

**ASSESSMENT REPORT**  
**ON**  
**GEOCHEMICAL RESULTS OF THE 2008 SOIL SURVEY**  
**ON**  
**CLAIMS MPMC 49 and MPMC 41**  
**ON THE MOUNT POLLEY PROPERTY,**  
**NEAR LIKELY, B.C.**

**CARIBOO MINING DIVISION**

**NTS 93A/12E**

**LATITUDE 52° 30' 22"**  
**LONGITUDE 121° 32' 12"**

**OR**

**UTM 599300E, 5818300N, Zone 10 (NAD 83)**

**OWNER:**

**MOUNT POLLEY MINING CORPORATION**  
**Box 12**  
**Likely, B.C. V0L 1N0**

**OPERATOR:**

**IMPERIAL METALS CORPORATION**  
**200-580 Hornby Street,**  
**Vancouver, B.C. V6C 3B6**

**By: Chris Rees, P.Geo.**

**Date: April 6, 2009**

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## **1. INTRODUCTION**

A soil survey totalling 15.325 line-kilometres (562 samples) was carried out on claims on the Mount Polley property near Likely, B.C., in the summer of 2008. The property is owned by Mount Polley Mining Corporation, a wholly-owned subsidiary of Imperial Metals Corporation of Vancouver, B.C., who acted as operator and conducted the survey.

The principal concern of the property is the Mount Polley open-pit porphyry copper-gold mine. The mine opened in 1997 and ran until 2001, at which time operations were suspended due to adverse economic conditions. The mine re-opened in 2004-2005, facilitated by improved commodity prices and the discovery in late 2003 of a new, high-grade ore deposit.

Exploration conducted by Imperial Metals Corporation has continued since 2004, consisting of geological mapping, geophysics, trenching and drilling. Away from the mining area, mapping and prospecting have been focussed on other igneous intrusions on the property which might have mineral potential. The soil survey reported here is part of Imperial's ongoing exploration strategy, and was aimed at finding a target for future diamond drilling.

## **2. LOCATION, ACCESS AND PHYSIOGRAPHY**

The Mount Polley mine is 56 km northeast of Williams Lake, in the Cariboo region of British Columbia. It is accessible by following the Likely Road from 150 Mile House on Highway 97, and then by a 12-km gravel road turning off the Likely Road 13 km west of the village of Likely (Fig. 1).

The soil survey area lies in the extreme southeast of NTS sheet 093A/12, straddling the very eastern end of the Gavin Lake forest access road (Fig. 2). This road starts by turning off the Likely Road roughly 4 km north of Beaver Valley or 15 km south of the Morehead Lake resort. Also, it can be accessed from the 'Ditch road' (Fig. 2) which branches off the Likely Road 2.5 km west of Likely: approximately 14 km to the south along the Ditch road is the turn-off for the Gavin Lake road. The soil survey area is almost immediately after of this turn-off from the Ditch road. Mount Polley mine roads also connect with the Gavin Lake road, but gates are in place to restrict public access.

### Physiography

The property is situated along the eastern margin of the low-lying Fraser Plateau of the British Columbia interior, flanked to the east by the Quesnel Highlands, and the Cariboo Mountains beyond. The mine buildings and existing open pits occupy the highest ground, near the centre of the property, halfway between Bootjack Lake to the west, and Polley Lake to the east. The highest point is Mount Polley or Polley Mountain (1,266 metres). The terrain slopes away from Polley Mountain into subdued topography composed of moraines, till sheets and other fluvio-glacial landforms. The largest drainage to the north is Morehead Creek. To the south of Polley Mountain, the terrain slopes

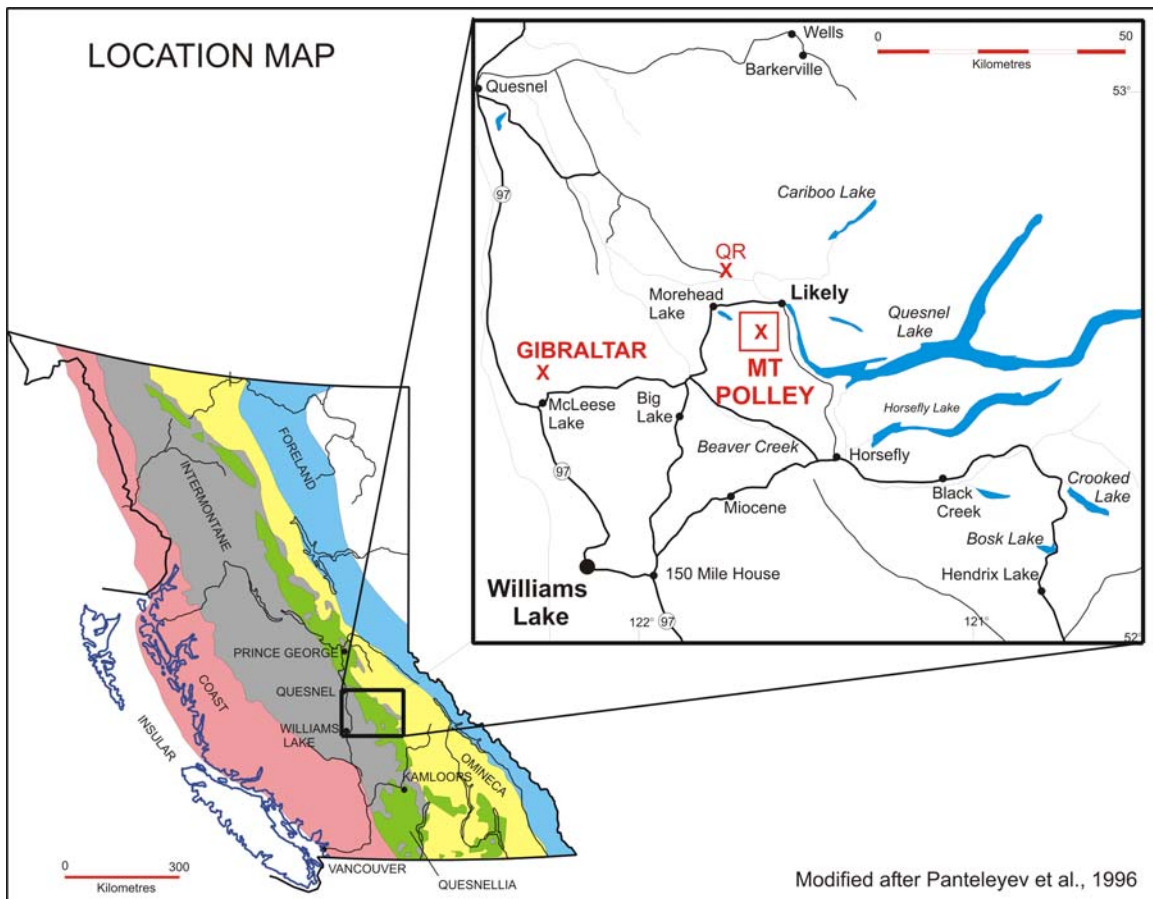


Fig. 1: Location of the Mount Polley property in the Canadian Cordillera.

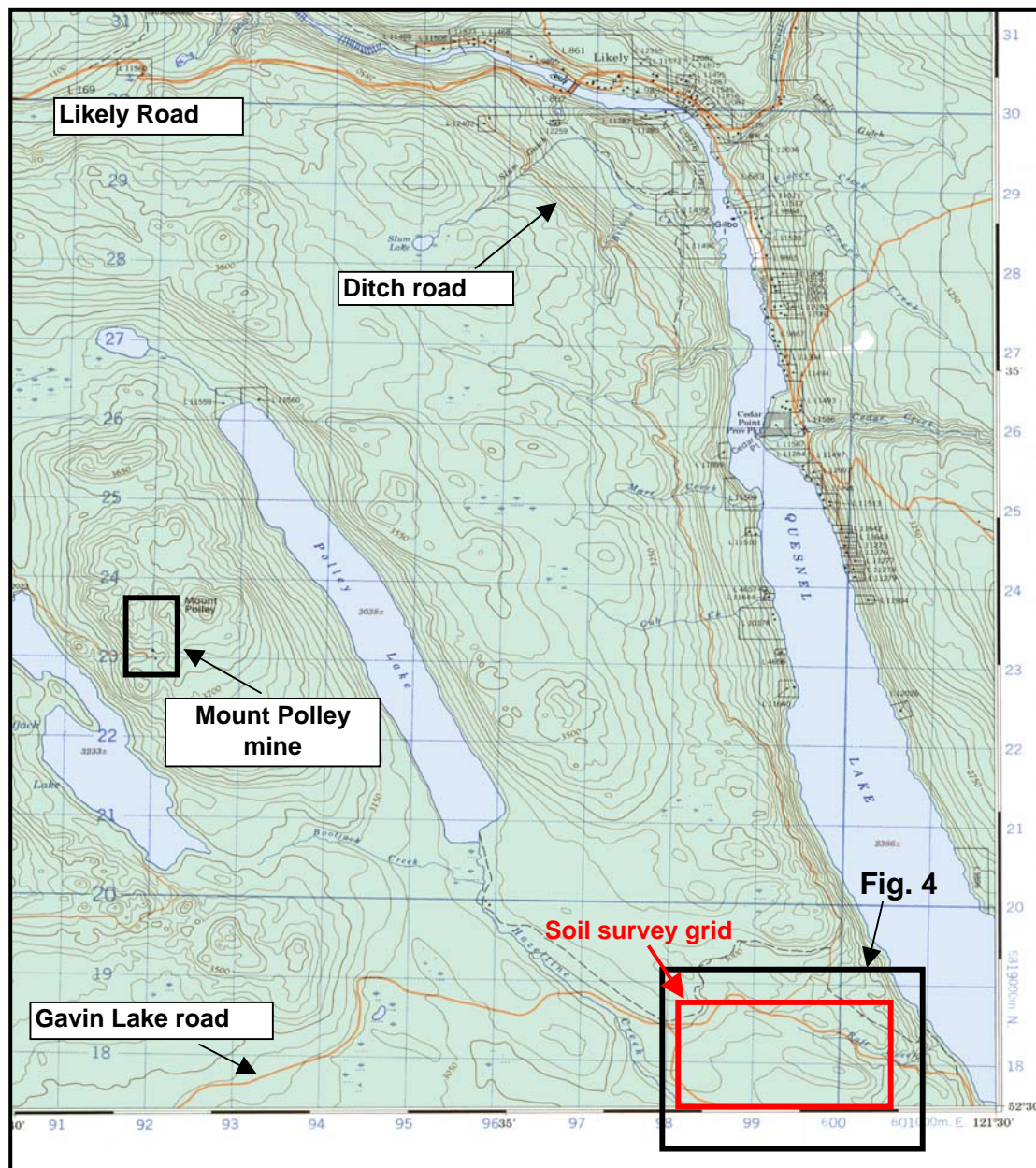


Fig. 2: Location of Mount Polley mine and soil survey area, near Likely, B.C.  
(Note UTM grid shown is NAD27; all other maps are NAD83.)

towards low-lying undulating ground where the mine's tailings impoundment is located. The soil survey area is 2 km east of the tailings, in an area of mostly very low relief.

#### Climate and vegetation

Mean monthly temperatures range from 13.7°C in July to -10.7°C in January. Precipitation averages 755 mm, with 300 mm falling as snow.

Forest cover consists of red cedar, Douglas-fir and sub-alpine fir, with lesser black cottonwood, trembling aspen and paper birch. Much of the area has been clearcut by commercial logging, although the older clearcuts have advanced re-growth.

### **3. LAND TENURE**

The mine is roughly in the centre of the property, which in early 2009 comprised 42 claims and 5 mining leases (Table 1; Fig. 3). All claims and leases are 100% held by Mount Polley Holding Company Limited, an indirect, wholly-owned subsidiary of Imperial Metals Corporation. There are no underlying royalties or other interests.

The soil survey covers parts of claims MPMC49 (Title number 501972) and MPMC41 (Title number 501479), in the southeast of the property (Fig. 4).

### **4. HISTORY**

#### Mount Polley

The Mount Polley deposit was discovered in the early 1960s, after prospecting an aeromagnetic anomaly revealed by a federal government survey released in 1963. Mastodon Highland Bell Mines Limited and Leitch Gold Mines first staked claims in 1964. In 1966, the two companies merged to form Cariboo-Bell Copper Mines Limited. In 1969, Teck Corporation assumed control of Cariboo-Bell. During the period from 1966 to 1972, diamond and percussion drilling was done, along with magnetic, seismic and induced polarization (IP) surveys. In 1978 Highland Crow Resources, an affiliate of Teck, acquired control.

In 1981, E&B Explorations Inc. optioned the property from Highland Crow, and in 1982 acquired a 100% interest and continued to work the property with joint venture partners Geomex Partnerships and Imperial Metals Corporation. In 1987, Imperial Metals purchased the remaining interest in the property from Homestake Canada and others (E&B had merged with Mascot Gold Mines that subsequently merged with Corona Corporation and finally became Homestake Canada). During the period between 1988 and 1990, Imperial Metals Corporation conducted a comprehensive exploration program of drilling, mapping and geophysics.

In 1992, Imperial Metals bought the Geomex Partnerships consolidating ownership of the property in one company. Following a merger with Bethlehem Resources Corporation in

**Table 1: Mount Polley property claims at 7 January, 2009**

<b>Tenure Number</b>	<b>Claim Name</b>	<b>Tenure Sub Type</b>	<b>Expiry date</b>	<b>Area (ha)</b>
204475	CB 16	Claim	2015/apr/08	500
206450	PM-5	Claim	2014/apr/08	500
206798	PM-9	Claim	2014/apr/08	150
206799	PM-10	Claim	2015/apr/08	150
207244	PM 13	Claim	2015/apr/08	300
340019	IMC 3	Claim	2015/apr/08	125
340020	IMC 4 FR	Claim	2013/apr/08	25
345731		Lease	2009/aug/22	483.16
392621	POL 4	Claim	2015/apr/08	25
392622	POL 5	Claim	2015/apr/08	25
410495		Lease	2009/sep/29	310.07
411010	POL 2	Claim	2009/may/22	125
501124	MPMC1	Claim	2010/jan/12	472.007
501143	MPMC2	Claim	2010/jan/12	19.661
501182	MPMC3	Claim	2010/jan/12	334.394
501337	MPMC4	Claim	2010/jan/12	314.854
501385	MPMC40	Claim	2010/jan/12	492.2
501423	MPMC5	Claim	2010/jan/12	491.946
501479	MPMC41	Claim	2010/jan/12	491.94
501594	MPMC42	Claim	2010/jan/12	492.217
501657	MPMC43	Claim	2010/jan/12	492.386
501761	MPMC44	Claim	2010/jan/12	394.054
501800	MPMC45	Claim	2010/jan/12	374.39
501872	MPMC46	Claim	2010/jan/12	394.192
501888	MPMC8	Claim	2010/jan/12	98.208
501910	MPMC47	Claim	2010/jan/12	433.556
501937	MPMC48	Claim	2010/jan/12	472.794
501942	MPMC9	Claim	2009/jan/31	490.886
501972	MPMC49	Claim	2010/jan/12	98.391
501997	MPMC50	Claim	2010/jan/12	393.805
502017	MPMC10	Claim	2009/jan/31	490.637
502054	MPMC51	Claim	2010/jan/12	196.658
502067	MPMC11	Claim	2009/jan/31	490.589
502071	MPMC52	Claim	2010/jan/12	19.695
502095	MPMC12	Claim	2009/jan/31	490.671
502162	MPMC13	Claim	2010/jan/31	490.857
502212	MPMC14	Claim	2010/jan/31	490.823
502239	MPMC15	Claim	2010/jan/31	392.653
514037	MOOREHEAD	Claim	2009/jun/07	58.931
514039		Claim	2015/apr/08	1889.024
514040	GAVIN	Claim	2009/jun/07	78.696
514044		Claim	2014/apr/08	1238.993
514047		Claim	2014/apr/08	1414.943
514049	MOREHEAD2	Claim	2009/jun/07	19.643
524068		Lease	2009/dec/19	501
566385		Lease	2009/sep/21	172.7
573346		Lease	2010/jan/09	399.92



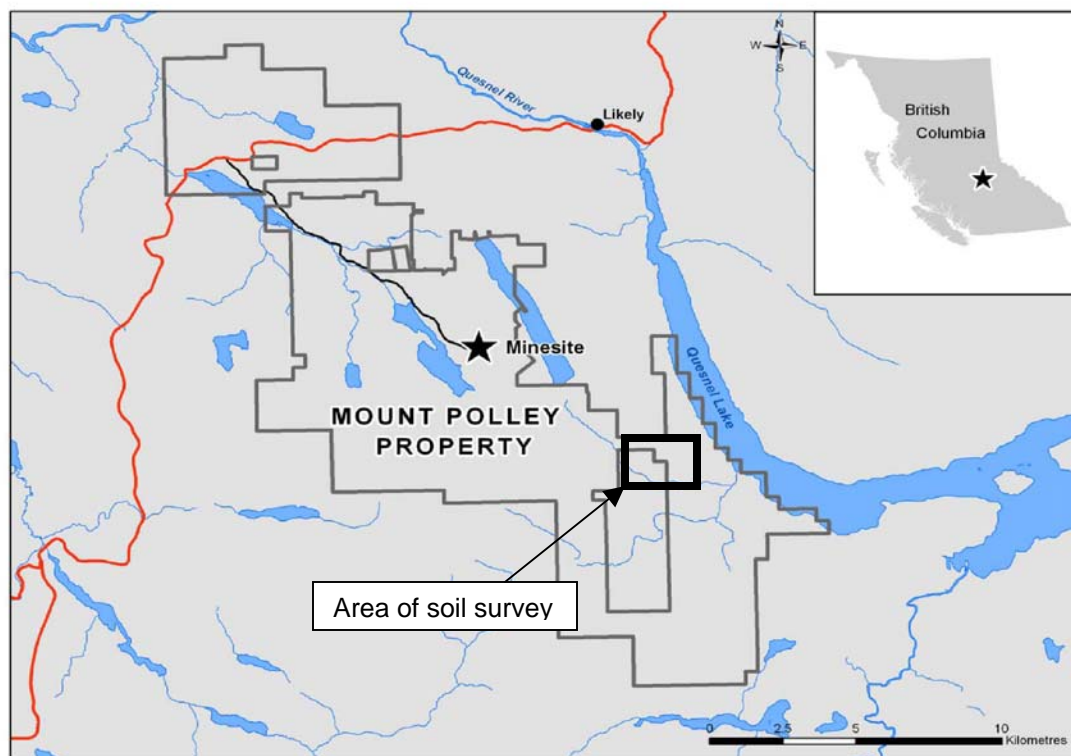


Fig. 3: Map of Mount Polley property, and location of the soil survey.

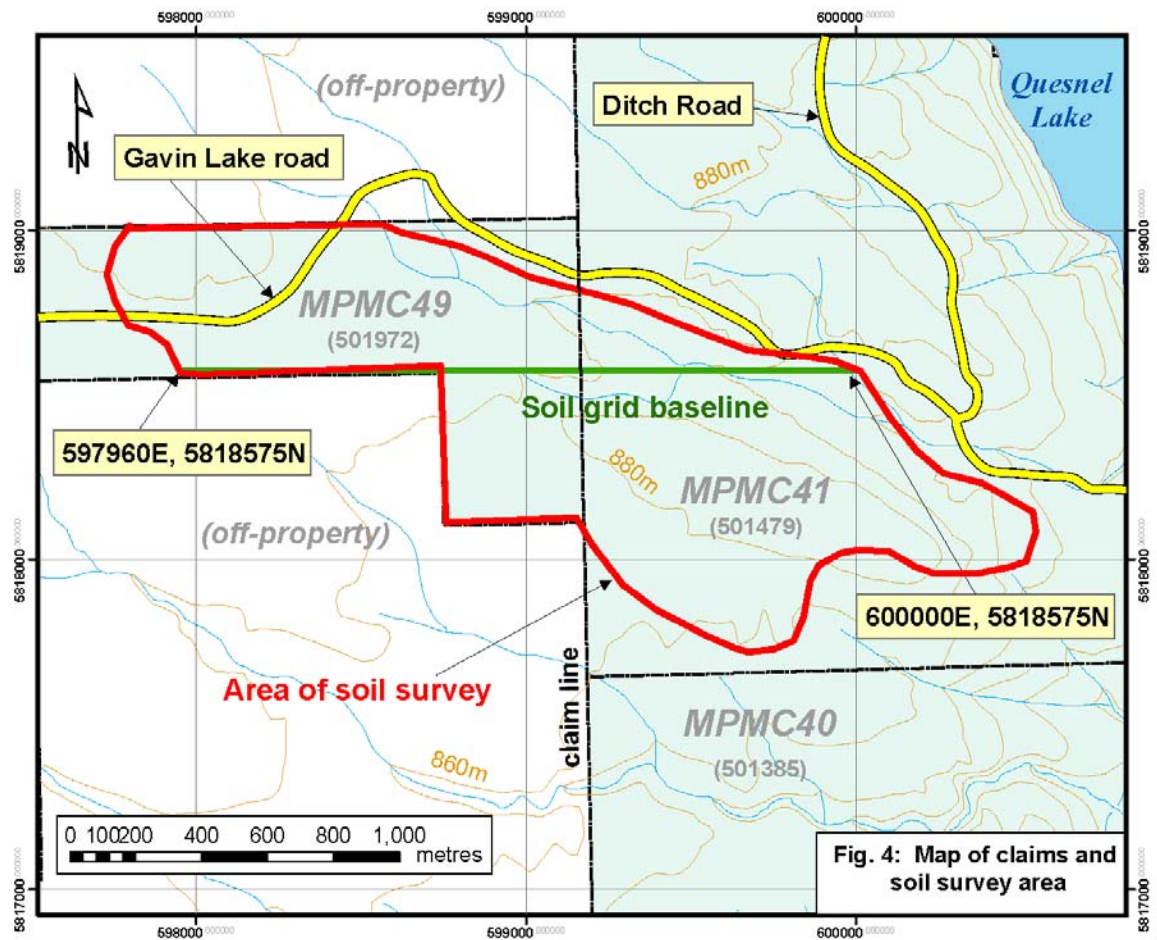


Fig. 4: Map of claims and soil survey area.

1995, Imperial completed an in-house Feasibility Study. Financing was arranged with Sumitomo Corporation of Japan through a joint venture with SC Minerals Canada that culminated in the formation of Mount Polley Mining Corporation in April 1996.

In late May 1996, construction of an 18,000 tonne per day mine and milling facility began at the Mount Polley site. Construction was completed in June of 1997. The plant start-up and commissioning took place in late June with the plant rising towards design capacity by the end of 1997. Mining continued until September of 2001, when operations were suspended due to low metal prices. In 2004, the decision was made to resume mining operations, which have continued to date.

Exploration has continued at Mount Polley, both in and around the mine leases, and in the outlying property. The Mount Polley property expanded in January 2005 with the addition of 10,660 hectares using the 'paper staking' facilities introduced by the provincial government at that time. The new ground lies mainly to the southeast and northwest of the former property boundary, and takes the property almost to the Quesnel River in the north, and to just north of Antoine Lake in the south. The claims on which the soil survey reported here is located were acquired at this time.

#### Soil survey area – Previous work

Previous owners of claims covering the area of the present survey have carried out exploration in the general area. Recorded work includes the following.

In 1985, Allure Resources Corporation conducted reconnaissance soil sampling on the Raft group of claims (Homenuke, 1985), on widely spaced lines, probably overlapping the area of the present report. They recognized two anomalous trends defined by copper, arsenic, gold and zinc values.

In 1992, Canim Lake Gold Corporation carried out a geochemical and drill program on the Hazel property, comprising the Hazel 1-4 claims (Schatten, 1993). The IM intrusion (subject of the present report) occurred on claims Hazel 2 and Hazel 4. Copper up to 167 ppm was reported, but otherwise there were no significant anomalies and no follow-up work was reported (drill holes were on Hazel 3).

## **5. REGIONAL AND PROPERTY GEOLOGY**

The Mount Polley property is in the accreted terrane of Quesnellia, in the Intermontane Belt of the Canadian Cordillera. Quesnellia is characterized by a Triassic-Jurassic assemblage of mafic to intermediate intrusive and extrusive rocks formed in a west-facing island arc, outboard from the early Mesozoic paleo-continental margin of North America to the east (Barkerville terrane of the Omineca Belt). The arc was accreted to North America in the late Early Jurassic, sometime after Mount Polley magmatism and mineralization.

The region around Mount Polley is known as the Central Quesnel Belt (Panteleyev *et al.*, 1996). As in southern B.C., the Quesnellia arc rocks are assigned to the Middle to Late Triassic Nicola Group, along with late-arc, Early Jurassic rocks (Fig. 5).

From the base, Central Quesnel Belt Nicola stratigraphy comprises (simplified):

- Basinal argillaceous sediments and minor tholeiitic basalt (incipient arc volcanics) (Middle to Late Triassic).
- Alkalic olivine-pyroxene-phyric basaltic (submarine) volcanics (Late Triassic, Norian).
- Alkalic pyroxene-phyric basalt & basaltic andesite, related volcanoclastics & minor intrusions.
- Basaltic to andesitic extrusive & intrusive (microdiorite) culminations, some pseudoleucite-bearing, with local limestone (all still Late Triassic, Norian).
- Major phase of intrusive activity at end of Triassic, including Mount Polley, ranging from diorite to monzonite, and nepheline syenite.
- Polymictic, intrusive-clast breccia & conglomerate and minor sediments, extending into the (post-Nicola) Early Jurassic.

Accretion (obduction) of the arc onto North America in the Late Early Jurassic was followed by folding in the Middle Jurassic. Mount Polley lies in the synclinal hinge of a broad regional Middle Jurassic fold. Metamorphic grade on the property is generally no higher than zeolite facies.

Mount Polley itself is an igneous complex measuring about 6 by 3 km, elongate north-northwest. It consists of silica-undersaturated intermediate intrusions and related magmatic-hydrothermal breccias (Fraser *et al.*, 1995). Intrusive rocks range from diorite to monzonite. Quartz is virtually absent. The Mount Polley Complex (MPC) formed quite rapidly, perhaps over 1-2 million years or so around 204-205 Ma at the end of the Triassic, during the waning stages of Quesnellia arc volcanism.

Mineralization occurs in most MPC units except some of the minor cross-cutting dikes, so it is inferred to be a relatively late event in the formation of the MPC. Chalcopyrite and lesser bornite occur disseminated in hydrothermally altered intrusions, or in fracture-controlled stockwork veins, or may form the interclast-cement in hydrothermal breccias.

Away from the Mount Polley Complex, the property is underlain by Nicola Group basaltic to andesitic volcanics and minor intrusive and sedimentary rocks, or by younger overlapping clastic units and outliers of Tertiary extrusives (Logan and Mihalynuk, 2005). Relatively small intrusions occur in the Nicola volcanics, generally of monzonitic composition. Some are weakly hydrothermally altered and mineralized. Their similar composition and appearance to Mount Polley intrusions suggests they are approximately the same age (around 200 Ma), though in the absence of isotopic age determinations, they are usually assigned a generic Triassic-Jurassic age (Logan *et al.*, 2007). One such intrusion in the southeast of the property was dubbed the IM intrusion by Imperial geologists (see below).

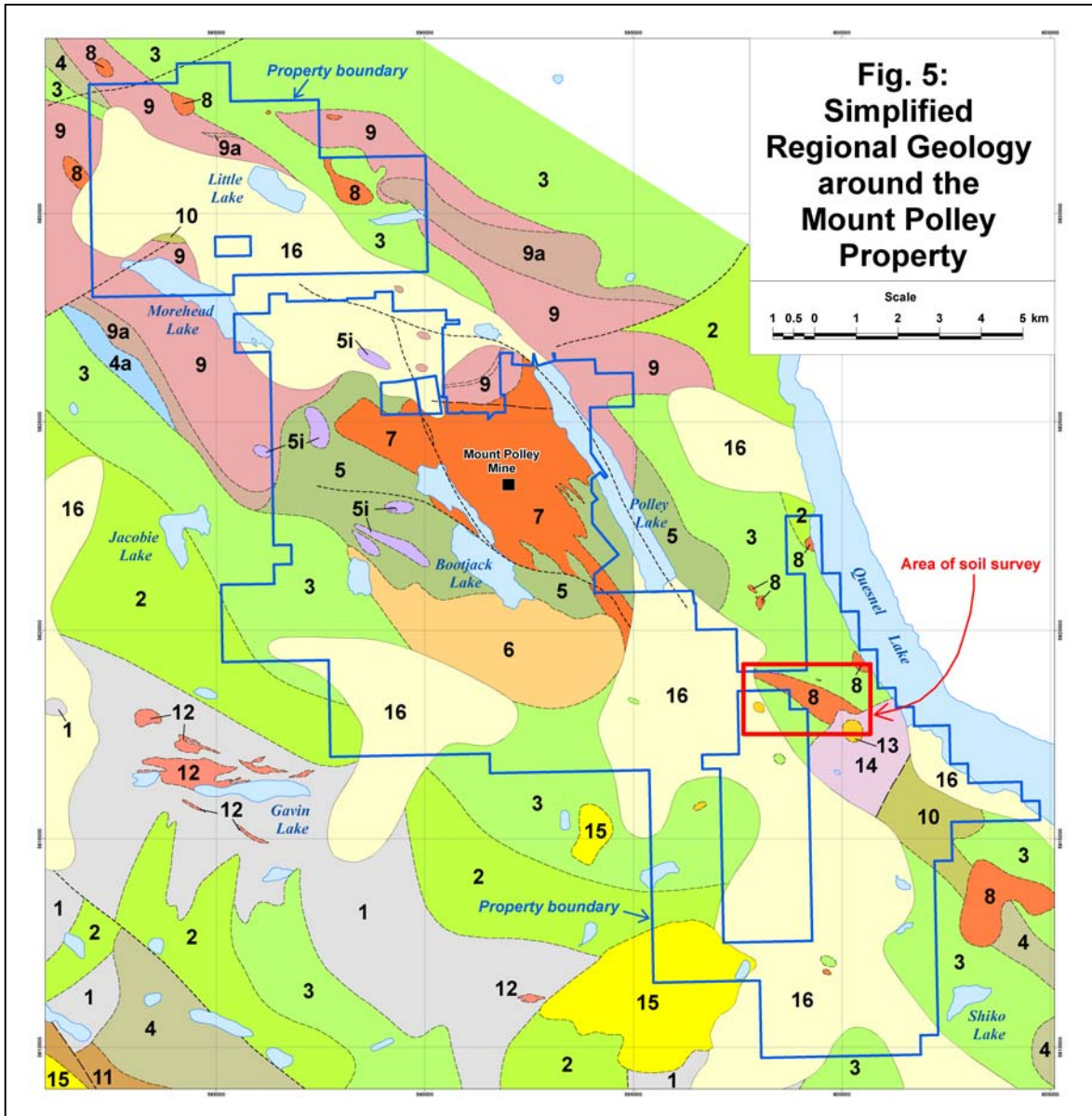


Fig. 5: Simplified regional geology around the Mount Polley property (legend on next page).

## LEGEND

### QUATERNARY

- |    |   |
|----|---|
| 16 | Till, glaciofluvial, glaciolacustrine deposits. |
|----|---|

### TERTIARY

#### *MIOCENE - PLIOCENE*

- |    |   |
|----|---|
| 15 | Chilcotin Group: Alkali olivine basalt. |
|----|---|

#### *EOCENE*

- |    |   |
|----|---|
| 14 | Kamloops Group: Calcalkaline volcanics, siltstone, shale. |
|----|---|

### CRETACEOUS

- |    |   |
|----|---|
| 13 | Polymictic cobble/pebble conglomerate, minor sandstone. |
|----|---|

### MIDDLE JURASSIC

- |    |   |
|----|---|
| 12 | Gavin Lake Stock: Quartz monzonite.                           |
| 11 | Dragon Mountain Formation: Conglomerate, sandstone, siltstone |

### EARLY JURASSIC

- |    |                       |
|----|-----------------------|
| 10 | Sandstone, siltstone. |
|----|-----------------------|

### LATE TRIASSIC and/or EARLY JURASSIC

- |   |   |
|---|---|
| 9 | Polymictic, intrusive-clast-rich breccia and conglomerate, and lesser sandstone (9a). |
| 8 | Monzonitic intrusive rocks.   |

### LATE TRIASSIC Nicola Group

- |   |  |
|---|--|
| 7 | Mount Polley Complex: Diorite to monzonite stocks and dikes, hydrothermal breccias.                                |
| 6 | Bootjack Stock: Orbicular nepheline syenite.   |
| 5 | Basaltic to andesitic rocks and equivalent subvolcanic intrusives, breccias, and minor mafic sediments, limestone. |
| 4 | Mafic, feldspathic sandstone to siltstone, minor limestone. 4a massive grey limestone.                             |
| 3 | Basalt, pyroxene-phyric, minor breccia and tuffaceous sediments.   |
| 2 | Basalt, olivine-pyroxene-phyric.   |
| 1 | Siltstone to fine sandstone.   |

Fig. 5 (continued): Legend for map units.

## 6. GEOLOGY OF THE SOIL SURVEY AREA

An intrusion, hereafter called the IM intrusion, is exposed in an area south of the Gavin Lake road in the southeast of the property, occurring on claims MPMC49 in the west and MPMC41 in the east (Figs. 4 and 6). Natural exposure in the area is very poor. The intrusion is best exposed in a small quarry probably dug for road fill material, 250 metres south of the Gavin Lake road. The intrusion is also exposed along a nearby logging road, and blocks can also be found along a gentle ridge formed by the relatively resistant rock. The main host rocks of the intrusion in the area are fine-grained, dark grey augite-phyric basalt of the Nicola Group. Other outcrops in the area include breccias of uncertain age, Cretaceous(?) sandstone-conglomerate, and tan-grey sandstone-siltstone thought to belong to the Eocene Kamloops Group.

The IM intrusion is typically pale pinkish grey and medium grained. It is equigranular to slightly plagioclase-phyric. No quartz was observed. The composition is assumed to be monzonite. In the quarry, however, the monzonite attracted attention because of unusual alteration. The monzonite is somewhat bleached white from moderate argillic alteration of feldspar, and is flecked with maroon-grey or rusty orange from the nearly complete oxidation of mafic minerals to hematite or limonite. Select grab samples were collected in previous years, resulting in anomalous values of copper, but no gold. Visible malachite was reported then, but could not be confirmed in subsequent examination of the outcrops. Other outcrops of the IM monzonite in the area do not have this argillic alteration, but their pink colour may indicate mild potassium feldspar alteration.

## 7. SOIL SURVEY

The IM intrusion was deemed a target for future diamond drilling as part of Imperial's property evaluation. A soil survey was designed to identify geochemical anomalies in order to prioritize drill targets.

### Grid design

The IM intrusion is elongate roughly east-west (Fig. 6). The limits of the IM intrusion are not well defined from surface outcrop, but it apparently lies entirely within Imperial Metals property, even where the property narrows into a 460-metre-wide corridor west of 599160N (Figs. 4,6). The grid had to be designed to respect the claim boundary, so the amount of overlap of the grid across the assumed IM intrusion contacts in the west is virtually nil. Elsewhere, the dimensions of the soil grid were estimated to provide a reasonable but not extensive overlap into the country rocks (see below).

For convenience, the survey layout was planned so that sample locations could be tracked by following UTM coordinates using a handheld GPS unit. Thus, the grid was designed so that lines would run (UTM-)north-south, with sample stations every 25 metres. (The UTM grid is rotated approximately 1 degree east of true north.) 'North-south' lines are 100 metres apart in a (UTM-) east-west direction.



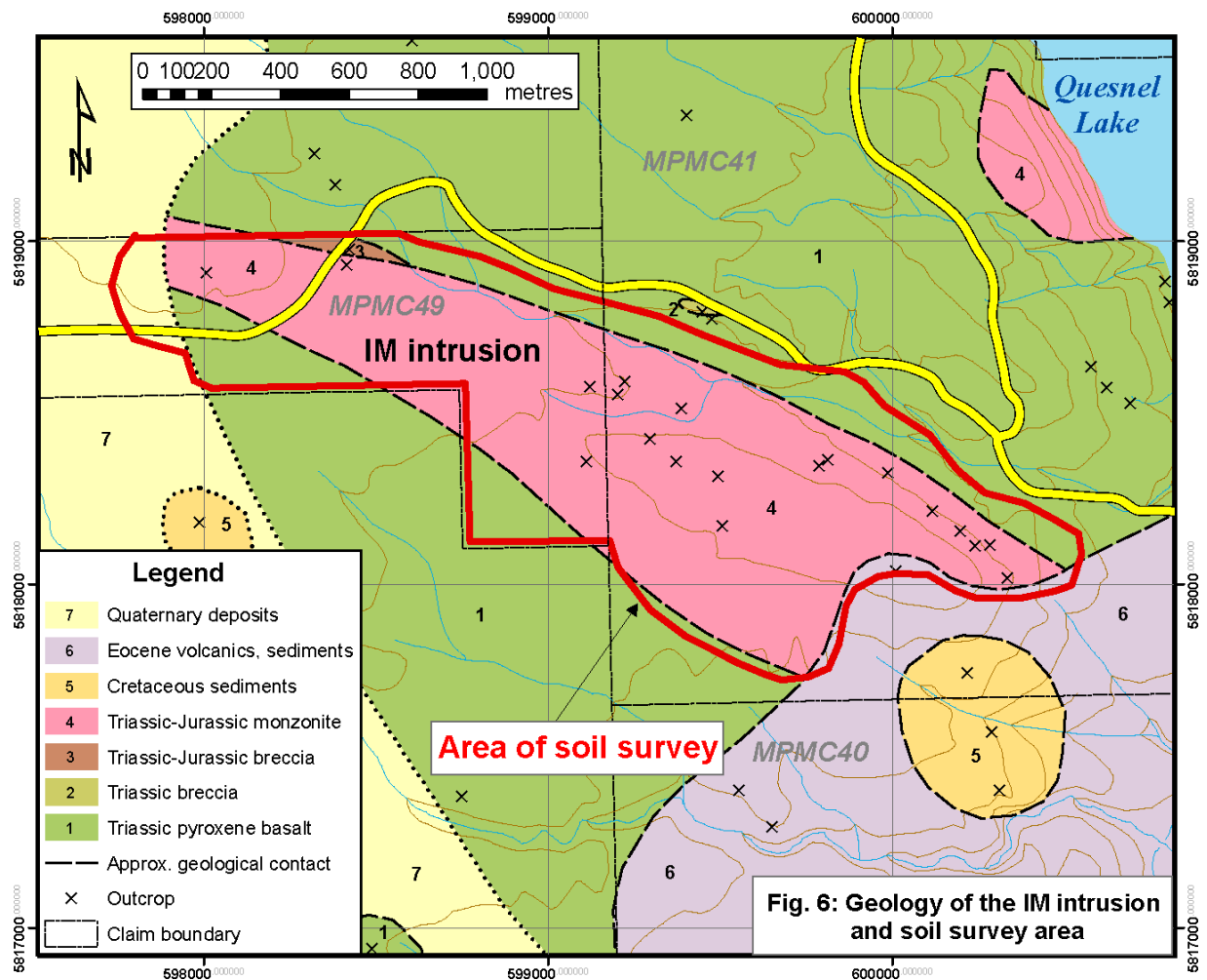


Fig. 6: Geology of the IM intrusion and soil survey area.



This system precluded the need for prior marking along individual sample lines.

#### Method and implementation

An east-west line along 5818575N was installed for baseline control. The task was performed by a contractor who flagged out the line and surveyed the line precisely with a backpack-mounted GPS survey instrument.

Sampling was done over 14 field-days between 7 August and 24 August, 2008, by two persons working in tandem. Each had a handheld GPS unit to locate stations. Accuracy was probably within a few metres at most. An advantage of this method is that any navigational errors will not be cumulative, as might occur using compass and chain.

Individual north-south sample lines were usually accessed from the east-west flagged baseline, or from the Gavin Lake road. The most western line is 597800E. The most eastern line is 600500E. Line numbering was shortened to the last 4 digits for convenience.

The total line-length of soil sampling in the survey was 15.325 km. The total number of samples collected was 562.

Soil samples were collected from the B horizon using manual Dutch augers. The B horizon was usually intersected about 30 to 40 cm below the surface, and typically consisted of pale grey (locally rusty orange) sandy material derived from bedrock. The sample was placed in Kraft paper bags numbered with the line number (corresponding to UTM eastings), followed by the unique station number (corresponding to UTM northings). Sample packets were strung together on baling wire in the correct order as they were collected, eliminating the need for resorting later.

Some stations did not yield a reliable sample because of disturbance from human activity, for example along or adjacent to a road or old logging skid trail. Some ground was not easily penetrated and the recovered sample was deemed insufficient by the analytical laboratory (listed as “I.S.” for insufficient sample in the assay certificates included in this report in Appendix C).

Samples were allowed to dry before being shipped to the laboratory from the field. The samples (total 562) were packed into four sturdy plastic totes, sealed with ‘zap straps’. Each had a list of contents inside. They were shipped by Greyhound bus to Acme in Vancouver (see below). Samples and totes were always in secure premises before they were shipped.

## **8. ANALYTICAL PROCEDURES AND RESULTS**

All 562 soil samples were analysed by Acme Analytical Laboratories Ltd. of Vancouver, B.C.

### Sample preparation

With the SS80 method utilized, the soil material was dried at 60°C, with a sample (up to 100 g) sieved to –80 mesh. Excess pulp was returned to Imperial. Excess sample material was discarded.

### Analysis

The samples were analysed for 36 elements as part of the 1DX (15 gram) package provided by Acme. Sample splits were treated by hot (95°C) Aqua Regia acid digestion in preparation for analysis by ICP-MS. The detection limit for copper was 0.1 ppm, and 0.5 ppb for gold. Detection limits for all elements are shown on the assay certificates.

### Results and Interpretation

Of particular interest are the results for copper and gold, given the focus on porphyry copper mineralization potential on the property. Approximately 85% of samples are below 40 ppm copper, indicating that copper is elevated but within the range of regional background values. The values for copper (ppm) are shown in map form in Fig. 7 (actual results given to one decimal place have been rounded to integers on this map). Isopleths for samples with greater than 50 ppm copper have been interpreted, shown in blue.

Within the ‘highs’ implied by the >50 ppm copper contours, only 3 samples are above 90 ppm, the highest being 143.9 ppm copper. These ‘highs’ are quite isolated, and are not surrounded by above average values, so are unlikely to indicate extensive anomalies. The outcrops of (argillic-)altered monzonite on lines 9100 and 9200 referred to earlier in this report do not exhibit an anomaly in copper, or in any other element. However, the outcrops occur halfway along a straight line (parallel with the trend of the IM intrusion) connecting the two highest copper values in the survey, 143.9 ppm and 131.8 ppm (534 metres to the northwest and 620 metres to the southeast, respectively).

For gold, 96% of results are below 10 ppb. Of the remainder, many are over 20 ppb which is definitely anomalous, but like higher copper, the higher gold values appear to be erratic, with no particular trends apparent. Gold values for the area of altered monzonite appear to be especially low, and gold may have been leached by the alteration.

One strikingly anomalous sample on line 9300E at 8225N might be telling, with respect to gold distribution. The sample returned a value of 406.8 ppb (with insignificant copper), but is bounded by very low gold values on this line. It is tentatively postulated that the B-horizon soil sample was contaminated by a grain(s) of gold derived from the A horizon which contained transported Quaternary material.

## **9. CONCLUSIONS AND RECOMMENDATIONS**

The soil survey reported here did not produce any convincing anomalies in copper that can be attributed to a significant alteration-mineralization nucleus or trend within the

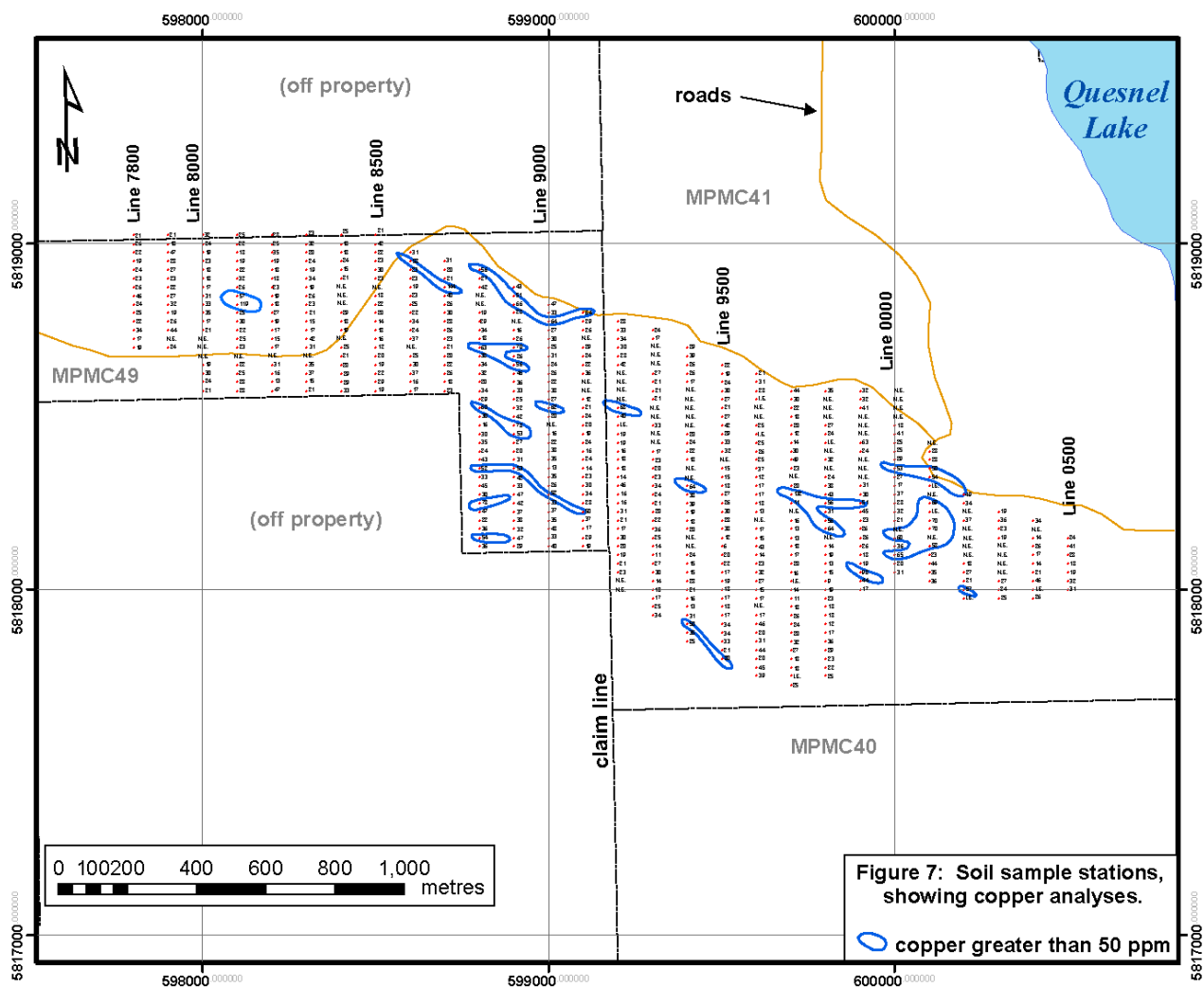


Fig. 7: Soil sample stations showing copper analyses, and contour for copper >50 ppm.

monzonite of the IM intrusion. The highly anomalous gold value is thought to reflect post-glacial redistribution of placer gold.

The (argillic-)altered monzonite near the centre of the IM intrusion remains interesting. Even though no significant geochemical anomalies are associated with it, the rock is clearly representative of unusual hydrothermal activity, and the recommendation is that it be investigated by diamond drilling in the future. If mineralization is encountered during drilling, another target in the area along a WNW-ESE trend could be selected based on the strongest anomalies derived from the soil survey reported herein.

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## APPENDIX A

### STATEMENT OF COSTS

*Items below pertain to 14 days of field work between 7 August and 24 August, 2008.*

Field Personnel, Wages	
Supervising geologist (1), 3 field days & report prep. @ \$390 per day	1,170
Supervising geologist (2), 2 field days @ \$375 per day	750
Junior geologist, sampler, 14 field days @ \$228 per day	3,192
Field assistant (1), 5 days @ \$228 per day	1,140
Field assistant (2), 5 days @ \$228 per day	1,140
Field Personnel, Accommodation and Food	
Accommodation, 14 days @ \$80 per day (2-person crew)	2,240
Food, 14 days @ \$50 per day (2-person crew)	1,400
Transportation	
Truck rental costs, 14 days @ \$100 per day	1,400
Fuel costs, 14 days @ \$40 per day	560
Field Supplies	1,546.32
(Includes new tools, GPS, sample materials)	
Grid installation, survey costs	5,614
Geochemical Analyses	10,785.41
562 @ \$17.71/sample, prep.+analysis, + tax, etc.	
Shipping costs	67
 <b>TOTAL for project</b>	 <hr/> <b>\$31,005</b>

## APPENDIX B

### STATEMENT OF QUALIFICATIONS

I, Christopher J. Rees of Victoria, British Columbia, do hereby certify that:

- I am a graduate of the University College of Wales (U.K.) with a B.Sc. (Hons.) degree, and a graduate of the University of Regina with an M.Sc. degree, and a graduate of Carleton University with a Ph.D. degree, all in geology.
- I am a professional geologist with accreditation from the Association of Professional Engineers and Geoscientists of British Columbia, since 1992.
- I have been practising my profession since 1987 in the mineral exploration industry, or through provincial government and university appointments.
- I have been an employee of Imperial Metals Corporation since 1997, and have worked on the Mount Polley property as a geologist since 2003.
- I am the author of this Assessment Report on the 'Geochemical Results of the 2008 Soil Survey on the Mount Polley property', and supervised the work therein.

Signed

A handwritten signature in black ink, appearing to read 'CJ Rees', written in a cursive style.

Chris Rees, Ph.D., P.Geo.  
April 6, 2009.

## **APPENDIX C**

### **ASSAY CERTIFICATES OF GEOCHEMICAL RESULTS**

**Client:** **Imperial Metals Corporation**  
200 - 580 Hornby St.  
Vancouver BC V6C 3B6 Canada

Submitted By: Steve Robertson  
Receiving Lab: Canada-Vancouver  
Received: September 05, 2008  
Report Date: September 24, 2008  
Page: 1 of 11

## CERTIFICATE OF ANALYSIS

VAN08009020.1

### CLIENT JOB INFORMATION

Project: None Given  
Shipment ID:  
P.O. Number  
Number of Samples: 282

### SAMPLE DISPOSAL

RTRN-PLP Return  
DISP-RJT Dispose of Reject After 90 days

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Imperial Metals Corporation  
200 - 580 Hornby St.  
Vancouver BC V6C 3B6  
Canada

CC:

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
SS80	280	Dry at 60C sieve 100g to -80 mesh		
Dry at 60C	280	Dry at 60C		
RJSV	280	Save all or part of soil reject fraction		
1DX15	280	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed
DIS-RJT	280	Warehouse handling / Disposition of reject		

### ADDITIONAL COMMENTS



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.



# CERTIFICATE OF ANALYSIS

VAN08009020.1

	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	2	0.01
LINE 78 8700	Soil	0.4	18.7	4.8	48	<0.1	21.9	7.7	336	2.23	3.5	0.5	1.9	3.4	32	0.1	0.2	<0.1	55	0.29	0.056
LINE 78 8725	Soil	0.4	17.0	5.1	41	<0.1	21.9	8.3	336	2.26	3.9	0.5	1.9	3.9	37	0.1	0.2	<0.1	57	0.30	0.066
LINE 78 8750	Soil	0.3	34.0	7.5	41	<0.1	30.0	14.2	645	2.65	5.5	0.6	1.9	4.9	50	<0.1	0.2	0.1	66	0.37	0.067
LINE 78 8775	Soil	0.4	21.5	5.5	54	<0.1	24.8	9.5	430	2.38	4.4	0.5	1.9	3.3	42	0.1	0.2	<0.1	63	0.36	0.064
LINE 78 8800	Soil	0.4	24.5	5.6	64	0.2	27.5	9.7	466	2.34	3.5	0.6	3.7	3.2	37	0.2	0.2	<0.1	54	0.35	0.061
LINE 78 8825	Soil	0.9	23.5	5.9	61	<0.1	31.2	10.9	347	2.51	5.3	0.6	3.2	4.2	27	0.2	0.4	0.1	54	0.29	0.114
LINE 78 8850	Soil	0.9	46.0	9.7	123	0.4	47.9	17.1	871	3.73	6.5	0.8	3.6	4.0	39	0.3	0.3	0.2	79	0.31	0.116
LINE 78 8875	Soil	0.4	26.3	7.6	60	0.1	28.4	12.1	477	2.66	5.0	0.6	1.5	4.4	29	0.2	0.3	0.1	56	0.26	0.061
LINE 78 8900	Soil	0.3	22.7	6.4	39	<0.1	23.3	9.9	364	2.24	4.3	0.6	6.0	4.7	32	<0.1	0.2	0.1	51	0.27	0.057
LINE 78 8925	Soil	0.3	23.7	8.1	48	<0.1	28.7	13.2	465	2.55	4.8	0.6	<0.5	5.5	27	<0.1	0.3	0.1	53	0.26	0.053
LINE 78 8950	Soil	0.3	18.5	6.7	47	<0.1	24.4	9.7	322	2.20	2.8	0.6	2.2	3.8	25	0.1	0.2	<0.1	46	0.24	0.046
LINE 78 8975	Soil	0.4	21.7	7.7	52	<0.1	28.0	9.7	350	2.39	3.5	0.6	1.8	4.6	30	0.1	0.3	0.1	50	0.27	0.046
LINE 78 9000	Soil	0.4	26.1	7.1	49	<0.1	28.0	12.5	486	2.64	5.2	0.7	2.6	4.6	46	<0.1	0.3	0.1	62	0.34	0.062
LINE 78 9025	Soil	0.3	21.2	6.5	61	<0.1	29.4	11.1	366	2.61	4.2	0.6	4.8	4.1	31	<0.1	0.2	0.1	59	0.31	0.065
LINE 79 8700	Soil	0.4	23.7	5.0	55	<0.1	20.9	8.8	373	2.64	4.1	0.6	1.3	3.2	60	0.2	0.3	<0.1	71	0.42	0.077
LINE 79 8750	Soil	0.8	44.1	8.3	55	<0.1	33.1	13.7	493	2.95	6.9	0.6	1.9	4.6	45	0.2	0.3	0.1	68	0.39	0.068
LINE 79 8775	Soil	0.5	25.5	6.2	52	<0.1	24.5	9.0	329	2.50	3.9	0.5	2.2	3.3	52	0.2	0.2	0.1	62	0.38	0.062
LINE 79 8800	Soil	0.7	19.0	5.2	68	<0.1	26.6	9.8	464	2.22	2.7	0.6	1.4	3.8	25	0.2	0.3	0.1	44	0.28	0.065
LINE 79 8825	Soil	0.5	32.3	8.1	62	0.2	31.6	14.6	778	2.60	5.1	0.7	2.9	3.8	35	0.1	0.2	0.2	61	0.32	0.069
LINE 79 8850	Soil	0.4	26.5	6.5	41	<0.1	30.0	11.1	432	2.36	5.1	0.6	5.5	4.4	36	0.1	0.3	0.1	56	0.35	0.069
LINE 79 8875	Soil	0.4	22.2	7.2	52	<0.1	29.7	11.6	471	2.56	4.4	0.6	2.8	4.1	33	0.1	0.2	0.1	57	0.34	0.065
LINE 79 8900	Soil	0.4	23.1	7.3	54	<0.1	28.1	11.9	495	2.95	6.6	0.6	1.5	4.7	36	0.2	0.2	0.1	56	0.36	0.079
LINE 79 8925	Soil	0.4	27.3	7.7	62	<0.1	29.8	13.6	560	3.26	7.0	0.7	1.8	5.3	38	0.1	0.3	0.1	61	0.37	0.070
LINE 79 8950	Soil	0.5	27.7	8.0	60	<0.1	30.6	13.6	596	3.11	5.9	0.6	1.1	5.1	35	0.1	0.3	0.1	55	0.31	0.058
LINE 79 8975	Soil	0.6	47.2	9.4	69	<0.1	40.5	14.6	535	3.94	9.4	0.8	2.6	6.2	53	<0.1	0.5	0.2	79	0.38	0.068
LINE 79 9000	Soil	0.3	17.9	6.8	59	<0.1	24.0	9.5	381	2.63	4.3	0.6	0.9	4.0	35	0.2	0.2	0.1	50	0.32	0.056
LINE 79 9025	Soil	0.4	20.6	6.1	81	0.1	25.1	10.1	322	3.14	5.5	0.6	<0.5	4.4	36	0.2	0.3	0.1	64	0.29	0.091
LINE 80 8575	Soil	0.5	20.8	6.3	67	<0.1	23.5	10.6	516	2.77	5.1	0.6	<0.5	3.6	36	0.1	0.2	0.1	58	0.33	0.053
LINE 80 8600	Soil	0.3	24.2	5.9	41	<0.1	20.8	8.5	374	2.48	5.2	0.6	2.1	3.9	50	0.1	0.2	<0.1	56	0.39	0.062
LINE 80 8625	Soil	0.3	29.5	6.3	44	<0.1	22.6	8.9	413	2.64	5.4	0.7	1.6	4.2	55	<0.1	0.3	<0.1	63	0.41	0.059

# CERTIFICATE OF ANALYSIS

VAN08009020.1

LINE	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 78 8700	Soil	13	33	0.49	63	0.068	1	1.20	0.013	0.07	<0.1	0.01	2.0	<0.1	<0.05	3	<0.5
LINE 78 8725	Soil	13	35	0.49	63	0.075	1	1.20	0.017	0.10	<0.1	0.01	2.3	<0.1	<0.05	3	<0.5
LINE 78 8750	Soil	14	41	0.58	107	0.088	1	1.74	0.017	0.12	<0.1	0.03	3.1	<0.1	<0.05	4	<0.5
LINE 78 8775	Soil	12	40	0.51	80	0.077	2	1.36	0.012	0.08	<0.1	0.01	2.4	<0.1	<0.05	4	<0.5
LINE 78 8800	Soil	14	40	0.55	95	0.070	1	1.55	0.014	0.10	<0.1	0.02	2.8	<0.1	<0.05	4	<0.5
LINE 78 8825	Soil	14	49	0.58	68	0.083	<1	1.46	0.016	0.09	<0.1	0.04	2.8	<0.1	<0.05	4	<0.5
LINE 78 8850	Soil	14	60	0.64	145	0.061	<1	2.80	0.014	0.15	<0.1	0.04	4.4	<0.1	<0.05	7	<0.5
LINE 78 8875	Soil	15	46	0.67	70	0.078	<1	1.64	0.014	0.12	<0.1	0.04	2.9	<0.1	<0.05	4	<0.5
LINE 78 8900	Soil	16	41	0.58	72	0.076	1	1.44	0.022	0.13	0.1	0.03	3.9	<0.1	<0.05	4	<0.5
LINE 78 8925	Soil	17	47	0.67	83	0.092	2	1.61	0.027	0.16	0.1	0.03	4.3	<0.1	<0.05	5	<0.5
LINE 78 8950	Soil	16	38	0.63	66	0.074	1	1.51	0.020	0.11	<0.1	0.02	3.1	<0.1	<0.05	4	<0.5
LINE 78 8975	Soil	17	45	0.70	80	0.082	1	1.66	0.032	0.14	<0.1	0.03	4.0	<0.1	<0.05	5	<0.5
LINE 78 9000	Soil	18	46	0.64	85	0.089	2	1.53	0.036	0.13	<0.1	0.02	4.1	<0.1	<0.05	4	<0.5
LINE 78 9025	Soil	16	46	0.68	74	0.082	1	1.53	0.023	0.10	<0.1	0.02	2.9	<0.1	<0.05	4	<0.5
LINE 79 8700	Soil	12	38	0.51	96	0.080	2	1.39	0.013	0.08	<0.1	0.02	2.2	<0.1	<0.05	4	<0.5
LINE 79 8750	Soil	14	49	0.65	103	0.080	1	1.92	0.013	0.12	0.1	0.04	3.4	<0.1	<0.05	5	<0.5
LINE 79 8775	Soil	14	38	0.52	86	0.072	1	1.53	0.014	0.09	<0.1	0.02	2.4	<0.1	<0.05	4	<0.5
LINE 79 8800	Soil	15	42	0.60	67	0.078	<1	1.36	0.012	0.09	<0.1	0.02	2.1	<0.1	<0.05	4	<0.5
LINE 79 8825	Soil	15	50	0.62	98	0.070	2	1.84	0.019	0.11	<0.1	0.03	3.1	<0.1	<0.05	5	<0.5
LINE 79 8850	Soil	15	43	0.53	78	0.079	2	1.37	0.027	0.12	<0.1	0.03	3.3	<0.1	<0.05	4	<0.5
LINE 79 8875	Soil	16	45	0.63	66	0.078	1	1.47	0.017	0.11	<0.1	0.02	2.8	<0.1	<0.05	4	0.6
LINE 79 8900	Soil	17	41	0.69	69	0.078	<1	1.56	0.012	0.14	<0.1	0.03	2.9	<0.1	0.08	4	<0.5
LINE 79 8925	Soil	19	47	0.72	92	0.083	3	1.78	0.013	0.15	<0.1	0.04	3.6	0.1	<0.05	5	0.6
LINE 79 8950	Soil	18	47	0.73	82	0.082	<1	1.87	0.013	0.16	<0.1	0.04	3.6	0.1	<0.05	5	<0.5
LINE 79 8975	Soil	19	62	0.87	124	0.101	<1	2.46	0.016	0.19	<0.1	0.09	6.3	0.1	<0.05	6	<0.5
LINE 79 9000	Soil	19	37	0.65	74	0.079	<1	1.48	0.012	0.12	<0.1	0.02	2.9	<0.1	<0.05	4	0.6
LINE 79 9025	Soil	18	42	0.64	88	0.083	2	1.66	0.010	0.14	<0.1	0.02	2.6	<0.1	<0.05	5	<0.5
LINE 80 8575	Soil	17	38	0.60	77	0.075	<1	1.53	0.012	0.11	<0.1	0.02	2.4	<0.1	<0.05	5	<0.5
LINE 80 8600	Soil	15	35	0.54	84	0.087	<1	1.52	0.015	0.11	<0.1	0.02	3.0	<0.1	<0.05	5	0.5
LINE 80 8625	Soil	17	39	0.59	84	0.091	<1	1.58	0.020	0.11	<0.1	0.02	4.0	<0.1	<0.05	4	<0.5

# CERTIFICATE OF ANALYSIS

VAN08009020.1

	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	2	0.01
LINE 80 8650	Soil	0.3	18.5	4.4	31	<0.1	20.1	6.0	228	1.74	4.5	0.4	7.4	2.8	35	<0.1	0.2	<0.1	42	0.32	0.061
LINE 80 8700	Soil	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
LINE 80 8725	Soil	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
LINE 80 8750	Soil	0.3	21.2	5.3	37	0.1	22.7	7.9	359	1.99	4.6	1.0	<0.5	3.3	40	0.2	0.2	<0.1	49	0.49	0.056
LINE 80 8775	Soil	0.4	17.3	6.5	63	<0.1	20.2	9.6	489	2.16	3.4	0.5	<0.5	3.1	28	0.2	0.2	<0.1	48	0.29	0.046
LINE 80 8800	Soil	0.3	34.8	7.8	55	<0.1	30.7	12.3	498	3.23	7.0	0.7	1.7	4.5	61	0.1	0.3	0.1	68	0.50	0.076
LINE 80 8825	Soil	0.4	32.9	6.2	51	0.1	27.6	9.6	427	2.61	5.7	0.8	1.2	3.2	65	0.2	0.2	<0.1	66	0.52	0.074
LINE 80 8850	Soil	0.5	30.5	6.7	111	0.1	32.3	10.9	859	2.98	4.3	0.7	<0.5	3.6	34	0.3	0.2	0.1	51	0.35	0.101
LINE 80 8875	Soil	0.3	17.1	5.5	56	<0.1	19.8	8.1	285	2.64	3.6	0.5	<0.5	3.8	35	0.1	0.2	0.1	56	0.26	0.047
LINE 80 8900	Soil	0.3	18.1	6.5	71	0.1	23.2	9.9	477	2.27	3.2	0.6	<0.5	3.1	37	0.3	0.2	<0.1	50	0.35	0.052
LINE 80 8925	Soil	0.3	17.8	5.5	62	<0.1	26.1	9.9	367	2.50	3.7	0.6	0.9	3.4	32	0.2	0.2	<0.1	49	0.35	0.039
LINE 80 8950	Soil	0.4	23.4	6.6	67	<0.1	28.6	10.8	367	3.25	5.9	0.5	1.5	4.7	34	0.2	0.4	0.1	62	0.32	0.061
LINE 80 8975	Soil	0.3	19.1	5.8	73	<0.1	28.6	10.5	344	3.04	4.5	0.6	2.8	4.6	31	0.2	0.3	<0.1	54	0.29	0.065
LINE 80 9000	Soil	0.5	24.0	6.1	67	<0.1	29.2	9.8	408	2.92	4.6	0.6	1.0	4.5	30	0.1	0.3	0.1	59	0.31	0.062
LINE 80 9025	Soil	0.4	32.3	7.8	61	<0.1	33.9	13.5	412	3.37	6.8	0.6	0.9	5.2	40	0.2	0.4	0.1	72	0.32	0.069
LINE 81 8575	Soil	0.4	28.0	5.5	49	<0.1	22.1	9.6	425	2.99	5.7	0.6	2.4	3.5	48	<0.1	0.2	<0.1	80	0.46	0.062
LINE 81 8600	Soil	0.3	27.9	6.6	52	<0.1	22.9	10.3	498	2.71	5.1	0.6	2.4	3.9	47	0.2	0.2	<0.1	54	0.41	0.069
LINE 81 8625	Soil	0.4	25.1	6.6	72	<0.1	28.4	11.4	488	2.75	4.1	0.7	2.1	3.9	45	0.3	0.3	<0.1	57	0.46	0.062
LINE 81 8650	Soil	0.5	22.3	5.6	50	<0.1	29.1	10.3	486	2.46	3.8	0.7	0.6	4.3	37	0.1	0.3	<0.1	55	0.45	0.061
LINE 81 8700	Soil	0.4	23.3	6.2	49	<0.1	25.0	11.4	508	2.80	6.3	0.6	1.5	4.3	48	<0.1	0.2	<0.1	60	0.42	0.071
LINE 81 8725	Soil	0.3	25.1	6.0	50	<0.1	27.0	9.3	345	2.65	4.7	0.7	1.3	4.1	42	0.1	0.2	<0.1	55	0.40	0.066
LINE 81 8750	Soil	0.4	21.8	5.7	71	<0.1	27.1	10.6	442	2.82	5.5	0.6	0.9	3.3	38	0.3	0.2	<0.1	65	0.39	0.084
LINE 81 8775	Soil	0.4	30.1	7.5	60	<0.1	29.0	12.3	547	3.30	6.8	0.7	1.5	5.3	55	<0.1	0.3	0.1	71	0.45	0.082
LINE 81 8800	Soil	0.4	24.7	7.8	55	<0.1	25.7	10.6	399	2.88	4.7	0.6	<0.5	4.6	40	0.1	0.2	0.1	55	0.37	0.059
LINE 81 8825	Soil	0.7	119.4	8.2	55	<0.1	59.4	18.5	997	4.07	7.6	0.7	1.8	5.1	77	0.1	0.3	0.1	87	0.53	0.083
LINE 81 8850	Soil	0.8	56.9	10.1	91	0.4	41.1	15.2	725	3.91	8.4	0.9	1.7	3.0	53	0.2	0.3	0.1	82	0.52	0.149
LINE 81 8875	Soil	0.5	26.4	7.3	64	<0.1	29.1	13.4	508	3.24	5.7	0.6	2.4	4.9	44	<0.1	0.2	0.1	63	0.36	0.072
LINE 81 8900	Soil	0.3	32.0	7.9	60	<0.1	35.0	11.8	483	3.34	7.3	0.6	1.7	6.0	39	<0.1	0.3	0.1	66	0.35	0.071
LINE 81 8925	Soil	0.4	21.9	6.2	68	<0.1	27.6	10.2	431	3.01	4.9	0.6	1.1	4.6	35	0.2	0.2	0.1	56	0.33	0.074
LINE 81 8950	Soil	0.3	19.0	6.7	53	<0.1	22.7	9.0	362	2.46	4.5	0.5	8.5	3.7	30	<0.1	0.2	0.1	54	0.25	0.052

# CERTIFICATE OF ANALYSIS

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Method Analyte Unit MDL		1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 80 8650	Soil	10	29	0.44	56	0.064	<1	1.10	0.011	0.07	<0.1	0.01	2.0	<0.1	<0.05	4	<0.5
LINE 80 8700	Soil	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
LINE 80 8725	Soil	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
LINE 80 8750	Soil	16	38	0.48	75	0.076	<1	1.33	0.014	0.08	0.1	0.03	3.7	<0.1	<0.05	4	<0.5
LINE 80 8775	Soil	15	37	0.49	71	0.062	<1	1.26	0.011	0.08	<0.1	0.02	2.2	<0.1	<0.05	4	<0.5
LINE 80 8800	Soil	19	49	0.71	107	0.084	2	1.83	0.017	0.14	<0.1	0.03	4.7	<0.1	<0.05	5	<0.5
LINE 80 8825	Soil	17	42	0.55	117	0.077	1	1.61	0.020	0.10	<0.1	0.04	4.4	<0.1	<0.05	5	0.5
LINE 80 8850	Soil	20	45	0.70	112	0.067	<1	2.04	0.011	0.14	<0.1	0.03	3.6	0.1	<0.05	5	0.8
LINE 80 8875	Soil	18	37	0.56	69	0.074	<1	1.46	0.012	0.09	<0.1	<0.01	2.4	<0.1	<0.05	5	0.6
LINE 80 8900	Soil	18	38	0.59	94	0.073	<1	1.57	0.012	0.10	<0.1	0.01	2.5	<0.1	<0.05	5	0.5
LINE 80 8925	Soil	19	40	0.62	76	0.078	3	1.50	0.014	0.11	<0.1	0.02	2.6	<0.1	<0.05	4	0.5
LINE 80 8950	Soil	18	41	0.64	75	0.089	<1	1.57	0.011	0.14	<0.1	0.02	2.7	<0.1	<0.05	5	<0.5
LINE 80 8975	Soil	19	42	0.65	77	0.077	<1	1.67	0.011	0.11	<0.1	0.03	2.8	<0.1	<0.05	5	<0.5
LINE 80 9000	Soil	20	43	0.69	73	0.088	<1	1.63	0.012	0.11	<0.1	0.02	2.4	<0.1	<0.05	5	<0.5
LINE 80 9025	Soil	18	48	0.71	95	0.091	2	1.97	0.012	0.14	<0.1	0.02	3.3	<0.1	<0.05	5	<0.5
LINE 81 8575	Soil	15	38	0.60	70	0.104	2	1.46	0.018	0.10	0.1	0.02	2.8	<0.1	<0.05	5	0.6
LINE 81 8600	Soil	17	38	0.62	86	0.067	<1	1.58	0.015	0.10	<0.1	0.03	3.3	<0.1	<0.05	5	1.0
LINE 81 8625	Soil	18	44	0.66	78	0.078	<1	1.64	0.013	0.11	0.1	0.02	3.1	0.1	0.05	5	<0.5
LINE 81 8650	Soil	18	45	0.65	70	0.097	2	1.47	0.018	0.11	<0.1	0.03	4.0	<0.1	<0.05	4	0.5
LINE 81 8700	Soil	19	45	0.62	79	0.087	<1	1.64	0.015	0.14	0.1	0.02	3.4	0.1	<0.05	5	0.8
LINE 81 8725	Soil	18	41	0.62	77	0.079	1	1.53	0.015	0.12	<0.1	0.02	3.1	<0.1	<0.05	4	<0.5
LINE 81 8750	Soil	15	44	0.62	83	0.075	<1	1.53	0.010	0.10	<0.1	0.02	2.8	<0.1	<0.05	4	<0.5
LINE 81 8775	Soil	19	50	0.72	99	0.096	3	1.93	0.020	0.16	0.1	0.04	4.3	0.1	<0.05	5	0.9
LINE 81 8800	Soil	19	44	0.66	74	0.079	<1	1.64	0.018	0.13	<0.1	0.01	3.6	<0.1	<0.05	4	0.6
LINE 81 8825	Soil	17	74	0.93	174	0.124	5	3.12	0.057	0.41	<0.1	0.09	6.5	0.1	<0.05	7	0.6
LINE 81 8850	Soil	18	52	0.74	141	0.068	2	2.50	0.012	0.15	0.1	0.07	4.5	0.1	<0.05	7	0.7
LINE 81 8875	Soil	19	46	0.72	84	0.083	1	1.83	0.016	0.15	<0.1	0.03	3.5	<0.1	<0.05	5	0.5
LINE 81 8900	Soil	19	50	0.74	86	0.093	2	1.94	0.015	0.17	<0.1	0.04	4.2	0.1	<0.05	5	<0.5
LINE 81 8925	Soil	20	43	0.68	85	0.087	<1	1.68	0.014	0.14	<0.1	0.02	3.0	<0.1	<0.05	5	0.5
LINE 81 8950	Soil	13	34	0.52	82	0.078	2	1.39	0.027	0.15	0.2	0.02	4.1	0.1	<0.05	4	<0.5

## CERTIFICATE OF ANALYSIS

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	Method	Analyte	Unit	MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15		
					Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
					ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
					0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	2	0.01
LINE 81 8975	Soil		0.4	17.7	6.3	63	<0.1	25.4	9.4	328	2.68	4.4	0.5	6.9	3.8	22	0.1	0.3	0.1	51	0.20	0.051		
LINE 81 9000	Soil		0.4	22.2	5.8	59	<0.1	28.0	9.3	330	2.62	4.6	0.5	5.5	3.6	31	0.1	0.3	0.1	59	0.24	0.054		
LINE 81 9025	Soil		0.4	24.6	7.2	62	<0.1	28.3	11.3	349	3.01	5.1	0.6	12.9	4.2	29	0.1	0.3	0.1	57	0.20	0.041		
LINE 82 8575	Soil		0.5	46.6	8.1	58	<0.1	33.2	10.9	486	3.40	7.7	0.7	14.8	4.4	76	<0.1	0.5	0.2	73	0.50	0.070		
LINE 82 8600	Soil		0.6	12.5	5.4	91	<0.1	17.9	8.0	357	1.83	1.7	0.4	10.8	2.2	27	0.2	0.2	0.1	45	0.25	0.035		
LINE 82 8625	Soil		0.3	15.6	5.9	64	<0.1	26.3	9.2	288	2.52	3.9	0.5	10.1	5.5	33	0.2	0.2	0.1	55	0.28	0.046		
LINE 82 8650	Soil		0.7	30.8	7.8	73	0.2	32.3	13.8	700	2.92	5.3	0.8	13.9	2.9	39	0.2	0.3	0.2	64	0.37	0.041		
LINE 82 8700	Soil		0.3	17.0	5.7	58	<0.1	25.0	8.8	334	2.20	2.7	2.0	13.9	3.3	35	0.2	0.2	0.1	42	0.35	0.041		
LINE 82 8725	Soil		0.4	15.0	5.4	73	<0.1	22.1	9.8	383	2.20	2.5	0.6	13.5	2.7	33	0.1	0.2	0.1	45	0.30	0.041		
LINE 82 8750	Soil		0.3	16.9	5.7	56	<0.1	21.1	9.1	396	2.13	2.6	0.5	11.0	2.6	33	0.2	0.2	<0.1	45	0.33	0.045		
LINE 82 8775	Soil		0.4	18.9	6.2	56	<0.1	23.7	10.1	500	2.47	4.2	0.6	9.2	3.1	51	<0.1	0.2	0.1	57	0.38	0.064		
LINE 82 8800	Soil		0.4	26.6	7.1	54	<0.1	23.7	10.0	414	2.42	4.3	0.6	11.9	3.1	48	0.1	0.3	0.1	60	0.34	0.055		
LINE 82 8825	Soil		0.3	17.9	6.4	52	<0.1	23.2	9.3	360	2.51	4.2	0.5	12.4	3.6	32	<0.1	0.3	0.1	50	0.27	0.053		
LINE 82 8850	Soil		0.3	19.4	5.9	55	<0.1	24.5	9.5	415	2.57	4.4	0.5	11.1	3.4	46	0.1	0.2	0.1	60	0.29	0.063		
LINE 82 8875	Soil		0.4	23.3	6.4	63	<0.1	28.9	10.2	528	2.62	4.8	0.6	11.9	3.5	47	0.1	0.3	0.1	61	0.33	0.072		
LINE 82 8900	Soil		0.4	17.5	6.3	74	<0.1	26.2	8.6	304	2.51	3.6	0.6	11.8	3.9	25	0.2	0.2	0.1	47	0.21	0.052		
LINE 82 8925	Soil		0.3	17.5	6.4	54	<0.1	24.5	8.2	348	2.30	3.6	0.5	8.5	3.8	30	<0.1	0.2	0.1	43	0.25	0.049		
LINE 82 8950	Soil		0.5	18.9	5.7	68	<0.1	27.3	9.4	324	2.71	4.0	0.5	7.0	3.7	26	0.1	0.3	0.1	58	0.24	0.058		
LINE 82 8975	Soil		0.5	35.0	7.1	59	<0.1	24.8	11.8	690	3.18	7.6	0.7	8.6	4.0	50	<0.1	0.3	0.2	78	0.28	0.052		
LINE 82 9000	Soil		0.4	24.7	6.2	54	<0.1	26.8	11.3	396	2.80	4.9	0.5	13.3	4.1	35	<0.1	0.3	0.1	59	0.24	0.057		
LINE 82 9025	Soil		0.5	28.3	6.7	60	<0.1	30.2	11.0	381	3.22	6.7	0.6	10.4	2.9	70	0.1	0.3	0.1	80	0.38	0.074		
LINE 83 8575	Soil		0.4	20.8	6.6	66	<0.1	30.2	11.3	483	2.83	4.1	0.7	9.2	4.3	43	0.2	0.2	0.1	56	0.35	0.051		
LINE 83 8600	Soil		0.3	14.5	5.2	41	<0.1	19.9	7.7	296	2.07	3.1	0.7	8.1	4.0	32	<0.1	0.2	<0.1	46	0.29	0.036		
LINE 83 8625	Soil		0.5	36.9	9.7	61	<0.1	40.5	14.8	612	3.47	7.4	1.9	7.9	5.4	53	0.2	0.4	0.2	65	0.49	0.068		
LINE 83 8650	Soil		0.4	34.6	9.9	72	<0.1	43.1	16.2	632	3.43	6.6	1.0	8.3	5.3	58	0.3	0.4	0.2	62	0.55	0.055		
LINE 83 8700	Soil		0.5	30.6	9.5	56	0.1	37.9	13.1	529	3.43	8.4	0.9	8.5	5.1	65	0.2	0.4	0.2	63	0.65	0.078		
LINE 83 8725	Soil		0.6	41.8	11.7	74	0.1	51.1	18.4	874	4.07	7.4	2.0	15.1	6.1	62	<0.1	0.5	0.3	75	0.61	0.041		
LINE 83 8750	Soil		0.4	16.6	6.2	76	<0.1	25.1	10.0	358	2.27	2.6	0.5	8.5	2.9	31	0.3	0.2	0.1	42	0.30	0.041		
LINE 83 8775	Soil		0.4	14.6	5.7	47	<0.1	22.1	8.5	368	2.10	2.5	0.5	9.7	3.5	31	<0.1	0.2	<0.1	43	0.27	0.055		
LINE 83 8800	Soil		0.4	21.4	7.1	65	0.1	27.6	9.9	444	2.48	3.1	0.7	7.3	3.0	36	0.1	0.2	0.1	44	0.28	0.051		

## CERTIFICATE OF ANALYSIS

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LINE	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1
LINE 81 8975	Soil	15	38	0.58	72	0.076	3	1.44	0.022	0.14	0.1	0.02	3.9	0.1	<0.05	5
LINE 81 9000	Soil	14	39	0.56	90	0.076	2	1.47	0.022	0.15	0.2	0.01	3.6	0.1	<0.05	5
LINE 81 9025	Soil	15	43	0.64	85	0.099	8	1.71	0.025	0.16	0.1	0.03	4.7	0.2	<0.05	5
LINE 82 8575	Soil	15	54	0.72	133	0.089	3	2.01	0.024	0.13	<0.1	0.05	7.3	0.1	<0.05	5
LINE 82 8600	Soil	12	34	0.42	74	0.065	3	1.25	0.014	0.09	<0.1	<0.01	2.6	<0.1	<0.05	4
LINE 82 8625	Soil	16	44	0.62	76	0.094	15	1.49	0.045	0.12	0.1	<0.01	4.6	<0.1	<0.05	4
LINE 82 8650	Soil	16	52	0.64	100	0.071	3	1.88	0.014	0.12	<0.1	0.01	4.6	0.1	<0.05	5
LINE 82 8700	Soil	17	34	0.57	71	0.080	3	1.38	0.029	0.11	0.1	<0.01	3.8	<0.1	<0.05	4
LINE 82 8725	Soil	15	37	0.54	79	0.068	2	1.25	0.022	0.11	0.1	<0.01	3.3	<0.1	<0.05	4
LINE 82 8750	Soil	14	33	0.52	71	0.062	2	1.30	0.024	0.08	<0.1	0.02	2.9	<0.1	<0.05	4
LINE 82 8775	Soil	15	37	0.57	87	0.091	3	1.51	0.023	0.13	0.1	0.02	4.0	<0.1	<0.05	4
LINE 82 8800	Soil	14	38	0.52	89	0.075	3	1.47	0.026	0.10	<0.1	0.02	4.0	<0.1	<0.05	4
LINE 82 8825	Soil	14	35	0.56	78	0.080	11	1.40	0.038	0.12	<0.1	0.01	3.7	<0.1	<0.05	5
LINE 82 8850	Soil	14	37	0.58	92	0.085	3	1.52	0.023	0.12	0.1	0.02	3.6	<0.1	<0.05	5
LINE 82 8875	Soil	13	38	0.54	104	0.080	3	1.75	0.028	0.16	0.1	0.02	4.8	0.1	<0.05	5
LINE 82 8900	Soil	17	38	0.59	74	0.068	3	1.44	0.013	0.12	<0.1	<0.01	3.5	0.1	<0.05	5
LINE 82 8925	Soil	17	36	0.59	79	0.077	2	1.54	0.030	0.15	<0.1	<0.01	4.5	0.1	<0.05	4
LINE 82 8950	Soil	16	43	0.58	72	0.094	11	1.30	0.025	0.13	0.1	0.02	5.3	<0.1	<0.05	4
LINE 82 8975	Soil	15	44	0.54	113	0.077	4	1.68	0.057	0.15	<0.1	0.06	6.8	0.1	<0.05	5
LINE 82 9000	Soil	14	39	0.53	94	0.075	2	1.53	0.014	0.12	0.1	0.03	3.2	<0.1	<0.05	5
LINE 82 9025	Soil	13	42	0.55	125	0.081	3	1.75	0.016	0.10	0.1	0.03	4.0	<0.1	<0.05	5
LINE 83 8575	Soil	18	48	0.77	88	0.095	3	1.66	0.027	0.15	0.2	0.02	5.2	0.1	<0.05	5
LINE 83 8600	Soil	14	34	0.49	59	0.074	2	1.08	0.030	0.10	0.1	0.02	3.7	<0.1	<0.05	4
LINE 83 8625	Soil	20	55	0.83	106	0.084	3	1.89	0.026	0.17	0.1	0.05	6.0	0.1	<0.05	5
LINE 83 8650	Soil	18	49	0.85	116	0.085	3	1.88	0.018	0.18	0.1	0.03	5.8	0.2	<0.05	6
LINE 83 8700	Soil	20	44	0.79	145	0.079	4	1.77	0.034	0.15	0.1	0.05	5.5	0.1	<0.05	5
LINE 83 8725	Soil	24	66	0.90	178	0.112	4	2.38	0.022	0.20	0.1	0.04	7.9	0.2	0.09	6
LINE 83 8750	Soil	15	35	0.51	79	0.062	2	1.21	0.011	0.10	<0.1	<0.01	2.5	<0.1	<0.05	4
LINE 83 8775	Soil	15	34	0.55	68	0.070	3	1.40	0.029	0.12	<0.1	0.02	4.4	<0.1	<0.05	4
LINE 83 8800	Soil	16	40	0.68	87	0.077	2	1.87	0.015	0.14	<0.1	0.04	3.6	0.1	<0.05	5

## CERTIFICATE OF ANALYSIS

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	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	2	0.01
LINE 83 8825	Soil	0.4	22.9	6.7	50	<0.1	26.0	9.2	439	2.41	4.0	0.6	9.9	3.8	48	<0.1	0.2	0.1	53	0.28	0.042
LINE 83 8850	Soil	0.6	25.8	9.1	86	0.2	29.6	14.5	761	2.68	4.4	0.6	9.2	2.7	38	0.3	0.2	0.2	51	0.32	0.061
LINE 83 8875	Soil	0.3	18.5	5.3	53	<0.1	26.4	7.9	288	2.41	3.7	0.5	8.3	3.6	49	<0.1	0.2	0.1	50	0.25	0.065
LINE 83 8900	Soil	0.5	33.5	8.2	48	<0.1	28.6	12.5	588	3.03	6.6	0.6	11.1	4.7	57	0.1	0.4	0.1	69	0.37	0.062
LINE 83 8925	Soil	0.4	18.6	4.8	49	<0.1	22.0	7.8	273	2.12	3.9	0.5	1.0	3.0	28	<0.1	0.2	0.1	47	0.20	0.056
LINE 83 8950	Soil	0.5	23.7	6.1	51	<0.1	22.4	9.5	331	2.52	5.7	0.5	1.7	3.4	35	0.1	0.2	0.1	60	0.25	0.056
LINE 83 8975	Soil	0.4	19.6	5.6	53	<0.1	21.8	8.6	274	2.52	5.3	0.5	3.7	3.3	31	0.1	0.2	0.1	55	0.23	0.059
LINE 83 9000	Soil	0.6	32.2	11.4	56	0.1	23.8	11.7	637	2.76	7.8	0.5	2.6	3.0	89	<0.1	0.3	0.1	67	0.35	0.057
LINE 83 9025	Soil	0.5	22.9	5.1	60	<0.1	23.4	10.0	507	2.76	7.4	0.5	1.1	2.3	204	<0.1	0.3	0.1	67	0.42	0.058
LINE 84 8575	Soil	0.6	33.3	8.4	66	0.2	32.3	9.5	364	2.75	5.1	1.1	4.2	3.1	39	0.4	0.2	0.1	56	0.47	0.027
LINE 84 8600	Soil	0.4	29.3	7.9	67	<0.1	34.4	12.7	495	3.00	5.7	1.1	1.6	4.4	40	0.3	2.0	0.2	62	0.39	0.055
LINE 84 8625	Soil	0.5	28.6	8.6	83	0.1	32.9	13.7	584	2.85	4.6	0.8	0.6	3.0	37	0.3	0.3	0.2	54	0.41	0.053
LINE 84 8650	Soil	0.3	19.5	6.3	42	<0.1	24.5	8.2	268	2.28	4.3	1.0	2.1	4.1	35	<0.1	0.2	0.1	49	0.33	0.063
LINE 84 8675	Soil	0.5	20.9	6.8	76	<0.1	28.2	10.2	388	2.57	3.8	0.5	1.8	3.0	39	0.4	0.3	0.1	51	0.47	0.043
LINE 84 8700	Soil	0.5	25.2	8.0	58	<0.1	34.8	11.1	385	2.72	4.2	0.6	20.8	5.2	26	0.1	0.2	0.2	52	0.26	0.044
LINE 84 8750	Soil	0.3	18.9	6.8	63	<0.1	24.7	11.0	413	2.37	3.2	0.6	0.9	3.6	22	0.2	0.2	0.1	44	0.23	0.055
LINE 84 8775	Soil	0.3	18.4	6.6	54	<0.1	27.0	10.1	314	2.59	4.5	0.5	<0.5	4.1	26	0.1	0.2	0.1	44	0.20	0.040
LINE 84 8800	Soil	0.4	28.6	9.0	71	<0.1	33.7	14.9	570	3.01	5.9	0.6	1.4	4.9	32	0.1	0.3	0.2	50	0.27	0.068
LINE 84 8900	Soil	0.4	20.9	5.7	63	<0.1	22.4	9.7	345	2.68	5.1	0.6	4.2	3.5	36	<0.1	0.2	0.1	57	0.25	0.062
LINE 84 8925	Soil	0.4	14.9	5.7	48	<0.1	16.5	7.7	346	1.87	3.5	0.5	<0.5	2.2	31	<0.1	0.1	0.1	39	0.22	0.036
LINE 84 8950	Soil	0.5	24.1	6.5	57	<0.1	22.0	12.1	656	3.11	10.2	0.5	<0.5	2.9	646	0.1	0.2	0.1	75	0.54	0.075
LINE 84 8975	Soil	0.4	18.1	5.2	55	<0.1	19.1	8.2	360	2.27	4.6	0.4	<0.5	2.2	84	0.1	0.2	<0.1	52	0.31	0.043
LINE 84 9000	Soil	0.4	17.9	6.1	60	<0.1	26.7	11.1	370	2.51	4.4	0.5	1.4	3.7	30	0.1	0.3	0.1	51	0.28	0.060
LINE 84 9025	Soil	0.5	24.7	5.8	66	<0.1	28.3	12.8	588	2.87	4.5	0.6	2.2	2.8	53	0.1	0.2	0.1	68	0.42	0.063
LINE 85 8575	Soil	0.4	19.2	7.0	54	<0.1	25.9	10.1	323	2.43	3.8	0.8	2.7	4.6	31	0.2	0.2	0.1	44	0.30	0.049
LINE 85 8600	Soil	0.5	28.6	8.1	53	<0.1	30.5	10.3	395	3.14	6.6	1.5	2.3	5.4	61	<0.1	0.3	0.2	65	0.43	0.060
LINE 85 8625	Soil	0.4	21.6	7.5	51	<0.1	29.6	9.5	328	2.72	4.3	1.1	1.4	5.3	33	<0.1	0.2	0.1	49	0.30	0.042
LINE 85 8650	Soil	0.2	18.7	7.0	58	<0.1	28.3	8.8	319	2.46	3.6	0.9	1.7	4.6	33	0.1	0.2	0.1	49	0.34	0.049
LINE 85 8675	Soil	0.2	19.9	6.8	62	<0.1	28.0	9.4	323	2.54	3.7	0.6	1.6	4.4	26	0.1	0.2	0.1	47	0.24	0.045
LINE 85 8700	Soil	0.5	11.9	5.5	60	<0.1	20.2	7.9	292	2.06	3.0	0.5	13.2	3.4	22	0.2	0.2	<0.1	38	0.22	0.069

## CERTIFICATE OF ANALYSIS

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LINE	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 83 8825	Soil	15	37	0.64	99	0.072	3	1.76	0.042	0.16	0.1	0.03	4.5	<0.1	<0.05	5	<0.5
LINE 83 8850	Soil	14	39	0.58	116	0.056	2	1.69	0.015	0.13	<0.1	0.03	3.0	0.1	<0.05	5	<0.5
LINE 83 8875	Soil	14	34	0.53	85	0.071	2	1.38	0.017	0.10	<0.1	0.03	3.3	<0.1	<0.05	4	<0.5
LINE 83 8900	Soil	16	41	0.59	114	0.084	3	1.89	0.031	0.15	0.2	0.06	6.1	<0.1	<0.05	5	<0.5
LINE 83 8925	Soil	12	31	0.48	68	0.049	<1	1.23	0.012	0.07	<0.1	0.02	2.4	<0.1	<0.05	4	1.2
LINE 83 8950	Soil	11	34	0.49	85	0.057	1	1.38	0.016	0.08	<0.1	0.03	2.9	<0.1	<0.05	4	<0.5
LINE 83 8975	Soil	11	32	0.48	82	0.053	1	1.35	0.013	0.07	<0.1	0.04	2.6	<0.1	<0.05	4	<0.5
LINE 83 9000	Soil	12	36	0.49	143	0.054	1	1.46	0.009	0.09	<0.1	0.10	3.8	<0.1	<0.05	4	1.2
LINE 83 9025	Soil	11	34	0.58	185	0.059	1	1.61	0.017	0.11	<0.1	0.08	3.4	<0.1	<0.05	5	0.5
LINE 84 8575	Soil	15	40	0.52	108	0.050	<1	1.50	0.011	0.08	<0.1	0.04	3.3	<0.1	<0.05	4	1.0
LINE 84 8600	Soil	17	45	0.63	93	0.068	1	1.52	0.016	0.14	0.1	0.03	4.9	0.1	<0.05	4	<0.5
LINE 84 8625	Soil	16	44	0.67	102	0.058	2	1.61	0.013	0.13	<0.1	0.04	3.4	<0.1	<0.05	5	0.8
LINE 84 8650	Soil	14	37	0.52	62	0.064	<1	1.15	0.009	0.09	<0.1	0.03	3.6	<0.1	<0.05	3	<0.5
LINE 84 8675	Soil	14	39	0.61	96	0.064	1	1.37	0.008	0.11	<0.1	0.02	2.8	<0.1	<0.05	4	0.6
LINE 84 8700	Soil	16	46	0.70	87	0.090	1	1.69	0.020	0.15	<0.1	0.03	4.3	0.1	<0.05	5	<0.5
LINE 84 8750	Soil	14	36	0.61	72	0.058	1	1.42	0.008	0.10	<0.1	0.03	2.4	<0.1	<0.05	4	0.6
LINE 84 8775	Soil	15	37	0.63	67	0.058	2	1.51	0.020	0.13	0.3	0.02	3.6	0.1	<0.05	4	0.5
LINE 84 8800	Soil	15	39	0.66	87	0.058	1	1.62	0.010	0.13	0.1	0.05	3.3	0.1	<0.05	5	<0.5
LINE 84 8900	Soil	14	37	0.54	100	0.056	<1	1.33	0.009	0.10	<0.1	0.04	3.1	<0.1	<0.05	4	<0.5
LINE 84 8925	Soil	12	29	0.41	82	0.040	<1	1.19	0.006	0.07	<0.1	0.04	2.1	<0.1	<0.05	4	<0.5
LINE 84 8950	Soil	11	34	0.64	468	0.065	1	1.95	0.021	0.15	<0.1	0.31	3.7	<0.1	<0.05	5	1.0
LINE 84 8975	Soil	12	28	0.49	117	0.051	1	1.29	0.009	0.07	<0.1	0.05	2.4	<0.1	<0.05	4	<0.5
LINE 84 9000	Soil	15	36	0.62	75	0.068	1	1.37	0.011	0.11	<0.1	0.02	3.0	<0.1	<0.05	5	<0.5
LINE 84 9025	Soil	14	49	0.77	96	0.085	2	1.62	0.011	0.10	<0.1	0.04	3.3	<0.1	<0.05	5	<0.5
LINE 85 8575	Soil	15	37	0.59	70	0.060	2	1.36	0.013	0.10	<0.1	0.02	3.3	<0.1	<0.05	4	<0.5
LINE 85 8600	Soil	16	46	0.72	107	0.076	2	1.75	0.018	0.15	0.1	0.04	6.0	0.1	<0.05	5	<0.5
LINE 85 8625	Soil	17	42	0.68	78	0.075	1	1.54	0.021	0.15	<0.1	0.03	4.6	0.1	<0.05	4	0.6
LINE 85 8650	Soil	16	40	0.67	74	0.065	1	1.50	0.019	0.15	<0.1	0.02	4.1	0.1	<0.05	5	0.9
LINE 85 8675	Soil	16	40	0.61	77	0.068	1	1.45	0.027	0.16	0.1	0.02	4.3	0.1	<0.05	5	<0.5
LINE 85 8700	Soil	14	29	0.40	65	0.044	<1	1.12	0.009	0.07	<0.1	0.03	1.9	<0.1	<0.05	3	<0.5



## CERTIFICATE OF ANALYSIS

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	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
LINE 85 8725	Soil	0.4	16.0	5.5	71	<0.1	19.9	7.4	418	2.16	3.1	0.5	1.2	2.9	27	0.2	0.2	<0.1	46	0.22	0.055
LINE 85 8750	Soil	0.4	17.7	5.2	54	<0.1	23.4	8.2	259	2.50	3.6	0.5	6.1	3.7	27	<0.1	0.2	<0.1	49	0.21	0.053
LINE 85 8775	Soil	0.4	14.4	5.0	58	0.1	22.1	7.9	391	2.03	2.9	0.5	1.2	2.6	28	0.1	0.1	0.1	37	0.24	0.041
LINE 85 8800	Soil	0.4	20.3	5.4	66	<0.1	26.1	8.5	306	2.70	5.5	0.6	<0.5	3.5	41	0.2	0.2	<0.1	54	0.36	0.061
LINE 85 8825	Soil	0.3	22.2	6.8	66	<0.1	26.2	12.0	423	2.94	5.8	0.5	1.7	4.1	38	0.2	0.2	0.1	62	0.30	0.073
LINE 85 8850	Soil	0.4	17.9	5.6	61	<0.1	22.6	8.6	307	2.48	4.0	0.5	<0.5	3.4	33	<0.1	0.2	0.1	44	0.23	0.058
LINE 85 8900	Soil	0.4	22.9	6.4	54	<0.1	23.6	10.4	426	2.68	6.5	0.5	1.2	3.6	94	0.1	0.1	0.1	64	0.41	0.065
LINE 85 8925	Soil	0.6	29.5	4.9	90	<0.1	16.1	8.5	300	2.82	6.8	0.4	<0.5	2.4	30	0.2	0.3	0.1	75	0.16	0.096
LINE 85 8950	Soil	0.4	23.2	6.0	74	<0.1	24.1	10.2	558	2.70	5.3	0.5	7.2	3.4	49	0.2	0.2	<0.1	54	0.42	0.082
LINE 85 8975	Soil	0.4	22.2	5.8	66	0.1	25.2	8.8	293	2.69	5.0	0.7	<0.5	3.1	42	0.1	0.2	0.1	56	0.33	0.059
LINE 85 9000	Soil	0.4	42.3	8.0	61	<0.1	41.4	16.0	610	3.72	10.2	0.7	<0.5	5.2	55	<0.1	0.4	0.2	83	0.42	0.068
LINE 85 9025	Soil	0.5	20.9	4.5	89	<0.1	21.8	10.7	577	2.85	5.7	0.4	0.8	2.9	48	0.1	0.2	0.1	68	0.28	0.081
LINE 86 8575	Soil	0.3	17.2	5.2	49	<0.1	24.8	9.0	331	2.47	3.7	0.7	<0.5	4.2	30	<0.1	0.2	0.1	45	0.27	0.052
LINE 86 8600	Soil	0.4	15.6	5.4	57	<0.1	26.7	9.7	309	2.57	3.8	0.5	2.7	4.2	25	0.1	0.2	0.1	45	0.23	0.045
LINE 86 8625	Soil	0.4	37.4	8.1	63	<0.1	38.6	12.4	451	3.31	6.1	0.6	1.4	6.7	50	<0.1	0.4	0.2	53	0.43	0.068
LINE 86 8650	Soil	0.6	29.7	5.7	82	<0.1	31.2	11.6	369	3.32	8.3	0.7	1.6	3.7	41	0.2	0.3	0.1	83	0.22	0.091
LINE 86 8675	Soil	0.6	24.8	4.3	90	<0.1	21.3	9.2	428	2.82	5.1	0.5	1.4	2.9	41	0.2	0.3	0.1	72	0.24	0.074
LINE 86 8725	Soil	0.6	36.8	6.4	65	0.3	31.8	10.7	692	2.69	5.2	0.8	1.9	2.6	56	0.1	0.2	0.2	59	0.47	0.047
LINE 86 8750	Soil	0.5	24.4	5.7	77	<0.1	29.1	12.5	468	3.19	7.2	0.6	1.9	4.0	45	0.1	0.3	<0.1	70	0.35	0.099
LINE 86 8775	Soil	1.7	34.1	7.5	54	0.1	41.9	19.7	811	4.05	14.3	0.6	2.5	4.6	149	0.1	0.4	0.2	101	0.66	0.037
LINE 86 8800	Soil	0.4	22.0	4.9	45	<0.1	23.6	11.6	392	2.96	7.4	0.5	3.9	3.6	115	<0.1	0.2	<0.1	71	0.40	0.101
LINE 86 8825	Soil	0.4	24.7	5.5	62	<0.1	31.7	12.3	430	3.35	7.5	0.5	1.2	3.7	72	<0.1	0.2	0.1	77	0.33	0.100
LINE 86 8850	Soil	0.4	22.6	4.7	89	<0.1	26.5	10.3	358	3.11	6.5	0.4	1.0	3.2	54	<0.1	0.3	0.1	72	0.31	0.131
LINE 86 8875	Soil	0.4	19.0	4.4	54	<0.1	26.2	9.7	322	2.70	4.9	0.5	2.0	3.3	53	0.1	0.2	<0.1	68	0.30	0.075
LINE 86 8900	Soil	0.4	22.5	5.0	60	<0.1	29.5	11.2	339	3.03	6.2	0.5	3.9	3.8	51	<0.1	0.3	<0.1	79	0.35	0.074
LINE 86 8925	Soil	0.3	22.6	5.1	59	<0.1	23.1	10.1	354	2.76	4.6	0.7	2.1	4.1	59	0.1	0.2	0.1	67	0.45	0.051
LINE 86 8950	Soil	0.9	58.0	7.7	56	0.1	34.9	14.6	2699	3.49	9.8	1.6	4.7	4.2	117	0.3	0.5	0.2	83	1.07	0.068
LINE 86 8975	Soil	0.4	30.5	4.3	53	<0.1	27.2	12.2	586	3.37	6.4	0.4	2.2	3.0	116	<0.1	0.3	<0.1	99	0.67	0.091
LINE 87 8575	Soil	0.4	22.5	5.9	63	<0.1	35.0	11.9	427	2.85	5.6	1.5	2.2	4.0	60	<0.1	0.3	0.1	63	0.32	0.032
LINE 87 8600	Soil	0.4	18.1	5.2	44	<0.1	25.1	10.1	389	2.47	4.7	1.6	0.7	3.7	47	<0.1	0.2	0.1	49	0.34	0.029

# CERTIFICATE OF ANALYSIS

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	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 85 8725	Soil	13	32	0.43	84	0.048	1	1.06	0.008	0.09	<0.1	0.02	2.5	<0.1	<0.05	4	<0.5
LINE 85 8750	Soil	15	33	0.54	67	0.060	1	1.24	0.009	0.11	0.2	0.03	3.0	<0.1	<0.05	4	<0.5
LINE 85 8775	Soil	14	30	0.48	88	0.045	1	1.21	0.007	0.09	0.2	0.04	2.0	<0.1	<0.05	4	<0.5
LINE 85 8800	Soil	13	32	0.56	122	0.051	<1	1.66	0.010	0.12	<0.1	0.11	2.7	<0.1	<0.05	5	<0.5
LINE 85 8825	Soil	13	41	0.57	112	0.059	1	1.47	0.009	0.12	<0.1	0.04	2.9	<0.1	<0.05	5	<0.5
LINE 85 8850	Soil	13	33	0.51	80	0.041	<1	1.32	0.007	0.09	<0.1	0.03	2.4	<0.1	<0.05	4	<0.5
LINE 85 8900	Soil	14	35	0.58	125	0.069	2	1.54	0.012	0.13	0.1	0.08	3.3	<0.1	<0.05	5	<0.5
LINE 85 8925	Soil	9	28	0.26	86	0.029	1	0.88	0.005	0.06	<0.1	0.02	2.3	<0.1	<0.05	4	<0.5
LINE 85 8950	Soil	14	36	0.57	114	0.053	2	1.38	0.009	0.12	<0.1	0.04	2.6	<0.1	<0.05	5	<0.5
LINE 85 8975	Soil	14	35	0.53	106	0.050	1	1.64	0.008	0.10	<0.1	0.03	2.9	<0.1	<0.05	5	<0.5
LINE 85 9000	Soil	15	57	0.81	125	0.081	5	2.03	0.023	0.22	0.2	0.07	7.1	0.2	<0.05	6	<0.5
LINE 85 9025	Soil	12	41	0.57	116	0.067	3	1.55	0.018	0.12	<0.1	0.13	3.8	<0.1	<0.05	5	<0.5
LINE 86 8575	Soil	18	37	0.67	62	0.073	3	1.31	0.015	0.15	0.1	0.02	3.5	<0.1	<0.05	4	<0.5
LINE 86 8600	Soil	16	38	0.70	62	0.089	2	1.51	0.021	0.13	0.1	0.02	3.4	<0.1	<0.05	5	<0.5
LINE 86 8625	Soil	23	43	0.76	101	0.088	3	1.69	0.037	0.17	0.1	0.05	5.8	<0.1	<0.05	5	<0.5
LINE 86 8650	Soil	15	47	0.58	91	0.057	2	1.37	0.008	0.11	<0.1	0.04	4.8	0.1	<0.05	4	<0.5
LINE 86 8675	Soil	12	35	0.41	83	0.049	2	0.98	0.008	0.08	<0.1	0.04	3.5	<0.1	<0.05	3	<0.5
LINE 86 8725	Soil	16	43	0.68	154	0.054	3	2.10	0.014	0.14	<0.1	0.08	4.5	<0.1	<0.05	6	<0.5
LINE 86 8750	Soil	14	42	0.69	137	0.078	3	1.52	0.028	0.19	<0.1	0.38	4.9	<0.1	<0.05	5	<0.5
LINE 86 8775	Soil	23	53	0.75	188	0.084	4	2.23	0.023	0.17	0.1	0.15	8.9	0.1	<0.05	6	<0.5
LINE 86 8800	Soil	12	34	0.62	102	0.084	2	1.76	0.020	0.16	<0.1	0.11	3.5	<0.1	<0.05	5	<0.5
LINE 86 8825	Soil	14	44	0.72	118	0.093	2	2.05	0.018	0.17	<0.1	0.04	4.0	<0.1	<0.05	6	<0.5
LINE 86 8850	Soil	12	40	0.63	130	0.074	3	1.77	0.018	0.13	0.1	0.03	3.5	<0.1	<0.05	6	<0.5
LINE 86 8875	Soil	14	40	0.67	96	0.081	1	1.50	0.017	0.14	0.1	0.03	3.9	<0.1	<0.05	5	<0.5
LINE 86 8900	Soil	14	44	0.72	112	0.088	4	1.68	0.025	0.15	0.1	0.02	3.8	<0.1	<0.05	5	<0.5
LINE 86 8925	Soil	13	45	0.75	97	0.093	3	1.71	0.027	0.14	0.1	0.03	4.9	<0.1	<0.05	6	<0.5
LINE 86 8950	Soil	17	45	0.85	216	0.108	3	2.71	0.040	0.17	0.2	0.11	9.7	<0.1	<0.05	8	0.5
LINE 86 8975	Soil	10	46	0.68	152	0.116	3	2.05	0.015	0.12	0.1	0.02	3.7	<0.1	<0.05	5	<0.5
LINE 87 8575	Soil	17	44	0.72	111	0.084	3	1.65	0.018	0.13	0.1	0.03	5.1	<0.1	<0.05	5	<0.5
LINE 87 8600	Soil	16	35	0.59	85	0.061	3	1.30	0.017	0.10	<0.1	0.04	3.8	<0.1	<0.05	4	<0.5

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	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	2	0.01
LINE 87 8625	Soil	0.4	25.5	6.0	42	0.1	25.4	9.4	390	2.64	5.7	0.8	<0.5	3.8	56	<0.1	0.2	0.1	54	0.34	0.044
LINE 87 8650	Soil	0.5	22.2	5.5	68	0.1	24.9	12.7	481	2.62	5.1	0.5	2.0	2.8	42	0.2	0.2	0.1	57	0.31	0.084
LINE 87 8675	Soil	0.5	19.8	6.0	91	<0.1	29.1	11.8	544	3.09	4.5	0.5	<0.5	3.1	45	0.1	0.2	0.1	63	0.34	0.066
LINE 87 8700	Soil	0.4	20.8	5.2	50	<0.1	24.1	10.8	395	2.80	5.2	0.5	<0.5	2.9	68	<0.1	0.2	<0.1	72	0.40	0.038
LINE 87 8725	Soil	0.5	23.4	6.4	46	<0.1	22.4	10.0	429	2.70	8.2	0.8	12.6	3.5	201	0.2	0.2	0.1	64	0.45	0.032
LINE 87 8750	Soil	0.7	26.4	6.9	48	<0.1	25.0	16.1	713	3.41	13.0	0.9	1.6	3.5	327	0.2	0.3	0.1	84	0.78	0.048
LINE 87 8775	Soil	0.8	27.6	7.3	49	<0.1	30.4	16.9	879	3.41	14.0	1.0	0.7	4.1	177	<0.1	0.3	0.1	82	0.65	0.044
LINE 87 8800	Soil	0.5	30.3	6.1	66	<0.1	28.3	12.7	480	3.06	10.5	1.2	2.6	3.4	73	0.2	0.2	0.1	72	0.53	0.029
LINE 87 8825	Soil	0.4	26.4	4.4	48	<0.1	23.4	10.2	526	2.65	5.5	0.7	1.1	2.9	61	0.2	0.2	<0.1	63	0.41	0.065
LINE 87 8850	Soil	0.4	39.6	5.8	74	<0.1	33.3	15.0	691	3.85	7.2	0.5	1.0	3.1	146	0.1	0.3	<0.1	109	0.82	0.104
LINE 87 8875	Soil	1.0	143.9	11.6	83	0.8	66.0	19.5	4114	5.01	14.1	4.2	3.7	4.1	87	0.3	0.5	0.2	107	1.30	0.070
LINE 87 8900	Soil	0.5	21.2	4.9	74	<0.1	20.2	8.2	433	2.65	5.4	0.5	<0.5	2.7	33	<0.1	0.3	<0.1	60	0.31	0.067
LINE 87 8925	Soil	0.5	20.3	5.0	92	0.2	17.7	8.3	788	2.58	4.7	0.4	<0.5	2.0	42	0.3	0.3	<0.1	58	0.40	0.124
LINE 87 8950	Soil	0.7	31.1	8.7	65	<0.1	22.6	10.7	483	3.14	10.4	0.6	<0.5	2.4	46	0.1	0.3	<0.1	81	0.32	0.098
LINE 88 8125	Soil	0.6	36.4	7.9	78	<0.1	41.8	14.3	831	3.25	5.8	1.1	1.6	3.9	58	0.2	0.4	0.2	63	0.56	0.023
LINE 88 8150	Soil	0.9	53.7	8.1	80	0.2	50.5	18.0	712	3.24	6.0	1.1	2.3	3.5	59	0.7	0.6	0.2	72	0.59	0.031
LINE 88 8175	Soil	0.4	35.8	9.1	53	<0.1	37.1	13.0	406	3.00	6.0	0.9	3.9	4.6	41	0.1	0.3	0.2	60	0.43	0.025
LINE 88 8200	Soil	0.6	21.9	7.0	63	<0.1	27.8	11.4	455	2.47	3.6	0.8	1.1	2.6	47	0.2	0.3	0.1	52	0.51	0.032
LINE 88 8225	Soil	0.5	47.2	8.5	83	0.2	43.7	13.2	567	2.70	4.1	1.2	2.6	3.3	47	0.4	0.3	0.2	54	0.59	0.027
LINE 88 8250	Soil	0.4	77.5	10.1	93	0.3	51.4	14.7	714	3.48	5.2	3.3	2.0	3.6	63	0.3	0.2	0.2	69	0.73	0.031
LINE 88 8275	Soil	0.4	29.8	9.3	69	<0.1	35.5	12.7	399	3.26	5.7	1.1	2.4	5.2	37	0.1	0.2	0.2	58	0.42	0.042
LINE 88 8300	Soil	0.5	44.6	11.4	71	0.1	45.1	15.9	529	3.99	9.0	1.3	3.8	6.4	46	<0.1	0.3	0.2	71	0.47	0.050
LINE 88 8325	Soil	0.5	33.4	10.5	66	<0.1	45.2	14.6	502	3.80	7.1	1.5	3.8	6.5	46	<0.1	0.3	0.2	68	0.50	0.048
LINE 88 8350	Soil	0.7	52.0	11.6	73	0.2	58.7	19.2	660	4.53	7.2	2.6	3.1	5.7	77	0.1	0.3	0.2	89	0.58	0.034
LINE 88 8375	Soil	0.5	43.1	11.8	72	<0.1	46.5	17.5	673	3.91	8.0	1.3	3.3	6.9	48	0.1	0.4	0.2	67	0.46	0.066
LINE 88 8400	Soil	0.4	24.3	7.7	105	<0.1	36.7	13.1	414	3.42	3.0	1.1	1.2	3.9	47	0.2	0.2	0.1	70	0.31	0.033
LINE 88 8425	Soil	0.4	35.3	9.5	63	<0.1	38.7	11.8	410	3.49	6.4	1.8	2.2	6.4	37	<0.1	0.3	0.2	56	0.35	0.059
LINE 88 8450	Soil	0.4	30.3	9.0	63	<0.1	37.5	12.1	414	3.21	5.0	1.0	2.7	6.1	32	0.1	0.3	0.2	55	0.32	0.048
LINE 88 8475	Soil	0.4	16.3	7.7	47	<0.1	24.4	10.7	541	2.41	3.9	0.8	1.9	4.7	30	<0.1	0.2	0.1	46	0.29	0.040
LINE 88 8500	Soil	0.5	29.9	7.3	95	<0.1	31.0	12.8	521	3.62	6.5	1.0	2.0	3.6	47	0.5	0.2	0.1	93	0.38	0.080

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	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.1	0.05	1
LINE 87 8625	Soil	16	36	0.64	107	0.064	2	1.63	0.024	0.13	<0.1	0.04	4.3	0.1	<0.05	4	<0.5
LINE 87 8650	Soil	14	37	0.58	102	0.058	2	1.54	0.010	0.12	<0.1	0.03	2.7	<0.1	<0.05	4	<0.5
LINE 87 8675	Soil	15	41	0.74	128	0.079	2	1.65	0.015	0.16	<0.1	0.04	3.5	<0.1	<0.05	6	<0.5
LINE 87 8700	Soil	13	38	0.62	117	0.084	3	1.50	0.020	0.13	<0.1	0.05	3.4	<0.1	<0.05	5	<0.5
LINE 87 8725	Soil	15	35	0.62	185	0.071	3	1.58	0.036	0.16	<0.1	0.10	5.9	<0.1	<0.05	5	<0.5
LINE 87 8750	Soil	16	39	0.73	221	0.072	7	1.97	0.045	0.13	<0.1	0.19	6.4	<0.1	<0.05	6	<0.5
LINE 87 8775	Soil	15	40	0.76	152	0.075	6	1.93	0.041	0.13	0.1	0.17	6.1	<0.1	<0.05	6	<0.5
LINE 87 8800	Soil	17	41	0.68	94	0.069	5	1.66	0.022	0.12	0.1	0.07	5.2	<0.1	<0.05	5	<0.5
LINE 87 8825	Soil	16	34	0.67	100	0.075	2	1.66	0.018	0.16	<0.1	0.04	4.7	<0.1	<0.05	5	<0.5
LINE 87 8850	Soil	10	54	0.77	221	0.123	4	2.70	0.017	0.18	0.1	0.04	4.9	<0.1	<0.05	7	<0.5
LINE 87 8875	Soil	34	76	0.95	381	0.064	8	4.12	0.019	0.24	0.2	0.20	16.5	0.2	<0.05	10	<0.5
LINE 87 8900	Soil	10	29	0.49	128	0.052	2	1.34	0.009	0.08	0.1	0.05	2.3	<0.1	<0.05	4	<0.5
LINE 87 8925	Soil	9	28	0.46	210	0.045	2	1.53	0.009	0.12	0.1	0.07	2.4	<0.1	<0.05	5	<0.5
LINE 87 8950	Soil	10	32	0.51	170	0.059	3	1.74	0.023	0.11	0.1	0.10	3.7	<0.1	<0.05	5	<0.5
LINE 88 8125	Soil	16	51	0.87	133	0.090	3	2.00	0.017	0.17	<0.1	0.05	5.0	0.1	<0.05	6	<0.5
LINE 88 8150	Soil	15	57	0.83	111	0.109	3	1.98	0.016	0.14	0.1	0.04	5.1	0.1	<0.05	6	<0.5
LINE 88 8175	Soil	15	53	0.77	101	0.073	2	1.64	0.019	0.13	0.4	0.04	5.6	<0.1	0.15	5	<0.5
LINE 88 8200	Soil	12	45	0.63	86	0.066	3	1.34	0.015	0.10	0.2	0.03	3.9	<0.1	0.14	4	0.6
LINE 88 8225	Soil	14	52	0.68	124	0.079	2	1.61	0.024	0.13	0.2	0.02	4.7	0.1	0.11	5	<0.5
LINE 88 8250	Soil	18	61	0.95	154	0.076	3	2.13	0.017	0.15	0.2	0.04	6.7	<0.1	0.09	6	0.9
LINE 88 8275	Soil	16	47	0.79	101	0.067	2	1.83	0.017	0.14	0.1	0.02	5.6	0.1	<0.05	5	<0.5
LINE 88 8300	Soil	21	61	0.95	122	0.074	3	2.31	0.024	0.20	0.2	0.06	7.3	0.2	<0.05	7	<0.5
LINE 88 8325	Soil	20	58	1.00	132	0.083	3	2.21	0.030	0.18	0.2	0.03	6.8	0.1	<0.05	7	0.6
LINE 88 8350	Soil	19	74	1.24	157	0.093	3	2.64	0.028	0.19	0.2	0.04	9.0	0.1	<0.05	8	<0.5
LINE 88 8375	Soil	20	57	0.99	114	0.078	2	2.16	0.036	0.21	0.2	0.06	6.5	0.2	<0.05	7	0.9
LINE 88 8400	Soil	18	52	0.81	121	0.088	2	1.94	0.029	0.21	0.1	<0.01	5.3	<0.1	<0.05	7	<0.5
LINE 88 8425	Soil	21	50	0.87	104	0.072	2	1.93	0.022	0.20	<0.1	0.04	5.9	0.1	<0.05	6	<0.5
LINE 88 8450	Soil	19	52	0.83	103	0.083	2	1.99	0.024	0.21	0.2	0.03	6.0	0.1	<0.05	6	<0.5
LINE 88 8475	Soil	18	37	0.58	76	0.068	2	1.34	0.028	0.12	0.1	0.02	3.3	<0.1	<0.05	4	<0.5
LINE 88 8500	Soil	14	45	0.54	100	0.066	2	1.30	0.014	0.10	0.1	0.06	5.3	<0.1	<0.05	4	0.5

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	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	2	0.01
LINE 88 8525	Soil	0.4	60.3	9.3	56	0.4	41.2	9.4	252	2.99	5.0	2.3	2.8	3.4	56	0.3	0.2	0.2	61	0.52	0.032
LINE 88 8550	Soil	0.3	28.8	7.4	61	<0.1	32.8	10.1	335	2.73	4.5	1.2	1.9	4.7	37	0.1	0.2	0.1	54	0.27	0.024
LINE 88 8575	Soil	0.8	33.5	6.8	62	<0.1	26.0	9.5	574	3.15	7.0	1.0	3.9	3.1	72	0.2	0.4	0.1	88	0.35	0.096
LINE 88 8600	Soil	0.4	20.0	7.8	66	<0.1	28.4	11.6	439	3.18	5.8	0.7	1.7	4.9	34	<0.1	0.2	0.1	55	0.26	0.036
LINE 88 8625	Soil	0.8	31.5	7.8	43	<0.1	28.9	10.9	345	2.75	8.3	0.6	2.7	5.8	56	<0.1	0.3	0.2	50	0.41	0.064
LINE 88 8650	Soil	0.8	34.4	9.2	62	<0.1	40.0	17.6	765	4.09	13.6	0.9	1.5	4.8	110	<0.1	0.3	0.2	93	0.61	0.031
LINE 88 8675	Soil	1.7	38.0	9.0	83	0.1	39.9	17.9	1318	3.49	9.7	0.8	1.4	3.9	109	0.2	0.2	0.2	68	0.65	0.034
LINE 88 8700	Soil	0.5	62.6	9.4	80	0.2	37.1	14.3	606	3.42	5.8	1.7	1.4	3.8	50	0.2	0.3	0.2	73	0.55	0.035
LINE 88 8725	Soil	0.4	18.3	6.5	73	<0.1	25.7	10.5	368	3.00	4.7	0.5	1.0	3.8	42	0.2	0.2	0.1	66	0.35	0.105
LINE 88 8750	Soil	0.6	34.3	6.8	70	<0.1	35.3	15.1	672	3.98	9.5	0.8	1.5	4.2	63	0.2	0.4	0.1	95	0.49	0.074
LINE 88 8775	Soil	0.5	28.6	7.3	59	<0.1	26.4	11.2	479	3.15	8.0	0.9	<0.5	4.0	101	0.1	0.2	0.1	67	0.73	0.055
LINE 88 8800	Soil	0.3	19.4	6.7	48	<0.1	25.9	13.7	459	2.91	5.7	0.7	2.4	5.0	99	0.1	0.2	0.1	67	0.54	0.053
LINE 88 8875	Soil	0.4	42.3	6.3	68	0.1	26.9	14.2	1256	3.68	9.8	1.1	2.1	1.8	167	0.2	0.3	<0.1	103	1.68	0.047
LINE 88 8900	Soil	0.4	27.3	5.0	57	0.1	27.7	11.9	537	3.56	8.2	0.5	5.6	2.1	120	0.2	0.4	<0.1	111	0.85	0.131
LINE 88 8925	Soil	0.2	55.5	5.4	60	<0.1	10.6	13.3	857	3.05	12.5	0.7	5.8	2.1	94	<0.1	0.2	<0.1	99	1.80	0.058
LINE 89 8125	Soil	0.7	28.5	9.5	73	<0.1	36.9	14.8	571	3.05	5.0	0.9	0.8	4.5	48	0.3	0.3	0.2	60	0.52	0.043
LINE 89 8150	Soil	1.9	47.2	16.4	80	0.1	59.8	25.6	2932	4.99	10.0	1.6	2.9	10.1	61	0.2	0.3	0.4	80	0.60	0.051
LINE 89 8175	Soil	0.6	31.6	9.8	63	<0.1	39.4	14.2	588	3.66	7.0	1.2	2.2	5.8	55	<0.1	0.3	0.2	64	0.55	0.048
LINE 89 8200	Soil	0.5	37.5	11.1	69	<0.1	45.0	16.1	519	3.75	7.6	0.9	3.1	6.0	62	0.1	0.3	0.2	64	0.56	0.034
LINE 89 8225	Soil	0.5	36.5	8.4	76	<0.1	38.7	14.1	580	3.40	5.0	1.2	2.5	4.6	55	0.2	0.2	0.2	63	0.45	0.027
LINE 89 8250	Soil	1.0	41.8	11.1	72	0.2	51.5	20.6	1310	4.07	8.5	2.0	4.2	6.1	79	0.2	0.3	0.2	77	0.57	0.040
LINE 89 8275	Soil	0.9	46.9	12.2	77	<0.1	57.6	22.7	625	4.47	7.8	1.5	2.2	6.3	105	0.1	0.3	0.2	84	0.68	0.034
LINE 89 8300	Soil	0.6	33.4	8.2	78	<0.1	30.0	12.9	614	3.23	7.9	1.4	24.8	3.4	70	0.3	0.3	0.2	65	0.46	0.036
LINE 89 8325	Soil	0.6	42.0	11.4	69	<0.1	44.4	16.5	650	3.81	9.9	1.6	3.9	5.7	64	0.1	0.4	0.2	69	0.45	0.041
LINE 89 8350	Soil	0.6	52.8	10.0	65	0.1	41.8	13.3	550	3.69	10.7	1.4	3.5	5.7	68	0.1	0.4	0.2	69	0.58	0.065
LINE 89 8375	Soil	0.7	30.7	7.3	108	<0.1	24.6	12.2	548	3.40	6.3	0.8	2.4	2.7	43	0.5	0.3	0.1	76	0.32	0.082
LINE 89 8400	Soil	0.3	20.3	6.5	66	<0.1	25.4	8.4	281	2.61	4.3	0.5	0.7	3.4	46	0.1	0.2	0.1	53	0.28	0.059
LINE 89 8425	Soil	0.4	27.3	7.2	72	<0.1	27.1	11.1	423	2.95	6.5	0.5	1.6	3.9	45	0.3	0.2	0.1	58	0.37	0.078
LINE 89 8450	Soil	0.9	53.3	8.5	126	0.1	40.7	15.5	959	4.37	6.9	1.5	1.3	3.6	55	0.6	0.3	0.2	102	0.39	0.045
LINE 89 8475	Soil	1.0	78.0	10.2	80	0.3	45.8	14.4	751	4.52	11.2	3.8	2.2	3.1	73	0.5	0.4	0.2	102	0.62	0.052

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LINE	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 88 8525	Soil	17	50	0.63	165	0.051	2	1.88	0.016	0.12	0.1	0.07	6.7	<0.1	<0.05	5	0.6
LINE 88 8550	Soil	19	43	0.61	132	0.060	1	1.72	0.023	0.12	0.1	0.04	5.6	<0.1	<0.05	5	<0.5
LINE 88 8575	Soil	15	44	0.39	91	0.040	3	1.18	0.017	0.11	<0.1	0.16	5.8	<0.1	<0.05	4	<0.5
LINE 88 8600	Soil	18	41	0.74	99	0.077	3	1.77	0.032	0.20	0.1	0.02	5.9	0.1	<0.05	5	<0.5
LINE 88 8625	Soil	18	35	0.63	131	0.047	2	1.44	0.029	0.12	<0.1	0.06	4.9	0.1	<0.05	4	<0.5
LINE 88 8650	Soil	14	52	0.78	173	0.067	4	2.23	0.030	0.17	0.1	0.10	8.2	0.1	<0.05	6	<0.5
LINE 88 8675	Soil	19	49	0.75	156	0.067	6	2.20	0.025	0.14	<0.1	0.10	6.6	0.1	<0.05	6	<0.5
LINE 88 8700	Soil	44	51	0.74	166	0.070	12	2.09	0.019	0.16	0.2	0.08	7.6	<0.1	<0.05	6	0.7
LINE 88 8725	Soil	14	44	0.62	115	0.076	2	1.61	0.021	0.15	<0.1	0.02	3.2	<0.1	<0.05	5	<0.5
LINE 88 8750	Soil	17	55	0.61	144	0.082	4	1.56	0.019	0.13	<0.1	0.04	5.8	<0.1	<0.05	5	<0.5
LINE 88 8775	Soil	15	42	0.71	166	0.068	5	1.81	0.021	0.15	0.1	0.07	5.1	<0.1	<0.05	5	<0.5
LINE 88 8800	Soil	15	42	0.68	139	0.082	4	1.73	0.033	0.13	0.1	0.04	4.6	0.1	<0.05	5	<0.5
LINE 88 8875	Soil	9	36	0.88	180	0.088	4	3.53	0.090	0.16	0.2	0.05	8.6	<0.1	<0.05	9	<0.5
LINE 88 8900	Soil	8	48	0.65	155	0.104	4	2.68	0.016	0.14	0.2	0.04	4.3	<0.1	<0.05	6	<0.5
LINE 88 8925	Soil	11	12	0.89	126	0.086	4	3.04	0.049	0.21	<0.1	0.12	7.7	<0.1	<0.05	10	<0.5
LINE 89 8125	Soil	17	54	0.83	106	0.098	3	1.78	0.025	0.20	0.1	0.02	5.2	0.1	<0.05	5	<0.5
LINE 89 8150	Soil	25	71	1.15	288	0.103	3	2.69	0.020	0.41	0.2	0.05	7.6	0.3	<0.05	8	0.5
LINE 89 8175	Soil	20	56	0.89	118	0.077	3	1.99	0.024	0.18	0.1	0.03	7.0	<0.1	<0.05	6	<0.5
LINE 89 8200	Soil	19	57	1.03	130	0.087	2	2.17	0.018	0.20	0.2	0.05	6.0	0.1	<0.05	6	<0.5
LINE 89 8225	Soil	19	54	0.91	114	0.082	3	1.94	0.023	0.18	<0.1	0.01	5.4	<0.1	<0.05	6	<0.5
LINE 89 8250	Soil	24	63	1.05	159	0.089	2	2.37	0.029	0.22	<0.1	0.05	8.2	0.1	<0.05	7	0.8
LINE 89 8275	Soil	21	71	1.37	176	0.102	4	2.79	0.045	0.27	0.1	0.06	8.4	0.1	<0.05	8	<0.5
LINE 89 8300	Soil	15	44	0.67	143	0.059	3	1.62	0.016	0.11	<0.1	0.04	5.1	<0.1	<0.05	5	0.5
LINE 89 8325	Soil	20	56	0.89	151	0.075	3	2.04	0.017	0.18	0.1	0.06	6.8	0.1	<0.05	7	0.7
LINE 89 8350	Soil	20	49	0.78	159	0.068	3	1.88	0.016	0.15	0.1	0.08	6.7	0.1	<0.05	6	0.7
LINE 89 8375	Soil	13	43	0.44	125	0.044	1	1.21	0.013	0.11	0.1	0.04	3.9	<0.1	<0.05	5	<0.5
LINE 89 8400	Soil	15	36	0.60	90	0.061	<1	1.36	0.011	0.09	<0.1	0.02	3.0	<0.1	<0.05	4	<0.5
LINE 89 8425	Soil	15	37	0.61	93	0.063	2	1.51	0.013	0.12	<0.1	0.04	3.2	<0.1	<0.05	5	<0.5
LINE 89 8450	Soil	17	60	0.63	157	0.056	2	1.46	0.013	0.12	<0.1	0.04	7.9	0.1	<0.05	5	0.7
LINE 89 8475	Soil	24	59	0.57	192	0.031	2	1.77	0.014	0.13	0.1	0.07	9.5	<0.1	<0.05	5	1.2

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	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	2	0.01
LINE 89 8500	Soil	0.7	42.2	9.0	58	<0.1	33.5	12.6	542	3.55	12.2	1.5	3.0	4.8	59	0.2	0.3	0.2	73	0.51	0.036
LINE 89 8525	Soil	0.6	31.5	7.7	84	<0.1	25.6	12.5	564	2.97	6.9	0.7	1.4	2.1	68	0.5	0.2	0.1	56	0.80	0.043
LINE 89 8550	Soil	0.9	24.8	7.9	51	<0.1	29.1	9.0	344	3.34	9.6	1.2	0.7	4.5	55	<0.1	0.2	0.2	65	0.47	0.033
LINE 89 8575	Soil	0.8	32.7	9.3	66	0.1	30.8	13.0	885	3.59	9.0	1.1	3.0	4.6	68	0.1	0.2	0.2	66	0.64	0.039
LINE 89 8600	Soil	0.6	35.9	8.3	58	<0.1	34.5	11.7	578	3.65	9.5	0.9	3.8	4.7	100	<0.1	0.2	0.2	78	0.69	0.051
LINE 89 8625	Soil	1.6	46.4	9.9	61	0.1	44.3	16.1	1158	4.05	13.0	0.8	2.2	5.5	97	0.2	0.3	0.2	84	0.67	0.038
LINE 89 8650	Soil	0.7	56.0	9.1	88	0.2	38.7	12.8	511	3.66	6.9	1.8	2.9	4.1	56	0.3	0.3	0.2	77	0.42	0.031
LINE 89 8675	Soil	0.5	25.7	6.3	106	0.1	31.3	11.5	513	3.15	6.8	1.2	2.3	3.3	53	0.3	0.3	0.1	68	0.43	0.047
LINE 89 8700	Soil	0.7	69.8	10.4	74	0.2	52.3	13.8	442	4.74	8.0	2.1	3.7	6.8	69	<0.1	0.3	0.2	92	0.53	0.020
LINE 89 8725	Soil	0.6	26.2	6.9	73	<0.1	31.0	13.2	393	3.45	7.0	0.5	1.2	4.4	35	0.1	0.3	0.1	64	0.25	0.074
LINE 89 8750	Soil	0.6	16.2	7.0	161	0.2	22.8	9.6	376	3.24	6.3	0.5	1.5	3.3	34	0.3	0.2	0.1	57	0.30	0.178
LINE 89 8800	Soil	0.4	28.2	7.3	67	<0.1	25.9	11.6	531	3.05	6.4	0.7	0.7	2.8	95	0.2	0.2	0.1	70	0.57	0.031
LINE 89 8825	Soil	0.6	65.7	7.5	69	<0.1	46.7	17.0	804	4.34	11.4	0.6	4.2	4.1	225	<0.1	0.4	0.1	116	1.27	0.092
LINE 89 8850	Soil	1.0	50.9	7.1	56	<0.1	41.9	17.6	1431	3.91	11.9	0.6	7.6	3.7	197	0.1	0.4	0.1	116	1.20	0.081
LINE 89 8875	Soil	0.5	43.1	7.5	51	<0.1	39.5	15.9	1270	3.75	29.5	0.4	2.7	3.7	162	<0.1	0.4	0.1	102	0.93	0.041
LINE 90 8125	Soil	0.5	40.2	8.6	65	<0.1	36.2	12.6	548	3.31	9.0	0.7	2.8	4.4	71	0.1	0.4	0.2	69	0.55	0.076
LINE 90 8150	Soil	0.6	32.5	9.7	84	<0.1	39.8	14.3	527	3.52	7.1	0.7	1.6	5.5	51	0.3	0.3	0.2	59	0.37	0.047
LINE 90 8175	Soil	0.7	47.8	12.7	74	0.2	45.8	14.4	689	3.97	8.9	1.0	4.7	4.8	73	0.2	0.2	0.3	65	0.64	0.041
LINE 90 8200	Soil	0.8	34.9	11.0	67	<0.1	42.4	15.7	620	3.95	9.9	0.6	2.9	6.9	63	<0.1	0.4	0.2	65	0.48	0.052
LINE 90 8225	Soil	0.7	37.2	10.6	62	<0.1	42.9	14.2	583	3.54	6.9	0.8	0.8	5.2	61	0.2	0.3	0.2	55	0.58	0.029
LINE 90 8250	Soil	0.8	32.6	8.5	66	0.2	34.8	11.0	1347	2.86	3.9	1.3	3.2	3.6	57	0.3	0.2	0.2	49	0.55	0.035
LINE 90 8275	Soil	0.7	51.8	10.0	78	0.3	46.8	13.0	508	3.43	6.6	3.0	2.9	2.6	70	0.4	0.3	0.2	59	0.78	0.057
LINE 90 8300	Soil	0.5	26.2	8.0	88	<0.1	31.6	11.2	430	2.73	4.1	0.9	1.4	3.7	43	0.3	0.2	0.2	46	0.39	0.026
LINE 90 8325	Soil	0.5	35.2	10.4	78	<0.1	41.5	14.8	518	3.51	7.0	1.0	2.9	5.9	48	0.3	0.4	0.2	51	0.39	0.033
LINE 90 8350	Soil	0.3	13.0	5.2	38	<0.1	23.1	7.3	265	2.05	3.6	0.6	1.7	4.0	25	<0.1	0.1	<0.1	35	0.20	0.022
LINE 90 8375	Soil	0.9	35.2	7.7	89	<0.1	32.6	12.3	620	3.69	6.8	0.9	1.9	4.2	51	0.3	0.3	0.1	88	0.37	0.039
LINE 90 8400	Soil	0.7	37.9	8.7	78	<0.1	29.9	10.9	416	3.44	10.2	1.2	1.8	3.9	54	0.3	0.4	0.1	75	0.39	0.050
LINE 90 8425	Soil	0.3	22.2	7.3	46	<0.1	24.4	8.2	299	2.50	7.4	0.8	1.6	3.7	48	0.1	0.2	0.1	47	0.32	0.023
LINE 90 8450	Soil	0.5	16.1	6.3	106	<0.1	19.8	9.9	326	2.65	5.1	0.5	1.2	2.4	35	0.4	0.2	0.1	55	0.36	0.051
LINE 90 8500	Soil	0.4	20.4	7.8	59	<0.1	27.5	8.1	279	3.08	4.9	0.8	1.9	4.0	46	<0.1	0.1	0.2	54	0.45	0.038

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	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 89 8500	Soil	19	50	0.68	188	0.057	2	1.92	0.017	0.15	0.1	0.09	7.1	0.1	<0.05	6	0.7
LINE 89 8525	Soil	15	37	0.62	172	0.041	4	1.58	0.012	0.10	<0.1	0.07	3.8	<0.1	<0.05	5	0.5
LINE 89 8550	Soil	17	42	0.70	154	0.054	2	1.83	0.018	0.08	<0.1	0.05	4.8	0.1	<0.05	6	0.7
LINE 89 8575	Soil	15	46	0.78	160	0.059	3	2.03	0.018	0.12	0.1	0.06	6.2	<0.1	<0.05	6	<0.5
LINE 89 8600	Soil	17	50	0.80	166	0.068	4	1.97	0.022	0.14	0.1	0.07	6.9	<0.1	<0.05	6	0.5
LINE 89 8625	Soil	19	50	0.90	261	0.081	4	2.14	0.033	0.15	0.1	0.13	6.8	0.1	<0.05	7	<0.5
LINE 89 8650	Soil	22	55	0.77	209	0.069	2	2.29	0.015	0.14	0.1	0.04	7.2	<0.1	<0.05	7	0.6
LINE 89 8675	Soil	15	48	0.64	128	0.068	4	1.57	0.018	0.11	<0.1	0.03	4.4	<0.1	<0.05	5	0.6
LINE 89 8700	Soil	24	72	1.15	280	0.099	3	2.86	0.022	0.15	<0.1	0.06	9.8	0.1	<0.05	9	0.6
LINE 89 8725	Soil	16	46	0.73	123	0.086	<1	1.74	0.013	0.13	<0.1	0.03	3.0	<0.1	<0.05	6	<0.5
LINE 89 8750	Soil	14	38	0.56	158	0.057	1	1.88	0.009	0.10	0.1	0.05	2.6	<0.1	<0.05	6	<0.5
LINE 89 8800	Soil	13	39	0.65	118	0.084	3	1.69	0.019	0.09	0.1	0.03	4.2	<0.1	<0.05	6	<0.5
LINE 89 8825	Soil	15	73	1.30	220	0.126	6	2.66	0.047	0.15	0.2	0.06	9.2	<0.1	<0.05	8	<0.5
LINE 89 8850	Soil	14	61	1.14	199	0.121	7	2.52	0.058	0.12	0.2	0.06	8.9	<0.1	<0.05	7	<0.5
LINE 89 8875	Soil	14	60	1.05	164	0.121	5	2.49	0.039	0.13	0.2	0.07	8.7	<0.1	<0.05	7	<0.5
LINE 90 8125	Soil	18	48	0.79	115	0.089	3	1.84	0.017	0.16	0.2	0.07	5.4	0.1	<0.05	6	0.7
LINE 90 8150	Soil	19	52	0.83	116	0.084	2	1.88	0.015	0.17	<0.1	0.04	4.6	0.1	<0.05	6	<0.5
LINE 90 8175	Soil	19	54	0.97	196	0.074	3	2.31	0.016	0.20	<0.1	0.02	6.4	0.1	<0.05	7	0.5
LINE 90 8200	Soil	23	53	0.93	138	0.088	3	2.00	0.024	0.17	0.1	0.03	5.7	0.2	<0.05	6	<0.5
LINE 90 8225	Soil	19	50	0.86	149	0.079	1	2.02	0.015	0.16	<0.1	0.03	5.3	0.1	<0.05	6	0.6
LINE 90 8250	Soil	21	43	0.73	167	0.073	2	1.71	0.017	0.11	<0.1	0.06	5.3	0.1	<0.05	5	0.8
LINE 90 8275	Soil	27	49	0.73	223	0.050	5	2.23	0.017	0.13	0.1	0.10	7.6	0.1	<0.05	6	1.4
LINE 90 8300	Soil	20	42	0.67	129	0.059	1	1.60	0.012	0.09	0.1	0.02	3.8	<0.1	<0.05	5	0.5
LINE 90 8325	Soil	21	47	0.87	140	0.077	2	1.99	0.015	0.17	<0.1	0.04	4.9	0.1	<0.05	6	0.6
LINE 90 8350	Soil	15	29	0.52	81	0.056	<1	1.13	0.011	0.08	<0.1	0.03	3.1	<0.1	<0.05	4	<0.5
LINE 90 8375	Soil	18	49	0.68	139	0.063	2	1.51	0.013	0.13	0.1	0.07	6.8	<0.1	<0.05	5	<0.5
LINE 90 8400	Soil	16	46	0.53	149	0.045	3	1.45	0.013	0.14	<0.1	0.07	6.3	0.1	<0.05	5	0.7
LINE 90 8425	Soil	16	33	0.60	125	0.059	1	1.31	0.013	0.09	<0.1	0.03	3.9	<0.1	<0.05	4	<0.5
LINE 90 8450	Soil	11	30	0.50	145	0.037	4	1.23	0.012	0.09	<0.1	0.02	2.5	<0.1	0.10	5	<0.5
LINE 90 8500	Soil	15	39	0.77	108	0.041	4	1.77	0.011	0.09	<0.1	0.02	3.5	<0.1	0.09	5	<0.5



# CERTIFICATE OF ANALYSIS

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	Method	Analyte	Unit	MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15		
					Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
					ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
					0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	2	0.01
LINE 90 8525	Soil			0.5	61.6	9.0	77	<0.1	46.3	17.3	725	4.30	14.8	0.6	3.1	4.8	91	<0.1	0.4	0.2	97	0.58	0.072	
LINE 90 8550	Soil			0.6	26.6	7.0	81	<0.1	27.9	11.9	491	3.43	7.9	0.6	2.1	2.4	59	0.2	0.2	0.2	72	0.37	0.063	
LINE 90 8575	Soil			1.0	37.8	9.0	61	0.3	38.0	13.7	1031	3.81	6.1	1.1	2.2	4.5	95	<0.1	0.2	0.2	74	0.70	0.041	
LINE 90 8600	Soil			0.5	22.3	6.2	80	<0.1	28.1	11.3	420	3.18	7.1	0.5	<0.5	3.3	41	0.3	0.3	0.1	74	0.28	0.071	
LINE 90 8625	Soil			0.4	25.7	6.0	56	<0.1	28.7	9.9	397	3.20	6.9	0.7	2.0	3.9	47	<0.1	0.2	0.1	68	0.31	0.050	
LINE 90 8650	Soil			0.4	23.9	6.6	70	<0.1	29.6	11.0	280	3.08	6.4	0.5	<0.5	4.5	26	0.1	0.2	0.1	56	0.21	0.083	
LINE 90 8675	Soil			0.6	30.8	6.0	82	<0.1	29.3	11.8	354	3.17	7.9	0.6	1.9	3.2	29	0.2	0.2	0.1	76	0.23	0.088	
LINE 90 8700	Soil			0.5	24.5	5.9	114	<0.1	27.0	9.7	367	3.49	8.0	0.5	1.2	3.1	45	0.2	0.2	0.1	80	0.31	0.144	
LINE 90 8725	Soil			1.2	29.9	8.2	73	<0.1	29.7	13.7	602	3.28	14.8	0.9	1.9	3.1	57	0.2	0.3	0.1	83	0.40	0.068	
LINE 90 8750	Soil			0.4	26.5	6.5	54	<0.1	28.3	12.7	426	2.98	5.2	1.0	<0.5	3.2	50	0.2	0.2	0.1	69	0.39	0.014	
LINE 90 8775	Soil			0.7	64.2	9.0	81	0.2	40.6	17.7	1136	3.72	8.7	1.2	3.3	3.4	73	0.5	0.3	0.2	85	0.82	0.051	
LINE 90 8800	Soil			1.4	32.5	8.5	54	<0.1	30.3	15.1	856	4.03	13.6	0.6	2.4	4.0	634	0.1	0.4	0.1	99	0.74	0.038	
LINE 90 8825	Soil			0.3	47.4	6.1	68	<0.1	27.8	14.2	735	3.23	8.0	0.6	2.3	2.5	115	0.1	0.4	<0.1	100	1.11	0.074	
LINE 91 8125	Soil			0.3	19.3	7.2	68	<0.1	29.1	11.0	360	2.85	4.4	0.6	1.2	4.2	31	0.1	0.3	0.1	47	0.32	0.052	
LINE 91 8150	Soil			0.5	28.9	8.1	74	<0.1	34.7	13.4	419	3.11	4.5	0.8	1.1	3.9	41	0.4	0.3	0.1	53	0.40	0.037	
LINE 91 8175	Soil			0.7	16.5	7.7	43	<0.1	26.3	11.4	446	3.30	5.7	0.8	1.4	4.5	42	<0.1	0.2	0.2	55	0.41	0.040	
LINE 91 8200	Soil			0.5	36.6	10.5	70	<0.1	41.0	14.5	542	3.66	6.6	0.9	1.6	5.7	35	0.1	0.4	0.2	60	0.42	0.068	
LINE 91 8225	Soil			0.8	50.2	9.4	187	0.4	40.0	14.9	2311	3.19	5.6	2.4	0.9	4.3	48	0.8	0.2	0.2	53	0.63	0.062	
LINE 91 8250	Soil			0.4	27.5	8.7	64	<0.1	37.0	11.7	424	3.17	5.2	1.2	1.3	4.8	32	0.1	0.2	0.2	50	0.35	0.039	
LINE 91 8275	Soil			0.4	33.5	9.5	64	<0.1	43.1	12.8	487	3.62	6.4	1.3	2.2	6.3	34	0.1	0.3	0.2	55	0.37	0.035	
LINE 91 8300	Soil			0.7	30.1	7.2	105	<0.1	36.3	13.8	628	3.60	5.4	0.9	1.4	3.1	38	0.5	0.2	0.1	78	0.33	0.056	
LINE 91 8325	Soil			0.4	22.5	5.7	54	<0.1	28.3	9.6	483	2.65	4.3	0.7	1.6	4.1	31	0.1	0.3	<0.1	45	0.31	0.058	
LINE 91 8350	Soil			0.3	13.9	5.0	46	<0.1	18.7	7.0	209	2.15	3.8	0.5	1.3	3.1	22	<0.1	0.1	<0.1	39	0.16	0.032	
LINE 91 8375	Soil			0.4	24.2	7.0	47	<0.1	25.1	12.5	472	2.61	6.2	0.6	3.0	4.8	49	<0.1	0.2	0.1	49	0.33	0.062	
LINE 91 8400	Soil			0.5	16.1	5.7	62	<0.1	16.2	7.2	405	2.30	4.2	0.4	<0.5	2.0	56	0.2	0.2	0.1	50	0.33	0.050	
LINE 91 8425	Soil			1.3	23.5	5.9	83	<0.1	26.4	12.4	322	3.69	22.8	0.5	<0.5	3.1	37	0.1	0.3	0.1	69	0.20	0.108	
LINE 91 8450	Soil			0.4	18.8	7.0	54	<0.1	24.5	10.5	356	2.80	6.4	0.4	<0.5	3.7	49	<0.1	0.1	0.1	47	0.24	0.051	
LINE 91 8475	Soil			0.5	20.3	6.6	112	<0.1	29.2	10.6	376	3.55	7.4	0.5	<0.5	3.5	58	0.3	0.2	0.2	63	0.28	0.129	
LINE 91 8500	Soil			0.4	23.6	7.0	97	<0.1	29.1	11.5	435	3.20	6.1	0.6	0.8	4.0	37	0.3	0.2	0.2	62	0.30	0.066	
LINE 91 8525	Soil			0.4	20.9	6.5	66	<0.1	27.6	9.7	312	2.92	5.5	0.7	<0.5	4.0	37	<0.1	0.2	<0.1	58	0.29	0.037	

# CERTIFICATE OF ANALYSIS

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LINE	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1
LINE 90 8525	Soil	16	57	0.97	192	0.079	4	2.49	0.033	0.22	0.1	0.10	9.5	0.1	<0.05	7
LINE 90 8550	Soil	15	42	0.75	115	0.061	3	1.94	0.025	0.15	0.1	0.04	3.4	0.1	<0.05	6
LINE 90 8575	Soil	13	50	0.83	206	0.064	5	2.28	0.028	0.17	0.1	0.06	7.9	<0.1	<0.05	7
LINE 90 8600	Soil	14	44	0.63	145	0.069	3	1.77	0.025	0.20	<0.1	0.02	3.8	<0.1	<0.05	5
LINE 90 8625	Soil	16	45	0.71	123	0.066	5	1.65	0.027	0.20	0.1	0.04	6.0	<0.1	<0.05	5
LINE 90 8650	Soil	15	43	0.71	119	0.068	11	1.83	0.038	0.20	<0.1	0.03	3.9	0.1	<0.05	5
LINE 90 8675	Soil	11	44	0.61	148	0.051	2	1.95	0.012	0.13	0.1	0.06	4.3	<0.1	<0.05	5
LINE 90 8700	Soil	11	44	0.65	249	0.072	3	2.07	0.020	0.14	0.1	0.09	3.7	<0.1	<0.05	6
LINE 90 8725	Soil	15	41	0.65	213	0.075	4	1.68	0.037	0.21	0.1	0.23	4.7	0.1	<0.05	5
LINE 90 8750	Soil	16	46	0.66	141	0.074	2	1.49	0.026	0.11	0.1	0.04	4.1	<0.1	<0.05	5
LINE 90 8775	Soil	18	55	0.81	151	0.068	5	2.17	0.022	0.14	0.1	0.14	7.1	<0.1	<0.05	6
LINE 90 8800	Soil	14	43	0.77	333	0.060	5	2.10	0.045	0.17	0.1	0.07	6.5	0.1	<0.05	6
LINE 90 8825	Soil	11	47	0.71	124	0.080	5	1.82	0.023	0.13	0.2	0.07	5.5	<0.1	0.06	6
LINE 91 8125	Soil	17	44	0.75	80	0.076	3	1.55	0.045	0.23	0.2	0.02	4.6	0.1	<0.05	6
LINE 91 8150	Soil	19	45	0.73	91	0.062	3	1.72	0.020	0.16	<0.1	0.02	3.5	<0.1	<0.05	5
LINE 91 8175	Soil	16	42	0.67	110	0.064	3	1.47	0.017	0.15	<0.1	0.03	4.4	0.1	<0.05	5
LINE 91 8200	Soil	21	55	0.92	103	0.074	2	2.02	0.033	0.22	<0.1	0.04	5.4	0.2	<0.05	6
LINE 91 8225	Soil	27	43	0.65	180	0.051	3	1.78	0.015	0.15	0.1	0.07	5.2	0.1	<0.05	5
LINE 91 8250	Soil	19	43	0.71	140	0.058	2	1.85	0.010	0.13	<0.1	0.04	4.1	0.1	<0.05	6
LINE 91 8275	Soil	19	52	0.88	160	0.072	2	2.03	0.029	0.21	0.1	0.07	6.4	0.1	<0.05	6
LINE 91 8300	Soil	17	51	0.55	155	0.042	3	1.46	0.011	0.13	<0.1	0.08	6.3	0.1	0.07	4
LINE 91 8325	Soil	18	36	0.65	93	0.046	2	1.40	0.015	0.12	<0.1	0.04	4.2	0.1	<0.05	4
LINE 91 8350	Soil	15	30	0.45	82	0.033	2	1.20	0.009	0.07	<0.1	0.02	2.1	<0.1	<0.05	4
LINE 91 8375	Soil	16	38	0.69	132	0.052	2	1.79	0.044	0.15	0.1	0.06	4.5	<0.1	<0.05	5
LINE 91 8400	Soil	13	28	0.46	167	0.040	3	1.16	0.007	0.10	<0.1	0.05	1.9	<0.1	<0.05	5
LINE 91 8425	Soil	13	36	0.60	151	0.028	2	1.99	0.013	0.12	<0.1	0.03	2.7	0.1	<0.05	6
LINE 91 8450	Soil	16	38	0.66	95	0.050	8	1.76	0.025	0.16	0.6	0.04	3.3	0.1	<0.05	5
LINE 91 8475	Soil	15	38	0.68	173	0.061	3	2.14	0.014	0.14	0.1	0.06	2.9	0.1	<0.05	7
LINE 91 8500	Soil	16	44	0.70	131	0.067	4	1.71	0.031	0.22	0.1	0.02	4.6	0.1	<0.05	5
LINE 91 8525	Soil	19	43	0.67	117	0.063	4	1.59	0.035	0.18	<0.1	0.03	5.1	<0.1	<0.05	5

## CERTIFICATE OF ANALYSIS

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	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
LINE 91 8550	Soil	0.4	12.0	4.9	83	0.1	15.1	6.9	498	2.24	3.0	0.4	<0.5	2.8	27	0.2	0.2	0.1	47	0.27	0.034
LINE 91 8625	Soil	0.9	35.7	7.0	123	<0.1	25.9	10.7	716	3.49	10.7	0.5	1.4	1.9	37	0.2	0.3	0.1	92	0.26	0.151
LINE 91 8650	Soil	0.8	22.4	5.7	181	0.1	38.6	13.5	325	3.63	10.1	0.8	<0.5	3.2	39	0.2	0.2	0.1	84	0.26	0.241
LINE 91 8675	Soil	0.7	24.0	5.8	102	0.1	21.6	8.2	267	3.27	10.6	0.6	<0.5	3.1	29	0.1	0.3	0.1	75	0.20	0.119
LINE 91 8700	Soil	0.7	28.7	6.6	124	<0.1	32.5	12.3	384	3.63	8.3	0.6	2.1	3.6	42	0.2	0.3	0.2	82	0.25	0.119
LINE 91 8750	Soil	0.2	25.9	5.4	59	<0.1	29.4	10.3	385	3.02	4.8	0.6	1.9	3.7	74	<0.1	0.2	<0.1	73	0.50	0.073
LINE 91 8775	Soil	0.4	29.3	6.5	56	<0.1	28.5	12.2	584	3.12	7.8	0.5	2.0	3.1	107	0.1	0.3	0.1	86	0.61	0.066
LINE 91 8800	Soil	0.5	64.3	8.7	76	0.1	34.9	14.9	1143	3.24	6.6	1.1	2.1	2.1	89	0.5	0.3	0.2	80	0.82	0.045
LINE 92 8050	Soil	0.4	23.4	8.5	54	0.1	28.6	13.0	273	2.97	7.1	1.1	1.9	4.9	108	0.2	0.3	0.2	65	0.57	0.084
LINE 92 8075	Soil	0.4	21.4	9.9	68	0.2	26.8	11.9	254	3.20	3.6	1.2	1.8	5.2	59	<0.1	0.2	0.2	52	0.57	0.063
LINE 92 8100	Soil	0.5	19.3	6.8	40	<0.1	22.8	9.6	189	2.66	6.1	1.0	<0.5	3.8	70	<0.1	0.3	0.1	59	0.39	0.041
LINE 92 8125	Soil	0.4	20.2	8.7	54	0.3	27.1	10.7	305	2.48	3.6	1.0	<0.5	3.5	43	0.2	0.2	0.2	48	0.32	0.011

## CERTIFICATE OF ANALYSIS

VAN08009020.1

	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 91 8550	Soil	15	30	0.38	152	0.049	2	1.03	0.008	0.11	<0.1	0.03	2.3	<0.1	<0.05	4	<0.5
LINE 91 8625	Soil	8	41	0.38	319	0.062	2	1.86	0.013	0.08	0.1	0.11	2.8	<0.1	<0.05	7	<0.5
LINE 91 8650	Soil	10	46	0.62	337	0.068	4	2.75	0.011	0.12	0.1	0.08	4.1	<0.1	<0.05	8	<0.5
LINE 91 8675	Soil	13	38	0.46	164	0.066	3	1.54	0.010	0.11	<0.1	0.27	3.1	<0.1	<0.05	7	<0.5
LINE 91 8700	Soil	12	45	0.67	238	0.074	3	2.16	0.015	0.11	0.1	0.07	4.3	<0.1	<0.05	7	<0.5
LINE 91 8750	Soil	15	45	0.73	139	0.113	2	1.67	0.018	0.11	0.1	0.04	4.3	<0.1	<0.05	5	<0.5
LINE 91 8775	Soil	12	45	0.70	145	0.099	3	1.69	0.020	0.12	0.1	0.04	4.0	<0.1	<0.05	6	<0.5
LINE 91 8800	Soil	23	47	0.78	167	0.070	3	2.01	0.028	0.12	0.1	0.05	6.6	<0.1	<0.05	7	<0.5
LINE 92 8050	Soil	17	37	0.68	156	0.057	3	1.50	0.034	0.13	0.1	0.10	6.0	<0.1	<0.05	5	<0.5
LINE 92 8075	Soil	17	46	0.80	134	0.068	3	1.73	0.022	0.20	<0.1	0.08	6.2	0.1	<0.05	6	<0.5
LINE 92 8100	Soil	12	31	0.48	94	0.049	3	1.09	0.018	0.07	<0.1	0.06	4.7	<0.1	<0.05	4	<0.5
LINE 92 8125	Soil	17	37	0.52	163	0.083	3	1.48	0.035	0.09	<0.1	0.02	4.9	0.1	<0.05	5	<0.5

## QUALITY CONTROL REPORT

VAN08009020.1

Method	Analyte	Unit	MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15		
				Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
				0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
Pulp Duplicates																							
LINE 78 9000	Soil		0.4	26.1	7.1	49	<0.1	28.0	12.5	486	2.64	5.2	0.7	2.6	4.6	46	<0.1	0.3	0.1	62	0.34	0.062	
REP LINE 78 9000	QC		0.4	27.3	7.6	51	<0.1	30.9	12.9	499	2.81	5.0	0.7	2.7	4.9	49	<0.1	0.3	0.1	63	0.35	0.066	
LINE 79 8975	Soil		0.6	47.2	9.4	69	<0.1	40.5	14.6	535	3.94	9.4	0.8	2.6	6.2	53	<0.1	0.5	0.2	79	0.38	0.068	
REP LINE 79 8975	QC		0.6	46.4	9.5	73	<0.1	42.4	14.5	532	3.83	10.6	1.0	1.0	6.6	55	0.1	0.6	0.2	80	0.42	0.067	
LINE 81 8750	Soil		0.4	21.8	5.7	71	<0.1	27.1	10.6	442	2.82	5.5	0.6	0.9	3.3	38	0.3	0.2	<0.1	65	0.39	0.084	
REP LINE 81 8750	QC		0.4	24.8	5.9	72	<0.1	28.0	10.6	461	2.95	5.4	0.6	2.2	3.4	41	0.2	0.3	<0.1	68	0.41	0.081	
LINE 82 8750	Soil		0.3	16.9	5.7	56	<0.1	21.1	9.1	396	2.13	2.6	0.5	11.0	2.6	33	0.2	0.2	<0.1	45	0.33	0.045	
REP LINE 82 8750	QC		0.3	17.1	5.6	59	<0.1	21.6	8.9	405	2.01	2.7	0.5	11.5	2.7	33	0.2	0.2	0.1	42	0.32	0.043	
LINE 83 8825	Soil		0.4	22.9	6.7	50	<0.1	26.0	9.2	439	2.41	4.0	0.6	9.9	3.8	48	<0.1	0.2	0.1	53	0.28	0.042	
REP LINE 83 8825	QC		0.4	22.2	6.4	48	<0.1	25.6	10.1	463	2.48	4.1	0.6	7.4	3.6	48	<0.1	0.2	0.1	53	0.27	0.042	
LINE 84 8650	Soil		0.3	19.5	6.3	42	<0.1	24.5	8.2	268	2.28	4.3	1.0	2.1	4.1	35	<0.1	0.2	0.1	49	0.33	0.063	
REP LINE 84 8650	QC		0.3	19.9	6.2	41	<0.1	25.0	8.3	270	2.32	4.8	1.1	1.9	4.4	38	<0.1	0.2	0.1	50	0.36	0.066	
LINE 85 8850	Soil		0.4	17.9	5.6	61	<0.1	22.6	8.6	307	2.48	4.0	0.5	<0.5	3.4	33	<0.1	0.2	0.1	44	0.23	0.058	
REP LINE 85 8850	QC		0.4	17.7	5.5	59	<0.1	22.7	8.3	305	2.41	4.1	0.5	<0.5	3.5	32	0.1	0.2	0.1	44	0.22	0.060	
LINE 85 9000	Soil		0.4	42.3	8.0	61	<0.1	41.4	16.0	610	3.72	10.2	0.7	<0.5	5.2	55	<0.1	0.4	0.2	83	0.42	0.068	
REP LINE 85 9000	QC		0.4	41.3	7.5	61	<0.1	40.5	16.2	603	3.80	10.2	0.7	2.8	5.0	57	<0.1	0.3	0.2	82	0.42	0.067	
LINE 87 8800	Soil		0.5	30.3	6.1	66	<0.1	28.3	12.7	480	3.06	10.5	1.2	2.6	3.4	73	0.2	0.2	0.1	72	0.53	0.029	
REP LINE 87 8800	QC		0.5	30.1	5.8	67	<0.1	28.6	12.8	527	3.16	10.5	1.2	<0.5	3.8	73	0.1	0.3	0.1	75	0.56	0.029	
LINE 88 8525	Soil		0.4	60.3	9.3	56	0.4	41.2	9.4	252	2.99	5.0	2.3	2.8	3.4	56	0.3	0.2	0.2	61	0.52	0.032	
REP LINE 88 8525	QC		0.5	62.0	9.3	58	0.4	40.4	9.3	260	3.00	5.5	2.3	2.5	3.5	55	0.3	0.2	0.2	65	0.52	0.033	
LINE 88 8800	Soil		0.3	19.4	6.7	48	<0.1	25.9	13.7	459	2.91	5.7	0.7	2.4	5.0	99	0.1	0.2	0.1	67	0.54	0.053	
REP LINE 88 8800	QC		0.3	20.9	6.9	51	<0.1	27.4	14.8	466	3.00	5.5	0.7	2.0	4.3	97	0.1	0.2	0.1	69	0.54	0.051	
LINE 89 8425	Soil		0.4	27.3	7.2	72	<0.1	27.1	11.1	423	2.95	6.5	0.5	1.6	3.9	45	0.3	0.2	0.1	58	0.37	0.078	
REP LINE 89 8425	QC		0.4	26.7	6.8	71	<0.1	27.2	11.1	425	3.00	6.5	0.5	3.1	3.7	45	0.3	0.3	0.1	59	0.36	0.078	
LINE 90 8150	Soil		0.6	32.5	9.7	84	<0.1	39.8	14.3	527	3.52	7.1	0.7	1.6	5.5	51	0.3	0.3	0.2	59	0.37	0.047	
REP LINE 90 8150	QC		0.6	34.0	9.8	89	<0.1	39.5	14.8	537	3.51	7.2	0.7	1.6	5.8	52	0.2	0.3	0.2	60	0.38	0.047	
LINE 90 8525	Soil		0.5	61.6	9.0	77	<0.1	46.3	17.3	725	4.30	14.8	0.6	3.1	4.8	91	<0.1	0.4	0.2	97	0.58	0.072	
REP LINE 90 8525	QC		0.5	58.0	9.1	69	<0.1	45.2	16.5	734	4.28	14.7	0.7	9.7	4.9	93	<0.1	0.4	0.2	97	0.65	0.074	

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Method Analyte Unit MDL		1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Ti	S	Ga
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1
Pulp Duplicates																
LINE 78 9000	Soil	18	46	0.64	85	0.089	2	1.53	0.036	0.13	<0.1	0.02	4.1	<0.1	<0.05	4
REP LINE 78 9000	QC	16	47	0.67	91	0.093	2	1.57	0.022	0.13	0.1	0.02	4.0	<0.1	<0.05	5
LINE 79 8975	Soil	19	62	0.87	124	0.101	<1	2.46	0.016	0.19	<0.1	0.09	6.3	0.1	<0.05	6
REP LINE 79 8975	QC	21	59	0.89	123	0.110	<1	2.45	0.017	0.20	0.2	0.05	6.3	0.1	0.05	7
LINE 81 8750	Soil	15	44	0.62	83	0.075	<1	1.53	0.010	0.10	<0.1	0.02	2.8	<0.1	<0.05	4
REP LINE 81 8750	QC	16	48	0.61	83	0.086	1	1.59	0.014	0.11	<0.1	0.03	2.8	<0.1	<0.05	5
LINE 82 8750	Soil	14	33	0.52	71	0.062	2	1.30	0.024	0.08	<0.1	0.02	2.9	<0.1	<0.05	4
REP LINE 82 8750	QC	15	33	0.51	71	0.067	2	1.33	0.019	0.08	<0.1	0.01	2.8	<0.1	<0.05	4
LINE 83 8825	Soil	15	37	0.64	99	0.072	3	1.76	0.042	0.16	0.1	0.03	4.5	<0.1	<0.05	5
REP LINE 83 8825	QC	15	38	0.63	101	0.089	2	1.76	0.036	0.15	<0.1	0.03	4.6	0.1	<0.05	5
LINE 84 8650	Soil	14	37	0.52	62	0.064	<1	1.15	0.009	0.09	<0.1	0.03	3.6	<0.1	<0.05	3
REP LINE 84 8650	QC	15	37	0.54	63	0.067	1	1.19	0.016	0.09	0.1	0.03	3.6	<0.1	<0.05	3
LINE 85 8850	Soil	13	33	0.51	80	0.041	<1	1.32	0.007	0.09	<0.1	0.03	2.4	<0.1	<0.05	4
REP LINE 85 8850	QC	13	32	0.49	76	0.044	1	1.30	0.008	0.09	0.1	0.04	2.2	<0.1	<0.05	4
LINE 85 9000	Soil	15	57	0.81	125	0.081	5	2.03	0.023	0.22	0.2	0.07	7.1	0.2	<0.05	6
REP LINE 85 9000	QC	16	56	0.84	129	0.085	4	2.13	0.027	0.24	0.1	0.09	6.9	0.1	<0.05	6
LINE 87 8800	Soil	17	41	0.68	94	0.069	5	1.66	0.022	0.12	0.1	0.07	5.2	<0.1	<0.05	5
REP LINE 87 8800	QC	19	42	0.69	97	0.083	8	1.75	0.024	0.13	0.2	0.04	5.3	<0.1	<0.05	5
LINE 88 8525	Soil	17	50	0.63	165	0.051	2	1.88	0.016	0.12	0.1	0.07	6.7	<0.1	<0.05	5
REP LINE 88 8525	QC	18	53	0.61	165	0.056	1	1.86	0.012	0.12	<0.1	0.09	6.7	<0.1	<0.05	6
LINE 88 8800	Soil	15	42	0.68	139	0.082	4	1.73	0.033	0.13	0.1	0.04	4.6	0.1	<0.05	5
REP LINE 88 8800	QC	15	45	0.70	149	0.081	3	1.77	0.039	0.15	0.1	0.05	4.2	<0.1	<0.05	5
LINE 89 8425	Soil	15	37	0.61	93	0.063	2	1.51	0.013	0.12	<0.1	0.04	3.2	<0.1	<0.05	5
REP LINE 89 8425	QC	15	38	0.60	101	0.064	1	1.42	0.009	0.12	0.1	0.04	3.2	<0.1	<0.05	5
LINE 90 8150	Soil	19	52	0.83	116	0.084	2	1.88	0.015	0.17	<0.1	0.04	4.6	0.1	<0.05	6
REP LINE 90 8150	QC	19	51	0.85	115	0.081	2	1.89	0.016	0.17	<0.1	0.04	4.6	0.1	<0.05	6
LINE 90 8525	Soil	16	57	0.97	192	0.079	4	2.49	0.033	0.22	0.1	0.10	9.5	0.1	<0.05	7
REP LINE 90 8525	QC	15	58	0.97	195	0.073	4	2.48	0.028	0.21	0.1	0.12	9.7	0.1	<0.05	7

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		1DX15 Mo ppm 0.1	1DX15 Cu ppm 0.1	1DX15 Pb ppm 0.1	1DX15 Zn ppm 1	1DX15 Ag ppm 0.1	1DX15 Ni ppm 0.1	1DX15 Co ppm 0.1	1DX15 Mn ppm 1	1DX15 Fe % 0.01	1DX15 As ppm 0.5	1DX15 U ppm 0.1	1DX15 Au ppb 0.5	1DX15 Th ppm 0.1	1DX15 Sr ppm 1	1DX15 Cd ppm 0.1	1DX15 Sb ppm 0.1	1DX15 Bi ppm 0.1	1DX15 V ppm 2	1DX15 Ca % 0.01	1DX15 P % 0.001
LINE 91 8400	Soil	0.5	16.1	5.7	62	<0.1	16.2	7.2	405	2.30	4.2	0.4	<0.5	2.0	56	0.2	0.2	0.1	50	0.33	0.050
REP LINE 91 8400	QC	0.4	15.6	5.6	60	<0.1	17.4	7.1	399	2.15	4.7	0.4	<0.5	2.0	51	0.2	0.2	<0.1	47	0.33	0.046
Reference Materials																					
STD DS7	Standard	20.3	101.7	66.0	380	0.8	55.5	9.3	630	2.34	49.0	4.4	53.1	4.0	80	5.8	6.2	4.4	84	0.91	0.072
STD DS7	Standard	21.1	121.4	77.8	424	0.8	62.1	10.3	662	2.54	53.0	5.4	72.6	4.9	86	6.2	6.6	5.0	96	1.01	0.080
STD DS7	Standard	19.5	103.0	70.9	387	0.8	53.5	8.6	595	2.25	47.7	5.1	62.2	4.3	69	5.3	5.8	4.6	82	0.89	0.068
STD DS7	Standard	20.2	124.5	71.6	424	0.8	55.9	9.0	664	2.45	58.7	4.4	67.5	4.2	76	7.3	6.7	4.8	89	0.94	0.072
STD DS7	Standard	20.3	126.1	74.5	424	0.9	53.4	9.2	628	2.33	60.8	4.4	74.8	4.1	74	7.5	6.4	4.6	84	0.92	0.074
STD DS7	Standard	19.9	108.4	65.6	380	0.9	53.5	9.3	635	2.34	51.3	5.0	74.4	4.4	74	5.7	5.9	4.4	88	0.99	0.074
STD DS7	Standard	18.3	98.1	70.4	369	0.8	50.8	8.3	577	2.21	44.9	4.7	66.2	4.1	79	5.8	6.5	4.9	78	0.88	0.068
STD DS7	Standard	20.4	107.6	68.4	401	0.9	53.2	9.1	659	2.39	51.5	4.6	59.6	4.0	70	6.4	6.1	4.3	88	1.03	0.078
STD DS7	Standard	22.4	113.2	71.3	434	0.8	56.9	10.2	713	2.74	57.0	5.2	64.1	5.0	91	6.2	6.3	5.0	95	1.10	0.083
STD DS7 Expected		20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93	0.08
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001

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		1DX15 La ppm	1DX15 Cr ppm	1DX15 Mg %	1DX15 Ba ppm	1DX15 Ti %	1DX15 B ppm	1DX15 Al %	1DX15 Na %	1DX15 K %	1DX15 W ppm	1DX15 Hg ppm	1DX15 Sc ppm	1DX15 Ti ppm	1DX15 S %	1DX15 Ga ppm	1DX15 Se ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 91 8400	Soil	13	28	0.46	167	0.040	3	1.16	0.007	0.10	<0.1	0.05	1.9	<0.1	<0.05	5	<0.5
REP LINE 91 8400	QC	12	26	0.43	165	0.036	2	1.12	0.008	0.09	<0.1	0.04	1.9	<0.1	<0.05	4	<0.5
Reference Materials																	
STD DS7	Standard	13	189	1.05	371	0.125	35	1.04	0.094	0.44	3.7	0.20	2.4	4.1	0.15	4	2.7
STD DS7	Standard	15	220	1.08	394	0.143	40	1.08	0.103	0.48	3.5	0.20	2.5	4.3	0.23	5	2.9
STD DS7	Standard	12	189	0.99	380	0.115	37	0.95	0.088	0.43	3.8	0.20	2.5	4.3	0.18	4	3.5
STD DS7	Standard	13	178	1.07	398	0.134	39	1.02	0.087	0.47	3.9	0.19	2.5	4.4	0.14	5	3.8
STD DS7	Standard	13	167	1.02	375	0.132	37	1.02	0.097	0.46	3.7	0.20	2.6	4.2	0.15	5	3.1
STD DS7	Standard	13	195	1.05	376	0.124	35	1.05	0.103	0.46	3.6	0.20	2.7	4.1	0.25	5	3.7
STD DS7	Standard	13	184	1.01	377	0.126	39	0.99	0.097	0.46	3.6	0.18	2.5	4.2	0.19	4	3.9
STD DS7	Standard	12	201	1.10	382	0.115	39	1.04	0.101	0.49	4.0	0.21	2.6	4.4	0.21	5	3.3
STD DS7	Standard	15	223	1.18	416	0.141	39	1.16	0.098	0.54	4.1	0.22	2.8	4.6	0.26	5	4.1
STD DS7 Expected		13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	5	3.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5



**Client:** **Imperial Metals Corporation**  
 200 - 580 Hornby St.  
 Vancouver BC V6C 3B6 Canada

Submitted By: Steve Robertson  
 Receiving Lab: Canada-Vancouver  
 Received: September 05, 2008  
 Report Date: October 01, 2008  
 Page: 1 of 11

## CERTIFICATE OF ANALYSIS

VAN08009045.1

### CLIENT JOB INFORMATION

Project: None Given  
 Shipment ID:  
 P.O. Number  
 Number of Samples: 282

### SAMPLE DISPOSAL

RTRN-PLP Return  
 DISP-RJT Dispose of Reject After 90 days

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Imperial Metals Corporation  
 200 - 580 Hornby St.  
 Vancouver BC V6C 3B6  
 Canada

CC:

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
SS80	282	Dry at 60C sieve 100g to -80 mesh		
Dry at 60C	282	Dry at 60C		
RJSV	282	Save all or part of soil reject fraction		
1DX15	272	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed
DIS-RJT	282	Warehouse handling / Disposition of reject		

### ADDITIONAL COMMENTS



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.

## CERTIFICATE OF ANALYSIS

VAN08009045.1

	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	2	0.01
LINE 92 8150	Soil	0.5	29.5	10.1	61	<0.1	35.8	12.6	477	3.05	6.6	0.6	2.3	5.6	36	0.2	0.5	0.2	52	0.32	0.056
LINE 92 8175	Soil	0.2	16.8	4.8	54	<0.1	21.1	6.7	220	1.96	4.5	0.4	0.7	2.8	32	0.2	0.2	<0.1	43	0.20	0.056
LINE 92 8200	Soil	0.4	20.7	6.9	90	<0.1	29.9	10.7	461	2.79	4.3	0.6	2.2	4.5	29	0.3	0.3	0.1	49	0.27	0.042
LINE 92 8225	Soil	0.5	30.5	6.1	80	<0.1	23.9	9.1	653	2.85	5.9	0.6	<0.5	3.1	42	0.3	0.3	0.1	65	0.27	0.046
LINE 92 8250	Soil	0.2	15.8	5.1	33	<0.1	18.8	6.3	240	1.90	3.9	0.6	0.7	4.6	35	<0.1	0.1	<0.1	34	0.23	0.038
LINE 92 8275	Soil	0.3	15.7	5.6	43	<0.1	19.6	8.1	285	2.21	5.3	0.7	47.5	4.2	38	<0.1	0.2	<0.1	43	0.25	0.020
LINE 92 8300	Soil	0.7	46.2	9.1	63	0.2	34.6	11.9	860	3.29	10.9	1.3	3.2	4.6	56	0.3	0.4	0.2	64	0.46	0.039
LINE 92 8325	Soil	0.4	14.2	5.2	62	<0.1	17.1	7.3	193	2.25	5.7	0.4	0.7	2.7	48	0.1	0.2	<0.1	47	0.26	0.032
LINE 92 8350	Soil	0.6	17.7	6.3	79	<0.1	22.0	10.4	297	3.16	10.8	0.4	1.5	3.1	53	0.2	0.2	0.1	65	0.18	0.069
LINE 92 8375	Soil	0.4	17.7	6.6	74	<0.1	25.0	9.1	260	3.00	7.6	0.5	1.7	4.6	37	0.1	0.2	0.1	49	0.23	0.115
LINE 92 8400	Soil	0.4	16.2	4.9	59	<0.1	17.9	7.6	326	2.51	7.5	0.4	<0.5	3.2	174	<0.1	0.2	<0.1	56	0.22	0.052
LINE 92 8425	Soil	0.5	18.6	5.5	156	0.1	18.5	8.4	388	3.07	7.7	0.4	<0.5	2.5	40	0.6	0.3	0.1	76	0.14	0.156
LINE 92 8450	Soil	0.4	18.7	5.5	79	<0.1	23.4	8.3	314	2.88	7.8	0.8	1.7	3.3	55	0.4	0.3	0.1	61	0.21	0.105
LINE 92 8475	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 92 8500	Soil	0.6	40.1	8.9	98	0.3	38.0	14.5	1043	3.43	8.2	1.1	1.4	5.0	62	0.4	0.3	0.2	60	0.56	0.060
LINE 92 8525	Soil	0.7	67.8	11.3	74	<0.1	47.5	18.0	793	4.11	13.9	0.8	4.3	6.6	62	0.2	0.5	0.1	85	0.43	0.076
LINE 92 8650	Soil	0.3	42.2	8.4	73	<0.1	38.8	15.0	608	4.05	7.6	0.8	3.2	4.8	100	<0.1	0.3	0.2	109	0.63	0.059
LINE 92 8675	Soil	0.3	27.9	6.7	66	<0.1	31.3	12.5	349	3.10	6.3	0.6	1.9	4.6	64	0.1	0.3	0.1	71	0.40	0.098
LINE 92 8700	Soil	0.4	30.4	6.4	64	<0.1	35.0	13.7	528	3.59	8.2	0.6	4.5	3.1	97	0.2	0.3	0.1	95	0.60	0.060
LINE 92 8725	Soil	0.4	33.8	7.4	57	<0.1	27.7	12.9	814	3.21	9.9	0.6	3.3	2.5	139	0.2	0.4	<0.1	98	0.91	0.085
LINE 92 8750	Soil	0.3	32.7	6.5	63	<0.1	29.5	12.0	507	3.19	6.3	0.7	2.3	3.6	106	0.1	0.3	0.1	91	0.61	0.068
LINE 92 8775	Soil	0.4	28.0	6.2	85	<0.1	30.6	13.2	493	3.57	5.3	0.5	1.2	3.0	108	0.3	0.3	<0.1	99	0.61	0.063
LINE 93 7925	Soil	0.5	34.3	8.4	62	0.1	32.8	9.1	309	2.74	4.2	2.6	1.3	5.4	43	<0.1	0.2	0.2	49	0.30	0.019
LINE 93 7950	Soil	0.4	25.2	8.4	72	<0.1	31.6	10.4	334	2.75	4.2	2.1	2.0	5.3	42	0.2	0.2	0.2	45	0.30	0.027
LINE 93 7975	Soil	0.8	17.0	7.8	62	<0.1	23.2	9.3	277	2.55	3.7	0.9	2.3	3.4	39	0.3	0.2	0.1	45	0.32	0.018
LINE 93 8000	Soil	0.3	17.8	5.3	44	0.1	21.3	7.6	288	2.17	5.3	0.8	1.0	3.3	39	<0.1	0.2	0.1	39	0.34	0.021
LINE 93 8025	Soil	0.4	14.4	6.8	46	0.1	21.5	9.0	261	2.29	3.8	0.5	1.5	3.8	43	<0.1	0.2	0.1	39	0.37	0.021
LINE 93 8050	Soil	0.5	29.9	8.2	47	<0.1	32.4	14.0	423	2.76	7.9	0.8	2.4	4.9	44	0.2	0.3	0.2	53	0.47	0.018
LINE 93 8075	Soil	0.4	27.1	6.0	54	0.2	30.2	12.7	305	2.51	4.7	0.7	3.2	3.3	36	0.2	0.3	0.1	54	0.44	0.054
LINE 93 8100	Soil	0.3	11.4	6.6	43	0.2	17.4	7.3	260	2.26	2.9	0.5	2.8	2.8	43	<0.1	0.2	0.1	39	0.47	0.033

## CERTIFICATE OF ANALYSIS

VAN08009045.1

LINE	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 92 8150	Soil	19	45	0.78	91	0.088	2	1.73	0.025	0.22	0.2	0.03	4.9	0.2	<0.05	5	<0.5
LINE 92 8175	Soil	12	25	0.37	81	0.049	2	0.89	0.011	0.07	<0.1	0.02	2.3	<0.1	<0.05	3	<0.5
LINE 92 8200	Soil	19	40	0.62	125	0.069	1	1.39	0.022	0.16	0.1	0.02	4.1	0.1	<0.05	5	<0.5
LINE 92 8225	Soil	17	36	0.44	157	0.040	2	1.23	0.011	0.08	<0.1	0.05	4.3	<0.1	<0.05	4	<0.5
LINE 92 8250	Soil	17	27	0.47	92	0.060	<1	1.09	0.021	0.08	<0.1	0.04	3.9	<0.1	<0.05	4	<0.5
LINE 92 8275	Soil	18	28	0.48	144	0.049	2	1.33	0.018	0.08	0.1	0.07	3.8	<0.1	<0.05	4	<0.5
LINE 92 8300	Soil	25	43	0.59	284	0.047	1	1.89	0.015	0.11	<0.1	0.18	7.9	<0.1	<0.05	5	0.8
LINE 92 8325	Soil	15	27	0.40	169	0.028	2	1.18	0.020	0.06	<0.1	0.03	2.4	<0.1	<0.05	4	<0.5
LINE 92 8350	Soil	12	31	0.45	164	0.042	2	1.65	0.010	0.07	<0.1	0.02	2.5	<0.1	<0.05	6	<0.5
LINE 92 8375	Soil	15	34	0.57	114	0.050	1	1.64	0.012	0.11	0.1	0.02	3.0	<0.1	<0.05	5	<0.5
LINE 92 8400	Soil	13	27	0.49	209	0.058	1	1.38	0.025	0.11	<0.1	0.05	2.9	<0.1	<0.05	4	<0.5
LINE 92 8425	Soil	10	34	0.36	252	0.045	2	1.43	0.014	0.09	<0.1	0.02	3.1	<0.1	<0.05	6	<0.5
LINE 92 8450	Soil	13	33	0.50	186	0.061	2	1.45	0.012	0.13	<0.1	0.02	3.3	0.1	<0.05	5	<0.5
LINE 92 8475	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 92 8500	Soil	25	50	0.71	204	0.071	4	2.11	0.019	0.18	0.1	0.04	8.2	0.1	<0.05	6	0.8
LINE 92 8525	Soil	24	56	0.82	197	0.089	4	2.26	0.042	0.25	0.1	0.11	9.3	0.2	<0.05	6	<0.5
LINE 92 8650	Soil	16	62	0.93	162	0.141	3	2.24	0.021	0.22	0.1	0.04	7.4	<0.1	<0.05	6	<0.5
LINE 92 8675	Soil	15	43	0.75	124	0.108	3	2.03	0.021	0.20	0.1	0.03	5.7	<0.1	<0.05	6	<0.5
LINE 92 8700	Soil	13	50	0.78	141	0.118	2	2.20	0.014	0.14	0.1	0.03	3.8	<0.1	<0.05	5	<0.5
LINE 92 8725	Soil	12	40	0.70	173	0.103	4	1.90	0.030	0.15	0.1	0.04	5.8	<0.1	<0.05	5	<0.5
LINE 92 8750	Soil	15	50	0.75	134	0.118	3	1.77	0.020	0.12	0.1	0.03	5.1	<0.1	<0.05	5	<0.5
LINE 92 8775	Soil	14	54	0.77	168	0.131	4	1.99	0.019	0.14	0.1	0.01	4.6	<0.1	<0.05	6	<0.5
LINE 93 7925	Soil	22	41	0.66	100	0.077	2	1.71	0.032	0.12	0.1	0.02	4.4	<0.1	<0.05	5	0.6
LINE 93 7950	Soil	20	40	0.70	97	0.064	1	1.68	0.017	0.13	<0.1	0.02	4.5	0.1	<0.05	5	<0.5
LINE 93 7975	Soil	18	33	0.49	100	0.039	1	1.49	0.011	0.08	<0.1	0.01	2.3	<0.1	<0.05	5	<0.5
LINE 93 8000	Soil	14	27	0.40	83	0.039	2	1.23	0.010	0.05	<0.1	0.03	3.2	<0.1	<0.05	3	0.6
LINE 93 8025	Soil	14	29	0.47	116	0.048	2	1.28	0.025	0.07	<0.1	0.02	3.3	<0.1	<0.05	4	<0.5
LINE 93 8050	Soil	17	41	0.50	146	0.051	2	1.47	0.015	0.10	<0.1	0.05	5.9	<0.1	<0.05	4	0.6
LINE 93 8075	Soil	15	38	0.48	109	0.046	2	1.50	0.019	0.07	<0.1	0.05	3.9	<0.1	<0.05	4	<0.5
LINE 93 8100	Soil	11	31	0.45	124	0.039	2	1.24	0.017	0.04	<0.1	0.04	3.0	<0.1	<0.05	3	<0.5

## CERTIFICATE OF ANALYSIS

VAN08009045.1

	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	2	0.01
LINE 93 8125	Soil	0.5	14.4	3.6	45	0.1	16.5	6.6	181	2.27	4.4	0.3	1.5	1.6	25	0.2	0.3	0.1	56	0.15	0.037
LINE 93 8150	Soil	0.4	25.4	4.5	75	<0.1	22.3	8.5	339	2.75	5.6	0.4	2.8	2.7	29	0.3	0.3	0.1	71	0.19	0.069
LINE 93 8175	Soil	0.5	35.5	5.8	90	<0.1	23.5	9.5	465	3.36	9.1	0.6	2.7	2.2	38	0.2	0.5	0.1	94	0.18	0.109
LINE 93 8200	Soil	0.5	21.9	5.8	68	<0.1	23.1	9.6	611	2.90	6.6	0.7	<0.5	2.7	47	0.3	0.3	0.1	70	0.25	0.048
LINE 93 8225	Soil	0.4	19.8	6.0	43	0.1	20.2	10.0	413	2.65	7.4	1.1	406.8	3.0	109	0.2	0.4	0.1	65	0.44	0.047
LINE 93 8250	Soil	0.5	20.6	5.5	54	<0.1	24.2	10.2	488	2.49	6.3	0.9	<0.5	3.3	53	<0.1	0.2	0.1	53	0.31	0.031
LINE 93 8275	Soil	0.5	24.4	6.7	75	<0.1	23.5	10.2	418	2.69	5.9	1.0	0.9	3.2	82	0.2	0.2	0.1	63	0.30	0.033
LINE 93 8300	Soil	1.1	34.4	7.8	80	<0.1	22.8	13.1	1025	5.80	11.4	1.3	3.0	4.3	105	0.1	0.4	0.1	134	0.42	0.055
LINE 93 8325	Soil	0.7	23.2	5.5	59	<0.1	17.7	8.8	556	2.84	6.4	0.5	1.2	2.5	45	0.2	0.3	0.1	63	0.25	0.051
LINE 93 8350	Soil	0.6	19.6	5.5	74	<0.1	27.1	10.2	240	3.31	6.3	0.5	1.5	3.7	32	0.2	0.2	0.1	55	0.12	0.065
LINE 93 8375	Soil	0.6	22.9	5.5	84	0.2	30.5	11.4	307	3.28	9.0	0.6	2.7	3.4	86	0.3	0.3	0.1	63	0.28	0.049
LINE 93 8400	Soil	0.6	16.7	5.6	91	<0.1	27.5	9.8	306	3.08	6.1	0.5	1.0	3.6	60	<0.1	0.3	<0.1	58	0.24	0.081
LINE 93 8475	Soil	0.8	33.4	8.8	64	0.2	24.1	12.2	295	3.17	7.7	0.9	2.5	3.3	47	0.2	0.4	0.2	83	0.38	0.031
LINE 93 8550	Soil	0.7	20.9	7.8	117	0.2	26.0	10.3	552	3.56	9.5	0.4	1.7	2.0	44	0.2	0.3	0.1	86	0.34	0.313
LINE 93 8575	Soil	0.6	21.1	5.6	96	<0.1	32.3	11.2	257	3.50	6.6	0.5	1.6	3.5	33	0.1	0.3	0.1	72	0.17	0.128
LINE 93 8600	Soil	0.3	20.7	5.7	237	<0.1	25.6	9.6	449	2.96	4.8	0.4	4.4	2.9	60	0.8	0.3	<0.1	64	0.59	0.065
LINE 93 8625	Soil	0.6	27.4	8.1	73	<0.1	39.6	19.6	434	4.58	8.5	0.6	1.4	3.0	93	0.2	0.3	0.1	119	0.40	0.030
LINE 93 8725	Soil	0.4	16.5	6.4	59	<0.1	27.1	9.8	260	3.04	4.9	0.4	<0.5	3.1	86	0.2	0.2	0.1	66	0.56	0.015
LINE 93 8750	Soil	0.4	24.3	6.6	48	<0.1	18.7	9.1	346	2.60	4.9	0.6	<0.5	3.5	124	<0.1	0.4	0.1	56	0.60	0.049
LINE 94 7850	Soil	0.5	25.3	7.5	96	0.1	34.2	11.9	492	3.06	4.6	2.0	1.3	4.3	46	0.1	0.3	0.2	58	0.32	0.034
LINE 94 7875	Soil	0.6	35.3	8.9	67	<0.1	35.2	15.9	593	3.98	7.2	1.2	2.7	6.2	45	<0.1	0.3	0.2	84	0.38	0.049
LINE 94 7900	Soil	0.8	50.1	11.0	80	<0.1	50.1	18.3	685	4.08	9.8	0.8	2.3	6.3	70	0.2	0.5	0.2	77	0.62	0.077
LINE 94 7925	Soil	1.2	31.0	9.6	59	<0.1	43.8	18.7	1219	3.75	7.7	0.9	4.2	7.0	56	0.1	0.4	0.2	63	0.49	0.042
LINE 94 7950	Soil	0.3	12.9	4.3	31	<0.1	17.3	6.6	231	1.95	4.5	0.7	1.4	2.5	51	<0.1	0.2	<0.1	43	0.33	0.023
LINE 94 7975	Soil	0.4	15.9	5.1	36	<0.1	19.6	8.6	389	2.49	6.7	0.7	2.1	2.5	76	0.1	0.2	0.1	57	0.48	0.030
LINE 94 8000	Soil	0.5	20.7	7.9	51	0.1	25.2	11.8	508	2.85	3.7	0.8	<0.5	3.5	50	0.2	0.2	0.1	43	0.64	0.030
LINE 94 8025	Soil	0.5	27.9	6.7	61	0.2	24.6	11.8	434	2.72	7.4	1.1	1.5	2.1	74	0.4	0.3	0.1	63	0.58	0.036
LINE 94 8050	Soil	0.3	15.2	6.3	40	0.1	27.2	9.1	209	2.31	3.5	0.6	0.9	4.2	26	<0.1	0.2	0.1	33	0.27	0.036
LINE 94 8075	Soil	0.3	15.4	5.5	32	0.2	21.2	7.0	268	2.06	4.9	1.2	1.6	3.5	30	0.2	0.2	0.1	38	0.29	0.025
LINE 94 8100	Soil	0.5	23.6	6.5	63	0.2	18.4	8.7	734	2.62	8.5	0.6	0.8	1.9	147	0.3	0.3	0.1	66	0.43	0.053

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LINE	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Ti	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 93 8125	Soil	9	27	0.28	90	0.028	<1	0.95	0.008	0.04	<0.1	0.02	1.8	<0.1	<0.05	3	0.5
LINE 93 8150	Soil	10	33	0.37	112	0.029	1	0.94	0.010	0.07	<0.1	0.04	3.5	<0.1	<0.05	3	0.6
LINE 93 8175	Soil	11	38	0.33	149	0.024	1	0.88	0.007	0.06	<0.1	0.04	4.4	<0.1	<0.05	3	<0.5
LINE 93 8200	Soil	14	33	0.38	160	0.038	<1	1.15	0.012	0.06	<0.1	0.04	3.7	<0.1	<0.05	4	0.7
LINE 93 8225	Soil	12	34	0.44	152	0.046	3	1.22	0.026	0.07	<0.1	0.06	4.4	<0.1	<0.05	3	0.6
LINE 93 8250	Soil	14	34	0.48	138	0.044	<1	1.42	0.013	0.06	<0.1	0.04	3.7	<0.1	<0.05	4	<0.5
LINE 93 8275	Soil	17	37	0.46	189	0.050	2	1.54	0.023	0.09	<0.1	0.04	4.0	<0.1	<0.05	4	<0.5
LINE 93 8300	Soil	18	47	0.40	137	0.012	1	1.41	0.012	0.09	<0.1	0.14	8.3	0.1	<0.05	4	0.8
LINE 93 8325	Soil	13	30	0.35	128	0.025	<1	1.12	0.009	0.09	<0.1	0.03	2.8	<0.1	<0.05	4	<0.5
LINE 93 8350	Soil	15	39	0.61	105	0.043	2	1.72	0.017	0.13	<0.1	0.02	3.0	<0.1	<0.05	5	<0.5
LINE 93 8375	Soil	13	36	0.61	186	0.063	2	1.92	0.021	0.19	<0.1	0.05	3.5	0.2	<0.05	6	<0.5
LINE 93 8400	Soil	15	36	0.60	185	0.053	1	1.76	0.021	0.13	<0.1	0.03	3.2	<0.1	<0.05	6	<0.5
LINE 93 8475	Soil	26	44	0.44	344	0.049	2	1.49	0.016	0.11	0.1	0.11	5.2	<0.1	<0.05	5	0.6
LINE 93 8550	Soil	8	40	0.41	245	0.048	2	2.05	0.011	0.10	0.2	0.05	3.1	<0.1	<0.05	7	<0.5
LINE 93 8575	Soil	13	42	0.60	142	0.052	1	2.01	0.009	0.09	<0.1	0.02	2.7	<0.1	<0.05	5	<0.5
LINE 93 8600	Soil	11	37	0.52	136	0.066	3	1.46	0.013	0.11	0.1	0.08	2.9	<0.1	<0.05	5	<0.5
LINE 93 8625	Soil	12	62	0.76	264	0.140	2	2.79	0.017	0.11	<0.1	0.04	4.1	<0.1	<0.05	9	<0.5
LINE 93 8725	Soil	14	38	0.62	110	0.078	3	1.79	0.022	0.07	0.2	<0.01	3.0	<0.1	<0.05	6	<0.5
LINE 93 8750	Soil	15	31	0.60	107	0.068	3	1.56	0.028	0.09	0.1	0.03	3.3	<0.1	<0.05	5	0.6
LINE 94 7850	Soil	19	47	0.74	108	0.079	2	1.70	0.020	0.12	<0.1	0.02	4.7	<0.1	<0.05	5	<0.5
LINE 94 7875	Soil	24	81	0.70	98	0.059	1	1.74	0.014	0.11	<0.1	0.04	7.5	0.1	<0.05	5	0.7
LINE 94 7900	Soil	21	58	0.97	122	0.092	4	1.97	0.039	0.22	0.1	0.05	6.9	0.1	<0.05	5	0.6
LINE 94 7925	Soil	24	50	0.81	131	0.088	3	1.98	0.019	0.17	0.1	0.04	5.8	0.1	<0.05	5	0.6
LINE 94 7950	Soil	11	24	0.35	72	0.042	2	1.01	0.013	0.05	<0.1	0.03	2.6	<0.1	<0.05	3	<0.5
LINE 94 7975	Soil	13	30	0.39	89	0.046	2	1.10	0.020	0.06	<0.1	0.04	3.7	<0.1	<0.05	3	0.7
LINE 94 8000	Soil	16	37	0.59	138	0.047	2	1.52	0.015	0.10	<0.1	0.02	3.9	<0.1	<0.05	5	0.7
LINE 94 8025	Soil	15	35	0.38	107	0.043	2	1.37	0.016	0.08	<0.1	0.11	5.2	<0.1	<0.05	4	0.6
LINE 94 8050	Soil	17	30	0.51	60	0.051	1	1.48	0.011	0.07	<0.1	0.02	1.9	<0.1	<0.05	4	<0.5
LINE 94 8075	Soil	16	27	0.32	98	0.039	<1	1.21	0.009	0.06	<0.1	0.04	3.0	<0.1	<0.05	3	0.6
LINE 94 8100	Soil	12	28	0.39	174	0.041	2	1.24	0.017	0.11	<0.1	0.11	3.3	0.1	<0.05	4	<0.5

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	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	2	0.01
LINE 94 8175	Soil	0.5	19.7	5.2	74	<0.1	15.7	8.4	430	2.92	10.6	0.5	0.5	2.2	179	<0.1	0.3	0.1	66	0.56	0.085
LINE 94 8200	Soil	0.4	18.2	4.8	67	<0.1	16.1	8.2	590	2.32	5.8	0.4	2.7	2.4	74	0.2	0.2	<0.1	57	0.26	0.054
LINE 94 8225	Soil	0.5	19.2	5.5	74	<0.1	21.9	10.2	392	2.87	6.2	0.5	1.4	3.4	88	0.1	0.2	0.1	61	0.26	0.044
LINE 94 8250	Soil	0.8	38.8	6.8	98	0.1	18.2	8.8	613	3.74	10.0	0.6	1.8	1.9	59	0.4	0.4	0.1	108	0.27	0.080
LINE 94 8275	Soil	0.8	37.9	7.8	83	<0.1	24.6	15.6	898	3.15	9.0	0.7	2.8	2.6	77	0.4	0.3	0.2	82	0.45	0.079
LINE 94 8300	Soil	0.9	63.8	6.9	88	<0.1	33.5	12.9	644	4.11	14.5	1.2	1.5	3.5	112	0.3	0.5	0.1	119	0.80	0.083
LINE 94 8375	Soil	0.7	17.8	5.6	95	<0.1	14.7	9.0	918	2.89	7.9	0.4	1.0	2.2	31	0.2	0.2	0.1	87	0.23	0.085
LINE 94 8400	Soil	0.6	21.9	4.6	102	<0.1	20.6	8.0	345	2.85	5.0	0.5	<0.5	2.9	23	0.3	0.2	<0.1	75	0.21	0.095
LINE 94 8425	Soil	0.7	24.0	4.9	118	<0.1	22.0	10.4	250	3.31	9.5	0.6	0.5	3.2	29	0.3	0.2	0.1	69	0.26	0.209
LINE 94 8450	Soil	1.2	19.9	4.9	89	<0.1	25.5	9.7	350	2.93	6.6	0.7	<0.5	3.1	34	0.1	0.3	0.1	73	0.25	0.091
LINE 94 8600	Soil	0.3	16.6	7.7	61	<0.1	30.3	14.7	314	3.20	3.3	0.8	1.2	4.0	78	0.2	0.1	0.1	69	0.62	0.049
LINE 94 8625	Soil	0.6	26.0	6.8	88	0.1	26.8	11.9	440	3.22	6.1	0.5	1.5	2.7	65	0.4	0.3	0.1	88	0.48	0.033
LINE 94 8650	Soil	0.4	26.2	6.2	68	<0.1	30.4	14.1	529	3.48	6.9	0.5	2.6	3.2	98	0.1	0.2	<0.1	91	0.72	0.040
LINE 94 8675	Soil	0.5	39.3	9.2	60	<0.1	37.5	15.2	266	3.75	5.5	0.9	2.8	5.2	111	<0.1	0.4	0.2	97	1.06	0.083
LINE 94 8700	Soil	0.4	28.9	5.9	53	<0.1	30.0	12.2	486	3.25	5.7	0.7	1.2	3.7	98	0.1	0.3	<0.1	83	0.55	0.036
LINE 95 7800	Soil	0.9	79.5	10.5	74	0.1	53.8	19.9	753	4.27	13.5	1.6	4.4	4.9	72	0.1	0.6	0.2	106	0.70	0.083
LINE 95 7825	Soil	0.4	20.5	6.4	55	<0.1	28.6	9.8	301	2.77	4.1	1.7	1.6	4.5	38	0.1	0.2	0.1	54	0.36	0.027
LINE 95 7850	Soil	0.8	33.2	8.2	57	0.1	34.6	12.7	328	3.32	6.3	1.3	2.3	4.7	53	<0.1	0.3	0.1	67	0.52	0.038
LINE 95 7875	Soil	0.9	34.2	9.1	61	<0.1	43.8	15.2	604	3.91	8.8	1.0	1.7	5.6	57	<0.1	0.3	0.2	80	0.68	0.062
LINE 95 7900	Soil	0.8	34.1	9.2	71	<0.1	37.7	13.0	384	3.54	5.5	0.8	3.0	7.2	42	0.2	0.2	0.2	52	0.49	0.069
LINE 95 7925	Soil	0.9	17.1	7.2	69	0.1	32.8	17.1	449	2.82	6.1	0.9	1.6	4.4	48	<0.1	0.2	0.1	62	0.50	0.038
LINE 95 7950	Soil	0.7	17.8	7.4	38	<0.1	27.3	13.7	306	2.72	8.1	0.5	4.0	4.8	44	<0.1	0.2	0.1	54	0.37	0.012
LINE 95 7975	Soil	0.5	17.2	5.7	42	0.2	22.3	11.4	415	2.09	4.6	0.7	1.9	2.6	48	<0.1	0.2	0.1	50	0.34	0.022
LINE 95 8000	Soil	0.3	18.4	4.0	43	<0.1	21.4	7.2	208	2.12	3.7	0.5	0.9	3.9	23	<0.1	0.1	<0.1	35	0.20	0.043
LINE 95 8025	Soil	0.4	19.2	5.3	67	0.1	31.2	10.3	174	2.73	5.3	0.6	1.2	4.4	17	<0.1	0.2	0.1	38	0.19	0.086
LINE 95 8050	Soil	0.3	17.3	4.4	34	<0.1	19.3	6.8	242	1.82	5.2	0.5	1.8	4.1	21	<0.1	0.2	<0.1	32	0.22	0.051
LINE 95 8075	Soil	0.3	21.9	4.7	53	0.1	28.1	11.2	227	2.87	6.2	0.5	2.4	3.3	36	<0.1	0.2	<0.1	60	0.23	0.104
LINE 95 8100	Soil	0.6	19.7	4.2	77	0.3	19.1	8.3	744	2.53	5.2	0.5	1.3	2.1	31	0.2	0.2	<0.1	55	0.29	0.062
LINE 95 8125	Soil	0.5	5.5	3.4	52	0.1	9.3	5.2	126	1.88	3.7	0.3	0.8	2.1	14	0.1	0.1	<0.1	37	0.12	0.096
LINE 95 8150	Soil	0.3	12.0	4.0	25	<0.1	15.4	6.4	156	1.56	4.3	0.7	3.0	3.3	37	<0.1	0.1	<0.1	28	0.23	0.046

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Method Analyte Unit MDL		1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 94 8175	Soil	11	21	0.47	512	0.033	<1	2.25	0.017	0.14	<0.1	0.24	2.9	<0.1	<0.05	8	<0.5
LINE 94 8200	Soil	12	24	0.40	188	0.043	1	1.21	0.008	0.08	<0.1	0.04	2.5	0.1	<0.05	3	<0.5
LINE 94 8225	Soil	16	34	0.56	141	0.058	1	1.51	0.017	0.13	<0.1	0.03	3.2	0.1	<0.05	5	<0.5
LINE 94 8250	Soil	9	35	0.28	171	0.023	<1	0.97	0.008	0.10	<0.1	0.06	3.9	<0.1	<0.05	4	<0.5
LINE 94 8275	Soil	12	34	0.45	204	0.039	2	1.37	0.015	0.14	<0.1	0.11	4.7	0.2	0.08	4	<0.5
LINE 94 8300	Soil	15	44	0.42	238	0.034	6	1.39	0.017	0.22	<0.1	0.19	11.3	0.1	0.06	5	0.6
LINE 94 8375	Soil	11	38	0.29	249	0.047	2	0.98	0.017	0.12	0.2	0.03	3.3	<0.1	<0.05	4	<0.5
LINE 94 8400	Soil	13	34	0.43	232	0.037	2	1.42	0.020	0.11	<0.1	0.09	3.0	<0.1	<0.05	5	<0.5
LINE 94 8425	Soil	11	35	0.41	217	0.034	3	1.64	0.009	0.10	0.1	0.07	2.6	<0.1	<0.05	5	<0.5
LINE 94 8450	Soil	12	39	0.45	179	0.051	3	1.39	0.012	0.11	<0.1	0.05	3.2	<0.1	<0.05	5	<0.5
LINE 94 8600	Soil	18	47	0.90	256	0.084	4	2.12	0.024	0.16	0.1	0.03	5.6	<0.1	<0.05	6	<0.5
LINE 94 8625	Soil	13	44	0.60	189	0.083	2	1.67	0.017	0.12	0.1	0.04	3.8	<0.1	<0.05	6	<0.5
LINE 94 8650	Soil	13	48	0.74	129	0.088	3	2.07	0.017	0.12	0.1	0.03	4.0	<0.1	<0.05	6	<0.5
LINE 94 8675	Soil	17	54	1.01	151	0.088	3	2.30	0.031	0.13	<0.1	0.07	7.2	<0.1	0.06	7	<0.5
LINE 94 8700	Soil	15	43	0.67	129	0.087	2	1.86	0.017	0.12	<0.1	0.27	4.6	<0.1	<0.05	5	<0.5
LINE 95 7800	Soil	19	72	0.94	165	0.078	4	2.25	0.040	0.17	0.1	0.08	9.9	0.1	<0.05	6	<0.5
LINE 95 7825	Soil	18	41	0.64	78	0.064	2	1.62	0.013	0.09	<0.1	0.02	4.5	<0.1	<0.05	5	0.6
LINE 95 7850	Soil	17	49	0.77	108	0.069	3	1.81	0.023	0.12	0.1	0.03	6.1	0.1	<0.05	5	<0.5
LINE 95 7875	Soil	20	56	0.85	107	0.085	3	2.02	0.025	0.19	<0.1	0.04	7.2	0.1	<0.05	6	<0.5
LINE 95 7900	Soil	23	42	0.89	92	0.069	2	1.77	0.021	0.13	0.1	0.04	4.7	0.1	<0.05	6	0.7
LINE 95 7925	Soil	16	44	0.65	123	0.074	3	1.55	0.019	0.12	<0.1	0.02	4.3	<0.1	<0.05	4	<0.5
LINE 95 7950	Soil	16	35	0.52	90	0.046	2	1.31	0.033	0.11	<0.1	0.03	5.2	<0.1	<0.05	4	<0.5
LINE 95 7975	Soil	14	31	0.38	85	0.037	1	1.37	0.012	0.07	<0.1	0.04	2.6	<0.1	<0.05	4	<0.5
LINE 95 8000	Soil	17	29	0.51	51	0.061	2	1.27	0.017	0.12	<0.1	0.02	3.2	<0.1	<0.05	3	<0.5
LINE 95 8025	Soil	19	33	0.54	79	0.038	1	1.68	0.007	0.10	<0.1	0.02	2.6	<0.1	<0.05	4	<0.5
LINE 95 8050	Soil	17	26	0.40	56	0.039	2	1.09	0.013	0.13	<0.1	0.01	2.4	<0.1	<0.05	3	<0.5
LINE 95 8075	Soil	14	36	0.54	76	0.053	3	1.57	0.025	0.13	<0.1	0.02	2.9	<0.1	<0.05	4	<0.5
LINE 95 8100	Soil	11	32	0.38	117	0.042	3	1.15	0.013	0.10	<0.1	0.02	2.7	<0.1	<0.05	4	<0.5
LINE 95 8125	Soil	10	19	0.21	55	0.036	<1	0.97	0.005	0.06	<0.1	0.02	1.3	<0.1	<0.05	4	<0.5
LINE 95 8150	Soil	12	20	0.31	131	0.033	<1	0.92	0.009	0.05	<0.1	0.02	1.9	<0.1	<0.05	2	<0.5

## CERTIFICATE OF ANALYSIS

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	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	2	0.01
LINE 95 8175	Soil	0.5	37.6	5.4	88	<0.1	10.7	13.9	634	3.88	17.7	0.9	<0.5	1.6	882	0.3	0.3	0.1	119	1.03	0.093
LINE 95 8200	Soil	0.7	28.0	5.9	66	<0.1	17.5	9.3	482	2.96	15.4	0.5	1.5	2.2	106	0.2	0.2	0.1	67	0.32	0.063
LINE 95 8225	Soil	0.8	29.7	5.0	114	0.2	18.5	8.0	488	3.41	9.0	0.5	2.6	1.5	59	0.4	0.3	0.1	90	0.35	0.109
LINE 95 8250	Soil	0.7	25.8	4.8	85	<0.1	30.4	10.7	322	3.32	8.4	0.6	2.3	3.2	70	0.1	0.3	0.1	83	0.17	0.045
LINE 95 8275	Soil	1.1	26.5	5.6	104	<0.1	20.0	10.1	474	3.30	11.4	0.6	1.4	2.4	107	0.3	0.3	0.1	94	0.17	0.069
LINE 95 8300	Soil	0.6	17.5	4.6	116	0.1	22.9	9.1	499	3.02	6.7	0.5	<0.5	2.9	52	0.2	0.2	0.1	66	0.34	0.162
LINE 95 8325	Soil	0.6	14.7	5.7	82	0.1	22.2	8.4	212	3.19	5.9	0.5	1.5	3.7	15	0.1	0.2	0.1	57	0.16	0.171
LINE 95 8350	Soil	0.4	14.5	5.0	77	<0.1	31.8	11.4	248	2.95	5.2	0.7	1.0	3.8	24	<0.1	0.2	<0.1	50	0.17	0.057
LINE 95 8400	Soil	1.1	31.5	6.0	137	0.2	31.8	12.7	415	3.88	13.8	1.1	1.1	2.4	46	0.2	0.3	0.1	92	0.22	0.146
LINE 95 8425	Soil	0.5	32.9	5.1	135	0.1	30.6	13.8	587	3.75	9.7	0.6	0.9	1.9	65	0.2	0.2	<0.1	100	0.32	0.108
LINE 95 8450	Soil	0.7	28.7	7.6	118	0.1	29.8	13.9	645	3.67	12.4	1.1	6.3	3.3	60	0.3	0.4	0.2	87	0.53	0.043
LINE 95 8475	Soil	0.6	42.4	8.8	72	0.2	41.3	17.0	794	3.54	10.3	1.2	4.3	3.7	73	0.3	0.4	0.2	81	0.72	0.076
LINE 95 8500	Soil	0.5	26.5	6.7	53	<0.1	29.9	12.9	544	3.02	7.8	1.0	2.7	3.6	51	<0.1	0.2	0.1	70	0.34	0.030
LINE 95 8525	Soil	0.4	21.0	8.1	60	<0.1	29.3	11.5	427	3.05	5.9	0.9	2.5	4.8	50	0.1	0.2	0.2	49	0.41	0.052
LINE 95 8550	Soil	0.7	26.9	7.0	70	0.2	28.0	11.7	492	3.16	7.8	1.3	2.1	2.8	52	0.3	0.3	0.2	60	0.58	0.056
LINE 95 8575	Soil	0.5	29.7	8.2	63	<0.1	32.5	10.8	429	3.35	7.4	1.6	1.7	4.1	59	0.2	0.3	0.2	59	0.57	0.038
LINE 95 8600	Soil	0.4	24.2	7.5	57	<0.1	26.3	12.2	610	3.14	6.4	0.6	1.9	4.6	57	0.1	0.4	0.1	64	0.42	0.070
LINE 95 8625	Soil	0.4	19.3	6.7	65	<0.1	30.6	12.9	399	3.35	5.3	0.6	0.9	3.6	74	0.2	0.3	0.1	76	0.38	0.066
LINE 95 8650	Soil	0.3	21.7	6.5	68	<0.1	30.0	14.2	513	3.48	4.7	0.6	0.7	3.4	104	0.2	0.3	0.1	86	0.59	0.051
LINE 96 7750	Soil	0.6	39.2	8.2	55	0.1	39.2	14.7	593	3.37	6.4	1.7	<0.5	2.9	75	0.2	0.3	0.2	57	0.90	0.058
LINE 96 7775	Soil	1.0	45.3	9.3	67	<0.1	51.3	16.5	751	4.32	13.5	0.9	4.8	5.3	85	0.1	0.6	0.2	95	0.81	0.105
LINE 96 7800	Soil	1.2	19.7	8.9	49	<0.1	35.7	12.5	1351	3.61	6.6	1.0	1.4	5.9	72	<0.1	0.3	0.2	69	0.62	0.043
LINE 96 7825	Soil	1.5	43.9	8.9	48	<0.1	38.6	13.4	441	3.66	8.9	0.8	2.4	6.1	67	<0.1	0.4	0.2	73	0.55	0.057
LINE 96 7850	Soil	0.9	30.9	9.1	62	<0.1	34.8	13.5	342	3.77	7.9	1.0	3.4	7.2	60	<0.1	0.4	0.2	57	0.51	0.076
LINE 96 7875	Soil	0.4	19.6	4.8	88	<0.1	24.7	9.4	310	2.84	4.5	0.5	1.1	3.0	52	0.2	0.2	<0.1	63	0.31	0.049
LINE 96 7900	Soil	0.7	46.2	8.9	61	0.1	43.7	15.9	765	3.98	9.3	2.1	2.0	4.4	99	0.1	0.4	0.1	88	0.74	0.069
LINE 96 7925	Soil	0.3	17.2	7.3	42	<0.1	24.2	11.0	234	2.91	3.6	0.6	0.8	3.7	54	<0.1	0.2	0.1	70	0.30	0.012
LINE 96 7975	Soil	0.7	17.4	4.9	74	0.2	12.1	7.9	1282	2.65	7.0	0.4	<0.5	1.1	134	0.4	0.3	<0.1	80	0.43	0.032
LINE 96 8000	Soil	0.5	14.8	5.1	109	0.3	24.1	10.2	273	2.70	5.7	0.3	<0.5	2.0	49	0.2	0.2	0.1	58	0.25	0.139
LINE 96 8025	Soil	0.5	27.4	5.5	87	0.2	27.7	10.7	350	3.40	9.4	0.6	<0.5	3.1	134	0.2	0.3	0.1	77	0.28	0.150



## CERTIFICATE OF ANALYSIS

VAN08009045.1

Method Analyte Unit MDL		1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 95 8175	Soil	7	15	0.78	602	0.086	3	3.35	0.019	0.36	<0.1	0.14	5.6	1.0	0.05	10	<0.5
LINE 95 8200	Soil	11	23	0.52	232	0.030	3	1.66	0.017	0.17	<0.1	0.22	3.1	0.3	<0.05	5	<0.5
LINE 95 8225	Soil	8	36	0.26	139	0.015	2	1.07	0.008	0.10	<0.1	0.03	3.5	<0.1	<0.05	4	0.9
LINE 95 8250	Soil	13	41	0.56	181	0.051	2	2.10	0.027	0.16	0.1	0.06	5.2	0.3	<0.05	6	<0.5
LINE 95 8275	Soil	11	35	0.30	161	0.027	2	1.13	0.008	0.09	<0.1	0.04	3.4	<0.1	<0.05	5	<0.5
LINE 95 8300	Soil	14	33	0.54	282	0.044	3	1.84	0.010	0.14	<0.1	0.06	2.9	<0.1	<0.05	7	<0.5
LINE 95 8325	Soil	14	34	0.53	131	0.043	1	1.77	0.007	0.09	<0.1	0.06	2.2	<0.1	<0.05	6	<0.5
LINE 95 8350	Soil	15	39	0.65	189	0.058	2	1.82	0.012	0.13	<0.1	0.05	2.4	<0.1	<0.05	5	<0.5
LINE 95 8400	Soil	10	42	0.47	304	0.044	3	1.86	0.010	0.12	<0.1	0.33	3.9	0.2	<0.05	5	0.6
LINE 95 8425	Soil	9	49	0.58	458	0.070	2	2.45	0.019	0.12	<0.1	0.10	5.0	<0.1	<0.05	7	<0.5
LINE 95 8450	Soil	12	54	0.69	545	0.060	5	1.97	0.024	0.10	<0.1	1.40	6.3	<0.1	<0.05	5	1.1
LINE 95 8475	Soil	16	50	0.70	448	0.050	3	2.05	0.055	0.12	0.1	0.13	7.4	0.1	0.07	5	0.5
LINE 95 8500	Soil	14	43	0.55	251	0.067	3	1.52	0.024	0.09	0.1	0.05	5.6	<0.1	<0.05	5	<0.5
LINE 95 8525	Soil	18	40	0.69	142	0.057	<1	1.75	0.017	0.11	<0.1	0.05	4.4	<0.1	<0.05	5	<0.5
LINE 95 8550	Soil	15	35	0.60	179	0.044	3	1.84	0.016	0.10	<0.1	0.08	4.1	<0.1	<0.05	5	0.7
LINE 95 8575	Soil	18	45	0.74	162	0.057	2	1.83	0.018	0.11	<0.1	0.06	5.2	<0.1	<0.05	5	0.6
LINE 95 8600	Soil	18	37	0.72	95	0.081	2	1.78	0.028	0.13	0.1	0.05	4.1	<0.1	<0.05	5	<0.5
LINE 95 8625	Soil	15	45	0.68	96	0.099	7	1.86	0.025	0.11	0.2	0.02	3.6	<0.1	<0.05	6	<0.5
LINE 95 8650	Soil	13	50	0.73	137	0.110	3	2.03	0.023	0.12	<0.1	0.02	4.2	<0.1	<0.05	6	<0.5
LINE 96 7750	Soil	17	47	0.75	108	0.052	3	1.90	0.017	0.10	0.1	0.02	5.1	<0.1	<0.05	5	0.8
LINE 96 7775	Soil	20	70	0.96	139	0.097	4	2.13	0.042	0.17	0.2	0.05	8.5	0.1	<0.05	6	<0.5
LINE 96 7800	Soil	19	55	0.77	136	0.078	3	1.85	0.029	0.12	0.1	0.03	6.2	<0.1	<0.05	5	<0.5
LINE 96 7825	Soil	20	43	0.78	120	0.072	2	1.92	0.025	0.10	<0.1	0.03	5.2	<0.1	<0.05	5	<0.5
LINE 96 7850	Soil	22	49	0.96	108	0.076	2	1.99	0.027	0.14	<0.1	0.03	5.6	<0.1	<0.05	6	<0.5
LINE 96 7875	Soil	15	38	0.57	137	0.073	2	1.48	0.021	0.13	0.1	0.02	3.4	<0.1	<0.05	4	<0.5
LINE 96 7900	Soil	20	59	0.80	162	0.067	3	2.41	0.034	0.13	0.1	0.08	9.2	<0.1	<0.05	6	<0.5
LINE 96 7925	Soil	16	43	0.60	99	0.042	<1	1.79	0.017	0.07	<0.1	0.07	4.0	0.1	<0.05	5	<0.5
LINE 96 7975	Soil	9	24	0.25	217	0.052	3	1.03	0.018	0.11	<0.1	0.03	2.2	0.1	<0.05	5	<0.5
LINE 96 8000	Soil	9	32	0.37	136	0.054	2	1.66	0.011	0.11	<0.1	0.03	2.2	<0.1	<0.05	5	<0.5
LINE 96 8025	Soil	14	37	0.59	163	0.056	3	1.77	0.011	0.16	<0.1	0.05	3.5	0.1	<0.05	5	<0.5

# CERTIFICATE OF ANALYSIS

VAN08009045.1

Method Analyte Unit MDL		1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo ppm 0.1	Cu ppm 0.1	Pb ppm 0.1	Zn ppm 1	Ag ppm 0.1	Ni ppm 0.1	Co ppm 0.1	Mn ppm 1	Fe % 0.01	As ppm 0.5	U ppm 0.1	Au ppb 0.5	Th ppm 0.1	Sr ppm 1	Cd ppm 0.1	Sb ppm 0.1	Bi ppm 0.1	V ppm 2	Ca % 0.01	P % 0.001
LINE 96 8050	Soil	0.8	31.6	8.7	78	0.1	24.5	11.7	795	3.34	10.6	0.5	<0.5	2.8	55	0.2	0.4	0.2	78	0.21	0.106
LINE 96 8075	Soil	0.4	22.7	4.7	49	<0.1	26.4	9.7	314	2.75	6.1	0.7	<0.5	3.6	57	0.1	0.2	<0.1	61	0.31	0.043
LINE 96 8100	Soil	0.4	14.1	4.2	61	0.1	16.2	7.5	205	2.38	7.8	0.5	<0.5	2.9	32	<0.1	0.2	<0.1	52	0.27	0.053
LINE 96 8125	Soil	0.6	42.9	7.6	73	<0.1	32.0	13.0	703	3.84	13.7	1.0	1.8	4.6	107	0.2	0.3	0.1	88	0.62	0.065
LINE 96 8150	Soil	0.5	14.7	4.7	61	<0.1	22.9	9.6	311	3.01	8.3	0.5	1.6	2.9	162	0.1	0.2	<0.1	65	0.33	0.052
LINE 96 8175	Soil	0.5	17.4	5.6	66	<0.1	27.2	10.1	238	3.15	6.6	0.6	1.2	4.2	54	<0.1	0.3	0.1	52	0.21	0.062
LINE 96 8225	Soil	0.5	13.1	5.7	101	<0.1	15.0	7.6	632	2.50	5.6	0.5	<0.5	2.7	29	0.2	0.2	0.1	56	0.23	0.112
LINE 96 8250	Soil	0.4	17.9	5.5	52	<0.1	19.1	7.7	241	2.23	3.8	0.5	<0.5	3.6	15	0.1	0.2	<0.1	37	0.16	0.077
LINE 96 8275	Soil	0.4	17.2	5.8	117	0.1	33.8	10.6	329	3.19	6.8	0.5	2.3	3.9	36	0.2	0.2	0.1	57	0.34	0.263
LINE 96 8300	Soil	0.3	17.3	5.3	75	<0.1	23.1	9.2	303	3.00	6.4	0.6	0.9	4.0	22	0.2	0.3	0.1	63	0.14	0.086
LINE 96 8325	Soil	0.3	12.1	4.7	62	<0.1	19.3	7.5	260	2.38	4.3	0.5	<0.5	3.5	45	0.1	0.2	0.1	47	0.23	0.079
LINE 96 8350	Soil	0.4	37.1	4.1	130	0.2	34.4	14.4	601	3.97	8.9	0.4	<0.5	2.3	42	0.2	0.2	<0.1	96	0.37	0.163
LINE 96 8375	Soil	0.6	24.9	6.1	114	0.1	28.8	12.1	510	3.67	10.0	0.6	1.3	2.8	42	0.2	0.3	0.1	88	0.25	0.125
LINE 96 8400	Soil	0.6	26.2	6.9	71	<0.1	31.9	12.4	414	3.28	8.5	1.1	0.6	3.7	62	0.1	0.3	0.1	79	0.38	0.030
LINE 96 8425	Soil	0.8	25.4	5.9	103	0.1	31.6	12.7	303	3.85	8.9	0.5	<0.5	2.7	42	<0.1	0.2	0.1	94	0.28	0.073
LINE 96 8450	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 96 8475	Soil	0.7	25.3	5.8	91	0.1	21.8	9.8	246	3.43	9.1	0.5	1.4	2.2	40	<0.1	0.2	0.1	88	0.31	0.069
LINE 96 8550	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 96 8575	Soil	0.3	28.2	5.7	65	<0.1	25.1	13.5	716	3.54	6.7	0.8	1.2	1.7	134	0.3	0.6	<0.1	105	1.00	0.067
LINE 96 8600	Soil	0.4	30.8	6.1	65	<0.1	24.7	13.1	591	3.61	6.3	0.6	2.4	2.7	123	0.1	0.4	<0.1	109	0.78	0.092
LINE 96 8625	Soil	0.3	20.7	5.8	65	<0.1	25.5	9.0	271	3.03	4.2	0.5	1.1	2.9	59	0.1	0.2	0.1	63	0.44	0.086
LINE 97 7725	Soil	0.5	25.4	8.6	60	0.1	32.1	10.9	380	3.12	5.5	0.8	2.0	5.1	42	<0.1	0.2	0.2	51	0.53	0.038
LINE 97 7750	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 97 7775	Soil	0.5	18.1	8.4	43	<0.1	28.4	10.3	299	3.12	5.8	0.5	1.3	6.1	42	<0.1	0.2	0.2	54	0.48	0.049
LINE 97 7800	Soil	0.5	18.1	9.2	51	<0.1	30.3	12.1	450	3.29	5.6	0.6	1.0	6.7	46	<0.1	0.2	0.2	50	0.55	0.066
LINE 97 7825	Soil	0.4	26.5	7.9	56	0.1	32.8	13.3	330	3.28	6.6	1.1	4.3	3.2	51	0.2	0.2	0.1	67	0.56	0.031
LINE 97 7850	Soil	0.5	31.6	7.3	52	<0.1	30.5	11.2	307	3.00	5.4	0.9	1.2	3.1	63	0.1	0.2	0.1	60	0.68	0.025
LINE 97 7875	Soil	0.4	19.9	9.3	63	<0.1	31.7	14.4	444	4.02	7.9	0.5	1.6	5.7	132	0.2	0.2	0.2	79	1.56	0.082
LINE 97 7900	Soil	0.6	23.8	7.9	73	0.1	32.0	17.0	572	3.90	10.1	0.6	8.3	3.5	96	0.2	0.3	0.1	84	1.47	0.083
LINE 97 7925	Soil	0.3	25.8	8.3	47	<0.1	23.6	11.8	370	3.10	10.4	0.5	1.6	5.1	282	0.3	0.2	0.1	50	5.95	0.073

# CERTIFICATE OF ANALYSIS

VAN08009045.1

LINE	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 96 8050	Soil	12	42	0.44	136	0.062	2	1.49	0.013	0.12	<0.1	0.03	3.5	<0.1	<0.05	5	<0.5
LINE 96 8075	Soil	14	38	0.56	97	0.074	2	1.61	0.018	0.16	<0.1	0.03	3.4	<0.1	<0.05	5	<0.5
LINE 96 8100	Soil	12	20	0.43	84	0.049	2	1.75	0.010	0.10	<0.1	0.05	2.4	<0.1	<0.05	6	<0.5
LINE 96 8125	Soil	15	38	0.70	176	0.076	2	2.54	0.015	0.28	<0.1	0.15	7.7	0.4	<0.05	7	<0.5
LINE 96 8150	Soil	14	31	0.60	218	0.065	1	1.86	0.013	0.17	<0.1	0.04	3.2	0.2	<0.05	6	<0.5
LINE 96 8175	Soil	18	38	0.71	141	0.067	13	1.93	0.015	0.16	<0.1	0.04	3.2	0.1	<0.05	5	<0.5
LINE 96 8225	Soil	13	23	0.45	214	0.052	2	1.58	0.012	0.13	0.1	0.03	2.5	<0.1	<0.05	7	<0.5
LINE 96 8250	Soil	12	26	0.42	119	0.042	1	1.21	0.007	0.07	<0.1	0.03	1.5	<0.1	<0.05	4	<0.5
LINE 96 8275	Soil	14	41	0.62	207	0.061	5	2.27	0.015	0.12	<0.1	0.04	3.0	<0.1	<0.05	5	<0.5
LINE 96 8300	Soil	21	38	0.46	145	0.058	1	1.37	0.008	0.09	<0.1	0.27	3.4	<0.1	<0.05	5	<0.5
LINE 96 8325	Soil	16	32	0.47	120	0.050	1	1.31	0.012	0.09	<0.1	0.02	2.1	<0.1	<0.05	4	<0.5
LINE 96 8350	Soil	11	94	0.69	322	0.027	3	2.58	0.012	0.12	<0.1	0.05	7.2	<0.1	<0.05	7	<0.5
LINE 96 8375	Soil	11	46	0.51	240	0.069	2	2.06	0.015	0.13	<0.1	0.04	4.6	<0.1	<0.05	6	<0.5
LINE 96 8400	Soil	14	45	0.64	284	0.066	2	1.99	0.021	0.10	<0.1	0.10	5.5	<0.1	<0.05	5	<0.5
LINE 96 8425	Soil	11	52	0.63	221	0.053	3	2.13	0.013	0.10	<0.1	0.04	3.8	<0.1	<0.05	8	<0.5
LINE 96 8450	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 96 8475	Soil	9	45	0.45	237	0.049	2	1.54	0.009	0.08	<0.1	0.06	2.9	<0.1	<0.05	5	<0.5
LINE 96 8550	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 96 8575	Soil	8	40	0.68	268	0.094	3	2.53	0.020	0.11	0.2	0.03	4.0	<0.1	<0.05	6	<0.5
LINE 96 8600	Soil	10	37	0.73	128	0.120	3	2.33	0.018	0.13	0.1	0.02	4.4	<0.1	<0.05	6	<0.5
LINE 96 8625	Soil	14	36	0.66	106	0.066	3	1.85	0.011	0.10	0.1	0.02	2.4	<0.1	<0.05	5	<0.5
LINE 97 7725	Soil	18	43	0.70	108	0.061	2	1.69	0.015	0.08	<0.1	0.02	4.0	<0.1	<0.05	5	<0.5
LINE 97 7750	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 97 7775	Soil	17	38	0.67	99	0.060	2	1.43	0.015	0.07	<0.1	0.03	3.7	<0.1	<0.05	4	<0.5
LINE 97 7800	Soil	21	39	0.73	106	0.054	1	1.58	0.019	0.06	<0.1	0.02	3.7	<0.1	<0.05	4	<0.5
LINE 97 7825	Soil	14	54	0.60	132	0.049	2	1.91	0.014	0.06	<0.1	0.03	4.5	<0.1	<0.05	5	<0.5
LINE 97 7850	Soil	15	40	0.55	139	0.046	2	1.67	0.016	0.06	<0.1	0.04	3.6	<0.1	<0.05	4	<0.5
LINE 97 7875	Soil	18	46	0.86	168	0.056	3	1.73	0.026	0.08	<0.1	0.07	5.2	<0.1	<0.05	5	<0.5
LINE 97 7900	Soil	17	53	0.84	124	0.043	3	1.50	0.022	0.08	<0.1	0.08	7.6	<0.1	<0.05	5	<0.5
LINE 97 7925	Soil	17	40	0.82	74	0.048	3	1.47	0.024	0.08	<0.1	0.07	5.6	0.2	<0.05	4	<0.5

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	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	2	0.01
LINE 97 7950	Soil	0.5	18.0	4.9	80	<0.1	22.9	9.8	326	3.22	8.6	0.5	1.9	2.2	93	0.3	0.2	<0.1	81	0.30	0.064
LINE 97 7975	Soil	0.6	11.1	5.8	93	<0.1	11.6	8.1	521	2.23	4.7	0.3	<0.5	1.8	64	0.3	0.1	0.1	64	0.32	0.057
LINE 97 8000	Soil	0.5	14.3	6.1	65	<0.1	18.8	9.2	383	2.36	5.3	0.4	<0.5	2.8	69	0.3	0.2	0.1	52	0.35	0.028
LINE 97 8025	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 97 8050	Soil	0.9	15.6	5.6	68	<0.1	17.2	8.9	216	2.78	6.8	0.5	0.7	2.5	146	0.1	0.2	0.1	68	0.21	0.018
LINE 97 8075	Soil	0.6	20.1	4.9	91	<0.1	18.7	7.5	205	3.00	7.8	0.4	1.1	2.6	50	0.2	0.2	0.1	73	0.20	0.108
LINE 97 8100	Soil	0.4	16.8	5.6	121	<0.1	26.3	9.6	379	2.87	6.3	0.5	<0.5	3.3	43	0.3	0.1	<0.1	54	0.23	0.129
LINE 97 8125	Soil	0.4	18.4	8.8	53	0.1	31.9	11.4	259	2.79	6.1	0.6	1.0	4.6	39	<0.1	0.2	0.1	50	0.20	0.044
LINE 97 8150	Soil	0.3	12.6	5.5	60	0.2	22.2	7.3	166	2.19	3.7	0.5	<0.5	4.0	14	0.1	0.1	<0.1	36	0.12	0.093
LINE 97 8175	Soil	0.3	12.5	5.7	70	0.1	27.1	9.3	211	2.77	4.9	0.4	0.9	3.5	25	0.2	0.2	0.1	51	0.28	0.205
LINE 97 8200	Soil	0.4	16.3	8.8	64	<0.1	29.9	9.2	204	2.63	4.3	0.5	1.2	4.4	24	<0.1	0.1	0.1	49	0.20	0.100
LINE 97 8250	Soil	0.4	11.4	4.7	66	<0.1	24.3	9.3	175	2.29	4.0	0.5	1.0	3.7	19	<0.1	0.1	<0.1	46	0.13	0.049
LINE 97 8275	Soil	1.1	131.8	5.6	65	<0.1	58.6	23.7	621	5.49	21.0	0.7	2.5	2.1	85	<0.1	0.2	<0.1	161	0.80	0.134
LINE 97 8300	Soil	0.5	20.3	5.3	118	0.1	27.4	9.7	242	3.28	7.9	0.5	<0.5	2.7	33	0.1	0.2	0.1	78	0.26	0.167
LINE 97 8350	Soil	0.6	23.4	6.4	114	0.2	27.7	12.6	477	3.43	7.2	0.6	<0.5	2.8	37	0.2	0.2	0.1	85	0.34	0.111
LINE 97 8375	Soil	0.6	48.6	8.1	82	<0.1	45.0	19.0	674	3.94	10.0	0.8	1.2	3.9	53	0.1	0.3	0.1	95	0.46	0.086
LINE 97 8400	Soil	0.6	29.6	6.8	163	0.1	38.6	13.3	275	4.01	8.9	0.6	1.2	3.2	38	0.2	0.2	0.1	90	0.26	0.183
LINE 97 8425	Soil	0.7	13.9	6.6	79	<0.1	20.5	7.7	266	2.80	4.3	0.5	0.7	3.7	27	<0.1	0.2	0.1	54	0.31	0.081
LINE 97 8450	Soil	0.5	12.4	4.6	83	<0.1	20.8	8.3	202	2.88	4.9	0.5	0.6	4.5	18	<0.1	0.1	<0.1	47	0.13	0.106
LINE 97 8475	Soil	0.5	20.2	8.3	74	0.2	23.4	11.5	671	3.29	6.5	1.8	<0.5	4.0	63	0.3	0.3	0.2	56	0.70	0.041
LINE 97 8500	Soil	0.4	18.2	6.4	69	<0.1	23.1	9.4	310	2.81	4.6	1.3	0.9	4.5	37	<0.1	0.2	0.1	46	0.26	0.028
LINE 97 8525	Soil	0.4	21.5	6.8	78	<0.1	29.8	11.8	522	3.19	5.8	0.6	1.1	2.8	58	0.2	0.2	0.1	72	0.40	0.044
LINE 97 8550	Soil	0.6	30.4	7.1	65	<0.1	20.1	11.7	529	3.84	9.3	0.5	1.3	1.5	130	0.2	1.8	<0.1	114	0.85	0.033
LINE 97 8575	Soil	0.3	44.3	7.2	53	0.2	33.6	12.9	732	3.44	8.8	1.3	8.0	3.3	115	0.2	0.5	0.1	84	0.97	0.050
LINE 98 7750	Soil	0.4	24.6	7.6	50	<0.1	30.8	10.5	334	2.92	4.2	1.6	1.4	5.2	34	0.1	0.2	0.1	40	0.29	0.030
LINE 98 7775	Soil	0.5	21.5	7.6	58	0.1	27.3	10.6	411	2.59	2.9	2.5	<0.5	3.6	39	0.2	0.2	0.2	39	0.44	0.023
LINE 98 7800	Soil	0.4	23.0	6.4	45	0.1	25.3	8.6	268	2.37	3.9	1.8	3.0	3.5	39	0.2	0.2	0.1	41	0.41	0.024
LINE 98 7825	Soil	0.5	28.8	6.3	74	<0.1	28.7	13.6	445	3.09	6.8	0.8	2.0	3.4	87	0.2	0.4	0.1	73	0.55	0.045
LINE 98 7850	Soil	0.4	36.3	7.1	70	0.1	26.3	9.6	311	3.28	7.1	0.6	3.0	3.0	71	0.2	0.3	0.1	71	0.57	0.045
LINE 98 7875	Soil	0.4	16.9	5.5	59	<0.1	23.9	10.6	331	2.85	7.3	0.6	1.6	3.4	65	<0.1	0.2	<0.1	66	0.32	0.018

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	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 97 7950	Soil	10	37	0.46	162	0.060	2	1.62	0.010	0.08	<0.1	0.03	2.4	<0.1	<0.05	5	<0.5
LINE 97 7975	Soil	9	27	0.21	149	0.051	2	0.82	0.010	0.07	<0.1	0.02	1.7	<0.1	<0.05	4	<0.5
LINE 97 8000	Soil	10	24	0.36	134	0.048	3	1.54	0.011	0.04	<0.1	0.03	2.6	0.2	<0.05	4	<0.5
LINE 97 8025	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 97 8050	Soil	11	29	0.34	178	0.034	2	1.50	0.015	0.06	<0.1	0.03	2.2	0.1	<0.05	5	<0.5
LINE 97 8075	Soil	12	33	0.35	99	0.031	2	1.25	0.008	0.08	<0.1	0.03	2.5	0.1	<0.05	5	<0.5
LINE 97 8100	Soil	14	35	0.55	193	0.052	2	1.63	0.009	0.11	<0.1	0.02	2.3	<0.1	<0.05	5	<0.5
LINE 97 8125	Soil	15	39	0.61	94	0.064	2	1.75	0.008	0.13	<0.1	0.05	2.3	0.4	<0.05	5	<0.5
LINE 97 8150	Soil	14	28	0.39	115	0.050	2	1.29	0.006	0.06	<0.1	0.04	1.7	<0.1	<0.05	4	<0.5
LINE 97 8175	Soil	12	35	0.50	261	0.053	3	1.62	0.007	0.10	<0.1	0.06	2.1	<0.1	<0.05	5	<0.5
LINE 97 8200	Soil	14	37	0.56	243	0.065	2	1.71	0.008	0.09	<0.1	0.05	2.4	<0.1	<0.05	4	<0.5
LINE 97 8250	Soil	12	34	0.48	157	0.054	2	1.41	0.007	0.07	<0.1	0.02	1.9	<0.1	<0.05	4	<0.5
LINE 97 8275	Soil	16	136	1.29	273	0.021	6	3.51	0.087	0.07	<0.1	0.15	22.3	<0.1	<0.05	8	<0.5
LINE 97 8300	Soil	10	48	0.53	276	0.056	3	2.04	0.008	0.10	<0.1	0.09	3.2	<0.1	<0.05	6	<0.5
LINE 97 8350	Soil	12	45	0.58	278	0.058	4	1.98	0.013	0.09	<0.1	0.06	3.7	<0.1	<0.05	6	<0.5
LINE 97 8375	Soil	13	77	0.73	312	0.045	3	2.19	0.020	0.11	<0.1	0.09	8.0	<0.1	<0.05	6	<0.5
LINE 97 8400	Soil	11	61	0.72	215	0.067	4	2.80	0.012	0.10	0.1	0.07	4.9	<0.1	<0.05	7	0.5
LINE 97 8425	Soil	15	31	0.48	135	0.058	3	1.60	0.009	0.08	<0.1	0.04	2.7	<0.1	<0.05	6	<0.5
LINE 97 8450	Soil	16	30	0.55	124	0.041	1	1.64	0.008	0.05	<0.1	0.05	2.0	<0.1	<0.05	5	<0.5
LINE 97 8475	Soil	18	34	0.60	361	0.048	4	1.61	0.015	0.07	0.2	0.09	5.5	<0.1	0.06	4	0.7
LINE 97 8500	Soil	18	32	0.62	189	0.039	1	1.63	0.017	0.07	0.1	0.04	3.9	<0.1	<0.05	5	<0.5
LINE 97 8525	Soil	11	42	0.64	151	0.068	2	1.75	0.025	0.09	0.1	0.04	3.2	<0.1	<0.05	5	<0.5
LINE 97 8550	Soil	6	35	0.65	179	0.099	1	2.55	0.016	0.10	0.5	0.03	3.8	<0.1	<0.05	8	<0.5
LINE 97 8575	Soil	15	45	0.84	129	0.075	4	2.20	0.028	0.09	0.2	0.07	5.5	<0.1	<0.05	6	0.6
LINE 98 7750	Soil	17	40	0.70	76	0.051	2	1.58	0.021	0.06	0.2	0.02	3.5	<0.1	<0.05	4	<0.5
LINE 98 7775	Soil	16	38	0.64	104	0.049	2	1.67	0.012	0.08	<0.1	0.01	3.2	<0.1	<0.05	5	<0.5
LINE 98 7800	Soil	14	34	0.53	94	0.047	1	1.36	0.012	0.06	0.1	0.03	2.8	<0.1	<0.05	4	<0.5
LINE 98 7825	Soil	12	43	0.56	166	0.063	3	1.63	0.024	0.09	0.1	0.04	5.6	0.1	<0.05	5	<0.5
LINE 98 7850	Soil	13	42	0.53	127	0.042	3	1.48	0.031	0.06	<0.1	0.08	5.6	<0.1	<0.05	5	0.7
LINE 98 7875	Soil	12	37	0.52	117	0.074	3	1.44	0.024	0.09	0.1	0.03	4.2	<0.1	<0.05	4	<0.5

# CERTIFICATE OF ANALYSIS

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Method Analyte Unit MDL		1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo ppm 0.1	Cu ppm 0.1	Pb ppm 0.1	Zn ppm 1	Ag ppm 0.1	Ni ppm 0.1	Co ppm 0.1	Mn ppm 1	Fe % 0.01	As ppm 0.5	U ppm 0.1	Au ppb 0.5	Th ppm 0.1	Sr ppm 1	Cd ppm 0.1	Sb ppm 0.1	Bi ppm 0.1	V ppm 2	Ca % 0.01	P % 0.001
LINE 98 7900	Soil	0.5	12.4	5.7	50	<0.1	13.1	7.3	268	2.63	4.2	0.3	<0.5	2.4	61	0.1	0.2	0.1	64	0.20	0.023
LINE 98 7925	Soil	0.4	18.3	5.3	75	<0.1	20.0	8.1	211	2.86	6.7	0.5	<0.5	2.7	49	0.1	0.2	0.1	56	0.18	0.076
LINE 98 7950	Soil	0.5	17.8	5.6	64	0.1	22.2	8.5	356	2.66	6.5	0.6	<0.5	2.5	332	0.2	0.2	0.1	58	0.31	0.023
LINE 98 7975	Soil	0.5	22.6	5.8	75	<0.1	30.6	10.4	248	3.42	9.6	0.6	<0.5	4.1	75	0.2	0.3	0.1	61	0.16	0.084
LINE 98 8000	Soil	0.6	18.6	5.7	69	<0.1	18.5	11.3	719	3.02	12.1	0.5	<0.5	1.9	163	0.3	0.3	0.1	71	0.55	0.099
LINE 98 8025	Soil	0.3	9.3	5.5	135	<0.1	20.9	8.2	222	2.61	6.2	0.4	<0.5	2.5	32	0.3	0.2	0.1	50	0.13	0.159
LINE 98 8050	Soil	0.4	14.6	4.4	88	<0.1	19.6	7.4	215	2.42	4.4	0.4	<0.5	2.8	27	0.2	0.2	0.1	47	0.16	0.087
LINE 98 8075	Soil	0.3	13.1	4.7	54	<0.1	18.3	6.7	204	2.03	4.3	0.4	0.7	2.4	34	0.1	0.2	<0.1	40	0.14	0.064
LINE 98 8100	Soil	0.4	18.6	3.9	66	<0.1	28.4	7.1	212	2.56	4.5	0.5	<0.5	3.0	35	0.1	0.2	<0.1	50	0.13	0.063
LINE 98 8125	Soil	0.3	13.5	4.5	106	<0.1	19.1	7.4	330	2.55	4.3	0.4	<0.5	3.4	22	0.1	0.2	<0.1	47	0.10	0.102
LINE 98 8175	Soil	4.9	64.0	8.5	99	<0.1	42.4	19.0	874	4.88	33.8	2.9	2.4	3.5	51	0.2	0.4	0.1	117	0.29	0.078
LINE 98 8200	Soil	1.5	55.6	6.3	124	<0.1	48.4	16.6	481	4.80	32.2	1.4	<0.5	1.9	44	0.2	0.5	<0.1	127	0.34	0.086
LINE 98 8225	Soil	0.6	30.6	4.5	140	0.1	34.7	12.7	239	4.03	12.1	0.4	0.7	1.6	34	0.2	0.2	0.1	102	0.28	0.327
LINE 98 8250	Soil	0.5	56.0	6.0	83	<0.1	52.2	19.7	456	4.67	11.0	0.6	1.2	3.4	57	<0.1	0.3	0.1	112	0.54	0.090
LINE 98 8275	Soil	0.9	43.3	5.3	74	0.1	44.1	15.3	322	3.83	12.2	1.0	0.9	3.3	48	0.2	0.3	<0.1	90	0.38	0.101
LINE 98 8300	Soil	0.8	37.5	5.7	100	<0.1	48.5	17.4	334	4.20	17.3	1.1	0.8	2.9	35	0.2	0.3	<0.1	105	0.24	0.091
LINE 98 8325	Soil	0.5	23.5	5.7	96	<0.1	34.2	14.0	458	3.46	7.0	2.1	<0.5	3.2	43	0.1	0.2	<0.1	83	0.40	0.039
LINE 98 8375	Soil	0.6	31.7	5.8	54	<0.1	25.6	10.4	309	3.22	8.3	0.9	1.4	4.3	32	<0.1	0.3	<0.1	71	0.21	0.059
LINE 98 8425	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 98 8450	Soil	0.4	23.9	7.0	47	0.1	20.7	10.2	500	2.98	6.8	2.3	1.9	3.2	93	0.3	0.3	0.1	59	0.54	0.039
LINE 98 8475	Soil	0.5	27.2	7.1	58	0.1	26.4	12.6	673	3.33	6.3	2.0	0.6	4.4	90	0.2	0.3	0.1	77	0.59	0.040
LINE 98 8575	Soil	0.4	34.8	6.2	76	<0.1	21.1	14.5	651	3.80	5.6	0.7	1.0	2.4	297	0.1	0.3	<0.1	123	1.27	0.084
LINE 99 8000	Soil	0.6	16.5	5.2	81	0.1	20.2	7.1	295	2.55	8.3	0.4	<0.5	2.2	37	0.2	0.2	<0.1	65	0.22	0.105
LINE 99 8025	Soil	1.9	44.3	5.9	75	<0.1	32.0	11.7	342	3.80	13.0	1.1	0.8	3.5	47	0.2	0.3	0.1	100	0.31	0.065
LINE 99 8050	Soil	5.4	89.6	7.7	108	0.2	34.1	17.8	619	6.14	34.8	4.0	1.7	2.2	63	0.2	0.7	0.1	181	0.26	0.132
LINE 99 8075	Soil	1.3	19.1	4.8	96	0.1	27.7	10.5	217	2.87	10.7	0.6	<0.5	2.6	25	0.2	0.2	<0.1	55	0.21	0.106
LINE 99 8100	Soil	1.4	17.6	4.7	91	<0.1	26.3	8.8	238	2.66	7.3	0.9	0.7	4.6	23	0.1	0.2	<0.1	42	0.20	0.048
LINE 99 8125	Soil	1.1	26.4	6.2	137	<0.1	29.3	10.7	471	3.54	13.6	0.6	<0.5	2.5	31	0.2	0.2	0.1	65	0.34	0.262
LINE 99 8150	Soil	0.7	26.1	4.4	102	<0.1	26.3	10.1	396	3.10	7.2	0.4	<0.5	1.7	30	0.1	0.2	<0.1	67	0.30	0.202
LINE 99 8175	Soil	0.5	26.1	5.2	173	0.2	38.8	14.3	378	3.92	9.2	0.4	<0.5	1.7	27	0.2	0.1	<0.1	89	0.27	0.246

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Method Analyte Unit MDL		1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 98 7900	Soil	10	29	0.30	103	0.048	2	1.02	0.022	0.08	<0.1	0.01	2.2	<0.1	<0.05	5	<0.5
LINE 98 7925	Soil	12	29	0.49	113	0.038	1	1.42	0.011	0.08	<0.1	0.07	2.5	<0.1	<0.05	5	<0.5
LINE 98 7950	Soil	11	31	0.43	240	0.055	1	1.51	0.032	0.09	<0.1	0.03	3.2	<0.1	<0.05	4	<0.5
LINE 98 7975	Soil	13	36	0.61	133	0.055	1	1.98	0.020	0.13	<0.1	0.04	3.6	0.2	<0.05	6	<0.5
LINE 98 8000	Soil	9	30	0.42	226	0.038	2	1.75	0.019	0.12	<0.1	0.04	3.1	0.2	<0.05	6	<0.5
LINE 98 8025	Soil	9	32	0.37	165	0.041	<1	1.45	0.010	0.08	0.1	0.03	2.1	0.1	<0.05	5	<0.5
LINE 98 8050	Soil	10	32	0.39	101	0.041	2	1.24	0.010	0.08	<0.1	0.03	2.1	<0.1	<0.05	4	<0.5
LINE 98 8075	Soil	10	27	0.36	102	0.050	1	1.03	0.007	0.09	<0.1	0.02	1.5	<0.1	<0.05	3	<0.5
LINE 98 8100	Soil	13	34	0.45	107	0.034	2	1.14	0.009	0.08	<0.1	0.03	2.4	0.1	<0.05	4	<0.5
LINE 98 8125	Soil	13	27	0.42	183	0.037	<1	1.45	0.010	0.07	<0.1	0.03	2.5	<0.1	<0.05	5	<0.5
LINE 98 8175	Soil	13	73	0.56	236	0.045	2	1.42	0.011	0.16	<0.1	0.15	9.5	0.6	<0.05	5	<0.5
LINE 98 8200	Soil	8	83	0.66	389	0.039	3	2.31	0.013	0.09	<0.1	0.07	8.3	0.2	<0.05	6	<0.5
LINE 98 8225	Soil	5	86	0.55	367	0.038	3	3.19	0.013	0.10	<0.1	0.07	6.3	<0.1	<0.05	10	<0.5
LINE 98 8250	Soil	12	98	0.91	393	0.043	3	2.91	0.023	0.18	<0.1	0.04	7.6	<0.1	<0.05	7	0.5
LINE 98 8275	Soil	10	64	0.68	374	0.052	3	2.37	0.017	0.13	<0.1	0.14	5.4	<0.1	<0.05	6	<0.5
LINE 98 8300	Soil	9	74	0.70	354	0.050	2	2.67	0.013	0.09	<0.1	0.12	5.4	0.1	<0.05	6	<0.5
LINE 98 8325	Soil	10	73	0.75	427	0.059	3	2.12	0.020	0.09	<0.1	0.05	5.3	<0.1	<0.05	6	<0.5
LINE 98 8375	Soil	15	33	0.47	142	0.055	2	1.54	0.015	0.09	0.1	0.20	5.7	<0.1	<0.05	4	<0.5
LINE 98 8425	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 98 8450	Soil	13	34	0.55	242	0.048	2	1.56	0.022	0.06	0.1	0.07	4.5	<0.1	<0.05	4	<0.5
LINE 98 8475	Soil	18	39	0.70	166	0.081	2	1.95	0.025	0.11	0.1	0.05	5.2	<0.1	<0.05	6	<0.5
LINE 98 8575	Soil	9	24	0.72	259	0.100	3	3.69	0.047	0.12	<0.1	0.04	5.1	<0.1	<0.05	9	<0.5
LINE 99 8000	Soil	9	35	0.32	158	0.057	2	1.18	0.008	0.09	<0.1	0.03	2.6	<0.1	<0.05	4	<0.5
LINE 99 8025	Soil	12	49	0.46	155	0.044	3	1.40	0.010	0.11	<0.1	0.06	6.0	0.3	<0.05	5	<0.5
LINE 99 8050	Soil	8	99	0.32	136	0.030	3	1.11	0.011	0.12	<0.1	0.12	11.1	0.3	<0.05	4	<0.5
LINE 99 8075	Soil	9	38	0.56	167	0.036	2	1.66	0.013	0.10	<0.1	0.02	2.8	0.1	0.07	5	<0.5
LINE 99 8100	Soil	17	35	0.55	139	0.034	2	1.31	0.011	0.10	<0.1	0.02	2.5	<0.1	<0.05	4	<0.5
LINE 99 8125	Soil	8	52	0.48	387	0.030	2	1.84	0.012	0.11	<0.1	0.06	4.3	0.1	<0.05	6	<0.5
LINE 99 8150	Soil	7	52	0.52	257	0.041	2	1.75	0.011	0.13	<0.1	0.02	4.0	<0.1	<0.05	6	<0.5
LINE 99 8175	Soil	5	81	0.58	325	0.033	2	2.54	0.009	0.14	<0.1	0.03	4.8	<0.1	<0.05	7	<0.5

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LINE	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
		ppm 0.1	ppm 0.1	ppm 0.1	ppm 1	ppm 0.1	ppm 0.1	ppm 0.1	ppm 1	% 0.01	ppm 0.5	ppm 0.1	ppb 0.5	ppm 0.1	ppm 1	ppm 0.1	ppm 0.1	ppm 0.1	ppm 2	% 0.01
LINE 99 8200	Soil	0.8	22.9	6.2	79	<0.1	25.1	9.5	606	2.94	15.9	6.7	5.7	2.6	36	0.1	0.2	<0.1	59	0.32
LINE 99 8225	Soil	0.6	44.5	4.8	74	<0.1	42.8	15.6	405	4.26	12.4	0.5	0.5	2.4	44	<0.1	0.2	<0.1	106	0.33
LINE 99 8250	Soil	1.8	50.6	5.0	85	<0.1	46.3	15.4	278	3.93	15.7	0.7	1.9	2.6	43	<0.1	0.2	<0.1	97	0.23
LINE 99 8275	Soil	1.0	29.9	5.4	84	<0.1	32.8	13.2	659	3.45	9.8	0.7	<0.5	1.4	37	<0.1	0.2	<0.1	85	0.32
LINE 99 8300	Soil	0.7	31.1	4.6	64	<0.1	23.4	8.7	244	3.01	7.1	0.6	0.9	3.2	30	<0.1	0.2	<0.1	63	0.22
LINE 99 8400	Soil	0.8	24.2	5.5	81	0.1	22.4	8.2	235	3.65	9.2	0.6	0.8	2.7	22	<0.1	0.3	<0.1	77	0.15
LINE 99 8425	Soil	0.8	62.8	8.0	57	0.2	25.7	13.7	1016	3.66	9.4	2.6	0.6	2.0	85	0.4	0.3	0.1	89	0.68
LINE 99 8525	Soil	0.5	40.9	6.7	50	0.1	29.7	10.8	695	3.05	6.3	0.9	1.7	3.1	77	0.2	0.2	0.1	67	0.74
LINE 99 8550	Soil	0.4	31.9	5.3	53	<0.1	30.3	12.6	346	3.38	7.4	0.5	2.9	3.0	76	<0.1	0.2	<0.1	80	0.54
LINE 99 8575	Soil	0.4	32.2	5.6	49	<0.1	29.4	11.4	466	3.35	6.5	0.6	<0.5	3.3	95	<0.1	0.2	<0.1	94	0.69
LINE 00 8050	Soil	0.4	31.2	4.3	71	<0.1	39.1	15.4	283	3.80	10.1	0.4	0.6	2.7	36	0.2	0.2	<0.1	91	0.42
LINE 00 8075	Soil	1.3	19.6	5.6	109	<0.1	29.1	10.9	250	3.27	13.8	0.7	0.7	3.5	29	0.1	0.2	<0.1	55	0.23
LINE 00 8100	Soil	0.6	64.6	4.9	65	<0.1	40.3	15.3	512	4.23	12.3	0.7	0.6	2.8	76	0.1	0.3	<0.1	116	0.50
LINE 00 8125	Soil	0.8	35.5	5.9	86	<0.1	37.2	15.2	549	4.70	9.6	0.6	1.2	3.4	32	<0.1	0.4	<0.1	124	0.20
LINE 00 8150	Soil	2.7	60.2	7.9	75	<0.1	39.1	13.9	450	3.93	18.2	1.1	1.8	3.8	49	0.1	0.4	0.1	86	0.34
LINE 00 8200	Soil	0.6	20.8	4.7	104	<0.1	29.8	10.8	448	3.15	7.1	0.5	<0.5	3.1	28	<0.1	0.2	<0.1	60	0.25
LINE 00 8225	Soil	0.7	32.4	5.0	72	<0.1	32.8	11.4	321	3.33	7.8	0.6	1.0	3.5	32	<0.1	0.2	<0.1	75	0.24
LINE 00 8250	Soil	0.6	28.4	4.7	77	<0.1	27.2	10.4	555	2.92	8.0	0.5	1.7	2.5	33	0.1	0.2	<0.1	61	0.26
LINE 00 8275	Soil	0.7	37.2	4.6	106	<0.1	31.1	10.6	345	3.41	9.8	0.5	<0.5	3.1	30	0.1	0.2	<0.1	76	0.22
LINE 00 8300	Soil	0.7	17.2	4.8	101	0.1	16.3	6.7	425	2.54	6.1	0.4	<0.5	2.5	25	0.1	0.2	<0.1	54	0.25
LINE 00 8325	Soil	0.7	27.0	5.4	96	<0.1	19.1	8.5	423	2.98	7.2	0.6	<0.5	3.0	26	<0.1	0.2	<0.1	63	0.22
LINE 00 8350	Soil	0.6	52.9	7.6	100	0.1	46.2	17.9	671	3.96	13.1	0.7	0.8	3.8	42	0.2	0.2	0.1	98	0.40
LINE 00 8375	Soil	0.7	29.1	7.0	80	0.1	25.8	12.0	522	3.45	9.1	0.7	0.5	2.5	82	0.2	0.2	0.1	91	0.44
LINE 00 8400	Soil	0.6	24.6	7.0	50	<0.1	30.2	14.0	382	3.64	12.0	2.4	<0.5	2.4	92	0.2	0.2	<0.1	95	0.41
LINE 00 8425	Soil	0.7	25.3	6.4	52	<0.1	26.4	11.2	998	2.99	7.0	2.3	0.8	2.0	110	0.3	0.2	<0.1	74	0.88
LINE 00 8450	Soil	0.4	41.1	7.1	60	<0.1	30.2	13.4	811	3.04	6.0	0.8	1.5	2.9	83	0.3	0.2	0.1	78	0.63
LINE 00 8475	Soil	0.8	17.6	5.3	74	<0.1	21.5	9.2	576	3.50	9.0	0.5	<0.5	1.8	89	0.1	0.2	0.1	92	0.38
LINE 100 8025	Soil	0.5	36.4	5.9	59	<0.1	29.7	9.6	234	3.25	6.0	0.7	1.3	5.9	27	<0.1	0.1	0.1	42	0.23
LINE 100 8050	Soil	1.6	34.8	5.9	93	<0.1	33.5	12.3	367	3.61	12.4	1.2	1.7	4.5	45	0.1	0.2	<0.1	67	0.24
LINE 100 8075	Soil	0.8	43.8	4.2	88	0.1	51.3	17.4	323	4.38	10.3	0.5	0.7	2.4	40	0.1	0.2	<0.1	116	0.35



# CERTIFICATE OF ANALYSIS

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Line	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 99 8200	Soil	11	39	0.53	299	0.048	2	1.40	0.015	0.14	0.1	0.26	3.1	0.2	<0.05	4	<0.5
LINE 99 8225	Soil	7	76	0.75	387	0.033	2	2.31	0.011	0.12	<0.1	0.06	6.6	<0.1	<0.05	6	<0.5
LINE 99 8250	Soil	8	68	0.76	327	0.034	2	2.38	0.010	0.11	<0.1	0.08	5.7	<0.1	<0.05	5	<0.5
LINE 99 8275	Soil	8	64	0.61	340	0.033	2	1.93	0.009	0.10	<0.1	0.05	3.9	<0.1	<0.05	6	<0.5
LINE 99 8300	Soil	11	35	0.49	188	0.041	2	1.63	0.019	0.06	<0.1	0.06	4.1	<0.1	<0.05	5	<0.5
LINE 99 8400	Soil	10	37	0.44	132	0.031	2	1.49	0.008	0.06	<0.1	0.12	2.8	<0.1	<0.05	6	<0.5
LINE 99 8425	Soil	18	47	0.46	247	0.051	4	1.91	0.019	0.07	<0.1	0.12	5.9	<0.1	<0.05	6	<0.5
LINE 99 8525	Soil	13	40	0.75	104	0.062	3	2.04	0.021	0.08	0.1	0.06	5.0	<0.1	<0.05	6	<0.5
LINE 99 8550	Soil	11	37	0.74	77	0.065	3	2.24	0.021	0.07	0.1	0.04	3.3	<0.1	<0.05	6	<0.5
LINE 99 8575	Soil	11	45	0.79	87	0.088	3	1.80	0.030	0.07	<0.1	0.04	4.2	<0.1	<0.05	6	<0.5
LINE 00 8050	Soil	8	73	0.78	248	0.041	3	2.19	0.013	0.14	<0.1	0.02	6.3	<0.1	<0.05	6	<0.5
LINE 00 8075	Soil	14	40	0.59	211	0.045	2	1.89	0.010	0.12	<0.1	0.04	2.5	0.1	<0.05	6	<0.5
LINE 00 8100	Soil	11	81	0.76	323	0.047	3	2.09	0.030	0.17	<0.1	0.11	11.1	<0.1	<0.05	6	<0.5
LINE 00 8125	Soil	12	117	0.56	241	0.049	2	1.67	0.011	0.10	0.1	0.07	9.3	<0.1	<0.05	5	<0.5
LINE 00 8150	Soil	13	65	0.67	249	0.050	3	1.88	0.018	0.16	<0.1	0.14	8.0	0.1	<0.05	6	<0.5
LINE 00 8200	Soil	11	52	0.62	272	0.047	2	1.74	0.011	0.11	0.1	0.05	2.8	<0.1	<0.05	5	<0.5
LINE 00 8225	Soil	12	64	0.65	206	0.053	2	1.95	0.017	0.09	<0.1	0.03	4.8	<0.1	<0.05	6	<0.5
LINE 00 8250	Soil	10	48	0.50	213	0.045	2	1.50	0.009	0.09	<0.1	0.08	3.8	<0.1	<0.05	5	<0.5
LINE 00 8275	Soil	11	56	0.56	237	0.040	2	1.70	0.008	0.08	<0.1	0.07	4.4	<0.1	<0.05	5	<0.5
LINE 00 8300	Soil	10	29	0.36	204	0.040	2	1.21	0.010	0.12	<0.1	0.05	2.2	<0.1	<0.05	5	<0.5
LINE 00 8325	Soil	13	33	0.39	185	0.042	3	1.23	0.014	0.11	<0.1	0.09	4.0	<0.1	<0.05	5	<0.5
LINE 00 8350	Soil	12	64	0.65	308	0.043	3	2.28	0.012	0.11	<0.1	0.25	6.1	<0.1	<0.05	6	<0.5
LINE 00 8375	Soil	11	41	0.50	222	0.062	3	1.88	0.016	0.08	<0.1	0.09	3.8	<0.1	<0.05	6	<0.5
LINE 00 8400	Soil	15	50	0.53	226	0.047	2	2.11	0.021	0.06	<0.1	0.09	6.9	<0.1	<0.05	5	<0.5
LINE 00 8425	Soil	12	36	0.66	190	0.070	4	1.87	0.023	0.10	0.2	0.04	3.5	<0.1	<0.05	5	<0.5
LINE 00 8450	Soil	14	40	0.72	109	0.089	3	1.98	0.021	0.18	0.1	0.06	4.3	<0.1	<0.05	6	<0.5
LINE 00 8475	Soil	8	31	0.45	173	0.085	3	1.96	0.016	0.09	0.1	0.06	2.6	<0.1	<0.05	8	<0.5
LINE 100 8025	Soil	21	41	0.73	94	0.042	1	1.62	0.010	0.14	<0.1	0.03	6.1	0.2	<0.05	5	<0.5
LINE 100 8050	Soil	16	43	0.65	208	0.055	2	1.79	0.009	0.14	<0.1	0.06	4.0	0.1	<0.05	5	<0.5
LINE 100 8075	Soil	8	104	0.82	301	0.039	3	2.95	0.014	0.12	<0.1	0.07	7.1	<0.1	<0.05	7	<0.5

## CERTIFICATE OF ANALYSIS

VAN08009045.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
LINE 100 8100	Soil	0.6	22.8	4.1	117	<0.1	27.9	11.5	259	3.28	7.5	0.4	<0.5	2.5	28	<0.1	0.2	<0.1	68	0.20	0.099
LINE 100 8125	Soil	0.6	58.2	6.3	86	<0.1	44.3	19.4	475	4.29	11.6	0.7	<0.5	3.5	44	<0.1	0.2	0.2	97	0.38	0.092
LINE 100 8175	Soil	2.6	70.3	9.6	89	<0.1	42.2	17.6	762	4.40	20.9	1.6	1.1	4.6	46	0.2	0.7	0.1	84	0.35	0.061
LINE 100 8200	Soil	2.7	70.2	13.0	151	0.1	72.7	68.1	1544	6.74	35.4	3.9	1.4	3.4	39	0.7	0.8	0.1	148	0.21	0.169
LINE 100 8225	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 100 8250	Soil	1.7	69.1	7.5	81	<0.1	34.6	13.2	458	4.17	21.8	1.3	<0.5	3.0	36	0.3	0.7	<0.1	92	0.32	0.059
LINE 100 8300	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 100 8325	Soil	1.0	53.8	7.8	70	<0.1	41.3	20.8	933	3.93	13.4	1.2	<0.5	2.9	72	0.3	0.4	<0.1	95	0.80	0.085
LINE 100 8350	Soil	0.6	49.9	7.3	71	0.1	34.1	16.6	940	3.58	12.5	1.0	<0.5	3.1	103	0.3	0.5	0.1	88	0.90	0.079
LINE 100 8375	Soil	0.7	28.2	5.9	64	<0.1	23.8	12.8	422	3.54	13.5	0.6	1.6	2.6	130	0.2	0.4	0.1	99	0.50	0.060
LINE 100 8400	Soil	0.7	27.8	5.6	55	<0.1	20.4	8.6	365	3.21	9.6	1.7	<0.5	2.6	96	<0.1	0.3	<0.1	79	0.60	0.034
LINE 200 7975	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 200 8000	Soil	1.2	56.9	7.2	94	<0.1	47.3	21.9	1026	5.03	24.8	0.7	<0.5	2.5	58	0.1	0.3	<0.1	108	0.56	0.176
LINE 300 8025	Soil	0.8	20.8	4.6	104	<0.1	27.6	9.3	649	3.06	8.2	0.6	<0.5	4.0	24	0.2	0.2	<0.1	53	0.22	0.083
LINE 300 8150	Soil	0.7	27.2	5.3	53	<0.1	25.4	11.2	383	3.35	11.1	0.6	<0.5	3.3	55	0.3	0.7	<0.1	85	0.32	0.063
LINE 300 8175	Soil	0.7	17.6	7.8	107	<0.1	18.6	16.8	841	4.43	12.4	0.4	<0.5	2.1	75	0.2	0.5	0.1	104	0.55	0.033
LINE 300 8200	Soil	0.4	37.2	6.4	49	<0.1	26.8	12.1	176	3.27	4.9	1.4	1.2	3.2	103	<0.1	0.2	<0.1	81	0.85	0.113
LINE 300 8225	Soil	0.3	34.0	7.8	56	<0.1	25.2	11.1	247	3.53	3.7	0.6	1.3	5.1	46	<0.1	0.2	0.1	65	0.44	0.065
LINE 400 7975	Soil	0.5	49.4	6.4	79	<0.1	39.7	14.8	412	4.33	14.5	0.6	1.0	2.8	57	0.2	0.4	<0.1	98	0.46	0.228
LINE 400 8000	Soil	0.6	25.3	4.3	69	<0.1	32.8	11.6	318	3.44	8.6	0.5	<0.5	2.4	38	0.2	0.3	<0.1	80	0.25	0.062
LINE 400 8025	Soil	1.7	24.2	5.6	50	<0.1	17.3	9.5	424	4.54	24.0	0.6	1.2	2.1	52	<0.1	11.6	<0.1	106	0.30	0.077
LINE 400 8050	Soil	0.4	26.8	4.0	46	<0.1	16.2	10.3	332	3.51	11.2	0.5	<0.5	2.8	128	<0.1	1.1	<0.1	87	0.43	0.078
LINE 400 8075	Soil	0.5	19.0	4.5	76	<0.1	16.9	10.5	549	3.38	8.5	0.4	<0.5	2.2	96	<0.1	0.9	<0.1	78	0.41	0.068
LINE 400 8100	Soil	0.5	22.8	4.7	66	<0.1	27.2	11.1	261	3.38	7.7	0.6	<0.5	2.4	64	<0.1	0.6	<0.1	82	0.34	0.054
LINE 400 8125	Soil	0.5	36.4	5.2	46	<0.1	23.2	10.0	344	3.62	10.8	0.6	<0.5	2.8	164	0.1	0.5	<0.1	94	0.53	0.062
LINE 400 8150	Soil	0.3	18.7	4.2	49	<0.1	20.7	9.6	256	3.06	8.0	0.5	<0.5	2.9	104	<0.1	0.3	<0.1	70	0.40	0.059
LINE 400 8200	Soil	0.6	26.1	5.9	104	0.1	20.4	11.0	2463	2.92	8.0	0.6	<0.5	2.2	61	0.2	0.3	0.1	64	0.40	0.170
LINE 500 8000	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 500 8025	Soil	0.4	45.5	7.5	68	0.1	26.5	12.8	753	3.53	11.4	1.3	1.1	2.4	141	0.2	0.3	0.1	57	0.74	0.069
LINE 500 8050	Soil	0.4	21.0	7.1	59	<0.1	27.0	11.1	382	3.43	7.2	0.6	<0.5	5.0	74	<0.1	0.3	0.1	54	0.31	0.024

## CERTIFICATE OF ANALYSIS

VAN08009045.1

LINE	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1
LINE 100 8100	Soil	10	55	0.61	201	0.039	3	1.85	0.010	0.09	<0.1	0.02	3.7	<0.1	<0.05	6
LINE 100 8125	Soil	11	77	0.86	248	0.039	2	2.21	0.018	0.13	<0.1	0.02	10.0	<0.1	<0.05	6
LINE 100 8175	Soil	16	59	0.58	378	0.047	6	1.55	0.014	0.19	<0.1	0.95	11.1	0.3	<0.05	4
LINE 100 8200	Soil	11	66	0.21	325	0.015	3	0.98	0.009	0.09	<0.1	2.28	11.8	0.3	<0.05	3
LINE 100 8225	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 100 8250	Soil	10	60	0.47	212	0.045	2	1.42	0.010	0.11	0.1	0.30	6.7	0.2	<0.05	4
LINE 100 8300	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 100 8325	Soil	12	68	0.61	303	0.039	5	1.91	0.043	0.07	0.1	0.26	8.0	0.1	<0.05	4
LINE 100 8350	Soil	12	46	0.58	272	0.059	6	1.80	0.035	0.08	0.2	0.21	7.1	0.1	<0.05	5
LINE 100 8375	Soil	8	33	0.46	172	0.073	3	2.22	0.020	0.08	0.2	0.09	3.4	<0.1	<0.05	5
LINE 100 8400	Soil	11	30	0.42	237	0.066	3	1.95	0.018	0.06	0.1	0.07	3.5	<0.1	<0.05	5
LINE 200 7975	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 200 8000	Soil	9	70	0.72	460	0.030	5	2.78	0.019	0.14	<0.1	0.11	8.4	<0.1	<0.05	6
LINE 300 8025	Soil	15	37	0.60	269	0.047	2	1.61	0.009	0.12	<0.1	0.05	3.1	<0.1	<0.05	5
LINE 300 8150	Soil	10	40	0.40	188	0.061	5	1.62	0.009	0.08	0.1	0.06	4.0	<0.1	<0.05	4
LINE 300 8175	Soil	7	39	0.44	196	0.093	6	1.67	0.010	0.09	0.1	0.09	2.9	<0.1	<0.05	7
LINE 300 8200	Soil	12	54	0.74	173	0.042	5	1.82	0.059	0.04	<0.1	0.15	8.6	<0.1	<0.05	4
LINE 300 8225	Soil	15	43	0.86	138	0.053	2	1.70	0.014	0.05	<0.1	0.08	4.3	<0.1	<0.05	5
LINE 400 7975	Soil	7	60	0.45	259	0.053	3	2.25	0.012	0.11	0.1	0.11	8.8	<0.1	<0.05	5
LINE 400 8000	Soil	8	43	0.45	160	0.055	2	1.76	0.007	0.10	<0.1	0.03	3.1	<0.1	<0.05	5
LINE 400 8025	Soil	7	33	0.35	198	0.035	4	1.58	0.008	0.10	2.3	0.05	4.4	<0.1	<0.05	4
LINE 400 8050	Soil	9	25	0.55	210	0.041	6	1.92	0.010	0.14	0.3	0.03	3.6	<0.1	<0.05	5
LINE 400 8075	Soil	10	28	0.43	212	0.048	4	1.65	0.010	0.12	0.3	0.03	2.5	<0.1	<0.05	4
LINE 400 8100	Soil	8	33	0.53	101	0.067	3	2.29	0.009	0.12	0.2	0.02	3.3	<0.1	<0.05	5
LINE 400 8125	Soil	9	35	0.50	177	0.074	3	2.24	0.012	0.16	<0.1	0.03	5.0	<0.1	<0.05	5
LINE 400 8150	Soil	10	29	0.55	110	0.067	2	2.04	0.015	0.13	<0.1	0.02	3.3	<0.1	<0.05	4
LINE 400 8200	Soil	12	32	0.33	178	0.053	3	1.98	0.009	0.08	<0.1	0.06	3.5	<0.1	<0.05	6
LINE 500 8000	Soil	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
LINE 500 8025	Soil	16	35	0.84	263	0.040	5	2.12	0.035	0.09	<0.1	0.05	5.6	<0.1	<0.05	5
LINE 500 8050	Soil	18	36	0.73	84	0.069	3	2.16	0.029	0.21	<0.1	0.02	4.7	0.1	<0.05	6

## CERTIFICATE OF ANALYSIS

VAN08009045.1

	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo ppm 0.1	Cu ppm 0.1	Pb ppm 0.1	Zn ppm 1	Ag ppm 0.1	Ni ppm 0.1	Co ppm 0.1	Mn ppm 1	Fe % 0.01	As ppm 0.5	U ppm 0.1	Au ppb 0.5	Th ppm 0.1	Sr ppm 1	Cd ppm 0.1	Sb ppm 0.1	Bi ppm 0.1	V ppm 2	Ca % 0.01	P % 0.001
LINE 500 8075	Soil	0.5	14.1	6.2	79	<0.1	24.9	10.2	305	3.07	7.0	0.5	0.5	3.4	99	0.2	0.2	<0.1	61	0.48	0.040
LINE 500 8100	Soil	0.6	17.0	4.8	78	0.1	25.4	11.6	336	3.42	7.7	0.5	0.7	2.7	79	<0.1	0.1	<0.1	72	0.36	0.092
LINE 500 8125	Soil	0.4	26.0	5.8	97	0.1	34.5	12.5	333	3.50	7.4	0.4	16.0	3.5	59	0.2	0.2	<0.1	69	0.38	0.135
LINE 500 8150	Soil	0.3	13.7	5.2	89	0.2	29.2	9.4	309	3.12	5.0	0.5	<0.5	2.7	54	<0.1	0.1	<0.1	55	0.29	0.081
LINE 400 8200	Soil	0.7	33.5	7.0	53	<0.1	23.3	13.1	723	3.24	9.8	0.7	0.7	3.9	75	0.1	0.4	<0.1	62	0.60	0.080
LINE 500 8000	Soil	0.6	30.6	4.9	89	0.1	34.3	11.3	268	3.54	11.0	0.5	0.6	2.8	34	0.1	0.2	<0.1	76	0.29	0.105
LINE 500 8025	Soil	1.3	31.6	4.3	116	0.1	27.7	10.0	297	3.09	14.6	0.8	<0.5	2.7	46	<0.1	0.3	<0.1	70	0.23	0.071
LINE 500 8050	Soil	0.3	18.9	4.0	91	<0.1	28.0	9.2	227	2.69	4.0	0.4	<0.5	3.6	19	<0.1	0.1	0.1	48	0.13	0.061
LINE 500 8075	Soil	0.5	17.5	5.4	116	<0.1	21.6	8.1	802	2.44	5.5	0.4	1.0	3.0	21	0.2	0.2	0.1	42	0.21	0.062
LINE 500 8100	Soil	1.5	27.6	7.4	71	<0.1	39.0	22.4	355	4.57	22.9	1.1	0.9	2.0	62	0.2	0.3	0.1	109	0.57	0.054
LINE 500 8125	Soil	0.9	40.6	7.2	57	<0.1	33.5	16.5	783	3.80	14.0	1.0	2.8	2.6	69	0.3	0.3	0.1	86	0.67	0.099
LINE 500 8150	Soil	0.4	23.6	4.8	71	<0.1	20.7	8.4	659	2.72	7.4	0.3	1.5	1.5	46	0.1	0.1	<0.1	70	0.30	0.084

## CERTIFICATE OF ANALYSIS

VAN08009045.1

	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 500 8075	Soil	13	33	0.56	113	0.066	5	2.10	0.026	0.09	<0.1	0.03	2.6	<0.1	<0.05	6	<0.5
LINE 500 8100	Soil	10	32	0.59	116	0.066	4	2.50	0.010	0.11	0.1	0.03	2.5	<0.1	<0.05	6	<0.5
LINE 500 8125	Soil	12	39	0.68	110	0.083	3	2.28	0.009	0.14	0.1	0.02	2.8	<0.1	<0.05	6	<0.5
LINE 500 8150	Soil	12	33	0.62	92	0.066	3	2.41	0.011	0.11	0.1	0.02	2.6	<0.1	<0.05	6	<0.5
LINE 400 8200	Soil	14	31	0.57	155	0.048	5	1.28	0.059	0.07	0.2	0.11	6.7	<0.1	<0.05	4	<0.5
LINE 500 8000	Soil	12	64	0.43	199	0.047	4	1.84	0.007	0.13	<0.1	0.04	4.0	<0.1	<0.05	5	<0.5
LINE 500 8025	Soil	11	45	0.35	225	0.032	3	1.35	0.006	0.08	<0.1	0.10	3.6	0.1	<0.05	4	<0.5
LINE 500 8050	Soil	12	43	0.69	206	0.043	2	1.69	0.013	0.10	<0.1	0.02	3.0	<0.1	<0.05	5	<0.5
LINE 500 8075	Soil	12	34	0.51	272	0.047	2	1.21	0.017	0.11	<0.1	0.04	2.2	<0.1	<0.05	4	<0.5
LINE 500 8100	Soil	7	68	0.55	352	0.050	3	2.76	0.013	0.06	<0.1	0.08	5.1	<0.1	<0.05	6	<0.5
LINE 500 8125	Soil	12	58	0.62	338	0.034	2	1.54	0.044	0.09	0.1	0.12	9.3	<0.1	<0.05	4	<0.5
LINE 500 8150	Soil	6	38	0.39	167	0.052	2	1.39	0.010	0.11	<0.1	0.02	3.2	<0.1	<0.05	5	<0.5

## QUALITY CONTROL REPORT

VAN08009045.1

Method Analyte Unit MDL		1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
Pulp Duplicates																				
LINE 92 8350	Soil	0.6	17.7	6.3	79	<0.1	22.0	10.4	297	3.16	10.8	0.4	1.5	3.1	53	0.2	0.2	0.1	65	0.18
REP LINE 92 8350	QC	0.7	16.8	6.2	80	<0.1	21.3	10.0	276	3.04	10.7	0.4	1.7	2.9	56	0.2	0.2	0.1	62	0.17
LINE 92 8525	Soil	0.7	67.8	11.3	74	<0.1	47.5	18.0	793	4.11	13.9	0.8	4.3	6.6	62	0.2	0.5	0.1	85	0.43
REP LINE 92 8525	QC	0.6	65.1	11.2	73	<0.1	46.0	17.7	816	4.03	13.3	0.8	0.7	6.9	59	0.2	0.5	0.2	87	0.44
LINE 93 8250	Soil	0.5	20.6	5.5	54	<0.1	24.2	10.2	488	2.49	6.3	0.9	<0.5	3.3	53	<0.1	0.2	0.1	53	0.31
REP LINE 93 8250	QC	0.5	20.5	5.5	54	<0.1	23.0	9.7	471	2.42	6.2	0.9	<0.5	3.4	49	0.1	0.2	0.1	51	0.31
LINE 94 8175	Soil	0.5	19.7	5.2	74	<0.1	15.7	8.4	430	2.92	10.6	0.5	0.5	2.2	179	<0.1	0.3	0.1	66	0.56
REP LINE 94 8175	QC	0.5	19.2	5.2	76	<0.1	16.3	8.3	429	2.95	10.4	0.6	1.3	2.1	180	0.1	0.3	0.1	68	0.55
LINE 94 8650	Soil	0.4	26.2	6.2	68	<0.1	30.4	14.1	529	3.48	6.9	0.5	2.6	3.2	98	0.1	0.2	<0.1	91	0.72
REP LINE 94 8650	QC	0.4	23.9	5.9	64	<0.1	29.8	13.7	491	3.27	6.7	0.5	2.0	3.2	103	0.1	0.2	0.1	89	0.71
LINE 95 8425	Soil	0.5	32.9	5.1	135	0.1	30.6	13.8	587	3.75	9.7	0.6	0.9	1.9	65	0.2	0.2	<0.1	100	0.32
REP LINE 95 8425	QC	0.5	30.9	4.9	130	<0.1	30.8	13.4	570	3.73	9.5	0.5	1.1	1.9	65	0.2	0.2	<0.1	101	0.30
LINE 95 8500	Soil	0.5	26.5	6.7	53	<0.1	29.9	12.9	544	3.02	7.8	1.0	2.7	3.6	51	<0.1	0.2	0.1	70	0.34
REP LINE 95 8500	QC	0.4	25.5	6.9	51	<0.1	29.2	12.7	551	3.01	7.6	1.1	2.1	3.5	50	0.1	0.3	0.1	69	0.35
LINE 96 8025	Soil	0.5	27.4	5.5	87	0.2	27.7	10.7	350	3.40	9.4	0.6	<0.5	3.1	134	0.2	0.3	0.1	77	0.28
REP LINE 96 8025	QC	0.5	26.6	5.5	84	0.2	28.1	10.4	356	3.50	9.2	0.5	0.6	3.1	133	0.2	0.3	0.1	76	0.28
LINE 97 7825	Soil	0.4	26.5	7.9	56	0.1	32.8	13.3	330	3.28	6.6	1.1	4.3	3.2	51	0.2	0.2	0.1	67	0.56
REP LINE 97 7825	QC	0.4	28.2	7.8	58	0.1	33.6	13.9	339	3.35	6.5	1.2	1.5	3.8	51	<0.1	0.2	0.1	69	0.57
LINE 97 8175	Soil	0.3	12.5	5.7	70	0.1	27.1	9.3	211	2.77	4.9	0.4	0.9	3.5	25	0.2	0.2	0.1	51	0.28
REP LINE 97 8175	QC	0.3	11.8	6.1	64	0.1	24.9	8.4	200	2.57	4.4	0.5	0.8	3.5	23	0.1	0.1	0.1	47	0.27
LINE 98 7975	Soil	0.5	22.6	5.8	75	<0.1	30.6	10.4	248	3.42	9.6	0.6	<0.5	4.1	75	0.2	0.3	0.1	61	0.16
REP LINE 98 7975	QC	0.4	22.6	5.5	72	<0.1	30.5	10.2	240	3.42	9.8	0.5	<0.5	4.0	76	0.2	0.2	0.1	60	0.15
LINE 99 8100	Soil	1.4	17.6	4.7	91	<0.1	26.3	8.8	238	2.66	7.3	0.9	0.7	4.6	23	0.1	0.2	<0.1	42	0.20
REP LINE 99 8100	QC	1.4	18.2	5.0	94	<0.1	26.5	8.9	243	2.76	7.6	0.9	3.5	4.6	24	0.1	0.2	<0.1	42	0.21
LINE 100 8075	Soil	0.8	43.8	4.2	88	0.1	51.3	17.4	323	4.38	10.3	0.5	0.7	2.4	40	0.1	0.2	<0.1	116	0.35
REP LINE 100 8075	QC	0.8	43.4	4.0	87	0.1	49.8	17.2	334	4.42	10.6	0.5	0.6	2.4	40	0.1	0.2	<0.1	120	0.36
LINE 300 8150	Soil	0.7	27.2	5.3	53	<0.1	25.4	11.2	383	3.35	11.1	0.6	<0.5	3.3	55	0.3	0.7	<0.1	85	0.32
REP LINE 300 8150	QC	0.8	30.4	5.3	51	<0.1	28.7	12.6	402	3.48	11.4	0.7	<0.5	3.2	53	<0.1	0.5	<0.1	88	0.32

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Method Analyte Unit MDL		1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Ti	S	Ga
		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1
Pulp Duplicates																
LINE 92 8350	Soil	12	31	0.45	164	0.042	2	1.65	0.010	0.07	<0.1	0.02	2.5	<0.1	<0.05	6
REP LINE 92 8350	QC	11	29	0.44	159	0.040	<1	1.63	0.013	0.06	0.1	0.03	2.2	<0.1	<0.05	6
LINE 92 8525	Soil	24	56	0.82	197	0.089	4	2.26	0.042	0.25	0.1	0.11	9.3	0.2	<0.05	6
REP LINE 92 8525	QC	24	58	0.82	209	0.096	4	2.31	0.028	0.26	0.1	0.12	9.8	0.2	<0.05	6
LINE 93 8250	Soil	14	34	0.48	138	0.044	<1	1.42	0.013	0.06	<0.1	0.04	3.7	<0.1	<0.05	4
REP LINE 93 8250	QC	14	33	0.45	136	0.045	<1	1.38	0.015	0.07	<0.1	0.04	3.6	<0.1	<0.05	4
LINE 94 8175	Soil	11	21	0.47	512	0.033	<1	2.25	0.017	0.14	<0.1	0.24	2.9	<0.1	<0.05	8
REP LINE 94 8175	QC	11	21	0.46	515	0.032	1	2.36	0.017	0.14	<0.1	0.25	2.7	<0.1	<0.05	7
LINE 94 8650	Soil	13	48	0.74	129	0.088	3	2.07	0.017	0.12	0.1	0.03	4.0	<0.1	<0.05	6
REP LINE 94 8650	QC	13	48	0.74	128	0.093	4	2.11	0.023	0.13	0.1	0.03	3.7	<0.1	<0.05	5
LINE 95 8425	Soil	9	49	0.58	458	0.070	2	2.45	0.019	0.12	<0.1	0.10	5.0	<0.1	<0.05	7
REP LINE 95 8425	QC	9	47	0.57	446	0.057	2	2.22	0.022	0.12	<0.1	0.08	4.4	<0.1	<0.05	6
LINE 95 8500	Soil	14	43	0.55	251	0.067	3	1.52	0.024	0.09	0.1	0.05	5.6	<0.1	<0.05	5
REP LINE 95 8500	QC	14	43	0.54	241	0.065	2	1.61	0.019	0.09	<0.1	0.06	5.5	<0.1	<0.05	4
LINE 96 8025	Soil	14	37	0.59	163	0.056	3	1.77	0.011	0.16	<0.1	0.05	3.5	0.1	<0.05	5
REP LINE 96 8025	QC	14	37	0.56	168	0.053	2	1.78	0.011	0.15	<0.1	0.05	3.6	0.1	<0.05	5
LINE 97 7825	Soil	14	54	0.60	132	0.049	2	1.91	0.014	0.06	<0.1	0.03	4.5	<0.1	<0.05	5
REP LINE 97 7825	QC	16	53	0.62	136	0.058	3	1.98	0.018	0.07	<0.1	0.05	4.6	<0.1	<0.05	5
LINE 97 8175	Soil	12	35	0.50	261	0.053	3	1.62	0.007	0.10	<0.1	0.06	2.1	<0.1	<0.05	5
REP LINE 97 8175	QC	12	32	0.47	251	0.053	2	1.59	0.007	0.10	<0.1	0.05	1.8	<0.1	<0.05	5
LINE 98 7975	Soil	13	36	0.61	133	0.055	1	1.98	0.020	0.13	<0.1	0.04	3.6	0.2	<0.05	6
REP LINE 98 7975	QC	13	35	0.57	133	0.052	2	1.94	0.027	0.13	<0.1	0.05	3.2	0.2	<0.05	6
LINE 99 8100	Soil	17	35	0.55	139	0.034	2	1.31	0.011	0.10	<0.1	0.02	2.5	<0.1	<0.05	4
REP LINE 99 8100	QC	17	36	0.56	141	0.033	2	1.36	0.006	0.11	<0.1	0.02	2.6	0.1	<0.05	4
LINE 100 8075	Soil	8	104	0.82	301	0.039	3	2.95	0.014	0.12	<0.1	0.07	7.1	<0.1	<0.05	7
REP LINE 100 8075	QC	8	104	0.81	296	0.040	3	2.87	0.013	0.12	<0.1	0.02	7.2	<0.1	<0.05	7
LINE 300 8150	Soil	10	40	0.40	188	0.061	5	1.62	0.009	0.08	0.1	0.06	4.0	<0.1	<0.05	4
REP LINE 300 8150	QC	9	40	0.41	190	0.067	4	1.63	0.009	0.09	0.2	0.21	3.9	<0.1	<0.05	4

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		1DX15 Mo ppm 0.1	1DX15 Cu ppm 0.1	1DX15 Pb ppm 0.1	1DX15 Zn ppm 1	1DX15 Ag ppm 0.1	1DX15 Ni ppm 0.1	1DX15 Co ppm 0.1	1DX15 Mn ppm 1	1DX15 Fe % 0.01	1DX15 As ppm 0.5	1DX15 U ppm 0.1	1DX15 Au ppb 0.5	1DX15 Th ppm 0.1	1DX15 Sr ppm 1	1DX15 Cd ppm 0.1	1DX15 Sb ppm 0.1	1DX15 Bi ppm 0.1	1DX15 V ppm 2	1DX15 Ca % 0.01	1DX15 P % 0.001
LINE 500 8000	Soil	0.6	30.6	4.9	89	0.1	34.3	11.3	268	3.54	11.0	0.5	0.6	2.8	34	0.1	0.2	<0.1	76	0.29	0.105
REP LINE 500 8000	QC	0.6	28.4	4.7	88	<0.1	34.1	11.5	260	3.59	11.4	0.5	0.7	3.0	33	<0.1	0.2	<0.1	74	0.28	0.108
Reference Materials																					
STD DS7	Standard	20.3	126.1	74.5	424	0.9	53.4	9.2	628	2.33	60.8	4.4	74.8	4.1	74	7.5	6.4	4.6	84	0.92	0.074
STD DS7	Standard	19.5	109.9	71.6	390	0.8	54.8	9.0	640	2.35	48.9	4.8	69.1	4.2	86	6.1	6.5	5.0	86	0.97	0.078
STD DS7	Standard	21.2	107.9	68.8	402	1.0	55.2	9.5	623	2.32	53.0	4.9	361.0	4.1	75	6.1	6.0	4.5	94	1.00	0.078
STD DS7	Standard	20.2	115.0	71.7	417	0.9	56.5	9.6	656	2.41	48.5	4.5	73.1	4.2	79	5.9	6.7	5.0	93	0.93	0.074
STD DS7	Standard	19.7	107.8	70.2	390	0.8	56.0	9.3	626	2.34	50.5	5.1	58.8	4.5	80	6.0	6.6	4.5	83	0.95	0.076
STD DS7	Standard	21.0	118.3	71.6	415	0.8	55.9	9.4	646	2.46	53.7	4.8	90.5	4.4	78	6.8	5.7	4.5	91	0.96	0.083
STD DS7	Standard	19.5	108.2	69.2	400	0.8	52.7	8.8	616	2.30	48.9	4.7	66.5	4.1	77	6.3	5.6	4.3	85	0.88	0.077
STD DS7	Standard	19.8	108.3	72.6	388	0.9	54.4	9.4	624	2.33	49.8	5.2	58.2	4.6	75	5.9	5.8	4.6	88	0.94	0.075
STD DS7	Standard	19.2	106.6	68.9	381	0.8	51.5	8.7	611	2.31	51.3	4.9	64.2	3.9	79	6.5	7.0	4.8	77	0.92	0.075
STD DS7	Standard	20.3	110.3	69.6	391	0.9	52.6	8.9	621	2.46	50.2	4.9	149.7	4.3	73	5.9	5.8	4.5	86	0.99	0.079
STD DS7	Standard	20.2	115.8	69.1	400	0.8	58.2	10.5	646	2.44	56.1	5.3	77.1	4.3	68	6.9	6.2	5.1	87	0.92	0.090
STD DS7 Expected		20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93	0.08
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001



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		1DX15 La ppm	1DX15 Cr ppm	1DX15 Mg %	1DX15 Ba ppm	1DX15 Ti %	1DX15 B ppm	1DX15 Al %	1DX15 Na %	1DX15 K %	1DX15 W ppm	1DX15 Hg ppm	1DX15 Sc ppm	1DX15 Ti ppm	1DX15 S %	1DX15 Ga ppm	1DX15 Se ppm
		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
LINE 500 8000	Soil	12	64	0.43	199	0.047	4	1.84	0.007	0.13	<0.1	0.04	4.0	<0.1	<0.05	5	<0.5
REP LINE 500 8000	QC	12	64	0.41	199	0.042	3	1.77	0.006	0.13	<0.1	0.04	4.1	<0.1	<0.05	5	<0.5
Reference Materials																	
STD DS7	Standard	13	167	1.02	375	0.132	37	1.02	0.097	0.46	3.7	0.20	2.6	4.2	0.15	5	3.1
STD DS7	Standard	14	199	1.00	382	0.135	38	1.05	0.096	0.50	3.4	0.21	2.7	4.3	0.20	5	3.5
STD DS7	Standard	14	197	1.08	398	0.126	41	1.04	0.107	0.50	3.8	0.21	3.0	4.4	0.19	5	4.0
STD DS7	Standard	13	212	1.03	389	0.141	38	1.00	0.093	0.51	3.8	0.21	2.4	4.0	0.18	5	3.8
STD DS7	Standard	13	193	1.07	378	0.131	42	1.07	0.108	0.47	3.7	0.18	2.7	4.1	0.19	5	3.8
STD DS7	Standard	13	199	1.08	403	0.129	37	1.02	0.098	0.49	3.9	0.21	2.4	4.5	0.14	5	3.5
STD DS7	Standard	13	183	1.04	381	0.124	38	1.02	0.094	0.47	3.7	0.19	2.2	4.0	0.19	5	3.4
STD DS7	Standard	13	200	1.04	380	0.127	43	1.00	0.090	0.46	3.7	0.20	2.4	4.0	0.21	5	3.0
STD DS7	Standard	12	182	0.99	425	0.118	39	0.99	0.095	0.47	3.8	0.18	2.4	4.0	0.17	5	2.9
STD DS7	Standard	13	202	1.10	380	0.124	41	1.08	0.086	0.46	4.0	0.19	2.5	4.1	0.25	5	3.6
STD DS7	Standard	12	185	1.03	374	0.126	43	1.01	0.092	0.47	3.9	0.20	2.6	4.4	0.14	5	3.8
STD DS7 Expected		13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	5	3.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5