



Ministry of Energy and Mines  
BC Geological Survey

Assessment Report  
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Prospecting,

TOTAL COST: 15.384.53

AUTHOR(S): Derrick Strickland

SIGNATURE(S): 

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): May 25 to May 29 2019

YEAR OF WORK: 2019

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): \_\_\_\_\_

PROPERTY NAME: Mayner's Fortune Property

CLAIM NAME(S) (on which the work was done): 1068657 1061335 1067352 1067920 1067364 1067369

COMMODITIES SOUGHT: Gold Copper Lead

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 103I-: 113, 124, 192

MINING DIVISION: Skeena Mining Division

NTS/BCGS: 103I07

LATITUDE: 54 ° 245 ' 22 " LONGITUDE: 128 ° 37 ' 24 " (at centre of work)

OWNER(S):

1) Durango Resources Inc

2) \_\_\_\_\_

MAILING ADDRESS:

248 - 515 West Pender Street

V6B 6H5

OPERATOR(S) [who paid for the work]:

1) Durango Resources Inc.

2) \_\_\_\_\_

MAILING ADDRESS:

248-515 West Pender V6B 6H5

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Limestone, sedimentary, granodiorite, diorite, greenstone, Paleozoic, migmatized, graphitic, argillite, carbonate

Stikine terrane, island arc, Paleozoic to Lower Jurassic volcanic, Coast Range batholith,

Fossiliferous Palaeozoic limestone and associated greenstones occur as small pendants,

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 36945, 36203

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
<b>Ground, mapping</b>	1200 x 600 m	168657, 167369	7500
<b>Photo interpretation</b>			
<b>GEOPHYSICAL (line-kilometres)</b>			
<b>Ground</b>			
<b>Magnetic</b>			
<b>Electromagnetic</b>			
<b>Induced Polarization</b>			
<b>Radiometric</b>			
<b>Seismic</b>			
<b>Other</b>			
<b>Airborne</b>			
<b>GEOCHEMICAL (number of samples analysed for...)</b>			
<b>Soil</b>			
<b>Silt</b>			
<b>Rock</b>	15	168657, 167369	7064
<b>Other</b>			
<b>DRILLING (total metres; number of holes, size)</b>			
<b>Core</b>			
<b>Non-core</b>			
<b>RELATED TECHNICAL</b>			
<b>Sampling/assaying</b>	15 ICP	168657, 167369	820
<b>Petrographic</b>			
<b>Mineralographic</b>			
<b>Metallurgic</b>			
<b>PROSPECTING (scale, area)</b>			
<b>PREPARATORY / PHYSICAL</b>			
<b>Line/grid (kilometres)</b>			
<b>Topographic/Photogrammetric (scale, area)</b>			
<b>Legal surveys (scale, area)</b>			
<b>Road, local access (kilometres)/trail</b>			
<b>Trench (metres)</b>			
<b>Underground dev. (metres)</b>			
<b>Other</b>			
		<b>TOTAL COST:</b>	15.384.53

# 2019 Assessment Report



on the  
**Mayner's Fortune Property**  
British Columbia,  
At  
**128° 37' 24" Longitude**  
**54° 24' 22" Latitude**  
NTS MAP  
103I/07  
**Claims**

**1068657 1061335 1067352 1067920 1067364 1067369**



For  
Durango Resources Inc  
248 - 515 W. Pender St  
Vancouver  
V6B 2H5

By  
Derrick Strickland,  
P. Geo.

July 5, 2019

**Table of Contents**

1	SUMMARY .....	3
2	INTRODUCTION .....	4
2.1	Units and Measurements .....	5
3	PROPERTY DESCRIPTION AND LOCATION .....	6
4	ACCESSIBILITY, CLIMATE, PHYSIOGRAPHY, LOCAL RESOURCES, AND .....	9
5	HISTORY .....	10
6	GEOLOGICAL SETTING AND MINERALIZATION .....	12
7	2019 Exploration .....	16
8	Adjacent Properties .....	21
9	Sample Preparation, Analysis and Security .....	21
10	Interpretation and Conclusion .....	22
11	References .....	23
12	CERTIFICATE OF AUTHOR .....	24

**List of Figures**

Figure 1:	Regional Location Map .....	7
Figure 2:	Property Claim Map .....	8
Figure 3:	Property Geology .....	17
Figure 4:	2019 Area .....	18
Figure 5:	Bedded Limestone at Hal .....	19
Figure 6:	Limestone Bed .....	19
Figure 7:	New Limestone Sample MS19-15 .....	19
Figure 8:	Newly Exposed Limestone .....	19
Figure 9:	Limestone as road fill. ....	19
Figure 10:	Hal Showing .....	19
Figure 11:	2019 Rock Sample Locations .....	20

**List of Tables**

<i>Table 1: Definitions, Abbreviations, and Conversions</i> .....	5
<i>Table 2: Property Claim Information</i> .....	6

Appendix 1: Statement of Expenditure .....	This Volume
Appendix 2: 2019 Maps and Assay Data .....	This Volume

## 1 SUMMARY

Durango Resources Inc. undertook an exploration program on the Mayner's Fortune Property from May 25 to May 29, 2019, which included collection of 15 outcrop samples, prospecting and mapping. Much of the property can be access via historical and new logging roads. The total cost to undertake the exploration program is was \$15,384.53 (Expenditures are in Appendix 1).

The Mayner's Fortune Property consists of six non-surveyed mineral tenures (508.25 ha that form an irregular shaped block extending northwards and located on MTS map sheet 103I/07 centered at 54° 24' 22.99" North and 128°37'24.42" West. The Property is believed to be prospective for limestone, and skarn mineralization. The claim block is located centrally within the Kalum-Kitimat Pleistocene Valley, near the west flank of the Herman Mtn. intrusive complex, Paleozoic strata are the main component of the rocks and intrusive are less dominant. The regional structure of grain is approximately north - south to north 10° east and indicates north trending folds and some thrust faults dipping east.

Historically on the Mayner's Fortune claim group, at least six carbonate zones were observed, trending essentially north-south. The limestone beds on the property are usually covered by moss and other dense vegetation, so it is often difficult to determine the extent and quality of the limestone bodies. The westernmost unit of the limestone sequence, referred to as the Mayner's Fortune occurrence (also historically referred to as Unit #1) occurs on the western side of Durango's Mayner's Fortune claim block (Haman, 1966). The occurrence is 30 metres thick lying adjacent to the CNR railway line, striking 040 degrees and dipping 25 degrees southeast. The unit has been mapped along strike for 108 metres with an average height of 30 metres measured from the level of the CNR tracks, and is suspected to continue beneath this level as well (Haman, 1966). The block is estimated to contain at least 454,000 tonnes of limestone (K.P. Bottoms, 1967, pp. 3, 10). A representative sample from this block assayed 96.3 percent calcium carbonate and 1.59 percent magnesium carbonate (K.P. Bottoms 1967, p. 10).

Five additional limestone beds have been historically mapped on Durango's property, labelled Units #2 through #6. Of the five carbonate units mapped on the property, the third carbonate belt has been historically reported to carry some pure limestone of probably large extent and the fifth carbonate belt is thick but impure. Both of these units are relatively under-explored and appear to be the most prospective units on the property (Haman, 1966; Bottoms, 1967).

The Durango Resources Inc. team was successful in discovering additional massive limestone showings running parallel to the known six limestone beds reported in the Haman 1966 and Bottoms 1967 reports. The preliminary investigations indicate the newly discovered limestone beds all trend from the northwest to the southwest.

## 2 INTRODUCTION

In the preparation of this report, the author utilized both British Columbia and Federal Government of Canada geological maps, geological reports, and claim maps. Information was also obtained from British Columbia Government websites such as:

- Map Place - [www.empr.gov.bc.ca/Mining/Geoscience/MapPlace](http://www.empr.gov.bc.ca/Mining/Geoscience/MapPlace);
- Mineral Titles Online - [www.mtonline.gov.bc.ca](http://www.mtonline.gov.bc.ca); and
- GeoscienceBC - [www.geosciencebc.com](http://www.geosciencebc.com)

And the mineral assessment work reports (ARIS reports) from the Mayner's Fortune Property area that have been historically filed by various companies.

The author reserves the right, but will not be obliged; to revise the report and conclusions if additional information becomes known subsequent to the date of this report.

The information, opinions, and conclusions contained herein are based on:

- Information available to the author at the time of preparation of this report;
- Assumptions, conditions, and qualifications as set forth in this report;

As of the date of this report, the author is not aware of any material fact or material change with respect to the subject matter of this technical report that is not presented herein, or which the omission to disclose could make this report misleading.

This report has been written to fulfill the requirements for filing assessment work under the British Columbia Mineral Tenure Act. It describes the exploration undertaken on the Mayner's Fortune Property. This report is does not nor is it intended to meet with National Instrument 43-101 and Form 43-101F1, and should not be used as a "Technical Report" under National Instrument 43-101 nor relied upon in any form.

## 2.1 Units and Measurements

**Table 1: Definitions, Abbreviations, and Conversions**

Units of Measure	Abbreviation	Units of Measure	Abbreviation
Above mean sea level	amsl	Micrometre (micron)	µm
Annum (year)	a	Miles per hour	Mph
Billion years ago	Ga	Milligram	Mg
Centimetre	cm	Milligrams per litre	mg/L
Cubic centimetre	cm <sup>3</sup>	Millilitre	mL
Cubic metre	m <sup>3</sup>	Millimetre	Mm
Day	d	Million	M
Days per week	d/wk	Million tonnes	Mt
Days per year (annum)	d/a	Minute (plane angle)	'
Dead weight tonnes	DWT	Minute (time)	Min
Degree	°	Month	Mo
Degrees Celsius	°C	Ounce	oz.
Degrees Fahrenheit	°F	Parts per billion	Ppb
Diameter	∅	Parts per million	Ppm
Gram	g	Percent	%
Grams per litre	g/L	Pound(s)	lb.
Grams per tonne	g/t	Power factor	pF
Greater than	>	Specific gravity	SG
Hectare (10,000 m <sup>2</sup> )	ha	Square centimetre	cm <sup>2</sup>
Gram	g	Square inch	in <sup>2</sup>
Grams per litre	g/L	Square kilometre	km <sup>2</sup>
Grams per tonne	g/t	Square metre	m <sup>2</sup>
Greater than	>	Thousand tonnes	Kt
Kilo (thousand)	k	Tonne (1,000kg)	T
Kilogram	kg	Tonnes per day	t/d
Kilograms per cubic metre	kg/m <sup>3</sup>	Tonnes per hour	t/h
Kilograms per hour	kg/h	Tonnes per year	t/a
Kilometre	km	Total dissolved solids	TDS
Kilometres per hour	km/h	Total suspended solids	TSS
Less than	<	Week	Wk
Litre	L	Weight/weight	w/w
Litres per minute	L/m	Wet metric tonne	Wmt
Metre	m	Yard	yd.
Metres above sea level	masl	Year (annum)	A
Metres per minute	m/min	Year	yr.
Metres per second	m/s		
Metric ton (tonne)	t		

For the purpose of the report, the author has reviewed and relied on ownership information provided by Durango Resources Inc., which to the author's knowledge is correct. A limited search of tenure data on the British Columbia government's Mineral Titles Online (MTO) website confirms the data supplied.

### 3 PROPERTY DESCRIPTION AND LOCATION

The Mayner's Fortune Property consists of six non-surveyed mineral tenures (508.25 ha which form an irregular shaped block extending northwards and located on MTS map sheet 103I/07 centered at 54° 24' 22.99" North and 128° 37' 24.42" West.

The Mayner's Fortune Property is located approximately 15 kilometres south of Terrace, British Columbia and is accessible by numerous forest service logging roads in various states of regrowth. The mineral claims are shown in Figures 1 and 2, and the claim details are illustrated in the following table (Table 2):

**Table 2: Property Claim Information**

<b>Number</b>	<b>Name</b>	<b>Issue Date</b>	<b>Area (ha)</b>
1068657	HAL	2019-05-21	75.29
1061335		2018-06-20	18.82
1067352		2019-03-21	18.82
1067920	MAYNER NORTH	2019-04-15	18.82
1067364	MAYNERS	2019-03-21	301.18
1067369	MAYNERS EAST	2019-03-21	75.31
		<b>Total Ha</b>	<b>508.25</b>

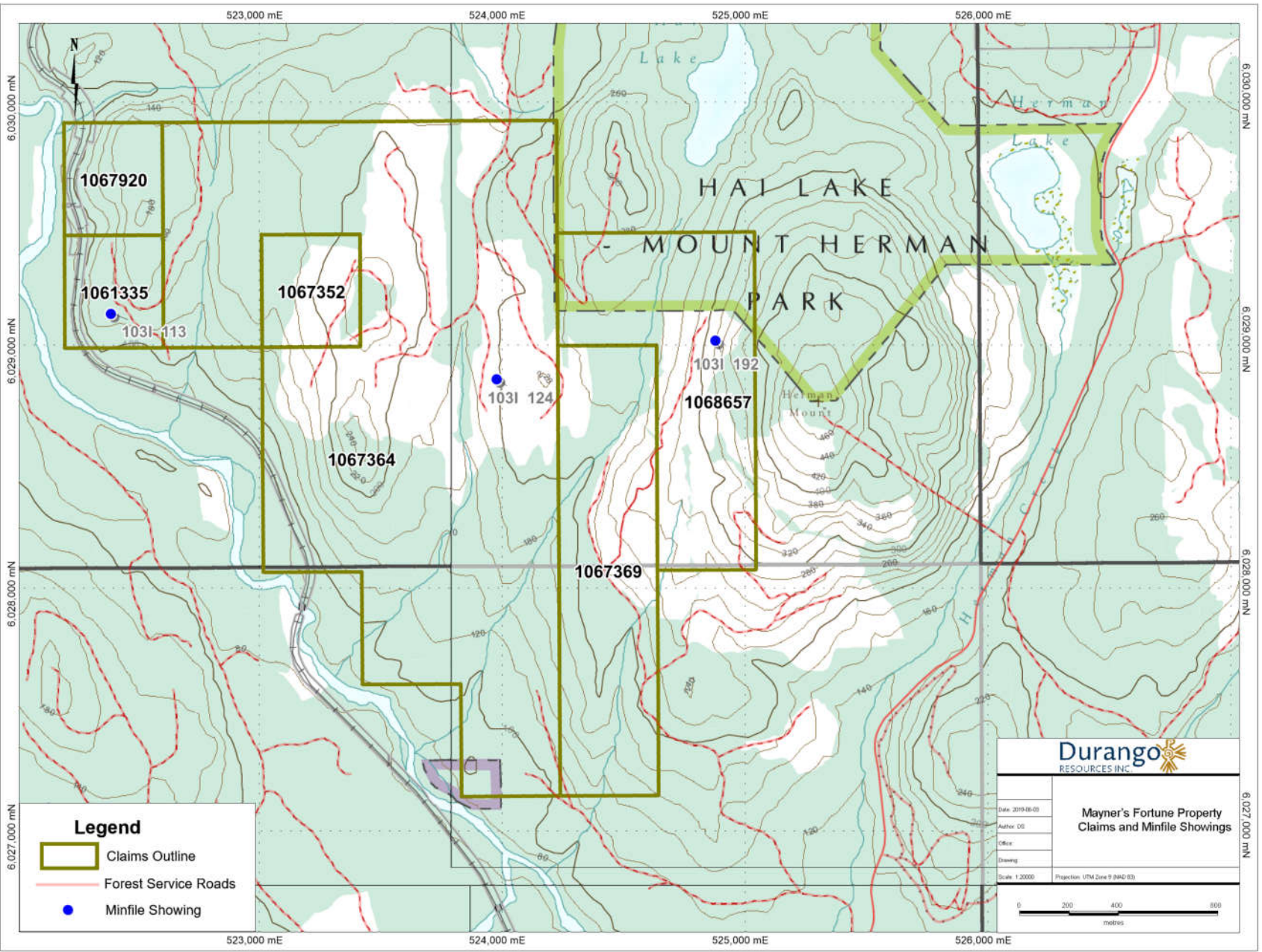
All mineral tenures are registered to Marcy Marie Kiesman and owned by Durango Resources Inc.



Figure 1: Regional Location Map



Figure 2: Property Claim Map



## 4 ACCESSIBILITY, CLIMATE, PHYSIOGRAPHY, AND LOCAL RESOURCES

The city of Terrace is the main business and administrative centre in the area. Kitimat, with its aluminum smelter, and a harbor at the Kitimat Arm, leading to the Pacific, is located 65 kilometres south of Terrace. There are numerous other small communities, particularly along the Canadian National Railway (CNR).

Highway No. 16 is paved and leads from Prince George via Terrace onto Prince Rupert. Paved highway No. 25, passing Lakelse Hot Springs, connects Terrace with Kitimat. Several airlines have daily scheduled service from Vancouver to an all-weather airport at Terrace. Charter float plane service is available at Lakelse Lake, and charter helicopter service is available at the Terrace airport. Local access to the claims is primarily on gravel roads. The branch line of the CNR from Terrace to Kitimat passes through the Mayner's Fortune claims. These claims can also be reached along a gravel road, leading south from the Terrace airport, and then west via lumber roads.

The region is best described as one of complex mountainous topography at a stage of early maturity; rugged mountainous terrain is dissected by deeply incised river valleys. Pacific Ranges of the Coast Mountains occupy by far the greater part of the area, with ranges of the Hazelton Mountains only in the northern third. The Coast and Hazelton Mountains are similar in general aspects; both include peaks of more than 9,000 feet in elevation with local relief generally of 5,000 to 7,000 feet. Both mountain sets have been modified by alpine glaciation and their higher ranges are characterized by serrated ridges, horn peaks, cirques, and cols. Alpine glaciers are common to both. The boundary between these two physiographic units is not clearly defined but is generally considered to lie through the deep valleys of the Cedar, Kitsumkalum, Skeena, and Zymoetz Rivers (Duffell & Souther, 1964).

The Coast Mountains in the Terrace map-area are typical of the Pacific Ranges. The lower peaks of 4,000 to 5,000 feet in elevation have well-rounded tops but very steep sides. The higher peaks and ridges are sharply crested, commonly serrated, and contain cirque glaciers and permanent snowfields. Streams cutting these ranges are deeply incised and occupy canyon-like gorges. These ranges are composed almost entirely of granitic rocks with minor amounts of metamorphic rocks (Duffell & Souther, 1964).

Perhaps the most spectacular physical feature of the whole area is the broad drainage valley, referred to in this report as the Kalum-Kitimat Valley, that extends north from Kitimat Arm across the Skeena River up Kitsumkalum and Cedar Rivers and then across a low divide to Sand Lake and beyond the northern boundary of the map-area, finally meeting the Nass River. The floor of this valley, now heavily forested, is from 2 to 7 miles wide and relatively flat. The Kitimat River occupies its southern part, and the Kitsumkalum River, to the north, are obvious 'misfit streams', too small to have built such an extensive flood plain. The large amount of fluvio-glacial deposits of sand, gravel, silt, and clay that covers the valley bottom from Kitimat

to Kitsumkalum Lake indicates that the Pleistocene period played an important role in the physical history of this dominant feature (Duffell & Souther, 1964).

## 5 HISTORY

*After Haman, 1966*

Mining and prospecting have played an important part in the settlement and development of Terrace map-area. Both placer and lode deposits have been worked, as well as some deposits containing non-metallic material. Gold, silver, lead, zinc, copper, tungsten, and limestone have all been mined. The number of adits, test pits, trails, and ore dumps encountered is evidence of active mining operations in the past and of the intensive search for economic minerals.

Terrace has been a centre for prospecting from the earliest times and much of the countryside within a radius of 100 kilometres had been explored by the turn of the 19<sup>th</sup> century. Placer mining was carried on in Lorne, Kleanza and Quill Creeks from 1900 until 1936. Lode deposits were discovered, developed and mined east of the Kalum Kitimat Valley at a rapid rate from 1910. None of the deposits are very large; most are of the fissure-filling and/or vein type. There are at least sixty known lode-deposits situated within the map sheet 103I, East-half).

Limestone and iron ore were the only mineral deposits known to exist on the west side of the valley until Mr. Ken Mayner made his discoveries. The iron ore deposits, situated on Iron Mountain about 20 kilometres of Kitimat, were discovered and partially explored between 1900 and 1908. The iron occurs as magnetite lenses within metamorphosed volcanic rocks that have been intruded by a granodiorite stock. The deposits are typically contact metamorphic and the metamorphosed volcanics in which the deposits occur could be described as "green skarn". Frobisher Limited took an interest in the Iron Mountain in 1957 and subsequently proved that a magnetic anomaly exists over the deposits which is 5,000 feet long and 400 feet wide. As a result of the exploration by Frobisher Limited, Falconbridge Nickel Mines Ltd. became interested in the area.

The current area in which Durango Resources Inc.'s claims are situated does not have a long, nor extensive, history of exploration. The fact that the area is underlain, in part, by sedimentary and volcanic rocks has not prompted extensive prospecting. The lack of exploration is due mainly to the physical conditions including dense forest growth over drift covered areas. Prospecting was difficult until recent years when multiple logging companies built good access roads into the area.

During late 1950's and early 1960's Mr. Ken Mayner prospected the area west of Lakelse Lake and discovered a number of metamorphosed greenstone and limestone "skarn" zones that contained magnetite, copper and zinc sulphides and molybdenite. Mr. Mayner staked the area when it became apparent that logging roads would be built throughout area.

A syndicate, organized by U.S. Smelting Mining & Refining Corp., Bralorne Pioneer Exploration, Columba Cellulose Co. Ltd., and Union Carbide, did some work on the property in 1965-1966; although no record of the work is available.

Most sulphide occurrences in the area are in narrow veins that hold little promise for a continuous mining operation. However, it is possible that some of these deposits could be worked profitably in a small way. The development of the high-grade limestone quarry at Shames, the possible development of the concentrating grade magnetite deposit on Iron Mountain, and the utilization of the immense sand and gravel deposits for local construction do point to possible future mining developments. The widespread occurrence of molybdenite and scheelite in veins and granitic rocks near contacts suggests the possibility that economic deposits of these minerals may someday be found in the area

The mineral deposits of the area may be classified broadly under the following headings:

#### **Metalliferous deposits**

- Placer deposits
- Lode deposits
- Vein deposits containing gold, silver, lead, zinc, copper, tungsten
- Iron deposits.

#### **Non-metallic deposits**

- Limestone deposits
- Marl deposits
- Sand and gravel deposits

#### **June 2016**

In June 2016 Durango Resource Inc. undertook a cursory mapping program on the claims.

The program was successful in locating the historically identified limestone bedding. The limestone bedding orientations were found to agree with historical mapping in the area and measurements were generally consistent across the entire mapped area, suggesting minimal deformation effecting the unit. As confirmed in the previous work program, strike ranges from 355° to 010°, while dip typically ranges from 055° to 060°. The units appeared to be composed of pure limestone material.

Porphyritic diorite intrusions were observed primarily on the eastern side of the mapped area, with crystal sizes ranging up to 1cm. These units intrude roughly parallel to the limestone bedding, with a strike of 355-360°. Dip was not identified due to lack of outcrop exposure in measured areas.

Several gabbroic intrusions were identified cross-cutting the limestone unit in several places. These dykes were observed to be 5 to 15 metres in thickness, inferred to be up to 25-30 metres in some locations. The dykes to the west tend to have an attitude of approximately  $128^{\circ}/48^{\circ}$  while the dyke mapped to the east have a strike and dip of about  $095^{\circ}/42^{\circ}$ .

## 6 GEOLOGICAL SETTING AND MINERALIZATION

*After Duffell & Souther, 1964*

The Terrace-Kitimat area lies within the central western Stikine terrane, which consists of superimposed island arc build ups of mid-Paleozoic through mid-Jurassic age, overlain by post collisional clastic strata of the Bowser Basin. Regional geology of the area, compiled from 1:20,000 scale mapping in 2005–2008, shows Paleozoic to Lower Jurassic volcanic and related units intruded by the Early Jurassic Kleanza pluton, all of them overlain to the north and east by the mid-Jurassic Smithers Formation and Troy Ridge facies, and Upper Jurassic and younger Bowser siliciclastic units. The southern margin of the Bowser Basin is defined by the Skeena arch, which formed a topographic high in Jurassic–Cretaceous time and shed detritus northwards into the basin. Abundant Cretaceous and younger plutons in the area represent the eastern part of the Coast Plutonic Complex.

In the mountains south east of Terrace, volcanic, volcanoclastic and overlying carbonate strata of the Permian and older Zymoetz Group are overlain by extensive exposures of the Early Jurassic Telkwa Formation. The sequence is deformed into a broad, regional north easterly anticline cored by the pre-Permian Mt. Attree volcanic complex. This regional structural culmination plunges to the north east; thus, the deepest structural levels are exposed on peaks that flank the deep valley between Terrace and Kitimat. The valley itself is occupied by a complex graben structure, the Kitsumkalum-Kitimat graben. Farther west, pre-Permian volcanic units are found on the eastern slopes of Mt. Clague near Kitimat and on Nash Ridge west of the Terrace airport. These western Paleozoic volcanic rocks are dominated by opaline quartz-phyric dacite, and fine-grained greenstone; they are unlike the andesite-dominated, plagioclase- and clinopyroxene-phyric volcanic sequences near Williams and Chist creeks. It is likely that they were the products of separate but coeval volcanic centres.

White granite and granodiorite outcrop both east and west of Lakelse Lake and extend farther west into the Coast Mountains. Compared to the intrusions of inferred Jurassic age, these exhibit much more homogeneous, more felsic plutonic exposure is apparently continuous with the Eocene-aged Williams Creek pluton to the east. Planar pink pegmatite and aplite dykes are present in places. Biotite is more abundant than hornblende, and both are unaltered and fresh. A key identifying characteristic is the presence of millimetre-scale, clear, euhedral, amber coloured titanite grains. The rocks are massive and are interpreted to post-date the penetrative deformation that affects Late Cretaceous and older units. Massive, medium-grained equigranular diorite, tonalite and granodiorite occur together east of Fire Mountain in the lower Hirsch Creek drainage in the south eastern corner of the map area. Tonalite dyke

complexes in diorite and intrusive breccia of diorite in tonalite show curvi-planar phase contacts suggestive of magma mixing. The age of this body is unknown; it is unlike the Early Jurassic suite, and may be a relatively mafic Eocene intrusion.

The geology of Terrace map-area may briefly be stated as that of a part of the eastern contact of the Coast Range batholith, and the flanking metamorphosed sedimentary and volcanic rocks that range in age from late Palaeozoic to early Cretaceous. The stratigraphy of the thick sequence (15,000 to 20,000 feet) of metamorphosed volcanic and sedimentary rocks is imperfectly known. Correlations of sections from one area to another, or even from one place to another in a small area, cannot be made with certainty. Fossil evidence obtained proves the existence of rocks of Permian, Triassic, Jurassic, and Cretaceous? age, but their boundaries are difficult to establish. Some earlier workers have considered the whole Mesozoic section to be conformable, but the study described in this report suggests an angular unconformity between volcanic rocks referable to the Hazelton Group and the overlying sedimentary sequence referred to as the Bowser Group.

Fossiliferous Palaeozoic limestone and associated greenstones occur as small pendants in the batholithic rocks or as narrow lenses along the flanks of eastward extending tongues of the batholith. Limestone boulder conglomerate, greywacke, and chert believed to be of Triassic age rest unconformably above the Palaeozoic rocks without marked angular discordance. Lying above the Triassic rocks in conformable succession is a series of volcanic and minor sedimentary rocks referable to Middle Jurassic strata of the Hazelton Group. These rocks may be divided into a lower division of coarse andesitic breccia, green andesite, and intercalated greywacke and argillite; and an upper division of red, green, and purple, porphyritic and amygdaloidal andesitic flows with minor basalt, rhyolite, and dacite. This upper division is lithologically similar to volcanic rocks lying conformably above Middle Jurassic sedimentary strata in Whitesail Lake map-area to the south west. Lying above the Middle Jurassic volcanic rocks with marked angular discordance is a series of marine and continental sedimentary rocks of Upper Jurassic age that may include some Lower Cretaceous strata. Marine beds near the bottom of this group yielded ammonites, pelecypods and brachiopods of Upper Jurassic age. Greywacke and argillaceous beds higher in the group yielded perfectly preserved plant remains mainly of Jurassic age but possibly including some of Cretaceous age.

The structure is dominated by the Coast Intrusions, which occupy most of the western and southwestern parts of the area and intrude all the sedimentary and volcanic formations described above. The main contact of the intrusion's trends northwesterly across the area in an extremely irregular manner. Great apophyses extend northeastward nearly to the eastern boundary of the area. The intruded strata generally dip to the northeast, away from the main contact; local structures although often complex, tend to conform to the local configuration of the intrusive bodies.

Granodiorite and adamellite (quartz-hornblende-mica diorite) are dominant rocks of the main batholith. Apophyses and stocks are generally more basic and consist mainly of quartz diorite, diorite, gabbro, and minor syenite. True granite is a minor component of both.

Dykes are abundant in the area and cut both bedded and batholithic rocks. They vary widely in composition and include such rock types as granite, diorite, aplite, lamprophyre, basalt, and porphyritic variations; pegmatites are conspicuous by their absence. Commonly dykes have exercised structural control on the localization of mineral deposits.

Regional metamorphism is of the lowest grade. Chlorite, muscovite, and minor epidote are present as secondary minerals in volcanic and sedimentary rocks but, with the exception of rocks near igneous contacts and faults, the texture and mineral composition of the original rocks have not been greatly altered. Contact metamorphism on the other hand has been extremely varied. Commonly rocks adjacent to the batholith are of the albite-epidote-amphibolite facies. Some rocks may show no megascopic alteration, whereas others fall within the highest grades of contact and dynamic metamorphism. Crystalline schists and gneisses of the latter type are more commonly developed along contacts with the main batholith than along contacts with apophyses and stocks. Deuteric alteration of the granitic rocks, with the development of sericite, actinolite, and epidote, is almost universal throughout the area.

West of Lakelse Lake on the Mayner's Fortune Property a number of contact skarn deposits are developed involving marbles of the Permian Ambition Formation, and Early Jurassic and Eocene intrusive bodies. Known showings of this type include the Lady Luck (MINFILE 103I 013, 103I 123), Lucky Fortune (MINFILE 103I 124) and Hal (MINFILE 103I 192). Mineralization comprises sphalerite, magnetite, molybdenite and chalcopyrite associated with epidote and garnet.

## Limestone

The limestone beds on the property are usually covered by moss and other dense vegetation, so that it is difficult to determine extent and quality of the limestone bodies. Haman (1966) combination of field and photogeological survey resulted in the recognition of relatively long trends of carbonate zones. Within the claim group some very thin bands of limestones were observed.

Historically the Mayner's Fortune claim group at least six carbonate zones were observed, trending essentially north south. The first carbonate zone is well exposed along the railroad and the following section was measured from east to west:

- |   |       |
|---|-------|
| • Greenstone, fine and coarse slate and quartzite, strongly laminated | 1.0 m |
| • limestone, thickly bedded, containing approximately 10% greenstone  | 2.4 m |
| • covered interval (probably disintegrated pure limestone)            | 6.0 m |
| • limestone, poorly exposed, bedding indistinct; thickness estimated  | 9.0 m |



• greenstone, approximately parallel to bedding	0.25 m
• limestone, grading to marble, thick bedded, pure, medium crystalline	9.0 m
• limestone, silicified, quartz is sub-parallel to bedding, appears to be sedimentary	0.25 m
• limestone, massive, fine to medium crystalline, grading to marble, 10% impurities	2.0 m
• limestone, grading to marble, massive, pure	4.5 m
• limestone, 4 inches to 1 foot bedded, containing some impurities	2.0 m
• limestone grading to marble, massive, relatively pure	4.5 m
• Total thickness of carbonate section	<b>60.0 m</b>

Haman (1966) took a representative sample of the pure limestone that assayed 96.3% CaCO<sub>3</sub>, 3.59% MgCO<sub>3</sub>, and traces of Zn.

The carbonates are generally flanked by greenstones, quartzites and argillites. It is presently not known for certain whether the repetition of some of the carbonate zones is stratigraphic or structural. A detailed structural analysis resulted in the recognition of north trending folds and faults and it is concluded that the repetition of the carbonates is structurally controlled. Most of the carbonate zones appear to occur in synclines, and the intrusive in anticlines. If all carbonate belts represent the same stratigraphic horizon, it is possible to carry out a stratigraphic analysis of this unit.

The first three or four carbonate belts appear to be fairly similar in thickness and lithology. The fifth carbonate belt deviates, however, considerably. A cross-section through this generally poorly exposed unit, indicates an apparent thickness of 240 m, and a true thickness of approximately 200 m. The lowermost 45 m are very well exposed in a west draining creek and showed strong laminations of approximately 30% interbedded chert. The higher portion of the section contains some pure limestones along with frequently interbedded chert bands, which reach several feet in thickness.

The claim block is located centrally within the Kalum-Kitimat Pleistocene Valley, near the west flank of the Herman Mtn. intrusive complex. Paleozoic strata are the main component of the rocks and intrusive are less dominant. The regional structure of grain is approximately north - south to north 10° east and indicates north trending folds and some thrust faults dipping east.

The reason for forming this regional north trending valley is herein interpreted to be structural. In the Lakelse Lake area the valley is bordered toward west and east by large intrusive bodies. The rocks within the valley consist mainly of Paleozoic strata or Mesozoic strata in the Kitimat area. An isolated major intrusive complex is present between Herman Mtn. and Lakelse Lake and is topographically indicated by mountains protruding above the Pleistocene valley floor.

There are a few isolated biotite-granodiorite intrusives of light grey to pinkish in colour. Most of the stratigraphically lowest rocks are of the medium to dark green variety. More basic hornblende granodiorite to diorite variety and occur near Paleozoic hornfels and greenstones. These medium to coarsely grained rocks are indicating relatively wide contact zones characterized by migmatization and their contacts with sedimentary rocks are presently thought

much less prospective than the contacts of biotite-granodiorite. At stratigraphic higher levels are hornfels and greenstone usually fine grained and dark bluish grey. The thickness may be in the order of a few hundred feet but may also be considerably less, probably because of structural thinning. Apparently overlying the greenstones are graphitic argillites and limestones. A well exposed section was measured along the railroad.

## 7 2019 Exploration

Durango Resources Inc. undertook an exploration program on the Mayner's Fortune Property from May 25 to May 29, 2019 which included 15 outcrop samples and prospecting mapping. Much of the property can be accessed via historical and new logging roads. The total cost to undertake the exploration program is was \$15,384.53 (Expenditures are in Appendix 1).

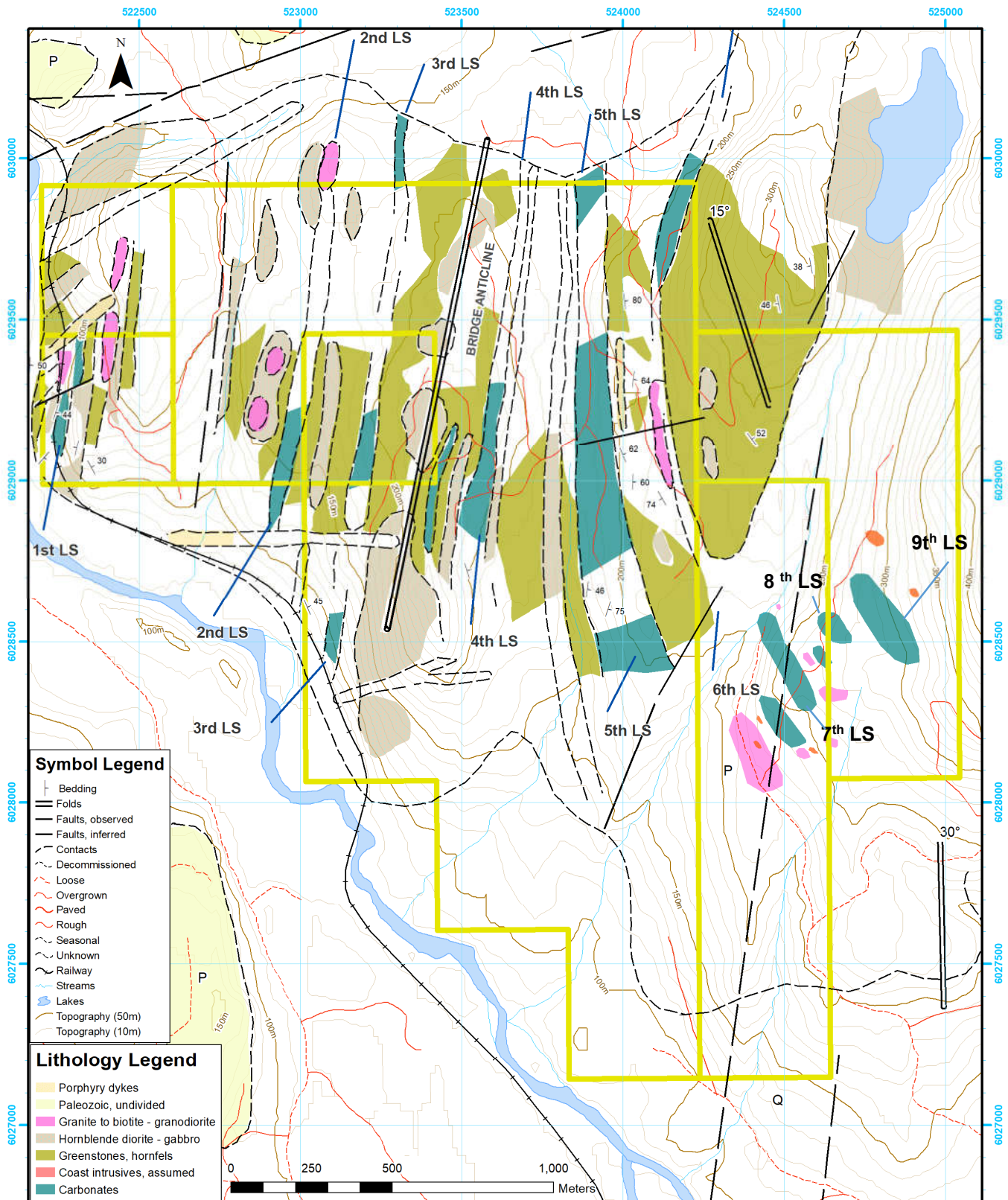
The crew consisted of one geologist, and two helpers. The property was access using ATV's along logging roads in various states of regrowth. A total of 15 rock samples, prospecting and preliminary mapping of the newly logged areas on the eastern part of the property. Rock data and assay sheets are in Appendix 2.

Durango Resources Inc. team was successful in discovering additional massive limestone showings running parallel to the known six limestone beds reported in the Haman 1966 and Bottoms 1967 reports. The preliminary investigations indicate the newly discovered limestone beds all trend from the northwest to the southwest (see figure 4) :

- Bed 7 (which might be an extension of bed 6) currently measures approximately 100 metres by 200 metres. If the assumption of 5 metres thickness is made the identified volume is 100,000 m<sup>3</sup>
- Bed 8 is 50 metres to the east of bed 7 and measures approximately 50 metres by 100 metres. If the assumption of 5 metres thickness is made the identified volume is 25,000 m<sup>3</sup>
- Bed 9 is 80 metres to the east of bed 8 and measures approximately 50 metres by 100 metres and is open to the southwest. If the assumption of 5 metres thickness is made the identified volume is 25,000 m<sup>3</sup>

The team was also successful in locating and sampling the HAL showing (Minfile 1031-192). The Hal showing is classified as a skarn mineralization with chalcopyrite, molybdenite, sphalerite and magnetite. The company collected four rock samples for geochemical analysis to reconfirm the historical assays. The Hal showing is approximately 200 metres northwest and on trend with the recently identified bed 9.

Figure 3: Property Geology



**Geology Map**

Durango Resources Inc.

Mayner's Fortune

Skeena Mining Division

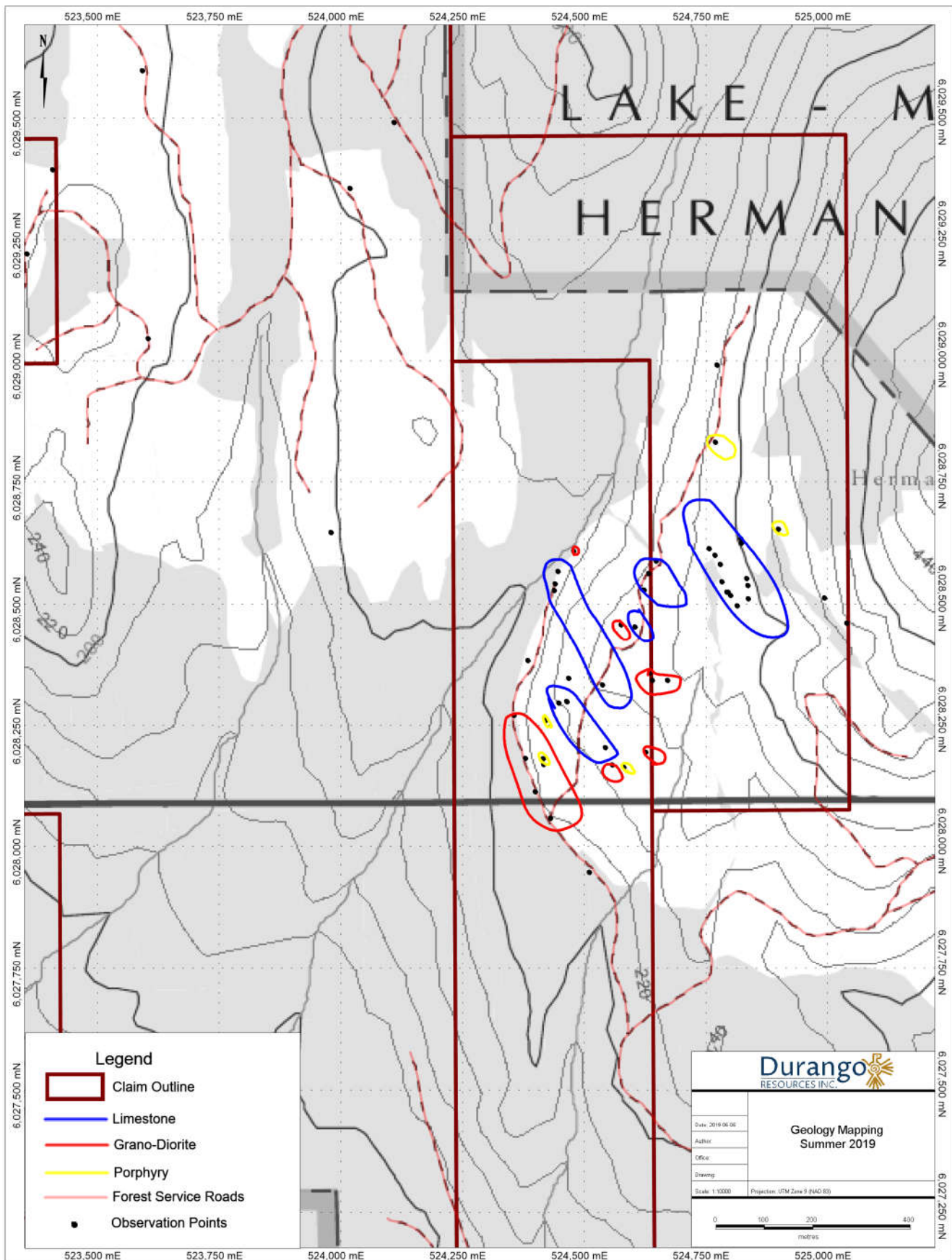
Date: June 27, 2019

Datum: NAD 1983 UTM Zone 9N

Prepared by: K. Cupit, P.Geo

Scale: 1:15,305

Figure 4: 2019 Area



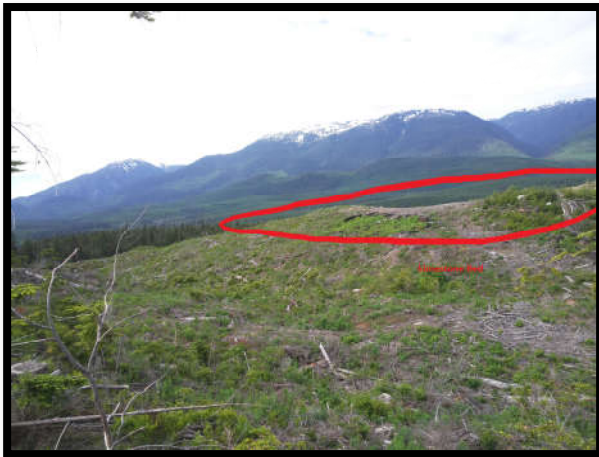
**Figure 5: Bedded Limestone at Hal**



**Figure 8: Newly Exposed Limestone**



**Figure 6: Limestone Bed**



**Figure 9: Limestone as road fill**



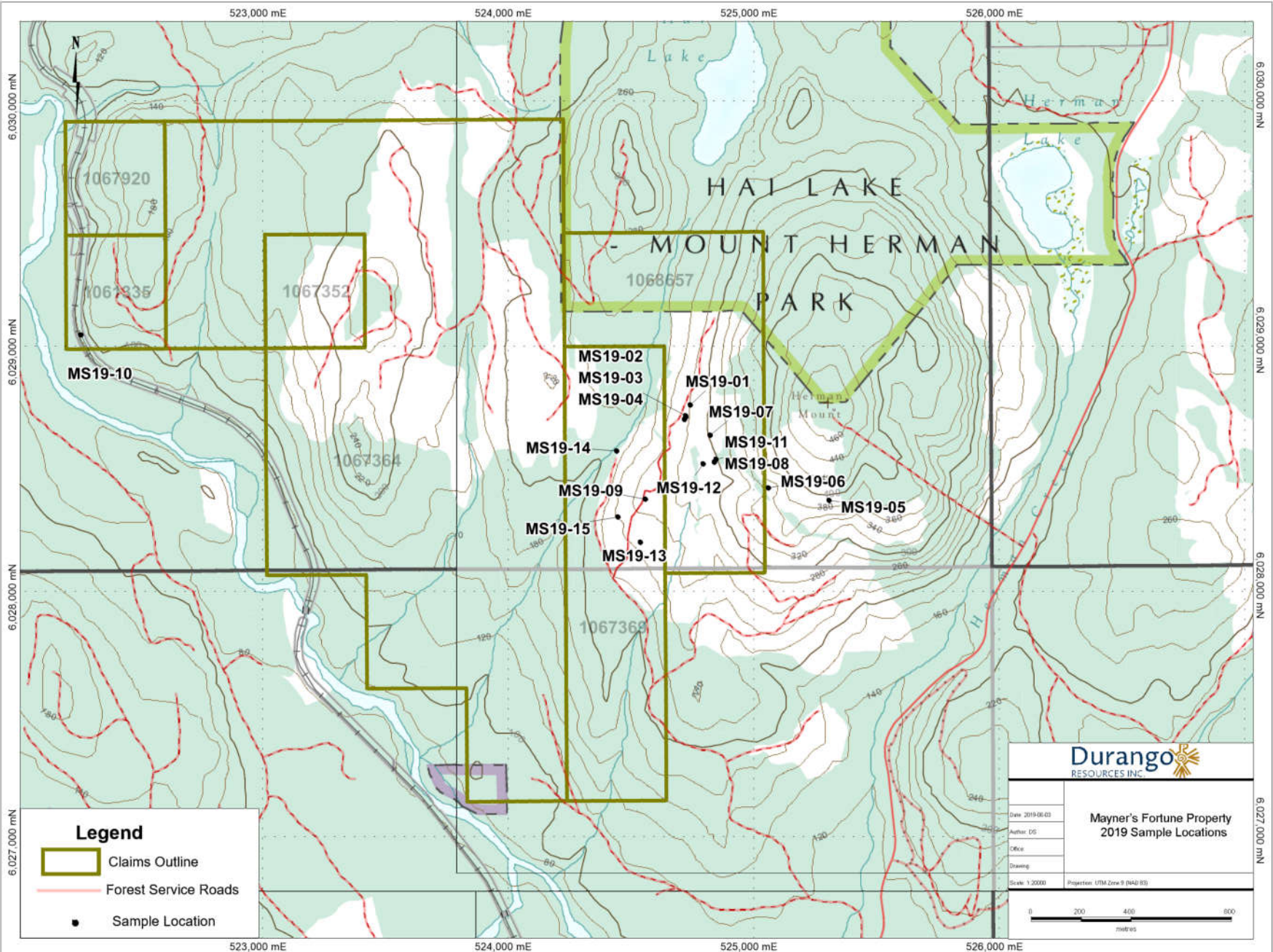
**Figure 7: New Limestone Sample MS19-15**



**Figure 10: Hal Showing**



Figure 11: 2019 Rock Sample Locations



## **8 Adjacent Properties**

The property currently does not have any mineral claims directly adjacent to the Mayner's Fortune Property.

## **9 Sample Preparation, Analysis and Security**

All samples were subjected to a quality control procedure that ensured best practices in the handling, sampling, analysis and storage. Rock Sample information was collected at each site and recorded. A sample description was completed for each sample in the field, with categories such as sample number, location, sample type, color, depth, texture etc. In addition, the local site environment was described and the regional setting. This data was transferred from the field sheets to a portable computer in camp. All sampling was performed according to industry standards.

Rock Samples were shipped to Acta Laboratories in Kamloops for analysis (which is an ISO 9001 and ISO/IEC 17025-certified lab). All samples underwent Code UT-1 Kamloops Aqua Regia ICP/MS, two samples underwent Code 7 water leach and Code 6 all analytes. In addition, three samples underwent Code 8 whole rock geochemistry. See Appendix 2 for assays sheets.

## 10 Interpretation and Conclusion

The geological setting of the Mayner's Fortune Property is highly prospective for limestone and skarn mineralization. The historical results of the exploration work and geochemical sampling, completed by previous operators have identified several areas.

Detailed mapping in selected areas might be done to try to ascertain if the Mo/Cu, Gold, and base metal zonation is truly on a property wide scale, or a more local scale directly related to individual monzonite dykes.

Of the eight carbonate units mapped on the property, the third carbonate belt has been historically reported to carry "some pure limestone of probably large extent" and the fifth carbonate belt is thick but impure (Haman, 1966). Both of these units are relatively under-explored and appear to be the most prospective units on the property.

Sampling during this campaign supported previous findings from the team's last visit to the property earlier in the year. Samples of up to 100% CaCO<sub>3</sub> (calculated) confirm the presence of limestone units extending for a significant distance across the southeastern region of the property.

The 2019 program identified new limestone occurrences, Bed 7 calculated at 100,000 m<sup>3</sup> Bed 8 and Bed 9 are calculated at 50,000 m<sup>3</sup>. Thus giving rise to preliminary new limestone volume of 150,00 m<sup>3</sup>

During the previous mapping campaign, focus was oriented towards the fifth carbonate belt. The results from this survey support the results from historical work and appear to be quite encouraging in terms of the existence of widespread limestone belts on the property. Limestone beds were found to strike in a northerly direction, in the 355° to 010° range, while dip typically ranges from 055° to 060°.

An initial diamond drilling campaign of approximately 2,000 metres of drilling in 15-20 short drill holes across the established limestone units with the goal of identifying the extent of the limestone units and potentially generating a near-surface resource on the property. Because of the continuous nature of limestone bedding, particularly on this property, drill hole spacing may be expanded if the units are found to be relatively consistent below surface. The observation of eight belts of carbonates makes this claim block attractive for the possibilities of limestone quarrying



## 11 References

Bottoms, K. (1967). Report on the Lady Luck, Mayner's Fortune and Lucky Fortune mineral claim groups, Terrace area, BC. Cree Lake Mining Limited (NPL).

Duffell, S. & Souther, J. (1964). Geology of Terrace map-area, British Columbia (103 I E1/2); G. Geological Survey of Canada, Memoir 329, 1964, 131 pages (3 sheets), <https://doi.org/10.4095/100553> (Open Access)

Haman, P. (1966). Geology of the terrace area, British Columbia. Lady Luck and Mayner's Fortune claim groups. Cree Lake Mining Ltd. (NPL).

Lewis, C. (2016). Report on geological mapping, sampling and map compilation on the Mayner's Fortune property, northwestern British Columbia, Canada. BC Geological Survey Assessment Report 36203.

Logan, J. M., J.R. Drobe & W.C. McLelland (1998). Geology of the Forrest Kerr - Mess Creek Area, Northwestern British Columbia, British Columbia Ministry of Energy and Mines Bulletin 104.

Logan, J. M., V.M. Koyanagi & J.R. Drobe (1990a). Geology and Mineral Occurrences of the Forrest Kerr - Iskut River Area, Northwestern British Columbia, British Columbia Ministry of Energy and Mines.

Ney, C.S. & Hollister V.F. (1976). Geological Setting of Porphyry Copper Deposits in the Canadian Cordillera. Porphyry Copper Deposits of the Canadian Cordillera, Published by CIM, 1976.

Seraphim, R.H. & Hollister, V.F. (1976). Structural setting of Porphyry Copper Deposits in the Canadian Cordillera. Porphyry Copper Deposits of the Canadian Cordillera, Published by CIM, 1976.

## 12 CERTIFICATE OF AUTHOR

I Derrick Strickland, of 595 Howe Street in the City of Vancouver in the Province of British Columbia do hereby certify that:

1. I am a Consulting Geologist working in Vancouver, British Columbia.
2. I hold a Bachelor of Science in Geology (1993)
3. I have been employed in the mineral exploration industry since 1987 and have practiced my profession since graduation.
4. The information for this report has been taken from government and old geological reports and work undertaken by Durango Resources Inc.
5. I am a member in good standing with Association of Professional Engineers, Geoscientist of British Columbia.
6. The assessment costs presented in this report are true and accurate to the best of my knowledge.

DATED at Vancouver, British Columbia, this 5<sup>th</sup> day of July 2019

Original signed \_\_\_\_\_

Derrick Strickland, P.Geol.

# Appendix 1

<b>Statement of Expenditure for</b>					
<b>Expenditure for May 25 to May 29 2019</b>					
<b>Labour-Contract</b>		<b>Rate</b>		<b>Number of units</b>	<b>Cost</b>
<b>Project Geologist</b>	Derrick Strickland	\$ 750	<b>May 25 to May 29</b>	5	\$ 3,750
Field Help	Marcy Kiesman	\$ 350	<b>May 25 to May 29</b>	4	\$ 1,400
Field Help	Carl Smith	\$ 300	<b>May 25 to May 29</b>	2	\$ 600
			<b>Total</b>		<b>\$ 5,750</b>
<b>Other Services and Supplies</b>					
Accommodations/Food	Lake Elsee	\$ 150	May 25 to May 29	8	\$ 1,200
ATV Rental		\$ 150	May 25 to May 29	4	\$ 600
AT Rental Side by Side		\$ 175	May 25 to May 29	3	\$ 525
Truck Rental		\$ 150	May 25 to May 29	4	\$ 600
Filed Supplies		\$ -	May 25 to May 29	1	\$ 154
Assay Laboratories		\$ 100	May 25 to May 29	15	\$ 820
Airline Tickets to Terrace	Strickland/Kiesman			2	\$ 730
Shipping of Rock to Lab					\$ 42
Taxi to YVR Airport					\$ 65
Assessment Report , Digitization of Map					\$ 3,500
<b>Field Program Expenses</b>				<b>\$</b>	<b>13,985.94</b>
Administration 10%					\$ 1,399
<b>Total Exploration Expense</b>				<b>\$</b>	<b>15,384.53</b>

# Appendix 2



**Date Submitted:** 03-Jun-19  
**Invoice No.:** A19-07315  
**Invoice Date:** 13-Jun-19  
**Your Reference:** MS19

**Derrick Strickland**  
**1107-1251 Cardero Street**  
**Vancouver BC**  
**Canada**

**ATTN: Derrick Strickland**

## CERTIFICATE OF ANALYSIS

15 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 6B Ion Chromatography

Code 7-Water Leach Water Leach ICP/MS(WATER)

REPORT      **A19-07315**

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

Notes:

Assays are recommended for values above the upper limit. The Au from AR-MS is only semi-quantitative. For accurate Au data, fire assay is recommended.

CERTIFIED BY:

A handwritten signature in black ink, appearing to be "Emmanuel Esemé". The signature is written in a cursive style with a large, stylized 'E' and 'S'.

Emmanuel Esemé , Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**  
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5  
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

**Date Submitted:** 03-Jun-19  
**Invoice No.:** A19-07315  
**Invoice Date:** 13-Jun-19  
**Your Reference:** MS19

**Derrick Strickland**  
**1107-1251 Cardero Street**  
**Vancouver BC**  
**Canada**

**ATTN: Derrick Strickland**

**CERTIFICATE OF ANALYSIS**

15 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code UT-1-Kamloops Aqua Regia ICP/MS

REPORT **A19-07315**

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

Notes:

Assays are recommended for values above the upper limit. The Au from AR-MS is only semi-quantitative. For accurate Au data, fire assay is recommended.

CERTIFIED BY:



Emmanuel Esemé , Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**  
9989 Dallas Drive, Kamloops, British Columbia, Canada, V2C 6T4  
TELEPHONE +250 573-4484 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL Kamloops@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Ti	S	P	Li	Be	B	Na	Mg	Al	K	Bi	Ca	Sc	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge
Unit Symbol	%	%	%	ppm	ppm	ppm	%	%	%	%	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	1	0.001	0.1	0.1	1	0.001	0.01	0.01	0.01	0.02	0.01	0.1	1	1	1	0.01	0.1	0.1	0.2	0.1	0.02	0.1
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
MS19-01	0.220	< 1	0.050	5.5	0.1	< 1	0.161	0.41	0.96	0.06	0.07	0.83	6.5	63	16	148	1.89	8.8	11.9	66.5	23.6	3.26	< 0.1
MS19-02	0.030	< 1	0.050	7.1	0.1	< 1	0.057	0.36	0.86	0.22	0.07	0.30	3.8	126	18	120	2.04	5.5	17.5	62.5	22.6	2.12	< 0.1
MS19-03	0.340	2	0.210	12.1	0.1	< 1	0.100	1.12	1.15	0.38	0.31	1.45	11.6	84	8	627	5.47	23.0	9.6	152	61.5	4.39	< 0.1
MS19-04	0.260	< 1	0.010	21.3	0.3	< 1	0.381	1.39	3.03	0.64	0.05	1.19	4.4	57	4	533	4.33	10.1	2.8	46.3	58.9	7.55	< 0.1
MS19-05	0.200	< 1	0.110	11.8	0.2	< 1	0.279	0.87	2.02	0.18	0.20	1.73	7.2	109	11	533	3.79	20.6	9.2	177	61.8	6.02	< 0.1
MS19-06	0.150	1	0.050	17.7	0.2	< 1	0.166	1.13	1.30	0.32	0.08	0.50	7.4	43	20	186	2.24	6.0	4.5	73.3	27.7	3.67	< 0.1
MS19-07	0.270	< 1	0.080	12.0	0.2	< 1	0.210	1.35	2.26	0.45	0.03	0.90	6.2	66	18	767	4.19	13.9	10.7	47.4	93.3	7.21	< 0.1
MS19-08	< 0.001	< 1	0.020	0.2	< 0.1	< 1	0.012	0.04	0.01	< 0.01	< 0.02	37.0	0.2	< 1	< 1	305	0.09	0.7	12.9	< 0.2	8.9	< 0.02	< 0.1
MS19-09	< 0.001	< 1	0.010	0.1	< 0.1	< 1	0.016	0.03	0.04	0.02	< 0.02	7.08	0.1	< 1	31	103	0.32	0.5	2.9	13.7	26.9	0.09	< 0.1
MS19-10	0.010	< 1	0.030	0.9	< 0.1	< 1	0.013	0.61	0.08	0.02	< 0.02	35.6	0.4	5	1	143	0.22	1.1	12.9	1.2	9.1	0.46	< 0.1
MS19-11	< 0.001	< 1	0.020	0.3	< 0.1	< 1	0.013	0.08	0.03	< 0.01	< 0.02	32.7	0.2	< 1	< 1	380	0.09	0.7	12.2	0.3	5.8	0.03	< 0.1
MS19-12	< 0.001	< 1	0.010	0.3	< 0.1	< 1	0.012	0.11	0.03	< 0.01	< 0.02	31.4	0.2	< 1	< 1	199	0.12	0.9	12.9	0.7	12.2	0.11	< 0.1
MS19-13	< 0.001	< 1	< 0.001	0.2	< 0.1	< 1	0.018	0.02	0.06	0.01	< 0.02	4.94	0.1	< 1	12	113	0.11	0.4	2.3	9.7	13.7	0.23	< 0.1
MS19-14	0.020	< 1	0.010	0.9	< 0.1	< 1	0.010	0.13	0.10	< 0.01	< 0.02	27.5	0.3	2	< 1	68	0.14	0.8	10.9	1.1	4.2	0.22	< 0.1
MS19-15	0.010	< 1	0.010	1.0	< 0.1	< 1	0.011	0.19	0.09	< 0.01	< 0.02	25.0	0.2	1	< 1	114	0.12	0.8	10.0	7.0	7.0	0.19	< 0.1

Analyte Symbol	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb	Te	Cs	Ba	La	Ce	Cd	Pr	Nd	Sm	Se	Eu	Gd
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.1	0.1	0.5	0.01	0.1	0.1	0.01	0.002	0.02	0.05	0.02	0.02	0.02	0.5	0.5	0.01	0.01	0.1	0.02	0.1	0.1	0.1	0.1
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
MS19-01	1.5	1.6	48.9	16.4	2.6	0.2	3.23	0.100	< 0.02	0.45	0.14	0.12	0.24	130	6.1	14.0	0.08	2.1	10.8	2.9	1.2	0.6	3.2
MS19-02	6.7	7.1	126	9.42	1.2	< 0.1	14.3	0.190	< 0.02	0.16	0.16	0.10	0.29	31.7	3.6	7.61	0.11	1.3	6.45	1.6	1.6	0.3	1.8
MS19-03	2.6	13.7	23.6	18.0	1.7	0.7	52.0	0.400	0.03	0.32	0.15	0.65	0.58	24.2	10.1	22.5	0.08	3.0	14.9	3.4	2.5	0.4	3.9
MS19-04	1.3	18.5	145	3.06	0.6	< 0.1	40.5	0.160	< 0.02	0.29	0.12	0.12	2.13	103	3.8	6.44	0.10	0.7	3.06	0.5	0.5	0.8	0.6
MS19-05	2.0	3.9	79.9	8.26	5.1	< 0.1	0.65	0.320	0.02	0.29	0.20	0.14	0.52	85.8	4.3	9.49	0.12	1.3	6.72	1.6	1.1	0.5	1.9
MS19-06	1.3	6.7	25.1	13.3	0.5	< 0.1	1.63	0.160	< 0.02	0.38	0.10	0.32	0.40	43.1	3.5	9.00	0.06	1.5	8.05	2.2	1.5	0.3	2.6
MS19-07	0.7	8.6	64.1	6.75	0.6	< 0.1	7.38	0.100	< 0.02	0.26	0.19	0.23	0.47	79.1	5.3	9.80	0.14	1.2	5.77	1.3	1.1	0.9	1.5
MS19-08	0.1	< 0.1	112	10.1	0.6	< 0.1	0.04	0.030	< 0.02	0.06	< 0.02	0.03	< 0.02	10.3	1.4	0.32	0.90	0.3	1.55	0.3	0.2	0.1	0.7
MS19-09	0.8	0.8	23.4	4.32	0.7	< 0.1	2.22	0.050	< 0.02	0.18	0.11	0.02	0.03	8.9	1.9	0.49	0.54	0.4	1.97	0.4	< 0.1	< 0.1	0.5
MS19-10	0.3	0.4	168	8.39	0.5	< 0.1	0.39	0.020	< 0.02	0.06	< 0.02	0.02	0.03	13.4	3.3	0.99	0.89	0.5	2.22	0.4	0.2	0.1	0.6
MS19-11	0.3	0.1	115	7.16	0.6	< 0.1	< 0.01	0.010	< 0.02	< 0.05	< 0.02	0.02	< 0.02	11.2	1.5	0.50	0.62	0.3	1.40	0.3	0.2	< 0.1	0.5
MS19-12	0.7	0.2	129	9.94	0.6	< 0.1	< 0.01	0.030	< 0.02	0.07	0.02	< 0.02	< 0.02	14.7	3.6	0.88	0.48	0.6	2.97	0.6	0.2	0.1	0.8
MS19-13	0.4	0.4	7.5	2.59	0.4	< 0.1	1.03	0.045	< 0.02	0.10	< 0.02	< 0.02	0.03	8.7	1.3	0.53	0.21	0.3	1.22	0.2	< 0.1	< 0.1	0.3
MS19-14	0.5	0.2	189	7.91	1.4	< 0.1	< 0.01	0.020	< 0.02	< 0.05	< 0.02	< 0.02	0.02	12.4	1.5	0.90	0.22	0.3	1.31	0.3	0.2	< 0.1	0.5
MS19-15	< 0.1	< 0.1	166	6.25	0.8	< 0.1	< 0.01	0.010	< 0.02	0.07	< 0.02	< 0.02	< 0.02	6.5	1.1	0.64	0.07	0.2	0.91	0.2	0.1	< 0.1	0.3



Analyte Symbol	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Re	Au	Tl	Pb	Th	U	Hg	F	Cl	NO2 (as N)	Br	NO3 (as N)	PO4 (as P)
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppb	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.001	0.5	0.02	0.1	0.1	0.1	10	0.01	0.03	0.01	0.03	0.01	0.02
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	IC	IC	IC	IC	IC	IC
MS19-01	0.5	3.4	0.7	2.0	0.3	1.7	0.2	0.2	< 0.05	0.5	0.010	2.5	0.03	3.0	2.8	1.9	40						
MS19-02	0.3	1.7	0.4	1.0	0.1	0.9	0.1	< 0.1	< 0.05	0.2	0.020	< 0.5	0.07	2.6	1.1	1.8	30						
MS19-03	0.5	3.7	0.8	2.2	0.3	1.9	0.3	0.1	< 0.05	0.4	0.030	4.0	0.15	1.9	2.1	0.9	30						
MS19-04	< 0.1	0.6	0.1	0.4	< 0.1	0.4	< 0.1	< 0.1	< 0.05	0.2	< 0.001	< 0.5	0.23	2.7	2.0	0.7	10						
MS19-05	0.3	1.7	0.4	1.0	0.1	0.9	0.1	0.3	< 0.05	0.3	< 0.001	< 0.5	0.04	3.5	0.4	0.2	20						
MS19-06	0.4	2.7	0.5	1.5	0.2	1.2	0.2	< 0.1	< 0.05	0.1	< 0.001	< 0.5	0.07	< 0.1	0.8	0.3	10						
MS19-07	0.2	1.3	0.3	0.8	0.1	0.7	0.1	< 0.1	< 0.05	0.2	< 0.001	< 0.5	0.07	2.0	1.6	0.7	10						
MS19-08	0.1	0.8	0.2	0.6	< 0.1	0.4	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	< 0.5	< 0.02	< 0.1	< 0.1	0.1	10	< 0.2	2.47	< 0.2	< 0.6	< 0.2	1.58
MS19-09	< 0.1	0.4	< 0.1	0.2	< 0.1	0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	0.5	< 0.02	5.2	< 0.1	0.4	< 10						
MS19-10	< 0.1	0.6	0.2	0.4	< 0.1	0.3	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	< 0.5	< 0.02	0.5	< 0.1	< 0.1	< 10						
MS19-11	< 0.1	0.5	0.1	0.3	< 0.1	0.2	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	1.0	< 0.02	< 0.1	< 0.1	< 0.1	< 10						
MS19-12	0.1	0.8	0.2	0.5	< 0.1	0.3	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	1.3	< 0.02	1.2	< 0.1	< 0.1	< 10						
MS19-13	< 0.1	0.2	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	< 0.5	< 0.02	< 0.1	< 0.1	0.2	< 10						
MS19-14	< 0.1	0.6	0.2	0.4	< 0.1	0.4	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	< 0.5	< 0.02	< 0.1	< 0.1	< 0.1	< 10						
MS19-15	< 0.1	0.4	0.1	0.4	< 0.1	0.3	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	0.9	< 0.02	< 0.1	< 0.1	< 0.1	< 10	< 0.2	0.76	< 0.2	< 0.6	< 0.2	< 0.4

Analyte Symbol	SO4	Mg	Na	Al	Ca	Fe	K	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co
Unit Symbol	mg/L	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Lower Limit	0.03	2	5	0.5	5	1	5	2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1
Method Code	IC	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS
MS19-01																							
MS19-02																							
MS19-03																							
MS19-04																							
MS19-05																							
MS19-06																							
MS19-07																							
MS19-08	2.06	< 2	< 5	2.1	287	< 1	< 5	< 2000	< 5	< 2	4	< 1	< 5	< 1	0.3	< 1	< 1	< 0.01	0.50	< 1	< 0.1	< 0.1	< 1
MS19-09																							
MS19-10																							
MS19-11																							
MS19-12																							
MS19-13																							
MS19-14																							
MS19-15	18.1	6	< 5	1.8	310	< 1	6	< 2000	< 5	< 2	2	< 1	< 5	< 1	< 0.1	< 1	< 1	< 0.01	< 0.05	< 1	< 0.1	< 0.1	< 1

Analyte Symbol	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Lower Limit	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1	1	0.1	0.1	0.1	0.1	0.1	0.1
Method Code	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS
MS19-01																							
MS19-02																							
MS19-03																							
MS19-04																							
MS19-05																							
MS19-06																							
MS19-07																							
MS19-08	< 3	< 3	< 10	2	< 1	< 0.5	< 0.2	0.5	< 0.1	< 0.8	< 0.1	< 0.8	< 100	< 20	3.6	38	< 1	0.7	< 0.1	0.2	< 0.1	< 0.1	0.2
MS19-09																							
MS19-10																							
MS19-11																							
MS19-12																							
MS19-13																							
MS19-14																							
MS19-15	< 3	9	< 10	< 1	< 1	< 0.5	< 0.2	< 0.2	< 0.1	< 0.8	< 0.1	< 0.8	< 100	< 20	2.3	< 1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Analyte Symbol	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Method Code	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS
MS19-01																						
MS19-02																						
MS19-03																						
MS19-04																						
MS19-05																						
MS19-06																						
MS19-07																						
MS19-08	< 0.1	< 0.1	0.2	< 0.1	0.2	< 0.1	0.2	< 0.1	0.1	< 0.1	6	< 2	< 100	126	4	387	0.1	30	< 1	< 1	2	< 1
MS19-09																						
MS19-10																						
MS19-11																						
MS19-12																						
MS19-13																						
MS19-14																						
MS19-15	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	0.2	< 0.1	0.1	< 0.1	8	< 2	< 100	83	16	520	0.8	18	< 1	< 1	< 1	< 1

Analyte Symbol	Ti	S	P	Li	Be	B	Na	Mg	Al	K	Bi	Ca	Sc	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge
Unit Symbol	%	%	%	ppm	ppm	ppm	%	%	%	%	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	1	0.001	0.1	0.1	1	0.001	0.01	0.01	0.01	0.02	0.01	0.1	1	1	1	0.01	0.1	0.1	0.2	0.1	0.02	0.1
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
GXR-6 Meas		< 1	0.030	19.4	0.6	< 1	0.064	0.32		1.08	0.16	0.13	20.0	149	69	938	5.06	12.3	20.1	66.1	115	18.1	
GXR-6 Cert		0.0160	0.0350	32.0	1.40	9.80	0.104	0.609		1.87	0.290	0.180	27.6	186	96.0	1010	5.58	13.8	27.0	66.0	118	35.0	
TILL-1 Meas																							
TILL-1 Cert																							
TILL-1 Meas																							
TILL-1 Cert																							
TILL-2 Meas																							
TILL-2 Cert																							
TILL-2 Meas																							
TILL-2 Cert																							
IC Ref Std Meas																							
IC Ref Std Cert																							
OREAS 904 (Aqua Regia) Meas		< 1	0.100		6.4			0.20	1.89	0.94	3.83	0.04	4.1	30	24	415	6.64	85.7	36.2	6350	23.2	4.80	
OREAS 904 (Aqua Regia) Cert		0.0340	0.0950		6.54			0.143	1.25	0.603	3.74	0.0404	3.83	21.7	17.5	410	6.40	82.0	36.6	6300	22.4	3.40	
OREAS 45e (Aqua Regia) Meas		< 1	0.020				0.026	0.07	2.89	0.05		0.03	59.1	229	733	347	19.4	44.8	321	619	31.8	10.5	
OREAS 45e (Aqua Regia) Cert		0.044	0.029				0.027	0.095	3.32	0.053		0.032	78	295.0	849.0	400.000	22.650	52	357.0	709.0	30.6	11.7	
OREAS 922 (AQUA REGIA) Meas		< 1	0.070	21.0	0.7		0.026	1.31	2.87	0.49	13.0	0.41	4.0	34	46	783	5.45	19.6	34.6	2240	267	7.85	0.1
OREAS 922 (AQUA REGIA) Cert		0.386	0.063	22.8	0.65		0.021	1.33	2.72	0.376	10.3	0.324	3.15	29.4	40.7	730	5.05	19.4	34.3	2176	256	7.62	0.10
OREAS 923 (AQUA REGIA) Meas		< 1	0.060	23.1	0.7			1.43	2.94	0.41	21.5	0.42	3.8	33	43	893	6.26	22.6	32.8	4530	346	7.69	
OREAS 923 (AQUA REGIA) Cert		0.684	0.061	23.4	0.61			1.43	2.80	0.322	21.8	0.326	3.09	30.6	39.4	850	5.91	22.2	32.7	4248	335	8.01	
OREAS 907 (Aqua Regia) Meas	0.020	< 1	0.020	5.3	1.0		0.088	0.22	1.16	0.37	22.3	0.27	2.2	5	7	328	8.54	45.5	4.9	6480	145	16.4	
OREAS 907 (Aqua Regia) Cert	0.0170	0.0660	0.0240	4.05	0.870		0.0860	0.221	0.945	0.286	22.3	0.280	2.16	5.12	8.59	330	8.18	43.7	4.74	6370	139	14.7	
Oreas 621 (Aqua Regia) Meas		4	0.030	8.2	0.8		0.176	0.44	1.77	0.38	4.32	1.63	2.2	11	31	523	3.54	30.0	26.2	3500	> 5000	8.66	
Oreas 621 (Aqua Regia) Cert		4.50	0.0335	8.17	0.530		0.160	0.436	1.60	0.333	3.85	1.65	2.20	10.9	31.3	520	3.43	27.9	25.8	3660	51700	9.29	
MS19-13 Orig	< 0.001	< 1	< 0.001	0.2	< 0.1	< 1	0.019	0.02	0.06	0.01	< 0.02	4.92	0.2	< 1	11	112	0.10	0.4	2.3	9.8	13.6	0.23	< 0.1
MS19-13 Dup	< 0.001	< 1	< 0.001	0.2	< 0.1	< 1	0.017	0.02	0.06	0.01	< 0.02	4.97	0.1	< 1	14	114	0.11	0.4	2.3	9.5	13.9	0.23	< 0.1
MS19-15 Orig																							

Analyte Symbol	Ti	S	P	Li	Be	B	Na	Mg	Al	K	Bi	Ca	Sc	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge
Unit Symbol	%	%	%	ppm	ppm	ppm	%	%	%	%	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	1	0.001	0.1	0.1	1	0.001	0.01	0.01	0.01	0.02	0.01	0.1	1	1	1	0.01	0.1	0.1	0.2	0.1	0.02	0.1
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
MS19-15 Dup																							
Method Blank	< 0.001	< 1	< 0.001	< 0.1	< 0.1	< 1	0.008	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01	< 0.1	< 1	< 1	< 1	< 0.01	< 0.1	< 0.1	< 0.2	< 0.1	0.04	< 0.1
Method Blank																							
Method Blank																							
Method Blank																							

Analyte Symbol	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb	Te	Cs	Ba	La	Ce	Cd	Pr	Nd	Sm	Se	Eu	Gd
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.1	0.1	0.5	0.01	0.1	0.1	0.01	0.002	0.02	0.05	0.02	0.02	0.02	0.5	0.5	0.01	0.01	0.1	0.02	0.1	0.1	0.1	0.1
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
GXR-6 Meas	235	55.1	29.4	6.28	9.0	< 0.1	1.72	0.300	0.06	1.05	1.62	0.07	3.17	847	10.2	27.8	0.10		10.3	2.0	0.3	0.5	1.9
GXR-6 Cert	330	90.0	35.0	14.0	110	7.50	2.40	1.30	0.260	1.70	3.60	0.0180	4.20	1300	13.9	36.0	1.00		13.0	2.67	0.940	0.760	2.97
TILL-1 Meas																							
TILL-1 Cert																							
TILL-1 Meas																							
TILL-1 Cert																							
TILL-2 Meas																							
TILL-2 Cert																							
TILL-2 Meas																							
TILL-2 Cert																							
IC Ref Std Meas																							
IC Ref Std Cert																							
OREAS 904 (Aqua Regia) Meas	95.9	34.4	17.7	18.0			1.92	0.410	0.18	0.90	0.83		1.04	78.8	35.5	68.3	0.06				2.6		
OREAS 904 (Aqua Regia) Cert	91.0	22.4	16.5	17.2			2.02	0.366	0.170	0.580	0.780		0.620	68.0	33.9	70.0	0.0580				2.81		
OREAS 45e (Aqua Regia) Meas	10.2	6.5	3.8	4.77					0.08	0.90			0.67	117		14.4							
OREAS 45e (Aqua Regia) Cert	11.4	7.93	4.05	5.74					0.090	0.97			0.77	139		17.7							
OREAS 922 (AQUA REGIA) Meas	7.0	27.8	15.0	21.6	8.7	0.4	0.66	1.19	0.25	4.45	0.67		2.12	88.2	35.9	69.3	0.31	8.0	31.8	5.7	3.5		5.4
OREAS 922 (AQUA REGIA) Cert	6.12	22.7	15.0	16.0	22.3	0.35	0.69	0.851	0.24	3.83	0.57		1.76	70	32.5	63	0.28	7.33	27.5	4.98	3.44		4.44
OREAS 923 (AQUA REGIA) Meas	8.3	23.4	13.1	19.3	16.3		0.77	1.77	0.44	6.78	0.63		1.72	69.9	33.2	62.8	0.44	7.3	29.2	5.1	5.9		4.8
OREAS 923 (AQUA REGIA) Cert	7.07	19.6	13.6	14.3	22.5		0.84	1.62	0.45	5.99	0.58		1.56	54	30.0	60	0.40	6.79	25.4	4.34	5.99		4.07
OREAS 907 (Aqua Regia) Meas	38.7	19.9	12.0	7.37	19.0		5.57	1.30	2.40	2.65	2.28	0.24	1.29	227	33.8	64.7	0.63	7.4	28.8	4.7	9.1	1.0	3.8
OREAS 907 (Aqua Regia) Cert	37.0	16.7	11.7	6.52	43.7		5.64	1.30	2.35	2.34	2.28	0.230	1.17	225	36.1	73.0	0.540	7.36	27.8	4.79	9.05	0.950	3.45
Oreas 621 (Aqua Regia) Meas	76.1		17.2	7.71	59.3		13.3	64.7	1.74	2.81	105		1.04		18.9	38.0	290				5.7		
Oreas 621 (Aqua Regia) Cert	75.0		18.9	6.87	55.0		13.3	68.0	1.73	2.68	107		1.01		19.4	39.6	278				5.64		
MS19-13 Orig	0.3	0.4	7.4	2.56	0.4	< 0.1	0.94	0.050	< 0.02	0.10	< 0.02	< 0.02	0.03	9.1	1.4	0.53	0.21	0.3	1.21	0.2	< 0.1	< 0.1	0.3
MS19-13 Dup	0.4	0.4	7.6	2.62	0.4	< 0.1	1.13	0.040	< 0.02	0.10	< 0.02	< 0.02	0.03	8.3	1.3	0.53	0.21	0.3	1.23	0.2	< 0.1	< 0.1	0.3
MS19-15 Orig																							

Analyte Symbol	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb	Te	Cs	Ba	La	Ce	Cd	Pr	Nd	Sm	Se	Eu	Gd
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.1	0.1	0.5	0.01	0.1	0.1	0.01	0.002	0.02	0.05	0.02	0.02	0.02	0.5	0.5	0.01	0.01	0.1	0.02	0.1	0.1	0.1	0.1
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
MS19-15 Dup																							
Method Blank	< 0.1	< 0.1	< 0.5	< 0.01	0.2	< 0.1	< 0.01	< 0.002	< 0.02	0.05	< 0.02	< 0.02	< 0.02	5.5	< 0.5	< 0.01	< 0.01	< 0.1	< 0.02	< 0.1	< 0.1	< 0.1	< 0.1
Method Blank																							
Method Blank																							
Method Blank																							



Analyte Symbol	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Re	Au	Tl	Pb	Th	U	Hg	F	Cl	NO2 (as N)	Br	NO3 (as N)	PO4 (as P)
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppb	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.001	0.5	0.02	0.1	0.1	0.1	10	0.01	0.03	0.01	0.03	0.01	0.02
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	IC	IC	IC	IC	IC	IC
GXR-6 Meas	0.2	1.4				0.7	< 0.1	0.3	< 0.05	< 0.1		81.7	1.16	89.4	3.6	0.7	70						
GXR-6 Cert	0.415	2.80				2.40	0.330	4.30	0.485	1.90		95.0	2.20	101	5.30	1.54	68.0						
TILL-1 Meas																							
TILL-1 Cert																							
TILL-1 Meas																							
TILL-1 Cert																							
TILL-2 Meas																							
TILL-2 Cert																							
TILL-2 Meas																							
TILL-2 Cert																							
IC Ref Std Meas																		1.96	14.4	3.07	9.70	2.90	4.81
IC Ref Std Cert																		2.00	15.0	3.01	10.0200	3.01	5.01
OREAS 904 (Aqua Regia) Meas	0.6					1.3	0.2						0.12	7.3	7.1	4.8							
OREAS 904 (Aqua Regia) Cert	0.700					1.41	0.210						0.150	8.49	7.56	5.20							
OREAS 45e (Aqua Regia) Meas						0.6						41.9	0.08	10.6	8.2	1.3							
OREAS 45e (Aqua Regia) Cert						0.86						50.000	0.072	14.3	10.70	1.73							
OREAS 922 (AQUA REGIA) Meas	0.7							< 0.1		1.1			0.17	59.1	14.9	2.2							
OREAS 922 (AQUA REGIA) Cert	0.62							0.61		1.12			0.14	60	14.5	1.98							
OREAS 923 (AQUA REGIA) Meas	0.6							0.3		1.6			0.14	83.0	14.6	2.1							
OREAS 923 (AQUA REGIA) Cert	0.54							0.60		1.96			0.12	81	14.3	1.80							
OREAS 907 (Aqua Regia) Meas	0.4	1.8	0.3	0.5	< 0.1	0.3	< 0.1	0.4		0.8		87.0	0.09	30.8	7.7	2.0							
OREAS 907 (Aqua Regia) Cert	0.430	1.63	0.210	0.430	0.0490	0.290	0.0390	1.09		0.980		101	0.120	34.1	8.04	2.15							
Oreas 621 (Aqua Regia) Meas	0.3					0.6	< 0.1	2.2		0.9		1230	0.84	> 5000	5.2	1.7	3680						
Oreas 621 (Aqua Regia) Cert	0.330					0.520	0.0780	1.43		1.00		1230	0.770	13600	5.91	1.63	3930						
MS19-13 Orig	< 0.1	0.2	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	0.8	< 0.02	< 0.1	< 0.1	0.2	10						
MS19-13 Dup	< 0.1	0.2	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	< 0.5	< 0.02	< 0.1	< 0.1	0.2	< 10						

Analyte Symbol	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Re	Au	Tl	Pb	Th	U	Hg	F	Cl	NO2 (as N)	Br	NO3 (as N)	PO4 (as P)
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppb	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.001	0.5	0.02	0.1	0.1	0.1	10	0.01	0.03	0.01	0.03	0.01	0.02
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	IC	IC	IC	IC	IC	IC
MS19-15 Orig																		< 0.2	0.73	< 0.2	< 0.6	< 0.2	< 0.4
MS19-15 Dup																		< 0.2	0.79	< 0.2	< 0.6	< 0.2	< 0.4
Method Blank	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	0.8	< 0.02	< 0.1	< 0.1	< 0.1	110						
Method Blank																							
Method Blank																		< 0.01	< 0.03	< 0.01	< 0.03	< 0.01	< 0.02
Method Blank																		< 0.2	< 0.6	< 0.2	< 0.6	< 0.2	< 0.4

Analyte Symbol	SO4	Mg	Na	Al	Ca	Fe	K	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co
Unit Symbol	mg/L	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Lower Limit	0.03	2	5	0.5	5	1	5	2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1
Method Code	IC	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS
GXR-6 Meas																							
GXR-6 Cert																							
TILL-1 Meas						22			466		41	37		3	33.6			0.07	< 1	3.8	3.9	19	
TILL-1 Cert						48100.00			6400.0		99000	18000		2000	7800.0			13	90.0	5600.0	2200.0	18000	
TILL-1 Meas						16			461		35	33		2	32.0			0.07	< 1	3.1	3.9	19	
TILL-1 Cert						48100.00			6400.0		99000	18000		2000	7800.0			13	90.0	5600.0	2200.0	18000	
TILL-2 Meas						15			1090		25	31		15	1.0		1	< 0.05	< 1	9.9	15.9	12	
TILL-2 Cert						38400.00			12200.0		77000	26000		14000	800.0		5000	2	70.0	18400.0	5700.0	15000	
TILL-2 Meas						14			1120		24	31		18	1.0		1	< 0.05	< 1	9.3	17.0	13	
TILL-2 Cert						38400.00			12200.0		77000	26000		14000	800.0		5000	2	70.0	18400.0	5700.0	15000	
IC Ref Std Meas	14.6																						
IC Ref Std Cert	15.0																						
OREAS 904 (Aqua Regia) Meas																							
OREAS 904 (Aqua Regia) Cert																							
OREAS 45e (Aqua Regia) Meas																							
OREAS 45e (Aqua Regia) Cert																							
OREAS 922 (AQUA REGIA) Meas																							
OREAS 922 (AQUA REGIA) Cert																							
OREAS 923 (AQUA REGIA) Meas																							
OREAS 923 (AQUA REGIA) Cert																							
OREAS 907 (Aqua Regia) Meas																							
OREAS 907 (Aqua Regia) Cert																							
Oreas 621 (Aqua Regia) Meas																							
Oreas 621 (Aqua																							

Analyte Symbol	SO4	Mg	Na	Al	Ca	Fe	K	Cl	Br	I	V	As	Se	Mo	Sb	Te	W	Re	Au	Hg	Th	U	Co
Unit Symbol	mg/L	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Lower Limit	0.03	2	5	0.5	5	1	5	2000	5	2	1	1	5	1	0.1	1	1	0.01	0.05	1	0.1	0.1	1
Method Code	IC	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS
Regia) Cert																							
MS19-13 Orig																							
MS19-13 Dup																							
MS19-15 Orig	18.1	6	< 5	1.7	347	< 1	6	< 2000	< 5	< 2	2	< 1	< 5	< 1	< 0.1	< 1	< 1	< 0.01	< 0.05	< 1	< 0.1	< 0.1	< 1
MS19-15 Dup	18.1	6	< 5	1.8	272	< 1	6	< 2000	< 5	< 2	2	< 1	< 5	< 1	< 0.1	< 1	< 1	< 0.01	< 0.05	< 1	< 0.1	< 0.1	< 1
Method Blank																							
Method Blank		< 2	< 5	< 0.5	< 5	< 1	< 5	< 2000	< 5	< 2	< 1	< 1	< 5	< 1	< 0.1	< 1	< 1	< 0.01	< 0.05	< 1	< 0.1	< 0.1	< 1
Method Blank	< 0.03																						
Method Blank	< 0.6																						

Analyte Symbol	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Lower Limit	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1	1	0.1	0.1	0.1	0.1	0.1	0.1
Method Code	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS
GXR-6 Meas																							
GXR-6 Cert																							
TILL-1 Meas	14	377	110	54									700	< 20	36.2	18	2	0.5	0.4	45.5	73.2		44.6
TILL-1 Cert	24000	47000	98000	22000									5990000	65000	38000	502000	10000	13000	700.0	28000	71000		26000
TILL-1 Meas	13	268	80	65									500	< 20	42.2	16	1	0.5	< 0.1	52.5	68.6		51.3
TILL-1 Cert	24000	47000	98000	22000									5990000	65000	38000	502000	10000	13000	700.0	28000	71000		26000
TILL-2 Meas	14	300	60	48									700	30	47.0	37	2	1.5	0.1	54.3	117		60.8
TILL-2 Cert	32000	150000	130000	31000									5300000	74000	40000	390000	20000	11000	1900.0	44000	98000		36000
TILL-2 Meas	14	319	60	54									600	30	51.7	35	1	1.4	0.1	58.4	129		59.0
TILL-2 Cert	32000	150000	130000	31000									5300000	74000	40000	390000	20000	11000	1900.0	44000	98000		36000
IC Ref Std Meas																							
IC Ref Std Cert																							
OREAS 904 (Aqua Regia) Meas																							
OREAS 904 (Aqua Regia) Cert																							
OREAS 45e (Aqua Regia) Meas																							
OREAS 45e (Aqua Regia) Cert																							
OREAS 922 (AQUA REGIA) Meas																							
OREAS 922 (AQUA REGIA) Cert																							
OREAS 923 (AQUA REGIA) Meas																							
OREAS 923 (AQUA REGIA) Cert																							
OREAS 907 (Aqua Regia) Meas																							
OREAS 907 (Aqua Regia) Cert																							
Oreas 621 (Aqua Regia) Meas																							
Oreas 621 (Aqua																							

Analyte Symbol	Ni	Cu	Zn	Pb	Ga	Ge	Ag	Cd	In	Sn	Tl	Bi	Ti	Cr	Y	Zr	Nb	Hf	Ta	La	Ce	Pr	Nd
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Lower Limit	3	3	10	1	1	0.5	0.2	0.2	0.1	0.8	0.1	0.8	100	20	0.5	1	1	0.1	0.1	0.1	0.1	0.1	0.1
Method Code	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS
Regia) Cert																							
MS19-13 Orig																							
MS19-13 Dup																							
MS19-15 Orig	< 3	9	< 10	< 1	< 1	< 0.5	< 0.2	< 0.2	< 0.1	< 0.8	< 0.1	< 0.8	< 100	< 20	2.7	< 1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
MS19-15 Dup	< 3	9	< 10	< 1	< 1	< 0.5	< 0.2	< 0.2	< 0.1	< 0.8	< 0.1	< 0.8	< 100	< 20	1.8	< 1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Method Blank																							
Method Blank	< 3	< 3	< 10	< 1	< 1	< 0.5	< 0.2	< 0.2	< 0.1	< 0.8	< 0.1	< 0.8	< 100	< 20	< 0.5	< 1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Method Blank																							
Method Blank																							

Analyte Symbol	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Method Code	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS
GXR-6 Meas																						
GXR-6 Cert																						
TILL-1 Meas	9.1	1.9		1.4			3.6		3.0	0.4	6	< 2	< 100	5930	32	141	0.5	372				
TILL-1 Cert	5900.0	1300.0		1100.0			3600.0		3900.0	600.0	15000	2400.0	13000	14200 00	44000	291000	1000.0	702000				
TILL-1 Meas	10.3	2.2		1.6			5.0		3.3	0.5	2	< 2	< 100	6320	31	143	0.4	434				
TILL-1 Cert	5900.0	1300.0		1100.0			3600.0		3900.0	600.0	15000	2400.0	13000	14200 00	44000	291000	1000.0	702000				
TILL-2 Meas	11.4	2.4		1.8			4.9		4.1	0.6	9	3	< 100	2300	127	229	4.2	560				
TILL-2 Cert	7400.0	1000.0		1200.0			3700.0		3700.0	600.0	47000	4000.0	12000	780000	143000	144000	12000	540000				
TILL-2 Meas	12.7	2.7		2.0			5.2		4.4	0.6	9	4	< 100	2340	131	238	4.3	586				
TILL-2 Cert	7400.0	1000.0		1200.0			3700.0		3700.0	600.0	47000	4000.0	12000	780000	143000	144000	12000	540000				
IC Ref Std Meas																						
IC Ref Std Cert																						
OREAS 904 (Aqua Regia) Meas																						
OREAS 904 (Aqua Regia) Cert																						
OREAS 45e (Aqua Regia) Meas																						
OREAS 45e (Aqua Regia) Cert																						
OREAS 922 (AQUA REGIA) Meas																						
OREAS 922 (AQUA REGIA) Cert																						
OREAS 923 (AQUA REGIA) Meas																						
OREAS 923 (AQUA REGIA) Cert																						
OREAS 907 (Aqua Regia) Meas																						
OREAS 907 (Aqua Regia) Cert																						
Oreas 621 (Aqua Regia) Meas																						
Oreas 621 (Aqua																						

Analyte Symbol	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Li	Be	Sc	Mn	Rb	Sr	Cs	Ba	Ru	Pd	Os	Pt
Unit Symbol	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2	2	100	1	1	1	0.1	1	1	1	1	1
Method Code	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS	H2O-MS
Regia) Cert																						
MS19-13 Orig																						
MS19-13 Dup																						
MS19-15 Orig	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	0.2	< 0.1	0.2	< 0.1	8	< 2	< 100	102	16	551	0.8	18	< 1	< 1	< 1	< 1
MS19-15 Dup	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	0.1	< 0.1	0.1	< 0.1	8	< 2	< 100	65	16	488	0.8	18	< 1	< 1	< 1	< 1
Method Blank																						
Method Blank	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 2	< 2	< 100	< 1	< 1	< 1	< 0.1	< 1	< 1	< 1	< 1	< 1
Method Blank																						
Method Blank																						

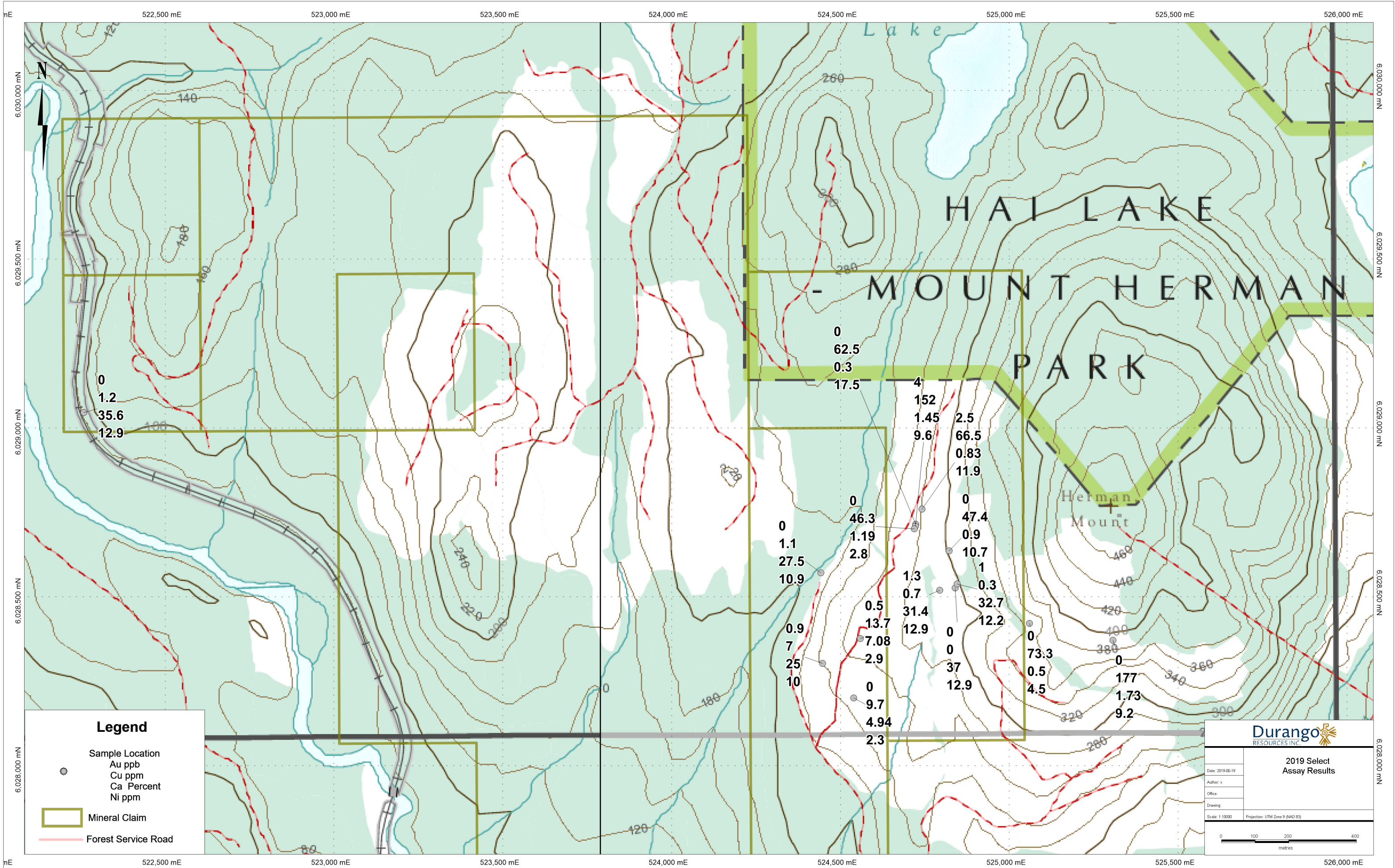


Name	Easting	Northing	Ti %	S %	P %	Li ppm	Be ppm	B ppm	Na %	Mg %	Al %	K %	Bi ppm	Ca %	Sc ppm	V ppm	Cr ppm	Mn ppm	Fe %	Co ppm	Ni ppm	Cu ppm	Zn ppm	As ppm	Rb ppm	Sr ppm	Y ppm	Zr ppm	Ga ppm	Ge ppm
MS19-01	524742	6028760	0.22	<1	0.05	5.5	0.1	<1	0.161	0.41	0.96	0.06	0.07	0.83	6.5	63	16	148	1.89	8.8	11.9	66.5	23.6	1.5	1.6	48.9	16.4	2.6	3.26	<0.1
MS19-02	524723	6028715	0.03	<1	0.05	7.1	0.1	<1	0.057	0.36	0.86	0.22	0.07	0.3	3.8	126	18	120	2.04	5.5	17.5	62.5	22.6	6.7	7.1	126	9.42	1.2	2.12	<0.1
MS19-03	524722	6028709	0.34	2	0.21	12.1	0.1	<1	0.1	1.12	1.15	0.38	0.31	1.45	11.6	84	8	627	5.47	23	9.6	152	61.5	2.6	13.7	23.6	18	1.7	4.39	<0.1
MS19-04	524719	6028701	0.26	<1	0.01	21.3	0.3	<1	0.381	1.39	3.03	0.64	0.05	1.19	4.4	57	4	533	4.33	10.1	2.8	46.3	58.9	1.3	18.5	145	3.06	0.6	7.55	<0.1
MS19-05	525307	6028371	0.2	<1	0.11	11.8	0.2	<1	0.279	0.87	2.02	0.18	0.2	1.73	7.2	109	11	533	3.79	20.6	9.2	177	61.8	2	3.9	79.9	8.26	5.1	6.02	<0.1
MS19-06	525060	6028421	0.15	1	0.05	17.7	0.2	<1	0.166	1.13	1.3	0.32	0.08	0.5	7.4	43	20	186	2.24	6	4.5	73.3	27.7	1.3	6.7	25.1	13.3	0.5	3.67	<0.1
MS19-07	524822	6028636	0.27	<1	0.08	12	0.2	<1	0.21	1.35	2.26	0.45	0.03	0.9	6.2	66	18	767	4.19	13.9	10.7	47.4	93.3	0.7	8.6	64.1	6.75	0.6	7.21	<0.1
MS19-08	524840	6028526	<0.001	<1	0.02	0.2	<0.1	<1	0.012	0.04	0.01	<0.01	<0.02	37	0.2	<1	<1	305	0.09	0.7	12.9	<0.2	8.9	0.1	<0.1	112	10.1	0.6	<0.02	<0.1
MS19-09	524559	6028376	<0.001	<1	0.01	0.1	<0.1	<1	0.016	0.03	0.04	0.02	<0.02	7.08	0.1	<1	31	103	0.32	0.5	2.9	13.7	26.9	0.8	0.8	23.4	4.32	0.7	0.09	<0.1
MS19-10	522259	6029046	0.01	<1	0.03	0.9	<0.1	<1	0.013	0.61	0.08	0.02	<0.02	35.6	0.4	5	1	143	0.22	1.1	12.9	1.2	9.1	0.3	0.4	168	8.39	0.5	0.46	<0.1
MS19-11	524846	6028538	<0.001	<1	0.02	0.3	<0.1	<1	0.013	0.08	0.03	<0.01	<0.02	32.7	0.2	<1	<1	380	0.09	0.7	12.2	0.3	5.8	0.3	0.1	115	7.16	0.6	0.03	<0.1
MS19-12	524794	6028519	<0.001	<1	0.01	0.3	<0.1	<1	0.012	0.11	0.03	<0.01	<0.02	31.4	0.2	<1	<1	199	0.12	0.9	12.9	0.7	12.2	0.7	0.2	129	9.94	0.6	0.11	<0.1
MS19-13	524539	6028200	<0.001	<1	<0.001	0.2	<0.1	<1	0.018	0.02	0.06	0.01	<0.02	4.94	0.1	<1	12	113	0.11	0.4	2.3	9.7	13.7	0.4	0.4	7.5	2.59	0.4	0.23	<0.1
MS19-14	524442	6028571	0.02	<1	0.01	0.9	<0.1	<1	0.01	0.13	0.1	<0.01	<0.02	27.5	0.3	2	<1	68	0.14	0.8	10.9	1.1	4.2	0.5	0.2	189	7.91	1.4	0.22	<0.1
MS19-15	524447	6028303	0.01	<1	0.01	1	<0.1	<1	0.011	0.19	0.09	<0.01	<0.02	25	0.2	1	<1	114	0.12	0.8	10	7	7	<0.1	<0.1	166	6.25	0.8	0.19	<0.1

Name	Nb ppm	Mo ppm	Ag ppm	In ppm	Sn ppm	Sb ppm	Te ppm	Cs ppm	Ba ppm	La ppm	Ce ppm	Cd ppm	Pr ppm	Nd ppm	Sm ppm	Se ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Hf ppm	Ta ppm	W ppm	Re ppm	Au ppb	Tl ppm
MS19-01	0.2	3.23	0.1	<0.02	0.45	0.14	0.12	0.24	130	6.1	14	0.08	2.1	10.8	2.9	1.2	0.6	3.2	0.5	3.4	0.7	2	0.3	1.7	0.2	0.2	<0.05	0.5	0.01	2.5	0.03
MS19-02	<0.1	14.3	0.19	<0.02	0.16	0.16	0.1	0.29	31.7	3.6	7.61	0.11	1.3	6.45	1.6	1.6	0.3	1.8	0.3	1.7	0.4	1	0.1	0.9	0.1	<0.1	<0.05	0.2	0.02	<0.5	0.07
MS19-03	0.7	52	0.4	0.03	0.32	0.15	0.65	0.58	24.2	10.1	22.5	0.08	3	14.9	3.4	2.5	0.4	3.9	0.5	3.7	0.8	2.2	0.3	1.9	0.3	0.1	<0.05	0.4	0.03	4	0.15
MS19-04	<0.1	40.5	0.16	<0.02	0.29	0.12	0.12	2.13	103	3.8	6.44	0.1	0.7	3.06	0.5	0.5	0.8	0.6	<0.1	0.6	0.1	0.4	<0.1	0.4	<0.1	<0.1	<0.05	0.2	<0.001	<0.5	0.23
MS19-05	<0.1	0.65	0.32	0.02	0.29	0.2	0.14	0.52	85.8	4.3	9.49	0.12	1.3	6.72	1.6	1.1	0.5	1.9	0.3	1.7	0.4	1	0.1	0.9	0.1	0.3	<0.05	0.3	<0.001	<0.5	0.04
MS19-06	<0.1	1.63	0.16	<0.02	0.38	0.1	0.32	0.4	43.1	3.5	9	0.06	1.5	8.05	2.2	1.5	0.3	2.6	0.4	2.7	0.5	1.5	0.2	1.2	0.2	<0.1	<0.05	0.1	<0.001	<0.5	0.07
MS19-07	<0.1	7.38	0.1	<0.02	0.26	0.19	0.23	0.47	79.1	5.3	9.8	0.14	1.2	5.77	1.3	1.1	0.9	1.5	0.2	1.3	0.3	0.8	0.1	0.7	0.1	<0.1	<0.05	0.2	<0.001	<0.5	0.07
MS19-08	<0.1	0.04	0.03	<0.02	0.06	<0.02	0.03	<0.02	10.3	1.4	0.32	0.9	0.3	1.55	0.3	0.2	0.1	0.7	0.1	0.8	0.2	0.6	<0.1	0.4	<0.1	<0.1	<0.05	<0.1	<0.001	<0.5	<0.02
MS19-09	<0.1	2.22	0.05	<0.02	0.18	0.11	0.02	0.03	8.9	1.9	0.49	0.54	0.4	1.97	0.4	<0.1	<0.1	0.5	<0.1	0.4	<0.1	0.2	<0.1	0.1	<0.1	<0.1	<0.05	<0.1	<0.001	0.5	<0.02
MS19-10	<0.1	0.39	0.02	<0.02	0.06	<0.02	0.02	0.03	13.4	3.3	0.99	0.89	0.5	2.22	0.4	0.2	0.1	0.6	<0.1	0.6	0.2	0.4	<0.1	0.3	<0.1	<0.1	<0.05	<0.1	<0.001	<0.5	<0.02
MS19-11	<0.1	<0.01	0.01	<0.02	<0.05	<0.02	0.02	<0.02	11.2	1.5	0.5	0.62	0.3	1.4	0.3	0.2	<0.1	0.5	<0.1	0.5	0.1	0.3	<0.1	0.2	<0.1	<0.1	<0.05	<0.1	<0.001	1	<0.02
MS19-12	<0.1	<0.01	0.03	<0.02	0.07	0.02	<0.02	<0.02	14.7	3.6	0.88	0.48	0.6	2.97	0.6	0.2	0.1	0.8	0.1	0.8	0.2	0.5	<0.1	0.3	<0.1	<0.1	<0.05	<0.1	<0.001	1.3	<0.02
MS19-13	<0.1	1.03	0.045	<0.02	0.1	<0.02	<0.02	0.03	8.7	1.3	0.53	0.21	0.3	1.22	0.2	<0.1	<0.1	0.3	<0.1	0.2	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.001	<0.5	<0.02
MS19-14	<0.1	<0.01	0.02	<0.02	<0.05	<0.02	<0.02	0.02	12.4	1.5	0.9	0.22	0.3	1.31	0.3	0.2	<0.1	0.5	<0.1	0.6	0.2	0.4	<0.1	0.4	<0.1	<0.1	<0.05	<0.1	<0.001	<0.5	<0.02
MS19-15	<0.1	<0.01	0.01	<0.02	0.07	<0.02	<0.02	<0.02	6.5	1.1	0.64	0.07	0.2	0.91	0.2	0.1	<0.1	0.3	<0.1	0.4	0.1	0.4	<0.1	0.3	<0.1	<0.1	<0.05	<0.1	<0.001	0.9	<0.02

Name	Pb ppm	Th ppm	U ppm	Hg ppb	F mg/L	Cl mg/L	2 (as N) mg	Br mg/L	3 (as N) mg	4 (as P) mg	SO4 mg/L	Mg ppm	Na ppm	Al ppm	Ca ppm	Fe ppm	K ppm	Cl ppb	Br ppb	I ppb	V ppb	As ppb	Se ppb	Mo ppb	Sb ppb	Te ppb	W ppb	Re ppb	Au ppb	Hg ppb	Th ppb	
MS19-01	3	2.8	1.9	40																												
MS19-02	2.6	1.1	1.8	30																												
MS19-03	1.9	2.1	0.9	30																												
MS19-04	2.7	2	0.7	10																												
MS19-05	3.5	0.4	0.2	20																												
MS19-06	<0.1	0.8	0.3	10																												
MS19-07	2	1.6	0.7	10																												
MS19-08	<0.1	<0.1	0.1	10	<0.2	2.47	<0.2	<0.6	<0.2	1.58	2.06	<2	<5	2.1	287	<1	<5	<2000	<5	<2	4	<1	<5	<1	0.3	<1	<1	<0.01	0.5	<1	<0.1	
MS19-09	5.2	<0.1	0.4	<10																												
MS19-10	0.5	<0.1	<0.1	<10																												
MS19-11	<0.1	<0.1	<0.1	<10																												
MS19-12	1.2	<0.1	<0.1	<10																												
MS19-13	<0.1	<0.1	0.2	<10																												
MS19-14	<0.1	<0.1	<0.1	<10																												
MS19-15	<0.1	<0.1	<0.1	<10	<0.2	0.76	<0.2	<0.6	<0.2	<0.4	18.1	6	<5	1.8	310	<1	6	<2000	<5	<2	2	<1	<5	<1	<0.1	<1	<1	<0.01	<0.05	<1	<0.1	

Name	U ppb	Co ppb	Ni ppb	Cu ppb	Zn ppb	Pb ppb	Ga ppb	Ge ppb	Ag ppb	Cd ppb	In ppb	Sn ppb	Ti ppb	Bi ppb
------	-------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

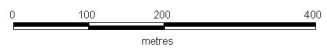


**Legend**

- Sample Location
- Au ppb
- Cu ppm
- Ca Percent
- Ni ppm
- ▭ Mineral Claim
- Forest Service Road

**Durango**  
RESOURCES INC.

Date: 2019-06-19	<b>2019 Select Assay Results</b>
Author: x	
Office:	
Drawing:	
Scale: 1:10000	Projection: UTM Zone 9 (NAD 83)



0  
1.2  
35.6  
12.9

0  
1.1  
27.5  
10.9

0.9  
7  
25  
10

0  
9.7  
4.94  
2.3

0  
62.5  
0.3  
17.5

4  
152  
1.45  
9.6

1.3  
0.7  
31.4  
12.9

0  
37  
12.9

2.5  
66.5  
0.83  
11.9

0  
47.4  
0.9  
10.7  
1  
0.3

0  
32.7  
12.2

0  
73.3  
0.5  
4.5

Herman  
Mount

0  
177  
1.73  
9.2



**Date Submitted:** 03-Jun-19  
**Invoice No.:** A19-07315Final2  
**Invoice Date:** 26-Jun-19  
**Your Reference:** MS19

**Derrick Strickland**  
**1107-1251 Cardero Street**  
**Vancouver BC**  
**Canada**

**ATTN: Derrick Strickland**

## CERTIFICATE OF ANALYSIS

15 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 8-Clay, Limestone, Dolomite,Gypsum-XRF XRF Package

REPORT **A19-07315Final2**

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

Notes:

CERTIFIED BY:

A handwritten signature in black ink, appearing to read "Elitsa Hrischeva". The signature is fluid and cursive, written over a horizontal line.

Elitsa Hrischeva, Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**  
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5  
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

**Results**

**Activation Laboratories Ltd.**

**Report: A19-07315**

Analyte Symbol	Al2O3	CaO	Cr2O3	Fe2O3(T)	K2O	MgO	MnO	Na2O	P2O5	SiO2	TiO2	Total	LOI
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	%
Lower Limit	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.002	0.01	0.01	0.01	
Method Code	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	GRAV
MS19-09	0.16	10.64	0.01	0.46	0.03	0.11	0.010	< 0.01	0.039	85.20	0.01	100.0	3.33
MS19-12	0.10	54.08	< 0.01	0.11	0.01	0.41	0.030	0.01	0.023	11.91	0.02	100.3	33.60
MS19-15	0.86	51.65	< 0.01	0.50	0.01	2.26	0.020	0.02	0.045	5.47	0.08	99.75	38.83

Analyte Symbol	Al2O3	CaO	Cr2O3	Fe2O3(T)	K2O	MgO	MnO	Na2O	P2O5	SiO2	TiO2	Total	LOI
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	%
Lower Limit	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.002	0.01	0.01	0.01	
Method Code	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	FUS-XRF	GRAV
BE-N Meas	10.09	14.04	0.06	12.96	1.39	13.29	0.201	3.23	1.080	38.31	2.65		
BE-N Cert	10.1	13.9	0.0500	12.8	1.39	13.1	0.200	3.18	1.05	38.2	2.61		
AC-E Meas	14.71	0.37		2.54	4.47		0.060	6.65		70.04	0.11		
AC-E Cert	14.70	0.34		2.56	4.49		0.058	6.54		70.35	0.11		
NCS DC73304 (GBW 07106) Meas	3.40	0.34		3.22	0.64	0.07		0.05	0.228	89.94			
NCS DC73304 (GBW 07106) Cert	3.52	0.30		3.22	0.65	0.082		0.061	0.222	90.36			
SX27-04 (DH-2704) Meas	0.36	53.17			0.04	0.07	0.010			23.63			
SX27-04 (DH-2704) Cert	0.332	53.707			0.067	0.025	0.006			24.33			
NCS DC16006 Meas	0.87	64.55				4.72	0.013	0.05		3.61			
NCS DC16006 Cert	0.885	65.2				4.55	0.0130	0.0210		3.72			
MS19-15 Orig	0.85	51.50	< 0.01	0.50	0.01	2.24	0.020	0.02	0.044	5.43	0.08	99.53	38.82
MS19-15 Dup	0.87	51.79	< 0.01	0.50	0.01	2.27	0.020	0.02	0.045	5.52	0.08	99.97	38.84