ASSESSMENT REPORT ON 2008 SOIL SURVEY AND ROCK SAMPLING

on the

REDFORD PROPERTY

Alberni Mining Division
Vancouver Island, British Columbia

NTS 92C/13,14 & 92F/03,04
Lat 49° 02' N, Long 125° 26' W
UTM 5434600 N, 320500E

for

LOGAN RESOURCES LTD.
1640 - 1066 West Hastings Street
Vancouver, BC V6E 3X1
(owner & operator)

by

Aiden Lavelle, B.Sc.
Rita Chow, B.Sc.

October 28, 2008

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

SUMMARY

A reconnaissance Mobile Metal Ion (MMI) soil survey was conducted on the Redford Property from April to May of 2008. This property wide survey was aimed at narrowing target areas for further evaluation. The program also included prospecting and sampling of some of the historic showings on the property. A multi-element soil geochemical anomaly around the area of the Fact showing warrants additional detailed soil sampling and trenching.

INTRODUCTION

Property Description and Location

The Redford property is located 22 km northeast of Ucluelet on Vancouver Island, British Columbia, centered at latitude 49°02'30" north and longitude 125°26'00" west/ UTM 5434600N, 320500E on NTS map sheets 92C/13,14 and 92F/03,04 within the Alberni Mining Division (Figure 1). It is located on the west coast of Vancouver Island within the Mackenzie Range, an area of rugged steep topography and dense old growth forests as well as dense newer growth in recently logged areas.

The property comprises 25 contiguous mineral claims (432 units) on approximately 10,800 hectares and covers an area of about 13 kilometres east-west by up to 10.5 kilometres north-south (Table 1 & Figure 2). The mineral claims were staked in 1995, 2002, 2003 and 2004 and are 100%-owned by Logan Resources Ltd.

Table 1: Claims List

Claim Name	Tenure Number	Owner	Good To Date	Area
DRAW 7	342159	Logan Resources Ltd.	2008/Nov/05	500.0
DRAW 8	342160	Logan Resources Ltd.	2008/Nov/05	500.0
DRAW 9	342161	Logan Resources Ltd.	2008/Nov/05	375.0
JAYA	398856	Logan Resources Ltd.	2008/Nov/05	400.0
GEGE	404313	Logan Resources Ltd.	2008/Nov/05	400.0
EASTER 1	409826	Logan Resources Ltd.	2008/Nov/05	500.0
EASTER 2	409827	Logan Resources Ltd.	2008/Nov/05	500.0
EASTER 3	409828	Logan Resources Ltd.	2008/Nov/05	150.0
EASTER 4	409829	Logan Resources Ltd.	2008/Nov/05	375.0
EASTER 5	409830	Logan Resources Ltd.	2008/Nov/05	500.0
EASTER 6	409831	Logan Resources Ltd.	2008/Nov/05	500.0
EASTER 7	409832	Logan Resources Ltd.	2008/Nov/05	375.0
EASTER 8	409833	Logan Resources Ltd.	2008/Nov/05	450.0
EASTER 9	409834	Logan Resources Ltd.	2008/Nov/05	375.0
EASTER 10	409835	Logan Resources Ltd.	2008/Nov/05	450.0
EASTER 11	409836	Logan Resources Ltd.	2008/Nov/05	450.0
EASTER 12	409837	Logan Resources Ltd.	2008/Nov/05	450.0
EASTER 13	409838	Logan Resources Ltd.	2008/Nov/05	450.0
EASTER 14	409839	Logan Resources Ltd.	2008/Nov/05	450.0
EASTER 15	409840	Logan Resources Ltd.	2008/Nov/05	375.0
EASTER 16	409841	Logan Resources Ltd.	2008/Nov/05	375.0
EASTER 17	409842	Logan Resources Ltd.	2008/Nov/05	450.0
EASTER 18	409843	Logan Resources Ltd.	2008/Nov/05	450.0
EASTER 19	409844	Logan Resources Ltd.	2008/Nov/05	500.0
EASTER 20	409845	Logan Resources Ltd.	2008/Nov/05	500.0
BRYNNOR_FRA	584339	Logan Resources Ltd.	2008/May/15	42.336

Access, Climate, Local Resources, Infrastructure and Physiography

Access to the property is via a paved highway that connects Port Alberni to Ucluelet on Vancouver Island (Figure 2). The property is accessible from Ucluelet via 22 kilometres of paved road. Access to the mineral claims is by active and inactive/decommissioned all weather logging roads. The Draw Creek – Toquart Bay road joins Highway 4 near the middle of the east side of Kennedy Lake, and leads to the central part of the property at a distance of 6 kilometres. Numerous logging roads throughout the property provide access to the various claims although many of the roads are overgrown and/or washed out and must be accessed by All Terrain Vehicles (ATV) or by foot. Some logging roads on steeper slopes have been destroyed by slides. The property is close to tide water in Toquart Bay which has a public campsite, boat ramp and small marina.

The Redford property encompasses as area of rugged topography on the southeast flank of the Mackenzie Range. Elevations range from sea level to 850m on Draw Mountain. Redford Mountain attains an elevation of 750m. Recent logging and related roads have greatly improved access and exposures on the property and some new road cuttings were sampled.

Vegetation on the property is typical of the Coast Range. Steep mountain slopes are heavily forested with old growth, including hemlock, cedar and spruce interspersed with areas of abundant dead-fall and heavy undergrowth. Slides are common in the steeper terrain and are thick with dead-fall and heavy growth of devils club, alder and nettles. Locally in valley bottoms, usually proximal to creeks, swampy areas with buck brush are common. Clear cuts occur throughout the area and the maturity of replanted trees varies but some areas have not yet been replanted. Vegetation extends to the top of the mountains. The combination of steep topography and heavy vegetation makes surface traversing very difficult and sometimes dangerous and some soil samples were impossible to retrieve safely. Black bears are very common in the area and were frequently encountered by the exploration team. One cougar was also encountered.

Glacial movement on the property is to the southwest. It has not apparently scoured the area very strongly and has left considerable depths of overburden in the valleys. The area receives considerable precipitation that can reach more than 3300mm annually. Summers are short and winter snowfall is variable, being heavy on the mountains and lighter in the valleys. Up to 7ft of snow remained on the top of Draw mountain during the course of the latest work in May 2008 with less but significant amounts of snow on other mountain tops at elevations greater than 500m.

The town of Ucluelet, 22 kilometres to the south, is on the B.C Hydro grid system and offers accommodation, restaurants and shops for purchase of supplies, hardware, camp-related materials and access to a work force. The town of Port Alberni, 40 kilometres northeast of the property, provides extensive industrial infrastructure and deep water port facilities. Port facilities developed in conjunction with mining operations at the Brynnor Mine also exist at Toquart Bay.

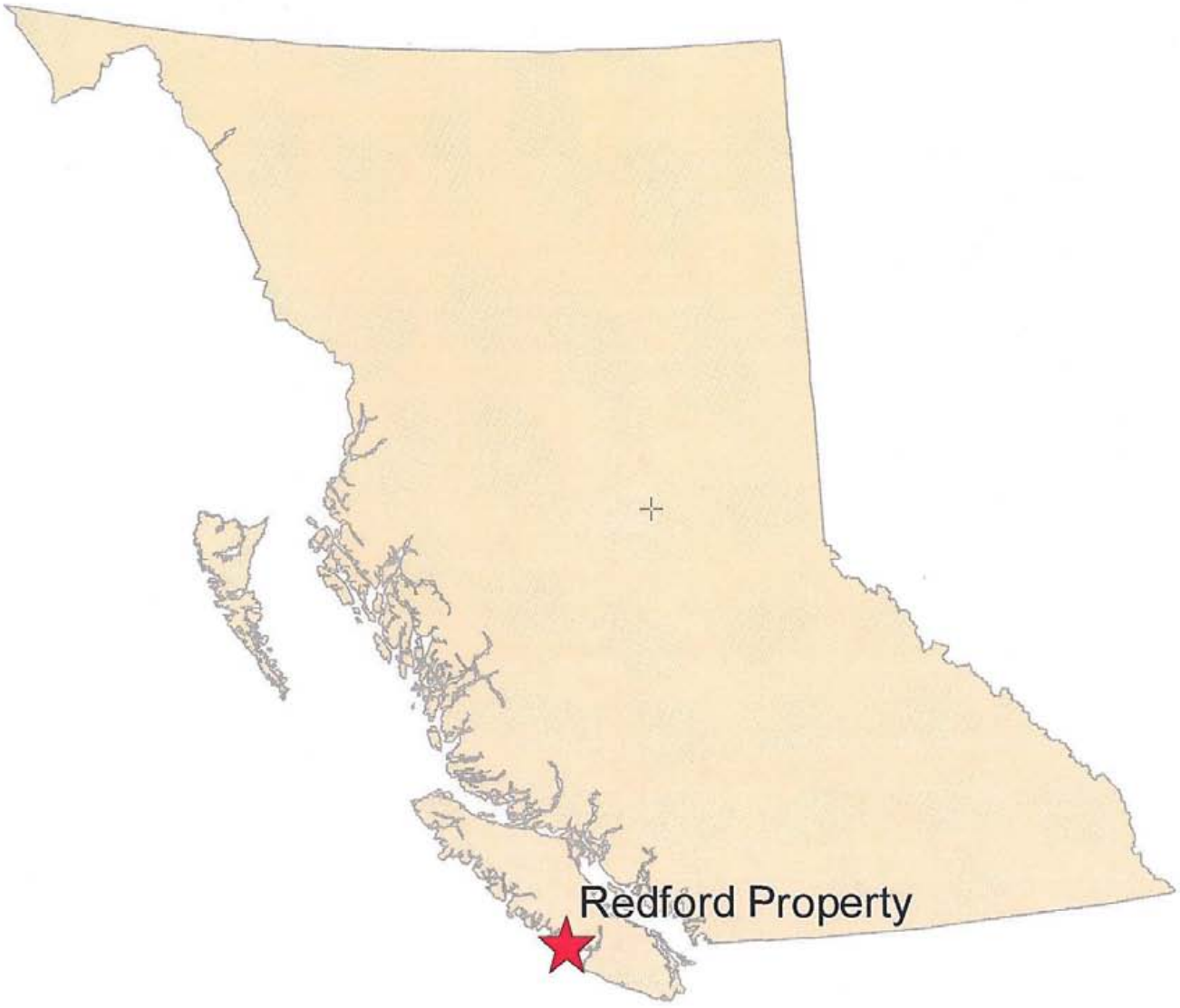


Figure 1: Location Map

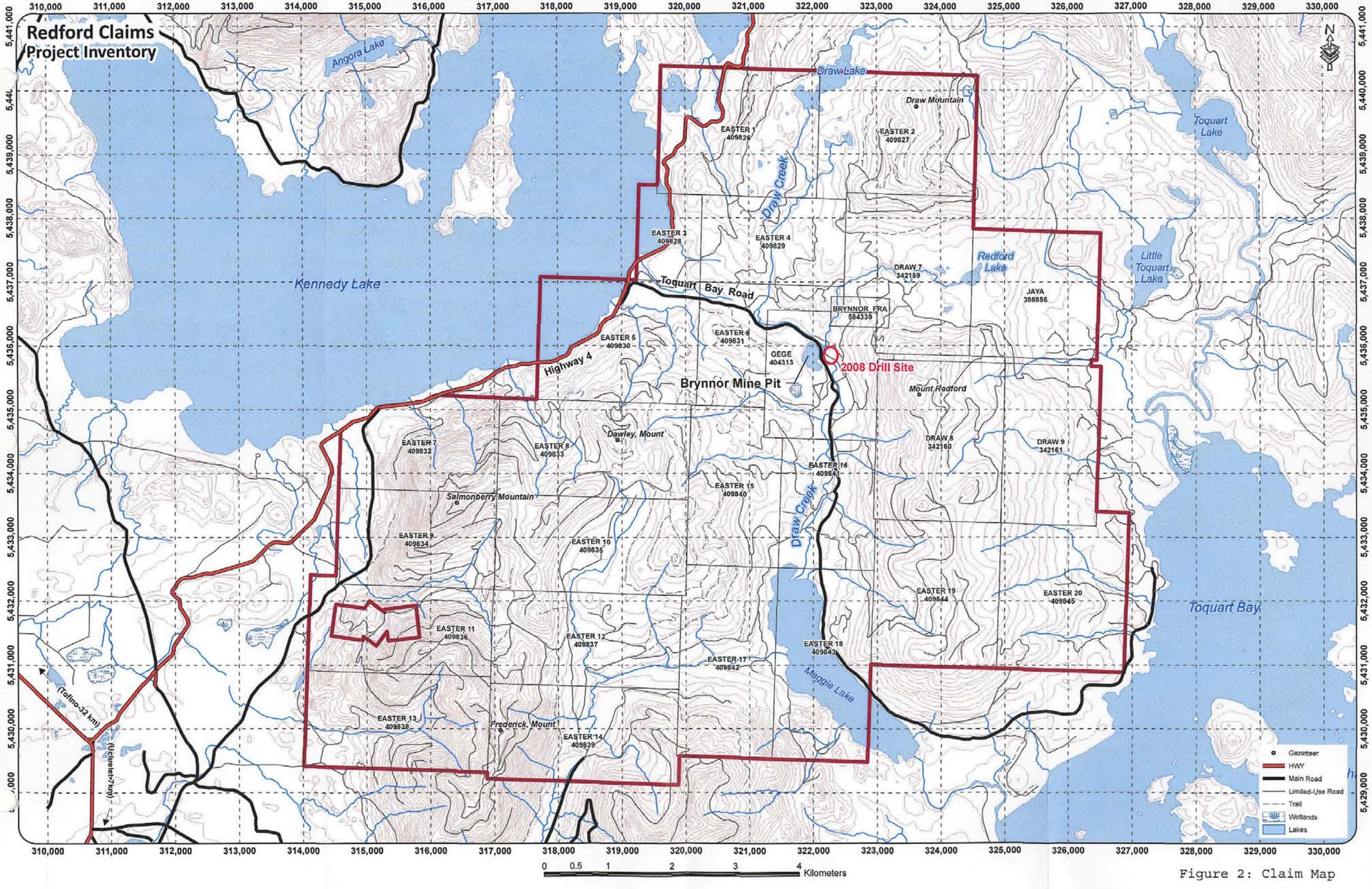


Figure 2: Claim Map

Property History

The Redford property was originally part of a much larger mineral claim holding known as the Lucky property. Consolidated Logan Mines Ltd., the predecessor company to Logan Resources Ltd., optioned the property in 1995 from Electrum Resource Corporation and added mineral claims to the original property through staking. The option with Electrum Resource Corporation was terminated in 1998 and the mineral claims outside the option perimeter agreement area were retained by Consolidated Logan Mines Ltd. In April 2004, the original Redford property was enlarged to cover showings west and south of it. (Bridge, 2004)

The following chronology relates to work on and adjacent to the Redford property by Consolidated Logan Mines Ltd./Logan Resources Ltd.:

1995: Consolidated Logan Mines Ltd. conducted 3.5 kilometres of VLF-EM surveying on the Toq Grid to confirm the location and strength of the geophysical anomaly. Five diamond drill holes totalling 826 metres were completed during the summer. Geological mapping and prospecting was completed as part of the second phase of exploration.

1996: An airborne magnetic survey was flown over the western two-thirds of the property by Questor Surveys on behalf of Logan.

Rock sampling was conducted at the Mount Redford and Draw Mountain areas and a reconnaissance soil survey on a 800 m by 1800 m grid at Mount Redford located encouraging gold and arsenic values in rock and soil samples. A program of soil, lake sediment, and rock geochemical sampling was conducted. Soil sampling consisted of an expansion of the Mount Redford grid with three new grids at Redford Lake, Draw Lake and Lucky Mountain.

1998: A reconnaissance Induced Polarization survey was undertaken along four road traverses in the area of Redford Lake.

2004: Diamond drilling of the Seamus Zone (6 holes totalling 928.9 metres) was completed. Intervals of albite-arsenic-gold mineralization were intersected with grades up to 1.18 g/t gold over 1.0 metres.

2008 Work Program

From April to May of 2008, a reconnaissance Mobile Metal Ion (MMI) soil survey was conducted on the Redford Property with a total of 398 samples collected over a 500 metre-spaced grid. This property wide survey was aimed at narrowing target areas for further evaluation. The program also included rock sampling and prospecting along new road cuts and of some of the historic showings on the property (68 samples).

REGIONAL GEOLOGY

Vancouver Island lies within the Insular Tectonic Belt of the Canadian Cordillera. This belt is composed of four groups of Paleozoic and Mesozoic volcanic and sedimentary rocks, which together comprise a displaced Terrane named Wrangellia. This terrane was regionally metamorphosed, folded and extensively intruded by Jurassic granitoid plutons belonging to the Coast Plutonic Complex, which are unconformably overlain by Cretaceous clastic sediments and intruded by Tertiary hypabyssal stocks of mafic to felsic composition.

The Devonian Sicker Group, the oldest stratigraphic unit in Wrangellia, is an island arc assemblage of differentiated mafic to felsic volcanics. In the general area of the property, the Sicker Group has been metamorphosed to amphibolite facies and is extensively intruded by Jurassic granitoids of the West Coast Plutonic Complex.

The Triassic Vancouver Group includes a thick pile of tholeiitic flood basalts of the Karmutsen Formation, overlain by the Quatsino Formation limestone and Parsons Bay Formation black argillite and marl. These rocks appear weakly metamorphosed and are well represented on and around the property.

The Jurassic strata includes calcareous siltstones of the Harbeldown Formation at the base, followed by Bonanza Formation mafic to felsic volcanics representing an island arc sequence which varied from submarine near the bottom to subaerial near the top. Small areas of Bonanza Formation are present in and around the Redford property.

These strata are extensively intruded by Jurassic granitoid plutons of the Coast Plutonic Complex and more localized, shallow level, subvolcanic Tertiary intrusions of the Clayoquot Intrusive Suite (previously called Catface Intrusions). Tertiary stocks are located within faults and as epizonal intrusions within the Redford property. Quartz-feldspar porphyry dykes on the property are suspected to be Tertiary, but have not been dated. The Tertiary intrusions and limited preserved coeval Tertiary volcanics are 40-55 million years old and represent continental arc magmatism above a paleo-subduction zone located west off the current coast of Vancouver Island.

The property is centred over a large, very strong regional magnetic high in the order of 10 kilometres in diameter. This magnetic high is interpreted as the expression of a Tertiary magmatic chamber from which the felsic stocks and volcanics were derived.

PROPERTY GEOLOGY AND MINERALIZATION

The property has only been preliminarily prospected. The map in Figure 3 has been compiled from a variety of sources. The property is dominated by Jurassic Island intrusions in the east. Where these intrusions are exposed on the west, they intrude lowermost Triassic Karmutsen volcanics and dykes, Triassic Quatsino Formation limestone and Parson Bay Formation argillaceous sediments, and Jurassic Bonanza Formation volcanics. Tertiary feldspar porphyritic stocks and dykes of the Clayoquot Suite (Catface Intrusions) intrude all older units – especially along faults.

Units shown on the map consist of:

Tg: Tertiary granitoid intrusives

Trk: Triassic Karmutsen Formation Basalt
Recognized by features such as pillow structures with interstitial quartz, and amygdaloidal texture

Trs: Triassic Quatsino Formation limestone and Parsons Bay Formation black argillite

JB: Jurassic Bonanza Formation Volcanics: Mafic to felsic volcanics of an island arc sequence.

JG: Jurassic granitoid intrusives.

PMW: Paleozoic-Mesozoic Westcoast Crystalline Complex
Metamorphosed Sicker Group volcanics extensively intruded by granitoids.

Mineralization has been identified in the Karmutsen volcanics, Quatsino limestone, and Island and Tertiary intrusives due to multiple mineralizing events in the Redford property area.

There are four areas of distinct mineralization on the Redford property: (1) Seamus Zone arsenic-gold mineralization; (2) Copper-gold-cobalt magnetite skarn showings and deposits; (3) Gold-quartz epithermal veins; and (4) Copper-platinum-paladium mineralization hosted by Karmutsen Volcanics.

(1) Seamus Zone

The Seamus Zone occurs in the eastern part of the property and was first identified and sampled in 1995. Six holes were drilled to test the extent and continuity of mineralization. The zone is poorly defined, but is at least 2200 metres by 3400 metres. Mineralization and altered outcrops and anomalous gold and arsenic soil and rock geochemical anomalies extend beyond this area.

The Seamus Zone comprises altered outcrops of fine and medium-grained diorite and granodiorite of Jurassic Island intrusive. Minor fine-grained volcanics cut by syn-mineralization Tertiary feldspar porphyry dykes are later barren dykes. Mineralization occurs as pervasive replacement, stockworks and sheeted veins of auriferous arsenopyrite with variable amounts of albite, sericite, chlorite, biotite and quartz alteration. The veinlets are fracture controlled and millimetres to several centimetres thick and vary in intensity from outcrop to outcrop. Shear zones vary from several centimetres to 25 centimetres wide. Rock sampling of the zone returned significant gold with values to 3210 ppb (Chow, 1998).

(2) Copper-Cobalt-Gold-Magnetite Skarn Showings

Brynnor Mine

The Brynnor Iron Mine occurs in the centre of the Redford property on the floor of Draw Creek valley (Figure 3). Noranda produced 3.0 billion kilograms of iron concentrate at a grade of 63.8% iron from 4.48 million tonnes of magnetite ore mined from 1962-1968. A deeper magnetite deposit was developed for production, but was never mined. A mill and deep water shipping dock was located on Toquart Bay.

The Brynnor ore is fine-grained, massive magnetite and magnetite-bearing skarn in Triassic Quatsino Formation marble and overlying tuff and argillite of the Jurassic Bonanza or Parsons Bay Formations. Seven lenses and bands of magnetite and skarn are reported in marble contacts. The marble-sediment contact and magnetite deposits take the form of a NNE-trending, flat, plunging anticline with steep limbs.

Tony

The Tony skarn showing (NY gold occurrence) is located in the centre of a magnetic high with similar dimensions as that covering the Brynnor Mine. The showing consists of massive sulphide (pyrrhotite-pyrite-chalcopyrite) replacement of the Quatsino limestone and interbedded volcanic rocks. The exposed mineralization is over an area of 5 metres by 1.5 metres with unknown depth. The true extent of the mineralization is not known. Previous assays of the sulphide mineralization returned 0.112 oz/ton Au over 12 feet.

Fact

The Fact skarn showing consists of bornite-pyrrhotite-magnetite-chalcopyrite veins at the contact of a Teritary feldspar porphyry and Quatsino limestone. A character sample assayed 14.26 g/t Au, 13.7 g/t Ag and 1.6% Cu. This showing is at the edge of a magnetic high which is possibly due to the intrusion of the feldspar porphyry into the limestone (Figure 3). The true extent of the mineralization is not known.

(3) Gold-Quartz Epithermal Shear Veins

Mowgli Showing

Arsenopyrite, pyrite, chalcopyrite, sphalerite and galena are found in a one-metre wide southwest trending shear zone at the contact of Tertiary quartz feldspar porphyry and hornfels Bonanza volcanic rocks. A grab sample assayed 4.75 g/t gold and 25 g/t silver. A channel sample across the one-metre wide zone assayed 1.02 g/t gold and 60.9 g/t silver. The true extent of the mineralization is not known, but the structure hosting the mineralization has been traced for 3 kilometres.

M-6 Showing (Switch Back Shear Zone)

A regional fault/shear zone with an orientation of 160/70E hosts sericite, quartz, limonite alteration and up to 15% arsenopyrite. This zone assayed 2.7 g/t gold over 5 metres. The fault zone is up to 25 metres wide and has been traced for 2.5 kilometres. Diamond drilling of this fault approximately 2 kilometres north of the M-6 showing intersected 1.10 g/t over 0.9 metres.

Parallel shears to the Switch Back Shear Zone assayed 890 ppb gold over 1.89 metres, 380 ppb gold over 1.4 metres, 620 ppb gold,

Dom Showing

The Dom showing is a 2 to 3 metre wide shear zone striking 020° and dips 70° east through Tertiary quartz diorite. The zone is characterized by brecciation and several lenses of clay gouge. Chip samples of the zone returned 1.34 g/t gold over 0.15 metres, 1.16 g/t gold over 0.6 metres, 990 ppb gold over 0.35 metres and 450 ppb gold over 3.0 metres.

Redford Claims
Property Geology

Angora Lake
Draw Lake
Kennedy Lake
Brynnor Mine Pit

EASTER 1 409826
EASTER 2 409827
EASTER 3 409828
EASTER 4 409829
EASTER 5 409830
EASTER 6 409831
EASTER 7 409832
EASTER 8 409833
EASTER 9 409834
EASTER 10 409835
EASTER 11 409836
EASTER 12 409837
EASTER 13 409838
EASTER 14 409839
EASTER 15 409840
EASTER 16 409841
EASTER 17 409842
EASTER 18 409843
EASTER 19 409844
EASTER 20 409845
DRAW 7 342159
DRAW 8 342160
DRAW 9 342161
JAYA 398856
GEGE 404313
BRYNNOR FRA 584339

ROBIN(AU)
DRAW(CU)
TONY(AU)
NOR(FE)
MAGGIE(FE)
FACT(AU)
NO. 2(FE)
MOUNT DAWLEY(FE)
BERT(CU)
KENNEDY LAKE(MG)
DOM(AU)
PYM 2(AU)
M-6(AU)
MOWGLI 6(AU)
ARSENIC(AU)
WILDCAT(MA)
GREAT EXPECTATIONS(CU)

JB
Jg
PMW
Tg
Trk
Trs

MINFILE showings
HWY
Main Road
Limited-Use Road
Trail
Wetlands
Lakes

Redford - Property Geology
UNIT CODE
JB
Jg
PMW
Tg
Trk
Trs

311,000 312,000 313,000 314,000 315,000 316,000 317,000 318,000 319,000 320,000 321,000 322,000 323,000 324,000 325,000 326,000 327,000 328,000 329,000 330,000 331,000

5,441,000 5,440,000 5,439,000 5,438,000 5,437,000 5,436,000 5,435,000 5,434,000 5,433,000 5,432,000 5,431,000 5,430,000 5,429,000

0 0.5 1 2 3 4 Kilometers

Figure 3: Property Geology

2008 EXPLORATION

Soil Survey

A wide-spaced Mobile Metal Ion (MMI) soil survey was conducted on the Redford Property from the 7th of May 2008 to the 30th of May 2008. The aim of the survey was to define anomalous zones and generate targets for follow up exploration and more focussed MMI soil survey grids.

An idealized soil grid with a sample spacing of 500m was generated using the Mapinfo program and programmed into handheld GPS units. There were a total of 418 points across the Redford Property. A team of up to five people collected the samples using hand augers.

The sampling team accessed most points by foot or by ATV where sample points were near logging roads. Most samples were taken within 50m of the target points however due to difficult terrain such as steep slopes, canyons or cliffs or due to a lack of soil, some samples were taken further from the target points. A few points could not be accessed safely. A total of 374 soil samples were taken by the team (Figure 4). Extra samples were taken where geologists noted prospective rocks such as gossan or sulfide bearing rocks.

Nine samples were collected adjacent to the Fact Skarn showing. The showing consists of bornite – pyrrhotite – magnetite – chalcopyrite veins at the contact of a Tertiary feldspar porphyry and Quatsino Limestone. A character sample from previous work assayed 14.26 g/t Au, 13.7 g/t Ag and 1.6% Cu (Groves, 1986). The soil samples were taken in a Northwest-Southeast trending line across the showing with a 30m spacing. Four samples lie to the southwest, one is centred on the showing and four lie to the southeast. The aim of this line was to test the extent of the mineralised contact and to test the response of the MMI technique across a known showing. This soil geochemistry method has not previously been tested on the Redford Property.

Samples were collected from a depth of 10 to 25cm below the surface. Samples were collected from the organic horizon where it was sufficiently thick but in most cases the organic horizon was very thin (<10cm) and the sample was collected from the B-horizon. The B-horizon was commonly a rusty coloured clay but locally it was a brown earth or grey sandy soil. The soil was placed in ziplock bags marked with the soil sample number and then double bagged to prevent spillage or contamination. Notes on the sample location (UTM co-ordinates), topography, soil quality and moisture and other relevant data were made at each sample point and later entered into an Excel database (Appendix A). The samples were sent to SGS Minerals in Toronto for analysis with the MMI-M package consisting of 43 elements.

After results were received from the lab, background values were determined by taking the average of the bottom quartile for each element. Response ratios were then calculated by dividing the value of each sample by the background value and rounding to a whole number. Finally, plots of the response ratios were created for each element of interest.

Prospecting/Rock Sampling

Logan Resources geologists obtained rock samples from a number of new road cuttings and newly discovered exposures after the soil survey was completed. Some of the new exposures were discovered during the soil sampling survey. A total of 63 rock samples were collected. Many of the samples were taken along new logging roads in the north central and south central parts of the property (Figure 14). Pyrite mineralization was evident in numerous samples, as well as visible sulfides including chalcopyrite, bornite, and arsenopyrite.

Short notes and UTM co-ordinates were taken at each location and the outcrops and rock samples were photographed. Data was later entered into an Excel database (Appendix B). Samples were delivered to Acme Labs in Vancouver for analysis by 30-element ICP-ES and fire geochemical gold. Follow-up fire assaying for gold and silver was conducted on higher grade samples.

Mineralised rock samples (below) were also collected from the Fact showing to confirm previous results.

Sample 830310

Sample 830314

DISCUSSION AND RECOMMENDATIONS

The MMI soil survey was successful in identifying several geochemical anomalies of interest. The most prominent anomaly occurs in the northwest region of the property around the Fact showing. This multi-element anomaly generated response ratios for Au ranging up to 12,620; Ag to 60; and Cu to 21 (Figures 5, 6, 7).

Au: A strong gold anomaly is found over the Fact Showing with response ratios in the range of 6 to 12,620. Other anomalies of note include samples with Au ratios of 124 and 60 in the eastern portion of the property.

Ag: High response ratios for silver in the range of 8 to 24 appear scattered across the property. The largest anomaly occurs over the Fact Showing with response ratios as high as 60. A few other samples on the west side of the property had highs of 40 and 62.

Cu: Scattered copper response ratios in the range of 6-10 occur across the property, with a few highs of 30-45. The strongest anomaly again occurs in the area of the Fact Showing with a cluster of samples giving response ratios ranging from 6 to 21.

Pb: Numerous strong lead anomalies appear across the property with response ratios in the range of 12-70. Many of these appear to coincide with known mineral showings.

Zn: Several zinc anomalies with a similar pattern to the lead anomalies occur with response ratios from 10-29.

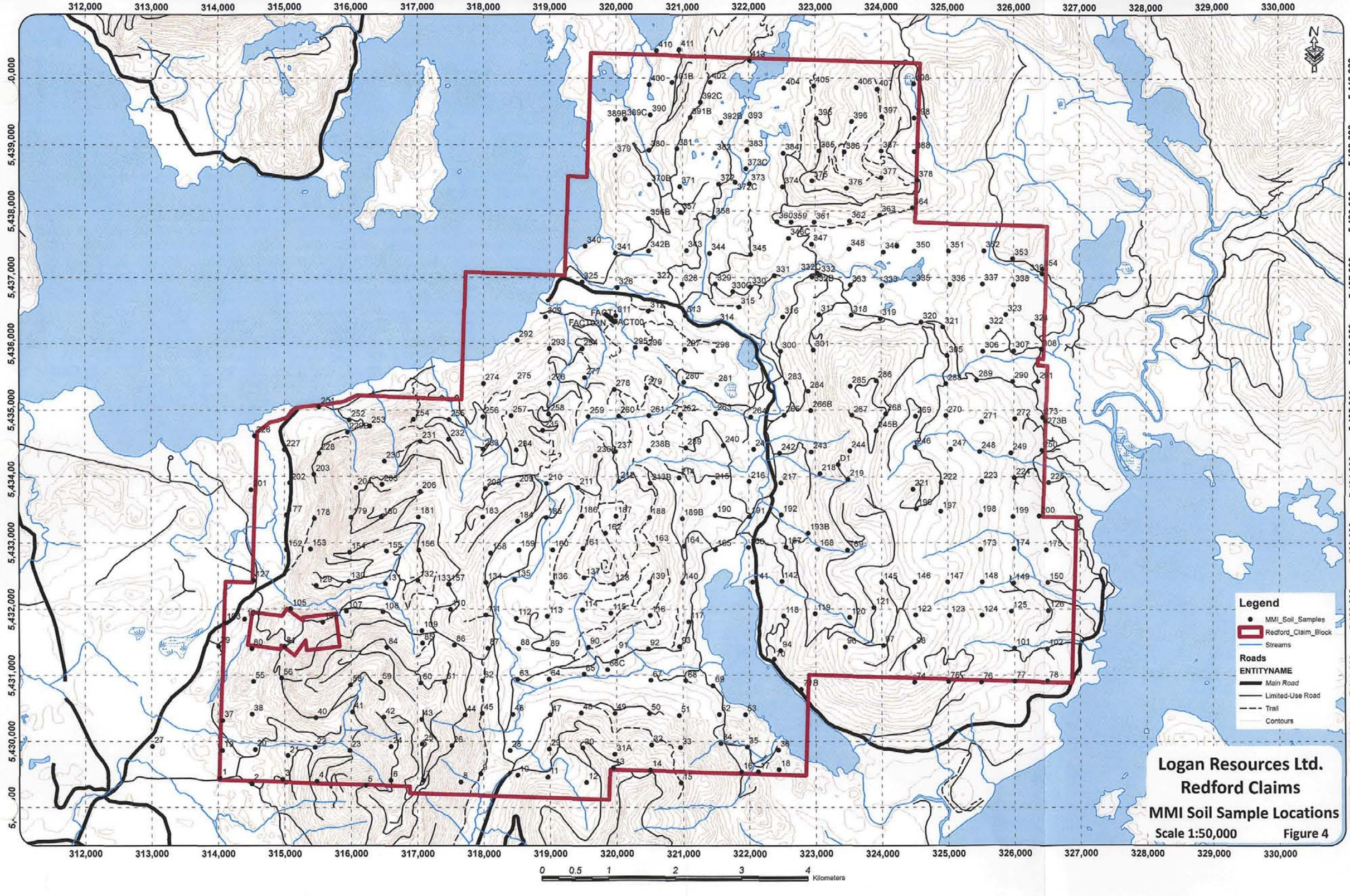
Other notable elements include Mo with a few highs (up to 132) towards the periphery of the property boundary, As with a large strong anomaly in the centre of the property (up to 656), and several Fe highs (up to 40) including around the Brynnor Fe mine and the Fact showing.

Rock samples returned a number of significant values, mostly from the Fact showing. Samples of mineralized limestone and vein material returned the following values:

Sample No.	Au (g/t)	Ag (g/t)	Cu (%)	Fe (%)
830310	16.19	45	5.5	25.6
830313	7.61	15	2.4	11.8
830314	32.96	81	>10	35.7
830315	17.14	62	5.3	21.2

Other samples of note include 830311, a mafic to intermediate volcanic taken from a road cutting in the central area of the property, which returned 6878 ppm Zn. Sample 830318, limestone-marble skarn with pyrite veinlets taken from a new road cut near the eastern boundary, returned elevated Au (379 ppb), Pb (524 ppm), and As (5827 ppm). Sample 830346, a quartz vein sample containing > 5% pyrite from the northern area, returned 571 ppb Au, while a sample of mafic wallrock above the vein, 830348, returned 1490 ppb Au.

Additional exploration work is warranted on the Redford Property. The multi-element MMI soil geochemical anomaly in the northwest region of the property should be further evaluated with a detailed MMI soil survey (lines 100 m apart and samples at 50 m spacing) to delineate the extent of the anomaly. Follow-up trenching and detailed mapping should also be conducted.


312,000
313,000
314,000
315,000
316,000
317,000
318,000
319,000
320,000
321,000
322,000
323,000
324,000
325,000
326,000
327,000
328,000
329,000
330,000
5,440,000
5,439,000
5,438,000
5,437,000
5,436,000
5,435,000
5,434,000
5,433,000
5,432,000
5,431,000
5,430,000
5,429,000
N
Legend
MMI_Soil_Samples
Redford_Claim_Block
Streams
Roads
ENTITYNAME
Main Road
Limited-Use Road
Trail
Contours
Logan Resources Ltd.
Redford Claims
MMI Soil Sample Locations
Scale 1:50,000
Figure 4
0
0.5
1
2
3
4
Kilometers

311,000 312,000 313,000 314,000 315,000 316,000 317,000 318,000 319,000 320,000 321,000 322,000 323,000 324,000 325,000 326,000 327,000 328,000 329,000 330,000

5,441,000 5,440,000 5,439,000 5,438,000 5,437,000 5,436,000 5,435,000 5,434,000 5,433,000 5,432,000 5,431,000 5,430,000 5,429,000

N

AU_PPB_R
- >50
- 21 - 50
- 11 - 20
- 0 - 10
- <all other values>
- HWY
- Main Road
- Limited-Use Road
- Trail
- Wetlands
- Lakes

Au MMI Response Ratio

Logan Resources Ltd.
Redford Claims
MMI Response Ratios - Au
Scale 1:50,000 **Figure 5**

0 0.5 1 2 3 4 Kilometers

311,000 312,000 313,000 314,000 315,000 316,000 317,000 318,000 319,000 320,000 321,000 322,000 323,000 324,000 325,000 326,000 327,000 328,000 329,000 330,000

5,440,000 5,439,000 5,438,000 5,437,000 5,436,000 5,435,000 5,434,000 5,433,000 5,432,000 5,431,000 5,430,000 5,429,000

N

MMI Response Ratios
AG_PPB_R
- >50
- 21 - 50
- 11 - 20
- 0 - 10
- <all other values>
- HWY
- Main Road
- Limited-Use Road
- Trail
- Wetlands
- Lakes

Ag MMI Response Ratio

Logan Resources Ltd.
Redford Claims
MMI Response Ratios - Ag
Scale 1:50,000 **Figure 6**

0 0.5 1 2 3 4 Kilometers

311,000 312,000 313,000 314,000 315,000 316,000 317,000 318,000 319,000 320,000 321,000 322,000 323,000 324,000 325,000 326,000 327,000 328,000 329,000 330,000

5,440,000 5,439,000 5,438,000 5,437,000 5,436,000 5,435,000 5,434,000 5,433,000 5,432,000 5,431,000 5,430,000 5,429,000

N

CU_PPB_R
- >50
- 21 - 50
- 11 - 20
- 0 - 10
- <all other values>
- HWY
- Main Road
- Limited-Use Road
- Trail
- Wetlands
- Lakes

Cu MMI Response Ratio

Logan Resources Ltd.
Redford Claims
MMI Response Ratios - Cu
Scale 1:50,000 **Figure 7**

0 0.5 1 2 3 4 Kilometers

311,000 312,000 313,000 314,000 315,000 316,000 317,000 318,000 319,000 320,000 321,000 322,000 323,000 324,000 325,000 326,000 327,000 328,000 329,000 330,000

5,440,000 5,439,000 5,438,000 5,437,000 5,436,000 5,435,000 5,434,000 5,433,000 5,432,000 5,431,000 5,430,000 5,429,000

N

PB_PPB_R
- >50
- 21 - 50
- 11 - 20
- 0 - 10
- <all other values>
- HWY
- Main Road
- Limited-Use Road
- Trail
- Wetlands
- Lakes

Pb MMI Response Ratio

0 0.5 1 2 3 4 Kilometers

Logan Resources Ltd.
Redford Claims
MMI Response Ratios - Pb
Scale 1:50,000 Figure 8

311,000 312,000 313,000 314,000 315,000 316,000 317,000 318,000 319,000 320,000 321,000 322,000 323,000 324,000 325,000 326,000 327,000 328,000 329,000 330,000

5,440,000 5,439,000 5,438,000 5,437,000 5,436,000 5,435,000 5,434,000 5,433,000 5,432,000 5,431,000 5,430,000 5,429,000

N

ZN_PPB_R
- >50
- 21 - 50
- 11 - 20
- 0 - 10
- <all other values>
- HWY
- Main Road
- Limited-Use Road
- Trail
- Wetlands
- Lakes

Zn MMI Response Ratio

Logan Resources Ltd.
Redford Claims
MMI Response Ratios - Zn
Scale 1:50,000 Figure 9

0 0.5 1 2 3 4 Kilometers

311,000 312,000 313,000 314,000 315,000 316,000 317,000 318,000 319,000 320,000 321,000 322,000 323,000 324,000 325,000 326,000 327,000 328,000 329,000 330,000

5,441,000 5,440,000 5,439,000 5,438,000 5,437,000 5,436,000 5,435,000 5,434,000 5,433,000 5,432,000 5,431,000 5,430,000 5,429,000

N

MO_PPB_R
- >50
- 21 - 50
- 11 - 20
- 0 - 10
- <all other values>
- HWY
- Main Road
- Limited-Use Road
- Trail
- Wetlands
- Lakes

Mo MMI Response Ratio

Logan Resources Ltd.
Redford Claims
MMI Response Ratios - Mo
Scale 1:50,000 Figure 10

0 0.5 1 2 3 4

311,000 312,000 313,000 314,000 315,000 316,000 317,000 318,000 319,000 320,000 321,000 322,000 323,000 324,000 325,000 326,000 327,000 328,000 329,000 330,000

5,440,000 5,439,000 5,438,000 5,437,000 5,436,000 5,435,000 5,434,000 5,433,000 5,432,000 5,431,000 5,430,000 5,429,000

N

AS_PPB_R
- >50
- 21 - 50
- 11 - 20
- 0 - 10
- <all other values>
- HWY
- Main Road
- Limited-Use Road
- Trail
- Wetlands
- Lakes

As MMI Response Ratio

0 0.5 1 2 3 4 Kilometers

Logan Resources Ltd.
Redford Claims
MMI Response Ratios - As

Scale 1:50,000 Figure 11

311,000 312,000 313,000 314,000 315,000 316,000 317,000 318,000 319,000 320,000 321,000 322,000 323,000 324,000 325,000 326,000 327,000 328,000 329,000 330,000

5,440,000 5,439,000 5,438,000 5,437,000 5,436,000 5,435,000 5,434,000 5,433,000 5,432,000 5,431,000 5,430,000 5,429,000

N

FE_PPM_R
- >50
- 21 - 50
- 11 - 20
- 0 - 10
- <all other values>
- HWY
- Main Road
- Limited-Use Road
- Trail
- Wetlands
- Lakes

Fe MMI Response Ratio

Logan Resources Ltd.
Redford Claims
MMI Response Ratios - Fe
Scale 1:50,000 **Figure 12**

0 0.5 1 2 3 4 Kilometers

311,000 312,000 313,000 314,000 315,000 316,000 317,000 318,000 319,000 320,000 321,000 322,000 323,000 324,000 325,000 326,000 327,000 328,000 329,000 330,000

5,439,000 5,438,000 5,437,000 5,436,000 5,435,000 5,434,000 5,433,000 5,432,000 5,431,000 5,430,000 5,429,000

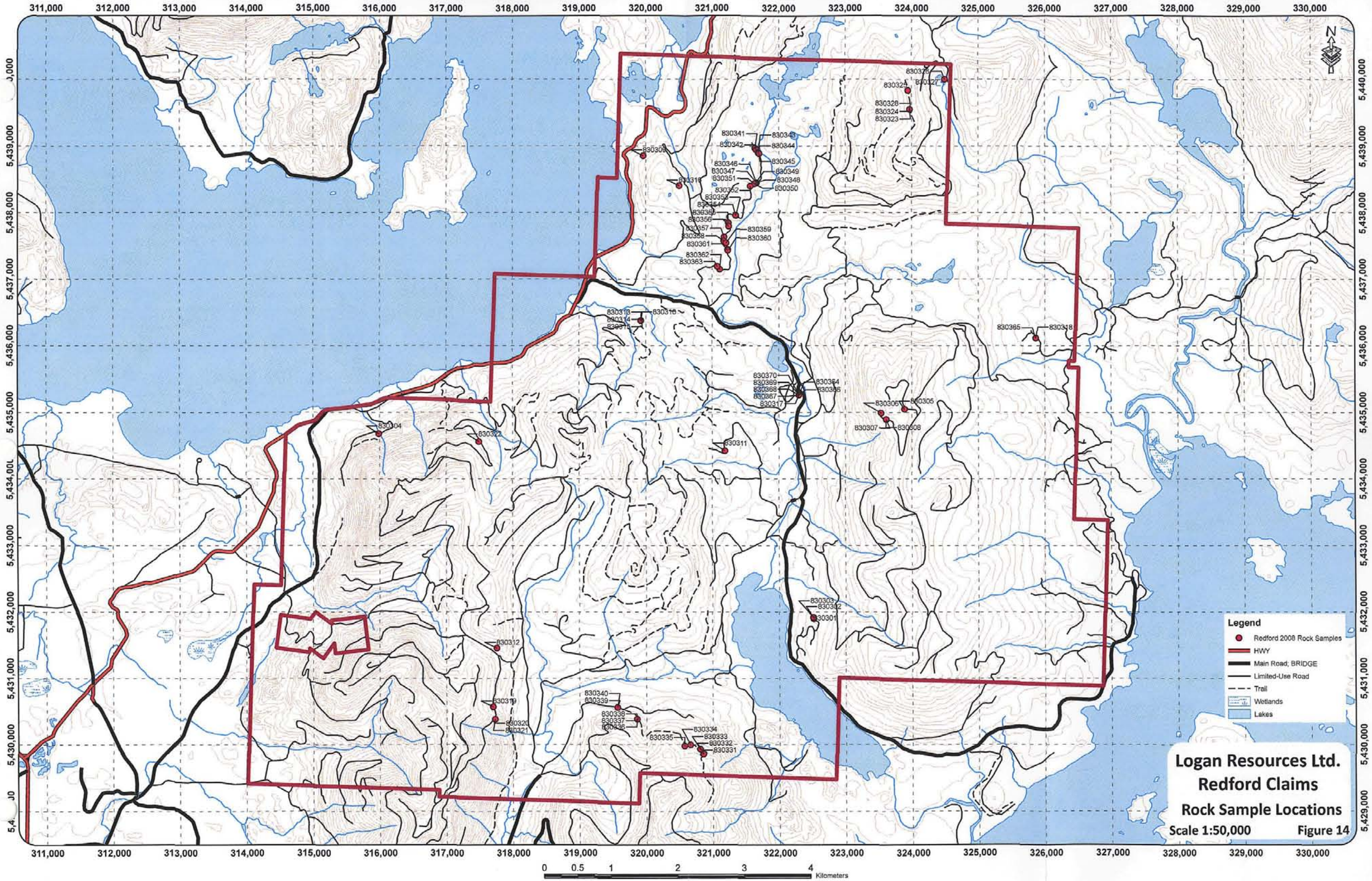
N

CO_PPB_R
- >50
- 21 - 50
- 11 - 20
- 0 - 10
- <all other values>
- HWY
- Main Road
- Limited-Use Road
- Trail
- Wetlands
- Lakes

Co MMI Response Ratio

Logan Resources Ltd.
Redford Claims
MMI Response Ratios - Co
Scale 1:50,000 Figure 13

0 0.5 1 2 3 4 Kilometers


311,000
312,000
313,000
314,000
315,000
316,000
317,000
318,000
319,000
320,000
321,000
322,000
323,000
324,000
325,000
326,000
327,000
328,000
329,000
330,000
5,439,000
5,438,000
5,437,000
5,436,000
5,435,000
5,434,000
5,433,000
5,432,000
5,431,000
5,430,000
5,429,000
N
830325
830327
830326
830328
830324
830323
830341
830343
830342
830344
830345
830346
830347
830349
830351
830348
830350
830316
830352
830353
830354
830355
830356
830357
830358
830359
830360
830361
830362
830363
830313
830314
830315
830318
830365
830370
830369
830368
830367
830317
830364
830366
830306
830305
830307
830308
830304
830322
830311
830303
830302
830301
830312
830319
830320
830321
830340
830339
830338
830337
830336
830335
830334
830333
830332
830331
Legend
Redford 2008 Rock Samples
HWY
Main Road; BRIDGE
Limited-Use Road
Trail
Wetlands
Lakes
Logan Resources Ltd.
Redford Claims
Rock Sample Locations
Scale 1:50,000
Figure 14
0
0.5
1
2
3
4
Kilometers

311,000 312,000 313,000 314,000 315,000 316,000 317,000 318,000 319,000 320,000 321,000 322,000 323,000 324,000 325,000 326,000 327,000 328,000 329,000 330,000

5,440,000 5,439,000 5,438,000 5,437,000 5,436,000 5,435,000 5,434,000 5,433,000 5,432,000 5,431,000 5,430,000 5,429,000

N

88
15198
571
1490
171407618
32960
16190
379
31
81
40

Legend

Redford 2008 Rock Au

Au (ppb)

- 0 - 2
- 2 - 5
- 5 - 18
- 18 - 379
- 379 - 33000

HWY
Main Road; BRIDGE
Limited-Use Road
Trail
Wetlands
Lakes

Logan Resources Ltd.
Redford Claims
Rock Geochemistry - Au
Scale 1:50,000 Figure 15

0 0.5 1 2 3 4 Kilometers

311,000 312,000 313,000 314,000 315,000 316,000 317,000 318,000 319,000 320,000 321,000 322,000 323,000 324,000 325,000 326,000 327,000 328,000 329,000 330,000

5,440,000 5,439,000 5,438,000 5,437,000 5,436,000 5,435,000 5,434,000 5,433,000 5,432,000 5,431,000 5,430,000 5,429,000

N

81
45

Legend

Redford 2008 Rock Ag

Ag (ppm)

- 0 - 1
- 2 - 5
- 6 - 15
- 16 - 62
- 63 - 81

HWY

Main Road; BRIDGE

Limited-Use Road

Trail

Wetlands

Lakes

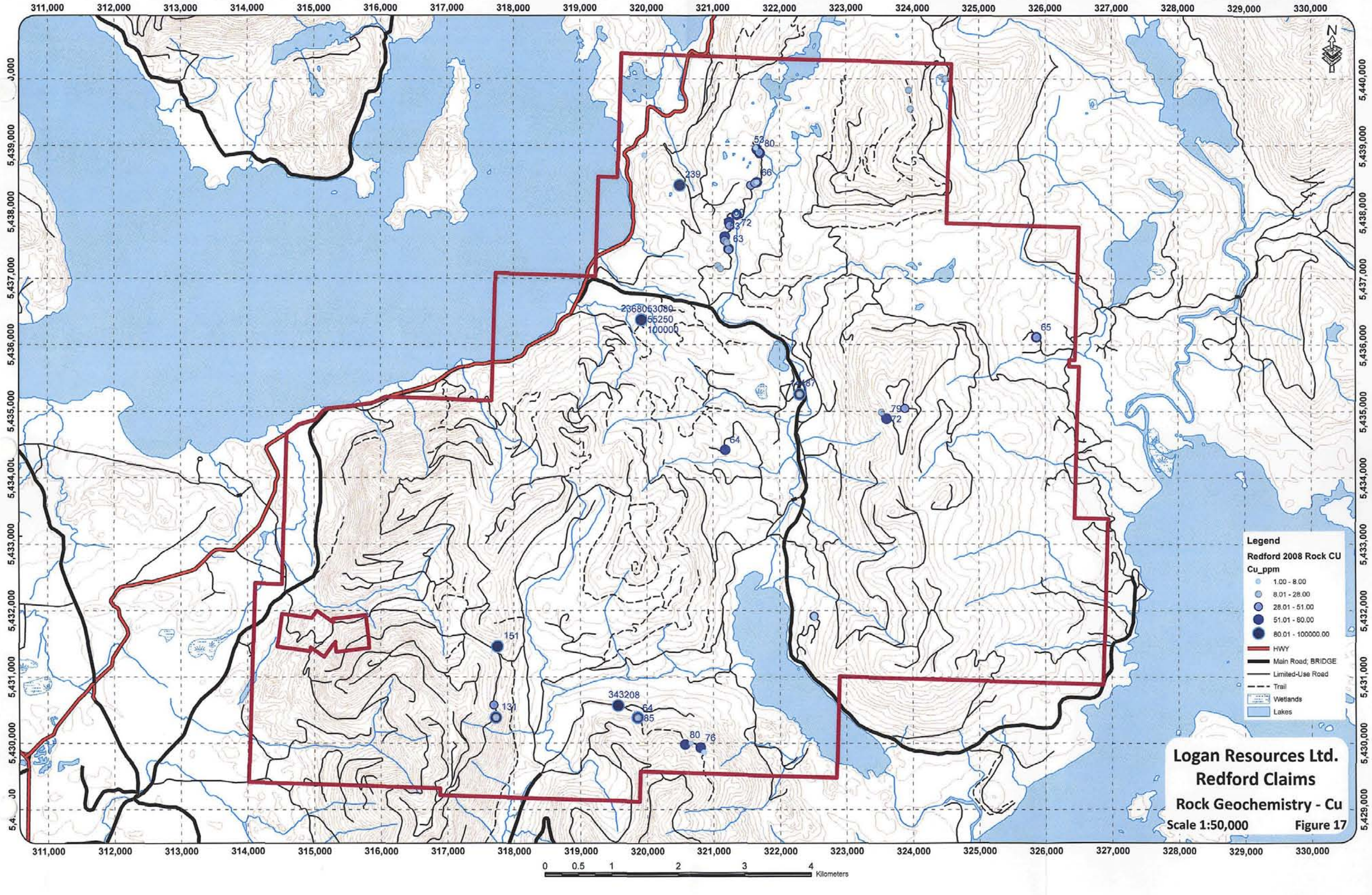
Logan Resources Ltd.

Redford Claims

Rock Geochemistry - Ag

Scale 1:50,000 **Figure 16**

0 0.5 1 2 3 4 Kilometers


311,000
312,000
313,000
314,000
315,000
316,000
317,000
318,000
319,000
320,000
321,000
322,000
323,000
324,000
325,000
326,000
327,000
328,000
329,000
330,000
5,440,000
5,439,000
5,438,000
5,437,000
5,436,000
5,435,000
5,434,000
5,433,000
5,432,000
5,431,000
5,430,000
5,429,000
N
52
80
239
66
72
63
2368053080
55250
100000
65
67
79
72
64
151
131
343208
64
85
80
76
0 0.5 1 2 3 4
Kilometers
Legend
Redford 2008 Rock CU
Cu_ppm
1.00 - 8.00
8.01 - 28.00
28.01 - 51.00
51.01 - 80.00
80.01 - 100000.00
HWY
Main Road; BRIDGE
Limited-Use Road
Trail
Wetlands
Lakes
Logan Resources Ltd.
Redford Claims
Rock Geochemistry - Cu
Scale 1:50,000
Figure 17

REFERENCES

Bridge, D.J (2004): Report on the Rock Sampling and Diamond Drilling on the Redford Property, Draw 7-9, Easter 1-20, Gege and Jaya Mineral Claims; for Logan Resources Ltd.

Casselman, M.J. (2003): Draw 7, 8 and 9, Maggie 1, Jaya; Redford Property – Logan Resources Ltd.

Chow, R. (1996): Geological, Geochemical and Prospecting Report on the Lucky Property; for Consolidated Logan Mines Ltd.

Groves, W.D. (1986): Assessment Report on Geological, Geochemical, Metallurgical and Prospecting Work; The Kennedy Sulphides Group (Tony Group, Gil, and Fact); for First Coast Minerals Corp.

STATEMENT OF COSTS

Field Personnel:	
Daithi Mac Gearailt – 37 days (May 6-Jun 11)@ $400/day	14,800
Aiden Lavelle - 37 days (May 6-Jun 11)@ $400/day	14,800
Shane Treacy – 23 days (May 20 – Jun 11) @ $300/day	6,900
Zhihuan Wan – 5 days (May 13-17) @ $300/day	1,500
Andrew Lukeman – 20 days (May 12-31) @ $250/day	5,000
Graeme Zucko – 20 days (May 12-31) @ $250/day	5,000
Pierre Van der Merwe – 5 days (May 6-10) @ $150/day	750
	48,750
Accommodation & Meals:	
147 person days @ $66/person/day (May 6 – Jun 11)	**9,711**
Analyses:	
398 soil samples (MMI, 42-elements) @ $38.59/sample	15,359
68 rock samples (ICP & fire geochem Au) @ $29.22/sample	1,987
4 rock samples (fire assay Au + Ag) @ $17.95/sample	72
4 rock samples (Cu assay) @ $9.54/sample	38
	17,456
Travel & Transport	**3,082**
Fuel	**2,005**
Supplies & misc.	**8,234**
Report preparation / maps	**3,500**
TOTAL:	**$ 92,738**

APPENDIX A

Soil Sample Data

Sample_No	UTM_x	UTM_y	Elev.	Date	Sampler	Topo_Position	Dr	Soil_Moisture	S_Q_I	Notes
70	322375	5431246	59	9-May	AL	hummock, near creek broken timber nearby. slope facing SW to lake.	w	moist-dry	1	Lots of outcrop in cliff above sample site, possible slump, soil is 'B' red/brown in colour with coarse fragments.
74	324493	5430893	497	7-May	DMG	Steep slope facing SE, area prone to landslides	m	moist	4	steep slope beside stream/flood area. Large faulted+slumped outcrop. Diorite sample taken. OC has slid down hill.
75	325003	5430907	320	7-May	DMG	Steep SE facing, little or no brush.	w	moist		steep hillside, large trees, poor satellite. Area had a burn in the past.
76	325502	5430895	188	7-May	AL	Hillside facing SE,	w	moist	1	Broken/knocked trees, freshly exposed granodiorite? nearby, prone to slips? outcrop within 10m, creek with outcrop 40 m East.
77	326000	5430906	130	7-May	AL	Hillside near small creek to the West	w	moist	1	Hummocky, rusty felsic-intermediate rock to the east in gorge, not much A horizon.
78	326499	5430914	126	7-May	AL	Hillside, moderate slope	w	moist	2	Hummocky, shallow soil, outcrop of medium-grained intermediate rock to the 50m east.
94	322472	5431372	127	9-May	AL	Hillside facing lake to west. Forest, edge of logged area.	w	dry	1	No humus, red sandy soil, difficult to dig, broken timber nearby, contains weathered rock fragments?
95	522991	5431441	116	8-May	DMG	Steep slope facing NW	w	moist	4	Heavily wooded, 130m off road - some landslide lower down, lots of peat in soil, dark black soil, thick root cover, B horizon not seen.
96	323448	5431425	508	8-May	DMG	slight slope, top of hill	w	moist	4	old logged with new growth, lots of vines, snow, very big tree stumps.
99	324963	5451405	451	7-May	DMG	Just below road, looks like water may flow all down this side.	w	moist	4	Looks like area is prone to flood-snow melt. Heavily veg, looged in the past, lots of little streams run off path/road.
101	326000	5431405	174	7-May	AL/DMG	Slope near creek	w	moist	3	Rough broken timber, outcrop at road 50 S in road cutting, area logged.
102	326500	5431400		7-May	AL/DMG	slope, hummocky	w	moist	4	Dense Growth, logged, No visible outcrop, heavily overgrown.

118	322521	5431895	160	9-May	AL	Hillside sloping down to lake west, road cutting in logged area.	w	dry	2	Underlain by felsic intrusives-visible road cutting, soil is rusty coloured and sandy.
119	322998	5431929	300	8-May	P	Slope, under big trees	w	moist	4	
120	323518	5431871	381	8-May	DMG	Hill side facing NW	w	moist	3	Heavily covered by fallen timber. Near a large stream.
141	322054	5432406	27	9-May	AL	near lake shore, 70m? west.gentle sloping forest floor.	m	moist	3	Sample is dark grey soil, slightly sandy, B horizon, very little black humus. River/lake gravel 15m SW on forest floor.
142	322494	5432417	103	9-May	AL	Elevated spot between two creeks, large river to the south. Gentle slope.	w	moist	2	Sample is humus, possibly underlain by river deposits, large boulders nearby, Int-felsic intrusives outcrop in river.
165	3214971	5432901		9-May	P	Underneath trees, near a small stream, flat area	w	moist	4	
166	321993	5432929		9-May	P	flat swampy area between trees.	w	moist	4	
167	322555	5432939	146	8-May	DMG	Gentle slope, dry	w	moist	2	Beside road-overgrown, lots of dead timber v-little 'A'. Red/brown rusty coloured clay along road cut. Black Bear seen.
168	323041	5432903	298	7-May	A.L	Steep Hillside, river in gorge to the NE.	w	moist	1	Very little A horizon, dense brush, fallen trees. Lots of outcrop in river 90m NE. Intermediate Intrusive.
169	323486	5432888	442	7-May	A.L	Steep slope, N of river.	w	moist	3	Dense veg, possibly underlain by till. Outcrop in river downstream and till visible.
190	321497	5433416		9-May	P	open logged area, on a slope above stream.	m	wet	4	
191	322011	5433393		9-May	P	near a road, underneath trees, flat area	w	moist	4	
192	322490	5433423	80	8-May	P	Valley, between 2 streams, slightly elevated.	w	moist	4	Big trees, vegetated. Probably underlain by river gravel.

217	3224081	5433906	63	9-May	P	near a small stream, flat area.		moist	4	
218	323071	5434043	276	9-May	DMG	steep west facing slope between two v-slope gorges	w	moist	2	Trees 8-10ft thick, heavily wooded. Soil was missing 'A' horizon so sample was taken just under leaf litter. Red/oxidised ,little gritty, possible slumping in area though there are some sturdy trees above the site. V-steep site, 150m off actual target-cannot cross gorge.
219	323494	5433957	433	9-May	DMG	beside steep gorge with creek, area recently logged.	w	moist	2	Sample taken just below A-B interface, gritty, red/brown slightly oxidised sample. Near road cut, only 2cm of A horizon, had to move uphill a little because site was just gravel and boulders left from logging. Area looks prone to slumping to the SW.
242	322463	5434352	92	9-May	DMG	low lying flat area in between two slides.	w	moist	2	This whole area is underlain by glacial or river till-over 15ft thick in some of the cutouts/gorges, soil sample is sandy and pebbly.
243	322943	5434370	195	9-May	DMG	sloping west, heavily wooded , protected	w	moist	2	Beside a gorge+landslide, steep slope, dense root, underlain by large glacial debris. Possibly not a great sample as multiple levels of roots, possibly a cavity under sample, also underlain by slumped glacial till.
244	323524	5434385	454	9-May	DMG	steep slope west, exposed	w	moist	2	Overgrown with low dense brush, 3m from road-impassable. Lots of dead logs etc in the area. Hard to find a suitable site, looks like slump of glacial till, rounded rocks 10-15cm and silty, oxidised B-horizon, Sample from 'B' down 10cm.
265	322535	5434925	81	9-May	AL	Flat, near road, moss & fern covered forest floor, tall trees	w	moist	3	Thick black humus, no outcrop, hummocky ground, 'B' not seen.
283	322560	5435412	61	9-May	AL	Stream to the south, just east of road. Forest floor, hummocky.	w	moist	2	Thick well decayed wood, Man made area/rubble at target site, the sample contains woody tissue, could not get below this.

193B	322893	5433145	217	7-May	A.L	Steep slope above river cliff, river is SSW	w	moist	2	Outcrop in river cliff, very thin A horizon, very dense veg, dangerous loose slopes. Difficult bush, slow moving.
71B	322786	5430785	62	9-May	AL	SW facing slope, around 40m from road and lake	w	fairly dry	2	dense brush near creek, slight slope, soil is dark a bit mixed, dense root mat difficult to penetrate.
D1	323346	5434178	434	9-May	DMG	exposed, west facing	w	moist	3	On the downslope side of a roadcut, road cut lots of glacial till/river. Top of landslide; extra sample.
266B	322938	5434993	162	10-May	DMG	wooded west facing	w	moist	4	Rusty brown silty sample, possibly some
						slope, beside stream				ash? Residue, oxi app, sample taken
						(50m) area looks prone				just below 'A'. Outcrop + cliff 200m east,
						to slumping.				
316	322516	5436406	160	10-May	DMG	just off road, low lying	w	moist	3	Hummocky woods, sample from top of
						prone to flooding.				B, rusty brown.
347	322951	5437500	272	10-May	DMG	slope-75m from stream	w	moist	4	Outcrop all over, karst limestone, sample
						NE facing slope				from top of 'B' at 'A' interface.
										Orange/brown-gritty.
318	323551	5436428		10-May	DMG	flat lying, near road,	m	moist	3	lots of dead big timber. Sample is from
						prone to flooding.				bottom of A+top of B.
321	324935	5436252	261	10-May	DMG	steep slope, side of road	w	moist	3	outcrop below me, intrusive diorite, some
										oxi, sample A/B interface.
251	315523	5435049	16	10-May	AL+DMG	Edge of forest, bottom	w	moist	4	Lots of clay, sample below interface with
						of slope beside road.				organic layer. Redish colour.
319	323989	5436379	289	10-May	AL	forest floor near road and	w	wet	2	Thin humus underlain by sandy soil,
						small stream, fallen				possible stream material, sample from
						timber.				sandy soil.
320	324606	5436325	321	10-May	AL	under cliff near road side	w	wet	1	Red rusty sandy soil, no humus,
						steep slope				dangerous slopes, dense veg.

252	315981	5434850	67	10-May	AL	hummocky forest floor,	w	moist	4	50m from target, south of road. Soil is
						near road and stream				brown earth, not much black humus,
						junction,				brown soil sampled.
228	315523	5434350	155	10-May	DMG	top of a cliff, above old	w	moist	3	Road overgrown, not passable, lots of
						road, very steep.				root cover. Limestone? In cliff, sampe
										from bottom of 'A'.
284	322894	5435285	195	10-May	AL	steep slope east of	w	wet	1	Felsic intrusives in road cut nearby, thin
						overgrown road and				A and B horizon, stony, sample is black
						small cliff				organic material.
300	322478	5435887	103	10-May	AL	forest floor near road	w	wet	3	Red soil sampled, thin humus layer above
						20m from target.				red soil.
332	323067	5437032	221	10-May	AL	near road and cliff, big	w	wet	3	boulders in area. Sample is blue-grey clay
						trees, very rough				below thin humus, weathered limestone?
										150m from target,very dense veg
333	323533	5436883	228	10-May	AL	above road cut	w	wet	3	Thin humus, grey clayey soil underneath-
										sampled. Till+felsic intrusives in cutting
										beneath sample.
203	315443	5434033	161	10-May	DMG	hillside above road,	w	wet	3	Road impassable, bottom of A+B in
						steep slope, forest floor				sample, outcrop along road.
229B	315953	5434665	104	10-May	DMG	steep hillside forest,	w	moist	3	Brown rusty soil in sample, 287m from
						above road, broken				target.
						timber.				
286	323922	5435445	687	11-May	DMG+AL	Hillside near top of	w	moist, thick	4	Diorite with rusty veins on old road nearby,
						mountain.		snow		A'+'B' visible, 'B' sampled.
285	323530	5435359	749	11-May	DMG+AL	Top peak of mountain	w	moist	3	Nearby outcrop-valley cut ravine near trail.
						exposed slope				
245B	323925	5434691	586	11-	DMG+AL	Roadside slope,	w	moist	3	Brown, oxidised slightly, 'B' horizon

				May		forest				
						and snow.				sampled.
268	324070	5434946	582	11-May	DMG+AL	road junction on hillside	m	moist, 3ft snow.	2	Near large tree trunk, 90m off target, very
										thin humus-'A' horizon, sample is 'B'.
267	323559	5434922	589	11-May	DMG+AL	steep slope, beside	w	moist	3	Densely wooded, sample from 'B' horizon,
						gravel roadcut, east				red rusty colour. OC-sample of rock face
						facing slope.				taken, had some oxi veinlets etc.
										Sample is underlain by glacial debris ie
										rounded rocks etc. Still snow on ground.
313	321045	5436427	111	12-May	DMG+AL	Hummocky forest floor	m	moist	4	B' red oxidised/rusty soil, 58m from target.
						near road,				lots of fallen timber.
314	321545	5436308	89	12-May	DMG+AL	Forest hillside near road	p	wet	3	Grey-rusty soil, sample just below 'A',
										100m off target, target in river.
340	319539	5437472	23	12-May	DMG+AL	Bottom of steep slope	w	moist	1	Possibly slumped, sample from under
						near main road+K. Lake.				rotten log, sandy sample, slightly rusty
										colour.
411	320953	5440434	77	12-May	DMG+AL	Botton of steep slope	m	moist	4	Lots of fallen timber-rotten. Red/rusty clay
						near main road.				Outcrop in cliff above sample spot, outcrop
										along main road.
325	319491	5436932	70	12-May	DMG+AL	Hummocky forest floor	w	moist	4	Sample in 'B', clay-silt red oxidised colour
						near road-25m.				No outcrop, Bear+cub seen on road 150m.
327	320587	5436932	103	12-May	DMG+AL	Hillside, steep rocky	w	moist	3	Forest with fallen timber. 97m from target
						ground.				Granite outcrop cut by mafic? Dykes on
										road 180m to the east. Brown clayey soil
										stony hard to penetrate.
326	320016	5436846	84	12-May	DMG+AL	Sloping forest floor near	w	moist	3	Red oxidised colour soil, thin humus, 'B'

						road, steep slope down				sampled, not too much brush, 54m south
						to creek.				of target.
328	320994	5436899	96	12-May	DMG+AL	Swamp, dead trees,	p	wet	4	Sample in 'A' horizon, dark soil, hard rock
						fallen timber				under soil, possibly granite.
391B	321119	5439412	327	13-May	AL	Road side, east, near	w	wet-heavy rain	2	130m? Off target, lots of outcrop in
						cliff.				cliff, 'B' sampled, red rusty colour, little
										or no humus.
357	320970	5437983	357	13-May	AL	Near old road, granite	m	wet	1	A horizon sampled.
						outcrop.				
343	321064	5437406	216	13-May	AL	Humocky ground, 70m	w	wet	3	Granite outcrop nearby, some dead trees.
						from target				A' horizon sampled above interface with 'B'
341	319991	5437367	94	13-May	AL	Hummocky forest floor,	m	wet	4	Not much organic/'A' layer, brown-rusty
						near rocks, dead timber.				clay sample from 'B'.
413	322014	5440270	371	13-May	AL	Rocky hillside near road	w	wet	1	rusty 'B' in sample, thin organic layer.
						and lake.				
392C	321274	5439641	332	13-May	AL	roadside	w	wet	3	rusty soil in sample, thin humus/'A',
										outcrop nearby.
344	321413	5437363	168	13-May	AL	Hummocky ground, near	m	wet	3	Big trees, fallen timber, 'A' sampled, dark
						steep canyons,				and peaty, outcrop in canyon 30 m away
401	321423	5439944		13-May	AL	Near top of steep bank,	w	very moist	2	Not much soil, too steep, washed out
						below rock cliff				
381	320918	5438941	310	13-May	AL	Site of moderately steep	w		3	Small vegetation
						slop				
371	320958	5438371	295	13-May	AL	Down in a flat, marshy,	p	very wet	2	
						area				

358	321479	5437909	217	13-May	AL	Steep rocky slope below,	w	med	3	
						logging road				
401B	320845	5439938	122	13-May	Z	Cliffs, lots of vegetation	w	moderate	3	Lots of outcrop, rock faces
380	320498	5438917	211	14-May	Z	Side of road, hill	w	dry	3	Vegetation, stream nearby.
389B	320022	5439376	57	13-May	DMG	Base of slope hill, etc	m	moist	3	Bottom of cliff/hill, red clay (rusty, same
										as other), lots of outcrop
379	319988	5438843	182	13-May	DMG	On a rocky bluff above	p	moist	2	Steep slope, no A, red clay
						the highway				
400	320499	5439902	57	13-May	DMG	Beside road, flat lying,	p	moist	4	50 m from main highway, loged, soil is A,
						very organic, little swamp				dark brown, organic
						lillies				
410	320612	5440412	53	13-May	DMG	Flat under cliff outcrop	w	dry	4	B horizon, under cliff, beside main highway,
										long trees, Hummocky, under cliff, lots of
										outcrop
389C	320136	5439388	107	13-May	DMG	Slight vally dip	w	moist	4	Red/brown clay, B horizon, top of hill above
										highway, near large outcrop of M-vein
										intrusive diorite, top of mountain is all
										outcrop, same as road below
390	320513	5439448	68	13-May	DMG	Hummocky, densely	w	moist	4	Gradual slope, 75 m off highway, near
						overgrown				seasonal straine, red/orange rusty brown
										soil, little organic
361	322991	5437832	303	14-May	DMG	On east facing slope	m	moist	4	Soil from B horizon, big trees, not too
										much brush, soil is red/rusty brown, sillty,
										100 m off path

362	323525	5437847	351	14-May	DMG	On slope beside stream			2	Look like there was some slumping land
										slides in the past-lots of disturbed ground,
										glacial till, B horizon, red/brown silty clay
363	323978	5437939	344	?	?	?	?	?	?	??
380B	N49,04.615	W125,27.482	211	14-May	Zhihuan,	On the hill	w	fairly dry	3	Side of the road, vegetation, stream river
					Zucko					nearby
370B	N49,04.335	W125,27.465	283	14-May	Zhihuan,	Top of steep hill	p	moderate	3	On top of one side of the vally, outcrop
					Zucko					nearby, outcrop sample collected
356B	320491	5437886	169	14-May	Zhihuan,	Bottom of an outcrop	m	moderate dry	2	Outcrop nearby, swamp land, close to
					Zucko					road.
342B	320490	5437397	114	14-May	Zhihuan,	Flat	p	wet and heavy	3	Close to road
					Zucko					
FACT1N	319903	5436401	125	15-May	Zhihuan,	On top of a hill, flat land,	w	moist	4	Some trees around, no densely grown
					DMG	near slope				plants
FACT2N	319883	5436415	127	15-May	Zhihuan,	On the slope	w	moist	4	Some trees around, no densely grown
					DMG					plants
FACT03N	319864	5436432	117	15-May	Zhihuan,	On the slope	w	moist	4	Some trees around
					DMG					
FACT04N	319845	5436441	123	15-May	Zhihuan,	On the slope	w	moist	3	Some trees around, no densely overgrown
					DMG					plants, slump landslide
FACT01S	319943	5436360	126	15-May	Zhihuan,	On the slope	w	moist	2	Some trees around, no densely overgrown
					DMG					plants, very poor sample underlain by
										limestone
FACT02S	319963	5436335	136	15-May	Zhihuan,	On the slope	w	moist	2	Poor soil underlain by limestone, some
					DMG					trees around, logs around, no dense
										overgrown
FACT03S	319975	5436333	139	15-May	Zhihuan,	On the gradual slope	w	moist	4	Some trees around, logs around
					DMG					

FACT04S	319993	5436330	147	15-May	Zhihuan,	On the slope	w	moist	3	Some trees around, slump landslide, no
					DMG					densely overgrown plants
273	326439	5434890	67	16-May	Zhihuan,	Bottom of the slope,	w	moist	3	Near the stream, near the road
					DMG,AL					
250	326426	5434393	85	16-May	Zhihuan,	On the slope	p	moist	3	Above road cutting, nice outcrop nearby
					DMG,AL					
224	326006	5433981	138	16-May	Zhihuan,	On the steep slope,	w	moist	4	Recently logged
					DMG	steep knol				
225	326527	5433912	80	16-May	Zhihuan,	Beside the road	w	moist	3	Dense vegetation, bear nearby
					DMG,AL					
117	321091	5431809	89	16-May	Zhihuan,	On the slope	w	moist	4	Some trees around, lillies growing around
					DMG					it, not too far from the road, some diorite
										outcrop below, steep sloep, A horizon 5
										cm
93	320949	5431434	110	16-May	Zhihuan,	On the slope	w	moist		very red, very rusty, heavily oxidized
					DMG					
92	320478	5431395	152	16-May	Zhihuan,	On the slope	w	moist	2	Beside the road, some trees around,
					DMG					very silty, silty gravel, slump landslide
91	320006	5431359	188	16-May	Zhihuan,	On the slope	w	moist	4	Near the road, some trees around, no
					DMG					densely overgrown plants
66C	319863	5431085	157	16-May	Zhihuan,	On the slope	m	moist	3	Near the river, losts of dead timber, taken
					DMG					200 m short, because close to the river,
										recommend one sample on the other side
										of the river
										Change sample No on the sample bag
372	321550	5438409	260	14-May	AL	Logged hillside near	w	wet	3	Lots of granite outcrop on road, sample
						road and creek				from 'A', dark clayey soil above rusty 'B'
										soil, 50 m from target

382	321500	5438872	345	14-May	AL	Swampy-rocky ground	p	wet	3	Dead trees, no black organic soil, sample
						large granite outcrops.				from 'B', light coloured clay with grit.
										Sample taken from mossy ground between
										two outcrops, 24m from target.
392B	321583	5439336	411	14-May	AL	Hummocky ground,	p	wet	3	Dead trees, thin soil, black peaty 'A'
						large rounded outcrops				sampled, underlain by light coloured clay.
										Brush not too dense, swamps between
										outcrops of felsic intrusives.
393	321969	5439348	378	14-May	AL	Hillside forest sloping	p	wet	3	Fallen timber, red rusty clay in sample
						down to Creek.				overlain by thin organic layer, some fresh
										erosion/slip nearby.
383	321980	5438923	324	14-May	AL	Bottom of slope	p	wet	3	Top dark layer sampled, fallen timber
										rocky slope with int-felsic intrusives,
										near river.
373C	321960	5438640	282	14-May	AL	Forest, not far from river	m	wet	3	Large trees, some are dead, thin organic
						canyon to the west.				layer, sample is rusty clay from just below
										B interface.
373	322012	5438412	283	14-May	AL	Forest floor near stream	w	wet	3	Thin organic layer, sample from 'B', red/
										oxidised, very big trees, some dead.
372C	321800	5438433	261	14-May	AL	Logged hillside near	m	wet	2	Sample is black peaty soil from 'A', some
						river.				woody tissue. East of sulfide bearing vein
										on road near 372m.
378	324544	5438465	508	16-May	AL	Hillside near road.	w	moist	3	Thin organic layer, sample from 'B', rusty
										colour. Small trees, some snow, 38m from
										target, good road for ATV.
10	318509	5429486	258	18-	AL	Hummocky forest	w	moist	4	Sample from 'B'-grey clay. No outcrop

				May		floor,				
						100m from road,				seen, 80m off target.
11	318965	5429456	315	18-May	AL	Forest with some large	w	moist	3	Sample from 'A', black organic, large
						trees, near road.				fallen timber, 60m from target.
29	318986	5429878	298	18-May	AL	Steep hillside forest.	w	dry	2	Sample from 'B', loose red sandy soil, no
										A', on target, bush not dense.
30	319491	5429899	421	18-May	AL	Forest, moderate slope	w	moist	4	Sample from 'B', rusty colour, very thin 'A'
						near road.				on target, some fallen timber, Int & felsic
										intrusive clasts common in area.
14	320502	5429561	521	18-May	AL	Hillside below road.	w	moist	4	B' sampled-rusty colour, thin 'A'. Fallen
										timber, 3ft of snow on road.
13	319946	5429598	473	18-May	AL	Forest floor near bend	w	moist	3	250m from point 13, Soil sample is rusty
						in road.				B', <10cm 'A', no outcrop, snow, some
										broken timber.
31A	319969	5429803	400	18-May	AL	Near stream on steep	w	moist	4	Brown silt sampled, A-horizon. Some
						wooded slope below road				fallen timber, 95m from target, target
										appears to be in a stream bed area.
12	319548	5429380	354	18-May	AL	Hummocky forest floor,	m	moist	4	49m from target, dense underbrush. Thin
						some large trees.				A', sample from 'B', rusty coloured clay,
										no outcrop.
214	320947	5433982	223	20-May	DMG	Slight slope,large trees.	m	moist	4	From "B", Creamy grey, silty clay.
215	321465	5433909	151	20-May	DMG	Slight East facing slope,	w	moist	4	"B",rusty brn silty clay.Area recently loged
239	321051	5434432	165	20-May	DMG	Near Road,flat area near	w	moist	3	"B",grey/brn silty/sand clay. Ground
						slope into valley			3	disturbed in the past.
240	321620	5434465	132	20-May	DMG	Steep slope near road	w	moist	4	"B",red/brn silty clay. Near lots of oxi-OC.
211	319425	5433836	469	20-May	AL	Steep rocky hillside	w	wet	1	Hard to find soil, rusty coloured sample
						above road.				from 'B'.Heavy rain. 100m from target.

216	322005	5433926	83	20-May	AL	Forest, no underbrush	w	moist	2	Lots of rotten timber, very thin 'A', sample
						moderate slope.				from 'B',rusty colour+stony
241	322076	5434408	68	20-May	AL	Flat forest west of river,	w	moist	3	Very thin 'A', rusty coloured sample from
										B'. 84m from target.
1	314031	5429440	77	21-May	AL	Mature forest near road,	m	moist	4	Sample from 'A', thick black organic soil.
						flat, some underbrush.				
20	314555	5429872	104	21-May	AL	Forest near old road.	w	moist	1	Difficult to find soil, 69m off target, large
										granodiorite? outcrop nearby. Sample is
										a rusty colour-from 'B'. Overlain by river?
										sand. Sample from roughly 50 cm depth.
19	314062	5429859	86	21-May	AL	Forest near swamp, no	w	moist	3	Very thin 'A', sample from 'B'-rusty colour.
						underbrush.				
37	314068	5430314	96	21-May	AL	Forest with underbrush.	m	moist	1	100m SE of target. Int-felsic intrusive
										outcrop nearby and beneath sample.
										Thin soil, sample is a grey clay from 'B'.
2	314509	5429355	95	21-May	AL	Between road and	w	moist	3	Thin soil, fallen timber, sample is a rusty
						swamp, dense bush.				colour from 'B'.
3	314973	5429419	144	21-May	AL	Forest near road.	w	moist	3	Thin 'A', sample from 'B', rusty colour,
										road passable to here on ATV.
189B	320997	5433366	182	21-May	ST	in forest on slope	m	moist	2	thick foliage mat, rotting trees, plant debris
										; ferns and trees,vines growing; steep
										slope approaching vertical sided gully.
213B	320507	5433897	381	21-May	ST	Steep slope in forest	w	moist	3	large fallen logs; thick foliage debris mat; vines and spruce; some boulders outcrop- granodiorite? Sample horizon B; slope direction W
238B	320491	5434391	245	21-May	ST	Dense forest,slight slope	w	moist	2	dense forest; thick undergrowth; fallen
										trees, vines; horizon B, at least 30cm of

										horiz A; slight slope direction:SSE
164	321020	5432952	164	21-May	DMG	Steep,Large boulders.	w	moist	3	Large trees w/ thick organic mat.(B)
236B	319686	5434315	561	21-May	DMG	Steep,Fallen debris	w	moist	4	Possibly area of avalanche. "A" Near OC
237	319990	5434377	403	21-May	DMG	Steep,lots of veg.	w	moist	3	"B" orangy brn, silty clay. Near road.
212	320037	5433928	390	21-May	DMG	Slight slope, on river bank	w	moist	3	"B" Pale/yellow brn/silty clay. Near path.
364	324472	5438050	376	21-May	DMG	Slope near creek	m	moist	2	"B" Near end of road
360	322430	5437841	326	21-May	DMG	Slope near cliff OC.	m	moist	4	In large trees w/ organic debris
346C	322603	5437590	286	21-May	DMG	Slope above river	m	moist	3	"A" dark organic 200m off target
332B	322958	5437004	202	21-May	DMG	Lots of rock OC.	w	moist	4	"B" creamy/brn clay. All OC
311	319997	5436423	98	15-May	DMG	Med/steep slope	w	moist	4	"B" underlain by till. Light brn/ creamy
fact1	319923	5436370	137	15-May	DMG	gradual slope	w	moist	4	Limestone boulders around (Fact)
fact 00	319930	5436388	133	15-May	DMG	gradual slope	w	moist	4	"B" redy/brn Near fact showing, MMI
105	315092	5432003	139	22-May	AL	mature forest near river canyon.	w	moist	2	Lots of rotten fallen timber, thin 'A', sample from 'B', rusty colour.
106	315575	5431802	302	22-May	AL	Steep slope near old road.	w	moist	2	Steep cliffs nearby. Some serp+brucite?
										in limestone road cutting nearby. Soil
										from 'A', 120m SE of target, difficult to find soil
107	315934	5431966	297	22-May	AL	Hillside near old road.	w	moist	3	96m from target, rough ground, broken+
										rotten timbers. Thin 'A', sample from just
										below interface in 'B'. Red rusty colour.
108	316483	5431955	370	22-May	AL	Hillside near road,	w	dry	2	Sample is a brown silty material-possibly
						stream nearby.				some river sediment-stream nearby in
										channel.
135	318468	5432443	349	23-May	AL	Swampy forest near	p	wet	4	Sample from 'A', wet peaty soil. 53m NW
						logged area and stream.				of target.

60	317051	5430884	605	22-May	DMG	Slope in woods,near	w	moist	3	"B" Silty brn clay + Sand
						forestry track.				
61	3171411	5430891	629	22-May	DMG	Slope in woods on top of ridge	w	moist	3	"B" Silty brn clay, lots of igneous OC nearby w/ lots of Fe stains (west of sample)
185	318949	5433379	376	23-May	AL	Swampy logged area	p	wet	2	Sample from 'A' but soil appears slightly
						near road.				mixed with some peat and sandy material.
159	318537	5432892	361	23-May	AL	Swampy forest near	p	wet	3	Sample from 'A' underlain by sandy
						logged area.				material. A is peaty. 40m from target.
184	318517	5433326	439	23-May	AL	steep hillside above road	p	wet	2	Peaty soil, difficult to find soil, dense
										bush, thick roots. Sample from 'A'. Some woody tissue.
186	319485	5433406	423	23-May	AL	Hillside near road, forest	w	dry	3	Thin 'A', sample from 'B', rusty colour,
						not too much brush.				
160	319045	5432889	377	23-May	AL	Wooded hillside below road.	w	moist	4	Thick 'A', sampled.
80	314507	5431401	130	22-May	ST	steep hillside; very little	w	dry	3	very little undergrowth; boulders and
						undergrowth				outcrop; igneous, black fine grained
										, crystalline; slope under thin vegetative
										cover slope direction:NW
55	314530	5430901	232	22-May	ST	Steep sided saddle,	m	moist	1	dead fall good exposure of outcrop (very
						dense undergrowth				weathered and overgrown), thick A thin B sampled; thin vegetative cover
38	314510	5430407	167	22-May	ST	moderate slope to	w	moist	3	nearby creek; angular gravel to small rock
						WNW, wooded				size overburden of granodiorite and felsic igneous rocks.
21	315047	5429777	174	23-May	ST	Dense forest narrowly	w	moist	2	horiz A; Creek nearby; slope to north west
						spaced trees, thick				in steps gradual platforms then steep

						vine undergrowth				drops; lots of deadfall
22	315455	5429909	272	23-May	ST	openly spaced woods	m	wet	3	horz A; slope 40degs to NW; light
										undergrowth; thick vegetative mat
4	315486	5429398	361	23-May	ST	woods on hillside	w	moist	4	moderate undergrowth; moderate
										vegetative mat(15cm); horiz A; hill 30-40
										to the west
23	315980	5429859	358	23-May	ST	woods on hillside, near	w	dry	4	moderate undergrowth; moderate
						creek, canyon				vegetative mat; Horizon B; hill 40+ to the
										North
136	319030	5432396	416	23-May	AL	Wooded hillside under	w	moist	3	Sample from 'A', black.
						road, fallen+rotten				
						timber				
115	319917	5431938	418	24-May	AL	Dense bush near rough	w	moist	4	90m NW of target.Sample from 'A', black
						logged area.				organic soil.
114	319494	54319587	382	24-May	AL	Logged area near	w	moist	3	Sample from 'B', rusty-grey colour, stony.
						stream.				
255	317485	5434854	251	25-May	AL	Roadside, overgrown.	w	moist	3	Sample from 'A' but appears mixed with
										some rusty clay.
232	317477	5434557	329	25-May	AL	Head of landslide, steep	w	moist	1	Sample is a bleached soil mixed with
						slope, dense bush.				grit-possibly weathered granite. Felsic
										intrusions nearby.
231	317050	5434528	424	25-May	AL	Steep densly wooded	w	dry	3	Sample is a brown soil from 'A'. 130m from
						slope above limestone				target. Limestone/granote contact very
						cliff.				near.
254	316950	5434861	220	25-May	AL	Bottom of steep hill with	w	moist	1	Sample from 'A', contains woody tissue.
						cliffs+scree slopes.				50m from target.
125	325958	5431966	226	26-May	AL	Forest, large trees,	m	moist	3	75m NW of target.Very little 'A', sample

						fallen timber.				from 'B', rusty clay.
246	324513	5434441	405	15-May	A.Lu	Close to road.	m	wet	2	Vegetation not too thick.
288	324975	5435399	338	15-May	A.Lu	Top of steep hill.	w	dry	3	Close to river and road.
269	324521	5434908	466	15-May	A.Lu	Hill	w	dry	3	Not too thick bush.
270	324979	5434918	366	15-May	A.Lu	gradual slope of hill	p	wet	3	Not too thick bush.
						down from road				
305	324995	5435821	323	15-May	A.Lu	side of road, sideslope	p	dry	2	boulder field, side of hill, sandy.
308	326417	5435917	18	15-May	A.Lu	Close to road above river	m	quite dry	2	Lots of organic dirt.
307	326000	5435892	51	15-May	A.Lu	Bottom of hill close to	p	wet, hard	3	Deep vegetation
						road, clearcut.				
306	325536	5435888	98	15-May	A.Lu	Clearcut, close to river and road.	m	wet, heavy	3	
330	322023	5436859	626ft		A.Lu	Beside small stream,	w	moist	3	Moderate slope, lots of fallen timber.
						draining to larger stream				
						in gorge below.				
331	322385	5437030	611ft		A.Lu	Flat area with pooling water.	p	very wet	3	Muddy, a lot of new growth and dead
										organic matter. Below eroding rocky cliff.
330C	321761	5436786	496ft		A.Lu	Clearcut rocky steep	w	moist	2	New growth beginning, drains down to
						slope.				fast stream.
329	321499	5436901	392ft		A.Lu	Steep slope along side	w	moist	2	Lots of cobble under dead organic matter.
						of old road.				
345	322032	5437345	850ft		A.Lu	Low slope near very old	p	wet	3	
						loging road.				
359	322643	5437834			A.Lu	flat wooded area	m	moist	2	
317	323063	5436437	888ft		A.Lu	Moderate slope	w	moist	1	Very little soil, almost all organic matter,
										densly wooded, thick bush, lot of deadfall.

301	322977	5435906	1026ft		A.Lu	Side of steep slope.	w	moist	2	Signs of snow slides,packed organic
										matter, thick forest.
273B	326482	5434840	352ft		A.Lu	Side of steep slope	w	moist	3	Dense forest, a lot of fallen trees
						below road				
291	326363	5435430	123ft		A.Lu	Low slope leading down	w	moist-dry	3	Very thick bush, lots of fallen trees.
						to small river.				
290	325981	5435431	261ft		A.Lu	Side of moderately	w	moist-dry	2	Recenty clearcut, a lot of dead organic
						steep slope				material.
289	325441	5435457	517ft		A.Lu	Side of steep slope	w	moist	3	Logged years ago, a lot of dead organic
						above road.				matter.
7	317092	5429410	687		A.Lu	Flat low sloping area	w	very moist	3	Still snow on ground, logged many new
						near top of very steep				years ago, thick new growth. Some dead
						hill.				debris on the ground.
25	317070	5429956	779		A.Lu	Clearing at top of	w	moist	2	A lot of cut trees, fallen debris, still snow
						mountain.				on ground, dark organics, rock just
										below surface.
43	317066	5430330	729		A.Lu	Top of ridge between	w	very moist	2	A lot of snow on ground, hard to find soil.
						two steep slopes.				Very densly wooded, small trees.
161	319500	5432916	516	24-May	A.Lu	Medium slope below old	w	moist	3	Thick small undergrowth, a lot of dead
						logging road.				debris, rocky below surface, snow in area.
137	319516	5432473	513	24-May	A.Lu	Moderately steep slope	w	moist	3	Previously logged, a lot of dead fallen
						below old logging road.				debris on ground, rocky below surface.
138	319955	5432378	508	24-May	A.Lu	Sparsely wooded slope.	w	moist	3	Dark sample, a lot of fallen debris, rocky.
162	319839	5433145	550	24-May	A.Lu	Very steep rocky area	w	moist	3	Boulders, a lot of fallen debris, snow
						below old road.				nearby, dark moist sample.
187	319999	5433401		24-May	A.Lu	Moderately steep slope	w	moist	4	A lot of fallen debris, still snow, very little

						Sparsely wooded.				black organic matter, hard packed.
209	318516	5433871	584	25-May	A.Lu	Steep slope	m	moist	3	A lot of fallen trees, small trees, below
										rocky outcrop, a lot of dead debris, ash
										grey sandy sample.
292	318514	5436052	107	26-May	A.Lu	Steep slope below rocky cliff.	w	dry	3	A lot of dead fallen trees, loose rocky soil.
296	320454	5435921	146	26-May	A.Lu	Bottom of steep sided gully.	w	moist	3	One side of gully is logged, the other is a rocky cliff face. Dense small vegetation. Hardpacked rocky sample.
295	320290	5435944	146	26-May	A.Lu	Steep rocky area.	w	moist	2	Hardpacked rocky sample, hard to find
						Clearcut, above small				enough soil to sample.
						river gorge.				
324	326288	5436297	120ft	16-May	A.Lu	Low sloping area,	p	moist-wet	2	A lot of dead organic matter.
						recently clearcut.				
339	326429	5437051	192	16-May	A.Lu	Low sloping boggy area.	p	wet	3	A lot of dead fall, mossy low brush.
						Downslope from logging road.				
354	326432	5437124	241ft	16-May	A.Lu	Side of steep slope.	w	moist	2	A lot of deadfall/dead organic matter,
										rocky outcrops uphill above sample.
353	325986	5437285	331	16-May	A.Lu	Moderately steep slope.	w	moist	3	Sparsely wooded, very little dead matter.
352	325554	5437402	511	16-May	A.Lu	Moderately steep slope.	w	moist	1	A lot of dead organic matter. Almost no
						Completely clearcut.				soil, all organic matter then rock.
312	320486	5436490	498	17-May	A.Lu	Flat area on top of	w	dry	2	Logged many years ago.
						rocky outcrop.				
315	321854	5436551	363	17-May	A.Lu	Flat forested area.	w	moist	4	Very little dead organic matter.
28	318395	5429859	224	18-May	A.Lu	Flat area,	m	moist-dry	3	Hard packed soil, thick small undergrowth.
46	318440	5430405	221	18-May	A.Lu	Small clearing, no slope	p	moist	3	Mossy, forested in past, very soft dark
										soil.

65	319511	5431016	139	18-May	A.Lu	Steep slope draining small creek into river.	p	moist-dry	3	Sample taken on north side of river up on a bank above, very muddy soil except for sample location, a lot of deadfall.
90	319578	5431424	217	18-May	A.Lu	Steep slope along side	w	moist	2	A lot of fallen timber, dark soil.
						fast flowing stream.				
111	318037	5431912	388	18-May	A.Lu	Steep sparsely wooded	w	moist-dry	3	Hard packed rocky soil, forest not very
						slope.				thick.
134	318037	5432401	399	18-May	A.Lu	Low slope sparsely	w	moist-dry	3	Hard-packed rocky soil, a lot of dead
						wooded.				organic material.
158	318108	5432848	425	18-May	A.Lu	Steep slope with very	w	moist	3	Dead organic soil.
						thick underbrush.				
87	318062	5431411	337	18-May	A.Lu	Low slope, sparsely	w	moist-dry	3	A lot of organic material.
						wooded.				
86	317558	5431453	448	19-May	A.Lu	Steep wooded slope	w	moist	3	A lot of small forest debris, very rocky soil
						above old road.				
85	317078	5431484	453	19-May	A.Lu	Flat area above rapid stream.	m	wet	1	Very dense forest, a lot of dead material.
										Sample organic layer.
109	317070	5431672	425	19-May	A.Lu	Flat area along low	w	wet	2	Thickly wooded with small underbrush.
						sloping area.				A lot of organic material.
110	317501	5431992	545	19-May	A.Lu	Steep wooded slope	w	moist	3	A lot of snow still, a lot of organic debris.
310	319466	5436337	139	20-May	A.Lu	Low sloping forest area.	w	moist	2	Not much soil to sample, previously
										logged.
294	319490	5435925	277	20-May	A.Lu	Low sloping area	w	moist	2	Rocky area, little vegetation.
						between curve in logging road.				
277	319528	5435491	401	20-May	A.Lu	Thick wooded area	w	moist	2	A lot of fallen debris, very rocky area, hard
						alongside unmarked				to get enough sample.

						road. Flat are, top of hill.				
79	314012	5431437	46	21-May	A.Lu	Flat boggy area,	p	wet	2	Muddy sample.
						previously logged.				
103	314104	5431794	50	21-May	A.Lu	Flat boggy area along				
						side of road.	m	moist	3	Soft soil, a lot of dead organic matter, a
										lot of fallen trees, thick bush.
104	314401	5431846	90	21-May	A.Lu	Flat sparsely wooded	m	moist	3	Some small rocky outcrops, hard-packed
						area.				soil, rock underneath.
127	314534	5432431	56	21-May	A.Lu	Flat wooded area along	m	moist-dry	2	A lot of fallen trees, mossy, hard to find
						road.				enough soil to sample, hard sandy ash
										grey sample.
128	314907	5432442	59	21-May	A.Lu	Low lying flat boggy	w	moist-dry	2	Rocky-sandy soil, perhaps occasionally
						area, sparsely wooded.				flooded by nearby river, loose sandy
										sample.
153	315391	5432906	196	21-May	A.Lu	Small flat area along	w	moist	3	A lot of fallen timber down the slope.
						very steep slope.				Rocky under soil.
178	315453	5433368	128	21-May	A.Lu	Medium sloping wooded	w	moist	3	A lot of deadfall, some large boulders up
						area on side of hill				the hill, soft organic layer. Hard-packed
						above road.				clay sampled.
152	315029	5432895	52	21-May	A.Lu	Flat, boggy, heavily	p	moist	3	A lot of dead material, hard packed sandy
						wooded area.				sample.
177	315031	5433416	37	21-May	A.Lu	Very boggy area.	p	wet	2	Muddy, standing water, thick small
										vegetation, muddy sample.
202	315078	5433902	32	21-May	A.Lu	Flat area below large	p	wet	1	Very dense small veg, very muddy.
						rocky cliff.				
227	315002	5434402	31	21-May	A.Lu	Flat boggy area.	m	wet	2	A lot of fallen debris, small stream nearby.
226	314554	5434610	15	21-May	A.Lu	Very densly overgrown	w	moist	1	Possible occasional flood from nearby

						area, flat.				river.
201	314497	5433800	70	21-May	A.Lu	Low sloping area.	w	moist	3	Logged years ago, a lot of dead material.
62	317978	5430917	326	21-May	A.Lu	Medium sloping area	w	moist	2	Sparsely wooded, some fallen debris,
						above old road.				reddish black sample.
45	317978	5430423	298	21-May	A.Lu	Moderately steep slope.	w	moist-dry	3	Some small veg+fallen trees. Boulders
										along side of hill, rocky soil.
27	313011	5429919	285	21-May	A.Lu	Steep sparsely wooded	w	moist	3	A lot of dead fallen debris, very rocky area,
						slope.				hardpacked soil.
9	317951	5429510	259	21-May	A.Lu	Medium sloping area	w	wet	2	Sparsely wooded, very dark sample.
						below old road.				
8	317656	5429381	359	21-May	A.Lu	Very steep slope,	w	very moist	3	Recent forest fire. Gravelly area.
						sparsely wooded.				
181	317021	5433390	471	26-May	DMG	Steep slope in forest	W	moist	3	"B" Gray/brn muddy sand-Dead trees
131	316518	5432382	282	26-May	DMG	High bank above river	W	moist	4	"A" dark organic peaty,lots of veg.
206	317046	5433773	584	26-May	DMG	Steep slope, dead trees	w	moist	4	"B" Creamy/orangey brn
155	316536	5432875	352	26-May	DMG	Steep slope/recently cut	w	dry	4	"B" rusty brn, silty clay+Gray grit
132	317007	5432434	331	26-May	DMG	Flat area in woods,	w	wet	1	"A" Dark organic peaty,underlain by
						bad soil.				wet gravel
156	317025	5432890	397	26-May	DMG	steep slope in woods	w	moist	4	"B"orangey/brn silty clay. Lots of organic
						just off the road				overburden-little deep.
26	317516	5429928	587	26-May	DMG	Slope in woods,near	w	moist	3	"B" creamy brn,silty/clay-lots of cliff OC
						forestry track.				on road.good looking rocks
44	317717	5430391	487	26-May	DMG	steep slope in woods	w	moist	3	near good OC
6	316601	5429410	598	23-May	DMG	Very steep slope in	w	moist	4	"B"Creamy orange/brn clay w/little silt
						woods				area prone to slumping. Near track
5	316226	5429330	605	23-May	DMG	Steep slope in woods	w	moist	4	"B" orangy brn, silty clay.

24	316601	5429919	565	23-May	DMG	Steep slope below road	w	moist	4	"A"Dark organic peaty,lots of fallen
						near steep drop into river				logs+ debris + snow.
42	316494	5430362	591	23-May	DMG	Very steep, 60-65, in	w	moist	1	"A" black/organic, w/some clay. Slumped because so steep
						woods, West facing.				
281	321517	5435386	113	24-May	DMG	Flat area.	w	moist	3	"B" orangey/brn clay. Recently logged
										little soil.
280	321015	5435422	130	24-May	DMG	Steep slope, on bank	w	moist	3	"B"Slumped with lots of gravel/rock chips
262	320971	5434937	197	24-May	DMG	Steep slope w/lrg knoll	w	moist	3	lots of boulders around
261	320496	5434915	209	24-May	DMG	steep bang near river	w	moist	3	"B" Rusty/brn clay
260	320043	5434910	327	24-May	DMG	Steep slope on bank	w	moist	3	"B" Creamy brn clay, underlain by gravel
						above ravine into river				
259	319584	5434904	428	24-May	DMG	Flat saddle in logged area	W	moist	3	"B" creamy/brn caly. Lots of OC near by.
278	319972	5435312	357	24-May	DMG	Flat area in woods	W	moist	3	"B" Creamy/brn silty clay.
279	320453	5435332	253	24-May	DMG	Flat saddle above road	w	moist	3	"B" Redy/brn silty clay, lots of oc
126	326521	5431978	126	26-May	DMG	Steep slope in woods	W	moist	1	"B" redy/brn silty clay, slumped
276	325019	5437400	276	27-May	DMG	Steep slope in woods	w	moist	3	"B" Redy/brn clay, possible line of
										intrusions. Swamp.
350	324503	5437395	262	27-May	DMG	Flat swampy area,no soil	P	moist	1	"B" pale gray, gritty sand+clay.
350 (C)	324239	5437473	280	27-May	DMG	Flat area in mature forest	W	moist	4	"B" Redy/brn clay
349	324034	5437382	266	27-May	DMG	Swamp	p	Wet	1	"B" Creamy gray silty clay
348	323516	5437423	277	27-May	DMG	slope in woods	m	moist	2	"B" redy/brn clay, slumped
332(C)	323036	5437061	198	27-May	DMG	below road flat.	m	moist	4	"A" rich black, probably floods.

386	323443	5438889	759	27-May	AL	Mountain top under old	w	moist	1	Logged, boulders+rotten timber. Sample
						road, steep slope.				from 'A', hard to find soil.
396	323553	5439349	827	27-May	AL	Top of mountain.	m	wet	2	75m SE of target, bush not too dense, 3ft of snow, difficult to find soil, sample from B', gritty grey clay, thin mossy 'A'
										underlain by cavity, near trees.
406	323623	5439860	830	27-May	AL	Cedar forest on top of	m	wet	3	Hard to find soil, up to 8ft of snow, sample
						Draw mountain.				from 'B', rusty clay, thin 'A', intrusive
										outcrop nearby.
407	323941	5439835	650	27-May	AL	Steep hillside at road	w	moist	3	Above road cutting, 90m SW of target,
						edge. Small trees.				sample from 'B', rusty clay, hard to find
										soil, some snow.
397	324007	5439425	680	27-May	AL	Above road cutting.	w	moist	1	Hard to get sample, thin 'A', stony, sampe is a bit mixed, A+B. Snow on road.
377	324000	5438506	688	27-May	AL	Roadside, hilltop, small trees.	w	moist	2	105m N of target, difficult to find soil, thin A', cavity, sample from 'B', grey clay & grit.
272	326018	5434870	190	28-May	AL	Cedar forest, moderate	w	moist	3	Lots of fallen timber, Thin 'A', sample from
						slope.				top of 'B', rusty grey clay.
271	325516	5434824	300	28-May	AL	Hummocky forest.	w	moist	2	Mixed thin soil, sample mostly B.
247	325047	5434413	354	28-May	AL	Edge of swamp and	p	wet	4	Thick 'A' sampled, peaty. Granodiorite
						cedar forest.				outcrop nearby.
248	325485	5434377	293	28-May	AL	Gentle slope down to stream. Cedar forest.	p	wet	4	Fallen timber, peaty sample from 'A'.
249	325957	5434355	203	28-May	AL	Slope above river, cedar forest.	w	moist	3	Little or no 'A', sample from 'B', rusty grey clay. Large intrusive outcrops nearby.
322	325607	5436252	79		Z	Flat ground, valley	m	moist	3	Close to clearcut, not too thick bush.
323	325884	5436442	47		Z	Flat ground above	m	moist	2	Sandy soil.
						stream.				
338	325996	5436889	89		Z	Flat ground	m	moist	3	Thick vegetation layer.
336	325036	5436897	258		Z	Gradual Hill	m	moist	2	
337	325529	5436902	127		Z	Small Valley	m	moist	4	Close to creek, clearcut.

335	324503	5436896	253		Z	Bottom of hill close to lake.	p	wet	2	
333	324010	5436880	264		Z	On slope of hill beside	p	wet	2	Thick vegetation, swampy.
						river.				
69	321456	5430839	24		Z	Swampy area.	m	dry	3	Thick vegetation.
68	321042	5430916	59		Z	Close to creek on a hill.	w	dry	2	
						Flat land				
67	320513	5430921	99		Z	Valley, slight hill.	m	moist	3	Little vegetation.
63	318510	5430936			Z	On hill above river.	w	dry	2	Close to road.
64	318983	5430937	181		Z	slight slope, close to	m	dry	2	Sandy soil, thick veg.
						creek.				
89	318976	5431384	252		Z	Gradual Hill	m	moist	3	Close to road.
88	318528	5431403	284		Z	Flat ground.	m	moist	3	Close to road.
112	318494	5431860	364		Z	Valley/gulley	p	Wet	2	Thick vegetation.
113	318963	5431888	368		Z	Slight hill.	w	dry	4	Old clearcut.
28	318507	5249852	221		Z	Flat ground by river.	m	moist	4	Small timber, little veg above river.
47	319002	5430396	228		Z	Valley	w	dry	4	Beside road.
48	319471	5430427	303		Z	Gradual Hill	w	dry	3	Thick vegetation.
49	319976	5430422	233		Z	Hill close to creek.	w	moist	3	Thick vegetation, outcrop.
50	320493	5430415	268		Z	Hill	w	dry	2	Clearcut close to road.
51	320942	5430388	208		Z	Slope of hill.	m	moist	3	Thick vegetation.
32	320522	5429938	395		Z	Gradual Hill	p	wet	1	Stream and waterfall close, sandy dirt.
15	320970	5429369	415		Z	Steep hill.	p	Wet	2	Clearcut, wet mud.
33	320957	5429904	355		Z	Gradual Hill	w	dry	2	Thick vegetation.
309	318944	5436403	86		Z	Flat spot on gradual hill.	m	moist	4	Hard packed dark grey soil, rocky area,
										big timber, sparsely wooded.
293	319000	5435926	311		Z	Gradual hill.	m	moist	4	Dark dirt, spruce trees, outcrop, lots of
										rocks.
276	318998	5435402	452		Z	Flat ground on gradual hill.	m	moist	2	Spaced out trees, rocky soil, red layer
										no B horizon.
258	318990	5434939	532		Z	Flat rocky ground close to creek.	m	moist	3	Brown soil, spruce trees.
235	318900	5434693	643		Z	Steep hill.	w	moist	3	Dark brown soil, outcrop, small trees,
										deep snow, close to DOM Au showing.

35	321966	5429910	65		Z	Flat groun close to river and road.	w	moist-dry	2	Sandy loose soil, rocky ground, no 'A'.
36	322435	5429865	53		Z	Flat swampy area.	p	wet	3	Brown packed dirt, outcrop.
121	323884	5432024	520	29-May	AL	Hillside near old road.	w	moist	3	Sample from 'B', overlain by rotten wood, rusty sandy soil.
18	322441	5429568	87		Z	Flat ground.	p	wet	4	Spaced out trees, grey compact mud.
17	322131	5429533	76		Z	Flat area, gradual hill.	m	moist-wet	2	Old clearcut, thick vegetation, small
										trees, thick red compact mud/clay.
16	321877	5429530	120		Z	Gradual hill, close to road.	m	moist	3	Big trees, thick vegetation, compact red
										clay.
34	321571	5429967	104		Z	Side of hill.	m	moist	2	Old clearcut, bedrock.
52	321550	5430403	90		Z	Flat ground, clost to stream.	m	moist	3	Spaced out large timber, thick vegetation.
53	321942	5430399	70		Z	Side slope, valley.	m	moist	3	Big trees, no 'B' horizon.
210	318952	5433894	479		Z	Swampy gulley, close to stream.	p	Wet	2	
81	315000	5431432	259		Z	Flat ground on gradual hill.	w	dry	4	Close to trail, rocky ground, spaced out
										trees, compact soil.
56	314953	5430952	354			Steep hill.	m	Wet	2	Dark black soil, thick veg layer, underlain
										by bedrock, thick vines, small trees.
39	315014	5430459	280		Z	Steep Hill	m	Wet	2	Sandy-rocky grey brown soil, recently
										logged, outcrop.
40	315469	5430355	378		Z	Side slope, gradual hill.	w	dry	3	Sandy rocky light brown, small trees,
										jungle like, very rocky.
58	315994	5430851	483		Z	Side hill, close to	w	dry	3	Loose dark brown black soil., small
						waterfall.				trees, rocky ground.
59	316441	5430889	575		Z	Steep hill, flat ground.	w	moist	3	Grey black soil, small spruce trees, no
										vegetation on ground.
41	316023	5430440	385		Z	Flat ground.	w	dry	2	Lots of alders, rocks, brown sandy soil.
188	320504	5433380	623		Z	Flat ridge on hill.	w	dry	4	Dry brown loose soil, no vegetation layer small trees, close to trail.
163	320550	5432973	368		Z	Bottom of steep rocky cliff.	w	moist	4	Dark brown soil, outcrop.

264	322034	5434895	74		Z	Flat ground close to creek.	m	moist	3	Hard red clay, beside tailing, close to
										creek, no 'B' horizon.
263	321506	5434949	132		Z	Gradual slope, close to stream.	m	moist	2	Compact red clay, spaced out trees.
129	315473	5432355	281		Z	Gradual hill, flat spot.	w	moist	2	Brown grey soil, 40cm veg layer, spaced out trees, lots of deadfall.
130	315970	5432415	289		Z	Flat ground.	w	moist	4	Light brown soil, small veg layer, spaced out trees.
154	315983	5432853	485		Z	Flat ground on hill.	w	moist	4	Dark brown rich soil.Small trees, spaced.
180	316463	5433383	623		Z	Flat ground on side	w	moist	3	Red brown clay, compact, old clearcut
						slope.				off road.
179	316008	5433383	553		Z	Side slope, bottom of	w	dry	2	Red clay, sandy, lots of outcrop/gossan.
						cliff.				
204	316077	5433832	515		Z	Side of hill.	m	moist	2	Veg layer 1ft thick, grey compact mud.
										Outcrop gossan?, old clearcut.
205	316470	5433879	552		Z	In a canyon, up from	m	moist	3	Red brown compact soil, little vegetation
						creek.				small timber.
230	316507	5434228	468		Z	Slope by ravine.	m	moist	2	Densely wooded, light brown silty mud 'B'.
253	316288	5434756	115		Z	Side slope, ravine by	w	moist	2	Brown soil, mixed 'A' and 'B', hard to
						creek.				discriminate.
297	321034	5435915	178		Z	Flat gound	m	moist	2	Grey sandy mud, 'B' horizon, old clearcut
										with thick vegetation layer.
298	321475	5435891	157		Z	Flat ground	p	wet	2	Red clay, old clearcut, new growth.
140	320994	5432399	155	24-May	ST	Steep wooded hillside	w	damp	4	hill 55 to the east; thin veg mat; horiz A
										and thin B
116	320510	5431901	360	24-May	ST	wooded steep sided	w	damp	3	horiz B; boulders on sides of gully dead fall
						gully				in middle; gully drains to SW
139	320493	5432402	436	24-May	ST	lightly wooded hillside	w	wet	3	godd exposed outcrop on w side of this
										road; thin veg mat; slope 30 ESE
234	318499	5434398	453	25-May	ST	open wooded hillside	w	damp	2	slope 20 to the west; creek to the S

										thin veg mat covering fractured outcrop
										horiz B/ thin A
257	318423	5434916	536	25-May	ST	cliff/ steep sided dense	w	damp	2	cliff stops progress; slope 50 to NW; good
						woodland				outcrop felsic granodiorite, contact w/
										limestone, near roadside to the west of
										this point; Lst appears cooked did not see
										contact. Horiz A taken at base of cliff
233	317997	5434412	281	25-May	ST	woods moderately	w	dry	3	slope 10 to NW; feldspar 50/quartz 50
						spaced, thin veg mat				granite boulders; lots of Fe staining in rock along road between here and 257; Horiz B
256	317998	5434902	293	25-May	ST	open spaced woods;	w	damp	4	slope 15 to W undulating some Fe
						gentle slope				stained boulders; Horiz B; good outcrop on roadside nearby
275	318484	5435422	343	25-May	ST	open woods w/ large	w	damp	1	very weathered outcrop; lots of deadfall;
						boulders				thick veg mat; Horiz A; slope 45 to NW
274	318001	5435402	173	25-May	ST	open woods on hill	w	damp	2	thick veg mat; Horiz A; slope 45 to N
149	325991	5432390	150	26-May	ST	logged open hill	w	damp	3	thin veg mat; Horiz A; slope 25 to ENE
408	324494	5439915	420	27-May	ST	swamp in valley	p	wet	1	flat area; excellent outcrop on road
										looping around 408; granite and fine
										grained mafic intrusives epidote in granite
										and mafics. Horiz A
398	324498	5439402	437	27-May	ST	wooded hillside	w	damp	4	horiz B; slope 25 ESE; thin veg mat; light
										undergrowth
387	324003	5438907	516	27-May	ST	wooded hillside close to creek	w	wet	2	slope 30 to E; snow patches; horiz B;
										thick veg mat; moderate undergrowth
388	324505	5438897	425	27-May	ST	cedar woods; gentle slope	m	damp	3	horiz A; very gentle slope; creek nearby
148	325517	5432409	281	28-May	ST	wooded hillside	w	damp	3	horiz B; creek nearby slope 20 to SE to

										creek; moderate undergrowth
173	325496	5432903	296	28-May	ST	woods on hillside	w	damp	3	horiz B; slope 30 to E; moderate
										undergrowth
174	325999	5432908	168	28-May	ST	woods on hillside	w	damp	3	thin soil cover to boulders/ bedrock; horiz
										B; slope 15 to E; moderate undergrowth
										thin veg mat; deadfall
175	326491	5432896	130	28-May	ST	lightly wooded rise in	w	damp-wet	3	horiz B; light undergrowth; med veg mat
						swampy area				
150	326508	5432403	100	28-May	ST	wooded hillside	w	damp	2	horiz B; slope 40 to SSW; thick veg mat
										densely wooded; thick undergrowth
147	324996	5432409	450	29-May	ST	open hillside	w	damp	3	horiz B; lots of deadfall, moderate
										undergrowth slope 35 to E
146	324502	5432406	607	29-May	ST	wooded hillside	w	dry-damp	2	horiz B; slope 35 to ENE; moderate
										undergrowth; lots of fallen logs/trees, thick veg mat
145	323999	5432403	624	29-May	ST	steep wooded hillside	w	damp	3	very little (none) horiz A; horiz B sample; slope 50 to SW
84	316539	5431421	608	30-May	ST	steep wooded hillside	w	damp	2	horiz A; slope 50 to ENE
						above rock slid road				
223	325515	5433926	277		z	Gradual Hill	p	Wet	2	old growth; big trees spaced out swampy
198	325497	5433418	275		z	hillside of gully with a creek.	p	wet	2	wet orange mud; no b horizon; large trees \ lots of deadfall.
199	325988	5433395	174		z	flat swampland, few tree	p	Wet	2	wet mixed b/c orange/grey sandy mud
										compacted together
200	326385	5433401	135		z	flat swampy lowland	p	wet		wet compact orange mud, no b layer sandy
										mud, spaced out trees not dense forest
374	322511	5438368	398		z	flat ground on gradual hill	w	dry	2	grey brown mixed b & c horizon spaced

										out trees outcrop below and above
384	322524	5438875	422		z	flat ground on gradual slope	m	damp	2.5	orange brown compact heavy mud outcrop spaced out trees, thick veg layer
394	322521	5439411	435		z	top of hill on top of a lake	m	damp	2	sandy grey mixed layers little damp and compact yet crumbly; bedrock; spaced out trees
404	322532	5439854	399		z	flat ground above stream	p	wet	2	wet mixed horizons b & c grey sandy and
										orange caly thick veg layer; old growth
										forest;douglas firs
405	322982	5439883	509		z	swampy flat ground	p	wet	2	mixed horizons b/c sandy wet brown grey
										mud, outcrop clearcut , small new trees.
124	325516	5431924	352		z	flat ground on gradual	p	wet	2	wet mixed a/b grey sandy mud; spaced out
						hill, swampy land				trees; little ground bush, thick veg layer
123	325022	5431907	496		z	Slope of hill.	m/p	wet	2 to 3	wet mixed b/c horizon grey orange mud old clearcut; thick veg layer
122	324515	5431909	568		z	gradual hill on flat ground in a valley	p	wet		wet grey mud, thick veg, old clearcut with small new trees swampy area
98	324496	5431426	600		z	flat ground on gradual hill	m	wet		wet reddish brown mud; old clearcut with new small growth forest, thick veg layer
97	324025	5431451	556		z	slight slope; flat ground	m	damp	3	horiz b; light brown grey lots of deadfall
133	317468	5432373	576		z	off the road flat ground	w	dry	3	light brown dirt; outcrop
157	317478	5432884	590		z	steep hill overlooking	w			sandy grey rocky soil; outcrop; clearcut; new growth; bedrock
						valley				
376	323476	5438343	605	27-May	A lu	steep slope	w	dry	3	open forest; previously logged; below rocky
										outcrop; good drainage; thick organic layer hardpacked dry soil
375	322954	5438457	616	27-May	A lu	open top of hill	w	dry	2	clearcut; small veg; starting to return; some
										exposed boulders on rock; dark sandy
										sample; low soil moisture
385	323062	5438907	578	27-	A lu	rocky clearcut	w	dry	2	below old logging road; thick small

				May		area				
										undergrowth beginning; hard to find enough soil
395	323019	5439395	622	27-May	A lu	steep rocky barren	w	damp	3	clearcut; very small new growth; very moist
						hillside				dark soil
222	324901	5433908	455	28-May	A lu	thick wooded area below	w		3	rocks and boulders in area; small
						logging road				undergrowth; a lot of deadfall, organic
										matter; rocky hardpacked sample
197	324898	5433473	478	28-May	A lu	low sloping area in old	m	moist	3	big trees, small veg; some deadfall med
						growth forest				drainage; moist organic sample;
196	324530	5433515	541	28-May	A lu	top of steep sloping area	w	dry	3	a lot of fallen trees and very thick
						below old logging road				undergrowth; small streams nearby; rocky area; dry soft soil
221	324477	5433808	636	28-May	A lu	medium sloping area	w	dry	3	thick small undergrowth; a lot of dead
						near top of hill				fallen material; hardpacked dry sample
183	317993	5433391	698	30-May	A lu	thick forest of small trees	w		2	still snow on the ground; previously logged
						on top of mountain				good drainage; loose, soft organic sample
208	318027	5433818	568	30-May	A lu	side of steep logged slope	w	dry	2	a lot of rocky outcrop; good drainage; still some snow; very rocky soil sample; dry loose sandy sample
402	321423	5439944		13-May	Aiden L	near top of steep bank	w	very moist	2	
						below rock cliff				
351	325019	5437400	276	27-May	DMG	Steep slope in woods	w	damp	3	B horizon; reddish brown clay; possible line of intrusions between 352 -> 351; no soil on the intrusions so had to step off to side

APPENDIX B

Rock Sample Data

Sample_No	UTM_x	UTM_y	Elev.	Date	Sampler	Topo_Position	Lithology	Notes
830301	322521	5431895	159	9-May	AL	Road Cutting	Intrusive-Intermediate	Rusty Intermediate? Rock from directly under soil sample 118. Outcrop has a brecciated appearance with some thin veinlets locally.
830302	322514	5431916	159	9-May	AL	Road Cutting	Intrusive-Int-felsic	More felsic?, looks like a dyke but has rust stains and
								weathered pyrite. Accesible with ATV.
830303	322514	5431916	159	9-May	AL	Road Cutting	Intrusive-Int-felsic	1m NE from above, some white veinlets in sample, rust
								stains visible, disseminated pyrite, limonite veins-have
								rotten appearance, more mafic, possibly quartz-diorite
								but difficult to tell-no fresh surface.
830304	315986	5434678	105	10-May	AL	Outcrop in stream.	Skarn like?	Limonite staining, magnetic, some quartz, protolith
								uncertain but possibly a skarn-like rock? From outcrop
								in stream where silt sample is 505ppb Au-road stream
								junction. Road Impassable-overgrown.
830305	323890	5435046	651	11-May	AL	Old road cutting	Diorite?	Possible fault nearby, road impassable.
830306	323538	5434990	593	11-May	AL	Old road cutting	Altered? Diorite	Feldspars altered to white/cream clay, rust stains,
								rusty weathered sulfide veins.
830307	323615	5434892	590	11-May	AL	Old roadside	Diorite/Gossan clast	Diorite, slightly weathered, rusty veins.
830308	323613	5434894	585	11-May	DMG	Breccia/Stope zone	Diorite+Mafic Volc?	Rust stained + weathered sulfides. Not in situ. Possibly
								a diorite with mafic? Xenoliths.
830309	319962	5438853		13-May	DMG		Mafic Volcanic	Karmutsen? Epidote-chlorite alteration, thin veinlets.
830310	319924	5436378	126	15-May	AL	Outcrop/scarp in	Quatsino Limestone	Sulfides+malachite, magnetite+limonite skarn? rock in
						forest		limestone-weathered.
830311	321187	5434420		20-May	DMG	Road Cutting	Mafic-Int? Volcanic	Equigranular with Fe staining on large cliff face.
830312	317759	5431455		19-May	A.Lu	Large outcrop	Mafic Volcanic/dyke	Fine-grained mafic volcanic or possibly dyke rock but
								very fine-grained for dyke. Contains fine pyrite, possibly 1-2%, has a grey colour but a rusty weathering surface.
830313	319924	5436375		15-May	AL/DMG	Outcrop in Forest	Quatsino Limestone	Skarn Marble with pyrite, chalcopyrite, magnetite,
							Fact Showing	limonite, malachite, azurite.
830314	319924	5436375		15-	AL/DMG	Outcrop in Forest	Quatsino	Vein material from skarn, magnetite, chalco, Py,

				May			Limestone	Bornite
							Fact Showing	malachite, azurite.
830315	319924	5436375		15-May	AL/DMG	Outcrop in Forest	Quatsino Limestone	Vein material from skarn, magnetite, chalco, Py, Bornite
							Fact Showing	malachite, azurite.
830316	320499	5438401			Zhuko	Outcrop	Karmutsen Volcanic?	From soil sample site 370, NW of property. Possibly
								fine pyrite. Co-ordinate may not be correct.
830317	322301	5435258		15-May	AL	Mine Tailings	Limestone	Minor epidote or serpentine, minor magnetite+rust spots.
830318	325869	5436115		16-May	AL	New road cutting	Limestone-marble	Pyrite veinlets, rock is soft, light grey in colour. There is
							skarn.	possible talc on a slip plane.
830319	317700	5430570	489	22-May	DMG		Black Siltstone	Area of gossan, also chert in area with oxidised beds.
830320	317729	5430380		22-May	DMG		Fine-grained siltsone	Light grey on fresh surfaces, sample is from a wall of
								gossan, pinhead sulfides present & on cleavage planes.
830321	317729	5430380		22-May	DMG		Siltsone like 830320	Thin bed of oxides with sulfides in it.
830322	317492	5434559	328	22-May	AL	Fresh exposure	Granite	Medium to Coarse-grained,coarse glassy quartz/eyes
						due to landslip near		contains plag+K-fsp, rusty weathering colour, some
						overgrown road.		weathered mafic minerals. No sulfides evident.
830323	323971	5439547	657	27-May	AL	Road cutting,	Quartz rich rock.	Rusty pyrite rich rock, 5-10% pyrite, medium-grained,
						Draw Mountain		light grey colour on fresh surfaces, also arsenopyrite.
								Possibly dacitic in composition.
839324	323971	5439547	657	27-May	AL	Road cutting	Quartz rich rock.	Rusty rock, 10% fine disseminated pyrite, thin quartz
						Draw Mountain		veins, grey quartz rich, dacitic comp? Possibly near a
								contact.
830325	323946	5439829	654	27-May	AL	Road cutting	Quartz rich rock.	Grey medium-grained, rusty weathering colour, pyrite+
						Draw Mountain		arsenopyrite, disseminated >5%. Possibly from a
								boulder but epidote altered outcrop nearby.
830326	324500	5439999		27-May	ST	Road Cutting	Gabbro	Looks like a gabbro from a contact zone, coarse pyrite
						East of Draw Mtn		porphyroblasts. From bottom of cliff on road. Soil 408
830327	324500	5439999		27-	ST	Road Cutting	Diorite	Contain quartz, plag, hornblende, biotite?, 2% fine

				May				
						East of Draw Mtn		disseminated pyrite, possibly very minor sericite alt.
								Not outcrop, collected from bottom of cliff, near soil
								point 408.
830328	323971	5439547		27-May	AL	Road cutting,		Second sample same as 830323..
830329						Draw Mountain		
830330								
830331	320851	5429863	384	30-May	AL	New road cutting.	Intrusive?	A1, Medium-grained blue-grey rock, quartz, calcite? >1%
								disseminated pyrite, near intrusives and andesite.
830332	320860	5429858	409	30-May	AL	New road cutting	Andesite?	A2, Very light coloured, bleached andesite? Fine grained,
								rusty weathering colour, fine pyrite disseminated, large
								rusty outcrop.
830333	320804	5429932	376	30-May	AL	New road cutting	Mafic Dyke	A3, slightly chlorite altered, crackled with veinlets,
								visible fine sulfides,. Cuts granodiorite-diorite.
830334	320658	5429996	363	30-May	AL	New road cutting	Andesite?	A4, Rusty weathering, bleached-light coloured, visible
								hornblende, manganese.
830335	320568	5429976	373	30-May	AL	New road cutting	Gabbro Dyke	A5, >1% visible pyrite, some large blebs, magnetic.
830336	319857	5430383	303	30-May	AL	New road cutting	Gossan/Fault zone	A6, Fine-grained, grey-slightly blue volcanic? Heavily
								rusted on weathering surface. Crumbly, soft at outcrop.
830337	319857	5430383	303	30-May	AL	New road cutting	Gossan/Fault zone	A7, Heavily rusted soft clay altered rock, fresh surfaces
								are light grey-blue-green, looks like could be intrusive.
830338	319857	5430383	303	30-May	AL	New road cutting	Gossan/Fault zone	A8, Rusty soft rock/clay from oxide zone at top of
								outcrop, similar to above sample.
830339	319566	5430560	254	30-May	AL	New road cutting	Vein/Fault	A9, Quartz vein, rusty at edges.
830340	319566	5430560	254	30-May	AL	New road cutting	Vein/Fault	A10, Dark, medium-grained gabbro-diorite, trace pyrite
								present in some, difficult to sample.
830341	321642	5438970	313	2-Jun	AL	New road cutting	Granite	B1, Coarse-grained Qtz, Fsp, Hornblende granite.
								Greenish colour, slightly sericite altered?
830342	321660	5438946	321	2-Jun	AL	New road cutting	Mafic Volcanic	B2, Dark, fine-grained, slightly greenish colour,

								veinlets,
								slight rusty weathering colour, near granite.
830343	321694	5438903	328	2-Jun	AL	New road cutting	Mafic Volcanic	B3, 1m from granote contact, disseminated pyrite, some
								epidote alteration, veinlets, some quartz.
830344	321693	5438897	321	2-Jun	ST	New road cutting	Mafic Volcanic	B4, 1% disseminated pyrite, 1m from granite contact,
								possible dyke.
830345	321704	5438887	320	2-Jun	ST	New road cutting	Mafic Volcanic	B5, Medium-grained grey mafic volcanic or possible dyke
								1% disseminated pyrite, epidote alteration, veinlets,
								near slip planes, magnetic.
830346	321664	5438450	280	2-Jun	AL	New road cutting	Quartz vein	B6, Vein sample, >5% pyrite, some blue-grey rock, vein
								at contact of felsic and mafic?
								near slip planes, magnetic. Vein at 255/60 deg North.
830347	321664	5438450	293	2-Jun	AL	New road cutting	Wallrock under vein.	B7, Coarse granite-granodiorite, 2-3% sulfides, pyrite
								and chalcopyrite.
830348	321664	5438450	293	2-Jun	AL	New road cutting	Wallrock above vein.	B8, Mafic rock, 5% disseminated pyrite, blue-grey-green
								colour, fine grained.
830349	321649	5438442	270	2-Jun	AL	New road cutting	Granite	B9, 2% pyrite+minor chalcopyrite, veins nearby at
								255/55 deg North. Area has veins, dykes?, pods of
								mineralised rock, slips are abundant.
830350	321632	5438436	270	2-Jun	AL	New road cutting	Mafic Volcanic	B10, Some disseminated pyrite, veined, slight stockwork texture, light grey-green blue colour, near granite contact.
830351	321632	5438436	270	2-Jun	ST	New road cutting	Mafic Volcanic	B11, similar to above sample B10.
830352	321570	5438398	259	2-Jun	AL	New road cutting	Mafic Volcanic	B12, crackled brecciated appearance, up to 4%
								disseminated pyrite, fine grained, grey colour, in drain
								beside road.
830353	321358	5437952	235	2-Jun	AL	New road cutting	Mafic Volcanic	B13, brecciated appearance, near granite contact on
								either side, grey colour, trace pyrite, some rust stains.
830354	321355	5437956	228	3-Jun	ST	New road cutting	Int-Mafic Volcanic	B14, Brecciated/faulted with intense hematite/limonite
								coating and minor sulfides, <1%, similar to B13.
830355	321246	5437842	226	3-Jun	ST	New road cutting	Mafic Volcanic	B15, Andesite-Rhyodacite? With epidote alteration, in
								granite host rock, disseminated pyrite <1%.
830356	321250	5437791	227	3-Jun	ST	New road cutting	Mafic Intrusive	B16, epidote alteration along margins with granite,
								strongly magnetic, fine-grained, black and green, limonite staining, disseminated pyrite <1%.

830357	321182	5437629	202	3-Jun	ST	New road cutting	Int-Mafic Volcanic	B17, Grey colour, entrained in granite, cross-section of
								quartz veinlets, lots of magnetite on road near here.
830358	321177	5437569	201	3-Jun	ST	New road cutting	Int-Volcanics	B18, 1% disseminated pyrite.
830359	321210	5437539	233	3-Jun	ST	New road cutting	Int-Intrusive	B19, Grey/green medium-grained granodiorite, abundant
								limonite coating on weathered surface. Disseminated
								sulfides.
830360	321236	5437443	189	3-Jun	ST	New road cutting	Micro-Diorite	B20, Dark grey-black, medium-grained, 1-2% sulfides
								associated with quartz vein.
830361	321236	5437430	186	3-Jun	ST	New road cutting	Micro-Diorite	B21, Grey-green medium-grained, crosscut by quartz
								veins/veinlets at random orientations. Disseminated
								sulfides associated with quartz veins, 1%.
830362	321113	5437145	155	3-Jun	ST	New road cutting	Micro-Diorite	B22,Purple/green/grey colour, medium-grained,
								moderately magnetic, 1% sulfides, one sample from
								dyke swarm on this outcrop.
830363	321075	5437190	157	3-Jun	ST	New road cutting	Mafic Volcanic?	B23, Brecciated, micro-diorite or mafic volcanic? <1%
								disseminated sulfides, not as dark as B22, quartz veining
								moderately magnetic.
830364	322301	5435258	67	15-May	AL/DMG	Mine Tailings Heap	Magnetite Skarn	Five magnetite rich fragments, some have fine-grained
								light grey siliceous hostrock, pyrite + chalcopyrite
								stringers. Magnetite disseminated and in veinlets.
830365	325869	5436115	63	16-May	DMG	From Road near	Rhyodacite?	Fine-grained, quartz rich with some visible small
						new cuttings		phenocrysts, light grey-pink colour, sulfides on joint
								surfaces.
830366	322301	5435258	67	15-May	AL/DMG	Mine Tailings Heap	Magnetite Skarn	Four fragments, all magnetite-rich, >60%, one has a
								quartz vein breccia texture.
830367	322301	5435258	67	15-May	AL/DMG	Mine Tailings Heap	Skarn	Four fragments, one quartz-rich skarn, fine-grained,
								disseminated sulfides, one other is fine-grained mafic,
								two other smaller fragments, one has a lot of magnetite.
830368	322301	5435258	67	15-May	AL/DMG	Mine Tailings Heap	Skarn	Light grey, fine-grained, altered intermediate intrusive?
								Quartz + dolomite? Can be scratched easily, dark
								minerals visible, possible hornblende. Trace pyrite.
								Same co-ordinate given for all tailings samples.
830369	322301	5435258	67	15-	AL/DMG	Mine Tailings	Skarn	Magnetite with minor disseminated sulfides.

				May		Heap		
830370	322301	5435258	67	15-May	AL/DMG	Mine Tailings Heap	Skarn	Pure magnetite sample.
Total: 70						All outcrops and rock samples were photographed.		

APPENDIX C

Analytical Certificates

Certificate of Analysis

Work Order: TO100651

To: **Logan Resources Ltd.**
Attn: Rita Chow
Suite 1640-1066 West Hasting St.
Oceanic Plaza, Box 12543
VANCOUVER
BC V6E 3X1

Date: Jul 03, 2008

P.O. No.	:
Project No.	: DEFAULT
No. Of Samples	71
Date Submitted	Jun 02, 2008
Report Comprises	Pages 1 to 11 (Inclusive of Cover Sheet)

Distribution of unused material:

STORE: 71 Soils

Certified By :

Gavin McGill
Operations Manager

SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at www.scc.ca

Report Footer:

L.N.R.	= Listed not received	I.S.	= Insufficient Sample
n.a.	= Not applicable	--	= 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
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

Element	Ag	Al	As	Au	Ba	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.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
01	2	170	40	0.1	350	2	120	11	32	100
*Dup 01	1	148	20	<0.1	280	2	120	17	19	91
02	<1	>300	<10	<0.1	120	<1	60	3	15	35
03	<1	281	20	<0.1	120	1	10	6	16	41
04	5	293	30	<0.1	360	4	10	23	141	23
05	4	274	20	<0.1	200	2	<10	4	34	32
06	3	275	50	<0.1	180	4	10	4	29	15
07	<1	117	40	<0.1	180	10	20	5	78	13
08	3	245	30	<0.1	90	1	<10	37	30	90
09	<1	130	30	<0.1	170	4	40	14	23	16
10	2	>300	100	<0.1	170	2	<10	3	34	9
11	<1	33	<10	<0.1	130	9	90	42	25	10
12	15	>300	380	<0.1	240	3	<10	5	43	14
13B	3	259	230	<0.1	140	2	10	7	19	18
*Dup 13B	2	263	260	<0.1	130	2	10	5	18	15
14B	2	>300	240	<0.1	260	3	20	8	48	21
15	2	259	90	<0.1	490	2	20	1	61	23
16	<1	>300	<10	<0.1	60	<1	30	3	<5	12
17	1	>300	930	<0.1	220	3	<10	3	31	19
18	3	>300	140	0.1	160	3	<10	2	79	7
	18	177	10	0.7	30	<1	<10	11	19	10
	7	215	140	0.2	270	4	190	9	98	26
21	<1	120	20	<0.1	250	1	80	9	19	101
22	3	145	40	<0.1	140	<1	120	29	33	92
23	2	296	100	0.1	300	3	20	7	84	32
24	<1	18	<10	<0.1	80	3	80	24	28	9
25	<1	85	10	<0.1	120	15	60	28	10	15
*Dup 25	<1	86	10	<0.1	110	13	60	24	5	14
26	20	189	120	0.2	180	3	<10	8	96	26
27	4	>300	150	<0.1	230	39	<10	37	87	747
28	2	>300	240	<0.1	430	11	20	29	120	217
28B	9	>300	180	<0.1	90	1	<10	7	82	8
29	11	>300	200	<0.1	90	1	<10	7	89	8
30	3	>300	540	<0.1	350	4	<10	4	61	22
31A	2	244	80	<0.1	370	1	10	52	133	82
31B	2	>300	370	<0.1	350	5	<10	11	416	198
32	3	>300	120	<0.1	320	3	<10	2	61	13
33	<1	255	70	<0.1	160	2	<10	10	17	19
34	<1	155	280	<0.1	150	<1	70	33	45	166
35	5	169	480	0.3	570	2	50	9	314	208
*Dup 35	5	187	500	0.2	640	2	60	9	325	232
36	3	<1	330	0.2	330	4	<10	2	209	14
37	<1	>300	<10	<0.1	50	<1	<10	1	<5	14
38	3	184	10	<0.1	50	<1	20	10	20	43
40	3	>300	70	<0.1	310	3	70	15	161	150
41	1	296	60	0.1	400	3	30	147	136	197
42	1	263	10	<0.1	150	2	<10	4	25	12
43	1	257	40	<0.1	230	2	<10	15	40	120

Element	Ag	Al	As	Au	Ba	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.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
44	<1	43	<10	<0.1	70	10	60	31	11	16
45	4	280	120	<0.1	120	2	10	32	36	17
46	<1	163	30	<0.1	70	1	<10	1	8	15
47	5	>300	320	<0.1	150	2	<10	4	109	14
48	<1	265	70	<0.1	100	2	<10	3	14	7
*Dup 48	<1	263	80	<0.1	100	2	10	4	13	7
49	2	>300	510	<0.1	360	4	<10	5	43	18
50	<1	>300	380	<0.1	170	4	30	4	21	14
51	4	179	50	<0.1	380	2	80	21	117	231
51B	<1	251	2580	<0.1	70	2	<10	2	52	10
52	<1	160	40	<0.1	60	<1	10	5	9	16
53	<1	193	60	<0.1	130	2	20	<1	12	10
55	2	280	100	<0.1	240	10	<10	5	30	27
56	<1	199	20	<0.1	130	1	30	13	15	210
58	5	>300	100	0.2	930	8	20	23	583	163
59	2	276	80	<0.1	240	5	20	14	45	26
60	31	>300	70	0.2	120	4	<10	9	75	9
61	3	255	110	<0.1	170	7	20	4	127	21
*Dup 61	2	269	70	<0.1	150	5	10	6	52	26
62	<1	47	<10	<0.1	80	7	60	15	7	7
	4	>300	170	0.1	320	2	10	20	189	192
	<1	243	110	<0.1	90	4	<10	6	11	12
65	3	>300	200	0.1	320	1	<10	19	106	63
66	2	>300	190	<0.1	430	3	20	5	49	25
67	<1	>300	310	<0.1	110	4	<10	2	15	11
68	<1	217	100	<0.1	110	3	40	11	6	26
69	1	233	250	0.1	320	3	<10	4	41	95
70	<1	120	<10	0.2	120	3	80	19	30	46
71	1	176	20	<0.1	260	10	80	23	9	90
*Std MMISRM16	21	57	30	34.1	60	<1	200	5	23	79
*Std MMISRM16	22	56	30	35.8	60	<1	190	5	21	79
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	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
01	<100	240	9	12.4	0.7	227	4	10	11	25
*Dup 01	<100	290	10	15.9	0.6	175	3	5	9	26
02	<100	60	3	5.4	<0.5	69	2	4	<5	27
03	<100	110	7	8.1	0.6	134	3	5	<5	16
04	<100	360	19	15.4	2.2	236	12	36	16	10
05	<100	250	8	6.4	0.9	120	5	12	<5	3
06	<100	180	5	4.4	0.7	369	3	10	11	11
07	<100	30	4	2.1	1.2	164	6	17	<5	31
08	<100	600	11	9.3	1.1	53	5	12	<5	3
09	<100	120	2	0.9	<0.5	146	2	5	<5	36
10	<100	100	7	4.7	1.5	97	5	17	9	4
11	<100	130	3	1.7	0.8	20	3	8	<5	57
12	<100	240	9	6.5	1.9	865	7	17	13	7
13B	<100	190	4	4.0	0.6	440	3	8	5	10
*Dup 13B	<100	200	4	3.5	0.6	455	2	7	7	11
14B	<100	250	14	11.8	1.6	598	7	17	14	11
15	<100	360	8	4.7	1.7	534	6	24	15	9
16	<100	20	<1	1.4	<0.5	38	<1	1	<5	15
17	400	200	7	6.3	1.3	1120	5	12	17	9
18	200	100	17	10.9	3.1	78	11	52	18	5
	<100	1630	21	19.6	1.9	24	8	6	<5	<1
	<100	380	21	12.2	3.0	350	15	32	11	16
21	<100	30	3	3.5	<0.5	211	2	8	6	33
22	<100	80	10	6.4	1.6	89	8	16	<5	10
23	<100	320	16	11.7	2.4	293	12	50	12	12
24	<100	80	3	1.5	0.7	14	3	12	<5	40
25	<100	120	1	1.1	<0.5	61	1	3	<5	32
*Dup 25	<100	110	1	0.8	<0.5	56	<1	1	<5	35
26	<100	450	27	21.8	4.9	214	26	34	8	2
27	<100	830	19	15.8	3.0	413	13	34	29	5
28	200	300	25	16.3	3.8	444	17	36	24	8
28B	<100	310	31	19.5	5.8	453	22	27	7	3
29	100	320	32	19.6	6.0	495	22	30	8	3
30	200	350	9	7.7	1.5	1000	6	18	19	12
31A	<100	620	53	30.3	8.8	64	40	46	7	6
31B	900	690	69	53.6	10.2	1160	44	78	104	41
32	200	150	10	6.4	2.5	168	9	31	16	5
33	100	110	5	3.6	0.7	323	3	8	<5	13
34	<100	40	8	6.4	1.2	45	5	13	<5	11
35	<100	2090	47	25.3	14.5	185	55	126	7	10
*Dup 35	<100	2270	49	27.1	14.8	208	58	130	8	12
36	500	170	33	18.4	8.2	763	30	103	51	9
37	<100	60	1	1.6	<0.5	73	<1	<1	<5	7
38	<100	400	10	10.5	1.0	73	4	9	<5	4
40	<100	500	38	23.8	6.4	302	29	44	62	10
41	<100	980	49	28.3	6.0	67	36	49	23	11
42	<100	110	5	3.9	0.5	179	3	12	6	10
43	<100	630	13	8.5	1.2	119	6	11	12	7

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	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
44	<100	150	2	1.0	<0.5	30	1	4	<5	42
45	<100	650	23	15.8	2.5	210	11	13	7	5
46	<100	30	1	1.7	<0.5	151	1	4	<5	6
47	<100	370	23	13.7	5.1	354	18	41	10	4
48	<100	90	3	2.0	<0.5	287	2	7	9	11
*Dup 48	<100	110	2	1.9	<0.5	310	1	6	8	13
49	300	220	7	4.2	1.5	1080	5	15	23	9
50	100	140	4	4.4	0.7	965	2	10	11	18
51	<100	130	18	13.0	3.7	130	15	34	50	21
51B	<100	30	4	2.8	1.1	248	4	8	11	3
52	<100	40	2	1.5	<0.5	135	1	4	<5	7
53	<100	120	2	2.2	<0.5	524	1	6	<5	11
55	200	230	5	3.5	1.0	396	4	16	23	12
56	<100	120	7	11.2	0.7	106	3	7	6	21
58	<100	760	88	48.9	10.9	168	67	96	44	10
59	<100	340	10	7.5	1.1	323	5	16	21	12
60	<100	560	16	9.4	2.9	221	12	26	9	2
61	<100	120	21	11.0	4.0	242	23	43	6	10
*Dup 61	<100	120	19	10.2	2.3	195	14	17	<5	9
62	<100	60	1	0.9	<0.5	28	1	2	<5	27
	<100	760	48	33.8	7.3	153	37	57	14	8
	<100	80	3	3.1	<0.5	231	2	6	<5	8
65	<100	520	28	19.5	4.5	213	20	48	12	8
66	300	190	13	10.6	2.2	378	8	24	35	15
67	<100	80	5	3.9	0.6	441	2	8	12	5
68	<100	60	2	2.3	<0.5	212	<1	3	11	20
69	<100	160	6	7.3	0.8	192	4	11	12	8
70	<100	380	49	36.4	4.3	18	22	11	<5	14
71	<100	90	3	5.1	<0.5	119	2	5	<5	30
*Std MMISRM16	<100	700	3	1.3	1.4	2	6	5	<5	34
*Std MMISRM16	<100	730	4	1.5	1.3	3	6	4	<5	33
*Blk BLANK	<100	<10	2	0.7	<0.5	<1	<1	<1	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	9	<1	<1	<5	<1

Element	Mo	Nb	Nd	Ni	Pb	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	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
01	7	4.7	10	40	110	<1	2	<1	10	<1
*Dup 01	<5	3.0	7	36	150	<1	2	<1	<5	<1
02	<5	<0.5	6	40	<10	<1	1	<1	<5	<1
03	<5	7.7	6	33	70	<1	1	<1	27	1
04	9	10.7	36	70	240	<1	9	<1	74	1
05	<5	21.4	16	55	90	<1	4	<1	52	2
06	9	53.9	11	75	220	<1	3	<1	34	4
07	<5	13.2	23	78	740	<1	5	<1	61	2
08	<5	4.3	14	119	480	<1	3	<1	50	<1
09	<5	7.4	7	94	370	<1	2	<1	11	1
10	28	35.4	17	49	90	<1	4	<1	34	2
11	<5	0.7	13	103	4320	<1	3	<1	38	<1
12	57	62.0	24	57	200	<1	5	<1	47	7
13B	8	23.6	8	54	170	<1	2	<1	22	3
*Dup 13B	8	26.6	7	52	140	<1	2	<1	21	3
14B	17	55.2	20	72	390	<1	4	<1	49	4
15	15	44.0	23	55	90	<1	6	<1	65	2
16	<5	<0.5	2	28	<10	<1	<1	<1	6	<1
17	122	93.4	15	83	130	<1	3	<1	40	9
18	25	62.4	37	30	120	<1	9	<1	47	2
	<5	2.0	15	42	50	<1	3	<1	13	<1
	10	38.5	39	119	230	<1	9	<1	43	3
21	<5	2.2	7	11	350	<1	2	<1	27	<1
22	13	3.1	21	57	240	<1	4	<1	27	<1
23	9	16.6	39	68	240	<1	9	<1	37	2
24	<5	<0.5	14	91	950	<1	3	<1	28	<1
25	<5	3.6	4	98	3740	<1	<1	<1	27	1
*Dup 25	<5	2.7	3	96	2860	<1	<1	<1	25	<1
26	7	26.0	84	49	770	<1	16	<1	75	2
27	15	31.5	40	153	390	<1	9	<1	57	7
28	30	51.2	46	119	1270	<1	10	<1	77	7
28B	13	29.8	59	32	200	<1	12	<1	80	2
29	15	33.6	61	35	190	<1	13	<1	80	3
30	22	78.1	19	69	200	<1	5	<1	60	8
31A	6	4.3	97	71	950	<1	19	<1	64	4
31B	14	95.5	111	202	320	<1	24	<1	52	12
32	17	70.1	30	46	130	<1	7	<1	69	4
33	9	31.1	9	45	230	<1	2	<1	21	2
34	9	1.1	18	65	840	<1	4	<1	38	<1
35	24	4.3	194	72	300	<1	41	<1	65	5
*Dup 35	23	4.8	199	81	290	<1	43	<1	70	5
36	59	99.9	106	50	160	<1	27	<1	67	5
37	<5	5.4	1	41	<10	<1	<1	<1	8	<1
38	<5	2.6	10	38	170	<1	2	<1	17	<1
40	15	23.3	76	92	170	<1	16	<1	80	4
41	22	8.7	88	87	1100	<1	18	<1	73	1
42	<5	24.0	12	51	90	<1	3	<1	46	1
43	<5	12.1	14	69	500	<1	3	<1	94	<1

Element	Mo	Nb	Nd	Ni	Pb	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	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
44	<5	0.5	5	81	1640	<1	1	<1	89	<1
45	8	18.9	22	143	630	<1	5	<1	33	2
46	<5	8.4	4	9	60	<1	<1	<1	14	1
47	14	30.3	58	44	320	<1	13	<1	51	2
48	9	39.1	5	13	50	<1	1	<1	13	3
*Dup 48	10	38.1	5	15	60	<1	1	<1	12	3
49	30	101	18	67	150	<1	4	<1	39	8
50	30	86.1	9	31	210	<1	2	<1	19	7
51	30	12.0	48	43	60	<1	11	<1	49	2
51B	52	12.1	13	31	110	<1	3	<1	23	4
52	10	32.8	5	7	50	<1	<1	<1	17	2
53	35	59.5	5	20	70	<1	1	<1	18	3
55	15	119	14	33	260	<1	3	<1	43	10
56	5	6.5	8	37	60	<1	2	<1	44	<1
58	8	18.6	178	74	780	<1	38	<1	197	3
59	8	36.8	15	52	540	<1	4	<1	74	4
60	8	29.6	37	29	710	<1	8	<1	101	2
61	13	67.0	78	86	630	<1	17	<1	35	4
*Dup 61	8	40.1	33	85	570	<1	7	<1	22	3
62	<5	1.0	3	123	1000	<1	<1	<1	13	<1
	13	7.8	99	105	580	<1	21	<1	58	3
	9	31.2	6	25	130	<1	2	<1	8	6
65	11	14.4	60	87	440	<1	13	<1	55	4
66	26	75.8	25	91	240	<1	6	<1	70	5
67	52	76.9	7	32	120	<1	2	<1	26	5
68	18	10.6	3	35	140	<1	<1	<1	9	3
69	9	10.9	12	50	430	<1	3	<1	26	2
70	<5	<0.5	33	80	760	<1	6	<1	93	<1
71	<5	5.4	5	28	540	<1	1	<1	9	<1
*Std MMISRM16	69	<0.5	18	315	120	36	3	<1	352	1
*Std MMISRM16	70	<0.5	18	326	130	37	3	<1	356	1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	2	<1	<5	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
01	20	3	3	490	<1	<1	30	6.3	3120	0.7
*Dup 01	16	2	1	500	<1	<1	<10	4.2	1900	<0.5
02	29	2	<1	260	<1	<1	<10	0.7	214	<0.5
03	48	2	3	90	<1	<1	<10	5.5	7620	<0.5
04	40	10	4	90	<1	2	<10	9.8	10300	1.0
05	32	4	6	10	2	<1	<10	10.0	9110	<0.5
06	30	3	12	60	3	<1	<10	12.2	28000	<0.5
07	32	6	6	170	<1	<1	<10	8.3	7200	<0.5
08	22	4	2	<10	<1	1	<10	4.5	2460	<0.5
09	12	2	3	360	<1	<1	<10	6.5	4830	<0.5
10	49	5	9	40	2	1	<10	16.3	29700	<0.5
11	11	3	2	330	<1	<1	<10	4.7	314	<0.5
12	62	6	16	50	4	1	<10	16.3	51300	<0.5
13B	33	2	6	120	1	<1	<10	16.3	18200	<0.5
*Dup 13B	32	2	7	120	2	<1	<10	15.1	20600	<0.5
14B	60	5	15	110	4	2	<10	22.4	40700	<0.5
15	61	6	12	90	3	1	<10	17.9	32600	0.6
16	20	<1	<1	130	<1	<1	<10	1.1	200	<0.5
17	78	4	23	60	6	<1	<10	26.7	65900	0.5
18	84	9	15	20	4	2	<10	14.8	52300	<0.5
	85	5	<1	<10	<1	2	<10	2.6	1920	<0.5
	48	11	11	390	2	3	<10	13.4	29900	<0.5
21	24	2	2	300	<1	<1	<10	2.9	1760	<0.5
22	19	6	1	320	<1	1	<10	4.0	2240	0.9
23	41	9	6	150	1	2	<10	18.8	11900	<0.5
24	<5	3	<1	320	<1	<1	<10	2.1	67	<0.5
25	8	1	2	350	<1	<1	<10	5.2	605	<0.5
*Dup 25	9	<1	1	390	<1	<1	<10	5.4	439	0.6
26	84	21	8	<10	2	4	<10	21.1	13500	<0.5
27	64	10	17	30	2	3	<10	15.0	26000	1.5
28	61	13	18	80	3	3	<10	22.4	33100	0.9
28B	105	18	6	<10	2	4	<10	22.8	27200	<0.5
29	109	18	7	<10	2	4	<10	26.3	30000	<0.5
30	83	5	20	100	5	1	<10	30.8	62900	0.6
31A	60	28	2	60	<1	8	<10	7.8	3490	0.6
31B	147	32	20	90	6	9	<10	42.8	85100	0.7
32	108	8	17	50	5	2	<10	31.4	57000	0.5
33	41	2	8	100	2	<1	<10	17.6	27700	<0.5
34	19	4	<1	190	<1	1	<10	2.6	780	<0.5
35	90	48	4	120	<1	8	<10	49.0	2980	0.7
*Dup 35	98	50	3	140	<1	9	<10	48.9	3630	0.7
36	169	27	23	30	7	5	<10	57.6	79000	0.8
37	14	<1	2	40	<1	<1	<10	1.0	6170	<0.5
38	47	3	<1	40	<1	1	<10	4.2	2260	<0.5
40	93	22	7	160	1	5	<10	20.3	16700	0.6
41	39	26	3	190	<1	7	<10	16.5	3930	1.0
42	12	3	10	100	2	<1	<10	9.3	8470	0.6
43	41	4	4	90	<1	2	<10	10.6	5360	<0.5

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
44	<5	1	<1	280	<1	<1	<10	2.4	72	<0.5
45	61	7	6	70	1	3	<10	12.0	15400	<0.5
46	20	<1	3	40	<1	<1	<10	4.4	6120	<0.5
47	93	16	7	20	2	3	<10	32.5	26300	<0.5
48	26	1	10	80	2	<1	<10	7.5	30200	<0.5
*Dup 48	26	1	10	100	2	<1	<10	7.6	29100	<0.5
49	74	5	24	80	7	<1	<10	34.7	77300	<0.5
50	42	2	21	180	6	<1	<10	15.8	64300	<0.5
51	77	13	4	380	<1	3	<10	7.9	10400	1.1
51B	30	4	5	<10	<1	<1	<10	13.6	9430	<0.5
52	33	1	9	50	2	<1	<10	6.6	26000	<0.5
53	24	1	15	90	4	<1	<10	7.5	46600	<0.5
55	64	3	48	60	7	<1	<10	15.8	88300	<0.5
56	25	2	2	210	<1	<1	<10	2.4	4000	<0.5
58	95	54	6	200	1	13	<10	54.2	7330	1.9
59	40	4	15	130	2	1	<10	17.5	18600	0.6
60	44	11	12	<10	2	2	<10	24.4	15000	1.0
61	35	21	19	50	5	4	<10	34.1	13400	<0.5
*Dup 61	33	11	14	50	3	3	<10	24.0	9480	<0.5
62	<5	<1	<1	400	<1	<1	<10	3.2	169	<0.5
	108	30	3	60	<1	7	<10	35.4	5230	0.8
	21	2	12	50	2	<1	<10	8.5	23300	<0.5
65	75	16	4	40	<1	4	<10	22.6	11200	0.6
66	95	7	17	110	5	2	<10	32.1	56700	0.6
67	40	2	20	20	5	<1	<10	10.4	60600	<0.5
68	15	<1	4	230	<1	<1	<10	4.8	7800	<0.5
69	33	3	3	40	<1	<1	<10	12.8	7810	<0.5
70	36	12	<1	230	<1	5	<10	2.5	63	<0.5
71	19	1	2	320	<1	<1	<10	5.6	3390	<0.5
*Std MMISRM16	12	6	<1	460	<1	<1	<10	29.2	<3	<0.5
*Std MMISRM16	11	6	<1	460	<1	<1	<10	30.7	4	<0.5
*Blk BLANK	<5	2	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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
01	4	2	54	11	500	16
*Dup 01	3	1	63	15	640	13
02	<1	<1	23	8	<20	<5
03	3	2	40	8	200	30
04	6	2	99	12	220	63
05	8	3	33	6	160	169
06	5	5	28	4	320	168
07	3	2	20	2	370	41
08	4	1	60	7	370	29
09	2	1	9	<1	720	28
10	11	4	32	4	170	92
11	2	<1	14	1	1150	6
12	32	7	46	7	250	104
13B	6	3	22	4	200	48
*Dup 13B	6	3	20	4	190	54
14B	11	6	77	11	830	100
15	18	4	34	4	70	95
16	<1	<1	<5	2	50	<5
17	7	8	34	7	400	153
18	15	8	106	8	290	160
	4	<1	125	17	40	20
	12	5	110	9	170	67
21	3	1	19	5	780	9
22	14	<1	76	4	670	11
23	9	3	101	10	180	62
24	1	<1	18	1	1350	<5
25	2	<1	8	2	1890	47
*Dup 25	2	<1	6	1	1940	37
26	18	3	201	19	130	123
27	18	5	106	13	280	89
28	30	8	134	13	530	349
28B	12	4	153	16	200	104
29	12	4	152	17	150	114
30	9	11	52	8	280	159
31A	7	<1	327	22	820	21
31B	50	8	421	40	990	330
32	30	7	46	6	270	187
33	4	2	30	4	690	61
34	148	<1	49	5	1470	<5
35	29	2	251	22	700	39
*Dup 35	29	2	266	24	710	43
36	35	13	176	16	250	364
37	1	<1	7	2	<20	8
38	7	<1	52	8	680	15
40	14	4	212	20	460	91
41	18	3	265	20	1930	40
42	7	4	23	4	40	95
43	6	2	55	7	520	57

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
44	1	<1	9	1	1340	<5
45	8	3	116	12	890	70
46	6	1	7	3	50	17
47	16	4	92	12	130	124
48	4	4	13	2	210	78
*Dup 48	3	4	11	2	250	75
49	11	10	29	5	310	190
50	5	9	26	5	280	139
51	11	3	105	12	100	57
51B	115	3	16	4	50	47
52	5	3	11	2	480	46
53	4	6	14	3	90	100
55	8	17	24	4	420	144
56	3	1	40	14	630	8
58	19	4	398	38	490	100
59	7	6	51	7	750	235
60	12	3	69	7	130	70
61	8	5	98	8	430	328
*Dup 61	7	4	91	8	550	280
62	1	<1	8	<1	1130	6
	41	2	277	29	830	64
	3	3	22	3	370	36
65	9	2	142	17	390	93
66	14	6	73	9	370	211
67	8	7	23	4	150	138
68	2	1	9	4	410	19
69	18	2	33	9	120	31
70	48	<1	322	28	340	<5
71	8	<1	22	6	1180	16
*Std MMISRM16	57	<1	15	1	210	20
*Std MMISRM16	60	<1	15	1	300	19
*Blk BLANK	<1	<1	9	<1	<20	<5
*Blk BLANK	<1	<1	<5	<1	<20	<5

Certificate of Analysis

Work Order: TO100652

To: **Logan Resources Ltd.**
Attn: Rita Chow
Suite 1640-1066 West Hasting St.
Oceanic Plaza, Box 12543
VANCOUVER
BC V6E 3X1

Date: Jul 01, 2008

P.O. No.	:
Project No.	: DEFAULT
No. Of Samples	58
Date Submitted	Jun 02, 2008
Report Comprises	Pages 1 to 11 (Inclusive of Cover Sheet)

Distribution of unused material:

STORE: 58 Soils

Certified By :

Gavin McGill
Operations Manager

ISO 17025 Accredited for Specific Tests. SCC No. 456

Report Footer:

L.N.R.	= Listed not received	I.S.	= Insufficient Sample
n.a.	= Not applicable	--	= 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
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

Element	Ag	Al	As	Au	Ba	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.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
74	4	209	<10	<0.1	970	<1	30	71	23	209
*Dup 74	4	216	<10	<0.1	780	<1	30	83	20	174
75	1	274	140	0.3	760	2	30	10	28	30
76	<1	47	<10	<0.1	440	5	120	35	75	13
77	<1	293	20	<0.1	240	3	20	7	13	8
78	<1	120	<10	<0.1	370	7	30	18	16	27
79	1	182	60	0.1	610	6	70	14	19	119
80	20	197	20	0.2	70	2	<10	9	16	28
81	9	231	60	0.3	190	3	90	47	75	96
85	<1	207	10	<0.1	210	4	20	16	8	81
86	1	229	30	<0.1	140	3	<10	13	27	19
87	3	289	180	<0.1	210	2	<10	41	42	124
88	2	>300	340	0.1	600	8	<10	<1	32	10
89B	1	292	140	<0.1	180	2	10	3	12	44
*Dup 89B	1	267	120	<0.1	160	2	<10	3	12	38
90	<1	92	40	<0.1	400	3	70	15	46	13
91	5	226	40	0.2	200	<1	<10	2	43	<5
92	3	>300	210	0.1	710	2	10	13	146	157
93	1	179	30	0.1	50	<1	<10	5	9	<5
94	<1	242	170	<0.1	160	2	10	17	73	43
	<1	75	<10	<0.1	200	7	20	2	14	<5
	<1	55	<10	<0.1	120	5	20	8	9	8
99	<1	174	20	0.4	1100	<1	180	36	85	91
101	3	>300	30	<0.1	150	2	<10	3	14	7
102	<1	45	<10	<0.1	140	3	100	27	75	19
103	10	>300	20	0.3	130	<1	<10	8	90	32
104	1	>300	70	<0.1	270	7	<10	5	94	17
*Dup 104	1	>300	100	<0.1	360	9	<10	5	118	19
105	4	212	50	0.3	80	1	<10	4	14	8
106	<1	238	20	<0.1	280	2	30	41	20	129
107	5	>300	80	0.2	130	6	<10	10	41	26
108	31	253	70	1.1	100	9	<10	20	49	14
109	<1	209	40	<0.1	220	5	40	10	17	37
110	<1	173	<10	<0.1	110	5	50	16	<5	31
111	4	>300	160	<0.1	780	3	20	19	39	86
112B	7	182	<10	0.4	40	<1	<10	3	54	<5
113B	4	6	<10	0.5	10	<1	<10	1	<5	<5
114	1	<1	920	0.1	350	11	30	8	24	19
115	<1	196	20	<0.1	70	<1	<10	15	9	75
116	2	221	20	<0.1	80	<1	<10	11	13	18
*Dup 116	2	232	20	<0.1	100	<1	<10	11	14	19
117	<1	257	30	<0.1	120	1	10	15	19	90
118	3	>300	120	0.1	230	4	<10	1	31	12
119	<1	241	<10	<0.1	120	2	10	19	22	41
120	<1	39	<10	<0.1	120	3	70	14	20	7

	Ag	Al	As	Au	Ba	Bi	Ca	Cd	Ce	Co
	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
	1	1	10	0.1	10	1	10	1	5	5
	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
125	2	>300	130	0.3	450	5	40	3	62	14
126	1	>300	40	<0.1	390	4	20	10	64	25
127	<1	134	<10	<0.1	260	2	10	3	58	7
Element	Ag	Al	As	Au	Ba	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.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
129	1	>300	70	0.1	150	4	30	2	34	9
130	11	248	20	0.7	210	1	10	49	82	24
131	<1	23	<10	<0.1	130	5	90	25	52	8
132	1	97	470	<0.1	150	2	110	35	56	43
134	5	>300	350	<0.1	270	2	<10	11	102	25
*Dup 134	4	>300	250	<0.1	220	2	<10	12	81	27
135	<1	206	10	<0.1	60	1	<10	3	10	7
136	2	269	40	<0.1	140	2	10	29	34	47
137	10	>300	340	<0.1	130	3	<10	21	28	41
138	1	251	70	<0.1	130	2	30	24	15	40
139	6	>300	240	0.2	290	2	<10	2	77	11
140	<1	202	90	<0.1	90	3	30	5	18	49
141	2	230	80	0.2	180	3	10	5	64	38
[illegible]	<1	104	10	<0.1	230	7	60	4	17	21
	2	>300	120	<0.1	390	3	20	3	49	11
*Std MMISRM16	17	62	20	29.8	60	<1	240	5	20	67
*Std MMISRM16	19	64	20	31.2	50	<1	230	5	20	76
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	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
74	<100	290	21	25.1	1.1	31	6	13	<5	12
*Dup 74	<100	310	33	29.6	1.6	23	10	11	<5	11
75	<100	140	11	11.9	0.8	169	4	14	<5	14
76	<100	50	10	6.0	2.7	53	11	36	<5	53
77	<100	90	6	6.4	0.8	320	3	6	<5	16
78	<100	20	2	1.7	0.6	142	3	9	<5	24
79	<100	330	8	8.2	0.9	260	4	6	20	15
80	100	990	20	13.7	2.5	184	10	6	<5	3
81	<100	2900	36	26.7	5.4	66	27	32	16	14
85	<100	880	3	4.0	<0.5	80	1	4	<5	11
86	<100	340	15	10.8	1.9	160	8	12	6	7
87	<100	570	15	12.6	1.9	99	8	16	6	3
88	100	190	5	4.0	0.9	484	3	16	30	10
89B	<100	130	5	4.5	0.5	365	2	6	9	7
*Dup 89B	<100	120	4	4.1	0.5	332	2	5	7	5
90	<100	60	9	5.6	1.9	98	7	23	<5	44
91	<100	330	19	15.2	2.7	115	11	6	6	3
92	<100	1460	67	58.3	8.4	351	38	46	9	9
93	<100	180	6	6.9	0.8	118	3	3	<5	1
94	<100	90	34	38.9	2.5	104	12	23	17	7
	<100	20	1	0.5	<0.5	41	2	8	<5	43
	<100	70	<1	<0.5	<0.5	42	<1	5	<5	32
99	<100	400	53	33.7	7.8	33	40	33	<5	23
101	<100	130	6	5.1	0.9	339	3	5	7	3
102	<100	80	24	14.0	5.2	23	20	24	<5	39
103	<100	970	35	22.8	5.1	58	26	38	8	4
104	200	120	18	15.5	2.2	546	12	39	53	5
*Dup 104	300	150	20	15.8	2.8	702	15	50	80	7
105	<100	240	4	5.3	0.6	181	2	5	<5	5
106	<100	270	7	7.5	0.7	149	3	8	15	19
107	<100	570	6	5.8	1.2	183	6	14	15	7
108	<100	1000	29	20.9	1.6	49	14	19	8	1
109	<100	130	4	4.2	<0.5	136	2	8	6	21
110	<100	160	<1	0.9	<0.5	78	<1	1	<5	31
111	<100	470	12	8.4	1.7	233	7	11	14	9
112B	<100	370	59	42.1	5.3	8	33	25	<5	<1
113B	<100	510	20	18.0	2.6	5	10	<1	<5	<1
114	300	290	6	6.0	1.0	1340	4	10	24	14
115	<100	190	12	10.5	1.0	72	5	4	<5	5
116	<100	520	9	10.5	0.9	46	4	5	<5	2
*Dup 116	<100	500	10	10.8	1.0	54	4	6	<5	2
117	<100	90	8	5.0	1.4	135	5	4	29	3
118	<100	250	6	4.7	1.2	383	4	15	22	5
119	<100	220	13	12.3	1.1	30	6	10	<5	5
120	<100	20	3	1.8	0.6	25	3	8	<5	30

	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
	100	10	1	0.5	0.5	1	1	1	5	1
	PPB	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB	PPM
125	700	330	15	9.2	3.3	394	12	24	31	14
126	<100	260	37	27.2	4.6	764	18	26	34	15
127	<100	80	5	2.4	1.0	47	6	27	6	7
Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	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
129	<100	160	4	3.2	1.0	138	4	8	6	14
130	<100	930	57	34.4	8.7	26	45	34	<5	4
131	<100	110	9	5.6	1.6	13	8	19	<5	63
132	<100	130	8	5.5	0.8	193	7	26	18	22
134	<100	300	17	11.9	1.4	238	12	32	30	6
*Dup 134	<100	230	15	11.0	1.3	196	10	28	21	4
135	<100	20	3	3.2	<0.5	53	2	6	<5	2
136	<100	3060	20	14.1	1.6	72	8	19	19	6
137	<100	450	8	6.8	1.3	225	5	15	15	4
138	<100	240	14	9.8	1.3	68	6	7	5	9
139	200	430	12	5.8	3.0	262	10	28	12	5
140	<100	90	5	6.4	1.0	87	4	6	<5	12
141	<100	270	20	19.9	1.7	221	10	28	<5	6
[illegible]	<100	30	4	2.7	0.6	73	3	9	<5	80
	200	220	10	6.4	2.3	284	8	19	7	8
*Std MMISRM16	<100	670	3	1.0	1.3	2	6	4	<5	34
*Std MMISRM16	<100	700	3	2.3	1.5	3	7	4	<5	33
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

Element	Mo	Nb	Nd	Ni	Pb	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	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
74	<5	1.3	13	48	850	<1	3	<1	34	<1
*Dup 74	<5	0.7	15	55	1080	<1	3	<1	27	<1
75	6	8.8	13	37	200	<1	3	<1	65	8
76	<5	2.4	45	59	1950	<1	11	<1	30	<1
77	21	36.1	8	21	180	<1	2	<1	11	2
78	<5	0.9	10	43	910	<1	2	<1	51	<1
79	58	5.6	10	34	1760	<1	2	<1	38	2
80	7	17.0	14	58	70	<1	2	<1	31	2
81	8	2.0	58	198	410	<1	11	<1	73	1
85	<5	3.1	4	41	350	<1	1	<1	21	<1
86	5	13.8	17	64	340	<1	4	<1	43	1
87	6	9.9	21	130	460	<1	4	<1	54	1
88	37	118	15	42	250	<1	4	<1	77	12
89B	15	24.9	7	36	160	<1	2	<1	26	4
*Dup 89B	14	21.2	6	29	130	<1	1	<1	26	3
90	<5	6.4	27	43	500	<1	6	<1	19	1
91	<5	10.8	25	86	220	<1	5	<1	53	<1
92	28	24.5	82	51	410	<1	17	<1	94	9
93	8	4.6	6	28	80	<1	1	<1	37	<1
94	17	5.3	31	24	650	<1	7	<1	85	2
	<5	1.3	8	79	80	<1	2	<1	56	<1
	<5	0.7	5	51	420	<1	1	<1	57	<1
99	<5	0.9	75	88	270	<1	14	<1	77	<1
101	14	51.1	9	25	80	<1	2	<1	24	3
102	<5	0.6	60	55	800	<1	12	<1	21	<1
103	6	4.9	67	53	270	<1	14	<1	51	<1
104	21	73.8	44	38	360	<1	11	<1	79	4
*Dup 104	27	100	54	46	400	<1	13	<1	86	5
105	5	11.4	7	40	140	<1	1	<1	23	2
106	<5	4.7	8	54	890	<1	2	<1	72	<1
107	11	12.4	17	62	200	<1	4	<1	40	2
108	<5	5.2	29	35	1030	<1	6	<1	55	<1
109	<5	5.4	7	58	650	<1	2	<1	25	<1
110	<5	1.0	2	130	870	<1	<1	<1	34	<1
111	5	16.4	18	144	600	<1	4	<1	82	3
112B	7	0.5	59	12	190	<1	11	<1	77	<1
113B	<5	<0.5	12	8	140	<1	1	<1	86	<1
114	29	100	13	58	220	1	3	<1	52	22
115	<5	1.9	8	23	570	<1	1	<1	43	<1
116	<5	2.6	9	45	70	<1	2	<1	21	<1
*Dup 116	<5	3.1	10	46	90	<1	2	<1	24	<1
117	16	13.1	10	34	370	<1	2	<1	45	2
118	27	93.3	15	37	130	<1	4	<1	68	6
119	<5	1.0	12	33	680	<1	3	<1	14	<1
120	<5	0.8	11	55	500	<1	3	<1	43	<1

	Mo	Nb	Nd	Ni	Pb	Pd	Pr	Pt	Rb	Sb
	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
	5	0.5	1	5	10	1	1	1	5	1
	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
125	177	148	33	58	200	2	7	<1	58	6
126	38	68.6	41	62	210	<1	8	<1	71	4
127	7	29.2	29	16	330	<1	7	<1	85	<1
Element	Mo	Nb	Nd	Ni	Pb	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	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
129	5	11.3	11	31	50	<1	2	<1	25	1
130	<5	1.1	102	50	540	<1	18	<1	62	<1
131	<5	<0.5	30	79	2040	<1	7	<1	52	<1
132	9	6.2	25	28	450	<1	6	<1	50	1
134	10	27.7	37	62	930	<1	9	<1	90	3
*Dup 134	8	20.8	33	64	870	<1	8	<1	109	2
135	<5	3.4	6	21	160	<1	1	<1	<5	<1
136	<5	3.6	19	58	1490	<1	4	<1	28	2
137	7	14.6	15	88	250	<1	4	<1	49	4
138	<5	3.8	10	39	1110	<1	2	<1	77	1
139	17	36.8	34	58	90	<1	8	<1	63	2
140	<5	1.6	10	16	510	<1	2	<1	8	<1
141	<5	3.9	34	34	540	<1	8	<1	40	1
[illegible]	<5	2.3	10	65	170	<1	2	<1	29	<1
	32	44.3	24	31	100	<1	5	<1	78	3
*Std MMISRM16	59	<0.5	18	263	140	31	3	<1	353	<1
*Std MMISRM16	63	<0.5	18	331	160	32	3	<1	353	<1
*Blk 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

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
74	24	3	<1	220	<1	2	<10	2.5	570	0.8
*Dup 74	22	5	<1	160	<1	3	<10	2.1	498	<0.5
75	33	3	3	190	<1	1	<10	9.2	7220	<0.5
76	15	9	<1	410	<1	2	<10	3.5	2030	<0.5
77	38	2	9	130	2	<1	<10	9.9	30000	<0.5
78	25	2	<1	230	<1	<1	<10	4.4	358	<0.5
79	49	3	10	260	<1	<1	<10	5.1	5870	<0.5
80	84	6	10	<10	1	2	<10	3.7	17900	<0.5
81	94	17	1	190	<1	5	<10	15.9	1430	0.7
85	17	1	2	150	<1	<1	<10	3.4	1530	<0.5
86	73	5	5	40	<1	2	<10	12.3	9630	0.6
87	38	5	4	40	<1	2	<10	9.7	6750	0.9
88	89	3	32	100	8	<1	<10	24.6	99700	0.9
89B	38	2	8	60	2	<1	<10	7.7	21500	<0.5
*Dup 89B	36	2	6	50	1	<1	<10	7.4	18200	<0.5
90	16	6	2	610	<1	1	<10	5.8	4550	<0.5
91	131	8	2	<10	<1	2	<10	12.3	9100	<0.5
92	136	26	7	90	2	8	<10	32.0	20600	0.6
93	86	2	1	<10	<1	<1	<10	8.8	4400	<0.5
94	35	8	2	30	<1	3	<10	7.6	4060	<0.5
	<5	2	<1	360	<1	<1	<10	2.5	493	<0.5
	<5	1	<1	280	<1	<1	<10	3.0	109	<0.5
99	70	25	<1	460	<1	7	<10	10.9	761	<0.5
101	87	3	12	<10	3	<1	<10	12.7	48900	<0.5
102	8	17	<1	330	<1	4	<10	4.4	278	<0.5
103	86	20	2	10	<1	5	<10	16.5	2820	<0.5
104	57	10	59	10	6	2	<10	65.5	33900	0.6
*Dup 104	76	12	79	30	8	3	<10	80.6	46800	0.8
105	44	2	4	20	<1	<1	<10	8.9	9910	<0.5
106	26	2	2	160	<1	<1	<10	6.5	3370	0.5
107	39	4	7	40	<1	<1	<10	13.6	8960	0.6
108	38	9	3	<10	<1	3	<10	21.9	2140	1.0
109	16	1	3	220	<1	<1	<10	7.2	3150	<0.5
110	13	<1	<1	250	<1	<1	<10	5.0	259	<0.5
111	50	5	8	150	<1	2	<10	20.3	13900	0.8
112B	61	18	<1	<10	<1	7	<10	5.0	148	<0.5
113B	99	7	<1	<10	<1	2	<10	<0.5	<3	<0.5
114	106	3	26	190	7	<1	<10	30.2	98000	0.8
115	30	3	<1	30	<1	1	<10	2.3	2160	<0.5
116	37	3	<1	20	<1	<1	<10	2.8	3310	<0.5
*Dup 116	40	3	<1	20	<1	<1	<10	3.1	3810	<0.5
117	42	4	4	20	<1	1	<10	6.3	10700	0.6
118	62	3	21	20	6	<1	<10	20.4	85600	0.7
119	21	3	<1	40	<1	1	<10	3.1	853	<0.5
120	<5	2	<1	380	<1	<1	<10	3.0	246	<0.5

	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
	5	1	1	10	1	1	10	0.5	3	0.5
	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
125	137	10	28	220	10	2	<10	48.7	147717	0.5
126	130	12	26	120	4	4	<10	18.3	79600	0.6
127	24	6	21	90	2	<1	<10	23.6	8030	<0.5
Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
129	35	3	6	130	<1	<1	<10	13.7	8160	<0.5
130	60	30	<1	60	<1	8	<10	6.5	930	0.5
131	<5	7	<1	400	<1	1	<10	2.1	31	<0.5
132	21	6	4	230	<1	1	<10	22.4	2040	<0.5
134	39	10	12	30	2	2	<10	59.3	12600	0.8
*Dup 134	34	9	9	10	2	2	<10	57.9	9570	0.8
135	41	1	1	10	<1	<1	<10	12.6	1820	<0.5
136	18	5	3	60	<1	2	<10	5.0	3090	<0.5
137	38	4	6	40	<1	<1	<10	9.3	16500	0.5
138	23	3	2	100	<1	2	<10	4.8	3480	<0.5
139	64	9	8	40	3	2	<10	35.5	35600	0.5
140	13	3	1	130	<1	<1	<10	3.7	1460	<0.5
141	56	8	1	50	<1	2	<10	18.5	2420	<0.5
	8	2	<1	610	<1	<1	<10	6.2	1760	<0.5
	78	7	11	120	3	1	<10	39.3	41400	0.8
*Std MMISRM16	12	6	<1	440	<1	<1	<10	32.9	<3	<0.5
*Std MMISRM16	13	6	<1	430	<1	<1	<10	32.9	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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
74	10	<1	150	23	750	<5
*Dup 74	11	<1	245	24	880	<5
75	6	2	63	11	530	30
76	1	<1	63	4	1370	8
77	3	3	35	7	380	104
78	2	<1	16	2	770	7
79	36	1	45	7	1020	35
80	4	6	107	11	270	29
81	158	2	271	21	740	27
85	3	<1	16	5	240	24
86	6	1	85	9	630	23
87	8	1	93	10	290	19
88	7	14	28	5	320	296
89B	4	3	27	5	300	62
*Dup 89B	5	3	23	4	240	52
90	1	<1	58	4	610	25
91	7	1	96	14	120	80
92	18	5	423	54	800	112
93	7	<1	27	8	100	39
94	83	<1	239	35	360	23
	2	<1	5	<1	300	9
	1	<1	<5	<1	610	6
99	24	<1	348	25	870	20
101	8	4	23	6	250	157
102	1	<1	99	11	1010	8
103	16	<1	172	18	440	28
104	10	8	101	14	240	91
*Dup 104	12	11	114	14	280	120
105	7	1	24	6	130	35
106	9	<1	46	7	2230	27
107	12	2	33	7	200	38
108	17	1	160	16	670	21
109	5	<1	26	5	560	25
110	1	<1	<5	1	1180	<5
111	8	3	58	7	740	49
112B	58	<1	478	30	230	12
113B	<1	<1	68	23	60	<5
114	10	15	33	8	550	304
115	3	<1	68	9	250	14
116	3	<1	53	9	220	27
*Dup 116	3	<1	54	10	210	29
117	10	1	27	6	400	30
118	15	9	30	5	330	194
119	2	<1	78	11	480	6
120	<1	<1	17	2	610	8

	U	W	Y	Yb	Zn	Zr
	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
	1	1	5	1	20	5
	PPB	PPB	PPB	PPB	PPB	PPB
125	54	7	61	9	610	507
126	8	10	219	21	620	241
127	3	2	23	2	390	12
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
129	8	1	16	4	200	44
130	32	<1	378	26	570	12
131	<1	<1	53	4	1880	<5
132	99	2	63	4	1510	15
134	27	4	71	12	360	43
*Dup 134	28	3	60	12	320	34
135	14	<1	18	4	420	22
136	3	<1	119	9	810	15
137	8	2	44	6	270	51
138	4	1	70	7	1080	17
139	21	6	40	5	300	132
140	4	<1	27	9	130	6
141	13	<1	108	22	380	21
[illegible]	2	<1	31	3	380	14
	18	5	42	7	350	206
*Std MMISRM16	60	<1	14	1	240	20
*Std MMISRM16	64	<1	16	1	270	21
*Blk BLANK	<1	<1	<5	<1	<20	<5
*Blk BLANK	<1	<1	<5	<1	<20	<5

Certificate of Analysis

Work Order: T●100653

To: Logan Resources Ltd.
Attn: Rita Chow
Suite 1640-1066 West Hasting St.
Oceanic Plaza, Box 12543
VANCOUVER
BC V6E 3X1

Date: Jul 03, 2008

P.O. No.	
Project No.	DEFAULT
No. Of Samples	55
Date Submitted	Jun 02, 2008
Report Comprises	Pages 1 to 11 (Inclusive of Cover Sheet)

Distribution of unused material:

STORE: 55 Soils

Certified By :

Gavin McGill
Operations Manager

SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at www.scc.ca

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
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

Element	Ag	Al	As	Au	Ba	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.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
152	6	147	30	0.5	230	1	230	33	39	103
*Dup 152	9	147	40	0.4	160	1	250	31	40	74
153	4	230	180	0.2	80	8	10	58	44	119
154	1	244	40	<0.1	70	5	20	33	19	20
155	3	158	40	<0.1	110	2	60	20	41	14
156	7	>300	250	0.4	230	3	<10	14	103	24
158	<1	221	30	<0.1	190	2	50	34	58	52
159	<1	182	20	<0.1	70	1	30	9	33	17
160	<1	143	20	<0.1	100	<1	110	46	24	108
161	4	278	820	0.1	150	7	<10	7	19	80
162	<1	195	490	<0.1	150	3	<10	7	15	161
163	<1	193	200	<0.1	50	1	<10	9	11	54
164	3	276	370	<0.1	110	1	<10	13	18	10
165	2	226	390	0.2	430	3	70	33	87	235
*Dup 165	3	228	400	0.2	420	3	60	35	86	245
166	2	158	590	0.4	450	8	70	9	62	136
167	<1	>300	80	<0.1	190	2	40	16	42	26
168	<1	78	20	<0.1	300	5	90	28	522	14
169	<1	29	<10	<0.1	230	4	100	34	183	15
177	<1	46	40	0.7	120	<1	380	11	25	212
[illegible]	3	>300	260	0.1	260	2	20	55	96	37
[illegible]	10	83	<10	0.3	120	<1	340	10	<5	<5
180	15	230	20	0.9	1610	4	50	79	272	51
181	<1	121	<10	0.1	60	1	10	2	36	<5
184	<1	161	<10	<0.1	60	1	30	28	18	603
185	4	270	110	0.6	150	3	<10	4	115	32
186	12	279	1280	<0.1	230	8	50	27	44	38
*Dup 186	12	258	1010	<0.1	210	6	60	33	43	49
187	2	>300	90	0.2	150	1	<10	7	55	13
188	6	>300	80	0.1	50	<1	<10	12	78	50
189	<1	107	1330	<0.1	50	<1	200	14	54	34
190	<1	199	640	<0.1	80	<1	30	3	22	24
191	<1	13	20	<0.1	90	4	60	6	11	11
192	<1	32	<10	<0.1	50	6	80	34	<5	15
193	<1	63	10	<0.1	190	2	100	11	10	18
201	<1	283	10	0.1	20	<1	<10	2	20	166
202	<1	96	70	0.3	210	5	140	13	45	162
203	2	192	90	<0.1	100	3	170	74	77	164
204	<1	175	30	<0.1	140	1	20	1	26	17
205	8	>300	50	0.8	50	<1	<10	28	79	24
*Dup 205	5	>300	40	0.8	40	<1	<10	29	66	25
206	2	>300	80	<0.1	130	4	<10	2	38	6
209	8	107	<10	<0.1	90	<1	30	8	90	7
210	2	270	190	0.2	180	10	20	8	66	116
211	2	229	70	0.2	60	<1	<10	12	31	12
212	1	229	30	<0.1	70	1	40	17	40	6
213	3	261	400	0.2	120	2	10	24	49	24
214	1	>300	40	<0.1	120	4	<10	3	49	<5

Element	Ag	Al	As	Au	Ba	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.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
215	2	>300	1420	0.1	160	11	<10	3	13	22
216	<1	>300	1730	0.2	90	10	10	3	25	11
217	<1	253	460	<0.1	140	2	<10	9	47	119
218	8	>300	300	0.2	60	<1	<10	11	71	7
219	6	>300	160	0.2	150	2	<10	11	103	27
*Dup 219	7	>300	170	0.3	160	2	<10	12	103	24
224	<1	267	20	<0.1	310	<1	<10	6	25	21
225	1	>300	20	<0.1	60	<1	<10	2	10	14
226	1	62	10	0.3	140	<1	380	43	21	27
227	2	248	20	0.1	540	<1	20	9	24	40
228	<1	192	110	<0.1	150	9	110	26	20	66
229	12	219	200	5.7	40	1	20	13	55	51
*Std MMISRM16	21	47	20	34.2	50	<1	200	4	20	70
*Std MMISRM16	19	50	20	32.9	40	<1	210	4	22	69
*Blk BLANK	<1	<1	<10	<0.1	20	<1	<10	<1	<5	<5
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	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
152	<100	820	19	12.1	3.2	33	17	22	<5	20
*Dup 152	<100	920	16	9.8	2.9	33	16	24	<5	18
153	<100	490	22	16.4	2.9	132	13	22	8	7
154	<100	770	10	6.4	1.0	79	5	5	5	10
155	<100	120	5	2.5	1.1	147	5	16	<5	15
156	100	550	9	5.0	1.3	334	5	11	50	17
158	<100	180	12	8.5	1.0	145	9	13	14	28
159	<100	40	16	11.9	1.0	87	11	18	<5	7
160	<100	160	14	9.3	1.9	21	9	9	<5	30
161	<100	380	6	4.7	0.8	290	3	8	12	5
162	<100	530	8	6.8	0.8	216	3	6	<5	5
163	<100	190	7	6.7	0.6	70	3	4	<5	2
164	<100	380	7	6.1	0.8	202	3	7	<5	4
165	<100	800	31	19.0	5.7	67	26	30	<5	12
*Dup 165	<100	800	32	19.3	5.7	69	28	29	<5	11
166	<100	1900	13	8.8	2.1	364	10	23	6	14
167	<100	100	23	14.5	2.8	133	13	16	<5	27
168	<100	70	72	36.2	18.2	72	77	196	<5	43
169	<100	30	29	18.2	5.3	21	28	76	<5	70
177	<100	2530	3	2.1	0.6	33	4	8	<5	19
	200	390	11	8.0	1.9	298	8	22	30	8
	<100	200	<1	<0.5	<0.5	5	<1	<1	<5	6
180	<100	440	173	110	29.8	33	152	190	<5	8
181	<100	40	5	2.7	<0.5	11	5	16	<5	4
184	<100	60	12	16.5	<0.5	69	5	12	<5	10
185	<100	630	38	25.1	1.9	95	21	44	18	3
186	<100	410	18	12.8	2.7	348	12	18	26	10
*Dup 186	<100	410	22	15.9	3.5	262	15	20	23	11
187	100	410	15	10.4	2.6	282	11	22	8	3
188	<100	560	40	23.5	6.5	66	31	31	<5	2
189	<100	370	7	5.3	1.9	59	7	17	7	7
190	<100	70	7	4.5	1.2	99	5	8	<5	7
191	<100	430	2	1.0	<0.5	12	2	4	<5	29
192	<100	190	1	0.7	<0.5	18	<1	1	<5	40
193	<100	40	2	1.2	<0.5	85	2	3	<5	43
201	100	850	8	6.2	1.4	36	6	8	<5	4
202	<100	2290	10	6.9	1.8	169	9	16	<5	9
203	300	160	17	10.2	3.4	161	16	24	6	18
204	<100	250	4	2.5	1.3	421	4	13	6	17
205	<100	490	16	8.9	2.4	67	12	25	<5	2
*Dup 205	<100	470	16	9.0	2.0	59	11	20	<5	2
206	<100	140	5	3.5	<0.5	282	4	15	17	5
209	<100	160	12	6.0	0.9	20	12	41	<5	6
210	100	700	13	7.4	2.8	274	12	29	9	13
211	<100	110	9	7.6	1.3	131	5	15	<5	4
212	<100	110	7	3.9	1.9	92	8	16	<5	17
213	<100	490	20	12.9	2.9	190	13	19	8	6
214	<100	80	5	2.2	2.0	49	5	24	<5	5

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	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
215	700	300	4	3.3	1.0	623	3	5	13	7
216	100	130	6	4.9	1.0	647	4	9	7	7
217	<100	160	18	12.9	2.5	137	12	20	<5	3
218	200	330	25	12.1	4.5	188	18	35	<5	1
219	<100	280	16	8.3	3.3	188	16	43	6	4
*Dup 219	<100	320	16	7.7	3.2	183	15	41	7	4
224	<100	290	12	11.3	0.8	101	4	6	<5	10
225	<100	130	4	2.5	0.7	94	3	4	<5	6
226	<100	150	6	4.3	0.9	13	5	8	<5	24
227	<100	540	49	40.1	4.1	38	20	7	<5	9
228	<100	170	6	6.1	0.7	134	4	10	5	40
229	<100	440	37	24.7	7.0	136	26	17	9	7
*Std MMISRM16	<100	740	4	1.2	1.2	2	6	5	<5	35
*Std MMISRM16	<100	700	3	1.3	1.3	3	6	5	<5	42
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	2	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	1	<1	<1	<5	<1

Element	Mo	Nb	Nd	Ni	Pb	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	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
152	<5	1.5	38	193	370	<1	8	<1	114	<1
*Dup 152	5	1.7	38	208	300	<1	8	<1	72	<1
153	16	6.2	31	338	260	<1	6	<1	44	4
154	<5	3.0	10	56	370	<1	2	<1	47	2
155	8	18.3	20	45	430	<1	5	<1	53	2
156	10	38.0	15	124	710	<1	3	<1	44	6
158	<5	8.6	21	45	1060	<1	5	<1	87	1
159	<5	3.1	25	21	680	<1	6	<1	22	<1
160	<5	1.1	17	35	630	<1	3	<1	23	<1
161	10	21.3	9	53	310	<1	2	<1	50	7
162	<5	5.4	8	64	240	<1	2	<1	32	2
163	7	2.4	6	39	350	<1	1	<1	34	<1
164	10	25.5	9	47	180	<1	2	<1	42	2
165	5	3.1	63	112	290	<1	12	<1	55	1
*Dup 165	5	3.2	60	105	310	<1	12	<1	55	1
166	11	5.8	32	179	90	<1	7	<1	26	5
167	6	14.0	27	40	590	<1	5	<1	8	1
168	<5	1.9	288	42	2040	<1	70	<1	32	<1
169	<5	<0.5	107	67	1360	<1	26	<1	52	<1
177	10	0.7	12	133	60	<1	3	<1	59	1
	11	27.9	23	106	230	<1	5	<1	44	3
	<5	<0.5	1	25	20	<1	<1	<1	55	<1
180	<5	1.7	406	44	490	<1	76	<1	83	1
181	<5	16.6	20	17	290	<1	5	<1	62	<1
184	<5	<0.5	13	10	530	<1	3	<1	111	<1
185	14	15.8	51	30	200	<1	12	<1	45	4
186	10	37.1	29	68	630	<1	6	<1	54	11
*Dup 186	8	28.0	35	78	630	<1	7	<1	47	8
187	9	39.7	31	90	110	<1	7	<1	58	2
188	<5	5.7	74	54	160	<1	14	<1	50	<1
189	50	1.3	25	44	300	<1	6	<1	24	23
190	9	6.2	13	29	210	<1	3	<1	24	<1
191	<5	<0.5	5	69	270	<1	1	<1	21	<1
192	<5	<0.5	2	77	850	<1	<1	<1	28	<1
193	<5	1.3	6	42	480	<1	1	<1	51	<1
201	11	3.8	13	96	110	<1	3	<1	29	<1
202	8	0.9	25	146	70	<1	5	<1	29	1
203	6	3.2	40	99	300	<1	8	<1	17	3
204	9	14.7	14	56	90	<1	3	<1	26	2
205	7	3.7	34	116	410	<1	7	<1	45	1
*Dup 205	7	3.1	29	111	420	<1	6	<1	44	<1
206	13	99.4	12	53	160	<1	3	<1	81	4
209	<5	6.3	46	42	360	<1	12	<1	74	<1
210	13	18.7	39	62	100	<1	9	<1	30	4
211	11	11.9	16	55	230	<1	4	<1	67	2
212	<5	19.6	29	40	670	<1	6	<1	7	2
213	12	22.9	31	121	360	<1	6	<1	56	2
214	12	43.4	22	42	200	<1	6	<1	27	3

Element	Mo	Nb	Nd	Ni	Pb	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	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
215	17	36.4	8	73	130	<1	2	<1	22	16
216	24	75.0	11	49	140	<1	3	<1	22	10
217	11	8.3	28	58	220	<1	6	<1	19	2
218	8	14.2	49	55	140	<1	11	<1	73	1
219	7	19.8	53	68	440	<1	12	<1	73	2
*Dup 219	7	19.0	51	68	400	<1	12	<1	72	2
224	<5	8.5	9	80	120	<1	2	<1	31	1
225	6	18.6	7	67	70	<1	2	<1	10	<1
226	<5	<0.5	13	73	110	<1	3	<1	44	<1
227	<5	3.2	28	110	80	<1	5	<1	53	<1
228	<5	2.6	9	90	80	<1	2	<1	24	2
229	29	5.9	52	54	890	<1	9	<1	13	2
*Std MMISRM16	63	<0.5	17	302	110	27	3	<1	343	<1
*Std MMISRM16	54	<0.5	19	274	150	25	3	<1	335	2
*Blk 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

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
152	37	12	<1	280	<1	3	<10	9.9	972	0.9
*Dup 152	36	11	<1	240	<1	2	<10	8.9	1120	0.9
153	41	8	2	70	<1	3	<10	8.1	4440	0.9
154	31	3	4	90	<1	1	<10	9.4	2350	0.7
155	29	5	10	160	1	<1	<10	13.5	13800	0.7
156	64	5	12	40	3	1	<10	66.3	20400	1.2
158	31	6	5	240	<1	2	<10	65.2	2760	0.6
159	16	8	2	100	<1	2	<10	21.5	941	<0.5
160	13	5	<1	350	<1	2	<10	2.2	788	<0.5
161	46	2	11	20	2	<1	<10	9.1	22900	0.6
162	27	2	3	50	<1	<1	<10	5.1	5440	0.6
163	23	2	<1	20	<1	<1	<10	13.1	1710	0.5
164	30	3	8	20	2	<1	<10	27.6	14600	0.6
165	49	20	<1	270	<1	5	<10	16.7	2300	0.7
*Dup 165	51	20	1	260	<1	5	<10	16.8	2220	0.6
166	51	8	2	230	<1	2	<10	16.2	4440	0.7
167	22	8	4	250	<1	3	<10	4.7	11700	<0.5
168	17	65	1	340	<1	12	<10	6.1	1030	<0.5
169	6	23	<1	410	<1	5	<10	3.0	27	<0.5
177	7	3	<1	480	<1	<1	<10	5.3	66	0.6
	43	6	12	80	2	2	<10	16.5	16500	0.8
9	5	<1	<1	970	<1	<1	<10	1.0	67	<0.5
180	130	106	3	650	<1	26	<10	11.4	1220	1.3
181	17	5	16	40	1	<1	<10	36.9	2180	0.9
184	5	4	1	200	<1	1	<10	9.2	111	2.0
185	33	15	6	20	1	5	<10	41.0	8300	1.1
186	61	8	9	100	2	2	<10	16.6	29600	0.9
*Dup 186	59	10	7	110	2	3	<10	13.3	23100	0.8
187	60	9	6	10	3	2	<10	45.1	25500	0.7
188	68	22	1	<10	<1	6	<10	11.7	4810	<0.5
189	14	6	<1	320	<1	1	<10	9.2	313	<0.5
190	25	4	2	130	<1	<1	<10	9.0	4830	<0.5
191	<5	2	<1	210	<1	<1	<10	0.9	53	<0.5
192	<5	<1	<1	410	<1	<1	<10	2.1	46	<0.5
193	13	2	<1	380	<1	<1	<10	4.2	350	<0.5
201	80	4	3	30	<1	1	<10	3.8	3620	<0.5
202	48	7	<1	290	<1	2	<10	8.9	480	0.6
203	56	11	1	360	<1	2	<10	4.8	3700	0.6
204	36	4	8	170	<1	<1	<10	9.9	18200	<0.5
205	48	10	2	20	<1	2	<10	22.4	2460	<0.5
*Dup 205	42	8	2	10	<1	2	<10	18.3	2100	<0.5
206	24	3	87	30	8	<1	<10	48.0	19800	1.1
209	12	11	11	80	<1	2	<10	22.0	529	0.6
210	49	11	6	120	1	2	<10	22.0	15100	0.5
211	19	4	2	30	<1	1	<10	13.1	6560	<0.5
212	26	7	4	90	1	1	<10	10.7	9970	<0.5
213	49	9	6	60	1	3	<10	21.9	16600	0.8
214	23	5	41	90	3	<1	<10	23.0	20200	0.7

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
215	78	2	25	<10	2	<1	<10	9.8	51400	<0.5
216	36	3	31	80	5	<1	<10	45.5	35200	<0.5
217	42	8	3	50	<1	2	<10	9.9	6290	<0.5
218	72	14	3	<10	<1	4	<10	22.8	12400	<0.5
219	43	13	7	30	1	3	<10	50.7	13100	<0.5
*Dup 219	44	13	7	30	1	3	<10	54.9	12600	<0.5
224	43	3	2	70	<1	1	<10	9.8	6840	<0.5
225	20	2	4	40	1	<1	<10	4.7	15600	<0.5
226	7	4	<1	580	<1	<1	<10	4.1	96	<0.5
227	118	11	<1	110	<1	5	<10	4.0	2560	<0.5
228	24	2	<1	680	<1	<1	<10	3.3	2260	<0.5
229	125	20	2	30	<1	5	<10	11.6	4030	0.6
*Std MMISRM16	11	5	<1	480	<1	<1	<10	26.7	5	0.6
*Std MMISRM16	11	6	<1	510	<1	<1	<10	27.4	76	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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
152	66	2	128	9	520	12
*Dup 152	62	<1	108	8	520	11
153	81	1	159	13	940	27
154	14	<1	43	5	1940	26
155	3	2	24	2	490	29
156	17	7	27	5	420	105
158	76	1	67	7	1740	19
159	115	1	94	12	320	8
160	9	<1	84	6	360	<5
161	6	3	30	5	250	62
162	3	1	39	7	360	22
163	9	<1	36	8	200	9
164	16	4	31	7	530	23
165	23	<1	181	15	1400	31
*Dup 165	23	<1	193	15	1330	30
166	40	2	69	7	330	34
167	2	1	147	10	270	33
168	1	<1	409	23	870	9
169	<1	<1	216	12	1010	<5
177	38	5	23	2	70	<5
[illegible]	14	3	73	6	360	56
	1	<1	<5	<1	60	<5
180	48	1	1500	75	180	26
181	10	7	25	2	230	14
184	38	<1	80	14	370	<5
185	246	4	193	20	190	32
186	126	4	115	11	880	100
*Dup 186	160	3	152	14	930	86
187	20	5	63	10	220	108
188	11	1	228	19	310	40
189	741	2	52	5	1120	6
190	13	3	33	4	260	31
191	<1	<1	10	<1	1360	<5
192	<1	<1	6	<1	1530	<5
193	<1	<1	11	1	1840	6
201	6	2	33	7	220	24
202	78	<1	69	6	380	12
203	48	2	118	9	2030	54
204	6	3	18	3	200	48
205	16	3	77	7	170	33
*Dup 205	14	3	75	7	170	26
206	9	13	24	4	150	71
209	5	2	67	4	470	8
210	23	4	59	6	460	93
211	12	1	50	7	350	19
212	2	1	42	3	470	30
213	15	3	109	11	1200	68
214	13	4	19	2	320	41

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
215	4	7	19	4	230	57
216	12	8	30	6	260	116
217	15	2	110	12	160	33
218	7	2	106	9	170	99
219	15	2	83	6	240	49
*Dup 219	17	2	75	6	250	52
224	2	<1	54	9	210	53
225	2	1	21	2	240	37
226	70	<1	43	3	430	<5
227	23	<1	267	36	400	25
228	25	<1	52	10	380	33
229	218	2	217	22	320	57
*Std MMISRM16	53	<1	13	<1	300	21
*Std MMISRM16	46	<1	13	<1	270	18
*Blk BLANK	<1	<1	<5	<1	<20	<5
*Blk BLANK	<1	<1	<5	<1	<20	<5

Certificate of Analysis

Work Order: TO100654

To: **Logan Resources Ltd.**
Attn: Rita Chow
Suite 1640-1066 West Hasting St.
Oceanic Plaza, Box 12543
VANCOUVER
BC V6E 3X1

Date: Jul 18, 2008

P.O. No.	:	
Project No.	:	DEFAULT
No. Of Samples		84
Date Submitted		Jun 02, 2008
Report Comprises		Pages 1 to 16 (Inclusive of Cover Sheet)

Distribution of unused material:

STORE: 84 Soils

Certified By :

Gavin McGill
Operations Manager

SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at www.scc.ca

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
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

Element	Ag	Al	As	Au	Ba	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.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
230	1	213	110	<0.1	210	3	40	9	53	24
*Dup 230	<1	217	120	<0.1	210	3	40	9	49	26
231	18	>300	1350	0.8	280	3	50	35	195	119
232	<1	208	20	0.3	170	2	20	18	84	97
233	14	69	60	1.0	180	<1	380	40	24	25
234	3	>300	200	0.4	910	7	30	48	166	207
235	5	>300	250	0.1	140	4	20	26	64	120
236	<1	198	<10	<0.1	120	6	10	16	8	11
237	1	>300	30	0.2	190	2	10	8	31	87
238	<1	171	110	<0.1	40	<1	<10	2	9	9
239	4	>300	1670	1.0	510	4	<10	4	261	114
240	<1	>300	140	0.1	70	1	<10	1	<5	11
241	4	>300	260	0.3	170	4	<10	2	39	8
242	6	>300	1250	1.4	550	3	30	23	98	402
*Dup 242	6	>300	950	0.6	500	2	20	28	75	378
243	3	>300	370	<0.1	110	2	<10	14	61	20
244	5	>300	360	0.4	160	2	<10	16	61	25
245	6	262	70	0.2	110	<1	<10	9	27	16
246	1	245	160	0.2	270	2	10	6	54	69
250	<1	>300	10	0.1	90	2	20	3	15	21
51	<1	288	20	0.1	430	<1	<10	8	23	14
252	1	152	20	0.3	170	1	210	90	19	40
253	7	254	100	<0.1	190	<1	50	78	63	77
254	<1	104	20	<0.1	120	7	<10	24	14	5
255	2	>300	10	0.3	540	<1	30	12	63	145
256	<1	<1	10	<0.1	<10	<1	<10	<1	<5	<5
257	<1	78	<10	<0.1	190	5	60	27	12	15
*Dup 257	<1	66	<10	<0.1	150	5	50	26	9	12
258	2	>300	80	0.5	240	1	<10	21	47	127
259	<1	>300	10	<0.1	70	<1	<10	<1	6	7
260	2	>300	50	<0.1	140	3	30	12	19	20
261	2	>300	70	<0.1	60	1	<10	3	8	11
262	1	>300	1860	<0.1	150	6	<10	4	28	15
263	1	>300	1130	0.2	150	5	<10	3	81	27
264	4	>300	90	0.2	680	<1	<10	8	37	29
265	2	231	70	<0.1	240	10	<10	3	34	17
266	5	>300	2240	0.1	250	10	<10	4	54	17
267	5	>300	80	<0.1	180	5	<10	10	50	19
268	8	>300	90	0.2	250	<1	10	6	84	87
269	1	>300	110	<0.1	170	3	<10	4	26	13
*Dup 269	2	>300	120	<0.1	200	3	<10	4	37	14
270	<1	234	10	<0.1	70	1	20	4	26	8
273	<1	>300	80	<0.1	550	2	10	3	38	32
273B	<1	>300	50	<0.1	300	2	10	8	62	99
274	1	201	20	0.2	170	<1	<10	11	10	43
275	<1	279	30	<0.1	140	<1	<10	5	10	23
276	2	<1	190	<0.1	440	6	<10	8	72	16
277	1	>300	70	0.1	200	2	<10	12	60	16

Element	Ag	Al	As	Au	Ba	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.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
278	<1	>300	<10	<0.1	60	<1	30	2	<5	11
279	1	>300	340	<0.1	120	2	50	14	28	32
280	5	250	70	0.2	30	<1	<10	5	30	7
281	1	>300	340	<0.1	100	2	<10	4	12	12
283	<1	72	10	<0.1	330	13	60	19	23	81
*Dup 283	<1	75	<10	<0.1	290	11	60	14	12	72
284	<1	80	30	<0.1	190	10	110	14	126	42
285	2	184	20	<0.1	100	1	40	5	33	37
286	1	178	40	<0.1	100	2	20	2	12	27
288	1	>300	190	<0.1	180	3	40	18	73	99
289	<1	183	40	<0.1	120	1	30	13	20	84
290	<1	58	20	<0.1	110	1	110	15	45	26
291	3	262	10	0.1	350	<1	10	6	168	18
292	5	>300	70	<0.1	160	1	<10	15	20	49
293	<1	235	<10	<0.1	140	<1	<10	39	62	27
294	1	>300	100	0.1	270	3	<10	19	75	98
295	<1	>300	210	<0.1	190	3	<10	17	24	15
296	3	>300	120	<0.1	110	2	<10	13	130	45
*Dup 296	2	>300	120	<0.1	110	2	<10	13	130	43
297	<1	279	30	<0.1	60	2	<10	6	22	6
)8	3	>300	1830	0.9	80	7	<10	3	77	7
300	3	285	290	<0.1	80	2	10	7	22	38
301	<1	224	20	<0.1	100	<1	40	15	17	53
305	10	234	380	3.0	490	1	100	29	225	486
306	<1	>300	130	<0.1	120	2	<10	5	37	8
307	<1	295	90	<0.1	80	2	<10	2	6	13
308	<1	>300	60	<0.1	330	<1	50	12	39	50
309	<1	95	<10	<0.1	30	<1	190	36	11	6
311	3	>300	40	0.2	110	<1	10	34	62	45
312	<1	174	<10	<0.1	120	4	30	9	38	29
313	4	232	120	0.2	70	1	40	8	60	14
*Dup 313	3	261	180	0.2	90	2	50	8	64	17
314	8	>300	110	0.1	260	3	<10	3	106	18
315	<1	>300	10	<0.1	90	<1	<10	9	25	28
316	2	>300	70	<0.1	70	1	<10	5	26	9
317	<1	39	<10	<0.1	170	<1	120	17	22	26
318	<1	129	130	<0.1	210	2	180	16	70	32
319	2	>300	90	0.2	220	11	20	19	66	167
320	<1	>300	260	<0.1	130	4	10	3	14	29
321	<1	288	170	<0.1	150	3	10	8	31	112
322	3	>300	780	0.2	120	3	<10	4	24	12
323	<1	271	100	<0.1	70	3	<10	1	6	6
324	<1	221	<10	<0.1	120	1	20	14	29	42
*Std MMISRM16	18	51	20	29.2	50	<1	220	4	18	66
*Std MMISRM16	19	47	20	31.2	50	<1	230	4	13	63
*Std MMISRM16	19	49	20	31.4	60	<1	230	4	13	66
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

Element	Ag	Al	As	Au	Ba	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.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	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
230	<100	130	8	4.1	1.4	134	8	28	14	10
*Dup 230	<100	130	9	4.5	1.2	146	8	26	22	10
231	100	500	23	16.1	4.0	799	19	35	63	133
232	<100	380	44	47.9	0.7	119	15	28	11	7
233	<100	660	6	3.3	1.1	19	7	9	5	37
234	200	910	53	33.6	8.0	245	42	71	26	14
235	200	1720	31	19.0	5.4	267	26	36	9	5
236	<100	100	2	2.6	<0.5	74	1	5	<5	10
237	<100	260	18	13.2	2.5	114	11	12	<5	6
238	<100	50	3	4.9	<0.5	41	2	2	<5	1
239	200	1860	48	29.7	11.7	330	48	63	11	5
240	<100	70	1	2.8	<0.5	106	<1	1	<5	6
241	400	150	6	4.1	1.6	556	5	16	15	5
242	100	1670	20	11.8	3.1	282	18	31	9	14
*Dup 242	<100	1730	19	12.2	2.4	257	15	25	7	12
243	<100	320	21	14.3	2.8	331	11	17	6	5
244	<100	410	18	10.3	3.1	164	13	20	6	4
245	<100	320	8	7.6	0.9	155	4	10	7	4
246	<100	1180	32	21.1	3.9	110	19	20	<5	4
?50	<100	90	6	3.6	1.2	70	5	7	<5	11
1	<100	240	17	12.0	1.8	101	8	9	11	4
252	<100	420	19	14.3	2.7	32	14	17	<5	30
253	<100	620	46	30.3	5.2	131	28	45	12	12
254	<100	120	3	1.6	0.5	39	3	9	7	36
255	<100	1770	27	14.1	2.9	60	16	23	6	9
256	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
257	<100	90	1	1.0	<0.5	41	2	5	<5	36
*Dup 257	<100	80	1	1.1	<0.5	39	1	3	<5	36
258	<100	670	16	13.3	1.9	196	8	16	10	6
259	<100	80	3	3.1	<0.5	121	<1	3	<5	3
260	<100	230	6	5.6	0.6	345	3	6	<5	21
261	<100	110	5	4.2	<0.5	169	2	3	<5	6
262	100	160	6	6.8	0.9	703	3	13	10	8
263	100	170	15	11.0	3.2	360	11	28	9	5
264	<100	690	11	9.5	1.1	163	4	9	7	5
265	<100	150	4	3.3	0.8	248	3	16	<5	4
266	100	330	13	12.0	2.1	855	8	24	14	7
267	<100	320	11	9.4	1.8	301	7	20	8	5
268	<100	1270	23	12.6	4.5	186	19	24	<5	6
269	100	210	6	6.0	1.1	480	4	9	10	6
*Dup 269	200	240	8	6.7	1.5	543	5	10	11	7
270	<100	70	10	5.7	2.4	49	9	10	<5	5
273	100	250	7	5.9	1.1	487	4	13	11	18
273B	200	780	19	15.8	2.4	333	10	15	13	12
274	<100	300	12	11.0	1.2	50	5	3	<5	3
275	<100	200	2	2.3	<0.5	134	1	3	6	11
276	200	280	10	5.6	2.1	667	7	22	18	12
277	<100	150	16	11.7	2.8	370	10	16	11	4

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	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
278	<100	10	<1	<0.5	<0.5	53	<1	<1	<5	23
279	100	320	9	5.7	1.5	464	6	8	6	13
280	<100	180	12	9.9	1.5	178	6	11	<5	1
281	100	140	2	2.4	<0.5	629	1	5	5	8
283	<100	170	2	2.2	0.5	74	3	11	<5	31
*Dup 283	<100	120	2	1.4	<0.5	73	1	5	<5	34
284	<100	90	20	11.3	4.8	89	20	57	<5	35
285	<100	330	5	3.1	1.0	233	5	12	<5	8
286	<100	310	2	1.5	<0.5	569	1	5	5	12
288	<100	990	37	20.9	6.6	131	28	21	<5	8
289	<100	220	6	4.8	1.0	123	4	10	<5	15
290	<100	330	7	3.8	1.8	27	7	18	<5	37
291	<100	420	70	38.5	15.5	54	69	58	<5	4
292	<100	330	6	4.9	0.9	426	3	8	14	6
293	<100	350	38	22.8	4.5	26	24	24	<5	4
294	<100	390	24	21.6	2.9	514	13	24	17	10
295	<100	120	8	7.2	1.4	608	5	9	8	9
296	<100	400	27	13.0	4.7	194	20	30	14	3
*Dup 296	<100	410	26	12.9	4.7	182	20	29	14	4
297	<100	80	2	1.3	0.6	33	3	11	<5	9
298	300	240	9	6.3	2.7	458	7	4	6	3
300	<100	190	9	8.6	1.0	313	4	9	<5	5
301	<100	240	7	6.2	0.9	75	4	7	<5	9
305	<100	1890	42	23.9	9.6	67	47	91	<5	14
306	100	120	12	8.2	2.4	48	9	14	<5	3
307	<100	30	1	1.6	<0.5	57	<1	3	<5	8
308	<100	660	35	21.5	4.4	212	21	10	6	19
309	<100	360	5	4.7	0.7	12	3	3	<5	16
311	<100	890	33	18.1	4.6	92	19	15	<5	4
312	<100	80	5	2.9	1.3	45	5	17	<5	20
313	<100	180	23	11.9	4.4	128	17	15	<5	6
*Dup 313	<100	180	24	12.5	4.4	173	18	17	<5	8
314	100	340	18	10.5	3.9	275	17	62	9	5
315	<100	150	14	12.6	1.4	151	6	12	<5	4
316	<100	210	7	5.8	1.3	308	4	9	<5	4
317	<100	70	2	1.6	0.5	18	3	11	<5	51
318	<100	190	16	8.5	3.8	145	17	29	<5	33
319	<100	750	32	19.5	4.6	145	23	25	<5	7
320	<100	220	4	4.4	0.5	762	2	6	6	11
321	<100	420	15	10.1	2.2	291	10	12	<5	6
322	200	170	9	7.2	1.6	519	6	8	5	4
323	<100	80	2	1.8	<0.5	430	<1	3	<5	5
324	<100	130	14	11.6	2.2	136	9	13	<5	16
*Std MMISRM16	<100	670	3	1.1	1.1	3	5	4	<5	34
*Std MMISRM16	<100	660	2	1.0	0.9	3	4	3	<5	36
*Std MMISRM16	<100	690	2	0.9	0.9	2	4	3	<5	36
*Blk BLANK	<100	<10	<1	<0.5	<0.5	1	<1	<1	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	2	<1	<1	<5	<1

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	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
*Blk BLANK	<100	<10	<1	<0.5	<0.5	5	<1	<1	<5	<1

Element	Mo	Nb	Nd	Ni	Pb	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	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
230	13	25.0	32	38	490	<1	8	<1	26	3
*Dup 230	14	26.6	28	31	420	<1	7	<1	27	3
231	41	35.1	52	279	1320	<1	12	<1	70	10
232	<5	5.8	33	38	1280	<1	8	<1	83	<1
233	<5	1.7	17	62	70	<1	3	<1	71	<1
234	11	18.8	109	203	550	<1	23	<1	67	5
235	18	12.1	61	123	120	<1	12	<1	40	3
236	<5	1.0	4	41	1470	<1	<1	<1	16	<1
237	7	26.3	22	58	320	<1	4	<1	15	2
238	10	3.8	5	32	110	<1	1	<1	27	<1
239	19	31.7	134	93	230	<1	26	<1	57	5
240	<5	5.5	1	28	10	<1	<1	<1	10	<1
241	18	79.0	18	46	120	<1	4	<1	45	4
242	6	9.9	52	50	320	<1	11	<1	144	4
*Dup 242	6	8.1	41	53	300	<1	9	<1	139	3
243	11	27.3	27	61	330	<1	6	<1	78	4
244	7	15.7	33	98	340	<1	7	<1	51	1
245	6	11.6	12	64	100	<1	3	<1	48	<1
246	10	5.8	37	54	270	<1	7	<1	32	<1
250	8	36.4	13	38	190	<1	2	<1	18	2
51	<5	6.7	18	60	110	<1	4	<1	46	<1
52	<5	<0.5	27	123	490	<1	5	<1	52	<1
253	8	3.9	63	110	520	<1	12	<1	40	2
254	<5	1.1	11	61	740	<1	3	<1	70	<1
255	<5	3.3	33	116	1330	<1	7	<1	77	<1
256	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
257	<5	0.9	7	51	1280	<1	2	<1	53	<1
*Dup 257	<5	0.9	6	64	2000	<1	1	<1	60	<1
258	5	14.4	22	75	200	<1	5	<1	79	2
259	<5	23.9	3	27	20	<1	<1	<1	13	2
260	7	53.7	7	56	200	<1	2	<1	9	4
261	11	31.9	4	32	70	<1	<1	<1	12	3
262	17	59.6	11	50	230	<1	3	<1	32	7
263	18	29.1	36	45	200	<1	8	<1	48	2
264	<5	19.2	12	70	130	<1	3	<1	50	1
265	<5	15.3	14	46	200	<1	3	<1	21	1
266	35	114	27	55	170	<1	6	<1	60	13
267	5	39.1	23	79	400	<1	5	<1	38	3
268	10	15.5	47	81	110	<1	10	<1	87	1
269	13	55.0	12	45	150	<1	3	<1	42	3
*Dup 269	12	60.8	15	49	170	<1	3	<1	45	3
270	<5	12.2	23	29	500	<1	4	<1	20	<1
273	11	36.6	14	63	90	<1	3	<1	28	2
273B	12	45.0	23	83	140	<1	5	<1	43	3
274	<5	2.4	7	28	480	<1	1	<1	56	<1
275	<5	5.1	4	29	160	<1	<1	<1	46	<1
276	12	82.4	23	77	240	<1	6	<1	73	6
277	7	73.7	29	42	360	<1	6	<1	75	5

Element	Mo	Nb	Nd	Ni	Pb	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	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
278	<5	<0.5	<1	31	<10	<1	<1	<1	6	<1
279	20	37.2	14	125	430	<1	3	<1	25	4
280	<5	8.2	15	39	150	<1	3	<1	31	<1
281	11	57.8	4	24	70	<1	1	<1	12	4
283	<5	0.8	10	80	770	<1	3	<1	6	<1
*Dup 283	<5	0.7	5	80	540	<1	1	<1	6	<1
284	<5	1.6	76	58	1780	<1	18	<1	46	<1
285	6	42.8	19	45	70	<1	4	<1	29	4
286	7	47.2	4	30	100	<1	1	<1	15	4
288	5	11.3	60	76	260	<1	11	<1	68	1
289	<5	1.4	11	48	550	<1	3	<1	6	<1
290	<5	0.8	25	53	520	<1	6	<1	5	<1
291	<5	8.1	186	37	100	<1	33	<1	51	<1
292	9	22.3	10	87	180	<1	2	<1	33	4
293	<5	2.0	50	70	380	<1	10	<1	27	<1
294	12	53.8	33	69	300	<1	7	<1	94	3
295	35	133	15	56	260	<1	3	<1	19	5
296	40	19.0	48	58	420	<1	10	<1	59	1
*Dup 296	40	17.8	48	55	420	<1	10	<1	57	1
297	<5	10.3	12	20	210	<1	3	<1	27	<1
)8	16	46.1	15	33	210	<1	2	<1	38	4
;00	19	20.2	11	56	180	<1	2	<1	30	2
301	<5	1.3	10	40	400	<1	2	<1	10	<1
305	8	3.1	141	145	490	<1	29	<1	77	5
306	7	29.8	24	40	180	<1	5	<1	21	2
307	5	16.3	3	35	40	<1	<1	<1	15	3
308	9	21.8	33	87	190	<1	6	<1	24	1
309	<5	<0.5	6	104	120	<1	1	<1	26	<1
311	<5	7.0	38	118	280	<1	7	<1	45	<1
312	<5	7.3	21	31	890	<1	5	<1	34	<1
313	20	10.4	43	36	140	<1	8	<1	29	<1
*Dup 313	26	15.2	42	39	170	<1	8	<1	30	<1
314	16	48.7	53	48	100	<1	13	<1	57	2
315	<5	12.0	15	93	150	<1	3	<1	24	<1
316	8	24.5	13	34	90	<1	3	<1	23	3
317	<5	0.5	12	31	740	<1	3	<1	48	<1
318	8	13.9	48	52	830	<1	10	<1	23	2
319	7	9.9	51	97	660	<1	10	<1	65	2
320	26	77.3	6	39	120	<1	1	<1	18	16
321	11	28.8	22	56	310	<1	4	<1	43	5
322	19	65.7	14	43	170	<1	3	<1	29	7
323	17	55.4	3	30	80	<1	<1	<1	13	6
324	7	13.2	21	38	370	<1	4	<1	6	<1
*Std MMISRM16	57	<0.5	15	244	100	28	3	<1	350	<1
*Std MMISRM16	59	<0.5	11	231	70	27	2	<1	371	<1
*Std MMISRM16	58	<0.5	11	250	70	27	2	<1	359	<1
*Blk 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

Element	Mo	Nb	Nd	Ni	Pb	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	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
230	25	7	17	110	2	1	<10	19.7	13500	<0.5
*Dup 230	28	7	17	90	2	1	<10	20.9	14300	<0.5
231	169	16	16	70	3	3	<10	62.0	15400	0.9
232	26	10	2	70	<1	4	<10	55.1	1160	<0.5
233	6	5	<1	340	<1	<1	<10	11.2	695	<0.5
234	111	31	4	110	1	8	<10	56.3	10800	1.0
235	110	18	3	30	<1	4	<10	12.9	12000	0.7
236	5	<1	<1	90	<1	<1	<10	3.8	448	<0.5
237	27	7	5	70	2	2	<10	14.9	13900	<0.5
238	20	1	<1	<10	<1	<1	<10	9.6	2070	<0.5
239	142	40	8	40	2	8	<10	53.4	22700	0.7
240	26	<1	3	40	<1	<1	<10	4.7	4280	<0.5
241	70	5	18	20	6	<1	<10	48.0	59600	<0.5
242	63	15	2	130	<1	3	<10	54.7	5920	1.1
*Dup 242	61	12	2	120	<1	3	<10	48.6	4870	1.0
243	58	8	8	30	2	2	<10	28.6	19800	<0.5
244	59	10	4	40	1	2	<10	38.1	11100	<0.5
245	33	3	3	30	<1	<1	<10	12.0	10400	<0.5
246	89	13	1	80	<1	4	<10	15.3	4930	<0.5
[illegible]	39	4	10	70	3	<1	<10	7.4	30100	<0.5
	51	5	1	40	<1	2	<10	7.9	5590	<0.5
252	34	8	<1	340	<1	2	<10	4.6	370	<0.5
253	56	16	2	200	<1	6	<10	6.7	4400	0.5
254	5	2	3	110	<1	<1	<10	7.9	198	<0.5
255	30	10	1	130	<1	4	<10	16.7	2130	<0.5
256	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
257	<5	2	<1	370	<1	<1	<10	4.6	145	<0.5
*Dup 257	<5	1	<1	330	<1	<1	<10	4.7	132	<0.5
258	49	6	3	30	1	2	<10	25.9	11400	<0.5
259	13	<1	4	30	2	<1	<10	5.5	13200	<0.5
260	26	2	9	150	4	<1	<10	16.3	31100	<0.5
261	19	1	6	50	2	<1	<10	6.5	18400	<0.5
262	49	3	20	60	4	<1	<10	23.5	41300	<0.5
263	51	9	10	50	2	2	<10	35.6	22400	0.7
264	73	3	4	20	1	1	<10	16.7	15400	<0.5
265	25	3	4	50	<1	<1	<10	15.2	8750	<0.5
266	57	7	41	70	9	2	<10	36.1	65400	0.7
267	39	6	16	60	3	1	<10	17.2	23400	<0.5
268	68	15	3	50	1	3	<10	21.2	14600	<0.5
269	57	3	12	40	4	<1	<10	15.2	44600	<0.5
*Dup 269	66	4	13	50	4	1	<10	20.3	51400	<0.5
270	56	7	3	40	<1	2	<10	10.1	9770	<0.5
273	76	4	6	110	2	<1	<10	23.3	31200	<0.5
273B	120	7	9	110	3	2	<10	20.6	36400	<0.5
274	41	3	<1	40	<1	1	<10	3.3	2290	<0.5
275	18	1	1	90	<1	<1	<10	18.1	2690	<0.5
276	71	6	12	60	6	1	<10	106	37500	<0.5
277	72	9	11	30	5	2	<10	74.1	29800	<0.5

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
278	6	<1	<1	240	<1	<1	<10	3.0	111	<0.5
279	39	4	9	110	3	1	<10	37.5	28200	<0.5
280	46	4	2	<10	<1	1	<10	15.0	7100	<0.5
281	37	1	15	50	4	<1	<10	9.2	41600	<0.5
283	6	2	<1	300	<1	<1	<10	5.3	288	<0.5
*Dup 283	<5	1	<1	330	<1	<1	<10	4.6	169	<0.5
284	17	16	<1	290	<1	3	<10	6.9	666	<0.5
285	37	4	11	60	3	<1	<10	24.5	19000	<0.5
286	31	<1	11	80	3	<1	<10	10.9	30900	<0.5
288	108	21	3	130	<1	5	<10	18.0	9730	<0.5
289	16	3	<1	130	<1	<1	<10	3.3	1080	<0.5
290	10	6	<1	280	<1	1	<10	2.1	695	<0.5
291	173	53	1	30	<1	11	<10	9.2	6790	<0.5
292	62	3	6	40	1	<1	<10	13.8	26600	<0.5
293	25	15	<1	40	<1	5	<10	6.8	1240	<0.5
294	63	9	9	50	4	3	<10	44.3	31700	0.7
295	36	4	22	50	10	1	<10	35.8	59200	<0.5
296	61	14	5	20	1	4	<10	20.2	14300	<0.5
*Dup 296	59	14	5	30	1	4	<10	21.0	13500	<0.5
297	<5	3	4	30	<1	<1	<10	5.7	3500	<0.5
3	202	8	15	<10	3	1	<10	57.2	32800	<0.5
300	40	3	6	50	1	<1	<10	23.8	16000	<0.5
301	20	3	<1	130	<1	<1	<10	7.2	1070	<0.5
305	93	37	1	660	<1	7	<10	24.0	2510	<0.5
306	46	7	7	50	2	2	<10	15.8	26300	<0.5
307	44	<1	5	70	1	<1	<10	9.9	13800	<0.5
308	98	13	4	200	1	5	<10	13.2	18700	<0.5
309	23	2	<1	450	<1	<1	<10	1.2	200	<0.5
311	91	13	1	50	<1	4	<10	15.2	6090	<0.5
312	18	5	2	120	<1	<1	<10	14.3	1980	<0.5
313	50	13	3	80	<1	3	<10	15.3	7100	<0.5
*Dup 313	49	13	4	100	1	3	<10	18.4	10500	<0.5
314	66	13	10	50	3	3	<10	37.1	41600	<0.5
315	33	4	3	50	<1	1	<10	9.0	10300	<0.5
316	44	4	5	40	2	<1	<10	30.7	16500	<0.5
317	<5	2	<1	290	<1	<1	<10	1.2	279	<0.5
318	30	12	3	360	<1	3	<10	11.7	10400	<0.5
319	54	16	3	80	<1	4	<10	19.6	8660	<0.5
320	59	2	19	100	5	<1	<10	13.0	77400	<0.5
321	45	7	7	90	2	2	<10	11.8	25400	<0.5
322	61	4	15	30	5	1	<10	16.2	54200	<0.5
323	21	<1	11	30	4	<1	<10	13.4	45800	<0.5
324	20	6	3	130	<1	2	<10	4.9	12500	<0.5
*Std MMISRM16	6	5	<1	440	<1	<1	<10	26.7	3	<0.5
*Std MMISRM16	<5	4	<1	470	<1	<1	<10	21.9	3	<0.5
*Std MMISRM16	5	4	<1	460	<1	<1	<10	22.0	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	5	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	5	<0.5

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
230	19	19	54	3	350	30
*Dup 230	23	19	53	3	380	32
231	228	58	114	16	1630	155
232	17	2	239	49	1040	6
233	74	1	33	3	420	7
234	143	8	285	28	2410	106
235	75	4	176	16	610	106
236	2	<1	12	4	370	<5
237	9	3	103	12	660	32
238	41	<1	10	7	190	25
239	24	5	215	27	590	145
240	2	1	9	4	90	17
241	17	8	25	5	210	270
242	28	2	86	10	640	52
*Dup 242	26	2	82	11	650	51
243	10	4	86	12	410	79
244	15	4	77	9	240	77
245	13	2	36	8	240	38
246	39	1	161	16	360	61
250	4	3	31	3	320	95
	4	<1	79	9	100	62
252	115	<1	162	11	2460	10
253	88	2	365	21	3970	66
254	2	1	13	1	1270	8
255	13	1	134	9	700	9
256	<1	<1	<5	<1	<20	<5
257	1	<1	8	1	740	6
*Dup 257	1	<1	8	1	1040	5
258	19	1	70	12	520	37
259	2	2	15	4	120	26
260	4	6	41	5	520	45
261	3	3	26	4	220	38
262	7	6	38	7	310	122
263	21	7	68	10	210	85
264	5	2	51	9	340	98
265	10	2	19	4	160	21
266	14	15	77	13	330	160
267	12	9	56	9	570	36
268	12	2	93	10	580	97
269	8	6	31	6	290	130
*Dup 269	9	6	35	7	310	155
270	8	2	51	5	330	55
273	8	3	29	7	270	175
273B	9	4	84	16	650	203
274	7	<1	69	10	270	12
275	7	<1	13	4	300	16
276	26	4	33	6	760	128
277	22	6	67	12	330	95

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
278	<1	<1	<5	<1	80	<5
279	11	4	45	5	610	103
280	7	1	60	8	120	59
281	3	5	12	3	340	99
283	2	2	15	3	1760	6
*Dup 283	2	<1	10	2	1480	6
284	2	2	120	8	2380	10
285	3	3	28	3	350	15
286	4	4	9	2	200	67
288	12	2	170	17	620	82
289	2	<1	33	5	660	8
290	2	2	38	3	910	8
291	8	<1	362	29	110	79
292	9	2	25	5	480	60
293	6	<1	232	17	490	11
294	18	7	142	22	740	87
295	11	13	43	8	570	127
296	38	3	122	9	330	79
*Dup 296	37	3	125	9	320	83
297	1	1	12	<1	700	11
	30	7	26	9	270	197
	13	3	55	9	420	53
301	4	<1	34	6	700	13
305	18	4	247	20	1220	64
306	13	3	53	7	250	101
307	10	2	6	2	220	75
308	17	2	168	17	1030	96
309	84	<1	39	4	1340	<5
311	12	1	148	14	500	53
312	3	1	26	3	530	10
313	26	2	105	9	130	47
*Dup 313	27	2	113	9	200	59
314	20	7	98	8	230	148
315	9	1	78	12	220	36
316	10	2	28	6	130	64
317	2	3	16	1	1370	<5
318	7	2	84	6	740	37
319	15	2	179	16	700	39
320	6	6	24	6	410	139
321	7	3	79	9	580	61
322	6	5	44	7	250	155
323	3	4	10	3	160	126
324	3	1	92	10	660	36
*Std MMISRM16	58	<1	11	<1	260	18
*Std MMISRM16	51	<1	9	<1	240	15
*Std MMISRM16	52	<1	9	<1	240	16
*Blk BLANK	<1	<1	<5	<1	<20	<5
*Blk BLANK	<1	<1	<5	<1	20	<5

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
*Blk BLANK	<1	<1	<5	<1	<20	<5

Certificate of Analysis

Work Order: TO100655

To: Logan Resources Ltd.
Attn: Rita Chow
Suite 1640-1066 West Hasting St.
Oceanic Plaza, Box 12543
VANCOUVER
BC V6E 3X1

Date: Jul 18, 2008

P.O. No.	:	
Project No.	:	DEFAULT
No. Of Samples		73
Date Submitted		Jun 02, 2008
Report Comprises		Pages 1 to 11 (Inclusive of Cover Sheet)

Distribution of unused material:

STORE: 73 Soils

Certified By :

Gavin McGill
Operations Manager

SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at www.scc.ca

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
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

Element	Ag	Al	As	Au	Ba	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.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
325	9	194	10	0.2	40	<1	<10	9	8	14
*Dup 325	7	223	30	0.2	50	2	<10	8	9	19
326	3	280	30	<0.1	100	1	<10	5	41	23
327	<1	195	<10	<0.1	110	<1	<10	2	19	24
328	2	238	<10	<0.1	60	<1	<10	<1	57	27
329	5	207	<10	0.1	50	1	<10	11	128	15
330	1	>300	70	<0.1	320	3	40	7	67	16
330C	1	>300	<10	<0.1	60	1	<10	2	28	6
331	3	234	110	0.4	460	1	80	43	136	138
332	<1	>300	<10	<0.1	80	1	30	8	21	12
332B	2	>300	70	<0.1	110	1	<10	22	18	37
333	<1	281	20	<0.1	90	1	10	7	19	17
333B	<1	>300	20	<0.1	40	<1	<10	3	<5	8
335	<1	226	20	<0.1	80	<1	<10	3	12	26
*Dup 335	<1	271	40	<0.1	80	<1	<10	2	10	20
336	<1	196	<10	<0.1	70	<1	<10	5	7	47
337B	<1	211	<10	<0.1	50	<1	<10	4	6	32
338	<1	>300	10	0.1	70	2	<10	2	11	15
339	<1	156	<10	<0.1	70	<1	20	2	28	7
340	3	>300	60	<0.1	70	<1	10	10	41	74
1	1	283	20	0.1	180	<1	<10	8	54	27
342	<1	275	<10	<0.1	50	<1	<10	2	22	11
343	<1	21	<10	<0.1	60	3	90	19	8	11
344	<1	82	<10	<0.1	130	2	50	17	12	17
345	2	269	10	<0.1	110	2	30	5	17	26
346C	2	97	<10	<0.1	20	<1	90	19	12	<5
347	2	>300	160	<0.1	120	3	10	5	63	20
*Dup 347	2	>300	150	<0.1	120	3	<10	6	71	19
352	<1	212	<10	<0.1	70	2	20	5	6	15
353	<1	224	<10	<0.1	60	<1	<10	3	8	18
354	<1	269	<10	<0.1	40	<1	10	<1	<5	21
356B	1	254	<10	<0.1	50	<1	20	<1	<5	106
357	<1	39	<10	<0.1	90	6	80	19	10	16
358	<1	291	<10	<0.1	90	<1	<10	6	18	16
359	<1	296	<10	<0.1	60	<1	20	2	<5	61
360	2	>300	10	<0.1	60	1	50	9	9	15
361	8	>300	<10	<0.1	50	<1	<10	11	54	5
362	3	274	<10	<0.1	160	<1	20	18	52	28
363	5	>300	20	<0.1	140	1	<10	8	44	39
364	2	290	10	<0.1	150	3	<10	3	20	10
*Dup 364	2	278	20	<0.1	150	3	10	3	24	10
370	<1	244	<10	<0.1	30	<1	20	2	<5	52
371	<1	164	<10	<0.1	100	1	10	3	35	7
372	<1	261	<10	<0.1	70	2	<10	11	15	66
372C	<1	33	<10	<0.1	70	3	50	21	10	12
373B	1	>300	20	<0.1	100	2	<10	3	19	15
373C	<1	294	<10	<0.1	50	<1	10	6	9	10
378	1	>300	30	<0.1	90	2	<10	3	20	13

Element	Ag	Al	As	Au	Ba	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.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
379	3	>300	<10	<0.1	70	<1	<10	9	39	87
380	6	234	<10	0.2	20	<1	<10	8	57	10
381	2	>300	10	<0.1	160	1	<10	2	21	20
382	<1	>300	<10	<0.1	90	1	<10	<1	30	11
383	<1	212	10	<0.1	80	<1	60	14	57	70
*Dup 383	<1	241	30	<0.1	110	<1	60	10	89	98
389B	2	>300	20	0.1	90	<1	<10	2	40	32
389C	2	>300	10	<0.1	60	1	10	3	12	60
390	5	<1	60	0.3	130	2	<10	13	102	107
391	<1	>300	<10	<0.1	80	<1	<10	2	10	35
392	<1	56	<10	<0.1	80	5	<10	17	6	14
392C	2	>300	110	<0.1	160	3	20	11	15	139
393	2	>300	70	<0.1	140	3	<10	6	40	25
400	<1	164	<10	<0.1	30	<1	<10	15	35	34
401	<1	157	<10	<0.1	80	<1	50	38	45	36
402	<1	228	<10	<0.1	70	<1	<10	3	10	26
410	<1	>300	10	<0.1	250	<1	10	10	43	77
411	2	153	<10	0.2	20	<1	<10	4	9	17
*Dup 411	2	164	<10	0.2	20	<1	<10	4	10	18
413	<1	270	<10	<0.1	80	<1	30	3	<5	31
	9	>300	210	0.3	150	1	<10	15	98	55
FACT 1	5	170	<10	0.6	20	<1	<10	14	50	19
FACT 1N	1	259	20	0.2	110	<1	20	40	21	39
FACT 2N	1	169	<10	0.8	40	<1	<10	21	49	7
FACT 3N	6	206	10	1.3	30	<1	<10	19	13	15
FACT 4N	<1	>300	<10	<0.1	60	<1	30	7	<5	18
FACT 00	1580	18	10	631	20	<1	90	5	5	59
FACT 1S	1	253	<10	0.3	50	<1	30	1	<5	26
FACT 2S	3	197	30	0.5	30	<1	<10	16	46	12
FACT 3S	3	>300	160	0.2	170	2	<10	19	300	132
FACT 4S	3	>300	110	0.3	150	1	<10	3	119	27
*Dup FACT 4S	2	>300	100	0.2	160	1	<10	2	122	30
*Std MMISRM16	16	36	20	27.3	50	<1	190	4	16	49
*Std MMISRM16	17	42	20	28.3	40	<1	200	4	16	60
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Blk BLANK	<1	3	<10	<0.1	<10	<1	<10	<1	<5	<5

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	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
325	<100	320	6	4.7	0.5	81	2	3	<5	2
*Dup 325	<100	300	4	4.2	<0.5	110	2	4	<5	3
326	<100	280	12	13.2	1.9	159	8	19	<5	6
327	<100	100	8	7.0	1.1	219	5	9	<5	4
328	<100	60	11	7.4	2.7	60	10	25	<5	<1
329	<100	310	36	19.3	9.4	27	40	55	<5	<1
330	400	280	10	5.7	2.6	638	9	25	7	9
330C	<100	170	9	5.8	1.3	19	5	13	<5	2
331	<100	2200	42	26.2	8.1	66	37	41	<5	8
332	<100	90	8	4.7	1.5	58	7	8	<5	18
332B	100	220	11	9.1	1.1	202	5	6	<5	7
333	<100	90	10	6.2	1.6	83	7	7	<5	6
333B	<100	50	2	1.7	<0.5	75	<1	<1	<5	7
335	<100	80	4	2.5	0.6	185	3	6	<5	4
*Dup 335	<100	80	3	2.8	<0.5	166	2	5	<5	4
336	<100	130	3	3.2	0.6	203	2	3	<5	5
337B	<100	50	5	4.4	0.7	128	2	2	<5	2
338	<100	120	7	5.1	1.0	262	4	4	<5	5
339	<100	30	6	3.3	1.2	115	5	13	<5	3
340	<100	460	23	16.5	2.4	112	11	18	<5	7
1	<100	590	42	24.8	5.5	135	24	17	<5	6
342	<100	100	7	4.9	1.2	50	4	10	<5	2
343	<100	120	1	0.7	<0.5	7	1	3	<5	40
344	<100	90	2	1.1	<0.5	48	2	5	<5	22
345	<100	190	9	7.6	1.1	252	4	8	<5	12
346C	<100	160	12	8.3	1.6	3	8	10	<5	4
347	200	160	9	8.7	1.3	482	6	12	10	8
*Dup 347	200	150	11	9.8	1.8	477	8	15	9	7
352	<100	60	1	1.4	<0.5	89	<1	3	<5	9
353	<100	60	4	5.4	<0.5	46	2	4	<5	3
354	<100	70	1	1.8	<0.5	143	<1	<1	<5	9
356B	200	420	3	4.1	<0.5	370	1	1	<5	15
357	<100	110	1	0.8	<0.5	15	1	3	<5	36
358	<100	120	5	4.1	0.9	114	4	8	<5	5
359	<100	160	1	1.8	<0.5	132	<1	<1	<5	12
360	<100	190	7	5.4	0.6	203	3	2	<5	14
361	<100	350	24	12.6	3.8	146	16	13	<5	3
362	<100	390	31	18.4	4.1	133	20	18	<5	6
363	<100	680	14	12.4	1.8	249	8	11	<5	2
364	<100	210	7	4.4	1.2	311	5	8	<5	4
*Dup 364	<100	220	7	4.6	1.5	335	6	10	<5	5
370	300	200	3	3.1	<0.5	254	1	1	<5	9
371	<100	40	5	2.8	1.4	46	5	17	<5	6
372	<100	180	8	8.2	0.8	43	3	6	<5	4
372C	<100	110	1	0.8	<0.5	18	1	3	<5	63
373B	100	160	7	7.2	1.0	495	4	8	<5	5
373C	<100	130	5	3.5	0.8	116	3	3	<5	7
378	<100	150	7	7.4	0.9	457	4	4	<5	5

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	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
379	<100	1850	48	29.8	4.6	347	23	15	<5	7
380	<100	1230	44	24.7	5.9	87	28	22	<5	2
381	<100	190	5	5.3	0.6	408	2	11	<5	6
382	<100	110	9	5.5	1.5	98	6	14	<5	2
383	<100	110	16	9.8	2.4	171	11	19	<5	5
*Dup 383	<100	140	20	13.2	2.9	182	13	30	<5	5
389B	900	960	15	9.0	3.2	466	11	16	14	5
389C	800	300	4	3.3	0.8	608	3	5	8	7
390	1400	1620	42	29.1	7.5	1280	26	27	16	7
391	100	140	5	4.2	0.7	147	3	4	<5	9
392	<100	50	<1	<0.5	<0.5	38	<1	2	<5	68
392C	600	390	7	6.8	1.1	543	5	5	<5	11
393	900	610	9	6.9	1.7	1410	6	13	10	7
400	<100	480	38	29.1	3.3	26	15	12	<5	<1
401	<100	460	45	25.6	5.7	12	28	15	<5	8
402	<100	80	3	4.4	<0.5	288	2	5	<5	6
410	100	370	7	8.1	0.8	341	3	9	8	7
411	<100	350	7	11.6	0.9	50	3	3	<5	<1
*Dup 411	<100	370	9	12.8	0.9	66	4	3	<5	<1
413	<100	120	<1	0.8	<0.5	333	<1	1	<5	21
	<100	490	17	10.9	2.9	118	12	29	<5	3
FACT 1	<100	1260	55	37.4	9.0	9	38	24	<5	2
FACT 1N	<100	880	19	14.2	1.9	92	7	7	<5	8
FACT 2N	<100	430	33	22.5	5.0	34	20	20	<5	2
FACT 3N	<100	850	4	4.2	0.5	98	2	4	<5	3
FACT 4N	<100	80	1	2.6	<0.5	47	<1	<1	<5	16
FACT 00	<100	393225	4	4.1	0.7	42	2	3	<5	4
FACT 1S	<100	1400	<1	0.6	<0.5	172	<1	1	<5	10
FACT 2S	<100	740	32	22.8	4.6	109	18	9	<5	1
FACT 3S	500	950	40	29.4	5.4	654	23	43	33	13
FACT 4S	600	640	13	9.4	2.4	563	8	9	11	7
*Dup FACT 4S	600	550	9	7.8	1.7	495	6	9	9	7
*Std MMISRM16	<100	580	2	0.7	0.8	1	3	4	<5	32
*Std MMISRM16	<100	650	2	0.9	1.0	2	4	3	<5	32
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	5	<1	<1	<5	<1

Element	Mo	Nb	Nd	Ni	Pb	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	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
325	<5	1.7	5	98	100	<1	1	<1	20	<1
*Dup 325	<5	4.2	5	90	80	<1	1	<1	21	<1
326	7	8.6	25	77	210	<1	6	<1	43	<1
327	8	10.6	12	45	60	<1	3	<1	29	<1
328	<5	3.0	33	30	70	<1	7	<1	14	<1
329	7	2.3	123	34	90	<1	25	<1	61	<1
330	16	59.9	34	90	650	<1	8	<1	39	4
330C	<5	8.2	15	25	130	<1	3	<1	32	<1
331	11	5.3	89	278	350	<1	18	<1	49	<1
332	<5	5.6	19	60	300	<1	4	<1	6	<1
332B	12	17.0	11	99	140	<1	2	<1	11	2
333	7	20.9	16	40	220	<1	3	<1	27	2
333B	<5	5.3	1	32	40	<1	<1	<1	<5	1
335	6	8.2	7	32	70	<1	2	<1	6	1
*Dup 335	11	14.6	5	37	40	<1	1	<1	8	2
336	<5	10.3	5	24	80	<1	1	<1	<5	<1
337B	12	6.4	5	22	120	<1	<1	<1	24	<1
338	22	37.5	9	59	70	<1	2	<1	14	1
339	5	4.0	16	16	80	<1	4	<1	<5	<1
340	<5	5.2	26	87	440	<1	6	<1	46	<1
1	<5	10.5	51	122	300	<1	10	<1	53	1
2	11	5.7	12	38	20	<1	3	<1	26	<1
343	<5	<0.5	5	51	1360	<1	1	<1	23	<1
344	<5	0.6	7	49	370	<1	2	<1	29	<1
345	9	20.4	10	51	200	<1	2	<1	24	1
346C	<5	<0.5	18	84	50	<1	4	<1	21	<1
347	13	34.9	16	69	140	<1	4	<1	18	5
*Dup 347	13	32.1	21	68	170	<1	5	<1	17	4
352	<5	2.4	3	23	130	<1	<1	<1	6	<1
353	<5	3.9	5	28	320	<1	1	<1	8	<1
354	<5	2.4	<1	19	<10	<1	<1	<1	13	<1
356B	<5	6.5	2	223	20	<1	<1	<1	23	1
357	<5	<0.5	6	45	2600	<1	1	<1	60	<1
358	<5	9.6	11	86	150	<1	2	<1	31	<1
359	<5	4.8	<1	47	<10	<1	<1	<1	7	<1
360	10	20.7	5	70	120	<1	1	<1	7	<1
361	5	13.3	37	53	120	<1	7	<1	36	<1
362	6	7.9	43	72	480	<1	8	<1	35	<1
363	7	16.7	20	59	110	<1	4	<1	49	<1
364	21	42.6	13	54	120	<1	3	<1	41	1
*Dup 364	20	41.6	16	59	130	<1	3	<1	40	1
370	<5	14.3	2	196	40	<1	<1	<1	7	1
371	<5	2.7	18	24	300	<1	4	<1	10	<1
372	<5	2.9	9	105	580	<1	2	<1	20	<1
372C	<5	<0.5	5	79	570	<1	1	<1	14	<1
373B	15	42.2	11	51	100	<1	3	<1	15	2
373C	<5	12.1	8	48	180	<1	2	<1	<5	<1
378	12	44.4	9	48	90	<1	2	<1	16	1

Element	Mo	Nb	Nd	Ni	Pb	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	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
379	6	22.5	38	120	70	<1	7	<1	13	1
380	<5	7.8	55	51	30	<1	10	<1	50	<1
381	8	59.3	9	80	70	<1	2	<1	17	1
382	7	44.0	17	54	70	<1	4	<1	22	2
383	74	1.0	32	98	130	<1	7	<1	15	<1
*Dup 383	127	1.7	44	98	150	<1	10	<1	15	<1
389B	35	36.0	28	144	40	<1	6	<1	46	1
389C	10	36.4	8	144	80	<1	2	<1	17	2
390	22	67.5	58	156	140	1	12	<1	55	3
391	<5	24.1	7	83	90	<1	1	<1	15	<1
392	<5	0.8	3	116	1130	<1	<1	<1	45	<1
392C	22	33.3	10	158	530	<1	2	<1	17	3
393	21	103	18	96	290	1	4	<1	31	5
400	7	1.0	26	85	60	<1	5	<1	10	<1
401	<5	0.7	50	78	380	<1	9	<1	23	<1
402	8	20.4	6	20	90	<1	1	<1	13	1
410	30	32.4	9	94	240	<1	2	<1	53	1
411	<5	2.3	8	109	50	<1	2	<1	32	<1
*Dup 411	<5	3.5	9	116	60	<1	2	<1	32	<1
*13	<5	18.4	2	43	30	<1	<1	<1	7	<1
	<5	8.0	42	112	320	<1	10	<1	51	<1
FACT 1	6	<0.5	89	93	110	<1	16	<1	40	<1
FACT 1N	<5	5.4	13	144	290	<1	3	<1	84	<1
FACT 2N	<5	1.8	49	77	190	<1	9	<1	50	<1
FACT 3N	<5	4.8	5	80	110	<1	1	<1	32	<1
FACT 4N	<5	<0.5	<1	93	50	<1	<1	<1	14	<1
FACT 00	<5	<0.5	5	18	<10	<1	1	<1	42	1
FACT 1S	<5	5.7	1	49	20	<1	<1	<1	11	<1
FACT 2S	<5	7.5	39	84	190	<1	7	<1	35	<1
FACT 3S	11	49.8	60	219	1640	<1	14	<1	57	4
FACT 4S	7	41.5	20	134	140	<1	4	<1	29	3
*Dup FACT 4S	6	36.2	16	131	140	<1	3	<1	29	3
*Std MMISRM16	45	<0.5	13	202	60	23	2	<1	332	<1
*Std MMISRM16	49	<0.5	14	254	90	25	2	<1	340	<1
*Blk 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

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
325	30	2	<1	20	<1	<1	<10	6.5	1360	<0.5
*Dup 325	30	1	1	30	<1	<1	<10	9.5	1530	<0.5
326	38	6	2	50	<1	2	<10	12.6	7470	<0.5
327	21	3	2	40	<1	1	<10	7.6	8100	<0.5
328	37	8	<1	<10	<1	2	<10	15.5	1610	<0.5
329	59	33	<1	<10	<1	6	<10	14.2	1590	<0.5
330	56	9	10	90	4	2	<10	79.0	36500	<0.5
330C	25	4	3	<10	<1	1	<10	6.5	6510	<0.5
331	103	28	1	90	<1	6	<10	43.0	3590	<0.5
332	12	5	2	130	<1	1	<10	3.3	3760	<0.5
332B	63	3	5	50	1	1	<10	5.2	21400	<0.5
333	30	5	5	50	1	1	<10	6.7	18700	<0.5
333B	19	<1	1	60	<1	<1	<10	2.5	4350	<0.5
335	15	2	2	30	<1	<1	<10	4.1	7050	<0.5
*Dup 335	16	1	3	30	<1	<1	<10	4.8	12500	<0.5
336	23	2	4	40	<1	<1	<10	6.8	8480	<0.5
337B	37	2	2	<10	<1	<1	<10	6.7	6280	<0.5
338	27	3	9	40	2	<1	<10	6.0	28500	<0.5
339	24	4	1	30	<1	<1	<10	7.2	2970	<0.5
340	37	8	1	50	<1	3	<10	14.0	4260	<0.5
1	63	16	2	20	<1	6	<10	11.3	9190	<0.5
342	25	3	<1	<10	<1	<1	<10	13.4	4450	<0.5
343	<5	1	<1	280	<1	<1	<10	1.6	81	<0.5
344	7	2	<1	220	<1	<1	<10	5.1	155	<0.5
345	23	3	4	150	1	1	<10	10.7	17500	<0.5
346C	16	5	<1	150	<1	2	<10	<0.5	51	<0.5
347	41	4	8	70	2	1	<10	20.6	30200	<0.5
*Dup 347	42	6	7	60	2	2	<10	22.6	27700	<0.5
352	16	<1	1	90	<1	<1	<10	2.7	2470	<0.5
353	21	1	1	20	<1	<1	<10	6.5	2610	<0.5
354	9	<1	<1	70	<1	<1	<10	1.1	2670	<0.5
356B	33	<1	3	120	<1	<1	<10	1.7	12900	<0.5
357	<5	1	<1	290	<1	<1	<10	2.8	157	<0.5
358	13	3	2	40	<1	<1	<10	14.6	5250	<0.5
359	17	<1	1	160	<1	<1	<10	1.5	4510	<0.5
360	25	2	5	190	1	<1	<10	5.2	18900	<0.5
361	52	12	4	20	<1	4	<10	9.0	12600	<0.5
362	46	13	2	80	<1	4	<10	13.1	7370	<0.5
363	67	6	4	<10	1	2	<10	16.2	15700	<0.5
364	36	4	11	40	3	<1	<10	13.5	39700	<0.5
*Dup 364	37	5	11	50	3	1	<10	15.5	38900	<0.5
370	44	<1	5	50	<1	<1	<10	1.9	22400	<0.5
371	17	4	<1	60	<1	<1	<10	12.5	778	<0.5
372	17	2	<1	40	<1	<1	<10	3.3	2110	<0.5
372C	<5	1	<1	420	<1	<1	<10	3.5	71	<0.5
373B	41	3	9	30	3	<1	<10	13.0	31900	<0.5
373C	18	2	3	60	<1	<1	<10	2.9	11300	<0.5
378	48	3	9	40	3	<1	<10	21.2	30400	<0.5

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
379	52	12	4	30	2	6	<10	3.6	21700	<0.5
380	103	18	1	<10	<1	6	<10	5.8	8180	<0.5
381	20	2	8	70	5	<1	<10	38.3	24300	<0.5
382	37	5	10	<10	3	1	<10	9.7	42600	<0.5
383	27	9	<1	90	<1	2	<10	4.6	807	<0.5
*Dup 383	31	11	<1	120	<1	3	<10	6.0	1440	<0.5
389B	111	9	7	20	2	2	<10	13.7	40600	<0.5
389C	57	2	7	40	2	<1	<10	6.1	36600	<0.5
390	377	21	13	20	5	6	<10	37.1	69600	<0.5
391	31	2	5	50	2	<1	<10	8.6	24900	<0.5
392	5	<1	<1	230	<1	<1	<10	3.5	474	<0.5
392C	82	4	8	70	2	<1	<10	10.3	41700	<0.5
393	103	5	18	40	7	1	<10	42.5	89400	<0.5
400	51	9	<1	<10	<1	4	<10	2.4	976	<0.5
401	30	16	<1	140	<1	6	<10	1.6	685	<0.5
402	39	2	7	40	1	<1	<10	5.5	20600	<0.5
410	74	2	5	40	2	<1	<10	13.2	24200	<0.5
411	84	3	<1	<10	<1	<1	<10	6.5	2110	<0.5
*Dup 411	86	3	<1	<10	<1	<1	<10	7.4	3310	<0.5
413	28	<1	4	180	1	<1	<10	4.4	19500	<0.5
	41	11	3	40	<1	2	<10	31.0	5660	<0.5
, ACT 1	147	27	<1	<10	<1	8	<10	2.4	340	<0.5
FACT 1N	46	5	1	90	<1	2	<10	5.8	4660	<0.5
FACT 2N	70	13	<1	20	<1	4	<10	3.3	1680	<0.5
FACT 3N	28	2	<1	20	<1	<1	<10	7.0	4100	<0.5
FACT 4N	14	<1	<1	230	<1	<1	<10	2.9	128	<0.5
FACT 00	73	2	<1	120	<1	<1	<10	0.6	208	<0.5
FACT 1S	16	<1	2	220	<1	<1	<10	4.4	4720	<0.5
FACT 2S	98	13	2	<10	<1	4	<10	7.4	6950	<0.5
FACT 3S	109	17	10	30	3	5	<10	36.8	43200	<0.5
FACT 4S	155	7	8	10	3	2	<10	34.6	37700	<0.5
*Dup FACT 4S	112	5	6	20	2	1	<10	33.6	32300	<0.5
*Std MMISRM16	7	4	<1	460	<1	<1	<10	18.7	<3	<0.5
*Std MMISRM16	8	4	<1	470	<1	<1	<10	21.8	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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
325	4	<1	25	4	250	18
*Dup 325	4	<1	18	4	340	26
326	7	1	68	13	290	27
327	6	1	44	7	140	17
328	51	<1	59	7	40	18
329	60	<1	189	15	90	23
330	11	5	47	5	630	178
330C	10	1	45	5	200	26
331	142	1	232	24	1950	48
332	2	<1	54	3	290	17
332B	6	3	57	8	440	41
333	5	3	48	5	260	51
333B	1	<1	10	2	360	11
335	3	1	19	2	150	18
*Dup 335	3	1	19	3	130	26
336	2	1	23	4	270	17
337B	15	1	16	6	320	21
338	2	3	35	5	460	52
339	10	<1	25	3	380	19
340	6	<1	126	12	650	26
1	4	1	199	17	530	71
2	12	<1	31	4	130	36
343	<1	<1	6	<1	1110	<5
344	1	<1	9	1	530	8
345	8	3	49	7	590	40
346C	41	<1	89	6	480	<5
347	11	5	57	8	360	105
*Dup 347	12	5	68	9	380	110
352	2	<1	5	3	200	9
353	6	<1	28	6	470	10
354	<1	<1	8	2	60	6
356B	1	1	18	4	110	17
357	1	1	6	<1	1140	6
358	6	<1	29	4	380	16
359	<1	<1	6	3	100	11
360	3	2	42	5	450	28
361	5	1	103	9	240	37
362	5	<1	179	14	480	37
363	7	2	62	13	250	80
364	8	4	29	4	370	91
*Dup 364	9	4	30	4	340	92
370	2	1	13	4	180	25
371	8	<1	22	2	290	13
372	3	<1	40	8	390	6
372C	<1	<1	6	<1	1480	6
373B	4	4	38	7	160	84
373C	2	<1	30	3	330	32
378	5	3	30	8	260	81

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
379	2	2	295	16	240	73
380	5	1	238	17	140	60
381	6	2	27	6	180	45
382	6	3	44	5	150	74
383	170	<1	86	7	520	10
*Dup 383	208	<1	107	10	530	17
389B	17	3	57	8	290	170
389C	3	2	22	3	440	83
390	25	6	189	27	450	435
391	4	2	30	4	340	42
392	<1	<1	<5	<1	1340	8
392C	8	4	44	8	1220	75
393	13	8	40	7	480	395
400	715	<1	272	23	460	6
401	4	<1	267	17	970	<5
402	5	2	16	7	300	31
410	33	2	38	8	460	72
411	8	<1	41	13	110	31
*Dup 411	8	<1	49	14	140	35
413	2	2	<5	2	160	41
	22	1	82	8	220	28
CT 1	36	<1	333	30	190	16
FACT 1N	8	<1	109	11	890	21
FACT 2N	7	<1	210	17	360	19
FACT 3N	4	<1	21	4	150	20
FACT 4N	<1	<1	8	3	200	<5
FACT 00	8	<1	37	4	110	<5
FACT 1S	3	<1	<5	2	230	13
FACT 2S	12	<1	144	18	190	40
FACT 3S	26	4	215	22	660	184
FACT 4S	15	3	35	13	250	170
*Dup FACT 4S	12	3	30	11	240	159
*Std MMISRM16	42	<1	8	<1	230	16
*Std MMISRM16	48	<1	9	<1	260	18
*Blk BLANK	<1	<1	<5	<1	<20	<5
*Blk BLANK	<1	<1	<5	<1	20	<5

Certificate of Analysis

Work Order: TO100802

To: Logan Resources Ltd.
Attn: Rita Chow
Suite 1640-1066 West Hasting St.
Oceanic Plaza, Box 12543
VANCOUVER
BC V6E 3X1

Date: Jul 15, 2008

P.O. No.	:
Project No.	: DEFAULT
No. Of Samples	57
Date Submitted	Jun 05, 2008
Report Comprises	Pages 1 to 11 (Inclusive of Cover Sheet)

Distribution of unused material:

STORE: 57 Soils

Certified By :

Gavin McGill
Operations Manager

SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at www.scc.ca

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
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

Element	Ag	Al	As	Au	Ba	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.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
84	<1	187	<10	<0.1	270	6	30	4	5	11
*Dup 84	<1	231	<10	<0.1	210	6	30	3	6	11
97	2	248	240	<0.1	190	3	10	2	11	7
98	5	248	30	<0.1	160	1	10	6	16	17
121	2	>300	360	0.1	370	3	<10	4	21	10
122	3	256	60	0.2	300	3	<10	<1	36	12
123	4	>300	50	<0.1	110	1	<10	2	46	7
124	<1	253	<10	<0.1	160	1	<10	2	8	12
133	26	>300	1210	1.0	340	21	<10	9	255	41
145	11	>300	370	6.2	2720	<1	<10	10	574	75
146	<1	>300	220	<0.1	320	3	10	3	29	11
147	2	>300	30	<0.1	190	<1	<10	7	144	108
148	<1	>300	130	<0.1	170	2	<10	<1	33	9
150	<1	235	20	<0.1	250	1	70	13	34	21
*Dup 150	<1	242	20	<0.1	150	<1	80	14	34	22
157	2	235	10	<0.1	70	4	70	20	37	6
173	<1	295	30	<0.1	160	1	<10	<1	14	9
174	1	230	30	<0.1	150	2	<10	2	13	11
175	1	>300	20	0.1	110	2	<10	2	27	6
183	<1	26	<10	<0.1	100	8	70	35	9	11
	10	>300	1320	0.2	180	<1	<10	10	92	27
197	<1	121	10	<0.1	80	10	50	60	14	31
198	<1	238	130	<0.1	90	3	<10	<1	8	<5
199	<1	>300	<10	<0.1	30	<1	<10	1	<5	<5
200	<1	276	<10	<0.1	40	<1	<10	<1	<5	<5
208	9	>300	200	0.9	260	3	<10	9	570	44
221	8	>300	300	0.2	110	1	<10	12	25	30
*Dup 221	8	>300	340	0.2	120	1	<10	11	32	30
222	2	>300	630	1.2	750	2	60	38	160	279
223	6	236	10	0.2	80	1	<10	7	24	21
247	<1	29	<10	<0.1	40	8	<10	19	<5	20
248	<1	230	<10	<0.1	30	<1	<10	1	19	<5
249	<1	118	10	<0.1	50	<1	40	11	40	20
271	<1	231	20	<0.1	130	2	20	3	25	18
272	<1	222	50	0.2	150	3	<10	<1	13	32
294	<1	>300	10	<0.1	210	5	<10	<1	57	8
332(C)	1	50	<10	<0.1	60	<1	360	84	<5	11
348	<1	>300	380	0.4	160	2	10	16	85	60
349	<1	281	<10	<0.1	60	2	<10	7	7	22
350	<1	>300	<10	<0.1	30	<1	20	2	<5	<5
*Dup 350	<1	>300	<10	<0.1	20	<1	20	4	<5	5
350C	<1	264	50	0.1	140	5	<10	<1	61	14
351	<1	>300	40	<0.1	70	3	<10	7	13	11
374	1	>300	<10	<0.1	90	1	70	8	12	32
375	<1	169	<10	<0.1	170	5	40	42	13	27
376	1	>300	<10	<0.1	160	1	<10	3	16	14
377	<1	232	<10	<0.1	80	<1	10	9	11	22
384	<1	>300	10	<0.1	90	2	<10	<1	45	7

Element	Ag	Al	As	Au	Ba	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.	1	1	10	0.1	10	1	10	1	5	5
Units	PPB	PPM	PPB	PPB	PPB	PPB	PPM	PPB	PPB	PPB
385	1	285	<10	<0.1	240	<1	<10	10	36	128
386	<1	202	<10	<0.1	120	5	30	18	7	73
387	2	216	20	<0.1	750	5	50	11	83	129
388	<1	234	<10	<0.1	250	2	10	27	26	430
395	<1	132	<10	<0.1	120	2	50	22	16	21
*Dup 395	<1	133	<10	<0.1	100	2	50	18	12	19
396	<1	128	<10	<0.1	60	2	<10	10	24	11
397	<1	266	<10	<0.1	130	5	<10	15	16	62
398	<1	>300	30	<0.1	240	8	30	8	31	55
404	<1	201	20	<0.1	90	5	<10	<1	11	<5
405	<1	252	20	<0.1	200	6	20	<1	21	13
406	<1	238	<10	<0.1	50	<1	70	3	<5	8
407	2	277	10	<0.1	120	5	10	39	13	76
408	<1	118	<10	<0.1	150	1	10	3	8	10
*Std MMISRM16	21	57	20	31.1	40	<1	180	5	22	88
*Std MMISRM16	18	47	20	27.4	60	<1	200	4	21	64
*Blk BLANK	<1	1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	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
84	<100	20	<1	<0.5	<0.5	149	<1	3	7	28
*Dup 84	<100	30	<1	<0.5	<0.5	148	<1	3	12	30
97	<100	110	1	1.2	<0.5	502	1	5	<5	7
98	<100	180	3	3.2	0.6	254	2	5	<5	7
121	<100	170	4	3.7	0.9	596	3	9	7	8
122	200	540	5	3.7	1.2	370	5	17	12	5
123	200	390	18	12.7	3.3	294	13	16	<5	2
124	<100	60	2	1.8	<0.5	112	1	4	<5	5
133	<100	600	30	16.3	2.3	226	26	63	8	4
145	<100	1120	143	95.4	28.7	108	146	227	6	7
146	100	150	4	4.0	0.7	598	3	15	6	10
147	<100	260	28	17.8	5.8	83	24	56	5	1
148	300	130	6	4.0	1.5	741	5	10	6	4
150	<100	150	36	26.9	3.3	237	18	22	<5	29
*Dup 150	<100	150	36	25.9	3.4	149	20	22	<5	41
157	<100	120	3	1.7	0.5	28	4	13	<5	22
173	100	90	2	2.2	<0.5	280	2	6	6	5
174	<100	130	3	2.2	0.5	305	2	5	<5	6
175	200	70	5	3.9	1.0	74	4	14	<5	3
183	<100	90	1	0.7	<0.5	13	1	4	<5	46
	200	970	30	20.1	5.0	227	20	35	6	5
197	<100	110	3	2.3	0.6	45	3	5	<5	23
198	<100	80	1	1.4	<0.5	556	<1	3	<5	8
199	<100	20	1	1.9	<0.5	24	<1	<1	<5	4
200	<100	40	<1	1.0	<0.5	149	<1	<1	<5	3
208	100	2210	117	64.3	10.5	219	114	220	6	4
221	<100	490	8	6.4	1.2	213	4	11	<5	3
*Dup 221	<100	480	9	6.6	1.4	264	5	13	<5	3
222	100	640	29	20.1	5.2	251	24	34	6	12
223	<100	2040	21	15.5	2.2	36	9	8	<5	3
247	<100	130	<1	0.6	<0.5	18	<1	<1	<5	33
248	<100	100	5	6.1	1.0	7	4	8	<5	1
249	<100	130	9	4.9	2.3	254	9	16	<5	17
271	<100	90	5	3.6	1.1	268	4	11	<5	7
272	200	300	2	2.1	<0.5	512	2	6	<5	7
294	<100	190	8	5.1	1.8	217	7	30	14	5
332(C)	<100	10	<1	<0.5	<0.5	3	<1	<1	<5	50
348	100	180	34	35.4	4.2	537	17	24	15	7
349	<100	40	3	2.3	<0.5	52	2	3	<5	9
350	<100	20	<1	<0.5	<0.5	20	<1	<1	<5	12
*Dup 350	<100	20	<1	0.6	<0.5	25	<1	<1	<5	12
350C	<100	200	3	2.7	0.6	604	2	6	<5	11
351	200	180	6	6.5	0.7	726	3	6	<5	7
374	<100	170	16	13.7	1.3	96	8	4	<5	24
375	<100	120	4	2.7	0.6	97	2	5	<5	15
376	<100	170	4	3.6	0.5	192	2	7	<5	6
377	<100	150	4	3.0	<0.5	150	2	5	<5	4
384	<100	270	7	4.1	1.6	296	6	20	5	4

Element	Cr	Cu	Dy	Er	Eu	Fe	Gd	La	Li	Mg
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	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
385	<100	550	12	11.4	1.5	151	7	14	<5	6
386	<100	200	3	3.7	<0.5	94	1	2	<5	12
387	<100	580	18	15.1	2.5	402	13	39	8	17
388	<100	660	18	22.0	1.2	43	7	10	<5	6
395	<100	70	3	1.7	0.5	101	2	8	<5	18
*Dup 395	<100	50	2	1.4	<0.5	105	2	6	<5	15
396	<100	90	4	2.3	0.8	112	3	11	<5	9
397	<100	320	5	5.7	0.7	114	3	8	<5	5
398	<100	150	8	7.3	1.3	500	5	12	11	8
404	<100	190	2	1.7	<0.5	564	2	5	<5	5
405	<100	290	4	3.0	0.7	355	3	11	<5	9
406	<100	10	<1	<0.5	<0.5	216	<1	<1	<5	26
407	<100	530	8	8.8	0.8	168	3	6	<5	6
408	<100	<10	1	0.8	<0.5	91	<1	4	<5	6
*Std MMISRM16	<100	810	4	1.5	1.4	4	7	5	<5	32
*Std MMISRM16	<100	650	3	1.0	1.2	2	5	5	<5	34
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

Element	Mo	Nb	Nd	Ni	Pb	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	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
84	<5	3.3	2	44	180	<1	<1	<1	136	<1
*Dup 84	<5	4.8	3	45	150	<1	<1	<1	106	<1
97	10	54.9	5	24	90	<1	1	<1	18	7
98	6	17.9	7	56	50	<1	2	<1	26	<1
121	14	40.7	11	39	90	<1	3	<1	60	9
122	23	46.7	17	49	90	<1	4	<1	60	3
123	11	29.8	33	39	90	<1	7	<1	52	1
124	17	16.6	5	13	50	<1	1	<1	22	1
133	9	19.8	77	100	2420	<1	19	<1	169	7
145	7	9.4	419	27	370	<1	86	<1	261	4
146	14	43.2	12	31	100	<1	3	<1	23	3
147	7	3.2	81	24	300	<1	19	<1	27	1
148	16	54.6	17	30	80	<1	4	<1	23	5
150	6	14.5	32	36	200	<1	6	<1	<5	1
*Dup 150	<5	11.9	34	33	160	<1	7	<1	<5	<1
157	<5	1.1	15	37	600	<1	4	<1	55	2
173	10	38.1	5	36	50	<1	1	<1	28	2
174	6	36.2	7	28	70	<1	2	<1	7	2
175	12	42.5	12	27	70	<1	3	<1	18	1
183	<5	0.5	6	109	4170	<1	1	<1	62	<1
	9	19.0	54	77	110	<1	12	<1	78	2
197	<5	0.7	9	117	3770	<1	2	<1	18	<1
198	13	48.6	3	18	70	<1	<1	<1	7	5
199	<5	<0.5	1	17	<10	<1	<1	<1	<5	<1
200	<5	9.1	1	24	10	<1	<1	<1	11	<1
208	10	33.5	331	48	600	<1	76	<1	83	3
221	7	17.5	13	75	130	<1	3	<1	56	2
*Dup 221	8	21.0	16	76	140	<1	4	<1	53	2
222	10	16.2	62	183	250	<1	13	<1	151	5
223	18	3.2	19	49	100	<1	4	<1	43	<1
247	<5	<0.5	2	146	3120	<1	<1	<1	40	<1
248	<5	2.5	11	14	70	<1	3	<1	9	<1
249	6	26.9	28	35	250	<1	6	<1	13	1
271	20	24.3	14	31	150	<1	3	<1	16	2
272	16	62.3	6	41	90	<1	1	<1	22	3
294	27	153	28	38	160	<1	7	<1	67	4
332(C)	37	<0.5	1	81	40	<1	<1	<1	8	<1
348	22	32.0	47	63	220	<1	10	<1	64	5
349	8	6.6	4	25	600	<1	<1	<1	13	<1
350	<5	<0.5	<1	20	<10	<1	<1	<1	6	<1
*Dup 350	<5	0.8	<1	25	20	<1	<1	<1	7	<1
350C	15	53.4	7	38	120	<1	2	<1	13	3
351	18	58.7	7	51	140	<1	2	<1	27	4
374	7	18.2	11	52	80	<1	2	<1	13	<1
375	<5	13.3	8	43	1040	<1	2	<1	30	<1
376	5	17.2	8	33	30	<1	2	<1	29	<1
377	<5	17.0	6	36	80	<1	1	<1	28	<1
384	11	43.4	23	25	50	<1	6	<1	43	2

Element	Mo	Nb	Nd	Ni	Pb	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	0.5	1	5	10	1	1	1	5	1
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
385	<5	8.8	19	48	120	<1	4	<1	57	<1
386	<5	2.6	4	35	980	<1	<1	<1	7	<1
387	8	14.4	40	66	160	<1	10	<1	60	1
388	<5	1.5	15	50	550	<1	3	<1	30	<1
395	<5	3.5	9	40	410	<1	2	<1	22	<1
*Dup 395	<5	8.9	6	29	310	<1	2	<1	27	<1
396	<5	18.7	13	21	70	<1	3	<1	37	<1
397	<5	8.5	9	32	240	<1	2	<1	29	<1
398	330	60.1	15	44	320	<1	3	<1	69	2
404	18	70.0	6	17	80	<1	1	<1	14	2
405	13	60.4	10	36	80	<1	2	<1	32	2
406	<5	<0.5	<1	16	<10	<1	<1	<1	6	<1
407	6	13.1	8	56	280	<1	2	<1	26	<1
408	<5	2.1	4	17	130	<1	<1	<1	29	<1
*Std MMISRM16	63	<0.5	20	356	150	34	3	<1	372	<1
*Std MMISRM16	59	<0.5	17	228	80	28	3	<1	363	<1
*Blk 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

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
84	12	<1	2	200	<1	<1	<10	3.8	924	<0.5
*Dup 84	13	<1	3	180	<1	<1	<10	4.1	2010	<0.5
97	22	1	16	90	4	<1	<10	14.4	35100	<0.5
98	28	2	4	90	1	<1	<10	10.3	15400	<0.5
121	39	3	12	80	3	<1	<10	33.1	24100	<0.5
122	41	4	13	60	3	<1	<10	16.7	41400	0.5
123	76	10	6	20	2	2	<10	12.7	28100	<0.5
124	19	<1	4	60	<1	<1	<10	7.2	13500	<0.5
133	25	23	8	50	2	5	<10	200	5480	1.2
145	159	115	2	50	<1	23	<10	50.9	6440	1.5
146	44	2	11	90	3	<1	<10	13.9	36200	<0.5
147	39	20	1	20	<1	4	<10	7.4	2650	<0.5
148	50	5	12	40	3	<1	<10	25.2	46500	<0.5
150	22	9	4	270	1	4	<10	8.5	14700	<0.5
*Dup 150	21	10	3	380	<1	4	<10	5.9	10600	<0.5
157	<5	3	4	160	<1	<1	<10	13.4	275	<0.5
173	32	1	7	70	2	<1	<10	8.7	28900	<0.5
174	30	2	8	90	2	<1	<10	9.9	28900	<0.5
175	39	3	9	40	3	<1	<10	14.7	35100	<0.5
183	<5	1	<1	230	<1	<1	<10	2.2	271	<0.5
	99	16	4	50	1	4	<10	21.7	19800	<0.5
197	9	2	<1	180	<1	<1	<10	5.1	273	<0.5
198	27	<1	12	80	3	<1	<10	9.2	40500	<0.5
199	<5	<1	<1	30	<1	<1	<10	1.8	149	<0.5
200	17	<1	2	40	<1	<1	<10	3.6	8060	<0.5
208	91	99	12	30	3	20	<10	255	18800	1.1
221	45	4	4	40	1	1	<10	14.5	15200	<0.5
*Dup 221	44	5	5	40	1	1	<10	18.3	17400	<0.5
222	95	19	4	180	1	4	<10	39.8	13500	0.6
223	72	7	<1	50	<1	2	<10	6.0	2700	<0.5
247	<5	<1	<1	150	<1	<1	<10	2.6	69	<0.5
248	39	3	<1	20	<1	<1	<10	1.5	2120	<0.5
249	39	7	6	90	2	2	<10	7.7	21400	<0.5
271	21	3	6	120	2	<1	<10	6.6	21000	<0.5
272	34	1	14	80	4	<1	<10	9.5	56000	<0.5
294	58	7	32	40	10	1	<10	19.1	123373	<0.5
332(C)	<5	<1	<1	540	<1	<1	<10	<0.5	88	0.6
348	120	13	7	50	2	4	<10	24.5	26600	0.5
349	6	1	2	70	<1	<1	<10	8.0	2710	<0.5
350	<5	<1	<1	110	<1	<1	<10	1.6	170	<0.5
*Dup 350	<5	<1	<1	100	<1	<1	<10	2.4	290	<0.5
350C	56	2	13	100	3	<1	<10	22.3	42400	<0.5
351	59	2	14	60	4	<1	<10	14.2	52100	<0.5
374	19	4	5	270	1	2	<10	4.3	15100	<0.5
375	36	2	4	140	<1	<1	<10	17.1	5350	<0.5
376	17	2	5	80	1	<1	<10	6.6	12200	<0.5
377	31	2	6	60	1	<1	<10	9.8	11600	<0.5
384	45	6	9	40	3	1	<10	26.8	32600	<0.5

Element	Sc	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	5	1	1	10	1	1	10	0.5	3	0.5
Units	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
385	46	5	2	90	<1	1	<10	17.3	6940	<0.5
386	28	1	1	110	<1	<1	<10	3.3	2720	<0.5
387	34	9	5	250	<1	2	<10	14.2	11900	<0.5
388	45	4	<1	70	<1	2	<10	3.8	1280	<0.5
395	19	2	<1	160	<1	<1	<10	7.6	2120	<0.5
*Dup 395	28	1	2	140	<1	<1	<10	8.9	5240	<0.5
396	25	3	6	60	1	<1	<10	13.9	10600	<0.5
397	25	2	2	40	<1	<1	<10	6.7	8830	<0.5
398	39	4	13	150	4	1	<10	29.3	43900	0.6
404	20	1	14	70	4	<1	<10	9.1	53700	<0.5
405	27	3	13	100	4	<1	<10	10.4	57300	<0.5
406	14	<1	<1	260	<1	<1	<10	0.9	316	<0.5
407	32	2	4	90	<1	<1	<10	3.6	19000	<0.5
408	<5	<1	<1	90	<1	<1	<10	13.5	326	<0.5
*Std MMISRM16	8	6	<1	440	<1	<1	<10	31.5	7	<0.5
*Std MMISRM16	5	5	<1	490	<1	<1	<10	23.7	8	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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
84	1	<1	<5	<1	210	7
*Dup 84	2	2	<5	<1	190	15
97	5	5	7	2	170	66
98	7	2	14	5	200	62
121	7	5	20	5	110	86
122	15	5	25	4	140	141
123	9	3	80	11	220	97
124	7	2	10	2	150	61
133	61	3	112	14	370	40
145	25	3	870	79	240	66
146	6	5	24	5	200	153
147	12	<1	143	13	130	25
148	8	4	22	5	140	176
150	2	1	283	17	530	49
*Dup 150	2	1	294	15	570	40
157	2	<1	18	1	770	5
173	3	3	12	3	360	105
174	4	2	13	3	150	107
175	10	3	26	4	180	108
183	<1	<1	5	<1	1590	<5
[illegible]	14	3	130	16	260	144
[illegible]7	2	<1	19	2	850	9
198	3	5	8	2	100	127
199	<1	<1	6	2	80	<5
200	2	<1	<5	2	40	22
208	72	7	513	50	210	131
221	9	2	34	6	220	61
*Dup 221	11	2	38	6	250	70
222	22	2	135	20	1260	119
223	15	<1	98	13	130	36
247	1	<1	<5	<1	1280	<5
248	3	<1	23	7	140	15
249	3	5	48	4	250	78
271	4	2	24	3	270	65
272	4	5	12	3	130	127
294	9	15	37	5	250	165
332(C)	142	<1	<5	<1	460	<5
348	30	5	184	35	460	128
349	3	<1	17	2	410	11
350	<1	<1	<5	<1	100	<5
*Dup 350	<1	<1	<5	<1	160	<5
350C	6	5	14	4	160	115
351	5	5	35	7	210	125
374	4	2	113	11	1150	40
375	4	2	17	3	900	28
376	6	2	19	6	120	35
377	4	2	20	3	380	36
384	12	5	27	4	130	115

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
385	15	1	56	13	500	48
386	2	<1	12	6	410	21
387	8	2	104	14	310	42
388	2	<1	104	21	550	12
395	3	<1	16	1	1000	24
*Dup 395	5	<1	12	1	920	39
396	5	1	19	2	610	42
397	5	<1	28	6	480	27
398	51	5	41	7	420	132
404	4	7	10	2	110	116
405	8	5	20	3	230	134
406	<1	<1	<5	<1	240	13
407	3	2	50	8	490	34
408	3	<1	5	1	450	7
*Std MMISRM16	70	<1	15	1	220	22
*Std MMISRM16	52	<1	10	<1	240	20
*Blk BLANK	<1	<1	<5	<1	<20	<5
*Blk BLANK	<1	<1	<5	<1	<20	<5

ACME ANALYTICAL LABORATORIES LTD.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Logan Resources Ltd.**
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Submitted By: Daithi Macgearailt
Receiving Lab: Canada-Vancouver
Received: May 28, 2008
Report Date: July 02, 2008
Page: 1 of 2

CERTIFICATE OF ANALYSIS VAN08006115.2

CLIENT JOB INFORMATION

Project: REDFORD
Shipment ID:
P.O. Number
Number of Samples: 28

SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage
DISP-RJT Dispose of Reject After 90 days

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

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
R150	28	Crush, split and pulverize rock to 150 mesh		
3B	28	Fire assay fusion Au by ICP-ES	30	Completed
1D	28	1:1:1 Aqua Regia digestion ICP-ES analysis	0.5	Completed
G6	4	Ag Au by fire assay	30	Completed
7AR	4	1:1:1 Aqua Regia digestion ICP-ES analysis	1	Completed

ADDITIONAL COMMENTS

Version 2 to include Group 6 and 7AR

Invoice To: Logan Resources Ltd.
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1
Canada

CC: Judith T. Mazvihwa
Rita Chow

BRITISH COLUMBIA CERTIFIED ASSAYER
Raymond Chan

ACME ANALYTICAL LABORATORIES LTD.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Logan Resources Ltd.**
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Project: REDFORD
Report Date: July 02, 2008

CERTIFICATE OF ANALYSIS VAN08006115.2

	Method	3B	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	2	1	1	3	1	0.3	1	1	2	0.01	2	8	2	2	1	0.5	3	3	1	0.01
830301	Rock	<2	1	6	<3	41	<0.3	8	7	647	2.74	2	<8	<2	<2	9	<0.5	<3	<3	24	0.20
830302	Rock	<2	<1	37	77	121	0.4	7	7	1065	2.41	2	<8	<2	<2	14	<0.5	<3	4	23	0.19
830303	Rock	<2	<1	6	10	187	<0.3	6	9	1491	4.04	<2	9	<2	3	13	<0.5	<3	7	44	0.60
830304	Rock	4	2	5	<3	15	<0.3	29	5	128	1.20	18	31	<2	<2	114	<0.5	<3	7	12	1.41
830305	Rock	2	2	34	<3	54	<0.3	7	10	358	2.93	3	<8	<2	4	18	<0.5	5	8	96	0.37
830306	Rock	<2	<1	16	11	73	<0.3	5	10	463	3.25	4	<8	<2	4	36	0.5	<3	5	92	0.30
830307	Rock	<2	1	72	<3	71	<0.3	5	9	744	4.43	6	<8	<2	5	24	<0.5	7	7	81	0.54
830308	Rock	<2	1	79	<3	45	<0.3	9	12	493	3.45	<2	<8	<2	4	47	<0.5	3	9	84	1.00
830309	Rock	<2	<1	3	<3	28	<0.3	162	20	441	2.84	<2	<8	<2	<2	19	<0.5	8	6	58	1.31
830310	Rock	>10000	1	>10000	6	340	49.2	6	96	989	25.62	17	<8	5	<2	185	5.7	<3	9	11	20.46
830311	Rock	10	1	64	<3	6878	<0.3	3	10	1146	3.82	177	<8	<2	<2	113	32.4	<3	<3	46	1.12
830312	Rock	11	1	151	<3	71	<0.3	320	55	218	5.47	3	<8	<2	<2	48	<0.5	<3	<3	68	1.84
830313	Rock	6539	<1	>10000	<3	220	23.0	1	27	844	11.77	17	<8	11	<2	320	2.8	<3	<3	10	30.78
830314	Rock	>10000	1	>10000	<3	433	>100	8	113	806	35.70	39	<8	27	4	83	6.6	<3	6	17	9.81
830315	Rock	>10000	<1	>10000	<3	350	49.8	4	68	1012	21.21	12	<8	12	<2	228	4.8	<3	7	11	24.05
830316	Rock	68	<1	239	<3	35	<0.3	167	26	399	3.96	<2	<8	<2	<2	47	<0.5	<3	<3	73	1.48
830317	Rock	12	1	87	<3	62	<0.3	10	8	1116	2.52	5	<8	<2	<2	141	<0.5	<3	4	40	2.50
830318	Rock	379	2	65	524	198	9.5	5	4	1049	2.60	5827	<8	<2	4	78	1.0	15	41	3	2.85
830319	Rock	2	2	43	8	27	<0.3	11	6	83	1.70	19	15	<2	4	10	0.6	<3	5	15	0.03
830320	Rock	3	1	131	6	73	<0.3	152	30	818	8.35	28	<8	2	<2	44	0.5	5	<3	151	0.87
830321	Rock	<2	2	18	7	94	<0.3	11	4	2459	10.03	<2	<8	<2	5	41	<0.5	<3	<3	11	0.81
830322	Rock	46	1	21	20	32	0.4	4	2	104	0.97	102	<8	<2	12	2	<0.5	<3	<3	4	0.02
830323	Rock	6	2	18	13	140	<0.3	8	20	557	5.91	4	<8	<2	3	6	2.2	<3	21	93	1.20
830324	Rock	<2	2	8	14	78	<0.3	4	11	379	5.23	6	<8	<2	3	8	1.0	<3	12	88	1.04
830325	Rock	5	<1	24	82	313	<0.3	10	12	472	5.82	<2	<8	<2	<2	3	2.1	<3	<3	39	0.15
830326	Rock	<2	2	24	<3	135	<0.3	3	5	1384	4.16	<2	<8	<2	<2	11	<0.5	<3	<3	14	0.49
830327	Rock	<2	1	7	4	28	<0.3	1	2	288	1.27	<2	<8	<2	4	10	<0.5	<3	<3	9	0.52
830328	Rock	5	2	16	13	105	<0.3	8	19	558	5.73	3	<8	<2	<2	8	0.8	<3	18	101	1.35

ACME ANALYTICAL LABORATORIES LTD.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Logan Resources Ltd.**
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Project: REDFORD
Report Date: July 02, 2008

CERTIFICATE OF ANALYSIS VAN08006115.2

Method		1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	G6	G6	7AR
Analyte		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Ag	Au	Cu
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	GM/T	GM/T	%
MDL		0.001	1	1	0.01	1	0.01	20	0.01	0.01	0.01	2	2	0.01	0.001
830301	Rock	0.042	7	8	0.90	53	0.12	<20	1.38	0.07	0.12	<2	N.A.	N.A.	N.A.
830302	Rock	0.035	4	4	0.74	36	0.12	<20	1.32	0.05	0.11	<2	N.A.	N.A.	N.A.
830303	Rock	0.061	3	4	1.11	60	0.08	<20	2.32	0.17	0.13	<2	N.A.	N.A.	N.A.
830304	Rock	0.054	2	4	0.25	6	0.02	<20	1.97	0.20	0.03	<2	N.A.	N.A.	N.A.
830305	Rock	0.049	6	11	0.85	130	0.24	<20	1.28	0.12	0.70	6	N.A.	N.A.	N.A.
830306	Rock	0.048	6	11	0.75	29	0.18	<20	2.11	0.06	0.12	2	N.A.	N.A.	N.A.
830307	Rock	0.045	4	11	1.18	54	0.11	<20	2.15	0.12	0.17	2	N.A.	N.A.	N.A.
830308	Rock	0.068	3	10	0.97	22	0.13	<20	2.30	0.23	0.08	2	N.A.	N.A.	N.A.
830309	Rock	0.019	<1	390	2.78	10	0.09	<20	3.26	0.07	0.02	<2	N.A.	N.A.	N.A.
830310	Rock	0.003	<1	<1	0.18	4	<0.01	<20	0.08	<0.01	<0.01	<2	45	16.19	5.525
830311	Rock	0.050	2	5	0.83	74	0.10	<20	2.79	0.21	0.79	<2	N.A.	N.A.	N.A.
830312	Rock	0.065	4	153	0.60	35	0.11	<20	3.42	0.45	0.17	<2	N.A.	N.A.	N.A.
830313	Rock	0.004	<1	<1	0.16	4	<0.01	<20	0.08	<0.01	<0.01	<2	15	7.61	2.368
830314	Rock	0.004	<1	<1	0.08	3	<0.01	<20	0.10	<0.01	<0.01	<2	81	32.96	>10
830315	Rock	0.002	<1	<1	0.11	3	<0.01	<20	0.03	<0.01	<0.01	<2	62	17.14	5.308
830316	Rock	0.021	<1	169	2.29	9	0.11	<20	3.57	0.18	0.06	2	N.A.	N.A.	N.A.
830317	Rock	0.117	2	14	1.04	10	0.11	<20	2.23	0.17	0.06	<2	N.A.	N.A.	N.A.
830318	Rock	0.026	3	5	0.08	106	<0.01	<20	0.34	0.02	0.26	<2	N.A.	N.A.	N.A.
830319	Rock	0.013	24	13	0.34	86	<0.01	<20	2.14	0.06	0.17	<2	N.A.	N.A.	N.A.
830320	Rock	0.055	1	224	1.76	29	0.18	<20	4.55	0.26	0.03	<2	N.A.	N.A.	N.A.
830321	Rock	0.008	4	12	1.69	12	0.01	<20	5.70	0.17	0.02	<2	N.A.	N.A.	N.A.
830322	Rock	0.009	15	5	0.03	15	<0.01	<20	0.35	0.04	0.17	<2	N.A.	N.A.	N.A.
830323	Rock	0.076	4	10	1.53	30	0.22	<20	2.27	0.03	0.20	3	N.A.	N.A.	N.A.
830324	Rock	0.075	3	6	1.04	37	0.22	<20	2.08	0.02	0.19	3	N.A.	N.A.	N.A.
830325	Rock	0.068	2	2	1.87	58	0.02	<20	2.50	<0.01	0.30	<2	N.A.	N.A.	N.A.
830326	Rock	0.111	3	<1	0.94	47	0.10	<20	1.85	0.07	0.17	<2	N.A.	N.A.	N.A.
830327	Rock	0.021	5	5	0.30	28	0.05	<20	0.64	0.06	0.16	<2	N.A.	N.A.	N.A.
830328	Rock	0.082	4	9	1.48	35	0.23	<20	2.28	0.03	0.24	3	N.A.	N.A.	N.A.

ACME ANALYTICAL LABORATORIES LTD.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Logan Resources Ltd.**
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Project: REDFORD
Report Date: July 02, 2008

QUALITY CONTROL REPORT VAN08006115.2

	Method	3B	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	2	1	1	3	1	0.3	1	1	2	0.01	2	8	2	2	1	0.5	3	3	1	0.01
830315	Rock	>10000	<1	>10000	<3	350	49.8	4	68	1012	21.21	12	<8	12	<2	228	4.8	<3	7	11	24.05
Pulp Duplicates																					
830301	Rock	<2	1	6	<3	41	<0.3	8	7	647	2.74	2	<8	<2	3	9	<0.5	<3	<3	24	0.20
REP 830301	QC	<2																			
830314	Rock	>10000	1	>10000	<3	433	>100	8	113	806	35.70	39	<8	27	4	83	6.6	<3	6	17	9.81
REP 830314	QC																				
830316	Rock	68	<1	239	<3	35	<0.3	167	26	399	3.96	<2	<8	<2	<2	47	<0.5	<3	<3	73	1.48
REP 830316	QC	33																			
830327	Rock	<2	1	7	4	28	<0.3	1	2	288	1.27	<2	<8	<2	4	10	<0.5	<3	<3	9	0.52
REP 830327	QC		1	7	5	29	<0.3	2	2	293	1.30	<2	<8	<2	6	11	<0.5	<3	<3	10	0.54
Reference Materials																					
STD DS7	Standard		19	97	62	381	1.1	49	8	597	2.23	47	<8	<2	4	61	5.4	5	<3	71	0.87
STD DS7	Standard		17	95	63	386	0.9	48	8	587	2.20	52	9	<2	3	61	5.5	6	<3	74	0.83
STD DS7	Standard		21	121	61	415	<0.3	48	8	597	2.23	50	10	<2	5	62	5.3	9	5	76	0.82
STD DS7	Standard		19	123	65	437	<0.3	49	8	630	2.36	47	<8	<2	6	62	5.8	10	8	79	0.90
STD OXD57	Standard	412																			
STD OXD57	Standard	408																			
STD OXD57	Standard	414																			
STD OXD57	Standard	400																			
STD OXD57	Standard	403																			
STD OXD57	Standard	402																			
STD R3A	Standard																				
STD R3A	Standard																				
STD S1	Standard																				
STD DS7 Expected			20.92	109	70.6	411	0.89	56	9.7	627	2.39	48.2	4.9	0.07	4.4	68.7	6.38	5.86	4.51	86	0.93
STD OXD57 Expected		413																			
STD S1 Expected																					
STD R3A Expected																					
BLK	Blank		<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<8	<2	<2	<1	<0.5	<3	<3	<1	<0.01

ACME ANALYTICAL LABORATORIES LTD.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Logan Resources Ltd.**
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Project: REDFORD
Report Date: July 02, 2008

QUALITY CONTROL REPORT VAN08006115.2

	Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	G6	G6	7AR
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Ag	Au	Cu
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	GM/T	GM/T	%
	MDL	0.001	1	1	0.01	1	0.01	20	0.01	0.01	0.01	2	2	0.01	0.001
830315	Rock	0.002	<1	<1	0.11	3	<0.01	<20	0.03	<0.01	<0.01	<2	62	17.14	5.308
Pulp Duplicates															
830301	Rock	0.042	7	8	0.90	53	0.12	<20	1.38	0.07	0.12	<2	N.A.	N.A.	N.A.
REP 830301	QC														
830314	Rock	0.004	<1	<1	0.08	3	<0.01	<20	0.10	<0.01	<0.01	<2	81	32.96	>10
REP 830314	QC												92	36.05	
830316	Rock	0.021	<1	169	2.29	9	0.11	<20	3.57	0.18	0.06	2	N.A.	N.A.	N.A.
REP 830316	QC														
830327	Rock	0.021	5	5	0.30	28	0.05	<20	0.64	0.06	0.16	<2	N.A.	N.A.	N.A.
REP 830327	QC	0.022	6	5	0.31	29	0.05	<20	0.65	0.06	0.16	<2			
Reference Materials															
STD DS7	Standard	0.068	10	165	1.00	382	0.10	32	0.92	0.07	0.43	4			
STD DS7	Standard	0.067	9	162	0.99	381	0.10	30	0.88	0.07	0.42	4			
STD DS7	Standard	0.068	10	177	1.02	395	0.11	37	0.96	0.08	0.44	6			
STD DS7	Standard	0.071	10	171	1.08	405	0.11	38	0.94	0.07	0.45	5			
STD OXD57	Standard														
STD OXD57	Standard														
STD OXD57	Standard														
STD OXD57	Standard														
STD OXD57	Standard														
STD OXD57	Standard														
STD R3A	Standard														0.791
STD R3A	Standard														0.781
STD S1	Standard												23	5.08	
STD DS7 Expected		0.08	12.7	163	1.05	370.3	0.124	38.6	0.959	0.073	0.44	3.8			
STD OXD57 Expected															
STD S1 Expected													20.9	4.96	
STD R3A Expected															0.811
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.01	<20	<0.01	<0.01	<0.01	<2			

ACME ANALYTICAL LABORATORIES LTD.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Logan Resources Ltd.**
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Project: REDFORD
Report Date: July 02, 2008

QUALITY CONTROL REPORT VAN08006115.2

		3B Au ppb 2	1D Mo ppm 1	1D Cu ppm 1	1D Pb ppm 3	1D Zn ppm 1	1D Ag ppm 0.3	1D Ni ppm 1	1D Co ppm 1	1D Mn ppm 2	1D Fe % 0.01	1D As ppm 2	1D U ppm 8	1D Au ppm 2	1D Th ppm 2	1D Sr ppm 1	1D Cd ppm 0.5	1D Sb ppm 3	1D Bi ppm 3	1D V ppm 1	1D Ca % 0.01
BLK	Blank	13																			
BLK	Blank	<2																			
BLK	Blank	<2																			
BLK	Blank	<2																			
BLK	Blank		<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<8	<2	<2	<1	<0.5	<3	<3	<1	<0.01
BLK	Blank	<2																			
BLK	Blank	<2																			
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
G1	Prep Blank	<2	<1	6	<3	43	<0.3	22	6	552	2.05	<2	<8	<2	3	70	<0.5	<3	4	37	0.50
G1	Prep Blank	<2	<1	4	<3	41	<0.3	15	5	537	1.90	<2	<8	<2	3	69	<0.5	<3	4	36	0.51

ACME ANALYTICAL LABORATORIES LTD.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Logan Resources Ltd.**
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Project: REDFORD
Report Date: July 02, 2008

QUALITY CONTROL REPORT VAN08006115.2

		1D P % 0.001	1D La ppm 1	1D Cr ppm 1	1D Mg % 0.01	1D Ba ppm 1	1D Ti % 0.01	1D B ppm 20	1D Al % 0.01	1D Na % 0.01	1D K % 0.01	1D W ppm 2	G6 Ag GM/T 2	G6 Au GM/T 0.01	7AR Cu % 0.001
BLK	Blank														
BLK	Blank														
BLK	Blank														
BLK	Blank														
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.01	<20	<0.01	<0.01	<0.01	<2			
BLK	Blank														
BLK	Blank														
BLK	Blank												<2	<0.01	
BLK	Blank														<0.001
Prep Wash															
G1	Prep Blank	0.076	6	11	0.62	267	0.13	<20	1.05	0.11	0.62	<2	N.A.	N.A.	N.A.
G1	Prep Blank	0.073	5	8	0.60	259	0.13	<20	1.07	0.12	0.60	<2	N.A.	N.A.	N.A.

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Logan Resources Ltd.**
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Submitted By:	Judith T. Mazvihwa
Receiving Lab:	Acme Analytical Laboratories (Vancouver) Ltd.
Received:	June 04, 2008
Report Date:	June 13, 2008
Page:	1 of 3

CERTIFICATE OF ANALYSIS VAN08006280.1

CLIENT JOB INFORMATION

Project:	None Given
Shipment ID:	
P.O. Number	
Number of Samples:	40

SAMPLE DISPOSAL

DISP-PLP	Dispose of Pulp After 90 days
DISP-RJT	Dispose of Reject After 90 days

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

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
R150	40	Crush, split and pulverize rock to 150 mesh		
DIS-RJT	40	Warehouse handling / Disposition of reject		
3B	40	Fire assay fusion Au by ICP-ES	30	Completed
1D	40	1:1:1 Aqua Regia digestion ICP-ES analysis	0.5	Completed

ADDITIONAL COMMENTS

Invoice To: Logan Resources Ltd.
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1
Canada

CC: Daithi Macgearailt

BRITISH COLUMBIA CERTIFIED ASSAYER
Raymond Chan

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Logan Resources Ltd.**
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Project: None Given
Report Date: June 13, 2008

CERTIFICATE OF ANALYSIS VAN08006280.1

	Method	WGHT	3B	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V
	Unit	kg	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	MDL	0.01	2	1	1	3	1	0.3	1	1	2	0.01	2	8	2	2	1	0.5	3	3	1
830331	Rock	1.36	<2	<1	8	5	19	<0.3	2	5	457	1.56	5	<8	<2	4	44	<0.5	<3	<3	15
830332	Rock	1.72	<2	<1	4	7	21	<0.3	1	1	103	0.92	35	<8	<2	5	6	<0.5	<3	<3	4
830333	Rock	1.92	<2	<1	76	<3	65	<0.3	13	22	844	4.65	<2	<8	<2	<2	37	<0.5	<3	<3	122
830334	Rock	1.83	<2	<1	3	18	26	<0.3	2	1	118	1.13	<2	<8	<2	4	6	<0.5	<3	<3	<1
830335	Rock	2.36	3	<1	80	<3	62	<0.3	9	19	760	4.92	<2	<8	<2	<2	90	<0.5	<3	4	145
830336	Rock	2.35	<2	<1	19	<3	55	<0.3	16	13	699	2.95	4	<8	<2	2	36	<0.5	<3	<3	13
830337	Rock	1.51	<2	<1	85	<3	82	<0.3	33	33	1239	6.29	15	<8	<2	3	13	<0.5	5	<3	136
830338	Rock	1.85	5	<1	64	<3	68	<0.3	11	20	1095	5.44	6	<8	<2	<2	23	0.7	<3	<3	60
830339	Rock	2.18	<2	31	343	<3	159	<0.3	43	24	817	5.91	<2	<8	<2	<2	79	0.7	<3	5	85
830340	Rock	1.79	<2	<1	208	<3	70	<0.3	13	18	571	3.39	<2	<8	<2	<2	57	0.5	<3	4	89
830341	Rock	1.32	2	<1	8	<3	30	<0.3	2	6	506	1.95	<2	<8	<2	3	58	<0.5	<3	5	16
830342	Rock	2.17	<2	<1	53	<3	77	<0.3	80	36	1599	6.40	<2	<8	<2	<2	19	<0.5	<3	5	160
830343	Rock	2.80	<2	1	36	<3	73	<0.3	4	18	1206	5.42	<2	<8	<2	<2	28	<0.5	<3	7	104
830344	Rock	3.06	<2	1	37	<3	80	<0.3	5	18	1032	5.33	<2	<8	<2	<2	16	<0.5	<3	6	123
830345	Rock	1.69	<2	<1	80	<3	56	<0.3	5	20	754	5.34	<2	<8	<2	<2	21	<0.5	<3	5	157
830346	Rock	1.27	571	<1	2	<3	12	<0.3	2	4	175	1.43	<2	<8	<2	4	7	<0.5	<3	3	7
830347	Rock	2.50	98	<1	1	<3	18	<0.3	1	4	274	1.38	<2	8	<2	4	5	<0.5	<3	<3	8
830348	Rock	2.59	1490	1	66	<3	80	<0.3	5	17	1116	5.56	<2	<8	<2	<2	11	<0.5	<3	<3	85
830349	Rock	2.71	151	<1	34	<3	8	<0.3	2	2	161	0.91	<2	<8	<2	3	7	<0.5	<3	<3	4
830350	Rock	1.93	17	<1	50	<3	111	<0.3	3	23	1520	7.46	<2	<8	<2	<2	13	<0.5	<3	6	156
830351	Rock	1.72	18	1	29	<3	92	<0.3	1	17	1108	5.83	<2	<8	<2	<2	17	<0.5	<3	<3	104
830352	Rock	1.95	2	1	50	<3	61	<0.3	8	23	1407	6.57	4	<8	<2	<2	14	<0.5	<3	10	197
830353	Rock	1.82	<2	1	72	<3	69	<0.3	18	19	1050	4.99	<2	<8	<2	<2	30	<0.5	<3	5	104
830354	Rock	2.64	4	<1	3	<3	18	<0.3	1	3	312	1.50	<2	8	<2	23	13	<0.5	<3	7	19
830355	Rock	2.33	13	<1	60	<3	72	<0.3	7	25	955	5.03	<2	<8	<2	<2	129	<0.5	<3	8	106
830356	Rock	2.16	<2	<1	47	<3	58	<0.3	14	23	846	4.38	<2	<8	<2	<2	61	<0.5	<3	6	121
830357	Rock	1.83	<2	<1	53	<3	80	<0.3	16	29	1549	6.94	<2	<8	<2	<2	15	<0.5	<3	5	187
830358	Rock	2.05	<2	<1	48	<3	74	<0.3	6	21	895	5.04	<2	<8	<2	<2	25	<0.5	<3	6	111
830359	Rock	2.09	<2	<1	16	<3	86	<0.3	5	27	879	5.98	<2	<8	<2	<2	25	<0.5	<3	9	63
830360	Rock	3.71	2	<1	63	<3	55	0.6	5	19	908	5.71	<2	<8	<2	<2	24	1.0	<3	4	192

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Logan Resources Ltd.**
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Project: None Given
Report Date: June 13, 2008

CERTIFICATE OF ANALYSIS VAN08006280.1

		Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
		Analyte	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W
		Unit	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm
		MDL	0.01	0.001	1	1	0.01	1	0.01	20	0.01	0.01	0.01	2
830331	Rock		2.98	0.019	3	5	0.36	140	<0.01	<20	0.77	0.02	0.22	<2
830332	Rock		0.09	0.007	17	2	0.04	62	<0.01	<20	0.44	0.04	0.21	<2
830333	Rock		1.94	0.053	2	32	1.90	33	0.16	<20	2.97	0.08	0.11	<2
830334	Rock		0.07	0.010	10	2	0.02	44	<0.01	<20	0.27	0.04	0.18	<2
830335	Rock		2.00	0.051	2	23	1.54	78	0.08	<20	3.67	0.23	0.12	2
830336	Rock		2.98	0.075	11	12	0.67	35	<0.01	<20	0.44	<0.01	0.15	<2
830337	Rock		0.33	0.064	9	37	0.09	58	<0.01	<20	1.19	0.02	0.11	<2
830338	Rock		3.09	0.083	6	5	0.22	26	<0.01	<20	0.65	<0.01	0.11	<2
830339	Rock		0.79	0.033	2	63	2.58	8	0.15	<20	2.94	<0.01	<0.01	3
830340	Rock		1.00	0.062	3	16	1.62	32	0.11	<20	2.54	0.17	0.06	<2
830341	Rock		0.96	0.061	7	4	0.63	20	0.09	<20	1.18	0.06	0.05	<2
830342	Rock		0.74	0.052	3	176	4.38	38	0.18	<20	4.29	0.04	0.02	<2
830343	Rock		2.27	0.129	5	9	1.43	29	0.20	<20	2.94	0.07	0.03	<2
830344	Rock		2.91	0.127	5	9	1.34	28	0.21	<20	3.16	0.06	0.04	<2
830345	Rock		1.32	0.143	4	2	1.17	36	0.18	<20	1.74	0.09	0.08	<2
830346	Rock		0.20	0.038	5	4	0.20	105	0.04	<20	0.53	0.02	0.16	<2
830347	Rock		0.31	0.038	3	3	0.31	46	0.04	<20	0.61	0.02	0.13	<2
830348	Rock		0.47	0.094	6	3	1.33	61	0.17	<20	2.21	0.04	0.12	<2
830349	Rock		0.43	0.021	3	6	0.15	33	0.02	<20	0.33	0.02	0.10	<2
830350	Rock		0.45	0.116	4	3	2.24	26	0.18	<20	3.32	0.05	0.08	<2
830351	Rock		0.35	0.089	5	4	1.61	21	0.13	<20	2.54	0.04	0.07	<2
830352	Rock		0.88	0.104	4	16	2.17	18	0.21	<20	2.98	0.07	0.04	<2
830353	Rock		1.04	0.134	4	31	1.94	31	0.18	<20	2.64	0.09	0.04	<2
830354	Rock		2.03	0.010	9	3	0.29	35	0.03	<20	2.05	0.07	0.08	<2
830355	Rock		0.91	0.102	4	14	2.21	16	0.22	<20	2.85	0.02	0.05	<2
830356	Rock		1.08	0.081	2	8	2.19	107	0.15	<20	2.85	0.19	0.06	<2
830357	Rock		1.43	0.052	3	53	3.26	69	0.18	<20	4.05	0.05	0.11	<2
830358	Rock		0.96	0.064	3	5	1.61	28	0.19	<20	2.43	0.07	0.06	<2
830359	Rock		1.71	0.103	7	16	2.48	20	0.19	<20	3.19	0.08	0.03	<2
830360	Rock		1.36	0.153	5	3	1.33	23	0.18	<20	1.97	0.10	0.07	<2

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Logan Resources Ltd.**
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Project: None Given
Report Date: June 13, 2008

CERTIFICATE OF ANALYSIS VAN08006280.1

	Method	WGHT	3B	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V
	Unit	kg	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	MDL	0.01	2	1	1	3	1	0.3	1	1	2	0.01	2	8	2	2	1	0.5	3	3	1
830361	Rock	2.25	<2	<1	51	<3	79	0.4	7	23	1120	5.83	<2	<8	<2	<2	30	1.2	<3	<3	160
830362	Rock	2.56	<2	<1	17	<3	86	0.5	5	28	1066	6.10	4	<8	<2	<2	86	1.6	<3	7	112
830363	Rock	2.48	2	<1	28	4	42	<0.3	56	18	823	3.91	<2	<8	<2	<2	38	0.8	<3	<3	100
830364	Rock	4.07	31	<1	144	6	211	0.7	19	63	2544	17.52	108	22	4	<2	134	3.5	<3	8	33
830365	Rock	3.45	18	<1	31	14	61	<0.3	21	9	564	2.35	533	<8	<2	<2	269	<0.5	3	5	9
830366	Rock	2.49	<2	<1	5	14	49	<0.3	2	12	1052	36.30	28	57	7	3	26	8.4	<3	9	6
830367	Rock	2.70	13	<1	13	<3	53	<0.3	25	12	817	3.60	87	<8	<2	<2	64	0.7	4	3	68
830368	Rock	3.15	5	<1	28	8	61	0.4	47	13	545	3.04	25	<8	<2	2	55	0.8	<3	6	69
830369	Rock	1.90	<2	<1	5	13	203	0.3	9	99	1215	32.32	12	57	4	<2	8	5.6	<3	4	27
830370	Rock	2.26	31	<1	7	21	42	<0.3	<1	<1	1148	34.94	23	77	3	3	4	8.0	<3	67	7

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Logan Resources Ltd.**
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Project: None Given
Report Date: June 13, 2008

CERTIFICATE OF ANALYSIS VAN08006280.1

	Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
	Analyte	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W
	Unit	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm
	MDL	0.01	0.001	1	1	0.01	1	0.01	20	0.01	0.01	0.01	2
830361	Rock	1.78	0.064	4	10	2.20	21	0.22	<20	3.13	0.07	0.06	<2
830362	Rock	3.44	0.103	10	20	2.61	27	0.27	<20	4.14	0.26	0.02	<2
830363	Rock	1.64	0.127	4	157	2.27	37	0.16	<20	2.69	0.07	0.05	<2
830364	Rock	5.57	0.073	5	15	1.12	35	0.02	23	1.88	0.05	0.07	<2
830365	Rock	2.72	0.057	6	6	0.90	113	<0.01	<20	0.41	0.03	0.25	<2
830366	Rock	2.48	0.007	7	8	1.99	11	<0.01	<20	0.35	<0.01	0.01	<2
830367	Rock	3.63	0.220	8	39	1.97	60	0.11	<20	2.10	0.11	0.29	<2
830368	Rock	2.68	0.075	10	95	2.03	18	0.04	<20	2.15	0.06	0.12	<2
830369	Rock	1.19	0.147	8	23	0.24	7	0.04	<20	0.37	<0.01	<0.01	<2
830370	Rock	0.43	0.040	7	13	1.09	12	<0.01	<20	0.16	<0.01	0.03	<2

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Logan Resources Ltd.**
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Project: None Given
Report Date: June 13, 2008

QUALITY CONTROL REPORT VAN08006280.1

Method		WGHT	3B	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
Analyte		Wgt	Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V
Unit		kg	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MDL		0.01	2	1	1	3	1	0.3	1	1	2	0.01	2	8	2	2	1	0.5	3	3	1
Pulp Duplicates																					
830349	Rock	2.71	151	<1	34	<3	8	<0.3	2	2	161	0.91	<2	<8	<2	3	7	<0.5	<3	<3	4
REP 830349	QC			<1	32	<3	9	<0.3	2	2	161	0.88	<2	<8	<2	3	7	<0.5	<3	<3	4
830361	Rock	2.25	<2	<1	51	<3	79	0.4	7	23	1120	5.83	<2	<8	<2	<2	30	1.2	<3	<3	160
REP 830361	QC		<2																		
830370	Rock	2.26	31	<1	7	21	42	<0.3	<1	<1	1148	34.94	23	77	3	3	4	8.0	<3	67	7
REP 830370	QC		28																		
Reference Materials																					
STD DS7	Standard			20	101	66	418	1.2	54	9	614	2.38	51	<8	<2	3	68	6.2	3	11	87
STD DS7	Standard			19	99	69	416	1.3	51	8	582	2.27	49	12	<2	3	66	6.1	<3	4	80
STD DS7	Standard			19	103	64	403	1.0	52	9	598	2.37	49	11	<2	4	69	5.8	4	7	80
STD DS7	Standard			19	98	62	387	1.0	52	9	617	2.30	49	9	<2	5	71	5.7	5	8	80
STD OXD57	Standard		407																		
STD OXD57	Standard		405																		
STD OXD57	Standard		404																		
STD OXD57	Standard		400																		
STD OXD57	Standard		416																		
STD OXD57 Expected			413																		
STD DS7 Expected				20.92	109	70.6	411	0.89	56	9.7	627	2.39	48.2	4.9	0.07	4.4	68.7	6.38	5.86	4.51	86
BLK	Blank		<2																		
BLK	Blank		<2																		
BLK	Blank		<2																		
BLK	Blank		<2																		
BLK	Blank		<2																		
BLK	Blank			<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<8	<2	<2	<1	<0.5	<3	<3	<1
BLK	Blank			<1	<1	<3	<1	<0.3	<1	<1	<2	<0.01	<2	<8	<2	<2	<1	<0.5	<3	<3	<1
Prep Wash																					
G1	Prep Blank	<0.01	<2	<1	2	<3	44	<0.3	5	4	567	1.98	<2	<8	<2	3	64	<0.5	<3	<3	39
G1	Prep Blank	<0.01	<2	<1	2	<3	45	<0.3	5	5	565	2.02	<2	<8	<2	4	64	<0.5	<3	<3	40

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Logan Resources Ltd.**
1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Project: None Given
Report Date: June 13, 2008

QUALITY CONTROL REPORT VAN08006280.1

		Method	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D	1D
		Analyte	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W
		Unit	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm
		MDL	0.01	0.001	1	1	0.01	1	0.01	20	0.01	0.01	0.01	2
Pulp Duplicates														
830349	Rock		0.43	0.021	3	6	0.15	33	0.02	<20	0.33	0.02	0.10	<2
REP 830349	QC		0.42	0.021	3	6	0.15	33	0.02	<20	0.33	0.02	0.10	<2
830361	Rock		1.78	0.064	4	10	2.20	21	0.22	<20	3.13	0.07	0.06	<2
REP 830361	QC													
830370	Rock		0.43	0.040	7	13	1.09	12	<0.01	<20	0.16	<0.01	0.03	<2
REP 830370	QC													
Reference Materials														
STD DS7	Standard		0.97	0.076	12	180	1.05	384	0.11	40	0.99	0.09	0.43	4
STD DS7	Standard		0.90	0.076	11	170	0.99	380	0.10	36	0.92	0.08	0.42	5
STD DS7	Standard		0.91	0.072	11	182	1.02	390	0.10	32	0.96	0.08	0.43	5
STD DS7	Standard		0.95	0.072	11	175	1.04	377	0.11	34	0.99	0.09	0.42	4
STD OXD57	Standard													
STD OXD57	Standard													
STD OXD57	Standard													
STD OXD57	Standard													
STD OXD57	Standard													
STD OXD57 Expected														
STD DS7 Expected			0.93	0.08	12.7	163	1.05	370.3	0.124	38.6	0.959	0.073	0.44	3.8
BLK	Blank													
BLK	Blank													
BLK	Blank													
BLK	Blank													
BLK	Blank													
BLK	Blank		<0.01	<0.001	<1	<1	<0.01	<1	<0.01	<20	<0.01	<0.01	<0.01	<2
BLK	Blank		<0.01	<0.001	<1	<1	<0.01	<1	<0.01	<20	<0.01	<0.01	<0.01	<2
Prep Wash														
G1	Prep Blank		0.57	0.079	8	11	0.63	263	0.13	<20	1.02	0.10	0.56	<2
G1	Prep Blank		0.53	0.079	7	10	0.63	268	0.14	<20	1.07	0.10	0.59	<2

APPENDIX D

Authors' Certificates

Statement of Qualifications

I, Rita Chow of 340 Richard Street, Coquitlam, British Columbia, do hereby declare that:

1. I graduated from the University of British Columbia with B.Sc. Degree (first class standing) in Geological Sciences in May 1995.

2. I have been employed in the mineral exploration industry for 7 years.

3. This report is based on work done on the property during the dates May 7th - June 2nd,2008 and on references as listed.

Dated at Vancouver, British Columbia, this 10th day of September, 2008.

Rita Chow

Certificate

I, Aiden Lavelle, B.Sc., of Sarnaught, Castlebar, Co. Mayo, Ireland and working from 1640-1066 West Hastings St., Vancouver, British Columbia, V6E 3X1 hereby certify that:

1. I am a graduate of the National University of Ireland, Galway in 2007 with an Honours Bachelor of Science Degree majoring in geology.
2. I have been involved in mineral exploration since 2007 on IOCG-U, volcanic redbed copper and Archaen gold projects.
3. I am not aware of any material fact or material change with respect to the subject matter of this report or omission to disclose which would make this report misleading.
4. I worked on the Redford Property, collecting soil and rock samples from May 7th to June 2nd, 2008.

Dated at Vancouver, British Columbia, this 10th day September, 2008.

Aiden Lavelle