.3g/t Au over 7.3m

Altered Rhyolite +  
Py stringers

Rusty Ridge

Mineralized Boulder

Mineralized Boulders



**TECK EXPLORATION LTD.**

## Lemoine Property Areas of Geological Interest

Date Drawn :	January 18, 2000	Job Number :	167700
Drawn By :	L. Martin	N.T.S. :	032G/09, G/16, H/13
Drawing :	Workspace: Quebec/Areas/Lemoine/Working/1999 Report/Geological_Interest		Figure 10

and may represent a portion of the strong DeepEM conductor identified along strike to the northeast and southwest.

Altered Rhyolite (L137+00E / 20+50N)

An outcrop of strongly altered and mineralized felsic volcanic material was identified just south of the main gravel road. With up to 15% disseminated and stringer pyrite, this outcrop represents the highest known concentration of sulphides identified in outcropping felsic volcanic rocks outside of the mine. Visually the outcrop appears very strongly altered with abundant sericite. This alteration was confirmed by geochemistry with significant Na<sub>2</sub>O depletion and K<sub>2</sub>O enrichment. Located near the base of the Waconichi Formation, this outcrop is also characterized by anomalous high concentrations of As, Bi and local Au enrichment.

Gold Hill (L126+00E / 30+00N)

The highest grab and chip samples from the summer mapping program were from an area called "Gold Hill", located near the northern edge of the property. The best assays included a selective grab sample of 48.2 g/t Au, 30.5 g/t Ag, 2.8% Cu and 2.3% Zn along with a chip sample of 6.3 g/t Au over a length of 7.3 metres. The mineralization is associated with late stage quartz veining and is not volcanogenic in origin. Prospecting and Beep-Mat surveying could not identify any extension to this mineralization system. The showing was previously followed up by IP surveying and diamond drilling in 1982 with no significant intersections.

Southwest Alteration Zone (L192+00W, 21+00S)

The largest concentration of hydrothermally altered felsic volcanic rocks is located in the southwestern part of the property. The alteration zone measuring over 700 x 350 metres was identified in several outcrops and drill holes. Other pathfinder elements in the area included anomalous As and Ba. The best assay was from a drill hole at the contact of the felsic volcanics and the overlying sediments that returned an intersection of 1.12% Cu and 5.36% Zn over 0.3 metres. The felsic volcanic rocks are in direct contact with the unconformably overlying Stella sediments, indicating that the mafic volcanics of the Gilman Formation and possibly the upper portion of the felsic volcanics have been eroded away.

Armitage Lake Zn Showing (L262+00W / 13+00S)

A previously identified zinc showing, located in the southwestern corner of the property, on the shore of Armitage Lake was mapped and sampled. The mineralization consists of narrow stringer to vein hosted sphalerite mineralization within peridotites. The mineralization appears to be late stage remobilized sulphides and not considered to be of volcanogenic origin. Best assay from a selective grab sample was 3.03% Zn.

Cu-Ag Mineralized Boulder (L34+50E / 0+25S)

A mineralized boulder, with up to 10% pyrite and lesser chalcopyrite, was located in the central part of the property. The sample returned an assay of 1.4% Cu and a surprising 151.0 g/t Ag. This Cu-Ag rich boulder is located up-ice and to the east of the Lemoine mine, indicating a source different from that of the Lemoine mine. Possible source areas include a MaxMin anomaly 700 metres to the northeast, the area near Rusty Ridge, Gold Hill or the Altered Rhyolite located 3-4 kilometres to the northeast.

Mineralized Boulder (L 170E / 26+00S)

The boulder was located in the southeastern part of the property, while prospecting with a Beep-Mat, in an area with several unexplained INPUT anomalies. The boulder contained 5 to 10% pyrite, pyrrhotite and trace chalcopyrite yielding low-grade yet anomalous base metal mineralization as high as 522 ppm Cu.

Mineralized Quartz Veins

Several other late stage quartz veins with sulphide mineralization were sampled during the summer mapping program. Best grab samples included 5700 ppm Cu and as high as 1170 ppb Au (Table 4)

**TABLE 2**  
**SIGNIFICANT ASSAYS, 1999**

Sample No	Cu (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Easting	Northing	Host Rock
L02706	1170	9	0.6	22	160+00E	28+00N	Border Zone
L02707	557	47	0.5	6	163+00E	31+00N	Border Zone
L02711	5700	263	2.1	96	258+00E	30+00N	Qtz Vein
L02714	26	656	0.6	1	282+00E	37+00N	Mafic Volcanic
L02745	396	708	1.1	13	143+75E	31+00N	Granophyre
L02761	612	10	0.2	2	80+00E	22+50N	Border Zone
L02764	1864	22	2.2	14	000+00E	00+00N	Border Zone
L02785	2614	608	4.3	1170	76+00W	25+00N	Qtz Vein
L02790	4812	58	16.6	11	80+00W	28+00N	Qtz Vein
L02806	53	30300	2.6	319	260+00W	16+00S	Border Zone
L02808	14	510	0.3	6	244+00W	6+50N	Peridotite
L02833	401	639	2.6	7	89+00W	10+00S	V2
L02841	385	480	-0.2	6	6+00E	16+00N	Mafic Volcanic
L02857	92	562	-0.2	7	58+00E	11+50N	Tuff
L02870	810	258	4.1	58	126+01E	38+00N	Granophyre/Gabbro
L02871	28000	23100	30.5	48155	126+02E	38+00N	Qtz Vein
L02872	864	550	3.3	5590	126+00E	38+00N	Granophyre/Gabbro
L02873	982	7940	3.2	6635	126+03E	38+00N	Granophyre/Gabbro
L02874	14080	326	151	24	34+50E	0+25S	Mafic Volcanic
L02887	522	32	0.8	19	~170+00E	~26+00S	Tuff

### Geochemistry

A total of 169 samples were taken from outcrop and drill core for whole rock analysis. This allowed characterization of the different volcanic and intrusive rocks and evaluation of alteration trends through bulk chemistry methods. The degree of alteration was monitored with relative enrichment-depletion patterns of mobile elements typical of gold and volcanogenic massive sulphide deposits. The results of these analyses are tabulated in Appendix III and illustrated on the accompanying maps and figures 11 to 15.

Alteration trends, using Na<sub>2</sub>O and CaO depletion and K<sub>2</sub>O, MgO and FeO enrichment, indicate that strong hydrothermally altered felsic volcanic rocks are widespread, extending across the property for a distance of 12 kilometres (Figure 11). The altered rhyolites are for the most part located near the base, or northern contact of the Waconichi Formation. The largest concentration of altered samples are located in the southwestern part of the property. This alteration zone measuring over 700 x 350 metres was identified in several outcrops and drill holes.

Elevated levels of copper mineralization were commonly found across the property in the Border Zone, most notably in the area of Rusty Ridge (Figure 12). Anomalous Zn mineralization was found within the peridotites in the southwestern corner of the property, near Rusty Ridge and along strike of the Lemoine mine to the southeast (Figure 13).

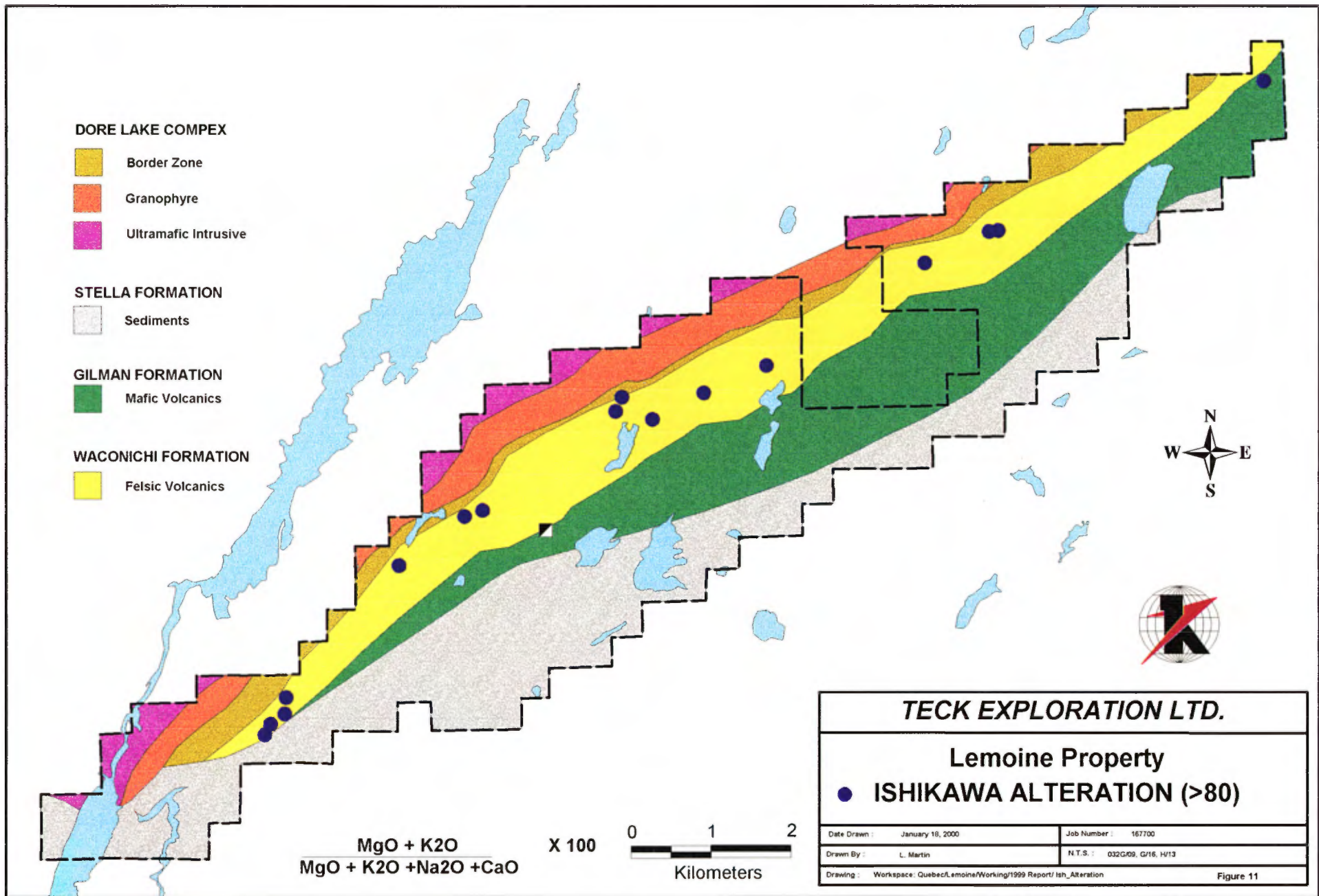
Anomalous gold was identified near the base of the rhyolite unit, stratigraphically above and to south of Rusty Ridge (Figure 14).

Other gold and base metal pathfinder elements that occur near known mineralized areas or zones of interest include Ag, As, Mo, Pb and W (Figure 15).

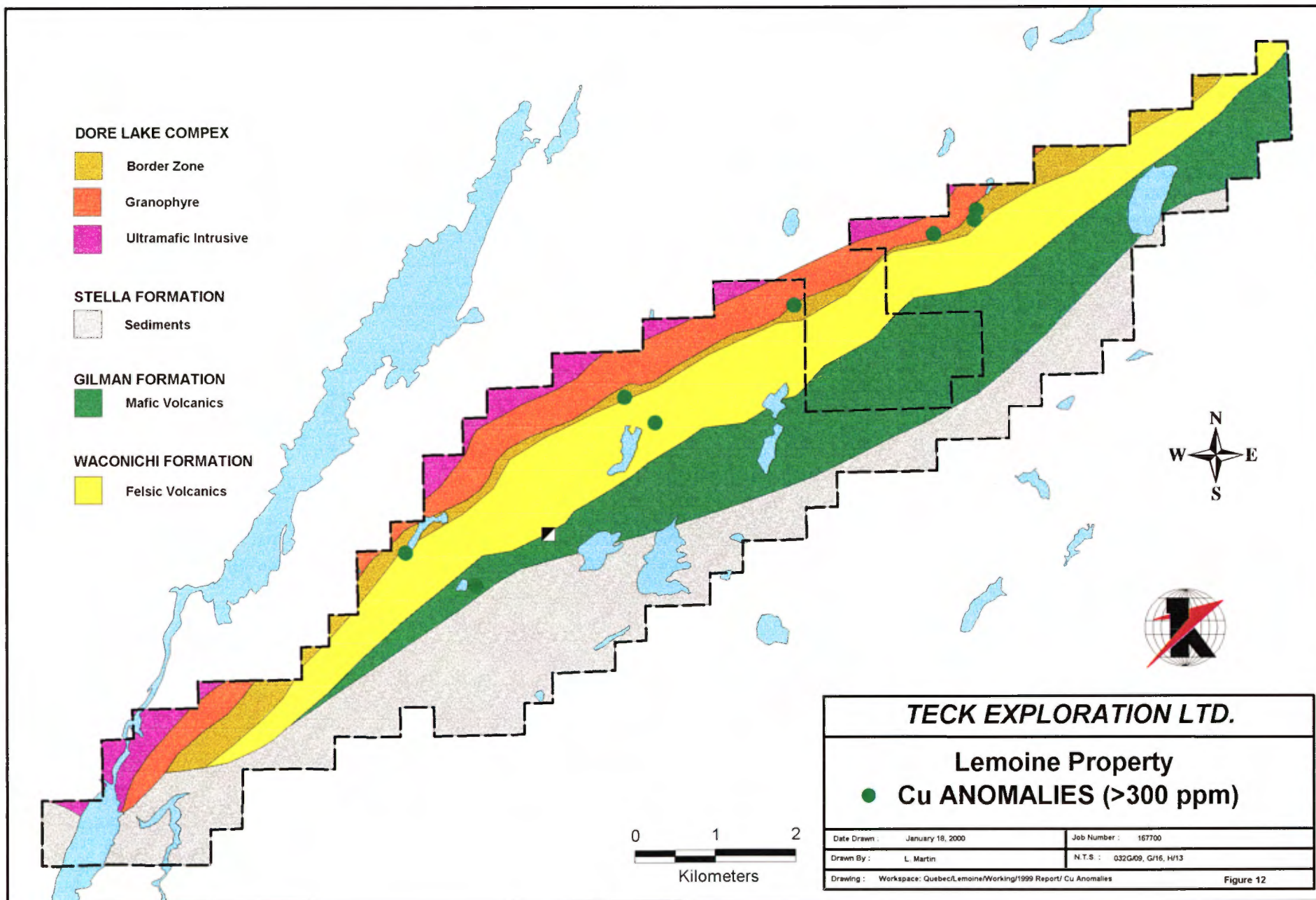
### CONCLUSIONS

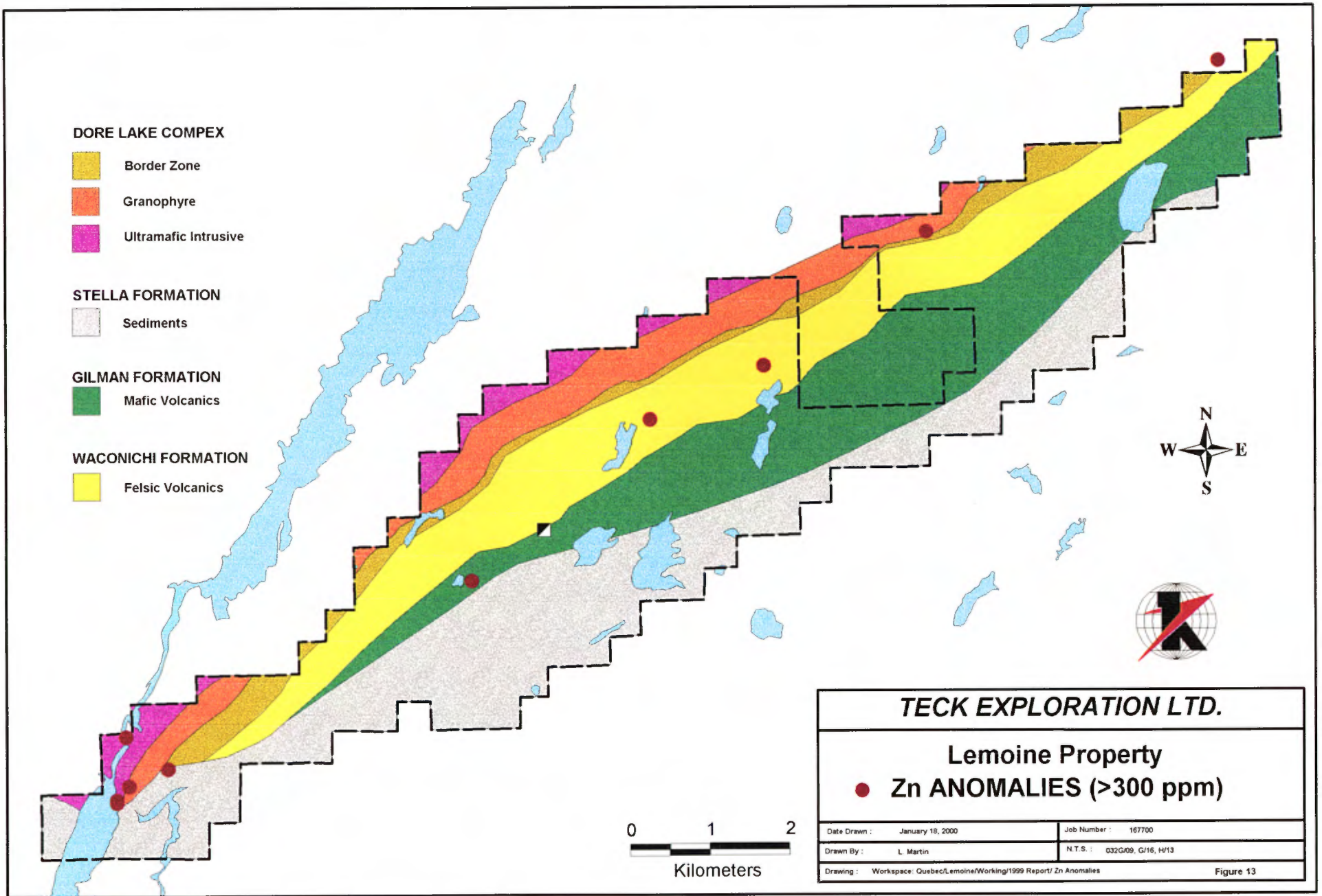
The 1999 field program has provided a more detailed geological understanding of the property, bringing together the surface geology, geochemical data and drill hole databases. The favourable felsic volcanic rocks of the Waconichi Formation extend across the property for a distance of more than 12 kilometres. Several slightly discordant crosscutting felsic and mafic intrusive rocks intrude these felsic volcanic rocks.

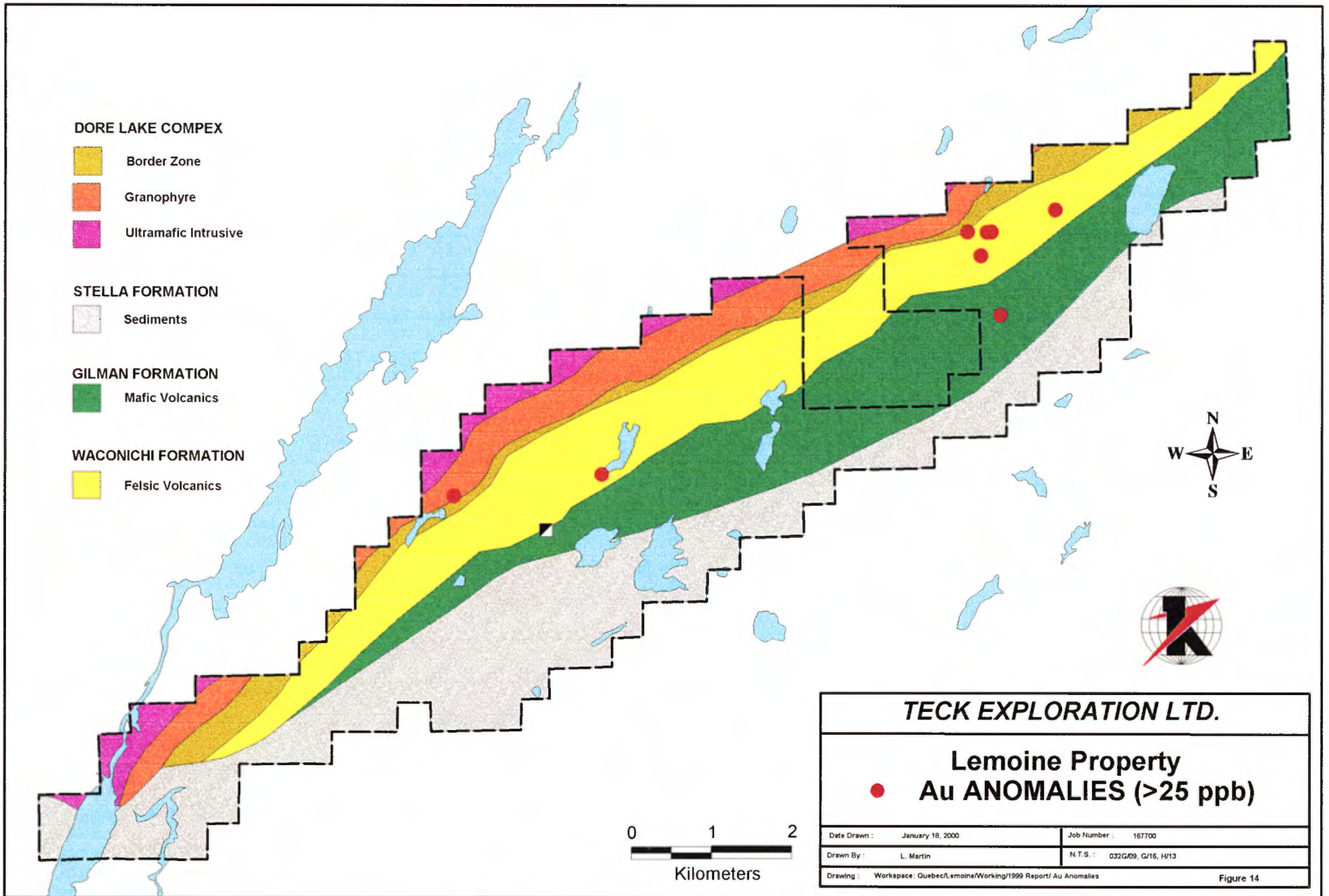
The hydrothermal alteration observed on the property is strong and widespread, extending within the felsic volcanic package for a distance of 12 kilometres. Due to the large area covered by this alteration, more than one hydrothermal source or vent may be present within the limits of the property. Many of these altered areas are associated with significant pathfinder elements typical of basemetal and gold deposits.

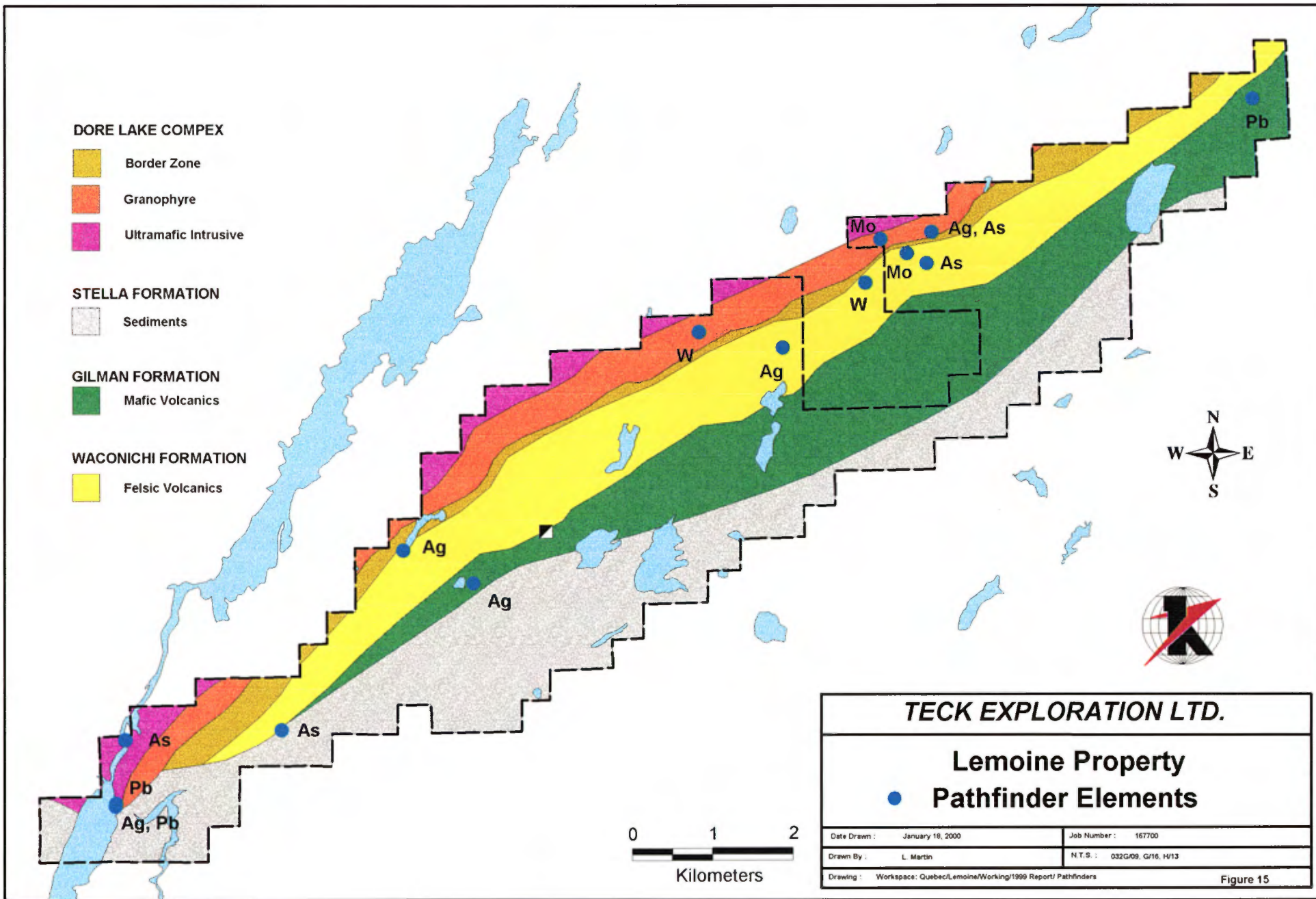












The most significant sulphide showings found to host base metal mineralization, as identified from mapping this summer, are located within a 750-metre radius in the eastern block of the property. These include the altered rhyolites at the base of the Waconichi Formation, the Border Zone in the area of Rusty Ridge and Gold Hill showing. Additional sulphide deposits along the Lemoine Mine horizon as well as stacked sulphide lenses, such as the Lower Zinc Zone, may exist elsewhere on the property

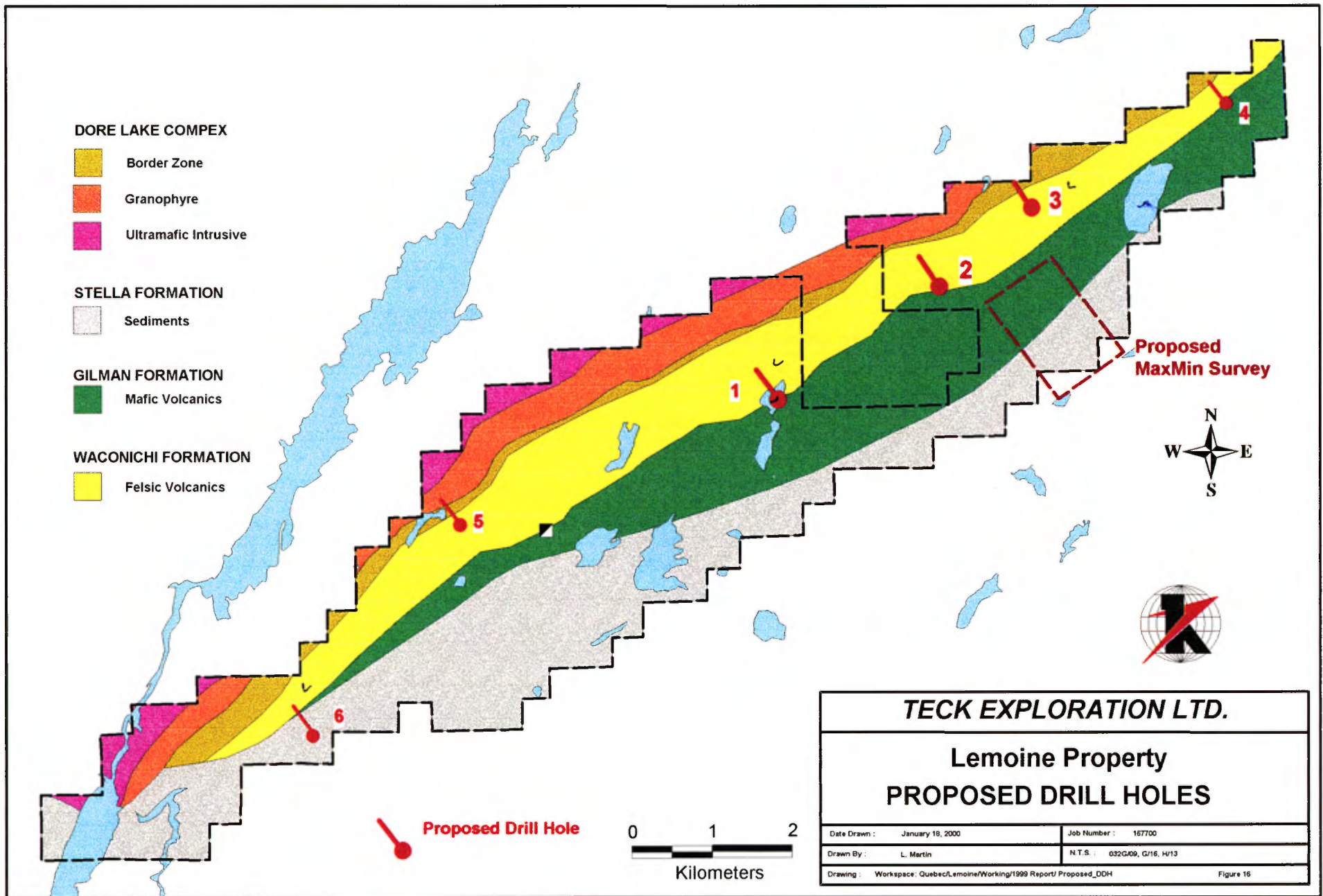
The DeepEM survey, which was completed over a large portion of the favourable felsic volcanic stratigraphy, has identified 7 conductors, 3 of which are classified as strong. The most significant of these DeepEM conductors is located along strike of the sulphide mineralization identified on surface at Rusty Ridge, and is relatively untested over its strike length of 2.2 kilometres.

### **RECOMMENDATIONS**

Several areas warrant follow up work based on the presence of interpreted mineralized horizons, geophysical conductors, hydrothermal alteration, sulphide mineralization and association with pathfinder elements. A program of 800 metres of diamond drilling in 3 holes is proposed (Figure 16).

Two holes (#1 & #2) are proposed to test the interpreted Lemoine Mine horizon or F/W Chert and Lower Zinc Zone at a distance of 3.5 km and 6.0 km to the northeast of the Lemoine Mine. Both holes would test the felsic volcanic package in areas where strongly altered rhyolites with sulphide mineralization have been identified. The target areas will be reached by extending previous drill holes L95-8 and V6-86.

The strong DeepEM anomaly, located within the eastern block of the property, will be tested with the third hole (#3). This conductor is located along strike of the stringer sulphide mineralization identified in the area of Rusty Ridge, which included widespread, anomalous



copper mineralization. The conductor is relatively untested over its strike length of 2.2 kilometres.

Though not included in the presently proposed exploration program a series of secondary priority target areas are presented below and illustrated on figure 16. These targets which would be tested at a later date include;

A drill hole (#4) to test a coincidental strong MaxMin and weak DeepEM conductor in the far northeast portion of the property.

A drill hole (#5) to test a strong MaxMin conductor close to the base of the felsic volcanic rocks, which locally display strong hydrothermal alteration. Grab samples taken in the area and drill holes along strike contain anomalous Cu, Zn and Ag mineralization.

A drill hole (#6) to test a weak DeepEM conductor in sediments south of the felsic volcanic – sediment contact in the southwest part of the property. A previous drill hole intersected 1.12% Cu and 5.36% Zn over a length of 0.3 metres. The area is also characterized by widespread Na<sub>2</sub>O depletion in volcanics to the north along with anomalous levels of As and Ba.

A program of line cutting and MaxMin surveying is proposed over a cluster of INPUT anomalies in the southeastern part of the property. Prospecting identified a mineralized boulder with up to 10% sulphides which returned an assay of 522 ppm Cu. No outcrops are present in the area, however sediments of the Stella Formation and felsic volcanic rocks of the Blondeau Formation are interpreted.

Respectfully submitted,  
TECK EXPLORATION LTD.



L. Martin



R. Stewart

December 17, 1999

REP-0270/ec



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**APPENDIX I**  
**ANALYTICAL PROCEDURES**

**XRAL****Les Laboratoires XRAL Laboratories**  
Une Division de / A Division of SGS Canada Inc.129 Ave. Marcel Baril  
Rouyn-Noranda, Québec  
Canada J9X 7B9  
Téléphone (819) 764-9108  
Fax (819) 764-4673**From:** JOE LANDERS  
OPERATIONS MANAGER**To:** SAMPLE PREPARATION  
XRAL ROUYN-NORANDA**Date:** December 17, 1999**Copies:****Subject:** QUALITY ASSURANCE IN SAMPLE PREPARATION**MEMO**

IN SAMPLE PREPARATION, THE FOLLOWING PROCEDURES WILL BE FOLLOWED:

UPON RECEIPT, THE SAMPLES WILL BE UNPACKED AND ARRANGED IN NUMERICAL ORDER. THE SAMPLES RECEIVED WILL BE COMPARED TO THE CLIENTS SAMPLE SUBMITTAL FORM. ALL DISCREPENCIES WILL BE NOTED ON THE SAMPLE SUBMITTAL FORM AND A SUPERVISOR WILL BE INFORMED. IF NO SAMPLE SUBMITTAL FORM HAS BEEN ENCLOSED, ONE WILL BE PREPARED AT THIS TIME AND A COPY FAXED TO THE CLIENT. THE SAMPLES WILL THEN BE ENTERED INTO OUR COMPUTER SYSTEM AND THE REQUIRED SAMPLE LABELS AND WORKSHEETS PREPARED. UNDER NO CIRCUMSTANCES WILL PREP BEGIN BEFORE THIS PROCEDURE IS FOLLOWED.

A COPY OF THE SAMPLE SUBMITTAL FORM WILL BE GIVEN TO THE PULP WEIGHERS AT THIS TIME AS WELL.

BEFORE THE FIRST SAMPLE IS CRUSHED, THE CRUSHERS WILL BE CLEANED WITH SUITABLE MATERIAL.

WHEN THE FIRST SAMPLE IS CRUSHED, A SPLIT WILL BE SCREENED THROUGH EITHER A 10 OR 24 MESH SCREEN TO DETERMINE THAT 90% WILL PASS THE REQUIRED MESH. THESE TESTS WILL BE RECORDED IN THE LOG PROVIDED. IF 90% DOES NOT PASS, THE CRUSHERS WILL BE ADJUSTED AND SCREEN TESTS REPEATED UNTIL 90% PASSES THE REQUIRED MESH. AT THIS TIME, ALL CLIENTS REQUIRE 90% PASSING 10 MESH.

CRUSHER REJECTS WILL BE STORED IN BOXES PROVIDED FOR THIS PURPOSE. THE CUSTOMER NAME, PROJECT, FILE NUMBER AND SAMPLE NUMBERS MUST APPEAR ON ALL BOXES AND THIS INFORMATION MUST BE READABLE. DO NOT MIX PROJECTS.

CRUSHING EQUIPMENT MUST BE CLEANED WITH AIR AND OR BRUSH BETWEEN SAMPLES. THE RIFFLE MUST ALSO BE CLEANED BETWEEN SAMPLES.



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ALL EQUIPMENT PROBLEMS MUST BE REPORTED TO A SUPERVISOR IMMEDIATELY. THESE INCLUDE HOLES IN SAMPLE PANS AND RIFFLES THAT REQUIRE REPAIRS.

THE PERSON CRUSHING AND SPLITTING WILL RECORD THEIR NAME AND JOB PERFORMED ON THE SAMPLE SUBMITTAL FORM. THEIR NAME WILL BE READABLE.

PULVERIZERS WILL BE CLEANED WITH SILICA SAND BEFORE EACH SAMPLE BATCH. BETWEEN SAMPLES, THE PULVERIZER WILL BE CLEANED WITH AIR OR VACUUM.

AFTER PULVERIZING THE FIRST SAMPLE OF A BATCH, A SCREEN TEST WILL BE DONE TO ENSURE THAT 90% PASSES 200 MESH. TIME WILL BE INCREASED AND SCREEN TESTS DONE UNTIL 80% PASSES 200 MESH. THIS IS FOR ALL CLIENTS.

SAMPLES WILL ALWAYS BE PULVERIZED IN NUMERICAL ORDER AND PLACED IN THE TRAYS PROVIDED IN NUMERICAL ORDER.

WHEN A TRAY OF SAMPLES IS COMPLETED, THE TRAY WILL BE PLACED ON THE RACK PROVIDED. THESE TRAYS MUST BE KEPT IN NUMERICAL ORDER IN THIS RACK.

IF YOU SUSPECT A SAMPLE MIX-UP OR ANY OTHER PROBLEM CONSULT A SUPERVISOR IMMEDIATELY.

WHEN SCREENING METALLICS, ENSURE THAT YOU HAVE THE PROPER SCREENS( 100,140 OR 200 MESH) NOTE THIS ON THE BAG CONTAINING THE + PORTION.

THE PERSON PULVERIZING WILL ALSO ENTER ALL SCREEN TEST RESULTS IN THE LOG PROVIDED FOR THIS PURPOSE. THE INFORMATION REQUIRED IS DATE, CLIENT, FILE NUMBER AND TEST WEIGHTS.

THE PERSON PULVERIZING WILL ALSO RECORD THEIR NAME AND JOB PERFORMED ON THE SAMPLE SUBMITTAL FORM. THEIR NAME WILL BE READABLE.

THE SUPERVISOR WILL COLLECT ALL COMPLETED SAMPLE SUBMITTAL FORMS AND FORWARD THEM TO THE OFFICE FOR FILING WITH THE COMPLETED FILE NUMBER.



**Les Laboratoires XRAL Laboratories**  
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## METHOD NUMBER 3- GOLD

Source of method: Xral Laboratories

Method code: FA301

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### SUMMARY

Gold is determined in geological materials by DCP after collection by fire assay. An assay fusion consists of heating a mixture of the finely pulverized sample with about three parts of a flux until the product is molten. One of the ingredients of the flux is a lead compound, which is reduced by other constituents of the flux or sample to metallic lead. The latter collects all the gold, together with silver, platinum metals and small quantities of certain base metals in the sample, and falls to the bottom of the crucible to form a lead button. The gangue of the ore is converted by the flux into a slag sufficiently fluid so that all particles of lead may fall readily through the molten mass. The choice of a suitable flux depends on the character of the ore. The lead button is cupelled to oxidize the lead leaving behind a dore bead containing the precious metals. The dore bead is then transferred to a test tube, dissolved with aqua regia, diluted to a specific volume and gold content determined by DCP.

This method is applicable to a wide variety of geological materials. However, heterogeneous distribution of gold in the sample may result in pronounced imprecision due to sampling error.

The lower reporting unit for 30-gram samples is 1 PPB by DCP. The upper reporting limit is 10,000 PPB by DCP. A gravimetric assay is recommended for values exceeding 1000 PPB.

# **XRAL**

## **APPARATUS**

- 30 gram crucible
- Balance capable of weighing to 0.01 gram
- Furnace capable of 1100 C
- # 6 cupel
- 12 x 75 test tubes
- Dispensers capable of an accuracy of 1% and 0.5% precision
- Spectrospan V or similar DCP

## **REAGENTS**

- Gold free litharge
- Soda ash
- Borax
- Silica flour
- Flour
- Silver nitrate
- Nitric acid
- Hydrochloric acid
- Distilled water

## **PREPARATION OF STANDARDS**

A series of standards are prepared by serial dilution of a 1000 PPM certified gold solution to cover a range from 0 to 10,000 PPB gold.

## **PROCEDURE**

1. Add 150 grams of flux to a 30-gram crucible.
2. Weigh 30.0 grams of prepared sample into the crucible.
3. Mix the sample and flux together.
4. Tap the crucible to expel air.
5. Add 1 mg of silver nitrate to the crucible.
6. Cover with borax.
7. Place crucible in the furnace for 45 minutes at a temperature of 1080 C. Pour into a cast iron mold and allow to cool. Hammer the lead button free of slag.
8. Place the lead button in a pre-heated cupel.
9. Place the cupel in the furnace at 950-1000 C until all lead is removed. Remove from furnace and allow to cool.
10. Place the dore bead in a 12 x 75-mm test tube; add 0.2 ml of 1:1 nitric acid and place in a hot water bath for 30 minutes. Add 0.3 ml of hydrochloric acid and return to the hot water bath for 60 minutes. Remove from the water bath, allow to cool and bring to final volume of 5.0 ml with distilled water.



**Acid Extraction, determination by ICP Spectroscopy - 36 elements**

**Description:**

A quarter gram sample is digested with 2 ml of nitric acid for one half hour in a water bath, then 1 ml of hydrochloric acid is added and the digestion continues for another 2 hours. Test tubes are shaken at regular intervals.

In house standards and previously analysed samples are run to monitor proper digestion procedures. Synthetic standards are used to calibrate the instrument.

**Limitations:**

The nitric aqua regia extraction will not completely extract difficultly soluble elements such as Ba, Cr, Sb, Sn, Ta, W, V and Zr. The multi-acid extraction ( Method code 80-1 ) will ensure better extraction, though some refractory minerals may remain incompletely attacked. Volatile elements such as As may be lost from solution in the multi-acid attack.

**Elements:**

Al	0.01%	Fe	0.01%	Na	0.01%
Sb	5ppm	Pb	2ppm	Sr	5ppm
As	5ppm	Li	1ppm	Ag	.1ppm
Ba	1ppm	Mg	.01%	Sn	10ppm
Be	5ppm	Mn	.01%	Ti	.01%
Bi	3ppm	Mo	1ppm	W	10ppm
Cd	1ppm	Ni	1ppm	V	2ppm
Ca	.01%	P	.01%	Y	.1ppm
Cr	1ppm	K	.01%	Zr	5ppm
Co	1ppm	Sc	5ppm	Zn	5ppm
Cu	5ppm				

Prepared by

Approved by

Date







**X-Ray Assay Laboratories**  
 A Division of SGS Supervision Services Inc.

**X-Ray Fluorescence Spectrometry - 27 Elements - Pressed Pellet**

**Description:**

At least 5 g of sample is required for the analysis of one or all of the above elements. A pellet is loaded into the holder of the automatic sample changer of a Philips PW1400 wavelength dispersive x-ray spectrometer. The 40 mm diameter sample pellets are loaded six to a tray with a total of 10 trays.

Elements are run in an inert nitrogen atmosphere employing a rhodium tube which also serves as an internal standard for some elements. For different combinations of requested elements various standard reference materials are inserted with these samples to verify calibration. Calibration is programmed into the instrument and inter-element corrections are applied to necessary analyte elements. Commonly requested element combinations are programmed to be determined individually or in groups.

**Limitations:**

This procedure is not suitable for mineralized materials. The presence of percentage levels of any element except the usual major rock constituents will have an adverse effect on the calibration.

The maximum concentration reported by these procedures is generally 5000 ppm. Analysis for elements with concentrations higher than 5000 ppm should be analysed by one of our assay procedures. The assay procedure involves a potassium pyrosulfate fusion of the sample followed by the preparation of a pressed disk. The pyrosulfate fusion produces a very homogeneous sample material with a uniform grain size. The fusion also saturates any matrix impact from the sample with the overwhelming matrix of the pyrosulfate flux itself thus allowing for synthetic standard calibrations. Internal standards are also used for assay grade analysis. This procedure is essential to produce the accuracy and precision requirements needed for assay grade analysis.

**Elements:**

Sb	3 ppm	Pb	2 ppm	Tl	5 ppm
As	3 ppm	Mo	2 ppm	Th	2 ppm
Ba	20 ppm	Nb	2 ppm	Sn	5 ppm
Bi	3 ppm	Ni	2 ppm	Ti	5 ppm
Cl	50 ppm	Rb	2 ppm	W	5 ppm
Co	2 ppm	Sc	3 ppm	U	2 ppm
Cu	2 ppm	Sr	2 ppm	Y	2 ppm
Ga	3 ppm	S	50 ppm	Zr	3 ppm
Fe	3 ppm	TA	5 ppm	Zn	2 ppm

Prepared by	Approved by	Date
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**Whole Rock Analysis by X-Ray Fluorescence Spectrometry****Description:**

A 2 gram sample, after roasting at 950 degrees for 1 hour, is fused with 7.7 grams of lithium tetraborate and the melt is cast into a 40 mm button.

The button is analyzed on a Philips PW1600 simultaneous x-ray fluorescence spectrometer. This system is calibrated using more than 40 reference materials, most of them being tabulated in K. Govindaraju "referred" values compilation.\*

Counting time on major elements is 60 seconds and each of them is analyzed for through its own fixed channel. Trace elements in this package are run as counts are accumulated for the majors using a scanner.

L.O.I. is obtained from the roasting mentioned above. All elements determined are added and any samples with a sum of less than 98% or higher than 101% are automatically repeated. This gives us control over the button preparation. Instrument precision on most elements is better than 0.5%. Only on lower count rates would one experience errors of 1-2%.

**Elements:**

<b>Major Oxides</b>		<b>Minor Elements</b>	
SiO <sub>2</sub>	0.01%	Ba	10 ppm
Al <sub>2</sub> O <sub>3</sub>	0.01%	Nb	10 ppm
CaO	0.01%	Rb	10 ppm
MgO	0.01%	Sr	10 ppm
Na <sub>2</sub> O	0.01%	Y	10 ppm
K <sub>2</sub> O	0.01%	Zr	10 ppm
Fe <sub>2</sub> O <sub>3</sub>	0.01%	Cr*	10 ppm
MnO	0.01%		
Cr <sub>2</sub> O <sub>3</sub>	0.01%		
P <sub>2</sub> O <sub>5</sub>	0.01%		
TiO <sub>2</sub>	0.01%		
LOI	0.01%		

\* 10 ppm detection limit cannot be achieved if samples are milled in chrome steel pots.

Prepared by

Approved by

Date



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**APPENDIX II**  
**CLAIM LIST**

**APPENDIX II****CLAIM LIST****LEMOINE (167700)**

<b>Claim Number</b>	<b>Township</b>	<b>Claim Size (ha.)</b>	<b>Recording Date</b>	<b>Expiry Date</b>
CL 3177371	Lemoine	16.0	3-Aug-89	2-Aug-01
CL 3177372	Lemoine	16.0	3-Aug-89	2-Aug-01
CL 3177373	Lemoine	16.0	3-Aug-89	2-Aug-01
CL 3177374	Lemoine	16.0	3-Aug-89	2-Aug-01
CL 3177591	Lemoine	16.0	8-Jan-89	7-Jan-01
CL 3177592	Lemoine	16.0	8-Jan-89	7-Jan-01
CL 3177593	Lemoine	16.0	8-Jan-89	7-Jan-01
CL 3177594	Lemoine	16.0	8-Jan-89	7-Jan-01
CL 3177595	Lemoine	16.0	8-Jan-89	7-Jan-01
CL 3177601	Lemoine	16.0	8-Jan-89	7-Jan-01
CL 3177602	Lemoine	16.0	8-Jan-89	7-Jan-01
CL 3177603	Lemoine	16.0	8-Jan-89	7-Jan-01
CL 3177604	Lemoine	16.0	8-Jan-89	7-Jan-01
CL 3177605	Lemoine	16.0	8-Jan-89	7-Jan-01
CL 3223595	Lemoine	16.0	3-Aug-89	2-Aug-01
CL 3223601	Lemoine	3.8	3-Aug-89	2-Aug-01
CL 3223602	Lemoine	11.0	3-Aug-89	2-Aug-01
CL 3223603	Lemoine	13.4	3-Aug-89	2-Aug-01
CL 3223621	Lemoine	16.0	3-Aug-89	2-Aug-01
CL 3223622	Lemoine	16.0	3-Aug-89	2-Aug-01
CL 3223753	Lemoine	11.7	3-Aug-89	2-Aug-01
CL 3223755	Lemoine	0.1	3-Aug-89	2-Aug-01
CL 3283241	Lemoine	16.0	21-Apr-89	20-Apr-01
CL 3283242	Lemoine	16.0	21-Apr-89	20-Apr-01
CL 3283243	Lemoine	16.0	21-Apr-89	20-Apr-01
CL 3283244	Lemoine	16.0	21-Apr-89	20-Apr-01
CL 3283245	Lemoine	16.0	21-Apr-89	20-Apr-01
CL 3283801	Lemoine	16.0	17-Apr-89	16-Apr-01
CL 3283802	Lemoine	16.0	17-Apr-89	16-Apr-01
CL 3283803	Lemoine	16.0	17-Apr-89	16-Apr-01
CL 3283804	Lemoine	16.0	17-Apr-89	16-Apr-01
CL 3283805	Lemoine	16.0	17-Apr-89	16-Apr-01
CL 3283811	Lemoine	16.0	18-Apr-89	17-Apr-01
CL 3283812	Lemoine	16.0	18-Apr-89	17-Apr-01
CL 3283813	Lemoine	16.0	18-Apr-89	17-Apr-01
CL 3283814	Lemoine	16.0	18-Apr-89	17-Apr-01
CL 3283815	Lemoine	16.0	18-Apr-89	17-Apr-01
CL 3283821	Lemoine	16.0	19-Apr-89	18-Apr-01
CL 3283822	Lemoine	16.0	19-Apr-89	18-Apr-01
CL 3283823	Lemoine	16.0	19-Apr-89	18-Apr-01
CL 3283824	Lemoine	16.0	19-Apr-89	18-Apr-01
CL 3283825	Lemoine	16.0	19-Apr-89	18-Apr-01
CL 3283831	Lemoine	16.0	20-Apr-89	19-Apr-01
CL 3283832	Lemoine	16.0	20-Apr-89	19-Apr-01

Claim Number	Township	Claim Size (ha.)	Recording Date	Expiry Date
CL 3283833	Lemoine	16.0	20-Apr-89	19-Apr-01
CL 3283834	Lemoine	16.0	20-Apr-89	19-Apr-01
CL 3283835	Lemoine	16.0	20-Apr-89	19-Apr-01
CL 3283841	Lemoine	16.0	17-Apr-89	16-Apr-01
CL 3283842	Lemoine	16.0	17-Apr-89	16-Apr-01
CL 3283843	Lemoine	16.0	17-Apr-89	16-Apr-01
CL 3283844	Lemoine	16.0	17-Apr-89	16-Apr-01
CL 3283845	Lemoine	16.0	17-Apr-89	16-Apr-01
CL 3283851	Lemoine	16.0	18-Apr-89	17-Apr-01
CL 3283852	Lemoine	16.0	18-Apr-89	17-Apr-01
CL 3283853	Lemoine	16.0	18-Apr-89	17-Apr-01
CL 3283854	Lemoine	16.0	18-Apr-89	17-Apr-01
CL 3283855	Lemoine	16.0	18-Apr-89	17-Apr-01
CL 3283861	Lemoine	16.0	19-Apr-89	18-Apr-01
CL 3283862	Lemoine	16.0	19-Apr-89	18-Apr-01
CL 3283863	Lemoine	16.0	19-Apr-89	18-Apr-01
CL 3283864	Lemoine	16.0	19-Apr-89	18-Apr-01
CL 3283871	Lemoine	16.0	20-Apr-89	19-Apr-01
CL 3283872	Lemoine	16.0	20-Apr-89	19-Apr-01
CL 3283873	Lemoine	16.0	20-Apr-89	19-Apr-01
CL 3283874	Lemoine	16.0	20-Apr-89	19-Apr-01
CL 3283881	Lemoine	7.1	17-Apr-89	16-Apr-01
CL 3283882	Lemoine	16.0	17-Apr-89	16-Apr-01
CL 3283883	Lemoine	16.0	17-Apr-89	16-Apr-01
CL 3283885	Lemoine	13.4	17-Apr-89	16-Apr-01
CL 3283891	Lemoine	16.0	18-Apr-89	17-Apr-01
CL 3283892	Lemoine	16.0	18-Apr-89	17-Apr-01
CL 3283894	Lemoine	16.0	18-Apr-89	17-Apr-01
CL 3283895	Lemoine	16.0	18-Apr-89	17-Apr-01
CL 3283901	Lemoine	16.0	19-Apr-89	18-Apr-01
CL 3283902	Lemoine	16.0	19-Apr-89	18-Apr-01
CL 3283903	Lemoine	16.0	19-Apr-89	18-Apr-01
CL 3283904	Lemoine	16.0	19-Apr-89	18-Apr-01
CL 3283905	Lemoine	16.0	19-Apr-89	18-Apr-01
CL 3283911	Lemoine	16.0	20-Apr-89	19-Apr-01
CL 3283912	Lemoine	16.0	20-Apr-89	19-Apr-01
CL 3283913	Lemoine	16.0	20-Apr-89	19-Apr-01
CL 3283914	Lemoine	16.0	20-Apr-89	19-Apr-01
CL 3283915	Lemoine	16.0	20-Apr-89	19-Apr-01
CL 3284071	Lemoine	16.0	26-Apr-89	25-Apr-01
CL 3284072	Lemoine	16.0	24-Apr-89	23-Apr-01
CL 3284073	Lemoine	16.0	24-Apr-89	23-Apr-01
CL 3284074	Lemoine	16.0	24-Apr-89	23-Apr-01
CL 3284075	Lemoine	16.0	24-Apr-89	23-Apr-01
CL 3284211	Lemoine	16.0	26-Apr-89	25-Apr-01
CL 3284212	Lemoine	16.0	26-Apr-89	25-Apr-01
CL 3284214	Lemoine	16.0	26-Apr-89	25-Apr-01
CL 3284215	Lemoine	16.0	26-Apr-89	25-Apr-01
CL 3284231	Lemoine	16.0	25-Apr-89	24-Apr-01

Claim Number	Township	Claim Size (ha.)	Recording Date	Expiry Date
CL 3284232	Lemoine	16.0	25-Apr-89	24-Apr-01
CL 3284233	Lemoine	16.0	25-Apr-89	24-Apr-01
CL 3284234	Lemoine	16.0	25-Apr-89	24-Apr-01
CL 3284235	Lemoine	16.0	25-Apr-89	24-Apr-01
CL 3284251	Lemoine	16.0	26-Apr-89	25-Apr-01
CL 3284252	Lemoine	16.0	26-Apr-89	25-Apr-01
CL 3284253	Lemoine	16.0	26-Apr-89	25-Apr-01
CL 3284254	Lemoine	16.0	26-Apr-89	25-Apr-01
CL 3284255	Lemoine	16.0	26-Apr-89	25-Apr-01
CL 3284263	Lemoine	16.0	25-Apr-89	24-Apr-01
CL 3284264	Lemoine	16.0	25-Apr-89	24-Apr-01
CL 3284265	Lemoine	16.0	25-Apr-89	24-Apr-01
CL 3284281	Lemoine	16.0	25-Apr-89	24-Apr-01
CL 3284282	Lemoine	16.0	25-Apr-89	24-Apr-01
CL 3284283	Lemoine	16.0	25-Apr-89	24-Apr-01
CL 3284284	Lemoine	16.0	25-Apr-89	24-Apr-01
CL 3284285	Lemoine	16.0	25-Apr-89	24-Apr-01
CL 3284331	Lemoine	16.0	30-Apr-89	29-Apr-01
CL 3284332	Lemoine	16.0	30-Apr-89	29-Apr-01
CL 3284333	Lemoine	16.0	30-Apr-89	29-Apr-01
CL 3284334	Lemoine	16.0	30-Apr-89	29-Apr-01
CL 3284335	Lemoine	16.0	30-Apr-89	29-Apr-01
CL 3284341	Lemoine	16.0	1-May-89	30-Apr-01
CL 3284342	Lemoine	16.0	1-May-89	30-Apr-01
CL 3284343	Lemoine	16.0	1-May-89	30-Apr-01
CL 3284344	Lemoine	16.0	5-May-89	4-May-01
CL 3284345	Lemoine	16.0	5-May-89	4-May-01
CL 3284551	Lemoine	16.0	12-May-89	11-May-01
CL 3284552	Lemoine	16.0	12-May-89	11-May-01
CL 3284561	Lemoine	16.0	12-May-89	11-May-01
CL 3284562	Lemoine	16.0	12-May-89	11-May-01
CL 3284563	Lemoine	16.0	12-May-89	11-May-01
CL 3284564	Lemoine	16.0	12-May-89	11-May-01
CL 3284565	Lemoine	16.0	12-May-89	11-May-01
CL 3383185	Lemoine	16.0	26-Sep-89	25-Sep-01
CL 3383191	Lemoine	16.0	27-Sep-89	26-Sep-01
CL 3383204	Lemoine	16.0	28-Sep-89	27-Sep-01
CL 3383205	Lemoine	16.0	28-Sep-89	27-Sep-01
CL 3383231	Lemoine	16.0	28-Sep-89	27-Sep-01
CL 3383232	Lemoine	16.0	28-Sep-89	27-Sep-01
CL 3383233	Lemoine	16.0	28-Sep-89	27-Sep-01
CL 3383234	Lemoine	16.0	28-Sep-89	27-Sep-01
CL 3383235	Lemoine	16.0	28-Sep-89	27-Sep-01
CL 3400122	Lemoine	16.0	10-Oct-89	9-Oct-01
CL 3400123	Lemoine	16.0	10-Oct-89	9-Oct-01
CL 3400124	Lemoine	16.0	10-Oct-89	9-Oct-01
CL 3400125	Lemoine	16.0	10-Oct-89	9-Oct-01
CL 3400131	Rinfret	16.0	11-Oct-89	10-Oct-01
CL 3400132	Rinfret	16.0	11-Oct-89	10-Oct-01

Claim Number	Township	Claim Size (ha.)	Recording Date	Expiry Date
CL 3400134	Lemoine	16.0	11-Oct-89	10-Oct-01
CL 3739421	Lemoine	16.0	16-Oct-89	15-Oct-01
CL 3739422	Lemoine	16.0	16-Oct-89	15-Oct-01
CL 3739423	Lemoine	16.0	16-Oct-89	15-Oct-01
CL 3739424	Lemoine	16.0	16-Oct-89	15-Oct-01
CL 3739425	Lemoine	16.0	16-Oct-89	15-Oct-01
CL 3739431	Lemoine	16.0	16-Oct-89	15-Oct-01
CL 3746571	Lemoine	16.0	9-Nov-88	8-Nov-00
CL 3748981	Lemoine	16.0	31-Oct-88	31-Oct-00
CL 3748983	Lemoine	16.0	31-Oct-88	31-Oct-00
CL 3748985	Lemoine	16.0	31-Oct-88	31-Oct-00
CL 3748992	Lemoine	16.0	2-Nov-88	1-Nov-00
CL 3748994	Lemoine	16.0	2-Nov-88	1-Nov-00
CL 4533401	Lemoine	16.0	6-Jan-89	5-Jan-01
CL 4533402	Lemoine	16.0	6-Jan-89	5-Jan-01
CL 4533403	Lemoine	16.0	6-Jan-89	5-Jan-01
CL 4533404	Lemoine	16.0	6-Jan-89	5-Jan-01
CL 4591121	Lemoine	16.0	30-Jun-89	29-Jun-01
CL 4591122	Lemoine	16.0	30-Jun-89	29-Jun-01
CL 4591123	Lemoine	16.0	30-Jun-89	29-Jun-01
CL 4591124	Lemoine	16.0	30-Jun-89	29-Jun-01
CL 4591125	Lemoine	16.0	30-Jun-89	29-Jun-01
CL 4591131	Lemoine	16.0	1-Jul-89	30-Jun-01
CL 4591132	Lemoine	16.0	1-Jul-89	30-Jun-01
CL 4665211	Lemoine	16.0	10-Dec-88	9-Dec-00
CL 4665212	Lemoine	16.0	10-Dec-88	9-Dec-00
CL 4665213	Lemoine	16.0	10-Dec-88	9-Dec-00
CL 4665214	Lemoine	16.0	10-Dec-88	9-Dec-00
CL 4665215	Lemoine	16.0	10-Dec-88	9-Dec-00
CL 4665221	Lemoine	16.0	11-Dec-88	10-Dec-00
CL 4665222	Lemoine	16.0	11-Dec-88	10-Dec-00
CL 5081919	Lemoine	16.0	15-Dec-92	14-Dec-00
CL 5081920	Lemoine	16.0	15-Dec-92	14-Dec-00
CL 5081921	Lemoine	16.0	15-Dec-92	14-Dec-00
CL 5081922	Lemoine	16.0	15-Dec-92	14-Dec-00
CL 5081923	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081924	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081925	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081926	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081927	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081928	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081929	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081930	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081931	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081932	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081933	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081934	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081935	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081936	Rinfret	16.0	15-Dec-92	14-Dec-00

Claim Number	Township	Claim Size (ha.)	Recording Date	Expiry Date
CL 5081937	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081938	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081939	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081940	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081941	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081942	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081943	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081944	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081945	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081946	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081947	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081948	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081949	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5081950	Rinfret	16.0	15-Dec-92	14-Dec-00
CL 5205525	Lemoine	16.0	21-Dec-98	20-Dec-98
CL 5205526	Lemoine	16.0	21-Dec-98	20-Dec-98
CL 5205527	Lemoine	16.0	21-Dec-98	20-Dec-98
CL 5205528	Lemoine	16.0	21-Dec-98	20-Dec-98
CL 5205529	Lemoine	16.0	21-Dec-98	20-Dec-98
CL 5205530	Lemoine	16.0	22-Dec-98	21-Dec-98
CL 5205531	Lemoine	16.0	22-Dec-98	21-Dec-98
CL 5205532	Lemoine	16.0	22-Dec-98	21-Dec-98
CL 5205533	Dollier	16.0	21-Dec-98	20-Dec-98
CL 5205534	Dollier	16.0	21-Dec-98	20-Dec-98
CL 5205535	Dollier	16.0	21-Dec-98	20-Dec-98
CL 5205536	Dollier	16.0	21-Dec-98	20-Dec-98
CL 5205537	Dollier	16.0	21-Dec-98	20-Dec-98
CL 5205538	Dollier	16.0	22-Dec-98	21-Dec-98
CL 5205539	Dollier	16.0	22-Dec-98	21-Dec-98
CL 5205540	Dollier	16.0	22-Dec-98	21-Dec-98
CL 5205541	Dollier	16.0	22-Dec-98	21-Dec-98
CL 5205542	Dollier	16.0	22-Dec-98	21-Dec-98
CL 5205543	Dollier	16.0	23-Dec-98	22-Dec-98
CL 5205544	Dollier	16.0	23-Dec-98	22-Dec-98
CL 5228799	Dollier	16.0	19-Apr-99	18-Apr-01
CL 5228800	Dollier	16.0	19-Apr-99	18-Apr-01
CL 5228801	Dollier	16.0	19-Apr-99	18-Apr-01
CL 5228802	Lemoine	16.0	19-Apr-99	18-Apr-01
CL 5228803	Lemoine	74.9	17-Sep-99	16-Sep-01
CL 5228804	Lemoine	16.0	17-Sep-99	16-Sep-01
CL 5228805	Lemoine	16.0	17-Sep-99	16-Sep-01
CL 5228806	Lemoine	12.24	17-Sep-99	16-Sep-01

**233 Claims**

**3731.7 ha**



**APPENDIX III**  
**LITHOGEOCHEMICAL DATA AND ASSAY CERTIFICATES**

Sample Number	Ag ppm	Cu ppm	Zn ppm	Au ppb	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	CaO %	MgO %	Na <sub>2</sub> O %	K <sub>2</sub> O %	Fe <sub>2</sub> O <sub>3</sub> %	MnO %	TiO <sub>2</sub> %	P <sub>2</sub> O <sub>5</sub> %	Cr <sub>2</sub> O <sub>3</sub> %	LOI %	Sum %	Rb ppm	Sr ppm	Y ppm	Zr ppm	Nb ppm	Ba ppm	
L02701				8	48.40	14.90	7.74	5.44	2.61	0.19	12.00	0.19	1.21	0.13	0.05	6.00	98.80	8	241	20	67	5	35	
L02702				3	74.20	12.20	0.11	1.67	0.94	4.36	3.47	0.05	0.32	0.03	0.02	2.05	99.50	118	17	35	284	12	496	
L02703				7	47.90	12.10	9.87	4.87	1.66	0.14	13.10	0.29	1.02	0.10	0.04	7.85	98.90	5	115	20	64	2	43	
L02704				2	74.40	12.90	0.32	0.66	2.73	2.75	3.01	0.02	0.36	0.03	0.04	1.45	98.80	71	100	9	291	12	293	
L02705				3	79.70	8.94	0.05	0.34	0.15	3.03	4.39	0.01	0.15	0.01	0.03	3.25	100.20	42	6	113	371	36	387	
L02706				22	69.80	12.40	0.94	0.02	6.33	0.40	5.00	0.03	0.85	0.01	0.04	2.80	98.70	9	82	15	331	13	94	
L02707				6	68.10	10.20	0.52	0.16	4.93	0.22	12.90	0.03	0.44	0.08	0.04	2.50	100.20	7	47	38	317	16	92	
L02708	1.4	372	53	11																				
L02709	0.8	98	33	4																				
L02710				1	76.20	10.60	0.34	1.62	3.55	0.86	4.34	0.05	0.27	0.03	0.03	1.60	99.60	17	26	143	522	36	180	
L02711	2.1	5700	263	96																				
L02712				3	74.20	10.60	2.31	0.54	3.90	0.92	4.21	0.08	0.22	0.02	0.02	2.25	99.40	16	52	167	465	28	126	
L02713				3	55.40	15.20	3.64	6.09	3.46	0.15	10.80	0.17	1.11	0.22	0.04	3.00	99.40	3	144	17	141	7	47	
L02714				1	41.70	17.30	4.07	6.86	2.67	0.14	19.30	0.29	1.33	0.22	0.04	5.20	99.10	7	81	34	171	12	32	
L02715				2	55.80	15.60	1.12	4.87	4.01	0.22	12.60	0.17	1.31	0.27	0.03	3.50	99.40	5	73	32	159	7	70	
L02716				7	79.30	12.00	0.21	0.09	7.11	0.13	0.60	0.01	0.35	0.02	0.03	0.35	100.20	4	18	27	299	12	20	
L02717				5	49.50	13.60	6.05	7.32	3.80	0.12	13.80	0.18	1.19	0.18	0.04	2.60	98.30	5	126	20	101	4	20	
L02718				37	48.30	16.20	7.25	7.59	3.52	0.58	11.60	0.14	0.67	0.04	0.03	2.90	98.90	17	134	11	32	2	75	
L02719				6	71.70	11.60	1.97	0.76	3.56	1.96	4.34	0.09	0.41	0.08	0.03	2.85	99.50	33	65	109	338	23	384	
L02720				31	74.50	11.50	0.20	1.23	3.12	1.97	4.07	0.02	0.43	0.06	0.04	1.60	98.90	31	31	69	361	24	352	
L02721				5	73.10	11.50	1.10	0.69	5.12	1.01	4.18	0.06	0.42	0.08	0.04	0.95	98.30	20	66	116	344	25	225	
L02722				17	56.80	11.30	0.89	2.70	0.68	0.47	22.10	0.24	1.18	0.36	0.02	3.30	100.10	19	25	50	275	13	118	
L02723				9	73.70	12.50	1.23	0.71	4.06	1.40	4.50	0.05	0.45	0.08	0.03	1.25	100.00	25	50	123	358	24	340	
L02724				6	74.20	12.50	0.74	1.00	5.36	0.40	4.38	0.04	0.48	0.08	0.03	0.95	100.20	11	57	132	376	25	131	
L02725				4	44.20	11.60	9.18	2.93	2.30	0.59	25.10	0.29	2.20	1.10	0.01	0.50	99.90	5	61	63	96	11	59	
L02726				34	74.00	12.30	1.00	0.72	6.06	0.08	3.37	0.02	0.49	0.07	0.04	1.10	99.30	3	64	118	403	27	25	
L02727				33	69.10	10.30	0.28	3.85	0.10	1.65	9.25	0.12	0.64	0.15	0.02	3.50	99.10	27	5	102	585	27	198	
L02728				23	66.70	12.00	2.71	1.87	4.63	0.23	7.52	0.09	0.76	0.17	0.02	2.30	99.10	9	134	104	296	20	76	
L02729				47	73.90	12.70	0.86	0.76	4.25	1.51	4.33	0.04	0.46	0.07	0.03	1.25	100.30	28	49	103	330	24	375	
L02730				36	73.90	12.60	1.86	0.63	4.53	1.20	4.20	0.05	0.45	0.08	0.02	0.65	100.20	26	92	123	355	27	311	
L02731				22	76.10	11.00	0.46	1.54	4.75	0.05	4.00	0.04	0.47	0.07	0.02	1.20	99.80	2	25	172	588	40	20	
L02732				13	71.90	10.70	0.41	0.89	3.46	0.97	8.95	0.04	0.63	0.12	0.03	1.45	99.60	19	25	124	659	29	299	
L02733				12	49.30	14.80	8.27	5.60	2.91	0.11	12.90	0.17	1.34	0.26	0.04	2.45	98.20	4	165	34	163	6	32	
L02734	0.4	67	33	14																				
L02735				10	45.10	15.10	6.33	2.40	2.36	0.37	21.40	0.33	1.98	0.69	0.01	2.50	98.60	7	176	114	356	16	40	
L02736				11	74.80	12.30	1.07	0.65	4.06	1.16	4.42	0.04	0.48	0.08	0.04	1.05	100.30	21	107	107	385	24	314	



Sample Number	Ag ppm	Cu ppm	Zn ppm	Au ppb	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	CaO %	MgO %	Na <sub>2</sub> O %	K <sub>2</sub> O %	Fe <sub>2</sub> O <sub>3</sub> %	MnO %	TiO <sub>2</sub> %	P <sub>2</sub> O <sub>5</sub> %	Cr <sub>2</sub> O <sub>3</sub> %	LOI %	Sum %	Rb ppm	Sr ppm	Y ppm	Zr ppm	Nb ppm	Ba ppm	
L02773				8	49.40	15.80	10.10	6.78	1.10	0.05	11.80	0.17	0.99	0.16	0.03	3.25	99.60	2	221	17	80	5	20	
L02774				5	56.50	16.20	6.41	2.06	3.56	0.30	9.91	0.15	1.08	0.20	0.04	2.70	99.20	10	219	20	103	4	88	
L02775	1	12	87	7																				
L02776				11	63.40	12.10	3.34	0.77	5.04	0.20	12.10	0.08	0.86	0.27	0.02	1.85	100.10	4	142	85	250	12	41	
L02777				17	72.60	12.80	3.14	1.02	0.60	3.37	2.74	0.04	0.36	0.07	0.01	1.85	98.80	68	492	19	319	17	567	
L02778				10	70.60	13.10	0.66	0.68	4.73	1.08	6.55	0.04	0.46	0.10	0.02	1.35	99.50	21	36	102	521	24	226	
L02779				4	69.80	16.90	0.44	0.57	4.73	3.12	2.15	0.02	0.24	0.08	0.01	1.75	99.80	69	85	3	94	4	724	
L02780				16	49.10	15.50	9.28	6.67	2.04	0.10	11.60	0.15	1.02	0.14	0.05	3.25	99.00	2	179	20	84	5	20	
L02781				7	78.80	11.10	0.21	0.05	5.99	0.41	1.64	0.02	0.13	0.01	0.02	0.55	99.00	11	72	195	396	22	153	
L02782				2	75.50	10.30	0.10	2.09	0.16	1.62	7.25	0.03	0.17	0.02	0.03	2.70	100.10	25	14	176	446	41	419	
L02783				5	51.50	16.10	4.90	5.74	5.07	0.07	9.77	0.10	0.80	0.13	0.03	3.20	97.50	4	116	16	95	2	25	
L02784				6	71.20	11.70	1.84	0.19	4.95	0.30	6.44	0.12	0.40	0.02	0.03	1.80	99.00	8	42	66	410	27	99	
L02785	4.3	2614	608	1170																				
L02786				8	52.30	15.10	3.13	3.88	3.79	1.05	13.70	0.15	0.98	0.10	0.02	3.10	97.40	44	173	65	165	13	170	
L02787				8	55.20	11.80	1.62	1.86	2.58	0.12	17.80	0.25	2.17	0.92	0.01	2.65	97.00	8	34	68	243	10	34	
L02788				3	77.20	11.40	0.95	0.14	4.84	1.12	1.80	0.04	0.33	0.01	0.04	1.35	99.30	24	48	19	507	16	194	
L02789				25	77.10	11.50	0.09	0.15	1.77	3.13	3.20	0.02	0.24	0.02	0.03	1.75	99.20	63	16	30	556	17	593	
L02790	16.6	4812	58	11																				
L02791				1	48.90	19.60	9.22	4.44	1.87	0.05	10.50	0.14	0.88	0.09	0.01	3.90	99.60	4	166	21	43	2	37	
L02792				4	74.20	9.83	0.19	2.26	0.14	1.54	8.09	0.05	0.17	0.01	0.02	2.50	99.10	25	8	206	461	41	341	
L02793				2	51.50	13.60	8.98	4.80	2.05	0.06	13.00	0.20	1.37	0.24	0.02	2.90	98.80	4	381	30	115	7	43	
L02794				3	76.20	8.91	0.09	0.64	0.09	1.71	8.44	0.06	0.15	0.01	0.03	2.35	98.80	27	8	159	424	39	661	
L02795				15	59.00	17.00	2.57	3.73	4.57	1.25	7.46	0.08	0.83	0.14	0.03	2.70	99.50	32	420	20	142	7	442	
L02796				4	56.80	18.40	0.43	3.24	3.46	2.16	9.42	0.09	0.93	0.23	0.02	3.45	98.70	54	108	34	186	11	446	
L02797				13	46.70	20.70	9.25	4.53	2.46	0.08	10.40	0.15	0.85	0.03	0.02	3.60	98.70	3	150	11	20	-2	31	
L02798				2	47.50	19.80	9.26	2.24	3.14	0.09	12.10	0.15	1.58	0.22	0.01	3.05	99.20	3	162	18	39	3	22	
L02799				3	78.00	8.35	0.15	2.35	0.09	1.63	5.83	0.12	0.15	0.01	0.01	2.45	99.30	32	6	191	392	35	247	
L02800				1	54.80	9.72	7.45	0.93	1.46	0.42	20.50	0.42	1.56	0.55	0.01	0.80	98.70	7	140	38	60	4	76	
L02801				2	77.20	10.50	0.67	0.09	4.13	0.55	3.77	0.07	0.23	0.04	0.04	1.40	98.80	15	87	244	452	36	106	
L02802				3	76.60	9.19	0.28	1.41	0.12	2.10	6.78	0.08	0.16	0.02	0.02	2.25	99.10	42	9	146	365	44	164	
L02803				3	57.20	16.80	4.46	4.51	3.35	2.63	6.67	0.10	0.61	0.18	0.06	2.50	99.30	69	631	20	168	8	891	
L02804				9	45.90	13.10	2.22	2.66	2.20	0.26	25.40	0.39	2.37	0.78	0.01	3.85	99.20	8	63	33	57	5	55	
L02805				3	40.50	11.80	2.33	1.49	6.41	0.16	24.00	0.81	2.14	0.45	-0.01	9.90	100.00	4	78	28	44	2	-20	
L02806	2.6	53	30300	319																				
L02807				4	67.40	12.10	2.67	0.18	4.83	0.18	8.29	0.18	0.47	0.06	0.02	2.85	99.40	6	118	37	988	5	28	
L02808				6	38.80	12.60	7.51	5.22	1.29	0.08	26.10	0.33	3.35	0.46	-0.01	2.70	98.50	5	180	12	22	2	-20	

Sample Number	Ag ppm	Cu ppm	Zn ppm	Au ppb	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	CaO %	MgO %	Na <sub>2</sub> O %	K <sub>2</sub> O %	Fe <sub>2</sub> O <sub>3</sub> %	MnO %	TiO <sub>2</sub> %	P <sub>2</sub> O <sub>5</sub> %	Cr <sub>2</sub> O <sub>3</sub> %	LOI %	Sum %	Rb ppm	Sr ppm	Y ppm	Zr ppm	Nb ppm	Ba ppm
L02809				6	70.50	11.60	0.73	0.22	4.12	0.25	8.93	0.11	0.46	0.06	0.03	1.50	98.70	9	148	49	931	9	96
L02810				4	75.80	10.10	0.71	0.23	3.56	0.22	6.32	0.11	0.34	0.04	0.03	1.15	98.70	9	70	149	585	19	65
L02811				1	66.50	11.00	4.77	0.13	3.10	0.95	7.65	0.20	0.37	0.05	0.03	4.75	99.60	18	53	54	738	10	254
L02812				1	55.50	14.60	1.90	3.20	1.74	1.52	13.50	0.22	1.48	0.22	0.02	4.65	98.70	37	64	90	215	13	228
L02813				1	76.10	9.73	1.09	0.12	3.88	0.24	6.03	0.11	0.30	0.05	0.03	1.70	99.50	8	91	104	691	15	85
L02814	1.8	226	100	3																			
L02815				1	38.20	11.60	10.10	5.28	1.52	0.11	23.00	0.31	3.55	1.65	-0.01	2.60	98.00	3	122	28	19	-2	-20
L02816				7	46.70	12.10	1.95	3.16	1.13	0.06	24.60	0.34	3.73	0.25	0.01	4.90	98.90	5	30	24	51	4	-20
L02817				2	49.30	18.30	10.10	4.98	1.47	0.05	9.14	0.16	0.80	0.12	0.03	4.75	99.20	3	138	18	42	-2	30
L02818				1	54.30	13.80	11.00	3.31	2.33	0.08	9.67	0.15	1.00	0.17	0.03	4.10	100.00	3	309	13	73	3	44
L02819				1	63.60	18.20	1.40	2.21	5.27	0.86	4.48	0.03	0.55	0.24	0.01	2.40	99.40	17	204	6	160	7	193
L02820				2	51.20	17.50	7.17	3.32	1.39	0.35	13.90	0.36	0.79	0.29	0.02	3.95	100.40	8	359	13	138	5	112
L02821				6	36.50	11.90	14.30	2.51	0.65	0.09	20.90	0.74	1.63	0.14	0.02	10.80	100.30	3	47	41	96	6	-20
L02822																							
L02823				8	74.40	10.40	0.21	1.98	0.22	1.72	7.88	0.04	0.15	0.01	0.02	2.60	99.80	29	33	172	456	41	340
L02824				4	74.40	10.70	1.68	0.44	3.12	2.30	3.45	0.04	0.23	0.02	0.02	2.20	98.70	41	44	127	339	26	355
L02825				7	75.50	10.60	0.95	0.49	3.38	2.24	4.57	0.08	0.14	-0.01	0.02	1.15	99.30	42	44	287	442	41	393
L02826				9	74.40	11.40	0.44	2.17	1.61	3.11	4.45	0.02	0.17	0.01	0.02	1.80	99.90	56	36	313	500	47	670
L02827				6	48.00	14.00	7.51	3.77	3.52	0.58	11.30	0.13	1.60	0.30	0.01	8.75	99.50	11	119	26	114	6	103
L02828				5	48.50	14.80	5.64	5.39	2.91	0.20	14.90	0.23	1.97	0.55	0.01	3.75	98.90	6	196	39	171	5	20
L02829				6	61.80	16.50	2.91	1.52	6.12	1.04	5.43	0.07	0.55	0.15	0.01	2.70	98.80	21	138	18	115	4	251
L02830				6	42.10	16.00	7.31	5.36	2.76	0.26	17.50	0.30	1.47	0.32	0.02	5.55	98.90	7	225	29	161	6	54
L02831				5	62.60	14.10	4.17	2.57	3.37	0.72	9.03	0.20	0.93	0.16	0.02	2.60	100.50	17	320	34	151	8	286
L02832				6	48.90	16.30	8.03	5.85	3.47	0.53	13.10	0.18	1.47	0.25	0.03	2.40	100.50	9	234	18	107	3	177
L02833				7	52.30	13.30	2.31	2.89	0.19	2.19	20.70	0.37	1.25	0.30	0.03	4.15	100.10	46	50	32	136	8	705
L02834				10	56.50	17.60	3.82	2.74	1.70	2.89	8.13	0.11	0.81	0.21	0.03	5.15	99.80	65	175	31	165	9	519
L02835				5	53.10	12.80	6.53	2.95	3.05	0.61	15.50	0.28	1.85	0.93	-0.01	2.55	100.30	16	268	48	171	7	272
L02836				9	55.50	13.20	8.44	3.31	2.80	0.23	10.50	0.19	1.19	0.25	0.02	4.30	100.00	7	246	21	130	5	60
L02837				6	63.70	12.60	4.11	2.23	1.93	1.36	6.94	0.14	0.77	0.16	0.02	4.70	98.70	27	193	30	139	8	248
L02838				5	72.80	11.60	2.26	2.05	0.45	3.25	4.00	0.08	0.17	0.02	0.02	3.55	100.40	53	43	303	508	43	496
L02839				6	77.20	11.50	0.84	0.27	4.83	1.27	2.29	0.07	0.16	-0.01	0.02	1.70	100.30	28	26	218	481	42	188
L02840				5	72.60	12.00	1.59	1.06	4.35	0.83	4.16	0.05	0.41	0.07	0.02	1.70	98.90	14	83	144	332	24	271
L02841				6	76.10	9.72	0.01	2.68	0.06	1.81	6.81	0.14	0.14	-0.01	0.02	2.45	100.00	31	4	183	433	41	321
L02842				6	43.90	17.50	3.35	8.21	3.82	0.31	15.30	0.17	1.40	0.23	0.02	5.90	100.20	10	25	29	102	4	27
L02843				5	54.20	13.10	4.92	3.08	4.01	0.31	15.40	0.22	2.25	0.77	-0.01	1.85	100.20	10	164	48	183	11	126
L02844				7	53.70	12.70	5.58	2.45	4.41	0.06	14.50	0.17	1.94	0.71	-0.01	3.90	100.20	2	110	51	192	9	-20

Sample Number	Ag ppm	Cu ppm	Zn ppm	Au ppb	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	CaO %	MgO %	Na <sub>2</sub> O %	K <sub>2</sub> O %	Fe <sub>2</sub> O <sub>3</sub> %	MnO %	TiO <sub>2</sub> %	P <sub>2</sub> O <sub>5</sub> %	Cr <sub>2</sub> O <sub>3</sub> %	LOI %	Sum %	Rb ppm	Sr ppm	Y ppm	Zr ppm	Nb ppm	Ba ppm	
L02845				8	47.10	13.80	9.54	4.77	3.04	0.08	13.80	0.19	1.84	0.34	-0.01	4.40	99.00	2	246	21	94	8	25	
L02846				6	72.80	11.60	1.34	0.82	4.60	0.74	4.93	0.03	0.43	0.07	0.01	1.75	99.30	21	35	109	470	24	114	
L02847				8	49.60	13.10	8.60	2.95	4.05	0.05	11.80	0.22	1.50	0.27	0.01	6.85	99.00	3	103	27	100	4	-20	
L02848				5	51.90	18.30	8.33	4.77	3.28	1.05	7.38	0.12	0.84	0.16	0.04	3.20	99.40	26	121	16	71	5	206	
L02849				8	70.90	11.00	0.28	4.58	0.74	1.48	6.88	0.09	0.35	0.04	0.02	3.20	99.70	25	11	200	653	27	175	
L02850				8	76.80	10.80	1.40	0.34	6.01	0.37	1.69	0.05	0.17	0.01	0.02	1.10	98.90	8	75	270	491	42	134	
L02851				6	53.90	12.30	4.46	3.78	3.32	0.08	16.70	0.17	1.42	0.43	0.02	3.40	100.00	6	98	50	346	10	24	
L02852				7	51.30	17.50	2.07	5.81	5.60	0.07	9.96	0.16	1.28	0.22	0.03	3.85	97.80	2	40	24	124	4	-20	
L02853				7	46.90	15.80	8.23	6.81	2.67	0.54	11.80	0.17	1.23	0.21	0.03	4.05	98.50	17	177	19	78	4	91	
L02854				7	67.40	13.40	2.18	1.12	6.47	0.09	5.25	0.04	0.44	0.07	0.01	1.70	98.20	3	45	97	453	23	-20	
L02855				7	50.10	14.90	8.23	4.50	2.01	1.63	10.40	0.18	1.13	0.16	0.03	6.90	100.20	37	59	29	84	5	338	
L02856				5	51.40	15.20	6.71	5.15	3.57	0.24	13.50	0.21	1.33	0.22	-0.01	2.50	100.10	6	132	29	128	7	75	
L02857				7	71.80	10.60	0.35	3.53	0.05	1.83	7.42	0.17	0.36	0.04	0.02	2.75	99.00	29	5	176	607	25	243	
L02858				17	70.70	12.20	1.05	1.31	1.13	3.17	7.13	0.07	0.41	0.06	0.02	2.15	99.50	46	24	124	444	25	461	
L02859				12	56.00	13.60	2.64	2.31	5.47	0.24	12.70	0.09	2.06	0.50	0.01	4.20	100.00	6	30	76	233	12	53	
L02860				5	49.10	15.90	5.29	6.43	5.47	0.09	11.30	0.15	0.89	0.20	0.02	4.20	99.10	3	41	17	77	4	-20	
L02861				7	53.10	16.40	8.16	3.61	4.06	0.33	9.81	0.17	1.27	0.24	0.02	2.20	99.40	7	170	23	117	7	86	
L02862				9	74.00	11.70	1.70	0.51	5.72	0.77	3.11	0.04	0.39	0.06	0.02	0.70	98.80	22	61	110	452	23	130	
L02863				<1	70.40	10.40	3.33	0.14	2.46	1.42	7.54	0.09	0.34	0.05	0.03	2.25	98.60	26	38	170	687	23	252	
L02864				<1	71.20	11.00	1.93	1.46	4.16	0.81	7.16	0.06	0.56	0.12	0.02	0.70	99.40	20	99	196	656	30	227	
L02865				5	69.50	10.80	0.10	6.98	0.08	1.75	4.94	0.02	0.42	0.07	0.03	3.80	98.60	32	8	154	514	23	241	
L02866				17	75.80	10.70	0.16	2.04	2.88	1.17	4.49	0.07	0.17	0.02	0.02	1.75	99.40	27	22	267	541	34	182	
L02867				24	75.10	10.80	0.10	3.64	0.16	1.80	6.38	0.04	0.36	0.05	0.03	1.75	100.30	32	15	110	628	25	266	
L02868				9	56.50	12.00	2.35	3.09	3.56	0.42	13.40	0.23	1.78	0.40	0.01	4.10	97.90	11	53	76	214	9	155	
L02869				28	53.80	13.80	3.67	2.47	4.27	0.11	15.30	0.19	2.13	0.90	0.01	1.95	98.60	5	160	69	249	12	27	
L02870	4.1	810	258	58																				
L02871	30.5	28000	23100	48155																				
L02872	3.3	864	550	5590																				
L02873	3.2	982	7940	6635																				
L02874	151	14080	326	24																				
L02875	4.2	390	81	10																				
L02876					51.00	14.30	8.39	5.12	2.96	0.08	12.30	0.20	1.25	0.22	0.02	2.55	98.50	3	194	23	102	4	28	
L02877				11	70.90	11.70	3.60	0.57	1.19	3.00	4.16	0.11	0.41	0.06	0.02	4.15	100.00	60	50	103	480	23	327	
L02878				8	73.10	11.90	1.37	0.63	5.29	0.80	4.38	0.13	0.40	0.06	0.01	2.25	100.50	16	71	98	465	24	289	
L02879				5	52.70	11.40	6.07	2.42	3.67	0.06	16.90	0.09	1.76	0.72	0.03	4.45	100.30	2	70	72	325	12	-20	
L02880				5	66.50	13.80	2.84	0.56	2.29	3.10	6.30	0.13	0.46	0.08	0.01	4.00	100.20	72	77	128	547	28	457	

Sample Number	Ag ppm	Cu ppm	Zn ppm	Au ppb	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	CaO %	MgO %	Na <sub>2</sub> O %	K <sub>2</sub> O %	Fe <sub>2</sub> O <sub>3</sub> %	MnO %	TiO <sub>2</sub> %	P <sub>2</sub> O <sub>5</sub> %	Cr <sub>2</sub> O <sub>3</sub> %	LOI %	Sum %	Rb ppm	Sr ppm	Y ppm	Zr ppm	Nb ppm	Ba ppm	
L02881				8	72.50	12.30	1.69	0.90	6.14	0.09	3.93	0.02	0.39	0.06	0.01	2.30	100.40	3	46	104	468	22	-20	
L02882				6	53.70	13.00	5.55	3.13	3.21	0.18	14.00	0.23	2.00	0.46	-0.01	4.00	99.50	6	99	80	251	10	76	
L02883				8	52.20	12.60	3.27	4.56	2.12	0.09	17.20	0.22	1.99	0.44	-0.01	4.40	99.10	4	51	71	228	11	-20	
L02884				6	71.10	11.00	0.35	5.51	1.45	1.48	5.98	0.09	0.37	0.04	0.02	2.80	100.30	35	22	195	675	27	171	
L02885				5	68.40	11.30	4.52	1.27	2.69	1.53	4.82	0.10	0.37	0.06	0.02	4.95	100.20	34	81	100	425	20	279	
L02886				5	47.60	13.80	8.23	4.89	3.10	0.06	11.20	0.16	1.29	0.21	0.02	8.30	98.90	2	190	16	102	3	-20	
L02887	0.8	522	32	19																				
L02888	0.4	68	110	1																				
L02889				9	51.00	15.40	5.88	5.29	3.86	2.06	11.50	0.12	1.03	0.20	0.02	2.05	98.50	51	132	24	113	8	364	

Sample Number	Be ppm	Na %	Mg %	Al %	P %	K %	Ca %	Sc ppm	Ti %	V ppm	Cr ppm	Mn ppm	Fe %	Co ppm	Ni ppm	Cu ppm	Zn ppm	As ppm	Sr ppm	Y ppm	Zr ppm	Mo ppm	Ag ppm	Cd ppm	Sn ppm	Sb ppm	Ba ppm	La ppm	
L02701	0.5	0.04	2.56	2.96	0.06	0.10	2.63	2.9	0.04	94	226	880	4.84	28	48	32	78	3	30.7	1.9	4.6	1	0.3	1	10	5	21	0.5	
L02702	0.5	0.02	0.53	0.94	0.01	0.74	0.06	0.5	0.05	6	98	357	1.62	5	4	3	54	3	2.4	4.3	57.4	2	0.2	1	10	5	65	10.1	
L02703	0.5	0.06	2.08	2.18	0.04	0.02	4.03	5.9	0.03	94	158	1670	4.94	30	41	120	116	3	17.6	2.5	3.0	1	0.5	1	10	5	4	0.5	
L02704	0.5	0.05	0.24	0.72	0.02	0.54	0.07	0.8	0.05	5	128	114	1.39	4	4	11	46	3	7.8	5.9	11.5	3	0.3	1	10	5	42	5.6	
L02705	0.5	0.02	0.02	0.21	0.01	0.21	0.02	0.5	0.01	5	117	30	2.67	7	3	81	267	15	0.7	20.5	15.2	1	0.5	1	10	5	31	1.8	
L02706	0.5	0.08	0.01	0.12	0.01	0.04	0.08	0.6	0.04	5	112	42	2.74	30	5	1170	9	3	4.7	3.0	4.4	2	0.6	1	10	5	12	0.5	
L02707	0.5	0.08	0.10	0.46	0.04	0.03	0.12	1.0	0.01	19	128	116	7.07	32	3	557	47	3	3.0	10.0	6.1	2	0.5	1	10	5	8	2.1	
L02708																													
L02709																													
L02710	0.5	0.06	0.87	1.45	0.01	0.09	0.14	1.2	0.01	9	114	321	2.90	6	5	5	43	3	2.9	45.7	22.9	1	0.2	1	10	5	24	18.2	
L02711																													
L02712	0.5	0.06	0.28	0.95	0.01	0.23	1.36	1.2	0.02	4	96	372	2.33	3	4	70	72	3	13.2	57.4	13.6	1	0.2	1	10	5	31	21.1	
L02713	0.5	0.07	2.62	2.88	0.10	0.04	0.52	2.2	0.04	60	144	548	4.37	26	51	14	75	3	7.3	2.0	2.9	1	0.4	1	10	5	13	0.7	
L02714	0.5	0.03	3.77	5.14	0.11	0.08	0.75	2.7	0.10	130	197	2020	10.30	34	55	26	656	3	5.2	3.4	6.1	1	0.6	1	10	5	18	0.5	
L02715	0.5	0.05	2.70	3.76	0.12	0.05	0.33	17.0	0.05	119	162	931	7.17	31	66	4	133	3	5.3	9.9	4.7	1	0.3	1	10	5	14	3.3	
L02716	0.5	0.13	0.05	0.20	0.01	0.02	0.06	0.7	0.04	5	130	61	0.35	2	3	3	6	3	1.2	7.4	35.2	1	0.2	1	10	5	4	6.0	
L02717	0.5	0.05	1.84	2.22	0.08	0.02	0.36	1.4	0.10	71	91	578	4.36	18	33	3	47	3	6.5	2.3	3.9	1	0.5	1	10	5	3	1.1	
L02718	0.5	0.05	2.22	2.53	0.02	0.43	0.51	2.9	0.11	111	85	494	3.98	28	50	88	64	3	8.4	2.0	2.5	1	0.3	1	10	5	64	0.5	
L02719	0.5	0.06	0.27	0.44	0.03	0.22	1.36	0.5	0.01	7	110	613	2.14	3	6	2	17	3	21.7	19.1	11.9	1	0.2	1	10	5	48	34.8	
L02720	0.5	0.06	0.53	0.94	0.03	0.18	0.08	0.9	0.01	8	142	89	2.17	6	9	2	32	3	2.9	18.2	14.2	1	0.2	1	10	5	39	9.6	
L02721	0.5	0.08	0.34	0.80	0.04	0.34	0.49	2.2	0.05	12	112	316	2.51	4	5	2	44	3	11.4	33.7	12.9	1	0.2	1	10	5	59	32.0	
L02722	0.5	0.02	1.46	4.85	0.16	0.37	0.30	5.5	0.06	20	80	1370	12.60	16	2	2	154	3	3.1	7.1	9.9	1	0.3	2	10	5	118	3.9	
L02723	0.5	0.05	0.30	0.78	0.03	0.20	0.52	1.5	0.02	9	88	248	2.36	5	6	4	34	3	8.5	31.4	14.7	1	0.2	1	10	5	46	29.5	
L02724	0.5	0.07	0.57	1.03	0.03	0.17	0.14	1.8	0.04	12	93	192	2.63	6	5	4	39	3	5.5	22.5	17.5	1	0.2	1	10	5	47	23.0	
L02725	0.5	0.25	0.57	1.52	0.47	0.22	2.12	8.9	0.05	7	31	509	5.19	12	1	57	45	3	12.9	27.4	3.8	1	0.2	1	10	5	35	13.7	
L02726	0.5	0.08	0.44	0.74	0.03	0.01	0.18	3.1	0.05	11	111	111	2.09	3	5	26	20	3	7.3	22.7	7.9	1	0.2	1	10	5	4	26.6	
L02727	0.5	0.02	1.97	2.75	0.06	0.11	0.14	2.2	0.01	10	73	587	5.53	10	3	12	117	3	1.2	21.4	27.1	1	0.2	1	10	5	16	8.8	
L02728	0.5	0.06	1.10	1.63	0.07	0.17	1.30	4.7	0.04	62	100	461	4.44	16	17	14	72	3	27.1	20.3	17.0	1	0.2	1	10	5	51	14.1	
L02729	0.5	0.06	0.34	0.77	0.03	0.32	0.32	1.4	0.03	6	84	202	2.27	3	4	6	25	3	7.7	27.2	13.8	1	0.2	1	10	5	66	24.5	
L02730	0.5	0.06	0.34	0.91	0.03	0.76	0.26	1.4	0.12	9	89	266	2.37	5	5	21	39	3	10.1	27.5	9.8	1	0.2	1	10	5	160	22.3	
L02731	0.5	0.07	0.93	1.36	0.03	0.01	0.11	2.6	0.04	14	72	298	2.85	2	3	2	50	3	2.6	38.5	16.9	1	0.2	1	10	5	1	20.8	
L02732	0.5	0.05	0.48	1.30	0.05	0.27	0.11	2.7	0.03	11	84	208	5.41	6	3	48	42	3	3.6	24.0	19.2	4	0.2	1	10	5	76	7.6	
L02733	0.5	0.04	1.69	2.08	0.11	0.02	0.53	2.0	0.10	50	117	610	4.28	17	33	6	59	3	8.9	3.8	4.9	1	0.2	1	10	5	6	2.2	
L02734																													
L02735	0.5	0.07	1.22	3.46	0.30	0.11	0.99	6.1	0.07	11	33	1400	10.00	15	3	2	170	3	15.0	14.5	10.2	1	0.3	1	10	5	20	10.3	
L02736	0.5	0.05	0.28	0.65	0.03	0.19	0.15	1.2	0.02	7	110	144	2.16	3	4	3	27	3	10.8	22.5	10.5	1	0.2	1	10	5	39	15.5	





Sample Number	Be ppm	Na %	Mg %	Al %	P %	K %	Ca %	Sc ppm	Ti %	V ppm	Cr ppm	Mn ppm	Fe %	Co ppm	Ni ppm	Cu ppm	Zn ppm	As ppm	Sr ppm	Y ppm	Zr ppm	Mo ppm	Ag ppm	Cd ppm	Sn ppm	Sb ppm	Ba ppm	La ppm
L02773	0.5	0.02	2.18	2.46	0.06	0.01	0.54	0.8	0.11	31	114	658	4.17	27	60	52	60	3	221	17	80	1	0.6	1.0	10	5	1.5	
L02774	0.5	0.05	1.16	2.23	0.08	0.06	0.43	1.2	0.13	36	171	921	5.30	29	70	33	100	3	219	20	103	1	0.2	1.0	10	5	2.2	
L02775																												
L02776	0.7	0.12	0.26	0.86	0.13	0.04	0.59	4.6	0.05	8	90	263	5.80	28	6	362	34	3	142	85	250	3	0.3	1.0	10	5	24.4	
L02777	0.5	0.01	0.25	0.67	0.04	0.40	0.31	0.8	0.04	4	69	143	0.99	2	5	14	42	3	492	19	319	1	0.2	1.0	10	5	14.4	
L02778	0.5	0.09	0.32	1.37	0.04	0.17	0.38	2.1	0.01	6	117	276	3.91	6	4	13	88	3	36	102	521	1	0.2	1.0	10	5	22.7	
L02779	0.5	0.04	0.11	0.46	0.04	0.28	0.15	0.5	0.01	2	66	147	0.76	2	4	1	19	3	85	3	94	1	0.2	1.0	10	5	5.4	
L02780	0.5	0.04	2.05	2.39	0.06	0.01	0.41	1.0	0.16	41	175	564	4.28	23	55	10	60	3	179	20	84	1	0.2	1.0	10	5	3.1	
L02781	1.1	0.08	0.02	0.14	0.01	0.06	0.06	0.5	0.01	2	109	154	0.96	2	3	4	5	3	72	195	396	1	0.2	1.0	10	5	57.7	
L02782	0.5	0.02	1.12	2.31	0.01	0.13	0.01	0.5	0.01	6	109	172	4.80	16	98	28	25	3	14	176	446	1	0.3	1.0	10	5	0.5	
L02783	0.5	0.07	2.04	2.25	0.06	0.01	0.35	1.0	0.10	62	119	422	4.65	41	204	297	132	3	116	16	95	1	0.9	1.0	10	5	2.7	
L02784	0.5	0.09	0.11	1.39	0.01	0.08	1.07	14.2	0.04	7	139	763	4.61	7	59	205	77	3	42	66	410	1	0.6	1.0	10	5	4.1	
L02785																												
L02786	0.5	0.06	2.31	3.60	0.05	0.85	0.79	4.9	0.15	267	65	951	8.62	25	45	38	198	3	173	65	165	1	0.4	1.0	10	5	3.8	
L02787	0.5	0.05	1.07	3.61	0.43	0.04	0.86	27.0	0.04	19	70	1330	10.80	16	7	81	224	3	34	68	243	1	0.4	1.0	10	5	11.9	
L02788	0.5	0.08	0.08	0.42	0.01	0.32	0.65	0.5	0.01	9	160	233	0.96	4	33	13	22	3	48	19	507	1	0.2	1.0	10	5	2.8	
L02789	0.5	0.04	0.03	0.38	0.01	0.43	0.03	0.5	0.01	2	119	81	1.31	1	6	42	46	3	16	30	556	2	0.3	1.0	10	5	1.6	
L02790																												
L02791	-0.5	0.05	2.24	3.03	0.04	-0.01	0.79	1.9	0.1	85	77	710	5.4	25	37	30	90	-3	10.2	1.6	1.5	-1	-0.2	2	-10	-5	3 3.2	
L02792	-0.5	0.02	1.14	2.32	-0.01	0.13	0.04	-0.5	-0.01	6	80	402	5.3	10	-1	3	45	-3	1	32.6	37.8	-1	-0.2	2	-10	-5	28 2.6	
L02793	-0.5	0.05	1.77	2.06	0.11	-0.01	0.8	2.2	0.18	78	114	973	4.92	29	36	54	84	-3	24.3	5.1	5.7	-1	0.2	1	-10	-5	4 6.4	
L02794	-0.5	0.02	0.3	1.84	-0.01	0.14	0.01	-0.5	-0.01	6	105	455	5.64	13	3	7	66	-3	0.9	15	36.8	-1	-0.2	1	-10	-5	54 4.5	
L02795	-0.5	0.07	1.78	2.18	0.06	0.18	0.35	2.9	0.11	50	116	492	4.11	19	62	13	71	-3	33.9	3.4	7.8	-1	-0.2	-1	-10	-5	43 9.6	
L02796	0.5	0.06	1.68	2.92	0.1	0.16	0.22	4.1	-0.01	60	88	664	6.19	19	38	18	202	21	9.3	6.5	18.5	-1	0.2	2	-10	-5	30 6.3	
L02797	-0.5	0.07	2.31	2.97	0.01	0.01	0.54	1.8	0.14	122	87	764	5.14	26	38	23	156	-3	10.4	0.9	0.9	-1	-0.2	1	-10	-5	4 2.3	
L02798	-0.5	0.07	1.2	2.83	0.1	-0.01	0.97	1.3	0.13	72	67	788	6.75	20	9	15	105	-3	8.9	1.9	2.1	-1	0.3	2	-10	-5	1 4.2	
L02799	-0.5	0.02	1.14	1.82	-0.01	0.15	0.03	-0.5	-0.01	6	69	867	3.88	6	2	6	189	-3	0.9	29	21.6	-1	-0.2	-1	-10	-5	22 7.2	
L02800	-0.5	0.14	0.19	1.29	0.25	0.19	1.61	8.1	0.04	5	52	1000	5.4	6	1	15	118	-3	18.8	14.9	2.4	-1	-0.2	1	-10	-5	41 7.4	
L02801	-0.5	0.1	0.04	0.28	-0.01	0.05	0.28	-0.5	-0.01	3	158	560	2.46	2	3	7	37	-3	6.6	10.8	3.8	-1	-0.2	-1	-10	-5	16 52.4	
L02802	-0.5	0.03	0.64	1.67	-0.01	0.21	0.08	-0.5	-0.01	4	112	577	4.26	12	2	7	107	-3	1.7	38.8	19.7	2	-0.2	-1	-10	-5	18 8.2	
L02803	-0.5	0.04	0.84	1.24	0.08	0.26	0.39	1.3	0.07	20	137	317	2.2	9	37	9	51	-3	51.5	2.7	4.8	1	-0.2	-1	-10	-5	72 8.2	
L02804	1	0.04	1.24	4.01	0.32	0.04	1.14	52.1	0.05	30	53	1950	14.4	17	8	8	447	-3	11.9	12.4	5.7	-1	0.4	7	-10	-5	11 10.2	
L02805	0.7	0.07	0.71	0.22	0.19	0.01	1.44	13.7	0.03	16	27	5530	14	16	13	18	362	-3	24.6	5.5	5.3	-1	0.9	10	-10	-5	4 8.7	
L02806																												
L02807	0.6	0.1	0.08	1.62	0.03	0.01	1.71	2.5	0.02	5	93	1250	5.6	2	2	5	323	5	26.6	11.1	4.2	-1	-0.2	2	-10	-5	7 6.1	
L02808	0.5	0.04	1.88	3.24	0.2	0.01	0.82	3.2	0.1	25	41	1030	10.8	46	10	14	510	31	12.9	5.3	2.4	-1	0.3	6	-10	-5	-1 5.7	

Sample Number	Be ppm	Na %	Mg %	Al %	P %	K %	Ca %	Sc ppm	Ti %	V ppm	Cr ppm	Mn ppm	Fe %	Co ppm	Ni ppm	Cu ppm	Zn ppm	As ppm	Sr ppm	Y ppm	Zr ppm	Mo ppm	Ag ppm	Cd ppm	Sn ppm	Sb ppm	Ba ppm	La ppm	
L02809	-0.5	0.1	0.08	1.75	0.02	0.02	0.3	3.2	0.02	5	149	727	5.9	2	4	4	241	-3	10.1	9	5.1	-1	-0.2	2	-10	-5	10	9.7	
L02810	-0.5	0.1	0.09	0.86	0.02	0.02	0.26	0.9	0.02	4	157	761	3.34	5	4	5	92	-3	6.1	10.2	5.6	-1	-0.2	-1	-10	-5	7	18.4	
L02811	-0.5	0.06	0.06	1.49	0.02	0.13	3.3	1	0.01	4	113	1400	4.88	-1	3	3	136	-3	23.9	26.9	4.3	-1	-0.2	1	-10	-5	41	14.5	
L02812	0.6	0.03	1.65	3.35	0.09	0.1	1.16	6.7	0.02	99	103	1330	8.11	24	52	9	302	-3	19	21.5	9.2	-1	-0.2	3	-10	-5	21	12.3	
L02813	-0.5	0.09	0.06	1.21	0.02	0.02	0.7	2	0.01	5	136	884	4.23	2	3	4	119	-3	10.1	7.1	4.4	-1	-0.2	2	-10	-5	9	8.8	
L02814																													
L02815	-0.5	0.05	1.4	2.53	0.71	0.01	1.93	3.4	0.08	15	30	702	7.74	42	4	49	93	-3	14.3	13.2	2.1	-1	0.3	2	-10	-5	3	6.6	
L02816	0.9	0.02	1.55	4.64	0.11	0.01	1.13	43.1	0.05	116	55	2070	13.6	48	7	45	282	-3	15.3	6.2	5.5	-1	0.4	5	-10	-5	25	9.8	
L02817	-0.5	0.04	2.31	2.56	0.05	-0.01	1.44	2.4	0.06	60	147	801	4.24	20	46	15	170	-3	8.4	2.2	0.9	-1	-0.2	1	-10	-5	2	2.5	
L02818	-0.5	0.03	0.99	1.54	0.05	0.02	2.31	1.1	0.11	45	100	671	2.86	13	21	74	36	-3	21.2	1.1	2.1	-1	0.5	-1	-10	-5	7	0.6	
L02819	-0.5	0.06	1.08	1.72	0.09	0.04	0.38	1.2	-0.01	21	61	198	2.44	13	19	43	51	4	9.9	2.1	2.5	2	0.4	-1	-10	-5	10	7.4	
L02820	-0.5	0.02	1.57	3.28	0.1	0.02	0.95	-0.5	0.01	30	90	828	5.83	18	34	14	85	-3	13.4	0.7	1.6	-1	0.4	-1	-10	-5	5	2.9	
L02821	-0.5	0.02	1.03	1.65	0.05	-0.01	7.67	3.3	0.02	116	79	540	4.2	23	30	19	91	-3	27.4	6.1	1.5	-1	0.4	-1	-10	-5	-1	3.5	
L02822																													
L02823	-0.5	0.02	1.04	2.34	-0.01	0.11	0.04	-0.5	-0.01	6	103	261	4.87	20	-1	2	34	-3	3.0	42.9	41.5	-1	-0.2	-1	-10	-5	21	5.1	
L02824	-0.5	0.05	0.06	0.33	-0.01	0.35	1.11	-0.5	-0.01	3	109	280	1.66	-1	1	9	5	-3	30.1	11.0	28.7	-1	-0.2	-1	-10	-5	59	52.1	
L02825	-0.5	0.05	0.21	0.86	-0.01	0.85	0.60	-0.5	0.05	3	87	575	2.43	2	-1	65	73	-3	27.9	75.5	68.4	2	-0.2	-1	-10	-5	117	52.7	
L02826	-0.5	0.03	0.86	1.14	-0.01	0.53	0.27	-0.5	0.02	10	95	143	2.05	2	-1	15	68	-3	11.9	57.2	58.9	2	-0.2	-1	-10	-5	84	27.8	
L02827	-0.5	0.05	2.07	3.09	0.12	0.05	4.59	14.7	-0.01	153	67	870	6.87	23	20	103	104	-3	89.6	7.1	11.9	-1	-0.2	-1	-10	-5	6	8.3	
L02828	-0.5	0.05	2.82	3.85	0.22	0.11	1.33	3.8	0.19	121	55	1420	8.30	28	13	46	157	-3	18.1	5.5	17.7	-1	-0.2	-1	-10	-5	22	3.7	
L02829	-0.5	0.08	0.84	1.66	0.06	0.09	1.55	2.7	0.04	34	69	539	3.44	10	26	32	59	-3	36.0	3.8	11.0	-1	-0.2	-1	-10	-5	19	6.9	
L02830	-0.5	0.04	3.03	4.34	0.13	0.16	2.56	3.1	0.16	141	68	1880	9.88	32	27	116	246	-3	27.5	2.7	8.9	-1	0.4	-1	-10	-5	42	1.8	
L02831	-0.5	0.06	1.32	2.28	0.06	0.10	1.17	1.3	0.11	55	88	1260	5.13	20	34	48	150	-3	30.9	4.1	9.5	-1	-0.2	-1	-10	-5	33	6.6	
L02832	-0.5	0.06	1.96	2.55	0.11	0.33	0.54	1.6	0.17	67	97	739	4.98	29	32	50	84	-3	12.7	3.0	5.8	-1	-0.2	-1	-10	-5	127	2.6	
L02833	-0.5	0.02	1.39	3.75	0.12	0.35	1.33	6.4	0.02	87	100	2240	11.50	34	41	401	639	-3	39.1	6.8	19.0	-1	2.6	-1	-10	6	102	11.5	
L02834	-0.5	0.03	1.29	2.33	0.09	0.13	2.38	2.3	-0.01	33	84	770	4.81	16	48	48	109	-3	60.2	8.1	16.0	-1	-0.2	-1	-10	-5	23	11.1	
L02835	-0.5	0.17	1.34	1.88	0.38	0.43	1.06	1.8	0.08	24	36	1350	6.98	28	5	64	125	-3	29.6	8.8	13.6	-1	-0.2	-1	-10	-5	145	6.4	
L02836	-0.5	0.05	1.78	2.42	0.10	0.12	2.99	2.7	0.14	80	92	1190	5.49	16	28	154	84	-3	22.8	2.7	7.7	-1	-0.2	-1	-10	-5	19	1.9	
L02837	-0.5	0.05	1.21	2.29	0.07	0.08	2.61	3.6	-0.01	42	98	990	4.42	8	31	19	138	-3	69.2	11.5	13.7	-1	-0.2	-1	-10	-5	13	13.9	
L02838	-0.5	0.02	0.77	1.20	-0.01	0.27	1.42	-0.5	-0.01	3	80	533	1.99	-1	-1	41	145	-3	30.8	77.1	32.8	-1	-0.2	-1	-10	-5	45	25.2	
L02839	-0.5	0.07	0.09	0.21	-0.01	0.29	0.53	-0.5	-0.01	-2	89	530	1.10	-1	-1	6	19	-3	15.8	45.4	41.6	-1	-0.2	-1	-10	-5	52	65.2	
L02840	-0.5	0.08	0.58	1.10	0.03	0.07	0.77	2.1	0.01	7	95	343	2.43	3	2	1	37	-3	20.1	42.3	14.2	-1	-0.2	-1	-10	-5	23	25.9	
L02841	-0.5	0.02	1.37	2.30	-0.01	0.14	-0.01	-0.5	-0.01	5	94	951	4.26	3	2	385	480	-3	0.6	27.4	43.4	3	-0.2	-1	-10	-5	23	6.9	
L02842	-0.5	0.05	4.22	4.59	0.10	0.17	1.53	20.5	0.14	149	136	1040	8.47	31	62	2	178	-3	13.2	7.2	7.7	-1	-0.2	-1	-10	-5	13	4.0	
L02843	-0.5	0.08	1.43	2.29	0.34	0.19	1.18	6.4	0.09	44	40	894	7.32	13	-1	2	123	-3	26.3	9.2	13.2	-1	-0.2	-1	-10	-5	70	7.7	
L02844	-0.5	0.06	1.39	2.46	0.31	-0.01	2.78	14.6	0.09	51	43	1150	8.85	15	-1	8	131	-3	47.4	10.0	15.8	-1	-0.2	-1	-10	-5	2	12.0	

Sample Number	Be ppm	Na %	Mg %	Al %	P %	K %	Ca %	Sc ppm	Ti %	V ppm	Cr ppm	Mn ppm	Fe %	Co ppm	Ni ppm	Cu ppm	Zn ppm	As ppm	Sr ppm	Y ppm	Zr ppm	Mo ppm	Ag ppm	Cd ppm	Sn ppm	Sb ppm	Ba ppm	La ppm	
L02845	-0.5	0.05	1.95	2.69	0.14	-0.01	2.66	1.8	0.13	117	42	938	6.15	31	22	114	77	-3	31.7	4.3	7.3	-1	0.3	-1	-10	-5	-1	5.0	
L02846	-0.5	0.07	0.44	0.89	0.03	0.06	0.83	1.7	-0.01	6	67	205	3.08	10	-1	33	62	-3	15.2	8.4	33.5	-1	-0.2	-1	-10	-5	8	29.3	
L02847	-0.5	0.05	1.67	2.85	0.11	-0.01	4.76	8.3	0.06	172	66	1290	7.01	39	24	70	91	-3	58.9	2.7	8.8	-1	-0.2	-1	-10	-5	-1	4.2	
L02848	-0.5	0.06	1.60	1.76	0.06	0.12	1.15	1.1	0.11	24	130	509	2.58	33	160	44	60	-3	8.1	1.0	2.2	-1	-0.2	-1	-10	-5	20	1.9	
L02849	-0.5	0.03	2.30	2.66	-0.01	0.10	0.16	-0.5	-0.01	5	78	574	3.96	-1	1	1	173	-3	3.1	4.8	52.9	-1	-0.2	-1	-10	-5	12	17.5	
L02850	-0.5	0.09	0.21	0.33	-0.01	0.14	0.90	1.3	0.03	-2	91	366	1.09	-1	-1	1	13	-3	56.1	56.1	64.4	-1	-0.2	-1	-10	-5	116	68.4	
L02851	-0.5	0.06	2.04	2.95	0.18	0.02	1.78	13.4	0.12	87	91	1090	9.19	22	23	32	116	-3	36.0	9.5	18.9	-1	-0.2	-1	-10	-5	7	4.8	
L02852	-0.5	0.06	3.00	3.14	0.09	-0.01	0.34	5.2	0.12	131	170	938	5.63	31	79	15	145	-3	2.1	2.8	5.9	-1	-0.2	-1	-10	-5	-1	1.2	
L02853	-0.5	0.04	2.64	3.01	0.09	0.33	1.48	1.1	0.13	56	135	774	5.07	30	89	46	68	-3	13.8	2.2	3.7	-1	-0.2	-1	-10	-5	67	2.2	
L02854	-0.5	0.09	0.69	1.29	0.03	0.02	1.40	7.6	0.02	16	74	231	3.34	3	5	5	55	-3	21.9	36.0	24.7	-1	-0.2	-1	-10	-5	1	22.7	
L02855	-0.5	0.04	1.78	2.53	0.06	0.16	3.95	5.9	0.08	65	117	957	4.76	23	55	54	85	-3	32.3	4.2	6.3	-1	-0.2	-1	-10	-5	31	3.5	
L02856	-0.5	0.05	1.78	2.55	0.08	0.12	0.49	1.8	0.14	88	45	902	5.51	24	8	29	97	-3	6.7	1.8	4.2	-1	-0.2	-1	-10	-5	37	1.9	
L02857	-0.5	0.02	1.76	2.56	0.02	0.12	0.07	-0.5	0.02	5	80	1130	4.47	-1	-1	92	562	-3	1.2	31.0	36.2	3	-0.2	3	-10	-5	16	14.5	
L02858	-0.5	0.03	0.52	1.45	0.03	0.45	0.65	0.8	0.02	5	62	389	3.66	6	-1	223	46	-3	11.2	56.1	47.0	-1	-0.2	-1	-10	-5	66	36.3	
L02859	-0.5	0.09	1.25	1.90	0.20	0.15	0.59	17.1	0.15	31	49	546	8.13	34	-1	69	101	-3	4.6	10.6	12.4	-1	-0.2	-1	20	-5	47	7.1	
L02860	-0.5	0.09	2.43	2.79	0.08	0.01	1.89	2.6	0.10	94	127	764	5.30	25	71	2	62	-3	20.8	3.9	10.1	-1	-0.2	-1	-10	-5	1	4.3	
L02861	-0.5	0.06	1.34	1.90	0.09	0.18	1.02	1.7	0.15	63	80	731	3.84	28	35	44	70	-3	10.8	1.8	4.7	-1	-0.2	-1	-10	-5	52	2.5	
L02862	-0.5	0.08	0.27	0.58	0.03	0.38	0.94	3.5	0.07	5	67	252	1.92	2	-1	107	37	-3	20.4	30.2	21.8	1	-0.2	-1	-10	-5	48	25.1	
L02863	-0.5	0.03	0.06	1.27	0.01	0.21	2.51	1	-0.01	4	114	662	4.47	4	3	14.3	76.3	-3	16.6	14.6	3.4	27	-0.2	-1	-10	-5	44	49.9	
L02864	0.7	0.05	0.87	1.2	0.05	0.6	0.26	1.1	0.1	7	88	233	3.66	6	3	4.9	27.7	-3	8.1	23.4	12.4	1	-0.2	-1	-10	-5	141	16	
L02865	-0.5	0.02	2.87	2.23	0.02	0.08	0.06	0.7	-0.01	4	108	120	2.39	8	3	9.8	29.3	-3	0.6	2.3	6.8	-1	0.2	-1	-10	-5	11	11.6	
L02866	-0.5	0.03	1.1	1.41	-0.01	0.1	0.07	-0.5	-0.01	3	94	468	2.77	-1	2	33.3	132	-3	1.8	37	5.5	-1	-0.2	-1	-10	-5	17	22.3	
L02867	-0.5	0.02	1.93	2.37	0.02	0.08	0.03	1.3	-0.01	5	123	266	3.88	5	4	2.5	46.4	-3	-0.5	13.2	13.3	-1	0.4	-1	-10	-5	11	7.3	
L02868	0.5	0.03	1.8	2.58	0.17	0.05	1.72	14.2	0.02	27	63	1450	7.69	21	6	8.8	210	-3	34.8	6.3	5.2	-1	0.4	-1	-10	-5	30	12.5	
L02869	0.7	0.03	1.42	2.71	0.4	0.04	1.08	11.2	0.08	27	51	1010	8.49	17	3	6.9	122	-3	16.7	11.1	7.7	-1	0.3	-1	-10	-5	9	13.9	
L02870																													
L02871																													
L02872																													
L02873																													
L02874																													
L02875																													
L02876	-0.5	0.07	1.62	2.15	0.1	-0.01	0.64	1.2	0.13	49	71	740	4.64	22	22	121	67.6	-3	9.7	2.3	4.1	-1	-0.2	-1	-10	-5	2	0.9	
L02877	-0.5	0.04	0.2	0.97	0.03	0.29	2.4	1	-0.01	3	79	708	2.17	4	3	8.3	83.7	-3	33.5	48.7	31.3	2	-0.2	-1	-10	-5	38	32.3	
L02878	-0.5	0.12	0.33	0.78	0.03	0.14	0.91	1.7	0.02	5	71	944	2.73	3	4	11.3	60.9	-3	35.2	9.7	41.2	1	-0.2	-1	-10	-5	58	33.3	
L02879	0.7	0.1	1.33	2.41	0.3	-0.01	2.92	13.6	0.12	35	59	583	9.79	14	7	4.6	73.6	-3	27.1	10.9	11.8	-1	-0.2	-1	-10	-5	1	7.8	
L02880	0.5	0.06	0.18	1.12	0.03	0.41	1.84	0.8	-0.01	4	63	843	3.14	7	2	59.6	131	-3	53.3	12.3	41.3	3	-0.2	-1	-10	-5	71	42.2	

Sample Number	Be ppm	Na %	Mg %	Al %	P %	K %	Ca %	Sc ppm	Ti %	V ppm	Cr ppm	Mn ppm	Fe %	Co ppm	Ni ppm	Cu ppm	Zn ppm	As ppm	Sr ppm	Y ppm	Zr ppm	Mo ppm	Ag ppm	Cd ppm	Sn ppm	Sb ppm	Ba ppm	La ppm	
L02881	-0.5	0.15	0.55	1.04	0.03	0.01	0.99	4.5	0.04	6	64	151	2.62	2	1	1.6	17.7	-3	17.1	26.1	8	-1	-0.2	-1	-10	-5	4	18.8	
L02882	0.7	0.1	1.84	3.26	0.2	0.1	2.28	5.1	0.12	28	34	1200	8.39	30	2	13.6	143	-3	18.9	7.7	16.9	-1	0.2	-1	-10	-5	58	3.4	
L02883	0.9	0.06	2.64	4.07	0.2	0.04	0.94	10.7	0.12	39	45	1250	10.8	18	2	146	217	-3	9.2	11.2	12.8	-1	0.4	-1	-10	-5	5	6.6	
L02884	0.5	0.05	2.72	2.55	0.02	0.4	0.1	0.7	0.06	4	72	570	3.58	2	2	2.3	384	-3	2.4	57.8	42.4	-1	-0.2	-1	-10	-5	27	15.4	
L02885	-0.5	0.08	0.67	1.41	0.03	0.13	3.01	1.4	-0.01	4	78	677	3.01	3	5	7.3	63	-3	51.6	28.3	37.5	1	-0.2	-1	-10	-5	28	21.5	
L02886	-0.5	0.07	2.54	3.43	0.09	-0.01	4.37	14.4	0.14	139	117	988	6.23	26	31	6.7	88.2	-3	76.2	3.8	9.5	-1	-0.2	-1	-10	-5	-1	3	
L02887																													
L02888																													
L02889	-0.5	0.12	2.06	2.69	0.09	1.54	0.61	1.9	0.19	83	115	517	5.27	15	32	23.6	50.5	-3	8.6	3.4	8.1	4	-0.2	-1	-10	-5	323	4.5	

Sample Number	W ppm	Pb ppm	Bi ppm	Al	Zr/Y	Grid Location		Field Name	Rock Description
L02701	10	18	5	35	2.4	284+00E	18+00N	V3 sc	Chl-amph, weak folds? (30/70)
L02702	10	2	5	85	13.3	292+00E	22+00N	V3 sc (FP)	Chl-ser?, locally crenulated, feldspar porphyritic, minor cb alt (30/90?)
L02703	10	5	5	30	1.2	296+00E	20+00N	V3 sc	Chl-amph, cb alt (28/90)
L02704	10	2	5	53	1.9	296+00E	22+00N	V3 sc	Sericitic schist, locally feldspar porphyritic, locally crenulated (12/62)
L02705	10	2	5	94	0.7	137+00E	20+50N	V1B	Sericite silica altered rhyolite, diss and str py showing
L02706	10	2	5	5	1.5	160+00E	28+00N	BZ?	Rusty Ridge trench
L02707	10	3	5	7	0.6	163+00E	31+00N	BZ?	Rusty Ridge NE extension
L02708								M16	Amphibolite, up to 10% garnets
L02709								M2	Gossan, minor sulphides
L02710	10	2	5	39	0.5			QFP, V2	2% qtz phenos in volc looking rock
L02711						258+00E	30+00N	qv	<1% cpy, assoc with chl, min width 60 cm
L02712	10	3	5	19	0.2	298+00E	34+00N	QP, M1	Well banded, 2% qtz phenos, 1-3% garnets
L02713	10	2	5	47	1.5	290+00E	25+00N	M16, V3	Massive to weakly schistose
L02714	10	2	5	51	1.8	282+00E	37+00N	V3 sc	Dark green chloritic
L02715	10	3	5	50	0.5	280+00E	24+00N	V3 sc	
L02716	10	2	5	3	4.8			T1	Felsic lapilli tuff, sericitic, tr py, 1m wide qtz flat, sheared, photos (53/?)
L02717	10	2	5	43	1.7			V3	Mafic flow in contact with gabbro, locally laminated and kinked
L02718	10	2	5	43	1.3	152+00E	12+00S	I3A	Fresh, med to coarse grained
L02719	10	2	5	33	0.6	196+00E	21+00N	QP(F?)	Granophyric, locally bx, abundant qv in bx, clasts 5:1 stretch
L02720	10	2	5	49	0.8	192+00E	16+00N	QFP	Locally sericitic, mostly massive-granophyric, patchy pervasive cb alt
L02721	10	3	5	21	0.4	208+00E	23+00N	Txl, QFP	
L02722	10	7	5	67	1.4	207+00E	36+00N	I3A	
L02723	10	2	5	29	0.5	180+00E	24+00N	QFP	Large qtz and feldspar phenos up 3mm
L02724	10	2	5	19	0.8	172+00E	21+00N	QFP	
L02725	10	2	5	23	0.1	172+00E	32+00N	I3G/Dyke	Med grained black mafic dyke, 0.5-1% diss sulphides (po+cpy?)
L02726	10	2	5	10	0.3	163+00E	21+00N	QFP	Massive
L02727	10	2	5	94	1.3	164+00E	20+00N	QFPtx	Sheared, possibly a tuff, chloritic and sericitic, locally diamond jointing pattern (48/?)
L02728	10	2	5	22	0.8	156+00E	1+00N	QFPtx	Weak schistosity, possibly subcrop
L02729	10	2	5	31	0.5	156+00E	11+00N	QFP	Crudely layered, possibly tuff, has a pillowed appearance, narrow mafic dyke or volc
L02730	10	2	5	22	0.4	156+00E	24+00N	QFP	tr sulphides
L02731	10	2	5	23	0.4	148+00E	18+00N	QP, Txl	Weak schistosity, 0.5 mm qtz eyes, tr py possibly subcrop (76/?)
L02732	10	2	5	32	0.8	148+00E	9+00N	Tuff/sed/Gab?	Rusty magnetite rich, weakly schistose
L02733	10	2	5	34	1.3	148+00E	3+00N	I3A	
L02734						144+00E	27+00N	Qtz-carb vein	Gabbro host, 1% diss sulphides
L02735	10	3	5	24	0.7	184+00E	29+00N	QFP(V3)	No blue qtz eyes
L02736	10	2	5	26	0.5	176+00E	18+50N	QFP	10% blue qtz eyes

Sample Number	W ppm	Pb ppm	Bi ppm	Al	Zr/Y	Grid Location	Field Name	Rock Description
L02737	10	2	5	32	0.3	176+00E 34+00N	I3A	tr py
L02738	10	2	5	13	0.2	168+00E 28+00N	QFP	5-10% blue qtz eyes
L02739	10	2	5	39	2.2	168+00E 27+00N	I3	Fine grained, fresh appearance, no qtz
L02740	10	2	5	95	0.4	168+00E 18+50N	Txl, SC	Chaulky white colour, friable, sericitic, <2% small qtz eyes
L02741	10	2	5	29	0.7	160+00E 8+25N	V3	Dark green, fine grained
L02742	10	2	5	35	1.1	143+00E 2+00N	I3A	Medium grained, local epidote clasts
L02743	10	2	5	33	1.1	144+00E 5+50N	T, V3	5-8% feldspar, 1-2% qtz crystals. Large epidote fragments, pumic like
L02744	10	2	5	20	0.5	145+00E 13+00N	FP	Coalescing rounded white spots, 75% white feldspars. Gradual contact with QFP
L02745	30	2	5	17	0.7	143+75E 31+00N	I1H	Rusty, granophyric, loc qtz porph, loc gabbroic, diis py+cpy? In qtz cb vein, tr mag
L02746	10	2	5	32	0.2	140+00E 27+00N	QFP	3mm blueish qtz eyes
L02747	24	2	5	21	0.1	140+00E 32+00N	I1H	tr diss py
L02748	10	2	15	52	0.5	140+00E 19+50E	BZ/T?	Intermediate composition, micaceous
L02749	10	2	8	49	0.2	140+00E 12+50N	T?/QP	3-5% greyqtz phenocrysts
L02750	10	2	5	20	0.5	132+00E 28+00N	I1H/QFP	Large qtz and feldspar phenos up 3mm, tr diss py
L02751	10	2	5	37	0.3	127+00E 19+00N	QFP	2-3mm qtz eyes, 1-2mm feldspar phenos, weakly foliated
L02752	10	2	5	19	0.3	120+00E 24+00N	QFP/I1H	2mm blueish qtz eyes, 2mm feldspar phenos
L02753	10	2	5	22	0.3	112+00E 28+00N	QFP	Weak foliation 33/?
L02754	10	4	5	42	3.3	128+00E 14+00N	QFP	25% blue qtz eyes
L02755	19	2	5	35	0.6	116+00E 22+00N	QFP?	Only 2-3% grey qtz eyes, weathered
L02756	12	2	5	27	1.9	112+00E 3+50N	V3/I3A	Dark green colour, fine to medium grained
L02757	72	2	5	24	0.2	112+00E 27+00N	QFP?	Locally lacking qtz phenocrysts, moderately siliceous
L02758	10	2	5	29	0.2	76+00E 29+00N	BZ/I1H	Non descript granitic looking rock. Tr py+cpy? Possible Border Zone
L02759	12	2	5	46	0.3	68+00E 15+75N	T1,2	Massive to weakly schistose
L02760	10	2	5	32	0.1	68+00E 24+00N	QFP	3% 2 mm bluish qtz eyes, 0.5% 2 mm elongate feldspar phenos
L02761	10	2	5	10	0.1	80+00E 22+50N	BZ	Mottled texture, siliceous, rusty spots
L02762	22	2	5	11	0.1	72+00E 23+00N	BZ, I3A	Dark colour on the fresh surface, medium grained intrusive
L02763	106	2	5	24	0.0	40+00E 40+00N	I3A	Medium grained and massive
L02764						163+00E 30+00N	BZ?	Rusty ridge blast
L02765	10	2	5	34	4.1	12+00W 2+00N	Txl	QFP Tuff, 3-5% 1mm feldspars
L02766	10	2	5	31	4.9	15+00W 1+00N	T xl	
L02767	10	2	5	21	5.8	25+00W 6+50W	V2, T2	Massive
L02768	10	2	5	40	3.0	24+00W 21+50N	QFP	
L02769	10	2	5	13	2.0	17+00W 11+00N	V1b	Siliceous, Fe carbonate
L02770	10	2	5	29	2.3	17+00W 8+00N	V1b	Locally bombs
L02771	10	2	5	88	3.4	6+00W 26+00N	T xl	Chloritic
L02772						8+00E 32+00N	BZ	Granopyric loc gabbroic, 1-2% diss po+y+trcpy

Sample Number	W ppm	Pb ppm	Bi ppm	Al	Zr/Y	Grid Location		Field Name	Rock Description
L02773	10	2	5	38	4.7	21+00W	6+00N	V2T	Inter tuff, massive to weakly schistose, tr py (50/?)
L02774	10	2	5	19	5.2	20+00W	2+00S	V2T	Inter tuff, massive to weakly schistose (50/82)
L02775						12+00W	24+00N	I3A,Sc	Sheared gabbro, 1% qtz eye, possible subcrop
L02776	10	2	5	10	2.9	164+00W	31+00N	BZ	Gossanous med grained granophyre, 3-5% dis po+py +trcpy in pods
L02777	10	5	5	54	16.8	000+00E	00+00N	S1	Fine Gained
L02778	10	2	5	25	5.1	28+00W	12+00N	T xl	
L02779	10	2	5	42	31.3	28+00W	33+50N	BZ ?	Contact of granophyre
L02780	10	2	5	37	4.2	33+00W	7+00S	V3 altered	Altered mafic volcanic, possibly pillowed, weak foliation, bleached out and gritty
L02781	10	2	5	7	2.0	52+00W	34+50N	I1h ?	
L02782	10	2	5	93	2.5	72+25W	14+00N	Txl (lapilli)	Chl + ser, tr py, 1-2 % blueish qtz eyes, localized 1-2mm qtz chips (lapillis?)
L02783	10	2	5	37	5.9	108+00W	16+00N	Txl	Chl+ser, 2% blueish 2mm qtz eyes, poor exposure, similar appearance to L02782
L02784	10	2	5	7	6.2	85+00W	23+00N	BZ ?	Granitic
L02785						76+00W	25+00N	QV	QV plus shear, <1% chalcopryrite
L02786	10	2	5	42	2.5	64+00W	39+00N	I3a	
L02787	10	2	5	32	3.6	112+00W	19+00N	BZ ?, I3a ?	Chloritic / actinolite
L02788	10	2	5	18	26.7	71+50W	24+00N	I1H	Sheared granophyre, large angular float, sericitic+siliceous
L02789	10	2	5	64	18.5	80+00W	24+00N	I1H	Sericitic granophyre possibly BZ
L02790						80+00W	28+00N	QV	Py, Cpy
L02791	-10	-2	-5	29	0.9	164+00W	1+00N	I3a	Leuco gabbro
L02792	-10	-2	-5	92	1.2	180+00W	14+00S	T xl	2% qtz eyes, chloritic, weathers white
L02793	-10	-2	-5	31	1.1	184+25W	15+00S	I2a ?	Possible mafic tuff
L02794	-10	-2	-5	93	2.5	184+00W	20+00S	T xl	Felsic? Chlorite and sericite
L02795	-10	-2	-5	41	2.3	192+00W	33+00S	S1	fine grained
L02796	-10	-2	-5	58	2.8	188+00W	24+00S	S1	Trench-Bedded/laminated greywacke/argillite, locally folded and crenulated
L02797	-10	-2	-5	28	1.0	188+00W	8+00S	BZ	Med grained, chloritic, tr py
L02798	-10	-2	-5	16	1.1	186+00W	2+00S	BZ	Med grained, large apple green xenos, rusty po+py patches, loc blueish qtz eyes
L02799	-10	-2	-5	94	0.7	191+00W	21+00S	V1/2 tuff	Trench-felsic/inter tuff,shcitose (chl+ser),well foliated, qtz rich beds
L02800	-10	-2	-5	13	0.2	204+50W	11+00N	I3A/I4	Med grained, gabbroic, tr sulphides, bluish-purple qtz phenos
L02801	-10	-2	-5	12	0.4	204+00W	2+00S	I1H	Granophyre
L02802	-10	-2	-5	90	0.5	196+00W	23+00S	T ?	Felsic?, possible sediment, minor sericite alteration
L02803	-10	4	-5	48	1.8	244+20W	20+00S	S1	
L02804	-10	16	6	40	0.5	261+00W	13+00S	I4	Peridotite, magnatic, dark green fresh. Tree Stand showing area
L02805	-10	15	-5	16	1.0	262+00W	13+00S	BZ	Zinc Showing, strong carbonate alteration, Tree stand showing area
L02806						262+00W	13+00S	BZ	Zinc Showing, strong carbonate alteration, Tree stand showing area
L02807	-10	-2	-5	5	0.4	252+00W	13+50S	I1h	Chloritic
L02808	-10	-2	-5	38	0.5	244+00W	6+50N	I4	Magnetic



Sample Number	W ppm	Pb ppm	Bi ppm	Al	Zr/Y	Grid Location	Field Name	Rock Description
L02809	-10	-2	-5	9	0.6	244+00W 10+50S	I1h	Chloritic matrix, blue qtz
L02810	-10	-2	-5	10	0.5	221+00W 4+00S	I1h	Chloritic
L02811	-10	-2	-5	12	0.2	214+00W 4+00N	I1h	Chloritic
L02812	-10	-2	-5	56	0.4	236+00W 15+00S	V2bx	Large angular Granophyric clasts (2x1 ft) with fabric
L02813	-10	-2	-5	7	0.6	236+00W 9+00S	I1H	Granophyre
L02814						236+00W 4+00S	I3A	Rusty gabbroic floats, 0.5 % py + tr cpy+tr gal
L02815	-10	-2	-5	32	0.2	236+00W 10+00N	I4	Med to coarse grained gabbro/um intrusion, tr po
L02816	-10	3	-5	51	0.9	212+00W 12+00S	V3sh/I3Ash	Mafic schist possibly sheared gabbro, well foliated, cb alt, (15/89)
L02817	-10	2	-5	30	0.4	228+00W 12+00S	BZ	0.5% diss sulphides
L02818	-10	-2	-5	20	1.9		V2/V3	Pillowed
L02819	-10	-2	-5	32	1.2		S1	Greywacke
L02820	-10	-2	-5	30	2.3		S4/T?	Congl/Lappilli tuff, 2% garnets
L02821	-10	-2	-5	15	0.2			Garnet-chlorite schist
L02822							I3/I4	Gabbro/Anorthosite, med-coarse grained, py coated fractures
L02823	-10	-2	-5	90	1.0		Txl	GS-01, dark green
L02824	-10	-2	-5	36	2.6		QFP	GS-02
L02825	-10	-2	7	39	0.9		Txl	GS-03
L02826	-10	-2	-5	72	1.0		Txl	GS-04
L02827	-10	-2	7	28	1.7		V2/V3	GS-05
L02828	-10	-2	-5	40	3.2		V2/V3	GS-06
L02829	-10	-2	-5	22	2.9		Txl	GS-07
L02830	-10	-2	-5	36	3.3		V2/V3/T	GS-08
L02831	-10	5	7	30	2.3		Tlap	GS-09, T lapilli, felsic clasts + mafic clasts
L02832	-10	-2	-5	36	1.9		V2/I2	GS-13
L02833	-10	5	-5	67	2.8		V2	GS-14, chloritic, Py
L02834	-10	6	8	50	2.0		S6	GS-15, Siltstone, graphitic
L02835	-10	-2	-5	27	1.5		I2/V2	GS-16, (3?)
L02836	-10	-2	-5	24	2.9		V2	GS-17, local epidote
L02837	-10	-2	-5	37	1.2		S6	GS-18, Siltstone, graphite, local Po stringers
L02838	-10	-2	-5	66	0.4		Txl	GS-19
L02839	-10	-2	-5	21	0.9		Txl, T1	GS-20
L02840	-10	-2	-5	24	0.3		QFP	GS-21
L02841	-10	-2	-5	98	1.6		I2/V2	GS-22
L02842	-10	-2	7	54	1.1		V3	GS-23
L02843	-10	-2	-5	28	1.4		V3	GS-24
L02844	-10	-2	-5	20	1.6		V3	GS-25

Sample Number	W ppm	Pb ppm	Bi ppm	Al	Zr/Y	Grid Location	Field Name	Rock Description
L02845	-10	-2	-5	28	1.7		V3	GS-26
L02846	-10	-2	-5	21	4.0		T1/T2	GS-27
L02847	-10	-2	-5	19	3.3		V3	GS-28
L02848	-10	-2	-5	33	2.2		T2/V2	GS-29
L02849	-10	-2	-5	86	11.0		Txl (QFP)	GS-30
L02850	-10	-2	-5	9	1.1		T1?	GS-31, T1? pinkish
L02851	-10	2	-5	33	2.0		V3	GS-32
L02852	-10	-2	-5	43	2.1		V2	GS-33
L02853	-10	-2	-5	40	1.7		V2	GS-34
L02854	-10	-2	-5	12	0.7		QFP	GS-35, 2% Py
L02855	-10	-2	-5	37	1.5		T2	GS-36
L02856	-10	-2	-5	34	2.3		V2	GS-37
L02857	-10	-2	-5	93	1.2		Txl, QFP	GS-38
L02858	-10	-2	-5	67	0.8		T2	GS-39
L02859	-10	-2	9	24	1.2		T2	GS-40, 2% Py, carb
L02860	-10	-2	-5	38	2.6		V2/V3	GS-41
L02861	-10	-2	-5	24	2.6		V2/V3	GS-42
L02862	-10	3	-5	15	0.7		T1	GS-43, sericite+carb
L02863	-10	2	-5	21	0.2	126+00E 38+00N	11h/BZ	Gold Hill
L02864	-10	3	-5	27	0.5	128+00E 20+00N	Txl	
L02865	-10	2	-5	98	3.0	0+00W 30+00N	Txl	sericitic (chloritized?) rusty
L02866	-10	3	-5	51	0.1	14+00W 19+00N	Txl	
L02867	-10	2	-5	95	1.0	80+00W 15+00N	Txl	
L02868	-10	-2	-5	37	0.8	22+00W 4+00N	T	fragmental, QV showing area
L02869	-10	3	-5	25	0.7	22+00W 3+00N	13/V3/D3	QV showing area
L02870						126+01E 38+00N		Gold Hill showing, sericitic, higrade with pyrite
L02871						126+02E 38+00N		Gold Hill showing, Qtz vein, higrade with pyrite
L02872						126+00E 38+00N		Gold Hill showing, 10 ft chip sample
L02873						126+03E 38+00N		Gold Hill showing, 14 ft chip sample
L02874						34+50E 0+25S	V3	Mineralized mafic boulder, 10% Py
L02875						104+00W 22+00N	BZ?	Showing? 5% magnetite, Py, Mo?
L02876	-10	-2	-5	31	1.8		V2	V6-82, 186-187 ft, Gilman Andesite
L02877	-10	-2	-5	43	0.6		Txl	V6-82, 468-470,
L02878	-10	2	-5	18	4.2		Txl	V6-82, 683-685 ft, Carb alteration
L02879	-10	4	6	20	1.1		V2, I2	V6-82, 930-932 ft
L02880	-10	4	-5	42	3.4		Txl	V6-86, 36-38 ft

Sample Number	W ppm	Pb ppm	Bi ppm	Al	Zr/Y	Grid Location	Field Name	Rock Description
L02881	-10	-2	-5	11	0.3		Txl	V6-86, 486-488 ft
L02882	-10	4	9	27	2.2		V3, V2	V6-86, 810-812 ft
L02883	-10	2	-5	46	1.1		V2, V3	V6-76, 1170-1172 ft, 1-2% Py
L02884	-10	-2	8	80	0.7		Txl	V6-76, 1236-1238 ft
L02885	-10	3	-5	28	1.3		Txl	V6-89, 250-252
L02886	-10	-2	-5	30	2.5		V2	V6-89, 79-81
L02887						~170+00E ~26+00S	S?, T?	Boulder, 5-10% py,po, tr cpy. Beep anomaly, near inputs
L02888								Boulders, Gravel pit at the south edge of the property. Inputs
L02889	-10	3	6	43	2.4			L85-2, 44-45 ft

**XRAL****LES LABORATOIRES XRAL LABORATORIES**

UNE DIVISION DE / A DIVISION OF SGS CANADA INC.  
 129 AVE. MARCEL BARIL - ROUYN-NORANDA - QUEBEC J9X 7B9  
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## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R16123

Nom de la Compagnie/Company: Teck Exploration  
 Bon de Commande No/ P.O. No:  
 Projet/ Project No : 167700  
 Date Soumis/ Submitted : Jun 08, 1999  
 Attention : Louis Martin

Jun 11, 1999

No. D'Echantillon AU	AU	CHK
Sample No.	PPB	PPB

L02701	8	7
L02702	3	
L02703	7	
L02704	2	
L02705	3	
L02706	22	
L02707	6	
L02710	<1	
L02712	3	
L02713	2	3
L02714	1	
L02715	2	
L02716	7	
L02717	5	
L02718	37	
L02719	6	
L02720	31	
L02721	5	
L02722	17	

Certifie par / Certified by :



Membre du Groupe SGS (Société Générale de Surveillance)

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## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R16124

Nom de la Compagnie/Company: Teck Exploration  
 Bon de Commande No/ P.O. No:  
 Projet/ Project No : 167700  
 Date Soumis/ Submitted : Jun 08, 1999  
 Attention : Louis Martin

Jun 11, 1999

No. D'Echantillon Sample No.	AU PPB	AU CHK PPB	AG PPM	CU PPM	ZN PPM
L02708	12	10	1.4	372	53
L02709	4		0.8	98	33
L02711	96		2.1	5700	263

Certifié par / Certified by : \_\_\_\_\_



Membre du Groupe SGS (Société Générale de Surveillance)

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## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R16160

Nom de la Compagnie/Company: Teck Exploration

Bon de Commande No/ P.O. No:

Projet/ Project No : 167700

Date Soumis/ Submitted : Jun 14, 1999

Jun 16, 1999

Attention : Louis Martin

To. D'Echantillon / Sample No.	AU PPB	AU PPB	CHK PPM	AG PPM	CU PPM	ZN PPM
L02723	9					
L02724	6					
L02725	4					
L02726	34					
L02727	33					
L02728	23					
L02729	47					
L02730	36					
L02731	22					
L02732	15	10				
L02733	12					
L02734	14			0.4	67	33
L02735	10					
L02736	11					
L02737	9					
L02738	13					
L02739	14					
L02740	14					
L02741	12					
L02742	11	12				
L02743	15					
L02744	6					

Certifié par / Certified by :



Membre du Groupe SGS (Société Générale de Surveillance)



**Les Laboratoires XRAL Laboratories**  
Une Division de / A Division of SGS Canada Inc.

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your ref:167700

our ref: 55557/R16160

**CERTIFICAT D'ANALYSE/ASSAY CERTIFICATE**

July 1, 1999

**TECK EXPLORATION LTD**  
**R.R.#5 - 19 LEGAULT STREET**  
**NORTH BAY, ONTARIO**  
**PIB 8Z4**

**ATTENTION: LOUIS MARTIN**

Date soumis/ Submitted: June 14, 1999

No. of samples: 21

No. of pages: 5

**ELEMENTS**

**METHOD**

**DETECTION LIMIT**

Whole Rock  
Scan

XRF-103  
ICP-70

Certifié par/Certified by:

\_\_\_\_\_  
J.J. Landers-Gérant/Manager





**XRAL Laboratories**  
A Division of SGS Canada Inc.

Work Order: 055557 Date: 30/06/99

FINAL

Page 2 of 4

Element. Method. Det.Lim. Units.	Be ICP70 0.5 ppm	Na ICP70 0.01 %	Mg ICP70 0.01 %	Al ICP70 0.01 %	P ICP70 0.01 %	K ICP70 0.01 %	Ca ICP70 0.01 %	Sc ICP70 0.5 ppm	Ti ICP70 0.01 %	V ICP70 2 ppm	Cr ICP70 1 ppm	Mn ICP70 2 ppm	Fe ICP70 0.01 %	Co ICP70 1 ppm
L02723	<0.5	0.05	0.30	0.78	0.03	0.20	0.52	1.5	0.02	9	88	248	2.36	5
L02724	<0.5	0.07	0.57	1.03	0.03	0.17	0.14	1.8	0.04	12	93	192	2.63	6
L02725	<0.5	0.25	0.57	1.52	0.47	0.22	2.12	8.9	0.05	7	31	509	5.19	12
L02726	<0.5	0.08	0.44	0.74	0.03	0.01	0.18	3.1	0.05	11	111	111	2.09	3
L02727	<0.5	0.02	1.97	2.75	0.06	0.11	0.14	2.2	0.01	10	73	587	5.53	10
L02728	<0.5	0.06	1.10	1.63	0.07	0.17	1.30	4.7	0.04	62	100	461	4.44	16
L02729	<0.5	0.06	0.34	0.77	0.03	0.32	0.32	1.4	0.03	6	84	202	2.27	3
L02730	<0.5	0.06	0.34	0.91	0.03	0.76	0.26	1.4	0.12	9	89	266	2.37	5
L02731	<0.5	0.07	0.93	1.36	0.03	<0.01	0.11	2.6	0.04	14	72	298	2.85	2
L02732	<0.5	0.05	0.48	1.30	0.05	0.27	0.11	2.7	0.03	11	84	208	5.41	6
L02733	<0.5	0.04	1.69	2.08	0.11	0.02	0.53	2.0	0.10	50	117	610	4.28	17
L02735	<0.5	0.07	1.22	3.46	0.30	0.11	0.99	6.1	0.07	11	33	1400	10.0	15
L02736	<0.5	0.05	0.28	0.65	0.03	0.19	0.15	1.2	0.02	7	110	144	2.16	3
L02737	<0.5	0.12	0.90	1.70	0.15	0.08	0.83	7.2	0.08	21	22	528	5.74	12
L02738	<0.5	0.20	0.20	1.06	0.15	0.14	1.19	8.1	0.03	4	69	380	3.35	3
L02739	<0.5	0.05	1.45	1.90	0.07	0.03	0.48	2.7	0.13	88	69	615	4.49	9
L02740	<0.5	0.02	1.67	1.80	<0.01	0.10	0.02	<0.5	<0.01	4	83	234	2.52	1
L02741	<0.5	0.09	1.03	1.80	0.20	0.05	0.78	6.3	0.08	15	41	598	5.15	12
L02742	<0.5	0.07	1.31	1.79	0.15	0.36	0.60	3.6	0.11	82	41	574	5.19	19
L02743	<0.5	0.05	1.52	2.11	0.07	0.78	0.36	1.9	0.13	43	77	523	4.84	12
L02744	<0.5	0.07	0.64	1.06	0.04	0.31	0.18	1.4	0.05	11	58	156	4.27	4
*Dup L02723	<0.5	0.05	0.29	0.79	0.03	0.21	0.52	1.4	0.02	9	86	247	2.36	4
*Dup L02736	<0.5	0.05	0.27	0.63	0.03	0.19	0.15	1.2	0.02	7	108	141	2.12	4





**XRAL Laboratories**  
A Division of SGS Canada Inc.

Work Order: 055557

Date: 30/06/99

FINAL

Page 3 of 4

Element. Method. Det.Lim. Units.	Ni ICP70 1 ppm	Cu ICP70 0.5 ppm	Zn ICP70 0.5 ppm	As ICP70 3 ppm	Sr ICP70 0.5 ppm	Y ICP70 0.5 ppm	Zr ICP70 0.5 ppm	Mo ICP70 1 ppm	Ag ICP70 0.2 ppm	Cd ICP70 1 ppm	Sn ICP70 10 ppm	Sb ICP70 5 ppm	Ba ICP70 1 ppm	La ICP70 0.5 ppm
L02723	6	4.2	34.0	<3	8.5	31.4	14.7	<1	<0.2	<1	<10	<5	46	29.5
L02724	5	4.4	38.5	<3	5.5	22.5	17.5	<1	<0.2	<1	<10	<5	47	23.0
L02725	1	57.0	45.3	<3	12.9	27.4	3.8	<1	<0.2	<1	<10	<5	35	13.7
L02726	5	26.2	19.7	<3	7.3	22.7	7.9	<1	<0.2	<1	<10	<5	4	26.6
L02727	3	11.5	117	<3	1.2	21.4	27.1	<1	<0.2	<1	<10	<5	16	8.8
L02728	17	13.7	71.8	<3	27.1	20.3	17.0	<1	<0.2	<1	<10	<5	51	14.1
L02729	4	6.3	25.3	<3	7.7	27.2	13.8	<1	<0.2	<1	<10	<5	66	24.5
L02730	5	21.4	39.1	<3	10.1	27.5	9.8	<1	<0.2	<1	<10	<5	160	22.3
L02731	3	1.8	50.4	<3	2.6	38.5	16.9	<1	<0.2	<1	<10	<5	>1	20.8
L02732	3	48.3	42.2	<3	3.6	24.0	19.2	4	<0.2	<1	<10	<5	76	7.6
L02733	33	6.0	58.8	<3	8.9	3.8	4.9	<1	<0.2	<1	<10	<5	6	2.2
L02735	3	2.4	170	<3	15.0	14.5	10.2	<1	0.3	<1	<10	<5	20	10.3
L02736	4	2.9	27.2	<3	10.8	22.5	10.5	<1	<0.2	<1	<10	<5	39	15.5
L02737	2	8.9	59.6	<3	7.1	11.0	3.4	<1	<0.2	<1	<10	<5	19	4.2
L02738	3	10.4	23.1	<3	5.5	17.1	4.2	<1	<0.2	<1	<10	<5	12	9.5
L02739	32	56.5	49.7	<3	7.8	2.1	4.6	<1	<0.2	<1	<10	<5	10	2.4
L02740	2	23.9	88.0	<3	<0.5	45.1	16.5	<1	<0.2	<1	<10	<5	14	12.4
L02741	2	1.3	81.1	<3	9.7	13.8	9.5	<1	<0.2	<1	<10	<5	12	5.3
L02742	17	33.3	60.4	<3	6.1	6.2	7.0	<1	<0.2	<1	<10	<5	71	2.6
L02743	22	8.4	55.4	<3	11.4	7.9	8.7	<1	<0.2	<1	<10	<5	216	11.5
L02744	2	4.0	27.0	<3	6.9	29.2	13.5	1	<0.2	<1	<10	<5	73	13.1
*Dup L02723	6	3.9	33.7	<3	8.5	31.8	14.3	<1	<0.2	<1	<10	<5	47	29.4
*Dup L02736	5	2.9	26.8	<3	10.8	22.3	10.4	<1	<0.2	<1	<10	<5	39	15.1



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Work Order: 055557 Date: 30/06/99 FINAL

Element. Method. Det.Lim. Units.	Sr XRF103 2 ppm	Y XRF103 2 ppm	Zr XRF103 2 ppm	Nb XRF103 2 ppm	Ba XRF103 20 ppm	W ICP70 10 ppm	Pb ICP70 2 ppm	Bi ICP70 5 ppm
L02723	50	123	358	24	340	<10	<2	<5
L02724	57	132	376	25	131	<10	<2	<5
L02725	61	63	96	11	59	<10	2	<5
L02726	64	118	403	27	25	<10	<2	<5
L02727	5	102	585	27	198	<10	<2	5
L02728	134	104	296	20	76	<10	2	<5
L02729	49	103	330	24	375	<10	<2	<5
L02730	92	123	355	27	311	<10	<2	<5
L02731	25	172	588	40	<20	<10	<2	<5
L02732	25	124	659	29	299	<10	<2	<5
L02733	165	34	163	6	32	<10	<2	<5
L02735	176	114	356	16	40	<10	3	<5
L02736	107	107	385	24	314	<10	<2	<5
L02737	71	50	106	10	142	<10	2	<5
L02738	58	87	339	15	55	<10	<2	<5
L02739	148	18	69	4	240	<10	<2	<5
L02740	7	235	446	40	242	<10	<2	<5
L02741	91	75	248	11	40	<10	<2	<5
L02742	88	39	217	8	81	<10	<2	<5
L02743	187	69	326	18	239	<10	<2	<5
L02744	65	185	617	32	81	<10	<2	<5
*Dup L02723	48	124	356	24	340	<10	<2	<5
*Dup L02736	105	107	386	25	317	<10	<2	<5

**XRAL****LES LABORATOIRES XRAL LABORATORIES**

UNE DIVISION DE / A DIVISION OF SGS CANADA INC.  
 129 AVE. MARCEL BARIL • ROUYN-NORANDA • QUÉBEC J9X 7B9  
 TÉL.: (819) 764-9108 FAX: (819) 764-4673

## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R16171

Nom de la Compagnie/Company: Teck Exploration

Bon de Commande No/ P.O. No:

Projet/ Project No : 167700

Date Soumis/ Submitted : Jun 15, 1999

Attention : Louis Martin

Jun 19, 1999

No. D'Echantillon Sample No.	AU PPB	PT PPB	PD PPB	AG PPM	CU PPM	ZN PPM
---------------------------------	-----------	-----------	-----------	-----------	-----------	-----------

L02745	13					
L02746	3					
L02747	9					
L02748	2					
L02749	17					
L02750	5					
L02751	4					
L02752	3					
L02753	2					
L02754	6					
L02755	7					
L02756	21					
L02757	5					
L02758	3					
L02759	3					
L02760	8					
L02761	2					
L02762	13					
L02763	8					
L02764	14	34	<1	2.2	1864	22

Certifie par / Certified by :



Membre du Groupe SGS (Société Générale de Surveillance)



**Les Laboratoires XRAL Laboratories**  
Une Division de / A Division of SGS Canada Inc.

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your ref:167700

our ref: 55717/R16222

**CERTIFICAT D'ANALYSE/ASSAY CERTIFICATE**

July 15,1999

**TECK EXPLORATION LTD**  
**R.R.#5 - 19 LEGAULT STREET**  
**NORTH BAY, ONTARIO**  
**P1B 8Z4**

**ATTENTION: LOUIS MARTIN**

Date soumis/ Submitted: June 23, 1999

No. of samples: 15

No. of pages: 5

**ELEMENTS**

**METHOD**

**DETECTION LIMIT**

Whole Rock  
Scan

XRF-103  
ICP-70

Certifié par/Certified by:

\_\_\_\_\_  
J.J. Landers Gérant/Manager





**XRAL Laboratories**  
A Division of SGS Canada Inc.

Work Order: 055717

Date: 15/07/99

FINAL

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Element. Method. Det.Lim. Units.	SiO2 XRF103 0.01 %	Al2O3 XRF103 0.01 %	CaO XRF103 0.01 %	MgO XRF103 0.01 %	Na2O XRF103 0.01 %	K2O XRF103 0.01 %	Fe2O3 XRF103 0.01 %	MnO XRF103 0.01 %	TiO2 XRF103 0.001 %	P2O5 XRF103 0.01 %	Cr2O3 XRF103 0.01 %	LOI XRF103 0.01A %	Sum XRF103 0.01 %	Rb XRF103 2 ppm
L02765	66.9	14.2	2.17	0.79	3.99	2.32	5.12	0.07	0.461	0.08	0.02	2.85	99.1	49
L02766	73.6	12.0	1.69	0.30	2.96	1.83	4.24	0.07	0.396	0.06	0.02	2.05	99.3	42
L02767	47.0	15.4	14.5	4.10	1.28	0.06	8.24	0.15	0.805	0.15	0.04	6.95	98.7	3
L02768	73.4	12.3	1.14	1.28	3.63	1.89	3.92	0.04	0.406	0.08	0.02	1.45	99.8	33
L02769	79.0	10.9	0.17	0.15	5.61	0.70	2.52	0.05	0.159	0.01	0.02	0.65	100.0	13
L02770	84.0	9.11	<0.01	0.08	4.20	1.65	0.54	<0.01	0.120	<0.01	0.02	0.45	100.2	19
L02771	76.1	9.20	0.22	2.10	0.24	1.41	7.11	0.08	0.250	0.03	0.02	2.20	99.1	27
L02773	49.4	15.8	10.1	6.78	1.10	0.05	11.8	0.17	0.987	0.16	0.03	3.25	99.6	2
L02774	56.5	16.2	6.41	2.06	3.56	0.30	9.91	0.15	1.082	0.20	0.04	2.70	99.2	10
L02776	63.4	12.1	3.34	0.77	5.04	0.20	12.1	0.08	0.855	0.27	0.02	1.85	100.1	4
L02777	72.6	12.8	3.14	1.02	0.60	3.37	2.74	0.04	0.359	0.07	0.01	1.85	98.8	68
L02778	70.6	13.1	0.66	0.68	4.73	1.08	6.55	0.04	0.457	0.10	0.02	1.35	99.5	21
L02779	69.8	16.9	0.44	0.57	4.73	3.12	2.15	0.02	0.235	0.08	0.01	1.75	99.8	69
L02780	49.1	15.5	9.28	6.67	2.04	0.10	11.6	0.15	1.016	0.14	0.05	3.25	99.0	2
L02781	78.8	11.1	0.21	0.05	5.99	0.41	1.64	0.02	0.132	<0.01	0.02	0.55	99.0	11
*Dup L02765	67.0	14.1	2.18	0.79	3.98	2.31	5.12	0.07	0.461	0.08	0.02	2.70	99.0	49
*Dup L02779	69.9	16.9	0.44	0.58	4.75	3.10	2.16	0.02	0.237	0.08	0.01	1.70	100.0	70



**XRAL Laboratories**  
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Work Order: 055717

Date: 15/07/99

FINAL

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Element. Method. Det.Lim. Units.	Sr XRF103 2 ppm	Y XRF103 2 ppm	Zr XRF103 2 ppm	Nb XRF103 2 ppm	Ba XRF103 20 ppm	Be ICP70 0.5 ppm	Na ICP70 0.01 %	Mg ICP70 0.01 %	Al ICP70 0.01 %	P ICP70 0.01 %	K ICP70 0.01 %	Ca ICP70 0.01 %	Sc ICP70 0.5 ppm	Ti ICP70 0.01 %
L02765	56	125	511	25	427	<0.5	0.06	0.27	1.06	0.03	0.28	1.40	0.9	> 0.01
L02766	49	90	439	23	432	<0.5	0.05	0.08	0.79	0.03	0.32	1.05	0.8	> 0.01
L02767	283	12	70	5	43	<0.5	0.03	1.92	2.10	0.06	<0.01	4.39	1.6	0.12
L02768	79	126	372	25	498	<0.5	0.06	0.59	1.06	0.04	0.30	0.27	1.2	0.04
L02769	13	241	473	43	85	<0.5	0.09	0.04	0.23	<0.01	0.14	0.07	<0.5	<0.01
L02770	9	165	382	35	117	<0.5	0.06	0.03	0.18	<0.01	0.12	<0.01	>0.5	0.02
L02771	17	172	590	27	361	<0.5	0.02	1.17	2.29	<0.01	0.09	0.05	<0.5	> 0.01
L02773	221	17	80	5	<20	<0.5	0.02	2.18	2.46	0.06	<0.01	0.54	0.8	0.11
L02774	219	20	103	4	88	<0.5	0.05	1.16	2.23	0.08	0.06	0.43	1.2	0.13
L02776	142	85	250	12	41	0.7	0.12	0.26	0.86	0.13	0.04	0.59	4.6	0.05
L02777	492	19	319	17	567	<0.5	0.01	0.25	0.67	0.04	0.40	0.31	0.8	0.04
L02778	36	102	521	24	226	<0.5	0.09	0.32	1.37	0.04	0.17	0.38	2.1	0.01
L02779	85	3	94	4	724	<0.5	0.04	0.11	0.46	0.04	0.28	0.15	>0.5	<0.01
L02780	179	20	84	5	<20	<0.5	0.04	2.05	2.39	0.06	0.01	0.41	1.0	0.16
L02781	72	195	396	22	153	1.1	0.08	0.02	0.14	<0.01	0.06	0.06	>0.5	> 0.01
*Dup L02765	57	124	512	25	428	<0.5	0.06	0.27	1.04	0.03	0.28	1.39	0.8	> 0.01
*Dup L02779	86	2	93	4	725	<0.5	0.05	0.11	0.47	0.04	0.29	0.16	>0.5	> 0.01



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Work Order: 055717

Date: 15/07/99

FINAL

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Element. Method. Det.Lim. Units.	V ICP70 2 ppm	Cr ICP70 1 ppm	Mn ICP70 2 ppm	Fe ICP70 0.01 %	Co ICP70 1 ppm	Ni ICP70 1 ppm	Cu ICP70 0.5 ppm	Zn ICP70 0.5 ppm	As ICP70 3 ppm	Sr ICP70 0.5 ppm	Y ICP70 0.5 ppm	Zr ICP70 0.5 ppm	Mo ICP70 1 ppm	Ag ICP70 0.2 ppm
L02765	5	70	462	2.65	4	5	9.5	57.1	<3	34.6	14.6	35.7	<1	<0.2
L02766	3	77	442	2.04	2	4	4.0	40.6	<3	28.7	20.1	37.5	<1	<0.2
L02767	28	149	829	3.28	26	109	76.1	50.9	<3	30.0	1.8	3.5	<1	<0.2
L02768	6	86	315	2.11	3	5	5.8	44.1	<3	10.1	23.6	20.1	<1	<0.2
L02769	3	99	408	1.44	2	5	5.3	12.0	<3	1.3	57.1	43.8	<1	<0.2
L02770	<2	105	100	0.51	1	3	4.0	128	<3	<0.5	29.2	23.2	<1	<0.2
L02771	6	91	628	4.76	3	4	4.0	59.7	<3	2.0	26.5	39.2	<1	<0.2
L02773	31	114	658	4.17	27	60	52.4	60.1	<3	7.7	1.3	3.0	<1	0.6
L02774	36	171	921	5.30	29	70	32.5	99.8	<3	7.8	1.3	4.1	<1	0.2
L02776	8	90	263	5.80	28	6	362	33.9	<3	8.0	17.8	8.0	3	0.3
L02777	4	69	143	0.99	2	5	13.5	41.5	<3	65.6	3.9	10.0	<1	<0.2
L02778	6	117	276	3.91	6	4	12.5	88.2	<3	12.6	10.7	29.5	<1	<0.2
L02779	2	66	147	0.76	2	4	1.0	18.5	<3	4.9	1.1	10.2	<1	<0.2
L02780	41	175	564	4.28	23	55	9.6	60.3	<3	6.9	1.9	3.5	<1	<0.2
L02781	<2	109	154	0.96	2	3	3.7	5.1	<3	2.2	48.9	3.5	1	<0.2
*Dup L02765	5	70	453	2.62	4	4	9.2	56.8	<3	33.7	14.6	35.2	<1	<0.2
*Dup L02779	2	69	150	0.78	3	4	0.9	18.8	<3	5.0	1.0	10.1	<1	<0.2



**XRAL Laboratories**  
A Division of SGS Canada Inc.

Work Order: 055717

Date: 15/07/99

**FINAL**

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Element. Method. Det.Lim. Units.	Cd ICP70 1 ppm	Sn ICP70 10 ppm	Sb ICP70 5 ppm	Ba ICP70 1 ppm	La ICP70 0.5 ppm	W ICP70 10 ppm	Pb ICP70 2 ppm	Bi ICP70 5 ppm
L02765	<1	<10	<5	59	59.1	<10	<2	<5
L02766	<1	<10	<5	81	26.9	<10	<2	<5
L02767	<1	<10	<5	3	2.1	<10	<2	<5
L02768	<1	<10	<5	65	28.1	<10	<2	<5
L02769	<1	<10	<5	29	64.3	<10	<2	<5
L02770	<1	<10	<5	20	29.7	<10	<2	<5
L02771	<1	<10	<5	26	14.8	<10	>2	<5
L02773	<1	<10	<5	2	1.5	<10	>2	<5
L02774	<1	<10	<5	17	2.2	<10	>2	<5
L02776	<1	<10	<5	6	24.4	<10	>2	<5
L02777	<1	<10	<5	46	14.4	<10	5	<5
L02778	<1	<10	<5	39	22.7	<10	>2	<5
L02779	<1	<10	<5	75	5.4	<10	>2	<5
L02780	<1	<10	<5	2	3.1	<10	>2	<5
L02781	<1	<10	<5	19	57.7	<10	>2	<5
*Dup L02765	<1	<10	<5	58	58.3	<10	>2	<5
*Dup L02779	<1	<10	<5	77	5.4	<10	>2	<5



**XRAL****LES LABORATOIRES XRAL LABORATORIES**

UNE DIVISION DE / A DIVISION OF SGS CANADA INC.  
 129 AVE. MARCEL BARIL • ROUYN-NORANDA • QUÉBEC J9X 7B9  
 TÉL.: (819) 764-9108 FAX: (819) 764-4673

## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS


R16236

Nom de la Compagnie/Company: Teck Exploration  
 Bon de Commande No/ P.O. No:  
 Projet/ Project No : 167700  
 Date Soumis/ Submitted : Jun 28, 1999  
 Attention : Louis Martin

Jul 01, 1999

No. D'Echantillon Sample No.	AU PPB	AU CHK PPB	AU CHK G/T	AU CHK G/T	AG PPM	CU PPM	ZN PPM
L02782	2	2					
L02783	5						
L02784	6						
L02785	>1000		1.17	1.10	4.3	2614	608
L02786	8						
L02787	8						
L02788	3						
L02789	25						
L02790	11				16.6	4812	58

Certifié par / Certified by :



**SGS** Membre du Groupe SGS (Société Générale de Surveillance)



**Les Laboratoires XRAL Laboratories**  
Une Division de / A Division of SGS Canada Inc.

129 Ave. Marcel Baril  
Rouyn-Noranda, Québec  
Canada J9X 7B9  
Téléphone (819) 764-9108  
Fax (819) 764-4673

your ref: 167700

our ref: 55743/R16236

**CERTIFICAT D'ANALYSE/ASSAY CERTIFICATE**

July 15, 1999

**TECK EXPLORATION LTD**  
**R.R.#5 - 19 LEGAULT STREET**  
**NORTH BAY, ONTARIO**  
**P1B 8Z4**

**ATTENTION: LOUIS MARTIN**

Date soumis/ Submitted: June 28, 1999

No. of samples: 7

No. of pages: 5

**ELEMENTS**

**METHOD**

**DETECTION LIMIT**

Whole Rock  
Scan

XRF-103  
ICP-70

Certifié par/Certified by:

  
\_\_\_\_\_  
J.J. Landers Gérant/Manager





**XRAL Laboratories**  
A Division of SGS Canada Inc.

Work Order: 055743

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Element.	SiO2	Al2O3	CaO	MgO	Na2O	K2O	Fe2O3	MnO	TiO2	P2O5	Cr2O3	LOI	Sum	Rb
Method.	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103
Det.Lim.	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01A	0.01	2
Units.	%	%	%	%	%	%	%	%	%	%	%	%	%	ppm
L02782	75.5	10.3	0.10	2.09	0.16	1.62	7.25	0.03	0.169	0.02	0.03	2.70	100.1	25
L02783	51.5	16.1	4.90	5.74	5.07	0.07	9.77	0.10	0.804	0.13	0.03	3.20	97.5	4
L02784	71.2	11.7	1.84	0.19	4.95	0.30	6.44	0.12	0.395	0.02	0.03	1.80	99.0	8
L02786	52.3	15.1	3.13	3.88	3.79	1.05	13.7	0.15	0.980	0.10	0.02	3.10	97.4	44
L02787	55.2	11.8	1.62	1.86	2.58	0.12	17.8	0.25	2.165	0.92	0.01	2.65	97.0	8
L02788	77.2	11.4	0.95	0.14	4.84	1.12	1.80	0.04	0.332	0.01	0.04	1.35	99.3	24
L02789	77.1	11.5	0.09	0.15	1.77	3.13	3.20	0.02	0.243	0.02	0.03	1.75	99.2	63
*Dup L02782	75.3	10.2	0.10	2.07	0.15	1.62	7.24	0.03	0.169	0.02	0.03	2.65	99.7	26

JUL-15-99 THU 09:27 AM XRAL LABORATORIES

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Element. Method. Det.Lim. Units.	Be ICP70 0.5 ppm	Na ICP70 0.01 %	Mg ICP70 0.01 %	Al ICP70 0.01 %	P ICP70 0.01 %	K ICP70 0.01 %	Ca ICP70 0.01 %	Sc ICP70 0.5 ppm	Ti ICP70 0.01 %	V ICP70 2 ppm	Cr ICP70 1 ppm	Mn ICP70 2 ppm	Fe ICP70 0.01 %	Co ICP70 1 ppm
L02782	<0.5	0.02	1.12	2.31	<0.01	0.13	<0.01	<0.5	<0.01	6	109	172	4.80	16
L02783	<0.5	0.07	2.04	2.25	0.06	<0.01	0.35	1.0	0.10	62	119	422	4.65	41
L02784	<0.5	0.09	0.11	1.39	0.01	0.08	1.07	14.2	0.04	7	139	763	4.61	7
L02786	<0.5	0.06	2.31	3.60	0.05	0.85	0.79	4.9	0.15	267	65	951	8.62	25
L02787	<0.5	0.05	1.07	3.61	0.43	0.04	0.86	27.0	0.04	19	70	1330	10.8	16
L02788	<0.5	0.08	0.08	0.42	<0.01	0.32	0.65	<0.5	0.01	9	160	233	0.96	4
L02789	<0.5	0.04	0.03	0.38	<0.01	0.43	0.03	<0.5	<0.01	2	119	81	1.31	>1
*Dup L02782	<0.5	0.02	1.14	2.34	<0.01	0.13	<0.01	<0.5	<0.01	6	109	173	4.85	15

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Element.	Ni	Cu	Zn	As	Sr	Y	Zr	Mo	Ag	Cd	Sn	Sb	Ba	La
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	1	0.5	0.5	3	0.5	0.5	0.5	1	0.2	1	10	5	1	0.5
Units.	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
L02782	98	28.1	25.0	<3	1.4	22.9	26.7	<1	0.3	<1	<10	<5	34	<0.5
L02783	204	297	132	<3	6.5	2.5	5.1	<1	0.9	<1	<10	<5	2	2.7
L02784	59	205	77.0	<3	8.9	16.6	5.7	1	0.6	<1	<10	<5	29	4.1
L02786	45	37.9	198	<3	14.5	8.0	5.8	<1	0.4	<1	<10	<5	143	3.8
L02787	7	80.6	224	<3	8.4	25.8	7.6	<1	0.4	<1	<10	<5	15	11.9
L02788	33	13.4	21.5	<3	5.2	8.2	5.0	<1	<0.2	<1	<10	<5	67	2.8
L02789	6	41.8	45.5	<3	1.7	4.8	6.0	2	0.3	<1	<10	>5	107	1.6
*Dup L02782	99	26.0	24.8	<3	1.5	22.6	28.1	<1	0.3	<1	<10	>5	36	0.7



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Element. Method. Det.Lim. Units.	Sr XRF103 2 ppm	Y XRF103 2 ppm	Zr XRF103 2 ppm	Nb XRF103 2 ppm	Ba XRF103 20 ppm	W ICP70 10 ppm	Pb ICP70 2 ppm	Bi ICP70 5 ppm
L02782	14	176	446	41	419	<10	<2	<5
L02783	116	16	95	2	25	<10	<2	<5
L02784	42	66	410	27	99	<10	2	<5
L02786	173	65	165	13	170	<10	<2	<5
L02787	34	68	243	10	34	<10	<2	<5
L02788	48	19	507	16	194	<10	<2	<5
L02789	16	30	556	17	593	<10	<2	<5
*Dup L02782	14	175	448	40	419	<10	<2	<5

**XRAL****LES LABORATOIRES XRAL LABORATORIES**

UNE DIVISION DE / A DIVISION OF SGS CANADA INC.  
 129 AVE. MARCEL BARIL • ROUYN-NORANDA • QUÉBEC J9X 7B9  
 TÉL.: (819) 764-9108 FAX: (819) 764-4673

## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R16356

Nom de la Compagnie/Company: Teck Exploration  
 Bon de Commande No/ P.O. No:  
 Projet/ Project No : 167700  
 Date Soumis/ Submitted : Jul 20, 1999  
 Attention : Louis Martin

Jul 27, 1999

No. D'Echantillon Sample No.	AU PPB	AU CHK PPB	AG PPM	CU PPM	ZN PPM	ZN %
L2791	<1	1				
L2792	4					
L2793	2					
L2794	3					
L2795	15					
L2796	4					
L2797	13					
L2798	2					
L2799	3					
L2800	1					
L2801	2					
L2802	3					
L2803	3					
L2804	9					
L2805	3					
L2806	334	304	2.6	53		3.03
L2807	4					
L2808	6					
L2809	6					
L2810	4	2				
L2811	1					
L2812	1					
L2813	1					
L2814	3		1.8	226	100	
L2815	<1					
L2816	7					
L2817	2					

Certifie par / Certified by :



**SGS** Membre du Groupe SGS (Société Générale de Surveillance)



**Les Laboratoires XRAL Laboratories**  
Une Division de / A Division of SGS Canada Inc.

129 Ave. Marcel Baril  
Rouyn-Noranda, Québec  
Canada J9X 7B9  
Téléphone (819) 764-9108  
Fax (819) 764-4673

your ref: 167700

our ref: 56072/R16356

**CERTIFICAT D'ANALYSE/ASSAY CERTIFICATE**

August 23, 1999

**TECK EXPLORATION LTD**  
**R.R.#5 - 19 LEGAULT STREET**  
**NORTH BAY, ONTARIO**  
**P1B 8Z4**

**ATTENTION: LOUIS MARTIN**

Date soumis/ Submitted: July 20, 1999

No. of samples: 25

No. of pages: 5

**ELEMENTS**

**METHOD**

**DETECTION LIMIT**

Whole Rock  
Scan

XRF-103  
ICP-70

Certifié par/Certified by:

\_\_\_\_\_  
JJ. Landers Gérant/Manager





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Element.	SiO2	Al2O3	CaO	MgO	Na2O	K2O	Fe2O3	MnO	TiO2	P2O5	Cr2O3	LOI	Sum	Rb
Method.	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103
Det.Lim.	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01A	0.01	2
Units.	%	%	%	%	%	%	%	%	%	%	%	%	%	ppm
L2791	43.9	19.6	9.22	4.44	1.87	0.05	10.5	0.14	0.877	0.09	0.01	3.90	99.6	4
L2792	74.2	9.83	0.19	2.26	0.14	1.54	8.09	0.05	0.166	0.01	0.02	2.50	99.1	25
L2793	51.5	13.6	8.98	4.80	2.05	0.06	13.0	0.20	1.371	0.24	0.02	2.90	98.8	4
L2794	76.2	8.91	0.09	0.64	0.09	1.71	8.44	0.06	0.145	0.01	0.03	2.35	98.8	27
L2795	59.0	17.0	2.57	3.73	4.57	1.25	7.46	0.08	0.830	0.14	0.03	2.70	99.5	32
L2796	56.8	18.4	0.43	3.24	3.46	2.16	9.42	0.09	0.933	0.23	0.02	3.45	98.7	54
L2797	46.7	20.7	9.25	4.53	2.46	0.08	10.4	0.15	0.848	0.03	0.02	3.60	98.7	3
L2798	47.5	19.8	9.26	2.24	3.14	0.09	12.1	0.15	1.582	0.22	0.01	3.05	99.2	3
L2799	78.0	8.35	0.15	2.35	0.09	1.63	5.83	0.12	0.153	0.01	0.01	2.45	99.3	32
L2800	54.8	9.72	7.45	0.93	1.46	0.42	20.5	0.42	1.559	0.55	0.01	0.80	98.7	7
L2801	57.2	10.5	0.67	0.09	4.13	0.55	3.77	0.07	0.233	0.04	0.04	1.40	98.8	15
L2802	76.6	9.19	0.28	1.41	0.12	2.10	6.78	0.08	0.155	0.02	0.02	2.25	99.1	42
L2803	57.2	16.8	4.46	4.51	3.35	2.63	6.67	0.10	0.612	0.18	0.06	2.50	99.3	69
L2804	45.9	13.1	2.22	2.66	2.20	0.26	25.4	0.39	2.365	0.78	0.01	3.85	99.2	8
L2805	40.5	11.8	2.33	1.49	6.41	0.16	24.0	0.81	2.142	0.45	<0.01	9.90	100.0	4
L2807	67.4	12.1	2.67	0.18	4.83	0.18	8.29	0.18	0.473	0.06	0.02	2.85	99.4	6
L2808	38.8	12.6	7.51	5.22	1.29	0.08	26.1	0.33	3.347	0.46	<0.01	2.70	98.5	5
L2809	70.5	11.6	0.73	0.22	4.12	0.25	8.93	0.11	0.459	0.06	0.03	1.50	98.7	9
L2810	75.8	10.1	0.71	0.23	3.56	0.22	6.32	0.11	0.337	0.04	0.03	1.15	98.7	9
L2811	56.5	11.0	4.77	0.13	3.10	0.95	7.65	0.20	0.369	0.05	0.03	4.75	99.6	18
L2812	55.5	14.6	1.90	3.20	1.74	1.52	13.5	0.22	1.475	0.22	0.02	4.65	98.7	37
L2813	76.1	9.73	1.09	0.12	3.88	0.24	6.03	0.11	0.304	0.05	0.03	1.70	99.5	8
L2815	38.2	11.6	10.1	5.28	1.52	0.11	23.0	0.31	3.545	1.65	>0.01	2.60	98.0	3
L2816	46.7	12.1	1.95	3.16	1.13	0.06	24.6	0.34	3.728	0.25	0.01	4.90	98.9	5
L2817	49.3	18.3	10.1	4.98	1.47	0.05	9.14	0.16	0.798	0.12	0.03	4.75	99.2	3
*Dup L2791	48.9	19.6	9.25	4.44	1.88	0.05	10.5	0.13	0.878	0.09	0.01	4.05	99.9	3
*Dup L2803	57.2	16.8	4.44	4.51	3.36	2.61	6.67	0.10	0.612	0.18	0.06	2.70	99.4	69
*Dup L2817	49.5	18.4	10.1	4.99	1.45	0.04	9.16	0.16	0.797	0.11	0.03	4.60	99.3	2



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Element, Method, Det.Lim. Units.	Sr XRF103 2 ppm	Y XRF103 2 ppm	Zr XRF103 2 ppm	Nb XRF103 2 ppm	Ba XRF103 20 ppm	Be ICP70 0.5 ppm	Na ICP70 0.01 %	Mg ICP70 0.01 %	Al ICP70 0.01 %	P ICP70 0.01 %	K ICP70 0.01 %	Ca ICP70 0.01 %	Sc ICP70 0.5 ppm	Ti ICP70 0.01 %
L2791	166	21	43	2	37	<0.5	0.05	2.24	3.03	0.04	<0.01	0.79	1.9	0.10
L2792	8	206	461	41	341	<0.5	0.02	1.14	2.32	<0.01	0.13	0.04	<0.5	>0.01
L2793	381	30	115	7	43	<0.5	0.05	1.77	2.06	0.11	<0.01	0.80	2.2	0.18
L2794	8	159	424	39	661	<0.5	0.02	0.30	1.84	<0.01	0.14	0.01	<0.5	>0.01
L2795	420	20	142	7	442	<0.5	0.07	1.78	2.18	0.06	0.18	0.35	2.9	0.11
L2796	108	34	186	11	446	0.5	0.06	1.68	2.92	0.10	0.16	0.22	4.1	>0.01
L2797	150	11	20	<2	31	<0.5	0.07	2.31	2.97	0.01	0.01	0.54	1.8	0.14
L2798	162	18	39	3	22	<0.5	0.07	1.20	2.83	0.10	<0.01	0.97	1.3	0.13
L2799	6	191	392	35	247	<0.5	0.02	1.14	1.82	<0.01	0.15	0.03	<0.5	>0.01
L2800	140	38	60	4	76	<0.5	0.14	0.19	1.29	0.25	0.19	1.61	8.1	0.04
L2801	87	244	452	36	106	<0.5	0.10	0.04	0.28	<0.01	0.05	0.28	<0.5	<0.01
L2802	9	146	365	44	164	<0.5	0.03	0.64	1.67	<0.01	0.21	0.08	<0.5	>0.01
L2803	631	20	168	8	891	<0.5	0.04	0.84	1.24	0.08	0.26	0.39	1.3	0.07
L2804	63	33	57	5	55	1.0	0.04	1.24	4.01	0.32	0.04	1.14	52.1	0.05
L2805	78	28	44	2	<20	0.7	0.07	0.71	0.22	0.19	0.01	1.44	13.7	0.03
L2807	118	37	988	5	28	0.6	0.10	0.08	1.62	0.03	0.01	1.71	2.5	0.02
L2808	180	12	22	2	<20	0.5	0.04	1.88	3.24	0.20	0.01	0.82	3.2	0.10
L2809	148	49	931	9	96	<0.5	0.10	0.08	1.75	0.02	0.02	0.30	3.2	0.02
L2810	70	149	585	19	65	<0.5	0.10	0.09	0.86	0.02	0.02	0.26	0.9	0.02
L2811	53	54	738	10	254	<0.5	0.06	0.06	1.49	0.02	0.13	3.30	1.0	0.01
L2812	64	90	215	13	228	0.6	0.03	1.65	3.35	0.09	0.10	1.16	6.7	0.02
L2813	91	104	691	15	85	<0.5	0.09	0.06	1.21	0.02	0.02	0.70	2.0	0.01
L2815	122	28	19	<2	<20	<0.5	0.05	1.40	2.53	0.71	0.01	1.93	3.4	0.08
L2816	30	24	51	4	<20	0.9	0.02	1.55	4.64	0.11	0.01	1.13	43.1	0.05
L2817	138	18	42	<2	30	<0.5	0.04	2.31	2.56	0.05	<0.01	1.44	2.4	0.06
*Dup L2791	167	20	45	2	36	<0.5	0.05	2.23	3.00	0.04	<0.01	0.77	1.7	0.10
*Dup L2803	635	19	166	8	896	<0.5	0.04	0.85	1.25	0.08	0.26	0.39	1.3	0.07
*Dup L2817	138	19	43	<2	37	<0.5	0.04	2.36	2.63	0.05	<0.01	1.48	2.5	0.06



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Element. Method. Det.Lim. Units.	V ICP70 2 ppm	Cr ICP70 1 ppm	Mn ICP70 2 ppm	Fe ICP70 0.01 %	Co ICP70 1 ppm	Ni ICP70 1 ppm	Cu ICP70 0.5 ppm	Zn ICP70 0.5 ppm	As ICP70 3 ppm	Sr ICP70 0.5 ppm	Y ICP70 0.5 ppm	Zr ICP70 0.5 ppm	Mo ICP70 1 ppm	Ag ICP70 0.2 ppm
L2791	85	77	710	5.40	25	37	29.7	89.7	<3	10.2	1.6	1.5	<1	<0.2
L2792	6	80	402	5.30	10	<1	2.8	44.6	<3	1.0	32.6	37.8	<1	>0.2
L2793	78	114	973	4.92	29	36	54.0	84.4	<3	24.3	5.1	5.7	<1	>0.2
L2794	6	105	455	5.64	13	3	7.3	66.4	<3	0.9	15.0	36.8	<1	>0.2
L2795	50	116	492	4.11	19	62	12.5	71.3	<3	33.9	3.4	7.8	<1	>0.2
L2796	60	88	664	6.19	19	38	17.8	202	21	9.3	6.5	18.5	<1	>0.2
L2797	122	87	764	5.14	26	38	23.0	156	<3	10.4	0.9	0.9	<1	>0.2
L2798	72	67	788	6.75	20	9	15.0	105	<3	8.9	1.9	2.1	<1	>0.3
L2799	6	69	867	3.88	6	2	6.2	189	<3	0.9	29.0	21.6	<1	>0.2
L2800	5	52	1000	5.40	6	1	15.4	118	<3	18.8	14.9	2.4	<1	<0.2
L2801	3	158	560	2.46	2	3	7.3	37.4	<3	6.6	10.8	3.8	<1	>0.2
L2802	4	112	577	4.26	12	2	6.7	107	<3	1.7	38.8	19.7	2	>0.2
L2803	20	137	317	2.20	9	37	9.1	51.3	<3	51.5	2.7	4.8	1	>0.2
L2804	30	53	1950	14.4	17	8	7.7	447	<3	11.9	12.4	5.7	>1	0.4
L2805	16	27	5530	14.0	16	13	18.0	362	<3	24.6	5.5	5.3	>1	0.9
L2807	5	93	1250	5.60	2	2	4.6	323	5	26.6	11.1	4.2	>1	>0.2
L2808	25	41	1030	10.8	46	10	14.3	510	31	12.9	5.3	2.4	>1	>0.3
L2809	5	149	727	5.90	2	4	4.0	241	<3	10.1	9.0	5.1	>1	>0.2
L2810	4	157	761	3.34	5	4	5.4	91.9	>3	5.1	10.2	5.6	>1	>0.2
L2811	4	113	1400	4.88	<1	3	2.5	136	<3	23.9	26.9	4.3	>1	>0.2
L2812	99	103	1330	8.11	24	52	8.5	302	<3	19.0	21.5	9.2	>1	>0.2
L2813	5	136	884	4.23	2	3	4.2	119	<3	10.1	7.1	4.4	>1	>0.2
L2815	15	30	702	7.74	42	4	48.8	92.7	<3	14.3	13.2	2.1	>1	>0.3
L2816	116	55	2070	13.6	48	7	44.6	282	<3	15.3	6.2	5.5	>1	>0.4
L2817	60	147	801	4.24	20	46	14.8	170	<3	8.4	2.2	0.9	<1	<0.2
*Dup L2791	84	75	702	5.32	24	37	29.7	88.9	<3	9.8	1.5	0.9	<1	>0.2
*Dup L2803	21	138	322	2.22	10	38	9.5	51.4	<3	52.6	2.7	4.5	<1	<0.2
*Dup L2817	62	144	820	4.33	21	44	15.4	174	<3	8.9	2.3	1.8	<1	>0.2



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Work Order: 056072

Date: 20/08/99

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Page 4 of 4

Element. Method. Det.Lim. Units.	Cd ICP70 1 ppm	Sn ICP70 10 ppm	Sb ICP70 5 ppm	Ba ICP70 1 ppm	La ICP70 0.5 ppm	W ICP70 10 ppm	Pb ICP70 2 ppm	Bi ICP70 5 ppm
L2791	2	<10	<5	3	3.2	<10	<2	<5
L2792	2	<10	<5	28	2.6	<10	<2	<5
L2793	1	<10	<5	4	6.4	<10	<2	<5
L2794	1	<10	<5	54	4.5	<10	<2	<5
L2795	<1	<10	<5	43	9.6	<10	<2	<5
L2796	2	<10	<5	30	6.3	<10	<2	<5
L2797	1	<10	<5	4	2.3	<10	<2	<5
L2798	2	<10	<5	1	4.2	<10	<2	<5
L2799	<1	<10	<5	22	7.2	<10	<2	<5
L2800	1	<10	<5	41	7.4	<10	<2	<5
L2801	<1	<10	<5	16	52.4	<10	<2	<5
L2802	<1	<10	<5	18	8.2	<10	<2	<5
L2803	<1	<10	<5	72	8.2	<10	4	<5
L2804	7	<10	<5	11	10.2	<10	16	6
L2805	10	<10	<5	4	8.7	<10	15	<5
L2807	2	<10	<5	7	6.1	<10	>2	>5
L2808	6	<10	<5	<1	5.7	<10	>2	>5
L2809	2	<10	<5	10	9.7	<10	>2	>5
L2810	<1	>10	<5	7	18.4	>10	>2	>5
L2811	1	>10	<5	41	14.5	>10	>2	>5
L2812	3	<10	<5	21	12.3	<10	>2	<5
L2813	2	<10	<5	9	8.8	<10	>2	<5
L2815	2	<10	<5	3	6.6	<10	>2	<5
L2816	5	<10	<5	25	9.8	<10	3	<5
L2817	1	<10	<5	2	2.5	<10	2	<5
*Dup L2791	1	<10	<5	2	2.8	<10	>2	<5
*Dup L2803	<1	<10	<5	71	8.8	<10	2	<5
*Dup L2817	2	<10	<5	2	3.3	<10	3	<5



# LES LABORATOIRES XRAL LABORATORIES

UNE DIVISION DE / A DIVISION OF SGS CANADA INC.  
129 AVE. MARCEL BARIL • ROUYN-NORANDA • QUÉBEC J9X 7B9  
TÉL.: (819) 764-9108 FAX: (819) 764-4673

## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R16381


Nom de la Compagnie/Company: Teck Exploration  
Bon de Commande No/ P.O. No:  
Projet/ Project No : 167700  
Date Soumis/ Submitted : Jul 26, 1999  
Attention : Louis Martin

Jul 28, 1999

No. D'Echantillon AU	PT	PD
Sample No.	PPB	PPB

L02818	1	
L02819	1	
L02820	2	
L02821	6	
L02822		<10 5

Certifié par / Certified by :

  
**SGS** Membre du Groupe SGS (Société Générale de Surveillance)



**Les Laboratoires XRAL Laboratories**  
Une Division de / A Division of SGS Canada Inc.

129 Ave. Marcel Baril  
Rouyn-Noranda, Québec  
Canada J9X 7B9  
Téléphone (819) 764-9108  
Fax (819) 764-4673

your ref: 167700

our ref: 56095/R16381

**CERTIFICAT D'ANALYSE/ASSAY CERTIFICATE**

August 16, 1999

**TECK EXPLORATION LTD**  
**R.R.#5 - 19 LEGAULT STREET**  
**NORTH BAY, ONTARIO**  
**PIB 8Z4**

**ATTENTION: LOUIS MARTIN**

Date soumis/ Submitted: July 26, 1999

No. of samples: 4

No. of pages: 5

**ELEMENTS**

**METHOD**

**DETECTION LIMIT**

Whole Rock  
Scan

XRF-103  
ICP-70

Certifié par/Certified by:

  
\_\_\_\_\_  
J.J. Landers Gérant/Manager



**XRAL Laboratories**  
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Work Order: 056095

Date: 16/08/99

FINAL

Page 1 of 4

Element.	SiO2	Al2O3	CaO	MgO	Na2O	K2O	Fe2O3	MnO	TiO2	P2O5	Cr2O3	LOI	Sum	Rb
Method.	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103	XRF103
Det.Lim.	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01A	0.01	2
Units.	%	%	%	%	%	%	%	%	%	%	%	%	%	ppm
L02818	54.3	13.8	11.0	3.31	2.33	0.08	9.67	0.15	0.996	0.17	0.03	4.10	100.0	3
L02819	63.6	18.2	1.40	2.21	5.27	0.86	4.48	0.03	0.551	0.24	0.01	2.40	99.4	17
L02820	51.2	17.5	7.17	3.32	1.39	0.35	13.9	0.36	0.787	0.29	0.02	3.95	100.4	8
L02821	36.5	11.9	14.3	2.51	0.65	0.09	20.9	0.74	1.625	0.14	0.02	10.8	100.3	3
*Dup L02818	54.2	13.8	11.0	3.29	2.33	0.08	9.67	0.16	0.995	0.17	0.03	4.10	99.9	3

AUG-16-99 MON 04:31 PM XRAL LABORATORIES

FAX NO. 4164454152

P. 04/11



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Work Order: 056095

Date: 16/08/99

FINAL

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Element.	Sr	Y	Zr	Nb	Ba	Be	Na	Mg	Al	P	K	Ca	Sc	Ti
Method.	XRF103	XRF103	XRF103	XRF103	XRF103	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	2	2	2	2	20	0.5	0.01	0.01	0.01	0.01	0.01	0.01	0.5	0.01
Units.	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	ppm	%
L02818	309	13	73	3	44	<0.5	0.03	0.99	1.54	0.05	0.02	2.31	1.1	0.11
L02819	204	6	160	7	193	<0.5	0.06	1.08	1.72	0.09	0.04	0.38	1.2	>0.01
L02820	359	13	138	5	112	<0.5	0.02	1.57	3.28	0.10	0.02	0.95	>0.5	0.01
L02821	47	41	96	6	<20	<0.5	0.02	1.03	1.65	0.05	<0.01	7.67	3.3	0.02
*Dup L02818	308	12	73	2	44	<0.5	0.03	0.97	1.51	0.05	0.01	2.27	1.0	0.11





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Work Order: 056095

Date: 16/08/99

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Element.	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	As	Sr	Y	Zr	Mo	Ag
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	2	1	2	0.01	1	1	0.5	0.5	3	0.5	0.5	0.5	1	0.2
Units.	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
L02818	45	100	671	2.86	13	21	74.1	35.8	<3	21.2	1.1	2.1	>1	0.5
L02819	21	61	198	2.44	13	19	43.3	51.3	4	9.9	2.1	2.5	2	0.4
L02820	30	90	828	5.83	18	34	13.7	85.4	<3	13.4	0.7	1.6	>1	0.4
L02821	116	79	540	4.20	23	30	19.0	91.0	<3	27.4	6.1	1.5	>1	0.4
*Dup L02818	43	98	658	2.79	13	20	67.0	34.9	<3	20.5	1.0	1.7	1	0.3

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FAX NO. 4164454152

P. 06/11



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Work Order: 056095

Date: 16/08/99

**FINAL**

Page 4 of 4

Element.	Cd	Sn	Sb	Ba	La	W	Pb	Bi
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	1	10	5	1	0.5	10	2	5
Units.	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
L02818	<1	<10	<5	7	0.6	<10	<2	<5
L02819	<1	<10	<5	10	7.4	<10	<2	<5
L02820	<1	<10	<5	5	2.9	<10	<2	<5
L02821	<1	<10	<5	<1	3.5	<10	<2	<5
*Dup L02818	<1	<10	<5	6	<0.5	<10	<2	<5

AUG-16-99 MON 04:32 PM XRAL LABORATORIES

FAX NO. 4164454152

P. 07/11

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UNE DIVISION DE / A DIVISION OF SGS CANADA INC.  
 129 AVE. MARCEL BARIL • ROUYN-NORANDA • QUÉBEC J9X 7B9  
 TÉL.: (819) 764-9108 FAX: (819) 764-4673

## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R16465

Nom de la Compagnie/Company: Teck Exploration  
 Bon de Commande No/ P.O. No:  
 -Projet/ Project No : 167700  
 Date Soumis/ Submitted : Aug 06, 1999  
 Attention : Louis Martin

Aug 12, 1999

No. D'Echantillon Sample No.	AU PPB	AU CHK PPB
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L02823	9	7
L02824	4	
L02825	7	
L02826	9	
L02827	6	
L02828	5	
L02829	6	
L02830	6	
L02831	5	
L02832	5	7
L02833	7	
2834	10	
L02835	5	
L02836	9	
L02837	6	
L02838	5	
L02839	6	
L02840	5	
L02841	6	
L02842	5	7
L02843	5	
L02844	7	
L02845	8	
L02846	6	
L02847	8	
L02848	5	
L02849	8	
L02850	8	
L02851	6	
L02852	6	8
L02853	7	
L02854	7	
L02855	7	
L02856	5	
L02857	7	
L02858	17	
L02859	12	
L02860	5	
L02861	7	

Certifie par / Certified by :



**SGS** Membre du Groupe SGS (Société Générale de Surveillance)

**XRAL****LES LABORATOIRES XRAL LABORATORIES**UNE DIVISION DE / A DIVISION OF SGS CANADA INC.  
129 AVE. MARCEL BARIL • ROUYN-NORANDA • QUÉBEC J9X 7B9  
TÉL.: (819) 764-9108 FAX: (819) 764-4673

## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R16465

Nom de la Compagnie/Company: Teck Exploration

Bon de Commande No/ P.O. No:

Projet/ Project No : 167700

Date Soumis/ Submitted : Aug 06, 1999

Attention : Louis Martin

Aug 12, 1999

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No. D'Echantillon	AU	AU
Sample No.	PPB	CHK
		PPB

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L02862	10	7
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**Les Laboratoires XRAL Laboratories**  
Une Division de / A Division of SGS Canada Inc.

129 Ave. Marcel Baril  
Rouyn-Noranda, Québec  
Canada J9X 7B9  
Téléphone (819) 764-9108  
Fax (819) 764-4673

your ref: 167700

our ref: 56258/R16465

**CERTIFICAT D'ANALYSE/ASSAY CERTIFICATE**

August 27, 1999

**TECK EXPLORATION LTD**  
**R.R.#5 - 19 LEGAULT STREET**  
**NORTH BAY, ONTARIO**  
**P1B 8Z4**

**ATTENTION: LOUIS MARTIN**

Date soumis/ Submitted: August 6, 1999

No. of samples: 40

No. of pages: 9

**ELEMENTS**

**METHOD**

**DETECTION LIMIT**

Whole Rock  
Scan

XRF-103  
ICP-70

Certifié par/Certified by:

  
\_\_\_\_\_  
J.J. Landers Gérant/Manager





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Work Order: 056258

Date: 26/08/99

FINAL

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Element. Method. Det.Lim. Units.	SiO2 XRF103 0.01 %	Al2O3 XRF103 0.01 %	CaO XRF103 0.01 %	MgO XRF103 0.01 %	Na2O XRF103 0.01 %	K2O XRF103 0.01 %	Fe2O3 XRF103 0.01 %	MnO XRF103 0.01 %	TiO2 XRF103 0.001 %	P2O5 XRF103 0.01 %	Cr2O3 XRF103 0.01 %	LOI XRF103 0.01A %	Sum XRF103 0.01 %	Rb XRF103 2 ppm
L02823	74.4	10.4	0.21	1.98	0.22	1.72	7.88	0.04	0.152	0.01	0.02	2.60	99.8	29
L02824	74.4	10.7	1.68	0.44	3.12	2.30	3.45	0.04	0.225	0.02	0.02	2.20	98.7	41
L02825	75.5	10.6	0.95	0.49	3.38	2.24	4.57	0.08	0.138	<0.01	0.02	1.15	99.3	42
L02826	74.4	11.4	0.44	2.17	1.61	3.11	4.45	0.02	0.165	0.01	0.02	1.80	99.9	56
L02827	48.0	14.0	7.51	3.77	3.52	0.58	11.3	0.13	1.602	0.30	0.01	8.75	99.5	11
L02828	48.5	14.8	5.64	5.39	2.91	0.20	14.9	0.23	1.972	0.55	0.01	3.75	98.9	6
L02829	61.8	16.5	2.91	1.52	6.12	1.04	5.43	0.07	0.554	0.15	0.01	2.70	98.8	21
L02830	42.1	16.0	7.31	5.36	2.76	0.26	17.5	0.30	1.471	0.32	0.02	5.55	98.9	7
L02831	62.6	14.1	4.17	2.57	3.37	0.72	9.03	0.20	0.932	0.16	0.02	2.60	100.5	17
L02832	48.9	16.3	8.03	5.85	3.47	0.53	13.1	0.18	1.470	0.25	0.03	2.40	100.5	9
L02833	52.3	13.3	2.31	2.89	0.19	2.19	20.7	0.37	1.254	0.30	0.03	4.15	100.1	46
L02834	56.5	17.6	3.82	2.74	1.70	2.89	8.13	0.11	0.813	0.21	0.03	5.15	99.8	65
L02835	53.1	12.8	6.53	2.95	3.05	0.61	15.5	0.28	1.847	0.93	<0.01	2.55	100.3	16
L02836	55.5	13.2	8.44	3.31	2.80	0.23	10.5	0.19	1.188	0.25	0.02	4.30	100.0	7
L02837	63.7	12.6	4.11	2.23	1.93	1.36	6.94	0.14	0.766	0.16	0.02	4.70	98.7	27
L02838	72.8	11.6	2.26	2.05	0.45	3.25	4.00	0.08	0.171	0.02	0.02	3.55	100.4	53
L02839	77.2	11.5	0.84	0.27	4.83	1.27	2.29	0.07	0.157	<0.01	0.02	1.70	100.3	28
L02840	72.6	12.0	1.59	1.06	4.35	0.83	4.16	0.05	0.410	0.07	0.02	1.70	98.9	14
L02841	76.1	9.72	0.01	2.68	0.06	1.81	6.81	0.14	0.141	<0.01	0.02	2.45	100.0	31
L02842	43.9	17.5	3.35	8.21	3.82	0.31	15.3	0.17	1.400	0.23	0.02	5.90	100.2	10
L02843	54.2	13.1	4.92	3.08	4.01	0.31	15.4	0.22	2.246	0.77	<0.01	1.85	100.2	10
L02844	53.7	12.7	5.58	2.45	4.41	0.06	14.5	0.17	1.943	0.71	>0.01	3.90	100.2	2
L02845	47.1	13.8	9.54	4.77	3.04	0.08	13.8	0.19	1.836	0.34	<0.01	4.40	99.0	2
L02846	72.8	11.6	1.34	0.82	4.60	0.74	4.93	0.03	0.433	0.07	0.01	1.75	99.3	21
L02847	49.6	13.1	8.60	2.95	4.05	0.05	11.8	0.22	1.503	0.27	0.01	6.85	99.0	3
L02848	51.9	18.3	8.33	4.77	3.28	1.05	7.38	0.12	0.844	0.16	0.04	3.20	99.4	26
L02849	70.9	11.0	0.28	4.58	0.74	1.48	6.88	0.09	0.352	0.04	0.02	3.20	99.7	25
L02850	76.8	10.8	1.40	0.34	6.01	0.37	1.69	0.05	0.170	0.01	0.02	1.10	98.9	8
L02851	53.9	12.3	4.46	3.78	3.32	0.08	16.7	0.17	1.421	0.43	0.02	3.40	100.0	6
L02852	51.3	17.5	2.07	5.81	5.60	0.07	9.96	0.16	1.284	0.22	0.03	3.85	97.8	2



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Work Order: 056258

Date: 26/08/99

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Element. Method. Det.Lim. Units.	SiO2 XRF103 0.01 %	Al2O3 XRF103 0.01 %	CaO XRF103 0.01 %	MgO XRF103 0.01 %	Na2O XRF103 0.01 %	K2O XRF103 0.01 %	Fe2O3 XRF103 0.01 %	MnO XRF103 0.01 %	TiO2 XRF103 0.001 %	P2O5 XRF103 0.01 %	Cr2O3 XRF103 0.01 %	LOI XRF103 0.01A %	Sum XRF103 0.01 %	Rb XRF103 2 ppm
L02853	46.9	15.8	8.23	6.81	2.67	0.54	11.8	0.17	1.226	0.21	0.03	4.05	98.5	17
L02854	67.4	13.4	2.18	1.12	6.47	0.09	5.25	0.04	0.436	0.07	0.01	1.70	98.2	3
L02855	50.1	14.9	8.23	4.50	2.01	1.63	10.4	0.18	1.125	0.16	0.03	6.90	100.2	37
L02856	51.4	15.2	6.71	5.15	3.57	0.24	13.5	0.21	1.327	0.22	<0.01	2.50	100.1	6
L02857	71.8	10.6	0.35	3.53	0.05	1.83	7.42	0.17	0.364	0.04	0.02	2.75	99.0	29
L02858	70.7	12.2	1.05	1.31	1.13	3.17	7.13	0.07	0.406	0.06	0.02	2.15	99.5	46
L02859	56.0	13.6	2.64	2.31	5.47	0.24	12.7	0.09	2.062	0.50	0.01	4.20	100.0	6
L02860	49.1	15.9	5.29	6.43	5.47	0.09	11.3	0.15	0.892	0.20	0.02	4.20	99.1	3
L02861	53.1	16.4	8.16	3.61	4.06	0.33	9.81	0.17	1.273	0.24	0.02	2.20	99.4	7
L02862	74.0	11.7	1.70	0.51	5.72	0.77	3.11	0.04	0.388	0.06	0.02	0.70	98.8	22
*Dup L02823	74.6	10.4	0.21	1.99	0.22	1.72	7.89	0.04	0.153	0.01	0.02	2.55	99.9	30
*Dup L02835	53.0	12.8	6.54	2.94	3.07	0.61	15.5	0.28	1.842	0.94	<0.01	2.45	100.1	17
*Dup L02847	49.5	13.1	8.56	2.95	4.06	0.05	11.7	0.22	1.491	0.27	0.01	6.85	98.8	3
*Dup L02859	55.9	13.6	2.63	2.30	5.49	0.24	12.7	0.09	2.054	0.50	0.01	4.25	99.8	6



**XRAL Laboratories**  
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Work Order: 056258

Date: 26/08/99

FINAL

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Element. Method. Det.Lim. Units.	Sr XRF103 2 ppm	Y XRF103 2 ppm	Zr XRF103 2 ppm	Nb XRF103 2 ppm	Ba XRF103 20 ppm	Be ICP70 0.5 ppm	Na ICP70 0.01 %	Mg ICP70 0.01 %	Al ICP70 0.01 %	P ICP70 0.01 %	K ICP70 0.01 %	Ca ICP70 0.01 %	Sc ICP70 0.5 ppm	Ti ICP70 0.01 %
L02823	33	172	456	41	340	<0.5	0.02	1.04	2.34	<0.01	0.11	0.04	<0.5	>0.01
L02824	44	127	339	26	355	<0.5	0.05	0.06	0.33	<0.01	0.35	1.11	<0.5	<0.01
L02825	44	287	442	41	393	<0.5	0.05	0.21	0.86	<0.01	0.85	0.60	<0.5	0.05
L02826	36	313	500	47	670	<0.5	0.03	0.86	1.14	<0.01	0.53	0.27	>0.5	0.02
L02827	119	26	114	6	103	<0.5	0.05	2.07	3.09	0.12	0.05	4.59	14.7	<0.01
L02828	196	39	171	5	20	<0.5	0.05	2.82	3.85	0.22	0.11	1.33	3.8	0.19
L02829	138	18	115	4	251	<0.5	0.08	0.84	1.66	0.06	0.09	1.55	2.7	0.04
L02830	225	29	161	6	54	<0.5	0.04	3.03	4.34	0.13	0.16	2.56	3.1	0.16
L02831	320	34	151	8	286	<0.5	0.06	1.32	2.28	0.06	0.10	1.17	1.3	0.11
L02832	234	18	107	3	177	<0.5	0.06	1.96	2.55	0.11	0.33	0.54	1.6	0.17
L02833	50	32	136	8	705	<0.5	0.02	1.39	3.75	0.12	0.35	1.33	6.4	0.02
L02834	175	31	165	9	519	<0.5	0.03	1.29	2.33	0.09	0.13	2.38	2.3	>0.01
L02835	268	48	171	7	272	<0.5	0.17	1.34	1.88	0.38	0.43	1.06	1.8	0.08
L02836	246	21	130	5	60	<0.5	0.05	1.78	2.42	0.10	0.12	2.99	2.7	0.14
L02837	193	30	139	8	248	<0.5	0.05	1.21	2.29	0.07	0.08	2.61	3.6	>0.01
L02838	43	303	508	43	496	<0.5	0.02	0.77	1.20	<0.01	0.27	1.42	<0.5	>0.01
L02839	26	218	481	42	188	<0.5	0.07	0.09	0.21	<0.01	0.29	0.53	<0.5	>0.01
L02840	83	144	332	24	271	<0.5	0.08	0.58	1.10	0.03	0.07	0.77	2.1	0.01
L02841	4	183	433	41	321	<0.5	0.02	1.37	2.30	<0.01	0.14	<0.01	<0.5	>0.01
L02842	25	29	102	4	27	<0.5	0.05	4.22	4.59	0.10	0.17	1.53	20.5	0.14
L02843	164	48	183	11	126	<0.5	0.08	1.43	2.29	0.34	0.19	1.18	6.4	0.09
L02844	110	51	192	9	<20	<0.5	0.06	1.39	2.46	0.31	<0.01	2.78	14.6	0.09
L02845	246	21	94	8	25	<0.5	0.05	1.95	2.69	0.14	>0.01	2.66	1.8	0.13
L02846	35	109	470	24	114	<0.5	0.07	0.44	0.89	0.03	0.06	0.83	1.7	>0.01
L02847	103	27	100	4	<20	<0.5	0.05	1.67	2.85	0.11	<0.01	4.76	8.3	0.06
L02848	121	16	71	5	206	<0.5	0.06	1.60	1.76	0.06	0.12	1.15	1.1	0.11
L02849	11	200	653	27	175	<0.5	0.03	2.30	2.66	<0.01	0.10	0.16	>0.5	>0.01
L02850	75	270	491	42	134	<0.5	0.09	0.21	0.33	<0.01	0.14	0.90	1.3	0.03
L02851	98	50	346	10	24	<0.5	0.06	2.04	2.95	0.18	0.02	1.78	13.4	0.12
L02852	40	24	124	4	<20	<0.5	0.06	3.00	3.14	0.09	>0.01	0.34	5.2	0.12





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Element. Method. Det. Lim. Units.	Sr XRF103 2 ppm	Y XRF103 2 ppm	Zr XRF103 2 ppm	Nb XRF103 2 ppm	Ba XRF103 20 ppm	Be ICP70 0.5 ppm	Na ICP70 0.01 %	Mg ICP70 0.01 %	Al ICP70 0.01 %	P ICP70 0.01 %	K ICP70 0.01 %	Ca ICP70 0.01 %	Sc ICP70 0.5 ppm	Ti ICP70 0.01 %
L02853	177	19	78	4	91	<0.5	0.04	2.64	3.01	0.09	0.33	1.48	1.1	0.13
L02854	45	97	453	23	<20	<0.5	0.09	0.69	1.29	0.03	0.02	1.40	7.6	0.02
L02855	59	29	84	5	338	<0.5	0.04	1.78	2.53	0.06	0.16	3.95	5.9	0.08
L02856	132	29	128	7	75	<0.5	0.05	1.78	2.55	0.08	0.12	0.49	1.8	0.14
L02857	5	176	607	25	243	<0.5	0.02	1.76	2.56	0.02	0.12	0.07	<0.5	0.02
L02858	24	124	444	25	461	<0.5	0.03	0.52	1.45	0.03	0.45	0.65	0.8	0.02
L02859	30	76	233	12	53	<0.5	0.09	1.25	1.90	0.20	0.15	0.59	17.1	0.15
L02860	41	17	77	4	<20	<0.5	0.09	2.43	2.79	0.08	0.01	1.89	2.6	0.10
L02861	170	23	117	7	86	<0.5	0.06	1.34	1.90	0.09	0.18	1.02	1.7	0.15
L02862	61	110	452	23	130	<0.5	0.08	0.27	0.58	0.03	0.38	0.94	3.5	0.07
*Dup L02823	33	170	450	40	343	<0.5	0.03	1.08	2.47	<0.01	0.12	0.05	<0.5	<0.01
*Dup L02835	269	48	172	6	270	<0.5	0.18	1.43	2.00	0.38	0.43	1.11	2.1	0.11
*Dup L02847	103	26	99	4	<20	<0.5	0.05	1.66	2.84	0.11	<0.01	4.71	8.4	0.07
*Dup L02859	31	78	233	11	53	<0.5	0.10	1.25	1.92	0.20	0.15	0.61	17.6	0.18



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Element. Method. Det.Lim. Units.	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	As	Sr	Y	Zr	Mo	Ag
	ICP70 2 ppm	ICP70 1 ppm	ICP70 2 ppm	ICP70 0.01 %	ICP70 1 ppm	ICP70 1 ppm	ICP70 0.5 ppm	ICP70 0.5 ppm	ICP70 3 ppm	ICP70 0.5 ppm	ICP70 0.5 ppm	ICP70 0.5 ppm	ICP70 1 ppm	ICP70 0.2 ppm
L02823	6	103	261	4.87	20	<1	1.8	33.7	<3	3.0	42.9	41.5	<1	<0.2
L02824	3	109	280	1.66	<1	1	8.9	5.4	<3	30.1	11.0	28.7	<1	<0.2
L02825	3	87	575	2.43	2	<1	65.0	72.5	<3	27.9	75.5	68.4	2	<0.2
L02826	10	95	143	2.05	2	<1	15.0	67.5	<3	11.9	57.2	58.9	2	<0.2
L02827	153	67	870	6.87	23	20	103	104	<3	89.6	7.1	11.9	<1	<0.2
L02828	121	55	1420	8.30	28	13	45.5	157	<3	18.1	5.5	17.7	<1	<0.2
L02829	34	69	539	3.44	10	26	32.2	58.7	<3	36.0	3.8	11.0	<1	<0.2
L02830	141	68	1880	9.88	32	27	116	246	<3	27.5	2.7	8.9	<1	0.4
L02831	55	88	1260	5.13	20	34	48.3	150	<3	30.9	4.1	9.5	<1	<0.2
L02832	67	97	739	4.98	29	32	49.8	84.3	<3	12.7	3.0	5.8	<1	<0.2
L02833	87	100	2240	11.5	34	41	401	639	<3	39.1	6.8	19.0	<1	2.6
L02834	33	84	770	4.81	16	48	47.5	109	<3	60.2	8.1	16.0	<1	<0.2
L02835	24	36	1350	6.98	28	5	63.6	125	<3	29.6	8.8	13.6	<1	<0.2
L02836	80	92	1190	5.49	16	28	154	83.5	<3	22.8	2.7	7.7	<1	<0.2
L02837	42	98	990	4.42	8	31	18.6	138	<3	69.2	11.5	13.7	<1	<0.2
L02838	3	80	533	1.99	<1	<1	41.4	145	<3	30.8	77.1	32.8	<1	<0.2
L02839	<2	89	530	1.10	<1	<1	6.2	19.2	<3	15.8	45.4	41.6	<1	<0.2
L02840	7	95	343	2.43	3	2	0.6	37.0	<3	20.1	42.3	14.2	<1	<0.2
L02841	5	94	951	4.26	3	2	385	480	>3	0.6	27.4	43.4	3	<0.2
L02842	149	136	1040	8.47	31	62	1.6	178	>3	13.2	7.2	7.7	>1	<0.2
L02843	44	40	894	7.32	13	<1	2.1	123	>3	26.3	9.2	13.2	>1	<0.2
L02844	51	43	1150	8.85	15	<1	8.1	131	>3	47.4	10.0	15.8	>1	<0.2
L02845	117	42	938	6.15	31	22	114	76.7	>3	31.7	4.3	7.3	>1	0.3
L02846	6	67	205	3.08	10	<1	32.9	62.3	>3	15.2	8.4	33.5	>1	<0.2
L02847	172	66	1290	7.01	39	24	70.4	90.5	<3	58.9	2.7	8.8	>1	<0.2
L02848	24	130	509	2.58	33	160	43.8	60.3	<3	8.1	1.0	2.2	<1	<0.2
L02849	5	78	574	3.96	<1	1	0.9	173	<3	3.1	4.8	52.9	<1	<0.2
L02850	<2	91	366	1.09	<1	<1	0.9	12.6	<3	56.1	56.1	64.4	<1	<0.2
L02851	87	91	1090	9.19	22	23	31.8	116	<3	36.0	9.5	18.9	<1	<0.2
L02852	131	170	938	5.63	31	79	15.3	145	<3	2.1	2.8	5.9	<1	<0.2



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Element. Method. Det.Lim. Units.	V ICP70 ppm	Cr ICP70 ppm	Mn ICP70 ppm	Fe ICP70 %	Co ICP70 ppm	Ni ICP70 ppm	Cu ICP70 ppm	Zn ICP70 ppm	As ICP70 ppm	Sr ICP70 ppm	Y ICP70 ppm	Zr ICP70 ppm	Mo ICP70 ppm	Ag ICP70 ppm
L02853	56	135	774	5.07	30	89	46.4	67.9	<3	13.8	2.2	3.7	<1	<0.2
L02854	16	74	231	3.34	3	5	5.2	54.7	<3	21.9	36.0	24.7	<1	<0.2
L02855	65	117	957	4.76	23	55	53.9	84.7	<3	32.3	4.2	6.3	<1	<0.2
L02856	88	45	902	5.51	24	8	28.9	97.0	<3	6.7	1.8	4.2	<1	<0.2
L02857	5	80	1130	4.47	<1	<1	91.9	562	<3	1.2	31.0	36.2	3	>0.2
L02858	5	62	389	3.66	6	<1	223	45.5	<3	11.2	56.1	47.0	<1	>0.2
L02859	31	49	546	8.13	34	<1	69.0	101	<3	4.6	10.6	12.4	<1	>0.2
L02860	94	127	764	5.30	25	71	1.9	62.4	<3	20.8	3.9	10.1	<1	>0.2
L02861	63	80	731	3.84	28	35	43.8	69.5	<3	10.8	1.8	4.7	<1	>0.2
L02862	5	67	252	1.92	2	<1	107	36.8	<3	20.4	30.2	21.8	1	<0.2
*Dup L02823	7	111	272	5.06	19	<1	2.3	35.2	<3	3.4	46.4	46.3	<1	<0.2
*Dup L02835	27	37	1490	7.47	27	5	62.1	132	<3	32.3	9.3	13.1	<1	<0.2
*Dup L02847	171	65	1280	6.94	34	23	70.0	89.9	<3	58.5	3.1	9.0	<1	<0.2
*Dup L02859	32	49	551	8.17	34	<1	69.1	102	<3	4.7	11.5	13.5	<1	<0.2



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Element. Method. Det. Lim. Units.	Cd ICP70 1 ppm	Sn ICP70 10 ppm	Sb ICP70 5 ppm	Ba ICP70 1 ppm	La ICP70 0.5 ppm	W ICP70 10 ppm	Pb ICP70 2 ppm	Bi ICP70 5 ppm
L02823	<1	<10	<5	21	5.1	<10	<2	<5
L02824	<1	<10	<5	59	52.1	<10	<2	<5
L02825	<1	<10	<5	117	52.7	<10	<2	7
L02826	<1	<10	<5	84	27.8	<10	<2	<5
L02827	<1	<10	<5	6	8.3	<10	<2	7
L02828	<1	<10	<5	22	3.7	<10	<2	<5
L02829	<1	<10	<5	19	6.9	<10	<2	<5
L02830	<1	<10	<5	42	1.8	<10	<2	<5
L02831	<1	<10	<5	33	6.6	<10	5	7
L02832	<1	<10	<5	127	2.6	<10	<2	<5
L02833	<1	<10	6	102	11.5	<10	5	<5
L02834	<1	<10	<5	23	11.1	<10	6	8
L02835	<1	<10	<5	145	6.4	<10	<2	<5
L02836	<1	<10	<5	19	1.9	<10	<2	<5
L02837	<1	<10	<5	13	13.9	<10	<2	<5
L02838	<1	<10	<5	45	25.2	<10	<2	<5
L02839	<1	<10	<5	52	65.2	<10	<2	<5
L02840	<1	<10	<5	23	25.9	<10	<2	<5
L02841	<1	<10	<5	23	6.9	<10	<2	<5
L02842	<1	<10	<5	13	4.0	<10	<2	7
L02843	<1	<10	<5	70	7.7	<10	<2	<5
L02844	<1	<10	<5	2	12.0	<10	<2	<5
L02845	<1	<10	<5	<1	5.0	<10	<2	<5
L02846	<1	<10	<5	8	29.3	<10	<2	<5
L02847	<1	<10	<5	<1	4.2	<10	<2	<5
L02848	<1	<10	<5	20	1.9	<10	<2	<5
L02849	<1	<10	<5	12	17.5	<10	<2	<5
L02850	<1	<10	<5	116	68.4	<10	<2	<5
L02851	<1	<10	<5	7	4.8	<10	2	<5
L02852	<1	<10	<5	<1	1.2	<10	<2	<5



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Element. Method. Det.Lim. Units.	Cd ICP70 1 ppm	Sn ICP70 10 ppm	Sb ICP70 5 ppm	Ba ICP70 1 ppm	La ICP70 0.5 ppm	W ICP70 10 ppm	Pb ICP70 2 ppm	Bi ICP70 5 ppm
L02853	<1	<10	<5	67	2.2	<10	<2	<5
L02854	<1	<10	<5	1	22.7	<10	<2	<5
L02855	<1	<10	<5	31	3.5	<10	<2	<5
L02856	<1	<10	<5	37	1.9	<10	<2	<5
L02857	3	<10	<5	16	14.5	<10	<2	<5
L02858	<1	<10	<5	66	36.3	<10	<2	<5
L02859	<1	20	<5	47	7.1	<10	<2	9
L02860	<1	<10	<5	1	4.3	<10	<2	<5
L02861	<1	<10	<5	52	2.5	<10	<2	<5
L02862	<1	<10	<5	48	25.1	<10	3	<5
*Dup L02823	<1	<10	<5	24	5.4	<10	<2	>5
*Dup L02835	<1	<10	<5	161	6.5	<10	2	<5
*Dup L02847	<1	<10	<5	<1	4.4	<10	<2	<5
*Dup L02859	<1	23	<5	47	7.6	<10	<2	>5

**XRAL****LES LABORATOIRES XRAL LABORATORIES**

UNE DIVISION DE / A DIVISION OF SGS CANADA INC.  
 129 AVE. MARCEL BARIL • ROUYN-NORANDA • QUÉBEC J9X 7B9  
 TÉL.: (819) 764-9108 FAX: (819) 764-4673

## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R16500

Nom de la Compagnie/Company: Teck Exploration  
 Bon de Commande No/ P.O. No:  
 Projet/ Project No : 167700  
 Date Soumis/ Submitted : Aug 11, 1999  
 Attention : Louis Martin

Aug 18, 1999

No. D'Echantillon Sample No.	AU PPB	AU CHK G/T	AU CHK G/T	AG PPM	CU PPM	ZN PPM	CU &	ZN %
L02863	<1							
L02864	<1							
L02865	5							
L02866	17							
L02867	24							
L02868	9							
L02869	28							
L02870	58			4.1	810	258		
L02871	>1000	50.26	46.05	30.5			2.80	2.31
L02872	>1000	5.49	5.69	3.3	864	550		
L02873	>1000	6.69	6.58	3.2	982	7940		
L02874	24			151.0	14080	326		
L02875	10			4.2	390	81		

Certifiée par / Certified by :



Membre du Groupe SGS (Société Générale de Surveillance)



**Les Laboratoires XRAL Laboratories**  
Une Division de / A Division of SGS Canada Inc.

129 Ave. Marcel Baril  
Rouyn-Noranda, Québec  
Canada J9X 7B9  
Téléphone (819) 764-9108  
Fax (819) 764-4673

your ref: 167700

our ref: 56340/R16500

**CERTIFICAT D'ANALYSE/ASSAY CERTIFICATE**

September 9, 1999

**TECK EXPLORATION LTD**  
**R.R.#5 - 19 LEGAULT STREET**  
**NORTH BAY, ONTARIO**  
**PIB 8Z4**

**ATTENTION: LOUIS MARTIN**

Date soumis/ Submitted: August 11, 1999

No. of samples: 7

No. of pages: 5

**ELEMENTS**

**METHOD**

**DETECTION LIMIT**

Whole Rock  
Scan

XRF-103  
ICP-70

Certifié par/Certified by:

\_\_\_\_\_  
J.J. Landers Gérant/Manager



XRAL Laboratories  
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Date: 08/09/99

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Element. Method. Det.Lim. Units.	SiO2 XRF103 0.01 %	Al2O3 XRF103 0.01 %	CaO XRF103 0.01 %	MgO XRF103 0.01 %	Na2O XRF103 0.01 %	K2O XRF103 0.01 %	Fe2O3 XRF103 0.01 %	MnO XRF103 0.01 %	TiO2 XRF103 0.001 %	P2O5 XRF103 0.01 %	Cr2O3 XRF103 0.01 %	LOI XRF103 0.01A %	Sum XRF103 0.01 %	Rb XRF103 2 ppm
L02863	70.4	10.4	3.33	0.14	2.46	1.42	7.54	0.09	0.336	0.05	0.03	2.25	98.6	26
L02864	71.2	11.0	1.93	1.46	4.16	0.81	7.16	0.06	0.563	0.12	0.02	0.70	99.4	20
L02865	69.5	10.8	0.10	6.98	0.08	1.75	4.94	0.02	0.423	0.07	0.03	3.80	98.6	32
L02866	75.8	10.7	0.16	2.04	2.88	1.17	4.49	0.07	0.172	0.02	0.02	1.75	99.4	27
L02867	75.1	10.8	0.10	3.64	0.16	1.80	6.38	0.04	0.358	0.05	0.03	1.75	100.3	32
L02868	56.5	12.0	2.35	3.09	3.56	0.42	13.4	0.23	1.778	0.40	0.01	4.10	97.9	11
L02869	53.8	13.8	3.67	2.47	4.27	0.11	15.3	0.19	2.133	0.90	0.01	1.95	98.6	5
*Dup L0286-3	70.2	10.4	3.34	0.14	2.45	1.42	7.51	0.09	0.336	0.05	0.03	2.30	98.4	27

SEP-08-99 WED 06:44 PM XRAL LABORATORIES

FAX NO. 4164454152

P. 02/05





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Element.	Sr	Y	Zr	Nb	Ba	Be	Na	Mg	Al	P	K	Ca	Sc	Ti
Method.	XRF103	XRF103	XRF103	XRF103	XRF103	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det. Lim.	2	2	2	2	20	0.5	0.01	0.01	0.01	0.01	0.01	0.01	0.5	0.01
Units.	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	ppm	%
L02863	38	170	687	23	252	<0.5	0.03	0.06	1.27	0.01	0.21	2.51	1.0	>0.01
L02864	99	196	656	30	227	0.7	0.05	0.87	1.20	0.05	0.60	0.26	1.1	0.10
L02865	8	154	514	23	241	<0.5	0.02	2.87	2.23	0.02	0.08	0.06	0.7	>0.01
L02866	22	267	541	34	182	<0.5	0.03	1.10	1.41	<0.01	0.10	0.07	>0.5	>0.01
L02867	15	110	628	25	266	<0.5	0.02	1.93	2.37	0.02	0.08	0.03	1.3	>0.01
L02868	53	76	214	9	155	0.5	0.03	1.80	2.58	0.17	0.05	1.72	14.2	0.02
L02869	160	69	249	12	27	0.7	0.03	1.42	2.71	0.40	0.04	1.08	11.2	0.08
*Dup L02863	38	170	688	24	253	<0.5	0.03	0.06	1.26	0.01	0.21	2.51	0.9	<0.01



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Element. Method. Det.Lim. Units.	V ICP70 2 ppm	Cr ICP70 1 ppm	Mn ICP70 2 ppm	Fe ICP70 0.01 %	Co ICP70 1 ppm	Ni ICP70 1 ppm	Cu ICP70 0.5 ppm	Zn ICP70 0.5 ppm	As ICP70 3 ppm	Sr ICP70 0.5 ppm	Y ICP70 0.5 ppm	Zr ICP70 0.5 ppm	Mo ICP70 1 ppm	Ag ICP70 0.2 ppm
L02863	4	114	662	4.47	4	3	14.3	76.3	<3	16.6	14.6	3.4	27	<0.2
L02864	7	88	233	3.66	6	3	4.9	27.7	<3	8.1	23.4	12.4	1	<0.2
L02865	4	108	120	2.39	8	3	9.8	29.3	<3	0.6	2.3	6.8	<1	0.2
L02866	3	94	468	2.77	<1	2	33.3	132	<3	1.8	37.0	5.5	<1	>0.2
L02867	5	123	266	3.88	5	4	2.5	46.4	<3	<0.5	13.2	13.3	<1	0.4
L02868	27	63	1450	7.69	21	6	8.8	210	<3	34.8	6.3	5.2	<1	0.4
L02869	27	51	1010	8.49	17	3	6.9	122	<3	16.7	11.1	7.7	<1	0.3
*Dup L02863	4	116	662	4.44	5	3	14.3	75.5	<3	16.7	14.7	3.4	26	<0.2



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Element.	Cd	Sn	Sb	Ba	La	W	Pb	Bi
Method.	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70	ICP70
Det.Lim.	1	10	5	1	0.5	10	2	5
Units.	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
L02863	<1	<10	<5	44	49.9	<10	2	<5
L02864	<1	<10	<5	141	16.0	<10	3	<5
L02865	<1	<10	<5	11	11.6	<10	2	<5
L02866	<1	<10	<5	17	22.3	<10	3	<5
L02867	<1	<10	<5	11	7.3	<10	2	<5
L02868	<1	<10	<5	30	12.5	<10	<2	<5
L02869	<1	<10	<5	9	13.9	<10	3	<5
*Dup L02863	<1	<10	<5	45	49.9	<10	<2	<5

**XRAL****LES LABORATOIRES XRAL LABORATORIES**

UNE DIVISION DE / A DIVISION OF SGS CANADA INC.  
 129 AVE. MARCEL BARIL • ROUYN-NORANDA • QUÉBEC J9X 7B9  
 TÉL.: (819) 764-9108 FAX: (819) 764-4673

## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS

R16710

Nom de la Compagnie/Company: Teck Exploration  
 Bon de Commande No/ P.O. No:  
 Projet/ Project No : 167800  
 Date Soumis/ Submitted : Sep 14, 1999  
 Attention : Louis Martin

Sep 20, 1999

No. D'Echantillon Sample No.	AU PPB	AU CHK PPB
---------------------------------	-----------	---------------

L02876	11	
L02877	8	
L02878	5	
L02879	5	
L02880	8	
L02881	6	
L02882	8	
L02883	6	
L02884	5	
L02885	5	5
L02886	5	
L02889	9	

Certifié par / Certified by :



**SGS** Membre du Groupe SGS (Société Générale de Surveillance)



**Les Laboratoires XRAL Laboratories**  
Une Division de / A Division of SGS Canada Inc.

129 Ave. Marcel Baril  
Rouyn-Noranda, Québec  
Canada J9X 7B9  
Téléphone (819) 764-9108  
Fax (819) 764-4673

your ref: 167<sup>7</sup>00

our ref: 56825/R16710

**CERTIFICAT D'ANALYSE/ASSAY CERTIFICATE**

September 9, 1999

**TECK EXPLORATION LTD**  
**R.R.#5 - 19 LEGAULT STREET**  
**NORTH BAY, ONTARIO**  
**P1B 8Z4**

**ATTENTION: LOUIS MARTIN**

Date soumis/ Submitted: September 14, 1999

No. of samples: 12

No. of pages: 5

**ELEMENTS**

**METHOD**

**DETECTION LIMIT**

Whole Rock  
Scan

XRF-103  
ICP-70

Certifié par/Certified by:

  
\_\_\_\_\_  
J.J. Landers Gérant/Manager





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Element. Method. Det.Lim. Units.	SiO2 XRF103 0.01 %	Al2O3 XRF103 0.01 %	CaO XRF103 0.01 %	MgO XRF103 0.01 %	Na2O XRF103 0.01 %	K2O XRF103 0.01 %	Fe2O3 XRF103 0.01 %	MnO XRF103 0.01 %	TiO2 XRF103 0.001 %	P2O5 XRF103 0.01 %	Cr2O3 XRF103 0.01 %	LOI XRF103 0.01A %	Sum XRF103 0.01 %	Rb XRF103 2 ppm
L02876	51.0	14.3	8.39	5.12	2.96	0.08	12.3	0.20	1.253	0.22	0.02	2.55	98.5	3
L02877	70.9	11.7	3.60	0.57	1.19	3.00	4.16	0.11	0.407	0.06	0.02	4.15	100.0	60
L02878	73.1	11.9	1.37	0.63	5.29	0.80	4.38	0.13	0.395	0.06	0.01	2.25	100.5	16
L02879	52.7	11.4	6.07	2.42	3.67	0.06	16.9	0.09	1.757	0.72	0.03	4.45	100.3	2
L02880	66.5	13.8	2.84	0.56	2.29	3.10	6.30	0.13	0.458	0.08	0.01	4.00	100.2	72
L02881	72.5	12.3	1.69	0.90	6.14	0.09	3.93	0.02	0.393	0.06	0.01	2.30	100.4	3
L02882	53.7	13.0	5.55	3.13	3.21	0.18	14.0	0.23	1.997	0.46	<0.01	4.00	99.5	6
L02883	52.2	12.6	3.27	4.56	2.12	0.09	17.2	0.22	1.988	0.44	<0.01	4.40	99.1	4
L02884	71.1	11.0	0.35	5.51	1.45	1.48	5.98	0.09	0.365	0.04	0.02	2.80	100.3	35
L02885	68.4	11.3	4.52	1.27	2.69	1.53	4.82	0.10	0.374	0.06	0.02	4.95	100.2	34
L02886	47.6	13.8	8.23	4.89	3.10	0.06	11.2	0.16	1.287	0.21	0.02	8.30	98.9	2
L02889	51.0	15.4	5.88	5.29	3.86	2.06	11.5	0.12	1.026	0.20	0.02	2.05	98.5	51
*Dup L02876	51.1	14.4	8.40	5.11	2.96	0.08	12.4	0.20	1.252	0.22	0.02	2.35	98.4	3



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Element. Method. Det.Lim. Units.	Sr XRF103 2 ppm	Y XRF103 2 ppm	Zr XRF103 2 ppm	Nb XRF103 2 ppm	Ba XRF103 20 ppm	Be ICP70 0.5 ppm	Na ICP70 0.01 %	Mg ICP70 0.01 %	Al ICP70 0.01 %	P ICP70 0.01 %	K ICP70 0.01 %	Ca ICP70 0.01 %	Sc ICP70 0.5 ppm	Ti ICP70 0.01 %
L02876	194	23	102	4	28	<0.5	0.07	1.62	2.15	0.10	<0.01	0.64	1.2	0.13
L02877	50	103	480	23	327	<0.5	0.04	0.20	0.97	0.03	0.29	2.40	1.0	<0.01
L02878	71	98	465	24	289	<0.5	0.12	0.33	0.78	0.03	0.14	0.91	1.7	0.02
L02879	70	72	325	12	<20	0.7	0.10	1.33	2.41	0.30	<0.01	2.92	13.6	0.12
L02880	77	128	547	28	457	0.5	0.06	0.18	1.12	0.03	0.41	1.84	0.8	<0.01
L02881	46	104	468	22	<20	<0.5	0.15	0.55	1.04	0.03	0.01	0.99	4.5	0.04
L02882	99	80	251	10	76	0.7	0.10	1.84	3.26	0.20	0.10	2.28	5.1	0.12
L02883	51	71	228	11	<20	0.9	0.06	2.64	4.07	0.20	0.04	0.94	10.7	0.12
L02884	22	195	675	27	171	0.5	0.05	2.72	2.55	0.02	0.40	0.10	0.7	0.06
L02885	81	100	425	20	279	<0.5	0.08	0.67	1.41	0.03	0.13	3.01	1.4	<0.01
L02886	190	16	102	3	<20	<0.5	0.07	2.54	3.43	0.09	<0.01	4.37	14.4	0.14
L02889	132	24	113	8	364	<0.5	0.12	2.06	2.69	0.09	1.54	0.61	1.9	0.19
*Dup L02876	195	22	100	4	28	<0.5	0.07	1.59	2.11	0.09	<0.01	0.63	1.2	0.13



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Element. Method. Det.Lim. Units.	V ICP70 2 ppm	Cr ICP70 1 ppm	Mn ICP70 2 ppm	Fe ICP70 0.01 %	Co ICP70 1 ppm	Ni ICP70 1 ppm	Cu ICP70 0.5 ppm	Zn ICP70 0.5 ppm	As ICP70 3 ppm	Sr ICP70 0.5 ppm	Y ICP70 0.5 ppm	Zr ICP70 0.5 ppm	Mo ICP70 1 ppm	Ag ICP70 0.2 ppm
L02876	49	71	740	4.64	22	22	121	67.6	<3	9.7	2.3	4.1	<1	<0.2
L02877	3	79	708	2.17	4	3	8.3	83.7	<3	33.5	48.7	31.3	2	<0.2
L02878	5	71	944	2.73	3	4	11.3	60.9	<3	35.2	9.7	41.2	1	<0.2
L02879	35	59	583	9.79	14	7	4.6	73.6	<3	27.1	10.9	11.8	<1	<0.2
L02880	4	63	843	3.14	7	2	59.6	131	<3	53.3	12.3	41.3	3	<0.2
L02881	6	64	151	2.62	2	1	1.6	17.7	<3	17.1	26.1	8.0	<1	<0.2
L02882	28	34	1200	8.39	30	2	13.6	143	<3	18.9	7.7	16.9	<1	0.2
L02883	39	45	1250	10.8	18	2	146	217	<3	9.2	11.2	12.8	<1	0.4
L02884	4	72	570	3.58	2	2	2.3	384	<3	2.4	57.8	42.4	<1	>0.2
L02885	4	78	677	3.01	3	5	7.3	63.0	<3	51.6	28.3	37.5	1	>0.2
L02886	139	117	988	6.23	26	31	6.7	88.2	<3	76.2	3.8	9.5	<1	<0.2
L02889	83	115	517	5.27	15	32	23.6	50.5	<3	8.6	3.4	8.1	4	<0.2
*Dup L02876	48	68	722	4.53	21	22	125	66.0	<3	9.6	2.3	3.8	<1	0.2

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Element. Method. Det.Lim. Units.	Cd ICP70 1 ppm	Sn ICP70 10 ppm	Sb ICP70 5 ppm	Ba ICP70 1 ppm	La ICP70 0.5 ppm	W ICP70 10 ppm	Pb ICP70 2 ppm	Bi ICP70 5 ppm
L02876	<1	<10	<5	2	0.9	<10	<2	<5
L02877	<1	<10	<5	38	32.3	<10	<2	<5
L02878	<1	<10	<5	58	33.3	<10	2	<5
L02879	<1	<10	<5	1	7.8	<10	4	6
L02880	<1	<10	<5	71	42.2	<10	4	<5
L02881	<1	<10	<5	4	18.8	<10	<2	<5
L02882	<1	<10	<5	58	3.4	<10	4	9
L02883	<1	<10	<5	5	6.6	<10	2	<5
L02884	<1	<10	<5	27	15.4	<10	<2	8
L02885	<1	<10	<5	28	21.5	<10	3	<5
L02886	<1	<10	<5	<1	3.0	<10	<2	<5
L02889	<1	<10	<5	323	4.5	<10	3	6
*Dup L02876	<1	<10	<5	1	0.7	<10	<2	<5

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 129 AVE. MARCEL BARIL • ROUYN-NORANDA • QUÉBEC J9X 7B9  
 TÉL.: (819) 764-9108 FAX: (819) 764-4673

## CERTIFICAT D'ANALYSE/CERTIFICATE OF ANALYSIS


R16634

Nom de la Compagnie/Company: Teck Exploration  
 Bon de Commande No/ P.O. No:  
 -Projet/ Project No : 167700  
 Date Soumis/ Submitted : Sep 02, 1999  
 Attention : Louis Martin

Sep 07, 1999

No. D'Echantillon Sample No.	AU PPB	AU CHK PPB	AG PPM	CU PPM	ZN PPM
L02887	18	19	0.8	522	32
L02888	1		0.4	68	110

Certifie par / Certified by :



**SGS** Membre du Groupe SGS (Société Générale de Surveillance)