# An MMI Geochemical Soil Sampling Assessment Report on the Tatsamenie Property

BC Geological Survey Assessment Report 29612

Claims: Tut Extention, LCZ, The Tatsam Claim, Enie, Tats, Tatsam Lake 2, Right Flank, Kite Claim, A Muse, Kodiak, Wind, Ice 1

> Atlin Mining Division NTS 104K/01 and 104K/08 Latitude 58° 17' 43" N Longitude 132° 19' 10" W

> > **Owner:**

Nash Meghji

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Line 60600N	n/a	10		
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Lead, Zinc, Cadmium, Molybdenum, Gold				
Line 60400N	n/a	17		
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Gold	1:5,000	GC-1
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Copper	1:5,000	GC-6A
Molybdenum	1:5,000	GC-7A
Cobalt	1:5,000	GC-8A
Nickel	1:5,000	GC-9A
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## At Back – MMI Survey Plan Contour Maps

Note: Scale of actual map within hardcopy report may be different due "Fit to Page" printing.

#### 1.0 SUMMARY

The Tatsamenie property claims lie within rocks of the Stikine Terrane along the western margin of the Intermontane Belt. The stratigraphy is dominated by the Stikine Assemblage, which is basal to the Stikine Terrane, and in the property area, comprises Permian limestones; Upper Carboniferous felsic to mafic volcanics, phyllite and limestone; and Lower Carboniferous rocks consisting of pyroxene-phyric mafic flows and tuffs, as well as intercalated sediments which include limestone, black, carbonaceous, slightly fetid calcsiltite and argillite. Large areas of the region are intruded by plutons that are Triassic, Jurassic, Cretaceous or Eocene and which are overlain by Tertiary volcanic rocks. Faulting in the area is dominated by north to northwesttrending high-angle, strike-slip faults, which are significant in representing first order structural controls on gold mineralization.

The Ophir Break is an economically important fault zone that extends at least 15 kilometres from Bearskin Lake to Tatsamenie Lake. This structure diverges into two main strands, the eastern Black fault and the western Fleece fault which is in the area of the Golden Bear deposit. The Fleece fault is called the West Wall fault north of Sam Creek. This fault zone is defined by areas of intense fracturing with abundant slickensiding; areas of carbonaceous and siliceous black siltstone and gouge; and linear quartz-carbonate alteration zones.

The area presently held as the Tatsamenie property received substantial exploration from 1981 to 1994 by Chevron Canada Resources Ltd. and several partners. An important phase of drilling in 1987 targeted the West Wall fault every 200 metres with 30 drillholes (including one on the Nie 3 occurrence). Gold-bearing silicified limestone on the western component of the Tatsamenie property also received considerable exploration in this time period including 3 holes drilled in 1987 and 4 in 1990. At least 12 documented areas of significant mineralization were defined by previous work:

**Nie** (2 Oz Notch) – two north trending quartz veins about 3 metres apart exposed in a 14.6 metre long trench along the West Wall fault. The easternmost vein is 30 centimetres thick and the westernmost vein is about 60 centimetres thick. Mineralization consists of disseminated and massive pyrite and minor pyrrhotite. Up to 14.0 grams per tonne gold were obtained from across the 0.3-metre vein (Shaw, 1984).

**Misty** – minor gold mineralization is associated with pyrite and occurs within tuff near the West Wall fault. A sample assayed over 10.0 grams per tonne gold (Brown and Walton, 1983).

Nie 3 (Spire) – a mineralized 1987 drillhole intersected carbonaceous, graphitic siltstones interbedded with grey limestone. Mineralization consists of disseminations, blebs and stringers of pyrite and sphalerite associated with calcite and quartz veins. A 1.5 metre sample of drill core assayed 0.37 per cent zinc (Walton, 1987). The nearby Spire grid examined quartz-carbonate breccia zones with pyrite, sphalerite, chalcopyrite and galena in an area of mafic volcanics and

siliceous to calcareous sediments and carbonate units. Up to 2.71 grams per tonne gold, 13.77 per cent zinc and 1.71 per cent lead were reported from three different samples (McBean, 1990).

**Honk** – a shear-hosted quartz pyrite vein with local chalcopyrite hosted in sheared mafic volcanic rock along a north-trending splay of the Ophir Break. A grab sample assayed 18.07 grams per tonne gold and 64.80 grams per tonne silver (McBean, 1990).

**Barron** – pods of semi-massive pyrite, pyrrhotite and chalcopyrite occur within strongly sheared, silicified and pyritized diorite and mafic volcanic rock that are cut by a north-trending fault. A grab sample assayed 1.48 per cent copper and 6.0 parts per million silver (Bradford and Brown, 1993).

**Patella** – a carbonate vein, at least 100 metres long, averaging 0.55 metre wide and containing up to 15 per cent sphalerite and galena. Hosted in intermediate to mafic volcanic rocks near and west of the Ophir Break fault zone.

**Backbone** – local high gold and polymetallic anomalies occur in discontinuous massive quartz veins in mafic volcanics as well as along north-northwest trending faults. A rock chip of a massive quartz vein pod yielded 9.8 grams per tonne gold (Zuran, 1994).

**Shoulder** – two parallel quartz veins, about 2 metres apart and traceable for 40 metres, are hosted in chloritized mafic volcanics. The smaller, 5 centimetre wide vein contains up to 50 per cent sulphides consisting of pyrite, galena, stibnite, and trace sphalerite. The second vein is 30 centimetres wide and consists of massive white quartz with 4 per cent pyrite and a trace of chalcopyrite. Up to 15.3 grams per tonne gold were obtained from grab samples (McBean, 1990). Further veining was reported to have been encountered in follow-up work.

Tatsamenie Lake – asbestos and talc mineralization related to the Ophir Break fault zone.

**Tut** – this zone occurs within a 900 metre long belt of dolomitized and silicified Permian limestone, approximately 100 to 150 metres wide, between strong east-northeast trending faults. R-37 was a 1987 drillhole drilled into the south bounding fault which contains abundant scorodite and silica. Only anomalous values were obtained from drill core. The best values came from near the north bounding fault where trenched dolomitized limestone yielded up to 3900 ppb gold over 1.1 metres (Bruaset, 1984).

LCZ (Limestone Contact Zone) – a 1.5 kilometre long zone of silicification and brecciation within Permian limestone along an overlying thrust contact with a Carboniferous phyllite unit. One significant drillhole interval from 1987 yielded 2.10 grams per tonne gold over 1.75 metres (Moffat and Walton, 1987). Much of this zone remains untested.

12) LCZ Extension – mineralization in silicified limestone outcrop near a contact with overlying phyllites consists of sparse, fine grained, euhedral pyrite with a trace of very fine dark grey sulphides. The phyllites host narrow, silicified, pyritic shear zones with minor quartz veining. While the silicified limestone yielded only anomalous values in gold, the phyllite-

hosted shears assayed up to 2000 ppb gold over 1.8 metres (Hamilton, 1994). The significance of this zone is that it promises to add a further 1 kilometre to the length of the LCZ zone.

A Mobile Metal Ion (MMI) soil sampling program was conducted from Aug 5th to 10<sup>th</sup>, 2007 in the area between the LCZ zone and the LCZ Extension showing on the "LCZ" claim (Tenure 534852 and on the "The Tatsam Claim" claim (Tenure 533124) (Figure 7). A total of 11.5 kilometres of line were installed, including an 800 metre base line. Sampling occurred every 25 metres with 420 samples collected overall.

The results of the MMI program show a broad zone of anomalous gold, silver and other elements extending to the grids north, south and eastern limits, indicating the need to extend the grid and MMI sampling in those directions. An induced polarization (IP) survey to better define drill targets previously outlined by the MMI sampling is recommended. Backhoe trenching should occur while the additional MMI sampling is being done or later in the field season. Drilling is recommended with targets focused on significant coincident MMI and IP anomalies. Geological mapping in the grid area should be ongoing during the program.

Based on the potential for discovery of Golden Bear-type carbonate-hosted mineralization, detailed geological mapping and sampling of existing and new mineral showings is recommended on other parts of the property outside the LCZ area. Detection of geochemically anomalous areas along the West Wall fault may be indicative of deeper mineralization. Soil sampling and VLF-EM surveying is recommended in order to investigate the West Wall fault in the relatively unexplored area north of the Nie 3 mineral occurrence.

Estimated cost for the proposed exploration program including diamond drilling is \$750,000.

## 2.0 INTRODUCTION

The Tatsamenie property surrounds the claim holdings of North American Metals Corp., and their past producing Golden Bear mine property, on three sides and covers sixteen mineral showings documented in the British Columbia provincial mineral database (MINFILE) and four others not yet in the database. The MINFILE showings are indicated in Figure 1; the four not in the database are the Patella, Shoulder, Backbone and LCZ Extension showings (Figure 6). The claim group is 100% owned by Nash Meghji.

The 2007 Mobile Metal Ion (MMI) soil geochemical sampling program conducted on the property is the subject of this report.

Results from the 2007 program and previous historic exploration have been positive and a program of expanded MMI geochemical sampling, geological mapping, trenching, and induced polarization (IP) and VLF-EM geophysical surveying is warranted, all preliminary to a program of diamond drilling later in the field season.

## 3.0 PROPERTY DESCRIPTION and LOCATION

The Tatsamenie Project area is situated in the Atlin Mining Division in northwest British Columbia, 160 kilometres south of the community of Atlin or 136 kilometres west of the community of Dease Lake. The village of Telegraph Creek is 82 kilometres southeast (Figure 2). The property is located on NTS mapsheet 104K/01 and 08 (TRIM mapsheets 104K.018, 019, 028, 029, 038, 039) at a latitude of 58°17'43" N and longitude 132°19'10" W (Figure 3). Access to the property is by helicopter from Atlin, Telegraph Creek or Dease Lake. The terminus of the past producing Golden Bear mine road occurs on the north side of Bearskin Lake (Figure 4) and transects the southeast portion of the present Tatsamenie property. The condition of the road is unknown at the time of this report submission.

The Tatsamenie property presently consists of 17 claims named Tut Extention, LCZ, The Tatsam Claim, Enie, Tats, Tatsam Lake 2, Right Flank, Kite Claim, A Muse, Kodiak, Wind, Ice 1, Bear Tan Claim, Tan, Oro, Fill In The Dot and Tat Gap. All are contiguous except for the Tat Gap. This assessment report is submitted to fulfil requirements for Statement of Works applied for of the 12 claims indicated by tenure numbers 522344, 533110, 533111, 533124, 534852, 547205, 549539, 549541, 549542, 549659, 549664, 552504; tenures 564617, 569450, 569451, 569452, 570562 are not the subject of this report.

The Tatsamenie property claim area is about 12 kilometres east-west by 20 kilometres northsouth. Table 1 lists all the claims which are held in the name of Nash Megjhi (Nakina Resources Inc.) as the Tatsamenie property. The 17 claims total 9,498.62 hectares in area. The 12 claims that are the subject of the Statement of Work and this assessment report total 7,624.838 hectares in area. The Tatsamenie property has not been legally surveyed. The authors are not aware of any planned or existing land use that would adversely affect development of mineral resources on the property.

Tenure Number	Туре	Claim Name	Good Until	Area (ha)
522344	Mineral	TATSAM LAKE 2	20080801	425.367
533110	Mineral	TATS	20080801	407.862
533111	Mineral	ENIE	20080801	408.551
533124	Mineral	THE TATSAM CLAIM	20080801	3232.011
534852	Mineral	LCZ	20080801	391.582
547205	Mineral	RIGHT FLANK	20080704	357.785
549539	Mineral	KITE CLAIM	20080115	426.23
549541	Mineral	A MUSE	20080115	290.065
549542	Mineral	KODIAK	20080115	425.696
549659	Mineral	TUT EXTENTION	20080115	850.983
549664	Mineral	WIND	20080116	153.411
552504	Mineral	ICE 1	20080222	255.295
*564617	Mineral	BEAR TAN CLAIM	20080821	324.032
*569450	Mineral	TAN	20081105	426.119
*569451	Mineral	ORO	20081105	409
*569452	Mineral	FILL IN THE DOT	20081105	289.441
*570562	Mineral	TAT GAP	20081123	425.19

#### TABLE 1. TATSAMENIE GROUP OF CLAIMS

\*Claims not the subject of relevant Statements of Work, including 564617, 569450, 569451, 569452, 570562



Figure 1. MINFILE Occurrences on and near Tatsamenie Claim Group.



Figure 2. Location Map, Tatsamenie Project.

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# 4.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE and PHYSIOGRAPHY

The Tatsamenie property consists of steep, mountainous terrain. Topography consists of steeply sloped bluffs incised by numerous streams and creeks. Elevations range from 800 metres in the northern part of the claim where it borders Tatsamenie Lake, to glaciers in the south and southwest part at 2360 metres elevation. Most of the property is above treeline except in the northern portion where it is wooded along the slopes down to Tatsamenie Lake. The property is located in the Northern and Central Plateaus and Mountains climatic zone. This region of northwestern British Columbia has much colder winters and cooler summers. In Dease Lake, for example, the average maximum temperature in January is minus 13°C and in July is 19°C. Precipitation, though quite light, is distributed evenly throughout the year. Higher elevations get heavy snowfall in the winter.

Access to the property is generally via helicopter either from the communities of Atlin, Dease Lake or Telegraph Creek, or staged from the terminus of the Golden Bear Mine road. There is no significant infrastructure on the property. The community of Dease Lake, population 700, is 136 kilometres east of the property and is a government centre and supply and service point for fuel, groceries, accommodation, etc. Dease Lake is located on Highway 37, often referred to as the Stewart-Cassiar Highway. Dease Lake is also the cut-off for Telegraph Creek, population 450, a historic village 98 kilometres to the southwest. The 155 kilometre, two wheel drive private haul road to the Golden Bear mine joins the Dease Lake-Telegraph Creek road. There is also an airstrip that can accommodate fixed wing aircraft at the Golden Bear mine. In early 2006, the Golden Bear mine road was still active but may not presently be in service. Atlin, population 450, is 160 kilometres north of the property and is accessed via Highway 7, also referred to as the Atlin Road. Atlin is a government centre and supply and service point for fuel, groceries, accommodation, etc. There are charter flights to Dease Lake, Telegraph Creek and Atlin.

#### 5.0 HISTORY

Pertinent exploration history is documented from 1959 to the present and summarized according to years worked. Mineralization that was the focus of historical work on the now lapsed Nie 1-4, Tut and Ram claims staked by Chevron in the early 1980's is now found within the boundaries of Nakina Resources' "The Tatsam Claim", Tatsam Lake 2 and LCZ claims. Chevron's lapsed Misty, Sam and Pole claims occur adjacent to the east of Nakina's Tatsamenie Project area (Figures 3 and 6). The history of Chevron's Ram-Tut area is defined separately from that of Chevron's Nie area as they were historically explored as separate claim groups. In general, the old Ram-Tut group was just over 2 kilometres to the southwest of the Nie group. The relationship of the old claims can be seen on Figure 4 which is derived from Zuran (1994).



Figure 3. Tatsamenie Project Mineral Claims Map.



The Oro and Tan showings were recently added to the Tatsamenie property's southern area (and south of the Golden Bear mine) by staking in 2007. The Oro was originally staked in 1983 and transferred to Sage Resources Ltd. later in the year. Work by Sage in 1984 included reconnaissance geological mapping, soil and rock sampling, and VLF-EM surveying. A program of mapping and sampling was conducted by Sage in 1986. The Tan group was staked by Chevron Minerals in 1983 adjacent the Oro claims and just south of Bearskin Lake. Chevron conducted a soil and rock sampling program on the Tan Group in 1983 and a soil sampling and VLF survey in 1985.

The Thor claims were staked in 1982 and 1983 by Chevron Canada in the area immediately south of the Ram-Tut group. Chevron conducted a rock sampling and trenching program in 1983. In 1985, Chevron collected 453 soil samples and reported poor results.

#### 5.1 Nie-Misty History

1959 Regional stream sediment geochemical and water sampling conducted by Kennco Explorations Ltd. The program targeted copper-molybdenum porphyry-type mineralization.

1981 Staking of Misty 1, 2; Nie 1, 2; Pole and Sam 1, 2 by Chevron Canada Resources Ltd.

1982 Misty and Nie claims: reconnaissance contour soil and rock sampling and prospecting at 1:10,000 scale (37 rocks, 76 soils). Sam and Pole claims: rock, soil and silt sampling, and prospecting at 1:10,000 scale.

1983 Misty and Nie claims: reconnaissance rock and soil sampling, and geologic mapping at 1:10,000 scale. Detailed rock sampling on ridge west of Shoulder Vein (103 rocks, 20 soils) was carried out. Pole and Sam 2 work included geophysics (VLF-EM and magnetometer).

1984 Misty and Nie claims: grid soil sampling, trenching, geophysics, and geologic mapping. "Nie Grid" established (68.2 kilometres covering Nie 3 and 4 as well). One trench (DS-337) 14.6 metres long was blasted on ridge exposing the Nie (2 Oz Notch) mineral occurrence. VLF-EM and magnetic surveying on grid were carried out. Geologic mapping at 1:10,000 scale was conducted.

1985 Misty claims: reconnaissance rock and contour soil sampling completed. Confirmation of previous anomalies (109 soils, 31 rocks) done. Sam 1 work included reconnaissance rock sampling (6 rocks).

1987 Misty and Nie claims work included: diamond drilling, geophysics, detailed geologic mapping and sampling. The West Wall fault was targeted every 200 metres with 30 drill holes (including one on Nie 3); 940 drill core samples, 15 overburden samples. Geophysics included 15.7 kilometres of VLF-EM. Detailed geologic mapping at 1:2000 scale was done in two blocks: 250 x 600 metres and 250 x 1600 metres. Sam 1 work

included: geologic mapping at 1:5000 scale on orthophotos. Rock and silt sampling (12 rock, 4 silt). The work was conducted by the Chevron-Dia Met Joint Venture.

1988 Shannon Energy Ltd. entered into Chevron-Dia Met Joint Venture - some field work done by Stetson Resource Management Corporation but no reports are available.

1990 In 1990, Homestake Mineral Development Company, under contract to North American Metals Corp., performed: reconnaissance mapping and sampling on the Misty and Nie claims under an option agreement with Chevron to earn 50 per cent interest in the property. The Shoulder Vein and Honk occurrence were discovered and Spire (Nie 3) showings were explored.

1991 Work was completed on Misty and Nie claims by Homestake Mineral Development Company under contract to North American Metals Corp. under an option agreement with Chevron Canada Resources Ltd. Geophysics included 6.9 line kilometres of VLF-EM and magnetometer surveys<sub>10</sub> Detailed geologic mapping around the Shoulder Vein and 2 Oz Notch (1:2000) was done and the northwest corner of the Nie 3 claim was mapped at 1:10,000 scale. Five of the 1987 diamond-drill holes in the 2 Oz Notch (Nie) zone were re-logged. Seventy-two silt samples, 361 soil samples and 182 rock samples were collected from the property for analysis. The Honk (Ultramafic Vein showing) was trenched using a high pressure water pump. Sixty-five metres in 8 trenches were reported excavated on the property.

1992 Sam claims: A new grid established over 1982 grid with mine grid coordinates. Soil sampling on grid occurred. Geologists John Bradford and Derek Brown of the provincial Geological Survey Branch mapped the area at a 1:50,000 scale and discovered new showings such as the Barron.

1994 The owner/operator is North American Metals Corp. Activities during the 1994 exploration on the Misty-Nie-Sam Property which encompasses much of the eastern portion of the present Tatsamenie property included: establishing mine grid survey control stations, establishing the Backbone and Shoulder grids, grid and reconnaissance soil sampling, rock sampling, grid geophysics, 1:5000 scale geologic mapping, and prospecting. Eight mine grid survey stations were established on the property.

Grid soil sampling was done on the Backbone and Shoulder grids at 25 metre intervals along lines spaced every 100 metres. Stations between pickets were located by compass bearing and hip chain. Soil sampling on the Backbone grid was incomplete due to snow cover. Soil sampling on the Shoulder grid was selective. Reconnaissance-style contour soil sampling includes lines S-I to S-7.

Geophysics comprising a magnetometer and VLF-EM survey was conducted on the Backbone and Shoulder grids. A total of 19.0 line kilometres of each survey were completed.

Geologic mapping at 1:5000 scale was conducted on and around the Backbone and Shoulder grids covering an area of approximately 3.5 square kilometres. Detailed mapping at 1:500 scale was conducted on the Patella Vein.

2005 On September 21<sup>st</sup>, 2005 Garry Payie, P.Geo., along with two assistants, flew via helicopter onto the Tatsamenie Project property of Nakina Resources Inc. from Atlin, B.C. Sampling and geological examination was conducted in the area of the Nie and Honk showings.

#### 5.2 Ram-Tut History

1981 The Ram-Tut-Tot property was first staked in 1981 by Chevron Minerals Ltd. The Tut 1-4 claims covered an area of anomalous silt geochemistry discovered during a reconnaissance program south of the east end of Tatsamenie Lake.

1982 Chevron completed a program of mapping and rock sampling on the property in 1982, when 16 rocks and 96 soils were collected; the previous year 68 rocks and 237 soils were taken (Shannon 1982, Brown and Shannon, 1982).

1983 A more thorough program of detailed geological mapping, rock and soil sampling, and minor trenching was conducted (Brown and Walton, 1983). The property was expanded in 1983 with the addition of the Tot 1-4 claims on the north side of Tatsamenie Lake but do not cover the area of present interest south of the lake in the Ram-Tut area. The Snow 1-6, adjacent to the east the Ram-Tut claims, were staked by Chevron and 207 soils and 24 rock samples were collected (Thicke and Shannon, 1983).

1984 Further trenching and sampling was completed by Chevron Canada with 294 rock chip samples taken (Bruaset, 1984).

1985 A student from the University of British Columbia completed a study of the albitized unit on the Tut claims (Hewgill, 1985a,b).

1987 In 1987, Chevron conducted a 674 metre diamond drill program to test the silicified limestone contact mineralization on the Ram-Tut claims, and a narrow shear zone on the Tot 4 claim (Walton et al., 1987, Walton, 1987). A total of 434.65 metres in 3 NQ drill holes were drilled on the Tut claims. The Ying claim was staked in 1987 to hold tenure in the area of the Tatsamenie Lake Base Camp.

1988 The Ram claim was optioned to Shannon Energy Ltd., and on behalf of Shannon Energy, Stetson Resource Management Corp. carried out an exploration program in 1988. Seven heavy mineral stream sediment samples were taken and geological mapping was conducted. Anomalous gold concentrations were obtained from one of the heavy mineral samples.

1989 The Ram Baa claim was staked.

1990 Chevron and Armeno Resources Inc. entered into an option agreement. Between July and September 1990, Armeno drilled 437.78 metres in four BQ diamond- drill holes to

further evaluate the silicified limestone mineralization on the Tut claims (Allen, 1990). Further work included an 11.6 kilometre VLF-EM survey, a 7.2 kilometre ground magnetics survey and the collection of 35 silt, 110 soil and 30 rock samples.

1992 North American Metals Corp. (NAMC) acquired 100% interest in the property, as part of the Asset Sale Agreement between Chevron and NAMC, prior to the 1992 field season. Homestake Canada Ltd. was contracted by NAMC to carry out the 1992 exploration program during which several known zones were re-evaluated and several new showings were discovered and evaluated (Howe and Reddy, 1993). In 1992, 184 rock and 185 soil samples were collected for analysis. Geologists John Bradford and Derek Brown of the provincial Geological Survey Branch mapped the area at a 1:50,000 scale.

1994 In 1994, work on the Tut claims consisted of soil sampling, rock chip sampling and limited geological mapping at a scale of 1:10,000 by owner/operator, North American Metals Corp. (Hamilton, 1994). A total of 19 soil samples and 45 rock samples were collected from the Tut claims. The work was not applied for assessment. The Ram Baa 4 claim was added in 1994 to cover a fraction between the Tot 4 and Ram Baa claims.

## 6.0 GEOLOGICAL SETTING

The following regional geology was largely derived, in whole or in part, from Bradford and Brown (1993). Minor nomenclature revisions have been made in accordance with the more recent northwest British Columbia geological compilation by Mihalynuk et al., 1996. A more up-to-date compilation of the geology was completed by the British Columbia Ministry of Energy, Mines and Petroleum Resources and is available online at the MapPlace website (www.mapplace.ca).

#### 6.1 Regional Geology

The area covered by this regional geological description is that defined by Bradford and Brown in their investigation of the region surrounding the Golden Bear Mine (Figure 5). The area is situated along the western edge of the Intermontane Belt and lies within the Stikine Terrane. Previous mapping at 1:250,000 scale by Souther (1971) identified an extensive unit of Triassic and older volcanic and sedimentary rocks containing Permian limestone in structural culminations. This unit was subdivided by Bradford and Brown into Upper Triassic Stuhini Group and Paleozoic Stikine Assemblage, however, the Stuhini rocks north of Bearskin Lake were later reassigned to the Stikine Assemblage by Mihalynuk et al. (1996). These rocks are intruded by Triassic to Eocene plutons and are overlain by Tertiary

volcanic rocks. The only Jurassic stratigraphy in the project area consists of a small, faultbounded wedge of elastic sedimentary rocks of the Takwahoni Formation.



#### **GEOLOGICAL LEGEND**

#### STRATIFIED ROCKS

MIOCENE	LOV	WER CARBONIFEROUS		
Mb LEVEL MOUNTAIN GROUP: Basalt - flat lyin columnar jointed	ıg,	ICSv Pyroxene-phyric mafic flows and tuffs; intercalated sediments include limestone, black, carbonaceous, slightly fetid calcsilitie and acrillite		
EOCENE	DEV	/ONIAN		
ESv SLOKO GROUP: Intermediate to felsic volcar tuff and lesser flows	nic breccia,	DSv Undivided volcanic rocks		
TERTIARY		INTRUSIVE ROCKS		
Tcg Polymictic conglomerate - poorly indurated	EOC	CENE		
LOWER JURASSIC		Egr Biotite homblende granite, plagioclase porphyritic granite,		
IJTs TAKWAHONI FORMATION (LABERGE GRO Sandstone, siltstone, polymictic conglomerate	DUP):	pore nombience granodionte, quarz plagioclase porphyritic rhyolite, plagioclase porphyritic and felsite dikes (Sloko-Hyder Plutonic Suite)		
UPPER TRIASSIC	LATI	E CRETACEOUS		
uTrSv STUHINI GROUP: Volcanics, volcaniclastics uTrSp - megacrystic, "bladed" plagioclase por	rphyry	IKqm Quartz monzonite (Ramtut Stock)		
Hbgb - hornblende gabbro		EARLY TO MIDDLE JURASSIC		
LOWER TO MIDDLE TRIASSIC		Homblende biotite quartz monzonite, albitic granodiorite		
ImTrim Limestone, marble, calcareous sedimentary ro	ocks	gabbro to diorite, granodiorite, diorite		
PERMIAN AND OLDER	MIDI	DLE TO LATE TRIASSIC		
STIKINE ASSEMBLAGE	m	Quartz diorite, homblende diorite, monzodiorite		
Lower Permian		Tropx Clinopyroxenite		
PSIs Limestone - variably recrystallized	_			
UPPER CARBONIFEROUS				
uCSvsI Felsic to mafic volcanics, phyllite, limestone	-	Fault Tatsamenie Project Claim Boundary		
CARBONIFEROUS (?)		Glacier		
CSs Slate, siltstone, limestone	MI	INFILE Occurrence		
CSvs Andesitic tuff, argillite, tuffaceous sandstone	*			
CSv Foliated, chloritic metavolcanic rocks containin similar to Stuhini Group	ng lithologies Geol	logical map and legend compiled from:		

Bradford, J.A. and Brown, D.A. (1993): Geology of the Bearskin Lake and Southern Tatsamenie Lake Map Areas, Northwestern British Columbia (104K/1 and 8); in Geologia Fieldwork 1992, B.C. Ministry of Energy, Mines and Petroleum Resources, Paper 1993-1, pp. 159-176.

Mihalynuk, M., Bellefontaine, K., Brown, D., Logan, J., Nelson, J., Legun, A. and Diakow, L. (1996): Digital Geology, Northwest British Columbia (94/E, L. M: 104/F, G, H, I, J, K, L, M, N, O, P: 114/I, O, P); B.C. Ministry of Energy, Mines and Petroleum Resources, Open File 1996-11. A **Devonian Stikine Assemblage (DSv)** unit consisting of undivided volcanic rocks occurs in an east-west trending belt just southeast of Misty Mountain. This belt of rocks was previously included in the CSv unit of Bradford and Brown.

**Carboniferous Stikine Assemblage (CSv)** rocks consisting of foliated, chloritic metavolcanic rocks contain lithologies similar to Stuhini Group in part, but distinguished from them by the following criteria:

strong, penetrative flattening foliation (especially evident in lapilli tuffs and pillow basalt) and phyllosilicate fabrics;

well-developed mullions and stretching lineations;

a "chloritic" green weathering colour, lacking the distinctive red-brown weathering of Stuhini rocks;

in general, more andesitic compositions;

greenschist metamorphic grade;

bright green colours on fresh surfaces.

The dominant pre-Upper Triassic volcanic lithologies include: andesitic ash to lapilli tuff; feldspar and lesser augite-phyric tuff and flows; massive andesitic flows; laminated green and white, locally calcareous tuff; maroon and green tuff and flows; rare pillow basalt and argillite. In places, thin to thick-bedded grey and white recrystallized limestone up to 25 metres thick is present. A phyllitic foliation is common, but strain is variable and some outcrops have only a very weak foliation. Southeast of the Samotua antiform, relatively unstrained tuff and massive flows locally resemble Stuhini Group, and transitions from phyllitic to very weakly foliated rocks are abrupt. In some cases, massive diabasic rocks may represent Stuhini feeder dikes and sills.

The age of the Stikine Assemblage metavolcanic rocks is poorly constrained. Chloritic metavolcanic rocks at Sam Creek (Figure 5) structurally overlie Upper Carboniferous (Moscovian) felsic volcanic rocks in what could be an inverted structural sequence; if so, a Moscovian or older age is implied.

A distinctive **Carboniferous Stikine Assemblage** (**CSvs**) unit of well-bedded tuff and sedimentary rocks crops out along the Samotua River south of the mouth of Bearskin Creek. Similar rocks are exposed east of the Samotua Glacier in the south-central part of map sheet 104K/1. The unit consists of thin to medium bedded felsic to intermediate ash tuff, tuffaceous sandstone and argillite. Interbedded volcaniclastic rocks and argillite are characterized by graded bedding, flame structures and argillite rip-ups. Heterolithic pebble conglomerate with abundant chert and metavolcanic clasts is present locally. Minor limestone, calcareous ash tuff and foliated pyroxene-phyric sills also occur within the sequence.

Strongly deformed **Carboniferous Stikine Assemblage (CSs)** argillaceous sedimentary rocks occur within the Stikine Assemblage metavolcanic sequence near the mouth of Bearskin Creek. They consist dominantly of slate to argillaceous phyllite with minor ash tuff, siltstone, and brown-weathering limestone beds and lenses up to 0.5 metre thick. The contact with overlying foliated volcanic rocks appears to be stratigraphic.

A unique stretched-pebble conglomerate occurs near the top of the sediment package and is exposed along the Golden Bear mine road. This matrix-poor pebble to cobble conglomerate consists almost entirely of subrounded felsic volcanic clasts, with minor black chert or cherty argillite and black silty limestone. Volcanic clasts include welllaminated felsic tuffs and plagioclase-phyric dacite. All volcanic clasts are intensely altered to an assemblage of fine-grained quartz, sericite and pyrite. The conglomerate coarsens upward over a thickness of about 5 metres. Clasts have undergone marked ductile strain. The source of the felsic volcanic clasts is unknown.

An **Upper Carboniferous Stikine Assemblage (uCSvsl)** heterogeneous section of foliated felsic to mafic volcanic rocks, argillaceous phyllite and limestone structurally overlies thick Permian limestone at the head of Sam Creek. Similar felsic phyllite and carbonate can be traced to the west side of Misty Mountain where they also overlie a thick limestone package.

All those rocks essentially north of Bearskin Lake and south of Tatsamenie Lake that were included with the Upper Triassic Stuhini Group by Bradford and Brown have subsequently been reassigned (Mihalynuk et al., 1996) to a Lower Carboniferous, primarily volcanic package of the Stikine Assemblage (ICSv). An attempt has been made here to assign the descriptive notes to each unit but some common passages are included.

South of Tatsamenie Lake, Lower Carboniferous Stikine Assemblage (ICSv) rocks consist predominantly of pyroxene-phyric mafic flows and tuffs. Intercalated sediments include white to grey limestone, black, carbonaceous, slightly fetid calcsiltite and argillite. Buff to grey ribbon chert was noted at one locality. At Sam Creek, weakly foliated pyroxene and plagioclase-phyric volcanic rocks overlie polydeformed chloritic phyllite, dolomitic limestone, argillaceous phyllite and siliceous phyllite along a foliation-parallel disconformity. Pillow basalt was observed in the Golden Bear pit area overlying Permian limestone and was also mapped between Tatsamenie Lake and the Sam batholith.

Volcaniclastic sequences comprise intercalated massive to finely laminated ash tuff and crystal tuff, lapilli tuff and block and ash tuff, as well as more massive greenstones which could be flows or sills. Lapilli tuff commonly contains augite and or plagioclase crystals as well as mafic lithic clasts. Augite phyric lithic clasts are common while intermediate to felsic volcanic, plagioclase-phyric hypabyssal intrusive and chert clasts are rare. Massive, homogeneous, crystal tuff or tuffaceous sandstone units can be mistaken for dioritic intrusive bodies, but locally contain thin beds of finer crystals, ash laminae, or scattered lithic clasts. Intercalated sedimentary rocks suggest that the volcaniclastic sequences are submarine.

At Sam Creek, Lower Permian limestone is overlain by a thin (100 metres) unit of chloritic metavolcanic rocks with intercalated pink marble. This is in turn overlain by a thick section (300-400 metres apparent thickness) of pale grey, tan or brown-weathering varicoloured (green, grey, brown, pink), thin bedded to laminated felsic phyllite (felsic metatuff). Intercalated with the felsic rocks are lesser dark green, chloritic, intermediate to mafic metavolcanic rocks, tan to orange-weathering dolostone and dolomitic phyllite, argillaceous phyllite and blue-grey to white and pinkish marble. A sericite and/or chlorite foliation is characteristic of the felsic unit, but lithologies can be massive to fissile. Thin, potassium feldspar-quartz layers occur in some laminated felsic rocks. Plagioclase and quartz-phyric rhyolite is present locally.

A **Permian Stikine Assemblage (PSIs)** unit consisting of massive to thin bedded, white to dark grey limestone underlies an 8 square kilometres area between Bearskin Lake and Sam Creek. This and smaller limestone bodies scattered throughout the map area have been assigned a Permian age on the basis of poorly preserved fossils found within. Limestone exposed in structural culminations in the Samotua River valley and along the western margin of the Moosehorn batholith provisionally thought to be Carboniferous have more recently been assigned a Lower Permian age (Mihalynuk et al., 1996). In general, carbonate is less fossiliferous than in other areas of Stikinia, possibly due to more intense deformation and metamorphism.

Internal stratigraphy of the Bearskin Lake limestone has been described as dark grey, carbonaceous limestone and black siltstone occurring near the top of the unit above Bearskin Lake. A black chert described in the Fleece Bowl could be a silicified correlative unit. The carbonaceous limestone overlies tan to orange-weathering dolomitic limestone, which also occurs near the top of the section at Sam Creek.

A Lower to Middle Triassic (ImTrIm) unit consisting of limestone, marble and calcareous sedimentary rocks is mapped along the Ophir Break within a few kilometres of Tatsamenie Lake. This unit was previously included by Bradford and Brown with the Stuhini Group but has not been reassigned to the Stikine Assemblage.

The **Upper Triassic Stuhini Group (uTrSv)** consists mainly of red-brown weathering, plagioclase and augite-bearing volcaniclastic rocks. Flows are subordinate to clastic rocks. At the Bandit showing (MINFILE 104K 086), gently northeast dipping pyroxene crystallithic lapilli tuff unconformably overlies strongly folded and foliated metavolcanic rocks, argillaceous phyllite and limestone.

Volcaniclastic sequences comprise intercalated massive to finely laminated ash tuff and crystal tuff, lapilli tuff and block and ash tuff, as well as more massive greenstones which could be flows or sills. Lapilli tuff commonly contains augite and or plagioclase crystals as well as mafic lithic clasts. Augite phyric lithic clasts are common while intermediate to felsic volcanic, plagioclase phyric, hypabyssal intrusive and chert clasts are rare. Massive, homogeneous, crystal tuff or tuffaceous sandstone units can be mistaken for dioritic intrusive bodies, but locally contain thin beds of finer crystals, ash laminae, or scattered

lithic clasts. Intercalated sedimentary rocks suggest that the volcaniclastic sequences are submarine.

Epiclastic rocks comprise at least 10 per cent of the Stuhini Group south of Bearskin Lake. Epiclastic sequences include thin to medium bedded, dark green-grey volcanic siltstone and sandstone, locally interbedded with argillite and minor limestone. Crossbedding and graded bedding occur within sandstone-argillite sections, which may be turbiditic deposits.

A continuous, west-facing section, about 4 kilometres north of the Bandit showing, has a thickness of about 2000 metres. It includes a thick, lower, dominantly epiclastic sequence of well bedded, graded tuffaceous sandstone, ash tuff and lesser argillite. Within this is a conglomerate unit with fine-grained basalt and rare felsic clasts. The epiclastic sequence is overlain by massive to well-bedded ash and crystal tuff with lesser pyroxene-phyric flows which are overlain by lapilli tuff with lesser ash and crystal tuff, coarsening upward into block and lapilli tuff with amygdaloidal basalt clasts.

Sills, dikes and plugs of megacrystic, bladed plagioclase, augite porphyry (±hornblende?) porphyry intrude Stuhini volcanic rocks east of the Samotua Glacier and north of the Bandit showing. Plagioclase crystals range up to 4 centimetres in length. These hypabyssal intrusions are interpreted as subvolcanic bodies within the Stuhini section.

Brittle/ductile shear fabrics are locally present in Stuhini rock throughout the map area. Bedding-parallel schistose fabric, augen-like sheared feldspar phenocrysts and flattened and stretched lapilli are evident north of the Golden Bear airstrip. This area is interpreted as a contractional zone related to strike-slip faulting. Elsewhere, shear fabrics in Stuhini rocks are generally confined to steeply dipping, sharply delimited shear zones. Within these zones, intensely foliated chloritic schists contain layers and lenses of unfoliated rock. A series of such zones east of the Samotua Glacier contains steeply plunging lenses of unsheared rock and steeply plunging shear-related folds with dextral asymmetry.

A fault-bounded block of elastic rocks, 18 kilometres southeast of Tatsamenie Lake and along the northern contact of the Moosehorn batholith, is correlated with the **Lower Jurassic Takwahoni Formation (IJTs) (Laberge Group)**. The sedimentary rocks consist of dark grey to pale brown weathering, thin to medium bedded, turbiditic, fine to coarse grained arkosic wacke and interbedded shale and siltstone, coarse-grained arkosic wacke and interbedded shale and siltstone, coarse-grained arkosic wacke and interbedded shale and siltstone. Graded bedding, flame structures and argillite rip-ups are common. Belemnoids and small, poorly preserved ammonites and carbonized plant stems were collected from the unit. A facies of subangular to subrounded polymictic pebble to cobble conglomerate containing felsic to intermediate volcanic chert, granodiorite and limestone clasts is intercalated with the finer sediments. Subrounded limestone clasts up to a metre in diameter occur. Structure within the fault wedge is complex, with well exposed folds and complex high and low-angle faults. Outcrops are locally strongly sheared and fractured and a spaced cleavage is evident in places. Clasts in the conglomerate unit are unstrained.

**Eocene Sloko Group (ESv)** volcanic rocks are exposed in fault-bounded blocks along the western part of the map area and in isolated areas below Miocene basalts along its eastern edge. The Sloko Group consists primarily of rhyolitic to dacitic pyroclastics, including heterolithic tuff breccia to lapilli tuff, welded crystal-vitric tuff and ash tuff. Minor andesitic tuff is also present. Flow rocks are less common, but include plagioclase and hornblende-phyric massive or columnar jointed dacite. Very coarse breccias (clasts 1 metre across) occur close to the bounding faults and contain a variety of volcanic and granitoid clasts, quartz, feldspar and hornblende crystals, ash and vitric fragments. An extensive section of brown, rhyolitic volcanic glass with abundant drusy cavities is exposed north-northwest of Tatsamenie Lake.

A poorly indurated, **Tertiary polymictic conglomerate (Tcg)** forms an isolated subcrop under Miocene flows several kilometres south of Tatsamenie Lake. It resembles unconsolidated gravel, however, some clasts are cemented to each other and medium grained wacke talus was also found. The clasts include dacite, felsite and plagioclase porphyritic andesite, believed to be derived from Sloko Group. Granitoid and pre-Stuhini phyllite clasts are also present. The poor induration and the abundance of Sloko-derived clasts suggests that this unit is Eocene or younger.

Subhorizontal, columnar jointed **Miocene olivine basalt flows** (**Mb**) occur about 20 kilometres east-southeast of Tatsamenie Lake and as a small erosional remnant southwest of Tatsamenie Lake. These basalt flows have been correlated with the Level Mountain Group. Some evidence suggests a possible Eocene age.

#### 6.11 Intrusive Rocks

#### Middle to Late Triassic (mlTrqd)

Two large plutons, called the Moosehorn and Sam batholiths by Bradford and Brown, underlie large areas south of Tatsamenie and Bearskin lakes. They are part of a quartz dioritic intrusive suite characterized by massive, grey weathering, variably foliated rock that is Middle to Late Triassic in age.

Elongate ultramafic bodies called the Sam Ultramafite by Bradford and Brown occur along the southwestern edge of the Sam batholith and represent a Late Triassic marginal phase. A marginal zone of pyroxenite and hornblendite blocks and irregular blobs within the diorite grades outward into fine to coarse grained olivine clinopyroxenite, locally with minor interstitial plagioclase. The western contact of the largest of the ultramafites is faulted, with serpentinite along the fault.

#### Jurassic (emJqm)

Several small bodies of Jurassic age occur south of Tatsamenie Lake. These include gabbroic to dioritic plutons and granodioritic and dioritic stocks. The albitic western phase

of the Ramtut stock is still defined as being Middle Jurassic while the gabbroic bodies are Early Jurassic.

#### Late Cretaceous (lKqm)

A quartz monzonitic stock, originally part of the Ramtut stock of Bradford and Brown, underlies a triangular peak northeast of Misty Mountain. It has recently been redefined by the British Columbia Geological Survey as Late Cretaceous in age. The stock is massive and unfoliated, with sharp discordant contacts. The albitic, granodioritic phase, the western part of the Ramtut stock as originally defined by Bradford and Brown, is actually part of an earlier Middle Jurassic intrusive suite.

#### **Tertiary** (Egr)

Two small granitic plugs in the area and numerous plagioclase porphyritic and felsite dikes are probably related to the Paleocene to Eocene Sloko-Hyder plutonic suite.

#### 6.12 Structure

Inversion of stratigraphy beneath the basal Stuhini unconformity, and a significantly greater amount of strain in rocks of the Stikine Assemblage is consistent with at least one and possibly two pre-Late Triassic phases of deformation, followed by an erosional interval. Post-Stuhini, Early Jurassic deformation is consistent with an Early to Middle Jurassic age for mineralization at Golden Bear. Faulting is complex and dominated by a strike-slip regime.

#### 6.13 Faults

Faulting in the Golden Bear area is dominated by north to northwest trending high-angle, strike-slip faults, which are significant in representing first order structural controls on gold mineralization. A northeast trending, dextral fault (Moosehorn fault) bounds the west side of the Moosehorn batholith, and postdates the north to northwest-trending faults. Eocene normal faults bound the Samotua caldera, and coeval faults affect older units to the east.

#### **Ophir Break**

The "Ophir Break" is an economically important fault zone that extends at least 15 kilometres from Bearskin Lake to Tatsamenie Lake, and possibly another 10 kilometres south to the Samotua River. The break is the primary structural control for the Golden Bear deposit. In the mine area, it comprises several anastomosing fault strands across a width of 50 to 100 metres or more. Fault dips within the zone range from 65 degrees to the east through vertical to locally overturned to the west. Small-scale flats along fault bends are believed to constitute dilational zones significant in localizing gold deposition suggesting local reverse slip. Faults in the mine area typically comprise up to several metres of brecciated pyritic rock and sulphide-rich gouge.

Fault strands in the deposit area bound at least two major silicified carbonate lenses. The main carbonate lens in the pit is up to 50 metres wide, and is in contact across the Bear

fault with carbonate-altered mafic volcanic rocks to the east. About 1.5 kilometres north of the mine in the Fleece Bowl area, the break diverges into two main strands, the eastern Black fault and the western Fleece fault. The Fleece fault is called the West Wall fault north of Sam Creek.

Fault grooves and slickensides on faults along the Ophir Break have dominantly shallow plunges.

#### **Faults West of the Ophir Break**

Northwest trending, left-stepping en echelon dextral faults bound a contractional zone northwest of Bearskin Lake. The Limestone Creek fault juxtaposes Permian limestone on the east with Carboniferous Stikine volcanic rocks on the west at the west end of the lake. Feldspar-phyric basalt west of the fault contains a strong, south-dipping shear fabric with asymmetrical porphyroblasts indicating top-to-the-north shear. Shear fabrics die out downsection to the north. About 4 kilometres to the north, felsic phyllites correlated with unit uCSvsl overlie mafic to intermediate metavolcanics along a steep reverse fault. Feldspar and augite-phyric tuffs and diorite in the footwall of this fault are also strongly sheared, with asymmetric feldspar porphyroblasts again indicating top-to-the-north motion. Steeply plunging fault lineations along the Limestone Creek fault indicate probable late (Eocene?) normal slip.

#### **Highway Fault**

The Highway fault trends subparallel to the Ophir Break and dips steeply to the northeast. East of Golden Bear mine in the Fleece Creek area, the Highway fault has an apparent reverse sense of motion, putting hangingwall Stikine Assemblage foliated volcanic rocks, phyllite and limestone on Stuhini Group mafic ash tuff. North of Sam Creek, the Highway fault forms a prominent linear of brecciated iron carbonate altered rock where it cuts through the Sam batholith. The partially fault-bounded sliver of limestone south of Sam Creek may represent the sheared-out limb of an  $F_2$  fold. South of Bearskin Creek, the Highway fault appears to split into several splays with an apparent reverse sense of motion while changing in orientation from north to northwest. This is consistent with dextral slip.

#### **Moosehorn Fault**

The Moosehorn fault is a north-northeast trending zone of brittle and brittle-ductile shearing intruded by numerous dikes along the west side of the Moosehorn batholith. Iron carbonate and hematitic alteration, silicification and brecciation affect some of the intrusive rocks along the fault. Copper mineralization associated with intense quartz-carbonate alteration and quartz veining occurs within the fault zone west of Moosehorn Lake. South of Shark Peak, the fault curves toward a more easterly orientation. Dextral slip is inferred by preservation of a downdropped block of Takwahoni sediments in an extensional fault-bend graben in this area, and by the northeast trending dike swarm south of Moosehorn Lake.

#### 6.14 Golden Bear Mine

The following was taken from the BC Government's Minfile web site for the Golden Bear Minfile number 104K 079.

In the Tatsamenie Lake area, intensely folded and regionally metamorphosed Permian, Triassic and older strata are separated from less folded and less metamorphosed Mesozoic sedimentary and volcanic rocks by a pre-Upper Triassic unconformity. Foliated hornblende diorite of Juro-Triassic age intrude the pre-Upper Triassic rocks. These are commonly altered to chlorite, hematite and epidote. The Mesozoic strata are overlain unconformably by flat-lying Upper Tertiary and Pleistocene plateau basalts of the Level Mountain Group.

The Permian strata consists of a 760 metre succession of limestone and dolomitic limestone, with local chert, shale and sandstone. The pre-Upper Triassic rocks consist of fine-grained crystal tuff to lapilli tuff with intercalated phyllite and greenstone, and minor chert, jasper, greywacke and limestone. These are Stikine assemblage.

A major north to northwest trending fault, known as the Ophir Break Zone, extends through the area for over 10 kilometres and is defined by areas of intense fracturing with abundant slickensiding, areas of carbonaceous and siliceous black siltstone and gouge, and linear quartz-iron carbonate-pyrite-fuchsite(?) (listwanites) and quartz-dolomite alteration zones. X-ray work by Schroeter on fuchsite-looking material did not confirm the existence of fuchsite (Personal Communication, Schroeter, T. 1988). The listwanites occur in the tuffs. The Ophir Break Zone is bounded on the west by the West Wall fault and on the east by the Ultramafic fault.

Mineralization consists of pyrite, trace arsenopyrite and scorodite, native gold, pyrrhotite, chalcopyrite in amygdules in lapilli and altered fuchsite-bearing(?) tuff, stibnite, tetrahedrite and hessite. Pyrite occurs as late-stage veinlets and as earlier breccia matrix filling, fragments within breccias, wispy rims on silicified limestone fragments in breccia, and local laminations in fine bleached tuff. Locally, gypsum is associated with mineralization.

One deposit, the Bear Main, and two showings, the Fleece Bowl (104K 087) and the Totem Silica (104K 088) zones, occur along the major north trending structure. The deposits are about 1.5 kilometres apart and exploration and development is progressing from the south to north deposit.

The Bear Main zone is a pod composed of silicified dolomitized limestone and brecciated and altered tuffs. The zone has been traced by drilling along a length of 1 kilometre, across a width of 10 metres and to a depth of at least 200 metres. The dolomite locally displays a quartz stockwork with resistant veinlets of quartz.

Heterolithic and monolithic breccias occur between the silicified dolomite and altered tuff. The hanging wall Bear fault cuts the tuffaceous rocks and is marked by a zone of black gouge. A thick section of ash, lapilli and crystal tuffs and mafic flows occur above the hanging wall. The lapilli tuff contains a chalcopyrite marker zone. A one metre wide dyke of black basalt (Tertiary) intrudes the mineralized zone.

Alteration minerals in the zone include quartz, dolomite and pyrite within the limestones and dolomite, kaolinite, sericite, illite, chlorite and pyrite in the metavolcanics. Age dating of sericite from the alteration zone, which gave an apparent age of 204 Ma plus or minus 7 Ma, suggests the main period of mineralization occurred in Early Jurassic (Fieldwork 1986).

Category	Tonnes	Grams/tonne gold
Proven	847,140	13.60
Probable	369,190	7.54
Total	1,216,330	12.00

Reserves calculated in 1987 for the Bear Main zone were as follows:

Reference: North American Metals Corp. Annual Report (1987)

The mineralization is primarily epigenetic, although supergene enrichment occurs locally. The deposits are characteristic of a low to medium temperature, low salinity, mesothermal system. Likely, mineralized solutions ascended the fault zone to an area of extensive tectonic brecciation and alteration. Intrusive activity, alteration and mineralization along the major regional fault is postulated to have occurred over a 50 million year period, from 156 to 206 million years (Jurassic age) (Schroeter, 1987).

#### 6.2 Property Geology

The Tatsamenie Project property is described in two parts: an eastern portion, previously held as the Nie-Misty property which includes the Backbone and Shoulder grid areas, and the recently lapsed Ram-Tut property now encompassed by the western extension of the Tatsamenie Project claims. The Nie-Misty description is in whole or in part from Zuran, 1994 (Assessment Report 23621 by North American Metals Corp.). The Ram-Tut description is sourced from Hamilton, 1994 (Assessment Report 23552 by North American Metals Corp.). In keeping with more recent reassignment of Stuhini rocks in the property area to the Stikine Assemblage and the age determination of the quartz monzonite phase of the Ramtut stock as Late Cretaceous, modification has been made.

#### 6.21 Nie-Misty

The geology of the property is comprised primarily of rocks of the Paleozoic Stikine Assemblage. These are dominated by Lower Carboniferous augite porphyry, thin bedded tuffs, lapilli tuff, and chlorite schist overlain by Upper Carboniferous felsic to mafic volcanics and Permian limestone. These are intruded by four distinct plutonic suites which include: weakly foliated diorites of the Triassic Sam batholith, on and near the eastern part of the property; Jurassic albitite sills and dikes; Cretaceous non-foliated diorites, and porphyritic diorite in the central to southern part of the property; and local occurrences of feldspar porphyry, rhyolite-rhyodacite dikes/sills ,and basalt dikes of the Tertiary Sloko Group. Recent Miocene Level Mountain Group plateau basalts cap rocks in the easternmost part of the property. Late Triassic clinopyroxenite ultramafic rocks are found locally in the north-central and the southeast parts of the property. The Paleozoic to Jurassic rocks have been deformed by several north to north-northwest trending, steep dipping, deep crustal faults - the Ophir Break. The west margin of this structural zone is bounded by the West Wall fault which occurs through the northwest and south-central part of the Tatsamenie property.

More detailed geological mapping was carried out by North American Metals Corp. in two areas that are now part of the Tatsamenie Project property: the Shoulder grid and the Backbone grid. The following detailed descriptions of these two areas are derived from Zuran (1994).

#### **Backbone Grid**

The Backbone grid area occurs along the southern extent of the Tatsamenie Project property (Figure 6). The main lithologies consist of plagioclase augite porphyritic to massive flows, tuffs, and sericite-chlorite schist; weakly foliated diorite; nonfoliated diorite; limestone; rhyolite-rhyodacite; and clinopyroxenite.

The volcanic rocks cover 60 per cent of the area. Dark green outcrops of plagioclase augite porphyry and massive flows are blocky weathering, generally non-foliated to weakly foliated. They are interbedded with the tuffaceous facies. Dark to moderate

#### **Tatsamenie Project Property**



green weathering outcrops of tuff are thin bedded, moderately to strongly foliated and are locally calcareous along the cliffs in the south part of the map. Dark green weathering outcrops of sericite-chlorite schist are strongly foliated and found locally sheared within an incised gully in the southeast part of the area. The volcanic rocks form a non-conformable contact with the western margin of the diorite batholith in the northeast part of the area.

The weakly foliated diorite in the northeast covers 25 per cent of the area. Outcrops weather dark grey and form blocky talus. The western margin of the diorite contains local xenoliths of volcanic rocks averaging 25 centimetres in diameter. The north-south contact in the northeast corner of the area is strongly sheared. Volcanic and ultramafic rocks outcrop to the east of the fault zone.

The non-foliated diorite forms a series of northeast trending dikes discordant with Lower Carboniferous Stikine volcanics in the northwest corner of the grid area. The dikes range from one half to several metres wide and outcrop along steep north-facing bluffs.

Several limestone lenses 0.5 to 3 metres thick by up to 300 metres strike length, outcrop along steep south-facing bluffs in the south. A small local altered outcrop is exposed on the east-facing slope. These rocks are light grey to off-white weathering, thin to moderately bedded, and locally strongly foliated. They are interbedded and gradational with the tuffaceous unit.

Three rhyolite-rhyodacite north-northwest trending dikes, 1 to 3 metres wide, and up to 900 metres long, are spaced 400 to 700 metres apart across the area. Several smaller dikes are noted branching out towards the north on the north-facing slope. Two small dikes averaging 1 by 50 metres outcrop on the south-facing slope. These rocks are beige weathering, flaggy to well jointed, and discordant with Paleozoic to Jurassic rocks.

Dark green, black to gossanous weathering outcrops of clinopyroxenite and gabbro(?) outcrop in two areas, the northeast corner and the southwest corner of the grid area. The clinopyroxenite in the northeast corner is within a fault zone and is locally sheared. A gabbro(?) dike, 50 centimetres wide by 400 metres long, is parallel to the fault. The clinopyroxenite, in the southwest corner of the area, occurs as a plug intruding the volcanic rocks.

#### **Structure in Backbone Grid Area**

Stratigraphy on the Backbone grid dips moderately to the northeast. Local polyphase deformation in the intermediate to mafic volcanic rocks is subparallel to bedding. Strong deformation is noted locally subparallel to the major faults. The dominant cleavage is a compaction cleavage or a bedding-parallel cleavage.

Three major faults that cross the map area include: the West Wall fault and two faults in the northeast part of the grid area. All are prominent airphoto linears.

The West Wall fault trends north-northwest, dips steeply to the east and averages 2 metres wide. An undeformed rhyolite dike is emplaced in the fault and postdates movement. Several subparallel shears are noted within 100 metres to the east and west of this zone in the south of the map area. The fault crosscuts non-foliated diorite dikes in the north. Displacement is unknown.

The next major fault to the east trends north, dips steeply to the east and averages 1.5 metres wide. The fault crosscuts the western margin of the weakly foliated diorite batholith.

The furthest fault in the northeast corner of the grid area trends north, dips moderately to steeply east and is 10 metres wide at Misty Creek. Volcanic rocks intruded by clinopyroxenite are noted east of the fault. Volcanic and diorite rocks are found west of the fault.

Other faults include northeast to northwest trending normal block faults located in the southwest part of the map area. Displacements under 5 metres are observed.

#### **Shoulder Grid**

The Shoulder grid is located near the centre of the Tatsamenie Project property (Figure 6). The main lithologies consist of: intermediate to mafic massive flows, bedded tuffs plagioclase augite porphyry; weakly foliated diorite; non-foliated diorite, and porphyritic andesite.

The volcanic rocks cover 50 per cent of the map area. These rocks are much the same as described on the Backbone grid. The bedded tuffs on the Shoulder grid are less calcareous and no gradational limestone interbeds were observed. A nonconformable, north-trending contact separates the volcanic rocks on the west, from the weakly foliated diorite on the east of the area. This contact is emplaced by an unaltered, steep dipping, dark green porphyritic andesite dike.

The diorite in the east covers 40 per cent of the map area. Outcrops are dark grey weathering, massive, jointed and form blocky talus. The unit is weakly foliated to non-foliated. A north trending, strongly gossanous nonconformable contact separates Level Mountain Group basalt to the east.

The non-foliated diorite occurs as two intrusive swarms; a northeast trending dike swarm approximately 100 metres wide in the southwest part of the map area; and a series of sills 100 metres wide hosted in bedded tuffs in the centre of the area. Both intrusive swarms are associated with gossans. There is also a small plug intruding the intermediate to massive flows 200 metres north of the dike swarm.

#### Structure in Shoulder Grid Area

Stratigraphy on the Shoulder grid dips moderately to steeply east and northeast. The dominant cleavage is a compaction cleavage subparallel to bedding. Bedding is represented by 1 to 50 centimetre thick beds in the tuffs. Three faults on the Shoulder grid include: a northwest-trending fault in the centre of the area; a divided north to northwest-trending fault also in the centre of the area; and a north-northwest trending fault in the southwest part of the area. The first fault is coincident with a snow filled, incised gully. This fault displaces the second fault by a dextral strike slip distance of approximately 75 metres. Judging from the diorite sill on both sides of the fault, there is also a rotational component calculated at 32 degrees. The third fault has an attitude of  $317^{\circ}/82^{\circ}$  northeast dip and crosscuts the western margin of a diorite intrusion. This fault contains a yellowish soil.

#### 6.22 Ram-Tut

The recently lapsed Ram-Tut property (Figure 4), now encompassed by the western extension of Nakina's Tatsamenie Project claims, is predominantly underlain by a tightly folded package of clastic, carbonate and volcanic rocks of the pre-Upper Triassic Stikine Terrane. These lithologies are locally cut by diorite to quartz diorite intrusions of Triassic age. A detailed description of each lithology, largely from Hamilton (1994) is given below.

This package (Unit 2) is comprised of Pennsylvanian phyllitic siltstone and felsic to mafic metavolcaniclastics of the Stikine Assemblage. Howe and Reddy (1993) divided the local section into 100-200 metres of well-bedded siltstone overlain by approximately 800 metres of poorly bedded volcaniclastics with minor interbedded clastic units including carbonate layers. Folding and/or faulting may have artificially increased the thickness of this unit which typically exhibits a well developed penetrative fabric relative to overlying units. Most of the package has a phyllitic texture and an alteration assemblage dominated by quartz, sericite and chlorite. The volcanic rocks vary from light buff to medium to pale green in colour and contain very fine grained euhedral pyrite and specular hematite as disseminations. Bedding parallel and crosscutting quartz veins and sweats are common throughout the unit and locally contain coarse potassic feldspar, specularite and muscovite.

Much of the property work has treated this unit as being stratigraphically younger than the limestone unit. Regionally however, this package has been identified as being stratigraphically lower than the limestones (Oliver and Gabites, 1993), therefore the phyllite and metavolcanic unit must have been thrust over the carbonates. Bradford and Brown (1993) have mapped the limestone-phyllite contact as a thrust and have a zircon date of 302 Ma from a felsic unit from within the package. Oliver (1993) obtained U-Pb zircon dates very close to this number. In addition, Bruaset (1984) mapped outcrops of this unit in the core of the Tatsamenie anticline on the Tot 3 claim to the north, underlying the limestones as well as above the limestones. These observations were confirmed in the field by Hamilton (1994).

Overlying the phyllites and metavolcaniclastics is a distinct mafic to intermediate volcaniclastics package (Unit 4), tentatively included here with the Stikine Assemblage based on more recent assignations by Mihalynuk et al. (1996) but previously assigned to the Upper Triassic Stuhini Group. These mafic volcaniclastic rocks appear to be andesitic in composition. Textures vary from fine grained ash tuff to coarse crystal-lithic tuff and coarse grained, augite porphyritic flows. This unit is typically medium to dark green, unfoliated and weakly chloritized with primary textures and mineralogy well preserved. Trace amounts of fine grained, euhedral pyrite are disseminated throughout the volcaniclastics. Iron carbonate alteration occurs locally as fracture controlled veins or weak to moderate replacement of the pyroclastic matrix. Bedding attitudes are usually shallow dipping towards the east. Well bedded volcaniclastics can be seen in the eastern portion of the lapsed Tut 2 claim.

A Permian limestone unit (Unit 3) has an estimated thickness of 100 metres (Howe and Reddy, 1993) and has been folded into a north-northwest trending antiform. Two varieties of limestone have been mapped: massive, white, thick bedded, grey weathering, recrystallized limestone or marble in the core of the antiform, and an overlying grey weathering, carbonaceous thin bedded limestone. Conodont samples from the limestone age dated by Brown and Bradford (1993) confirm the unit's Permian age.

Triassic diorite (Unit 6a) outcrops in several locations on the Ram-Tut property and is typically unaltered, unfoliated coarse-grained hornblende +/- plagioclase porphyritic in a plagioclase matrix. Narrow contact zones of intense iron carbonate alteration are common near these contacts. Middle Jurassic albitite (Unit 6b) outcrops only on the old Tut 2 claim. Fine grained mafic sills intrude the phyllites below their contact with the volcaniclastics on the Tut claims.

The oldest structural feature is the Tatsamenie antiform which trends roughly northnorthwest through the property. The bedding on the eastern limb is shallowly east dipping and may have been truncated by the thrust fault at the limestone/phyllite contact on the lapsed Tut 2 claim (Bradford and Brown, 1993). Northeast trending extensional faults exist along Tatsamenie Lake and a graben structure is developed along Tatsamenie Lake valley. Very late east-northeast trending structures crosscut the extensional faults and are the locus for some silicification at the north end of the LCZ zone on the lapsed Tut claims.

#### 6.3 Mineralization

The Ophir Break fault zone is an economically important system that extends at least 15 kilometres from Bearskin Lake to Tatsamenie Lake, and possibly another 10 kilometres south to the Samotua River. This fault zone is thought to act as a conduit for the mineralizing fluids that created the deposits such as those at the Golden Bear mine, about 6 kilometres south of the Tatsamenie Project property. The Ophir Break diverges into two main strands, the eastern Black fault and the western Fleece fault in the area of the Golden Bear deposit. The Fleece fault is called the West Wall fault north of Sam Creek. This fault zone is defined by areas of intense fracturing with abundant slickensiding; areas of carbonaceous and siliceous black siltstone and gouge; and linear quartz-iron carbonate-pyrite-fuchsite(?) (listwanites) and quartz-dolomite alteration zones. The listwanites occur in the tuffs.

Four gold-bearing showings occur along the Ophir Break fault zone and are encompassed by the Tatsamenie Project property claim boundaries: Nie (MINFILE 104K 081); Misty (MINFILE 104K 091), Nie 3 (MINFILE 104K 092) and Backbone. These four showings occur in areas underlain primarily by Lower Carboniferous volcanic and sedimentary rocks of the Stikine Assemblage. Lower to Middle Triassic limestone, marble and calcareous sedimentary rocks also occur along the Ophir Break, most significantly along the eastern contact of the West Wall fault in the Nie 3 area. The Honk (MINFILE 104K 122) and Barron (MINFILE 104K 120), in the eastern part of the property, occur along northeast trending splays of the Ophir Break. Asbestos and talc mineralization of the Tatsamenie Lake showing (MINFILE 104K 038) is also related to the Ophir Break fault zone. Three mineral occurrences not documented in the MINFILE provincial database are the Patella, Shoulder and Backbone showings.

Gold mineralization on the recently lapsed Ram-Tut property, now held as part of the Tatsamenie Project claims by Nakina Resources, is strongly associated with silicification. Two primary modes of mineralization in this area were reported by Hamilton (1994) and much of the Ram-Tut mineralization description is derived from that source:

Pervasively silicified and locally brecciated limestone with pyrite, arsenopyrite, anomalous silver and antimony, and localized gold mineralization.

Quartz veining and/or silicified shear zones with stibnite, arsenopyrite plus/minus base metal mineralization

Work to 1994 outlined two main zones of mineralization: the LCZ (Limestone Contact Zone) (MINFILE 104K 080) and the Tut zone (MINFILE 104K 097) (the silicification surrounding the fault at the north end of the LCZ). The LCZ Extension shows the potential for expanding the dimensions of the LCZ zone to the south.

Several small showing occur south of Bearskin Lake in the area that could be defined as an extension of the Ophir Break fault zone. These included the Oro (104K 039), Tan 3 (104K 101), Tan 4 (104K 102), Tan (104K 103) and Muse (104K 119). The Thor (104K 077) and Dot (104K 125), occurrences occur in the area just south of the Ram-Tut area.

Please refer to Figures 1 and 6 for plotted locations of all occurrences.

The Nie or "2 Oz. Notch" showing appears to consist of two north trending, 60 degree east dipping quartz veins about 3 metres apart. The veins were exposed in a 14.6 metre long trench in 1984. The easternmost vein is 30 centimetres thick and the westernmost vein is about 60 centimetres. Mineralization consists of abundant disseminated and massive pyrite and minor pyrrhotite adjacent to a hornblende feldspar porphyry dike within siltstone and limestone. The dike occurs along the trace of the West Wall fault. Dating of hornblende from the dike gave an apparent age of 156 Ma +/- 5 Ma, suggesting mineralization may have occurred during the Upper Jurassic (Schroeter, 1987). A 0.3-metre sample across the narrower eastern vein assayed 14.0 grams per tonne gold and 1.7 grams per tonne silver (Shaw, 1984).

At the **Misty** showing, minor gold mineralization is associated with pyrite and occurs within tuff near the West Wall fault. A sample assayed over 10.0 grams per tonne gold (Brown and Walton, 1983).

The **Nie 3** showing is documented as the result of a mineralized 1987 drillhole intersection (hole N-38) of black carbonaceous, graphitic siltstones interbedded with grey limestone. Tuff and altered feldspar porphyry dike rocks also occur in the hole. Mineralization consists of disseminations, blebs and stringers of pyrite and sphalerite associated with calcite and quartz veins. A 1.5 metre sample of drill core assayed 0.37 per cent zinc
(Walton, 1987). The Spire grid was established within a few hundred metres to the northeast in 1990. The rocks in this area are reported to be mafic volcanics along with siliceous to calcareous sediments and minor carbonate units. Mineralization is reported to consist of quartz-carbonate breccia zones with pyrite, sphalerite, chalcopyrite and galena. Up to 2.71 grams per tonne gold, 13.77 per cent zinc and 1.71 per cent lead were reported from three different samples (McBean, 1990).

The **Honk** occurrence is a shear-hosted quartz-pyrite vein with local chalcopyrite mineralization in sheared, chloritized mafic volcanic rock. The fragmented vein and accompanying limonite alteration is up to 3 metres wide and can be traced along strike for 70 metres and is open in all directions. Post-mineralization shearing has produced pods of solid vein material surrounded by yellow limonitic gouge containing quartz fragments. A grab sample assayed 18.07 grams per tonne gold and 64.80 grams per tonne silver; other grab samples yielded as much as 0.87 per cent copper (McBean, 1990).

The **Barron** showing consists of strongly sheared, silicified and pyritized diorite and mafic volcanic rock that are cut by a north trending fault. Pods of semimassive pyrite, pyrrhotite and chalcopyrite occur within the shear zone. A grab sample assayed 1.48 per cent copper, 6.0 parts per million silver. Gold assays are not available due to high pyrrhotite content of the sample (Bradford and Brown, 1993).

he **Patella** showing is an east-northeast trending yellow-brown weathering, carbonate vein, at least 100 metres long, averaging 0.55 metre wide and containing up to 15 per cent sphalerite and galena. This vein is hosted in intermediate to mafic volcanic rocks within several hundred metres to the west of the Ophir Break fault zone. The area is underlain by volcanic and sedimentary rocks of the Stikine Assemblage. Contact with a Late Cretaceous quartz monzonitic pluton (formerly the Ramtut stock) occurs to the immediate west of the vein area. The vein structure is reported to intersect a north-south diorite-volcanic contact approximately 100 metres to the west. Skarn-like mineral assemblages are noted in altered limy tuffaceous interbeds within the volcanics. The best result out of 9 rock samples taken on the vein in 1994 was 0.15 gram per tonne gold, 38.0 grams per tonne silver, 0.84 per cent lead, >1 per cent zinc and 1.13 per cent mercury (Zuran, 1994).

The **Backbone** occurrence is associated with three north-northwest trending faults that have associated subparallel structures. The faults crosscut a thick package of intermediate to mafic volcanics interbedded with limestone lenses of the Stikine Assemblage. The faults are host to rhyolite dikes, with probable Eocene Sloko Group affinity, averaging 1 metre in width and 500 metres in length. Local high gold and polymetallic anomalies were discovered in discontinuous massive quartz veins in the volcanics as well as along the north-northwest trending structures. The limestone is locally mineralized with skarn-like assemblages. The best analysis results include: 9.8 grams per tonne gold rock chip of a massive quartz vein pod (0.3 by 1 metre) (Zuran, 1994). A 50 by 800 metre soil grid gold anomaly ranging from 100 to 325 parts per billion gold is subparallel to the north-northwest trending structures. The plotted location of the 9.8 grams per tonne gold quartz vein sample is approximately 350 metres southwest of the Misty showing.

The **Shoulder** occurrence consists of two parallel quartz veins, hosted in chloritized mafic volcanics, about 2 metres apart. The veins trend northeast and dip 55 to 60 degrees to the southeast. The smaller, 5 centimetre wide vein contains up to 50 per cent sulphides consisting of pyrite, galena, stibnite, and trace sphalerite. The second vein is thirty centimetres wide and consists of massive white quartz with 4 per cent euhedral pyrite and a trace of chalcopyrite. One grab sample yielded 15.26 grams per tonne gold, 128.23 grams per tonne silver, 5.53 per cent zinc and 0.24 per cent lead (McBean, 1990). Further veining was reported to have been encountered in follow-up work.

The **Tut** zone occurs within a 900 metre long belt of dolomitized and silicified Permian limestone, approximately 100 to 150 metres wide, between strong east-northeast trending faults, the southern fault acting to truncate the LCZ zone at its north end (Figure 7). Surface samples from the Tut zone have yielded values of up to 1.6 grams per tonne gold (Walton, 1987) from within silicified limestones and up to 3900 ppb gold over 1.1 metres (Trench #2, sample KB4T 1-325) from trenched dolomitized limestone located near the north bounding fault (Bruaset, 1984). The trenched zone is open to the north and west. The intensity of dolomitization increases in the direction of the bounding faults. Stockwork veinlets of silica are common. Traces of tetrahedrite occur in fractures in the dolomitized limestone. In 1987, Chevron drilled a single hole (R-37) through the south bounding east-northeast trending fault, which contains abundant scorodite and silica. Drillhole R-37 yielded assays up to 275 ppb over 0.95 metre from a 10.0 metre intersection of silicified limestone (Moffat and Walton, 1987). The core was also reported to be mineralized with fine arsenopyrite.

The LCZ (Limestone Contact Zone) is a 1.5 kilometre long zone of silicification and brecciation within the Permian limestone (Figure 7). The zone follows the limestone/phyllite thrust contact on the Tut 2 claim and consists of a multilithic tectonic breccia with fragments of tuff, limestone and siltstone in a matrix of silica, pyrite and fine black sulphides (Reddy, 1993). Gold values of up to 7020 ppb were obtained from samples collected by Bruaset (1984).

A 900 x 400 metre gold, arsenic, antimony soil anomaly originates in the phyllitic siltstone above the contact and is caused, in part, by quartz-sulphide veins within the siltstone. Chevron geologists hypothesized that a manto-like silicified zone was fed by fluids from a vertical feeder zone within the limestones and that there was leakage of fluids into the overlying phyllites. The thrust itself may also have acted as a fluid conduit

Chevron Canada Resources Ltd. (1987) and Armeno Resources Inc. (1990) drilled a total of 6 holes to partly test the LCZ. Analytical results from drill core yielded 1.38 grams per tonne gold over 4.76 metres, 2.10 grams per tonne gold over 1.75 metres, and 1.30 grams per tonne gold over 2.0 metres (Moffat and Walton, 1983; Allen, 1990). None of the holes have tested very far downdip and drill spacing is at least 200 metres.

The LCZ zone is truncated at its north end by an east-northeast trending fault around which there exists an area of silicification and dolomitization in limestones that is known as the Tut zone.

During 1994, prospecting less than a kilometre to the south of the LCZ zone located a silicified limestone outcrop with overlying phyllites containing silicified shears and limestone lenses. This area is referred to as the **LCZ Extension** (Figure 7). Mineralization in the limestones consists of sparse, fine grained, euhedral pyrite with a trace of very fine dark grey sulphides. The phyllites host narrow, silicified, pyritic shear zones with minor quartz veining. Several of the limestone lenses were found to be silicified and carrying strongly disseminated pyrite, lesser chalcopyrite and tetrahedrite, and malachite. Rock samples of LCZ Extension silicified limestone failed to yield any significant gold, the highest value being 75 ppb, however, very limited outcrop exists in this area. Of seventeen samples collected from silicified shears in the phyllites three yielded strongly anomalous results (Hamilton, 1994):

1) 2000 ppb gold over 1.8 metres (Sample #1154)

2) 1130 ppb gold weighted average over 3.0 metres (samples 1144 and 1145)

A single, short contour soil line of nineteen samples at 10 metres spacing, aimed at tracing the silicified limestone yielded seven values between 70 and 225 ppb gold, however, it is not clear if these anomalous results represent the contact zone or downhill dispersion from mineralization in the overlying phyllites.

At the **Thor**, quartz veins and fractures are common in the dolomite and phyllite units and contain tetrahedrite, malachite, azurite, pyrite, K-spar, hematite, and tourmaline. A 1.0 metre chip sample from Trench 2 contained 58.9 grams per tonne silver and a subcrop sample of a chalcedony vein contained 1.35 grams per tonne gold (MINFILE).

At the **Dot**, a quartz vein up to 0.6 metres wide in a strongly fractured mafic tuffs has up to five per cent pyrite, with lesser chalcopyrite. Grab sample assayed 1.12 per cent copper (MINFILE).

At the **Oro** showing, gossans containing ankerite, hematite, pyrite and sometimes chalcopyrite and malachite occur within the stratified rocks and sometimes adjacent to faults and diorite stocks. A grab sample from an altered diorite assayed 0.81 per cent copper and 0.9 gram per tonne gold (MINFILE). About 600 metres to the south a large (700 by 300 metres) quartz-iron-carbonate gossan zone contain pyrite, minor chalcopyrite blebs, limonite and malachite.

At the **Tan 3**, gossans, containing ankerite, hematite, pyrite and sometimes chalcopyrite and malachite, occur within the stratified rocks and sometimes adjacent to faults and diorite stocks. A nearby 3 metre chip sample from silicified limestones apparently assayed 10 per cent copper (MINFILE).

At the **Tan 4**, a diorite stock contains several quartz-carbonate veins, 5 to 35 centimetres wide, with pyrite and chalcopyrite. A sample assayed 19.5 grams per tonne silver (MINFILE).

At the **Tan** showing, quartz-iron carbonate gossan zones, adjacent to a northwest trending fault, contain ankerite, hematite, pyrite and sometimes chalcopyrite, bornite and malachite as blebs, fracture fillings and disseminations. A 3 metre chip sample apparently assayed 10 per cent copper and 0.9 grams per tonne gold (Assessment Report 15894). A previous sample, 500 metres to the east, assayed 9.8 grams per tonne silver and 3.0 grams per tonne gold (MINFILE).

At the **Muse** showing, strongly fractured and chloritized mafic volcanics with up to two per cent disseminated pyrite and chalcopyrite; associated with north trending shears; possible evidence of porphyry system. Grab sample assayed 0.32 per cent copper (MINFILE).



# 7.0 MMI GEOCHEMICAL SOIL SURVEY

The location of the MMI grid was chosen based on previous historical work that is described in the Mineralization section. The entire southern extent of the LCZ mineralized trend (Figure 7), a length of about 1 kilometre, has yet to be tested by drilling. The distance between the southern limit of the LCZ trend and the relatively new LCZ Extension is a further one kilometre to the south. This represents a distance of approximately 2 kilometres of potential gold bearing mineralized ground. The 2007 grid was laid out in that largely unexplored area between the LCZ trend and the LCZ Extension zone. Figure 7 offers a representation of this areas long with simple geology and structure. The grid area was mapped previously by Chevron as phyllite and this was confirmed by the author G.Payie during the 2007 program. The grid area is above treeline and the relief is relatively moderate.

#### 7.1 Introduction

A 4-man crew from Geotronics Consulting Inc, under the direction of one of the authors, David Mark, P.Geo, carried out the Mobile Metal Ion (MMI) soil geochemical survey and the associated grid preparation including a section of baseline. Garry Payie, P.Geo., accompanied the sampling crew to the property on the first day to locate and inspect the predetermined grid area and campsite. Field work was conducted from August 5<sup>th</sup> to 10<sup>th</sup>, 2007, inclusive.

#### 7.2 Grid Line Preparation

An 800-metre baseline with 10.7 km of sample gridline on 9 lines was prepared as shown on the claim map, fig. 3. The baseline was surveyed with compass and GPS along UTM easting 651500. The nine gridlines were put in every 100 metres along the UTM northing lines from 6460400 to 6461200, which were also surveyed and measured by compass and GPS. Concurrent with the preparation of the gridline, MMI soil samples were collected every 25 metres for a total number of 420.

#### 7.3 MMI Theory and Practice

The MMI Process<sup>TM</sup> was developed by Wamtech Pty. Ltd in Australia and is performed by exclusive license at SGS Minerals' full service accredited laboratory facilities in Toronto, Ontario, Canada. The SGS website is the source of the following information on the process.

MMI anomalies are sharply bounded and, in most cases, directly overlie and define the surface projection of buried primary mineralized zones. Its effectiveness has been documented in over 1000 case histories on six continents and it has been responsible for numerous commercial successes.

The MMI Process<sup>TM</sup> consists of:

A simple sample collection procedure in which approximately 250 to 300 grams of sample is collected at a continuous interval of 10-25 cm below the living organics layer regardless of which horizon this depth corresponds to.

Samples that are not otherwise prepared or dried.

A weak extraction using a multi-component solution to release the mobile ions.

There are several extractions possible, and each is specific to various targets or elements.

A high sensitivity ICP-MS analysis which provides part per billion range results.

An innovative interpretation using MMI response ratios.

Referring to the MMI Technical Bulletins provided by the developers of the MMI process, MMI Technology, a Division of Wamtech Pty. Ltd. of Australia, this unique method of analysis MMI is used to describe ions which have moved in the weathering zone that are only weakly or loosely attached to surface soil particles. Also according to the developers of the technique it has been proven using radioactive isotope geochemistry that these Mobile Metal Ions are transported from deeply buried mineral deposits to the surface. Geoscientists from around the world have been studying this phenomenon for many years. Research and case studies over known ore-bodies have shown that mobile metal ions accumulate in surface soils above mineralization indicating that the metals are derived from oxidation of the mineralization source.

Generally as the Mobile Metal Ions reach the surface they attach themselves weakly to the soil particles, and these specific ions are the ones measured by the MMI technique to find mineralization at depth. They are at very low concentrations and because the ions have recently arrived at surface they provide a precise "signal" of the location of subcropping concentrations of minerals that could prove to be economically significant. Their lifetime in the ionic state at surface is very limited because they are subject to degradation and molecular binding or fixation into molecular forms by weathering but as long as the flow of ions is maintained, are detectable. Their limited lifetime precludes their detection by lateral circulation; accordingly they do not move away from the source of mineralization.

Therefore by only measuring the mobile metal ions in the surface soils, the MMI geochemistry is demonstrated to produce very sharp anomalous responses directly over the source of the mobile ions. The source would be interpreted as mineralization at depth which emit metal ions characteristic of that mineralization.

#### 7.4 Survey and Sampling Procedure

Survey lines were placed simultaneously as soil sampling was being carried out. Sampling stations occurred at 25-metre intervals along each survey line. At each sampling Station 60 cm wood pickets were driven into the ground with an aluminum tag stapled to it with the last five digits of the UTM line and station coordinates marked on the tag.

At each sampling site the field procedure was to first remove the organic material from the surface (A0 Layer) followed by digging a pit over 25 cm deep using a shovel. Sample material was then scraped from the sides of the pit over a measured depth interval from 10 centimetres to 25 centimetres, essentially channel-sampling the side of the pit. About 250 grams of sample was collected and placed into a plastic Zip-Loc sandwich bag with the sample coordinates marked thereon.

Upon completion of the soil sampling survey, the samples were packaged and sent to SGS Minerals at 1885 Leslie Street, Don Mills, Ontario. SGS Minerals is one of the two laboratories in the world licenced to assay samples in accordance the proprietary MMI assay technique. The other laboratory is located in Perth, Australia.

#### 7.5 Analytical Method

Details of the MMI Assaying technique are proprietary and accordingly details as to the assaying process cannot be given. However a general description of procedures is provided.

At SGS Minerals in Toronto the assaying procedure begins by weighing a 50 gram sample into a plastic vial fitted with a screw cap. A 50 ml aliquot of MMI-M solution is added to the sample and the vial is closed. Groups of vials are then placed in trays which are placed into a mechanical shaker and shaken for 20 minutes. There are eight MMI leachants currently available of which the MMI-M leachant represents the multi-element extraction, which currently consists of 46 elements.

The MMI-M solution is a neutral mixture of leachant solutions which have been specially developed to selectively release adsorbed ions from the soil substrate without attacking or influencing the natural mineralization of the soil or specific substrates. The leachate solution is applied to the sample for a 20 minute retention time which effectively collects loosely bound ions of any of the 46 elements on the soil substrate and holds the ions in solution. The ion-pregnant solution is allowed to sit overnight and subsequently centrifuged for 10minutes. The solution is then diluted to 20 times by volume which represents an overall dilution factor 200 times. This diluted solution is then transferred to plastic test tubes from which aliquots are taken for analyses on Inductively Coupled Plasma-Mass Spectrograph (ICP-MS) instrumentation.

Results from the ICP-MS instrumentation is processed automatically with the recovered assay data loaded into the Laboratory Information Management System (LIMS). Following quality control analysis the data results are available in software format or hardcopy.

#### 7.6 Compilation of Data

Twelve elements were chosen out of the 46 reported on and these were gold, silver, copper, arsenic, cobalt, molybdenum, zinc, lead, cadmium, uranium, nickel, and cerium. The mean background value was calculated for each of these 12 elements and this number was then divided into the reported value to obtain a figure called the response ratio. Two stacked

histograms were then made for each of the nine lines of samples of the response ratios as shown on figures #8 through to #25, respectively. The one stacked histogram, figures #8 to #16, consisted of the following elements, in order, copper, arsenic, silver, copper, and gold; and the second, figures #17 to #25, consisted of the following elements, lead, zinc, cadmium, molybdenum, and gold. Gold was repeated in both sets to show how each of the elements relate to gold and to assist in showing correlation between the two sets.

In addition, a plan map was made for each of nine metals, being gold, copper, arsenic, molybdenum, silver, zinc, uranium, nickel, and cerium, on maps GC-1 to GC-9, respectively. On each map, the original data were plotted and contoured at a logarithmic interval.

#### 7.7 Discussion of Results

Silver	Arsenic	Gold	Cadmium	Cerium	Cobalt
6.9	8.7	0.35	3.8	10	5.9

The background for the 12 elements was determined as follows:

Copper	Molybdenum	Nickel	Lead	Uranium	Zinc
129	0.5	24	11	2.1	82

The results from the MMI survey has revealed an anomaly, labeled A, that has very strong results in gold and silver correlating with a very strong arsenic anomaly. The gold results are as high as 901 times background (320 ppb) with many samples being above 100 times background. This anomaly strikes northwesterly, is 600 meters wide and 1600 meters long in strike length with it being open both to the northwest and to the northeast.

Anomaly A also correlates with a strong lead anomaly, zinc anomaly, cadmium anomaly as well as anomalous results for 14 rare earth elements, or rare earth-like elements. The main part of the lead anomaly occurs to the immediate northwest of the main part of the gold anomaly.

To the immediate southwest of the gold-silver-arsenic-lead-zinc anomaly is a copper anomaly, labeled B, correlating with anomalous cobalt and nickel results. This anomaly is about 300 meters wide with a strike length of minimum 500 meters and open to the south or southeast. The nickel is indicative that the host rock is a basic or ultra-basic rock type.

The MMI results indicate that mineralization occurs over a wide area and the mineralization is zoned. The results are considered to be very positive, especially the gold results. The possible type of gold deposit is epithermal, probably high sulphidation, considering the base metal correlation.

In general, the strongly anomalous gold, silver and arsenic zone is open at the north, south and eastern limits of the grid and is especially strong in the south to southeast parts of the zone area.

# 8.0 **RECOMMENDATIONS**

The 2007 Mobile Metal Ion soil sampling survey in the LZC Extension area defined a broad zone of highly anomalous gold and associated anomalous elements that extended to the grids north, south and eastern limits. An expansion of the grid beyond those anomalous perimeters is recommended. An induced polarization (IP) survey to better define drill targets previously outlined by MMI sampling is also recommended. Backhoe trenching should occur while the additional MMI sampling is being done or later in the field season. Drilling is recommended with targets focused on significant coincident MMI and IP anomalies. Geological mapping in the grid area should be ongoing during the program.

Based on the significant potential for discovery of Golden Bear-type carbonate-hosted mineralization, a program of detailed geological mapping and sampling of existing and exploration for new mineral showings is recommended on other parts of the property outside the LCZ area.

Once the expansion of the LCZ Extension MMI grid is completed, the sampling crew should be refocused to the relatively unexplored area north of the Nie 3 mineral occurrence. VLF-EM surveying should precede an MMI survey in order to define the West Wall fault structure and then followed up with MMI exploration lines across the fault. Any resulting geochemically anomalous areas detected along the fault may be indicative of deeper mineralization.

Estimated cost for the proposed exploration program including diamond drilling is \$750,000.

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# **10.0 STATEMENTS OF QUALIFICATIONS**

#### 10.1 Garry Payie, P.Geo.

3714 Raymond Street South, Victoria, British Columbia V8Z 4K1

Tel: 250.479.2299

Email: garry@tessco.ca

I, Garry Payie, am a self-employed Professional Geoscientist residing in the city of Victoria, British Columbia and do hereby certify that:

I graduated with a Bachelor of Science degree in Geological Sciences from the University of British Columbia, Vancouver, British Columbia in 1983.

I am registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

I have worked as a geologist in British Columbia for twenty-four years since my graduation from 1983 to present, having been employed by the BC Geological Survey Branch and several junior to senior resource companies as both a contract employee and as a consultant.

This report has been prepared from a review of the 3-D maps and satellite imagery provided by Terracad Ltd.

I maintain no interest in the Tatsamenie property claims that are the subject of this report.

Dated this 27<sup>th</sup> day of January, 2008.

Garry Payie, P.Geo.

#### 10.2 David G. Mark, P.Geo.

6204 – 125<sup>th</sup> Street, Surrey, British Columbia V3X 2E1

Tel: 604.596.4564 Cell: 778.908.4021

Email: davidgmark@shaw.ca

I, DAVID G. MARK, of the City of Surrey, in the Province of British Columbia, do hereby certify that:

I am registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

I am a Consulting Geophysicist of Geotronics Consulting Inc., with offices at  $6204 - 125^{\text{th}}$  Street, Surrey, British Columbia.

I further certify that:

- 1. I am a graduate of the University of British Columbia (1968) and hold a B.Sc. degree in Geophysics.
- 2. I have been practicing my profession for the past 40 years, and have been active in the mining industry for the past 43 years.
- 3. This report is compiled from data obtained from MMI soil sample surveying on the Tatsamenie Property belonging to Nash Meghji carried out by a 4-man crew of Geotronics Consulting headed by myself to the immediate south of Surprise Lake and to the immediate east of Otter Creek in the Atlin Area during the period of August, 4<sup>th</sup> to 10<sup>th</sup>, 2007.
- 4. I do not hold any interest in the Tatsamenie Property nor in any other property held by Nash Meghji, nor will I be receiving any interest as a result of writing this report.

David G. Mark, P.Geo. Geophysicist January 27<sup>th</sup>, 2008

# **11.0 STATEMENT OF COSTS**

FIELD:		
Mob/demob from Vancouver -		
Atlin, return, Nash Meghji's share	\$2,460.00	
Helicopter	12,780.00	
Geologist, Garry Payie, P.Geo., 4 days @ \$600/day	2,400.00	
Expediting, Peter Burjoski	\$2,500.00	
MMI Survey, 4-man crew, 6 days @ \$2,000/day	12,000.00	
Laboratory testing of 420 samples @ \$35/sample	14,700.00	
Courier costs for sample shipping	574.00	
TOTAL	\$47,414.00	\$47,414.00
<b>DATA REDUCTION and REPORT:</b>		
Geologist, Garry Payie, P.Geo., 5 days @ \$600/day	\$3,000.00	
MMI data organizing and reduction, and interpretive	4,875.00	
report		
TOTAL	\$7,875.00	\$7,875.00
GRAND TOTAL		\$55,289.00

# **APPENDIX – GEOCHEMISTRY DATA**



# **Certificate of Analysis**

Work Order: 095327

To: Geotronics Consulting Inc.

Attn: David G.Mark 6204 - 125th Street SURREY BC V3X 2E1 Date: Oct 18, 2007

P.O. No.	Project: Nakina
Project No.	DEFAULT
No. Of Samples	67
Date Submitted	Aug 30, 2007
Report Comprises	Pages 1 to 11
	(Inclusive of Cover Sheet)

#### Distribution of unused material:

STORE: 67 Soils

Russ Calow, B.Sc., C.Chem. Vice President Global Geochemistry

#### ISO 17025 Accredited for Specific Tests. SCC No. 456

Certified By ::

Report Footer:

L.N.R. = Listed not received n.a. = Not applicable I.S. = Insufficient Sample -- = No result

\*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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www.sgs.ca



Element Method	Ag MMI-M5	AI MMI-M5	As MMI-M5	Au MMI-M5	Ba MMI-M5	Bi MMI-M5	Ca MMI-M5	Cd MMI-M5	Ce MMI-M5	Co MMI-M5
Det.Lim.	1 DDD		DDE			I DDB		1 DDD		
	20	Wi 4	160	20	4000		- CE MI	12	20	
L62100N-51050E	30	4	100	3.2	4090	<1 -1	220	13	20	0
L62100N-51075E	42	4	190	D.1	4000	<1 -4	220	10	10	0
L62100N-51100E	33	4	100	4.3	4010	<1 -1	230	10	23	11
L62100IN-51123E	39	4	100	£.1 0.7	5520	<1 -4	240	17	000	13
L62100IN-51150E	32	30	240	2.7	10100	<1 -1	390	32	000	30
L62100N-51173E	100	02	120	17.0	5520	<1 -1	340	38	700	10
L62100N-51200E	102	93	270	0.0	2000	~1	200	20	700	21
E62100N-51225E	13	145	230	1.2	1690	~1	200	22	192	25
L62100N-51250E	7	110	200	0.9	2440	~1	200	23	266	20
L62100N-51273E	/ E	203	200	0.5	1420	<1 ~1	200	30	200	109
L02100N-51500E	10	179	100	0.4	2750	~1	200	40	1210	47
L02100N-51550E	15	24	110	0.7	5130	~1	250	33 47	700	47
E62100N-51575E	10	10	140	0.9	5170 6910	~1	400	97	210	49
L62400N-51400E	10	12	140	2.7	5010	~1	200	21	679	41
L62400N-51425E	51	50	100	1.1	14100	~1	200	34	0/0 70	10
L62400N-51450E	51	100	120	0.0	2040	~1	290	24 47	225	20
L62100N-51475E	5	>300	270	0.1	7530	<1	210	47	1210	433
L62100N-51500E	11	-300	270	0.4	7360	<1	210	1/12	1080	152
L62100N-51525E	25	90 43	50	0.4	1300	<1	100	140	1000	9
L62100N-51550E	30	43	50	2.7	40400	<1	260	9	1000 500	18
L 62100N-51670E	1	1.41	70	0.0	6430	<1	200	70	405	20
L62100N-51600E		280	220	0.3	1300	<1	230	70 68	435	20
L62100N-51650E	15	100	230	0.5	2050	<1	100	26	210 647	20
L62100N-51675E	18	140	80	0.3	3120	<1	230	106	282	20
L 62100N-51700E	183	1-0	50	13.2	9360	-1 c1	250	42	202	20
L60709N-51100E	15	4	<10	0.5	11100	-1 c1	240	-2 5	220	36
L60700N-51125E	11	7	<10	0.0	5430	-1 c1	210	s s	21	28
L60700N-51150E	7	4	20	0.4	1490	-1 c1	150	⊿	19	69
L60700N-51175E	15	5	<10	0.6	4390	<1	240	7	13	72
L60700N-51200E	16	5	<10	0.5	3950	<1	240	6	10	62
L60700N-51225E	21	6	<10	0.5	3550	<1	470	11	15	78
L 60700N-51250E	17	5	<10	0.6	3420	<1	460	12	15	144
L60700N-51275E	16	4	<10	0.2	4300	<1	180	2		65
L60700N-51300E	18	5	30	10	3050	<1	350	14	28	140
L 60700N-51325E	33	7	<10	13	3090	<1	420	28	39	129
L 60700N-51350E	24	. 7	10	11	4620	<1	360	27	36	111
L60700N-51375E	25	4	30	14	5670	<1	200		10	56
L60700N-51400E	9	213	270	1.1	1250	<1	30	51	436	23
L60700N-51425E	549	-,-	70	39.5	13400	<1	340	253	225	11
L60700N-51450E	135	150	490	14.3	7690	<1	150	48	7980	8
L60700N-51475E	131	136	890	37.4	5640	<1	50	33	15700	17
L60700N-51500E	118	65	240	47.9	24200	<1	180	21	6280	6
L60700N-51525E	14	191	490	13.7	7630	<1	60	13	3080	37
L60700N-51550E	32	153	230	2.9	20000	<1	100	6	2500	14
L60700N-51575E	31	230	600	2.8	5390	1	40	10	8150	11
L60700N-51600E	164	5	170	17.6	6250	<1	230	135	39	16
L60700N-51625E	211	3	400	15.8	3670	<1	280	36	45	55

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Element	Ag	AI MMLM5	As MM/LM5	Au MMLM5	Ba MMLM5	Bi MMLM5	Ca MMLM5	Cd MML-M5		Co MMLM5
Det Lim	1	1 IVIIVII-IVIJ	10	0.1	10	1 IVIIVII-IVIJ	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
L60700N-51650E	305	3	2820	31.4	3320	<1	290	142	19	14
L60700N-51675E	194	3	1170	20.7	3090	<1	230	81	15	12
L60700N-51700E	44	4	250	7.4	2120	<1	190	12	26	12
L60700N-51725E	74	4	200	6.9	2320	<1	150	3	9	25
L60700N-51750E	89	4	440	11.2	3280	<1	240	28	10	26
L60700N-51775E	74	4	150	10.2	4820	<1	160	2	6	23
L60700N-51800E	61	3	170	8.2	4940	<1	180	4	7	11
L60700N-51825E	57	3	150	6.5	4520	<1	190	10	9	14
L60700N-51850E	75	6	200	8.6	7800	<1	160	2	5	28
L60700N-51875E	50	3	200	9.9	2400	<1	220	11	14	19
L60700N-51900E	43	3	210	5.7	3470	<1	200	8	10	14
L60700N-51925E	45	5	160	5.3	5220	<1	170	2	7	26
L60700N-51950E	27	5	100	6.4	4740	<1	190	7	11	21
L60700N-51975E	22	5	60	8.5	8600	<1	200	6	12	19
L60700N-52000E	20	4	60	5.5	6320	<1	210	6	12	16
L60700N-52025E	49	5	110	9.9	4460	<1	200	7	8	26
L60700N-52050E	56	6	70	17.7	7410	<1	280	9	8	25
L60700N-52075E	35	5	80	10.1	6750	<1	210	7	10	21
L60700N-52100E	40	6	60	15.6	9650	<1	260	9	11	26
*Dup L62100N-51050E	40	4	170	4.1	4620	<1	200	13	19	11
*Dup L62100N-51375E	15	25	130	0.7	5200	<1	430	47	742	47
*Dup L62100N-51675E	18	140	90	0.4	2890	<1	230	108	288	21
*Dup L60700N-51350E	29	9	10	1.5	4740	<1	400	29	32	126
*Dup L60700N-51650E	302	3	3040	32.6	2890	<1	280	141	13	15
*Dup L60700N-51950E	31	6	120	6.6	4860	<1	200	7	12	28
*Std MMISRM14	19	48	10	46.1	110	<1	290	8	22	54
*Std MMISRM14	19	48	10	43.1	90	<1	280	8	22	54
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method	Cr MMI-M5	Cu MMI-M5	Dy MMI-M5	Er MMI-M5	Eu MMI-M5	Fe MMI-M5	Gd MMI-M5	La MMI-M5	Li MMI-M5	Mg MMI-M5
Det.Lim.	100	10	ן פוסוס	U.5 000	0.5			1 900		
	-400	FFB	FFD	FFB		FFINI	FFB			FFW
	<100	220	8 7	3.5	2.3	4	12	11	<0 -5	33
L6210UN-51075E	<100	400	1	2.9	2.0	4	12	11	<>	31
L6210UN-51100E	<100	260	8	3.4	3.0	3	15	13	<>	35
L6210UN-51125E	<100	260	10	4.0	3.7	4	18	17	<>	39
L6210UN-51150E	<100	1050	108	63.0	63.3	51	302	465	<2	36
L6210UN-51175E	<100	450	33	11.0	20.4	4	101	130	<0	5/
L6210UN-51200E	<100	870	514	235	199	32	954	1280	<>	38
L6210UN-51225E	<100	170	/2	27.0	28.1	65	127	310	<>	25
L62100N-51250E	<100	100	16	7,6	5.5	108	25	43	<5	50
L62100N-51275E	100	210	21	8.2	8.6	228	42	132	(	42
L62100N-51300E	<100	330	65	24.2	27.1	101	121	337	5	10
L62100N-51350E	<100	170	153	54.5	80.4	70	374	684	6	52
L62100N-51375E	<100	260	105	33.8	64.6	26	314	607	<5	61
L62100N-51400E	<100	320	132	39.2	100	9	477	1180	<5	65
L62100N-51425E	<100	140	102	34.1	55.6	31	268	530	<5	59
L62100N-51450E	<100	240	38	10.9	27.1	4	130	213	<5	66
L62100N-51475E	<100	100	65	23.4	21.6	89	110	146	13	17
L62100N-51500E	<100	150	84	29.2	38.1	251	178	519	16	31
L62100N-51525E	<100	110	63	20.2	35.1	27	164	498	<5	29
L62100N-51550E	<100	80	140	46.7	79.0	5	393	1920	<5	27
L62100N-51575E	<100	90	25	9.0	12.3	29	62	186	<5	28
L62100N-51600E	<100	80	52	19.4	23.3	60	116	227	6	25
L62100N-51625E	<100	150	40	17.0	10.8	93	52	71	11	6
L62100N-51650E	<100	60	55	19.2	28.4	66	128	283	6	26
L62100N-51675E	<100	70	40	15.7	15.3	68	69	93	<5	36
L62100N-51700E	<100	480	68	21.1	39.9	5	187	290	<5	45
L60700N-51100E	<100	1080	7	3.0	1.8	5	11	14	<5	28
L60700N-51125E	<100	970	9	4.1	2.7	5	13	12	<5	23
L60700N-51150E	<100	680	5	2.5	1.5	7	7	8	<5	29
L60700N-51175E	<100	1250	4	1.9	1.2	5	6	4	<5	31
L60700N-51200E	<100	890	4	1.7	1.0	5	5	4	<5	41
L60700N-51225E	<100	1600	3	1.6	0.9	5	5	3	5	47
L60700N-51250E	<100	1010	4	1.8	0.9	4	5	2	11	74
L60700N-51275E	<100	670	2	0.8	<0.5	3	2	2	7	97
L60700N-51300E	<100	1210	7	3.0	1.9	12	9	6	<5	34
L60700N-51325E	<100	1400	12	5.3	3.0	9	16	8	<5	43
L60700N-51350E	<100	1000	10	4.7	2.8	8	15	7	<5	44
L60700N-51375E	<100	660	4	1.7	1.0	4	6	3	<5	62
L60700N-51400E	<100	310	55	22.8	20.9	149	99	117	<5	3
L60700N-51425E	<100	730	198	62.3	120	6	630	870	<5	45
L60700N-51450E	<100	520	525	195	253	45	1220	3750	<5	21
L60700N-51475E	<100	130	319	99.7	188	71	924	7560	<5	9
L60700N-51500E	<100	140	203	60.8	126	29	596	2190	<5	32
L60700N-51525E	<100	140	85	24.9	53.7	90	253	1430	5	9
L60700N-51550E	<100	60	59	18.7	31.7	61	155	1000	<5	14
L60700N-51575E	<100	650	330	105	164	67	796	4240	<5	7
L60700N-51600E	<100	500	10	3.7	4.5	4	25	28	<5	59
L60700N-51625E	<100	640	9	3.4	3.6	5	19	21	<5	77

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Element Method	Cr MMI-M5	Cu MMI-M5	Dy MMI-M5	Er MMI-M5	Eu MMI-M5	Fe MMI-M5	Gd MMI-M5	La MMI-M5	Li MMI-M5	Mg MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
L60700N-51650E	<100	600	3	1.4	1.1	6	6	8	<5	103
L60700N-51675E	<100	440	5	2.0	1.4	6	8	7	<5	85
L60700N-51700E	<100	210	7	2.8	2.4	4	11	11	<5	48
L60700N-51725E	<100	260	3	1.2	0.7	4	4	4	<5	90
L60700N-51750E	<100	570	6	2.7	1.6	5	9	5	<5	77
L60700N-51775E	<100	280	3	1.3	<0.5	4	4	3	<5	99
L60700N-51800E	<100	230	4	1.6	0.9	4	6	3	<5	84
L60700N-51825E	<100	310	6	2.6	1.6	4	10	4	<5	85
L60700N-51850E	<100	240	2	1.0	<0.5	4	3	2	<5	105
L60700N-51875E	<100	450	5	2.3	1.5	5	8	4	<5	69
L60700N-51900E	<100	290	5	1.9	1.2	5	7	3	<5	66
L60700N-51925E	<100	270	4	1.6	0.6	3	5	2	8	116
L60700N-51950E	<100	350	6	2.7	1.7	4	10	3	6	79
L60700N-51975E	<100	350	7	2.7	1.9	4	12	4	<5	61
L60700N-52000E	<100	450	6	2.5	1.7	4	10	5	5	49
L60700N-52025E	<100	580	7	2.7	1.7	3	10	3	7	116
L60700N-52050E	<100	530	7	2.9	1.5	3	11	3	8	109
L60700N-52075E	<100	360	8	3.1	2.1	4	13	4	8	87
L60700N-52100E	<100	540	8	3.2	1.8	4	12	4	7	100
*Dup L62100N-51050E	<100	200	7	3.0	2.5	4	12	11	<5	30
*Dup L62100N-51375E	<100	250	105	33.8	65.0	27	312	630	<5	58
*Dup L62100N-51675E	<100	70	40	15.8	15.5	70	72	95	6	35
*Dup L60700N-51350E	<100	1060	10	4.8	2.3	7	14	5	<5	46
*Dup L60700N-51650E	<100	580	3	1.4	1.1	7	6	6	<5	100
*Dup L60700N-51950E	<100	480	6	2.6	1.5	4	9	4	7	86
*Std MMISRM14	<100	830	2	0.9	0.9	3	4	4	<5	39
*Std MMISRM14	<100	820	2	1.0	0.8	3	4	4	<5	38
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method	Mo MMI-M5	Nb MMI-M5	Nd MMI-M5	Ni MMI-M5	Pb MMI-M5	Pd MMI-M5	Pr MMI-M5	Pt MMI-M5	Rb MMI-M5	Sb MMI-M5
Det.Lim.	5	0.5	1	5 900	10	1	1	1	5 900	1
Units	РРВ	PPB	PPB	PPB	PPB	PPB	РРВ -	PPB	PPB	РРВ
L6210UN-51050E	(	1.1	29	23	110	<1	5	<1	68	3
L62100N-51075E	<5	<0.5	30	<>	80	<1	5	<1	(4	9
L62100N-51100E	4	<0.5	35	12	60	<1	6	<1	66	2
L62100N-51125E	<>	<0.5	4/	14	60	<1	8	<1	(1	2
L62100N-51150E	<>	0.5	952	332	340	<1	185	<1	21	9
L6210UN-51175E	5	<0.5	344	33	230	<1	57	<1	41	3
L62100N-51200E	<>	<0.5	2910	164	440	<1	5/4	<1	52	9
L62100N-51225E	<5	1.0	519		270	<1	113	<1	69	5
L62100N-51250E	<5	1.1	87	80	180	<1	18	<1	146	4
L62100N-51275E	13	6.5	192	116	470	<1	43	<1	103	17
L62100N-51300E	<5	2.5	540	118	370	<1	121	<1	137	8
L62100N-51350E	<5	0.9	1510	186	390	<1	304	<1	65	6
L62100N-51375E	<5	<0.5	1270	306	150	<1	243	<1	54	2
L62100N-51400E	<5	<0.5	2530	228	50	<1	485	<1	56	2
L62100N-51425E	<5	<0.5	1120	223	90	<1	221	<1	59	3
L62100N-51450E	<5	<0.5	548	30	40	<1	92	<1	54	4
L62100N-51475E	<5	0.6	359	93	230	<1	68	<1	132	2
L62100N-51500E	10	5.0	802	137	1030	<1	179	<1	102	7
L62100N-51525E	<5	0.8	834	77	130	<1	183	<1	167	2
L62100N-51550E	<5	<0.5	2410	<5	280	<1	552	<1	121	3
L62100N-51575E	<5	1.2	298	42	150	<1	65	<1	118	3
L62100N-51600E	<5	1.2	445	50	200	<1	91	<1	98	2
L62100N-51625E	8	3.0	155	78	710	<1	30	<1	187	4
L62100N-51650E	<5	1.5	585	61	220	<1	123	<1	128	2
L62100N-51675E	5	1.2	223	87	310	<1	44	<1	74	2
L62100N-51700E	<5	<0.5	704	61	180	<1	124	<1	30	4
L60700N-51100E	<5	<0.5	24	38	<10	<1	5	<1	27	<1
L60700N-51125E	<5	<0.5	27	43	<10	<1	5	<1	26	<1
L60700N-51150E	6	<0.5	14	83	<10	<1	3	<1	36	1
L60700N-51175E	7	<0.5	9	134	<10	<1	2	<1	33	<1
L60700N-51200E	6	<0.5	7	131	<10	<1	1	<1	39	<1
L60700N-51225E	5	<0.5	5	102	<10	<1	1	<1	19	<1
L60700N-51250E	14	<0.5	4	164	<10	<1	<1	<1	15	<1
L60700N-51275E	18	<0.5	1	126	<10	<1	<1	<1	35	<1
L60700N-51300E	14	<0.5	14	275	<10	<1	3	<1	38	2
L60700N-51325E	10	<0.5	20	266	<10	<1	4	<1	27	<1
L60700N-51350E	5	<0.5	19	221	10	<1	3	<1	30	<1
L60700N-51375E	10	<0.5	8	96	30	<1	1	<1	46	1
L60700N-51400E	<5	1.6	358	116	1980	<1	67	<1	144	8
L60700N-51425E	6	<0.5	2090	228	2690	<1	365	<1	22	4
L60700N-51450E	<5	0.6	6020	197	2930	<1	1340	<1	148	17
L60700N-51475E	<5	1.2	6820	34	4410	<1	1760	<1	195	27
L60700N-51500E	<5	<0.5	3390	54	3070	<1	739	<1	146	11
L60700N-51525E	<5	2.4	1640	28	1480	<1	401	<1	196	18
L60700N-51550E	9	2.9	1010	10	570	<1	256	<1	127	14
L60700N-51575E	325	3.2	4280	20	1220	<1	1040	<1	333	24
L60700N-51600E	<5	0.6	66	31	430	<1	11	<1	63	3
L60700N-51625E	<5	<0.5	45	82	70	<1	8	<1	61	4

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Element Method	Mo MMI-M5	Nb MMI-M5	Nd MMI-M5	Ni MMI-M5	Pb MMI-M5	Pd MMI-M5	Pr MMI-M5	Pt MMI-M5	Rb MMI-M5	Sb MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB									
L60700N-51650E	<5	<0.5	14	84	330	<1	3	<1	69	9
L60700N-51675E	6	<0.5	11	33	150	<1	2	<1	68	5
L60700N-51700E	<5	<0.5	27	15	30	<1	5	<1	69	3
L60700N-51725E	10	<0.5	5	55	50	<1	1	<1	57	4
L60700N-51750E	6	<0.5	10	49	20	<1	2	<1	57	3
L60700N-51775E	19	<0.5	1	49	50	<1	<1	<1	53	3
L60700N-51800E	11	<0.5	4	22	40	<1	<1	<1	45	2
L60700N-51825E	11	<0.5	10	20	20	<1	2	<1	48	2
L60700N-51850E	11	<0.5	<1	42	80	<1	<1	<1	44	3
L60700N-51875E	18	<0.5	11	35	10	<1	2	<1	64	3
L60700N-51900E	13	<0.5	7	27	30	<1	1	<1	54	3
L60700N-51925E	23	<0.5	3	16	30	<1	<1	<1	47	3
L60700N-51950E	16	<0.5	11	27	20	<1	2	<1	48	2
L60700N-51975E	14	<0.5	14	23	20	<1	2	<1	51	2
L60700N-52000E	11	<0.5	16	20	<10	<1	3	<1	51	2
L60700N-52025E	25	<0.5	10	19	30	<1	2	<1	32	5
L60700N-52050E	38	<0.5	8	27	60	<1	1	<1	30	3
L60700N-52075E	23	<0.5	15	10	30	<1	2	<1	37	4
L60700N-52100E	22	<0.5	13	14	40	<1	2	<1	33	4
*Dup L62100N-51050E	<5	<0.5	29	<5	80	<1	5	<1	66	2
*Dup L62100N-51375E	<5	<0.5	1350	263	170	<1	261	<1	52	3
*Dup L62100N-51675E	5	1.4	226	87	300	<1	45	<1	74	2
*Dup L60700N-51350E	8	<0.5	17	261	30	<1	3	<1	32	1
*Dup L60700N-51650E	<5	<0.5	11	97	280	<1	2	<1	70	9
*Dup L60700N-51950E	16	<0.5	9	42	30	<1	2	<1	50	2
*Std MMISRM14	41	<0.5	14	334	120	52	2	<1	287	<1
*Std MMISRM14	41	<0.5	13	320	130	52	2	<1	284	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method	Sc MMI-M5	Sm MMI-M5	Sn MMI-M5	Sr MMI-M5	Ta MMI-M5	Tb MMI-M5	Te MMI-M5	Th MMI-M5	Ti MMI-M5	TI MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB									
L62100N-51050E	7	9	<1	430	<1	2	<10	2.8	<3	0.7
L62100N-51075E	6	10	<1	400	<1	2	<10	2.4	<3	0.7
L62100N-51100E	7	12	<1	350	<1	2	<10	2.0	<3	0.7
L62100N-51125E	8	15	<1	320	<1	2	<10	2.2	<3	0.7
L62100N-51150E	26	273	<1	390	<1	36	<10	22.1	52	<0.5
L62100N-51175E	11	102	<1	550	<1	9	<10	2.9	<3	<0.5
L62100N-51200E	180	855	<1	260	<1	112	<10	25.2	73	0.8
L62100N-51225E	84	133	<1	90	<1	17	<10	34.2	155	<0.5
L62100N-51250E	41	25	<1	160	<1	3	<10	9.9	275	<0.5
L62100N-51275E	58	44	<1	230	<1	5	<10	47.5	1320	0.8
L62100N-51300E	115	131	<1	<10	<1	15	<10	43.2	835	1.4
L62100N-51350E	56	402	<1	340	<1	40	<10	18.0	130	0.7
L62100N-51375E	9	333	<1	750	<1	30	<10	9.6	21	<0.5
L62100N-51400E	9	563	<1	640	<1	42	<10	12.5	<3	<0.5
L62100N-51425E	8	288	<1	590	<1	27	<10	8.5	22	<0.5
L62100N-51450E	10	142	<1	530	<1	11	<10	3.7	<3	<0.5
L62100N-51475E	46	102	<1	130	<1	14	<10	16.1	244	0.7
L62100N-51500E	116	191	<1	450	<1	21	<10	70.5	856	1.2
L62100N-51525E	9	187	<1	560	<1	18	<10	17.7	34	<0.5
L62100N-51550E	16	459	<1	680	<1	40	<10	21.2	<3	1.3
L62100N-51575E	6	68	<1	500	<1	7	<10	14.4	73	0.5
L62100N-51600E	27	117	<1	220	<1	13	<10	23.3	227	0.7
L62100N-51625E	49	45	<1	90	1	8	<10	20.4	631	1.4
L62100N-51650E	39	143	<1	240	<1	14	<10	19.6	249	<0.5
L62100N-51675E	38	67	<1	400	<1	9	<10	13.5	184	<0.5
L62100N-51700E	13	188	<1	710	<1	18	<10	9.3	<3	0.5
L60700N-51100E	<5	8	<1	330	<1	1	<10	0.6	<3	<0.5
L60700N-51125E	9	10	<1	290	<1	2	<10	0.5	<3	<0.5
L60700N-51150E	8	5	<1	330	<1	<1	<10	0.6	<3	<0.5
L60700N-51175E	6	4	<1	290	<1	<1	<10	<0.5	<3	<0.5
L60700N-51200E	7	3	<1	370	<1	<1	<10	<0.5	<3	<0.5
L60700N-51225E	8	3	<1	670	<1	<1	<10	<0.5	<3	<0.5
L60700N-51250E	5	3	<1	770	<1	<1	<10	<0.5	<3	<0.5
L60700N-51275E	<5	1	<1	600	<1	<1	<10	<0.5	<3	<0.5
L60700N-51300E	13	6	<1	290	<1	1	<10	0.9	16	<0.5
L60700N-51325E	18	9	<1	390	<1	2	<10	1.0	<3	<0.5
L60700N-51350E	13	9	<1	310	<1	2	<10	0.7	<3	<0.5
L60700N-51375E	5	4	<1	400	<1	<1	<10	<0.5	<3	<0.5
L60700N-51400E	46	103	<1	<10	<1	12	<10	51.0	658	0.6
L60700N-51425E	45	602	<1	740	<1	57	<10	21.6	<3	<0.5
L60700N-51450E	211	1390	<1	100	<1	136	<10	97.8	110	1.4
L60700N-51475E	198	1 150	<1	<10	<1	98	<10	103	129	3.6
L60700N-51500E	35	738	<1	560	<1	61	<10	39.3	18	2.6
L60700N-51525E	41	317	<1	60	<1	26	<10	80.4	512	2.8
L60700N-51550E	22	190	<1	410	<1	17	<10	60.5	109	1.7
L60700N-51575E	47	906	<1	<10	<1	90	<10	89.5	300	5.7
L60700N-51600E	<5	22	<1	340	<1	3	<10	3.8	<3	0.8
L60700N-51625E	9	15	<1	340	<1	2	<10	2.7	<3	0.9

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Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	TI
Method	MMI-M5		MMI-M5					MMI-M5	CIM-IMIM 2	
Det.Lim.	PPB	PPR	PPR	PPR	PPR	PPR	PPR	PPR	PPR	PPR
00000 51650E	7	5	~1	330	~1	~1	<10	10	-3	25
	, 	5	~1	300		~1	<10	1.0	-3	2.5
L00700N-51075E	0		~1	320	~1	~1	<10	1.1	- 3	1.4
L00700N-51700E	5	10	~1	230	<1	1	<10	1.0	< 3	0.9
L60700IN-51723E	5	з 0	<1 .4	000	<   - 4	~	<10	<0.5	< 3	0.0
L60700N-51750E	6	6	<1 .4	390	<1	1	<10	0.6	<3	0.7
L60/00N-51/75E	<5	2	<1	470	<1	<1	<10	<0.5	<3	<0.5
L60700N-51800E	<5	3	<1	430	<1	<1	<10	<0.5	<3	<0.5
L60700N-51825E	<5	6	<1	530	<1	1	<10	0.5	<3	<0.5
L60700N-51850E	<5	1	<1	570	<1	<1	<10	<0.5	<3	<0.5
L60700N-51875E	5	6	<1	390	<1	1	<10	0.7	<3	0.6
L60700N-51900E	<5	5	<1	400	<1	<1	<10	0.6	<3	0.6
L60700N-51925E	<5	2	<1	1120	<1	<1	<10	<0.5	<3	<0.5
L60700N-51950E	<5	6	<1	560	<1	1	<10	0.5	<3	<0.5
L60700N-51975E	<5	8	<1	430	<1	1	<10	0.6	<3	<0.5
L60700N-52000E	<5	7	<1	420	<1	1	<10	0.6	<3	<0.5
L60700N-52025E	<5	6	<1	710	<1	1	<10	<0.5	<3	<0.5
L60700N-52050E	<5	6	<1	820	<1	1	<10	<0.5	<3	<0.5
L60700N-52075E	<5	8	<1	770	<1	2	<10	<0.5	<3	<0.5
L60700N-52100E	<5	7	<1	900	<1	2	<10	<0.5	<3	<0.5
*Dup L62100N-51050E	7	10	<1	320	<1	2	<10	1.1	<3	0.6
*Dup L62100N-51375E	9	338	<1	680	<1	30	<10	9.9	19	<0.5
*Dup L62100N-51675E	40	69	<1	390	<1	9	<10	14.5	200	<0.5
*Dup L60700N-51350E	12	8	<1	430	<1	2	<10	1.1	<3	<0.5
*Dup L60700N-51650E	8	5	<1	330	<1	<1	<10	<0.5	<3	2.4
*Dup L60700N-51950E	<5	6	<1	570	<1	1	<10	<0.5	<3	<0.5
*Std MMISRM14	9	4	<1	590	<1	<1	<10	21.5	4	<0.5
*Std MMISRM14	, g	⊿	<1	570	د1	<1	<10	21.5	6	<0.5
*Bik BI ANK	<5	- د1	<1	<10	<1	<1	<10	<0.5	<u>د</u> ۲	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method	U MMI-M5	W MMI-M5	Y MMI-M5	Yb MMI-M5	Zn MMI-M5	Zr MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
L62100N-51050E	1	<1	48	2	260	<5
L62100N-51075E	<1	<1	39	2	410	6
L62100N-51100E	1	<1	46	3	270	6
L62100N-51125E	1	<1	51	3	300	6
L62100N-51150E	18	<1	729	45	440	26
L62100N-51175E	7	<1	165	8	290	5
L62100N-51200E	9	2	3280	169	180	23
L62100N-51225E	5	<1	258	20	180	28
L62100N-51250E	3	<1	70	6	1510	23
L62100N-51275E	9	<1	82	6	2900	101
L62100N-51300E	10	<1	235	18	1430	49
L62100N-51350E	15	<1	553	41	1240	27
L62100N-51375E	7	<1	414	24	1390	10
L62100N-51400E	8	<1	547	27	300	8
L62100N-51425E	10	<1	396	24	600	13
L62100N-51450E	6	<1	169	7	190	6
L62100N-51475E	2	<1	244	16	2140	15
L62100N-51500E	15	<1	281	21	3430	62
L62100N-51525E	6	<1	227	14	2380	17
L62100N-51550E	5	<1	562	33	140	20
L62100N-51575E	4	<1	88	6	2380	18
L62100N-51600E	5	<1	200	14	2140	25
L62100N-51625E	7	<1	167	12	900	36
L62100N-51650E	3	<1	205	13	240	31
L62100N-51675E	4	<1	157	11	4820	21
L62100N-51700E	5	<1	291	14	330	7
L60700N-51100E	2	<1	40	2	130	<5
L60700N-51125E	<1	<1	59	3	90	<5
L60700N-51150E	1	<1	31	2	130	6
L60700N-51175E	2	<1	28	1	120	5
L60700N-51200E	3	<1	23	1	130	<5
L60700N-51225E	7	<1	21	1	80	6
L60700N-51250E	10	<1	22	1	150	<5
L60700N-51275E	7	<1	10	<1	130	<5
L60700N-51300E	<1	<1	40	2	250	<5
L60700N-51325E	<1	<1	69	4	280	<5
L60700N-51350E	<1	<1	63	3	400	<5
L60700N-51375E	2	<1	23	1	160	<5
L60700N-51400E	11	<1	228	18	1860	32
L60700N-51425E	8	<1	1030	44	3240	10
L60700N-51450E	23	1	2050	153	1280	46
L60700N-51475E	12	<1	1240	68	820	60
L60700N-51500E	11	<1	688	43	320	25
L60700N-51525E	6	<1	315	17	420	46
L60700N-51550E	4	<1	201	14	260	31
L60700N-51575E	6	<1	1270	70	470	58
L60700N-51600E	9	<1	53	3	2540	6
L60700N-51625E	3	<1	48	2	560	<5

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Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1 DDB		5			
Units	FFB	FFB		FFB		-
L60700N-51650E	1	<1	19	1	4940	<5
L60700N-51675E	2	<1	24	1	3970	<5
L60700N-51700E	2	<1	35	2	300	6
L60700N-51725E	2	2	13	<1	490	<5
L60700N-51750E	4	<1	35	2	430	<5
L60700N-51775E	4	<1	13	<1	310	<5
L60700N-51800E	3	<1	20	1	230	<5
L60700N-51825E	4	<1	33	2	340	<5
L60700N-51850E	4	<1	11	<1	320	<5
L60700N-51875E	2	<1	30	2	380	<5
L60700N-51900E	2	<1	23	1	410	6
L60700N-51925E	5	<1	17	1	320	<5
L60700N-51950E	6	<1	32	2	240	5
L60700N-51975E	5	<1	33	2	210	5
L60700N-52000E	3	<1	32	2	150	6
L60700N-52025E	6	<1	32	2	280	<5
L60700N-52050E	7	<1	32	2	350	<5
L60700N-52075E	4	<1	38	2	260	5
L60700N-52100E	5	<1	37	2	280	<5
*Dup L62100N-51050E	<1	<1	40	2	280	7
*Dup L62100N-51375E	8	<1	397	24	1240	9
*Dup L62100N-51675E	5	<1	157	11	4620	28
*Dup L60700N-51350E	2	<1	61	3	290	<5
*Dup L60700N-51650E	2	<1	19	1	4740	<5
*Dup L60700N-51950E	6	<1	30	2	250	<5
*Std MMISRM14	36	<1	12	<1	350	13
*Std MMISRM14	37	<1	12	<1	340	13
*BIK BLANK	<1	<1	<5	<1	<20	<5
*BIK BLANK	<1	<1	<5	<1	<20	<5

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# **Certificate of Analysis**

Work Order: 095329

To: Geotronics Consulting Inc.

Attn: David G.Mark 6204 - 125th Street SURREY BC V3X 2E1 Date: Oct 18, 2007

P.O. No.	Project: Nakina
Project No.	DEFAULT
No. Of Samples	69
Date Submitted	Aug 30, 2007
Report Comprises	Pages 1 to 11
	(Inclusive of Cover Sheet)

#### Distribution of unused material:

STORE: 69 Soils

Russ Calow, B.Sc., C.Chem. Vice President Global Geochemistry

#### ISO 17025 Accredited for Specific Tests. SCC No. 456

Certified By ::

Report Footer:

L.N.R. = Listed not received n.a. = Not applicable I.S. = Insufficient Sample -- = No result

\*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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Element Method	Ag MMI-M5	AI MMI-M5	As MMI-M5	Au MMI-M5	Ba MMI-M5	Bi MMI-M5	Ca MMI-M5	Cd MMI-M5	Ce MMI-M5	Co MMI-M5
Det.Lim.	1 000	ן געסס	10	U.1 DDD	10	ן 200	10	l add	C 900	5
	67	204	200	FFB	0570		CC101		7FD	
L01000N-51323E	37	294	320	0.0	2370	<1 -1	20	11	2130	30
	10	150	200	4.4	20400	<1 <1	200	31	2220	JU -E
L61000N-51373E	113	21	120	17.2	19000	<1 -1	100	7	014	<->
			100	ວ.ວ 010	10000	~1	250	20	204	0 ~5
	107	10	001	475	15100	~1	210	30	304	-5
L61000N-51450E	123	7	30	0.0	7200	~1	470	25	33	1
L 61000N 51500E	37	150	510	9.2 0.9	1050	~1	4/0	12	2120	22
L 61000N 51525E	37	10	70	5.0	0030	~1	370	9 21	2130	14
L61000N-51525E	49	19	150	0.2	3030	~1	3/0	21	100	14
		4	170	9.1 10.5	5000	~1	210	10	20	10
L 61000N 51000E	71	4	150	10.0	4560	~1	250	10	20	11
L61000N-51600E	33	4 730	30	0.0	2060	~1	220	14	1730	36
L61000N-51650E	40	230	30	10	4610	~1	470	28	238	50
L 61000N 51675E	20	00	60	A 7	5/80	<1 c1	380	16	230	0 8
L 61000N-51700E	65	20	60	 A A	4080	<1 <1	330	10	96	7
L 61000N 51735E	92	20	70	50	6230	-1	300	30	47	, 20
L 61000N-51720E	32 89	4	80	48	4350	-1 c1	340	26	17	20
L61000N-51775E	76	73	50	1.9	5530	<1	330	20	282	<5
L 61000N-51800E	22	7.0 14	50	2.3	6720	<1	320	19	138	<5
L 61000N-51850E	24	29	30	1.5	3970	<1	510	16	98	
L 61000N-51875E	45	19	40	27	6230	<1	460	12	80	10
L61000N-51900E	120	6	180	8.3	5050	<1	350	16	15	<5
L61000N-51925E	4	196	80	0.5	1650	<1	180	42	137	8
L61000N-51950E	21	87	50	1.7	7490	<1	260	22	506	6
L61000N-51975E	37	32	60	3.2	7770	<1	260	13	49	<5
L61000N-52000E	69	18	30	5.3	10500	<1	380	14	42	18
L61000N-52025E	98	24	<10	9.3	14800	<1	470	53	32	8
L61000N-52050E	34	3	30	3.7	7070	<1	230	71	11	8
L61000N-52075E	75	6	90	11.8	10200	<1	320	55	20	6
L61000N-52100E	80	4	160	8.0	10400	<1	270	42	9	<5
L60900N-51175E	34	236	330	4.2	5580	<1	60	8	3390	55
L60900N-51200E	9	>300	300	1.3	1230	<1	20	22	1770	35
L60900N-51225E	11	216	450	3.5	960	<1	<10	8	1430	9
L60900N-51250E	214	7	140	19.6	11900	<1	420	91	32	10
L60900N-51275E	27	228	720	4.7	2330	<1	40	77	806	26
L60900N-51300E	27	>300	340	7.3	510	<1	<10	33	427	24
L60900N-51325E	120	27	<10	3.9	20400	<1	880	3	78	<5
L60900N-51350E	51	167	280	3.8	5620	<1	260	49	798	25
L60900N-51375E	12	>300	80	0.7	2850	<1	50	59	503	9
L60900N-51400E	9	235	380	1.8	2740	<1	90	25	1120	21
L60900N-51425E	11	279	50	0.3	1850	<1	50	16	650	25
L60900N-51450E	9	223	260	1.4	3570	<1	130	36	1070	17
L60900N-51475E	42	>300	150	4.6	2600	<1	10	19	580	23
L60900N-51500E	92	105	10	5.2	12700	<1	420	23	2280	<5
L60900N-51525E	117	7	80	8.9	12900	<1	380	18	39	<5
L60900N-51550E	45	20	30	4.0	14800	<1	440	6	101	7
L60900N-51575E	81	7	60	8.0	4180	<1	360	26	33	<5

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Element Mothod	Ag MMLM5	AI MMLM5	As MMLM5	Au MMLM5	Ba MMI_M5	Bi MMLM5	Ca MMLM5	Cd MMLM5	Ce MMLM5	Co MML-M5
Det Lim	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
L60900N-51600E	51	50	130	6.4	8440	<1	220	27	2540	15
L60900N-51625E	4	193	40	0.7	6470	<1	210	6	1230	9
L60900N-51650E	47	5	60	7.0	14000	<1	360	4	22	<5
L60900N-51675E	84	3	280	15.0	4630	<1	260	13	29	13
L60900N-51700E	133	5	430	7.8	2830	<1	310	40	10	<5
L60900N-51725E	79	5	160	5.7	4510	<1	340	24	17	7
L60900N-51750E	106	5	120	11.6	5610	<1	370	25	16	7
L60900N-51775E	98	19	30	5.7	14700	<1	500	13	60	<5
L60900N-51800E	55	4	70	9.3	6590	<1	390	14	27	52
L60900N-51825E	27	3	40	7.3	3770	<1	310	12	27	40
L60900N-51850E	28	39	50	4.2	11900	<1	450	12	35	<5
L60900N-51875E	99	5	240	13.8	9260	<1	230	54	36	34
L60900N-51900E	75	8	110	7.0	5450	<1	300	48	58	64
L60900N-51925E	68	5	290	5.1	3050	<1	370	38	38	44
L60900N-51950E	51	15	140	4.6	4830	<1	400	54	63	22
L60900N-51975E	31	105	90	2.7	4620	<1	300	41	420	6
L60900N-52000E	69	49	90	5.3	4820	<1	380	40	200	6
L60900N-52025E	31	213	470	5.6	1110	<1	30	22	2260	33
L60900N-52050E	23	221	280	1.2	550	<1	10	13	1840	11
L60900N-52075E	10	160	190	0.6	2220	<1	140	42	599	30
L60900N-52100E	49	79	190	2.1	3810	<1	170	11	573	<5
*Dup L61000N-51325E	32	283	350	4.9	2930	<1	20	10	2290	51
*Dup L61000N-51625E	42	205	20	8.7	2840	<1	250	5	1630	37
*Dup L61000N-51950E	19	84	50	1.9	7160	<1	250	22	529	6
*Dup L60900N-51300E	26	>300	420	6.6	720	<1	<10	33	436	24
*Dup L60900N-51600E	51	59	160	6.0	7710	<1	220	27	2520	21
*Dup L60900N-51900E	63	6	110	7.9	5060	<1	280	40	61	43
*Std MMISRM14	18	37	10	44.6	130	<1	290	8	16	42
*Std MMISRM14	17	39	10	42.3	100	<1	260	7	20	45
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method	Cr MMI-M5	Cu MMI-M5	Dy MMI-M5	Er MMI-M5	Eu MMI-M5	Fe MMI-M5	Gd MMI-M5	La MMI-M5	Li MMI-M5	Mg MMI-M5
Det.Lim.	100	10	ן פסס	U.5 000	0.5			1 DDD	C 900	
	PPB	FFB	PPB	PPB	FFB to o	FFW	PPB	766	FFB	PPWI
L6100UN-51325E	<100	90	109	38.4	49.9	101	218	(00	<c></c>	2
L61000N-51350E	<100	130	107	40.1	47.0	37	234	1210	<>	20
L6100UN-51375E	<100	130	309	108	149	4	806	2500	<>	13
L6100UN-51400E	<100	120	55	18.0	28.6	16	134	433	<>	26
L61000N-51425E	<100	230	204	60.8	13/	4	6/6	1130	<>	37
L6100UN-51450E	<100	570	10	3.1	4.1	2	24	33	<>	16
L61000N-51475E	<100	470	24	10.1	8.8	3	46	36	<>	35
	<100	240	70	25.1	33.4	5/	146	/1/	<0	3
L6100UN-51525E	<100	400	62	22.2	30.0	(	140	205	<>	29
L6100UN-51550E	<100	330	8	3.6	3.2	3	15	24	6	44
L61000N-51575E	<100	330	9	3.6	3.2	3	17	16	<>	41
L6100UN-51600E	<100	220	8	3.2	2.6	3	13	17	5	45
L6100UN-51625E	<100	130	224	84.5	87.3	17	345	706	5	50
L61000N-51650E	<100	60	35	13.7	16.4	19	68	94	<>	57
L61000N-51675E	<100	180	29	10.3	13.6	5	54	65	-	41
L61000N-51700E	<100	200	43	15.3	22.0	8	90	117	-	52
L61000N-51725E	<100	220	18	6.6	9.0	3	36	38	7	43
L61000N-51750E	<100	160	10	3.5	4.2	2	17	15	<5	4/
L61000N-51775E	<100	140	109	40.2	50.1	9	212	419	<5	50
L61000N-51800E	<100	260	48	14.9	25.6	4	115	216	<5	44
L6100UN-51850E	<100	160	43	15.8	18.4	13	/8	/8	-	53
L61000N-51875E	<100	280	44	15.2	20.1	9	83	11	5	55
L61000N-51900E	<100	190	11	4.1	5.2	3	21	18	<5	60
L61000N-51925E	<100	30	25	10.8	10.0	39	36	56	5	19
L6100UN-51950E	<100	380	99	35.5	40.0	28	176	355	<5	42
L61000N-51975E	<100	400	36	12.8	16.2	10	/1	93	<5	45
L61000N-52000E	<100	830	34	12.0	14.2	9	61	53	<5	49
L6100UN-52025E	<100	1690	62	21.7	24.3	о 0	106	12	<5	50
L61000N-52050E	\$100	400	10	2.4	2.2	2	10	9	<0 -5	42
L61000N-52075E	<100	870	10	0.0	7.0	2	10	20	<0 -5	40
L61000N-52100E	<100	310	400	2.0	2.5	2 50	12	4050	<0 -5	30
L60900N-51175E	<100	190	109	34.5	61.0	20	209	1200	<0 -5	
L60900N-51200E	100	470	75	21.Z 46.A	40.5	77	1/1	621 667	<5	ے 1
L60900N-51225E	<100	620	47	10.4	24.3	2	105	10	<0 /5	S 1 46
L60900N-51250E	<100	460	10	0.4	3.7	104	21	242	<5	40
L60900N-51275E	<100	330	20	9.0	14.1	101	62 52	120	<5	c1
L60000N-51305E	<100	340	70	33.4	24.5	001	114	76	<5	50
L 60900N 51323E	<100	190	410	20.1	125	25	563	76	~5	74
L00900N-51330E	<100	60	415	200	13.4	23	505	150	<5 <5	14
L60900N-51375E	<100	160	40	143	21.8	30 81	97	406	~5	18
L60900NL51400E	<100	100	40	14.5	21.0 18.3	60	21 RA	400	~5	01 2
L60900N-51450E	<100	100	52	18.5	26.6	76	122	200	~5	12
L60900NL51475E	<100	150	92 82	340	10.0	54	97	207	-5	12
L60900N-51500E	<100	280	303	131	114	я	573	1170	-5	5 61
L60900NL51525E	<100	200	26	8.1	13.8	2	70	88	-5	23
L60900N-51550E	<100	320	30	10.0	14.4	5	73	73	<5	20 30
L60900N-51575E	<100	340	13	4.9	5.1	3	26	20	<5	66

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Element Method	Cr MMI-M5	Cu MMI-M5	Dy MMI-M5	Er MMI-M5	Eu MMI-M5	Fe MMI-M5	Gd MMI-M5	La MMI-M5	Li MMI-M5	Mg MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
L60900N-51600E	<100	170	216	79.5	107	26	533	2300	<5	25
L60900N-51625E	<100	80	101	38.8	39.5	35	194	596	<5	16
L60900N-51650E	<100	160	8	3.0	3.0	2	17	13	<5	32
L60900N-51675E	<100	290	8	3.1	3.2	3	17	20	<5	44
L60900N-51700E	<100	180	5	1.8	2.2	3	8	7	<5	50
L60900N-51725E	<100	400	9	3.5	3.3	3	15	10	<5	34
L60900N-51750E	<100	310	9	3.4	3.2	3	15	10	<5	39
L60900N-51775E	<100	270	43	15.7	19.8	6	80	74	<5	61
L60900N-51800E	<100	990	10	4.3	3.0	4	15	11	<5	58
L60900N-51825E	<100	570	8	3.4	2.3	4	12	8	<5	43
L60900N-51850E	<100	250	15	5.7	5.6	9	25	26	<5	49
L60900N-51875E	<100	420	23	9.2	7.9	4	36	26	<5	25
L60900N-51900E	<100	570	32	12.4	11.5	6	51	51	<5	25
L60900N-51925E	<100	460	15	6.0	5.5	8	23	21	<5	40
L60900N-51950E	<100	600	35	14.0	13.5	17	54	54	<5	33
L60900N-51975E	<100	180	111	45.5	39.4	27	166	233	<5	31
L60900N-52000E	<100	180	56	23.7	21.4	20	87	106	<5	35
L60900N-52025E	<100	790	168	61.1	72.2	57	323	961	<5	3
L60900N-52050E	<100	490	123	46.3	46.9	47	212	720	7	2
L60900N-52075E	<100	290	54	23.3	19.7	48	80	207	7	16
L60900N-52100E	<100	180	102	39.7	43.7	12	180	422	<5	12
*Dup L61000N-51325E	<100	80	102	36.0	48.1	95	211	848	<5	3
*Dup L61000N-51625E	<100	140	229	89.1	83.0	12	337	644	<5	37
*Dup L61000N-51950E	<100	360	102	36.6	38.2	26	176	361	<5	39
*Dup L60900N-51300E	<100	300	36	13.9	12.2	99	56	117	<5	1
*Dup L60900N-51600E	<100	170	213	79.5	106	32	517	2230	<5	25
*Dup L60900N-51900E	<100	480	25	10.0	10.0	5	43	58	<5	25
*Std MMISRM14	<100	720	2	0.7	1.0	2	4	3	<5	38
*Std MMISRM14	<100	710	2	0.8	1.1	2	5	3	<5	33
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method	Mo MMI-M5	Nb MMI-M5	Nd MMI-M5	Ni MMI-M5	Pb MMI-M5	Pd MMI-M5	Pr MMI-M5	Pt MMI-M5	Rb MMI-M5	Sb MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	FFB	PPB	PPB	PPB	FFB 400	PPB
L6100UN-51325E	Э	1.2	1120	66	1410	<1	267	<1	189	12
L61000N-51350E	6	1.4	1240	139	2150	<1	307	<1	123	4
L6100UN-51375E	6	0.6	3870	26	60	<1	/92	<1	1/4	2
L6100UN-51400E	<>	0.7	624	54	320	<1	138	<1	177	3
L6100UN-51425E	8	<0.5	2/10	12	400	<1	498	<1	64	1
L6100UN-51450E	6	<0.5	55	24	270	<1	10	<1	27	2
L61000N-51475E	(	<0.5	200	52	20	<1	15	<1	18	1
L6100UN-51500E	8	2.6	786	40	470	<1	200	<1	213	12
L6100UN-51525E	6	<0.5	488	98	60	<1	91	<1	66	1
L6100UN-51550E	(	<0.5	45	32	60	<1	9	<1	/1	2
L61000N-51575E	9	<0.5	39	33	70	<1	6	<1	56	2
L6100UN-51600E	8	<0.5	35	29	40	<1	6	<1	/6	2
L61000N-51625E	<5	<0.5	1130	129	2360	<1	248	<1	108	2
L61000N-51650E	<>	<0.5	224	100	150	<1	44	<1	55	<1
L61000N-51675E	<5	<0.5	151	60	80	<1	28	<1	45	<1
L61000N-51700E	<5	<0.5	2/4	62	70	<1	54	<1	60	<1
L61000N-51725E	6	<0.5	92	79	90	<1	16	<1	42	1
L61000N-51750E	5	<0.5	36	37	60	<1	6	<1	45	<1
L61000N-51775E	<5	<0.5	771	78	750	<1	164	<1	169	1
L61000N-51800E	<5	<0.5	452	25	30	<1	91	<1	120	<1
L61000N-51850E	5	<0.5	198	117	70	<1	37	<1	41	<1
L61000N-51875E	<5	<0.5	201	98	70	<1	37	<1	45	1
L61000N-51900E	7	<0.5	46	25	70	<1	8	<1	58	1
L61000N-51925E	<5	0.6	108	59	560	<1	23	<1	179	1
L61000N-51950E	6	<0.5	585	111	270	<1	129	<1	100	2
L61000N-51975E	5	<0.5	204	39	50	<1	40	<1	110	2
L61000N-52000E	6	<0.5	131	68	50	<1	24	<1	39	2
L61000N-52025E	6	<0.5	189	112	60	<1	32	<1	32	1
L61000N-52050E	10	<0.5	21	18	20	<1	4	<1	36	<1
L61000N-52075E	9	<0.5	67	17	40	<1	12	<1	66	<1 •
L61000N-52100E	8	<0.5	20	15	50	<1	3	<1	39	<1 2
L60900N-51175E	6	1.5	1450	94	730	<1 -4	360	<1 -4	268	9
L60900N-51200E	9	1.8	9/6	58	1080	<1	230	<1	347	10
L60900N-51225E	11	7.1	617	30	510	<1 -4	100	<1 -4	231	10
L60900N-51250E	7	<0.5	44	46	320	< I - 1		< I - 4	21	Z
L60900N-51275E	7	2.1	342	62	2100	S I - 1	0/ E4	S I 	141	17
L60900N-51300E	/	-0.5	227	200	14100	۲۹ ۲۹	25	۲ ۲	100	15
L00900N-51325E	<0	<0.5	1070	203	210	<1 -1	30	<1 -1	10	1 2
L00900N-51350E	<>	C.0>	270	307	2020	<1 ~1	203	<1 -1	09 101	3
L00900N-51375E	~> -	0.0	210	40	2090	~1	100	~1	101	5
	о 	0.8	100	04 EE	2170	51	00.1	51	204	5
L00300N-31423E	\$ 	1.0	382 670	20 117	2000	SI 24	450	~1	210	2
L00900N-51430E	<> 	0.6	0/0	07	2000	51	152	51	90 207	4
L00200N-31473E	<>	0.7 -0.F	2000	0Z 100	300	S   -4	10	SI 24	207	0
L 60200N 515255	<> 	~0.5 ~0.5	2000	100	320	~1	442	~1	00 20	×1 ~4
L 60900NL51550E	40	-0.D A D	201	22 60	50	~1	33 25	~1	20	~1
L60900NL51575E	Ω	1.4	63	27	30	~1	10	21	52	~1
LOUDDINGTOTOL	0	1+		<u> </u>	50		10		52	

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Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152

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Element Method	Mo MMI-M5	Nb MMI-M5	Nd MMI-M5	Ni MMI-M5	Pb MMI-M5	Pd MMI-M5	Pr MMI-M5	Pt MMI-M5	Rb MMI-M5	Sb MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB									
L60900N-51600E	5	1.3	2800	213	170	<1	652	<1	99	3
L60900N-51625E	<5	0.9	856	114	340	<1	193	<1	86	<1
L60900N-51650E	5	<0.5	33	20	20	<1	5	<1	30	1
L60900N-51675E	10	<0.5	48	34	80	<1	8	<1	64	4
L60900N-51700E	12	<0.5	16	18	250	<1	3	<1	40	8
L60900N-51725E	9	<0.5	29	28	70	<1	5	<1	52	1
L60900N-51750E	8	<0.5	28	31	70	<1	5	<1	41	1
L60900N-51775E	<5	<0.5	186	73	70	<1	34	<1	23	<1
L60900N-51800E	9	<0.5	27	118	10	<1	5	<1	33	1
L60900N-51825E	8	<0.5	22	92	<10	<1	4	<1	54	1
L60900N-51850E	<5	<0.5	62	48	80	<1	12	<1	70	<1
L60900N-51875E	7	<0.5	68	44	100	<1	12	<1	44	2
L60900N-51900E	12	<0.5	115	95	60	<1	22	<1	27	1
L60900N-51925E	13	<0.5	51	128	40	<1	9	<1	29	3
L60900N-51950E	6	<0.5	133	117	80	<1	25	<1	37	2
L60900N-51975E	5	<0.5	464	102	260	<1	97	<1	90	2
L60900N-52000E	<5	<0.5	253	86	130	<1	51	<1	63	1
L60900N-52025E	6	1.9	1540	72	320	<1	365	<1	222	7
L60900N-52050E	8	2.4	988	37	210	<1	244	<1	321	5
L60900N-52075E	6	0.6	303	149	320	<1	71	<1	168	3
L60900N-52100E	5	<0.5	724	19	290	<1	161	<1	189	3
*Dup L61000N-51325E	6	1.6	1150	62	1280	<1	280	<1	171	12
*Dup L61000N-51625E	<5	<0.5	1060	128	2210	<1	231	<1	100	1
*Dup L61000N-51950E	5	<0.5	589	102	250	<1	131	<1	89	2
*Dup L60900N-51300E	6	1.3	234	52	13700	<1	52	<1	170	18
*Dup L60900N-51600E	<5	<0.5	2690	225	210	<1	630	<1	100	4
*Dup L60900N-51900E	10	<0.5	108	74	50	<1	22	<1	26	1
*Std MMISRM14	37	<0.5	19	254	100	44	4	<1	289	<1
*Std MMISRM14	39	<0.5	19	275	120	45	4	<1	272	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method	Sc MMI-M5	Sm MMI-M5	Sn MMI-M5	Sr MMI-M5	Ta MMI-M5	Tb MMI-M5	Te MMI-M5	Th MMI-M5	Ti MMI-M5	TI MMI-M5
Det.Lim.	5	ו פספ	1 DDD			1 DDB	10	0.5	3 DDD	0.5
	104	759	211	50	FFB 	70	-10	70.0	200	4 7
L6100UN-51325E	104	203	2	00	<1	20	<10	70.0	222	1.7
L61000N-51350E	3/	200	<1 -1	410	<1	28 05	<10	21.6	່ວເ	1.9
L01000N-51375E	30	807	<1 -4	320	<	60 45	<10	17.5	0	0.5
L61000N-51400E	10	149	<1 .4	520	<1	15	<10	20.1	44	1.4
L6100UN-51425E	30	709	<1	600	<1	64	<10	19.2	<3	0.8
L6100UN-51450E	<5	19	<1	370	<1	3	<10	1.7	<3	<0.5
L6100UN-51475E	15	34	<1	490	<1	6	<10	2.8	<3	<0.5
L61000N-51500E	54	168	<1	<10	1	18	<10	59.0	470	1.7
L61000N-51525E	11	143	<1	420	<1	16	<10	10.4	13	<0.5
L61000N-51550E	6	13	<1	460	<1	2	<10	1.8	<3	0.6
L61000N-51575E	6	13	<1	460	<1	2	<10	1.2	<3	<0.5
L61000N-51600E	7	11	<1	660	<1	2	<10	1.3	<3	<0.5
L61000N-51625E	97	295	<1	600	<1	50	<10	22.7	9	2.3
L61000N-51650E	6	67	<1	700	<1	9	<10	3.8	13	0.7
L61000N-51675E	6	47	<1	520	<1	7	<10	6.4	3	0.5
L61000N-51700E	<5	82	<1	540	<1	11	<10	9.5	8	0.5
L61000N-51725E	5	29	<1	610	<1	4	<10	3.8	<3	0.6
L61000N-51750E	7	13	<1	550	<1	2	<10	1.8	<3	0.5
L61000N-51775E	11	204	<1	610	<1	26	<10	10.4	18	1.2
L61000N-51800E	<5	115	<1	680	<1	13	<10	11.9	4	0.5
L61000N-51850E	<5	65	<1	750	<1	10	<10	4.9	14	<0.5
L61000N-51875E	<5	69	<1	770	<1	11	<10	6.6	3	<0.5
L61000N-51900E	<5	17	<1	970	<1	3	<10	2.8	<3	<0.5
L61000N-51925E	22	31	<1	260	<1	5	<10	7.3	117	0.7
L61000N-51950E	29	160	<1	790	<1	24	<10	18.3	47	<0.5
L61000N-51975E	5	62	<1	770	<1	9	<10	11.7	29	<0.5
L61000N-52000E	<5	48	<1	1020	<1	8	<10	9.9	6	<0.5
L61000N-52025E	<5	76	<1	1580	<1	14	<10	6.8	<3	<0.5
L61000N-52050E	<5	7	<1	1080	<1	1	<10	1.3	<3	<0.5
L61000N-52075E	5	23	<1	760	<1	4	<10	3.3	<3	<0.5
L61000N-52100E	<5	8	<1	560	<1	2	<10	1.0	<3	<0.5
L60900N-51175E	65	321	<1	110	<1	31	<10	56.3	242	2.1
L60900N-51200E	53	217	<1	<10	<1	21	<10	43.1	352	2.7
L60900N-51225E	75	131	<1	<10	<1	13	<10	75.0	1150	1.7
L60900N-51250E	5	16	<1	420	<1	2	<10	1.0	6	<0.5
L60900N-51275E	31	74	<1	50	<1	8	<10	56.4	465	1.2
L60900N-51300E	37	57	<1	<10	<1	8	<10	37.6	336	1.6
L60900N-51325E	28	80	<1	1290	<1	16	<10	2.0	<3	<0.5
L60900N-51350E	187	422	<1	380	<1	81	<10	10.5	7	1.2
L60900N-51375E	23	68	<1	70	<1	8	<10	23.2	172	1.4
L60900N-51400E	24	121	<1	120	<1	11	<10	39.8	156	0.9
L60900N-51425E	56	99	<1	80	<1	11	<10	44.4	208	1.0
L60900N-51450E	50	150	<1	140	<1	14	<10	35.3	142	0.7
L60900N-51475E	67	93	<1	30	<1	16	<10	28.8	145	3.1
L60900N-51500E	48	556	<1	650	<1	71	<10	5.3	<3	0.7
L60900N-51525E	7	67	<1	380	<1	7	<10	2.1	7	<0.5
L60900N-51550E	9	69	1	590	<1	8	<10	8.4	<3	1.1
L60900N-51575E	10	22	<1	420	<1	3	<10	2.5	<3	0.7

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Element	Sc	Sm	Sn	Sr	Та	Tb	Te	Th	Ti	TI
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	DDB	PPR	1 PPR	PPR	PPR	1 PPR	PPR	U.S PPR	PPR	U.S PDB
		500	-110	200		50	-10	24.5		10
	04 57	302	<1 -1	290	~1	39	<10	31.3	43	1.3
	5/	190	<1 -1	200	2	24	<10	10.0	10	1.3
L6090UN-51650E	6	13	<1	380	<1	2	<10	1.0	<3	0.9
L6090UN-51675E	8	16	<1	560	<1	2	<10	1.0	<3	1.2
L60900N-51700E	8	6	<1	1160	<1	1	<10	<0.5	<3	0.8
L60900N-51725E	10	10	<1	770	<1	2	<10	0.9	<3	0.9
L60900N-51750E	13	11	<1	720	<1	2	<10	0.8	<3	0.7
L60900N-51775E	5	62	<1	1250	<1	10	<10	4.1	4	0.6
L60900N-51800E	10	10	<1	470	<1	2	<10	0.7	<3	0.7
L60900N-51825E	13	8	<1	300	<1	2	<10	<0.5	<3	0.7
L60900N-51850E	<5	20	<1	1240	<1	3	<10	2.8	4	1.0
L60900N-51875E	7	25	<1	500	<1	5	<10	2.5	<3	1.2
L60900N-51900E	8	37	<1	490	<1	7	<10	4.4	5	0.8
L60900N-51925E	7	17	<1	700	<1	3	<10	3.8	11	0.9
L60900N-51950E	<5	42	<1	600	<1	8	<10	5.7	14	0.7
L60900N-51975E	30	137	<1	510	<1	24	<10	11.8	44	1.1
L60900N-52000E	9	75	<1	570	<1	12	<10	5.4	23	0.7
L60900N-52025E	114	357	<1	20	<1	42	<10	45.7	627	2.0
L60900N-52050E	93	223	<1	<10	<1	29	<10	43.4	539	3.2
L60900N-52075E	65	76	<1	150	<1	12	<10	17.9	216	1.4
L60900N-52100E	51	179	<1	320	<1	24	<10	15.0	72	1.2
*Dup L61000N-51325E	95	250	<1	40	<1	27	<10	66.4	212	1.7
*Dup L61000N-51625E	81	276	<1	560	<1	49	<10	16.3	7	2.6
*Dup L61000N-51950E	31	157	<1	700	<1	24	<10	16.4	52	0.8
*Dup L60900N-51300E	39	61	<1	<10	<1	8	<10	37.0	393	1.8
*Dup   60900N-51600E	76	559	<1	290	<1	57	<10	33.1	59	12
*Dup   60900N-51900E	6	33	<1	450	<1	6	<10	36	3	0.8
*Std MMISRM14	6	5	<1	540	د1	<1	<10	15.4	3	<0.5
*Std MMISRM14	å	5	<1	520	<1	<1	<10	17.8	7	0.5
*BIK BLANK	<5	د1 د1	-1	<10	-1	-1	<10	<0.5	، دع	<0.5
*Bik BLANK	-5 <5	ı د1	<1	<10	- 1 <1	<1	<10	<0.5	<3	<0.5

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Element Method	U MMI-M5	W MMI-M5	Y MMI-M5	Yb MMI-M5	Zn MMI-M5	Zr MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
L61000N-51325E	8	<1	404	29	420	40
L61000N-51350E	8	<1	470	29	820	11
L61000N-51375E	5	<1	1580	64	250	5
L61000N-51400E	5	<1	190	13	190	14
L61000N-51425E	6	2	906	38	390	8
L61000N-51450E	1	2	47	2	280	<5
L61000N-51475E	2	1	154	8	280	<5
L61000N-51500E	8	2	259	19	200	65
L61000N-51525E	5	2	278	16	210	8
L61000N-51550E	3	1	45	3	240	<5
L61000N-51575E	3	2	49	2	260	<5
L61000N-51600E	2	1	43	2	240	<5
L61000N-51625E	19	1	1070	51	190	6
L61000N-51650E	3	1	157	9	540	5
L61000N-51675E	2	1	147	7	260	<5
L61000N-51700E	3	<1	188	10	250	7
L61000N-51725E	2	<1	88	4	330	<5
L61000N-51750E	1	<1	55	3	380	<5
L61000N-51775E	5	1	455	27	110	11
L61000N-51800E	2	<1	200	10	300	10
L61000N-51850E	2	<1	178	10	420	7
L61000N-51875E	2	<1	184	10	220	<5
L61000N-51900E	3	<1	57	3	270	<5
L61000N-51925E	2	<1	120	8	2170	12
L61000N-51950E	4	1	412	25	600	21
L61000N-51975E	4	<1	144	9	200	13
L61000N-52000E	5	<1	144	8	280	8
L61000N-52025E	6	<1	272	15	1980	7
L61000N-52050E	1	<1	36	2	2000	<5
L61000N-52075E	2	<1	88	4	670	7
L61000N-52100E	2	<1	38	2	890	<5
L60900N-51175E	8	2	370	24	120	31
L60900N-51200E	9	1	301	20	340	37
L60900N-51225E	11	2	167	12	120	191
L60900N-51250E	3	1	54	2	340	<5
L60900N-51275E	7	1	96	6	1030	51
L60900N-51300E	6	1	119	10	510	31
L60900N-51325E	2	<1	404	22	<20	<5
L60900N-51350E	6	2	2510	149	60	8
L60900N-51375E	6	<1	120	8	270	13
L60900N-51400E	6	1	144	11	450	14
L60900N-51425E	8	1	130	9	350	31
L60900N-51450E	4	1	199	15	1150	13
L60900N-51475E	6	1	283	26	190	17
L60900N-51500E	13	2	1400	95	60	11
L60900N-51525E	4	2	122	5	120	<5
L60900N-51550E	7	3	1 18	7	50	8
L60900N-51575E	5	<1	66	4	110	<5

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Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	PPR	PPR	PPB	PPR	PPR	PPB
			900	50	310	17
L 60900N 51625E		2	430	28	70	11
	5	2 ~1	435	20	20 60	-5
	1	~1	41	2	200	<. -5
L00900N-51075E	4	~1	30	2	200	<5 ~5
	2	~1	24 45	י ר	300	< <u>-</u>
	2	<1	40	2	200	~S
	3	<1	40	10	200	<->
	3	<1	103	10	190	<->
	3	<	59	С	220	< <b>&gt;</b>
	1	<1	40	х	200	< <u>-</u>
	3	< 1	00	4	120	ю -Е
L00900N-51873E	2	<	110	0	1050	<>
L60900N-51900E	3	<	150	٥ -	000	6
L6090UN-51925E	3	<1	73	5	920	10
L60900N-51950E	2	<1	157	10	1630	10
L6090UN-51975E	/	<1	483	31	850	23
L6090UN-52000E	3	<1	234	17	1270	10
L60900N-52025E	6	<1	588	43	300	51
L60900N-52050E	9	<1	474	33	320	53
L60900N-52075E	4	<1	227	16	680	26
L60900N-52100E	6	<1	411	29	100	30
*Dup L61000N-51325E	7	<1	360	27	410	33
*Dup L61000N-51625E	16	<1	1040	57	170	<5
*Dup L61000N-51950E	3	<1	391	25	580	22
*Dup L60900N-51300E	6	<1	117	10	500	34
*Dup L60900N-51600E	5	<1	894	60	370	20
*Dup L60900N-51900E	2	<1	129	7	780	6
*Std MMISRM14	31	<1	9	<1	310	12
*Std MMISRM14	36	<1	10	<1	320	13
*BIK BLANK	<1	<1	<5	<1	<20	<5
*BIK BLANK	<1	<1	<5	<1	<20	<5

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# **Certificate of Analysis**

Work Order: 095331

To: Geotronics Consulting Inc.

Attn: David G.Mark 6204 - 125th Street SURREY BC V3X 2E1 Date: Oct 25, 2007

P.O. No.	Project: Nakina
Project No.	DEFAULT
No. Of Samples	79
Date Submitted	Aug 30, 2007
Report Comprises	Pages 1 to 11
	(Inclusive of Cover Sheet)

#### Distribution of unused material:

STORE: 79 Soils

Russ Calow, B.Sc., C.Chem. Vice President Global Geochemistry

#### ISO 17025 Accredited for Specific Tests. SCC No. 456

Certified By ::

Report Footer:

L.N.R. = Listed not received n.a. = Not applicable I.S. = Insufficient Sample -- = No result

\*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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Element Method	Ag MMI-M5	AI MMI-M5	As MMI-M5	Au MMI-M5	Ba MMI-M5	Bi MMI-M5	Ca MMI-M5	Cd MMI-M5	Ce MMI-M5	Co MMI-M5
Det.Lim.	1	1 גירות	10	0.1	10	1	10	1	5	5
	PPB	PPIW	PPB	PPB	6000	PPB	PPIW	PPB	FFB	PPB
L6090UN-50100E	14	1/9	<10	0.5	6000	<1	290	22	1/2	38
L60900N-50125E	8	188	<10	0.7	6300	<1	280	14	188	78
L60900N-50150E	(	199	<10	0.6	6700	<1	280	17	282	4/
L60900N-50175E	8	85	100	1.2	7500	<1	310	8	1290	126
L60900N-50200E	5	300	30	0.2	2750	<1	40	10	184	107
L60900N-50225E	3	>300	30	0.2	970	<1	20	7	63	97
L60900N-50250E	14	201	60	0.7	3240	<1	170	11	1730	24
L60900N-50275E	7	>300	10	0.2	920	<1	20	6	94	44
L60900N-50300E	5	275	50	0.2	1480	<1	40	7	181	96
L60900N-50325E	6	289	20	0.3	2230	<1	80	9	250	47
L60900N-50350E	8	186	50	0.4	3730	<1	230	8	206	50
L60900N-50375E	9	234	<10	0.1	3140	<1	320	14	119	25
L60900N-50400E	7	214	20	0.3	3030	<1	160	11	163	50
L60900N-50425E	7	286	20	0.2	2560	<1	100	9	157	75
L60900N-50450E	5	76	<10	0.2	3020	<1	320	9	50	15
L60900N-50475E	7	66	<10	0.4	6880	<1	380	4	115	6
L60900N-50500E	4	94	<10	0.2	11100	<1	610	6	76	13
L60900N-50525E	6	97	30	0.5	3730	<1	200	2	459	21
L60900N-50550E	17	38	40	2.8	5460	<1	260	6	370	5
L60900N-50575E	11	>300	20	0.1	1200	<1	<10	12	236	21
L60900N-50600E	6	>300	50	0.2	1050	<1	10	7	270	30
L60900N-50625E	9	>300	30	0.2	790	<1	<10	7	156	22
L60900N-50650E	7	>300	60	0.5	2240	<1	20	4	499	46
L60900N-50675E	7	>300	30	0.2	830	<1	<10	10	336	40
L60900N-50700E	4	>300	<10	0.3	1150	<1	20	6	369	34
L60900N-50725E	6	>300	<10	0.1	720	<1	<10	6	164	30
L60900N-50750E	4	>300	<10	0.1	410	<1	<10	11	301	22
L60900N-50775E	5	>300	<10	0.2	830	<1	20	4	452	20
L60900N-50800E	8	71	20	0.6	5220	<1	300	2	978	<5
L60900N-50825E	4	229	40	0.2	1420	<1	70	3	299	18
L60900N-50850E	8	139	10	0.2	2980	<1	230	8	289	13
L60900N-50875E	12	53	<10	0.2	2150	<1	620	4	19	9
L60900N-50900E	6	37	<10	0.7	2480	<1	540	2	19	<5
L60900N-50925E	5	186	110	3.2	2110	<1	30	6	3570	22
L60900N-50950E	4	224	110	0.5	1340	<1	40	9	2170	66
L60900N-50975E	42	50	90	8.7	4640	<1	250	13	403	14
L60900N-51000E	11	>300	130	2.6	750	<1	10	9	1870	24
L60900N-51025E	8	253	180	1.9	1720	<1	110	16	365	27
L60900N-51075E	3	250	20	0.3	1140	<1	40	46	204	26
L60900N-51100E	36	10	<10	4.4	3810	<1	730	15	26	15
L60900N-51125E	29	9	10	1.8	4120	<1	570	13	29	14
L60900N-51150E	39	54	20	3.6	13300	<1	450	9	1270	16
L61 100N-50875E	6	145	1 10	2.4	2490	<1	180	3	424	37
L61100N-50900E	63	7	10	4.8	2130	<1	380	24	48	24
L61 100N-50925E	47	5	10	3.6	1810	<1	440	19	47	48
L61 100N-50950E	26	7	20	2.4	6440	<1	340	4	9	29
L61100N-51000E	25	282	360	2.4	460	<1	<10	29	451	88
L61100N-51025E	18	295	350	0.4	710	<1	10	17	529	70

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Element	Ag	AI	As	Au	Ва	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5 10	MMI-M5	MMI-M5 10	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
L 61 100N-51050E	17	242	580	46	/30	<1	10	17	730	39
L61100N-51035E		274	130	0.6	420	-1	10	67	179	60
L 61 100N-51 100E	15	214	440	3.7	2080	<1	50	24	3630	20
L61100N-51125E	98	>300	250	16.2	880	<1	<10	<u>4</u> 9	944	20 49
L 61 100N-51 150E	36 16	286	170	12	610	<1	10	18	1800	57
L61100N-51175E	16	258	220	20	730	<1	<10	13	1860	42
L61100N-51200E	10	172	160	17	2380	<1	150	50	984	32
L61100N-51225E	18	81	100	60	4020	<1	220	22	645	8
L 61 100N-51 250E	7	283	140	11	2570	<1	50	18	1490	19
L61100N-51275E	32	136	520	61	1070	<1	10	7	5740	44
L61100N-51300E	52	59	500	11.8	8220	<1	160	12	2390	14
L 61 100N-51 325E	66	3	70	79	6740	<1	240	5	35	9
L61100N-51350E	86	6	70	10.0	12100	<1	420	14	16	<5
L 61 100N-51 375E	66	3	140	73	4160	<1	250	19	17	7
L61100N-51400E	109	3	70	11.8	2950	<1	300	31	13	, 8
L61100N-51425E	51	29	50	55	1630	<1	360	38	72	18
L 61100N-51450E	75	27	30	6.9	2110	<1	370	23	126	18
L61100N-51475E	22	33	30	3.0	1530	<1	370	32	123	17
L61100N-51500E	32	20	50	43	1450	<1	410	39	177	31
L61100N-51525E	52	4	70	64	1720	<1	350	23	61	43
L61100N-51550E	65	4	80	13.5	4330	<1	470	28	13	12
L61100N-51575E	27	27	60	3.4	3250	<1	810	185	236	77
L61100N-51600E	66	6	30	7.3	1890	<1	400	46	30	26
L61100N-51625E	20	76	90	2.6	3860	<1	690	127	589	46
L61100N-51650E	7	142	70	0.2	1400	<1	230	34	120	9
L61100N-51675E	10	182	30	1.3	1500	<1	210	94	152	7
L61100N-51700E	9	>300	210	1.0	720	<1	20	21	264	17
L61100N-51725E	10	214	40	1.0	1930	<1	110	21	518	15
L61100N-51750E	14	>300	360	1.3	480	<1	<10	19	247	42
L61100N-51775E	10	>300	110	0.4	570	<1	10	12	137	11
L61100N-51800E	7	176	130	0.2	1110	<1	120	37	304	22
*Dup L60900N-50100E	13	163	<10	0.4	6390	<1	300	21	190	34
*Dup L60900N-50400E	6	199	30	0.2	3130	<1	170	10	176	52
*Dup L60900N-50700E	4	>300	10	<0.1	1170	<1	20	7	400	31
*Dup L60900N-51000E	10	>300	130	2.0	460	<1	10	8	2150	24
*Dup L61100N-51050E	17	233	540	4.3	430	<1	10	16	736	36
*Dup L61100N-51350E	88	7	60	8.4	11500	<1	420	13	15	<5
*Dup L61100N-51650E	7	142	70	0.4	1650	<1	240	35	118	8
*Std MMISRM14	19	33	10	40.4	80	<1	270	6	17	39
*Std MMISRM14	17	39	10	40.6	90	<1	270	6	20	43
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*BIk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method	Cr MMI-M5	Cu MMI-M5	Dy MMI-M5	Er MMI-M5	Eu MMI-M5	Fe MMI-M5	Gd MMI-M5	La MMI-M5	Li MMI-M5	Mg MMI-M5
Det.Lim.	PPB	PPR	PDB	U.S PPR	U.S PPR	1 PPM	PPR	1 PPR	DDB DDB	T PDM
Units LEODONI 501005	<100	490	62	204	100	44	07	100		47
L60900N-50125E	<100	400 610	72	25.4	10.0	44 78	100	144	<5	4/ 53
L60900N-50125E	<100	660	111	J4.2 47.6	78.5	70 55	155	172	~5	50
L60900N-50175E	<100	2850	76	324	20.0	00 Q1	142	405	~5	30
L60900N-50200E	<100	380	58	26.0	14.7	62	75	100	~5	11
L60900N-50225E	<100	300	18	20.0	31	120	16	24	6	
L60900N-50250E	<100	950	395	139	191	52	924	1870	-5	15
L60900N-50275E	<100	300	18	7.8	48	78	24	38	<5	7
L60900N-50300E	<100	330	19	7.7	66	161	30	87	<5	7
L60900N-50325E	<100	460	43	17.8	13.7	78	66	117	<5	16
L60900N-50350E	<100	510	38	15.9	14.0	58	65	147	<5	31
L60900N-50375E	<100	400	31	13.9	87	40	45	83	<5	40
L60900N-50400E	<100	520	34	14.6	115	76	55	113	<5	25
L60900N-50425E	<100	470	28	12.6	7.8	108	38	58	<5	28
1 60900N-50450E	<100	140	5	2.3	20	24	9	19	<5	34
1 60900N-50475E	<100	290	20	7.3	9.0	19	43	73	<5	42
1 60900N-50500E	<100	190	50	18.3	23.8	11	126	293	<5	42
1 60900N-50525E	<100	410	52	18.3	26.8	35	125	359	<5	19
1 60900N-50550E	<100	460	205	58.2	144	10	661	1100	<5	42
L60900N-50575E	<100	410	22	8.5	9.0	55	41	97	<5	
L60900N-50600E	<100	1070	25	10.4	9.8	54	43	102	<5	2
L60900N-50625E	<100	510	23	10.2	7.7	68	34	59	<5	1
L60900N-50650E	<100	570	33	11.3	14.4	82	63	207	<5	3
L60900N-50675E	<100	360	33	12.7	10.7	52	52	123	<5	1
L60900N-50700E	<100	220	32	11.4	12.5	48	57	130	<5	3
L60900N-50725E	<100	460	42	19.8	9.6	58	47	49	<5	1
L60900N-50750E	<100	740	66	31.9	16.3	49	71	71	<5	1
L60900N-50775E	<100	490	61	28.1	17.9	35	82	148	<5	2
L60900N-50800E	<100	290	262	117	115	11	525	1260	<5	23
L60900N-50825E	<100	290	26	11.8	9.9	42	42	157	<5	5
L60900N-50850E	<100	360	48	22.6	16.9	23	75	163	<5	7
L60900N-50875E	<100	300	9	4.8	3.3	6	14	17	<5	13
L60900N-50900E	<100	250	6	2.9	2.3	7	10	16	<5	22
L60900N-50925E	<100	130	70	20.5	46.1	51	203	1000	<5	3
L60900N-50950E	<100	570	79	30.9	36.7	92	163	710	<5	7
L60900N-50975E	<100	710	441	146	246	17	1240	1820	<5	38
L60900N-51000E	<100	220	90	34.8	44.1	58	207	572	<5	1
L60900N-51025E	<100	420	61	22.6	22.5	74	109	205	<5	6
L60900N-51075E	<100	740	70	34.0	13.2	49	62	45	<5	6
L60900N-51100E	<100	1300	34	18.2	9.9	6	44	29	<5	46
L60900N-51125E	<100	620	22	11.5	7.4	6	33	27	<5	32
L60900N-51150E	<100	320	344	148	145	17	688	1050	<5	37
L61 100N-50875E	<100	300	60	26.0	22.8	55	106	281	<5	9
L61 100N-50900E	<100	790	34	17.8	9.5	6	54	34	<5	30
L61 100N-50925E	<100	860	17	8.2	5.2	4	27	24	<5	24
L61100N-50950E	<100	440	3	1.4	0.8	2	6	4	<5	65
L61100N-51000E	<100	340	54	25.0	17.8	128	76	124	<5	1
L61100N-51025E	<100	180	26	9.5	11.1	144	47	163	<5	2

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Element	Cr MMI-M5	Cu MMI-M5	Dy MMI-M5	Er MMI-M5	Eu MMI-M5	Fe MMI-M5	Gd MMI-M5	La MMI-M5	Li MMI-M5	Mg MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
L61100N-51050E	<100	510	46	18.3	16.5	163	73	172	<5	5
L61100N-51075E	<100	700	42	20.7	9.0	91	40	36	<5	5
L61100N-51100E	<100	460	158	60.3	64.9	70	302	1130	<5	7
L61 100N-51 125E	<100	160	63	23.4	21.8	102	101	182	<5	<1
L61 100N-51 150E	<100	380	138	55.4	54.7	61	245	492	<5	2
L61100N-51175E	<100	560	124	50.6	46.8	85	218	640	<5	1
L61100N-51200E	<100	80	50	18.4	23.6	75	103	318	<5	21
L61100N-51225E	<100	160	62	24.0	27.1	21	125	327	<5	20
L61100N-51250E	<100	90	75	29.1	32.3	65	151	446	<5	8
L61100N-51275E	<100	480	347	146	145	66	671	2150	<5	2
L61 100N-51 300E	<100	170	274	102	141	35	729	2410	<5	16
L61 100N-51 325E	<100	250	6	2.2	2.1	2	12	25	<5	30
L61 100N-51 350E	<100	140	9	3.5	2.7	2	18	12	<5	33
L61100N-51375E	<100	260	5	2.2	1.9	2	9	11	5	49
L61100N-51400E	<100	290	5	2.1	1.9	2	8	7	6	97
L61100N-51425E	<100	180	31	13.4	11.3	21	49	39	5	92
L61100N-51450E	<100	290	48	19.9	19.9	14	85	100	5	72
L61100N-51475E	<100	100	28	12.1	12.5	25	52	73	6	67
L61100N-51500E	<100	180	42	17.0	17.4	18	77	103	5	59
L61100N-51525E	<100	270	21	9.1	8.6	7	38	51	<5	60
L61100N-51550E	<100	310	6	2.3	2.1	2	10	9	<5	72
L61100N-51575E	<100	180	44	17.1	17.9	30	81	112	10	135
L61100N-51600E	<100	370	29	12.4	10.4	6	48	42	<5	71
L61100N-51625E	<100	240	98	37.0	41.2	69	185	309	14	105
L61100N-51650E	<100	40	18	7.7	7.2	56	30	56	8	39
L61100N-51675E	<100	50	26	11.3	9.5	40	38	62	<5	55
L61100N-51700E	<100	340	44	16.7	12.6	72	54	76	<5	3
L61100N-51725E	<100	160	60	23.1	21.7	50	99	182	<5	23
L61100N-51750E	<100	280	42	16.7	12.0	97	56	82	<5	2
L61100N-51775E	<100	90	20	8.0	6.4	69	28	46	5	3
L61100N-51800E	<100	100	25	8.3	10.9	77	49	118	<5	22
*Dup L60900N-50100E	<100	420	57	26.8	17.3	40	87	122	<5	49
*Dup L60900N-50400E	<100	500	35	14.5	12.6	74	59	120	<5	26
*Dup L60900N-50700E	<100	210	34	11.9	13.6	44	63	137	<5	3
*Dup L60900N-51000E	<100	200	94	33.5	46.5	58	226	663	<5	<1
*Dup L61100N-51050E	<100	480	42	16.8	16.1	145	69	176	<5	4
*Dup L61100N-51350E	<100	160	9	3.2	2.6	2	17	10	<5	35
*Dup L61100N-51650E	<100	40	18	7.6	7.3	52	31	55	8	39
*Std MMISRM14	<100	690	1	0.5	0.9	2	3	5	<5	35
*Std MMISRM14	<100	690	2	0.6	0.9	2	3	5	<5	36
*BIK BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*BIK BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method	Mo MMI-M5	Nb MMI-M5	Nd MMI-M5	Ni MMI-M5	Pb MMI-M5	Pd MMI-M5	Pr MMI-M5	Pt MMI-M5	Rb MMI-M5	Sb MMI-M5
Det.Lim.	DDB	U.S PPR	PDB	DDB	PPR	I PPR	PPR	1 DDB	DDB	1 DDB
		-0.5	110	140	120	-110		-110		
L00900N-50100E	\$ •	<0.5 0.0	223	140	130	<1 ~1	42	<1 -1	105	<1
L00900N-50125E	~> ~5	-0.5	209	135	170	~1	52 73	~1	120	~1
L00900N-00100E		~0.5	555	100	130	~1	140	~1	25	
L00900N-50175E		2.1	040 009	103	130	~1	140	~1	212	-1
	5	2.0	220	100	170	~1	44	~1	10	~1
L00900N-50223E	~> ~	2.0	2700	00	00	~1	707	~1	200	~1
L00900N-50250E		1.7	3700	20	90 150	~1	101	~1	200	~1
E00900N-50273E	~> ~5	7.4	125	50	00	~1	27	~1	10	1
L00900N-50300E	~~ ~	1.1	120	29	120	~1	21	~1	207	-1
L00900N-50323E	<>	1.3	244	00	100	~1	49	~1	207	</td
L00900N-50350E	~> ~	1.0	235	40	100	~1	43	~1	120	-1
L00900N-00373E	<b>S</b>	-0.5	140	44 60	70	~1	20	~1	40	~1
L 60900N 50425E	~> ~	2.2	132	65	00	~1	40 27	~1	1.00	~1
L00900N-50425E	~5 ~5	2.2 c0.5	132	00	20	~1	27	~1	119	-1
L60900N-50450E	<5	<0.5	160	20	20	<1	34	~1	124	-1
L60900N-50475E	<5	<0.5	475	51	30	<1	04	<1	131	-1
L 60000N-50500E	-5	4.7	475 507	34	20	<1	433	<1	100	· · · · · · · · · · · · · · · · · · ·
L60900N-50525E	14	-0.5	2097	21	30	<1	565	<1	103	-1
L60900N-50550E	-5	<0.5 3 4	2900	50	50	<1	200	<1	193	1
L 60900N 50600E	<5 6	3.1	104	35	30	<1	40	<1	220	י ז
L60900N-50605E	<5 <5	2.7	130	74	30	<1		<1	108	2
L 60900N-50650E	<5 6	2.0	200	13	20	<1	20 67	<1	130	2
L60900N-50635E	<5 c5	4.0	200	43	50	<1	45	<1	223	1
L60900N-50075E	~5	1.5	200	77	40	<1 <1	53	<1 <1	214	ر 1ء
L60900N-50725E	~~	1.1	135	42	40	-1 c1	26	-1 c1	131	-1 c1
L60900N-00720E		1.4	222	62	40 40	-1 c1	43	-1 c1	221	- i c1
L60900N-50775E	<5	0.7	302	47	 60	<1	63	<1	236	<1
1 60900N-50800E	<5	<0.5	2340	33	30	<1	487	<1	123	<1
160900N-50825E	<5	17	208	36	50	<1	49	<1	220	2
1 60900N-50850E	<5	<0.5	276	50	30	<1	60	<1	177	<1
L60900N-50875E	<5	<0.5	36	80	<10	<1	7	<1	24	<1
1 60900N-50900E	<5	<0.5	35	37	<10	<1	. 6	<1	132	1
1 60900N-50925E	<5	12	1280	37	100	<1	305	<1	147	3
1 60900N-50950E	5	22	935	146	140	<1	221	<1	199	3
1 60900N-50975E	12	<0.5	4400	45	310	<1	837	<1	164	1
L60900N-51000E	<5	0.9	1180	39	230	<1	259	<1	296	3
L60900N-51025E	8	3.4	390	76	170	<1	81	<1	233	6
L60900N-51075E	<5	<0.5	141	240	200	<1	26	<1	170	1
L60900N-51100E	<5	<0.5	78	207	<10	<1	12	<1	12	<1
L60900N-51125E	<5	<0.5	72	172	<10	<1	12	<1	16	<1
L60900N-51150E	<5	<0.5	2380	476	30	<1	460	<1	32	<1
L61 100N-50875E	<5	1.1	442	100	130	<1	96	<1	141	5
L61 100N-50900E	<5	<0.5	98	165	20	<1	15	<1	24	<1
L61 100N-50925E	6	<0.5	62	130	20	<1	11	<1	18	<1
L61 100N-50950E	24	<0.5	9	49	30	<1	1	<1	12	<1
L61 100N-51000E	6	8.5	285	39	890	<1	58	<1	191	7
L61100N-51025E	6	5.0	253	41	400	<1	57	<1	125	6

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Element	Mo	Nb	Nd	Ni	РЪ	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5 PPB	U.S PPB	1 PPR		10 PPB	1 PPR	1 PPR	1 PPR	C PPB	1 DDB
			222	74	1660	~1	72	~1	264	14
	9 ~E	3.0	333	100	200	<1 -1	13	~1	204	14
L61100N-51075E	5	1.7	114	199	1920	<1 -1	21	51	202	3
	6	12.9	400	144	1000	<1 <1	3/0	~1	100	9
	\$ •	1.0	423	41	3000	<1 -1	00	<1 -1	204	11
	\$ 	1.3	1090	97	000	51	220	<1 -1	224	4
L61 100N-51 175E	<>	2.2	1040	84 09	980	<1 -1	231	<1	200	o o
L61 100N-51200E	<>	0.8	521	98	540	<1 -1	115	<1 -1	154	3
L6110UN-51225E	<5	<0.5	582	/9	220	<1	127	<1	1/1	3
L6110UN-51250E	<	0.8	785	87	390	<1	1/4	<1	143	3
L6110UN-51275E	6	1.9	3210	50	890	<1	724	<1	194	11
L61100N-51300E	4	0.7	3700	50	510	<1	/92	<1	1/5	11
L6110UN-51325E	11	<0.5	29	18	140	<1	6	<1	42	2
L61100N-51350E	5	<0.5	30	20	80	<1	4	<1	25	1
L61100N-51375E	<	<0.5	22	24	150	<1	4	<1	69	3
L61100N-51400E	7	<0.5	16	34	210	<1	3	<1	49	3
L61100N-51425E	<5	<0.5	106	419	180	<1	18	<1	28	2
L61100N-51450E	<5	<0.5	238	251	210	<1	43	<1	27	2
L61100N-51475E	<5	<0.5	168	122	260	<1	32	<1	42	1
L61100N-51500E	<5	<0.5	247	126	290	<1	47	<1	46	2
L61100N-51525E	<5	<0.5	112	97	190	<1	21	<1	58	3
L61100N-51550E	6	<0.5	25	38	210	<1	4	<1	80	3
L61100N-51575E	5	<0.5	247	269	230	<1	47	<1	71	2
L61100N-51600E	<5	<0.5	106	222	290	<1	19	<1	35	1
L61100N-51625E	5	0.6	649	299	470	<1	127	<1	106	3
L61100N-51650E	<5	<0.5	113	63	570	<1	23	<1	171	1
L61100N-51675E	<5	<0.5	121	67	1040	<1	24	<1	86	1
L61100N-51700E	<5	1.7	172	45	260	<1	35	<1	212	3
L61100N-51725E	<5	1.2	382	80	180	<1	79	<1	159	1
L61100N-51750E	<5	3.6	179	70	480	<1	37	<1	173	6
L61100N-51775E	<5	2.6	98	57	290	<1	20	<1	212	2
L61100N-51800E	<5	2.3	204	63	220	<1	45	<1	115	2
*Dup L60900N-50100E	<5	<0.5	247	150	110	<1	47	<1	84	<1
*Dup L60900N-50400E	<5	1.6	222	60	70	<1	44	<1	154	<1
*Dup L60900N-50700E	<5	1.0	265	78	40	<1	57	<1	202	<1
*Dup L60900N-51000E	<5	0.9	1310	37	200	<1	290	<1	276	4
*Dup L61100N-51050E	9	3.0	335	66	1480	<1	74	<1	241	14
*Dup L61100N-51350E	<5	<0.5	27	15	70	<1	4	<1	25	1
*Dup L61100N-51650E	<5	<0.5	109	62	550	<1	22	<1	167	1
*Std MMISRM14	30	<0.5	12	244	100	34	2	<1	289	<1
*Std MMISRM14	28	<0.5	12	265	120	38	2	<1	293	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method	Sc MMI-M5	Sm MMI-M5	Sn MMI-M5	Sr MMI-M5	Ta MMI-M5	Tb MMI-M5	Te MMI-M5	Th MMI-M5	Ti MMI-M5	ti MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB									
L60900N-50100E	34	70	<1	800	<1	12	<10	20.3	56	<0.5
L60900N-50125E	38	80	<1	880	<1	14	<10	12.1	122	<0.5
L60900N-50150E	45	120	<1	1040	<1	22	<10	18.1	46	<0.5
L60900N-50175E	32	155	<1	800	<1	18	<10	46.6	591	0.5
L60900N-50200E	32	65	<1	250	<1	12	<10	20.1	522	<0.5
L60900N-50225E	18	12	<1	80	<1	3	<10	20.6	839	<0.5
L60900N-50250E	59	982	<1	320	<1	102	<10	32.9	589	<0.5
L60900N-50275E	16	22	<1	110	<1	4	<10	11.5	518	<0.5
L60900N-50300E	26	31	<1	120	<1	4	<10	29.0	1450	<0.5
L60900N-50325E	29	63	<1	250	<1	9	<10	16.0	476	0.9
L60900N-50350E	30	65	<1	430	<1	8	<10	21.0	724	<0.5
L60900N-50375E	13	39	<1	810	<1	6	<10	8.5	49	<0.5
L60900N-50400E	29	54	<1	340	<1	7	<10	19.3	373	<0.5
L60900N-50425E	30	35	<1	320	<1	5	<10	16.2	599	<0.5
L60900N-50450E	<5	9	<1	590	<1	1	<10	5.4	103	<0.5
L60900N-50475E	6	46	<1	740	<1	5	<10	7.9	45	<0.5
L60900N-50500E	6	124	<1	1100	<1	13	<10	3.0	<3	<0.5
L60900N-50525E	20	145	<1	370	<1	14	<10	26.7	340	0.6
L60900N-50550E	1 <b>1</b>	792	<1	750	<1	64	<10	27.5	44	0.7
L60900N-50575E	20	45	<1	50	<1	5	<10	16.2	720	0.7
L60900N-50600E	40	48	<1	60	<1	6	<10	22.2	989	1.0
L60900N-50625E	27	35	<1	50	<1	5	<10	13.6	737	0.9
L60900N-50650E	52	72	<1	60	<1	8	<10	38.8	1270	1.2
L60900N-50675E	30	50	<1	30	<1	7	<10	20.5	596	1.4
L60900N-50700E	31	62	<1	60	<1	7	<10	19.5	342	1.1
L60900N-50725E	69	40	<1	40	<1	7	<10	12.4	281	0.7
L60900N-50750E	106	65	<1	30	<1	12	<10	16.4	443	0.6
L60900N-50775E	91	78	<1	40	<1	12	<10	14.5	303	0.8
L60900N-50800E	106	540	<1	630	<1	58	<10	9.2	43	0.5
L60900N-50825E	47	46	<1	100	<1	5	<10	17.9	671	1.1
L60900N-50850E	49	72	<1	3090	<1	10	<10	12.3	101	0.7
L60900N-50875E	<5	12	<1	600	<1	2	<10	1.1	<3	<0.5
L60900N-50900E	<5	10	<1	480	<1	1	<10	4.1	3	<0.5
L60900N-50925E	34	269	<1	60	<1	21	<10	179	152	<0.5
L60900N-50950E	81	199	<1	60	<1	19	<10	69.8	565	0.6
L60900N-50975E	41	1270	<1	540	<1	123	<10	20.4	41	<0.5
L60900N-51000E	74	247	<1	40	<1	24	<10	58.8	281	1.3
L60900N-51025E	54	109	<1	180	<1	14	<10	63.0	648	1.0
L60900N-51075E	115	47	<1	100	<1	12	<10	20.3	258	0.7
L60900N-51100E	44	29	<1	670	<1	6	<10	3.4	<3	<0.5
L60900N-51125E	37	25	<1	570	<1	4	<10	4.9	6	<0.5
L60900N-51150E	93	658	<1	500	<1	79	<10	22.7	9	<0.5
L61 100N-50875E	45	109	<1	140	<1	14	<10	37.8	315	0.7
L61 100N-50900E	25	39	<1	330	<1	7	<10	2.5	<3	<0.5
L61 100N-50925E	21	20	<1	360	<1	3	<10	3.5	<3	<0.5
L61 100N-50950E	<5	4	<1	1010	<1	<1	<10	<0.5	<3	<0.5
L61100N-51000E	70	76	<1	30	<1	11	<10	54.6	1580	1.1
L61100N-51025E	49	57	<1	30	<1	6	<10	48.8	945	0.6

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Element	Sc MANAL MS	Sm MMI M5	Sn MMI M5	Sr Manal Mas	Та мма м5	TD MANAL MAS	Te MMAL M5	Th MANAL MAS	Ti MMALMES	TI Nanal nas
Det Lim	5	1411411-1413	1	10	1 IVII VII - IVII - IVI	1 IVIIVII-IVIJ	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
L61100N-51050E	83	82	<1	30	<1	10	<10	97.1	788	0.9
L61100N-51075E	79	36	<1	30	<1	7	<10	29.0	803	0.5
L61100N-51100E	153	333	<1	60	<1	37	<10	97.1	363	1.4
L61 100N-51 125E	44	111	<1	20	<1	14	<10	90.3	143	0.8
L61100N-51150E	162	263	<1	20	<1	31	<10	68.5	451	0.8
L61100N-51175E	206	231	<1	20	<1	28	<10	77.5	481	1.3
L61100N-51200E	30	124	<1	120	<1	12	<10	38.7	127	0.8
L61100N-51225E	16	137	<1	220	<1	15	<10	25.2	48	0.5
L61100N-51250E	58	170	<1	70	<1	18	<10	44.0	176	0.8
L61100N-51275E	328	740	<1	30	<1	81	<10	97.7	460	1.6
L61 100N-51 300E	69	771	<1	290	<1	74	<10	37.4	112	1.3
L61100N-51325E	<5	9	<1	340	<1	1	<10	1.1	5	<0.5
L61100N-51350E	<5	12	<1	450	<1	2	<10	1.1	<3	<0.5
L61100N-51375E	5	7	<1	710	<1	1	<10	1.3	<3	<0.5
L61100N-51400E	6	6	<1	1040	<1	1	<10	0.8	<3	<0.5
L61100N-51425E	14	37	<1	420	<1	6	<10	7.5	15	<0.5
L61100N-51450E	8	73	<1	400	<1	11	<10	7.5	3	<0.5
L61100N-51475E	5	49	<1	460	<1	6	<10	5.2	21	<0.5
L61100N-51500E	7	70	<1	440	<1	10	<10	10.6	14	<0.5
L61100N-51525E	10	32	<1	430	<1	5	<10	7.7	<3	<0.5
L61100N-51550E	<5	8	<1	800	<1	1	<10	1.1	<3	<0.5
L61100N-51575E	10	70	<1	1200	<1	10	<10	11.5	46	0.7
L61100N-51600E	<5	35	<1	580	<1	6	<10	3.3	<3	<0.5
L61100N-51625E	21	175	<1	860	<1	22	<10	26.9	99	0.7
L61100N-51650E	31	30	<1	240	<1	4	<10	9.1	79	<0.5
L61100N-51675E	25	34	<1	260	<1	5	<10	10.4	184	<0.5
L61100N-51700E	48	51	<1	50	<1	9	<10	34.3	433	2.0
L61100N-51725E	39	99	<1	190	<1	14	<10	32.0	233	0.6
L61100N-51750E	39	50	<1	30	<1	8	<10	32.3	712	1.2
L61100N-51775E	29	27	<1	40	<1	4	<10	31.0	401	1.1
L61100N-51800E	22	51	<1	200	<1	6	<10	29.8	432	0.5
*Dup L60900N-50100E	33	73	<1	770	<1	12	<10	18.7	74	<0.5
*Dup L60900N-50400E	28	59	<1	320	<1	8	<10	18.0	413	<0.5
*Dup L60900N-50700E	30	67	<1	70	<1	8	<10	17.2	332	0.9
*Dup L60900N-51000E	66	267	<1	20	<1	24	<10	58.6	278	1.4
*Dup L61100N-51050E	77	82	<1	30	<1	10	<10	92.7	764	0.9
*Dup L61100N-51350E	<5	12	<1	460	<1	2	<10	1.0	8	<0.5
*Dup L61100N-51650E	31	30	<1	240	<1	4	<10	9.5	81	<0.5
*Std MMISRM14	7	3	<1	510	<1	<1	<10	17.3	3	<0.5
*Std MMISRM14	7	3	<1	490	<1	<1	<10	19.3	<3	<0.5
*BIK BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*BIK BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element	U MANAL MAS	W MAN ME	Y MANI ME	Yb MMI M5	Zn MMI M5	Zr MANAL NAS
Method Det Lim	10101-1013	1 NINI-1413	WIWII-IWI3 5	WIWI-WI3 1	20	WIWII-IWI3 5
Units	PPB	PPB	PPB	PPB	PPB	PPB
L60900N-50100E	13	<1	306	21	560	27
L60900N-50125E	8	<1	388	24	690	26
L60900N-50150E	9	<1	544	31	430	17
L60900N-50175E	18	<1	316	25	200	95
L60900N-50200E	7	<1	249	18	470	44
L60900N-50225E	6	<1	77	7	460	49
L60900N-50250E	18	<1	1700	92	220	53
L60900N-50275E	4	<1	77	6	220	35
L60900N-50300E	6	<1	74	6	370	52
L60900N-50325E	5	<1	210	12	130	39
L60900N-50350E	5	<1	167	12	170	46
L60900N-50375E	3	<1	156	9	200	12
L60900N-50400E	5	<1	167	10	410	31
L60900N-50425E	3	<1	132	9	120	36
L60900N-50450E	2	<1	19	2	140	14
L60900N-50475E	5	<1	69	5	50	13
L60900N-50500E	13	<1	238	12	50	9
L60900N-50525E	11	<1	203	13	30	36
L60900N-50550E	35	<1	647	39	240	21
L60900N-50575E	5	<1	83	6	200	31
L60900N-50600E	4	<1	96	7	170	46
L60900N-50625E	4	<1	97	7	100	37
L60900N-50650E	3	<1	102	8	260	55
L60900N-50675E	3	<1	112	9	160	27
L60900N-50700E	3	<1	114	8	170	26
L60900N-50725E	4	<1	191	14	40	28
L60900N-50750E	4	<1	295	22	230	44
L60900N-50775E	3	<1	285	20	70	33
L60900N-50800E	5	<1	1240	80	50	23
L60900N-50825E	5	<1	122	9	100	37
L60900N-50850E	3	<1	226	17	140	21
L60900N-50875E	2	<1	57	3	90	10
L60900N-50900E	2	<1	28	2	50	11
L60900N-50925E	8	<1	194	15	380	35
L60900N-50950E	8	<1	304	23	620	53
L60900N-50975E	79	<1	1840	99	470	23
L60900N-51000E	12	<1	370	26	50	47
L60900N-51025E	11	<1	210	16	160	52
L60900N-51075E	6	<1	310	23	1960	22
L60900N-51100E	2	<1	231	13	120	10
L60900N-51125E	2	<1	151	9	60	25
L60900N-51150E	6	<1	1770	105	60	17
L61 100N-50875E	5	<1	294	20	90	34
L61100N-50900E	5	<1	237	15	110	9
L61 100N-50925E	3	<1	114	7	100	11
L61100N-50950E	7	<1	19	<1	110	9
L61100N-51000E	11	<1	210	19	340	75
L61100N-51025E	8	<1	85	7	570	51

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Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	PPR	PPR	PPR	PPR	PPR	PPR
	12		197	15	000	62
	12	~1	170	13	1510	22
	5	~1	604	17	710	50
	11	<1	004	43	/10	52 22
	8	<	180	19	490	33
L6110UN-51150E	19	<1	522	41	340	60
	10	<	465	30	260	90
L61 100N-51200E	ວ 7	<1	160	13	960	24
L6110UN-51225E	(	<1	220	18	530	23
L6110UN-51250E	3	<1	294	21	400	25
L6110UN-51275E	14	1	1270	118	370	95
L61100N-51300E	5	<1	1320	68	280	27
L61100N-51325E	3	<1	28	2	230	9
L61100N-51350E	2	<1	45	2	210	9
L61 100N-51 375E	2	<1	29	2	520	11
L61100N-51400E	3	<1	28	1	870	9
L61100N-51425E	2	<1	148	10	880	13
L61100N-51450E	6	<1	205	14	830	11
L61100N-51475E	3	<1	121	9	2040	12
L61100N-51500E	3	<1	177	12	2110	12
L61100N-51525E	2	<1	111	7	720	12
L61100N-51550E	2	<1	30	2	860	<5
L61100N-51575E	3	<1	196	12	8220	35
L61100N-51600E	2	<1	138	9	1860	<5
L61100N-51625E	6	<1	391	26	5780	48
L61100N-51650E	2	<1	74	5	1230	19
L61100N-51675E	2	<1	132	7	1920	17
L61100N-51700E	5	<1	143	11	730	37
L61100N-51725E	4	<1	235	16	870	25
L61100N-51750E	6	<1	158	12	620	40
L61100N-51775E	5	<1	68	6	600	36
L61100N-51800E	3	<1	81	5	2760	29
*Dup L60900N-50100E	13	<1	277	19	630	26
*Dup L60900N-50400E	4	<1	163	10	390	34
*Dup L60900N-50700E	2	<1	116	8	190	24
*Dup L60900N-51000E	11	<1	331	25	60	44
*Dup L61100N-51050E	12	<1	132	14	860	57
*Dup L61100N-51350E	2	<1	42	2	270	9
*Dup L61100N-51650E	3	<1	75	5	1300	18
*Std MMISRM14	28	<1	7	<1	320	19
*Std MMISRM14	31	<1	8	<1	320	18
*BIK BLANK	<1	<1	<5	<1	<20	<5
*BIK BLANK	<1	<1	<5	<1	<20	<5

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# **Certificate of Analysis**

Work Order: 095335

Date: Oct 18, 2007

#### To: Geotronics Consulting Inc.

Attn: David G.Mark 6204 - 125th Street SURREY BC V3X 2E1

P.O. No.	Project: Nakina
Project No.	DEFAULT
No. Of Samples	99
Date Submitted	Aug 30, 2007
Report Comprises	Pages 1 to 16
	(Inclusive of Cover Sheet)

#### Distribution of unused material:

STORE: 99 Soils

Russ Calow, B.Sc., C.Chem. Vice President Global Geochemistry

#### ISO 17025 Accredited for Specific Tests. SCC No. 456

Certified By ::

Report Footer:

L.N.R. = Listed not received n.a. = Not applicable I.S. = Insufficient Sample -- = No result

\*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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Element Method	Ag MMI-M5	AI MMI-M5	As MMI-M5	Au MMI-M5	Ba MMI-M5	Bi MMI-M5	Ca MMI-M5	Cd MMI-M5	Ce MMI-M5	Co MMI-M5
Det.Lim.	1 DDD		1U DDB			1 DDB		1 DDD		
	40		-10	FFB AD	10100		- CE MI	2	15	20
	12	7	<10	0.9	7490	<1 -1	210	3	15	28
	14	(	<10	0.8	7480	<1 -1	220	1	14	32
	12	6	<10	1.0	6690	<1	200	3	8 40	55
	12	4	10	0.5	2940	<1 .4	240	9	18	47
	17	<b>&gt;</b>	<10	0.4	4290	<1 -1	390	1	10	82
	24	(	<10	0.2	3820	<1 .4	300	10	13	103
	21	э ,	<10	0.3	3420	<1 -1	280	10	15	12
	12	4	10	0.6	4100	<1 -4	240	ت م	12	40
L605001N-51350E	12	4	20	0.7	1930	<1 .4	180	3	10	49
L60500N-51375E	14	5	10	0.7	10400	<1	180	3	9	54
L60500N-51400E	15	4	10	0.7	10200	<1	220	4	16	36
	17	4	<10	0.9	10900	<1	2/0	э	8 45	31
L60500N-51450E	16	4	20	0.8	13200	<1	240	4	15	20
L60500IN-51475E	20	4	10	1.1	14100	<1	260	2	6	25
L60500N-51500E	20	4	20	1.3	12000	<1	230	2	<5	29
L60500N-51525E	35	59	170	8.Z	0.658	<1 /	290	31	1830	8
L60500N-51550E	27	165	250	5.8	8600	<1	150	51	2920	27
L60500N-51575E	52	12	30	13.5	4960	<1	580	22	90	<5
L60500N-51600E	5/	3	<10	30.4	/930	<1	550	8	58	16
L60500N-51625E	106	3	<10	63.8	5580	<1	490	5	16	28
L60500N-51650E	114	2	10	0/.0	2610	<1	300	5	21	30
L60500N-51675E	172	3	30	0.0	0100	< I -4	240	20	17	01
L60500N-51700E	300	4	100	9.6	1320	<1	270	709	12	40
L60500N-51725E	1300		40	27.3	0/0	< I - 4	230	100	5800	137
L60500N-51750E	10	29	60	320	14000	<1 -1	270	12	2090	13
L60500N-51775E	19	10	50	22.9	14200	~1 ~4	260	19	2240	<0 -5
1 60500N-51000E	50	10	160	30.0	0000	~1	200	10	3310	<5
L60500N-51625E	51	5	400	15.0	7020	~1	270	30	104	<5
L60500N-51850E	70 68	5	400	10.1	7230	<1	240	27	43	-0
L 60500N-51073E	124	-	230	4.0 16.4	3340	-1	300	27 73		20
L 60500N-51900E	124		150	0.4	1/00	<1	230	13	17	17
L60500N-51925E	40 56	2	110	5.5	3110	<1	200	12	21	31
L 60500N-51975E	67	2 A	260	7.0	2860	-1	200	8	13	32
L60500N-52000E	68		200	5.2	2000	-1	190	6	14	35
1 60500N-52005E	68	7	160	5.9	5720	-1	240	ä	12	28
L 605000N-52025E	60	, 8	190	61	13000	-1	270	q	14	20
L 605000N-52035E	102	ŝ	220	7.1	6000	-1 c1	220	12	10	13
L 605000N-52100E	an	8	220	81	8540	<1	250	10	Q.	25
L60500N-52150E	28	10	220 QA	10.8	12400	<1	260	5	10	20
L60800N-51100E	20	10	30	3.7	6010	-1	200	26	29	17
L 60800N-51125E	25		20	1.8	3260	<1	320	20 14	20	37
L60800N-51150E	2.J 78	+ A	20 60	3.7	7460	<1	320	24	27	18
L60800N-51175E	, 5 35	e a	70	1.8	11900	<1	330	2- <del>1</del> A	20	27
L60800N-51200E	Я	130	90 90	2.1	3130	<1	260	12	992	11
L60800N-51225E	86	38	220	43	3680	<1	320	31	379	11
L60800N-51250E	39	70	80	22	14600	<1	290	36	1480	28
L60800N-51275E	14	>300	450	2.1	2470	<1	<10	28	1220	36

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Element Method	Ag MMI-M5	AI MMI-M5	As MMI-M5	Au MMI-M5	Ba MMI-M5	Bi MMI-M5	Ca MMI-M5	Cd MMI-M5	Ce MMI-M5	Co MMI-M5
Det.Lim.	1	ן אימט	10	0.1	10	1	10	1	5	5
Units	PPB	PPIW	PPB	PPB	PPB	PPB	PPIW	PPB	PPB	PPB
L6080UN-51325E	28	145	430	2.7	3640	<1	110	62	3360	19
L60800N-51350E	142	24	80	17.3	8920	<1	180	51	453	<5
L60800N-51375E	129	226	620	23.8	1590	<1	20	24	3770	51
L60800N-51400E	304	143	790	36.3	6760	<1	40	114	4570	38
L60800N-51425E	310	278	460	2.9	1940	<1	<10	30	610	15
L60800N-51450E	52	188	330	7.9	1580	<1	20	20	5210	16
L60800N-51475E	100	95	210	11.7	10500	<1	110	23	6940	6
L60800N-51500E	118	10	110	35.6	16800	<1	230	122	107	<5
L60800N-51525E	58	189	420	14.1	5830	<1	80	25	4380	15
L60800N-51550E	354	8	10	7.7	14000	<1	550	47	86	18
L60800N-51575E	97	6	70	10.0	8820	<1	270	27	87	5
L60800N-51600E	276	16	80	27.6	25300	<1	460	28	884	7
L60800N-51625E	30	107	280	16.6	5200	<1	60	11	7570	10
L60800N-51650E	68	8	50	6.5	10500	<1	400	10	184	7
L60800N-51675E	81	4	130	6.0	4150	<1	310	21	47	11
L60800N-51700E	108	5	80	10.9	7500	<1	410	17	33	8
L60800N-51725E	48	3	160	7.0	4270	<1	160	4	14	11
L60800N-51750E	54	3	120	6.5	6960	<1	180	4	10	12
L60800N-51775E	227	3	60	23.3	12700	<1	270	20	10	<5
L60800N-51800E	15	3	90	2.5	1980	<1	170	7	19	12
L60800N-51825E	12	3	80	4.1	4700	<1	200	4	14	12
L60800N-51850E	57	5	70	9.9	8940	<1	270	10	11	22
L60800N-51875E	46	4	90	8.3	3000	<1	350	15	21	20
L60800N-51900E	28	6	30	14.5	11700	<1	280	5	11	17
L60800N-51925E	22	4	50	14.2	7030	<1	200	3	9	16
L60800N-51950E	27	4	30	13.1	3620	<1	210	4	8	22
L60800N-51975E	36	5	30	17.3	4170	<1	230	6	9	22
L60800N-52000E	23	4	20	17.2	11700	<1	230	4	9	17
L60800N-52025E	41	4	60	10.3	9790	<1	240	5	7	17
L60800N-52075E	27	4	20	14.5	8650	<1	270	7	11	16
L60800N-52100E	155	6	200	4.8	2910	<1	330	31	13	17
L60600N-51100E	12	6	<10	0.5	7010	<1	280	9	26	19
L60600N-51125E	14	9	<10	0.7	13200	<1	220	2	9	35
L60600N-51150E	13	6	<10	0.4	8040	<1	190	2	9	37
L60600N-51175E	12	4	10	0.4	1400	<1	260	7	15	48
L60600N-51200E	12	4	10	0.3	1630	<1	170	4	11	85
L60600N-51225E	8	3	30	0.2	1000	<1	270	7	31	60
L60600N-51250E	15	4	<10	0.2	2590	<1	280	8	12	29
L60600N-51275E	19	8	<10	0.3	3390	<1	220	5	7	82
L60600N-51300E	13	4	10	0.5	710	<1	150	4	10	54
L60600N-51325E	28	7	<10	2.8	1810	<1	210	11	15	110
L60600N-51350E	17	5	<10	0.4	4480	<1	170	6	6	79
L60600N-51375E	15	3	10	0.8	6570	<1	260	7	15	24
L60600N-51400E	12	3	10	0.6	8220	<1	220	4	10	29
L60600N-51425E	16	4	<10	1.0	7580	<1	280	7	12	19
L60600N-51450E	126	3	20	6.3	2060	<1	320	34	22	62
L60600N-51475E	9	176	250	1.5	2840	<1	120	118	785	30
L60600N-51500E	15	123	210	4.6	3900	<1	170	104	697	24

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Element	Ag	AI	As	Au	Ba	Bi	Ca	Cd	Ce	Co
Method	MMI-M5									
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
L60600N-51525E	6	121	130	0.9	4540	<1	120	12	500	8
L60600N-51550E	9	277	60	0.8	2240	<1	60	25	821	15
L60600N-51575E	9	298	70	1.1	5080	<1	40	54	509	12
*Dup L60500N-51150E	12	7	<10	0.9	12900	<1	220	3	18	24
*Dup L60500N-51450E	16	4	20	0.9	13400	<1	250	4	9	25
*Dup L60500N-51750E	98	34	80	344	39600	<1	280	14	6370	18
*Dup L60500N-52050E	72	9	190	6.8	15000	<1	280	9	70	28
*Dup L60800N-51350E	142	23	90	24.5	10200	<1	180	43	436	<5
*Dup L60800N-51625E	28	98	250	11.6	5130	<1	70	12	6390	10
*Dup L60800N-51925E	26	4	50	18.6	8050	<1	210	3	38	19
*Dup L60600N-51225E	12	3	30	0.5	1600	<1	280	8	41	63
*Dup L60600N-51525E	6	118	120	1.1	4500	<1	120	12	534	7
*Std MMISRM14	21	39	20	39.5	110	<1	290	8	16	45
*Std MMISRM14	18	42	10	38.3	100	<1	270	8	19	49
*Std MMISRM14	18	41	10	38.6	100	<1	270	8	16	47
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method	Cr MMI-M5 100	Cu MMI-M5 10	Dy MMI-M5 1	Er MMI-M5	Eu MMI-M5	Fe MMI-M5 1	Gd MMI-M5 1	La MMI-M5 1	Li MMI-M5 5	Mg MMI-M5 1
Det.Lim.	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
L 60500N-51 150E	<100	720	6	26	16	4	10	5	<5	20
L60500N-51175E	<100	1050	7	3.2	2.1	4	11	- 5	<5	
L60500N-51200E	<100	1070	4	1.8	0.9	4	6	2	<5	19
L60500N-51225E	<100	870	6	2.6	1.7	5	- 8	- 4	<5	26
L60500N-51250E	<100	700	3	1.4	0.7	3	4	1	8	
L60500N-51275E	<100	770	- 5	2.3	1.1	3	6	, 1	6	68
L60500N-51300E	<100	950	5	2.3	1.3	4	7	2	<5	57
L60500N-51325E	<100	610	6	2.5	1.5	4	8	2	<5	48
L60500N-51350E	<100	540	4	1.9	1.3	4	6	2	6	51
L60500N-51375E	<100	410	4	1.6	0.6	4	6	1	<5	47
L60500N-51400E	<100	380	5	2.1	1.5	3	10	8	<5	51
L60500N-51425E	<100	320	5	2.2	1.2	3	8	2	<5	53
L60500N-51450E	<100	200	5	2.1	1.6	3	11	9	<5	52
L60500N-51475E	<100	220	4	1.9	0.8	3	8	2	<5	78
L60500N-51500E	<100	260	3	1.1	<0.5	3	4	<1	<5	68
L60500N-51525E	<100	410	215	87.6	85.9	22	422	793	<5	31
L60500N-51550E	<100	530	364	145	152	51	717	1650	<5	18
L60500N-51575E	<100	410	19	6.5	10.4	10	49	90	<5	26
L60500N-51600E	<100	770	28	11.9	10.1	7	55	41	<5	92
L60500N-51625E	<100	1130	8	3.8	2.3	5	14	10	<5	98
L60500N-51650E	<100	730	5	2.3	1.8	5	10	10	<5	75
L60500N-51675E	<100	260	5	1.7	2.5	3	14	8	<5	61
L60500N-51700E	<100	530	5	2.5	1.9	5	9	6	<5	78
L60500N-51725E	<100	4270	3	1.5	1.3	4	7	7	<5	73
L60500N-51750E	<100	70	251	60.2	261	3	1210	3550	<5	35
L60500N-51775E	<100	70	43	11.8	35.0	3	167	365	<5	6
L60500N-51800E	<100	20	234	58.1	263	4	1220	3370	<5	8
L60500N-51825E	<100	100	44	12.5	30.8	3	159	356	<5	18
L60500N-51850E	<100	210	38	10.4	25.6	3	131	243	<5	25
L60500N-51875E	<100	180	15	5.3	6.7	3	35	43	<5	60
L60500N-51900E	<100	380	10	3.8	3.5	4	20	20	<5	81
L60500N-51925E	<100	380	5	2.5	1.5	4	9	12	<5	55
L60500N-51950E	<100	410	6	2.5	1.6	5	9	10	<5	52
L60500N-51975E	<100	400	6	2.4	1.4	4	8	8	<5	78
L60500N-52000E	<100	410	4	1.9	1.0	4	6	6	5	87
L60500N-52025E	<100	310	8	3.1	1.5	4	10	5	7	94
L60500N-52050E	<100	370	7	3.0	1.2	4	10	5	<5	77
L60500N-52075E	<100	270	8	3.0	1.6	4	10	4	<5	67
L60500N-52100E	<100	350	8	3.1	1.2	4	10	4	7	87
L60500N-52150E	<100	420	6	2.9	1.0	4	8	4	6	70
L60800N-51100E	<100	690	10	4.1	3.9	4	20	16	<5	30
L60800N-51125E	<100	730	7	3.0	2.0	4	10	7	<5	26
L60800N-51150E	<100	460	16	7.1	4.8	4	26	13	<5	25
L60800N-51175E	<100	230	3	1.0	<0.5	3	4	3	<5	29
L60800N-51200E	<100	210	90	35.3	36.0	27	172	423	<5	28
L60800N-51225E	<100	160	138	50.1	61.6	18	261	381	<5	30
L60800N-51250E	<100	180	299	121	122	47	597	1310	<5	49
L60800N-51275E	<100	130	54	17.2	25.8	84	120	432	<5	4

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Element Method	Cr MMI-M5	Cu MMI-M5	Dy MMI-M5	Er MMI-M5	Eu MMI-M5	Fe MMI-M5	Gd MMI-M5	La MMI-M5	Li MMI-M5	Mg MMI-M5
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPW	PPB	PPB	PPB	PPW
L6080UN-51325E	<100	340	1/8	64.5	92.9	54	438	1/00	<>	14
L6080UN-51350E	<100	240	94	30.2	53.0	(	259	458	<5	25
L6080UN-51375E	<100	270	108	30.6	60.7	66	2/4	1250	<>	3
L6080UN-51400E	<100	180	90	24.8	53.6	/9	245	1650	<5	10
L60800N-51425E	<100	60	26	9.2	12.1	97	56	183	<5	<1
L6080UN-51450E	<100	330	272	95.2	138	50	644	2510	<5	2
L60800N-51475E	<100	270	330	119	161	22	795	3/20	<5	17
L6080UN-51500E	<100	150	113	32.7	76.4	3	410	617	<>	16
L60800N-51525E	<100	100	130	46.3	61.6	43	304	2060	<5	10
L60800N-51550E	<100	/40	94	37.1	32.6	5	192	115	<5	69
L60800N-51575E	<100	190	49	17.5	21.8	4	120	89	<5	45
L60800N-51600E	<100	530	369	145	158	7	853	693	<5	51
L60800N-51625E	<100	150	332	124	165	28	786	4090	<5	8
L60800N-51650E	<100	170	56	19.6	29.5	6	151	207	<5	53
L60800N-51675E	<100	420	8	3.6	2.8	4	15	23	<5	61
L60800N-51700E	<100	330	8	3.5	2.4	4	15	13	<5	48
L60800N-51725E	<100	170	4	1.7	0.9	3	6	9	<5	63
L60800N-51750E	<100	200	3	1.3	0.6	3	5	6	<5	60
L60800N-51775E	<100	90	9	3.4	3.1	2	19	10	<5	40
L60800N-51800E	<100	790	9	4.1	2.7	3	13	10	6	56
L60800N-51825E	<100	220	6	2.5	1.5	3	9	7	<5	35
L60800N-51850E	<100	420	7	2.6	1.7	3	10	4	<5	78
L60800N-51875E	<100	590	8	3.6	2.5	4	13	6	<5	79
L60800N-51900E	<100	310	5	2.1	0.9	3	8	4	<5	66
L60800N-51925E	<100	270	5	1.8	1.0	3	7	3	6	71
L60800N-51950E	<100	280	6	2.3	1.8	2	10	3	6	113
L60800N-51975E	<100	340	9	3.5	2.4	2	14	4	9	124
L60800N-52000E	<100	260	7	2.4	1.7	3	12	4	5	74
L60800N-52025E	<100	300	5	2.2	1.1	3	9	3	<5	74
L60800N-52075E	<100	310	6	2.5	1.7	3	10	4	<5	54
L60800N-52100E	<100	990	8	3.5	2.6	4	13	8	<5	18
L60600N-51100E	<100	730	9	4.0	3.2	4	17	11	<5	15
L6060UN-51125E	<100	640	4	1.8	0.6	4	5	3	<5	29
L60600N-51150E	<100	620	4	1.8	0.7	4	5	3	<5	33
L6060UN-51175E	<100	860	5	2.6	1.6	4	7	3	6	55
L6060UN-51200E	<100	850	4	1.8	1.1	4	5	3	<5	35
L6060UN-51225E	<100	1410	8	4.3	2.7	13	11	10	<5	49
L60600N-51250E	<100	600	6	2.5	1.7	3	8	3	<5	39
L60600N-51275E	<100	/90	3	1.5	0.8	3	4	2	<5	85
L60600N-51300E	<100	780	3	1.7	1.0	4	4	2	<5	48
L60600N-51325E	<100	1080	6	3.0	1.6	3	9	3	6	104
L60600N-51350E	<100	610	3	1.2	<0.5	3	4	2	<5	69
L60600N-51375E	<100	490	7	3.3	1.8	4	11	4	<5	44
L60600N-51400E	<100	420	5	2.0	1.1	3	8	3	<5	39
L60600N-51425E	<100	300	6	2.5	1.5	3	10	4	<5	45
L60600N-51450E	<100	350	8	4.1	2.5	5	13	7	<5	50
L60600N-51475E	<100	150	54	21.1	22.9	107	108	255	<5	12
L60600N-51500E	<100	70	36	13.6	16.3	75	76	264	<5	27

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	-									
Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5									
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
L60600N-51525E	<100	50	28	10.6	11.3	60	58	255	<5	17
L60600N-51550E	<100	200	105	38.3	31.2	44	164	315	<5	10
L60600N-51575E	<100	90	40	14.6	14.4	34	73	218	<5	14
*Dup L60500N-51150E	<100	620	5	2.4	0.9	3	8	6	<5	21
*Dup L60500N-51450E	<100	260	5	1.9	0.9	3	8	4	<5	55
*Dup L60500N-51750E	<100	90	263	62.5	273	3	1250	3590	<5	36
*Dup L60500N-52050E	<100	350	7	3.0	1.2	4	11	47	6	82
*Dup L60800N-51350E	<100	240	87	29.0	51.5	6	250	478	<5	25
*Dup L60800N-51625E	<100	150	325	122	159	26	761	3590	<5	9
*Dup L60800N-51925E	<100	320	5	2.0	1.1	3	7	22	6	74
*Dup L60600N-51225E	<100	2200	7	3.5	2.3	12	10	22	<5	52
*Dup L60600N-51525E	<100	50	29	11.3	11.9	58	61	283	<5	16
*Std MMISRM14	<100	730	2	0.7	0.9	2	4	3	<5	37
*Std MMISRM14	<100	770	2	0.7	0.9	2	4	4	<5	35
*Std MMISRM14	<100	730	2	0.8	0.8	2	4	3	<5	34
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method	Mo MMI-M5	Nb MMI-M5	Nd MMI-M5	Ni MMI-M5	Pb MMI-M5	Pd MMI-M5	Pr MMI-M5	Pt MMI-M5	Rb MMI-M5	Sb MMI-M5
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
L60500N-51150E	7	1.0	19	47	<10	<1	3	<1	25	<1
L60500N-51175E	6	<0.5	20	67	10	<1	3	<1	23	<1
L60500N-51200E	6	<0.5	9	77	10	<1	1	<1	24	<1
L60500N-51225E	7	<0.5	15	104	<10	<1	2	<1	26	<1
L60500N-51250E	11	<0.5	5	143	10	<1	<1	<1	14	<1
L60500N-51275E	12	<0.5	5	235	20	<1	<1	<1	23	<1
L60500N-51300E	12	<0.5	9	178	10	<1	1	<1	29	<1
L60500N-51325E	6	<0.5	12	123	<10	<1	2	<1	45	<1
L60500N-51350E	13	<0.5	10	104	<10	<1	1	<1	45	<1
L60500N-51375E	11	<0.5	6	113	20	<1	<1	<1	47	<1
L60500N-51400E	8	<0.5	23	76	<10	<1	4	<1	40	<1
L60500N-51425E	6	<0.5	9	70	<10	<1	1	<1	36	<1
L60500N-51450E	7	<0.5	27	52	<10	<1	4	<1	35	<1
L60500N-51475E	8	<0.5	10	46	10	<1	1	<1	31	<1
L60500N-51500E	9	<0.5	5	60	<10	<1	<1	<1	30	<1
L60500N-51525E	<5	<0.5	1580	395	550	<1	326	<1	51	4
L60500N-51550E	6	<0.5	2900	459	720	<1	649	<1	94	6
L60500N-51575E	<5	<0.5	191	125	30	<1	37	<1	29	<1
L60500N-51600E	<5	<0.5	104	111	10	<1	19	<1	18	1
L60500N-51625E	6	<0.5	21	197	<10	<1	4	<1	25	1
L60500N-51650E	8	<0.5	20	84	10	<1	4	<1	26	1
L60500N-51675E	10	<0.5	31	32	160	<1	4	<1	33	2
L60500N-51700E	6	<0.5	15	99	40	<1	2	<1	39	1
L60500N-51725E	32	<0.5	16	175	4130	<1	3	<1	50	26
L60500N-51750E	9	<0.5	7320	47	260	<1	1390	<1	142	2
L60500N-51775E	11	<0.5	798	21	40	<1	153	<1	86	<1
L60500N-51800E	<5	<0.5	7260	18	90	<1	1380	<1	146	<1
L60500N-51825E	11	<0.5	736	12	100	<1	139	<1	74	2
L60500N-51850E	16	<0.5	567	18	190	<1	105	<1	65	3
L60500N-51875E	11	<0.5	104	27	150	<1	18	<1	64	1
L60500N-51900E	22	<0.5	48	54	50	<1	8	<1	59	2
L60500N-51925E	18	<0.5	18	58	50	<1	4	<1	54	3
L60500N-51950E	9	<0.5	17	7 <del>9</del>	30	<1	3	<1	56	2
L60500N-51975E	12	<0.5	13	84	80	<1	2	<1	52	4
L60500N-52000E	16	<0.5	10	87	70	<1	2	<1	58	5
L60500N-52025E	21	<0.5	10	69	150	<1	2	<1	40	3
L60500N-52050E	12	<0.5	11	65	80	<1	2	<1	43	3
L60500N-52075E	31	<0.5	11	41	460	<1	2	<1	50	5
L60500N-52100E	11	<0.5	8	63	180	<1	1	<1	45	5
L60500N-52150E	12	<0.5	9	83	20	<1	1	<1	34	2
L60800N-51100E	6	<0.5	51	64	30	<1	8	<1	29	<1
L60800N-51125E	7	<0.5	19	105	20	<1	3	<1	23	<1
L60800N-51150E	8	<0.5	43	80	30	<1	7	<1	15	<1
L60800N-51175E	9	<0.5	7	63	60	<1	1	<1	14	<1
L60800N-51200E	<5	<0.5	733	192	300	<1	155	<1	186	3
L60800N-51225E	<5	<0.5	872	96	170	<1	172	<1	78	3
L60800N-51250E	6	1.6	2170	388	120	<1	475	<1	16	3
L60800N-51275E	7	3.4	677	66	2850	<1	161	<1	122	11

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Element Method	Mo MMI-M5	Nb MMI-M5	Nd MMI-M5	Ni MMI-M5	Pb MMI-M5	Pd MMI-M5	Pr MMI-M5	Pt MMI-M5	Rb MMI-M5	Sb MMI-M5
Det.Lim.	PPB	U.S PPB	1 PPR	DDB DDB	PPR	I PPR	PPR	1 DDB	DDB	1 DDB
	7		2200	076	1020	-110	557	-110	100	110
	1	-0.9 -0.5	1000	270	1000	<1 ~1	330	<1 -1	100	
	<5	<0.5	1090	00 70	1200	S1 -4	210	<1 -4	94	3
	12	1.0	15/0	/b 00	0400	<1 -1	300	<1 -1	179	20
	9	1.5	1000	00	4000	<1 -1	411	<1 -1	120	40
	0	4.7	250	30	4200	~1	843	~1	223	10
	0 7	1.0	3010	39	1020	<1 -4	043	<1 -4	100	10
L00000N-51475E	1	0.5	4400	110	1040	<1 -4	1070	<1 -4	165	0
	12	<0.5	1080	69	000	<1 .4	201	<1 •1	42	2
L60800N-51525E	6	0.7	1890	64	1830	<1	488	<1	123	10
	8	<0.5	332	19	10	<1	51	<1	18	2
L60800N-51575E	9	<0.5	292	36	70	<1	46	<1	46	1
L6080UN-51600E	6	<0.5	2270	90	60	<1	3/4	<1	34	1
L60800N-51625E	6	0.8	45/0	38	1030	<1	1140	<1	219	(
L60800N-51650E	<>	<0.5	492	83	20	<1	87	<1	20	<1
L60800N-51675E	7	<0.5	39	62	50	<1	7	<1	48	2
L60800N-51700E	6	<0.5	26	53	40	<1	5	<1	30	2
L60800N-51725E	12	<0.5	11	33	30	<1	2	<1	45	3
L60800N-51750E	10	<0.5	7	31	50	<1	1	<1	46	2
L60800N-51775E	13	<0.5	35	10	350	<1	5	<1	31	2
L60800N-51800E	9	<0.5	27	28	10	<1	4	<1	63	2
L60800N-51825E	8	<0.5	18	27	<10	<1	3	<1	53	2
L60800N-51850E	14	<0.5	12	36	110	<1	2	<1	28	2
L60800N-51875E	19	<0.5	19	63	10	<1	3	<1	36	<1
L60800N-51900E	10	<0.5	10	35	20	<1	1	<1	32	2
L60800N-51925E	15	<0.5	10	31	20	<1	1	<1	36	3
L60800N-51950E	28	<0.5	12	30	20	<1	2	<1	23	1
L60800N-51975E	35	<0.5	17	31	30	<1	2	<1	21	1
L60800N-52000E	24	<0.5	18	25	20	<1	3	<1	25	1
L60800N-52025E	16	<0.5	11	38	30	<1	1	<1	31	2
L60800N-52075E	12	<0.5	16	31	10	<1	2	<1	37	1
L60800N-52100E	19	<0.5	26	50	90	<1	4	<1	32	5
L60600N-51100E	6	<0.5	36	39	<10	<1	6	<1	26	<1
L60600N-51125E	5	<0.5	8	77	30	<1	1	<1	20	<1
L60600N-51150E	7	<0.5	8	45	<10	<1	1	<1	16	<1
L60600N-51175E	8	<0.5	11	98	10	<1	2	<1	33	<1
L60600N-51200E	12	<0.5	9	136	<10	<1	1	<1	27	<1
L60600N-51225E	13	<0.5	27	209	<10	<1	5	<1	21	2
L60600N-51250E	7	<0.5	13	99	<10	<1	2	<1	21	<1
L60600N-51275E	13	<0.5	4	194	20	<1	<1	<1	32	<1
L60600N-51300E	18	<0.5	8	145	60	<1	1	<1	36	<1
L60600N-51325E	18	<0.5	9	221	30	<1	1	<1	32	<1
L60600N-51350E	15	<0.5	5	153	10	<1	<1	<1	39	<1
L60600N-51375E	7	<0.5	16	67	10	<1	2	<1	42	<1
L60600N-51400E	6	<0.5	12	73	10	<1	2	<1	48	<1
L60600N-51425E	7	1.0	13	54	<10	<1	2	<1	35	<1
L60600N-51450E	7	<0.5	23	441	20	<1	4	<1	21	2
L60600N-51475E	8	2.1	478	129	880	<1	107	<1	61	8
L60600N-51500E	6	0.8	365	85	780	<1	84	<1	105	6

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Element	Mo	Nb	Nd	Ni	РЪ	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5									
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB									
L60600N-51525E	8	1.6	288	92	940	<1	70	<1	177	4
L60600N-51550E	<5	<0.5	588	84	410	<1	125	<1	102	2
L60600N-51575E	<5	<0.5	334	112	970	<1	76	<1	84	2
*Dup L60500N-51150E	5	<0.5	15	44	<10	<1	2	<1	24	<1
*Dup L60500N-51450E	6	<0.5	11	55	<10	<1	2	<1	37	<1
*Dup L60500N-51750E	8	<0.5	7360	60	330	<1	1400	<1	149	2
*Dup L60500N-52050E	13	<0.5	42	98	90	<1	11	<1	46	3
*Dup L60800N-51350E	5	<0.5	1120	44	1170	<1	220	<1	95	2
*Dup L60800N-51625E	6	0.6	4280	43	1120	<1	1040	<1	204	7
*Dup L60800N-51925E	15	<0.5	18	37	20	<1	4	<1	35	3
*Dup L60600N-51225E	15	<0.5	25	317	<10	<1	5	<1	22	2
*Dup L60600N-51525E	8	1.3	309	88	1000	<1	75	<1	175	4
*Std MMISRM14	40	<0.5	13	268	120	50	4	<1	290	<1
*Std MMISRM14	39	<0.5	13	302	120	49	2	<1	275	<1
*Std MMISRM14	38	<0.5	15	298	110	48	3	<1	273	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method	Sc MMI-M5	Sm MMI-M5	Sn MMI-M5	Sr MMI-M5	Ta MMI-M5	Tb MMI-M5	Te MMI-M5	Th MMI-M5	Ti MMI-M5	TI MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB									
L60500N-51150E	<5	8	<1	340	<1	1	<10	2.1	<3	<0.5
L60500N-51175E	6	8	<1	310	<1	2	<10	2.7	<3	<0.5
L60500N-51200E	<5	4	<1	340	<1	<1	<10	1.9	<3	<0.5
L60500N-51225E	9	6	<1	480	<1	1	<10	1.8	<3	<0.5
L60500N-51250E	<5	2	<1	1140	<1	<1	<10	1.4	6	<0.5
L60500N-51275E	5	3	<1	620	<1	<1	<10	1.0	<3	<0.5
L60500N-51300E	6	4	<1	440	<1	<1	<10	1.0	<3	<0.5
L60500N-51325E	6	5	<1	650	<1	1	<10	1.0	<3	<0.5
L60500N-51350E	6	4	<1	360	<1	<1	<10	1.0	<3	<0.5
L60500N-51375E	<5	3	<1	330	<1	<1	<10	0.7	<3	<0.5
L60500N-51400E	<5	8	<1	400	<1	1	<10	0.8	<3	<0.5
L60500N-51425E	5	5	<1	410	<1	1	<10	0.8	<3	<0.5
L60500N-51450E	<5	9	<1	410	<1	1	<10	0.7	<3	<0.5
L60500N-51475E	<5	5	<1	540	<1	<1	<10	0.6	<3	<0.5
L60500N-51500E	<5	3	<1	520	<1	<1	<10	<0.5	<3	<0.5
L60500N-51525E	38	419	<1	280	<1	51	<10	13.7	28	0.7
L60500N-51550E	183	738	<1	150	<1	89	<10	48.4	140	0.8
L60500N-51575E	<5	54	<1	410	<1	5	<10	4.3	<3	<0.5
L60500N-51600E	<5	42	<1	620	<1	7	<10	2.0	<3	<0.5
L60500N-51625E	19	9	<1	460	<1	2	<10	0.7	<3	<0.5
L60500N-51650E	16	7	<1	340	<1	1	<10	0.7	<3	<0.5
L60500N-51675E	5	12	<1	280	<1	1	<10	<0.5	<3	<0.5
L60500N-51700E	10	6	<1	310	<1	1	<10	<0.5	<3	<0.5
L60500N-51725E	<5	6	<1	300	<1	<1	<10	<0.5	<3	1.0
L60500N-51750E	16	1630	<1	990	<1	100	<10	49.5	<3	2.8
L60500N-51775E	<5	204	<1	670	<1	15	<10	11.8	<3	1.0
L60500N-51800E	<5	1610	<1	1270	<1	96	<10	34.7	<3	2.2
L60500N-51825E	<5	178	<1	680	<1	15	<10	5.7	<3	1.1
L60500N-51850E	<5	143	<1	580	<1	12	<10	4.5	<3	1.0
L60500N-51875E	<5	32	<1	350	<1	4	<10	2.3	<3	0.8
L60500N-51900E	<5	16	<1	400	<1	2	<10	1.2	<3	0.8
L60500N-51925E	5	6	<1	460	<1	1	<10	0.9	<3	0.6
L60500N-51950E	6	6	<1	370	<1	1	<10	0.9	<3	0.5
L60500N-51975E	5	5	<1	450	<1	1	<10	1.1	<3	0.7
L60500N-52000E	<5	4	<1	570	<1	<1	<10	0.7	<3	0.6
L60500N-52025E	<5	5	<1	610	<1	2	<10	0.9	<3	0.5
L60500N-52050E	<5	5	<1	620	<1	1	<10	0.9	<3	0.5
L60500N-52075E	<5	6	<1	480	<1	2	<10	0.8	<3	0.6
L60500N-52100E	<5	5	<1	800	<1	1	<10	0.6	<3	0.5
L60500N-52150E	<5	4	<1	680	<1	1	<10	0.7	<3	<0.5
L60800N-51100E	10	17	<1	320	<1	2	<10	0.9	<3	<0.5
L60800N-51125E	11	7	<1	290	<1	1	<10	0.7	<3	<0.5
L60800N-51150E	11	17	<1	360	<1	3	<10	0.9	<3	<0.5
L60800N-51175E	<5	3	<1	460	<1	<1	<10	<0.5	<3	<0.5
L60800N-51200E	56	179	<1	270	<1	22	<10	16.1	49	0.7
L60800N-51225E	48	257	<1	240	<1	34	<10	15.0	18	0.7
L60800N-51250E	143	573	<1	350	<1	72	<10	36.6	52	<0.5
L60800N-51275E	35	142	<1	10	<1	15	<10	34.2	447	0.7

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Element Method	Sc MMI-M5	Sm MMI-M5	Sn MMI-M5	Sr MMI-M5	Ta MMI-M5	Tb MMI-M5	Te MMI-M5	Th MMI-M5	Ti MMI-M5	ti MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB									
L60800N-51325E	99	508	<1	70	<1	50	<10	58.1	225	1.5
L60800N-51350E	10	277	<1	320	<1	27	<10	15.8	9	<0.5
L60800N-51375E	43	340	<1	<10	<1	33	<10	137	290	3.1
L60800N-51400E	40	316	<1	140	<1	29	<10	99.9	102	2.5
L60800N-51425E	34	68	<1	<10	<1	7	<10	50.3	843	2.4
L60800N-51450E	173	761	<1	<10	<1	75	<10	76.3	509	1.5
L60800N-51475E	116	921	<1	220	<1	94	<10	69.7	108	1.5
L60800N-51500E	10	407	<1	540	<1	36	<10	10.3	<3	<0.5
L60800N-51525E	73	357	<1	110	<1	37	<10	66.6	100	1.7
L60800N-51550E	49	134	<1	750	<1	22	<10	6.9	<3	<0.5
L60800N-51575E	13	100	<1	380	<1	13	<10	6.1	<3	<0.5
L60800N-51600E	54	752	<1	760	<1	92	<10	21.7	<3	<0.5
L60800N-51625E	120	935	<1	120	<1	94	<10	54.9	162	1.9
L60800N-51650E	13	145	<1	430	<1	16	<10	12.1	<3	0.5
L60800N-51675E	7	12	<1	600	<1	2	<10	2.3	<3	<0.5
L60800N-51700E	8	10	<1	440	<1	2	<10	1.3	<3	<0.5
L60800N-51725E	<5	4	<1	430	<1	<1	<10	0.8	<3	<0.5
L60800N-51750E	<5	3	<1	420	<1	<1	<10	0.6	<3	<0.5
L60800N-51775E	<5	15	<1	370	<1	2	<10	0.8	<3	<0.5
L60800N-51800E	6	10	<1	490	<1	2	<10	1.2	<3	<0.5
L60800N-51825E	5	7	<1	400	<1	1	<10	1.0	<3	<0.5
L60800N-51850E	<5	7	<1	590	<1	1	<10	0.5	6	<0.5
L60800N-51875E	6	8	<1	980	<1	2	<10	0.6	<3	<0.5
L60800N-51900E	<5	5	<1	470	<1	1	<10	<0.5	<3	<0.5
L60800N-51925E	<5	5	<1	580	<1	<1	<10	0.5	<3	<0.5
L60800N-51950E	<5	6	<1	760	<1	1	<10	<0.5	<3	<0.5
L60800N-51975E	<5	9	<1	840	<1	2	<10	<0.5	<3	<0.5
L60800N-52000E	<5	9	<1	910	<1	1	<10	<0.5	<3	<0.5
L60800N-52025E	<5	5	<1	610	<1	1	<10	<0.5	<3	<0.5
L60800N-52075E	<5	7	<1	480	<1	1	<10	0.6	<3	<0.5
L60800N-52100E	6	9	<1	560	<1	2	<10	0.8	<3	<0.5
L60600N-51100E	9	13	<1	330	<1	2	<10	0.8	<3	<0.5
L60600N-51125E	<5	3	<1	560	<1	<1	<10	0.6	<3	<0.5
L60600N-51150E	<5	4	<1	560	<1	<1	<10	<0.5	<3	<0.5
L60600N-51175E	8	5	<1	760	<1	1	<10	<0.5	<3	<0.5
L60600N-51200E	5	4	<1	380	<1	<1	<10	<0.5	<3	<0.5
L60600N-51225E	16	8	<1	480	<1	2	<10	1.1	19	<0.5
L60600N-51250E	8	5	<1	380	<1	1	<10	<0.5	<3	<0.5
L60600N-51275E	<5	2	<1	500	<1	<1	<10	<0.5	<3	<0.5
L60600N-51300E	6	3	<1	300	<1	<1	<10	0.5	<3	<0.5
L60600N-51325E	7	5	<1	580	<1	1	<10	<0.5	<3	<0.5
L60600N-51350E	<5	2	<1	380	<1	<1	<10	<0.5	<3	<0.5
L60600N-51375E	9	7	<1	370	<1	1	<10	0.8	<3	<0.5
L60600N-51400E	6	5	<1	320	<1	1	<10	0.6	<3	<0.5
L60600N-51425E	6	6	<1	340	<1	1	<10	4.4	<3	<0.5
L60600N-51450E	11	9	<1	310	<1	2	<10	3.8	<3	<0.5
L60600N-51475E	97	118	<1	100	<1	13	<10	50.4	480	0.5
L60600N-51500E	33	85	<1	220	<1	9	<10	19.5	203	<0.5

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Element	Sc	Sm	Sn	Sr	Та	Tb	Te	Th	Ti	TI
Method	MMI-M5									
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB									
L60600N-51525E	31	62	<1	160	<1	7	<10	32.9	289	<0.5
L60600N-51550E	69	146	<1	110	<1	23	<10	14.3	123	0.9
L60600N-51575E	36	74	<1	190	<1	10	<10	17.0	111	0.9
*Dup L60500N-51150E	<5	6	<1	350	<1	1	<10	1.3	<3	<0.5
*Dup L60500N-51450E	<5	5	<1	420	<1	<1	<10	0.9	<3	<0.5
*Dup L60500N-51750E	16	1680	<1	1000	<1	104	<10	52.3	<3	2.8
*Dup L60500N-52050E	<5	8	<1	690	<1	2	<10	1.4	<3	0.6
*Dup L60800N-51350E	10	278	<1	340	<1	26	<10	15.5	6	<0.5
*Dup L60800N-51625E	117	901	<1	130	<1	89	<10	53.6	159	1.8
*Dup L60800N-51925E	<5	6	<1	620	<1	<1	<10	1.0	<3	<0.5
*Dup L60600N-51225E	15	7	<1	500	<1	1	<10	1.4	21	<0.5
*Dup L60600N-51525E	30	65	<1	170	<1	8	<10	33.0	266	<0.5
*Std MMISRM14	7	5	<1	550	<1	<1	<10	17.5	<3	<0.5
*Std MMISRM14	7	4	<1	500	<1	<1	<10	18.1	<3	<0.5
*Std MMISRM14	6	4	<1	510	<1	<1	<10	18.2	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element	U MMI-M5	W MMI-M5	Y MMI-M5	Yb MMI-M5	Zn MMI-M5	Zr MML-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
L60500N-51150E	3	<1	32	2	90	<5
L60500N-51175E	2	<1	44	3	130	<5
L60500N-51200E	4	<1	23	1	130	<5
L60500N-51225E	2	<1	34	2	100	<5
L60500N-51250E	13	<1	18	1	100	<5
L60500N-51275E	11	<1	26	2	170	<5
L60500N-51300E	5	<1	30	2	140	<5
L60500N-51325E	4	<1	31	2	140	<5
L60500N-51350E	3	<1	23	1	140	<5
L60500N-51375E	5	<1	19	1	150	<5
L60500N-51400E	3	<1	26	2	130	<5
L60500N-51425E	3	<1	28	1	80	<5
L60500N-51450E	3	<1	26	1	80	<5
L60500N-51475E	3	<1	21	1	70	<5
L60500N-51500E	3	<1	14	<1	70	<5
L60500N-51525E	25	<1	962	62	260	22
L60500N-51550E	20	1	1660	109	1200	30
L60500N-51575E	21	<1	86	5	170	<5
L60500N-51600E	7	<1	118	9	130	<5
L60500N-51625E	1	<1	48	3	<20	<5
L60500N-51650E	2	<1	34	2	30	<5
L60500N-51675E	7	<1	26	1	150	<5
L60500N-51700E	3	<1	35	2	720	<5
L60500N-51725E	25	<1	20	1	15600	<5
L60500N-51750E	32	<1	733	45	160	5
L60500N-51775E	15	<1	143	9	80	<5
L60500N-51800E	27	<1	730	46	370	<5
L60500N-51825E	9	<1	175	9	400	<5
L60500N-51850E	9	<1	144	7	680	<5
L60500N-51875E	7	<1	63	4	280	<5
L60500N-51900E	6	<1	45	3	1270	<5
L60500N-51925E	4	<1	28	2	420	<5
L60500N-51950E	4	<1	32	2	300	<5
L60500N-51975E	4	2	26	2	730	<5
L60500N-52000E	9	1	21	1	580	<5
L60500N-52025E	5	2	28	2	740	<5
L60500N-52050E	5	<1	28	2	530	<5
L60500N-52075E	5	<1	29	2	820	<5
L60500N-52100E	8	<1	28	2	750	<5
L60500N-52150E	9	<1	27	2	450	<5
L60800N-51100E	3	<1	58	3	140	<5
L60800N-51125E	3	<1	38	2	80	<5
L60800N-51150E	3	<1	1 10	5	50	<5
L60800N-51175E	2	<1	14	<1	50	<5
L60800N-51200E	10	<1	348	24	130	12
L60800N-51225E	9	<1	505	34	70	7
L60800N-51250E	4	<1	1320	91	530	14
L60800N-51275E	5	<1	174	12	620	22

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Element Method	U MMI-M5	W MMI-M5	Y MMI-M5	Yb MMI-M5	Zn MMI-M5	Zr MML-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
L60800N-51325E	11	1	770	49	960	33
L60800N-51350E	15	<1	372	21	490	12
L60800N-51375E	12	1	290	22	950	50
L60800N-51400E	7	<1	255	18	2270	41
L60800N-51425E	10	<1	84	7	670	50
L60800N-51450E	16	1	1000	73	390	90
L60800N-51475E	13	1	1290	88	410	68
L60800N-51500E	13	<1	523	20	910	<5
L60800N-51525E	6	1	498	34	850	28
L60800N-51550E	6	<1	510	26	950	<5
L60800N-51575E	3	2	249	12	120	<5
L60800N-51600E	11	2	1910	99	130	6
L60800N-51625E	7	2	1240	95	210	30
L60800N-51650E	3	<1	272	13	100	<5
L60800N-51675E	4	<1	43	3	230	<5
L60800N-51700E	2	<1	43	2	200	<5
L60800N-51725E	3	2	19	1	220	<5
L60800N-51750E	3	1	15	1	240	<5
L60800N-51775E	3	<1	44	2	280	<5
L60800N-51800E	3	<1	45	3	150	<5
L60800N-51825E	2	<1	29	2	90	<5
L60800N-51850E	5	<1	30	2	330	<5
L60800N-51875E	5	<1	51	3	150	<5
L60800N-51900E	4	<1	24	1	150	<5
L60800N-51925E	4	<1	21	1	120	<5
L60800N-51950E	4	<1	28	2	120	<5
L60800N-51975E	5	<1	39	2	180	<5
L60800N-52000E	4	<1	29	2	170	<5
L60800N-52025E	5	<1	23	1	170	<5
L60800N-52075E	4	<1	31	2	120	<5
L60800N-52100E	6	1	48	2	290	<5
L60600N-51100E	2	<1	53	3	80	<5
L60600N-51125E	5	<1	21	1	100	<5
L60600N-51150E	3	<1	21	1	90	<5
L60600N-51175E	3	<1	32	2	130	<5
L60600N-51200E	4	<1	23	1	130	<5
L60600N-51225E	3	<1	55	3	100	<5
L60600N-51250E	5	<1	33	2	100	<5
L60600N-51275E	7	<1	19	1	150	<5
L60600N-51300E	3	<1	19	1	140	<5
L60600N-51325E	5	<1	37	2	290	<5
L60600N-51350E	7	<1	14	<1	150	<5
L60600N-51375E	2	<1	40	2	80	<5
L60600N-51400E	2	<1	26	2	80	<5
L60600N-51425E	3	<1	31	2	60	<5
L60600N-51450E	6	<1	59	3	130	<5
L60600N-51475E	11	1	211	16	3210	40
L60600N-51500E	7	<1	133	10	2680	18

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Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
L60600N-51525E	5	<1	126	7	340	27
L60600N-51550E	3	<1	446	24	380	12
L60600N-51575E	3	<1	157	10	530	17
*Dup L60500N-51150E	3	<1	28	2	70	<5
*Dup L60500N-51450E	3	<1	23	1	80	<5
*Dup L60500N-51750E	36	<1	752	47	190	5
*Dup L60500N-52050E	6	<1	28	2	640	<5
*Dup L60800N-51350E	14	<1	363	20	420	12
*Dup L60800N-51625E	7	2	1150	94	200	29
*Dup L60800N-51925E	4	<1	23	1	150	<5
*Dup L60600N-51225E	3	<1	47	3	110	<5
*Dup L60600N-51525E	5	<1	134	8	410	27
*Std MMISRM14	35	<1	9	<1	320	11
*Std MMISRM14	35	<1	9	<1	300	11
*Std MMISRM14	35	<1	8	<1	290	11
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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# **Certificate of Analysis**

Work Order: 095336

Date: Oct 18, 2007

#### To: Geotronics Consulting Inc.

Attn: David G.Mark 6204 - 125th Street SURREY BC V3X 2E1

P.O. No.	Project: Nakina
Project No.	DEFAULT
No. Of Samples	105
Date Submitted	Aug 30, 2007
Report Comprises	Pages 1 to 16
	(Inclusive of Cover Sheet)

#### Distribution of unused material:

STORE: 105 Soils

Russ Calow, B.Sc., C.Chem. Vice President Global Geochemistry

#### ISO 17025 Accredited for Specific Tests. SCC No. 456

Certified By ::

Report Footer:

L.N.R. = Listed not received n.a. = Not applicable I.S. = Insufficient Sample -- = No result

\*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Subject to SGS General Terms and Conditions

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Element Method	Ag MMI-M5	AI MMI-M5	As MMI-M5	Au MMI-M5	Ba MMI-M5	Bi MMI-M5	Ca MMI-M5	Cd MMI-M5	Ce MMI-M5	Co MMI-M5
Det.Lim.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	РРВ
L60400N-51100E	13	20	40	1.4	12500	<1	130	13	1520	6
L60400N-51125E	9	5	<10	2.3	4820	<1	180	8	54	26
L60400N-51150E	12	6	<10	1.3	8270	<1	180	4	20	46
L60400N-51175E	10	6	<10	0.8	9090	<1	170	3	17	30
L60400N-51200E	12	7	<10	0.9	9770	<1	170	3	11	30
L60400N-51225E	9	5	<10	0.4	5780	<1	140	3	15	44
L60400N-51250E	6	4	10	0.2	3010	<1	120	3	14	55
L60400N-51275E	18	6	<10	0.3	2270	<1	160	5	6	95
L60400N-51300E	18	6	<10	0.3	3140	<1	230	7	11	81
L60400N-51325E	21	6	<10	0.6	3080	<1	200	8	13	80
L60400N-51350E	13	6	<10	1.2	4350	<1	150	2	6	59
L60400N-51375E	9	3	20	0.4	1650	<1	120	3	10	55
L60400N-51400E	14	4	20	0.8	6210	<1	150	2	6	26
L60400N-51425E	12	3	20	0.6	5140	<1	180	3	8	27
L60400N-51450E	13	3	20	0.6	6940	<1	150	2	<5	30
L60400N-51475E	11	3	10	0.7	10400	<1	170	2	8	15
L60400N-51500E	15	3	20	1.4	7920	<1	160	2	7	19
L60400N-51525E	22	5	10	6.6	8640	<1	220	4	8	16
L60400N-51550E	67	10	30	14.0	15100	<1	220	81	200	<5
L60400N-51575E	99	7	20	11.4	8420	<1	280	37	49	8
L60400N-51600E	91	11	20	10.2	6930	<1	250	43	160	28
L60400N-51625E	68	6	30	8.9	6500	<1	260	57	30	9
L60400N-51650E	169	4	50	17.2	3420	<1	240	107	30	39
L60400N-51700E	58	5	30	21.9	10600	<1	300	7	31	<5
L60400N-51725E	131	2	350	21.7	1930	<1	180	20	47	20
L60400N-51750E	15	112	60	10.4	75700	<1	40	2	16600	<5
L60400N-51775E	19	12	50	13.0	117540	<1	260	7	626	<5
L60400N-51925E	680	6	130	71.4	10600	<1	220	153	368	8
L60400N-51950E	179	3	70	72.5	11100	<1	250	106	35	<5
L60400N-51975E	90	4	100	20.2	7650	<1	230	88	41	<5
L60400N-52000E	66	2	890	6.7	2730	<1	220	59	10	49
L60400N-52025E	103	3	1440	7.7	1200	<1	180	48	9	57
L60400N-52050E	19	3	250	4.3	960	<1	150	10	17	16
L60400N-52075E	10	2	140	2.0	1100	<1	140	7	16	13
L60400N-52100E	13	3	150	7.4	880	<1	150	7	16	17
L60400N-52125E	12	2	160	5.3	730	<1	140	8	16	12
L60400N-52200E	24	3	90	6.0	1200	<1	190	7	12	16
L60400N-52225E	73	6	320	5.9	1310	<1	190	13	15	18
L60400N-52250E	12	3	80	4.1	1300	<1	160	4	11	16
L60400N-52275E	28	3	90	10.5	5040	<1	200	8	11	15
L60400N-52300E	22	4	70	8.2	4900	<1	200	7	11	18
L60400N-52325E	36	5	110	14.0	3610	<1	220	9	9	21
L60400N-52350E	31	5	80	15.1	6800	<1	210	8	9	17
L60400N-52375E	29	5	80	59.3	7740	<1	240	8	10	16
L60400N-52400E	27	4	90	10.3	3630	<1	170	6	9	19
L60400N-52425E	32	5	80	27.7	7050	<1	200	8	10	21
L61000N-50300E	5	27	20	0.4	4380	<1	320	4	232	38
L61000N-50325E	1	23	<10	0.5	5730	<1	410	4	35	65

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Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152

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Element Method	Ag MMI-M5	AI MMI-M5	As MMI-M5	Au MMI-M5	Ba MMI-M5	Bi MMI-M5	Ca MMI-M5	Cd MMI-M5	Ce MMI-M5	Co MMI-M5
Det.Lim.	1 DDB		10 DDB	0.1	10	í DDB	10	1 DDB	С 900	5
	11	- CE 190	-10	6 F F B	7740	-1	250	40	222	60
L01000N-50350E		29	<10	0.5	2740	<1 -1	350	12	222	03
L61000N-50373E	4	21	20	0.5	6290	<1 <1	300	3	94Z	00 ~E
	4	102	<10	0.2	1220	<1 -1	300	2	600	<0 40
	10	100	20	0.2	1000	<1 -4	140	0	020	10
L01000N-50450E	0	20	-10	0.0	12400	~1	200	9 7	002	Q4 0
	09	40	<10	2.5	9340	<1 -1	100	2	4070	0
	2	49	-10	0.7	6240	~1	120	2	070	
	2	119	<10	0.2	22000	<1 -1	200	2	200	<0 •5
	9	070	<10	11.7	37600	<1 -4	200	2	130	<0 40
L01000N-50575E	3	218	30	3.1	1970	<1 -4	<10	0	(/6	10
	4	£1	<10	0.1	3890	<1 .4	300	2	67	<>
	24	34	<10	0.9	1110	<1 -4	460	4	40	10
	0	211	50	0.2	1220	<1 -1	20	3	789	40
L61000N-50675E	4	291	30	0.1	4990	<1 -1	<10	4	229	20
L61000N-50700E	5	231	60	0.3	1880	<1	30	3	2060	31
L61000N-50725E	3	280	30	0.1	750	<1	10	3 7	913	10
L61000N-50750E	19	81	40	0.9	4700	<1	180	1	205	17
L61000N-50775E	6	/4	40	1.0	1420	<1	110	4 7	332	22
L61000N-50800E	4	73	10	0.5	1510	<1	120		341	13
	12	450	10	0.4	3060	<1 -4	110	3	299	5
	1	100	40	0.7	2050	< I - 1	250	о •	2000	22
L61000N-50075E	14	52	<10	0.7	2000	S   - 4	200	•	454	42
	22	32	<10	0.9	3030	< I - 1	430	0 E	151	12
L61000N-50925E	20	30 74	20	0.5	2400	~1	400	11	97 860	9
L61000N-50950E	13	247	100	0.5	1020	~1	200	10	2280	3
L 61000N-50975E	12	24/	-10	0.0 E 4	1000	~1	260	24	2300	16
L 61000N-51000E	44	~300	270	3.1	800	<1	200	2 <del>9</del> 50	1070	95
L 61000N-51050E	л А	272	2/0	0.0	1330	<1 <1	10	36	181	76
L 61000N-51030E	10	272	240	0.1	590	<1 c1	c10	30	106	70 /0
L 61000N-51100E	ло А	200	290	0.0	500	<1 c1	<10	23	20	40
L 61000N 51125E		200	110	1.2	1530	-1	20	113	545	56
L 61000N-51150E	5	203	100	0.4	1700	-1	70	30	944	73
L61000N-51175E	21	235	220	0.4 11	1450	<1	30	84	968	34
L 61000N-51200E	7	237	550	37	300	<1	<10	37	946	61
L 61000N-51225E	63	£07 6	140	4 1	1690	-1 c1	290	84	A1	24
L 61000N-51250E	7	239	180	1.3	1270	<1	30	94	517	57
L 61000N-51275E	15	268	140	1.0	3660	<1	<10	14	745	47
L61000N-51300E	68	194	650	77	990	<1	<10	16	2660	40
L60600N-51600E	181	4	180	40.4	9950	<1	240	38	28	<5
L60600N-51625E	154	3	250	11.4	3410	<1	200	71	24	6
L60600N-51650E	206	3	300	87	2080	<1	220	38	13	18
L60600N-51675E	140	4	150	10.5	2130	<1	240	23	13	13
L60600N-51700E	53	3	200	12.7	2830	<1	220	18	40	16
L60600N-51775E	19	4	160	24	1320	<1	160	.5	12	17
L60600N-51800E	68	4	820	5.5	1890	<1	260	80	 6	90
L60600N-51825E	66	3	690	8.7	1350	<1	160	30	6	40
L60600N-51850E	70	3	290	10.5	820	<1	140	8	6	29

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Element	Ag	AI	As	Au	Ва	Bi	Ca	Cd	Ce	Co
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	] DDD	ן גינום	10	0.1	10	1 DDD	10	1	C C	5
Units	РРВ	PPIW	РРВ	PPB	PPB	РРВ	PPIW	PPB	FFB	PPB
L60600N-51875E	63	2	280	7.0	840	<1	160	17	8	19
L60600N-51900E	61	3	140	8.6	1790	<1	130	3	<5	25
L60600N-51925E	58	3	290	9.2	820	<1	150	12	13	35
L60600N-51950E	117	3	210	7.6	3060	<1	190	15	12	18
L60600N-51975E	37	4	190	9.6	2600	<1	150	7	9	16
L60600N-52000E	34	6	80	5.3	6630	<1	170	5	7	16
L60600N-52025E	24	9	50	7.0	10700	<1	230	10	15	19
L60600N-52050E	16	5	50	4.3	6380	<1	150	3	7	19
L60600N-52100E	35	3	70	34.1	3080	<1	170	12	10	22
*Dup L60400N-51100E	14	25	40	1.2	12500	<1	150	17	1540	13
*Dup L60400N-51400E	15	4	20	1.0	7120	<1	160	2	16	33
*Dup L60400N-51725E	172	3	370	24.9	1890	<1	210	23	46	23
*Dup L60400N-52200E	19	5	100	5.1	1300	<1	190	9	16	20
*Dup L61000N-50350E	8	37	<10	0.7	6930	<1	350	11	84	111
*Dup L61000N-50650E	6	279	70	0.3	1110	<1	10	3	714	39
*Dup L61000N-50950E	23	75	40	1.5	5370	<1	240	10	909	8
*Dup L61000N-51250E	7	237	200	1.3	1670	<1	30	97	544	56
*Dup L60600N-51875E	47	3	290	6.0	780	<1	140	11	19	28
*Std MMISRM14	17	39	10	40.5	110	<1	220	7	19	46
*Std MMISRM14	16	42	10	40.3	120	<1	230	7	20	48
*Std MMISRM14	16	41	10	39.4	100	<1	220	7	15	46
*Bik BLANK	<1	<1	<10	0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Det.lim.   100   10	Element Method	Cr MMI-M5	Cu MMI-M5	Dy MMI-M5	Er MMI-M5	Eu MMI-M5	Fe MMI-M5	Gd MMI-M5	La MMI-M5	Li MMI-M5	Mg MMI-M5
Data   FFB   FFB <th>Det.Lim.</th> <th>100</th> <th>10</th> <th>1</th> <th>0.5</th> <th>0.5</th> <th></th> <th></th> <th>1 900</th> <th>C 900</th> <th></th>	Det.Lim.	100	10	1	0.5	0.5			1 900	C 900	
London S1 102E   C100   100   110   2   320   1420   450   1     L60400AS1152E   <100	Units		700		FFB 40.0	FFB 400		FFD		FFB -F	FFINI
London/s1125E   100   650   12   5.3   4.9   4   2.2   40   55   1     L60400A/S1175E   <100		<100	700	140	43.0	130	0	550	1450	<0 ~5	10
London/s1152E   <100   700   7   2.1   1.3   4   11   1.5   <2     L60400/s1175E   <100	L60400N-51123E	<100	530	12	5.5	4.9	4	22	40	<0 -5	10
London/S1175E   Club   700   7   2.9   1.7   3   1   1   45   1     L60400/S1252E   <100	L60400N-51150E	<100	700		3.1	1.0	4	11	13	<0 -5	29
London/s1202E   Club   Good   4   1.9   0.9   4   6   6   5   5   1     L604001/S122SE   Cl00   610   4   2.1   1.1   5   5   6   45   2     L604001/S122SE   Cl00   910   4   1.7   0.9   3   5   3   7   6     L604001/S12DE   Cl00   770   4   1.9   1.1   4   5   4   6   5     L604001/S1375E   Cl00   700   4   1.9   1.1   4   5   4   6   5     L604001/S1375E   Cl00   260   3   1.3   <0.5	L60400N-51175E	<100	700		2.9	1.7	ے ا	11	11	<⊃ -5	19
Loudouns1222E   Klub   Zub   G   Zb   LA   4   6   6   45   16     Loudouns122DE   <100	L60400N-51200E	<100	700	4	1.9	0.9	4	0	0	<0 -5	10
Loodon-S1252E   100   60   4   2.1   1.1   5   5   6   4.5   2     L69000N-S1252E   100   910   4   1.7   0.9   3   5   3   3   7   6     L69000N-S1325E   4100   770   4   1.9   1.1   4   5   4   6   5   5     L69000N-S1325E   4100   660   2   0.9   40.5   3   5   2   45   5     L6900N-S1325E   4100   260   3   1.3   40.5   3   5   2   45   6     L6900N-S1425E   4100   200   3   1.3   40.5   3   4   2   45   6     L6000N-S1425E   4100   120   6   2.4   1.1   7   1   6   5   3   75   6     L6000N-S1425E   4100   120   6   2.4   2.1   1   4   2   75<	L60400IN-51223E	<100	720	0	2.0	1.4	4	0 5	0	<0 ~5	19
Loomons12/36E   Nuo   aso   2   1.1   0.3   3   3   3   7   0     L60400N-5130E   <100	L60400N-51250E	<100	010	4	2.1	1.1	2	с 2	0	<2 7	20
Londonk-si Sobe   Kilo   Filo	L60400N-51275E	<100	010	2	1.1	<0.5	ు	د -	3	7	64 50
Loodonk-3132BE   K100   //0   4   1.9   1.1   4   5   4   5     Loodonk-313SEE   <100	L60400N-51300E	<100	910	4	1.7	0.9	3	5	3	1	39 55
LoodQUN-S1330E <100	L60400N-51325E	<100	770	4	1.9	1.1	4	5	4	5	30
Loomony-Sirse <100	L60400N 51330E	<100	700	2	0.9	<0.5	3	2	2	<⊃ -5	رد مع
Loomoun-stratube   <100   260   3   1.3   <0.5   3   5   2   <5   6     Loomoun-strates   <100	L60400N-51375E	<100	700	4	2.2	1.2	4	р -	4	<0 -5	3/
Lood 0004-51425E   <100   340   4   1.7   1.0   3   6   3   <5   4     L60400A-51456E   <100		<100	260	3	1.3	<0.5	ు	5	2	<⊃ -5	60
LB0400N-51450E 4100 290 3 1.3 40.5 3 4 2 45 6   L60400N-51500E 4100 120 6 2.4 1.7 2 11 6 5 4   L60400N-51500E 4100 140 5 2.1 1.4 2 9 3 4.5 6   L60400N-51525E 4100 640 114 353 70.8 5 353 740 45 4   L60400N-51625E 4100 1470 30 11.7 12.5 3 67 63 45 5   L6040N-51625E 4100 1250 83 31.1 39.6 5 193 247 45 7   L6040N-51625E 4100 2860 15 6.2 5.7 4 30 29 45 5   L6040N-51725E 4100 340 8 3.0 3.9 3 20 29 45 3   L6040N-51725E 4100 40 141 27.2 197 1 939	L60400IN-51425E	<100	340	4	1.7	1.0	Э	ь ,	3	<0 -5	42
Laburation-51475E Club 120 6 2.4 1.7 2 11 6 c5 4   L60400N-51500E <100	L60400N-51450E	<100	290	3	1.3	<0.5	3	4	2	<5	68
Labdaulty-5150E <100	L60400N-51475E	<100	120	ю -	2.4	1.7	Z	11	6	<5	49
Lb0400N-51525E <100	L6040UN-51500E	<100	140	5	2.1	1.4	2	9	3	<5	69
Leoudoun-S1550E <100	L6040UN-51525E	<100	210	6	2.4	2.1	2	13	ю 	<5	65
L60400N-51670E <100	L6040UN-51550E	<100	640	114	35.3	70.8	5	353	/40	<5	49
Le0400N-51600E <100	L60400N-51575E	<100	1470	30	11.7	12.5	3	67	63	<5	91
Le0400N-51625E $<100$ $600$ $25$ $9.6$ $10.6$ $3$ $54$ $67$ $45$ $5$ L60400N-51650E $<100$ $2880$ $15$ $62$ $5.7$ $4$ $30$ $29$ $45$ $5$ L60400N-51700E $<100$ $330$ $66$ $22.3$ $27.2$ $2$ $156$ $174$ $45$ L60400N-51725E $<100$ $340$ $8$ $3.0$ $3.9$ $3$ $20$ $29$ $45$ $5$ L60400N-51750E $<100$ $20$ $128$ $28.1$ $194$ $2$ $798$ $7240$ $45$ $2$ L60400N-5175E $<100$ $40$ $141$ $27.2$ $197$ $1$ $939$ $3050$ $45$ $2$ L60400N-51950E $<100$ $40$ $141$ $27.2$ $197$ $1$ $939$ $3050$ $45$ $2$ L60400N-51950E $<100$ $400$ $141$ $27.2$ $197$ $1$ $939$ $3050$ $45$ $3$ L60400N-51950E $<100$ $410$ $29$ $6.9$ $26.2$ $2$ $129$ $240$ $45$ $3$ L60400N-52050E $<100$ $680$ $2$ $1.1$ $0.7$ $4$ $5$ $26$ $45$ $7$ L60400N-52050E $<100$ $260$ $7$ $3.0$ $2.1$ $3$ $11$ $16$ $5$ $4$ L60400N-52050E $<100$ $260$ $7$ $3.0$ $2.1$ $3$ $12$ $13$ $45$ $3$ L60400N-52100E $<100$ $290$	L6040UN-51600E	<100	1250	83	31.1	39.6	5	193	247	<5	73
Le0400N-51600E <100	L6040UN-51625E	<100	600	25	9.6	10.6	3	54	67	<5	51
Le0400N-51700E $<100$ $330$ $66$ $22.3$ $27.2$ $2$ $156$ $174$ $<5$ L60400N-51725E $<100$ $340$ $8$ $3.0$ $3.9$ $3$ $20$ $29$ $<5$ $5$ L60400N-51750E $<100$ $20$ $128$ $28.1$ $194$ $2$ $798$ $7240$ $<5$ L60400N-5175E $<100$ $40$ $141$ $27.2$ $197$ $1$ $939$ $3050$ $<5$ $2$ L60400N-5175E $<100$ $40$ $141$ $27.2$ $197$ $1$ $939$ $3050$ $<5$ $2$ L60400N-51925E $<100$ $40$ $141$ $27.2$ $197$ $1$ $939$ $3050$ $<5$ $3$ L60400N-5195E $<100$ $410$ $29$ $6.9$ $26.2$ $2$ $129$ $240$ $<5$ $3$ L60400N-51975E $<100$ $150$ $44$ $11.5$ $34.2$ $2$ $172$ $351$ $<5$ $1$ L60400N-5200E $<100$ $680$ $2$ $1.1$ $0.7$ $4$ $5$ $26$ $<5$ $7$ L60400N-5205E $<100$ $260$ $7$ $3.0$ $2.1$ $3$ $11$ $16$ $5$ $4$ L60400N-5205E $<100$ $230$ $8$ $3.4$ $2.5$ $2$ $12$ $17$ $<5$ $3$ L60400N-52105E $<100$ $230$ $8$ $3.4$ $2.6$ $3$ $12$ $13$ $<5$ $3$ L60400N-52105E $<100$ $290$ $7$ <td>L6040UN-51650E</td> <td>&lt;100</td> <td>2880</td> <td>15</td> <td>6.2</td> <td>5.7</td> <td>4</td> <td>30</td> <td>29</td> <td>&lt;5</td> <td>55</td>	L6040UN-51650E	<100	2880	15	6.2	5.7	4	30	29	<5	55
L60400N-51725E<10034083.03.932029<55L60400N-51750E<100	L6040UN-51700E	<100	330	65	22.3	27.2	2	156	1/4	<5	8
L60400N-51750E $<100$ $20$ $128$ $28.1$ $194$ $2$ $796$ $720$ $<5$ L60400N-51775E $<100$ $40$ $141$ $27.2$ $197$ $1$ $939$ $3050$ $<5$ $2$ L60400N-51925E $<100$ $320$ $55$ $11.9$ $66.7$ $3$ $313$ $792$ $<5$ $3$ L60400N-51950E $<100$ $410$ $29$ $6.9$ $26.2$ $2$ $129$ $240$ $<5$ $3$ L60400N-51975E $<100$ $150$ $44$ $11.5$ $34.2$ $2$ $172$ $351$ $<5$ $1$ L60400N-52000E $<100$ $680$ $2$ $1.1$ $0.7$ $4$ $5$ $26$ $<5$ $7$ L60400N-52050E $<100$ $860$ $3$ $1.3$ $0.7$ $6$ $4$ $20$ $<5$ $6$ L60400N-52050E $<100$ $260$ $7$ $3.0$ $2.1$ $3$ $11$ $16$ $5$ $4$ L60400N-52075E $<100$ $230$ $8$ $3.4$ $2.5$ $2$ $12$ $17$ $<5$ $3$ L60400N-52100E $<100$ $240$ $8$ $3.4$ $2.6$ $3$ $12$ $13$ $<5$ $3$ L60400N-5210E $<100$ $290$ $7$ $3.1$ $2.3$ $3$ $12$ $13$ $<5$ $3$ L60400N-5220E $<100$ $290$ $7$ $3.1$ $2.3$ $3$ $12$ $9$ $<5$ $5$ L60400N-5220E $<100$ $290$ $7$ </td <td>L6040UN-51725E</td> <td>&lt;100</td> <td>340</td> <td>8</td> <td>3.0</td> <td>3.9</td> <td>3</td> <td>20</td> <td>29</td> <td>&lt;5</td> <td>57</td>	L6040UN-51725E	<100	340	8	3.0	3.9	3	20	29	<5	57
Leo400N-51775E $(100  40  141  27.2  197  1  933  3050  <5  2$ L60400N-51925E $<100  320  55  11.9  66.7  3  313  792  <5  3$ L60400N-51950E $<100  410  29  6.9  26.2  2  129  240  <5  3$ L60400N-51975E $<100  150  44  11.5  34.2  2  172  351  <5  1$ L60400N-52000E $<100  680  2  1.1  0.7  4  5  26  <5  7$ L60400N-5205E $<100  680  2  1.1  0.7  6  4  20  <5  6$ L60400N-5205E $<100  260  7  3.0  2.1  3  11  16  5  44$ L60400N-5205E $<100  230  8  3.4  2.5  2  12  17  <5  3$ L60400N-52105E $<100  230  8  3.4  2.5  2  12  13  <5  3$ L60400N-52105E $<100  240  8  3.4  2.6  3  12  13  <5  3$ L60400N-52105E $<100  240  8  3.4  2.6  3  12  13  <5  3$ L60400N-52125E $<100  290  7  3.1  2.3  3  12  9  <5  5$ L60400N-52205E $<100  290  7  3.1  2.3  3  12  9  <5  5$ L60400N-5225E $<100  290  7  3.1  2.3  3  12  9  <5  5$	L6040UN-51750E	<100	20	128	28.1	194	2	798	/240	<5	4
Leo400N-51925E $<100$ $320$ $55$ $11.9$ $66.7$ $3$ $313$ $792$ $c5$ $3$ L60400N-51950E $<100$ $410$ $29$ $6.9$ $26.2$ $2$ $129$ $240$ $<5$ $3$ L60400N-51975E $<100$ $150$ $44$ $11.5$ $34.2$ $2$ $172$ $351$ $<5$ $1$ L60400N-52000E $<100$ $680$ $2$ $1.1$ $0.7$ $4$ $5$ $26$ $<5$ $7$ L60400N-5205E $<100$ $860$ $3$ $1.3$ $0.7$ $6$ $4$ $20$ $<5$ $6$ L60400N-52050E $<100$ $260$ $7$ $3.0$ $2.1$ $3$ $11$ $16$ $5$ $4$ L60400N-52075E $<100$ $230$ $8$ $3.4$ $2.5$ $2$ $12$ $17$ $<5$ $3$ L60400N-52100E $<100$ $240$ $8$ $3.4$ $2.6$ $3$ $12$ $13$ $<5$ $3$ L60400N-52125E $<100$ $290$ $7$ $3.1$ $2.3$ $3$ $12$ $9$ $<5$ $5$ L60400N-52200E $<100$ $290$ $7$ $3.1$ $2.3$ $3$ $12$ $9$ $<5$ $5$ L60400N-5225E $<100$ $290$ $7$ $3.1$ $2.3$ $3$ $12$ $9$ $<5$ $5$ L60400N-5225E $<100$ $300$ $10$ $3.9$ $2.1$ $4$ $13$ $6$ $11$ $7$	L60400N-51775E	<100	40	141	21.2	197	1	939	3050	<5	25
Leo400N-51950E $<100$ $410$ $29$ $6.9$ $26.2$ $2$ $129$ $240$ $<5$ $3$ L60400N-51975E $<100$ $150$ $44$ $11.5$ $34.2$ $2$ $172$ $351$ $<5$ $1$ L60400N-52000E $<100$ $680$ $2$ $1.1$ $0.7$ $4$ $5$ $26$ $<5$ $7$ L60400N-52025E $<100$ $860$ $3$ $1.3$ $0.7$ $6$ $4$ $20$ $<5$ $6$ L60400N-52050E $<100$ $260$ $7$ $3.0$ $2.1$ $3$ $11$ $16$ $5$ $4$ L60400N-52050E $<100$ $230$ $8$ $3.4$ $2.5$ $2$ $12$ $17$ $<5$ $3$ L60400N-52075E $<100$ $230$ $8$ $3.4$ $2.5$ $2$ $12$ $13$ $<5$ $3$ L60400N-52100E $<100$ $240$ $8$ $3.4$ $2.6$ $3$ $12$ $13$ $<5$ $3$ L60400N-52205E $<100$ $290$ $7$ $3.1$ $2.3$ $3$ $12$ $9$ $<5$ $5$ L60400N-52125E $<100$ $290$ $7$ $3.1$ $2.3$ $3$ $12$ $9$ $<5$ $5$ L60400N-52205E $<100$ $300$ $10$ $3.9$ $2.1$ $4$ $13$ $6$ $11$ $7$	L60400N-51925E	<100	320	55	11.9	00.7	3	313	/92	<5	37
Leo400N-51975E $< 100$ $150$ $44$ $11.5$ $34.2$ $2$ $172$ $351$ $< 5$ $1$ L60400N-52000E $< 100$ $680$ $2$ $1.1$ $0.7$ $4$ $5$ $26$ $< 5$ $7$ L60400N-52025E $< 100$ $860$ $3$ $1.3$ $0.7$ $6$ $4$ $20$ $< 5$ $6$ L60400N-52050E $< 100$ $260$ $7$ $3.0$ $2.1$ $3$ $11$ $16$ $5$ $4$ L60400N-52050E $< 100$ $230$ $8$ $3.4$ $2.5$ $2$ $12$ $17$ $< 5$ $3$ L60400N-52075E $< 100$ $300$ $8$ $3.6$ $2.7$ $3$ $12$ $13$ $< 5$ $3$ L60400N-52100E $< 100$ $240$ $8$ $3.4$ $2.6$ $3$ $12$ $13$ $< 5$ $3$ L60400N-52200E $< 100$ $290$ $7$ $3.1$ $2.3$ $3$ $12$ $9$ $< 5$ $5$ L60400N-5220E $< 100$ $300$ $10$ $3.9$ $2.1$ $4$ $13$ $6$ $11$ $7$	L60400N-51950E	<100	410	29	0.9	26.2	2	129	240	<0 -5	32
L60400N-52000E<10066021.10.74526<57L60400N-52025E<100	L60400N-51975E	<100	150	44	11.5	34.2	2	172	351	<5	12
L60400N-52055E<10065031.30.76420<56L60400N-52055E<100	L60400N-52000E	<100	000	2	1.1	0.7	4	5	20	<0 -5	75
Leoduly-52050E<10026075.02.13111654Leoduly-52075E<100	L60400N-52025E	< 100	000	3	1.3	0.7	0	4	20	<0 -	69
L60400N-52075E<10025065.42.521217455L60400N-52100E<100	L60400N-52050E	<100	200		3.0	2.1	3	10	47	5	44
Leo4000-52100E <100 500 6 5.6 2.7 3 12 13 45 3   L60400N-52125E <100	L60400N-52075E	<100	200	• •	3.4	2.5	2	12	17	<0 -5	31
L60400N-52125E   <100   240   6   3.4   2.6   3   12   13   63   3     L60400N-52200E   <100	L60400N-52100E	<100	240	0 0	3.0	2.7	3	12	13	<5	30
L60400N-5225E <100 250 7 5.1 2.5 5 12 5 55 L60400N-5225E <100 300 10 3.9 2.1 4 13 6 11 7	L60400N-52125E	<100	240	0 7	3.4	2.0	3	12	10	<0 <5	50
LOOGUUN-5223E 100 500 10 5.9 2.1 4 15 0 11 7	L60400N 52200E	<100	250	10	3.1	2.3	3 A	12	5	11	51
	L 60400N 52250E	<100	240	7	3.3	2.1		10	0		40
LE0400N-32230E 100 240 / 2.7 2.0 3 10 6 5 4	L60400N 52230E	<100	240	7	2.7	2.0	3	11	0 8	-5	40
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	L60400N 52300E	<100	350	7	2.0	1.5	3	11	7	5	57
	L 60400N 52325E	<100	360	، ع	3.0	2.1	3	10	, 5	7	9/
LOUTOUR-2222E 100 300 0 3.1 2.0 3 12 5 / 0	L00400NL52350E	<100	300	о s	3.1 3.0	2.0	ა ?	12		7	04 70
LOUTOUR-22002 100 010 0 0.0 2.0 0 12 0 1 1 LOUTOUR-22002 2.0 0 12 0 1 1	L60400NL52375E	<100	210	0 7	2.0	2.0		12	7	7	12
	L60400NL52400E	<100	340	7	2.3	1.2	3	12	í F	) ج	20
	L60400NL52425E	<100	450	1 9	3.0	2.2	3	12	0 E	0 6	00 50
Letron 1-02-1202	L61000NL50300E	<100	900	15	5.0	2.1	72	12	0 03	-5	33
L61000N-50325E <100 2320 7 44 1.5 21 10 19 <5 2	L61000N-50325E	<100	2320	7	4.4	1.5	21	10	19	<5	20

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Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152

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Element Method	Cr MMI-M5	Cu MMI-M5	Dy MMI-M5	Er MMI-M5	Eu MMI-M5	Fe MMI-M5	Gd MMI-M5	La MMI-M5 1	Li MMI-M5	Mg MMI-M5 1
Det.Lim.	PPB	PPR	PPR	PPR	PPR	PPM	PPR	PPR	PPR	PPM
L 61000NL-50350E	<100	2230	38	183	12.8	30	64	114	<5	34
L61000N-50375E	<100	1970	39	17.9	17.4	86	79	234	<5	38
L61000N-50400E	<100	280	69	22.9	311	21	153	248	<5	34
L61000N-50425E	<100	260	40	12.0	21.2	43	96	255	<5	<del>ب</del> ت ع
L61000N-50450E	<100	1620	68	26.0	31.3	32	156	412	<5	30
L61000N-50475E	<100	1760	433	336	65.9	4	445	579	<5	17
L61000N-50500E	<100	160	94	30.8	48.1	22	234	818	<5	13
L61000N-50525E	<100	220	107	39.3	44.1	13	226	381	<5	22
L61000N-50550E	<100	210	79	23.5	40.5	3	229	328	<5	31
L61000N-50575E	<100	150	65	16.7	30.3	67	138	259	<5	<1
L61000N-50600E	<100	290	12	4.3	5.5	14	28	54	<5	18
L61000N-50625E	<100	930	24	9.6	9.3	5	48	44	17	27
L61000N-50650E	<100	640	46	15.7	20.2	67	87	261	<5	2
L61000N-50675E	<100	250	24	8.7	8.0	51	36	72	<5	<1
L61000N-50700E	<100	370	118	41.9	53.4	66	245	1030	<5	3
L61000N-50725E	<100	350	55	19.9	25.6	41	111	340	<5	1
L61000N-50750E	<100	760	372	204	121	41	543	828	<5	17
L61000N-50775E	<100	330	26	10.5	9.7	29	41	127	<5	4
L61000N-50800E	<100	470	43	20.1	14.6	21	64	175	<5	9
L61000N-50825E	<100	530	79	37.8	32.5	8	147	284	<5	8
L61000N-50850E	<100	680	174	70.9	73.5	33	317	1040	<5	6
L61000N-50875E	<100	700	111	52.0	39.4	13	171	187	<5	15
L61000N-50900E	<100	1300	78	39.1	24.8	21	112	95	<5	25
L61000N-50925E	<100	1500	60	28.9	19.3	11	84	52	<5	26
L61000N-50950E	<100	690	187	72.5	87.7	18	408	801	<5	13
L61000N-50975E	<100	240	130	44.0	48.9	73	242	707	<5	2
L61000N-51000E	<100	720	20	9.4	7.4	5	38	29	<5	48
L61000N-51025E	<100	640	81	31.2	25.6	102	115	236	<5	2
L61000N-51050E	<100	200	34	14.3	7.8	87	39	65	<5	3
L61000N-51075E	<100	130	15	8.1	2.7	100	13	32	<5	<1
L61000N-51100E	<100	230	9	5.7	0.9	93	5	11	<5	2
L61000N-51125E	<100	120	49	16.9	16.4	131	78	159	<5	6
L61000N-51150E	<100	120	62	23.0	25.1	83	108	248	<5	14
L61000N-51175E	<100	170	84	32.2	31.6	81	144	284	<5	5
L61000N-51200E	<100	370	39	14.3	14.7	124	65	142	<5	2
L61000N-51225E	<100	560	11	5.3	2.9	8	14	10	<5	42
L61000N-51250E	<100	540	145	67.3	30.6	77	149	97	<5	11
L61000N-51275E	<100	40	46	18.6	19.7	125	89	222	<5	2
L61000N-51300E	<100	310	82	29.9	36.5	76	165	872	<5	2
L60600N-51600E	<100	130	32	8.7	22.0	2	115	129	<5	62
L60600N-51625E	<100	240	9	3.8	3.2	3	17	16	<5	60
L60600N-51650E	<100	880	6	2.5	1.5	3	8	6	<5	57
L60600N-51675E	<100	210	7	3.1	1.9	3	10	5	<5	75
L60600N-51700E	<100	280	8	3.1	3.5	3	19	19	<5	63
L60600N-51775E	<100	230	6	2.5	1.6	3	8	5	<5	34
L60600N-51800E	<100	1590	3	2.0	0.8	5	4	2	<5	80
L60600N-51825E	<100	650	3	1.5	0.8	5	5	3	<5	75
L60600N-51850E	<100	540	3	1.5	0.8	4	5	2	<5	81

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Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5									
Det.Lim.	100	10	1	0.5	0.5	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
L60600N-51875E	<100	340	4	1.8	0.9	4	5	2	<5	54
L60600N-51900E	<100	320	3	1.2	<0.5	3	3	1	<5	92
L60600N-51925E	<100	400	4	2.0	1.2	4	6	4	<5	68
L60600N-51950E	<100	420	6	2.5	1.3	4	8	4	<5	64
L60600N-51975E	<100	310	5	2.1	1.1	4	7	2	<5	62
L60600N-52000E	<100	250	5	2.1	0.8	3	7	2	5	67
L60600N-52025E	<100	340	8	3.5	1.5	3	12	3	<5	59
L60600N-52050E	<100	300	5	2.1	1.0	3	7	2	<5	49
L60600N-52100E	<100	500	8	3.2	2.1	3	11	4	6	76
*Dup L60400N-51100E	<100	730	167	49.5	136	9	596	1390	<5	18
*Dup L60400N-51400E	<100	320	3	1.4	<0.5	3	5	15	<5	71
*Dup L60400N-51725E	<100	400	8	3.0	3.4	4	18	21	<5	69
*Dup L60400N-52200E	<100	340	8	3.5	2.4	4	12	8	5	55
*Dup L61000N-50350E	<100	2970	20	15.4	3.9	26	23	44	<5	28
*Dup L61000N-50650E	<100	640	44	15.8	18.9	71	81	226	<5	3
*Dup L61000N-50950E	<100	660	190	74.0	88.9	21	415	852	<5	13
*Dup L61000N-51250E	<100	530	143	65.7	31.1	80	148	110	<5	10
*Dup L60600N-51875E	<100	440	4	1.7	1.0	5	6	11	<5	62
*Std MMISRM14	<100	690	2	0.8	0.9	2	4	3	<5	34
*Std MMISRM14	<100	710	2	0.8	0.8	2	4	6	<5	36
*Std MMISRM14	<100	710	2	0.8	0.9	2	4	3	<5	35
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method	Mo MMI-M5	Nb MMI-M5	Nd MMI-M5	Ni MMI-M5	Pb MMI-M5	Pd MMI-M5	Pr MMI-M5	Pt MMI-M5	Rb MMI-M5	Sb MMI-M5
Det.Lim.	PPR									
DARS 1.60400N 51100E	10	<0.5	3370	61	20	~1	673	~1	75	
L60400N-51100E	7	<0.5	75	45	<10	~1	1/	~1	24	~1
L60400N-51123E	, 0	-0.5	22	40	20	~1	14	~1	24	~1
L60400N-51175E	5	0.0	22	51	10	~1	4	~1	19	~1
L60400N-51776E	5	<0.5	12	56	<10	~1	2	~1	22	~1
L60400N-51200E	5	~0.5	10	56	10	~1	2	~1	22	~1
L60400N-51223E	7	<0.5	13	92	<10	<1	2	-1	23	<1
L60400N-51200E	13	<0.5	10	193	70	-1	- - 1	-1	20	<1
L60400N-512102	14	<0.5	7	177	20	<1	1	<1	25	<1
L60400N-51325E	14	<0.5	, Q	2/6	10	-1	1	-1	36	<1
L60400N-51323E	19	<0.5	A	173	10	-1	-1	-1	45	~1
L60400N-51375E	10	<0.5	11	118	10	-1	2	-1	38	<1
L60400N-51400E	12	<0.5	7	57	50	<1	<1	<1	32	<1
L60400N-51425E	9	<0.5	10	70	<10	<1	2	<1	32	<1
L60400NL51450E	11	<0.5	6	61	<10	e1	- -1	e1	33	- , c1
L60400N-51475E	6	<0.5	24	34	10	<1	-1	<1	31	<1
L60400N-51500E	q	<0.5	15	30	<10	<1	2	<1	28	<1
L60400N-51525E	ğ	<0.5	26	41	10	<1	3	<1	20	<1
L60400N-51550E	16	<0.5	1720	63	30	<1	319	<1	16	2
1 60400N-51575E	5	<0.5	177	70	30	<1	30	<1	21	2
L60400N-51600E	6	<0.5	697	144	60	<1	120	<1	27	2
L60400N-51625E	7	<0.5	172	35	30	<1	29	<1	43	2
L60400N-51650E	11	<0.5	80	93	30	<1	13	<1	31	11
L60400N-51700E	20	<0.5	481	29	30	<1	80	<1	35	1
L60400N-51725E	10	<0.5	75	97	110	<1	13	<1	59	6
L60400N-51750E	<5	<0.5	9360	9	260	<1	2250	<1	144	<1
L60400N-51775E	<5	<0.5	6290	9	70	<1	1190	<1	59	<1
L60400N-51925E	35	<0.5	1960	26	5110	<1	346	<1	83	14
L60400N-51950E	92	<0.5	612	12	770	<1	103	<1	51	2
L60400N-51975E	12	<0.5	884	10	640	<1	158	<1	57	5
L60400N-52000E	17	<0.5	21	156	<10	<1	6	<1	46	5
L60400N-52025E	14	<0.5	14	159	20	<1	4	<1	47	9
L60400N-52050E	10	<0.5	29	40	20	<1	5	<1	60	3
L60400N-52075E	8	<0.5	35	33	30	<1	7	<1	57	2
L60400N-52100E	10	<0.5	30	39	20	<1	5	<1	56	3
L60400N-52125E	9	<0.5	31	30	20	<1	6	<1	54	3
L60400N-52200E	11	<0.5	23	37	20	<1	4	<1	51	2
L60400N-52225E	33	<0.5	15	42	130	<1	2	<1	38	6
L60400N-52250E	8	<0.5	22	32	20	<1	3	<1	47	2
L60400N-52275E	14	<0.5	23	30	40	<1	4	<1	36	2
L60400N-52300E	12	<0.5	21	33	20	<1	3	<1	41	2
L60400N-52325E	21	<0.5	17	34	50	<1	2	<1	23	4
L60400N-52350E	16	<0.5	21	27	40	<1	3	<1	22	3
L60400N-52375E	15	<0.5	21	28	30	<1	3	<1	30	3
L60400N-52400E	22	<0.5	22	30	20	<1	3	<1	25	4
L60400N-52425E	21	<0.5	21	32	20	<1	3	<1	27	5
L61000N-50300E	9	0.6	1 10	45	60	<1	24	<1	38	<1
L61000N-50325E	12	<0.5	36	107	10	<1	8	<1	23	<1

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Element Method	Mo MMI-M5	Nb MMI-M5	Nd MMI-M5	Ni MMI-M5	Pb MMI-M5	Pd MMI-M5	Pr MMI-M5	Pt MMI-M5	Rb MMI-M5	Sb MMI-M5
Det.Lim.	PPR	0.5 PPR	PPR							
	10	-0.5	220	100		-110		-110		110
E61000N-30330E	13	10	409	120	40	~1	40	~1	22	1
L 64000N 50400E	12	<0.5	400	22	40	~1	21	~1	21	-1
	~	-0.5	449	20	20	~1	07	~1	55	~1
L61000N-50423E	15	2.4	702	33 65	20	~1	97 145	~1	101	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
L61000N-50450E	15	0.0 <0.5	702	102	20	~1	140	~1	32	-1
	0	10	1200	105	40	~1	193	~1	23	1
	0 7	-0.5	770	10	20	~1	270	~1	12	-1
	1	<0.5	710	02	20	<1 -1	104	<1 -1	100	<1
	17	<0.5 E.O	(ə)	27	<10 00	S1 -4	120	<1 -4	13	<1
	9	ວ.U - 2 F	600 407	20	80 10	<1 -1	120	<1 -1	204	1
	0	<0.5 -0.5	107	20	10	S1 -4	21	<1 -4	92	< 1
	22	<0.5	127	00	<10	<1 -4	22	<1 -4	23	<1
	ю -	3.2	440	33	30	<1 -4	101	<1 -4	200	2
L610000N-50575E	<>	1.0	102	29	40	<1 -1	30	<1 -1	201	1
L61000N-50700E	5	2.8	1360	29	40	<1	327	<1	225	2
L6100UN-50725E	5	1.5	5/9	21	30	<1 -4	131	<1 -4	200	() ()
L6100UN-50750E	<5	0.6	1750	/4	50	<1	351	<1	113	1
L6100UN-50775E	<5	<0.5	182	18	40	<1	42	<1	169	1
L6100UN-50800E	<5	<0.5	267	90	30	<1	61	<1	110	<1
L6100UN-50825E	<5	<0.5	595	16	10	<1	119	<1	66	<1 •
L6100UN-50850E	<5	<0.5	1620	43	100	<1	3/6	<1	154	1
L6100UN-50875E	<5	<0.5	456	160	20	<1	84	<1	38	<1
L6100UN-50900E	<5	<0.5	249	319	10	<1	44	<1	21	<1
L6100UN-50925E	<5	<0.5	162	185	<10	<1	27	<1	14	<1
L6100UN-50950E	<5	<0.5	1690	182	70	<1	353	<1	69	1
L6100UN-50975E	9	5.8	1220	46	140	<1	281	<1	162	4
L6100UN-51000E	11	<0.5	81	89	10	<1	13	<1	22	<1
L6100UN-51025E	14	6.1	433	239	240	<1	96	<1	162	9
L6100UN-51050E	<5	1.1	126	80	260	<1	26	<1	124	1
L6100UN-51075E	5	0.8	46	77	2280	<1	10	<1	186	4
L6100UN-51100E	<5	1.0	14	52	480	<1	3	<1	120	2
L6100UN-51125E	5	1.0	322	94	4890	<1	67	<1	115	4
L61000N-51150E	<2	<0.5	503	116	130	<1	110	<1	141	3
L6100UN-51175E	6	1.4	616	169	1710	<1 -4	133	<1 -4	183	11
L6100UN-51200E	10	1.9	297	52	4030	<1	65	<1	177	13
L6100UN-51225E	7	<0.5	23	124	40	<1	4	<1	13	3
L6100UN-51250E	<5	<0.5	397	346	1050	<1	72	<1	49	5
L6100UN-51275E	6	2.8	449	72	340	<1 .4	96	<1 .4	90	3
L6100UN-51300E	9	2.3	1040	60	1630	<1	258	<1	246	22
L60600N-51600E	19	<0.5	426	10	510	<1	65	<1	33	4
L60600N-51625E	6	<0.5	46	23	1730	<1	(	<1	5/	4
L60600N-51650E	10	<0.5	13	35	100	<1	2	<1	60	2
	47	<0.5	14	36	70	<1	2	<1	78	1
	10	<0.5	59	37	50	<1	9	<1	53	3
L60600N-51775E	8	0.9	15	38	20	<1	2	<1	57	2
	12	<0.5	5	264	<10	<1	<1	<1	83	2
	15	<0.5	-	104	30	<1	1	<1	52	5
L60600N-51850E	29	<0.5	6	80	50	<1	<1	<1	57	5

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Element	Mo	Nb	Nd	Ni	РЪ	Pd	Pr	Pt	Rb	Sb
Method	MMI-M5									
Det.Lim.	5	0.5	1	5	10	1	1	1	5	1
Units	PPB	РРВ	PPB	РРВ	PPB	PPB	PPB	PPB	РРВ	PPB
L60600N-51875E	10	<0.5	7	61	40	<1	1	<1	55	2
L60600N-51900E	17	<0.5	3	61	80	<1	<1	<1	52	3
L60600N-51925E	10	<0.5	12	77	50	<1	2	<1	71	4
L60600N-51950E	8	<0.5	15	47	60	<1	2	<1	71	3
L60600N-51975E	12	<0.5	9	48	60	<1	1	<1	54	2
L60600N-52000E	9	<0.5	8	41	60	<1	<1	<1	50	2
L60600N-52025E	7	<0.5	13	59	20	<1	2	<1	45	<1
L60600N-52050E	11	<0.5	9	52	20	<1	1	<1	40	1
L60600N-52100E	19	<0.5	16	43	40	<1	2	<1	31	2
*Dup L60400N-51100E	5	<0.5	3440	78	20	<1	674	<1	76	<1
*Dup L60400N-51400E	13	<0.5	18	69	<10	<1	4	<1	32	<1
*Dup L60400N-51725E	10	<0.5	57	108	130	<1	9	<1	67	6
*Dup L60400N-52200E	11	<0.5	23	46	20	<1	4	<1	61	2
*Dup L61000N-50350E	12	<0.5	74	148	40	<1	16	<1	16	1
*Dup L61000N-50650E	5	3.4	396	33	30	<1	91	<1	232	2
*Dup L61000N-50950E	<5	<0.5	1740	179	60	<1	362	<1	76	1
*Dup L61000N-51250E	<5	<0.5	401	337	1050	<1	74	<1	49	5
*Dup L60600N-51875E	10	<0.5	15	77	50	<1	3	<1	67	4
*Std MMISRM14	36	<0.5	15	284	130	44	3	<1	271	<1
*Std MMISRM14	36	<0.5	15	286	130	45	3	<1	265	<1
*Std MMISRM14	36	<0.5	15	281	130	44	3	<1	263	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method	Sc MMI-M5	Sm MMI-M5	Sn MMI-M5	Sr MMI-M5	Ta MMI-M5	Tb MMI-M5	Te MMI-M5	Th MMI-M5	Ti MMI-M5	TI MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	РРВ	PPB								
L6040UN-51100E	20	770	1	430	<1	49	<10	18.8	18	<0.5
L60400N-51125E	14	20	<1	200	<1	3	<10	3.4	3	<0.5
L60400N-51150E	6	(	<1	440	<1	1	<10	2.8	<3	<0.5
L60400N-51175E		8	<1	390	<1	1	<10	2.1	<3	<0.5
L60400N-51200E	(	4	<1	330	<1	<1	<10	1.7	<3	<0.5
L6040UN-51225E	8	6	<1	390	<1	1	<10	1.6	<3	<0.5
L60400N-51250E	10	4	<1	350	<1	<1	<10	1.3	3	<0.5
L60400N-51275E	6	2	<1	580	<1	<1	<10	1.3	<3	<0.5
L60400N-51300E	7	3	<1	660	<1	<1	<10	1.4	<3	<0.5
L60400N-51325E	9	4	<1	460	<1	<1	<10	1.3	<3	<0.5
L60400N-51350E	6	2	<1	440	<1	<1	<10	0.9	<3	<0.5
L60400N-51375E	9	5	<1	240	<1	<1	<10	1.1	<3	<0.5
L60400N-51400E	6	3	<1	470	<1	<1	<10	0.9	<3	<0.5
L60400N-51425E	7	4	<1	330	<1	<1	<10	0.9	<3	<0.5
L60400N-51450E	6	3	<1	510	<1	<1	<10	0.8	<3	<0.5
L60400N-51475E	6	10	<1	400	<1	1	<10	1.1	<3	<0.5
L60400N-51500E	6	7	<1	520	<1	1	<10	1.0	<3	<0.5
L60400N-51525E	7	10	<1	480	<1	1	<10	1.0	5	<0.5
L60400N-51550E	12	402	<1	540	<1	33	<10	11.8	<3	<0.5
L60400N-51575E	15	59	<1	290	<1	7	<10	4.2	<3	<0.5
L60400N-51600E	21	194	<1	260	<1	21	<10	8.8	3	<0.5
L60400N-51625E	21	49	<1	310	<1	6	<10	2.5	<3	<0.5
L60400N-51650E	14	25	<1	450	<1	3	<10	1.3	<3	<0.5
L60400N-51700E	7	139	<1	840	<1	16	<10	5.9	<3	<0.5
L60400N-51725E	9	20	<1	350	<1	2	<10	1.5	<3	0.9
L60400N-51750E	18	1530	<1	600	<1	64	<10	107	<3	3.8
L60400N-51775E	<5	1330	<1	1970	<1	65	<10	17.2	<3	0.9
L60400N-51925E	<5	426	<1	500	<1	23	<10	4.8	<3	1.8
L60400N-51950E	<5	154	<1	860	<1	10	<10	2.5	<3	0.9
L60400N-51975E	<5	206	<1	730	<1	15	<10	4.3	<3	0.6
L60400N-52000E	8	4	<1	590	<1	<1	<10	<0.5	<3	0.9
L60400N-52025E	11	3	<1	390	<1	<1	<10	<0.5	<3	1.0
L60400N-52050E	9	9	<1	460	<1	1	<10	1.1	<3	0.7
L60400N-52075E	10	11	<1	370	<1	2	<10	1. <b>1</b>	<3	0.6
L60400N-52100E	9	10	<1	410	<1	2	<10	1.1	<3	<0.5
L60400N-52125E	9	10	<1	370	<1	2	<10	1.1	<3	<0.5
L60400N-52200E	10	8	<1	460	<1	2	<10	0.9	<3	<0.5
L60400N-52225E	7	8	<1	800	<1	2	<10	1.0	<3	<0.5
L60400N-52250E	8	8	<1	510	<1	1	<10	0.9	<3	<0.5
L60400N-52275E	6	9	<1	530	<1	1	<10	0.7	<3	<0.5
L60400N-52300E	9	8	<1	540	<1	1	<10	0.9	<3	<0.5
L60400N-52325E	6	8	<1	780	<1	2	<10	0.6	<3	<0.5
L60400N-52350E	7	9	<1	790	<1	2	<10	0.5	<3	<0.5
L60400N-52375E	7	9	<1	670	<1	2	<10	0.7	<3	<0.5
L60400N-52400E	7	9	<1	660	<1	2	<10	0.7	<3	<0.5
L60400N-52425E	7	9	<1	650	<1	2	<10	0.7	<3	<0.5
L61000N-50300E	8	28	<1	970	<1	3	<10	9.9	160	<0.5
L61000N-50325E	6	9	<1	1420	<1	1	<10	2.1	<3	<0.5

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Element Method	Sc MMI-M5	Sm MMI-M5	Sn MMI-M5	Sr MMI-M5	Ta MMI-M5	Tb MMI-M5	Te MMI-M5	Th MMI-M5	Ti MMI-M5	ti MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPR	PPB	PPR	PPB	PPB	PPR	PPB	PPR	PPB	PPB
L61000N-50350E	16	60	<1	1130	<1	8	<10	8.2	11	<0.5
L61000N-50375E	24	92	<1	1160	<1	9	<10	13.5	49	<0.5
L61000N-50400E	27	161	<1	890	<1	17	<10	9.4	47	0.5
L61000N-50425E	26	112	<1	200	<1	11	<10	14.0	614	<0.5
L61000N-50450E	16	164	<1	970	<1	17	<10	22.4	77	<0.5
L61000N-50475E	10	266	<1	1970	<1	67	<10	1.6	<3	<0.5
L61000N-50500E	19	265	<1	320	<1	26	<10	18.1	215	<0.5
L61000N-50525E	25	218	<1	580	<1	26	<10	7.9	30	<0.5
L61000N-50550E	9	210	<1	980	<1	21	<10	8.3	<3	<0.5
L61000N-50575E	29	163	<1	<10	<1	18	<10	91.2	569	0.9
L61000N-50600E	<5	30	<1	400	<1	3	<10	5.5	34	<0.5
L61000N-50625E	<5	43	<1	720	<1	5	<10	1.5	<3	<0.5
L61000N-50650E	64	104	<1	<10	<1	11	<10	29.3	1360	0.9
L61000N-50675E	31	40	<1	<10	<1	5	<10	20.2	571	1.1
L61000N-50700E	113	284	<1	30	<1	29	<10	30.4	1540	1.2
L61000N-50725E	69	132	<1	<10	<1	14	<10	22.5	768	1.0
L61000N-50750E	236	479	<1	360	<1	71	<10	6.7	455	<0.5
L61000N-50775E	38	44	<1	130	<1	5	<10	12.1	294	<0.5
L61000N-50800E	52	64	<1	140	<1	9	<10	10.4	124	<0.5
L61000N-50825E	40	145	<1	190	<1	18	<10	7.5	47	<0.5
L61000N-50850E	151	359	<1	30	<1	41	<10	37.7	329	<0.5
L61000N-50875E	21	141	<1	270	<1	22	<10	5.5	17	<0.5
L61000N-50900E	21	87	<1	440	<1	15	<10	2.5	<3	<0.5
L61000N-50925E	15	63	<1	500	<1	12	<10	2.3	<3	<0.5
L61000N-50950E	21	430	<1	280	<1	46	<10	15.2	27	<0.5
L61000N-50975E	55	281	<1	<10	<1	33	<10	103	556	<0.5
L61000N-51000E	10	29	<1	300	<1	4	<10	1.8	<3	<0.5
L61000N-51025E	102	122	<1	<10	<1	17	<10	70.7	1250	1.0
L61000N-51050E	46	35	<1	<10	<1	6	<10	15.9	308	0.5
L61000N-51075E	30	13	<1	<10	<1	2	<10	25.5	242	1.0
L61000N-51100E	25	4	<1	<10	<1	1	<10	11.5	588	<0.5
L61000N-51125E	51	86	<1	20	<1	11	<10	34.5	157	<0.5
L61000N-51150E	70	123	<1	90	<1	14	<10	29.9	123	0.5
L61000N-51175E	85	157	<1	20	<1	19	<10	45.6	437	0.8
L61000N-51200E	68	76	<1	<10	<1	9	<10	66.4	467	0.7
L61000N-51225E	19	9	<1	240	<1	2	<10	1.6	6	<0.5
L61000N-51250E	112	125	<1	40	<1	26	<10	28.0	68	0.7
L61000N-51275E	24	109	<1	10	<1	11	<10	52.2	445	0.7
L61000N-51300E	54	207	<1	<10	<1	21	<10	124	287	1.8
L60600N-51600E	<5	121	<1	640	<1	10	<10	1.8	<3	<0.5
L60600N-51625E	<5	15	<1	350	<1	2	<10	1.5	<3	<0.5
L60600N-51650E	<5	6	<1	280	<1	1	<10	0.8	<3	0.7
L60600N-51675E	6	7	<1	390	<1	1	<10	0.9	<3	0.7
L60600N-51700E	6	18	<1	490	<1	2	<10	1.2	<3	0.6
L60600N-51775E	<5	6	<1	310	<1	1	<10	3.7	<3	<0.5
L60600N-51800E	9	2	<1	490	<1	<1	<10	2.1	<3	1.0
L60600N-51825E	8	3	<1	350	<1	<1	<10	1.5	<3	0.8
L60600N-51850E	7	3	<1	320	<1	<1	<10	1.3	<3	0.7

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SGS Canada Inc.

Mineral Services 1885 Leslie Street Toronto ON M3B 2M3 t(416) 445-5755 f(416) 445-4152

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Element	Sc	Sm	Sn	Sr	Та	Tb	Te	Th	Ti	TI
Method	MMI-M5									
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	РРВ	PPB	РРВ	PPB	PPB	РРВ	PPB	PPB	PPB
L60600N-51875E	7	3	<1	260	<1	<1	<10	1.2	<3	0.5
L60600N-51900E	<5	2	<1	440	<1	<1	<10	0.7	<3	<0.5
L60600N-51925E	8	5	<1	270	<1	<1	<10	1.4	<3	0.8
L60600N-51950E	8	6	<1	340	<1	1	<10	1.3	<3	0.6
L60600N-51975E	5	4	<1	420	<1	<1	<10	1.1	<3	<0.5
L60600N-52000E	<5	4	<1	440	<1	<1	<10	0.8	<3	<0.5
L60600N-52025E	7	7	<1	380	<1	2	<10	1.0	<3	<0.5
L60600N-52050E	<5	5	<1	370	<1	<1	<10	0.8	<3	<0.5
L60600N-52100E	5	7	<1	520	<1	2	<10	0.7	<3	<0.5
*Dup L60400N-51100E	20	807	<1	450	<1	53	<10	18.1	11	<0.5
*Dup L60400N-51400E	<5	4	<1	520	<1	<1	<10	0.5	<3	<0.5
*Dup L60400N-51725E	7	17	<1	390	<1	2	<10	1.4	<3	1.0
*Dup L60400N-52200E	7	9	<1	440	<1	2	<10	1.3	<3	<0.5
*Dup L61000N-50350E	13	19	<1	1200	<1	3	<10	6.4	<3	<0.5
*Dup L61000N-50650E	63	96	<1	<10	<1	10	<10	28.4	1490	0.9
*Dup L61000N-50950E	24	446	<1	260	<1	48	<10	17.9	42	<0.5
*Dup L61000N-51250E	110	125	<1	50	<1	26	<10	28.1	79	0.7
*Dup L60600N-51875E	<5	4	<1	240	<1	<1	<10	1.2	<3	0.7
*Std MMISRM14	10	4	<1	510	<1	<1	<10	17.8	<3	<0.5
*Std MMISRM14	8	4	<1	490	<1	<1	<10	18.1	<3	<0.5
*Std MMISRM14	6	4	<1	470	<1	<1	<10	18.0	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method	U MMI-M5	W MMI-M5	Y MMI-M5	Yb MMI-M5	Zn MMI-M5	Zr MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
L60400N-51100E	16	<1	557	29	310	12
L60400N-51125E	2	<1	68	4	90	<5
L60400N-51150E	3	<1	35	2	120	<5
L60400N-51175E	3	<1	36	2	110	<5
L60400N-51200E	3	<1	24	1	100	<5
L60400N-51225E	2	<1	32	2	100	<5
L60400N-51250E	2	<1	24	2	90	<5
L60400N-51275E	6	<1	13	<1	210	<5
L60400N-51300E	9	<1	21	1	160	<5
L60400N-51325E	7	<1	23	1	210	<5
L60400N-51350E	7	<1	11	<1	190	<5
L60400N-51375E	3	<1	24	2	130	<5
L60400N-51400E	4	<1	15	<1	80	<5
L60400N-51425E	2	<1	22	1	1 10	<5
L60400N-51450E	4	<1	15	<1	110	<5
L60400N-51475E	3	<1	29	2	90	<5
L60400N-51500E	3	<1	24	1	70	<5
L60400N-51525E	3	<1	30	2	80	<5
L60400N-51550E	14	<1	514	24	170	5
L60400N-51575E	10	<1	149	8	90	<5
L60400N-51600E	10	<1	412	21	110	6
L60400N-51625E	4	<1	139	7	160	<5
L60400N-51650E	24	<1	87	4	350	<5
L60400N-51700E	11	<1	312	14	40	<5
L60400N-51725E	7	<1	39	2	520	<5
L60400N-51750E	2	<1	315	23	100	<5
L60400N-51775E	11	<1	412	18	120	<5
L60400N-51925E	13	<1	163	8	3420	<5
L60400N-51950E	13	<1	97	4	1690	<5
L60400N-51975E	13	<1	157	7	1550	<5
L60400N-52000E	4	<1	13	<1	1340	<5
L60400N-52025E	2	<1	15	1	1370	<5
L60400N-52050E	3	<1	34	2	330	<5
L60400N-52075E	3	<1	39	2	220	<5
L60400N-52100E	3	<1	42	2	190	<5
L60400N-52125E	3	<1	42	3	200	<5
L60400N-52200E	4	<1	38	2	180	<5
L60400N-52225E	8	<1	39	3	630	<5
L60400N-52250E	3	<1	32	2	150	<5
L60400N-52275E	5	<1	33	2	190	<5
L60400N-52300E	4	<1	36	2	160	<5
L60400N-52325E	6	<1	34	2	350	<5
L60400N-52350E	6	<1	35	2	250	<5
L60400N-52375E	5	<1	34	2	260	<5
L60400N-52400E	5	<1	35	2	180	<5
L60400N-52425E	5	<1	36	2	210	<5
L61000N-50300E	5	<1	61	5	50	13
L61000N-50325E	9	<1	35	4	60	<5

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Element Method	U MMI-M5	W MMI-M5	Y MMI-M5	Yb MMI-M5	Zn MMI-M5	Zr MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
L61000N-50350E	31	<1	170	15	450	9
L61000N-50375E	25	<1	200	15	80	12
L61000N-50400E	19	<1	245	15	30	11
L61000N-50425E	6	<1	130	8	70	23
L61000N-50450E	11	<1	298	19	190	12
L61000N-50475E	83	1	2160	264	130	<5
L61000N-50500E	4	<1	393	20	80	16
L61000N-50525E	19	<1	462	26	100	10
L61000N-50550E	3	<1	327	13	90	<5
L61000N-50575E	18	<1	158	12	260	69
L61000N-50600E	7	<1	44	3	30	6
L61000N-50625E	23	<1	113	7	40	<5
L61000N-50650E	4	<1	140	11	80	49
L61000N-50675E	3	<1	75	6	70	25
L61000N-50700E	4	<1	455	27	80	44
L61000N-50725E	4	<1	193	13	40	36
L61000N-50750E	3	<1	2310	157	190	15
L61000N-50775E	3	<1	97	8	130	16
L61000N-50800E	4	<1	210	15	300	13
L61000N-50825E	3	<1	471	28	70	12
L61000N-50850E	6	<1	739	50	110	29
L61000N-50875E	2	<1	643	36	70	5
L61000N-50900E	5	<1	425	29	80	<5
L61000N-50925E	4	<1	347	20	30	<5
L61000N-50950E	11	<1	855	51	110	10
L61000N-50975E	16	<1	416	33	270	67
L61000N-51000E	4	<1	130	6	100	<5
L61000N-51025E	12	<1	248	24	1500	122
L61000N-51050E	4	<1	124	9	800	17
L61000N-51075E	5	<1	53	6	550	18
L61000N-51100E	4	<1	36	4	330	12
L61000N-51125E	7	<1	135	11	2480	20
L61000N-51150E	3	<1	212	16	1010	13
L61000N-51175E	9	<1	316	22	980	26
L61000N-51200E	12	<1	119	10	540	76
L61000N-51225E	3	<1	73	4	130	<5
L61000N-51250E	4	<1	618	48	1890	8
L61000N-51275E	7	<1	157	15	160	18
L61000N-51300E	9	2	280	23	710	57
L60600N-51600E	9	<1	118	5	500	<5
L60600N-51625E	4	<1	45	3	2460	<5
L60600N-51650E	3	<1	31	2	1500	<5
L60600N-51675E	3	<1	38	2	400	<5
L60600N-51700E	6	<1	38	2	680	<5
L60600N-51775E	3	<1	27	2	230	<5
L60600N-51800E	2	<1	21	2	1130	<5
L60600N-51825E	4	<1	17	1	1300	<5
L60600N-51850E	3	1	16	1	460	<5

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Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
L60600N-51875E	3	<1	20	1	650	<5
L60600N-51900E	4	<1	11	<1	520	<5
L60600N-51925E	2	<1	21	1	710	<5
L60600N-51950E	3	<1	28	2	480	<5
L60600N-51975E	3	<1	22	1	450	<5
L60600N-52000E	4	<1	21	1	270	<5
L60600N-52025E	5	<1	36	2	200	<5
L60600N-52050E	4	<1	21	1	200	<5
L60600N-52100E	6	<1	39	2	260	<5
*Dup L60400N-51100E	18	<1	584	35	410	11
*Dup L60400N-51400E	4	<1	15	<1	90	<5
*Dup L60400N-51725E	8	<1	35	2	650	<5
*Dup L60400N-52200E	5	<1	41	2	230	<5
*Dup L61000N-50350E	26	<1	93	15	420	<5
*Dup L61000N-50650E	4	<1	137	11	90	51
*Dup L61000N-50950E	10	<1	865	52	120	11
*Dup L61000N-51250E	4	<1	606	47	1820	10
*Dup L60600N-51875E	2	<1	20	1	660	<5
*Std MMISRM14	35	<1	9	<1	310	11
*Std MMISRM14	36	<1	9	<1	310	11
*Std MMISRM14	36	<1	9	<1	330	11
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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480		
460	□Au □Mo ■Cd □Zn ■Pb	TATSAMENIE PROPERTY
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