

2008 MMI SOIL AND ROCK GEOCHEMICAL REPORT

on the

CHEYENNE PROPERTY

Ant 1 -70 (YC25769-YC25838), Antimony 71 - 112 (YC35815 - YC35856),
Aant 1 – 100 (YC36644 - YC36743), AB 1 – 152 (YC36842 - YC36993)

Dawson Mining District, Yukon Territory

NTS 116B/8 & 116B/1
Lat 64° 18' N, Long 138° 16' W
UTM 7134000 N, 632000 E

for

LOGAN RESOURCES LTD.
1640 - 1066 West Hastings Street
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by

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6/1/2008



LOGAN
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LTD.

2008 EVALUATION OF THE CHEYENNE PROPERTY



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SUMMARY

The CHEYENNE property hosts several areas or zones of encouraging gold mineralization, with assay values from the 2008 grab samples of quartz-sulphide veins returning up to 261 g/t Au.

The gold occurs in quartz-sulphide veins up to one meter plus in width. These auriferous veins mainly strike in an east-west direction with sub-vertical dips. Many of these vein showings were sampled or drilled by previous owners of the property.

In 2008, a property wide 250m spaced Mobile Metal Multi Ion (MMI-M) geochemical soil survey was carried out by Logan Resources Ltd. on the Cheyenne property between the 11th of June and the 18th of July. Coincident to this survey, two smaller scale, more detailed (50m spacing) MMI-M soil surveys were also conducted. The first was a 50m spaced with 100m line spacing survey over the Golden Wall area. The second was a 50m spaced with 100m line spacing survey over the AJ vein area. There were also two lines of 25 meter spacing placed over the JC and TK showings. The total number of soils collected in 2008 for Cheyenne came to 1652 samples. From this total 12 control soil samples were taken. Six were taken with the same stainless steel auger that was used for all the other soils and six were taken with a plastic trowel. This was done to display that the auger did not influence the results of the soils.

Cheyenne's Golden Wall showing was also mapped in detail with 113 rock samples collected, photographed, described and then sent for assay. In addition to the Golden Wall rock samples, 79 rock samples were collected from the AJ Vein area, 19 from the JC, 16 from the TK and 13 from the Rainbow and 3 random rock samples were also collected, photographed, described and sent to Acme Labs in Vancouver for 36 element ICP-MS.

The Golden Wall zone indicates that gold mineralization on the CHEYENNE property is not confined to quartz-sulphide veins, as had been the assumption based on previous work. The extent of this stratabound mineralized zone is unknown.

LOCATION AND ACCESS

The CHEYENNE property is located 67 kilometres northeast from Dawson City (Figure 1). The western boundary of the claim block is located approximately 2 kilometres east of the Dempster Highway. The property is located on NTS Map Sheets 116B/8 and 116B/1. The center of the property is situated at UTM coordinates 632000E 7134000N (NAD 83, Zone 7). Logan holds a 100% interest (subject to a 2% NSR) in this gold and silver project. The property is comprised of 364 claims covering approximately 7,430 hectares (18,360 acres).

The survey crew stayed in Dawson City close to a temporary exploration office set up by Logan Resources at the Bonanza Gold Motel. Access to the property was by helicopter (Prism, MD 500D) either from a gravel pit located at kilometre 50 on the Dempster highway or directly from Logan's lot at Callison subdivision on the outskirts of town.

The CHEYENNE property consists of broad river valleys and steep mountains and cliffs. Elevations on the property range from around 1000 metres to 2040 metres above sea level. The severe topography limits the type of ground work that can be achieved on many areas of the property. Much of the property is covered by alpine tundra, with some stunted white spruce and willows found near some of the river valleys, especially in the eastern region of the property.

TOPOGRAPHY

The property is in glaciated, mountainous, alpine terrain of interconnected ridges with steep scree covered slopes. Rock outcrops are plentiful along most of the ridge tops and cliff faces on the property. The river valleys are for the most part covered in talus scree and alpine vegetation. Outcrops do appear in some of the creeks, but are mainly confined to the higher elevations on the property. Intrusive rocks form imposing jagged peaks while metasediments form cliff-like outcroppings on northeast-facing slopes, and steep scree covered south and west-facing slopes (often dip slopes).

Elevation ranges from 1200 metres at valley bottom to 2036 metres at the peak of Antimony Mountain. Diamiction and outwash generally cover the valleys while in-situ weathered rock, poorly developed soils, and felsenmeer dominate the ridges. The climate is characterised by low precipitation and a wide temperature range. Winters are cold and temperatures of -30C to -40C are common. Summers are moderately cool to hot, with daily highs of 10C to 25C. The property is generally snow free from early-June to the end of August.

PROPERTY INFORMATION

The Cheyenne property was under option to Logan Resources Ltd. by Mr. Shawn Ryan and Logan Resources was both owner and operator during the period of the exploration work covered by this report. The property consists of 364 unsurveyed, contiguous mineral claims located in the Dawson Mining District of the Yukon Territory (see Figure 2). The claims cover approximately 7,430 hectares (18,360 acres) on Yukon quartz map sheet 116B08. The claim data is listed below in Table 1.

Table 1: Cheyenne Claims

District	Grant Number	Claim Name	Claim Nbr	Claim Owner	Recording Date	Expiry Date
Dawson	YC25769	Ant	1	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2016
Dawson	YC25770	Ant	2	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2016
Dawson	YC25771	Ant	3	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2016
Dawson	YC25772	Ant	4	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2016
Dawson	YC25773	Ant	5	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2016
Dawson	YC25774	Ant	6	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2016
Dawson	YC25775	Ant	7	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2016
Dawson	YC25776	Ant	8	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2016
Dawson	YC25777	Ant	9	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2016
Dawson	YC25778	Ant	10	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2016
Dawson	YC25779	Ant	11	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2016
Dawson	YC25780	Ant	12	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2016
Dawson	YC25781	Ant	13	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2013
Dawson	YC25782	Ant	14	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2016
Dawson	YC25783	Ant	15	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2013
Dawson	YC25784	Ant	16	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2016
Dawson	YC25785	Ant	17	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2013
Dawson	YC25786	Ant	18	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2013
Dawson	YC25787	Ant	19	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2013
Dawson	YC25788	Ant	20	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2013
Dawson	YC25789	Ant	21	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2013
Dawson	YC25790	Ant	22	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2013
Dawson	YC25791	Ant	23	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2013
Dawson	YC25792	Ant	24	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2013
Dawson	YC25793	Ant	25	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2012
Dawson	YC25794	Ant	26	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2012
Dawson	YC25795	Ant	27	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2012
Dawson	YC25796	Ant	28	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2012
Dawson	YC25797	Ant	29	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2012
Dawson	YC25798	Ant	30	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2012
Dawson	YC25799	Ant	31	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2012
Dawson	YC25800	Ant	32	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2012
Dawson	YC25801	Ant	33	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2012
Dawson	YC25802	Ant	34	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2012
Dawson	YC25803	Ant	35	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2013
Dawson	YC25804	Ant	36	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2013
Dawson	YC25805	Ant	37	Logan Resources Ltd. - 100%.	3/3/2004	3/3/2015

[illegible]

[illegible]

Dawson	YC36961	AB	120	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36962	AB	121	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36963	AB	122	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36964	AB	123	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36965	AB	124	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36966	AB	125	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36967	AB	126	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36968	AB	127	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36969	AB	128	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36970	AB	129	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36971	AB	130	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36972	AB	131	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36973	AB	132	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36974	AB	133	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36975	AB	134	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36976	AB	135	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36977	AB	136	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36978	AB	137	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36979	AB	138	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36980	AB	139	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36981	AB	140	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36982	AB	141	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36983	AB	142	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36984	AB	143	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36985	AB	144	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36986	AB	145	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36987	AB	146	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36988	AB	147	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36989	AB	148	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36990	AB	149	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36991	AB	150	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36992	AB	151	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013
Dawson	YC36993	AB	152	Logan Resources Ltd. - 100%.	2/27/2006	2/27/2013

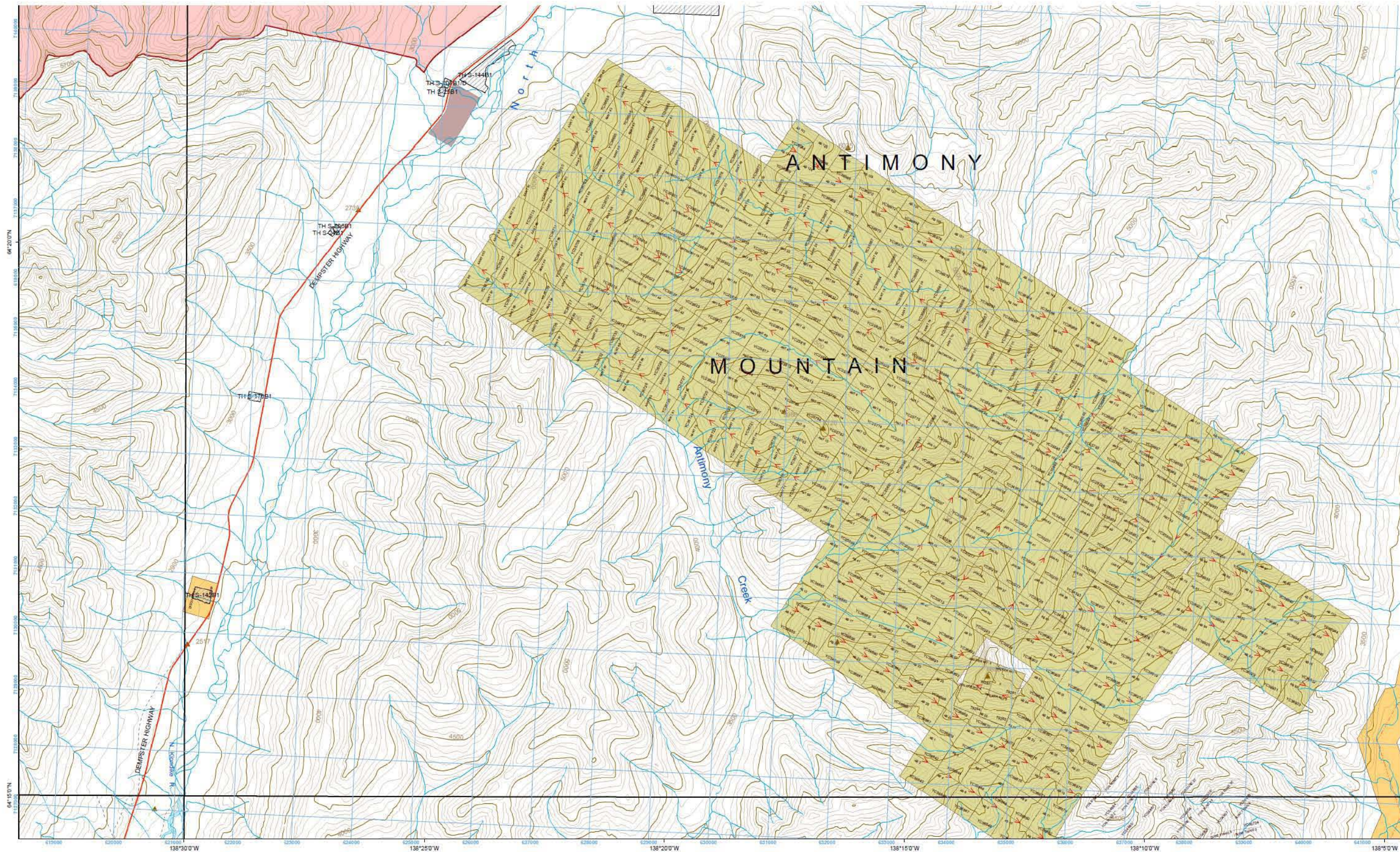


FIGURE 2

PROPERTY HISTORY

The CHEYENNE property has been explored by several parties since a stibnite discovery was made on the west side of Antimony Mountain in 1916 by Walker. A 5.5 metre adit/trench was hand dug in 1918.

The AJ vein, an auriferous quartz-arsenopyrite, was discovered and staked by Conwest Exploration in 1966. Mapping, trenching, and 4 shallow diamond drill holes totalling 201 metres were completed.

Also in 1966, Cream Silver Mines investigated the JC and Rainbow showings and carried out trenching and mapping in 1969 and 1970.

In 1975, Conwest optioned the AJ to Acheron Mines Ltd. Archeron re-sampled the trenches, carried out some mapping and soil geochemistry sampling, and completed three short drill holes totalling 166 metres.

Also in 1975, based on airborne radiometric surveys and stream sediment information, Standard Oil staked a large area around Antimony Mountain. In 1976, Standard Oil carried out ground radiometric surveys in an attempt to locate the source of uranium anomalies. Standard let the ground lapse after 1976.

In 1979, Anaconda Exploration Limited staked the area and carried out geological, geophysical, and soil geochemical surveys. The claims were allowed to lapse in 1981.

From 1982 - 1984, Cody Hawk Resources optioned the property and completed geophysical (electromagnetic and magnetic) and geological surveys over the area.

In 1988, Total Energold Corp. established a large land package in the area. They carried out a high resolution helicopter airborne EM and magnetic survey and some follow-up ground EM surveys. They also completed extensive geological mapping and sampling programs over the property.

In 1989, Total Energold Corp. completed six diamond drill holes totalling 706.5 metres of BQ and NQ core. The drilling targeted the AJ vein.

In 1994, Kennecott Canada Inc. staked a land package which covers the eastern part of the current CHEYENNE property. They carried out geological and geochemical sampling in 1998.

In 2004, Shawn Ryan staked the area. An anomalous soil sample result from the Kennecott work led Ryan to discover the Golden Wall showing in 2005. Ryan carried out additional contour soil geochemical sampling and completed a small trench on the south slope of the Golden Wall area. Ryan staked additional claims and optioned the property to Logan Resources in 2005.

In 2006, Logan Resources Ltd. commissioned J. L. LeBel, P.Eng of LeBel Geophysics to conduct a very low frequency electromagnetic and magnetic geophysical survey. This limited VLF-EM surveys carried out during the 2006 season showed encouraging results. It appeared that this can be an effective tool in searching for additional target areas on the property. It was recommended that a more comprehensive VLF-EM survey be carried out on certain areas of the claim group. A small scale geological and analytical program was also conducted at this time by Logan Resources.

REGIONAL GEOLOGY

The west central Yukon is subdivided into three regional terranes, the Yukon-Tanana Terrane (metamorphic terrane south of the Tintina Fault), the Selwyn Basin (between the Tintina and Dawson Faults), and the North American Shelf (north of the Tintina and Dawson Faults). Figure 3 is a simplistic summary to show the distribution of Proterozoic and Paleozoic and younger strata north of the Tintina Fault. The Selwyn Basin comprises a package of Late Proterozoic to Jurassic sedimentary rocks deposited in a deep basin on the west margin of the continental platform. Proterozoic basement rocks are exposed in the core of regional anticlines and in fault-bounded horst blocks. The mid-Cretaceous Tombstone Intrusive Suite (orange in Figure 5) occurs throughout the central part of the Selwyn basin along trends that roughly parallel the Tintina structure which is a major, deep crustal suture that has been active since early Proterozoic time. The intrusions commonly have vein-type gold showings within the intrusives and in the alteration halo that surrounds the intrusives (Hart and Burke 2005). Skarn and replacement-type mineral deposits are formed distal from the immediate contact zone of Tombstone Intrusives in carbonate-rich, gritty clastic sediments which had sufficient porosity to allow circulation of late-stage hydrothermal solutions.

Figure 4 presents the regional first vertical derivative aeromagnetic data from the Yukon Government website. Clearly the Tombstone Suite Intrusives have a distinct donut shaped aeromagnetic signature. This is caused by a non-magnetic core and a more magnetic contact area and alteration halo that is sulphide rich, including pyrrhotite (a magnetic form of iron sulphide). (George, 2006)

PROPERTY GEOLOGY

Cheyenne is underlain by Proterozoic metasedimentary rocks of the Hyland Group that have been subdivided in this part of the Yukon into the Yusezyu and Narchilla Formations. The Yusezyu Formation consists of rusty weathering gritty quartzite, sandstone, and quartz-pebble conglomerate. Minor interbeds of limestone, calcareous sandstone and shale are common. The Narchilla formation consists of black, maroon and green shales and slates. Geological mapping by Anaconda (Roots et al 1980), Total Energold (Pelletier and Tucker 1989), and Kennecott (Andersen and Hulstein 1998) provides the basis for defining the geology of the central to eastern part of the Cheyenne Property. The contacts of the Antimony Mountain intrusive are well established and there is a reasonable database of lithological and structural information for the Proterozoic metasedimentary rocks. Most of the known showings on the Cheyenne property are vein-type arsenopyrite-tourmaline-pyrrhotite mineralization within the Antimony Mountain Tombstone-type intrusive stock or in the contact metamorphic aureole of the stock. The Golden Wall showing on the Cheyenne property is typical of the skarn/replacement-type mineralization. (George, 2006)

FIGURE 3: Regional Geology

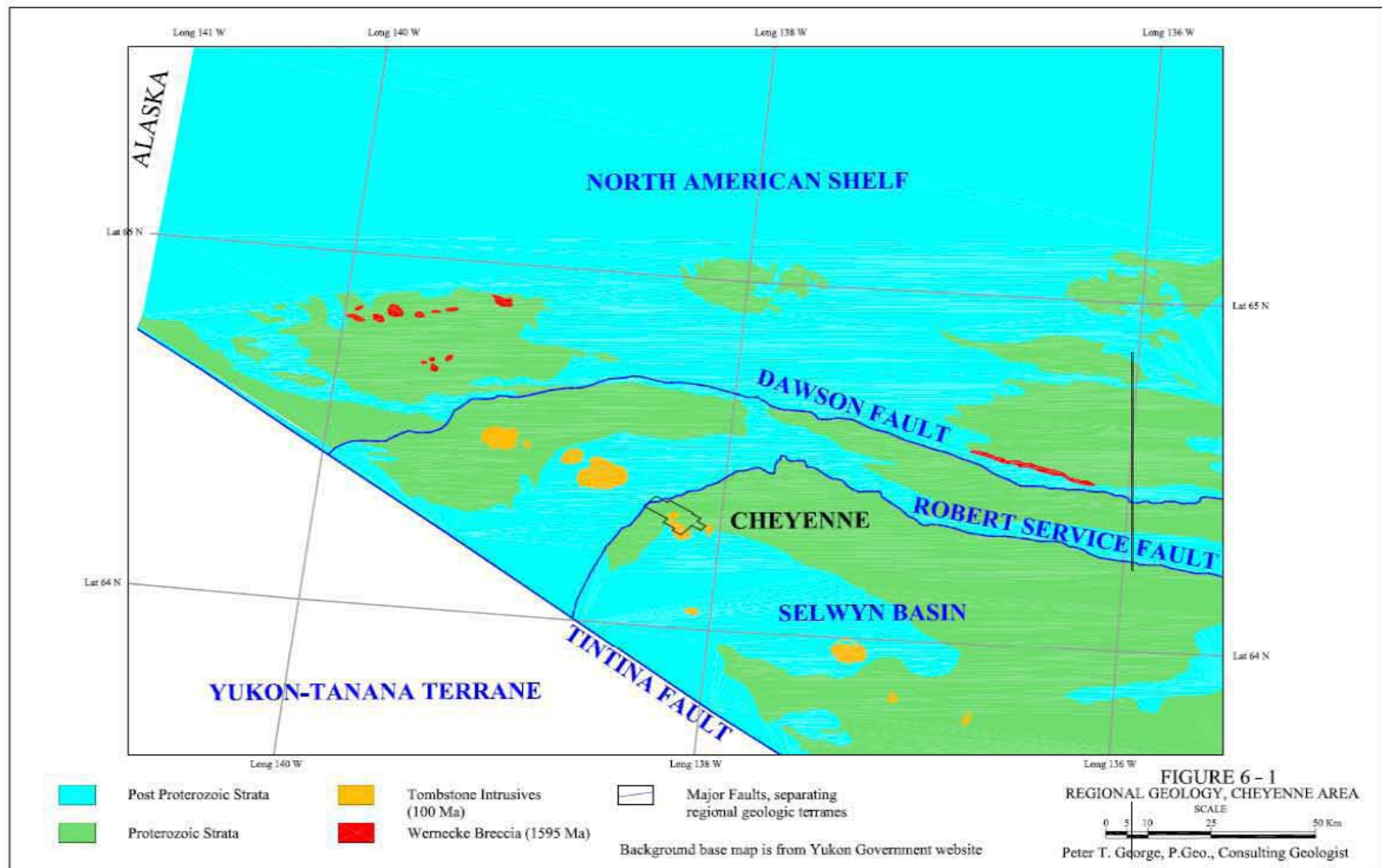
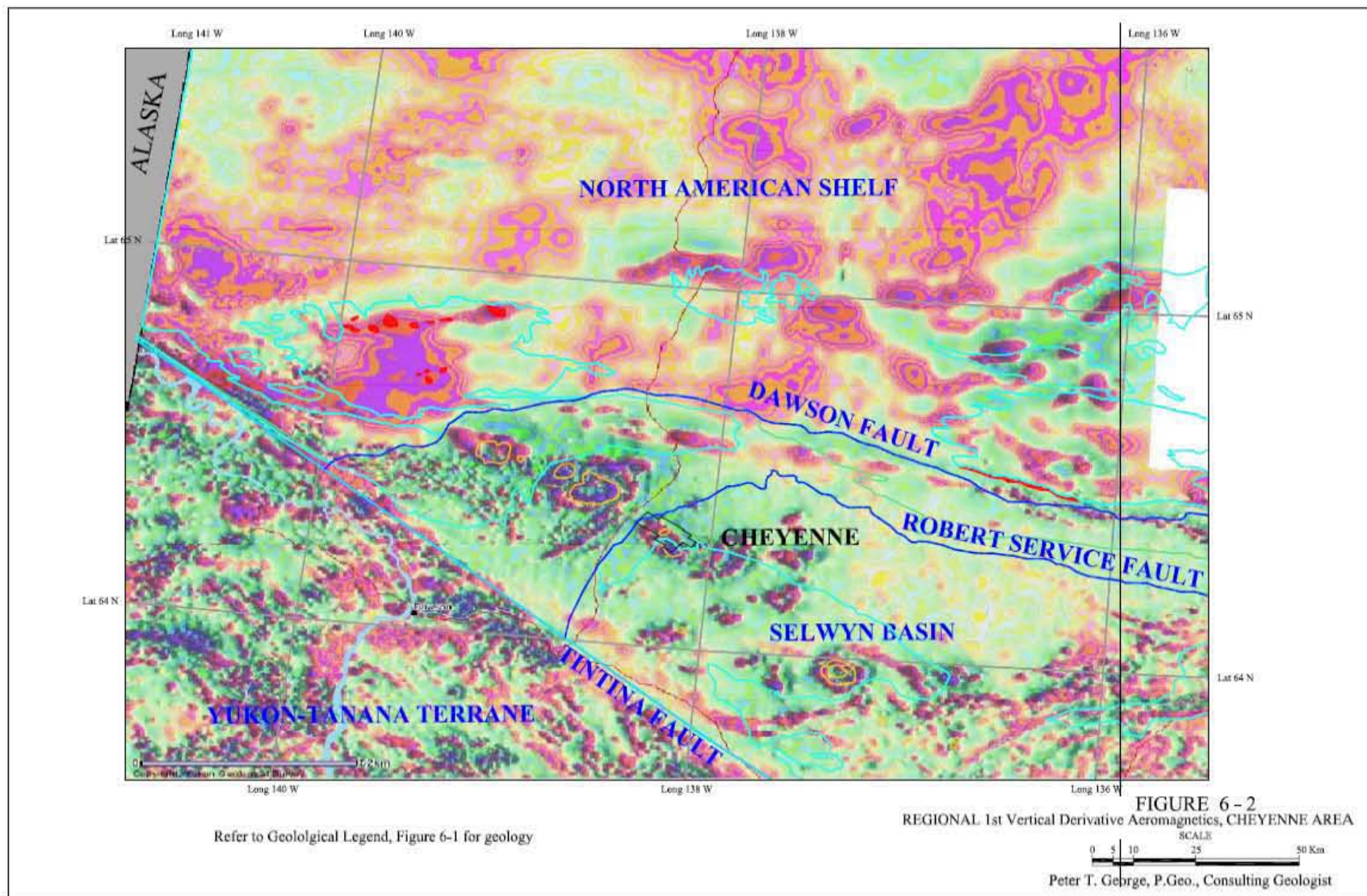


FIGURE 4: Regional Aeromagnetic Map



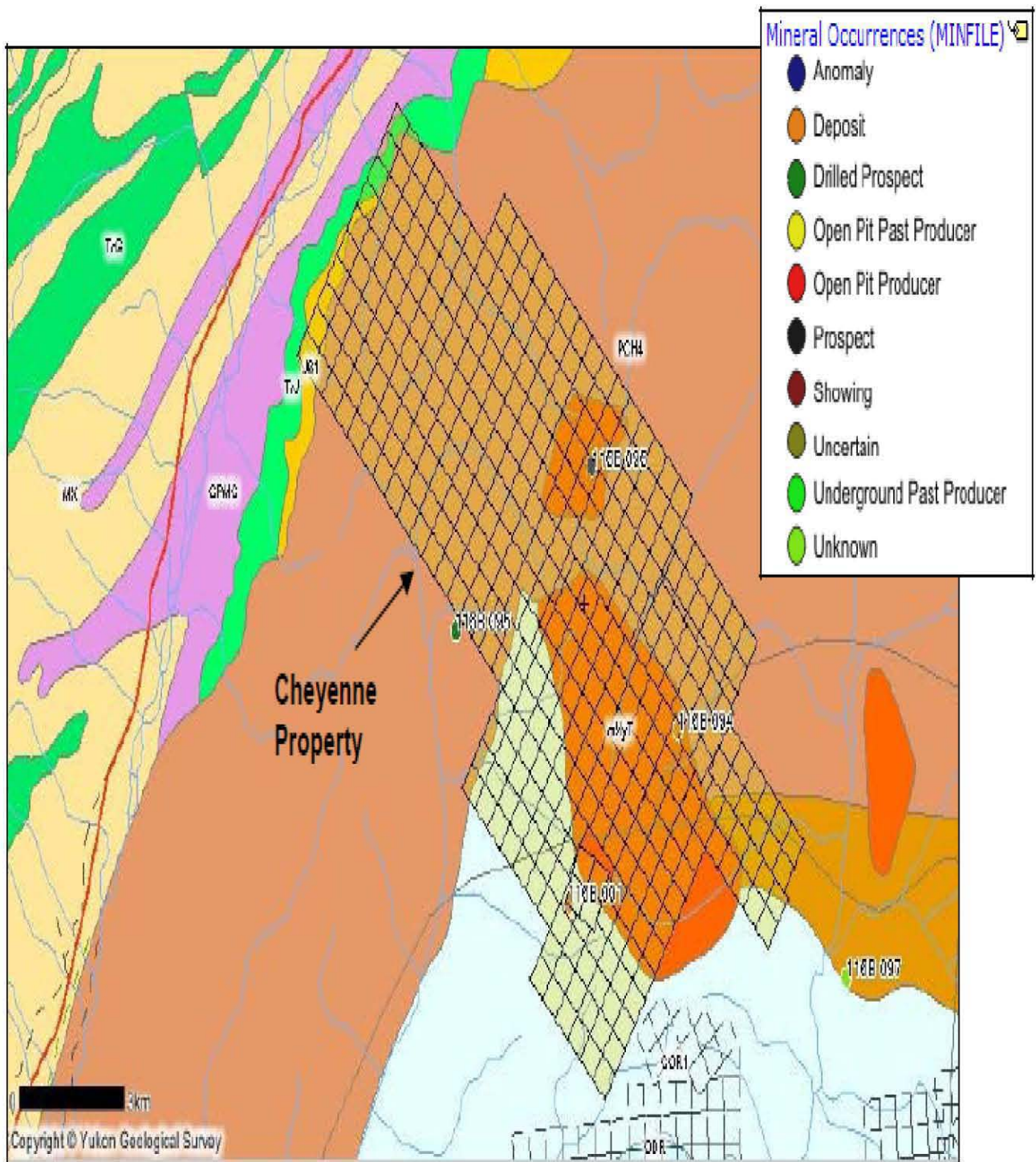


FIGURE 5: Property Geology

ALTERATION

The most common type of alteration is hornfelsing adjacent to the intrusion. It can be found up to one km from the intrusive margin. Hornfels is characterized by fine grained silica replacement and the introduction of fine pyrite and pyrrhotite. The sulphide richer outcrops weather rusty orange-red and quartz replacement makes the sandstone appear cherty. In the North Ridge of Valhalla Creek areas, there is evidence that hornfels is more intense and prevalent above mapped thrust faults that dip toward the main intrusion. The thrust faults apparently acted as fluid conduits thereby promoting hornfels in the upper plate or hanging wall of the thrust while the footwall or the lower plate escaped the thermal effects of the hot fluids emanating from the intrusion.

Sericite and chlorite alteration of country rock is localized near the Antimony Mountain stock. Phyllic alteration is localized in the selvages of veins and along fracture planes.

Silicification and milky white quartz stockwork were found in the well-sorted quartzites around mineralized and barren vein zones. Carbonate and silica alteration was observed in the sulphide bearing latite dikes. Local carbonate veins, faults and fracture filling in both the Antimony Mountain stock and the metasediments appear to be related to a late stage event and returned low gold values when sampled.

Calc-silicate assemblages (diopside-epidote-actinolite-sulphide) are found adjacent to the latite dikes. These are the skarns mapped by Energold in 1989. Secondary K-spar and biotite are found at the margins of the main intrusive and in the porphyritic syenite dikes. Sericite noted along foliation planes in some quartzites is likely related to regional metamorphism (Andersen and Hulstein 1998).

MINERALIZATION

All of the currently known mineralization on the Cheyenne property appears to be related to hydrothermal fluids from the Antimony Mountain intrusion. The following descriptions of the showings on the property, other than the Golden Wall which is contained in Appendix I, are taken from descriptions from the Yukon Government Assessment Files.

Golden Wall showing (discovered in 2004)

The Golden Wall showing is centred on UTM co-ordinates 629 280E, 7 135 860N and is comprised of “stratabound” replacement-type massive to disseminated sulphides (arsenopyrite, pyrite, and pyrrhotite) in carbonate rich Proterozoic grits/sandstones (George, 2006). (See following Golden Wall report for full description of mineralization).

Vein-type Showings (discovered in period 1966-1988)

The most common style of mineralization on the property is fault-controlled, base and precious metal-rich veins proximal to the contact of the Antimony Mountain intrusive (Coombes, 1996). Auriferous quartz veins contain arsenopyrite, +/- pyrite, chalcopyrite, stibnite and galena. The most significant vein-type showings are the AJ Zone (on Cody Creek at UTM 637 745E, 7132 110N), the Rainbow, JC and TK

Zones (on North Ridge at UTM 632730E, 7 133 115N; 632 835E, 7 133 860N; and 632 410E, 7 133 815N respectively), the Tom, Toby and TT zones (on Jan Creek at UTM 636 065E, 7 132 940N; 636 415E, 7 133 135N and 634 380E, 7 133 740N respectively). All of these veins are located in quartzite within two kilometres of the Antimony Mountain intrusion and are commonly spatially associated with felsic dikes/sills. (George, 2006).

GEOCHEMISTRY: SOILS

2008 Property-wide MMI geochemical soil survey

A total of 1282 samples were planned for the property wide MMI soil survey but 1136 samples were actually collected (Figure 6). Most of the uncollected samples were due to their location on rocky outcrops or on high ridges that were inaccessible and unsuitable for sampling because of little or no soil being present. Samples for this part of the survey were spaced at 250m on lines 250m apart.

328 soil samples were collected on the Golden Wall area with 50m sample spacing and 100m line spacing. Following the recommended methods for MMI surveys, soil samples, each weighing approximately 250 grams, were collected at a depth of 10-25 cm below the active or live organic layer or the point at which soil formation is initiated in this environment. The sample collected between 10-25 cm is a continuous 15 cm long plug of sediment or a continuous vertical channel of sediment.

108 samples were collected over the AJ vein area with 50m sample spacing and 100m line spacing.

Two parallel lines were placed over the JC and TK vein area with a total of 63 collected there.

QA/QC

All samples were collected with the same model of stainless steel Dutch auger and placed in pre-labelled Kraft paper soil sample bags and then resealed in plastic zip lock bags and relabelled with masking tape to prevent any contamination or misidentification.

A test line of 12 samples were collected for QA/QC purposes. Half of the test samples were collected with the Dutch auger and half with a plastic trowel to demonstrate that no contamination occurred from the augers.

All samples were shipped to SGS Mineral Services in Toronto for analysis.

DATA INTERPRETATION

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.

Generally, a response ratio of <10 indicates less than interesting responses and is usually an indication of the lack of a significant mineralized zone in the bedrock underpinning the survey area. A response ratio >20 or 20 times background is an initial indication of a low-contrast anomalous response although this "threshold" is not universal. A response of between 21 and 50 is used as a moderate response with $RR>51$ being referred to as high contrast. (Fedikow, 2009)

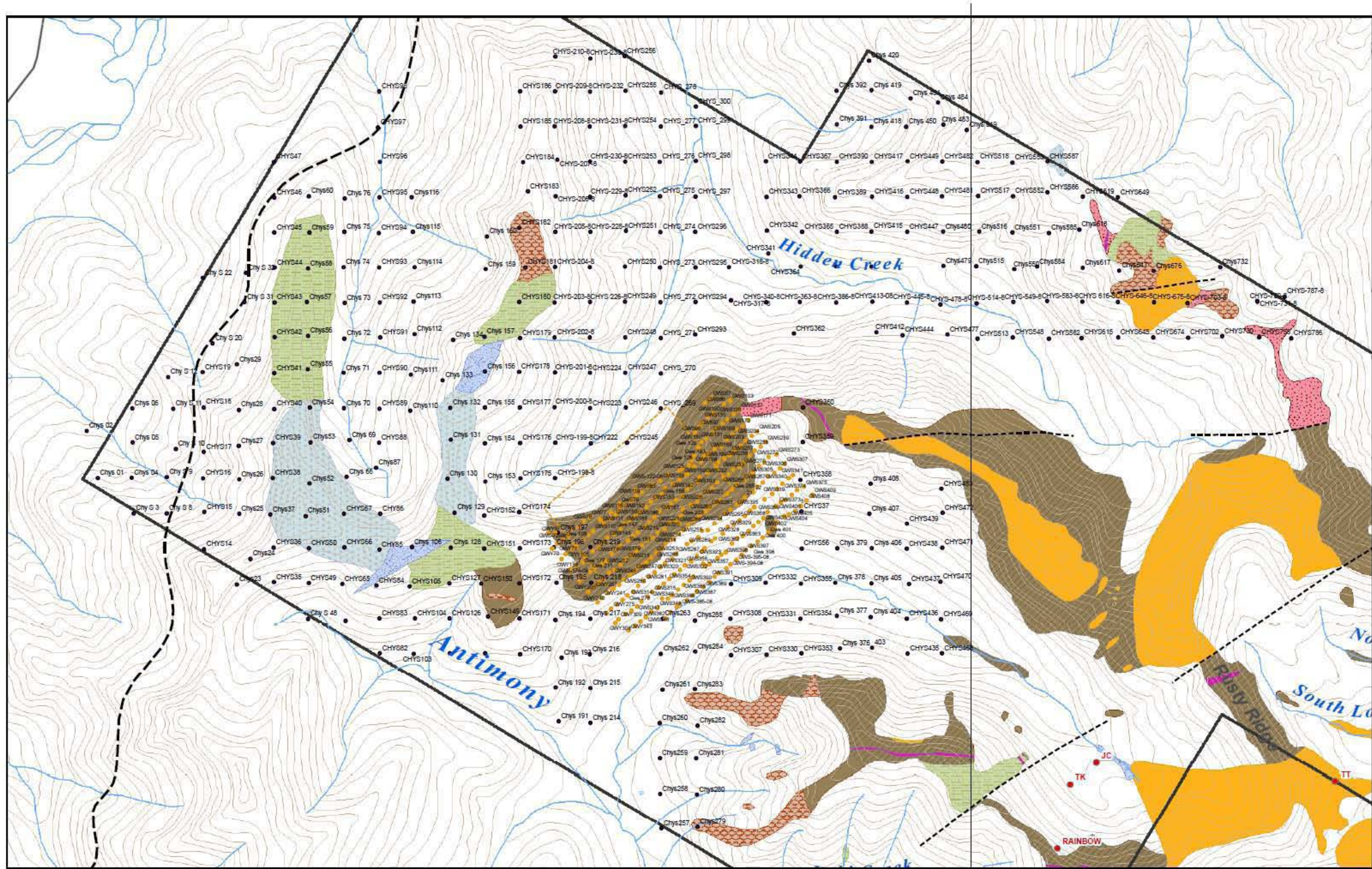


FIGURE 6

RESULTS

The MMI response ratio plots are labelled as Figures 7 through 14 below.

Ag

The silver plot shows several high anomalous responses. The largest multi-sample anomaly is located on the ridge east of the Golden Wall area, with other smaller anomalies near the western and eastern margins of the property, at Rusty Ridge, and Mike Creek.

As

High contrast arsenic anomalies occur around the edge of the central block of ground not owned by Logan, as well as smaller spot highs in and around the Golden Wall region. Several of the central anomalies occur near known mineral showings such as the Tom, Toby, and AJ and may be related to the Antimony Mountain stock.

Au

Gold anomalies with response ratios as high as 3000 times background occur in the vicinity of known showings – the Golden Wall, Rainbow, JC, TK, AJ, and TOM. A multi-sample high-contrast anomaly also occurs northwest of the JC/TK and southwest of the Rainbow.

Bi

Bismuth anomalies with response ratios ranging from moderate to high (up to 1491 times background) are prominent in and around the Golden Wall area. Highs also occur east of Toby Creek and on Mike Creek. Moderate responses also occur around the central region and in the vicinity of the TK and JC showings.

Cu

Multi-sample copper anomalies with high contrast values occur around the edge of the central block of non-Logan ground. Several of these anomalies occur in areas of known showings such as the JC, TK, TT, Tom, and AJ and may be associated with the underlying Antimony Mountain intrusive. A few smaller highs also occur in the Golden Wall area.

Pb

The response ratio plot of lead shows scattered anomalous highs with the largest anomaly occurring on the ridge east of the Golden Wall area and extending northward to Hidden Creek.

Sb

Antimony response ratios show high contrast multi-sample anomalies (up to 1052 times background) in the Antimony Mountain area in the south and on the ridge east of the Golden Wall. Other areas of significant anomalies include the Cody Creek area to the east and west of the TK/JC showings.

W

A multi-sample, moderate contrast tungsten anomaly about 3 km long occurs north of the TT showing, between North Lost Creek and South Lost Creek. Other smaller anomalies are scattered mainly across the southeast half of the property.

Zn

Zinc anomalies are broadly scattered throughout the property. Multi-sample high contrast anomalies are most prominent in the Hidden Creek area towards the north side of the property.

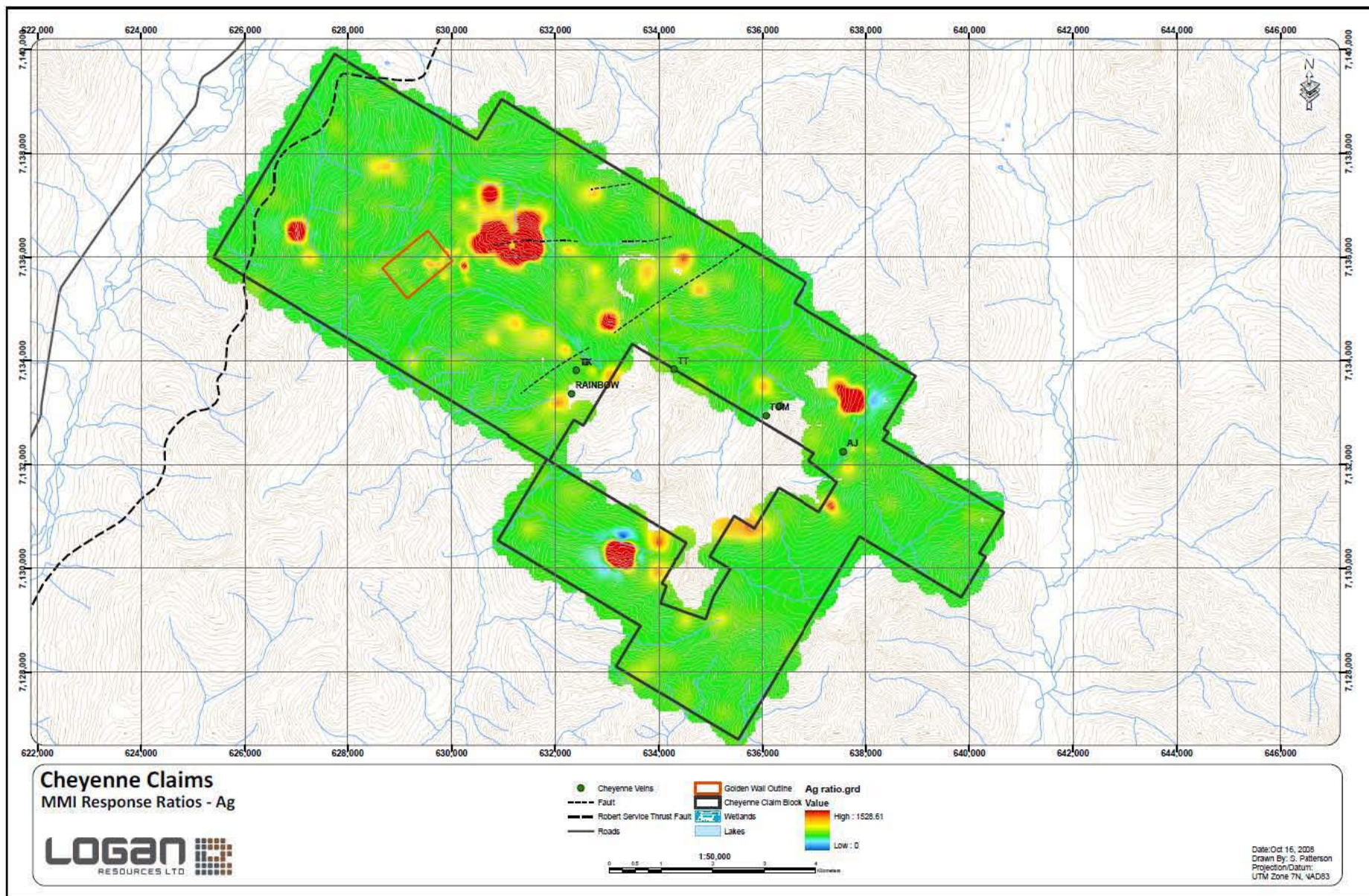


FIGURE 7

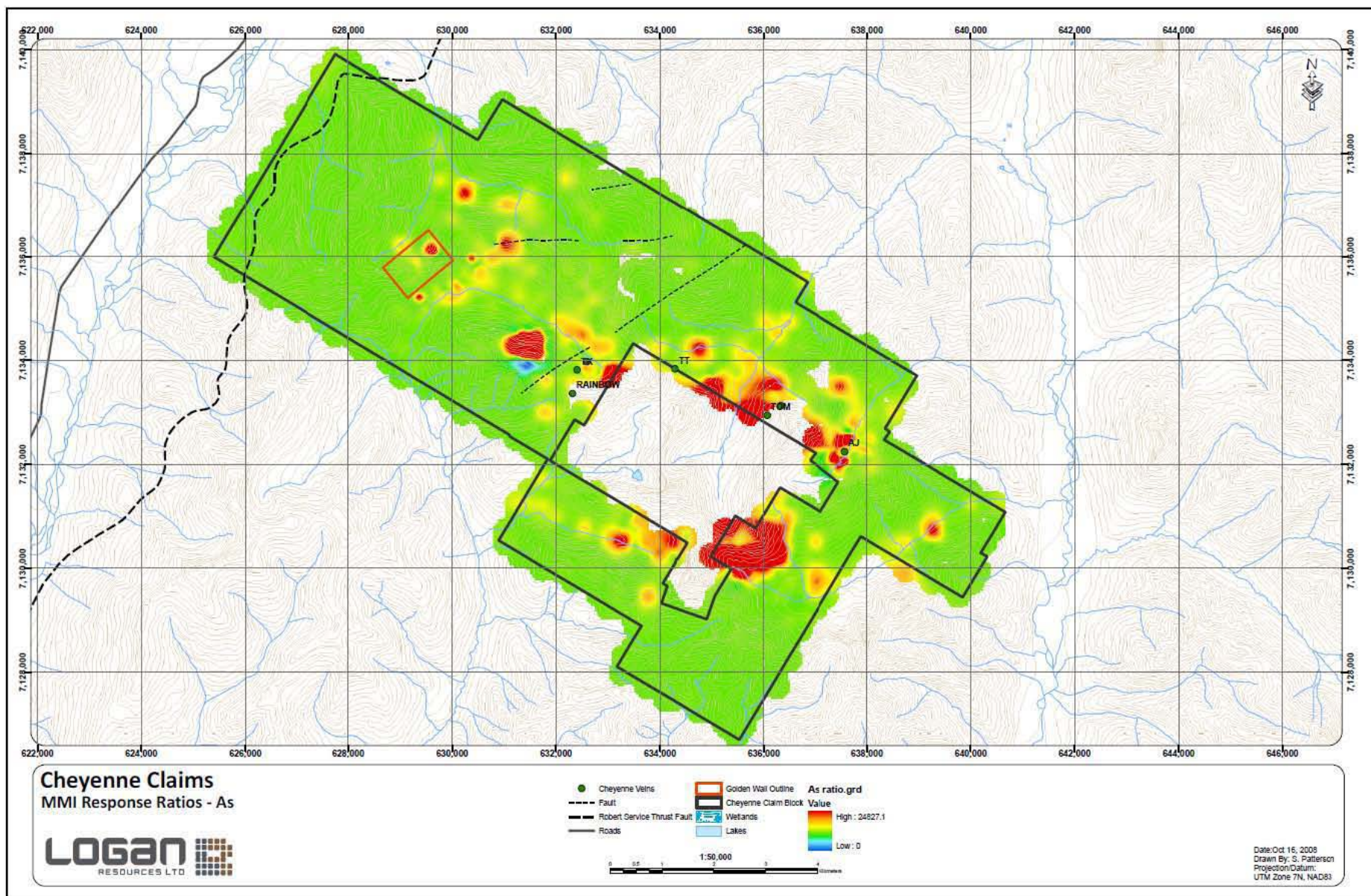


FIGURE 8

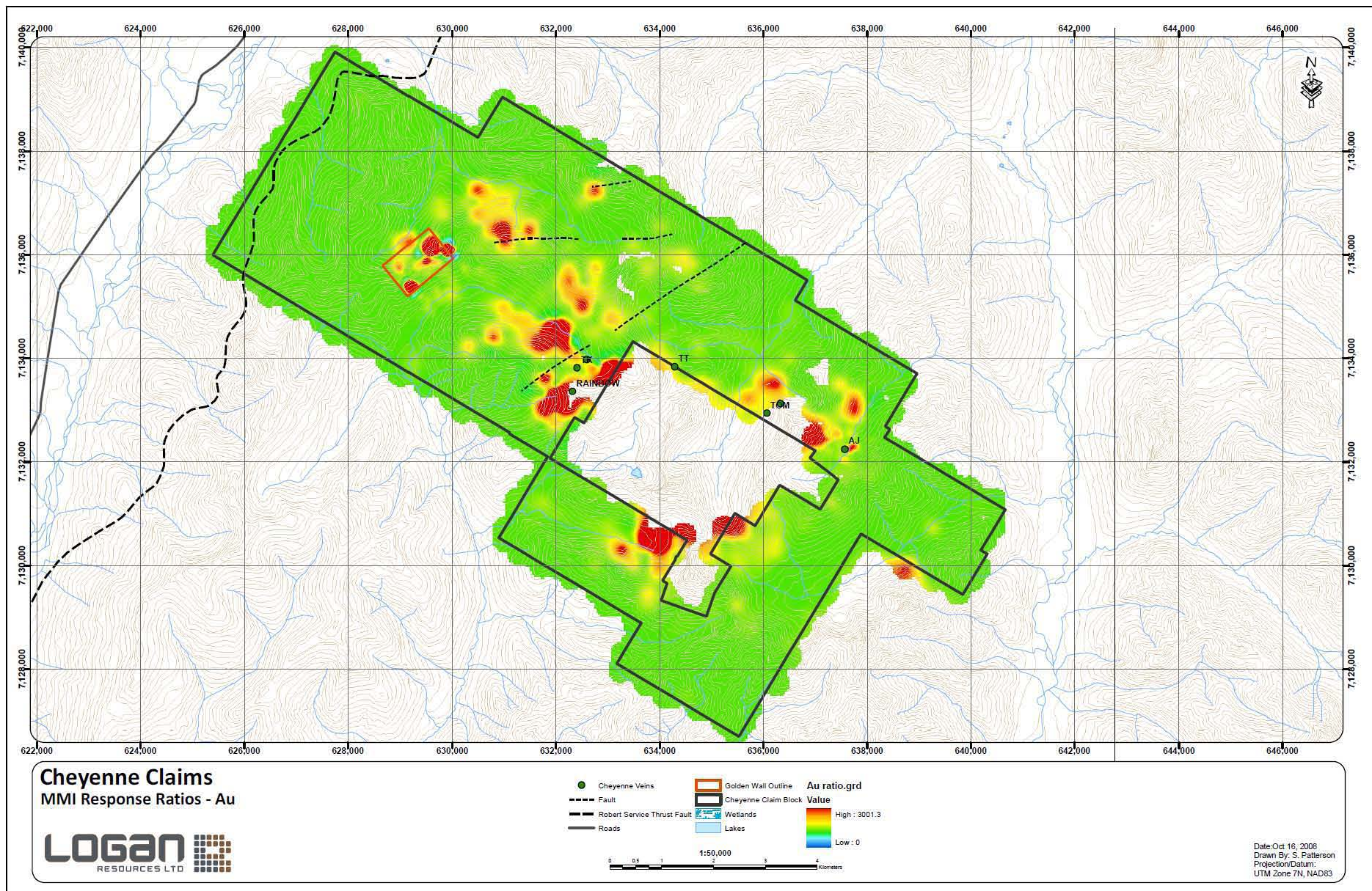


FIGURE 9

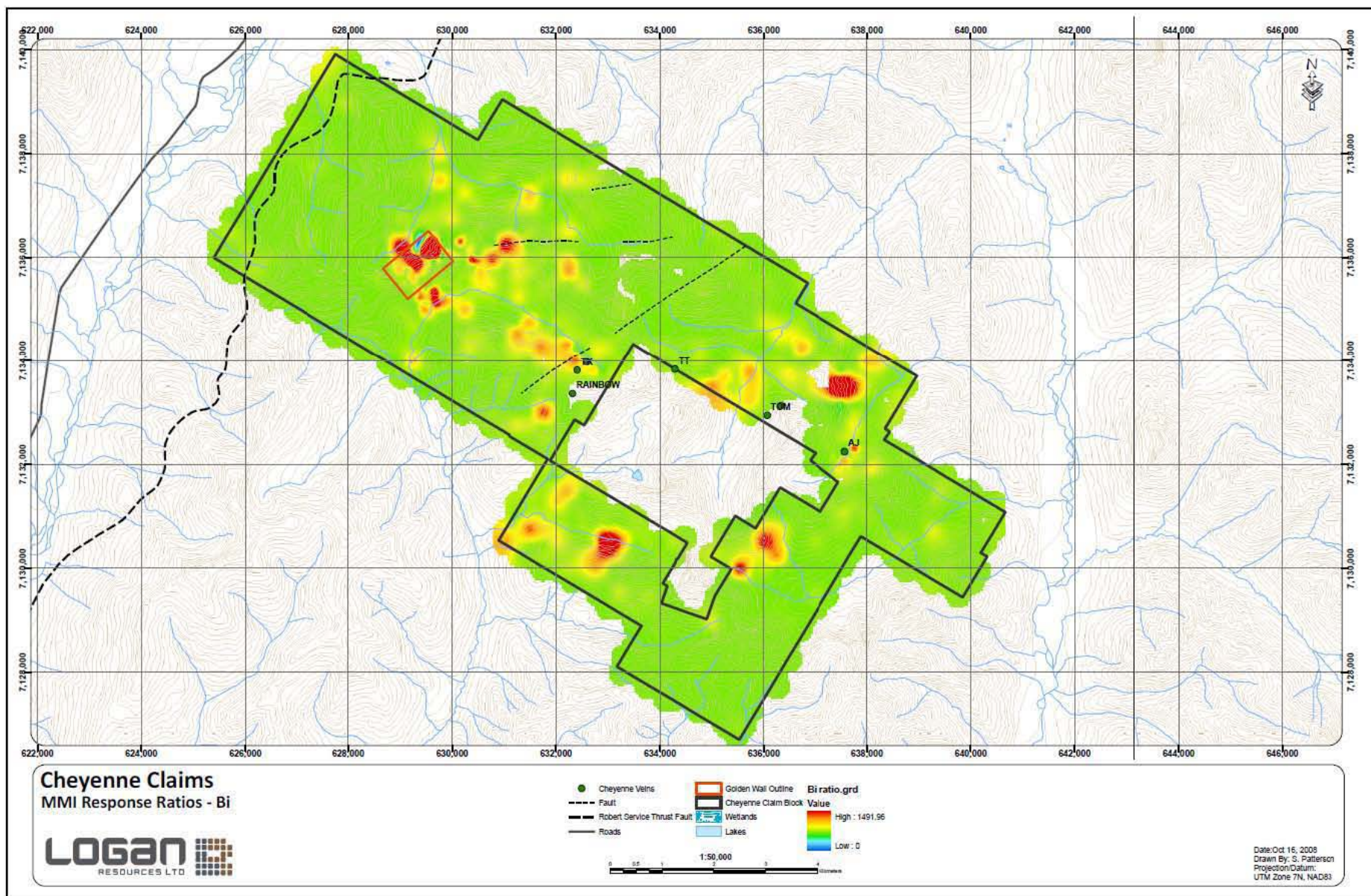


FIGURE 10

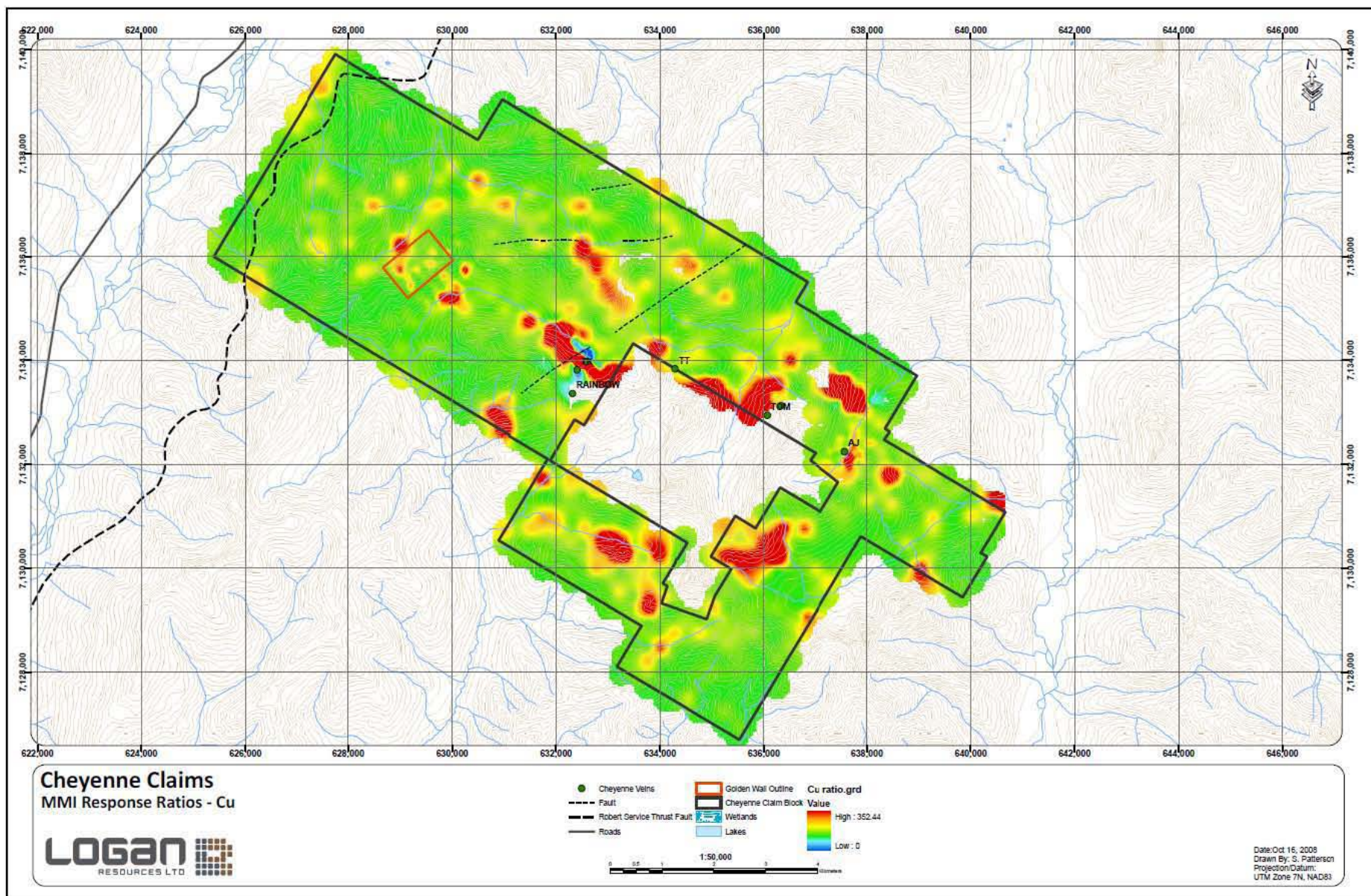


FIGURE 11

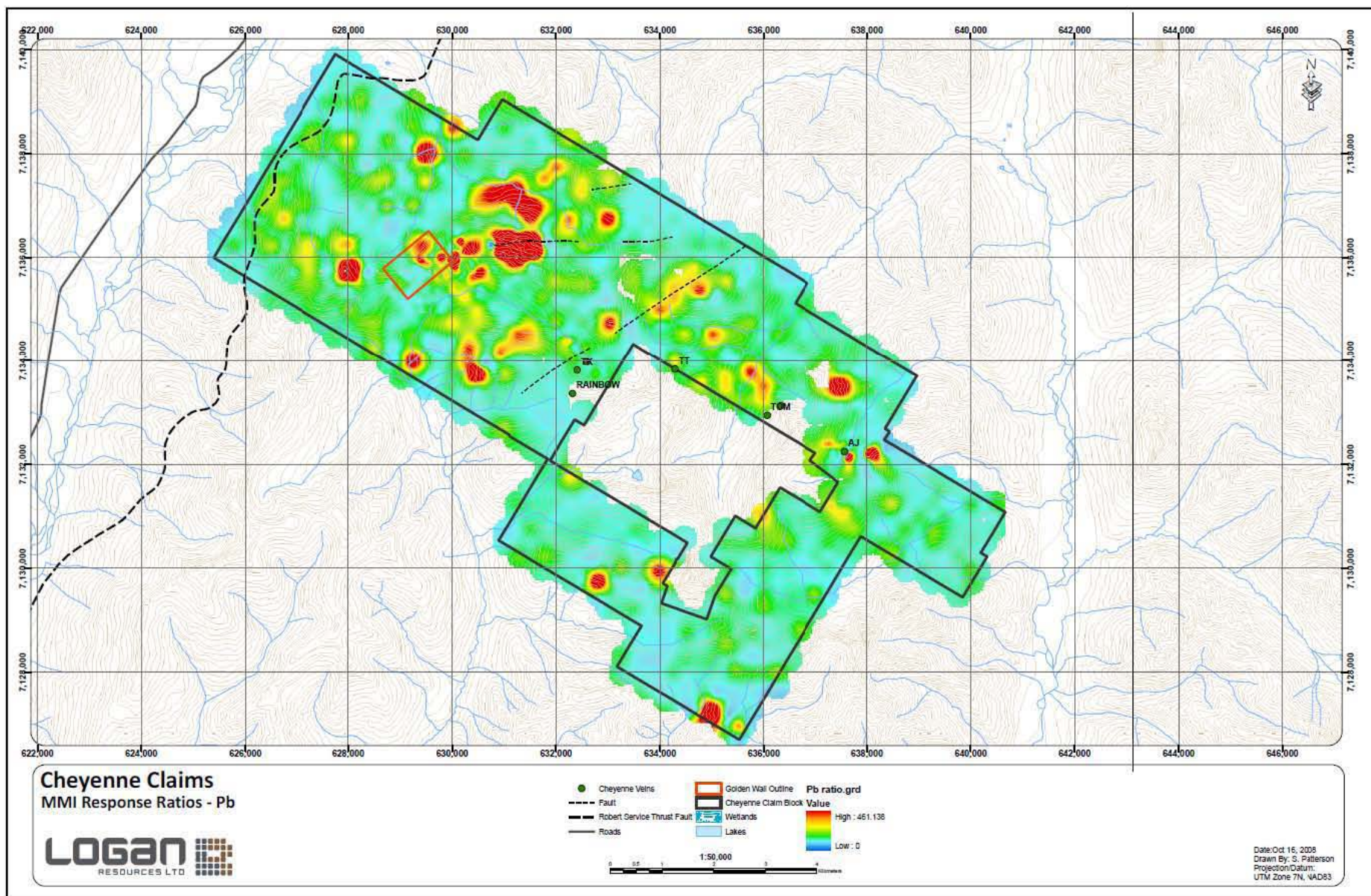


FIGURE 12

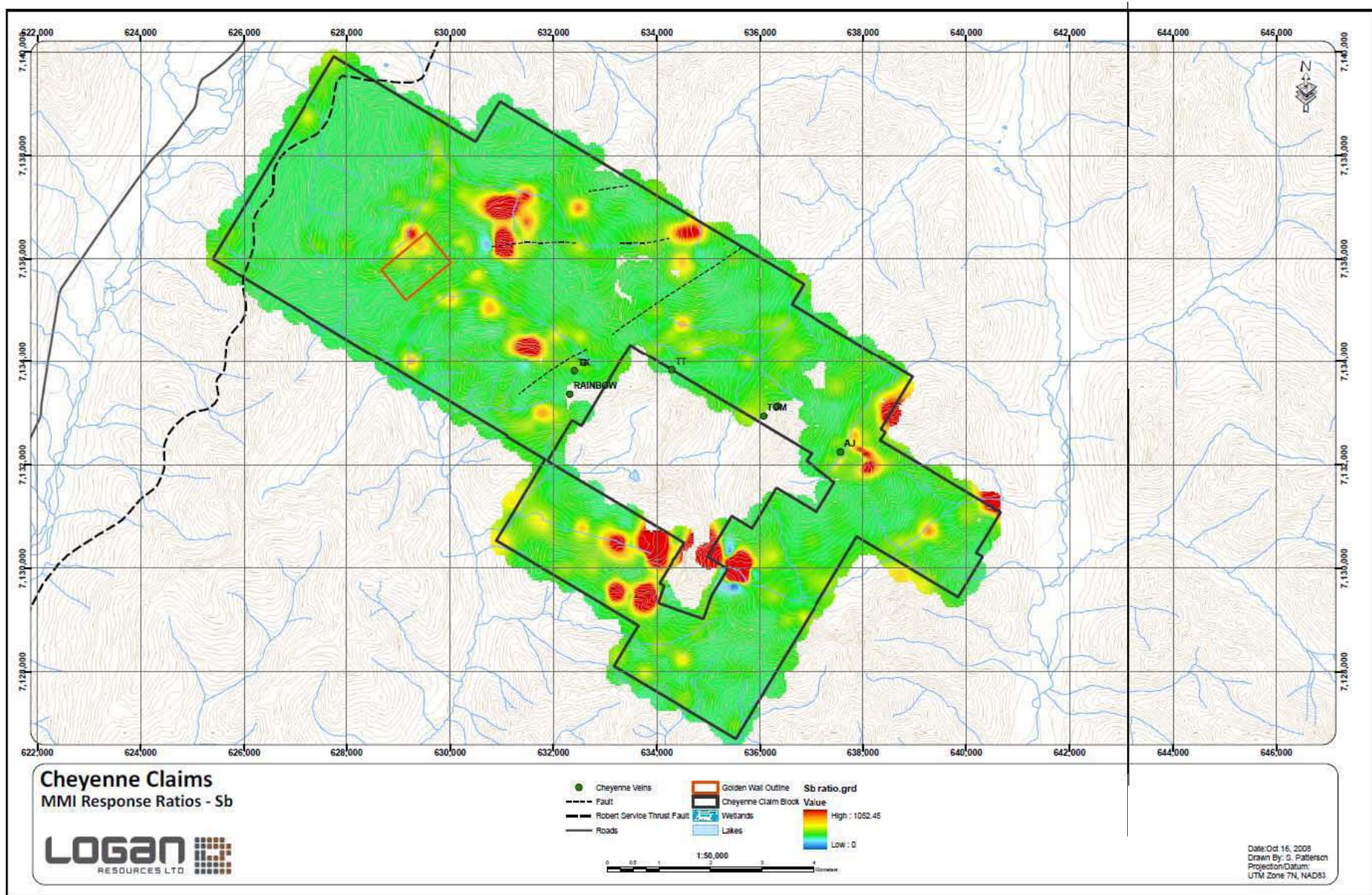


FIGURE 13

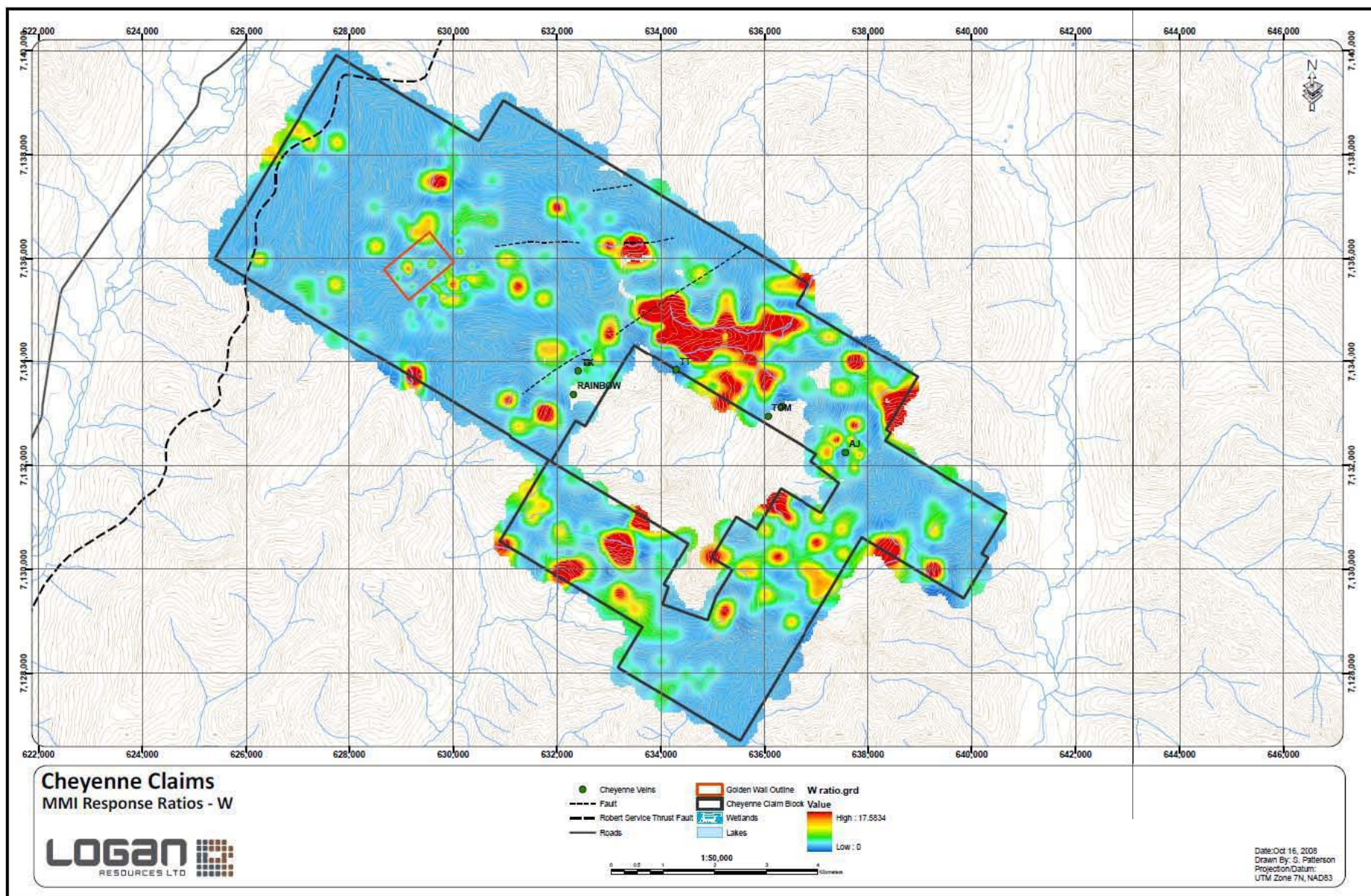


FIGURE 14

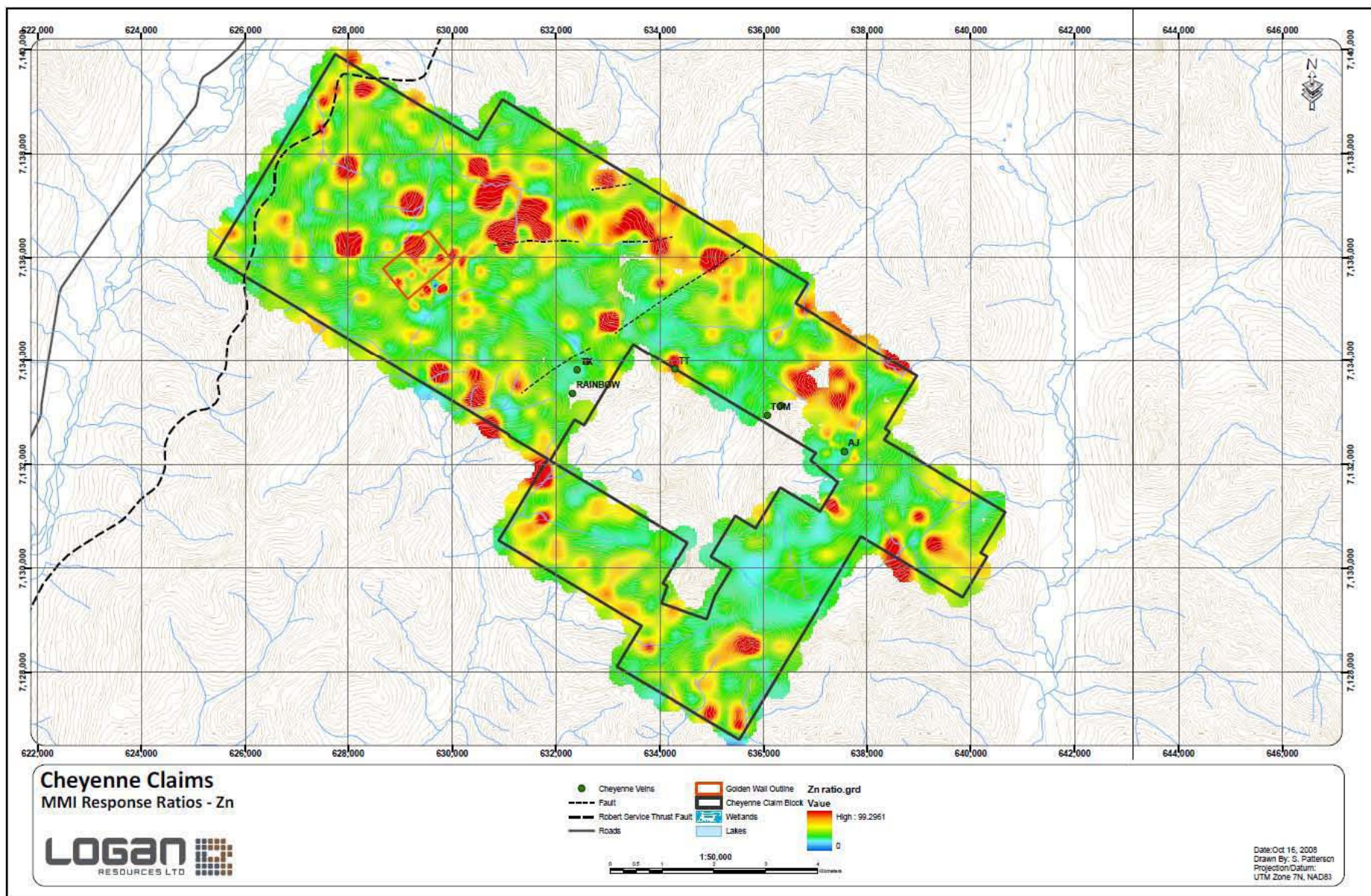


FIGURE 15

GEOCHEMISTRY: ROCKS

A total of 240 rock samples were collected in 2008 from the Cheyenne Property (Figure 16) consisting of 113 grab samples from the Golden Wall, 79 from the AJ Vein area, 19 from the JC Vein, 16 from the TK and 13 from the Rainbow Vein area. All samples were sent to Acme labs in Vancouver for 32 element ICP analyses.

Sample splits of 15g were chosen for all rock samples instead of 0.5g, and were leached in hot Aqua Regia. The larger split size was chosen because it was felt that it would be more representative for Au analysis, as refractory and graphitic samples can limit Au solubility.

HIGHLIGHTS OF THE ROCKS

Several samples from the Golden Wall showing returned over 1 g/t Au with the highest sample (#816651) returning 261.6 g/t Au and 373 g/t Ag. This quartz-rich metagreywacke was located at the west end of the gossanized wall and contained 2-3% arsenopyrite.

Numerous samples from the AJ Vein returned high-grade values in gold including 54.95 g/t, 51.91 g/t, and 79.45 g/t Au in samples 816702, 816818, and 816821 respectively. 816702 was comprised of a sample of massive arsenopyrite from the vein. Sample 816756, rusty sample from the centre of the AJ Vein, returned a lead value of 1.64% Pb.

In the JC Vein area, several samples returned high-grade gold and silver as well as significant values in copper and lead. Samples 817033 and 817004, both containing massive arsenopyrite, returned 98.29 g/t Au and 36.29 g/t Au respectively. 817003 also had high cobalt content with 0.35% Co. Samples 817005 and 817006 were arsenopyrite-rich samples taken from Trench 4 of the JC Vein and returned 136 g/t Ag / 2.4% Cu, and 360 g/t Ag / 6.6% Cu respectively.

Sample Number	Location	Au (g/t)	Ag (g/t)	Cu %	Pb %
816608	Golden Wall	1.35			
816609	Golden Wall	1.15			
816651	Golden Wall	261.6	373		
816669	Golden Wall	2.45			
816702	AJ Vein	54.95			
816708	Near JC	1.97	89		
816756	AJ Vein				1.64
816818	AJ Vein	51.91			
816821	AJ Vein	79.45			
816822	AJ Vein	14.57			
816824	AJ Vein	28.17			
816830	JC area	2.67			
816831	JC area	10.04			
816835	JC area				1.06
817033	JC Vein	98.29			
817004	JC Vein	36.29			
817005	JC Vein		136	2.42	
817006	JC Vein	3.37	360	6.63	

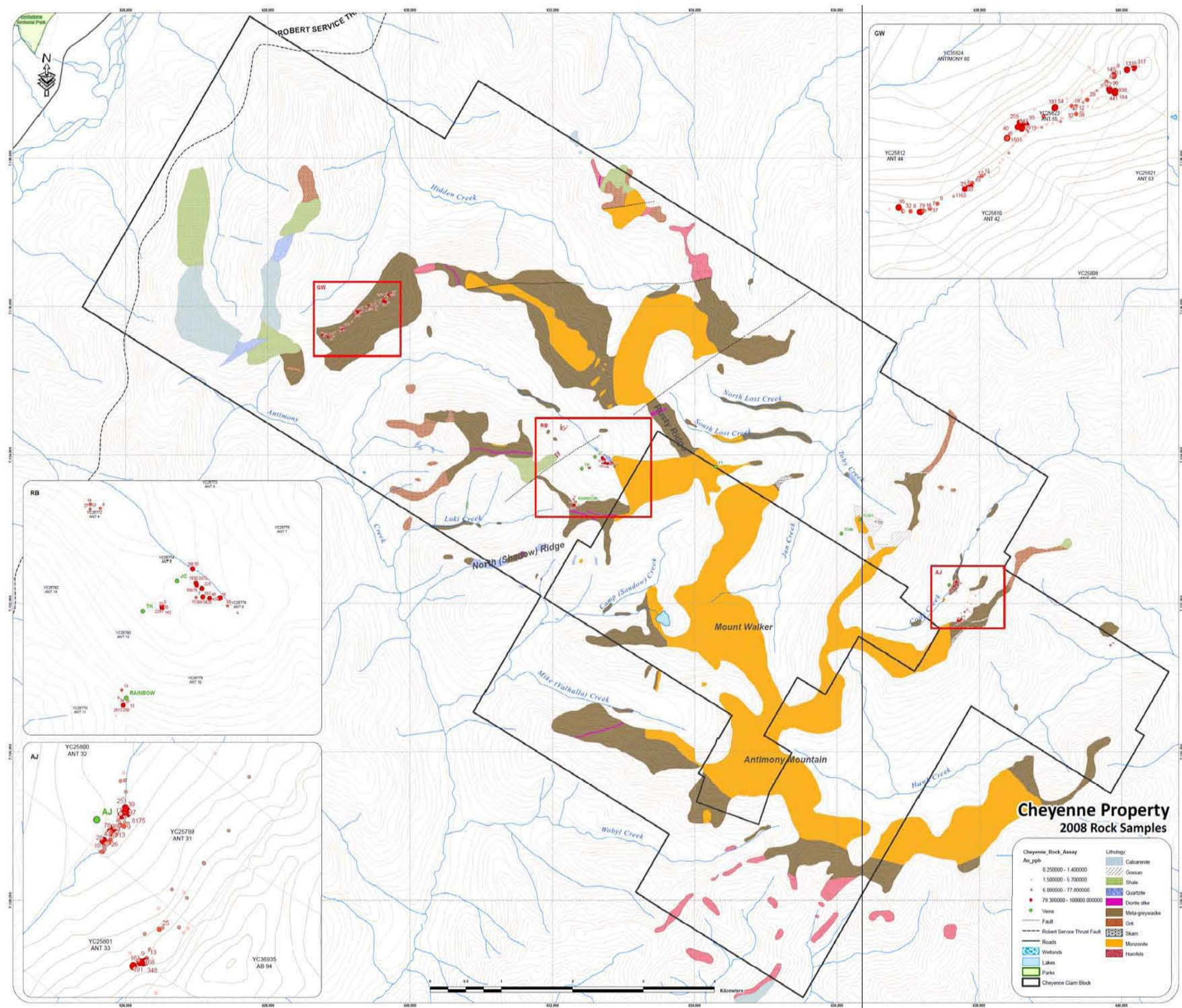


FIGURE 16

DISCUSSION & CONCLUSIONS

The 2008 exploration program on the Cheyenne produced a number of significant soil and rock geochemical anomalies which warrant further exploration.

MMI soil anomalies in arsenic, copper, antimony, and tungsten in the south part of the property around Antimony Mountain may indicate mineralization related to the Antimony intrusive. In particular, a multi-element (Ag, As, Bi, Cu, Sb, Cu, W) anomaly on Mike (Valhalla) Creek should be followed up with additional MMI soil sampling and prospecting.

The ridge located east of the Golden Wall contains a large silver soil anomaly, about 1.5 km long which extends north towards Hidden Creek. This anomaly is coincident with gold, lead, zinc, antimony and bismuth anomalies. Underlying this multi-element anomaly is the Antimony intrusive in contact with metasediments and a mapped fault line, which may have created favourable conditions for mineralization. A more detailed MMI soil survey along with ground VLF-EM surveying is recommended.

Sampling at the Golden Wall (sub-report attached as Appendix I) indicates that gold mineralization at surface is sporadic and is associated with arsenopyrite in fracture zones or small faults and in stratabound extensions from such fracture zones. Channel sampling is recommended on the northwest slope of the Golden Wall to provide a better indication of the nature and extent of the mineralization.

Rock sampling in the AJ and JC Vein areas confirmed the high-grade nature of the mineralization. These fault controlled, precious and base-metal rich veins occur in association with the Antimony Mountain intrusion and related dikes and sills. A VLF-EM survey in the JC vein area in 2006 revealed three conductors with coincident magnetic highs some distance from the known mineralization (Lebel, 2006). The coverage of the survey should be expanded as these conductors may represent targets for more vein mineralization.

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STATEMENT OF COSTS

Geologists: Daithi MacGearilt, Aiden Lavelle, Shane Treacy	44,400
Field Personnel: Kevin, Thomas, Julius, Sarah, Archie, Tubs, RJ	52,022
Accommodation & Meals:	21,760
Analyses:	54,423
240 rock samples (32-element ICP)	
1136 soil samples (MMI, 42-elements)	
Helicopter Support	58,518
Travel & Transport	9,077
Fuel	26,021
Supplies	6,261
Report preparation / maps	3,000
TOTAL:	\$ 275,482

STATEMENT OF QUALIFICATIONS

I, Daithi Mac Gearailt, with business address:

1640-1066 West Hastings St.
Vancouver, BC
V6E3X1

And residential address in Dawson City, Yukon Territory do here by certify that:

- I am a geologist with Logan Resources Ltd.
- I am a graduate geologist from the National University of Ireland, Galway
- I am the co-author of this report on the Cheyenne Property, Dawson Mining District, Yukon, which is based on my personal examination of the ground during July 1st to Sep 1st 2008.

Daithi Mac Gearailt, B.Sc.

APPENDIX I

GOLDEN WALL REPORT

LOGAN RESOURCES UPDATE ON THE GOLDEN WALL

CHEYENNE PROPERTY DAWSON MINING DISTRICT, YT

**MAPPING, ROCK SAMPLING AND MMI
SOIL SURVEY
JUNE 2008**

A Reduced Intrusion Related Gold System



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1.0 SUMMARY

This report is a compilation of the known data on the Golden Wall in the Cheyenne Property and includes work done during the 2008 field season. The report is intended for Logan Resources staff only. The author (Aiden Lavelle) and Shane Treacy spent four days (16-21th June 2008) at the Golden Wall. This time was spent mapping and collecting rock samples. Logan Resources staff also conducted an MMI soil survey on the south east slopes of the Golden Wall. Rock samples were assayed by Acme Analytical Laboratories Vancouver and soil samples were sent to SGS Laboratories, Toronto.

For more detailed information on the regional and property geology and claims refer to previous reports:

- 2006 GEOLOGICAL AND GEOPHYSICAL REPORT ON THE CHEYENNE PROPERTY (Hibbits and Nillos, 2007),
- GEOLOGICAL AND GEOCHEMICAL REPORT ON THE BUZ 1-14, HUD 1-6 AND TOOTH 1-180 CLAIMS by Total Energol 1989.
- 43-101 EVALUATION REPORT, CHEYENNE PROPERTY, FOR LOGAN RESOURCES LTD. By Peter T. George, P. Geo. Consulting Geologist Hamilton, Ontario, Canada, May 2006.

Recent work on the Golden Wall indicates that gold mineralization is sporadic or spotty and probably related to fracture zones where there is arsenopyrite mineralization. The geochemistry of rock samples from the Golden Wall has signatures of a reduced intrusion related gold system as expected for the area. It appears that the source of the mineralization/the causative pluton is distal to the Golden Wall or small if proximal.

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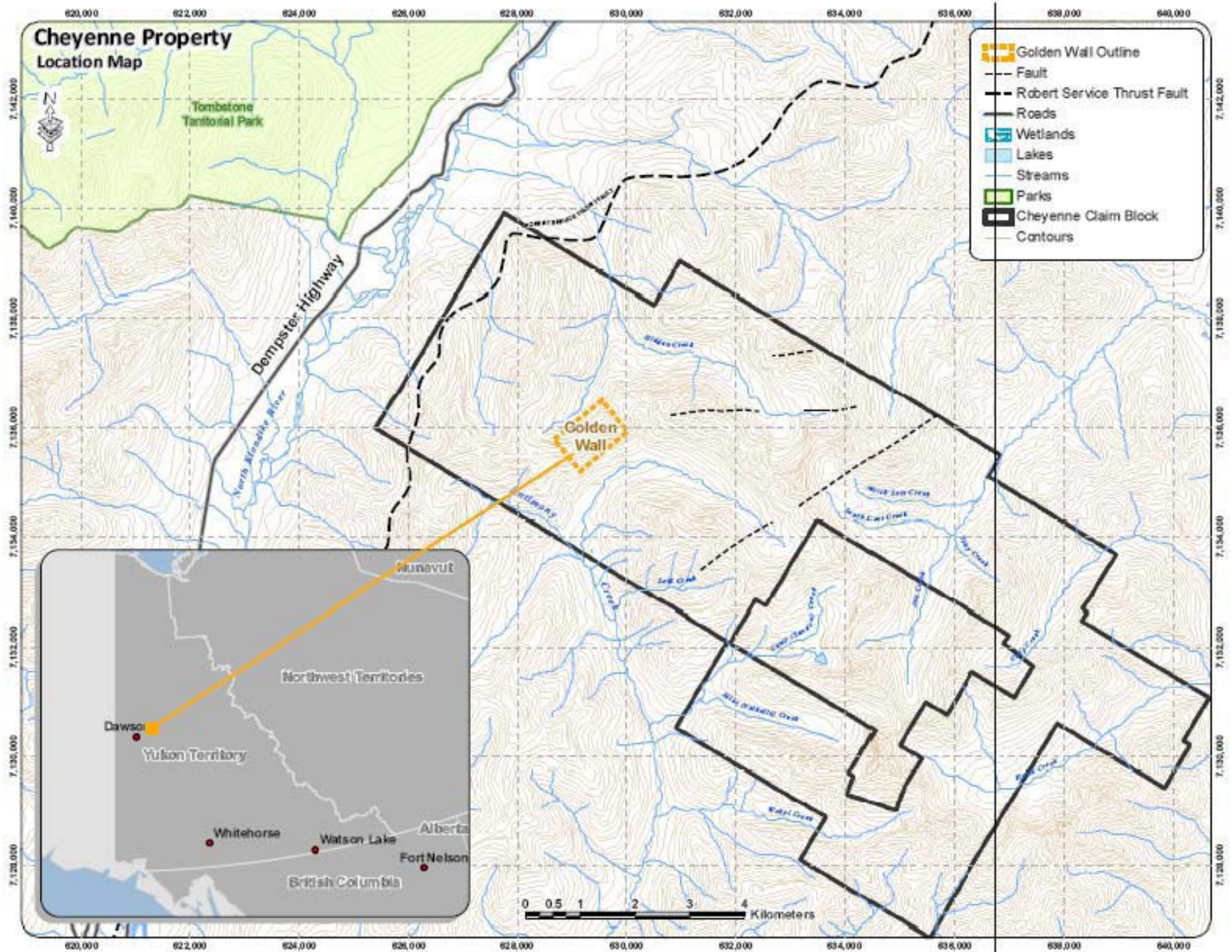
3.0 DESCRIPTION AND LOCATION

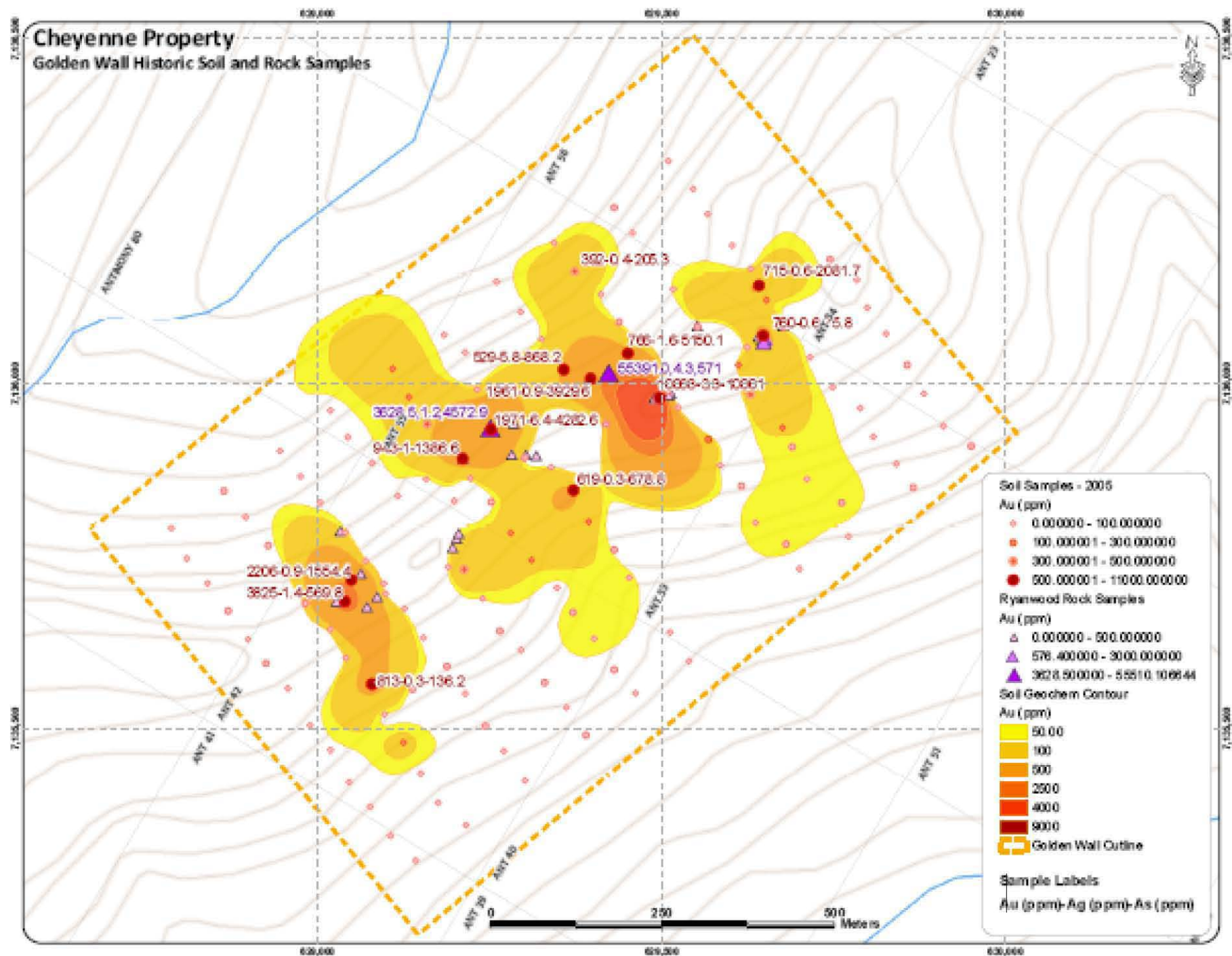
The Golden Wall is located in the west of the Cheyenne Property. The Cheyenne property is located approximately 67 kilometers northeast from Dawson City (Figure 2). The Golden Wall itself is approximately 6.5km east of the Dempster highway and is centred on UTM co-ordinates 629300, 7135900 (NAD 83, Zone 7). The Golden Wall has an area of 700m (northwest-southeast) by 1100m (southwest-northeast). Most recent work on the Golden Wall was done on claims ANT 53, 54, 55, 56, and 42 with some soil samples also taken on claims ANT 37, 38, 39, 40, 41, 51, 52, 23 and 25 (Figure 20).

The area is mountainous and access is by short helicopter flight from a gravel pit at kilometre 50 on the Dempster highway. The Golden Wall itself is a steep narrow ridge trending southwest to northeast and it reaches an elevation of just over 1700m at its highest point. The northwest slope of the ridge is extremely steep and difficult to work on with small cliffs in places. Much of it is covered with scree but there are some good outcrops that can be accessed and there are a number of gossan zones visible. The southeast slope is less steep but is scree covered or has thin low vegetation in places and exposure is not as good. The valley bottoms either side of the ridge are more vegetated with little exposure except for in stream beds. A small herd of caribou and a grizzly bear were seen on the Golden Wall during the course of this work.



Figure 1: The steep northwest slope of the Golden Wall.





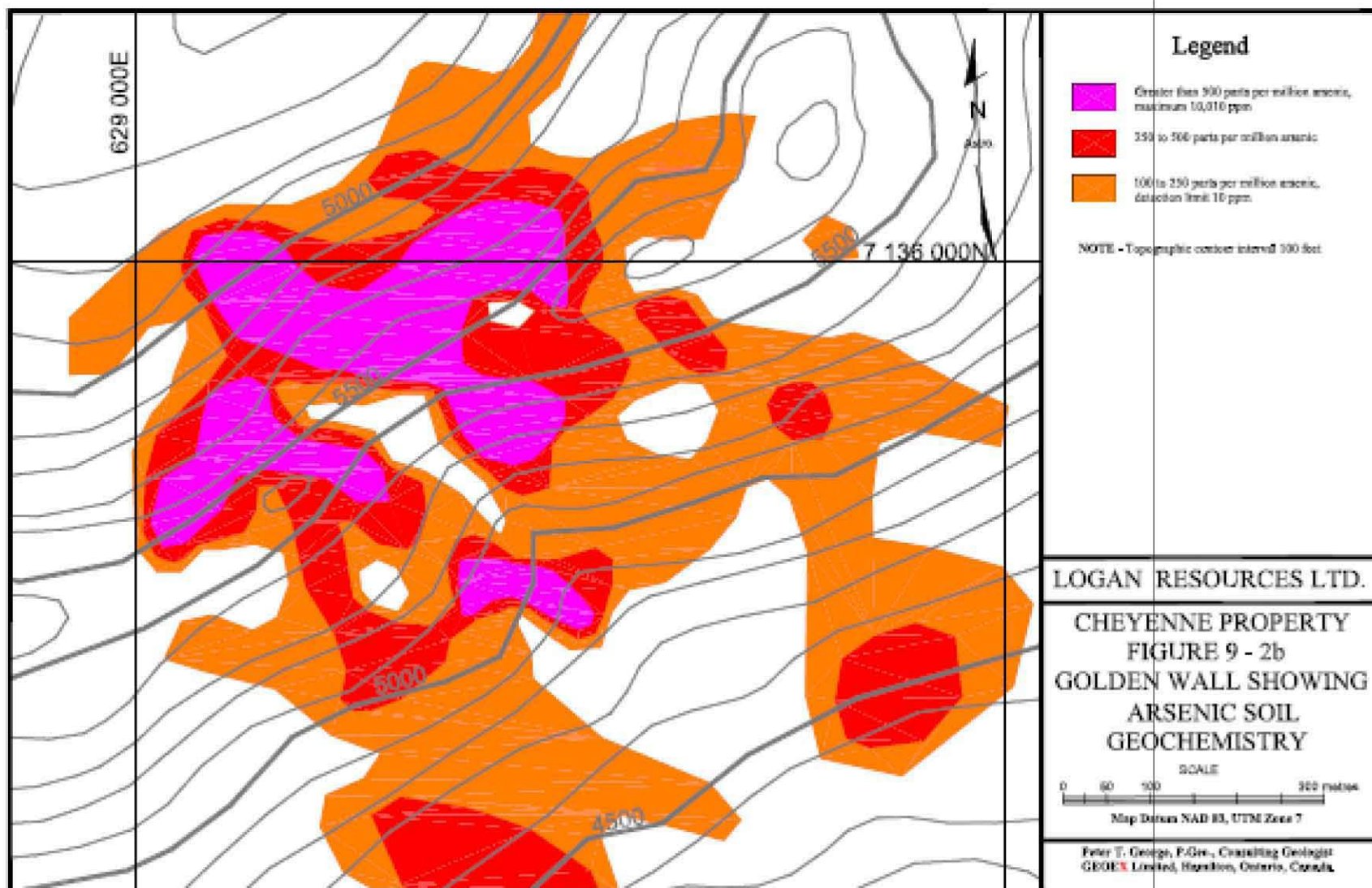




Figure 5: View looking northwest from the Golden Wall to the Dempster Highway and the Tombstone Mountains.

4.0 HISTORY

In 1994, Kennecott Canada Inc. staked a land package which covers the eastern part of the current Cheyenne property. They carried out geological and geochemical sampling in 1998.

In 2004, Shawn Ryan staked the area. An anomalous soil sample result from the Kennecott work led Ryan to discover the Golden Wall showing in 2004. Ryan carried out additional contour soil geochemical sampling (Figure 3 & 4) and completed a small trench on the south slope of the Golden Wall area. Ryan staked additional claims and optioned the property to Logan Resources in 2005.

Reconnaissance mapping by Mike Hibbits, Tim Nillos and Mark Terry in 2006 indicated that a metagreywacke unit dominated the geology of the Golden Wall.

At the Golden Wall showing, mineralization consists of disseminated to semi massive arsenopyrite and pyrite, with some minor chalcopyrite and bornite noted in some samples. The mineralized zone appears to extend laterally along the cliff face for several hundred meters. In July 2006, the company

collected samples along a section of the mineralized zone. All the samples collected returned anomalous values in Au (0.88 g/t to 5.04 g/t Au). The mineralized zone appears to be stratabound (Hibbits and Nillos 2007).

The main sulphide minerals seen on the Cheyenne property during the 2006 field program were pyrite, pyrrhotite, and arsenopyrite. Arsenopyrite is the main sulphide seen in the auriferous veins and also in the Golden Wall showing. The sulphide occurs as fine disseminations and also as massive to semi massive habits.

There are questions regarding some of the soil geochem data from the Golden Wall area, especially those taken from the slopes below the actual Golden Wall outcropping. The material may likely be talus and not true soil (Hibbits and Nillos 2007).

5.0 RECENT GEOLOGICAL WORK

Logan Resources geologists conducted field mapping and collected grab and channel samples on the Golden Wall from the 16th to the 20th of June 2008. The mapping confirmed that much of the Golden Wall is comprised of thin to medium bedded greywackes but a number of quartzite beds and minor limestone beds were noted (refer to Appendices for photographs and rock descriptions).

5.1 UNITS SEDIMENTARY ROCKS

Greywackes

The greywackes are fine-grained and mostly medium grey to purple grey in colour but sometimes are a light grey or grey-green colour. Many of the greywacke beds have a heavily rusted weathering surface and many contain very fine disseminated sulfides. Some of the greywackes appear silicified locally. Cross bedding was observed in some beds. In places the greywackes are shaley with thin laminations. Some of the metagreywackes are quartz-rich and grade into quartzite.

Quartzites

The quartzites are fine to medium-grained and vary from grey to blue-grey and white in colour. Some of the beds appear gritty. The quartzite beds are generally thicker bedded than the greywackes but they rarely exceed 3m. There are a few beds of sandstone that have not been recrystallised to quartzite. Some of the sandstone beds have a light grey to beige or yellow-brown colour and grains are easily visible with a handlens. Some quartzite and sandstone beds have visible flakes of secondary biotite, probably from the effects of thermal metamorphism due to nearby intrusives.

Limestones/Calcarenites

Limestone beds and calcarenites were noted in two areas on the Golden Wall. Their thickness is not known but there are at least 6m of limestone beds at one location (629647E, 7136143N). The limestones are thinly bedded and occur interbedded with harder meta-greywackes and quartzites which weather

more proud. The more pure limestones are a blue-grey colour but impure beds are darker in colour. Some of the beds appear recrystallised, especially those near the dyke mentioned below (Figure 8).

These units probably represent a relatively shallow water environment based on the presence of cross-bedding and gritty sandstones.

INTRUSIVES

Biotite-Hornblende Porphyry Dyke

A 1.3m dyke cuts limestones at grid co-ordinates 629649E, 7136150N on the northwest slope of the Golden Wall. The dyke is porphyritic with a grey-blue colour. It contains small hornblende phenocrysts and biotite flakes (12-13%) set in a hard, very fine-grained matrix. It was described as a biotite-hornblende porphyry dyke during mapping but in the thin section report it is described as a trachytic, intermediate composition volcanic (Appendix F, Sample GWA1). The dyke contains 12-13% opaque minerals of which 99% is pyrrhotite and <1% arsenopyrite. The rock weathers to a rusty colour and the dyke is weakly magnetic as expected for the amount of pyrrhotite it contains. It strikes roughly 100 degrees with a vertical dip.

There is a 35cm mineralised skarn contact at the north contact of the dyke that is weathered to gossan. The south contact of the dyke is less mineralised but is silica altered. This is the best-exposed dyke on the Golden Wall. Four chip samples were taken across the dyke and the skarn contacts. Two 65cm samples across the dyke and a sample from the wallrock either side.

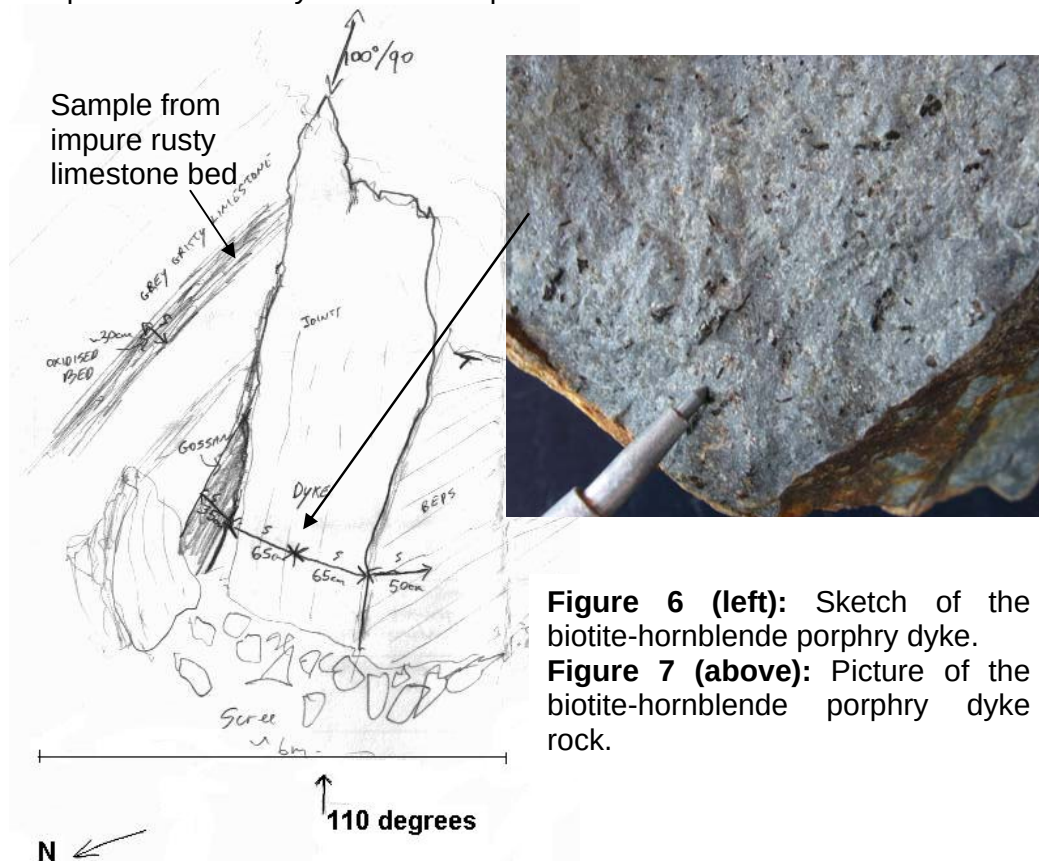


Figure 6 (left): Sketch of the biotite-hornblende porphyry dyke.

Figure 7 (above): Picture of the biotite-hornblende porphyry dyke rock.



Figure 8: Picture of the dyke. The contacts are marked as red lines.

Other Dykes

A number of smaller outcrops and talus of intrusive rocks were noted on the Golden Wall. The dykes could not be traced any distance but it is possible that one outcrop at 629566, 7136153 is a continuation of the dyke described above. The rock is fine to medium-grained, blue-grey in colour and is slightly magnetic. It contains 2-3% disseminated sulfides, 3-5% hornblende and has oxidised iron/limonite on the weathered surfaces.

There is a fine to medium-grained diorite and also gossan in a fracture zone at 629494, 7135981 (Figure 15). The gossan appears to be a weathered vein which strikes 100 degrees and dips 80 degrees south but the structure of the diorite is uncertain. It may be a dyke with the same strike. Three 1m chip samples were taken across the outcrop and a sample was taken from the centre of the vein. Another sample of the diorite was taken for whole rock analysis, See Appendix D.

Another intrusive, possibly a quartz monzonite (Figure 9) was seen at 629360E, 7135972N but was too difficult to break with a rock hammer for sampling. There was some talus of the same rock in the surrounding scree slope but the extent of this intrusive is not known. The rock is very light coloured, medium to coarse-grained with some biotite or hornblende, feldspars and minor quartz. No sulfides were seen in the rock.

It is possible that other intrusives were not seen because of snow covering part of the ridge top and difficult access to some outcrops on the steep slopes.



Figure 9: Unsampled Intrusive on the Golden Wall

5.2 STRUCTURE

Bedding

Strike and dip of bedding was measured at a number of locations during the latest work on the Golden Wall. The poles to the bedding are plotted on a stereonet below (Figure 10). They show one main cluster which indicates that most of the bedding strikes east-west to northeast-southwest and dips on average 30 degrees to the northwest.

Some tight to isoclinal folding (Figure 11 and 12) was seen on lower northwest side of the Golden Wall. The folding indicates that the area has suffered deformation which may be associated with the Robert Service Thrust that is inferred to lie roughly 3km to the west. The thrust fault strikes southwest northeast. Figure 11 and figure 12 show that the top and bottom beds of the folds have similar strikes and dips and so bedding on the fold limbs would plot mostly as one cluster on the stereonet. Given the absence of consistent way-up structures, this folding would make tracing individual beds difficult. Cross-bedding was seen at some locations where it indicated right way up (see updated geology map).

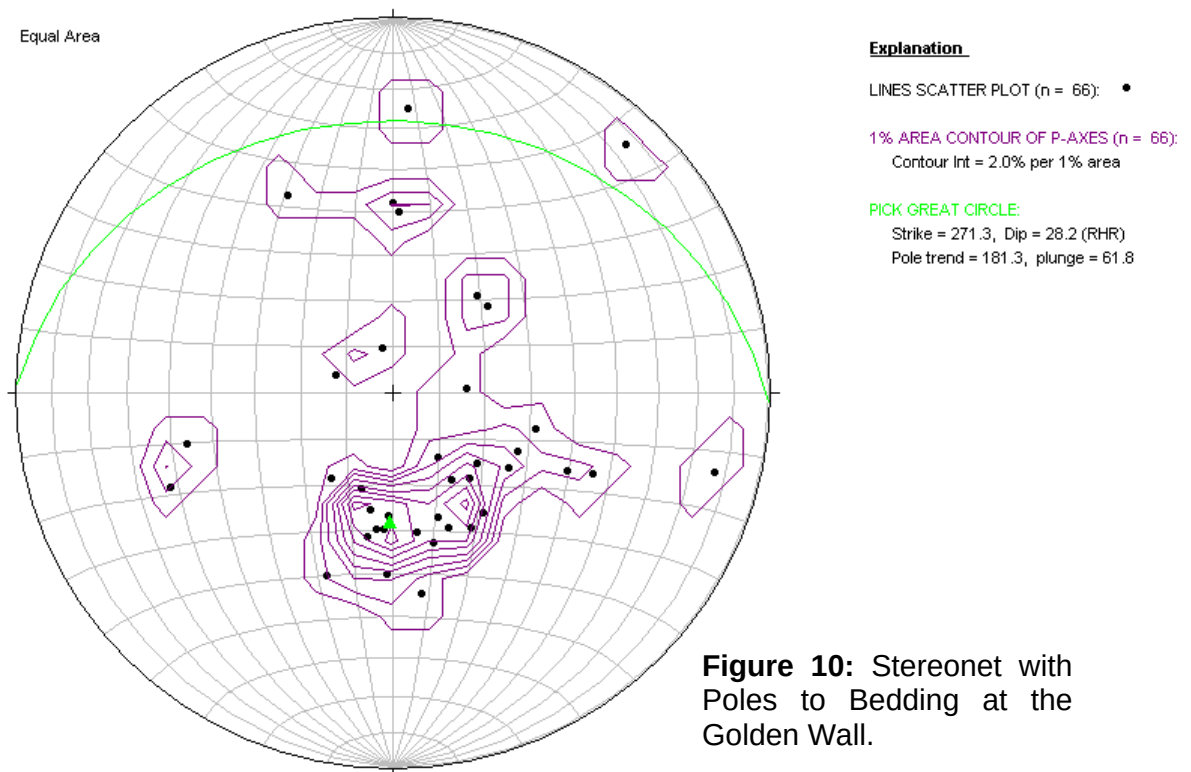


Figure 11: Tight fold in quartzites and limestone beds at 629100E, 7135940N.

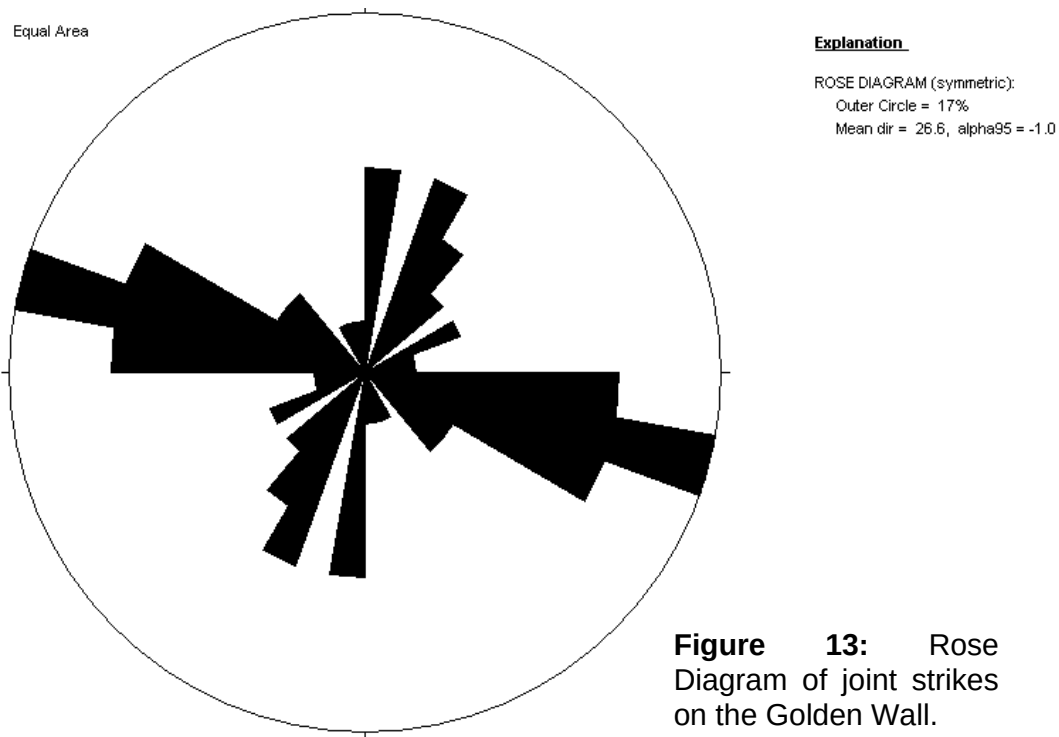


Figure 12: Near isoclinal fold at 629112E, 7135958N on the northwest side of the Golden Wall. The axial plane strikes roughly 080 degrees and dips around 30 degrees to the north. This is very close to the average pole to bedding on the stereonet.

Joints

There is obvious jointing in most outcrops on the Golden Wall. Where a definite set of parallel joints was seen on an outcrop, an average strike and dip for the joints were taken. These values were plotted on a stereonet program and a symmetric rose diagram was created (Figure 13). The rose diagram shows that there is one prominent joint set that strikes around 100 – 110 degrees. It is important to note that the biotite-hornblende porphyry dyke described above (Figure 8) has the same trend as these joints.

Structures with this trend also show up on the Cheyenne Property Aeromag map (reduced to pole) in the very west of the property (Figure 19) however no such structure is apparent on the map in the Golden Wall area itself (Figure 20).



5.3 OBSERVED MINERALISATION

In general, there is widespread pyritisation of rocks on the Cheyenne property including the Golden Wall where numerous gossan zones are visible. Pyrite and arsenopyrite were seen disseminated in both metagreywackes and some quartzites at numerous locations along the Golden Wall. In some places, it appears that some beds are mineralised but the full extent of the mineralisation is uncertain. At 629291E, 7135935N there appears to be around 10m of beds with significant mineralisation (Figure 14). Some of the beds here are replaced by massive arsenopyrite which weathers to a greenish colour. Another mineralised bed at 629629E, 7136079N near the northeast end of the Golden Wall Ridge was visible for at least 5m.

In places where the rocks have a very rusty weathering colour and contain fine disseminated sulfides, there are multiple parallel joints that give the outcrop a fractured or brecciated appearance locally. The fractures/joints in these zones often trend 100-110 degrees and appear to control the mineralisation eg at 629494E, 7135981N where there is a weathered sulfide vein with adjacent parallel joints (Figure 15).



Figure 14: Mineralised beds on the northwest side of the Golden Wall at 629291E, 7135935N.

6.0 RESULTS

6.1 ROCK SAMPLES

A total of one hundred and twenty rock samples were taken at the Golden Wall. They were sent to Acme Laboratories, Vancouver for multi-element (36) analysis. The results for gold are plotted on Figure 17. All other results are included in Appendix A with the rock sample descriptions. The significant results are highlighted.

Figure 17 shows that there are a number of samples grading at least 1g/t Au and one sample exceeding 10g/t (Au and Ag).

The biotite-hornblende porphyry dyke described above had insignificant gold values both from the dyke samples (1.4 and 2.3ppb) and also from the gossanous wallrock (7.8 and 1.3ppb). This is probably because there is a lack of arsenopyrite in the dyke (<1%) according to the thin section report in Appendix D.

There is an obvious cluster of results greater than 1g/t associated with the mineralised beds in Figure 14 above (Sample 816718-816720). The strike is limited but this zone is the highest priority target on the Golden Wall as the mineralisation is stratabound over a thickness of around 10m. The outcrop here is jointed and slightly brecciated. It is possible that the mineralisation is confined to this fracture zone.

Another cluster of results greater than 4g/t occurs in gossan at 629407E, 7136007N. There is some massive arsenopyrite here and again the mineralisation may be fracture controlled as there are noticeable closely spaced parallel joints on the outcrop (Sample 816712-816716). A 3m channel sample across the fracture zone averaged 6.38g/t.

A 3m channel sample across the fracture zone in Fig 15 yielded anomalous Au values up to 57ppb (Samples 816683-816685). Sample 816686 from the centre of the vein yielded highly anomalous lead and zinc values, both over 1000ppm and also 6.6g/t silver.



Weathered sulfide vein striking 100/80 S

Figure 15: Fracture zone with sulfide vein and parallel joints all trending 100 degrees (629494E, 7135981N) Samples 816683-816685

6.1.1 Discussion of Rock Sample Results

The results indicate that the gold mineralisation is sporadic or spotty. Highly oxidised sulfide rich rocks may or may not carry gold. Photographs of rock samples which carry gold and rocks that are weakly anomalous in gold are included in appendix B. Notice that sample 816669 contains 2.17g/t but the outcrop picture shows mostly grey rock. The sample was taken from a rusted part of the outcrop thus the mineralisation at this point is probably very localised. Notice also that sample 816692 which is highly gossanous only contained 89ppb.

The outcrop photograph from where sample 816691 was taken shows a moderately gossanous outcrop with jointed/brecciated texture. The sample contained 0.5g/t and it is likely that the mineralisation is fracture controlled.

6.1.2 Element Associations and Mineralisation Model

Mineralisation on the Cheyenne Property and surrounding area is related to the Tombstone Intrusive Suite and generally conforms to the reduced intrusion-related gold system model (RIRGS).

"RIRGS are characterised by widespread arrays of sheeted auriferous quartz veins that preferentially form in the brittle carapace at the top of small plutons but also include a wide range of intrusion-related mineral deposit styles (skarns, replacements, veins) that form within the region of hydrothermal

influence surrounding the causative pluton, and are characterised by proximal Au-W-As and distal Ag-Pb-Zn metal associations, thereby generating a zoned mineral system.

Distal mineralisation, which forms at or beyond the limits of hornfels, is dominated by a Pb-Ag-Zn or Sb-rich geochemical association, and typically occurs as fault-filled veins” (Hart, C.J.R., 2007).

Figure 16 show that Au correlates strongly with Ag and Bi, and Ag correlates strongly with Bi and As. There is also a moderate correlation between Au and As, Au and Sb and Ag and Cu which is a feature of more distal mineralisation in RIRGSS. The positive Au and Bi correlation is more commonly a feature of intrusion-hosted Au ores. For example, at Dublin Gulch Au correlates solely with Bi.

There is no correlation between Au and W which is hardly enriched at the Golden Wall. This is not unusual as W commonly occurs in early stage, intrusion-hosted veins and W enrichments may be spatially distinct from Au or later Au may overprint early W veins or skarns (Hart, C.J.R., 2007).

The strong correlation between Au and Se (Selenium) is a feature of many gold deposits. Selenium follows sulphur closely in nature and is frequently enriched in pyrite and chalcopyrite. It is also geochemically similar to Arsenic and is generally enriched in gossans (Boyle, R.W., 1979). As expected, there is a strong correlation between As and Se. These associations indicate that gold is linked to arsenopyrite mineralisation.

6.2 SOIL SAMPLES

A total of 320 soil samples were collected on the southeast slope of the Golden Wall by Logan Resources staff in June 2008. A 50m grid was pre-programmed into handheld Garmin GPS units. The samples were generally collected at 50m spacings but if there was insufficient soil the sample was collected at the nearest suitable site or at the next station. Soil sample stations are visible on the MMI response ratio maps in Appendix C and below (Figure 18).

The soil samples were placed in pre-labeled paper bags and then in ziplock plastic bags to prevent leaks or cross contamination during transport. The samples were boxed and shipped to SGS Laboratories in Toronto for multi-element mobile metal ion analysis (MMI-M).

Soil geochemistry maps showing response ratios for a number of elements are included in Appendix B while the results for gold are also shown below (Fig 18). The maps show that mineralisation is localized and there are no obvious correlations between Au and Ag and Cu, Pb and Zn. There is only one coincident Au-As-Bi anomaly at the northeast end of the Golden Wall ridge around 629600E, 7136100N. The area of the anomaly is limited and it coincides with known mineralized outcrop that returned values of 0.1 to 0.8g/t Au in grab samples. Two other gold anomalies are clearly visible on Figure 18 but they are also of limited extent. The Au anomaly at the southwest end of the Golden Wall coincides with a single anomalous Ag and Cu response.

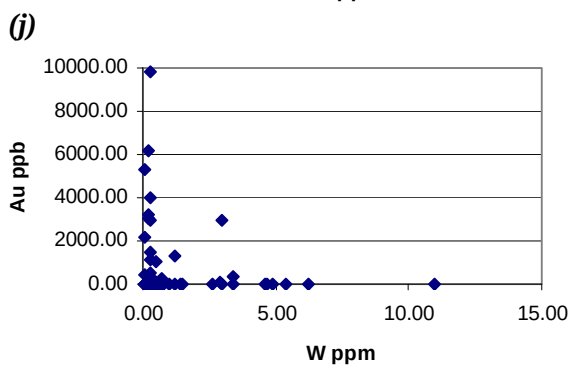
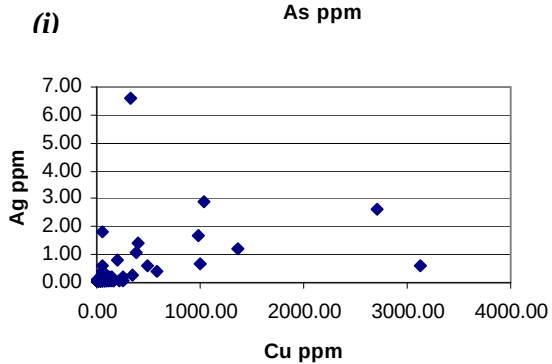
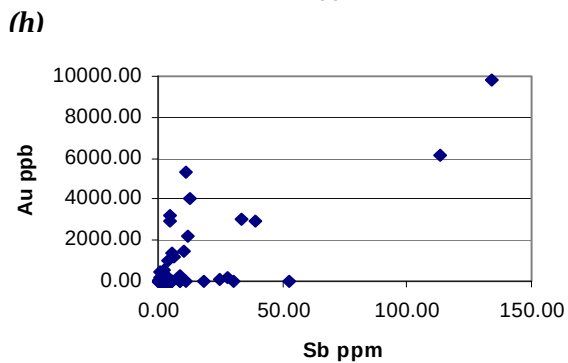
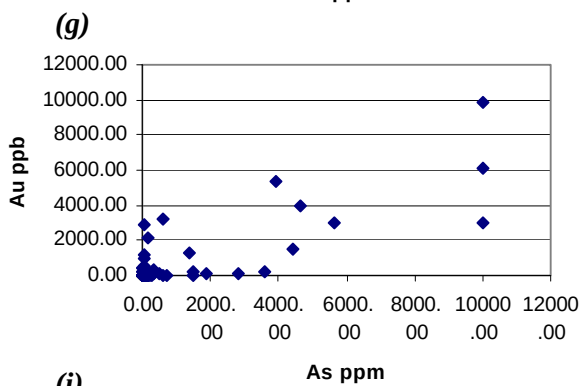
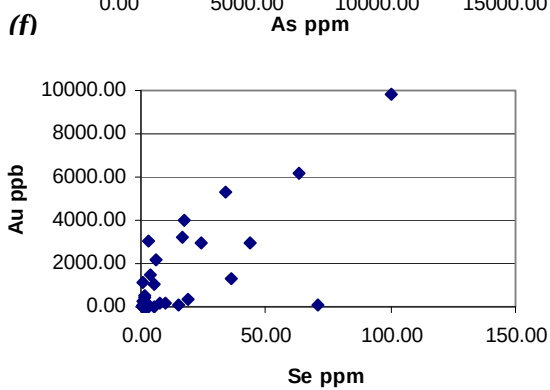
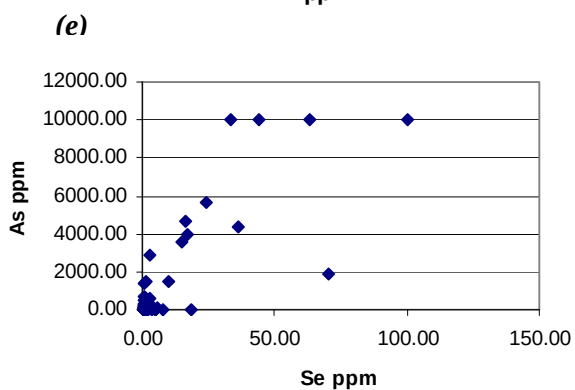
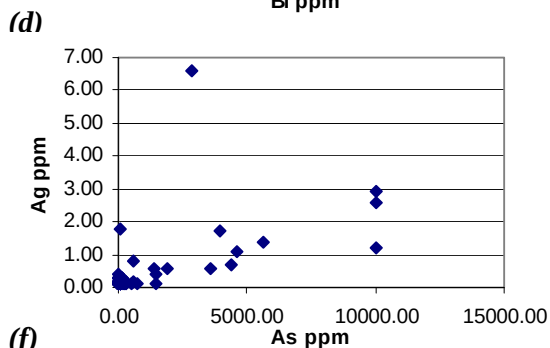
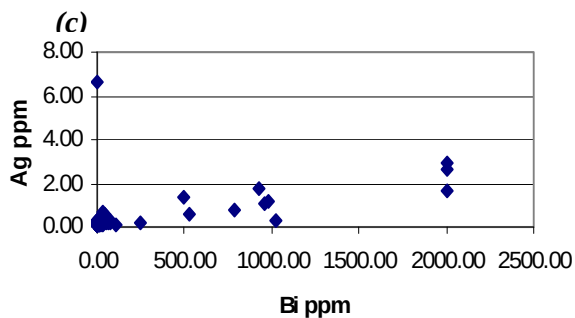
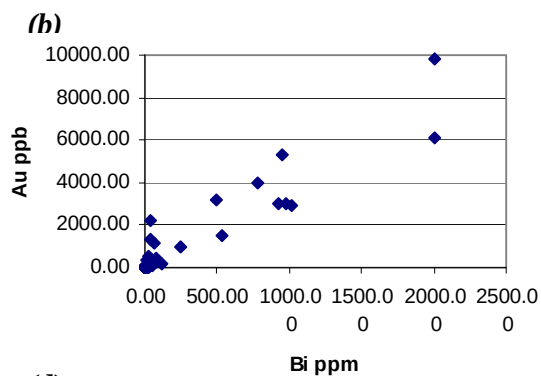
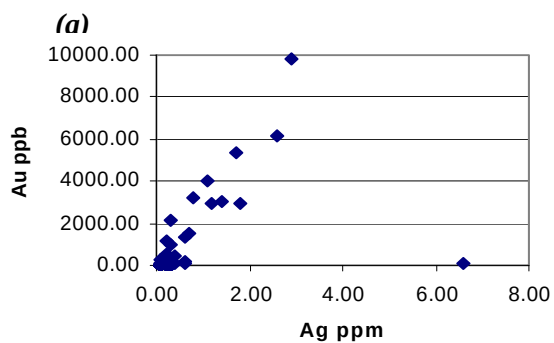


Fig 16 (previous page): Element Associations from Multi-element Results of Golden Wall Rock Samples. Graphs a to f show strong positive correlations, g,h and i show moderate positive correlations. Graph j shows that tungsten is not elevated at the Golden Wall and there is no correlation with gold.

The Pb response ratio map in Appendix B shows NW-SE trending anomaly that may be linked to an underlying structure. The trend is close to the trend of the joints and veins discussed above.

In general, it can be seen that Ag, Cu and Pb anomalies are more extensive than gold or bismuth anomalies and this further points to a distal type mineralisation.

7.0 CONCLUSION AND RECOMMENDATIONS

The results of the sampling at the Golden Wall indicate that gold mineralisation at surface is sporadic and is associated with arsenopyrite mineralisation in fracture zones or small faults and in places the mineralisation may appear as stratabound extensions from such fracture zones where the beds are of suitable permeability or chemistry.

Due to the strong folding of strata in the area, any stratabound mineralisation would probably be difficult to trace.

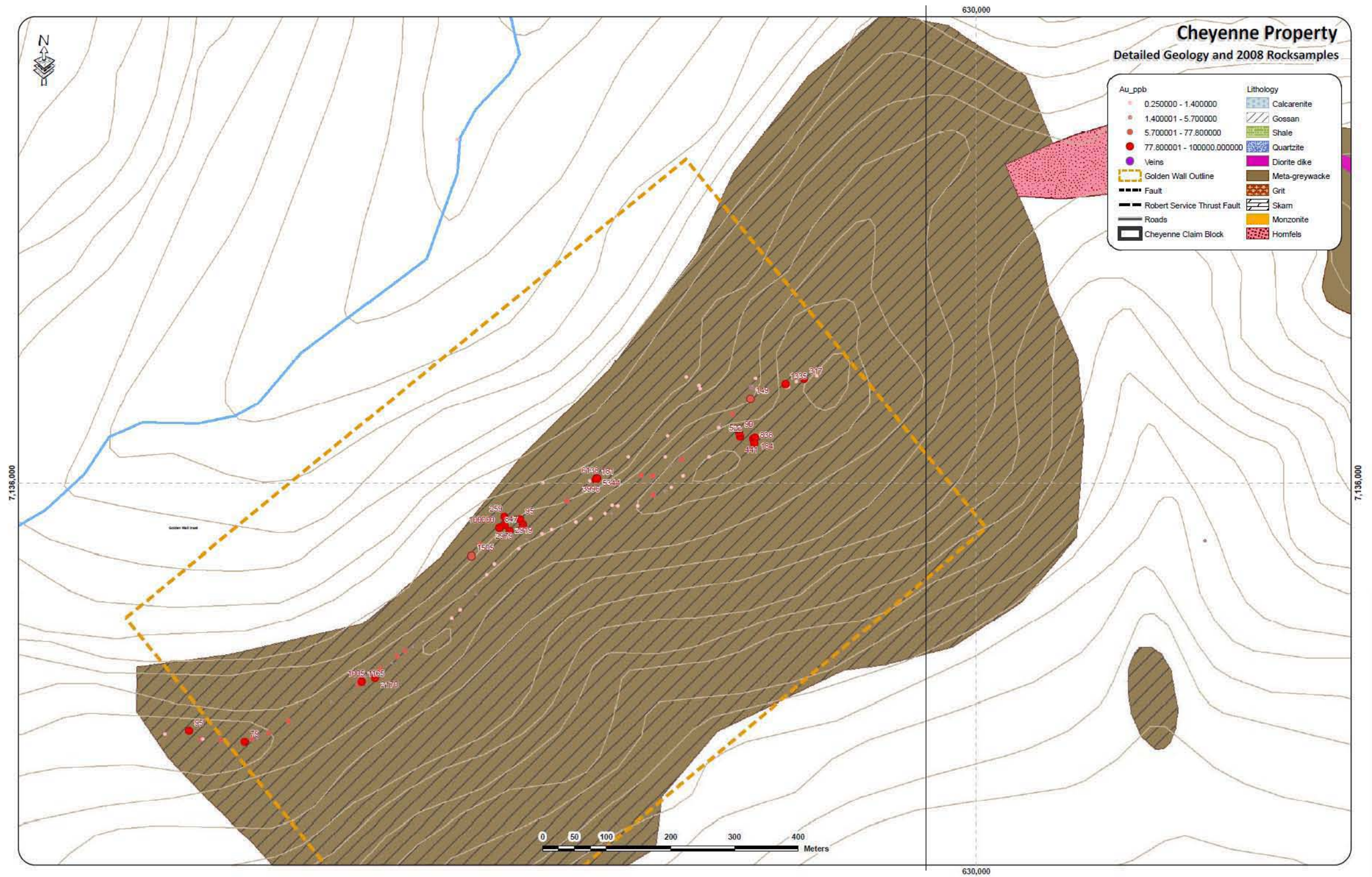
The evidence from rock and soil sample results point to distal mineralisation in a reduced intrusion related gold system however this could be an overprint.

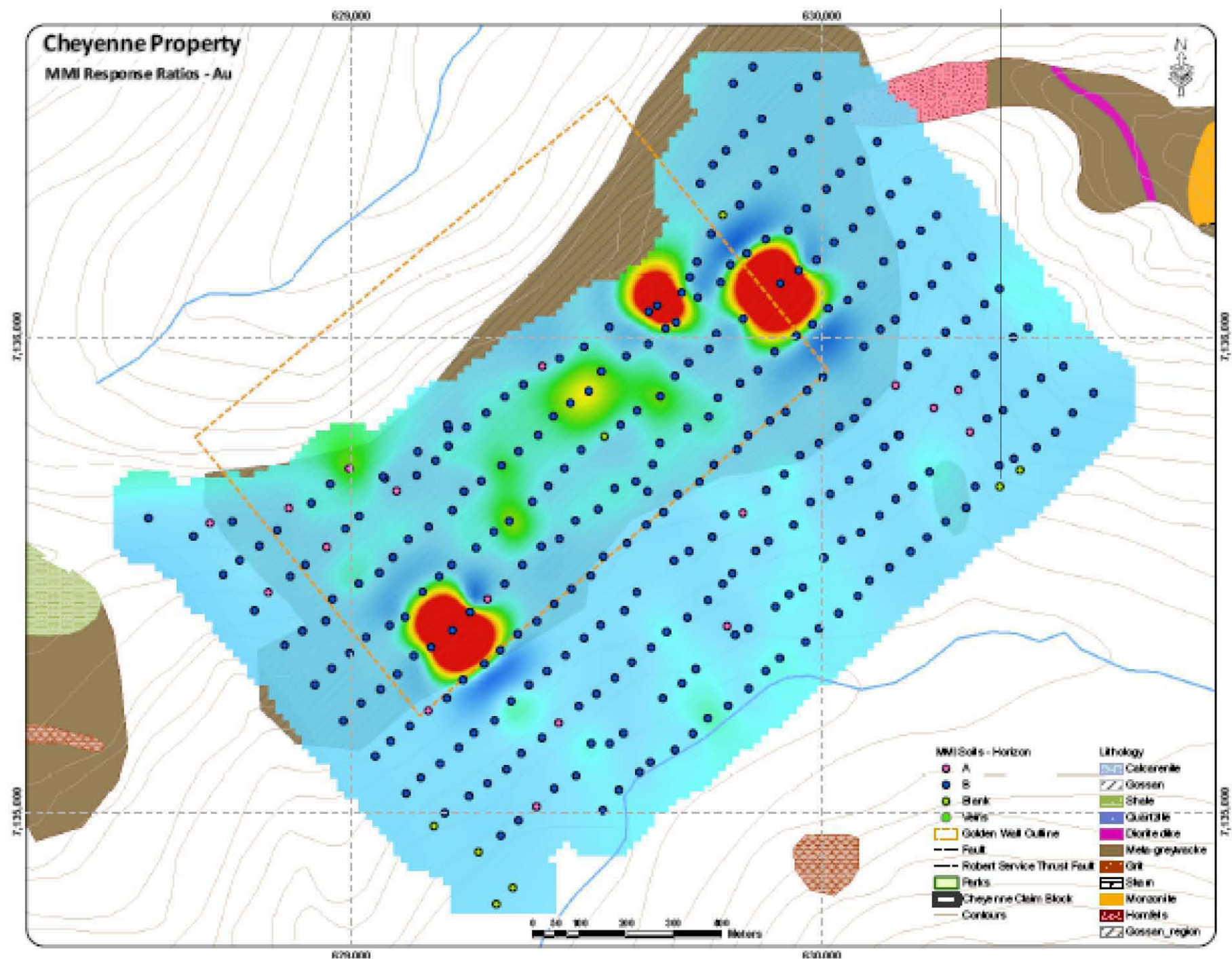
Proper channel sampling could be conducted on large sections of the Golden Wall as there is relatively good exposure on the northwest slope. This would better indicate the true nature and extent of mineralization.

Potential for further mineralisation at depth cannot be ruled out as there may be more intensive fracturing or strata more suitable to replacement type mineralisation. Thus drilling is the only method of investigating the deeper geology of the Golden Wall.

The structural information recorded during the most recent fieldwork indicates that the average bedding dips mostly to the north and major joint sets, veins and dykes strike 100-110 degrees with near vertical dips.

Therefore, drilling should be planned to best intersect both bedding and fractures. An azimuth of approximately 180 degrees and dip of -45 to -60 deg would best intersect both bedding and fracture zones/veins however such drill holes would be near-parallel to the southeast slope. Drill holes should be carefully selected based on the drill-site geology/bedding and thought should also be given to stability of the ground as some of the slopes are dangerously steep. For practical reasons first pass holes would probably be confined to the ridge top. Core angles should be carefully monitored during and drilling programme.





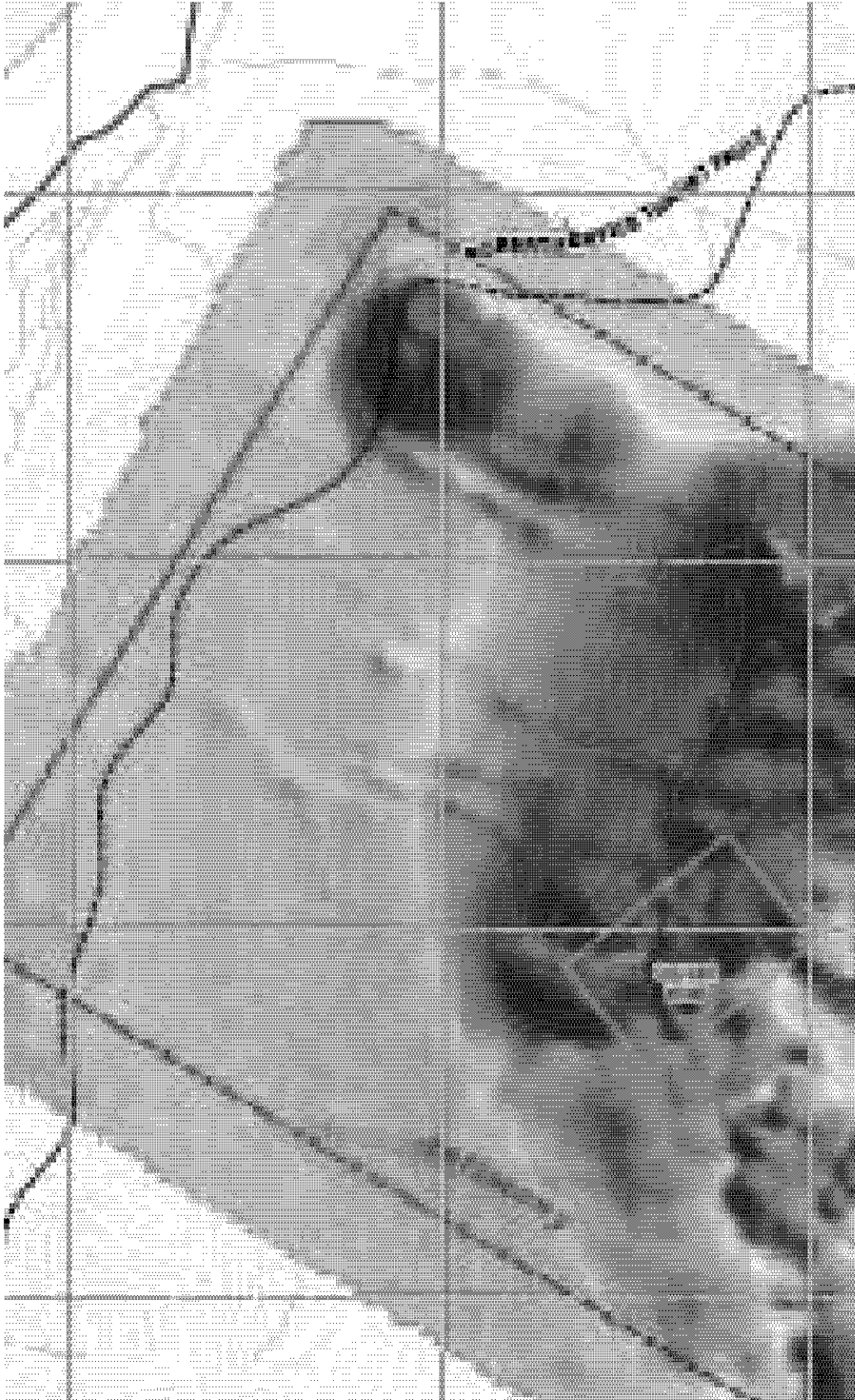
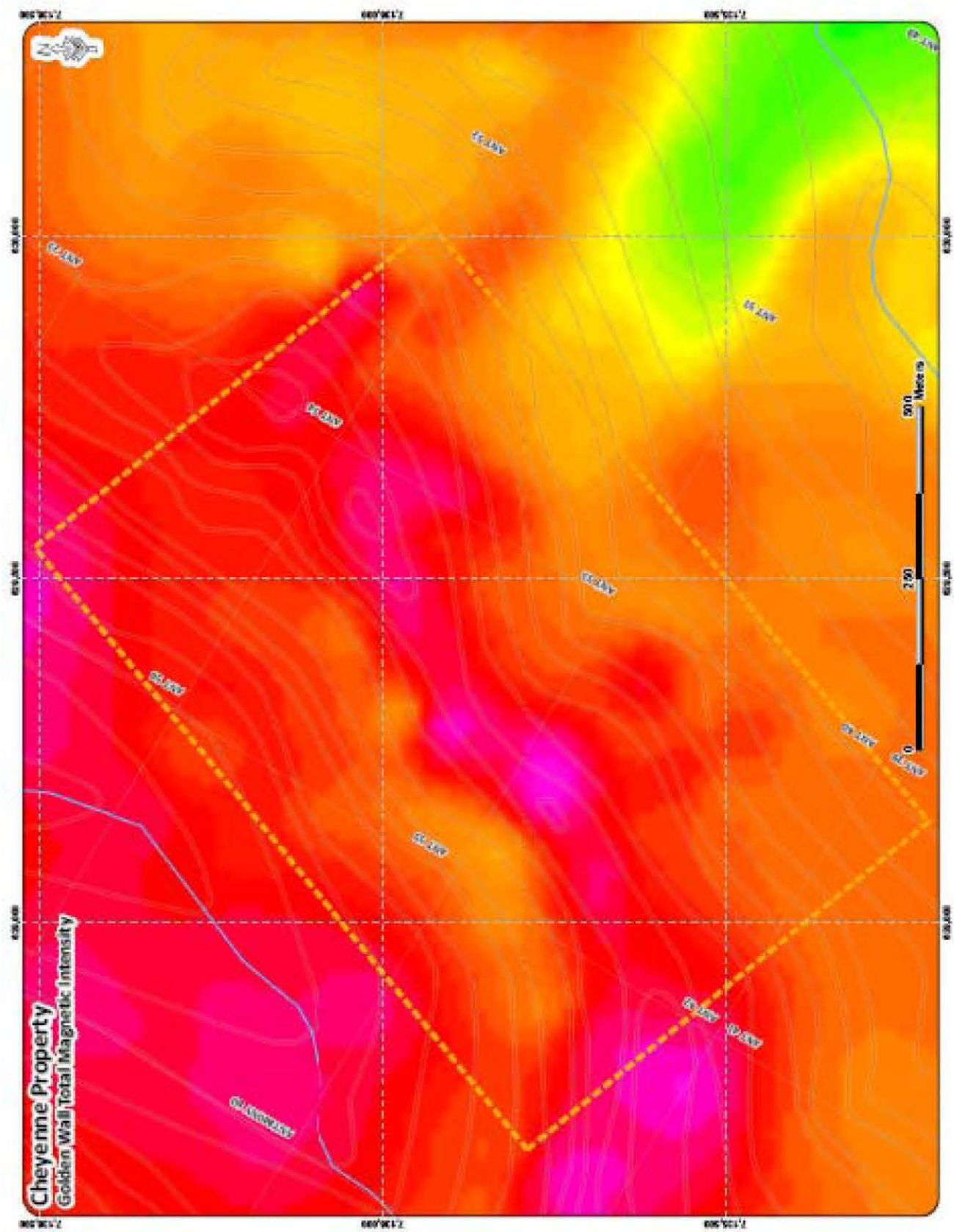


Figure 19: Cheyenne Aeromag (Reduced to pole) showing structures trending roughly 100-110 degrees in the west of the property.



Certificate of Qualifications

I Aiden Lavelle, B.Sc., with residence at 1640-1066 West Hastings St. Vancouver, BC, V6E3X1 and at Sarnaught, Castlebar, Co. Mayo, Ireland 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 Golden Wall area from June 16th to June 20th 2008.

Aiden Lavelle

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Appendix A

Rock Sample Descriptions and Assay Results

Appendix A

Sample	UTM_x	UTM_y	Elevation	Point_Type	Lithology	Note	Wgt_KG	Mo_ppm	Cu_ppm	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_pct	As_ppm	U_ppm
816602	629719	7136159	1655	Cross bedding	Metagreywacke	Cross beds -> RWU fine grained dark grey unit	2.20	0.60	40.90	53.40	110.00	0.10	30.40	16.50	289.00	4.23	9.90	1.60
816603	628730	7135608	1677	Bedding	Quartzite	Quartzite with minor <5% lithics; qtz veins, limonite staining; minor pinhead sulfides, possibly biotite/mica	1.51	0.90	9.30	17.50	36.00	0.10	15.60	6.50	127.00	1.56	0.70	1.60
816604	628789	7135600	1693	Outcrop	Metagreywacke	Intense Fe staining on weathered surfaces, very fractured rock, no visible bedding, minor disseminated sulphides with silver lustre (arsenopyrite?)	1.70	0.50	19.70	2.30	19.00	0.10	28.50	13.40	268.00	2.86	0.60	1.10
816605	628817	7135599	1703	Bedding	Metagreywacke	Fine grained dark grey-purple MGW interbedded with light grey-green med. Grained MGW, intense Fe limonite staining on some weathered surfaces, concentrated in the grey-purple unit	2.30	0.90	28.80	10.60	42.00	0.20	23.40	9.50	145.00	1.92	2.00	1.60
816606	628875	7135601	1690	Joints	Metagreywacke	Fine grained light grey-green MGW with limonite staining, no visible sulfides	2.40	0.90	33.20	17.20	39.00	0.10	23.30	5.90	265.00	2.13	4.00	2.00
816607	628991	7135658	1665	Outcrop	Metagreywacke	Dark grey-purple, fine grained, no limonite staining, no visible sulfides	1.86	0.40	16.50	2.70	9.00	0.10	6.70	2.80	76.00	1.99	1.50	0.90
816608	629039	7135689	1665	Outcrop	Breccia	Very weathered soft rock, intense Fe staining, soft and crumbly (possibly due to weathering?); alteration of minerals to green clay	2.89	0.30	115.20	5.60	28.00	0.20	1.90	6.50	483.00	7.89	38.20	3.10
816609	629039	7135689	1665	Outcrop	Breccia altered metagreywacke	Taken 2m downslope of GWR9, fine disseminated sulfides, sample taken out of soft crumbly outcrop	2.52	0.20	69.50	3.10	28.00	0.30	4.20	7.60	1180.00	6.28	28.10	3.40
816610	629058	7135704	1669	Joints	Metagreywacke	Light grey-green and dark grey-purple MGW, quart-rich, limonite staining, minor visible sulfides, biotite < 3%	2.14	0.60	62.70	11.20	46.00	0.10	19.00	9.90	516.00	4.88	34.10	4.10
816611	629067	7135709	1668	Bedding	Metagreywacke	Quartz-rich, light to med. Grey fine grained MGW, limonite coating on weathered surfaces, minor sulfides	1.51	0.60	37.10	16.90	20.00	0.10	26.70	9.80	83.00	2.00	19.50	1.10
816612	629118	7135744	1674	Bedding	Metagreywacke	Very fine grained, dark grey-purple with minor limonite staining on weathered surfaces	1.85	0.30	3.00	6.00	19.00	0.10	25.40	6.50	129.00	2.21	14.20	0.70
816613	629192	7135802	1663	Bedding	Metagreywacke	Very fine grained, dark grey-purple, limonite stained, good bedding with small ripples	1.78	0.70	30.90	5.20	11.00	0.10	36.50	14.70	62.00	2.02	25.50	1.60
816614	629234	7135857	1650	Bedding	Quartzite	Coarse grained, light grey-brown, thick beds, limonite on weathered surfaces, no visible sulfides. Quartzite unit is only a few metres thick here and is interbedded with the MGW formation, it is a member of this formation	1.96	0.80	7.00	6.90	14.00	0.10	7.20	1.50	97.00	0.69	6.90	0.40
816615	629321	7135920	1654	Bedding	Metagreywacke	Very fine grained dark grey-purple MGW; possibly an Argillite member, I would consider bedding to be reliable; no visible min other than minor limonite staining	3.50	0.30	5.60	1.50	16.00	0.10	38.80	11.00	151.00	3.61	3.20	0.60
816616	629352	7135928	1656	Bedding	Quartz-rich metagreywacke	Medium grey-pink; medium grained; 1% biotite; no visible sulfides, limonite staining on weathered surfaces	1.87	0.60	22.10	17.60	29.00	0.10	28.90	9.20	166.00	2.01	46.30	2.70
816617	629397	7135944	1663	Outcrop	Quartz-rich metagreywacke	Medium grey-purple, v. fine grained, chertiferous zones, no visible sulfides, limonite staining on weathered surfaces	1.98	0.40	7.90	17.30	22.00	0.10	30.20	8.30	212.00	2.82	16.20	1.00
816618	629430	7135952	1665	Outcrop	Impure quartzite	Intense Fe oxidation of a highly fractured lenticular pod of a light grey medium grained quartzite with >1% fine disseminated silvery sulfides. The vein or pod trends 110°ESE	2.08	7.20	75.60	178.30	146.00	0.30	6.70	12.00	96.00	1.93	13.30	5.60
816619	629439	7135964	1657	Outcrop	Metagreywacke	Highly fractured and Fe oxidized zone of fine grained MGW, dark grey-purple. Pinhead disseminated sulfides. Sulfides are bigger in the medium grained quartzite than the fine grained MGW -> pore space	1.99	0.60	45.70	13.10	36.00	0.10	30.60	12.20	182.00	3.05	50.30	2.10
816620	629470	7135964	1677	Bedding	Metagreywacke	Medium grained light grey-faint yellow gritty MGW with visible bedding surfaces; limonite staining; <1% sulfide pinhead size rare, disseminated	1.94	0.40	20.80	5.30	17.00	0.10	17.50	6.00	84.00	3.06	10.40	3.40
816621	629513	7135987	1687	Channel Sample/O	Intrusive diorite? Recrystallized metagreywacke	0-1m	2.92	1.00	217.60	22.90	46.00	0.10	14.80	9.20	310.00	1.59	48.90	1.70
816622	629513	7135987	1687	Channel Sample/O	Intrusive diorite? Recrystallized metagreywacke	1-2m	6.33	1.70	51.70	22.10	45.00	0.10	24.40	13.40	243.00	2.57	66.00	1.70
816623	629513	7135987	1687	Channel Sample/O	Intrusive diorite? Recrystallized metagreywacke	2-3m	2.66	1.10	70.00	20.30	40.00	0.10	22.10	12.70	218.00	2.70	38.10	1.50
816624	629582	7136041	1695	Bedding	Metagreywacke	Fine-grained dark grey-purple, good bedding, very little visible sulfides	1.94	0.50	19.90	87.20	102.00	0.10	54.50	11.10	227.00	2.33	9.60	2.10

Appendix A

Au_ppb	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm	Bi_ppm	V_ppm	Ca_pct	P_pct	La_ppm	Cr_ppm	Mg_pct	Ba_ppm	Ti_pct	B_ppm	Al_pct	Na_pct	K_pct	W_ppm	Hg_ppm	Sc_ppm	Tl_ppm	S_pct	Ga_ppm	Se_ppm	Sample
0.50	10.20	175.00	0.30	1.60	0.30	65.00	1.52	0.01	25.00	59.00	1.22	123.00	0.14	6.00	4.69	0.32	0.68	0.20	0.01	7.10	0.80	0.15	15.00	0.50	816602
0.50	15.00	11.00	0.10	0.40	0.20	13.00	0.27	0.01	29.00	23.00	0.25	91.00	0.01	4.00	0.80	0.04	0.24	0.10	0.01	2.20	0.10	0.05	3.00	0.50	816603
0.50	7.50	32.00	0.10	0.30	0.30	35.00	1.00	0.01	10.00	39.00	0.62	41.00	0.09	3.00	1.60	0.08	0.38	0.30	0.01	4.60	0.30	0.28	7.00	0.50	816604
8.30	10.60	143.00	0.20	0.20	0.30	23.00	4.00	0.11	14.00	26.00	0.42	40.00	0.07	5.00	2.63	0.25	0.21	0.40	0.01	3.30	0.20	0.82	8.00	0.50	816605
2.60	8.80	12.00	0.10	1.70	0.50	17.00	0.36	0.03	9.00	21.00	0.48	95.00	0.01	5.00	0.94	0.03	0.17	0.10	0.01	1.90	0.10	0.09	3.00	0.60	816606
2.20	7.50	22.00	0.10	3.50	0.40	9.00	0.04	0.01	11.00	14.00	0.37	118.00	0.04	2.00	1.20	0.04	0.57	0.10	0.01	1.40	0.60	0.12	4.00	0.50	816607
1164.80	13.10	6.00	0.10	6.00	70.90	2.00	1.09	0.16	12.00	1.00	0.03	17.00	0.01	2.00	0.34	0.03	0.13	0.30	0.01	1.00	0.10	0.13	3.00	5.10	816608
1004.80	7.40	7.00	0.10	3.90	246.50	4.00	3.22	0.08	21.00	6.00	0.05	28.00	0.02	1.00	1.22	0.05	0.19	0.50	0.01	1.10	0.10	0.17	5.00	1.30	816609
23.30	19.00	42.00	0.20	5.80	1.30	43.00	1.12	0.05	15.00	33.00	0.47	113.00	0.11	4.00	1.81	0.11	0.47	0.40	0.01	4.50	0.30	0.29	9.00	0.90	816610
13.00	9.00	23.00	0.10	5.90	2.10	13.00	0.24	0.01	10.00	14.00	0.44	71.00	0.01	4.00	1.23	0.08	0.40	0.20	0.01	1.80	0.40	0.90	5.00	0.50	816611
2.60	14.50	32.00	0.10	2.00	0.50	35.00	0.24	0.01	32.00	37.00	0.63	172.00	0.12	4.00	2.09	0.08	1.03	0.20	0.01	3.70	1.10	0.05	8.00	0.50	816612
1.30	11.00	26.00	0.10	4.90	0.30	41.00	0.09	0.01	11.00	38.00	0.57	78.00	0.10	3.00	1.74	0.05	0.81	0.10	0.01	4.10	0.90	0.15	7.00	0.50	816613
1.40	8.10	11.00	0.10	0.50	0.10	12.00	0.17	0.01	15.00	23.00	0.29	53.00	0.03	1.00	0.54	0.04	0.05	0.20	0.01	1.50	0.10	0.05	3.00	0.50	816614
0.70	12.70	10.00	0.10	2.20	0.20	62.00	0.07	0.01	30.00	60.00	0.75	115.00	0.06	3.00	2.35	0.04	0.61	0.10	0.01	6.80	0.80	0.05	10.00	0.50	816615
1.60	13.20	163.00	0.20	3.40	0.20	35.00	1.44	0.07	30.00	36.00	0.90	78.00	0.05	7.00	3.57	0.30	0.50	0.10	0.01	4.80	0.40	0.05	11.00	0.50	816616
0.70	11.00	31.00	0.10	3.10	0.10	44.00	0.14	0.01	26.00	43.00	0.74	96.00	0.05	3.00	2.26	0.05	0.53	0.10	0.01	5.00	0.40	0.05	8.00	0.50	816617
1.70	17.50	172.00	0.80	0.90	0.70	3.00	1.35	0.08	14.00	5.00	0.06	29.00	0.07	2.00	2.07	0.34	0.04	0.30	0.01	0.80	0.10	0.88	5.00	1.60	816618
0.90	15.20	37.00	0.10	4.40	0.40	31.00	0.25	0.02	26.00	29.00	0.89	89.00	0.01	8.00	2.58	0.09	0.68	0.10	0.01	5.70	0.60	0.25	10.00	0.50	816619
0.50	19.10	6.00	0.10	0.60	0.20	14.00	0.03	0.03	52.00	18.00	0.78	139.00	0.00	3.00	2.20	0.02	0.44	0.10	0.01	3.10	0.20	0.05	7.00	0.50	816620
1.90	10.60	285.00	0.20	1.50	1.40	40.00	2.31	0.17	25.00	15.00	0.35	260.00	0.13	8.00	3.14	0.24	0.22	0.20	0.01	2.10	0.20	0.09	8.00	0.50	816621
0.50	9.70	259.00	0.20	1.40	0.60	66.00	1.71	0.25	22.00	22.00	0.44	363.00	0.15	2.00	2.20	0.16	0.26	0.20	0.01	2.30	0.20	0.32	7.00	2.20	816622
1.90	8.30	243.00	0.20	1.50	0.40	61.00	1.75	0.23	21.00	27.00	0.46	306.00	0.12	3.00	2.34	0.17	0.22	0.20	0.01	2.60	0.20	0.31	7.00	1.40	816623
0.90	16.00	65.00	0.40	1.70	0.20	41.00	0.58	0.02	27.00	47.00	0.99	64.00	0.08	6.00	2.67	0.14	0.45	0.30	0.01	4.70	0.40	0.08	11.00	0.50	816624

Appendix A

Sample	UTM_x	UTM_y	Elevation	Point_Type	Lithology	Note	Wgt_KG	Mo_ppm	Cu_ppm	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_pct	As_ppm	U_ppm
816625	629651	7136069	1684	???	Very altered metagreywacke	Extremely altered, intense Fe oxidation, abundant mineralization, micas and sulfides of a greater size than the host grain size.	2.29	0.30	590.50	7.00	31.00	0.40	70.80	29.00	580.00	15.61	13.10	1.50
816626	629706	7136151	1696	Bedding	Metagreywacke	Fine grained, grey/green colour, qtz-rich, possible pinhead sulphides, beds are folded and warped	1.81	0.20	29.60	25.70	60.00	0.10	29.20	10.50	200.00	3.98	0.70	1.30
816627	629703	7136150	1699	Talus	Quartzite	Medium grained light grey-green quartzite in weathered talus beside GWR25, intense limonite staining, definite sulphides <1%, talus is most likely close to source and due to preferential weathering of a softer more fractured bed	3.05	0.50	20.10	11.00	20.00	0.10	12.70	5.40	268.00	3.26	22.30	2.10
816628	629657	7136147	1668	Bedding	Metagreywacke	Medium grained, qtz-rich, medium grey colour, intense Fe oxidation on weathered surfaces, sulphides visible disseminated silver colour ≈ 1%, 3 samples across this outcrop	2.59	1.90	77.80	41.70	80.00	0.10	10.00	18.00	216.00	3.88	21.90	4.20
816631	629657	7136147	1668	Outcrop	Metagreywacke	Secondary biotite 3-5%; sulphides (arseno?) 1-2%, intense Fe oxidation taken approx. 2-3m downslope of GWR27 from same bed	3.29	1.90	64.50	75.30	83.00	0.10	9.00	16.70	179.00	4.74	45.10	4.00
816632	629652	7136147	1656	Bedding	Metagreywacke	Same bed as GWR27 and GWR28, further along strike, secondary biotite and sulphides	2.69	2.00	72.40	19.50	26.00	0.10	9.80	11.00	223.00	3.81	16.50	3.60
816633	629649	7136150	1654	Dyke	Dyke Wallrock	Fine grained felsic dyke outcrop cutting st beds, grey-blue colour, limestone skarn along contact, dyke is 1.3 m thick. Sample both N and S contact limestone and two 65 cm channel samples of dyke N --> S; dyke contact zone, N side, 35 cm chip sample, gossan heavily rusted skarn contact.	1.45	0.50	157.80	8.00	18.00	0.10	9.90	16.10	324.00	8.50	20.70	5.00
816634	629649	7136150	1654	Dyke	Dyke Wallrock	Fe oxidised bed at contact with dyke (50cm sample); beds are ≈ 56" to dyke, sulfides in limestone, silicified laminations, S side	2.11	0.20	15.70	121.10	18.00	0.10	8.70	2.40	565.00	1.36	2.30	3.30
816635	629649	7136150	1654	Dyke	Felsic-intermediate dyke	Dyke: 65 cm chip sample from N side. Fine grained quartz matrix with hornblende and biotite(?) phenocrysts, 1% disseminated sulfides	1.92	2.00	66.50	59.10	50.00	0.20	8.90	16.30	217.00	4.60	46.60	3.70
816636	629649	7136150	1654	Dyke	Felsic-intermediate dyke	Dyke: 65 cm chip sample S side from edge to centre, fine grained grey-blue rock with biotite phenocrysts (3%) and sulfides (1-2%)	2.85	1.80	57.30	41.40	42.00	0.10	7.50	12.60	315.00	3.81	30.70	3.60
816637	629655	7136164	1662	Bedding	Metagreywacke/Quartzite	Medium grained, medium grey with green tint, interbeds of quartzite, gritty quartzite and metagreywacke, thin quartz veins, limonite staining on weathered surfaces, minor pinhead size disseminated sulphides	1.78	0.70	5.00	4.90	15.00	0.10	12.50	3.10	108.00	0.99	2.90	0.50
816638	629566	7136153	1613	Outcrop	Felsic intermediate dyke	Fine to medium grained felsic dyke outcrops in small area here, blue-grey in colour, sulphides ≈ 3% approx. disseminated. Fe oxidation on weathered surfaces, no biotite, hornblende present 3-5%, weakly magnetic	3.06	2.50	87.60	22.70	25.00	0.10	9.50	23.40	254.00	4.90	0.80	5.20
816639	629568	7136148	1620	Outcrop	Quartzite	Green/grey, fine grained, intensely silicified, disseminated silvery sulfides 0.5-1%, intense oxidation on weathered surfaces, this is similar to the dyke at GWR31 but lacks biotite and magnetism	2.66	4.00	52.30	119.10	194.00	0.30	26.10	18.70	245.00	2.88	2.30	8.40
816641	629522	7136027	1668	Bedding	Metagreywacke	Fine grained dark grey-blue colour, thin to medium bed thickness, Fe oxidation on weathered surfaces, trace sulfides, 2" micas	2.93	0.50	40.10	9.60	58.00	0.10	39.00	15.90	176.00	3.61	5.90	3.00
816642	629513	7136041	1660	Joints	Metagreywacke	Fe oxidation (intense) trending along joints perpendicular to bedding, trace sulfides visible, dark grey-purple fine grained, pinhead disseminated sulfides	2.34	0.40	24.50	11.70	40.00	0.10	29.00	9.90	228.00	4.85	8.10	0.80
816643	629455	7136041	1646	Joints	Metagreywacke	Medium grained dark grey greenish, qtz rich, thin stockworks, qtz veins and veinlets; sulfides disseminated and in stringers; veins roughly parallel to jointing	3.28	0.30	20.50	12.30	55.00	0.10	27.00	14.80	315.00	3.26	67.70	2.60
816644	629408	7136011	1615	Outcrop	Gossan	Gossanized zone, Black colour, black clay alteration, intensely oxidised, 10m lateral extent (approx), abundant mineralization	1.60	0.50	3125.20	55.20	74.00	0.60	868.30	384.00	172.00	40.00	1869.20	0.70

Appendix A

Au_ppb	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm	Bi_ppm	V_ppm	Ca_pct	P_pct	La_ppm	Cr_ppm	Mg_pct	Ba_ppm	Ti_pct	B_ppm	Al_pct	Na_pct	K_pct	W_ppm	Hg_ppm	Sc_ppm	Tl_ppm	S_pct	Ga_ppm	Se_ppm	Sample
441.40	1.00	49.00	0.10	0.80	76.20	4.00	1.58	0.18	6.00	3.00	0.08	9.00	0.02	2.00	1.50	0.08	0.02	0.10	0.01	1.00	0.10	5.40	5.00	18.60	816625
1.10	15.10	4.00	0.10	1.90	0.20	29.00	0.03	0.02	48.00	38.00	0.83	223.00	0.03	1.00	2.64	0.03	0.65	0.10	0.01	3.00	0.40	0.05	8.00	0.50	816626
0.80	12.10	25.00	0.10	5.10	0.40	42.00	0.20	0.05	13.00	49.00	0.82	134.00	0.09	2.00	2.14	0.05	0.60	0.20	0.01	3.60	0.60	0.13	8.00	0.50	816627
1.10	22.20	173.00	0.50	2.40	1.30	69.00	0.98	0.17	38.00	9.00	0.48	108.00	0.16	2.00	1.57	0.13	0.13	0.50	0.01	2.70	0.10	1.53	5.00	0.80	816628
1.40	21.70	236.00	0.50	2.40	1.30	39.00	1.35	0.18	28.00	7.00	0.29	92.00	0.11	1.00	1.81	0.22	0.08	0.40	0.01	1.70	0.10	2.66	5.00	1.00	816631
1.50	20.00	210.00	0.10	2.50	1.70	49.00	1.10	0.16	37.00	7.00	0.34	87.00	0.12	1.00	1.52	0.16	0.14	0.40	0.01	1.60	0.10	1.91	5.00	0.70	816632
7.80	8.60	333.00	0.10	1.40	2.50	12.00	7.06	0.06	23.00	10.00	0.09	43.00	0.06	11.00	4.41	0.32	0.04	0.20	0.01	1.70	0.10	1.73	11.00	0.80	816633
1.30	8.80	380.00	0.10	2.00	0.40	13.00	8.72	0.02	17.00	13.00	0.21	47.00	0.10	10.00	5.89	0.28	0.05	0.30	0.01	1.70	0.10	0.12	12.00	0.50	816634
1.40	19.30	210.00	0.20	3.00	1.20	66.00	1.11	0.17	32.00	9.00	0.51	74.00	0.15	2.00	1.82	0.18	0.17	0.40	0.01	2.50	0.10	2.06	6.00	1.10	816635
2.30	18.10	242.00	0.20	3.00	0.70	51.00	1.86	0.15	36.00	9.00	0.39	104.00	0.15	5.00	2.34	0.24	0.18	0.50	0.01	2.10	0.10	1.62	7.00	0.80	816636
0.80	10.60	10.00	0.10	1.90	0.10	19.00	0.08	0.01	18.00	25.00	0.29	43.00	0.03	4.00	0.87	0.03	0.24	0.10	0.01	1.40	0.20	0.05	4.00	0.50	816637
1.20	24.90	174.00	0.20	1.80	0.80	52.00	1.21	0.17	46.00	8.00	0.62	87.00	0.12	1.00	1.59	0.17	0.07	0.40	0.01	3.40	0.10	2.48	6.00	0.90	816638
0.50	36.00	66.00	1.20	3.10	0.70	40.00	1.03	0.13	21.00	14.00	0.84	110.00	0.12	1.00	1.16	0.11	0.10	0.60	0.01	2.60	0.10	1.46	5.00	1.20	816639
1.90	12.80	14.00	0.10	0.70	0.30	17.00	0.16	0.06	40.00	15.00	0.89	73.00	0.01	8.00	3.23	0.04	0.41	0.20	0.01	5.60	0.40	0.16	9.00	0.50	816641
0.50	8.80	33.00	0.10	1.40	0.30	79.00	0.28	0.01	10.00	74.00	1.03	149.00	0.19	6.00	2.85	0.09	0.67	1.40	0.01	8.70	0.70	0.50	12.00	0.50	816642
1.00	18.70	87.00	0.20	2.60	0.80	56.00	1.76	0.02	71.00	54.00	0.57	64.00	0.09	14.00	3.69	0.12	0.50	4.90	0.01	4.40	0.40	0.05	11.00	0.50	816643
54.40	0.90	1.00	1.20	3.30	14.10	2.00	0.14	0.01	2.00	1.00	0.01	3.00	0.00	1.00	0.35	0.00	0.01	0.40	0.01	0.30	0.10	10.00	1.00	70.70	816644

Appendix A

Sample	UTM_x	UTM_y	Elevation	Point_Type	Lithology	Note	Wgt_KG	Mo_ppm	Cu_ppm	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_pct	As_ppm	U_ppm
816645	629408	7136016	1615	Joints	Metagreywacke/Gossan	Medium grained MGW, intensely altered unit, intense Fe oxidation, directly above gossan, visible sulphides	3.14	0.20	113.20	15.70	43.00	0.10	24.40	14.80	3045.00	7.47	15.60	1.00
816646	629396	7136003	1615	Bedding	Metagreywacke	Crystalline, highly altered, coarse grained, black/dark green coloured; beside gossan	2.98	0.30	145.90	13.90	48.00	0.10	11.70	5.40	2716.00	8.26	5.40	2.10
816647	629322	7136000	1601	Joints	Metagreywacke	Medium grained, grey-green, crystalline, visible sulfides	1.75	0.80	63.30	19.20	41.00	0.10	22.80	11.80	94.00	3.77	11.20	2.20
816648	629286	7135943	1617	Joints	Breccia	Extremely oxidised joint or fracture, very weathered dark brown/black colour, light yellow-brown on some weathered surfaces; this unit follows jointing	2.49	0.20	249.50	14.20	25.00	0.10	5.30	7.40	172.00	40.00	481.60	0.40
816649	629262	7135947	1639	Outcrop	Possible metagreywacke	Extremely altered and oxidised, dark brown on weathering surfaces, also a light yellowish/green mottled texture on some weathered surfaces; very weathered rock, a lot of clay alteration	2.49	0.40	85.80	6.50	20.00	0.10	6.10	17.80	1223.00	10.54	1477.00	5.70
816650	629262	7135934	1616	Outcrop	Gossan	Very altered, lots of mineralization, sample taken 3m along wall to S of GWR46. Similar highly oxidised unit	4.34	0.50	1363.60	18.60	60.00	1.20	249.40	873.20	529.00	29.44	10000.00	4.30
816651	629254	7135930	1619	Outcrop	Qtz-rich Metagreywacke	Fine grained, crystalline grey-green colour, 2-3% arsenopyrite, at W end of gossanized wall	0.88	51.80	473.50	334.40	8.00	100.00	107.20	1058.40	3.00	31.13	10000.00	6.80
816652	629744	7136196	1696	Joints	Metagreywacke	V. fine grained purple grey, very jointed, very rusty (possible fracture zone, near vertical, fresh surface are grey, picture taken	1.37	0.50	991.30	17.70	46.00	0.70	103.20	216.10	383.00	21.51	4410.80	4.40
816653	629731	7136163	1701	Bedding	Metagreywacke	Purple-grey shaley, very fine, very rusty weathering colour, joints visible, thin laminated shale bed visible	1.89	0.30	47.10	5.30	26.00	0.20	28.80	10.80	188.00	4.29	321.40	0.90
816654	629702	7136155	1693	Joints	Metagreywacke and sandstone	Fine to med grained, visible biotite and finely disseminated pyrite, rock has numerous parallel joints and very rusty weathering colour locally. Some of the rock is a quartz rich sandstone	1.74	0.60	48.30	15.40	21.00	0.60	12.60	7.00	169.00	2.54	1382.00	0.60
816655	628768	7135613	1684	Bedding	Metagreywacke with quartzite beds	Thin laminations (1-2mm) visible, cross bedding indicates right way up	1.56	0.40	79.50	11.10	31.00	0.10	13.80	19.70	396.00	2.58	329.20	1.10
816656	628786	7135600	1693	Joints	Metagreywacke with quartzite	V. fractured, v. weathered/rusted, limonite coating, possibly contains fine pyrite	1.63	0.50	29.10	5.90	48.00	0.10	18.40	9.60	153.00	3.65	7.30	2.40
816657	628805	7135599		Bedding	Sandstone and metagreywacke beds	Interbedded medium grained sandstone and fine MGW with rusty weathering	1.98	0.70	51.80	26.50	31.00	0.20	27.20	6.60	150.00	2.85	81.70	4.20
816658	628867	7135601	1693	Bedding	Metagreywacke	Very jointed, rusty weathering	1.52	1.90	38.60	29.80	19.00	0.20	3.40	1.20	89.00	2.05	5.60	3.30
816661	628893	7135609	1687	Bedding	Metagreywacke	Very fine grained, rusty weathering underlain by qrtz sandstone	1.86	0.80	38.20	9.60	31.00	0.10	33.50	13.80	109.00	3.05	6.20	3.10
816662	628893	7135609	1687	Outcrop	Quartz sandstone	Coarse grained quartz sandstone with coarse biotite flecks	3.26	2.50	20.50	19.60	100.00	0.10	5.10	13.70	902.00	4.89	33.20	5.20
816663	628924	7135629	1674	???	Metagreywacke	Light and dark grey	1.97	1.00	37.70	20.60	18.00	0.20	2.60	0.80	74.00	2.66	12.80	2.40
816664	629031	7135684	1666	Joints	Metagreywacke	MGW contains sulfides, probably arsenopyrite, brecciated outcrop	1.91	0.50	80.10	54.90	113.00	0.10	26.30	10.70	247.00	2.51	23.80	2.60
816665	629031	7135686	1666	Bedding	Coarse sandstone and quartzite	Contains sulfides, rusty weathering, very hard	2.45	0.50	38.90	7.60	38.00	0.10	3.20	9.60	855.00	4.45	94.60	0.90
816666	629036	7135692	1667	Joints	Metagreywacke with quartzite	Quartz-rich MGW/quartzite outcrop is v. jointed, brecciated appearance. Possibly contains v. fine sulfides	3.29	0.50	34.20	14.10	61.00	0.10	8.70	11.90	812.00	3.17	76.10	2.60
816667	629036	7135692	1660	Bedding	F.G.Metagreywacke	Very rusted, v.f. sulfides	2.82	0.50	93.60	14.60	18.00	0.10	24.20	14.20	370.00	4.97	175.00	4.70
816668	629045	7135697	1665	Outcrop	Metagreywacke	Brecciated outcrop, rusty weathering, possible fracture zone. Secondary hematite	1.63	0.30	158.80	7.20	33.00	0.10	5.60	3.10	530.00	15.51	21.00	2.20
816669	629059	7135695	1668	Joints	Metagreywacke	Very rusted, nearby beds of qrtz sandstone with no rust. V.f. disseminated sulfides, brecciated outcrop 3m to W of grey sandstone	2.17	1.50	340.80	6.30	54.00	0.30	9.60	24.80	1593.00	8.37	177.50	5.40
816670	629084	7135719	1673	Joints	Metagreywacke	V.f. grained, purple-grey MGW, very jointed, slight rust weathering	2.45	0.60	27.10	12.80	29.00	0.10	41.70	15.00	144.00	2.76	87.20	1.60
816671	629093	7135729	1673	Bedding	Metagreywacke	F.g. purple-grey MGW with rusty weathering, v.f. sulfides, jointed outcrop	2.59	0.70	91.90	55.40	70.00	0.30	27.60	8.30	183.00	3.87	163.20	1.80
816672	629106	7135738	1678	Joints	Metagreywacke	V.f. grained, purple-grey MGW, quartz rich	2.14	0.30	8.00	8.10	22.00	0.10	26.30	4.60	189.00	2.55	12.00	0.90
816673	629134	7135753	1673	Bedding	Metagreywacke	Purple-grey MGW with slight rust weathering, jointed outcrop	1.85	0.40	35.00	12.10	21.00	0.10	20.10	8.40	90.00	1.95	39.30	1.20
816674	629179	7135789	1675	Bedding	Metagreywacke	V.f. purple-grey MGW, jointed outcrop with rust stains	2.22	0.40	14.30	3.30	20.00	0.10	28.70	8.00	178.00	3.71	5.40	1.10
816675	629217	7135827	1660	Bedding	Metagreywacke	V.f. purple-grey MGW, jointed outcrop with rust weathering	2.23	0.60	32.20	4.40	19.00	0.10	38.20	13.80	130.00	2.87	11.90	2.10

Appendix A

Au_ppb	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm	Bi_ppm	V_ppm	Ca_pct	P_pct	La_ppm	Cr_ppm	Mg_pct	Ba_ppm	Ti_pct	B_ppm	Al_pct	Na_pct	K_pct	W_ppm	Hg_ppm	Sc_ppm	Tl_ppm	S_pct	Ga_ppm	Se_ppm	Sample
4.60	1.30	69.00	0.20	1.40	1.10	25.00	5.72	0.03	1.00	10.00	0.21	37.00	0.07	4.00	3.29	0.13	0.05	0.50	0.02	1.30	0.10	0.93	11.00	0.50	816645
0.50	7.60	6.00	0.20	1.70	2.00	19.00	6.01	0.28	5.00	8.00	0.21	15.00	0.06	2.00	2.18	0.03	0.08	6.20	0.01	1.00	0.10	0.36	8.00	3.20	816646
0.50	14.50	7.00	0.10	4.20	0.50	17.00	0.04	0.02	42.00	23.00	0.74	139.00	0.00	6.00	2.46	0.02	0.45	0.30	0.01	3.70	0.30	0.49	7.00	0.50	816647
95.10	7.80	4.00	0.10	3.30	48.60	20.00	0.04	0.02	9.00	16.00	0.20	165.00	0.05	3.00	0.38	0.00	0.08	0.20	0.01	1.40	0.10	1.20	6.00	0.50	816648
259.40	28.80	9.00	0.10	8.60	62.60	22.00	3.18	0.27	34.00	15.00	0.12	23.00	0.06	2.00	1.42	0.04	0.13	0.70	0.01	1.70	0.10	0.66	6.00	9.90	816649
2979.10	11.90	14.00	0.30	39.20	927.40	9.00	1.43	0.12	41.00	8.00	0.06	12.00	0.03	1.00	0.87	0.02	0.04	3.00	0.04	2.20	0.10	10.00	3.00	43.90	816650
100000.00	9.60	1.00	0.10	1585.50	2000.00	2.00	0.01	0.01	6.00	1.00	0.01	5.00	0.00	7.00	0.02	0.00	0.01	1.00	9.09	1.90	2.10	5.42	2.00	100.00	816651
1504.50	12.60	14.00	0.20	10.40	527.90	13.00	0.99	0.13	31.00	16.00	0.27	38.00	0.03	3.00	1.57	0.03	0.38	0.30	0.03	2.50	0.40	10.00	5.00	36.20	816652
317.30	11.10	112.00	0.10	3.10	9.90	56.00	0.93	0.02	26.00	52.00	0.75	166.00	0.10	8.00	4.40	0.17	0.82	3.40	0.01	6.60	1.00	0.30	15.00	0.50	816653
1335.20	5.50	18.00	0.10	5.60	39.80	20.00	0.16	0.01	7.00	24.00	0.42	21.00	0.07	2.00	1.18	0.07	0.04	1.20	0.06	2.70	0.10	0.17	6.00	0.80	816654
95.20	5.60	98.00	0.10	2.30	37.20	14.00	10.98	0.03	12.00	22.00	0.39	88.00	0.04	7.00	1.21	0.05	0.29	0.50	0.01	2.20	0.20	1.04	4.00	2.00	816655
31.90	15.50	23.00	0.10	0.60	1.30	24.00	0.17	0.02	13.00	28.00	0.75	107.00	0.07	11.00	2.38	0.09	0.72	5.40	0.01	3.90	0.40	0.20	9.00	0.50	816656
79.30	14.40	12.00	0.10	2.60	4.30	24.00	0.11	0.04	19.00	29.00	0.55	240.00	0.01	10.00	1.55	0.04	0.52	0.40	0.01	3.00	0.40	0.71	5.00	1.40	816657
16.20	17.00	5.00	0.10	3.70	2.00	22.00	0.03	0.02	52.00	25.00	0.42	168.00	0.00	9.00	1.80	0.03	0.67	0.20	0.01	2.40	0.50	0.06	6.00	1.60	816658
6.50	17.90	114.00	0.10	0.50	0.70	32.00	1.42	0.02	18.00	34.00	0.71	63.00	0.13	9.00	2.81	0.25	0.29	4.60	0.01	4.80	0.20	1.34	9.00	0.70	816661
37.30	23.10	281.00	0.20	0.60	1.20	105.00	2.16	0.17	53.00	11.00	1.18	220.00	0.25	4.00	3.10	0.28	0.52	1.00	0.01	5.70	0.20	0.73	10.00	1.10	816662
9.10	13.00	5.00	0.10	1.10	1.70	21.00	0.01	0.03	20.00	24.00	0.34	206.00	0.01	11.00	1.52	0.03	0.75	0.40	0.01	2.40	0.50	0.28	5.00	1.80	816663
2.50	18.30	298.00	0.70	11.40	1.10	47.00	1.77	0.07	26.00	52.00	0.42	85.00	0.16	22.00	3.40	0.31	0.32	4.70	0.01	5.30	0.20	0.40	12.00	0.50	816664
23.30	2.30	16.00	0.10	2.80	5.90	2.00	2.28	0.02	5.00	5.00	0.07	30.00	0.02	3.00	0.70	0.04	0.16	0.60	0.01	1.00	0.10	0.05	3.00	0.50	816665
33.30	7.60	39.00	0.30	4.50	22.50	8.00	2.36	0.02	27.00	15.00	0.06	59.00	0.06	4.00	1.01	0.09	0.18	0.60	0.02	1.60	0.10	0.05	4.00	0.50	816666
7.50	16.70	69.00	0.10	9.10	4.90	34.00	1.23	0.07	76.00	38.00	0.51	64.00	0.09	9.00	2.80	0.19	0.63	1.50	0.01	4.70	0.60	0.95	9.00	0.70	816667
4.00	19.90	5.00	0.10	2.40	1.00	7.00	1.24	0.17	23.00	9.00	0.11	19.00	0.03	1.00	0.70	0.04	0.15	0.60	0.01	2.60	0.10	0.25	6.00	4.90	816668
2170.30	9.80	9.00	0.10	11.90	36.70	6.00	2.62	0.13	21.00	3.00	0.08	14.00	0.02	604.00	0.84	0.02	0.09	0.10	0.02	1.30	0.10	0.05	6.00	3.80	816669
5.30	12.10	61.00	0.10	4.20	1.20	64.00	0.51	0.01	13.00	63.00	0.96	71.00	0.19	5.00	2.69	0.17	1.07	3.40	0.01	7.60	1.40	0.20	13.00	0.50	816670
12.10	13.90	88.00	0.30	3.60	1.30	73.00	0.89	0.02	9.00	63.00	0.89	73.00	0.18	4.00	2.85	0.29	0.49	0.70	0.02	9.10	0.50	0.45	12.00	0.50	816671
10.50	14.10	75.00	0.10	3.20	0.50	63.00	0.67	0.01	26.00	54.00	0.95	188.00	0.22	7.00	2.87	0.23	1.28	0.20	0.01	7.80	1.40	0.05	12.00	0.50	816672
2.20	13.50	35.00	0.10	3.90	0.40	40.00	0.20	0.01	24.00	38.00	0.57	103.00	0.13	8.00	2.01	0.09	0.73	3.00	0.01	5.10	0.70	0.12	8.00	0.50	816673
1.30	14.60	42.00	0.10	2.60	0.20	63.00	0.19	0.01	29.00	54.00	0.93	252.00	0.27	6.00	2.82	0.11	1.69	0.20	0.01	8.10	2.00	0.05	12.00	0.50	816674
2.80	14.70	49.00	0.10	2.20	0.20	53.00	0.17	0.02	28.00	49.00	0.80	184.00	0.17	7.00	2.93	0.09	1.12	0.20	0.01	6.10	1.00	0.11	10.00	0.50	816675

Appendix A

Sample	UTM_x	UTM_y	Elevation	Point_Type	Lithology	Note	Wgt_KG	Mo_ppm	Cu_ppm	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_pct	As_ppm	U_ppm
816676	629246	7135874	1658	Joints	Metagreywacke	V.f. grey (lighter in colour than purple-grey samples) MGW, jointed outcrop, light rust weathering	2.06	1.00	40.90	7.80	12.00	0.10	42.40	19.70	64.00	1.82	35.10	2.30
816677	629284	7135897	1654	Outcrop	Micaceous quartzite	Probably just a thin member	2.35	4.30	126.60	33.60	19.00	0.20	2.60	4.00	77.00	2.98	3.50	8.70
816678	629296	7135912	1657	Bedding	Metagreywacke	F.g. MGW, nearly siltstone, some laminations visible, sulfide stringers present, slightly silica altered (very hard)	3.94	0.50	51.90	27.40	35.00	0.10	33.10	10.70	103.00	2.39	13.80	1.10
816679	629336	7135927	1657	Bedding	Sandstone	Light grey-beige sandstone, subangular grains still visible, nearly all quartz; interbedded with finer grained greywackes-MGW. Sample is representative of ~ 50cm	2.10	0.60	4.90	9.40	30.00	0.10	19.00	6.20	123.00	0.81	21.00	0.90
816680	629374	7135939	1658	Bedding	Metagreywacke	Fine to slightly medium grained, some quartz grains visible, thin laminations visible, bedding appears to vary between here and 40 m to W along the ridge, some folding/warping. Outcrop is jointed with localised minor rust stains.	2.44	0.80	15.70	12.00	30.00	0.10	34.60	6.10	85.00	1.06	19.20	1.80
816681	629420	7135952	1665	Bedding	Metagreywacke	Thinly-bedded, some quartz-rich MGW, very jointed outcrop, slightly rusty, fine visible finely disseminated pyrite: trace to 0.5%	2.03	0.50	134.10	6.70	33.00	0.10	34.90	11.30	208.00	3.08	11.80	3.50
816682	629431	7135965	1658	Bedding	Metagreywacke	V.f. grained purple-grey MGW, very rusted and jointed outcrop, fine sulfides visible, possibly a fracture zone, some quartz beds in area	1.87	0.40	19.70	58.00	175.00	0.10	31.30	8.80	248.00	2.65	4.00	1.00
816683	629494	7135981	1680	Vein and	Diorite and gossan	0-1m: chip sample, heavily rusted Fracture zone, VERY jointed outcrop, previously blasted, there appears to be a fine to med, grained intrusive here. Structure is uncertain, but major joints and 'rotten' vein is 100/80S. Intrusive is diorite, some calcite veins. sulfides visible in most samples. 5 samples takes: 3 across outcrop are 1m chip samples, 1 sample from centre of vein/fracture zone, another diorite sample was taken for whole rock analysis	1.79	2.10	39.10	23.90	80.00	0.10	33.50	113.40	443.00	2.36	720.60	5.10
816684	629494	7135981	1680	multiple joints		1-2m	3.00	2.70	61.40	51.00	138.00	0.40	12.80	50.20	1131.00	5.34	1495.00	4.40
816685	629494	7135981	1680			2-3m	2.30	1.60	23.60	35.60	74.00	0.10	11.70	9.60	480.00	2.30	65.90	2.90
816686	629494	7135981	1680			Centre of vein	1.51	8.10	334.30	1016.60	1157.00	6.60	18.80	169.20	4495.00	19.45	2831.60	7.20
816687	629523	7135993	1680	Bedding	Metagreywacke	Fine grained, grey-slightly purple MGW, some occasional glossy minerals - black, possibly pyroxenes and tourmaline	2.01	0.70	24.40	9.30	51.00	0.10	34.50	11.70	170.00	2.30	69.90	2.60
816688	629541	7136011	1694	Bedding	Metagreywacke	Fine grained, grey-purple colour	2.10	0.40	22.60	6.10	35.00	0.10	36.00	11.30	216.00	3.16	38.00	1.90
816689	629663	7136075	1688	Joints	Metagreywacke	Rusty weathering outcrop, jointed surface; fine grained, grey-purple colour, 1% disseminated sulphides	2.24	0.40	57.30	27.40	114.00	0.10	33.60	11.30	309.00	3.54	21.80	1.30
816690	629654	7136071	1680	Bedding	Gossan/Greywacke	Gossan, possibly mineralised bed that is oxidized, appears to be a very rusted greywacke	1.53	0.30	251.20	5.10	20.00	0.20	7.00	4.30	524.00	12.17	18.30	1.30
816691	629631	7136073	1678	Bedding	Metagreywacke	Very fine grained, slightly siliceous, grey colour, fine disseminated sulfides visible, outcrop is very rusted and jointed with a rough weathering surface, mineralisation possibly to related to joints, one obvious joint set	1.69	2.20	94.90	15.10	57.00	0.20	14.90	6.10	528.00	4.19	55.70	2.30
816692	629629	7136079	1670	Bedding	Metagreywacke	Very fine grained, grey colour, very rusted, similar to GWA45, contains sulfides, mineralisation may be related to joints, possible mineralised bed, gossan visible along strike, 2m SW of GWA47, rock is weathered out	1.41	2.80	140.20	25.40	61.00	0.20	34.60	20.00	498.00	4.92	230.60	5.80
816693	629599	7136093	1656	Joints	Metagreywacke/Quartzite	Obvious set of parallel joints, possible cross bedding, fine grained, purple-grey colour, quartz-rich, fine disseminated sulfides present, outcrop not rusty	1.81	0.20	11.50	2.20	33.00	0.10	40.00	11.90	146.00	3.63	6.50	1.90
816694	629597	7136087	1652	Bedding	Metagreywacke	Rusted outcrop, fine grained, purple-grey rock, overlies GWA49 by 2m	1.94	0.40	7.30	6.00	24.00	0.10	19.50	10.40	147.00	3.05	5.00	0.80
816695	629619	7136108	1641	Bedding	Quartzite	Blue-grey quartzite bed, jointed and rusted, contains 0.5% disseminated sulfides, overlain by competent bed of biotite quartzite, 450 cm thick, the biotite and quartzite bed is overlain by a hard fine grained silicified bed with visible laminations	2.16	1.70	51.20	33.70	60.00	0.10	4.90	8.50	261.00	2.70	14.80	5.70

Appendix A

Au_ppb	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm	Bi_ppm	V_ppm	Ca_pct	P_pct	La_ppm	Cr_ppm	Mg_pct	Ba_ppm	Ti_pct	B_ppm	Al_pct	Na_pct	K_pct	W_ppm	Hg_ppm	Sc_ppm	Tl_ppm	S_pct	Ga_ppm	Se_ppm	Sample
0.50	13.90	77.00	0.10	3.80	0.30	46.00	0.57	0.02	19.00	51.00	0.92	98.00	0.08	9.00	2.89	0.22	0.78	2.60	0.01	5.60	0.60	0.28	10.00	0.50	816676
0.50	28.00	50.00	0.10	1.90	0.30	33.00	0.72	0.19	36.00	6.00	0.12	89.00	0.13	2.00	0.87	0.07	0.13	1.20	0.01	3.30	0.10	0.46	4.00	0.90	816677
1.90	12.10	159.00	0.20	4.00	0.30	66.00	1.41	0.02	14.00	62.00	1.12	107.00	0.13	9.00	4.06	0.48	0.78	0.30	0.01	9.70	0.70	0.41	14.00	0.50	816678
0.50	9.80	47.00	0.10	2.10	0.10	23.00	0.38	0.01	15.00	30.00	0.40	52.00	0.06	10.00	1.47	0.10	0.35	11.00	0.01	2.40	0.20	0.05	5.00	0.50	816679
0.50	10.80	140.00	0.10	5.10	0.10	35.00	1.44	0.10	21.00	38.00	0.65	66.00	0.05	7.00	3.17	0.36	0.37	0.40	0.01	4.80	0.20	0.05	9.00	0.50	816680
0.50	15.90	58.00	0.10	3.00	0.20	43.00	0.33	0.02	22.00	47.00	0.97	90.00	0.04	5.00	3.05	0.13	0.66	0.20	0.01	5.80	0.60	0.22	11.00	0.50	816681
0.50	13.20	101.00	0.70	2.50	0.20	41.00	1.48	0.03	24.00	39.00	0.86	73.00	0.06	5.00	3.85	0.30	0.37	0.20	0.02	3.30	0.30	0.21	11.00	0.50	816682
32.10	31.10	182.00	0.50	3.90	3.40	61.00	1.77	0.20	99.00	17.00	0.50	184.00	0.15	11.00	1.81	0.20	0.40	0.70	0.01	2.40	0.30	0.07	6.00	0.50	816683
46.80	20.80	140.00	0.90	9.20	14.30	69.00	2.83	0.19	57.00	18.00	0.79	147.00	0.09	3.00	2.09	0.13	0.26	0.50	0.01	4.50	0.20	0.12	7.00	1.30	816684
5.00	18.90	175.00	0.40	1.90	0.90	71.00	2.19	0.24	42.00	18.00	0.68	166.00	0.14	2.00	1.56	0.13	0.19	0.50	0.01	4.00	0.10	0.08	6.00	0.70	816685
57.50	19.70	34.00	7.40	25.10	30.70	123.00	1.38	0.16	107.00	29.00	1.77	70.00	0.02	3.00	4.17	0.01	0.14	2.90	0.23	7.50	0.40	0.56	19.00	2.90	816686
0.80	15.20	75.00	0.20	3.20	0.30	34.00	0.65	0.02	38.00	30.00	0.76	71.00	0.05	12.00	3.03	0.12	0.61	0.20	0.01	4.70	0.40	0.15	10.00	0.50	816687
0.90	15.70	84.00	0.10	3.00	0.40	44.00	0.72	0.02	28.00	46.00	0.88	84.00	0.07	8.00	3.39	0.14	0.70	0.30	0.01	5.50	0.50	0.13	11.00	0.50	816688
0.50	9.00	185.00	0.40	2.00	1.10	39.00	1.33	0.02	15.00	35.00	0.68	60.00	0.09	7.00	3.56	0.17	0.36	0.20	0.01	3.80	0.40	0.67	11.00	0.60	816689
183.80	1.30	19.00	0.10	0.80	39.40	12.00	1.43	0.07	4.00	7.00	0.07	16.00	0.04	2.00	1.12	0.03	0.05	0.40	0.01	0.90	0.10	0.80	6.00	7.70	816690
522.40	6.60	223.00	0.20	2.30	26.00	23.00	3.24	0.06	31.00	22.00	0.23	82.00	0.09	9.00	4.81	0.37	0.14	0.30	0.02	2.10	0.20	0.64	13.00	1.60	816691
89.80	11.40	261.00	0.20	3.10	6.90	33.00	3.01	0.13	94.00	32.00	0.57	54.00	0.08	10.00	5.79	0.32	0.46	0.30	0.01	5.40	0.60	1.19	16.00	1.40	816692
3.30	16.60	165.00	0.10	0.70	0.40	32.00	1.60	0.04	37.00	37.00	0.82	116.00	0.04	9.00	4.75	0.18	0.64	0.10	0.01	4.50	0.40	0.17	13.00	0.50	816693
1.00	11.30	29.00	0.10	1.40	0.60	15.00	0.26	0.01	22.00	19.00	0.54	106.00	0.00	5.00	2.43	0.06	0.48	0.10	0.01	2.70	0.40	0.75	7.00	0.50	816694
6.00	16.10	40.00	0.30	2.00	1.90	25.00	0.61	0.09	29.00	13.00	0.72	70.00	0.14	3.00	1.76	0.10	0.12	0.80	0.01	2.70	0.10	0.80	8.00	0.50	816695

Appendix A

Sample	UTM_x	UTM_y	Elevation	Point_Type	Lithology	Note	Wgt_KG	Mo_ppm	Cu_ppm	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_pct	As_ppm	U_ppm
816696	629650	7136152	1656	Bedding	Limestone	Gritty limestones close to dyke contact, sample is from a rusty bed - probably a less pure bed - resembles a greywacke. The bed has a minor reaction to HCl, and possibly contains some dolomite	2.26	0.20	100.30	8.50	26.00	0.10	12.70	10.40	817.00	4.02	10.30	1.60
816697	629751	7136168	1613	Bedding contact	Greywacke and gritty quartzite	Fine grained, rust coloured shaley greywacke overlies a gritty quartzite bed. Quartzite is a white-grey colour. Greywacke bed sampled next to a weakness - creek. Possibly a small fault at this point as the shaley greywacke appears to strike into a gritty quartzite. Fault strikes 40 deg, possibly a reverse fault, upthrown on W side.	1.63	0.30	43.70	6.70	35.00	0.10	26.50	12.50	95.00	2.90	14.90	4.40
816698	629546	7136166	1600	Bedding	Metagreywacke	Fine grained purple-grey colour with some visible black biotite. Possibly subjected to thermal metamorphism, very hard, the contact with the gritty quartzite is 3m to the N, this point is W of fault mentioned above at GWA55	1.99	0.30	28.80	4.90	40.00	0.10	43.20	14.90	178.00	4.56	5.10	0.90
816709	629539	7136037	1676	Bedding	Metagreywacke	Fine grained purple-grey MGW, OC has a rusty weathering colour, bedding is possible folded so value given is uncertain	1.91	0.30	28.60	87.30	55.00	0.10	36.80	11.40	318.00	3.64	214.10	2.40
816710	629493	7136011	1660	Vein	Quartzite?	Fine sulfides <1% and black prismatic glassy crystals in a vein parallel to the main joints. Outcrop is a rusty colour.	1.91	1.80	39.70	101.00	34.00	0.20	16.40	10.60	394.00	2.34	591.30	68.00
816711	629475	7136012	1656	Joints and veins	Quartzite	Similar rock to GWA63, possibly an impure qtzite; there are veins with black glassy crystals and some thin rusty veinlets in the outcrop, mostly parallel	2.88	0.50	25.70	13.80	46.00	0.10	6.80	28.10	870.00	2.40	191.40	3.40
816712	629407	7136007	1618	Outcrop	Metagreywacke Gossan?	0-1m channel sample, heavily rusted	3.10	0.60	1031.20	225.10	42.00	2.90	325.10	701.80	702.00	32.98	10000.00	1.30
816713	629407	7136007	1618	Outcrop	Metagreywacke Gossan?	1-2m channel sample, heavily rusted	2.20	0.60	383.20	8.50	26.00	1.10	15.10	58.10	1845.00	20.41	4630.50	1.90
816714	629407	7136007	1618	Outcrop	Metagreywacke Gossan?	2-3, channel sample, heavily rusted, some dark glassy crystals	3.33	0.50	977.80	10.00	35.00	1.70	17.50	34.90	1708.00	16.99	3928.80	1.10
816715	629405	7136005	1617	Joints	Gossan	Heavily oxidised rock, mineralisation related to joints? Set of parallel joints visible, closely spaced, control the gossan at this point	1.72	1.40	499.50	55.80	44.00	0.60	11.40	13.00	771.00	29.72	3607.30	1.10
816716	629407	7136007	1618	Outcrop	Gossan	Heavily oxidised, sample from centre of gossan zone above chip sample GWA66 (1-2m), sample composed almost completely of a metallic mineral, possibly arsenopyrite	1.12	0.50	2716.60	27.00	63.00	2.60	715.90	2000.00	50.00	40.00	10000.00	0.20
816717	629360	7135972	1629	Contact Joints	Quartzite/monzonite	Appears to be a rusty weathering qtzite (trace - 0.5%) sulfides disseminated. The qtzite is at the joint contact of a coarse-medium grained light coloured igneous rock, there appears to be qtzite beds in area, the igneous rock is too hard to break; it contains some biotite or hornblende, quartz and plagioclase(?) Monzonite (? Extent unknown	1.84	2.90	46.30	83.90	64.00	0.10	28.20	5.10	201.00	1.26	86.50	4.70
816718	629291	7135935	1623	Bedding	Gossan	Mineralised beds, visible sulfides and heavily oxidised beds, possibly 10m of beds with significant sulfides. There is a set of parallel joints crossing oxidised beds. There is a hard silicified greywacke(?) or fine quartzite bed 2 m uphill, it has 3% disseminated sulfides.	1.58	0.30	393.50	21.00	33.00	1.40	28.60	152.80	506.00	13.65	5658.20	5.60
816719	629290	7135929	1628	Outcrop	Gossan	Mineralised beds, possibly localised in fracture zone, heavily oxidised gossan, some very fine grained hard grey rock is visible, possibly quartzite or silicified metagreywacke	2.14	0.50	199.30	11.80	15.00	0.80	8.60	12.60	879.00	13.78	610.40	4.50
816720	629270	7135925	1634	Joints	Gossan	Possible metagreywacke, most of the rock is rusted and has a brecciated or rough appearance on weathered surfaces	1.61	0.30	62.20	6.80	21.00	1.80	0.70	2.90	1240.00	8.24	57.60	12.40
816721	629223	7135904	1628	Joints	Metagreywacke-quartzite	Grey rock, very fine grained, hard, siliceous, either a fine qtzite or a silicified MGW, contains >1% disseminated sulfides, very jointed, rusty OC, closely spaced parallel joints	2.10	0.60	48.70	33.50	40.00	0.10	29.50	18.80	306.00	2.37	258.40	1.10

Appendix A

Au_ppb	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm	Bi_ppm	V_ppm	Ca_pct	P_pct	La_ppm	Cr_ppm	Mg_pct	Ba_ppm	Ti_pct	B_ppm	Al_pct	Na_pct	K_pct	W_ppm	Hg_ppm	Sc_ppm	Tl_ppm	S_pct	Ga_ppm	Se_ppm	Sample
2.40	6.10	406.00	0.10	2.00	2.80	15.00	8.19	0.03	13.00	16.00	0.22	50.00	0.08	5.00	3.04	0.18	0.05	0.30	0.01	1.70	0.10	1.22	8.00	0.50	816696
0.90	20.40	11.00	0.10	2.80	0.90	13.00	0.20	0.12	89.00	18.00	0.58	125.00	0.02	3.00	1.83	0.01	0.64	0.10	0.01	1.80	0.60	0.05	5.00	0.60	816697
0.50	8.40	13.00	0.10	1.10	0.20	44.00	0.07	0.02	26.00	49.00	1.02	160.00	0.10	1.00	2.99	0.04	0.95	0.20	0.01	4.10	0.70	0.07	9.00	0.50	816698
28.30	17.30	24.00	0.20	18.30	1.00	38.00	0.19	0.02	42.00	43.00	1.02	134.00	0.05	2.00	3.17	0.08	0.87	0.20	0.01	5.10	0.50	0.15	11.00	0.50	816709
12.20	177.60	151.00	0.20	52.50	4.50	19.00	2.31	0.10	2063.00	13.00	0.11	42.00	0.08	9.00	2.42	0.13	0.07	0.20	0.01	1.20	0.10	0.29	18.00	1.30	816710
18.40	6.10	22.00	0.10	4.40	9.10	7.00	1.26	0.15	92.00	7.00	0.16	27.00	0.02	2.00	0.58	0.04	0.05	0.20	0.01	0.80	0.10	0.09	3.00	0.50	816711
9825.50	3.00	2.00	0.10	134.20	2000.00	5.00	1.12	0.09	5.00	5.00	0.05	6.00	0.02	1.00	0.60	0.00	0.01	0.30	0.02	0.60	0.10	10.00	3.00	63.10	816712
3996.20	4.80	4.00	0.10	12.40	786.10	17.00	3.57	0.20	8.00	13.00	0.07	5.00	0.06	3.00	1.46	0.01	0.01	0.30	0.03	1.20	0.10	1.48	7.00	16.30	816713
5344.30	4.60	29.00	0.10	11.00	954.70	19.00	3.36	0.05	13.00	12.00	0.12	17.00	0.05	2.00	2.06	0.03	0.03	0.10	0.03	1.40	0.10	1.18	6.00	17.20	816714
180.80	3.90	2.00	0.10	28.00	112.10	22.00	0.85	0.10	13.00	17.00	0.06	16.00	0.01	7.00	1.20	0.01	0.10	0.30	0.04	1.90	0.20	0.61	6.00	14.80	816715
6137.60	0.60	1.00	0.50	113.30	2000.00	2.00	0.01	0.01	1.00	1.00	0.01	2.00	0.00	1.00	0.04	0.00	0.01	0.20	0.02	0.10	0.10	10.00	1.00	33.60	816716
38.00	12.90	105.00	0.50	30.50	7.90	31.00	0.99	0.02	34.00	32.00	0.19	50.00	0.13	11.00	1.85	0.30	0.06	0.20	0.01	2.30	0.10	0.32	7.00	0.90	816717
3047.70	21.30	4.00	0.10	33.80	977.40	9.00	1.53	0.26	18.00	11.00	0.04	7.00	0.02	2.00	0.41	0.01	0.02	0.20	0.09	1.00	0.10	3.18	2.00	24.30	816718
3215.20	71.70	82.00	0.10	4.40	492.10	36.00	3.10	0.05	152.00	42.00	0.14	21.00	0.10	3.00	2.58	0.13	0.12	0.20	0.04	3.30	0.10	0.85	9.00	2.90	816719
2919.20	19.80	35.00	0.10	4.80	1019.90	26.00	3.51	0.09	189.00	27.00	0.10	26.00	0.10	3.00	2.01	0.06	0.12	0.30	0.10	3.00	0.10	0.14	8.00	6.00	816720
39.90	12.30	299.00	0.20	8.50	9.40	59.00	3.50	0.04	27.00	58.00	0.73	119.00	0.09	7.00	6.35	0.70	0.53	0.20	0.02	6.40	0.50	0.37	18.00	0.50	816721

Appendix B

Photographs of Selected Rock Samples



Sample 816655 top and outcrop bottom. The sample is a metagreywacke but there are some quartzites in the outcrop. The sample returned 95ppb.



Sample 816656 above and outcrop left. The sample is a meta-greywacke but there are also some quartzites in the outcrop. The sample returned 32ppb.



Sample 816669 top and outcrop bottom. The rock is a metagreywacke. Note the joints in outcrop. The sample returned 2.17g/t.



Sample 816691 above and outcrop left. The rock is a meta-greywacke. The sample returned 0.52g/t.



Sample 816692 top and outcrop, bottom, showing an apparent mineralized bed however the sample returned only 89ppb. The rock is a metagreywacke.



Sample 816712, close-up on top and whole sample (1m chip sample) on bottom. The close-up shows massive arsenopyrite. The sample returned 9.8g/t.



Outcrop of sample 816712 with massive arsenopyrite in the centre. Sample pictures on previous page.

Appendix C

MMI Soil Geochemistry Maps

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630,000

Cheyenne Property

MMI Response Ratios - Ag



7,136,000

7,136,000

7,135,000

7,135,000

629,000

630,000

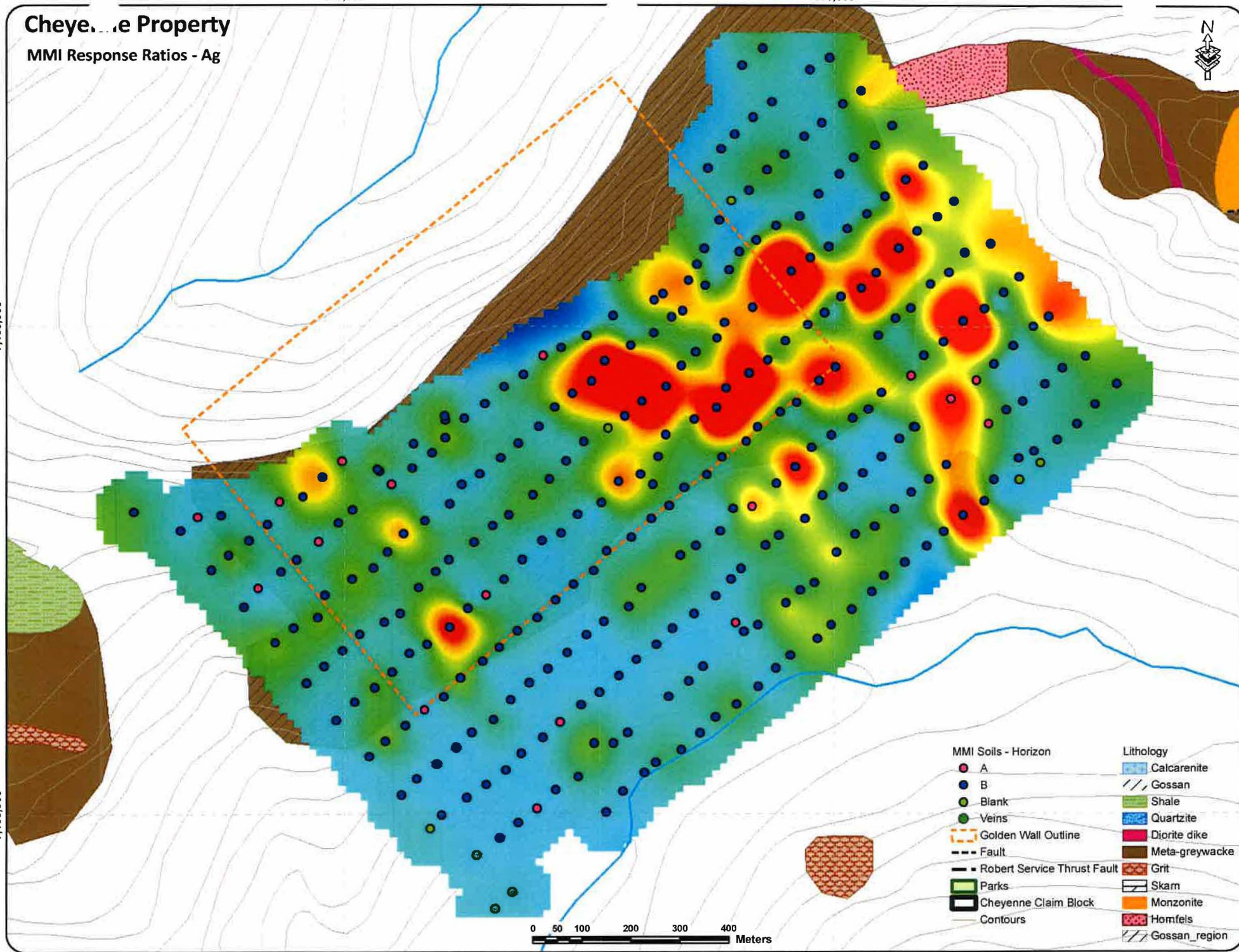
0 50 100 200 300 400 Meters

MMI Soils - Horizon

- A
- B
- Blank
- Veins
- Golden Wall Outline
- Fault
- Robert Service Thrust Fault
- Parks
- Cheyenne Claim Block
- Contours

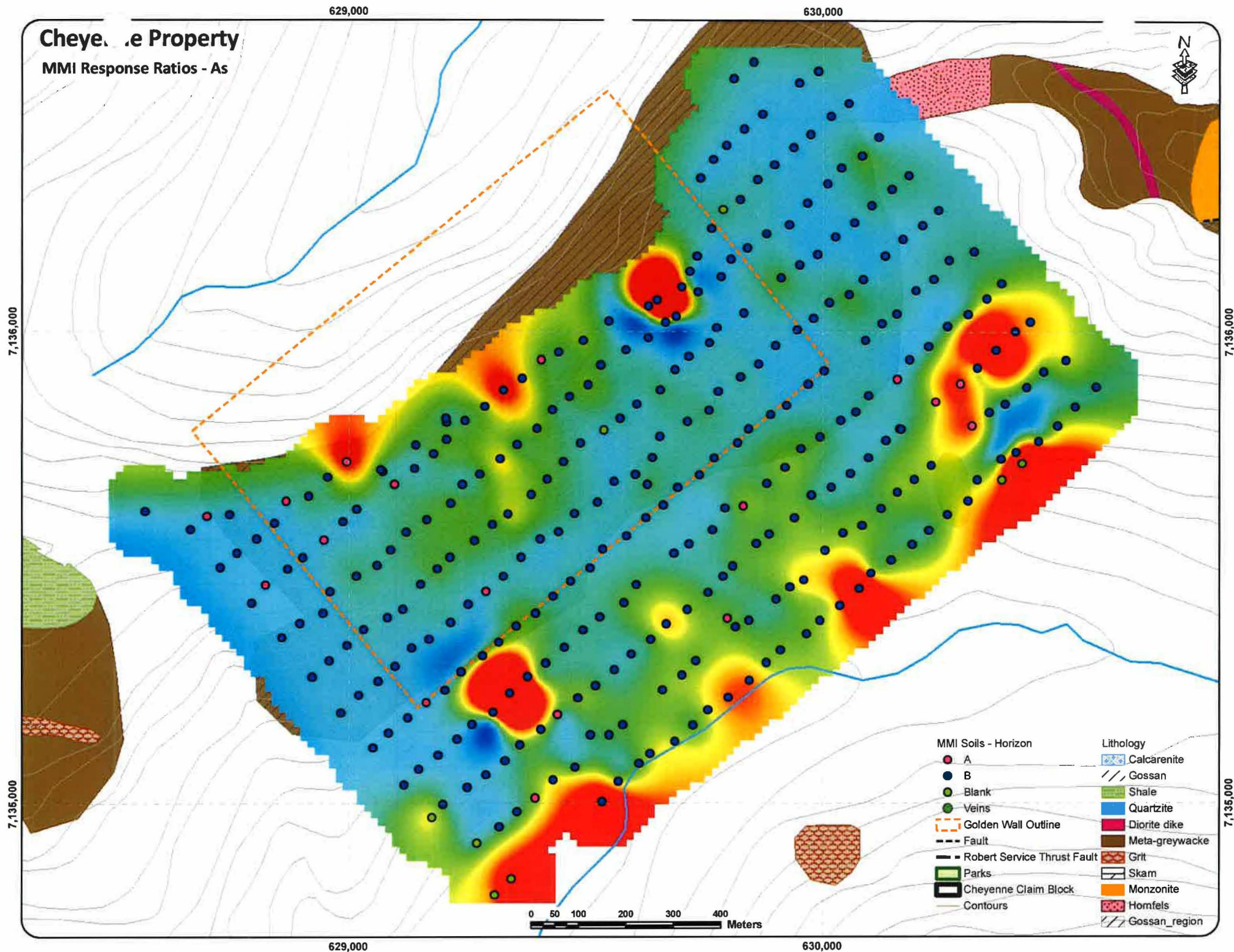
Lithology

- Calcarenite
- /// Gossan
- Shale
- Quartzite
- Diorite dike
- Meta-greywacke
- Grit
- Skarn
- Monzonite
- Hornfels
- /// Gossan_region



Cheyenne Property

MMI Response Ratios - As



629,000

630,000

Cheyenne Property

MMI Response Ratios - Au

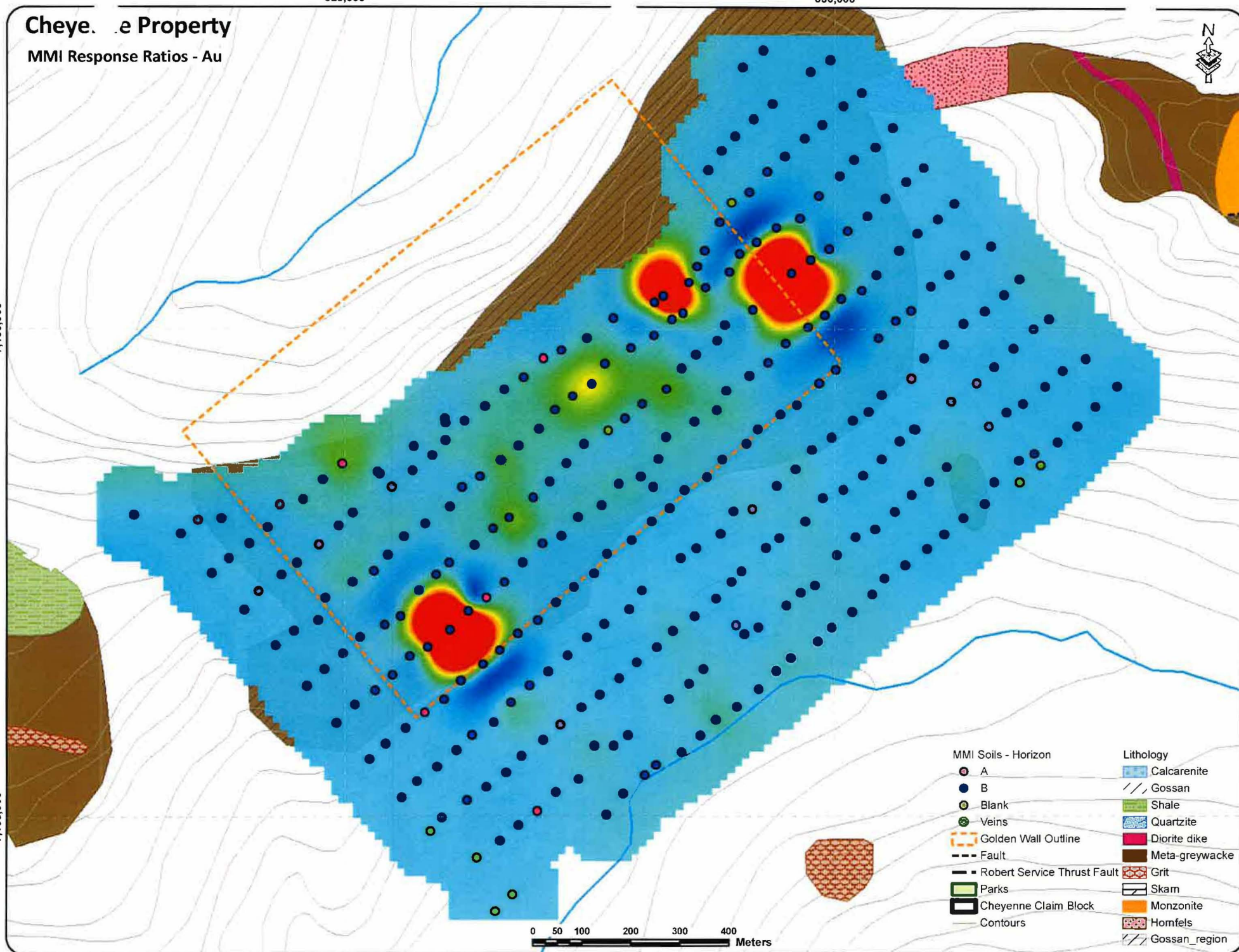


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MMI Soils - Horizon

- A
- B
- Blank
- Veins
- Golden Wall Outline
- Fault
- Robert Service Thrust Fault
- Parks
- Cheyenne Claim Block
- Contours

Lithology

- Calcarenite
- /// Gossan
- Shale
- Quartzite
- Diorite dike
- Meta-greywacke
- Grit
- Skam
- Monzonite
- Hornfels
- /// Gossan_region

0 50 100 200 300 400 Meters

629,000

630,000

Cheyenne Property

MMI Response Ratios - Bi



7,136,000

7,136,000

7,135,000

7,135,000

629,000

630,000

0 50 100 200 300 400 Meters

MMI Soils - Horizon

- A
- B
- Blank
- Veins
- Golden Wall Outline
- Fault
- Robert Service Thrust Fault
- Parks
- Cheyenne Claim Block
- Contours

Lithology

- Calcarenite
- Gossan
- Shale
- Quartzite
- Diorite dike
- Meta-greywacke
- Grit
- Skarn
- Monzonite
- Hornfels
- Gossan_region

629,000

630,000

Cheyenne Property

MMI Response Ratios - Cu



7,136,000

7,136,000

7,135,000

7,135,000

629,000

630,000

0 50 100 200 300 400 Meters

MMI Soils - Horizon

- A
- B
- Blank
- Veins
- Golden Wall Outline
- Fault
- Robert Service Thrust Fault
- Parks
- Cheyenne Claim Block
- Contours

Lithology

- Calcarenrite
- Gossan
- Shale
- Quartzite
- Diorite dike
- Meta-greywacke
- Grit
- Skarn
- Monzonite
- Hornfels
- Gossan_region

629,000

630,000

Cheyenne Property

MMI Response Ratios - Pb



7,136,000

7,136,000

7,136,000

7,136,000

629,000

630,000

0 50 100 200 300 400 Meters

MMI Soils - Horizon

- A
- B
- Blank
- Veins
- Golden Wall Outline
- Fault
- Robert Service Thrust Fault
- Parks
- Cheyenne Claim Block
- Contours

Lithology

- Calcarenrite
- Gossan
- Shale
- Quartzite
- Diorite dike
- Meta-greywacke
- Grit
- Skarn
- Monzonite
- Hornfels
- Gossan_region

629,000

630,000

Cheyenne Property

MMI Response Ratios - Zn

7,136,000

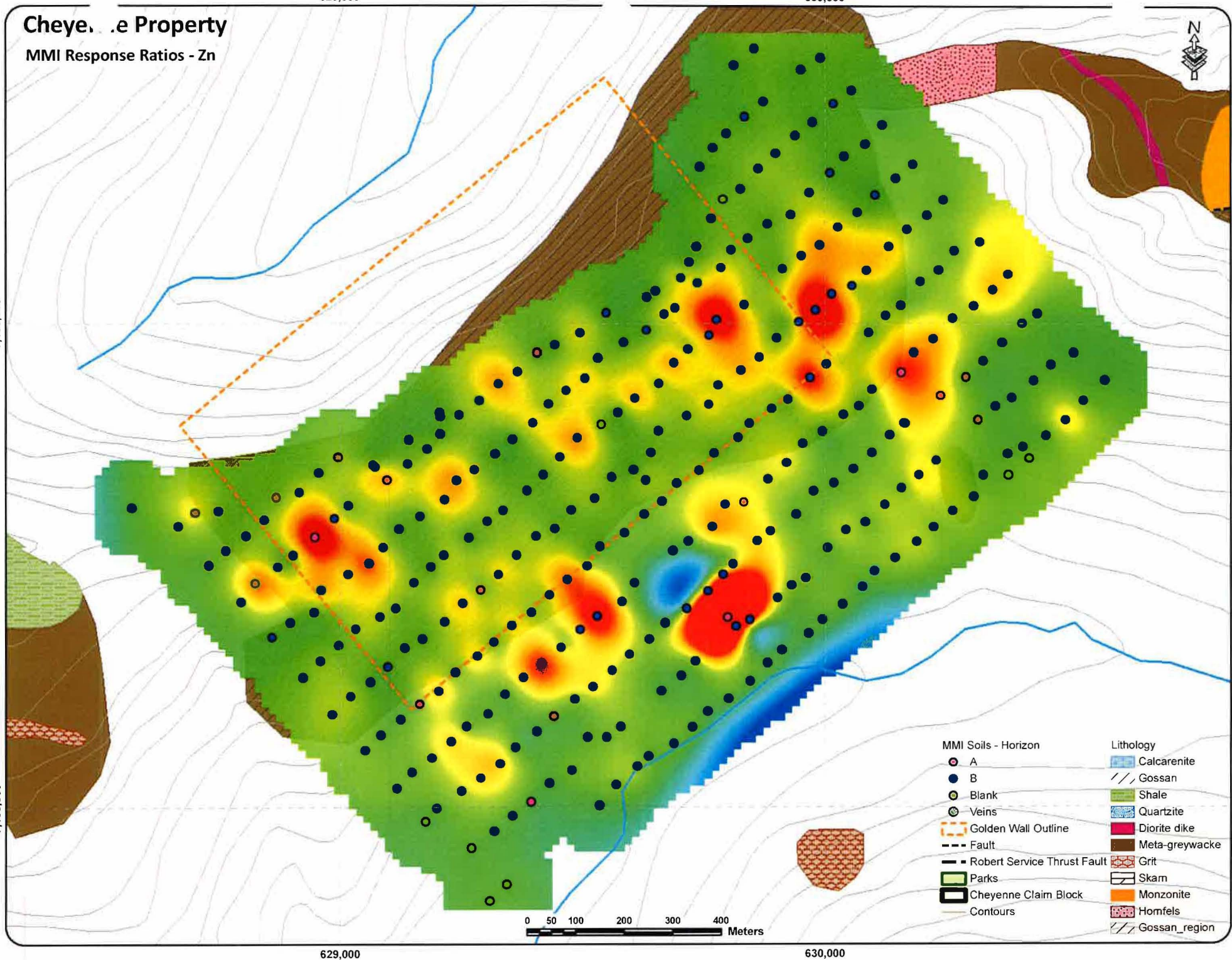
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630,000



Appendix D

Thin Section Reports and Whole Rock Analysis Results

Seamus Young
Logan Resources Ltd.
Suite 1640 - 1066 West Hastings Street
Oceanic Plaza Box 12543
Vancouver, B.C.
V6E 3X1

12 September, 2008

Dear Seamus: **RE: Cheyenne- GWA1 / G.D.L. Job V08-0573R**

One sample was submitted for preparation into a polished thin section and subsequent microscopic investigation. The description follows:

SAMPLE R08:41966 (GWA1).

In reflected light the rock is seen to contain about 12 – 13% by area of opaque minerals. The mode is visually estimated to be as follows:

Pyrrhotite:	99%
Arsenopyrite:	<1%
Chalcopyrite:	<<1%

Pyrrhotite occurs as disseminated blebs in an even manner throughout the rock. Most grains are in the 10 – 80 micron size range but some larger masses are present from 0.20 – 1.0 mm in size. A mottled mass of altered pyrrhotite is noted about 0.3 x 0.6 mm in size. Rare 0.1 mm grains of arsenopyrite are noted with pyrrhotite. As well, a few very small grains of chalcopyrite, up to 0.1 mm are noted as inclusions and attachments to pyrrhotite.

In transmitted light the rock consist of:

Felsite:	75%
Amphibole:	7-8%
Biotite:	5%
Opagues:	12-13%

Crystals and crystal fragments of biotite in the form of "burnt" laths and books are in the 0.5 – 1.5 mm size range. These are microcrysts. Aggregates of altered amphibole of 1.0 – 2.0 mm size are usually composed of several altered grains of amphibole, some biotite and sulfides. The matrix is composed of minute laths of feldspar, often with some very fine amphibole. This felsite dominates with grains no larger than 0.1 mm in maximum dimension. The sample reacts strongly to potash feldspar staining.

The minute feldspars tend to be aligned and might be termed microtrachytic.

The rock is a trachytic, intermediate composition volcanic.

A few photomicrographs have been taken and are appended to show mineralogy and textures.

Yours truly,



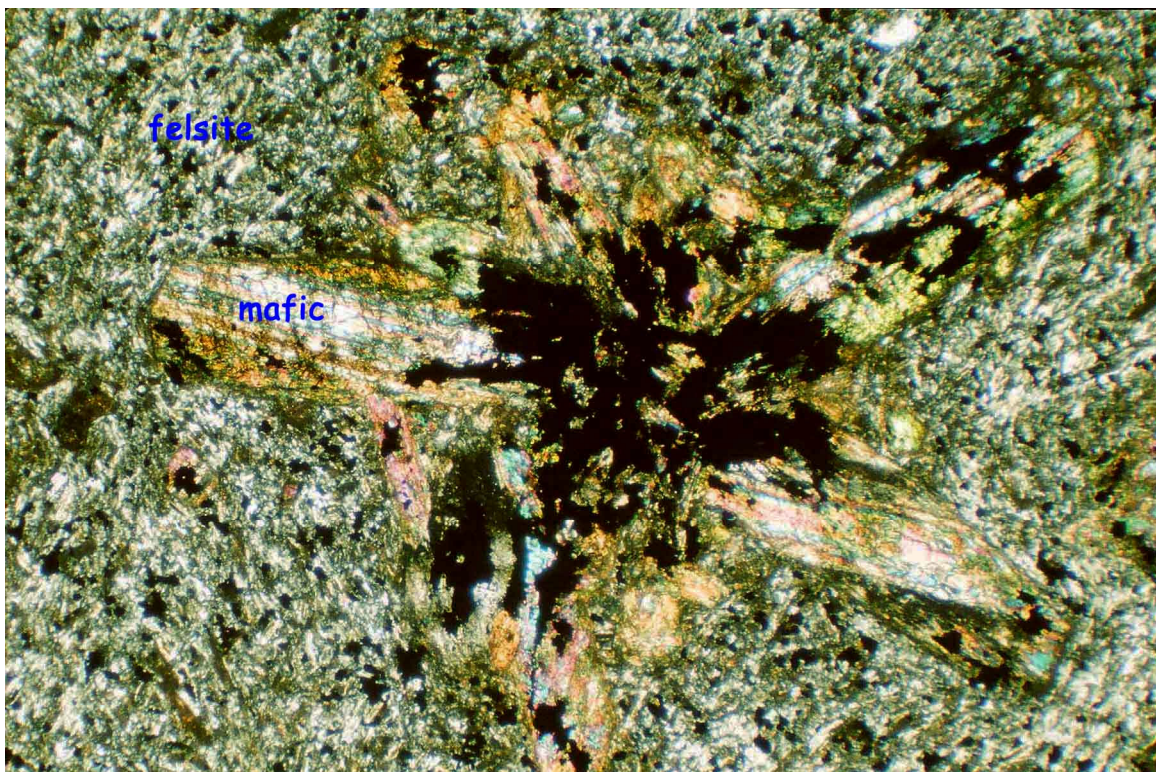
J.A. McLeod, M.A.Sc., P.Eng.
Manager, G.D.L.

JAM/skw

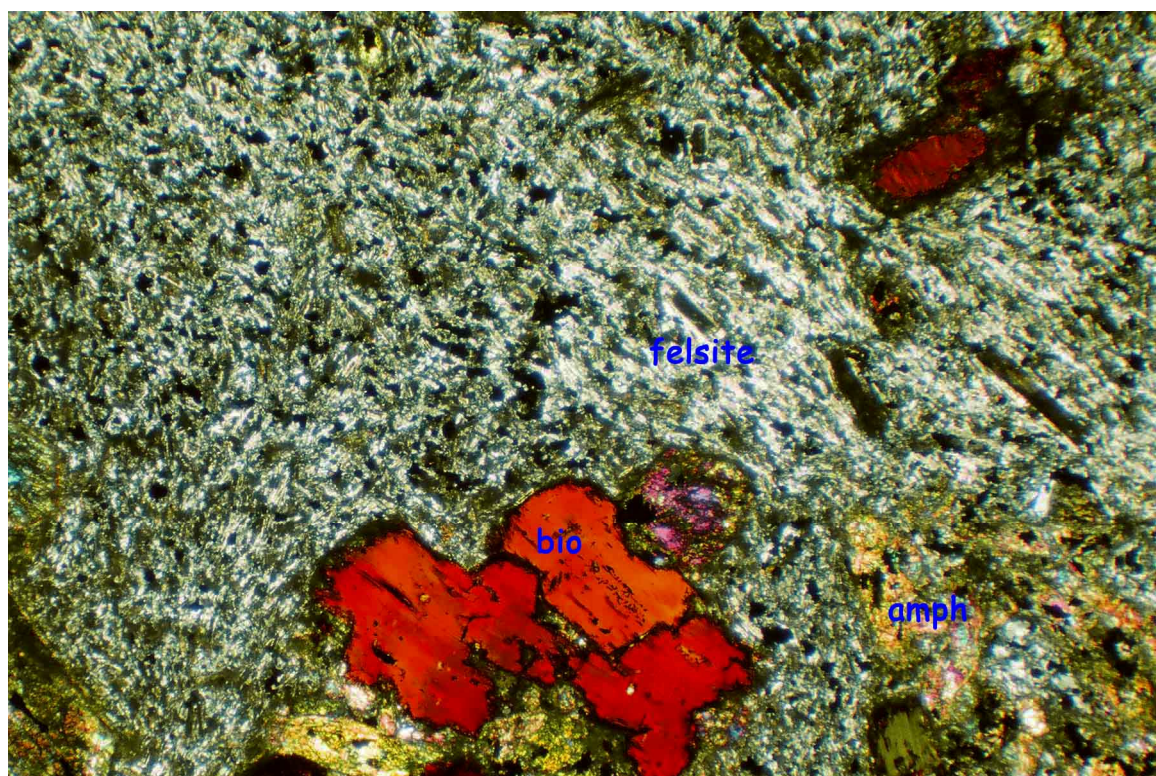
App. (photomicrographs)

Cc: Daithi Macgearailt

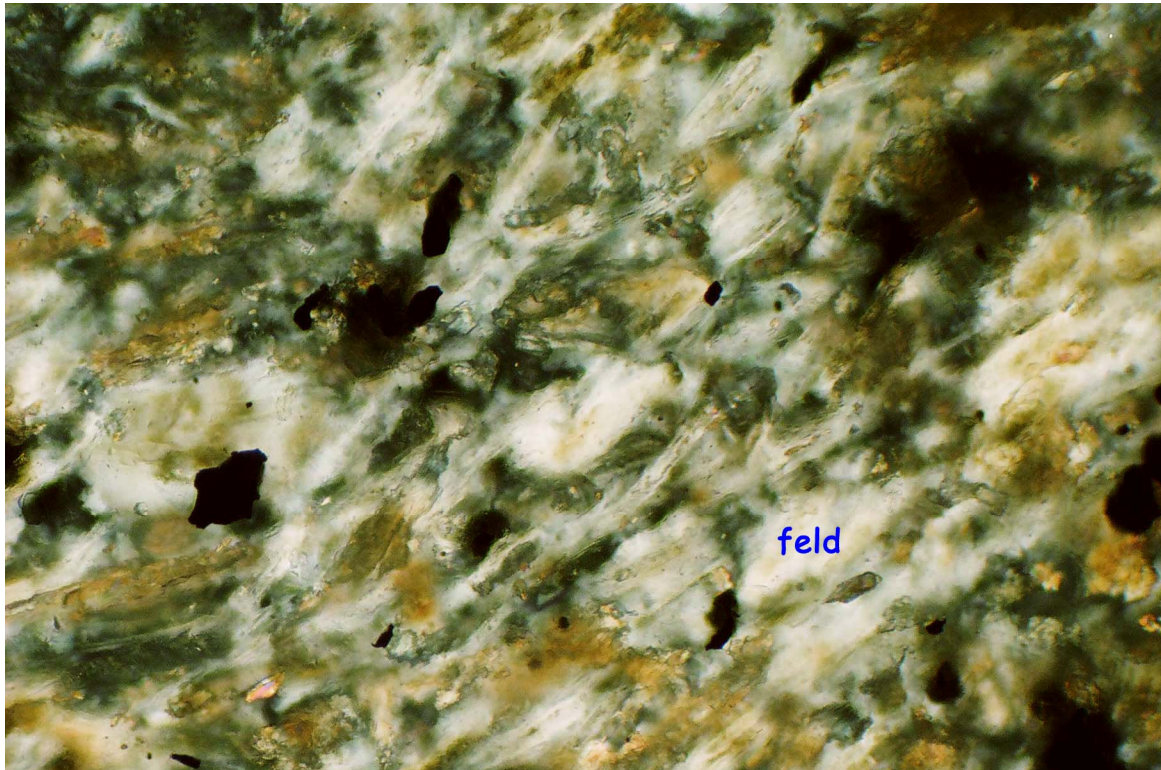
PHOTOMICROGRAPHS: LOGAN RESOURCES - GWA1 (V08-0573R)



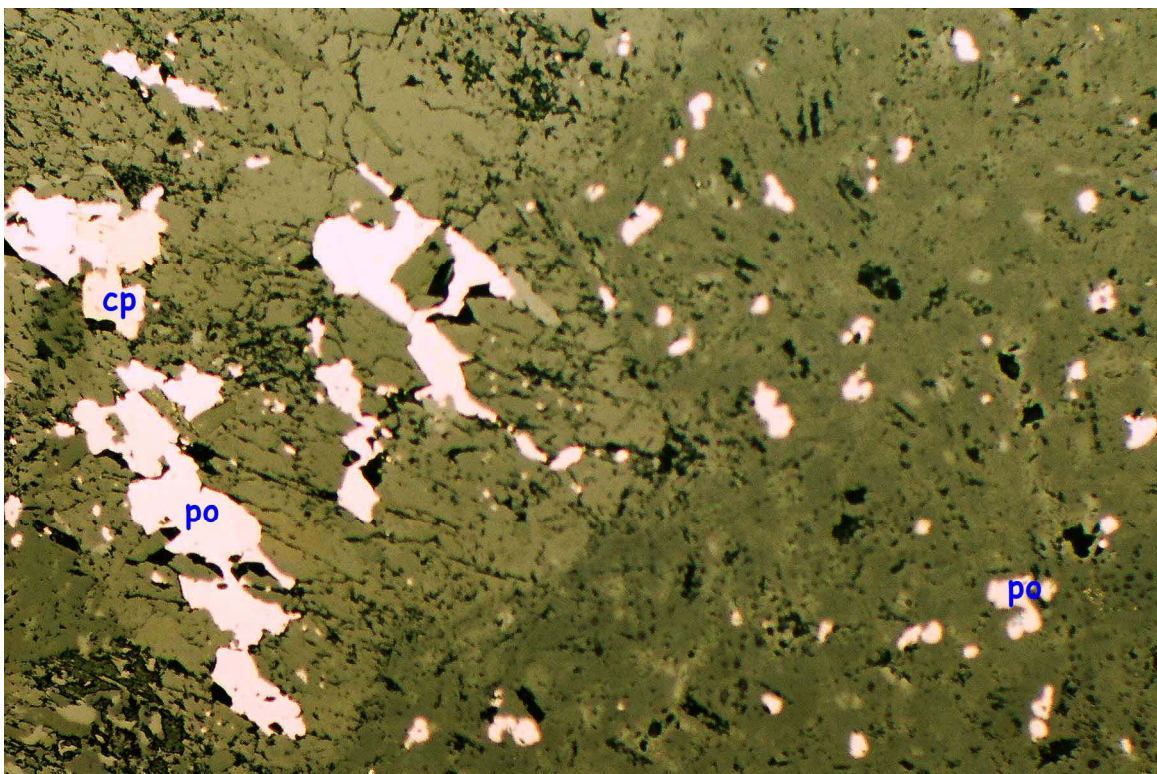
R08:41966. A cluster of mafics (amphibole?) and sulfides in a felsitic matrix.
(816919) Transmitted light, crossed nicols, magnification 25x.



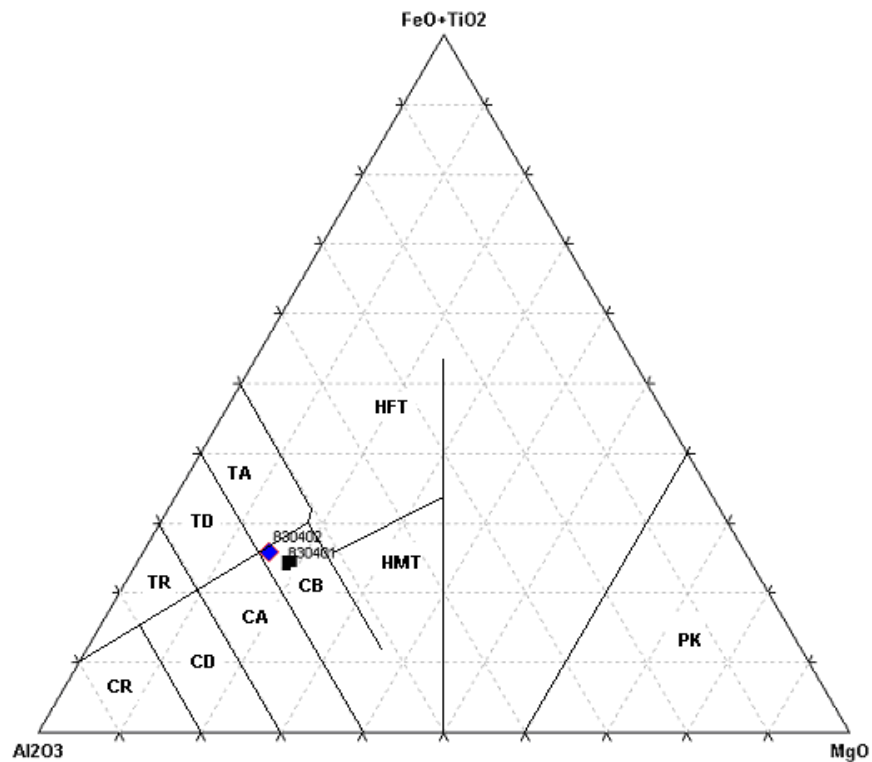
R08:41966. Biotite microcrysts appear "burnt" and are associated with other mafics
(816919) in an oriented "trachytic" felsite. Transmitted light, crossed nicols,
magnification 25x.



R08:41966. Aligned felsite consisting of microlitic feldspars (potash rich), some turbid inclusions of mafics and some opaques. Transmitted light, crossed nicols, magnification 160x.
(816919)



R08:41966. Disseminated and aggregates of pyrrhotite. Minor chalcopyrite. Reflected light, magnification 80x.
(816919)



Jensen Cation Plot of two intrusive rocks from the Golden Wall. Both rocks plot in the calc-alkaline basalt field.

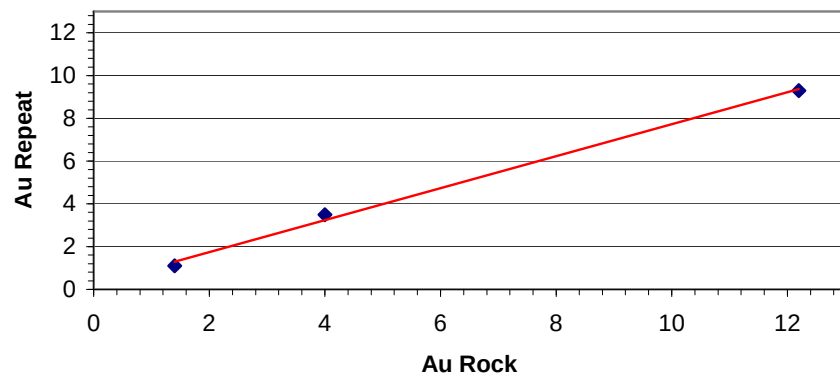
Sample 830401 was described as a biotite-hornblend porphyry dyke during mapping but the thin section report above describes it as a trachytic, intermediate composition volcanic. It is likely that the sulfide content (12-13%) leads to elevated Fe and causes the sample to plot high near the tholeiitic andesite field.

BK – Basaltic Komatiites
 PK – Peridotitic Komatiites
 HFT – High Iron Tholeiitic Basalt
 HMT – High Magnesium Tholeiitic Basalt
 CB – Calc-Alkaline Basalt
 CA – Calc-Alkaline Andesite
 CD – Calc-Alkaline Dacite

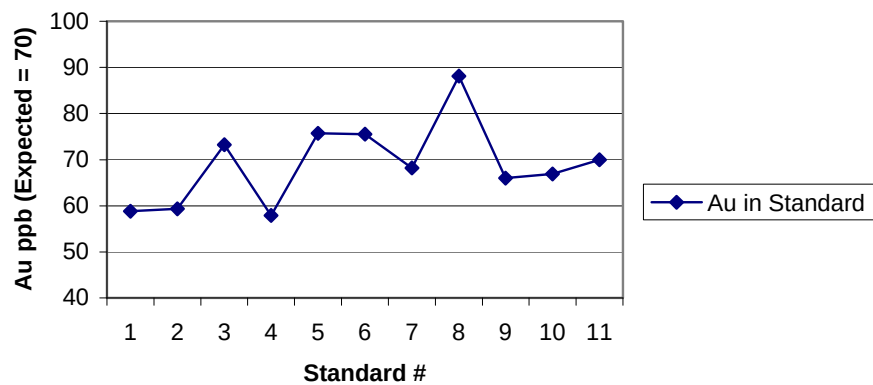
CR – Calc-Alkaline Rhyolite
TA – Tholeiitic Andesite
TD – Tholeiitic Dacite
TR – Tholeiitic Rhyolite

APPENDIX E
ASSAY CERTIFICATES AND QC

Quality Control: Lab Resplits



Quality Control: Lab Standards



Client: **Logan Resources Ltd.**

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Submitted By: Rita Chow
 Receiving Lab: Canada-Vancouver
 Received: July 03, 2008
 Report Date: October 31, 2008
 Page: 1 of 6

CERTIFICATE OF ANALYSIS

VAN08006973.2

CLIENT JOB INFORMATION

Project: CHEYENNE
 Shipment ID:
 P.O. Number
 Number of Samples: 123

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.

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

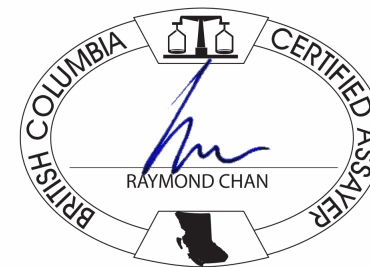
CC: Daithi Macgearailt

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
R150	117	Crush, split and pulverize rock to 200 mesh		
1DX15	120	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed
G6	16	Fire Assay fusion Au by ICP-ES	30	Completed
G6	2	Ag by fire assay	30	Completed

ADDITIONAL COMMENTS

Version 2 : G6-Au,Ag included.



CERTIFICATE OF ANALYSIS

VAN08006973.2

	Method	WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
816601	Rock	2.94	1.3	17.8	16.0	15	<0.1	10.8	5.2	115	1.72	16.1	1.4	<0.5	8.1	44	<0.1	2.9	2.1	20	0.29
816602	Rock	2.20	0.6	40.9	53.4	110	<0.1	30.4	16.5	289	4.23	9.9	1.6	<0.5	10.2	175	0.3	1.6	0.3	65	1.52
816603	Rock	1.51	0.9	9.3	17.5	36	<0.1	15.6	6.5	127	1.56	0.7	1.6	<0.5	15.0	11	<0.1	0.4	0.2	13	0.27
816604	Rock	1.70	0.5	19.7	2.3	19	<0.1	28.5	13.4	268	2.86	0.6	1.1	<0.5	7.5	32	<0.1	0.3	0.3	35	1.00
816605	Rock	2.30	0.9	28.8	10.6	42	0.2	23.4	9.5	145	1.92	2.0	1.6	8.3	10.6	143	0.2	0.2	0.3	23	4.00
816606	Rock	2.40	0.9	33.2	17.2	39	<0.1	23.3	5.9	265	2.13	4.0	2.0	2.6	8.8	12	0.1	1.7	0.5	17	0.36
816607	Rock	1.86	0.4	16.5	2.7	9	<0.1	6.7	2.8	76	1.99	1.5	0.9	2.2	7.5	22	<0.1	3.5	0.4	9	0.04
816608	Rock	2.89	0.3	115.2	5.6	28	0.2	1.9	6.5	483	7.89	38.2	3.1	1165	13.1	6	<0.1	6.0	70.9	<2	1.09
816609	Rock	2.52	0.2	69.5	3.1	28	0.3	4.2	7.6	1180	6.28	28.1	3.4	1005	7.4	7	<0.1	3.9	246.5	4	3.22
816610	Rock	2.14	0.6	62.7	11.2	46	<0.1	19.0	9.9	516	4.88	34.1	4.1	23.3	19.0	42	0.2	5.8	1.3	43	1.12
816611	Rock	1.51	0.6	37.1	16.9	20	<0.1	26.7	9.8	83	2.00	19.5	1.1	13.0	9.0	23	0.1	5.9	2.1	13	0.24
816612	Rock	1.85	0.3	3.0	6.0	19	<0.1	25.4	6.5	129	2.21	14.2	0.7	2.6	14.5	32	<0.1	2.0	0.5	35	0.24
816613	Rock	1.78	0.7	30.9	5.2	11	<0.1	36.5	14.7	62	2.02	25.5	1.6	1.3	11.0	26	<0.1	4.9	0.3	41	0.09
816614	Rock	1.96	0.8	7.0	6.9	14	<0.1	7.2	1.5	97	0.69	6.9	0.4	1.4	8.1	11	<0.1	0.5	0.1	12	0.17
816615	Rock	3.50	0.3	5.6	1.5	16	<0.1	38.8	11.0	151	3.61	3.2	0.6	0.7	12.7	10	0.1	2.2	0.2	62	0.07
816616	Rock	1.87	0.6	22.1	17.6	29	<0.1	28.9	9.2	166	2.01	46.3	2.7	1.6	13.2	163	0.2	3.4	0.2	35	1.44
816617	Rock	1.98	0.4	7.9	17.3	22	<0.1	30.2	8.3	212	2.82	16.2	1.0	0.7	11.0	31	<0.1	3.1	<0.1	44	0.14
816618	Rock	2.08	7.2	75.6	178.3	146	0.3	6.7	12.0	96	1.93	13.3	5.6	1.7	17.5	172	0.8	0.9	0.7	3	1.35
816619	Rock	1.99	0.6	45.7	13.1	36	<0.1	30.6	12.2	182	3.05	50.3	2.1	0.9	15.2	37	<0.1	4.4	0.4	31	0.25
816620	Rock	1.94	0.4	20.8	5.3	17	<0.1	17.5	6.0	84	3.06	10.4	3.4	<0.5	19.1	6	<0.1	0.6	0.2	14	0.03
816621	Rock	2.92	1.0	217.6	22.9	46	<0.1	14.8	9.2	310	1.59	48.9	1.7	1.9	10.6	285	0.2	1.5	1.4	40	2.31
816622	Rock	6.33	1.7	51.7	22.1	45	<0.1	24.4	13.4	243	2.57	66.0	1.7	<0.5	9.7	259	0.2	1.4	0.6	66	1.71
816623	Rock	2.66	1.1	70.0	20.3	40	<0.1	22.1	12.7	218	2.70	38.1	1.5	1.9	8.3	243	0.2	1.5	0.4	61	1.75
816624	Rock	1.94	0.5	19.9	87.2	102	<0.1	54.5	11.1	227	2.33	9.6	2.1	0.9	16.0	65	0.4	1.7	0.2	41	0.58
816625	Rock	2.29	0.3	590.5	7.0	31	0.4	70.8	29.0	580	15.61	13.1	1.5	441.4	1.0	49	<0.1	0.8	76.2	4	1.58
816626	Rock	1.81	0.2	29.6	25.7	60	<0.1	29.2	10.5	200	3.98	0.7	1.3	1.1	15.1	4	<0.1	1.9	0.2	29	0.03
816627	Rock	3.05	0.5	20.1	11.0	20	<0.1	12.7	5.4	268	3.26	22.3	2.1	0.8	12.1	25	<0.1	5.1	0.4	42	0.20
816628	Rock	2.59	1.9	77.8	41.7	80	<0.1	10.0	18.0	216	3.88	21.9	4.2	1.1	22.2	173	0.5	2.4	1.3	69	0.98
816629	Rock	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
816630	Rock Pulp	0.04	7.9	9735	17.3	81	2.9	283.2	13.6	837	6.87	8.5	0.1	828.2	1.1	72	0.4	9.2	0.7	44	2.09

CERTIFICATE OF ANALYSIS

VAN08006973.2

	Method Analyte Unit MDL	1DX15 P %	1DX15 La ppm	1DX15 Cr ppm	1DX15 Mg %	1DX15 Ba ppm	1DX15 Ti %	1DX15 B ppm	1DX15 Al %	1DX15 Na %	1DX15 K %	1DX15 W ppm	1DX15 Hg ppm	1DX15 Sc ppm	1DX15 Ti ppm	1DX15 S %	1DX15 Ga ppm	1DX15 Se ppm	G6 Au gm/mt	G6 Ag gm/mt
		0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.01	2
816601	Rock	0.015	8	28	0.26	68	0.071	3	0.88	0.049	0.15	0.4	<0.01	2.0	0.2	0.36	4	<0.5	N.A.	N.A.
816602	Rock	0.012	25	59	1.22	123	0.140	6	4.69	0.324	0.68	0.2	<0.01	7.1	0.8	0.15	15	<0.5	N.A.	N.A.
816603	Rock	0.013	29	23	0.25	91	0.005	4	0.80	0.044	0.24	<0.1	<0.01	2.2	0.1	<0.05	3	<0.5	N.A.	N.A.
816604	Rock	0.008	10	39	0.62	41	0.094	3	1.60	0.083	0.38	0.3	<0.01	4.6	0.3	0.28	7	<0.5	N.A.	N.A.
816605	Rock	0.112	14	26	0.42	40	0.069	5	2.63	0.251	0.21	0.4	<0.01	3.3	0.2	0.82	8	<0.5	N.A.	N.A.
816606	Rock	0.025	9	21	0.48	95	0.009	5	0.94	0.031	0.17	<0.1	<0.01	1.9	0.1	0.09	3	0.6	N.A.	N.A.
816607	Rock	0.014	11	14	0.37	118	0.038	2	1.20	0.037	0.57	0.1	<0.01	1.4	0.6	0.12	4	<0.5	N.A.	N.A.
816608	Rock	0.161	12	1	0.03	17	0.006	2	0.34	0.031	0.13	0.3	0.01	1.0	<0.1	0.13	3	5.1	1.35	N.A.
816609	Rock	0.082	21	6	0.05	28	0.024	1	1.22	0.051	0.19	0.5	<0.01	1.1	<0.1	0.17	5	1.3	1.15	N.A.
816610	Rock	0.051	15	33	0.47	113	0.113	4	1.81	0.107	0.47	0.4	0.01	4.5	0.3	0.29	9	0.9	N.A.	N.A.
816611	Rock	0.009	10	14	0.44	71	0.011	4	1.23	0.079	0.40	0.2	<0.01	1.8	0.4	0.90	5	<0.5	N.A.	N.A.
816612	Rock	0.011	32	37	0.63	172	0.120	4	2.09	0.079	1.03	0.2	<0.01	3.7	1.1	<0.05	8	<0.5	N.A.	N.A.
816613	Rock	0.006	11	38	0.57	78	0.101	3	1.74	0.051	0.81	0.1	<0.01	4.1	0.9	0.15	7	<0.5	N.A.	N.A.
816614	Rock	0.007	15	23	0.29	53	0.033	1	0.54	0.042	0.05	0.2	<0.01	1.5	<0.1	<0.05	3	<0.5	N.A.	N.A.
816615	Rock	0.013	30	60	0.75	115	0.060	3	2.35	0.038	0.61	<0.1	<0.01	6.8	0.8	<0.05	10	<0.5	N.A.	N.A.
816616	Rock	0.070	30	36	0.90	78	0.046	7	3.57	0.298	0.50	0.1	<0.01	4.8	0.4	<0.05	11	<0.5	N.A.	N.A.
816617	Rock	0.014	26	43	0.74	96	0.051	3	2.26	0.051	0.53	0.1	<0.01	5.0	0.4	<0.05	8	<0.5	N.A.	N.A.
816618	Rock	0.084	14	5	0.06	29	0.066	2	2.07	0.341	0.04	0.3	0.01	0.8	<0.1	0.88	5	1.6	N.A.	N.A.
816619	Rock	0.015	26	29	0.89	89	0.013	8	2.58	0.094	0.68	<0.1	<0.01	5.7	0.6	0.25	10	0.5	N.A.	N.A.
816620	Rock	0.027	52	18	0.78	139	0.003	3	2.20	0.020	0.44	<0.1	<0.01	3.1	0.2	<0.05	7	<0.5	N.A.	N.A.
816621	Rock	0.170	25	15	0.35	260	0.133	8	3.14	0.240	0.22	0.2	<0.01	2.1	0.2	0.09	8	<0.5	N.A.	N.A.
816622	Rock	0.246	22	22	0.44	363	0.147	2	2.20	0.155	0.26	0.2	<0.01	2.3	0.2	0.32	7	2.2	N.A.	N.A.
816623	Rock	0.231	21	27	0.46	306	0.122	3	2.34	0.165	0.22	0.2	<0.01	2.6	0.2	0.31	7	1.4	N.A.	N.A.
816624	Rock	0.017	27	47	0.99	64	0.084	6	2.67	0.140	0.45	0.3	<0.01	4.7	0.4	0.08	11	<0.5	N.A.	N.A.
816625	Rock	0.180	6	3	0.08	9	0.019	2	1.50	0.078	0.02	0.1	0.01	1.0	<0.1	5.40	5	18.6	N.A.	N.A.
816626	Rock	0.016	48	38	0.83	223	0.033	1	2.64	0.026	0.65	<0.1	<0.01	3.0	0.4	<0.05	8	<0.5	N.A.	N.A.
816627	Rock	0.048	13	49	0.82	134	0.087	2	2.14	0.048	0.60	0.2	<0.01	3.6	0.6	0.13	8	<0.5	N.A.	N.A.
816628	Rock	0.173	38	9	0.48	108	0.158	2	1.57	0.131	0.13	0.5	<0.01	2.7	<0.1	1.53	5	0.8	N.A.	N.A.
816629	Rock	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
816630	Rock Pulp	0.056	3	390	0.93	99	0.004	3	0.42	0.043	0.30	0.8	1.25	4.1	<0.1	1.18	2	9.5	N.A.	N.A.

CERTIFICATE OF ANALYSIS

VAN08006973.2

	Method	WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
816631	Rock	3.29	1.9	64.5	75.3	83	0.1	9.0	16.7	179	4.74	45.1	4.0	1.4	21.7	236	0.5	2.4	1.3	39	1.35
816632	Rock	2.69	2.0	72.4	19.5	26	<0.1	9.8	11.0	223	3.81	16.5	3.6	1.5	20.0	210	0.1	2.5	1.7	49	1.10
816633	Rock	1.45	0.5	157.8	8.0	18	<0.1	9.9	16.1	324	8.50	20.7	5.0	7.8	8.6	333	<0.1	1.4	2.5	12	7.06
816634	Rock	2.11	0.2	15.7	121.1	18	<0.1	8.7	2.4	565	1.36	2.3	3.3	1.3	8.8	380	<0.1	2.0	0.4	13	8.72
816635	Rock	1.92	2.0	66.5	59.1	50	0.2	8.9	16.3	217	4.60	46.6	3.7	1.4	19.3	210	0.2	3.0	1.2	66	1.11
816636	Rock	2.85	1.8	57.3	41.4	42	<0.1	7.5	12.6	315	3.81	30.7	3.6	2.3	18.1	242	0.2	3.0	0.7	51	1.86
816637	Rock	1.78	0.7	5.0	4.9	15	<0.1	12.5	3.1	108	0.99	2.9	0.5	0.8	10.6	10	<0.1	1.9	<0.1	19	0.08
816638	Rock	3.06	2.5	87.6	22.7	25	<0.1	9.5	23.4	254	4.90	0.8	5.2	1.2	24.9	174	0.2	1.8	0.8	52	1.21
816639	Rock	2.66	4.0	52.3	119.1	194	0.3	26.1	18.7	245	2.88	2.3	8.4	<0.5	36.0	66	1.2	3.1	0.7	40	1.03
816640	Rock	2.39	4.0	85.1	231.2	30	0.7	11.8	10.0	246	2.59	5.9	2.0	<0.5	15.4	80	0.1	1.7	1.3	37	0.99
816641	Rock	2.93	0.5	40.1	9.6	58	<0.1	39.0	15.9	176	3.61	5.9	3.0	1.9	12.8	14	0.1	0.7	0.3	17	0.16
816642	Rock	2.34	0.4	24.5	11.7	40	<0.1	29.0	9.9	228	4.85	8.1	0.8	<0.5	8.8	33	<0.1	1.4	0.3	79	0.28
816643	Rock	3.28	0.3	20.5	12.3	55	<0.1	27.0	14.8	315	3.26	67.7	2.6	1.0	18.7	87	0.2	2.6	0.8	56	1.76
816644	Rock	1.60	0.5	3125	55.2	74	0.6	868.3	384.0	172	>40	1869	0.7	54.4	0.9	<1	1.2	3.3	14.1	<2	0.14
816645	Rock	3.14	0.2	113.2	15.7	43	<0.1	24.4	14.8	3045	7.47	15.6	1.0	4.6	1.3	69	0.2	1.4	1.1	25	5.72
816646	Rock	2.98	0.3	145.9	13.9	48	0.1	11.7	5.4	2716	8.26	5.4	2.1	<0.5	7.6	6	0.2	1.7	2.0	19	6.01
816647	Rock	1.75	0.8	63.3	19.2	41	<0.1	22.8	11.8	94	3.77	11.2	2.2	<0.5	14.5	7	<0.1	4.2	0.5	17	0.04
816648	Rock	2.49	0.2	249.5	14.2	25	<0.1	5.3	7.4	172	>40	481.6	0.4	95.1	7.8	4	<0.1	3.3	48.6	20	0.04
816649	Rock	2.49	0.4	85.8	6.5	20	0.1	6.1	17.8	1223	10.54	1477	5.7	259.4	28.8	9	<0.1	8.6	62.6	22	3.18
816650	Rock	4.34	0.5	1364	18.6	60	1.2	249.4	873.2	529	29.44	>10000	4.3	2979	11.9	14	0.3	39.2	927.4	9	1.43
816651	Rock	0.88	51.8	473.5	334.4	8	>100	107.2	1058	3	31.13	>10000	6.8	>100000	9.6	<1	<0.1	1585	>2000	<2	0.01
816652	Rock	1.37	0.5	991.3	17.7	46	0.7	103.2	216.1	383	21.51	4411	4.4	1504	12.6	14	0.2	10.4	527.9	13	0.99
816653	Rock	1.89	0.3	47.1	5.3	26	0.2	28.8	10.8	188	4.29	321.4	0.9	317.3	11.1	112	<0.1	3.1	9.9	56	0.93
816654	Rock	1.74	0.6	48.3	15.4	21	0.6	12.6	7.0	169	2.54	1382	0.6	1335	5.5	18	<0.1	5.6	39.8	20	0.16
816655	Rock	1.56	0.4	79.5	11.1	31	<0.1	13.8	19.7	396	2.58	329.2	1.1	95.2	5.6	98	<0.1	2.3	37.2	14	10.98
816656	Rock	1.63	0.5	29.1	5.9	48	<0.1	18.4	9.6	153	3.65	7.3	2.4	31.9	15.5	23	<0.1	0.6	1.3	24	0.17
816657	Rock	1.98	0.7	51.8	26.5	31	0.2	27.2	6.6	150	2.85	81.7	4.2	79.3	14.4	12	<0.1	2.6	4.3	24	0.11
816658	Rock	1.52	1.9	38.6	29.8	19	0.2	3.4	1.2	89	2.05	5.6	3.3	16.2	17.0	5	<0.1	3.7	2.0	22	0.03
816659	Rock	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
816660	Rock Pulp	0.04	12.2	>10000	20.7	96	3.2	556.3	19.9	961	7.89	10.2	0.1	807.9	1.2	85	0.4	10.9	0.9	57	2.20

CERTIFICATE OF ANALYSIS

VAN08006973.2

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	G6	G6
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Ti	S	Ga	Se	Au	Ag
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	gm/mt	gm/mt
	MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.01	2
816631	Rock	0.175	28	7	0.29	92	0.106	1	1.81	0.216	0.08	0.4	<0.01	1.7	<0.1	2.66	5	1.0	N.A.	N.A.
816632	Rock	0.164	37	7	0.34	87	0.123	1	1.52	0.164	0.14	0.4	<0.01	1.6	0.1	1.91	5	0.7	N.A.	N.A.
816633	Rock	0.064	23	10	0.09	43	0.062	11	4.41	0.316	0.04	0.2	<0.01	1.7	<0.1	1.73	11	0.8	N.A.	N.A.
816634	Rock	0.015	17	13	0.21	47	0.104	10	5.89	0.284	0.05	0.3	<0.01	1.7	<0.1	0.12	12	<0.5	N.A.	N.A.
816635	Rock	0.166	32	9	0.51	74	0.154	2	1.82	0.179	0.17	0.4	<0.01	2.5	0.1	2.06	6	1.1	N.A.	N.A.
816636	Rock	0.146	36	9	0.39	104	0.146	5	2.34	0.242	0.18	0.5	<0.01	2.1	0.1	1.62	7	0.8	N.A.	N.A.
816637	Rock	0.008	18	25	0.29	43	0.025	4	0.87	0.032	0.24	<0.1	<0.01	1.4	0.2	<0.05	4	<0.5	N.A.	N.A.
816638	Rock	0.172	46	8	0.62	87	0.119	1	1.59	0.174	0.07	0.4	<0.01	3.4	<0.1	2.48	6	0.9	N.A.	N.A.
816639	Rock	0.126	21	14	0.84	110	0.115	<1	1.16	0.111	0.10	0.6	0.01	2.6	0.1	1.46	5	1.2	N.A.	N.A.
816640	Rock	0.191	22	8	0.47	191	0.083	2	0.98	0.123	0.08	25.6	<0.01	2.9	<0.1	0.58	4	1.5	N.A.	N.A.
816641	Rock	0.063	40	15	0.89	73	0.014	8	3.23	0.038	0.41	0.2	<0.01	5.6	0.4	0.16	9	0.5	N.A.	N.A.
816642	Rock	0.010	10	74	1.03	149	0.189	6	2.85	0.090	0.67	1.4	0.01	8.7	0.7	0.50	12	<0.5	N.A.	N.A.
816643	Rock	0.021	71	54	0.57	64	0.085	14	3.69	0.124	0.50	4.9	<0.01	4.4	0.4	<0.05	11	<0.5	N.A.	N.A.
816644	Rock	0.011	2	1	<0.01	3	0.003	<1	0.35	0.001	<0.01	0.4	<0.01	0.3	<0.1	>10	<1	70.7	N.A.	N.A.
816645	Rock	0.029	1	10	0.21	37	0.072	4	3.29	0.131	0.05	0.5	0.02	1.3	<0.1	0.93	11	<0.5	N.A.	N.A.
816646	Rock	0.279	5	8	0.21	15	0.064	2	2.18	0.028	0.08	6.2	<0.01	1.0	<0.1	0.36	8	3.2	N.A.	N.A.
816647	Rock	0.016	42	23	0.74	139	0.001	6	2.46	0.016	0.45	0.3	<0.01	3.7	0.3	0.49	7	<0.5	N.A.	N.A.
816648	Rock	0.023	9	16	0.20	165	0.047	3	0.38	0.003	0.08	0.2	0.01	1.4	<0.1	1.20	6	<0.5	N.A.	N.A.
816649	Rock	0.272	34	15	0.12	23	0.063	2	1.42	0.043	0.13	0.7	0.01	1.7	<0.1	0.66	6	9.9	N.A.	N.A.
816650	Rock	0.124	41	8	0.06	12	0.030	1	0.87	0.023	0.04	3.0	0.04	2.2	<0.1	>10	3	43.9	3.08	N.A.
816651	Rock	0.008	6	<1	<0.01	5	0.001	7	0.02	0.003	<0.01	1.0	9.09	1.9	2.1	5.42	2	>100	261.6	373
816652	Rock	0.130	31	16	0.27	38	0.027	3	1.57	0.033	0.38	0.3	0.03	2.5	0.4	>10	5	36.2	1.29	N.A.
816653	Rock	0.018	26	52	0.75	166	0.104	8	4.40	0.173	0.82	3.4	0.01	6.6	1.0	0.30	15	<0.5	N.A.	N.A.
816654	Rock	0.009	7	24	0.42	21	0.074	2	1.18	0.073	0.04	1.2	0.06	2.7	0.1	0.17	6	0.8	1.71	N.A.
816655	Rock	0.025	12	22	0.39	88	0.042	7	1.21	0.045	0.29	0.5	<0.01	2.2	0.2	1.04	4	2.0	N.A.	N.A.
816656	Rock	0.018	13	28	0.75	107	0.069	11	2.38	0.086	0.72	5.4	<0.01	3.9	0.4	0.20	9	<0.5	N.A.	N.A.
816657	Rock	0.043	19	29	0.55	240	0.006	10	1.55	0.039	0.52	0.4	<0.01	3.0	0.4	0.71	5	1.4	N.A.	N.A.
816658	Rock	0.017	52	25	0.42	168	0.002	9	1.80	0.030	0.67	0.2	<0.01	2.4	0.5	0.06	6	1.6	N.A.	N.A.
816659	Rock	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
816660	Rock Pulp	0.074	3	660	0.99	115	0.007	4	0.63	0.050	0.39	1.6	1.42	5.0	<0.1	1.24	3	10.8	N.A.	N.A.

CERTIFICATE OF ANALYSIS

VAN08006973.2

	Method	WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
816661	Rock	1.86	0.8	38.2	9.6	31	0.1	33.5	13.8	109	3.05	6.2	3.1	6.5	17.9	114	0.1	0.5	0.7	32	1.42
816662	Rock	3.26	2.5	20.5	19.6	100	0.1	5.1	13.7	902	4.89	33.2	5.2	37.3	23.1	281	0.2	0.6	1.2	105	2.16
816663	Rock	1.97	1.0	37.7	20.6	18	0.2	2.6	0.8	74	2.66	12.8	2.4	9.1	13.0	5	<0.1	1.1	1.7	21	0.01
816664	Rock	1.91	0.5	80.1	54.9	113	0.1	26.3	10.7	247	2.51	23.8	2.6	2.5	18.3	298	0.7	11.4	1.1	47	1.77
816665	Rock	2.45	0.5	38.9	7.6	38	<0.1	3.2	9.6	855	4.45	94.6	0.9	23.3	2.3	16	<0.1	2.8	5.9	2	2.28
816666	Rock	3.29	0.5	34.2	14.1	61	0.1	8.7	11.9	812	3.17	76.1	2.6	33.3	7.6	39	0.3	4.5	22.5	8	2.36
816667	Rock	2.82	0.5	93.6	14.6	18	0.1	24.2	14.2	370	4.97	175.0	4.7	7.5	16.7	69	<0.1	9.1	4.9	34	1.23
816668	Rock	1.63	0.3	158.8	7.2	33	<0.1	5.6	3.1	530	15.51	21.0	2.2	4.0	19.9	5	<0.1	2.4	1.0	7	1.24
816669	Rock	2.17	1.5	340.8	6.3	54	0.3	9.6	24.8	1593	8.37	177.5	5.4	2170	9.8	9	0.1	11.9	36.7	6	2.62
816670	Rock	2.45	0.6	27.1	12.8	29	<0.1	41.7	15.0	144	2.76	87.2	1.6	5.3	12.1	61	0.1	4.2	1.2	64	0.51
816671	Rock	2.59	0.7	91.9	55.4	70	0.3	27.6	8.3	183	3.87	163.2	1.8	12.1	13.9	88	0.3	3.6	1.3	73	0.89
816672	Rock	2.14	0.3	8.0	8.1	22	<0.1	26.3	4.6	189	2.55	12.0	0.9	10.5	14.1	75	<0.1	3.2	0.5	63	0.67
816673	Rock	1.85	0.4	35.0	12.1	21	<0.1	20.1	8.4	90	1.95	39.3	1.2	2.2	13.5	35	<0.1	3.9	0.4	40	0.20
816674	Rock	2.22	0.4	14.3	3.3	20	<0.1	28.7	8.0	178	3.71	5.4	1.1	1.3	14.6	42	<0.1	2.6	0.2	63	0.19
816675	Rock	2.23	0.6	32.2	4.4	19	<0.1	38.2	13.8	130	2.87	11.9	2.1	2.8	14.7	49	<0.1	2.2	0.2	53	0.17
816676	Rock	2.06	1.0	40.9	7.8	12	<0.1	42.4	19.7	64	1.82	35.1	2.3	<0.5	13.9	77	<0.1	3.8	0.3	46	0.57
816677	Rock	2.35	4.3	126.6	33.6	19	0.2	2.6	4.0	77	2.98	3.5	8.7	<0.5	28.0	50	0.1	1.9	0.3	33	0.72
816678	Rock	3.94	0.5	51.9	27.4	35	0.1	33.1	10.7	103	2.39	13.8	1.1	1.9	12.1	159	0.2	4.0	0.3	66	1.41
816679	Rock	2.10	0.6	4.9	9.4	30	<0.1	19.0	6.2	123	0.81	21.0	0.9	<0.5	9.8	47	0.1	2.1	0.1	23	0.38
816680	Rock	2.44	0.8	15.7	12.0	30	<0.1	34.6	6.1	85	1.06	19.2	1.8	<0.5	10.8	140	0.1	5.1	<0.1	35	1.44
816681	Rock	2.03	0.5	134.1	6.7	33	0.1	34.9	11.3	208	3.08	11.8	3.5	<0.5	15.9	58	<0.1	3.0	0.2	43	0.33
816682	Rock	1.87	0.4	19.7	58.0	175	<0.1	31.3	8.8	248	2.65	4.0	1.0	<0.5	13.2	101	0.7	2.5	0.2	41	1.48
816683	Rock	1.79	2.1	39.1	23.9	80	<0.1	33.5	113.4	443	2.36	720.6	5.1	32.1	31.1	182	0.5	3.9	3.4	61	1.77
816684	Rock	3.00	2.7	61.4	51.0	138	0.4	12.8	50.2	1131	5.34	1495	4.4	46.8	20.8	140	0.9	9.2	14.3	69	2.83
816685	Rock	2.30	1.6	23.6	35.6	74	0.1	11.7	9.6	480	2.30	65.9	2.9	5.0	18.9	175	0.4	1.9	0.9	71	2.19
816686	Rock	1.51	8.1	334.3	1017	1157	6.6	18.8	169.2	4495	19.45	2832	7.2	57.5	19.7	34	7.4	25.1	30.7	123	1.38
816687	Rock	2.01	0.7	24.4	9.3	51	<0.1	34.5	11.7	170	2.30	69.9	2.6	0.8	15.2	75	0.2	3.2	0.3	34	0.65
816688	Rock	2.10	0.4	22.6	6.1	35	<0.1	36.0	11.3	216	3.16	38.0	1.9	0.9	15.7	84	<0.1	3.0	0.4	44	0.72
816689	Rock	2.24	0.4	57.3	27.4	114	0.1	33.6	11.3	309	3.54	21.8	1.3	<0.5	9.0	185	0.4	2.0	1.1	39	1.33
816690	Rock	1.53	0.3	251.2	5.1	20	0.2	7.0	4.3	524	12.17	18.3	1.3	183.8	1.3	19	<0.1	0.8	39.4	12	1.43

CERTIFICATE OF ANALYSIS

VAN08006973.2

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	G6	G6
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Ti	S	Ga	Se	Au	Ag
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	gm/mt	gm/mt
	MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.01	2
816661	Rock	0.019	18	34	0.71	63	0.134	9	2.81	0.252	0.29	4.6	<0.01	4.8	0.2	1.34	9	0.7	N.A.	N.A.
816662	Rock	0.167	53	11	1.18	220	0.250	4	3.10	0.279	0.52	1.0	<0.01	5.7	0.2	0.73	10	1.1	N.A.	N.A.
816663	Rock	0.030	20	24	0.34	206	0.008	11	1.52	0.029	0.75	0.4	<0.01	2.4	0.5	0.28	5	1.8	N.A.	N.A.
816664	Rock	0.065	26	52	0.42	85	0.164	22	3.40	0.306	0.32	4.7	0.01	5.3	0.2	0.40	12	<0.5	N.A.	N.A.
816665	Rock	0.022	5	5	0.07	30	0.016	3	0.70	0.042	0.16	0.6	<0.01	1.0	<0.1	<0.05	3	<0.5	N.A.	N.A.
816666	Rock	0.020	27	15	0.06	59	0.057	4	1.01	0.085	0.18	0.6	0.02	1.6	<0.1	<0.05	4	<0.5	N.A.	N.A.
816667	Rock	0.068	76	38	0.51	64	0.085	9	2.80	0.194	0.63	1.5	<0.01	4.7	0.6	0.95	9	0.7	N.A.	N.A.
816668	Rock	0.173	23	9	0.11	19	0.034	1	0.70	0.035	0.15	0.6	<0.01	2.6	<0.1	0.25	6	4.9	N.A.	N.A.
816669	Rock	0.125	21	3	0.08	14	0.018	604	0.84	0.024	0.09	0.1	0.02	1.3	<0.1	<0.05	6	3.8	2.45	N.A.
816670	Rock	0.010	13	63	0.96	71	0.187	5	2.69	0.171	1.07	3.4	<0.01	7.6	1.4	0.20	13	<0.5	N.A.	N.A.
816671	Rock	0.017	9	63	0.89	73	0.180	4	2.85	0.286	0.49	0.7	0.02	9.1	0.5	0.45	12	<0.5	N.A.	N.A.
816672	Rock	0.011	26	54	0.95	188	0.217	7	2.87	0.228	1.28	0.2	<0.01	7.8	1.4	<0.05	12	<0.5	N.A.	N.A.
816673	Rock	0.009	24	38	0.57	103	0.126	8	2.01	0.087	0.73	3.0	<0.01	5.1	0.7	0.12	8	<0.5	N.A.	N.A.
816674	Rock	0.008	29	54	0.93	252	0.268	6	2.82	0.105	1.69	0.2	<0.01	8.1	2.0	<0.05	12	<0.5	N.A.	N.A.
816675	Rock	0.017	28	49	0.80	184	0.168	7	2.93	0.094	1.12	0.2	<0.01	6.1	1.0	0.11	10	<0.5	N.A.	N.A.
816676	Rock	0.019	19	51	0.92	98	0.084	9	2.89	0.223	0.78	2.6	<0.01	5.6	0.6	0.28	10	<0.5	N.A.	N.A.
816677	Rock	0.187	36	6	0.12	89	0.130	2	0.87	0.066	0.13	1.2	<0.01	3.3	0.1	0.46	4	0.9	N.A.	N.A.
816678	Rock	0.018	14	62	1.12	107	0.126	9	4.06	0.484	0.78	0.3	<0.01	9.7	0.7	0.41	14	<0.5	N.A.	N.A.
816679	Rock	0.011	15	30	0.40	52	0.055	10	1.47	0.104	0.35	11.0	<0.01	2.4	0.2	<0.05	5	<0.5	N.A.	N.A.
816680	Rock	0.097	21	38	0.65	66	0.052	7	3.17	0.363	0.37	0.4	<0.01	4.8	0.2	<0.05	9	0.5	N.A.	N.A.
816681	Rock	0.021	22	47	0.97	90	0.042	5	3.05	0.125	0.66	0.2	<0.01	5.8	0.6	0.22	11	<0.5	N.A.	N.A.
816682	Rock	0.030	24	39	0.86	73	0.062	5	3.85	0.300	0.37	0.2	0.02	3.3	0.3	0.21	11	0.5	N.A.	N.A.
816683	Rock	0.196	99	17	0.50	184	0.146	11	1.81	0.196	0.40	0.7	<0.01	2.4	0.3	0.07	6	<0.5	N.A.	N.A.
816684	Rock	0.189	57	18	0.79	147	0.091	3	2.09	0.128	0.26	0.5	<0.01	4.5	0.2	0.12	7	1.3	N.A.	N.A.
816685	Rock	0.238	42	18	0.68	166	0.138	2	1.56	0.128	0.19	0.5	<0.01	4.0	0.1	0.08	6	0.7	N.A.	N.A.
816686	Rock	0.164	107	29	1.77	70	0.019	3	4.17	0.011	0.14	2.9	0.23	7.5	0.4	0.56	19	2.9	N.A.	N.A.
816687	Rock	0.024	38	30	0.76	71	0.048	12	3.03	0.122	0.61	0.2	<0.01	4.7	0.4	0.15	10	<0.5	N.A.	N.A.
816688	Rock	0.018	28	46	0.88	84	0.072	8	3.39	0.143	0.70	0.3	<0.01	5.5	0.5	0.13	11	<0.5	N.A.	N.A.
816689	Rock	0.018	15	35	0.68	60	0.087	7	3.56	0.172	0.36	0.2	0.01	3.8	0.4	0.67	11	0.6	N.A.	N.A.
816690	Rock	0.072	4	7	0.07	16	0.043	2	1.12	0.034	0.05	0.4	<0.01	0.9	<0.1	0.80	6	7.7	N.A.	N.A.

CERTIFICATE OF ANALYSIS

VAN08006973.2

	Method	WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
816691	Rock	1.69	2.2	94.9	15.1	57	0.2	14.9	6.1	528	4.19	55.7	2.3	522.4	6.6	223	0.2	2.3	26.0	23	3.24
816692	Rock	1.41	2.8	140.2	25.4	61	0.2	34.6	20.0	498	4.92	230.6	5.8	89.8	11.4	261	0.2	3.1	6.9	33	3.01
816693	Rock	1.81	0.2	11.5	2.2	33	<0.1	40.0	11.9	146	3.63	6.5	1.9	3.3	16.6	165	<0.1	0.7	0.4	32	1.60
816694	Rock	1.94	0.4	7.3	6.0	24	<0.1	19.5	10.4	147	3.05	5.0	0.8	1.0	11.3	29	<0.1	1.4	0.6	15	0.26
816695	Rock	2.16	1.7	51.2	33.7	60	0.1	4.9	8.5	261	2.70	14.8	5.7	6.0	16.1	40	0.3	2.0	1.9	25	0.61
816696	Rock	2.26	0.2	100.3	8.5	26	<0.1	12.7	10.4	817	4.02	10.3	1.6	2.4	6.1	406	0.1	2.0	2.8	15	8.19
816697	Rock	1.63	0.3	43.7	6.7	35	<0.1	26.5	12.5	95	2.90	14.9	4.4	0.9	20.4	11	<0.1	2.8	0.9	13	0.20
816698	Rock	1.99	0.3	28.8	4.9	40	<0.1	43.2	14.9	178	4.56	5.1	0.9	<0.5	8.4	13	<0.1	1.1	0.2	44	0.07
816699	Rock	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
816700	Rock Pulp	0.04	10.3	9428	16.0	87	2.6	437.2	15.5	793	7.03	9.1	<0.1	753.5	1.0	80	0.3	10.4	0.6	49	2.07
816701	Rock	1.43	0.6	33.4	9.6	35	<0.1	33.2	12.3	234	2.90	82.8	1.0	<0.5	7.0	142	0.1	0.9	0.1	80	0.51
816702	Rock	3.40	41.5	142.4	40.1	14	16.2	126.1	>2000	9	28.80	>10000	0.1	>100000	0.3	<1	<0.1	1376	1527	<2	<0.01
816703	Rock	2.90	8.0	91.6	17.5	54	0.1	52.2	12.4	156	3.20	220.3	3.1	54.9	5.8	69	0.2	3.0	1.4	117	1.43
816704	Rock	3.26	14.8	89.8	13.0	76	0.1	95.0	13.5	359	4.95	234.2	10.0	67.7	4.4	87	0.4	3.5	1.8	206	0.89
816705	Rock	2.34	0.4	40.0	8.4	21	<0.1	9.3	3.9	150	2.24	33.6	0.8	4.9	8.5	26	<0.1	2.6	0.6	24	0.08
816706	Rock	2.34	10.2	1001	33.7	71	0.3	28.8	54.9	487	24.77	590.7	1.5	148.6	4.3	204	0.4	2.0	9.6	11	2.17
816707	Rock	1.82	15.5	681.3	27.2	60	0.2	19.4	38.1	612	19.10	173.9	2.0	10.9	5.0	322	0.3	1.6	7.6	17	3.39
816708	Rock	4.80	7.1	815.3	>10000	52	>100	15.4	30.5	23	24.75	>10000	3.5	2119	2.4	8	1.5	>2000	628.1	<2	0.03
816709	Rock	1.91	0.3	28.6	87.3	55	0.1	36.8	11.4	318	3.64	214.1	2.4	28.3	17.3	24	0.2	18.3	1.0	38	0.19
816710	Rock	1.91	1.8	39.7	101.0	34	0.2	16.4	10.6	394	2.34	591.3	68.0	12.2	177.6	151	0.2	52.5	4.5	19	2.31
816711	Rock	2.88	0.5	25.7	13.8	46	<0.1	6.8	28.1	870	2.40	191.4	3.4	18.4	6.1	22	0.1	4.4	9.1	7	1.26
816712	Rock	3.10	0.6	1031	225.1	42	2.9	325.1	701.8	702	32.98	>10000	1.3	9826	3.0	2	0.1	134.2	>2000	5	1.12
816713	Rock	2.20	0.6	383.2	8.5	26	1.1	15.1	58.1	1845	20.41	4631	1.9	3996	4.8	4	<0.1	12.4	786.1	17	3.57
816714	Rock	3.33	0.5	977.8	10.0	35	1.7	17.5	34.9	1708	16.99	3929	1.1	5344	4.6	29	<0.1	11.0	954.7	19	3.36
816715	Rock	1.72	1.4	499.5	55.8	44	0.6	11.4	13.0	771	29.72	3607	1.1	180.8	3.9	2	<0.1	28.0	112.1	22	0.85
816716	Rock	1.12	0.5	2717	27.0	63	2.6	715.9	>2000	50	>40	>10000	0.2	6138	0.6	<1	0.5	113.3	>2000	<2	<0.01
816717	Rock	1.84	2.9	46.3	83.9	64	0.1	28.2	5.1	201	1.26	86.5	4.7	38.0	12.9	105	0.5	30.5	7.9	31	0.99
816718	Rock	1.58	0.3	393.5	21.0	33	1.4	28.6	152.8	506	13.65	5658	5.6	3048	21.3	4	<0.1	33.8	977.4	9	1.53
816719	Rock	2.14	0.5	199.3	11.8	15	0.8	8.6	12.6	879	13.78	610.4	4.5	3215	71.7	82	<0.1	4.4	492.1	36	3.10
816720	Rock	1.61	0.3	62.2	6.8	21	1.8	0.7	2.9	1240	8.24	57.6	12.4	2919	19.8	35	<0.1	4.8	1020	26	3.51

CERTIFICATE OF ANALYSIS

VAN08006973.2

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	G6	G6
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Ti	S	Ga	Se	Au	Ag
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	gm/mt	gm/mt
	MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.01	2
816691	Rock	0.056	31	22	0.23	82	0.093	9	4.81	0.374	0.14	0.3	0.02	2.1	0.2	0.64	13	1.6	N.A.	N.A.
816692	Rock	0.130	94	32	0.57	54	0.079	10	5.79	0.321	0.46	0.3	0.01	5.4	0.6	1.19	16	1.4	N.A.	N.A.
816693	Rock	0.036	37	37	0.82	116	0.038	9	4.75	0.177	0.64	0.1	<0.01	4.5	0.4	0.17	13	0.5	N.A.	N.A.
816694	Rock	0.013	22	19	0.54	106	0.004	5	2.43	0.059	0.48	<0.1	<0.01	2.7	0.4	0.75	7	<0.5	N.A.	N.A.
816695	Rock	0.094	29	13	0.72	70	0.136	3	1.76	0.099	0.12	0.8	<0.01	2.7	0.1	0.80	8	<0.5	N.A.	N.A.
816696	Rock	0.033	13	16	0.22	50	0.082	5	3.04	0.178	0.05	0.3	<0.01	1.7	<0.1	1.22	8	0.5	N.A.	N.A.
816697	Rock	0.117	89	18	0.58	125	0.021	3	1.83	0.013	0.64	<0.1	<0.01	1.8	0.6	0.05	5	0.6	N.A.	N.A.
816698	Rock	0.016	26	49	1.02	160	0.095	1	2.99	0.035	0.95	0.2	<0.01	4.1	0.7	0.07	9	<0.5	N.A.	N.A.
816699	Rock	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
816700	Rock Pulp	0.061	3	520	0.92	157	0.005	4	0.60	0.042	0.37	1.1	1.22	4.2	0.1	1.20	2	10.5	N.A.	N.A.
816701	Rock	0.039	11	76	1.28	155	0.251	2	2.60	0.165	1.34	0.1	<0.01	10.7	0.8	0.50	10	0.8	N.A.	N.A.
816702	Rock	<0.001	<1	<1	<0.01	3	<0.001	<1	0.01	0.002	<0.01	0.5	3.20	0.2	0.6	>10	<1	>100	54.95	N.A.
816703	Rock	0.036	14	30	0.76	77	0.125	9	3.51	0.137	0.53	1.4	<0.01	4.4	0.6	1.47	11	2.5	N.A.	N.A.
816704	Rock	0.031	12	37	0.79	99	0.157	9	2.00	0.075	0.52	0.5	0.01	4.1	1.0	2.76	8	4.5	N.A.	N.A.
816705	Rock	0.008	13	27	0.55	68	0.065	4	1.48	0.053	0.36	0.3	<0.01	2.6	0.3	0.18	6	<0.5	N.A.	N.A.
816706	Rock	0.047	13	15	0.10	36	0.036	8	3.06	0.153	0.03	0.2	0.02	2.0	<0.1	>10	7	6.6	N.A.	N.A.
816707	Rock	0.046	15	20	0.11	58	0.043	12	4.32	0.177	0.05	0.2	<0.01	1.9	<0.1	8.84	10	4.4	N.A.	N.A.
816708	Rock	0.040	<1	1	<0.01	31	<0.001	4	0.03	<0.001	<0.01	0.7	0.29	0.4	0.7	7.73	<1	>100	1.97	89
816709	Rock	0.024	42	43	1.02	134	0.052	2	3.17	0.075	0.87	0.2	<0.01	5.1	0.5	0.15	11	<0.5	N.A.	N.A.
816710	Rock	0.095	2063	13	0.11	42	0.081	9	2.42	0.129	0.07	0.2	<0.01	1.2	<0.1	0.29	18	1.3	N.A.	N.A.
816711	Rock	0.152	92	7	0.16	27	0.024	2	0.58	0.038	0.05	0.2	<0.01	0.8	<0.1	0.09	3	<0.5	N.A.	N.A.
816712	Rock	0.085	5	5	0.05	6	0.021	1	0.60	0.004	<0.01	0.3	0.02	0.6	<0.1	>10	3	63.1	10.44	N.A.
816713	Rock	0.203	8	13	0.07	5	0.062	3	1.46	0.005	0.01	0.3	0.03	1.2	<0.1	1.48	7	16.3	4.65	N.A.
816714	Rock	0.051	13	12	0.12	17	0.051	2	2.06	0.029	0.03	0.1	0.03	1.4	<0.1	1.18	6	17.2	6.01	N.A.
816715	Rock	0.095	13	17	0.06	16	0.013	7	1.20	0.005	0.10	0.3	0.04	1.9	0.2	0.61	6	14.8	N.A.	N.A.
816716	Rock	0.005	1	<1	<0.01	2	<0.001	<1	0.04	0.003	<0.01	0.2	0.02	0.1	<0.1	>10	<1	33.6	5.32	N.A.
816717	Rock	0.017	34	32	0.19	50	0.132	11	1.85	0.295	0.06	0.2	<0.01	2.3	<0.1	0.32	7	0.9	N.A.	N.A.
816718	Rock	0.262	18	11	0.04	7	0.023	2	0.41	0.007	0.02	0.2	0.09	1.0	<0.1	3.18	2	24.3	3.03	N.A.
816719	Rock	0.047	152	42	0.14	21	0.100	3	2.58	0.133	0.12	0.2	0.04	3.3	<0.1	0.85	9	2.9	3.05	N.A.
816720	Rock	0.092	189	27	0.10	26	0.095	3	2.01	0.064	0.12	0.3	0.10	3.0	<0.1	0.14	8	6.0	2.88	N.A.

Client: Logan Resources Ltd.

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Project: CHEYENNE

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CERTIFICATE OF ANALYSIS

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	Method Analyte Unit MDL	WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
816721	Rock	2.10	0.6	48.7	33.5	40	<0.1	29.5	18.8	306	2.37	258.4	1.1	39.9	12.3	299	0.2	8.5	9.4	59	3.50
816722	Rock	3.83	0.2	134.3	10.6	55	0.5	11.9	76.4	1213	8.31	1268	17.6	846.6	2.2	27	0.1	8.9	429.7	12	3.82
816723	Rock	2.87	0.3	68.3	25.5	35	0.1	1.8	1.7	1202	9.11	16.1	7.2	6.3	45.6	24	0.1	2.5	1.9	23	3.99

Client: **Logan Resources Ltd.**

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Project: CHEYENNE

Report Date: October 31, 2008

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CERTIFICATE OF ANALYSIS

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	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	G6	G6
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Au	Ag
		%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	gm/mt	gm/mt
		0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.01	2
816721	Rock	0.035	27	58	0.73	119	0.089	7	6.35	0.700	0.53	0.2	0.02	6.4	0.5	0.37	18	<0.5	N.A.	N.A.
816722	Rock	0.345	368	8	0.21	25	0.030	4	0.94	0.034	0.10	0.3	0.02	1.7	<0.1	2.63	6	5.4	N.A.	N.A.
816723	Rock	0.488	29	21	0.08	26	0.059	5	1.42	0.026	0.06	1.1	0.02	2.3	<0.1	0.32	7	5.5	N.A.	N.A.

QUALITY CONTROL REPORT

VAN08006973.2

	Method Analyte Unit MDL	WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2
Pulp Duplicates																					
816614	Rock	1.96	0.8	7.0	6.9	14	<0.1	7.2	1.5	97	0.69	6.9	0.4	1.4	8.1	11	<0.1	0.5	0.1	12	0.17
REP 816614	QC		0.8	7.5	7.2	15	<0.1	7.8	1.6	100	0.73	7.3	0.5	1.1	8.4	12	<0.1	0.6	0.1	13	0.18
816668	Rock	1.63	0.3	158.8	7.2	33	<0.1	5.6	3.1	530	15.51	21.0	2.2	4.0	19.9	5	<0.1	2.4	1.0	7	1.24
REP 816668	QC		0.3	158.7	7.0	32	0.1	4.6	2.9	496	15.42	20.6	2.3	3.5	19.3	5	<0.1	2.1	1.0	6	1.27
816710	Rock	1.91	1.8	39.7	101.0	34	0.2	16.4	10.6	394	2.34	591.3	68.0	12.2	177.6	151	0.2	52.5	4.5	19	2.31
REP 816710	QC		1.7	38.8	103.4	39	0.2	17.0	10.6	410	2.34	583.4	67.8	9.3	184.5	154	0.2	53.3	4.6	18	2.32
Reference Materials																					
STD AGPROOF	Standard																				
STD DS7	Standard		21.1	104.8	68.7	389	0.8	56.3	10.0	633	2.39	49.9	5.0	58.8	4.7	73	6.2	5.9	4.3	86	1.01
STD DS7	Standard		20.8	110.3	68.8	398	0.9	57.3	9.8	658	2.44	51.2	5.1	59.3	4.8	76	6.1	5.8	4.4	91	1.05
STD DS7	Standard		20.6	111.4	75.3	401	0.9	55.3	10.2	635	2.43	51.9	5.3	73.2	4.8	71	6.5	6.4	4.7	91	0.98
STD DS7	Standard		20.1	111.9	74.7	405	0.9	56.8	10.0	639	2.51	56.4	5.5	57.9	4.8	73	6.8	6.2	4.7	87	1.05
STD DS7	Standard		21.3	112.1	78.0	401	0.9	56.1	10.0	640	2.46	56.8	5.7	75.7	5.4	79	6.8	6.3	5.2	87	1.07
STD DS7	Standard		21.6	113.3	72.0	413	0.9	54.6	10.1	638	2.46	54.2	5.5	75.5	4.6	85	7.0	6.4	5.0	87	1.07
STD DS7	Standard		21.0	107.0	63.5	415	0.8	55.7	9.6	658	2.44	52.7	4.7	68.2	4.4	78	6.4	6.3	4.6	84	1.01
STD DS7	Standard		22.6	113.5	68.2	424	0.8	54.7	10.0	646	2.45	61.5	4.8	88.1	4.4	80	6.6	6.5	4.6	84	1.01
STD DS7	Standard		21.0	113.7	66.5	404	0.9	58.0	10.1	655	2.46	54.9	4.9	66.0	4.2	67	6.5	5.7	4.5	86	0.97
STD DS7	Standard		20.4	110.7	63.5	378	0.9	57.4	9.4	619	2.34	51.4	4.5	66.9	4.2	61	5.9	5.2	4.3	82	0.91
STD FA10R	Standard																				
STD OXK48	Standard																				
STD OXK48	Standard																				
STD SI15	Standard																				
STD DS7 Expected			20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93
STD SI15 Expected																					
STD OXK48 Expected																					
STD AGPROOF Expected																					
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01

QUALITY CONTROL REPORT

VAN08006973.2

	Method Analyte Unit MDL	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	G6	G6
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Au	Ag
		%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	gm/mt	gm/mt
		0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.01	2
Pulp Duplicates																				
816614	Rock	0.007	15	23	0.29	53	0.033	1	0.54	0.042	0.05	0.2	<0.01	1.5	<0.1	<0.05	3	<0.5	N.A.	N.A.
REP 816614	QC	0.008	16	25	0.29	58	0.035	2	0.55	0.044	0.05	0.2	<0.01	1.5	<0.1	<0.05	3	<0.5		
816668	Rock	0.173	23	9	0.11	19	0.034	1	0.70	0.035	0.15	0.6	<0.01	2.6	<0.1	0.25	6	4.9	N.A.	N.A.
REP 816668	QC	0.163	21	8	0.11	19	0.033	2	0.70	0.035	0.14	0.5	<0.01	2.5	<0.1	0.25	6	4.3		
816710	Rock	0.095	2063	13	0.11	42	0.081	9	2.42	0.129	0.07	0.2	<0.01	1.2	<0.1	0.29	18	1.3	N.A.	N.A.
REP 816710	QC	0.100	2125	14	0.12	45	0.083	11	2.38	0.126	0.07	0.2	<0.01	1.2	<0.1	0.28	15	1.6		
Reference Materials																				
STD AGPROOF	Standard																			73
STD DS7	Standard	0.072	14	197	1.03	370	0.125	38	1.05	0.091	0.45	3.8	0.20	2.4	4.1	0.19	5	3.0		
STD DS7	Standard	0.073	15	215	1.07	380	0.128	41	1.11	0.095	0.46	3.8	0.20	2.7	4.2	0.19	5	3.4		
STD DS7	Standard	0.083	14	201	1.08	376	0.132	38	1.05	0.091	0.44	3.7	0.20	2.8	4.2	0.20	5	3.7		
STD DS7	Standard	0.081	14	192	1.10	368	0.136	40	1.12	0.094	0.45	3.7	0.21	2.8	4.5	0.20	5	3.4		
STD DS7	Standard	0.084	16	194	1.10	411	0.149	42	1.14	0.100	0.45	3.9	0.23	2.9	4.6	0.21	5	3.5		
STD DS7	Standard	0.085	15	185	1.12	402	0.138	42	1.15	0.097	0.46	3.9	0.23	2.9	4.2	0.20	5	3.6		
STD DS7	Standard	0.087	14	206	1.09	402	0.129	40	1.09	0.095	0.49	3.8	0.19	2.6	4.4	0.19	5	4.0		
STD DS7	Standard	0.077	15	212	1.10	416	0.128	38	1.06	0.094	0.48	4.3	0.22	2.6	4.5	0.16	5	4.1		
STD DS7	Standard	0.079	12	197	1.08	371	0.108	40	1.03	0.089	0.47	3.9	0.20	2.3	4.3	0.20	5	3.8		
STD DS7	Standard	0.074	11	186	1.02	365	0.107	38	0.98	0.081	0.44	3.7	0.19	2.4	4.2	0.19	5	4.0		
STD FA10R	Standard																			12
STD OXK48	Standard																			3.65
STD OXK48	Standard																			3.69
STD SI15	Standard																			20
STD DS7 Expected		0.08	13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	4.6	3.5		
STD SI15 Expected																				19.68
STD OXK48 Expected																				3.557
STD AGPROOF Expected																				0
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5		
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5		

QUALITY CONTROL REPORT

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		WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01
BLK	Blank		<0.1	<0.1	<0.1	8	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
G1	Prep Blank	<0.01	0.7	5.0	7.1	132	<0.1	5.1	5.0	652	2.20	<0.5	2.4	0.6	4.3	92	0.4	<0.1	0.5	44	0.98
G1	Prep Blank	<0.01	0.9	6.0	7.3	144	<0.1	5.7	4.9	672	2.47	<0.5	3.0	0.5	5.0	117	0.4	<0.1	<0.1	49	1.22

QUALITY CONTROL REPORT

VAN08006973.2

		1DX15 P %	1DX15 La ppm	1DX15 Cr ppm	1DX15 Mg %	1DX15 Ba ppm	1DX15 Ti %	1DX15 B ppm	1DX15 Al %	1DX15 Na %	1DX15 K %	1DX15 W ppm	1DX15 Hg ppm	1DX15 Sc ppm	1DX15 Tl ppm	1DX15 S %	1DX15 Ga ppm	1DX15 Se ppm	G6 Au gm/mt	G6 Ag gm/mt
		0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.01	2
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5		
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5		
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5		
BLK	Blank																			<2
BLK	Blank																		<0.01	
BLK	Blank																		<0.01	
BLK	Blank																			<2
BLK	Blank																			<2
Prep Wash																				
G1	Prep Blank	0.105	13	11	0.66	245	0.134	<1	1.12	0.103	0.55	<0.1	<0.01	2.7	0.4	<0.05	5	<0.5	N.A.	N.A.
G1	Prep Blank	0.131	16	12	0.72	242	0.131	1	1.11	0.106	0.54	<0.1	<0.01	2.7	0.4	<0.05	6	<0.5	N.A.	N.A.

Client: **Logan Resources Ltd.**

1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Submitted By: Rita Chow
Receiving Lab: Canada-Vancouver
Received: July 25, 2008
Report Date: September 10, 2008
Page: 1 of 2

CERTIFICATE OF ANALYSIS

VAN08007654.1

CLIENT JOB INFORMATION

Project: None Given
Shipment ID:
P.O. Number
Number of Samples: 2

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.

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

CC:

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
R150	2	Crush, split and pulverize rock to 200 mesh		
4A&4B	2	Whole Rock Analysis Majors and Trace Elements	0.2	Completed
DIS-RJT	2	Warehouse handling / Disposition of reject		

ADDITIONAL COMMENTS



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

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

Project: None Given
Report Date: September 10, 2008

Page: 2 of 2 **Part** 1

CERTIFICATE OF ANALYSIS

VAN08007654.1

	Method Analyte Unit MDL	WGHT	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B
		Wgt	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ni	Sc	LOI	Sum	Ba	Be	Co	Cs
		kg	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm
		0.01	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	20	1	-5.1	0.01	1	1	0.2	0.1
830401	Rock	2.60	54.95	13.86	8.41	3.59	8.37	1.99	5.24	0.90	0.45	0.19	0.007	<20	16	1.4	99.37	3023	3	25.3	9.2
830402	Rock	2.49	52.13	13.53	8.46	2.85	7.17	1.46	6.87	0.89	0.40	0.14	0.003	<20	15	5.4	99.30	3878	2	15.3	4.9

Client: **Logan Resources Ltd.**

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Project: None Given

Report Date: September 10, 2008

Page: 2 of 2 **Part** 2

CERTIFICATE OF ANALYSIS

VAN08007654.1

	Method Analyte Unit MDL	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B
		Ga	Hf	Nb	Rb	Sn	Sr	Ta	Th	U	V	W	Zr	Y	La	Ce	Pr	Nd	Sm	Eu	Gd
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.5	0.1	0.1	0.1	1	0.5	0.1	0.2	0.1	8	0.5	0.1	0.1	0.1	0.1	0.02	0.3	0.05	0.02	0.05
830401	Rock	18.8	5.1	17.6	150.4	6	1026	1.0	28.1	7.6	176	1.8	180.6	29.1	67.2	125.8	14.80	52.6	9.55	2.21	7.40
830402	Rock	19.0	4.4	14.7	186.4	5	964.2	0.8	32.7	9.4	168	2.2	169.2	25.9	67.6	123.8	13.86	49.7	8.53	2.01	6.88

Client: Logan Resources Ltd.

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Project: None Given

Report Date: September 10, 2008

Page: 2 of 2 **Part** 3

CERTIFICATE OF ANALYSIS

VAN08007654.1

	Method Analyte Unit MDL	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	2A Leco	2A Leco	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
		Tb	Dy	Ho	Er	Tm	Yb	Lu	TOT/C	TOT/S	Mo	Cu	Pb	Zn	Ni	As	Cd	Sb	Bi	Ag
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.01	0.05	0.02	0.03	0.01	0.05	0.01	0.02	0.02	0.1	0.1	0.1	1	0.1	0.5	0.1	0.1	0.1	0.1
830401	Rock	1.10	5.65	0.98	2.68	0.41	2.47	0.36	0.07	0.09	2.2	35.2	29.6	78	11.1	96.6	0.3	1.4	0.8	0.3
830402	Rock	0.97	4.67	0.85	2.46	0.37	2.21	0.34	0.05	1.85	2.0	60.4	47.1	53	8.3	13.0	0.3	3.3	1.0	0.2



AcmeLabs

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:

None Given

Report Date:

September 10, 2008

Page:

2 of 2

Part 4

CERTIFICATE OF ANALYSIS

VAN08007654.1

		Method	1DX	1DX	1DX
		Analyte	Hg	Tl	Se
		Unit	ppm	ppm	ppm
		MDL	0.01	0.1	0.5
830401	Rock		0.01	0.4	<0.5
830402	Rock		<0.01	<0.1	1.2

QUALITY CONTROL REPORT

VAN08007654.1

	Method Analyte Unit MDL	WGHT	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B
		Wgt	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ni	Sc	LOI	Sum	Ba	Be	Co	Cs
		kg	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	%	%	ppm	ppm	ppm	ppm
		0.01	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	20	1	-5.1	0.01	1	1	0.2
Pulp Duplicates																					
REP G1	QC																				
Reference Materials																					
STD CSC	Standard																				
STD DS7	Standard																				
STD DS7	Standard																				
STD OREAS76A	Standard																				
STD SO-18	Standard		58.03	14.15	7.62	3.35	6.39	3.70	2.15	0.69	0.82	0.39	0.546	41	24	1.9	99.75	500	<1	26.4	6.8
STD SO-18	Standard		58.07	14.16	7.63	3.34	6.39	3.68	2.15	0.69	0.83	0.39	0.545	40	24	1.9	99.76	496	2	26.5	6.8
STD DS7 Expected																					
STD CSC Expected																					
STD OREAS76A Expected																					
STD SO-18 Expected			58.47	14.23	7.67	3.35	6.42	3.71	2.17	0.69	0.83	0.39	0.55	44	25			514		26.2	7.1
BLK	Blank																				
BLK	Blank																				
BLK	Blank		<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<20	<1	0.0	<0.01	<1	<1	<0.2	<0.1
Prep Wash																					
G1	Prep Blank	<0.01	66.39	15.30	3.59	1.23	3.76	3.38	3.79	0.41	0.19	0.09	<0.002	<20	6	1.6	99.72	950	2	5.7	5.0
G1	Prep Blank																				

Client: **Logan Resources Ltd.**

1640 - 1066 Hastings St. W.
Vancouver BC V6E 3X1 Canada

Project: None Given

Report Date: September 10, 2008

Page: 1 of 1 Part 2

QUALITY CONTROL REPORT

VAN08007654.1

	Method Analyte Unit MDL	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B
		Ga	Hf	Nb	Rb	Sn	Sr	Ta	Th	U	V	W	Zr	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		0.5	0.1	0.1	0.1	1	0.5	0.1	0.2	0.1	8	0.5	0.1	0.1	0.1	0.1	0.02	0.3	0.05	0.02	0.05	
Pulp Duplicates																						
REP G1	QC																					
Reference Materials																						
STD CSC	Standard																					
STD DS7	Standard																					
STD DS7	Standard																					
STD OREAS76A	Standard																					
STD SO-18	Standard	17.2	9.5	21.1	27.8	15	405.1	7.0	10.5	16.3	196	14.7	281.3	31.8	12.0	25.7	3.42	13.9	2.84	0.87	2.96	
STD SO-18	Standard	16.5	9.5	20.1	27.7	11	402.6	6.5	9.6	15.8	190	14.7	278.5	31.8	12.0	25.7	3.41	13.8	2.89	0.85	2.93	
STD DS7 Expected																						
STD CSC Expected																						
STD OREAS76A Expected																						
STD SO-18 Expected		17.6	9.8	20.9	28.7	15	407.4	7.4	9.9	16.4	200	15.1	280	33	12.3	27.1	3.45	14	3	0.89	2.93	
BLK	Blank																					
BLK	Blank																					
BLK	Blank	<0.5	<0.1	<0.1	<0.1	<1	<0.5	<0.1	<0.2	<0.1	<8	<0.5	3.6	<0.1	<0.1	<0.1	<0.02	<0.3	<0.05	<0.02	<0.05	
Prep Wash																						
G1	Prep Blank	18.2	3.3	20.6	127.4	1	735.7	1.5	6.4	3.9	59	<0.5	121.6	16.3	26.7	54.4	6.27	21.8	3.94	1.02	2.95	
G1	Prep Blank																					

QUALITY CONTROL REPORT

VAN08007654.1

Method	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	4A&4B	2A Leco	2A Leco	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
Analyte	Tb	Dy	Ho	Er	Tm	Yb	Lu	TOT/C	TOT/S	Mo	Cu	Pb	Zn	Ni	As	Cd	Sb	Bi	Ag	Au
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb
MDL	0.01	0.05	0.02	0.03	0.01	0.05	0.01	0.02	0.02	0.1	0.1	0.1	1	0.1	0.5	0.1	0.1	0.1	0.1	0.5
Pulp Duplicates																				
REP G1	QC							0.07	0.03											
Reference Materials																				
STD CSC	Standard							3.16	4.36											
STD DS7	Standard									21.6	110.4	67.6	407	56.1	56.7	6.9	5.8	4.6	0.8	52.9
STD DS7	Standard									20.9	115.7	68.7	418	56.4	56.8	7.1	5.8	4.5	0.9	62.1
STD OREAS76A	Standard							0.17	17.52											
STD SO-18	Standard	0.50	2.91	0.62	1.76	0.28	1.74	0.27												
STD SO-18	Standard	0.50	2.88	0.59	1.77	0.28	1.75	0.26												
STD DS7 Expected										20.9	109	70.6	411	56	48.2	6.4	5.9	4.5	0.9	70
STD CSC Expected								3.13	4.19											
STD OREAS76A Expected								0.16	18											
STD SO-18 Expected		0.53	3	0.62	1.84	0.29	1.79	0.27												
BLK	Blank									<0.1	<0.1	<0.1	<1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5
BLK	Blank							<0.02	<0.02											
BLK	Blank	<0.01	<0.05	<0.02	<0.03	<0.01	<0.05	<0.01												
Prep Wash																				
G1	Prep Blank	0.48	2.58	0.52	1.67	0.27	1.67	0.28		0.6	6.6	46.1	105	5.1	1.5	0.4	1.2	<0.1	0.6	0.7
G1	Prep Blank							0.07	0.03											

Client: **Logan Resources Ltd.**

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Project: None Given

Report Date: September 10, 2008

Page: 1 of 1 Part 4

QUALITY CONTROL REPORT

VAN08007654.1

Method	1DX	1DX	1DX
Analyte	Hg	Tl	Se
Unit	ppm	ppm	ppm
MDL	0.01	0.1	0.5
Pulp Duplicates			
REP G1 QC			
Reference Materials			
STD CSC Standard			
STD DS7 Standard	0.21	4.4	3.9
STD DS7 Standard	0.20	4.2	3.9
STD OREAS76A Standard			
STD SO-18 Standard			
STD SO-18 Standard			
STD DS7 Expected	0.2	4.2	3.5
STD CSC Expected			
STD OREAS76A Expected			
STD SO-18 Expected			
BLK Blank	<0.01	<0.1	<0.5
BLK Blank			
BLK Blank			
Prep Wash			
G1 Prep Blank	0.03	0.4	<0.5
G1 Prep Blank			

Client: **Logan Resources Ltd.**

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Submitted By: Rita Chow
 Receiving Lab: Canada-Vancouver
 Received: July 23, 2008
 Report Date: October 10, 2008
 Page: 1 of 6

CERTIFICATE OF ANALYSIS

VAN08007549.3

CLIENT JOB INFORMATION

Project: None Given
 Shipment ID:
 P.O. Number 9
 Number of Samples: 131

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.

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

CC: Daithi Macgearailt

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
R150	131	Crush, split and pulverize rock to 200 mesh		
1DX	131	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed
DIS-RJT	131	Warehouse handling / Disposition of reject		
G6	10	Ag Au by fire assay	30	Completed
7AR	5	1:1:1 Aqua Regia digestion ICP-ES analysis	1	Completed
G6 Grav	7	Fire assay Au by gravimetric finish	30	Completed

ADDITIONAL COMMENTS

Ver.3 to include Au by gravimetric finish



CERTIFICATE OF ANALYSIS

VAN08007549.3

	Method Analyte Unit MDL	WGHT Wgt kg 0.01	1DX Mo ppm 0.1	1DX Cu ppm 0.1	1DX Pb ppm 0.1	1DX Zn ppm 1	1DX Ag ppm 0.1	1DX Ni ppm 0.1	1DX Co ppm 0.1	1DX Mn ppm 1	1DX Fe % 0.01	1DX As ppm 0.5	1DX U ppm 0.1	1DX Au ppb 0.5	1DX Th ppm 0.1	1DX Sr ppm 1	1DX Cd ppm 0.1	1DX Sb ppm 0.1	1DX Bi ppm 0.1	1DX V ppm 2	1DX Ca % 0.01
816757	Rock	2.65	0.2	220.5	19.0	101	0.2	7.7	5.4	376	3.27	41.8	0.9	2.7	8.3	229	0.4	3.6	4.8	12	1.84
816758	Rock	2.16	58.0	3801	62.0	583	8.3	98.4	1712	152	26.47	>10000	15.9	190.5	2.3	25	4.6	89.1	34.7	85	1.28
816759	Rock	2.61	707.7	1202	639.3	130	13.2	135.8	491.2	72	32.18	>10000	28.2	347.6	4.3	12	0.7	74.7	32.8	7	0.12
816760	Rock	1.68	168.5	183.5	1294	90	10.8	6.3	41.8	24	4.08	2516	3.3	168.0	4.7	6	0.3	133.4	9.8	<2	0.17
816761	Rock	2.35	13.2	197.5	304.6	108	6.6	20.4	342.5	28	5.13	>10000	12.9	160.8	13.2	9	0.3	113.9	14.8	<2	0.01
816762	Rock	2.27	2.5	150.6	445.6	53	7.0	2.6	1.7	53	4.44	63.3	0.9	8.7	6.6	6	0.2	544.2	267.0	3	0.08
816751	Rock	1.38	1.6	111.6	7.5	25	0.1	27.7	16.2	201	3.58	222.2	1.8	9.5	6.1	131	<0.1	1.0	0.7	161	1.37
816752	Rock	0.98	4.9	207.4	9.0	15	0.2	34.6	7.2	179	3.08	18.7	1.9	3.0	6.9	41	<0.1	3.6	1.3	66	0.79
816753	Rock	2.77	0.9	22.6	3.9	21	<0.1	31.7	16.4	224	3.85	76.9	1.6	1.8	10.9	10	<0.1	2.5	1.1	33	0.13
816754	Rock	1.29	0.7	20.9	2.5	7	<0.1	17.6	7.1	172	3.75	18.4	1.5	2.0	10.7	4	<0.1	2.2	0.3	33	0.05
816755	Rock	1.44	1.5	120.1	21.9	6	0.4	5.8	4.2	89	4.02	23.6	1.3	1.3	5.6	108	<0.1	4.5	1.3	12	1.27
816756	Rock	1.87	0.6	491.3	>10000	626	40.2	2.8	2.7	62	32.80	8399	0.4	12.8	5.6	47	0.2	326.8	75.3	8	<0.01
816776	Rock	2.24	13.0	117.0	109.1	303	0.4	75.2	10.9	56	2.96	28.8	4.5	3.2	3.1	46	2.0	6.1	0.4	166	0.39
816777	Rock	1.24	0.2	119.3	177.2	6	1.0	1.0	0.8	56	6.97	30.6	0.7	2.2	4.7	52	<0.1	3.9	2.6	9	0.54
816778	Rock	1.59	0.2	320.5	33.6	12	0.5	4.1	7.7	137	7.91	18.1	1.6	2.1	7.1	42	<0.1	4.7	1.9	9	0.82
816779	Rock	2.42	1.7	42.5	13.2	50	0.2	5.2	2.2	51	2.81	90.2	0.9	5.7	7.2	7	0.2	2.2	0.3	22	<0.01
816780	Rock	2.95	0.7	25.7	21.3	5	0.2	3.0	1.5	33	0.44	125.9	2.0	2.8	8.3	11	<0.1	1.6	<0.1	<2	0.03
816782	Rock	2.57	0.9	42.2	8.4	10	<0.1	35.0	16.8	105	3.69	11.4	1.1	1.1	13.1	13	<0.1	4.1	0.5	24	0.06
816770	Rock	1.98	1.1	28.2	11.5	21	<0.1	11.1	4.0	76	0.71	11.2	1.0	<0.5	6.5	127	0.3	1.5	<0.1	11	1.47
816771	Rock	2.75	9.8	61.3	15.0	56	0.1	45.9	12.3	82	2.06	70.0	6.1	1.3	9.7	103	0.4	6.0	0.5	230	1.48
816772	Rock	2.99	0.5	44.1	5.4	38	<0.1	14.6	4.6	293	2.25	3.6	0.4	<0.5	5.9	99	<0.1	0.2	<0.1	75	0.87
816773	Rock	3.10	2.4	77.1	16.9	25	0.1	25.3	11.9	106	1.78	26.1	1.3	1.1	3.4	53	0.1	2.0	0.7	27	0.94
816774	Rock	1.56	0.6	20.5	14.1	17	0.1	17.1	8.3	63	0.63	104.0	1.0	1.9	8.0	104	0.1	4.3	<0.1	19	1.25
816775	Rock	1.84	0.9	43.5	26.4	122	0.1	23.1	9.2	191	2.52	50.6	1.7	1.0	7.8	100	0.8	4.4	0.6	65	1.33
816763	Rock	2.98	1.9	35.5	17.3	31	<0.1	27.3	7.2	159	0.83	16.2	1.7	1.1	8.2	171	0.3	6.8	<0.1	26	1.85
816764	Rock	1.95	1.2	36.0	15.9	54	<0.1	22.3	6.7	173	1.55	36.9	1.5	<0.5	8.8	168	0.3	2.5	0.1	29	1.96
816765	Rock	1.69	9.0	51.9	10.0	36	0.1	34.6	11.1	89	2.75	12.5	3.4	2.8	9.2	7	0.3	3.6	0.4	31	0.20
816766	Rock	2.53	9.0	70.6	26.3	39	0.1	22.8	5.9	213	2.53	111.3	1.9	5.0	4.9	135	0.3	1.7	0.3	110	1.42
816767	Rock	1.81	26.1	153.1	20.9	49	0.2	35.0	52.0	256	4.52	1720	9.4	24.5	10.9	32	0.4	13.2	1.5	174	0.99
816768	Rock	2.49	1.2	34.3	2.9	17	<0.1	13.7	7.1	115	3.54	14.0	2.9	3.3	21.9	12	<0.1	0.9	0.5	6	0.02

CERTIFICATE OF ANALYSIS

VAN08007549.3

	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	G6	G6	7AR
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Ag	Au	Cu
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	gm/mt	gm/mt	%
	MDL	0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	5	0.01	0.001
816757	Rock	0.073	13	32	0.51	190	0.044	39	3.12	0.234	0.04	0.1	<0.01	1.1	0.3	0.40	10	0.7	N.A.	N.A.	N.A.
816758	Rock	0.489	20	6	0.11	6	0.003	<20	0.08	<0.001	<0.01	0.8	0.12	0.8	<0.1	>10	1	48.7	N.A.	N.A.	N.A.
816759	Rock	0.066	4	5	0.10	20	0.011	<20	0.34	0.003	0.02	0.9	0.33	0.3	<0.1	9.36	3	29.2	N.A.	N.A.	N.A.
816760	Rock	0.143	4	9	0.02	5	0.003	34	0.04	0.003	<0.01	1.5	1.71	0.1	0.2	1.01	<1	15.2	N.A.	N.A.	N.A.
816761	Rock	0.032	2	5	0.02	8	0.003	46	0.07	0.007	0.02	0.5	0.17	0.4	0.3	0.86	<1	10.1	N.A.	N.A.	N.A.
816762	Rock	0.073	10	10	0.05	18	0.006	35	0.19	0.006	0.04	0.3	0.23	0.4	0.1	0.14	<1	2.9	N.A.	N.A.	N.A.
816751	Rock	0.183	17	62	1.68	613	0.412	<20	3.48	0.299	1.49	0.1	<0.01	9.1	1.2	0.68	12	1.9	N.A.	N.A.	N.A.
816752	Rock	0.118	12	23	0.60	123	0.160	<20	0.89	0.062	0.21	0.2	<0.01	1.8	0.2	1.20	4	1.6	N.A.	N.A.	N.A.
816753	Rock	0.058	25	37	0.70	242	0.135	<20	2.38	0.027	1.22	0.1	<0.01	2.7	1.4	0.16	7	<0.5	N.A.	N.A.	N.A.
816754	Rock	0.044	31	38	0.71	186	0.139	<20	2.13	0.011	1.18	<0.1	0.14	2.5	2.3	0.19	7	<0.5	N.A.	N.A.	N.A.
816755	Rock	0.143	11	8	0.18	18	0.050	<20	1.94	0.257	0.02	0.1	<0.01	0.6	0.1	0.38	7	4.5	N.A.	N.A.	N.A.
816756	Rock	0.117	7	8	0.19	41	0.002	<20	0.24	0.073	0.11	0.8	1.25	0.4	0.9	1.92	11	10.7	N.A.	N.A.	N.A.
816776	Rock	0.021	6	27	0.32	56	0.109	<20	0.76	0.084	0.20	0.2	<0.01	2.0	0.3	1.53	4	3.2	N.A.	N.A.	N.A.
816777	Rock	0.105	24	10	0.12	14	0.048	<20	1.10	0.120	0.06	<0.1	0.02	0.9	0.1	0.30	8	1.5	N.A.	N.A.	N.A.
816778	Rock	0.099	21	8	0.14	10	0.046	<20	1.12	0.292	0.05	1.5	<0.01	0.6	0.1	2.75	5	2.0	N.A.	N.A.	N.A.
816779	Rock	0.042	21	15	0.30	108	0.011	<20	0.82	0.006	0.26	<0.1	<0.01	1.0	0.3	0.15	4	1.4	N.A.	N.A.	N.A.
816780	Rock	0.025	79	6	0.01	22	0.001	35	0.15	0.006	0.05	<0.1	0.07	0.2	<0.1	<0.05	<1	<0.5	N.A.	N.A.	N.A.
816782	Rock	0.033	38	33	0.82	180	0.117	<20	1.92	0.024	1.29	<0.1	<0.01	2.5	2.2	0.65	6	<0.5	N.A.	N.A.	N.A.
816770	Rock	0.107	24	9	0.15	61	0.046	<20	2.21	0.263	0.05	0.1	<0.01	0.6	<0.1	0.09	7	0.5	N.A.	N.A.	N.A.
816771	Rock	0.286	7	55	0.81	80	0.066	<20	2.53	0.255	0.51	<0.1	<0.01	4.8	0.5	0.69	9	4.0	N.A.	N.A.	N.A.
816772	Rock	0.048	12	56	1.14	332	0.192	<20	2.69	0.169	0.98	0.4	<0.01	7.3	0.4	0.23	8	<0.5	N.A.	N.A.	N.A.
816773	Rock	0.249	13	28	0.42	82	0.087	<20	0.89	0.108	0.31	0.5	<0.01	2.0	0.3	0.66	4	0.9	N.A.	N.A.	N.A.
816774	Rock	0.104	12	25	0.20	55	0.093	<20	1.94	0.320	0.16	0.4	<0.01	1.5	0.1	0.09	6	<0.5	N.A.	N.A.	N.A.
816775	Rock	0.088	14	47	1.05	119	0.167	<20	2.94	0.146	0.77	0.2	<0.01	4.5	0.6	0.06	7	<0.5	N.A.	N.A.	N.A.
816763	Rock	0.100	14	19	0.43	62	0.076	<20	2.84	0.423	0.18	0.3	<0.01	1.2	<0.1	0.22	8	0.7	N.A.	N.A.	N.A.
816764	Rock	0.105	18	19	0.58	105	0.080	<20	2.83	0.370	0.19	<0.1	<0.01	1.7	0.3	0.35	7	0.9	N.A.	N.A.	N.A.
816765	Rock	0.081	14	14	0.68	116	0.002	<20	1.16	0.011	0.22	0.1	<0.01	1.1	0.2	0.88	3	2.8	N.A.	N.A.	N.A.
816766	Rock	0.230	10	25	0.52	86	0.077	<20	2.30	0.115	0.25	0.3	<0.01	1.3	0.3	1.03	8	2.4	N.A.	N.A.	N.A.
816767	Rock	0.268	7	43	0.59	13	0.030	<20	2.10	0.042	0.07	0.3	<0.01	5.0	0.2	0.77	7	4.1	N.A.	N.A.	N.A.
816768	Rock	0.036	63	6	0.38	100	0.005	<20	1.06	0.014	0.27	<0.1	<0.01	0.7	0.6	0.16	3	<0.5	N.A.	N.A.	N.A.

Client: **Logan Resources Ltd.**

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Project: None Given

Report Date: October 10, 2008

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CERTIFICATE OF ANALYSIS

VAN08007549.3

	Method	7AR	7AR	G6
Analyte		Pb	Co	Au
Unit		%	%	gm/mt
MDL		0.01	0.001	0.17
816757	Rock	N.A.	N.A.	N.A.
816758	Rock	N.A.	N.A.	N.A.
816759	Rock	N.A.	N.A.	N.A.
816760	Rock	N.A.	N.A.	N.A.
816761	Rock	N.A.	N.A.	N.A.
816762	Rock	N.A.	N.A.	N.A.
816751	Rock	N.A.	N.A.	N.A.
816752	Rock	N.A.	N.A.	N.A.
816753	Rock	N.A.	N.A.	N.A.
816754	Rock	N.A.	N.A.	N.A.
816755	Rock	N.A.	N.A.	N.A.
816756	Rock	1.64	N.A.	N.A.
816776	Rock	N.A.	N.A.	N.A.
816777	Rock	N.A.	N.A.	N.A.
816778	Rock	N.A.	N.A.	N.A.
816779	Rock	N.A.	N.A.	N.A.
816780	Rock	N.A.	N.A.	N.A.
816782	Rock	N.A.	N.A.	N.A.
816770	Rock	N.A.	N.A.	N.A.
816771	Rock	N.A.	N.A.	N.A.
816772	Rock	N.A.	N.A.	N.A.
816773	Rock	N.A.	N.A.	N.A.
816774	Rock	N.A.	N.A.	N.A.
816775	Rock	N.A.	N.A.	N.A.
816763	Rock	N.A.	N.A.	N.A.
816764	Rock	N.A.	N.A.	N.A.
816765	Rock	N.A.	N.A.	N.A.
816766	Rock	N.A.	N.A.	N.A.
816767	Rock	N.A.	N.A.	N.A.
816768	Rock	N.A.	N.A.	N.A.

CERTIFICATE OF ANALYSIS

VAN08007549.3

	Method	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2
816769	Rock	2.08	7.0	55.6	8.7	28	<0.1	26.6	8.4	107	2.33	21.4	2.4	4.3	7.4	30	0.1	4.0	0.3	87
816726	Rock	2.15	4.7	29.2	29.5	51	0.1	26.9	77.1	156	1.12	1477	3.6	13.3	12.3	94	0.3	6.4	1.0	14
816727	Rock	3.08	1.3	26.9	3.8	15	<0.1	16.6	7.0	149	3.22	2.5	1.9	1.8	17.3	10	<0.1	0.6	0.2	4
816728	Rock	1.75	0.4	4.7	3.7	4	<0.1	1.8	0.7	45	0.29	5.4	0.5	1.7	4.8	2	<0.1	0.2	0.1	<2
816731	Rock	1.87	2.9	38.8	4.4	27	<0.1	36.4	15.2	177	3.55	8.2	2.5	1.3	19.5	8	<0.1	6.2	0.4	9
816732	Rock	1.49	1.1	33.7	3.9	7	<0.1	39.4	15.6	126	2.67	5.1	1.9	<0.5	15.8	7	<0.1	1.4	0.3	7
816733	Rock	2.16	0.5	25.7	6.0	11	<0.1	16.2	5.7	81	0.75	5.6	0.9	0.5	7.7	20	<0.1	0.9	<0.1	6
816740	Rock	1.72	1.1	17.7	14.5	46	<0.1	23.9	6.5	472	1.05	26.2	0.6	1.3	4.8	2	0.3	0.7	0.2	8
816741	Rock	0.80	0.2	307.9	4.4	12	0.3	5.4	3.3	115	21.39	22.6	0.3	2.5	4.6	41	<0.1	1.3	0.8	7
817008	Rock	2.94	2.0	16.3	8.5	59	<0.1	9.1	14.8	340	3.34	37.9	8.1	3.7	25.8	100	<0.1	0.6	<0.1	145
817020	Rock	1.07	0.4	17.1	7.8	13	<0.1	20.2	13.6	84	1.15	93.1	2.3	<0.5	18.0	37	<0.1	3.2	0.1	34
817021	Rock	2.25	2.8	56.0	26.5	25	0.1	18.5	9.5	104	0.84	11.6	15.2	2.1	59.0	218	0.2	2.4	0.2	17
817023	Rock	2.01	0.5	11.5	2.6	7	<0.1	6.4	4.5	66	1.23	24.7	1.0	<0.5	11.2	72	<0.1	0.9	<0.1	8
817024	Rock	2.21	0.9	37.0	6.4	13	<0.1	28.4	9.6	62	1.17	20.6	2.3	0.6	23.4	44	<0.1	2.3	0.2	17
817025	Rock	2.18	0.8	13.4	4.1	6	<0.1	5.1	3.2	72	1.17	25.6	1.4	0.8	14.3	12	<0.1	1.7	<0.1	7
817026	Rock	2.11	4.7	11.9	14.0	16	0.1	5.3	3.3	34	1.43	484.2	1.7	3.4	10.8	8	<0.1	2.5	<0.1	5
817027	Rock	1.77	2.6	39.6	4.2	9	<0.1	19.2	10.4	92	1.78	34.7	1.5	1.1	14.4	26	<0.1	2.2	0.1	18
817028	Rock	1.87	3.8	26.3	59.9	38	0.3	16.7	11.1	86	2.33	631.4	4.4	7.0	7.2	9	0.2	5.6	0.5	6
817029	Rock	1.82	1.0	67.1	3.7	29	<0.1	45.2	27.1	492	6.55	106.7	3.2	1.5	6.4	5	<0.1	3.6	0.5	68
817030	Rock	2.61	0.4	21.3	1.7	27	<0.1	37.9	17.1	546	5.43	26.2	0.9	1.8	7.1	8	<0.1	2.1	0.4	69
817031	Rock	2.04	1.1	57.5	2.1	21	<0.1	43.5	31.0	670	3.78	72.1	1.5	1.6	6.8	8	<0.1	3.2	0.5	29
817032	Rock	2.40	62.1	72.8	16.7	3	0.5	3.4	51.9	26	1.73	>10000	199.0	82.9	22.3	37	<0.1	29.0	3.1	3
817033	Rock	2.58	47.1	547.8	160.0	18	29.0	176.9	>2000	20	34.59	>10000	3.5	92706	1.0	<1	0.2	1735	1700	<2
816734	Rock	1.72	1.2	38.0	9.7	54	<0.1	36.2	16.7	103	3.02	199.3	2.8	34.3	18.1	12	<0.1	0.6	1.0	5
816735	Rock	1.66	3.8	45.6	12.2	13	1.0	5.8	81.5	44	3.72	>10000	2.1	2813	17.0	10	<0.1	26.4	44.1	3
816736	Rock	2.53	2.2	23.9	6.5	10	<0.1	21.3	6.2	73	1.40	82.9	0.9	15.6	10.5	114	<0.1	2.8	0.4	45
816737	Rock	1.95	1.7	23.3	10.9	10	0.2	19.7	10.5	65	1.60	869.4	1.0	250.4	10.0	107	<0.1	5.3	4.7	47
816738	Rock	1.97	2.5	33.6	11.8	5	0.1	23.6	10.0	39	1.30	25.6	1.2	<0.5	9.9	8	<0.1	5.0	0.5	9
816739	Rock	2.31	2.2	306.4	79.7	84	0.7	8.5	13.6	461	5.83	34.6	1.7	13.4	9.1	28	0.6	5.2	1.6	174
817034	Rock	3.08	42.4	361.7	19.9	5	3.2	6.6	152.4	16	8.12	>10000	12.8	2246	8.3	7	<0.1	172.0	33.8	<2

CERTIFICATE OF ANALYSIS

VAN08007549.3

	Method	Analyte	Unit	MDL	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	G6	G6	7AR			
					P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Ag	Au	Cu
					%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	gm/mt	gm/mt	%
					0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	5	0.01	0.001
816769	Rock				0.057	10	26	0.68	123	0.010	<20	1.39	0.030	0.24	<0.1	<0.01	2.6	0.3	0.51	4	3.7	N.A.	N.A.	N.A.
816726	Rock				0.125	21	16	0.20	31	0.051	<20	1.28	0.237	0.07	2.0	<0.01	0.9	0.1	0.18	4	0.6	N.A.	N.A.	N.A.
816727	Rock				0.024	43	6	0.48	90	0.009	<20	1.40	0.016	0.19	<0.1	<0.01	0.7	0.2	0.21	3	<0.5	N.A.	N.A.	N.A.
816728	Rock				0.006	2	8	0.01	8	<0.001	<20	0.08	0.004	0.03	<0.1	<0.01	0.1	<0.1	<0.05	<1	<0.5	N.A.	N.A.	N.A.
816731	Rock				0.032	49	15	0.51	109	0.011	<20	1.86	0.024	0.24	<0.1	0.01	0.9	0.3	0.09	4	<0.5	N.A.	N.A.	N.A.
816732	Rock				0.028	35	8	0.46	90	0.019	<20	1.47	0.018	0.29	<0.1	<0.01	0.8	0.3	0.45	3	<0.5	N.A.	N.A.	N.A.
816733	Rock				0.009	10	12	0.14	34	0.004	<20	0.58	0.034	0.06	<0.1	<0.01	0.6	0.1	<0.05	1	<0.5	N.A.	N.A.	N.A.
816740	Rock				0.012	13	15	0.20	21	0.002	<20	0.39	0.003	0.05	<0.1	<0.01	0.9	0.1	<0.05	1	0.8	N.A.	N.A.	N.A.
816741	Rock				0.010	2	5	0.02	7	0.038	<20	0.44	0.070	0.07	<0.1	<0.01	0.4	0.4	0.85	5	2.5	N.A.	N.A.	N.A.
817008	Rock				0.144	38	25	0.98	453	0.386	<20	2.11	0.199	1.15	1.7	<0.01	2.5	0.8	0.10	7	0.7	N.A.	N.A.	N.A.
817020	Rock				0.038	19	26	0.64	73	0.065	<20	1.36	0.058	0.65	<0.1	<0.01	3.3	0.9	<0.05	6	<0.5	N.A.	N.A.	N.A.
817021	Rock				0.196	20	5	0.21	39	0.070	<20	0.93	0.153	0.03	0.6	<0.01	0.7	<0.1	0.30	2	1.2	N.A.	N.A.	N.A.
817023	Rock				0.017	14	11	0.28	54	0.008	<20	0.85	0.014	0.18	<0.1	<0.01	0.5	0.3	<0.05	3	<0.5	N.A.	N.A.	N.A.
817024	Rock				0.026	23	18	0.33	103	0.026	<20	1.15	0.072	0.43	<0.1	<0.01	1.8	0.5	0.24	4	<0.5	N.A.	N.A.	N.A.
817025	Rock				0.015	13	14	0.25	40	0.017	<20	0.71	0.020	0.19	<0.1	0.03	0.6	0.3	<0.05	3	<0.5	N.A.	N.A.	N.A.
817026	Rock				0.014	19	8	0.04	21	0.002	<20	0.51	0.006	0.13	<0.1	0.24	0.7	0.2	<0.05	2	<0.5	N.A.	N.A.	N.A.
817027	Rock				0.045	13	24	0.56	94	0.065	<20	1.35	0.063	0.61	<0.1	<0.01	1.8	1.0	0.27	5	0.6	N.A.	N.A.	N.A.
817028	Rock				0.038	16	10	0.03	47	0.002	<20	0.88	0.004	0.13	0.1	0.20	1.4	0.2	<0.05	2	0.7	N.A.	N.A.	N.A.
817029	Rock				0.027	21	71	0.86	476	0.234	<20	3.39	0.017	2.04	0.3	0.16	6.0	4.7	0.15	11	<0.5	N.A.	N.A.	N.A.
817030	Rock				0.026	23	73	0.75	329	0.179	<20	3.06	0.025	1.70	0.2	0.01	4.7	2.7	0.09	9	<0.5	N.A.	N.A.	N.A.
817031	Rock				0.061	20	32	0.60	140	0.078	<20	2.09	0.016	0.97	<0.1	0.05	2.1	1.8	0.36	6	0.5	N.A.	N.A.	N.A.
817032	Rock				0.035	285	5	0.02	13	0.003	68	0.10	0.010	0.03	<0.1	0.63	0.5	0.2	<0.05	1	4.4	N.A.	N.A.	N.A.
817033	Rock				0.004	3	1	<0.01	6	0.001	<20	0.04	0.002	0.01	2.6	20.14	1.9	3.2	8.05	1	>100	N.A.	37.13	N.A.
816734	Rock				0.035	52	4	0.48	72	0.011	<20	1.47	0.036	0.18	0.1	0.04	0.7	0.1	0.54	3	0.6	N.A.	N.A.	N.A.
816735	Rock				0.043	49	2	0.22	65	0.001	<20	0.58	0.031	0.16	0.2	1.00	0.5	0.2	0.70	2	4.7	N.A.	N.A.	N.A.
816736	Rock				0.022	27	36	0.60	73	0.062	<20	3.47	0.206	0.22	0.2	0.02	3.4	0.3	0.35	10	<0.5	N.A.	N.A.	N.A.
816737	Rock				0.021	16	40	0.55	77	0.065	<20	2.93	0.258	0.34	0.2	0.11	3.5	0.4	0.48	8	0.7	N.A.	N.A.	N.A.
816738	Rock				0.041	13	6	0.20	40	0.005	<20	0.64	0.033	0.29	0.1	<0.01	0.6	0.4	0.71	2	0.6	N.A.	N.A.	N.A.
816739	Rock				0.229	43	18	1.67	15	0.063	<20	1.87	0.023	0.02	0.2	0.02	11.9	0.2	2.26	8	1.7	N.A.	N.A.	N.A.
817034	Rock				0.021	145	3	<0.01	7	0.002	21	0.08	0.003	0.02	0.4	4.68	0.9	1.3	4.01	1	24.4	N.A.	N.A.	N.A.

Client: **Logan Resources Ltd.**

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Project: None Given

Report Date: October 10, 2008

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CERTIFICATE OF ANALYSIS

VAN08007549.3

	Method	7AR	7AR	G6
Analyte		Pb	Co	Au
Unit		%	%	gm/mt
MDL		0.01	0.001	0.17
816769	Rock	N.A.	N.A.	N.A.
816726	Rock	N.A.	N.A.	N.A.
816727	Rock	N.A.	N.A.	N.A.
816728	Rock	N.A.	N.A.	N.A.
816731	Rock	N.A.	N.A.	N.A.
816732	Rock	N.A.	N.A.	N.A.
816733	Rock	N.A.	N.A.	N.A.
816740	Rock	N.A.	N.A.	N.A.
816741	Rock	N.A.	N.A.	N.A.
817008	Rock	N.A.	N.A.	N.A.
817020	Rock	N.A.	N.A.	N.A.
817021	Rock	N.A.	N.A.	N.A.
817023	Rock	N.A.	N.A.	N.A.
817024	Rock	N.A.	N.A.	N.A.
817025	Rock	N.A.	N.A.	N.A.
817026	Rock	N.A.	N.A.	N.A.
817027	Rock	N.A.	N.A.	N.A.
817028	Rock	N.A.	N.A.	N.A.
817029	Rock	N.A.	N.A.	N.A.
817030	Rock	N.A.	N.A.	N.A.
817031	Rock	N.A.	N.A.	N.A.
817032	Rock	N.A.	N.A.	N.A.
817033	Rock	N.A.	0.353	98.29
816734	Rock	N.A.	N.A.	N.A.
816735	Rock	N.A.	N.A.	N.A.
816736	Rock	N.A.	N.A.	N.A.
816737	Rock	N.A.	N.A.	N.A.
816738	Rock	N.A.	N.A.	N.A.
816739	Rock	N.A.	N.A.	N.A.
817034	Rock	N.A.	N.A.	N.A.

CERTIFICATE OF ANALYSIS

VAN08007549.3

	Method Analyte Unit MDL	WGHT Wgt kg 0.01	1DX Mo ppm 0.1	1DX Cu ppm 0.1	1DX Pb ppm 0.1	1DX Zn ppm 1	1DX Ag ppm 0.1	1DX Ni ppm 0.1	1DX Co ppm 0.1	1DX Mn ppm 1	1DX Fe % 0.01	1DX As ppm 0.5	1DX U ppm 0.1	1DX Au ppb 0.5	1DX Th ppm 0.1	1DX Sr ppm 1	1DX Cd ppm 0.1	1DX Sb ppm 0.1	1DX Bi ppm 0.1	1DX V ppm 2	1DX Ca % 0.01
817035	Rock	2.95	16.0	33.4	16.6	4	0.4	1.9	15.3	18	1.51	7142	2.0	77.8	6.6	9	<0.1	20.3	6.9	3	<0.01
817036	Rock	2.18	3.3	53.9	30.8	17	0.3	5.5	4.9	56	1.61	813.3	2.9	19.1	11.3	5	0.3	2.2	0.7	7	0.02
817037	Rock	2.37	1.9	13.4	16.3	8	0.1	1.4	2.7	42	0.83	763.1	1.0	5.1	9.2	4	<0.1	2.2	0.7	<2	0.02
817038	Rock	1.93	1.2	27.1	6.4	9	<0.1	11.5	13.6	123	0.98	178.0	1.2	3.4	9.2	31	<0.1	1.1	0.6	11	0.30
817039	Rock	1.72	3.0	65.8	46.9	52	0.2	12.4	19.9	196	4.97	23.3	7.3	1.8	32.4	126	0.3	2.4	2.2	62	0.91
817001	Rock	2.22	28.7	6683	26.3	154	53.3	20.1	7.6	114	5.40	9315	7.0	438.2	3.2	8	0.8	32.4	21.6	28	0.26
817002	Rock	2.27	7.4	1291	54.0	162	19.3	10.8	1.9	163	3.79	1139	3.2	47.6	3.6	15	0.4	7.6	3.7	24	0.59
817003	Rock	1.40	14.7	2213	65.5	73	11.2	123.4	301.6	100	7.70	>10000	4.6	886.8	5.2	7	0.4	174.2	28.3	10	0.11
817004	Rock	2.65	32.3	417.3	719.6	10	32.2	34.8	150.2	15	31.54	>10000	9.1	55676	2.8	2	0.2	1496	>2000	3	<0.01
817005	Rock	2.47	10.5	>10000	273.4	690	>100	28.9	116.0	86	19.44	>10000	3.9	1930	2.3	2	7.6	353.2	81.0	<2	<0.01
817006	Rock	2.76	5.7	>10000	2552	3017	>100	38.8	97.0	157	29.37	>10000	1.6	3375	0.6	4	32.4	268.4	378.1	<2	<0.01
817007	Rock	1.92	0.6	6496	252.4	317	25.9	3.3	4.7	18	2.34	4644	0.2	294.7	<0.1	2	3.3	23.0	52.0	<2	0.09
816809	Rock	2.08	4.3	347.4	17.5	31	1.3	28.1	22.1	193	3.10	526.7	2.0	41.4	10.1	94	0.2	1.9	6.8	74	1.11
816810	Rock	2.07	0.7	55.8	3.9	26	0.1	29.1	14.0	191	3.61	108.5	1.1	4.5	6.5	55	0.2	0.8	0.8	60	0.41
816811	Rock	2.75	1.0	69.9	5.5	41	0.2	25.0	12.6	406	3.89	97.3	1.3	12.8	5.9	13	<0.1	0.6	2.3	24	0.11
816812	Rock	2.40	0.8	139.2	5.6	27	0.3	24.8	8.0	166	2.37	100.9	1.8	2.3	7.2	11	0.1	1.9	0.9	18	0.28
816813	Rock	1.58	0.8	64.4	5.1	24	<0.1	23.1	9.2	209	2.29	59.9	1.8	8.7	14.0	10	<0.1	1.4	1.4	21	0.09
816814	Rock	1.98	1.1	77.9	5.9	5	<0.1	18.0	9.6	50	3.05	16.4	1.4	3.8	11.7	6	<0.1	2.1	1.0	20	0.03
816815	Rock	2.50	0.6	51.9	5.1	25	<0.1	27.8	8.6	71	1.79	53.2	1.6	3.7	10.7	14	0.3	1.8	0.6	21	0.05
816816	Rock	2.04	0.4	37.4	5.0	8	<0.1	5.6	3.3	57	1.25	24.2	0.8	1.4	10.6	21	<0.1	1.3	0.5	11	0.14
816817	Rock	2.21	0.6	47.1	10.3	11	<0.1	13.5	5.3	59	2.76	87.3	2.1	16.7	14.9	3	<0.1	2.7	0.8	21	0.05
816818	Rock	2.08	20.5	920.3	233.6	18	58.8	4.7	395.3	21	22.51	>10000	30.6	76796	8.9	3	0.2	1579	841.8	<2	<0.01
816819	Rock	2.09	1.0	54.7	7.5	38	0.1	18.2	8.2	205	2.42	144.7	2.1	37.1	16.6	35	0.3	2.0	0.9	12	0.15
816820	Rock	2.52	40.3	648.3	30.2	11	6.8	105.9	>2000	16	22.10	>10000	10.0	8175	2.3	2	0.1	500.8	38.4	<2	<0.01
816821	Rock	4.05	34.2	300.7	80.0	13	17.4	73.5	>2000	10	32.93	>10000	1.0	>100000	0.5	1	<0.1	1358	1508	<2	<0.01
816822	Rock	2.34	16.0	109.6	64.5	4	4.6	4.5	103.5	15	4.20	>10000	2.9	21364	8.7	12	<0.1	91.3	201.8	<2	<0.01
816823	Rock	2.25	7.4	48.7	38.5	4	1.1	2.9	55.4	21	2.29	5898	3.2	692.5	10.1	15	<0.1	19.7	11.9	4	<0.01
816805	Rock	3.38	0.6	63.0	5.6	38	<0.1	55.6	19.1	265	5.58	364.4	1.0	111.5	2.4	86	<0.1	1.4	2.5	95	0.66
816806	Rock	3.72	0.8	33.7	19.4	30	<0.1	19.2	9.3	139	2.51	168.7	1.9	27.8	8.4	54	0.2	1.1	0.9	21	0.25
816807	Rock	1.82	0.5	35.1	6.2	32	<0.1	26.0	8.0	179	2.60	111.3	1.0	25.6	8.3	173	0.1	0.6	0.9	63	1.67

CERTIFICATE OF ANALYSIS

VAN08007549.3

Method Analyte Unit MDL		1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	G6	G6	7AR	
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Ag	Au	Cu
		%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	gm/mt	gm/mt	%
		0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	5	0.01	0.001
817035	Rock	0.021	158	5	0.02	10	0.001	29	0.11	0.006	0.03	0.2	0.63	0.6	0.3	0.14	<1	3.1	N.A.	N.A.	N.A.
817036	Rock	0.026	32	8	0.03	47	0.001	<20	0.56	0.003	0.17	0.3	0.29	1.1	0.2	<0.05	2	0.5	N.A.	N.A.	N.A.
817037	Rock	0.016	17	5	0.02	17	<0.001	<20	0.21	0.001	0.08	0.1	0.41	0.3	0.2	<0.05	<1	0.7	N.A.	N.A.	N.A.
817038	Rock	0.018	10	16	0.38	68	0.021	<20	1.03	0.059	0.29	<0.1	0.04	1.6	0.4	0.05	3	<0.5	N.A.	N.A.	N.A.
817039	Rock	0.102	29	27	0.91	34	0.065	<20	2.20	0.231	0.14	0.3	0.04	1.9	0.2	2.51	9	2.3	N.A.	N.A.	N.A.
817001	Rock	0.193	43	9	<0.01	21	0.002	<20	0.14	<0.001	0.03	2.5	0.15	1.1	0.3	1.22	<1	8.7	N.A.	N.A.	N.A.
817002	Rock	0.337	21	10	0.02	22	0.003	<20	0.22	0.003	0.06	1.0	0.19	1.1	0.4	0.23	<1	3.0	N.A.	N.A.	N.A.
817003	Rock	0.087	59	8	<0.01	11	0.001	<20	0.11	0.001	0.03	0.7	0.08	0.9	0.2	2.70	<1	25.6	N.A.	N.A.	N.A.
817004	Rock	0.007	2	2	<0.01	18	0.002	<20	0.05	<0.001	<0.01	0.9	0.76	0.3	2.1	9.01	<1	41.9	N.A.	35.30	N.A.
817005	Rock	0.006	6	3	<0.01	8	<0.001	<20	0.02	<0.001	<0.01	8.1	1.19	0.1	0.8	6.05	<1	25.9	136	N.A.	2.418
817006	Rock	<0.001	4	2	<0.01	6	<0.001	<20	<0.01	<0.001	<0.01	2.2	3.10	<0.1	1.8	>10	<1	29.5	360	3.37	6.632
817007	Rock	<0.001	<1	1	<0.01	5	<0.001	<20	<0.01	0.331	<0.01	0.2	0.23	<0.1	0.1	1.54	<1	3.3	N.A.	N.A.	N.A.
816809	Rock	0.045	12	61	1.18	294	0.261	<20	3.21	0.338	1.01	<0.1	0.05	6.1	0.6	0.56	10	0.8	N.A.	N.A.	N.A.
816810	Rock	0.026	11	63	1.05	267	0.179	20	2.85	0.062	1.39	0.2	0.03	4.6	1.5	0.15	9	<0.5	N.A.	N.A.	N.A.
816811	Rock	0.030	14	23	0.49	143	0.090	<20	2.11	0.019	1.07	0.1	0.03	1.9	0.9	0.30	6	<0.5	N.A.	N.A.	N.A.
816812	Rock	0.106	14	22	0.46	111	0.068	22	1.34	0.017	0.73	<0.1	0.03	1.2	1.1	0.19	4	<0.5	N.A.	N.A.	N.A.
816813	Rock	0.026	26	21	0.38	100	0.063	<20	1.35	0.023	0.72	<0.1	0.03	1.9	0.8	0.19	4	<0.5	N.A.	N.A.	N.A.
816814	Rock	0.036	38	22	0.30	118	0.040	<20	1.15	0.016	0.73	<0.1	0.03	2.3	1.0	0.92	4	<0.5	N.A.	N.A.	N.A.
816815	Rock	0.017	26	20	0.47	83	0.049	20	1.13	0.021	0.63	<0.1	0.04	2.5	1.1	0.28	4	<0.5	N.A.	N.A.	N.A.
816816	Rock	0.016	9	14	0.31	29	0.012	<20	0.80	0.039	0.10	0.1	0.03	1.2	0.2	0.18	3	<0.5	N.A.	N.A.	N.A.
816817	Rock	0.045	40	18	0.04	32	0.002	<20	0.97	0.006	0.17	<0.1	0.51	3.3	0.4	0.12	3	<0.5	N.A.	N.A.	N.A.
816818	Rock	0.014	<1	1	<0.01	10	0.002	<20	0.06	0.002	0.03	1.4	9.22	1.2	4.5	3.35	1	>100	N.A.	55.01	N.A.
816819	Rock	0.028	29	14	0.29	115	0.004	<20	1.50	0.009	0.29	<0.1	0.32	1.5	0.6	<0.05	3	<0.5	N.A.	N.A.	N.A.
816820	Rock	0.009	25	3	<0.01	8	<0.001	<20	0.03	0.003	0.01	1.1	5.43	0.5	1.4	9.84	2	80.1	N.A.	N.A.	N.A.
816821	Rock	0.003	6	1	<0.01	6	<0.001	<20	0.02	0.002	<0.01	0.2	5.05	0.7	2.1	>10	5	87.4	N.A.	19.56	N.A.
816822	Rock	0.028	126	5	<0.01	41	0.002	25	0.14	0.004	0.09	0.5	1.92	1.6	0.9	0.61	2	19.8	N.A.	15.70	N.A.
816823	Rock	0.035	396	9	0.01	39	0.001	<20	0.18	0.004	0.11	0.2	1.75	0.5	0.7	0.21	2	4.9	N.A.	N.A.	N.A.
816805	Rock	0.032	7	67	1.21	482	0.209	<20	4.28	0.110	1.57	0.3	0.05	5.9	1.8	0.90	12	1.3	N.A.	N.A.	N.A.
816806	Rock	0.013	13	27	0.88	144	0.104	<20	1.89	0.089	0.89	<0.1	0.05	2.6	0.8	0.33	6	0.9	N.A.	N.A.	N.A.
816807	Rock	0.031	9	57	1.16	209	0.182	<20	4.60	0.404	1.00	<0.1	0.04	7.0	0.6	0.47	13	0.8	N.A.	N.A.	N.A.

Client: Logan Resources Ltd.

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Project: None Given

Report Date: October 10, 2008

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CERTIFICATE OF ANALYSIS

VAN08007549.3

	Method	7AR	7AR	G6
Analyte		Pb	Co	Au
Unit		%	%	gm/mt
MDL		0.01	0.001	0.17
817035	Rock	N.A.	N.A.	N.A.
817036	Rock	N.A.	N.A.	N.A.
817037	Rock	N.A.	N.A.	N.A.
817038	Rock	N.A.	N.A.	N.A.
817039	Rock	N.A.	N.A.	N.A.
817001	Rock	N.A.	N.A.	N.A.
817002	Rock	N.A.	N.A.	N.A.
817003	Rock	N.A.	N.A.	N.A.
817004	Rock	N.A.	N.A.	36.29
817005	Rock	N.A.	N.A.	N.A.
817006	Rock	N.A.	N.A.	N.A.
817007	Rock	N.A.	N.A.	N.A.
816809	Rock	N.A.	N.A.	N.A.
816810	Rock	N.A.	N.A.	N.A.
816811	Rock	N.A.	N.A.	N.A.
816812	Rock	N.A.	N.A.	N.A.
816813	Rock	N.A.	N.A.	N.A.
816814	Rock	N.A.	N.A.	N.A.
816815	Rock	N.A.	N.A.	N.A.
816816	Rock	N.A.	N.A.	N.A.
816817	Rock	N.A.	N.A.	N.A.
816818	Rock	N.A.	N.A.	51.91
816819	Rock	N.A.	N.A.	N.A.
816820	Rock	N.A.	N.A.	N.A.
816821	Rock	N.A.	N.A.	79.45
816822	Rock	N.A.	N.A.	14.57
816823	Rock	N.A.	N.A.	N.A.
816805	Rock	N.A.	N.A.	N.A.
816806	Rock	N.A.	N.A.	N.A.
816807	Rock	N.A.	N.A.	N.A.

CERTIFICATE OF ANALYSIS

VAN08007549.3

	Method	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
816808	Rock	2.07	0.6	23.2	5.9	24	<0.1	29.7	11.3	189	2.12	105.7	1.1	9.3	8.5	81	<0.1	0.7	0.6	78	0.56
816824	Rock	1.60	27.5	365.1	136.9	5	19.2	5.1	236.8	16	9.77	>10000	3.6	34171	3.9	10	<0.1	311.2	458.9	2	0.01
816825	Rock	2.03	1.1	134.5	23.4	15	0.3	13.0	10.7	51	2.17	2184	5.8	90.4	10.3	9	0.3	3.8	4.3	6	0.05
816826	Rock	1.93	2.1	25.1	72.1	3	0.6	1.5	4.1	17	0.78	3332	1.3	708.3	7.7	3	<0.1	9.5	28.6	<2	0.03
816827	Rock	2.31	2.2	42.8	5.2	15	<0.1	21.6	13.2	159	3.76	981.5	2.4	38.7	17.1	64	<0.1	4.1	2.2	30	0.20
816828	Rock	1.71	6.8	16.3	18.6	10	0.6	2.1	10.9	23	2.58	>10000	8.1	251.4	8.0	44	<0.1	18.8	3.4	<2	0.02
816801	Rock	2.97	1.0	29.1	11.5	47	<0.1	35.5	20.2	702	3.85	43.9	1.6	2.5	5.0	10	<0.1	1.2	0.4	42	0.12
816802	Rock	3.25	0.5	12.8	3.2	51	<0.1	54.4	22.6	535	5.12	93.8	1.2	7.3	5.3	61	<0.1	1.5	0.3	71	0.16
816803	Rock	2.15	0.4	29.1	6.5	26	<0.1	38.1	21.8	470	4.13	37.8	2.1	2.1	4.5	16	<0.1	1.5	0.3	49	0.21
816804	Rock	3.53	0.4	15.8	81.2	124	0.2	39.0	23.0	553	4.04	34.3	2.3	2.0	4.8	25	0.6	1.8	0.4	58	0.13
817009	Rock	3.17	1.2	54.6	12.1	13	0.1	12.4	8.2	81	2.12	16.8	1.1	2.0	7.4	39	0.1	1.4	0.3	17	0.41
817010	Rock	3.02	3.9	37.8	8.0	45	<0.1	22.9	10.3	173	2.96	29.0	2.7	3.2	6.6	116	<0.1	1.8	0.9	79	2.21
817011	Rock	2.36	9.6	122.9	9.5	9	0.1	25.0	5.9	41	1.47	24.9	5.8	4.5	5.1	13	<0.1	4.2	0.5	108	0.45
817012	Rock	2.10	3.5	113.8	10.2	26	0.2	32.1	8.7	170	2.25	23.6	2.0	21.5	3.8	12	0.2	0.9	0.3	29	0.24
817013	Rock	0.68	1.0	56.9	9.2	8	0.3	3.6	1.5	79	2.57	18.1	0.3	2.9	2.8	1	<0.1	2.1	0.5	<2	<0.01
817014	Rock	1.92	136.4	141.5	845.2	24	28.3	1.6	2.0	41	2.32	1897	0.3	54.5	0.4	3	0.1	38.2	28.2	<2	<0.01
817015	Rock	1.49	5.4	164.9	20.8	31	0.2	16.9	78.4	148	4.62	2895	8.2	142.3	30.8	34	0.2	3.1	0.5	77	0.55
817016	Rock	1.47	1.0	8.8	14.3	25	0.2	5.0	1.7	121	0.60	22.9	0.6	4.7	5.1	5	0.1	1.0	0.2	3	0.19
817017	Rock	1.36	2.6	25.0	3.9	11	<0.1	30.1	13.1	106	2.30	69.7	1.6	1.9	8.8	257	<0.1	1.1	0.2	62	2.51
817018	Rock	1.30	2.0	44.9	8.1	11	<0.1	44.6	19.5	66	2.62	46.6	2.4	9.2	11.0	6	<0.1	1.4	0.4	8	0.04
817019	Rock	1.27	1.2	513.1	82.9	25	2.7	27.9	30.5	49	6.26	>10000	1.1	2291	4.0	13	0.4	43.8	103.9	<2	0.02
816742	Rock	2.81	1.2	101.4	32.9	51	0.1	16.9	6.5	320	2.33	36.0	1.1	<0.5	3.0	32	0.2	1.3	0.3	20	0.16
816743	Rock	2.64	8.8	40.2	15.7	24	0.4	13.6	4.0	238	2.65	192.3	4.3	4.2	3.5	44	<0.1	2.2	0.5	28	0.56
816744	Rock	1.97	0.2	20.7	12.4	28	<0.1	29.0	11.1	182	3.12	7.9	2.0	<0.5	11.5	10	<0.1	1.4	0.1	29	0.13
816745	Rock	3.42	0.5	28.9	17.2	19	0.1	4.0	2.5	99	1.86	18.3	0.5	26.7	7.3	26	<0.1	0.9	1.1	10	0.19
816746	Rock	1.83	0.2	20.2	14.9	13	<0.1	13.5	6.2	124	1.93	8.6	1.1	14.1	9.5	66	0.1	1.0	0.4	19	0.65
816747	Rock	2.86	1.3	24.8	48.4	47	0.2	28.8	8.5	185	1.13	47.5	4.6	56.9	22.8	91	0.4	3.6	2.5	18	0.96
816748	Rock	2.87	2.4	633.1	2261	285	25.1	5.7	0.4	78	1.03	491.3	2.4	8.8	7.6	8	6.8	18.0	89.5	<2	0.23
816749	Rock	1.59	0.7	642.0	66.7	417	0.5	8.3	6.5	531	1.00	203.2	0.5	1.4	0.4	63	4.1	3.2	3.1	<2	0.82
816724	Rock	2.52	22.3	82.8	18.9	122	0.5	60.2	12.6	343	3.06	30.3	5.0	<0.5	3.6	61	1.4	3.6	0.5	153	1.01

CERTIFICATE OF ANALYSIS

VAN08007549.3

Method Analyte Unit MDL		1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	G6	G6	7AR
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Ag	Au	Cu
		%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	gm/mt	gm/mt	%
		0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	5	0.01	0.001
816808	Rock	0.029	11	70	1.13	167	0.247	23	2.28	0.153	0.98	0.1	0.04	8.1	0.5	0.17	8	<0.5	N.A.	N.A.	N.A.
816824	Rock	0.031	287	3	<0.01	14	0.001	<20	0.06	0.003	0.02	1.6	14.00	1.1	1.6	2.10	2	43.3	N.A.	28.73	N.A.
816825	Rock	0.030	41	9	0.04	24	0.001	<20	0.79	0.004	0.11	0.1	0.40	1.4	0.2	0.31	3	1.2	N.A.	N.A.	N.A.
816826	Rock	0.014	22	8	<0.01	21	<0.001	<20	0.18	0.003	0.09	<0.1	0.50	0.8	0.2	<0.05	3	2.1	N.A.	N.A.	N.A.
816827	Rock	0.067	51	32	0.44	158	0.076	<20	1.86	0.010	0.88	0.1	0.38	2.4	1.9	0.07	6	<0.5	N.A.	N.A.	N.A.
816828	Rock	0.029	351	5	0.01	12	0.001	36	0.08	0.005	0.02	0.1	0.40	0.5	0.5	<0.05	1	3.1	N.A.	N.A.	N.A.
816801	Rock	0.038	15	34	0.73	231	0.042	28	2.33	0.026	0.52	0.2	<0.01	3.0	0.5	0.20	7	<0.5	N.A.	N.A.	N.A.
816802	Rock	0.026	17	65	0.82	177	0.043	<20	3.41	0.036	0.54	0.2	<0.01	6.8	0.5	0.08	12	<0.5	N.A.	N.A.	N.A.
816803	Rock	0.044	14	48	0.73	358	0.149	<20	2.62	0.029	1.28	0.2	<0.01	4.9	1.4	0.10	9	0.8	N.A.	N.A.	N.A.
816804	Rock	0.032	15	57	0.63	256	0.105	<20	2.69	0.026	0.77	0.2	<0.01	8.3	0.9	0.06	10	1.1	N.A.	N.A.	N.A.
817009	Rock	0.020	2	19	0.68	106	0.070	<20	1.72	0.046	0.37	0.1	<0.01	2.5	0.4	0.90	6	2.2	N.A.	N.A.	N.A.
817010	Rock	0.040	12	52	1.48	89	0.245	<20	4.39	0.270	1.04	0.3	<0.01	5.6	0.9	1.24	14	3.2	N.A.	N.A.	N.A.
817011	Rock	0.240	6	23	0.22	69	0.008	<20	0.61	0.007	0.23	0.3	0.02	2.6	0.5	0.58	2	4.4	N.A.	N.A.	N.A.
817012	Rock	0.086	5	14	0.36	49	0.003	<20	0.83	0.020	0.19	<0.1	<0.01	2.1	0.2	1.08	3	3.5	N.A.	N.A.	N.A.
817013	Rock	0.012	1	7	<0.01	3	0.001	<20	0.04	0.003	<0.01	<0.1	0.03	0.2	<0.1	<0.05	<1	6.3	N.A.	N.A.	N.A.
817014	Rock	0.012	2	8	0.01	7	0.002	<20	0.06	0.004	0.02	0.4	0.84	0.2	1.7	0.08	<1	5.3	N.A.	N.A.	N.A.
817015	Rock	0.199	26	17	0.66	124	0.123	<20	0.90	0.048	0.41	0.6	0.02	4.0	0.4	2.31	4	10.6	N.A.	N.A.	N.A.
817016	Rock	0.006	13	10	0.02	16	0.002	<20	0.12	0.001	0.03	<0.1	0.02	0.5	0.1	<0.05	<1	0.9	N.A.	N.A.	N.A.
817017	Rock	0.019	14	54	0.65	119	0.077	<20	5.43	0.632	0.58	<0.1	<0.01	10.6	0.5	0.77	15	0.8	N.A.	N.A.	N.A.
817018	Rock	0.017	25	10	0.41	67	0.006	<20	1.18	0.018	0.29	<0.1	<0.01	2.0	0.5	1.07	4	1.9	N.A.	N.A.	N.A.
817019	Rock	0.006	6	8	0.01	20	0.001	<20	0.12	0.003	0.06	0.2	0.15	0.3	0.7	3.26	<1	47.0	N.A.	N.A.	N.A.
816742	Rock	0.017	2	20	0.66	46	0.028	<20	1.03	0.036	0.22	0.1	<0.01	1.8	0.3	0.90	4	0.8	N.A.	N.A.	N.A.
816743	Rock	0.110	12	12	0.70	138	0.003	<20	2.03	0.062	0.22	<0.1	0.07	0.9	0.1	0.15	5	2.6	N.A.	N.A.	N.A.
816744	Rock	0.052	31	36	0.86	69	0.035	<20	2.28	0.024	0.50	0.1	<0.01	4.1	0.6	0.17	8	<0.5	N.A.	N.A.	N.A.
816745	Rock	0.015	10	19	0.23	11	0.017	<20	0.81	0.055	0.03	<0.1	<0.01	1.6	0.1	0.30	3	1.2	N.A.	N.A.	N.A.
816746	Rock	0.014	12	23	0.33	25	0.041	<20	1.68	0.210	0.11	<0.1	<0.01	3.1	0.2	0.68	5	0.9	N.A.	N.A.	N.A.
816747	Rock	0.124	44	17	0.49	67	0.052	<20	0.98	0.055	0.07	0.2	<0.01	1.4	<0.1	0.20	4	<0.5	N.A.	N.A.	N.A.
816748	Rock	0.039	1	9	0.03	4	0.002	51	0.06	0.004	<0.01	0.2	0.12	0.2	0.2	0.41	<1	1.3	N.A.	N.A.	N.A.
816749	Rock	0.072	3	12	0.15	9	<0.001	<20	0.06	0.007	0.01	0.2	0.01	1.6	<0.1	0.05	<1	<0.5	N.A.	N.A.	N.A.
816724	Rock	0.177	8	37	0.90	58	0.045	<20	1.74	0.150	0.49	<0.1	0.02	3.2	0.5	2.03	6	3.8	N.A.	N.A.	N.A.

Client: **Logan Resources Ltd.**

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Project: None Given

Report Date: October 10, 2008

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CERTIFICATE OF ANALYSIS

VAN08007549.3

	Method	7AR	7AR	G6
Analyte		Pb	Co	Au
Unit		%	%	gm/mt
MDL		0.01	0.001	0.17
816808	Rock	N.A.	N.A.	N.A.
816824	Rock	N.A.	N.A.	28.17
816825	Rock	N.A.	N.A.	N.A.
816826	Rock	N.A.	N.A.	N.A.
816827	Rock	N.A.	N.A.	N.A.
816828	Rock	N.A.	N.A.	N.A.
816801	Rock	N.A.	N.A.	N.A.
816802	Rock	N.A.	N.A.	N.A.
816803	Rock	N.A.	N.A.	N.A.
816804	Rock	N.A.	N.A.	N.A.
817009	Rock	N.A.	N.A.	N.A.
817010	Rock	N.A.	N.A.	N.A.
817011	Rock	N.A.	N.A.	N.A.
817012	Rock	N.A.	N.A.	N.A.
817013	Rock	N.A.	N.A.	N.A.
817014	Rock	N.A.	N.A.	N.A.
817015	Rock	N.A.	N.A.	N.A.
817016	Rock	N.A.	N.A.	N.A.
817017	Rock	N.A.	N.A.	N.A.
817018	Rock	N.A.	N.A.	N.A.
817019	Rock	N.A.	N.A.	N.A.
816742	Rock	N.A.	N.A.	N.A.
816743	Rock	N.A.	N.A.	N.A.
816744	Rock	N.A.	N.A.	N.A.
816745	Rock	N.A.	N.A.	N.A.
816746	Rock	N.A.	N.A.	N.A.
816747	Rock	N.A.	N.A.	N.A.
816748	Rock	N.A.	N.A.	N.A.
816749	Rock	N.A.	N.A.	N.A.
816724	Rock	N.A.	N.A.	N.A.

Client: **Logan Resources Ltd.**

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Project: None Given

Report Date: October 10, 2008

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CERTIFICATE OF ANALYSIS

VAN08007549.3

	Method	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
816725	Rock	1.68	11.0	101.6	20.0	132	0.5	46.3	13.0	464	2.82	18.4	5.9	<0.5	4.2	81	1.8	3.1	0.3	205	1.55
816829	Rock	3.29	24.8	585.7	39.7	29	0.7	27.5	27.9	221	16.57	225.8	0.2	228.1	1.2	12	0.2	2.2	4.1	5	0.35
816830	Rock	2.11	24.1	406.1	118.4	14	5.9	77.7	317.4	33	12.63	>10000	3.1	5420	0.8	1	<0.1	426.9	311.3	<2	0.03
816831	Rock	1.48	19.9	280.4	123.5	8	11.2	113.7	459.9	24	17.12	>10000	2.9	11399	0.3	<1	<0.1	569.4	750.8	<2	0.01
816832	Rock	1.92	4.1	9728	17.6	10	2.7	14.4	13.2	58	8.35	3642	0.2	185.3	1.8	3	<0.1	10.6	11.9	3	0.06
816833	Rock	1.69	3.3	32.7	17.8	16	0.4	5.3	11.4	3278	1.16	4263	1.0	219.4	6.2	6	<0.1	10.2	21.8	3	0.07
816834	Rock	2.54	1.2	172.8	14.7	21	0.2	20.0	6.9	230	3.62	212.7	0.5	16.3	2.3	30	0.1	4.4	1.0	16	0.25
816835	Rock	1.52	9.2	195.3	>10000	22	25.4	48.3	118.7	34	24.94	>10000	1.1	1309	1.3	3	0.6	>2000	936.1	<2	0.04
816836	Rock	1.93	10.4	54.5	18.8	17	<0.1	30.9	6.3	121	2.63	194.9	4.0	6.8	7.7	94	<0.1	4.1	1.4	113	1.85
816837	Rock	1.01	0.8	457.7	568.1	19	1.5	27.5	46.3	651	12.20	8160	1.6	837.5	1.2	47	<0.1	199.1	250.2	8	1.27
816838	Rock	0.95	3.3	104.9	27.0	14	0.2	38.6	18.9	269	3.35	63.1	1.3	15.8	5.1	175	<0.1	3.0	1.6	98	1.57

Client: **Logan Resources Ltd.**

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Project: None Given

Report Date: October 10, 2008

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CERTIFICATE OF ANALYSIS

VAN08007549.3

	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	G6	G6	7AR
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Ag	Au	Cu
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	gm/mt	gm/mt	%
	MDL	0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	5	0.01	0.001
816725	Rock	0.306	11	40	1.11	65	0.065	<20	2.09	0.184	0.66	<0.1	<0.01	4.0	0.6	1.77	8	4.8	N.A.	N.A.	N.A.
816829	Rock	0.043	20	4	0.26	4	0.011	<20	0.71	0.007	<0.01	0.8	<0.01	0.8	<0.1	>10	4	35.3	N.A.	N.A.	N.A.
816830	Rock	0.023	<1	5	<0.01	8	<0.001	<20	0.05	<0.001	0.01	83.2	0.20	0.8	0.5	3.25	<1	61.3	N.A.	2.67	N.A.
816831	Rock	0.005	<1	6	0.01	3	<0.001	<20	0.04	<0.001	<0.01	94.3	0.15	0.9	0.3	5.21	<1	77.9	N.A.	9.89	N.A.
816832	Rock	0.016	17	10	0.05	16	0.018	<20	0.08	0.004	0.01	2.2	0.02	0.3	<0.1	1.79	1	20.6	N.A.	N.A.	N.A.
816833	Rock	0.023	1	18	0.12	18	0.002	<20	0.26	0.014	0.03	2.3	0.01	0.6	<0.1	0.18	1	2.3	N.A.	N.A.	N.A.
816834	Rock	0.013	4	21	0.49	157	0.076	<20	0.98	0.068	0.24	0.3	<0.01	1.4	0.3	1.66	3	1.5	N.A.	N.A.	N.A.
816835	Rock	0.023	<1	4	<0.01	19	<0.001	<20	0.02	<0.001	<0.01	2.7	0.45	<0.1	0.6	9.51	<1	94.2	N.A.	N.A.	N.A.
816836	Rock	0.035	14	49	1.22	88	0.215	<20	3.91	0.237	0.82	0.5	<0.01	4.3	0.8	1.15	12	1.2	N.A.	N.A.	N.A.
816837	Rock	0.117	4	10	0.03	26	0.017	<20	1.98	0.097	0.07	0.2	0.04	1.2	<0.1	0.55	6	14.6	N.A.	N.A.	N.A.
816838	Rock	0.119	11	32	0.69	125	0.087	<20	3.10	0.174	0.53	0.3	<0.01	3.7	0.6	1.38	11	4.3	N.A.	N.A.	N.A.

Client: **Logan Resources Ltd.**

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Project: None Given

Report Date: October 10, 2008

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CERTIFICATE OF ANALYSIS

VAN08007549.3

	Method	7AR	7AR	G6
	Analyte	Pb	Co	Au
	Unit	%	%	gm/mt
	MDL	0.01	0.001	0.17
816725	Rock	N.A.	N.A.	N.A.
816829	Rock	N.A.	N.A.	N.A.
816830	Rock	N.A.	N.A.	N.A.
816831	Rock	N.A.	N.A.	10.04
816832	Rock	N.A.	N.A.	N.A.
816833	Rock	N.A.	N.A.	N.A.
816834	Rock	N.A.	N.A.	N.A.
816835	Rock	1.06	N.A.	N.A.
816836	Rock	N.A.	N.A.	N.A.
816837	Rock	N.A.	N.A.	N.A.
816838	Rock	N.A.	N.A.	N.A.

QUALITY CONTROL REPORT

VAN08007549.3

	Method Analyte Unit MDL	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
Pulp Duplicates																					
816756	Rock	1.87	0.6	491.3	>10000	626	40.2	2.8	2.7	62	32.80	8399	0.4	12.8	5.6	47	0.2	326.8	75.3	8	<0.01
REP 816756	QC																				
816775	Rock	1.84	0.9	43.5	26.4	122	0.1	23.1	9.2	191	2.52	50.6	1.7	1.0	7.8	100	0.8	4.4	0.6	65	1.33
REP 816775	QC		1.0	44.9	26.5	127	0.1	24.4	9.6	195	2.50	50.4	1.7	1.4	7.9	100	0.8	4.3	0.6	65	1.34
817030	Rock	2.61	0.4	21.3	1.7	27	<0.1	37.9	17.1	546	5.43	26.2	0.9	1.8	7.1	8	<0.1	2.1	0.4	69	0.06
REP 817030	QC		0.4	21.2	1.7	26	<0.1	36.6	16.6	547	5.29	25.9	0.8	0.7	6.6	8	<0.1	1.9	0.4	66	0.05
817033	Rock	2.58	47.1	547.8	160.0	18	29.0	176.9	>2000	20	34.59	>10000	3.5	92706	1.0	<1	0.2	1735	1700	<2	<0.01
REP 817033	QC																				
816821	Rock	4.05	34.2	300.7	80.0	13	17.4	73.5	>2000	10	32.93	>10000	1.0	>100000	0.5	1	<0.1	1358	1508	<2	<0.01
REP 816821	QC																				
816807	Rock	1.82	0.5	35.1	6.2	32	<0.1	26.0	8.0	179	2.60	111.3	1.0	25.6	8.3	173	0.1	0.6	0.9	63	1.67
REP 816807	QC		0.4	32.4	5.3	28	<0.1	24.7	7.9	164	2.40	99.0	0.8	24.3	7.3	154	0.1	0.6	0.8	61	1.54
816803	Rock	2.15	0.4	29.1	6.5	26	<0.1	38.1	21.8	470	4.13	37.8	2.1	2.1	4.5	16	<0.1	1.5	0.3	49	0.21
REP 816803	QC		0.5	26.9	6.0	24	<0.1	35.4	19.9	451	4.01	32.2	1.5	2.8	4.2	15	<0.1	1.4	0.3	46	0.19
Reference Materials																					
STD DS7	Standard		19.4	105.1	77.1	383	0.8	55.4	9.5	619	2.30	64.4	5.1	72.3	4.1	75	5.6	4.9	5.1	79	0.89
STD DS7	Standard		19.7	107.3	76.1	379	0.8	52.3	9.6	606	2.24	48.4	4.9	58.9	4.0	67	5.4	5.0	4.8	82	0.86
STD DS7	Standard		22.8	135.3	72.4	435	0.9	59.4	9.8	642	2.35	53.3	5.1	59.2	4.2	69	6.3	4.3	4.2	91	0.93
STD DS7	Standard		23.1	110.8	69.9	391	0.8	53.3	9.4	613	2.26	47.1	4.5	52.2	3.8	62	6.1	4.1	4.0	84	0.89
STD DS7	Standard		21.5	113.2	73.0	412	1.1	60.9	9.8	622	2.39	59.4	4.6	106.4	4.2	73	6.0	4.7	4.8	89	0.95
STD DS7	Standard		21.7	119.0	72.7	409	0.8	58.3	10.2	647	2.36	55.2	5.0	56.2	4.2	66	6.5	5.1	4.5	92	0.94
STD DS7	Standard		20.4	111.0	69.5	406	1.0	57.7	10.3	629	2.39	50.1	4.8	68.4	4.0	66	6.2	4.8	4.5	95	0.94
STD OXH55	Standard																				
STD OXH55	Standard																				
STD OXK69	Standard																				
STD OXK69	Standard																				
STD OXP61	Standard																				
STD OXP61	Standard																				

QUALITY CONTROL REPORT

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Method Analyte Unit MDL		1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	G6	G6	7AR
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Ti	S	Ga	Se	Ag	Au	Cu
		%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	gm/mt	gm/mt	%
		0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	5	0.01	0.001
Pulp Duplicates																					
816756	Rock	0.117	7	8	0.19	41	0.002	<20	0.24	0.073	0.11	0.8	1.25	0.4	0.9	1.92	11	10.7	N.A.	N.A.	N.A.
REP 816756	QC																				0.053
816775	Rock	0.088	14	47	1.05	119	0.167	<20	2.94	0.146	0.77	0.2	<0.01	4.5	0.6	0.06	7	<0.5	N.A.	N.A.	N.A.
REP 816775	QC	0.086	14	46	1.04	120	0.158	<20	2.93	0.139	0.74	0.2	<0.01	4.3	0.5	0.07	7	0.6			
817030	Rock	0.026	23	73	0.75	329	0.179	<20	3.06	0.025	1.70	0.2	0.01	4.7	2.7	0.09	9	<0.5	N.A.	N.A.	N.A.
REP 817030	QC	0.025	21	71	0.74	320	0.169	<20	2.98	0.024	1.65	0.3	<0.01	4.5	2.6	0.09	9	<0.5			
817033	Rock	0.004	3	1	<0.01	6	0.001	<20	0.04	0.002	0.01	2.6	20.14	1.9	3.2	8.05	1	>100	N.A.	37.13	N.A.
REP 817033	QC																				
816821	Rock	0.003	6	1	<0.01	6	<0.001	<20	0.02	0.002	<0.01	0.2	5.05	0.7	2.1	>10	5	87.4	N.A.	19.56	N.A.
REP 816821	QC																	91	26.61		
816807	Rock	0.031	9	57	1.16	209	0.182	<20	4.60	0.404	1.00	<0.1	0.04	7.0	0.6	0.47	13	0.8	N.A.	N.A.	N.A.
REP 816807	QC	0.028	7	52	1.08	193	0.167	<20	4.11	0.357	0.94	<0.1	0.03	6.5	0.6	0.44	11	0.7			
816803	Rock	0.044	14	48	0.73	358	0.149	<20	2.62	0.029	1.28	0.2	<0.01	4.9	1.4	0.10	9	0.8	N.A.	N.A.	N.A.
REP 816803	QC	0.044	13	47	0.71	334	0.139	<20	2.52	0.027	1.25	0.1	<0.01	4.6	1.4	0.10	8	0.9			
Reference Materials																					
STD DS7	Standard	0.078	11	188	1.02	393	0.117	30	0.94	0.074	0.43	3.5	0.22	2.0	4.2	0.18	5	4.0			
STD DS7	Standard	0.068	10	179	1.00	378	0.120	38	0.91	0.080	0.44	3.4	0.19	2.1	4.1	0.18	5	3.6			
STD DS7	Standard	0.082	12	206	1.07	408	0.118	33	0.99	0.081	0.45	3.7	0.21	2.4	4.7	0.20	5	4.0			
STD DS7	Standard	0.082	11	193	1.02	367	0.119	29	0.95	0.085	0.43	3.5	0.22	2.3	4.1	0.18	5	3.5			
STD DS7	Standard	0.074	12	203	1.04	397	0.120	32	1.02	0.087	0.45	3.5	0.26	2.2	4.4	0.20	5	3.7			
STD DS7	Standard	0.081	11	187	1.04	380	0.126	38	1.00	0.087	0.46	5.2	0.21	2.2	4.5	0.19	5	3.6			
STD DS7	Standard	0.082	12	195	1.05	380	0.124	48	0.99	0.091	0.45	3.4	0.19	2.2	4.4	0.20	5	4.0			
STD OXH55	Standard																		219	1.34	
STD OXH55	Standard																		255	1.38	
STD OXK69	Standard																		188	3.58	
STD OXK69	Standard																		230	3.75	
STD OXP61	Standard																				
STD OXP61	Standard																				

Client: Logan Resources Ltd.

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Project: None Given

Report Date: October 10, 2008

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QUALITY CONTROL REPORT

VAN08007549.3

Method	7AR	7AR	G6
Analyte	Pb	Co	Au
Unit	%	%	gm/mt
MDL	0.01	0.001	0.17
Pulp Duplicates			
816756	Rock	1.64	N.A.
REP 816756	QC	1.65	<0.001
816775	Rock	N.A.	N.A.
REP 816775	QC		
817030	Rock	N.A.	N.A.
REP 817030	QC		
817033	Rock	N.A.	0.353
REP 817033	QC		98.29
816821	Rock	N.A.	N.A.
REP 816821	QC		79.45
816807	Rock	N.A.	N.A.
REP 816807	QC		
816803	Rock	N.A.	N.A.
REP 816803	QC		
Reference Materials			
STD DS7	Standard		
STD DS7	Standard		
STD DS7	Standard		
STD DS7	Standard		
STD DS7	Standard		
STD DS7	Standard		
STD DS7	Standard		
STD OXH55	Standard		
STD OXH55	Standard		
STD OXK69	Standard		
STD OXK69	Standard		
STD OXP61	Standard		14.93
STD OXP61	Standard		15.38

QUALITY CONTROL REPORT

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		WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
STD SF-3A	Standard																				
STD SF-3A	Standard																				
STD SQ18	Standard																				
STD DS7 Expected			20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93
STD SF-3A Expected																					
STD OXH55 Expected																					
STD OXK69 Expected																					
STD OXP61 Expected																					
STD SQ18 Expected																					
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
G1	Prep Blank	<0.01	0.2	3.1	4.9	47	<0.1	3.9	4.2	543	1.88	1.5	2.3	<0.5	3.5	47	<0.1	<0.1	<0.1	40	0.45
G1	Prep Blank	<0.01	0.3	3.4	5.3	47	<0.1	4.9	4.3	553	1.86	1.5	2.4	<0.5	3.5	51	<0.1	<0.1	<0.1	41	0.46

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

Project: None Given
Report Date: October 10, 2008

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QUALITY CONTROL REPORT

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		1DX P %	1DX La ppm	1DX Cr ppm	1DX Mg %	1DX Ba ppm	1DX Ti %	1DX B ppm	1DX Al %	1DX Na %	1DX K %	1DX W ppm	1DX Hg ppm	1DX Sc ppm	1DX Ti ppm	1DX S %	1DX Ga ppm	1DX Se ppm	G6 Ag gm/mt	G6 Au gm/mt	7AR Cu %
		0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	5	0.01	0.001
STD SF-3A	Standard																				0.778
STD SF-3A	Standard																				0.773
STD SQ18	Standard																				
STD DS7 Expected		0.08	13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	5	3.5			
STD SF-3A Expected																					0.7705
STD OXH55 Expected																					1.282
STD OXK69 Expected																					3.583
STD OXP61 Expected																					
STD SQ18 Expected																					
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5			
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5			
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5			
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5			
BLK	Blank																				<0.001
BLK	Blank																		223	<0.01	
BLK	Blank																		<5	<0.01	
BLK	Blank																		236	<0.01	
BLK	Blank																		214	<0.01	
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
G1	Prep Blank	0.088	6	12	0.58	230	0.134	<20	0.91	0.070	0.50	<0.1	<0.01	1.7	0.4	<0.05	5	<0.5	N.A.	N.A.	N.A.
G1	Prep Blank	0.084	7	12	0.58	231	0.140	<20	0.93	0.076	0.53	<0.1	<0.01	1.7	0.4	<0.05	5	<0.5	N.A.	N.A.	N.A.

Client: **Logan Resources Ltd.**

1640 - 1066 Hastings St. W.
 Vancouver BC V6E 3X1 Canada

Project: None Given

Report Date: October 10, 2008

Page: 2 of 2 **Part** 3

QUALITY CONTROL REPORT

VAN08007549.3

		7AR Pb %	7AR Co %	G6 Au gm/mt
		0.01	0.001	0.17
STD SF-3A	Standard	0.95	0.018	
STD SF-3A	Standard	0.94	0.018	
STD SQ18	Standard			31.11
STD DS7 Expected				
STD SF-3A Expected		0.9625	0.0183	
STD OXH55 Expected				
STD OXK69 Expected				
STD OXP61 Expected				14.917
STD SQ18 Expected				30.49
BLK	Blank			
BLK	Blank			
BLK	Blank			
BLK	Blank			
BLK	Blank	<0.01	<0.001	
BLK	Blank			
BLK	Blank			
BLK	Blank			
BLK	Blank			
BLK	Blank			<0.17
BLK	Blank			<0.17
BLK	Blank			<0.17
Prep Wash				
G1	Prep Blank	N.A.	N.A.	N.A.
G1	Prep Blank	N.A.	N.A.	N.A.

Appendix F

Radiometric Maps of the Golden Wall.

- Fig f1: Golden Wall Radiometric Potassium Count
- Fig f2: Golden Wall Radiometric Thorium Count
- Fig f3: Golden Wall Radiometric Uranium Count
- Fig f4: Cheyenne Radiometric Potassium Count
- Fig f5: Cheyenne Radiometric Thorium Count
- Fig f6: Cheyenne Radiometric Uranium Count

Fig f1:



Fig f2:



Fig f3

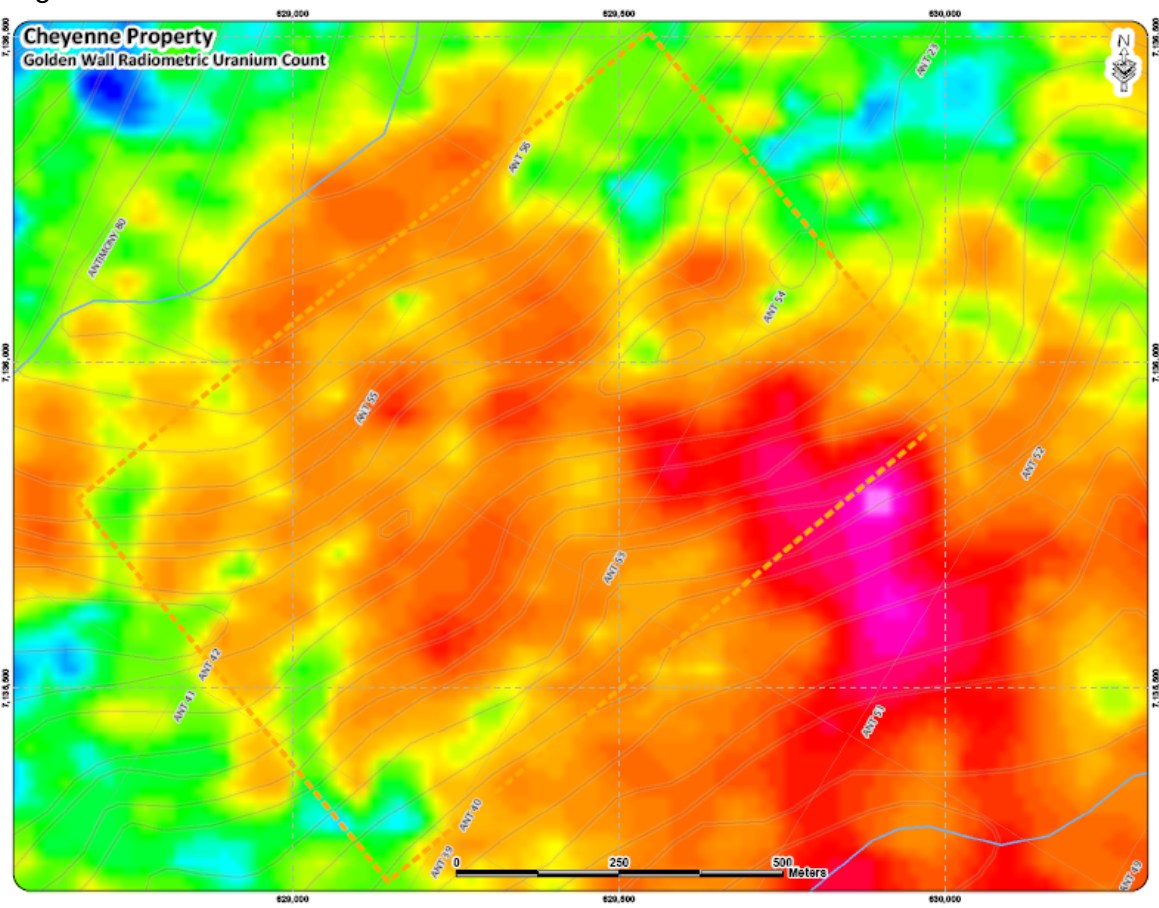


Fig f4:

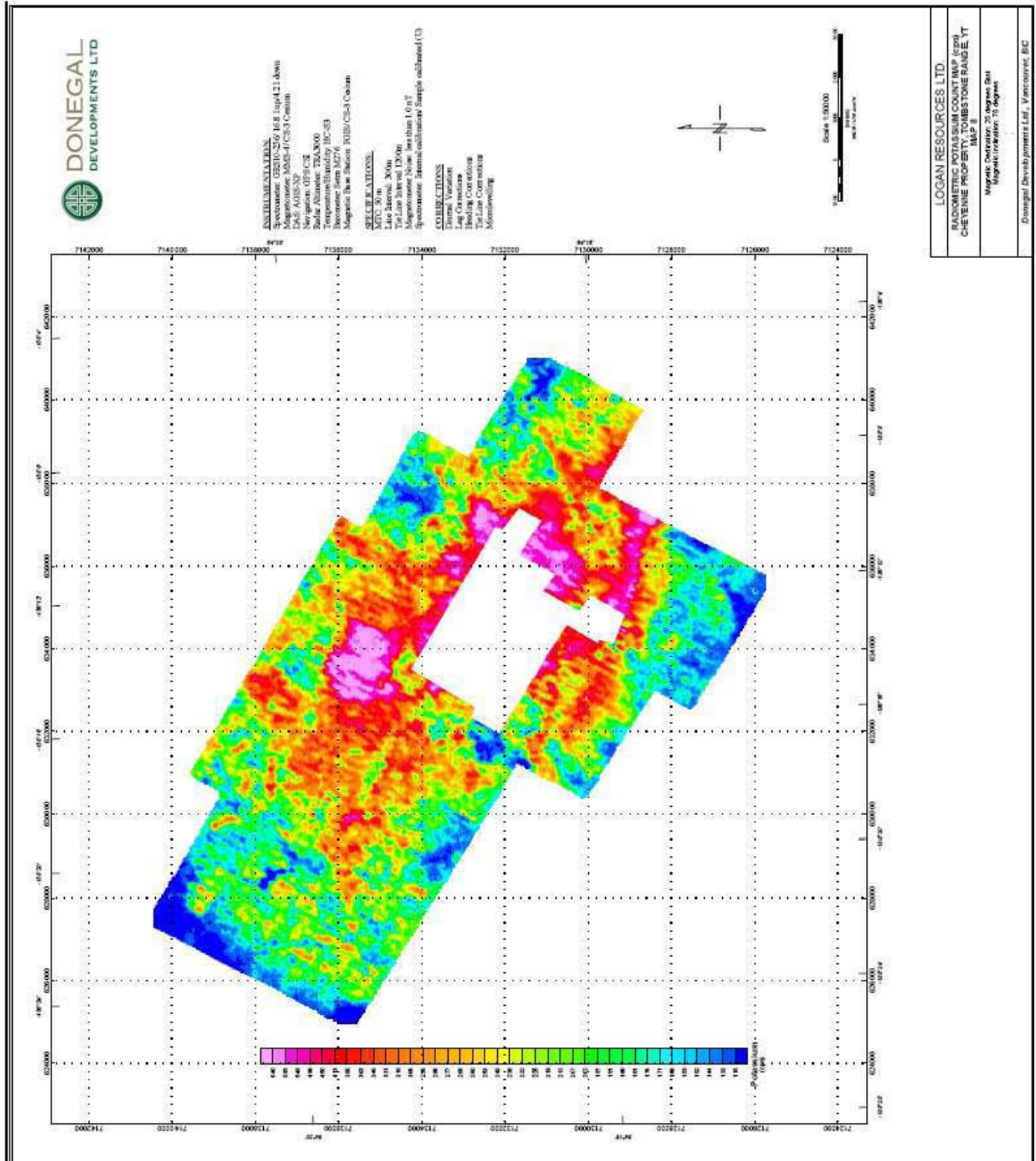


Fig f5:

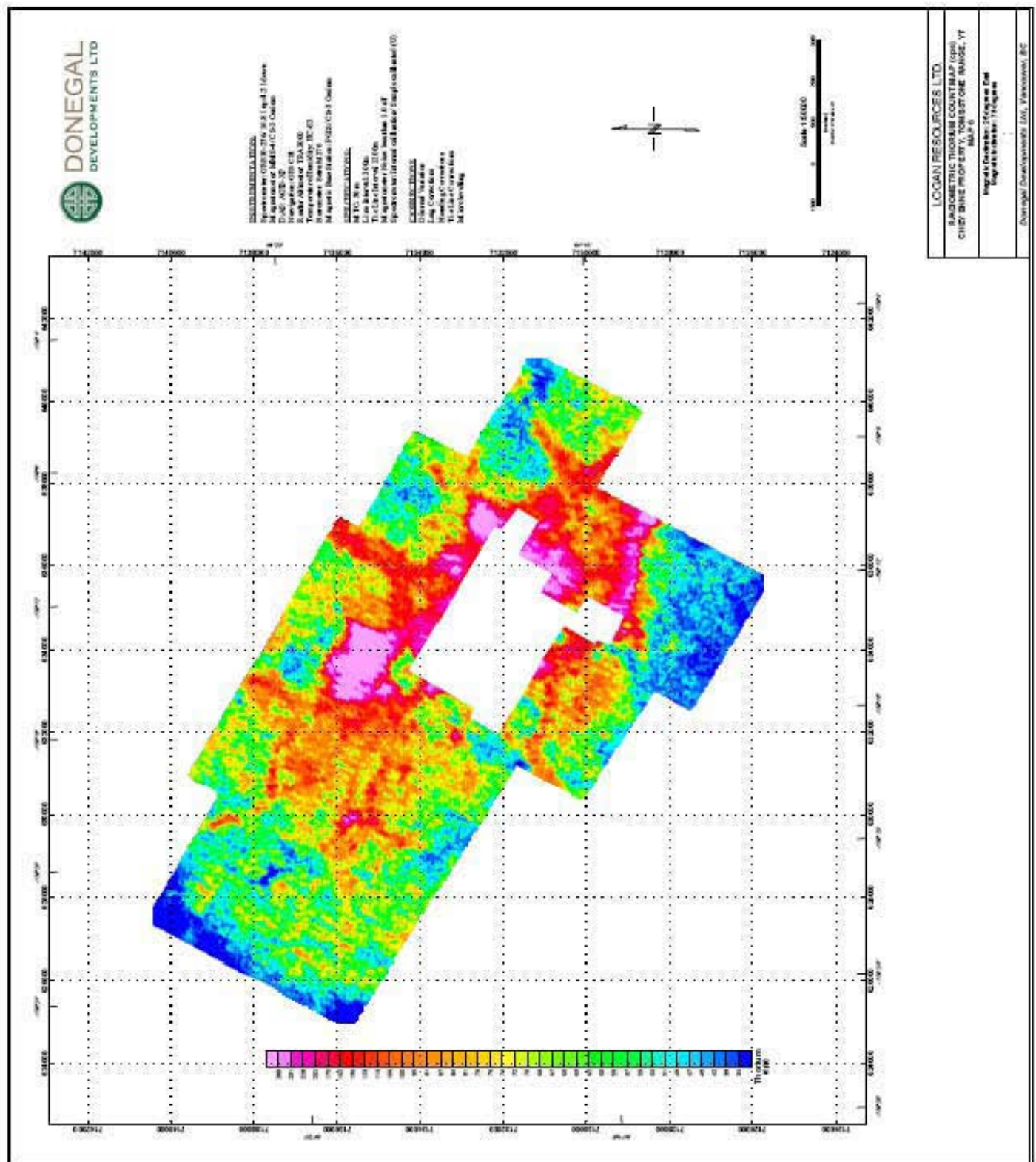
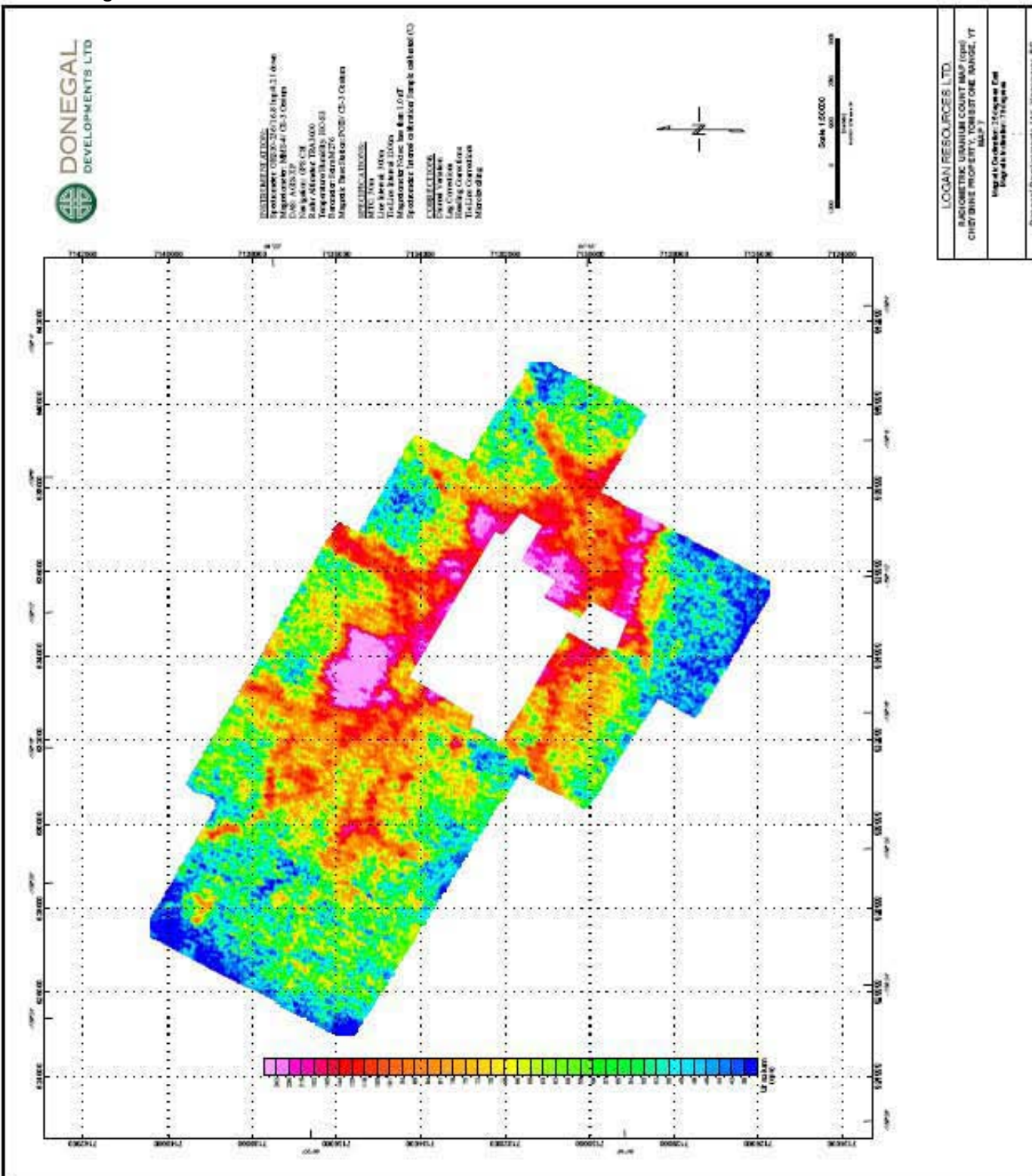


Fig f6:



APPENDIX II

CHEYENNE SOIL SAMPLING DATA

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_2_08	Gentle slope N, near creek	Poor	Wet	B	3	Brown	30m		Thomas	7136335	625420
CHYS_1_08	Moderate slope NW	Moderate	Damp	B	2	Dark Brown	No	Pebbly	Thomas	7135999	625499
CHYS_04_08	Steep slope NE	Moderate	Damp	B	1	Dark Brown	No	*Small sample	Thomas	7136001	625741
CHYS_06_08	Gentle slope NW	Moderate	Damp	B	2	Dark Brown	No		Thomas	7136496	625744
CHYS_05_08	Steep slope SW	Well	Dry	B	2	Light Brown	No		Thomas	7136253	625747
CHYS_3_08	On mossy shaly chips, slope of 30deg to the NW	Well	Damp	B	1	Dark grey to black	No		Daithi	7135748	625754
CHYS_7_08	Moderate slope SW	Well	Damp	B	3	Brown	No		Kevin	7136749	625761
CHYS_8_08	Halfway down steep NW facing slope	Moderate	Damp to wet	B	3	Grey	Yes, on ridge above 300m to SE	Still patchy snow, moss and grass; sample is gray clay slump debris	Daithi	7135748	625988
CHYS_9_08	Steep slope into valley	Well	Damp	B	2	Creamy-light brown	No	Large blocks of scree area has lots of shrubs, sample is light brown clay with chips and grit	Daithi	7136006	625990
CHYS_12_08	Top of small hill at foot of large scree cliff	Well	Damp	B	3	Rusty brown	No	Soil is a silty clay, area is underlain by scree debris and large fallen blocks'	Daithi	7136717	625999
CHYS_13_08	Gentle slope to NW	Well	Damp/dry	B	3	Light brown	No		Kevin	7137002	626014
CHYS_11_08	Flat little knoll with some black spruce on it	Well	Damp	B	4	Creamy to dark brown	Yes	To the NE around to SE is all large high scree slopes with some OC on them, soil is clay with minor shale chips and grit	Daithi	7136492	626036
CHYS_10_08	Little hollow at bottom of scree slope	Poor	Damp	B	3	Creamy-dark brown	Yes	Large blocks on slope with good stockwork veins, some carrying sulphides	Daithi	7136208	626053
CHYS_21_08	Gentle slope to NW	Well	Damp	B	3	Brownish grey	No		Kevin	7137243	626238
CHYS_19_08	Gentle slope at base of scree slope								Shane	7136752	626244
CHYS_22_08	Crest of steep slope, lots of moss and lichen and black spruce		Damp	B	3		No		Daithi	7137422	626245
CHYS_16_08	Steep hillside to NW between creeks	Well	Damp	B	2	Medium Brown	No		Shane	7135998	626248

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_18_08	Steep scree slope to W with minor veg.	Well	Dry - Damp	B	1	Brown	Yes	Nice Qtz Vbxa in outcrop to SE	Shane	7136503	626252
CHYS_17_08	Steep slope to W, thin veg. cover, dwarf pine	Well	Damp	B	1	Medium Brown	Yes, plenty	Sample taken here due to thick scree at actual spot; good accessible exposure of outcrop to NE; very little to no A	Shane	7136186	626254
CHYS_14_08	Steep scree slope	Well	Damp	A	1	Gun Metal Grey	Yes		Shane	7135494	626255
CHYS_15_08	Moderate slope beside creek	Good	Wet	B	2	Green/Brown		Very thin A horizon	Shane	7135759	626258
CHYS_20_08	Bottom of W to NW facing scree slope/boulder field; very little soil	Well	Dry	B	1	Light brown with creamy/red clay	No	Some boulders in nearby boulderfield have good qtz veining in them, most rock seems to be the MGW	Daithi	7136958	626316
CHYS_29_08	Moderate scree slope facing NW, thin soil	Well	Dry		1	Dark organic		Lots of stockwork qtz veins in scree rock, hard to find sample	Aiden	7136807	626488
CHYS_23_08	Steep slope SE to creek, patchy soil with sparse veg.	Well	Moist	B	3	Brown	Yes, on NW side near ridge	Silty soil	Aiden	7135243	626488
CHYS_33_08	Moderate slope W	Well	Damp	B	2	Grey	No		Kevin	7137748	626501
CHYS_27_08	Steep hillside facing W towards creek, scree and moss, thin patchy soil	Well	Moist	B	2	Brown		Sampled between boulders, some grit in clay	Aiden	7136228	626501
CHYS_28_08	Steep mossy scree slope facing NW	Well	Moist	B	2	Brown		Soil is patchy, clay with some grit	Aiden	7136485	626502
CHYS_26_08	Steep hillside near creek, sloping NW	Well	Dry		2	Dark	Yes; bedding visible, phyllite scree clasts at sample point	Soil thin and gritty with some clay	Aiden	7135989	626505
CHYS_25_08	Hillside, steep slope facing NW near small creeks	Well	Dry		1	Dark	Yes	Lots of outcrop in cliff above sample site; qtzite with qtz stockwork, possible gossan higher up. Very thin soil, very stony and gritty	Aiden	7135747	626505
CHYS_31_08	Little hat saddle at bottom of NW facing scree slope	Well		B	3	Dark grey to creamy brown		Soil is clay	Daithi	7137253	626543
CHYS_34_08	Gentle slope to NW	Well	Damp	B	2	Grey	No		Kevin	7137953	626546

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_32_08	Steep NW facing scree slope, little soil, large rocks	Well	Damp	B	3	Light brown		Soil is gritty-silty/SOMETHING slump	Daithi	7137459	626553
CHYS_24_08	Ridge top, gentle slope near cliff on NW side; scree and patchy soil	Well	Moist	B	2	Brown	No	112 m from target, cliff too steep and snow	Aiden	7135426	626583
CHYS_37_08	Steep scree slope facing NW, little to no soil	Well	Dry		1	Brown	Yes, sh and ss with qtz stockwork		Aiden	7135742	626727
CHYS_38_08	Hard steep W, on top of small cliff on W, 2m	Well	Dry	B	2	Brown	Yes		Kevin	7135999	626742
CHYS_39_08	Hard steep W	Well	Dry	B	2	Brown	Yes	Sample taken from small area with veg.	Kevin	7136249	626745
CHYS_36_08	Steep	Well	Damp	B	2	Greyish brown	Yes	Steep, boulders, no veg.	Tubs	7135505	626749
CHYS_47_08	Gentle slope, NW	Well	Damp	A	2	Brown	No		Kevin	7138248	626750
CHYS_35_08	Steep S and N	Well	Damp	B	2	Brown	Yes	Boulder field	Tubs	7135259	626751
CHYS_45_08	Moderate steep, NW	Well	Damp	B	4	Brown	No		Kevin	7137746	626753
CHYS_46_08	Gentle slope NW	Well	Damp	B	2	Brown	No		Kevin	7137994	626753
CHYS_41_08	Steep W	Well	Damp	A	3	Black	Yes, E 20m		Kevin	7136746	626753
CHYS_40_08	Steep W	Well	Dry-Damp	B	3	Brown	Yes, NW 50m		Kevin	7136492	626754
CHYS_42_08	Cliff ledge	Well	Dry	B	1	Grey	Yes		Kevin	7137003	626755
CHYS_43_08	Hard steep W	Well	Damp	B	2	Black	No		Kevin	7137248	626755
CHYS_44_08	Steep W	Well	Damp	B	2	Black	No		Kevin	7137496	626756
CHYS_51_08	Gentle slope near top of ridge, scree and patchy soil	Well	Moist/damp	B	1	Brown	Yes	No A horizon, sample taken from B, grit and clay; quartzite scree; 2(quartzite)/grit; 80/38N	Aiden	7135730	626976
CHYS_57_08	Moderate slope near top of ridge, rocky thin soil, scree slope beneath	Well	Moist	B	1	Brown	No	Very thin A, B is clay with grit and shale and meta greywacke fragments	Aiden	7137253	626986
CHYS_61_08	Moderate slope NW	Well	Damp	B	2	Grey	Yes		Kevin	7138236	626987
CHYS_55_08	Moderate E facing slope, beneath scree, thin soil, rocky area	Well	Moist/damp	B	2	Brown	No	Sample brown gritty clay	Aiden	7136772	626993
CHYS_56_08	Steep E facing scree slope, very little soil	Well	Dry	B	1	Brown	No	Soil is brown with grit, qrtzite scree, some meta greywacke	Aiden	7137012	626993
CHYS_48_08	Side of scree slope, little soil	Well	Wet	B	2	Light brown	Yes, lots upslope	There is a good size stream in valley; soil is clay and grit	Daithi	7134999	626994
CHYS_58_08	Moderate slope facing E; rocky, thin veg., thin soil	Well	Moist	B	2	Brown	Yes, 100m S	Sample is brown clay with some grit	Aiden	7137489	626994

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_49_08	Steep S and N	Well	Damp	B	2	Greyish brown	Yes	Boulders	Tubs	7135253	626998
CHYS_60_08	Steep slope facing W; rocky, moss covered with very thin patchy soil	Well	Moist	B	2	Brown	Yes, uphill, meta greywacke		Aiden	7138003	626999
CHYS_50_08	Steep	Well	Damp	B	2	Brown/lig ht green	Yes	Boulders, steep	Tubs	7135500	626999
CHYS_63_08	Gentle slope to NW	Moderate	Damp/wet	B	3	Grey	No		Kevin	7138741	626999
CHYS_59_08	Moderate slope facing E; rocky, moss covered, very thin soil	Well	Dry	B	1	Brown	Yes, at 25m, appears to be meta greywacke	Hard to get sample	Aiden	7137746	627003
CHYS_52_08	Steep slope facing N, scree with patchy soil	Well	Moist	B	3	Brown	No	No A, B is clay with minor grit; appears to be continuous grit and qrtzite from CHYS51 (change to meta greywacke at 0626990, 7135980, 1693)	Aiden	7135960	627004
CHYS_62_08	Gentle slope to NW	Moderate	Wet	B	3	Grey	No		Kevin	7138490	627005
CHYS_54_08	Steep scree slope facing E, very little soil	Well	Dry	B	1		Yes	Shale and greywacke nearby, SD=010/20W	Aiden	7136501	627005
CHYS_53_08	Steep scree slope facing NE into valley, very little soil	Well	Dry	B	1		Yes	Greywacke nearby, shale very close; SD = 145/30SW, interbedded SOMETHING shale and greywacke-sandstone	Aiden	7136255	627013
CHYS_79_08	Moderate slope NE	Well	Damp/dry	B	2	Grey	Yes		Kevin	7138755	627229
CHYS_65_08	Steep N and S	Well	Dry	B	1	Dark brown	Yes	Boulders	Tubs	7135246	627237
CHYS_80_08	Moderate slope NE	Well	Damp	B	3	Brown	No		Kevin	7138994	627244
CHYS_71_08	Flat area, 30 m from creek	Poor	Really wet	B	2	Green/Br own	No		Thomas	7136748	627247
CHYS_74_08	Gentle slope to E	Moderate	Damp	B	3	Brown	No		Thomas	7137500	627247
CHYS_77_08	Moderate slope to E, boulders	Well	Damp	B	3	Grey	Yes		Kevin	7138244	627247
CHYS_67_08	Steep	Well	Damp	B	2	Greyish brown	Yes	Loose rocks (shale?), big rocks	Tubs	7135746	627250
CHYS_70_08	Flat area, 10 m from creek	Moderate	Damp	B	3	Brown	Yes, at 25 m		Thomas	7136497	627250
CHYS_75_08	Gentle slope to NE	Well	Damp	B	1	Brown	Yes, at 5m		Thomas	7137750	627250
CHYS_66_08	Steep N/S	Well	Damp	B	2		Yes	Steep, boulders	Tubs	7135507	627251
CHYS_72_08	Gentle slope to E, 20 m from creek	Well	Damp	B	1	Light brown	Yes, all around		Thomas	7136992	627252

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_76_08	Steep slope to E	Well	Damp	B	2	Brown	Yes, all around		Thomas	7137988	627252
CHYS_73_08	Flat	Moderate	Damp	B	4	Grey	No		Thomas	7137246	627253
CHYS_78_08	Moderate slope to NE	Well	Damp/dry	B	3	Grey	Yes		Kevin	7138487	627257
CHYS_64_08	Steep N/S	Well	Dry	A	1	Med-dark brown	Yes	Boulders	Tubs	7134985	627261
CHYS_68_08	Moderate slope to NE	Moderate	Damp	B	4	Brown	Yes, surrounded by outcrop		Thomas	7136009	627267
CHYS_69_08	Gentle slope to N, beside creek	Poor	Damp	B	4	Brown	Yes, surrounded by outcrop		Thomas	7136270	627288
CHYS_87_08	Gentle slope, head of valley near stream	Well	Damp	B	3	Brown	Yes, 100m SW		Kevin	7136073	627478
CHYS_84_08	Steep N and S	Well	Damp	B	2	Brown grey	Yes	Boulders	Tubs	7135234	627479
CHYS_97_08	Steep	Well	Dry	B	3	Light brown			Kevin	7138493	627491
CHYS_94_08	Gentle slope	Well	Damp	B	3	Brown	No		Kevin	7137742	627497
CHYS_101_08	Gentle to W	Moderate	Wet	B	3	Grey brown	No		Thomas	7139507.5	627498.3
CHYS_88_08	Gentle slope, head of valley, grassy patch	Well	Damp	B	4	Brown	Yes, 200m SW		Kevin	7136251	627498
CHYS_93_08	Gentle slope	Well	Damp	B	2	Light brown	No		Kevin	7137497	627499
CHYS_98_08	Flat, by river creek	Well	Damp	B	3	Brown		Sample taken just beside creek/river	Kevin	7138749	627500
CHYS_85_08	Steep	Well	Damp	B	2	Greyish brown	Yes	Steep and boulders	Tubs	7135492	627501
CHYS_83_08									Tubs	7135004	627501
CHYS_90_08	Steep	Well	Damp	B	3	Brown	No		Kevin	7136747	627502
CHYS_95_08	Gentle slope	Well	Damp	B	4	Grey			Kevin	7137997	627502
CHYS_89_08	Steep	Well	Damp	B	2	Brown	Yes, 10m NE		Kevin	7136492	627503
CHYS_96_08	Gentle slope	Well	Damp	B	2	Black			Kevin	7138247	627503
CHYS_92_08	Steep	Well	Damp	A	3	Black	Yes, 150m		Kevin	7137249	627503
CHYS_82_08	Moderate slope to S and creek	Well	Dry/Damp	B	1	Light brown	No		Shane	7134754	627504
CHYS_86_08	Steep	Well	Damp	B	1		Yes	Steep and big boulders	Tubs	7135746	627506
CHYS_91_08	Moderate slope	Well	Dry/Damp	A	2	Black	No	Rocky area	Kevin	7137001	627506
CHYS_100_08	Gentle slope to NW	Moderate	Wet	B	3	Brown	No		Thomas	7139237.6	627506.9
CHYS_99_08	Gentle slope to NW	Well	Damp	B	3	Grey brown	No		Thomas	7139019.9	627517.8

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQL	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_105_08	Steep boulder and talus, slope to SE	Well	Dry	B	2	Medium to grey brown	Yes, to N	Soil is very poor here	Shane	7135228	627716
CHYS_110_08	Steep slope, scree and thin soil	Well	Damp	B	2	Brown		Brown clay in B, very little to no A	Aiden	7136480	627721
CHYS_111_08	Steep scree slope, facing W, thin patches of soil	Well		B	3	Brown	Yes, within 10m		Aiden	7136734	627724
CHYS_116_08	Steep slope facing NW, rocky with some soil and thin veg.		Damp	B	3	Brown			Aiden	7137996	627730
CHYS_106_08	Gentle slope to SE	Moderate	Damp	B	4	Yellow brown	Yes, at 30m		Thomas	7135510	627731
CHYS_102_08	Gentle slope to N	Well	Damp	B	3	Brown	No		Thomas	7134504.7	627735.9
CHYS_115_08	Moderate slope facing W, short veg., at the edge of scree slope	Well	Dry	B	2	Brown	Yes, 50m to N		Aiden	7137752	627739
CHYS_117_08	Gentle slope	Well	Damp	B	2	Brown	Yes		Julius	7138247.9	627741
CHYS_113_08	Moderate W facing slope, some veg.	Well	Moist	B	3	Brown		Very thin A horizon, some grit in B	Aiden	7137255	627743
CHYS_103_08	Flat gentle slope near creek, willows	Moderate	Dry/Damp	B	2	Medium Brown	Yes, near/beside creek to E		Shane	7134751	627746
CHYS_123_08	Gentle slope	Poor	Damp	B	1	Grey	No	Little soil profile available	Julius	7139800.7	627750.1
CHYS_112_08	Steep hillside slopes to W	Well		B	2			Rocky, some scree, thin patchy soil; pebbly soil, sample is mixed	Aiden	7137022	627751
CHYS_109_08	Moderate overgrown scree slope facing W	Well	Damp	B	3	Light orangey brown	No		Sarah	7136248.9	627751.3
CHYS_114_08	Moderate slope facing N.NW, some soil and short veg.		Moist	B	3	Brown-Grey	Yes, 150m upslope		Aiden	7137500	627752
CHYS_107_08	Moderate to NNW	Well	Damp	B	1	Light greyish brown	Yes	Overgrown talus, wine coloured phyllites and another unit	Shane	7135748	627752
CHYS_104_08	Steep open hillside to S	Well	Damp	B	1	Medium to dark brown	No		Shane	7135002	627754
CHYS_108_08	Moderate slope facing W, overgrown scree	Well	Damp	B	3	Light grey brown	Yes, uphill	Minor grit but good clay	Sarah	7136006.1	627754.6
CHYS_119_08	Gentle slope	Moderate	Damp	B	3	Brown	Yes		Julius	7138729.2	627757.2
CHYS_118_08	Gentle slope	Moderate	Damp	B	3	Brown	Yes		Julius	7138533.3	627771

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_120_08	Gentle slope	Moderate	Damp	B	1	Dark brown	No	Had to dig and scrape for sample	Julius	7139012.3	627778.8
CHYS_121_08	Steep slope	Well	Damp	B	1	Dark brown	Yes	Had to scrape for little soil	Julius	7139235.8	627787
CHYS_122_08	Steep slope	Moderate	Damp	B	1	Brown	Yes	Had to go further to get to area with soil, boulder mountain	Julius	7139366	627892.2
CHYS_142_08	Steep slope	Moderate	Damp	B	1	Dark brown	No	Difficult to get sample, had to scrape	Julius	7138979.7	627940.1
CHYS_133_08	Steep slope to the W	Well	Damp	A	1	Black	Yes, at 20m	No clay in soil	Thomas	7136693	627951
CHYS_130_08	Moderate slope to E	Moderate	Damp	B	3	Brown	Yes, at 20m		Thomas	7135994	627984
CHYS_135_08	Moderate slope NW into valley, overgrown boulders	Well	Damp	B	2	Brown grey	Yes, some rock with qtz veining to SW		Sarah	7137246.8	627995.6
CHYS_141_08	Moderate W facing slope, thick 5-6ft willows	Well	Damp	B	4	Light brownish grey	No	Good sample	Sarah	7138749.3	627995.7
CHYS_144_08	Gentle slope	Moderate	Damp	B	2	Brown	Yes		Julius	7139512.3	627997.8
CHYS_124_08	Gentle slope to N, 10m from creek	Moderate	Damp	B	3	Brown	No		Thomas	7134503.1	627997.8
CHYS_127_08	Steep open hillside to S and creek	Well	Damp	B	2	Golden brown	Yes, oxidised, well bedded, to WNW		Shane	7135250	627999
CHYS_140_08	Moderate slope facing NW, grass underlain by boulders	Well	Damp/wet	B	4	Dark grey	Yes	10-15 cm A horizon here, good sample	Sarah	7138498.1	627999.7
CHYS_126_08	Steep overgrown hillside near creek, slope to SE	Well	Dry/Damp	B	2	Golden brown	Yes, exposure up the creek from		Shane	7135003	628000
CHYS_125_08	Gentle sloping bench on hillside, stunted willow overgrowth	Well	Damp	B	2	Golden brown	Yes, to NE		Shane	7134754	628003
CHYS_143_08	Moderate slope to S	Well	Damp	B	2	Brown	Yes, on ridge	Trees and willow overgrowth	Shane	7139248	628004
CHYS_137_08	Grown over slumped area, moderate slope SW to gully	Well	Damp	B	1	Mottled light grey brown	No	Varied vegetation, fungus in soil, rusted rock inside auger hole	Sarah	7137756.7	628003.9
CHYS_138_08	Moderate scree/boulder slope NW to valley, just below ridge, patchy soil and vegetation	Well	Damp	B	2	Dark chocolate brown	Yes, 200m S bedded medium grained sandstone with quartz in joints	Lots of organic matter in soil, good clay	Sarah	7138002.6	628004.5
CHYS_132_08	Gentle slope to SW, near top of mountain	Moderate	Damp	B	4		No		Thomas	7136500	628005

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_139_08	On ridge between two gullies, moderate slope facing NW, steeper to either side	Well	Damp/dry	B	1	Orange brown	Yes, slightly rusted OC overlooking this waypoint	Sample is very sandy	Sarah	7138284.3	628005.6
CHYS_136_08	Slump on a moderate slope facing NW into valley	Well	Damp	B	1	Light grey with chips and dark organic matter	Yes, uphill, limonite staining		Sarah	7137501.7	628008.6
CHYS_131_08	Flat area between 2 peaks	Poor	Damp	B	3		Yes, at 30m	Presence of permafrost	Thomas	7136271	628009
CHYS_128_08	Moderat slope to E	Moderate	Damp	B	3	Brown	No		Thomas	7135505	628010
CHYS_145_08	Gentle slope	Moderate	Damp	B	1	Dark brown	Yes	Had to scrape for sample	Julius	7139761.6	628020.7
CHYS_134_08	Gentle slope turning into a cliff to the W	Well	Damp	A	1	Black	Yes, at 20m	No clay in soil	Thomas	7136982	628024
CHYS_129_08	Moderate slope to E, near top of mountain	Well	Damp	B	2	Brown	No		Thomas	7135754	628037
CHYS_167_08	Gentle slope	Poor	Damp	B	1	Dark brown	Yes		Julius	7139515.7	628212.8
CHYS_150_08	Steep talus slope to W and creek	Well	Damp	A	1	Black/brown	Yes, on ridge to E, pebbly conglomerate and phyllite		Shane	7135248	628225
CHYS_166_08	Steep talus slope to N	Well	Damp	A	2	Brown/black	Yes	Taken from grassy patch between talus	Shane	7139245	628241
CHYS_146_08	Moderate slope to N	Moderate	Damp	B	2	Brown	No		Thomas	7134254.6	628241.8
CHYS_151_08	Moderate open hillside, overgrown talus	Well	Damp	B	2	Medium Brown	Yes, to S		Shane	7135499	628246
CHYS_152_08	Steep open hillside, overgrown talus	Moderate	Damp	B	1	Brown	No		Shane	7135732	628246
CHYS_157_08	Gentle slope to N on top of mountain	Well	Damp	B	3	Red/brown	No		Thomas	7137004	628247
CHYS_163_08	Moderate slope to W	Well	Damp	A	2	Dark brown/black	No	Open grassy hillside, some trees and willows	Shane	7138498	628249

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_158_08	Steep slope to NW	Well	Dry/damp	B	1	Light brown grey	Yes, good bedding and structre	Very sandy sample with minor clay	Shane	7137252	628249
CHYS_155_08	Moderate slope to SE, near top of hill	Well	Damp	B	3	Brown	No		Thomas	7136502	628250
CHYS_154_08	Moderate slope to E	Moderate	Damp	B	2	Brown	No		Thomas	7136246	628251
CHYS_164_08	Moderate slope to W	Well	Damp	B	1	Orange brown	No	Thick willow cover	Shane	7138749	628251
CHYS_156_08	Moderate slope to E, about 150 m from top of hill	Well	Damp	B	3	Brown	No		Thomas	7136757	628251
CHYS_148_08	Steep hillside to S and creek, small willows covering slope	Well	Damp	B	2	Light brown	No		Shane	7134756	628252
CHYS_147_08		Moderate	Damp	B	3	Brown	No		Thomas	7134495.3	628252.5
CHYS_161_08	Moderate slope to W, beside gully	Well	Dry/damp	B	1	Brown	Yes	Overgrown talus	Shane	7137994	628253
CHYS_153_08	Gentle slope to NE	Well	Damp	B	2	Brown	Yes, all around		Thomas	7135976	628255
CHYS_162_08	Steep slope to SW and gully	Well	Damp	B	2	Dark brown	Yes, subcrop in valley	Open hillside, some willows and small trees	Shane	7138251	628255
CHYS_159_08	Steep slope to W	Well	Damp	A		Black		Near what seems to be a recent avalanche of rocks	Thomas	7137485	628256
CHYS_160_08	Steep slope to SW	Moderate	Damp	B	4	Brown	Yes, all around		Thomas	7137718	628266
CHYS_149_08	Steep hillside to W, overgrown talus	Well	Dry/Damp	B	1	Light brown	Yes, at this point		Shane	7135015	628273
CHYS_189_08	Gentle slope	Moderate	Damp	B	1	Dark brown	Yes	Had to scrape and search for sample	Julius	7139497.4	628351.7
CHYS_178_08	Moderate (40deg) open hillside to SE	Well	Damp	B	2	Light-med. Brown	No	Overgrown scree slope	Shane	7136755	628493
CHYS_182_08	Moderate sloping bench along ridge	Well	Dry/Damp	A	3	Med to dark greenish brown	Yes, along ridge; outcrop is of pebbly conglomerate and a gritstone	Waypoint 182 was inaccessible due to snow and scree cover	Shane	7137779	628494
CHYS_180_08	Steep to S and creek	Well	Dry/Damp	B	2	Dark golden brown	Yes, on ridge to W and NW	Overgrown scree, open mountainside	Shane	7137253	628494
CHYS_174_08	Moderate hillside at head of valley	Well	Damp	B	2	Grey	Yes		Shane	7135759	628495

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_171_08	Moderate in small creek to SE	Moderate	Damp	B	2	Medium Brown	Yes		Shane	7135002	628496
CHYS_172_08	Moderate slope to SE	Well	Damp	A	3	Dark brown/bl ack	Yes, to S		Shane	7135252	628496
CHYS_177_08	Moderate (40deg) open hillside to SE	Well	Damp	B	2	Light brown	No	Overgrown scree slope	Shane	7136501	628498
CHYS_173_08	Bench on moderate overgrown talus slope	Moderate	Damp	B	3	Golden brown	Yes, across ridge to N		Shane	7135502	628499
CHYS_179_08	Moderate slope at head of creek	Moderate	Wet	B	2	Light yellowish brown	Yes, on ridge to W (see photos of green and yellow veins)		Shane	7136995	628500
CHYS_170_08	Moderate hillside to S	Well	Dry/Damp	B	2	Golden brown	No		Shane	7134748	628501
CHYS_176_08	Moderate slope to ESE and small creek	Well	Damp	B	2	Green/Br own	No	Thin veg. cover, open hillside	Shane	7136250	628501
CHYS_186_08	Steep hillside to W, overgrown scree	Well	Damp	A	3	Black/red dish black	No		Shane	7138750	628502
CHYS_187_08	Moderate slope to NE	Well	Damp	B	2	Grey	No	Open grassy hillside	Shane	7138998	628502
CHYS_175_08	Gentle slope to NE	Moderate	Damp	B	2	Brown	Yes, to NW		Shane	7135997	628502
CHYS_185_08	Steep hillside to W, overgrown scree	Well	Wet/damp	A	2	Black	Yes	Permafrost in A	Shane	7138500	628502
CHYS_188_08	Moderate slope to NW	Well	Damp	A	2	Brown	No	Overgrown talus slope, some willows	Shane	7139250	628502
CHYS_168_08	Gentle slope to N	Moderate	Damp	B	4	Brown	No		Thomas	7134249.6	628505.8
CHYS_184_08	Steep scree slope with little vegetation	Well	Damp	A	2	Dark brown to black	Yes		Shane	7138245	628522
CHYS_181_08	Steep slope to E on ridge top	Well	Dry	A	2	Light golden brown	Yes, along ridge	Waypoint 181 was inaccessible: steep boulder/scree slope and vertical outcrop faces	Shane	7137497	628539
CHYS_183_08	Gentle slope on ridge top	Well	Damp	B	4	Medium Brown	Yes, all along ridge into a limonite stained shale or phyllite unit here	Waypoint 183 cut off by snow and steeo scree slope. Horizon B exposed on surface	Shane	7138039	628556

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_211_08	Moderate slope to N	Well	Damp	B	1	Grey brown	Yes		Shane	7139162	628738
CHYS_196_08	Moderate slope to S	Moderate	Damp	B	2	Brown	No		Thomas	7135508	628742
CHYS_208_08	Steep slope E	Well	Damp	B	3	Brown	No		Archie	7138501	628747
CHYS_202_08	Moderate slope E, water run off mtl(?)	Well	Damp	B	3	Brown	No	Beside a creek from mountain runoff	Archie	7137001	628747
CHYS_200_08	Steep slope SE	Well	Damp	B	3	Greyish brown	No		Archie	7136504	628747
CHYS_203_08	Steep slope E	Well	Damp	A	2	Black	No		Archie	7137248	628747
CHYS_201_08	Steep slope SE	Well	Damp	B	3	Greyish brown	Yes		Archie	7136750	628748
CHYS_204_08	Steep slope NE; Gully near a creek	Yes	Damp	B	3	Brown	Yes		Archie	7137500	628749
CHYS_209_08	Steep slope E	Well	Damp	B	2	Brown	No		Archie	7138750	628749
CHYS_198_08	Moderate slope NE	Well	Damp	B	3	Brown	No	Boulders everywhere	Archie	7136000	628749
CHYS_205_08	Ledge, E Slope, very rocky with big boulders	Yes	Damp	B	2	Brown	Yes		Archie	7137750	628750
CHYS_210_08	Steep slope N	Well	Damp	B	3	Brown	Yes		Archie	7138996	628751
CHYS_194_08	Moderate slope to SE	Well	Dry	B	1	Grey	No		Thomas	7134992	628751
CHYS_199_08	Gentle slope SE	Well	Damp	B	3	Greyish brown	No		Archie	7136251	628752
CHYS_192_08	Moderate slope to E	Moderate	Damp	B	2	Brown	No		Thomas	7134504	628752
CHYS_206_08	Moderate with flat slope	Yes	Damp	B	3	Brown	No	In a valley with flat areas	Archie	7138003	628752
CHYS_195_08	Moderate slope to E	Moderate	Damp	B	2	Grey brown	Yes, at 30m		Thomas	7135255	628760
CHYS_207_08	Steep slope NE	Yes	Damp	B	2	Brown	Yes	Outcrop went to a lower elevation	Archie	7138262	628766
CHYS_197_08	Gentle slope to SW, on mountain ridge	Moderate	Damp	B	3	Brown	Yes, at 5m		Thomas	7135610	628770
CHYS_190_08	Gentle slope to NE	Moderate	Damp	B	3	Brown	No		Thomas	7133990.7	628771.4
CHYS_191_08	Gentle slope to SE	Moderate	Damp	B	4	Grey brown	No		Thomas	7134266	628775
CHYS_193_08	Moderate slope to SE	Moderate	Damp	B	3	Brown	No		Thomas	7134723	628795
CHYS_213_08	Flat	Poor	Damp	B	4	Grey brown	No		Thomas	7134014.9	628995.8
CHYS_227_08	Gentle slope to E, mountainside	Well	Damp	B	1	Tan brown	Yes		Archie	7137499	628996
CHYS_216_08	Moderate slope to SE	Moderate	Dry	B	2	Brown	No		Thomas	7134748	628996

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_231_08	Steep slope to E	Well	Wet	B	3	Sandy brown	No		Archie	7138500	628997
CHYS_225_08	Steep slope S	Well	Damp	B	2	Brown	No		Archie	7137000	628997
CHYS_229_08	Steep slope to S	Well	Dry	B	1	Tan brown	Yes		Archie	7138000	628998
CHYS_226_08	Steep slope to E, mountainside	Well	Damp	B	2	Brown	No		Archie	7137253	628998
CHYS_230_08	Steep slope to NW	Well	Wet	B	3	Greyish black	No		Archie	7138250	628999
CHYS_223_08	Gentle slope to E, hillside	Well	Damp	B	3	Brown	No		Archie	7136498	628999
CHYS_224_08	Steep slope to E, mountainside	Well	Damp	B	2	Brown	No		Archie	7136748	628999
CHYS_232_08	Steep slope to N, heading to gully NE	Well	Damp	B	2	Greyish brown	Yes		Archie	7138748	628999
CHYS_215_08	Flat	Poor	Damp	B	1	Black grey	No		Thomas	7134500	629000
CHYS_233_08	Moderate slope to E	Well	Damp	B	2	Brown	Yes		Archie	7138983	629000
CHYS_228_08	Steep slope to SE	Well	Damp	B	2	Brown	Yes		Archie	7137750	629000
CHYS_214_08	Flat	Poor	Wet	B	3	Brown	No		Thomas	7134254	629000
CHYS_219_08	Steep slope to SE	Well	Damp	B	1	Brown	No		Thomas	7135510	629001
CHYS_217_08	Moderate slope to S	Moderate	Damp	B	2	Brown	No		Thomas	7135000	629001
CHYS_222_08	Gentle slope to NNW beside creek	Well	Damp	B	3	Brown	No		Archie	7136248	629004
CHYS_218_08	Moderate slope to SE	Moderate	Damp	B	3	Grey brown	No		Thomas	7135254	629006
CHYS_212_08	Flat, 2m from creek	Moderate	Damp	B	4	Brown	No		Thomas	7133717.9	629010.1
CHYS_256_08	Steep hillside to E, scree with thin veg. cover	Well	Damp	B	1	Medium Brown	Yes, upslope to W		Shane	7138998	629244
CHYS_249_08	Bench on steep scree slope to E	Well	Dry-Damp	A	2	Black	Yes	Polymictic conglomerate, average clast size 1cm, subrounded; interbed with metagreywacke	Shane	7137256	629246
CHYS_236_08	Flat	Moderate	Damp	B	3	Brown	No		Thomas	7134007	629247
CHYS_250_08	Steep hillside to E.SE and creek	Well	Damp	B	2	Light greenish/brown	Yes, to S.SW	Thick willows over hillside, thin veg, less than 20 cm soil cover	Shane	7137503	629247
CHYS_248_08	Gentle slope to SE	Well	Damp	B	2	Light brown	Yes, in creek and on hillside to NW		Shane	7137000	629248
CHYS_247_08	Moderate	Well	Damp	B	2	Greenish Brown	Yes, by creek		Shane	7136748	629249

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_253_08	Moderate hillside to E.NE	Well	Damp	B	3	Brown/green	Yes, between here and 252		Shane	7138248	629249
CHYS_254_08	Gentle	Well	Damp	B	3	Tan/golden brown	SW by gully		Shane	7138503	629250
CHYS_255_08	Steep to E	Well	Damp	A	3	Black	No	Lots of A here, very little B; just above/in treeline	Shane	7138753	629251
CHYS_252_08	Steep hillside to E.SE and gully	Well	Damp	B	2	Light brown	Yes, good exposure along S side of gully		Shane	7138010	629251
CHYS_235_08	Flat	Moderate	Damp	B	3	Brown	No		Thomas	7133753	629251.1
CHYS_251_08	Steep hillside to E.SE and creek	Well		A	1	Dark Brown	Yes, E.SE creek	Thick willows over hillside	Shane	7137758	629253
CHYS_246_08	Flat near creek	Moderate	Damp	B	1	Medium Brown	Yes, some in creek		Shane	7136502	629254
CHYS_245_08	Moderate scree slope with thin veg. cover, slope NW to creek	Good	Dry-Damp	B	1	Brown with a hint of red	Yes, in creek to NW along cliffs to SE	Very little clay, sandy pebbly soil	Shane	7136251	629259
CHYS_238_08	Moderate slope to NW, 5m of creek	Moderate	Damp	B	2	Brown	No		Thomas	7134497	629259.9
CHYS_239_08	Flat, 40m of creek	Moderate	Damp	B	4	Brown	No		Thomas	7134748.9	629260.2
CHYS_237_08	Moderate slope to SW	Moderate	Damp	B	3	Brown	No		Thomas	7134253.8	629265.1
CHYS_260_08	Steep slope near creek, slope facing S	Well	Dry	B	2	Brown	Yes, 100m E	Hard to get sample	Aiden	7134253	629493
CHYS_276_08	Steep to creek	Well	Dry	B	1	Light brown	Yes	High willows and boulders	Tubs	7138247	629493
CHYS_275_08	Steep to creek	Well	Dry	A/B	1	Light brown	Yes	High willows, big rocks	Tubs	7138003	629494
CHYS_259_08	Moderate slope facing W, dense veg., thin soil	Well	Dry	B	2	Brown	No	Difficult to get sample	Aiden	7134002	629495
CHYS_273_08	Steep to creek, high willows	Well	Damp	B	2	Dark and light brown	Yes, to SSW	Lots of boulders	Tubs	7137496	629495
CHYS_258_08	Flat valley bottom, dense brush		Moist	A	3			Soil is slightly mixed and has uneven thickness	Aiden	7133747	629496
CHYS_274_08	Steep to creek E, high willows	Well		B	2	Dark and light brown	Yes	Big boulders, thick high willows	Tubs	7137750	629499

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_272_08	Steep to creek	Well	Damp	B	1	Dark and light brown	Yes, at creek		Tubs	7137250	629500
CHYS_277_08	Steep to creek	Well	Dry	B	2	Brown	No	High willows, tall trees	Tubs	7138499	629501
CHYS_270_08	Gentle to creek	Well	Damp	B	2	Light-med. Brown		Gentle slope to creek	Tubs	7136743	629501
CHYS_271_08	Gentle to creek	Well	Damp	B	2	Light-med. Brown		Hardly any veg., a few boulders	Tubs	7136995	629501
CHYS_269_08	Steep to creek NNW	Well	Damp	B	2	Light-med. Brown		Lots of boulders	Tubs	7136495	629502
CHYS_262_08	Gentle slope in valley bottom, E of stream, some rocks but good soil in places	Well	Moist	B	3	Brown	No	Sample is brown clay	Aiden	7134750	629502
CHYS_278_08	Steep to creek E	Well	Damp	B	2	Light-med. Brown	Yes	Lots of boulders and willows	Tubs	7138741	629505
CHYS_257_08	Valley bottom, very gentle slope, thick organic soil	Moderate	Moist	A	4	Peaty black	No	Sample is peaty black clay	Aiden	7133506	629505
CHYS_261_08	Flat area on valley side, some scree	Well	Moist	A	3	Black	No	Sample is thick organic soil	Aiden	7134489	629512
CHYS_263_08	Gentle slope near creek	Well	Moist	B	4	Brown	No		Aiden	7135001	629515
CHYS_283_08	Moderate slope facing W, scree with some good soil patches	Well	Moist	B	4	Brown	No	Sample is brown clay	Aiden	7134494	629742
CHYS_285_08	Gentle slope W near creek (100m) in valley bottom. Moss covered scree, patchy soil	Well	Damp	A	4	Dark clay	No		Aiden	7134988	629742
CHYS_293_08	Flat	Moderate	Damp	B	2	Brown	Yes	Very rocky, small stones in soil, permafrost at base of scree	Thomas	7137021	629744
CHYS_296_08	Moderate slope	Well	Damp	B	2	Brown	No	Horizon is in permafrost	Thomas	7137752	629745
CHYS_284_08	Steep slope facing W, scree covered with moss, patchy soil		Dry	B	3	Brown earth	No		Aiden	7134766	629745
CHYS_295_08	Moderate slope	Moderate	Wet	B	2	Brown	No		Thomas	7137496	629747
CHYS_294_08	Gentle slope to NE	Well	Damp	B	4	Brown	Yes, 50 m to S		Thomas	7137253	629748

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_297_08	Steep to creek E	Well	Damp	B	2	Dark brown and grey	No	Willows and steep	Tubs	7138000	629748
CHYS_298_08	Steep E and W towards creeks	Well	Damp	B	2	Greyish brown	No	Thick willows	Tubs	7138253	629749
CHYS_299_08	Flat	Moderate	Damp	B	2	Greyish brown	No	Big trees high willows	Tubs	7138504	629749
CHYS_300_08	Flat	Moderate	Damp	B	2	Brownish grey	No	High willows	Tubs	7138641	629750
CHYS_281_08	Gentle slope near top of low ridge, slope to W	Well	Moist	A/B	3	Dark clay	Yes, within 5m, sandstone	Sample is mixed horizons, mostly A	Aiden	7134002	629752
CHYS_280_08	Moderate slope near dry creek, facing W	Well	Moist	A	4	Peaty black	Yes, 100m N		Aiden	7133742	629758
CHYS_282_08	Steep slope facing S down to creek	Well	Moist	B	3	Brown	Yes, 50m to W	Sample is brown clay	Aiden	7134235	629763
CHYS_279_08	Moderate slope near a very small dry creek, grassy ground	Well	Moist	A	4	Black peaty	No		Aiden	7133514	629764
CHYS_292_08	Mountain ridge, steep N	Well	Damp	B	2	Sandy brown	Yes	On top of OC, veg. visible on the slope, 70m from landslide and rock field	Archie	7136755.7	629822.4
CHYS_302_08	Steep W facing slope with grass and willow veg.	Well	Damp	B	2	Dark brown	Yes	Poor soil, boulder field with moss cover	Daithi	7133504.2	629951.8
CHYS_303_08	Bottom of side slope	Well	Damp	B	2	Creamy orangey brown	Lots of chips, poor sample		Daithi	7133778.6	629953.7
CHYS_316_08	Moderate N slope	Well	Damp	B	2	Sandy brown	Yes, to W	Veg. thick, bush starting	Archie	7136995.4	629985
CHYS_318_08	Gentle slope	Well	Wet	B	3	Brown		Bushy	Archie	7137498	629987
CHYS_304_08	Top of ridge on steep slope	Moderate	Damp	B	2	Creamy brown	Yes	Sample is clay, very dense; gossan above on hill	Daithi	7133983.8	629990.9
CHYS_308_08	Medium slope	Well	Damp	B	2		No		Kevin	7135001	629995
CHYS_322_08	Moderate W slope	Well	Dry	B	2	Brown	No	Rock field, very bushy, vegetation thick	Archie	7138493.2	629995.3
CHYS_315_08	Steep N slope	Well	Damp	B	2	Sandy brown	Yes	Rock field, veg. visible	Archie	7136707.7	629996.3
CHYS_301_08	Steep slope covered with willows	Well	Damp	B	2	Dark brown	No	Lots of little chips in soil, hard to get sample	Daithi	7133250.4	629998
CHYS_307_08	Moderate slope	Well	Damp	B	2	Dark brown	No		Kevin	7134740	629999

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CHYS_317_08	Gentle N slope	Well	Wet	B	3	Brown	No	Lots of veg.	Archie	7137264	629999
CHYS_309_08	Flat, creek 100m	Well	Damp/wet	B	4	Brown	No		Kevin	7135247	629999
CHYS_320_08	Gentle E slope	Well	Damp	B	3	Greyish brown	No	Bushy, 100m W of creek	Archie	7137986	629999.7
CHYS_319_08	Flat, beside river, N slope	Moderate	Wet	B	1	Sandy grey	No	Sandy texture, very bushy	Archie	7137762.7	630003.4
CHYS_321_08	Gentle E slope	Well	Wet	A	1	Black	No	Very big trees, a thick white brush	Archie	7138207.1	630005.9
CHYS_305_08	Ridge of steep slope	Well	Damp	B	3	Orangey brown	Yes	Sample is silty clay	Daithi	7134273.7	630053.8
CHYS_306_08	Steep slope, boulder field, scree and talus, little island of soil	Well	Damp	B	3	Dark brown	Yes		Daithi	7134450.5	630062.4
CHYS_325_08	Steep S slope	Well	Damp	B	2	Brown	Yes, at this point	Veg. present	Archie	7133459.5	630198
CHYS_323_08	Steep slope above river	Moderate	Wet	B	3	Silty grey to brown clay	Yes, lots		Daithi	7133003.2	630209.4
CHYS_326_08	Steep W slope	Well	Damp	B	1	Brown	Yes	Boulders and veg. present	Archie	7133745.1	630227.9
CHYS_324_08	Steep slope with willow	Well	Damp	B	2	Dark brown	Yes		Daithi	7133224.1	630231
CHYS_339_08	Moderate N slope	Well	Damp	B	2	Sandy brown	Yes, to E	Bushy, sandy texture	Archie	7137003.3	630242.1
CHYS_331_08	Moderate slope, NE	Well	Damp	A			No		Kevin	7134995	630243
CHYS_332_08	Flat	Well	Damp/Dry	B	2		No	Lots of small rocks in soil	Kevin	7135254	630245
CHYS_344_08	Steep, SW	Well	Damp/wet	B	3	Grey	No		Kevin	7138251	630247
CHYS_340_08	Gentle N slope	Well	Wet	B	3	Brown	No	Beside mounatin creek runoff, veg. plentiful	Archie	7137250	630249
CHYS_330_08	Steep, NE	Well	Damp	B	3	Brown	Yes		Kevin	7134743	630251
CHYS_343_08	Steep, S	Well	Damp	B	2	Brown	No		Kevin	7138000	630252
CHYS_338_08	Steep N slope	Well	Damp	A	1	Black	Yes	Above OC, no clay, just black soil	Archie	7136748.3	630254.7
CHYS_342_08	Moderate slope, S	Moderate	Damp/wet	B	3	Grey	No		Kevin	7137760	630255
CHYS_341_08	Steep, S cliff and creek 5m	Moderate	Wet	B	4	Grey	Yes		Kevin	7137597	630265
CHYS_329_08	Top of ridge	Moderate	Wet	B	4	Dark brown	Yes	A sample of sulphide vein was taken on the way up; Also area of sulphide showed stockwork veining in the talu and scree	Daithi	7134527.4	630294.3

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_328_08	Very steep slope	Well	Damp	B	3	Orangey brown	Yes	Good sample on steep slumped slope. Soil is more sandy here than seen before, with sandy gritty texture; area is underlain by the gritty pebble conglomerate	Daithi	7134249.9	630306.1
CHYS_362_08	Steep	Well	Damp	A	1	Brown	Yes		Tubs	7137027	630446
CHYS_349_08	Steep S slope	Well	Damp	B	2	Brown	Yes	As close to station as possible, veg. visible	Archie	7133805.3	630472.1
CHYS_366_08	Gentle sloped bench on hillside	Moderate	Damp	B	3	Brown	Yes		Shane	7138005	630486
CHYS_363_08	Moderate N slope	Well	Wet	B	3	Brown	No	Edge of bush line, boulders everywhere	Archie	7137253	630489
CHYS_367_08	Steep, SW	Well	Damp/Dry	B	2	Grey	Yes		Kevin	7138249	630490
CHYS_347_08	Steep S slope	Well	Dry	A	1	Black	Yes	Sample taken below outcrop, veg. getting thick	Archie	7133255.1	630491.7
CHYS_361_08	Steep N slope	Well	Damp	B	1	Sandy brown	Yes	Taken below OC, more sand than clay	Archie	7136784.3	630492.2
CHYS_354_08	Moderate slope	Well	Damp	B	4	Brown	No		Kevin	7135000	630494
CHYS_358_08	Steep W	Well	Damp/Wet	B	2	Brown	No		Kevin	7135987	630494
CHYS_364_08	Gentle slope S, creek at 30m	Well	Damp	A	3	Black	No		Kevin	7137503	630495
CHYS_355_08	Flat	Poor	Wet	B	4	Dark brown	No		Kevin	7135248	630497
CHYS_348_08	Very steep S slope	Well	Damp	B	2	Brown	Yes	Veg. growing	Archie	7133513.4	630497.2
CHYS_353_08	Steep, NE	Well	Damp	B	4	Brown	Yes		Kevin	7134754	630501
CHYS_357_08	Medium slope, SW	Well	Damp	B	3	Brown	No		Kevin	7135762	630501
CHYS_356_08	Gentle slope	Well	Damp	B	3	Light brown	No		Kevin	7135500	630502
CHYS_365_08	Steep hillside to S with tall willows	Good	Dry/Damp	A	1	Dark brown/bl ack	No		Shane	7137750	630505
CHYS_351_08	Steep slope/cliff, lots of OC, good soil but shallow	Well	Damp	B	3	Reddy brown	Yes, lots	Because of underlying rock, difficult to get proper depth; sample is clay	Daithi	7134190.8	630505.1
CHYS_359_08	Steep W	Well	Dry	B	2	Brown/bl ack	No		Kevin	7136256	630508
CHYS_360_08	Medium slope, W	Well	Damp/Dry	A	3	Black	No		Kevin	7136503	630511
CHYS_346_08	Moderate NE slope	Well	Damp	B	2	Brown	Yes	S side of creek	Archie	7133001.8	630524.1

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_350_08	Half way down a slope on a ridge, taken short to get soil	Well	Damp	B	3	Dark brown	Yes	Sample is clay and soil, some chips	Daithi	7133879.9	630529.3
CHYS_352_08	Flat, on a narrow ridge	Moderate	Damp	A	1	Black	Yes, at 7m	Soil had no clay, poor sample	Thomas	7134466.2	630576.4
CHYS_389_08	Moderate overgrown talus slope to S with scrub willow and stunted pine	Well	Dry/Damp	B	2	Golden brown	Yes		Shane	7137996	630740
CHYS_378_08	Flat area, 30 m from creek	Poor	Damp	B	4	Brown	No		Thomas	7135255	630742
CHYS_387_08	Gentle slope S	Moderate	Damp/wet	B	3	Grey	No		Kevin	7137506	630745
CHYS_384_08	Steep NW slope	Well	Dry	B	2	Sandy brown	Yes	Boulder field, below mountain face	Archie	7136728.3	630746
CHYS_370_08	Steep E, cliffs right behind	Well	Dry	A	3	Brown	Yes		Kevin	7133266	630747.3
CHYS_386_08	Gentle N slope	Well	Wet	B	2	Sandy brown	Yes	Bushy area, veg. plentiful	Archie	7137248	630748
CHYS_392_08	Moderate slope to SW	Well	Damp	B	1	Brown	No		Thomas	7138754	630750
CHYS_372_08	Steep S slope	Well	Damp	A	1	Brownish black	No	Veg. covering all around	Archie	7133768.7	630751
CHYS_390_08	Steep. SW	Moderate	Damp/Wet	B	2	Grey	No		Kevin	7138247	630752
CHYS_369_08	Gentle	Well	Damp	B	2	Brownish black	Yes, by creek	Veg. visible but not thick	Archie	7133009	630752.1
CHYS_388_08	Steep slope to S overgrown by stunted willows	Well	Dry/Damp	B	2	Light golden brown	No		Shane	7137750	630753
CHYS_368_08	Steep shale/talus slope	Well	Damp	A	1	Dark brown	Yes, well bedded wine phyllites	Very poor sample taken between rocks and shale interface, no 'soil' here	Shane	7132744.9	630753.3
CHYS_391_08	Gentle slope to SE	Moderate	Damp	B	3	Brown	No		Thomas	7138514	630754
CHYS_377_08	Gentle slope to N	Moderate	Damp	B	4	Brown	No		Thomas	7135020	630754
CHYS_379_08	Gentle slope to NE	Moderate	Damp	B	4	Brown	No		Thomas	7135501	630755
CHYS_371_08	Steep SE	Well	Damp/Dry	B	3	Brown	Yes		Kevin	7133514.3	630760.3
CHYS_374_08	Moderate slope to SW	Moderate	Damp	B	1	Grey brown	Yes, at 40m		Thomas	7134248.5	630761.3
CHYS_376_08	Steep slope to NE	Well	Dry	A	1	Brown	Yes, at 20m		Thomas	7134787	630775
CHYS_375_08	Flat on ridge near the top	Moderate	Damp	B	3	Brown	Yes, at 10m		Thomas	7134414	630786.9
CHYS_383_08	Steep cliffs SW	Well	Damp/dry	B	3	Light brown/ye llow	Yes		Kevin	7136459.7	630801.9
CHYS_382_08	Moderate slope SW, boulders	Moderate	Damp	B	3	Light brown/ye llow	No		Kevin	7136273.5	630857.6

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_401_08	Moderate slope to N near the top	Moderate	Damp	B	1	Brown	Yes, at this point		Thomas	7134169.5	630924.1
CHYS_420_08	Moderate slope to S	Well	Dry	B	2	Brown	Yes, at 30m		Thomas	7138966	630980
CHYS_407_08	Moderate slope to SE	Well	Damp	B	2	Brown	No		Thomas	7135747	630983
CHYS_410_08	Steep, cliffs W	Well	Damp	B	3	Brown	Yes		Kevin	7136533.3	630983.8
CHYS_395_08	Steep shale/talus slope	Well	Damp	A	1	Brown to brown-black	Yes, wine phyllites	Poor sample, very little clay, all roots and shale	Shane	7132731.8	630991.7
CHYS_408_08	Moderate slope to SW	Well	Dry	A	1	Brown	No	Sample contained no clay, gravel and rockas all around, v. little veg.	Thomas	7135960	630992
CHYS_404_08	Flat area, bottom of valley, 3 m from big rock avalanche(*)	Poor	Damp	B	4	Light brown	Yes, at 20m		Thomas	7135011	630992
CHYS_419_08	Moderate slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7138759	630998
CHYS_405_08	Moderate slope to S, at 50m of creek	Moderate	Damp	B	2	Brown	No		Thomas	7135251	630998
CHYS_418_08	Gentle slope to W	Moderate	Damp	B	2	Brown	No		Thomas	7138497	630998
CHYS_415_08	Steep slope to S	Well	Damp	A	2	Light brown	No		Shane	7137754	630998
CHYS_411_08	Steep NW, boulders	Well	Damp	B	3	Brown	Yes		Kevin	7136750	630999
CHYS_414_08	Moderate slope, S	Well	Damp	A	3	Black	No		Kevin	7137503	630999
CHYS_398_08	Moderate slope S	Well	Damp/Dry	B	3	Dark brown	No		Kevin	7133505.9	631000.2
CHYS_417_08	Steep, SW	Moderate	Damp	B	2	Brown	No		Kevin	7138246	631000
CHYS_396_08	Moderate	Well	Damp	B	3	Grey brown	Yes	Vegetaion, rocks	Tubs	7132992.5	631000.7
CHYS_406_08	Moderate slope to SE	Moderate	Damp	B	3	Brown	No		Thomas	7135500	631001
CHYS_403_08	Steep slope to NE	Well	Dry	B	1	Brown	Yes, at 30m		Thomas	7134792	631003
CHYS_416_08	Moderate overgrown talus slope to S	Well	Damp	A	2	Medium to dark brown	Yes, to NW		Shane	7138001	631003
CHYS_399_08	Steep S slope	Well	Damp	B	2	Brown	Yes	Veg. visible	Archie	7133754.5	631004.1
CHYS_413_08	Flat, bottom of mtn.	Well	Wet	B	3	Brown	Yes	Lots of veg.	Archie	7137254	631004
CHYS_402_08	Steep slope to E	Moderate	Damp	B	3	Brown	Yes, at 5m		Thomas	7134498.5	631006.7
CHYS_409_08	Steep SW, boulders	Well	Damp	B	3	Light brown	Yes		Kevin	7136295.9	631018.7
CHYS_400_08	Small island of dirt on a scree slope	Well	Damp	B	1		Yes	Good area for structure 200-s	Daithi	7134042.2	631026.3

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_393_08	Moderate slope facing SW, low brush	Moderate	Moist		3	Grey-rusty	No	Sample is clay with some grit	Aiden	7130503.1	631027.2
CHYS_394_08	Moderate slope to N	Moderate	Damp	B	3	Brown	No		Thomas	7130716.3	631029.8
CHYS_412_08	Steep	Well	Wet	B	3	Grey brown	Yes	Boulder city	Tubs	7137036	631035
CHYS_397_08	Moderate	Well	Damp	B	2	Brown	Yes	Boulders	Tubs	7133273.3	631067.5
CHYS_444_08	Steep N/S	Well	Damp	B	3	Brown	Yes	Boulder city	Tubs	7137017	631219
CHYS_431_08	Steep S slope	Well	Damp	B	2	Brown	Yes	This is as close as it is possible to get to station	Archie	7133781.6	631220
CHYS_423_08	Gentle slope to N	Moderate	Damp	B	3	Brown	No		Thomas	7130750.3	631233.9
CHYS_426_08	Moderate slope to S and creek	Well	Damp	B	2	Golden brown	Yes	Overgrown talus	Shane	7132499.9	631241.9
CHYS_434_08	Moderate slope to N	Well	Damp	B	1	Brown	Yes, at 10m		Thomas	7134508.7	631242.2
CHYS_450_08	Moderate slope to W	Moderate	Damp	B	2	Brown	No		Thomas	7138497	631245
CHYS_438_08	Steep	Well	Damp	B	2	Brown	Yes	High willows, boulders	Tubs	7135499	631248
CHYS_425_08	Gentle slope to SW	Moderate	Damp	B	3	Brown	No		Thomas	7131250.2	631249.1
CHYS_445_08	Gentle N slope	Well	Wet	B	3	Brown	No	Lots of bushes and veg.	Archie	7137249	631250
CHYS_428_08	Moderate	Well	Damp	B	3	Brown	Yes	Vegetation, boulders	Tubs	7133000.2	631251.2
CHYS_443_08	Steep NW, boulders	Well	Damp	B	2	Light brown	Yes		Kevin	7136748	631251
CHYS_436_08	Flat	Moderate	Damp/wet	B	3	Brown	No	High willows	Kevin	7134998.2	631251.8
CHYS_439_08	Steep	Well	Damp	B	2	Light to dark brown	Yes	Boulder fields	Tubs	7135675	631252
CHYS_447_08	Steep slope to S	Well	Damp	B	2	Light brown with a hint of grey	Yes, to E		Shane	7137751	631253
CHYS_448_08	Moderate slope to S	Well	Damp	B	1	Brown	Yes, to E		Shane	7137999	631254
CHYS_427_08	Steep talus slope to N and creek	Well	Damp	B	2	Brown	No	Oxidised coarse grained brown coloured qtz-rich metagreywacke	Shane	7132750.7	631254.1
CHYS_430_08	Moderate slope SW	Well	Damp	B	2	Dark brown	No		Kevin	7133505.9	631254.1
CHYS_449_08	Steep SW	Moderate	Damp	B	3	Brown	Yes		Kevin	7138251	631255
CHYS_435_08	Steep N/S	Well	Damp	B	3	Brown	Yes, S	Lots of boulders, steep to S, no veg.	Tubs	7134752	631256

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_422_08	Moderate slope facing W, low bush, slightly rocky ground	Well	Damp	B	3	Brown		Sample is brown clay with some grit	Aiden	7130508.4	631257.9
CHYS_441_08	Steep SW, boulders	Well	Dry	B	3	Brown	No		Kevin	7136260	631258
CHYS_432_08	Top of ridge	Well	Damp	B	1		Yes	Very poor sample, little soil	Daithi	7134071.9	631258.1
CHYS_424_08	Moderate	Well	Damp	B	3	Brown	Yes	Willows, boulders	Tubs	7130989.7	631258.2
CHYS_437_08	Gentle	Well	Damp	B	2	Dark and light brown	No	Willows	Tubs	7135247	631264
CHYS_429_08	Steep	Well	Damp	B	2	Brown	Yes	Vegetation, boulders	Tubs	7133240	631266
CHYS_451_08	Moderate slope to SE	Moderate	Dry	B	2	Brown	No		Thomas	7138698	631276
CHYS_442_08	Steep NW	Well	Damp	B	3	Light brown	Yes		Kevin	7136513.1	631278.2
CHYS_433_08	Flat, on a ridge near the top	Moderate	Damp	B	1	Brown	No		Thomas	7134073.1	631293.6
CHYS_421_08	Gentle slope W, bushes	Well	Damp	B	3	Grey	No		Kevin	7130255.1	631295.7
CHYS_474_08	Steep NE, on ridge	Well	Damp	B	3	Light brown/ye llow	Yes		Kevin	7136253	631426.9
CHYS_484_08	Steep slope to SW	Well	Dry	B	1	Brown	No		Thomas	7138670	631473
CHYS_475_08	Steep, cliffs NW	Well	Damp/dry	B	3	Brown	Yes		Kevin	7136485.4	631473.6
CHYS_452_08	Gentle slope W	Well	Dry	B	1	Brown grey	Yes		Kevin	7130244.6	631475.7
CHYS_476_08	Steep N	Well	Damp	B	1	Light brown	Yes		Kevin	7136737	631484
CHYS_465_08	Peak of hill on ridge, little soil, barren	Well	Damp	B	1	Light to creamy brown	Yes	Very poor sample, all chips with little or no soil	Daithi	7134047.1	631484.4
CHYS_470_08	Moderate, steep to N	Well	Damp	B	2	Light to dark brown	Yes	Boulders	Tubs	7135262	631488
CHYS_478_08	Gentle NE slope, beside river, S side	Well	Wet	B	3	Brown	No		Archie	7137235	631488
CHYS_456_08	Moderate	Well	Damp	B	3	Brown grey	Yes	Willows	Tubs	7131228.5	631488.9
CHYS_457_08	Flat	Moderate	Damp	B	3	Brown grey	No		Thomas	7131492.1	631493
CHYS_454_08	Gentle slope to N	Well	Damp	B	3	Brown	No		Thomas	7130752.5	631493.2
CHYS_469_08	Flat	Well	Damp	B	2	Brownish grey	No	High willows	Tubs	7134996	631493

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_473_08	Steep N/S	Well	Damp	B	2	Dark brown	Yes	Boulder field	Tubs	7135923	631495
CHYS_459_08	Moderate talus slope to S	Well	Damp	B	2	Light brown	Yes, to W	Overgrown talus, some willow cover	Shane	7132502.1	631496.1
CHYS_467_08	Steep slope to N	Well	Damp	B	1	Brown	Yes, at this point		Thomas	7134556.1	631498
CHYS_468_08	Flat, steep cliff 60-70m S	Well	Damp	B	3	Brown	Yes, to S		Tubs	7134754	631499
CHYS_481_08	Gentle slope to SE	Well	Damp	B	2	Medium brown	Yes, to NE		Shane	7138003	631499
CHYS_482_08	Moderate slope N	Well	Damp/Dry	B	2	Brown	Yes, S 20m		Kevin	7138249	631500
CHYS_461_08	Moderate	Well	Damp	B	2	Grey brown	Yes	Boulders	Tubs	7133001.3	631500.4
CHYS_471_08	Steep N/S	Well	Damp	B	2		Yes	Boulders	Tubs	7135505	631501
CHYS_472_08	Steep N/S/E	Well	Damp	B	1	Light to dark brown	Yes	Boulders	Tubs	7135753	631503
CHYS_455_08	Moderate	Well	Damp	B	2	Brown	Yes	Willows, boulders	Tubs	7131004.5	631503.4
CHYS_453_08	Gentle slope facing W, low vegetation	Well	Moist	B	3	Brown	No	Sample is brown clay	Aiden	7130496.7	631507.2
CHYS_480_08	Steep hillside facing SW, grass and small bush	Well	Moist	B	2	Brown	Yes, 70m N		Aiden	7137753	631508
CHYS_479_08	Gentle slope facing S, in valley bottom	Well	Moist	B	3	Brown	No		Aiden	7137507	631509
CHYS_483_08	Steep slope to W	Moderate	Damp	B	1	Brown	Yes, at 50m		Thomas	7138513	631510
CHYS_462_08	Steep W	Well	Damp	B	2	Brown	No		Kevin	7133259.9	631512.9
CHYS_460_08	Steep	Well	Damp	B	1	Grey	Yes	Boulders	Tubs	7132744.9	631529.1
CHYS_458_08	Moderate slope to S	Well	Dry/Damp	B	3	Light brown	No	Overgrown talus	Shane	7132318.1	631532.1
CHYS_477_08	Steep N/S	Well	Damp	A	1	Brown	Yes	Boulder field	Tubs	7137020	631539
CHYS_464_08	Steep S slope	Well	Damp	B	1	Brown	Yes	Boulder field	Archie	7133755.9	631555.9
CHYS_463_08	Steep SW	Well	Damp	B	3	Dark brown	Yes		Kevin	7133527.4	631556.5
CHYS_519_08	Steep slope to W	Moderate	Damp	B	1	Purple brown	Yes, at 4m		Thomas	7138475	631677
CHYS_510_08	Steep, cliffs N	Well	Damp	A	3	Black	Yes		Kevin	7136264	631711.7
CHYS_506_08	Gentle S slope	Well		B	2	Brown	No	Vegetation plentiful	Archie	7135252.3	631723.6
CHYS_511_08	Steep slope to E	Moderate	Damp	A	1	Black	Yes, at 10m		Thomas	7136505	631727
CHYS_496_08	Steep	Well	Damp	B	2	Brown	Yes	Boulders	Tubs	7132748	631732.1
CHYS_507_08	Moderate S slope	Well	Damp	A	2	Black	Yes	Vegetation present, sample taken below OC	Archie	7135494.9	631736.2

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_485_08	Gentle slope to S	Moderate	Damp	B	2	Brown	No	Green area surrounded by flat (volcanic*) rocks	Thomas	7130005.5	631739.4
CHYS_515_08	Moderate slope facing SW, near small creek	Well	Moist	B	3	Brown	Yes, 25m NW	Sample is brown clay	Aiden	7137504	631743
CHYS_514_08	Flat, beside river on N side of river	Well	Wet	B	4	Greyish brown	Yes	Brush thick	Archie	7137241	631745
CHYS_500_08	Steep SW slope, on mtn. ridge	Well	Damp	B	1	Brown	Yes	Grass and moss growing	Archie	7133749.2	631746.2
CHYS_494_08	Moderate slope, by gully, to SE	Well	Damp	B	2	Brown	Yes, up gully to NE	Overgrown talus, 2-4 ft willows	Shane	7132246.1	631747.7
CHYS_505_08	Gentle slope SW	Well	Dry	B	2	Brown	Yes		Kevin	7135001.5	631748.1
CHYS_513_08	Flat	Well	Damp	B	3	Brown	Yes	Willows, crossed two creeks	Tubs	7136992	631751
CHYS_491_08	Moderate	Well	Damp	B	2	Brown	Yes	Willows, boulders	Tubs	7131497.7	631750.9
CHYS_487_08	Moderate slope facing W, low vegetation	Well	Damp	B	3	Brown	Yes, 40m E		Aiden	7130498.2	631751.1
CHYS_518_08	Moderate slope N	Well	Damp/Dry	B	2	Brown	No		Kevin	7138246	631752
CHYS_495_08	Moderate slope to SE	Well	Damp	B	1	Brown	Yes, to SE	Overgrown talus, willow and juniper, outcrop is Fe oxidised	Shane	7132508.2	631752.2
CHYS_504_08	Flat, creek 10m N	Well	Damp	B	3	Brown	No		Kevin	7134745.4	631752.4
CHYS_512_08	Moderate slope NE, boulders	Well	Damp	B	2	Brown	Yes		Kevin	7136752	631753
CHYS_490_08									Tubs	7131251.6	631753.7
CHYS_503_08	Steep slope to N	Well	Damp	B	1	Brown	Yes, at 10m		Thomas	7134508.3	631753.7
CHYS_517_08	Moderate slope to SSE	Well	Damp	B	2	Medium brown	No		Shane	7138006	631756
CHYS_497_08	Steep	Well	Damp	B	2	Brown	Yes	Loose boulders	Tubs	7132981.3	631759.7
CHYS_509_08	Steep S slope	Well	Damp	B	2	Brown	Yes	Vegetation visible, rock field	Archie	7136032	631760.8
CHYS_492_08	Flat, 5m from creek	Moderate	Damp	B	2	Brown	No		Thomas	7131716.8	631763.2
CHYS_516_08	Steep S facing slope in gully	Well	Moist	B	2	Brown	Yes, 25m SE in gully	Soil is rocky	Aiden	7137753	631764
CHYS_486_08	Gentle slope W	Well	Damp	B	2	Brown	No		Kevin	7130253.3	631765.1
CHYS_489_08	Flat	Moderate	Damp	B	3	Brown	No		Thomas	7130977	631769.6
CHYS_508_08	Steep	Well	Wet	B	3	Brown	Yes	On top of outcrop area	Archie	7135798.8	631773.1
CHYS_499_08	Steep SE	Well	Damp/Dry	B	2	Brown	No		Kevin	7133632.6	631787.2
CHYS_498_08	Moderate slope W	Well	Damp	B	2	Brown	No		Kevin	7133281.5	631788.3
CHYS_493_08	Moderate, near valley floor to SE	Well	Damp	A	1	Dark grey brown	Yes, to E	Poor sample again, very little soil, sample taken just below moss, talus overgrown by moss and 3-4 ft willows	Shane	7131999.9	631808.8
CHYS_488_08	Gentle slope	Moderate	Damp	B	1	Brown		Poor soil at point, had to search surrounding area	Julius	7130782.1	631831.3
CHYS_544_08	Top of mtn, steep S slope	Well	Damp	B	2	Brown	Yes	Vegetation visible	Archie	7135900.5	631919.1

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_529_08	Moderate slope to SW	Well	Damp	A	2	Light brown/gray	No	Overgrown talus, stunted willows, taken 29m from waypoint	Shane	7132256.4	631976.9
CHYS_546_08	Moderate slope to E	Well	Damp	B	1	Grey	No		Thomas	7136491	631979
CHYS_542_08	Steep S slope, avalanche area	Well	Damp	B	1	Brown	No	Lots of sand in sample, rock pile	Archie	7135543.4	631979.8
CHYS_524_08	Flat	Moderate	Damp	B	3	Brown	No		Thomas	7130953.8	631980.7
CHYS_528_08	Flat/gently sloping valley floor	Well	Damp	B	2	Golden brown	No	4-5 ft willow overgrowth	Shane	7132000.8	631988.2
CHYS_525_08	Steep	Well	Damp	B	2	Grey brown	Yes	Willows, boulders	Tubs	7131263.6	631990.2
CHYS_521_08	Gentle slope SW	Well	Damp	B	2	Brown	Yes		Kevin	7130251	631995
CHYS_543_08	Steep SW slope, cliff NE slope	Well	Damp	B	2	Brown	Yes	On top of mtn. ridge, grass and moss visible	Archie	7135741.8	631998.9
CHYS_551_08	Steep hillside slopes to S above gully	Well	Moist	B	2	Brown	Yes, between here and 516, with qtz stockwork		Aiden	7137747	631999
CHYS_520_08	Gentle slope to SE	Moderate	Damp	B	3	Brown	No		Thomas	7129998.3	631999.9
CHYS_553_08	Moderate slope, W	Well	Damp	B	2	Grey	No		Kevin	7138243	632001
CHYS_534_08	Steep S	Well	Damp/Dry	B	2	Brown	Yes		Kevin	7133469.6	632000.7
CHYS_548_08	Flat	Well	Damp	B	3	Greyish	Yes	Willows	Tubs	7137001	632001
CHYS_539_08	Flat	Well	Damp	B	4	Brown	No		Kevin	7134751.8	632001.1
CHYS_527_08	Flat	Moderate	Damp	B	3	Brown	No		Thomas	7131754.8	632002.6
CHYS_552_08	Steep slope to W and creek	Well	Damp	B	1	Medium brown	No		Shane	7138003	632004
CHYS_530_08	Moderate slope to W	Well	Damp	B	1	Brown	No	Overgrown talus	Shane	7132499.3	632004.2
CHYS_547_08	Flat, creek 100m E	Moderate	Wet	B	4	Light brown	No		Kevin	7136748	632004
CHYS_526_08	Steep	Well	Dry	A	1	Brown	Yes	Willows, boulders	Tubs	7131498.9	632004.7
CHYS_549_08	Gentle S slope	Well	Damp	B	2	Brown	Yes, 100m NE	Shrubs and veg. abundant	Archie	7137252	632006
CHYS_531_08	Steep SW	Well	Dry	B	2	Brown	No		Kevin	7132760.9	632008.7
CHYS_540_08	Steep SW	Well	Dry	B	3	Brown	No		Kevin	7134987.5	632008.9
CHYS_541_08	Steep S slope	Well		B	2	Brown	Yes	Vegetation present, rock field	Archie	7135239.8	632010.1
CHYS_522_08	Steep hillside facing N, scree, very little soil	Well	Moist		1		Yes	Grit in sample	Aiden	7130516.1	632010.2
CHYS_550_08	Moderate slope facing W near valley bottom, rocky thin soil	Well	Moist	B	1	Brown	No	No A horizon	Aiden	7137485	632012
CHYS_532_08	Steep NW	Well	Damp/Dry	B	3	Brown	Yes		Kevin	7132987.9	632019.7
CHYS_533_08	Steep NW	Well	Damp/Dry	B	3	Light brown	No		Kevin	7133181.1	632023.1

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_538_08	Gentle slope NE	Poor	Wet	B	4	Light brown	Yes		Kevin	7134515.4	632026.1
CHYS_536_08	Steep	Well	Damp	B	2	Brown	Yes	Cliffs, boulders	Tubs	7133976.1	632032.1
CHYS_545_08	Steep NE, cliffs	Well	Damp/dry	B	3	Brown	Yes		Kevin	7136244.7	632054.6
CHYS_523_08	Gentle slope	Well	Damp	B	3	Grey			Julius	7130796.8	632055.7
CHYS_584_08	Moderate slope facing W, scree with thin patchy soil, near valley bottom	Well	Dry		1		No		Aiden	7137502	632175
CHYS_562_08	Steep	Well	Dry	A	1	Brown	Yes	Loose boulders	Tubs	7131498	632184.2
CHYS_575_08	Steep S slope	Well	Damp	B	2	Brown	Yes	Beneath outcrop	Archie	7135208	632195
CHYS_565_08	Steep SE	Well	Dry	B	2	Light brown	No		Kevin	7132815.1	632228.4
CHYS_557_08	Moderate slope SW	Well	Damp	B	3	Brown	Yes		Kevin	7130232.8	632237.7
CHYS_579_08	Steep slope NE				2	Rusty brown	Yes, overlaying rusty brown outcrop, mineralised rock		Aiden	7136217	632240
CHYS_576_08	Moderate W slope	Well	Damp	B	2	Brown	Yes	On top of mtn. ridge, grass and moss present	Archie	7135501.4	632243.9
CHYS_579A_08	Steep NE	Well	Damp	B	2	Brown	Yes		Kevin	7136230.1	632243.9
CHYS_577_08	Moderate slope to N	Well	Damp	B	2	Brown	Yes, at 40m		Thomas	7135742.2	632245.3
CHYS_583_08	Steep S slope	Well	Damp	B	1	Sandy brown	No	Brush, moss and grass present	Archie	7137259	632248
CHYS_586_08	Steep slope to W and creek	Well	Damp	B	1	Grey brown	Yes		Shane	7138032	632249
CHYS_573_08	Moderate slope SW	Well	Damp	B	3	Brown	No		Kevin	7134751.4	632249.4
CHYS_587_08	Gentle slope W	Well	Damp/Dry	B	2	Grey	No		Kevin	7138252	632249
CHYS_556_08	Moderate slope to SW	Moderate	Damp	B	3	Grey brown	No		Thomas	7129996.1	632250.2
CHYS_572_08	Flat	Well	Damp	B	4	Brown	Yes		Kevin	7134496.8	632250.7
CHYS_580_08	Flat, at foot of mountain	Moderate	Damp	B	3	Brown	No		Thomas	7136501	632251
CHYS_581_08	Flat, swamp	Poor	Wet	B	4	Light brown	No		Kevin	7136751	632253
CHYS_582_08	Moderate	Well	Damp	B	2	Brown grey	Yes	Willows, loose boulders	Tubs	7136992	632259
CHYS_585_08	Moderate SW facing slope	Well	Moist		2	Grey		Soil is slightly rocky/gritty	Aiden	7137743	632259
CHYS_578_08	Moderate slope NW, on a small plateau, boulders	Well	Damp	B	2	Brown	Yes		Kevin	7135968.4	632259.5

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_563_08	Gentle slope to NW and creek	Well	Damp	B	2	Dark grey brown	Yes	Overgrown talus, light willow cover	Shane	7131751.7	632260
CHYS_569_08	Steep	Well	Damp	B	2	Brown	Yes	Boulders	Tubs	7133793.9	632260.1
CHYS_561_08	Steep	Well	Damp	B	3	Grey	Yes	Willows, boulders	Tubs	7131264.8	632260.4
CHYS_574_08	Steep SW	Well	Damp	B	3	Brown	Yes		Kevin	7134983.3	632266.6
CHYS_558_08	Steep slope facing N, very stony, little to no soil	Well	Dry	B	1		Yes, shale outcrop nearby, also metagreywacke		Aiden	7130488.5	632271.4
CHYS_560_08	Flat	Well	Damp	B	3	Brown	No		Thomas	7130939.5	632274.2
									Kevin	7132901.8	632292.4
CHYS_559_08	Gentle slope	Moderate	Damp	B	1	Dark brown		Very poor sample, had to scrape and dig	Julius	7130782.3	632312.3
CHYS_555_08	Gentle slope S	Well	Damp	B	3	Brown	No		Kevin	7129782.2	632313
CHYS_611_08	Moderate slope NW	Well	Damp	B	3	Brown	Yes		Kevin	7135982	632447.9
CHYS_594_08	Steep slope	Moderate	Damp	B	1	Brown			Julius	7131025.8	632469.6
CHYS_618_08	Steep slope to W, rocky scree with grass patches	Well	Moist		2				Aiden	7137766	632475
CHYS_595_08	Steep	Well	Damp	B	3	Grey	Yes	Boulders	Tubs	7131253	632482.6
CHYS_610_08	Moderate slope to N, near cliffs	Moderate	Wet	B	3	Brown	Yes, at .5m		Thomas	7135753.7	632490.3
CHYS_608_08	Steep S slope, W slope cliff	Well	Wet	B	3		Yes	On top of ridge, grass and moss present, boulders everywhere	Archie	7135295.5	632490.8
CHYS_615_08	Steep N/S	Well	Damp	B	3	Brown	Yes	Boulder field	Tubs	7136997	632491
CHYS_616_08	Steep SW slope	Well	Damp	B	2	Brown	Yes	Veg. visible, rocky area with boulders	Archie	7137255	632498
CHYS_613_08	Gentle slope to W, in valley	Moderate	Damp	B	4	Brown	No		Thomas	7136500	632499
CHYS_612_08	Flat slope, near creek	Poor	Wet	B		Grey			Aiden	7136251	632500
CHYS_617_08	Steep hillside facing SW, some scree	Well	Moist	B	2	Brown	Yes, 50m S	Sample is a brown earth	Aiden	7137494	632500
CHYS_619_08	Flat area in saddle	Moderate	Damp	B	2	Grey brown	Yes, to S and N on ridge and saddle peripheries		Shane	7138002	632500
CHYS_614_08	Gentle slope W	Moderate	Damp/wet	B	4	Brown	No		Kevin	7136748	632502
CHYS_612A_08	Flat, swamp	Poor	Wet	B	4	Grey brown	No		Kevin	7136254.1	632502
CHYS_596_08	Moderate	Well	Damp	B	3	Grey	Yes	Steep all around	Tubs	7131450.3	632502.1
CHYS_606_08	Steep SW	Well	Damp	A	3	Brown	No		Kevin	7134747.2	632502.7
CHYS_590_08	Moderate slope to S	Moderate	Damp	B	2	Brown	No		Thomas	7130006.2	632502.9

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_605_08	Gentle slope SW	Well	Damp/wet	B	4	Light brown	No		Kevin	7134492.7	632503.2
CHYS_609_08	Steep slope to SE, in a cliff	Well	Damp	B	3	Brown	Yes, at .5m, all around		Thomas	7135488.2	632505.4
CHYS_607_08	Steep SW	Well	Damp	B	3	Brown	Yes		Kevin	7134995.4	632509
CHYS_592_08	Steep slope facing N, thin stony soil	Well	Moist	B	1		Yes, MGW and qtzite OC very near		Aiden	7130492	632512.8
CHYS_590B_08	Moderate slope SW	Well	Damp	B	3	Brown	No		Kevin	7130034.5	632522.9
CHYS_599_08	Steep S	Well	Damp/Dry	A	2	Black	Yes		Kevin	7133024.6	632524.9
CHYS_593_08	Gentle slope	Poor	Wet	B	1	Brown		Near creek	Julius	7130794.7	632552
CHYS_589_08	Moderate slope SW	Well	Damp/dry	B	3	Brown	No		Kevin	7129787.7	632560.6
CHYS_625_08	Gentle slope	Well	Damp	B	3	Brown			Julius	7130813.5	632722.4
CHYS_638_08	Steep, cliffs N	Well	Dry	B	4	Light brown	Yes	Sample taken on ridge	Kevin	7135153.4	632724.5
CHYS_622_08	Moderate slope to S, near tor	Moderate	Damp	B	3	Brown	Yes, at 10m		Thomas	7130004	632742
CHYS_642A_08	Flat	Well	Damp	B		Dark brown	No		Kevin	7136251.9	632745.3
CHYS_627_08	Steep	Well	Damp	B	2	Grey brown	Yes	Boulders, veg.	Tubs	7131305.1	632746.6
CHYS_643_08	Flat, in valley	Poor	Damp	B	3	Green brown	No		Thomas	7136501	632748
CHYS_628_08	Flat on top	Well	Damp	B	3	Brown grey	Yes	Steep hillside	Tubs	7131454	632749.3
CHYS_646_08	Steep S slope	Well	Damp	B	1	Tan brown	No	Rocky area, veg. visible	Archie	7137254	632750
CHYS_636_08	Steep NW	Well	Damp	B	3	Brown	Yes		Kevin	7134751.4	632750.1
CHYS_633_08	Moderate	Well	Damp	B	2	Brown	Yes	By creek, boulders	Tubs	7133994.2	632750.2
CHYS_649_08	Moderate slope to NE, open hillside	Moderate	Damp	B	2	Grey brown	Yes, to SE		Shane	7137997	632751
CHYS_639_08	Flat, base of mountain, boulders	Well	Damp/dry	B	3	Brown	Yes		Kevin	7135498.1	632751.4
CHYS_645_08	Moderate	Well	Damp	B	2	Greyish brown	Yes	Boulder field	Tubs	7137000	632752
CHYS_644_08	Gentle slope, W	Moderate	Wet	B	4	Light brown	No		Kevin	7136750	632754
CHYS_635_08	Steep S	Well	Damp	B	3	Light brown	No		Kevin	7134504.9	632754.8
CHYS_637_08	Steep SE	Well	Damp	B	3	Brown	Yes		Kevin	7134996.2	632757

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQL	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_624_08	Steep hillside facing N, scree, thin patchy soil underlain by scree	Well	Moist		3		Yes, talus with veins and gossan nearby		Aiden	7130493.8	632758.6
CHYS_647_08	Steep hillside, slope SW, lots of scree, thin patchy soil	Well	Dry	B	1		Yes, uphill 50m		Aiden	7137473	632760
CHYS_642_08	Gentle slope, near creek	Moderate	Wet	B	1	Brown			Aiden	7136225	632763
CHYS_641_08	Flat, swampy	Poor	Wet	B	4	Brown	No		Kevin	7135999.2	632771.2
CHYS_640_08	Flat, base of mountain, boulders, right next to creek	Moderate	Wet	B	3	Brown	No		Kevin	7135777.4	632772.7
CHYS_626_08	Gentle slope	Moderate	Damp	B	1	Brown		Had to dig deep to get sample	Julius	7131022	632790
CHYS_621_08	Steep SW	Well	Dry	B	2.5	Brown	No		Kevin	7129762.3	632799.4
CHYS_620_08	Moderate slope S	Moderate	Damp	B	3	Brown	Yes		Kevin	7129511	632822
CHYS_668_08	Steep, cliffs W, boulders	Well	Damp/dry	B	3	Brown	Yes		Kevin	7135475.2	632913.8
CHYS_655_08	Hillside facing N, bottom of steep slope near creek, rocky	Well	Moist	B?	3	Brown	Yes, rusty rock 50m S	Sample is brown soil with some organic matter	Aiden	7130512.6	632967.3
CHYS_657_08	Steep slope	Moderate	Damp	B	1	Brown			Julius	7131003.6	632972.9
CHYS_670_08	gentle slope N, base of mountain	Well	Damp	B	4	Light brown	Yes, 200m		Kevin	7135981.7	632974
CHYS_654_08	Steep	Well	Damp	B	1	Brown	Yes		RJ	7130272.6	632977.7
CHYS_671_08	Bottom of slope	Moderate	Wet	B	2	Brown	Yes, rusty outcrop near creek		Aiden	7136267	632991
CHYS_662_08	Flat	Well	Damp	B	3	Brown	Yes	Boulders	Tubs	7133989.3	632992.5
CHYS_666_08	Steep cliffs W	Well	Damp/dry	B	3	Brown	Yes		Kevin	7135026.5	632993.5
CHYS_664_08	Moderate slope to SW	Moderate	Damp	B	3	Brown	No		Thomas	7134511.1	632996.9
CHYS_672_08	Gentle slope to W in valley	Moderate	Damp	B	3	Brown	No		Thomas	7136503	632998
CHYS_650_08	Gentle slope S	Moderate	Damp	B	3	Brown/gr ey	No		Kevin	7129251.3	632998
CHYS_673_08	Gentle slope S	Well	Damp	B	3	Brown	No		Kevin	7136757	633000
CHYS_674_08	Steep	Well	Damp	B	2	Brown	Yes	Lots of veg.	Tubs	7137001	633002
CHYS_663_08									Thomas	7134247.3	633002.3
CHYS_676_08	Top of ridge and cliff, scree slope, thin soil	Well	Moist	B	2	Brown	Yes, and very rusted gossan in cliff 40m W		Aiden	7137471	633004
CHYS_675_08	Steep WSW slope	Well	Wet	B	2	Brown	Yes	Grass and mosses visible	Archie	7137252	633006
CHYS_669_08	Steep N, base of cliffs	Well	Damp/dry	B	3	Dark brown	Yes		Kevin	7135716.8	633012.8
CHYS_656_08	Gentle slope	Poor	Damp	B	2	Brown			Julius	7130804.2	633013.7
CHYS_661_08	Moderate	Well	Damp	B	2	Brown	Yes	Boulders	Tubs	7133746	633016.8
CHYS_651_08	Steep S	Well	Damp	B	2	Brown	Yes		Kevin	7129500.7	633018.4

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_652_08	Steep S, cliffs	Well	Damp/dry	B	2	Brown	Yes		Kevin	7129789.7	633041
CHYS_667_08	Ridge, steep and cliffs	Well	Damp/dry	B	3	Brown	Yes		Kevin	7135191.7	633042.8
CHYS_653_08	Steep cliffs N	Well	Damp	B	3	Brown	No	Could not get closer to ideal point, danger!	Kevin	7130079	633045.7
CHYS_665_08	Steep SE	Well	Damp	B	2	Brown	Yes		Kevin	7134765.5	633058.4
CHYS_681_08	Steep S	Well	Damp/wet	B	3	Brown	Yes		Kevin	7129543.4	633202.1
CHYS_687_08	Gentle slope	Moderate	Damp	B	1	Brown			Julius	7130999.5	633204
CHYS_699_08	Bottom of slope	Moderate	Wet	B	4	Brown	Yes, near creek		Aiden	7136277	633237
CHYS_703_08	Steep SW slope	Well	Damp	B	2	Brown	No	Boulder field	Archie	7137244	633244
CHYS_692_08	Moderate slope to SW	Moderate	Damp	B	2	Brown	Yes, at 10m		Thomas	7134527.2	633245.9
CHYS_702_08	Steep N/S	Well	Damp	B	2	Grey and brown	Yes	Lots of veg.	Tubs	7136998	633248
CHYS_690_08	Flat	Well	Wet	B	3	Brown	Yes	Vegetation, boulders	Tubs	7134000	633248.4
CHYS_701_08	Moderate slope, S	Well	Damp	B	3	Brown	No		Kevin	7136749	633250
CHYS_700_08	Flat, in valley	Moderate	Damp	B	3	Brown	No		Thomas	7136498	633251
CHYS_678_08	Moderate slope to W and gully	Well	Damp	B	2	Brown with light grey tinge	Yes, in gully	Taken outside property! Grassy hillside with light willow cover	Shane	7128002	633252.5
CHYS_693_08	Steep slope SW, boulders	Well	Damp	B	3	Brown	No		Kevin	7134756.5	633252.9
CHYS_691_08	Moderate slope to S	Moderate	Damp	B	2	Brown	No		Thomas	7134248.3	633256.5
CHYS_683_08	Steep cliffs N	Well	Damp	B	4	Yellow brown	Yes	Really good sample for this area	Kevin	7130002.4	633258.3
CHYS_694_08	Steep slope E	Well	Wet	B	1	Brown			Julius	7135032.4	633264
CHYS_686_08	Gentle slope	Poor		B	2	Dark brown			Julius	7130801.3	633283.1
CHYS_680_08	Steep, SW	Well	Damp	B	3	Brown	No		Kevin	7129247.1	633284.8
CHYS_685_08	Valley bottom near creek, gentle slope	Well	Moist	B	3	Brown	No	Scree nearby to S	Aiden	7130506.7	633285
CHYS_679_08	Moderate slope facing S, some bush, grass patches	Well	Moist	B	3	Brown	No		Aiden	7128300.6	633295.3
CHYS_682_08	Steep SW	Well	Damp	B	3	Brown	Yes		Kevin	7129784.3	633345.6
CHYS_720_08	Flat, on ridge of mtn.	Moderate	Damp	B	3	Brown	Yes, at 5m		Thomas	7134520.4	633425.7
CHYS_718_08	Gentle slope	Moderate	Damp	B	1	Brown		Very poor sample, had to dig and scrape for sample	Julius	7130992.7	633439.2
CHYS_722_08	Steep slope E	Moderate	Wet	B	1			Lots of grit in soil	Julius	7135018.9	633463.1
CHYS_732_08	Steep hillside, scree, v. little soil	Well	Moist	B	1		Yes, shale outcrop nearby, gossan in cliff 80m S		Aiden	7137500	633476
CHYS_727_08	Bottom of scree slope	Moderate	Wet	B	2	Brown	Yes, near creek	Gritty brown clay soil	Aiden	7136252	633491

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_730_08	Steep N/S	Well	Damp	B	2	Brown	Yes	Lots of veg.	Tubs	7137009	633492
CHYS_725_08	Steep talus/boulder slope to S	Well	Damp	B	2		Yes		Shane	7135724.8	633493.6
CHYS_711_08	Gentle slope SW	Well	Damp	B	2	Brown	Yes		Kevin	7129256	633496
CHYS_716_08	Flat area on valley floor near small creek, rocky ground, dark soil appears to be mostly organic soil with some grit	Well	Moist		3		No		Aiden	7130498.8	633498.3
CHYS_721_08	Steep E	Well	Damp/dry	B	2	Brown	Yes		Kevin	7134753.7	633498.4
CHYS_707_08	Moderate slope near ridge top facing S to gully	Moderate	Moist	B	2	Grey	No	Gritty soil	Aiden	7128261.3	633501.4
CHYS_710_08	Moderate slope SW	Well	Damp	B	2	Brown	No		Kevin	7129000.1	633501.6
CHYS_728_08	Gentle slope to W	Moderate	Damp	B	3	Brown	Yes, at 1m	In middle of valley	Thomas	7136499	633502
CHYS_714_08	Steep slope to NE, beside cliff	Moderate	Damp	B	3	Brown	Yes, at 1m		Thomas	7130022	633502.2
CHYS_729_08	Moderate slope SW	Well	Damp	B	2	Brown	No		Kevin	7136752	633503
CHYS_706_08	Steep slope on N side of gully	Well	Damp	B	2	Grey/brown, more brown	Yes, on gully sides	Grassy hillside	Shane	7128002.7	633503.4
CHYS_708_08	Steep slope facing N to creek, mossy, thin soil	Well	Moist		1			Sample is grit with some organic matter, difficult to get	Aiden	7128500.2	633504.8
CHYS_724_08	Steep boulder/talus slope to S	Well	Damp	B	1	Orange brown	Yes	No soil at point 724, sample taken here instead	Shane	7135549.8	633510.3
CHYS_715_08	Steep slope	Moderate	Wet	B	1	Light brown	Yes		RJ	7130253.1	633516.6
CHYS_713_08	Steep S	Well	Damp	B	2.5	Brown	Yes		Kevin	7129741.8	633522.1
CHYS_712_08	Steep S	Well	Dry	B	2	Brown	Yes		Kevin	7129476.7	633523.6
CHYS_717_08	Bottom of cliff	Moderate	Damp	B	2	Dark brown			Julius	7130744.8	633524.1
CHYS_746_08	Gentle slope	Well	Damp	B	1	Brown		Had to scrape up soil, sample taken some distance from point in order to get anything	Julius	7130922.2	633536.8
CHYS_709_08	Gentle slope S	Well	Damp	B	2	Brown	No	Thick bush	Archie	7128816.2	633553
CHYS_741_08	Steep S	Well	Damp/dry	B	1	Brown	Yes		Kevin	7129732.2	633718.3
CHYS_752_08	Moderate boulder/talus slope to S	Well	Damp	B	2	Orange brown	No	No soil at point 752, underground stream flowing here, soil built up on talus	Shane	7135497.4	633724.2
CHYS_755_08	Moderate slope S	Well	Damp	B	1	Brown	No		Aiden	7136316	633725
CHYS_750_08	Flat		Wet	B	2	Brown			Julius	7134997.8	633731.8
CHYS_742_08	Steep slope to N	Moderate	Damp	A	1	Black	Yes, at 20m	Poor sample, no clay	Thomas	7129998.7	633735

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_744_08	Flat area in valley, at foot of scree, small stream nearby	Moderate	Moist		4	Brown	No	Brown clay in sample, no organic soil	Aiden	7130494.9	633737.5
CHYS_731_08	Gentle slope S, on mtn. top	Well	Damp	B	1	Tan brown	No	Grass and mosses present	Archie	7137260	633741
CHYS_759_08	Moderate slope SE	Well	Wet	B	2	Tan brown	Yes, 25m NE	Grass and mosses present	Archie	7137255	633742
CHYS_751_08	Flat in backwall of valley	Poor	Wet/damp	B	3	Light golden brown	Yes	Better soil here than at point 751, open swampy poorly drained area	Shane	7135246.4	633743.1
CHYS_733_08	Top of ridge	Well	Damp	B	3	Yes	Light orangey brown	Scree and frost here, lots of chips, soil is dense clay	Daithi	7127735.9	633743.4
CHYS_737_08	Gentle slope S	Well	Wet	B	2	Brown	No	Thick bush	Archie	7128757.6	633749.5
CHYS_735_08	Steep, head of gully to NE	Well	Damp	B	2	Grey/black	Yes	OC appears to be phyllite with very nice structure in cleavage and folds	Shane	7128247.8	633749.9
CHYS_749_08	Flat and swampy, 3m from creek	Poor	Damp/wet	B	4	Light brown	No		Kevin	7134755	633750.1
CHYS_734_08	Moderate slope to N	Moderate	Damp	B	1	Grey	Yes, on peak to S	Grassy hillside, collect horizon A sample here too with SQI 3 and black colour	Shane	7127999	633750.7
CHYS_756_08	Steep slope to W	Moderate	Damp	B	3	Brown	Yes, at 7m		Thomas	7136501	633753
CHYS_738_08	Gentle slope S	Well	Damp	B	2	Grey	No		Kevin	7128999	633753.2
CHYS_758_08	Steep	Well	Damp	B	2	Grey	Yes	Lots of veg.	Tubs	7137002	633754
CHYS_753_08	Steep talus boulder slope to S	Well	Damp	B	1		Yes		Shane	7135735.2	633756.7
CHYS_757_08	Steep, SW	Well	Damp	B	2	Grey	Yes		Kevin	7136745	633760
CHYS_743_08	Steep slope	Moderate		B	1	Brown		Rocky	RJ	7130250.9	633765.2
CHYS_740_08	Gentle slope SW	Moderate	Damp	B	3	Brown	Yes		Kevin	7129491.9	633778.6
CHYS_748_08	Gentle slope to E	Moderate	Damp	B	4	Brown	Yes, all around		Thomas	7134527.3	633784
CHYS_736_08	Moderate slope at edge of gully facing NW, frozen soil	Well	Moist	A	3	Black	Yes, in creek	Sample is shallow	Aiden	7128487.7	633786
CHYS_739_08	Moderate slope SW	Moderate	Damp/wet	B	3	Brown	Yes		Kevin	7129232.6	633798.2
CHYS_787_08	Gentle slope NNW, near mtn. bottom, grass and moss present	Moderate	Wet	B	1	Tan brown	No		Archie	7137289	633934
CHYS_770_08	Moderate slope to NW, above a cliff	Moderate	Damp	B	3	Brown	Yes, huge, 20m away		Thomas	7129974.8	633955.3
CHYS_771_08	Gentle slope	Poor	Wet	B	2	Brown	Yes		RJ	7130286.4	633978.5
CHYS_786_08	Steep	Well	Damp	B	2	Grey/brown	Yes	Lots of veg.	Tubs	7136994	633982

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_785_08	Steep NE	Well	Damp	B	2	Grey	Yes		Kevin	7136752	633991
CHYS_783_08	Steep slope W	Well	Damp	B	1	Brown	Yes, lots	Gritty brown soil	Aiden	7136229	633995
CHYS_772_08	Flat low area at head of valley under cliff, swamp nearby	Poor	Moist	B	4	Brown	No	No black organic soil, sample is clay	Aiden	7130489.2	633995.3
CHYS_761_08	Steep slope	Well	Damp	B	3	Dark brown	Yes, lots	Lots of stone chips	Daithi	7127746.9	633995.7
CHYS_784_08	Steep slope to E	Moderate	Damp	B	1	Brown	Yes, at 30m		Thomas	7136544	633997
CHYS_780_08	Steep boulder slope to S	Well	Damp	B	1	Orange brown	Yes	Very poor sample, very sandy	Shane	7135519	634000
CHYS_762_08	Steep slope, grassy	Well	Damp	B			Yes		Daithi	7127987.7	634001.5
CHYS_776_08	Flat valley	Poor	Wet	B	4	Brown	No		Thomas	7134499.4	634001.6
CHYS_777_08	Flat	Moderate	Damp/wet	B	4	Brown	No		Kevin	7134752.6	634002
CHYS_763_08	Steep, gullied and slumped to WNW	Well	Damp	B	2	Grey/brown	Yes, at least 2 lithologies exposed	In gullies, grass and light willow overgrowth	Shane	7128249.6	634003.6
CHYS_764_08	Moderate slope at edge of gully, mossy ground, permafrost	Moderate	Wet	A/B	2	Grey clay and black soil		Sample difficult to get due to permafrost, a bit mixed, gritty clay and organic; bear!	Aiden	7128497.3	634004.3
CHYS_778_08	Moderate slope	Good	Damp	B	2				Julius	7135002.9	634008.2
CHYS_765_08	Gentle slope SW	Moderate	Damp	B	2	Brownish black	No	Thick bush 10-12 ft high	Archie	7128742.2	634009.8
CHYS_775_08	Moderate	Well	Damp	B	2	Brown	Yes	Boulders, veg.	Tubs	7134264.6	634011.2
CHYS_779_08	Moderate talus slope to S	Well	Damp	B	2	Brown	No		Shane	7135251.9	634011.6
CHYS_766_08	Moderate slope S	Well	Damp	A	3	Black	No		Kevin	7128990.4	634019.5
CHYS_781_08	Moderate overgrown talus slope to ESE	Well	Damp	B	2		Yes, very fractured		Shane	7135737.3	634026
CHYS_768B_08	Steep W, boulders	Well	Damp	B	3	Dark brown	Yes		Kevin	7129576.9	634032.6
CHYS_767_08	Flat, plateau, cliffs 15m	Well	Damp	B	3	Brown	Yes		Kevin	7129250.6	634048.7
CHYS_774_08	Steep slope E	Well	Damp	B	1	Brown	Yes	Rocky area, boulders	Archie	7134009.5	634067.1
CHYS_768_08	Moderate W slope	Well	Damp	B	3	Grey	Yes		Kevin	7129474	634078.5
CHYS_760_08	Gentle slope	Moderate	Damp	B	2	Dark brown	No		Julius	7127500	634099
CHYS_809_08	Steep	Well	Damp	B	2	Grey and brown	Yes	Boulders	Tubs	7136004	634197
CHYS_795_08	Moderate slope S	Moderate	d	B	4	Brown	No		Kevin	7129245.7	634232.2
CHYS_788_08	Steep slope	Moderate	Damp	B	1	Brown	No		Julius	7127492	634242
CHYS_802_08	Flat	Well	Damp	B	3	Brown	Yes	Boulders, veg.	Tubs	7134249.3	634244.5

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_792_08	Moderate slope to N, near gulley, mossy	Well	Moist	B	3	Grey	Yes, in gulley	Permafrost soil is a bit mixed but sample is mostly B, clay and grit	Aiden	7128493.6	634246.9
CHYS_813_08	Steep SE	Well	Damp	B	3	Brown	No		Kevin	7136999	634247
CHYS_804_08	Flat, boulders	Well	Damp	B	4	Brown	No		Kevin	7134746.2	634247.5
CHYS_789_08	Steep side of slope facing S	Well	Damp	B	3	Light brown	Yes	Silty clay	Daithi	7127753.7	634247.6
CHYS_810_08	Steep slope E	Well	Damp	B	2	Brown	Yes, lots uphill	Gritty clumpy soil	Aiden	7136229	634248
CHYS_803_08	Flat valley	Moderate	Damp	B	4	Brown	No	Big rocks every 5m	Thomas	7134503.7	634248.2
CHYS_797_08	Steep	Well	Damp	B	2	Brown		Rocky	RJ	7130241.1	634248.3
CHYS_791_08	Gentle slope to S, just off ridge	Well	Damp	B	1	Grey/brown	Yes, on N side of ridge	Scrub willows	Shane	7128252.5	634249.7
CHYS_794_08	Moderate slope SE	Well	Damp	B	2	Dark brown	No		Kevin	7129002.4	634251.5
CHYS_807_08	Wide flat ridge top with steep sides	Well	Damp	B	1	Orange brown	Yes, coarse grained felsic	Point inaccessible, sandy sample similar to 831	Shane	7135476	634255
CHYS_790_08	Steep slope, nearly at top of ridge	Well	Damp	B	3		No	Just under scree and frost here, poor sample because of amount of small rock chips 50%ish?	Daithi	7127990.1	634259.4
CHYS_798_08	Scree slope to W, near bottom of cliff, thin patchy soil	Well	Moist	B	3	Brown	Yes, felsic intrusive outcrop	Sample is brown clay	Aiden	7130500.6	634260.3
CHYS_811_08	Steep slope to E	Moderate	Damp	B	1	Brown	No		Thomas	7136492	634261
CHYS_805_08	Bottom of slope	Moderate	Damp	B	2	Brown			Julius	7134999.6	634261.5
CHYS_801_08	Gentle slope E	Well	Moist	B	1	Brown	No	Rocky area, vegetation present	Archie	7134005	634264.2
CHYS_793_08	Gentle slope S	Moderate	Wet	B	4	Grey	No	Grassy patches, thick bush	Archie	7128750.8	634264.5
CHYS_812_08	Steep E	Well	Damp	B	3	Grey-purple	No		Kevin	7136780	634268
CHYS_806_08	Moderate talus slope to S	Well	Damp	B	3	Dark brown	No, shattered rock	Overgrown talus	Shane	7135254.8	634268.8
CHYS_823_08	Flat spot at bottom of steep scree slope, large boulders	Well	Damp	B	2	Grey	Yes, up hill	Sample is gritty clay	Aiden	7130584.2	634468.6
CHYS_834_08	Steep slope E	Moderate	Moist	B	3	Dark and brown mixed	Yes, folds outcrop		Aiden	7136249	634491
CHYS_817_08	Steep side of river valley near small stream	Well	Damp		4	Dark brown	No	Silty gravelly clay with chips, willow and grass etc.	Daithi	7128013.2	634491.9

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_831_08	Steep sided ridge, steeper to N, E-W trending ridge	Well	Dry/Damp	B	2	yellowish brown and reddish brown	Yes, along ridge, possibly a micaceous sandstone	831 inaccessible, point taken here instead, sandy sample	Shane	7135368	634495
CHYS_826_08	Flat	Well	Damp	B	3	Brown	Yes	Boulders, veg.	Tubs	7134250	634495.7
CHYS_828_08	Flat, swamp	Poor	Wet	B	3	Grey	No		Kevin	7134751.5	634495.8
CHYS_835_08	Moderate slope to E	Moderate	Damp	B	2	Brown	No		Thomas	7136502	634497
CHYS_825_08	Gentle NE slope	Moderate	Wet	A	3	Greyish brown	No	Vegetation present	Archie	7133999.4	634497.3
CHYS_816_08	Steep grassy and willow E facing slope	Well	Damp	B	3	Light brown	No	Clay with chips etc but some slumped in organic; 2nd sample of organic A layer taken from same location	Daithi	7127747.4	634498.3
CHYS_827_08	Flat	Moderate	Wet	B	3	Brown	No		Thomas	7134502.8	634498.7
CHYS_824_08	Moderate slope S	Well	Damp	B	2	Brown	Yes, 125m S	Vegetation present	Archie	7133754.8	634499.6
CHYS_818_08	Moderate slope to S	Well	Damp	B	2	Medium brown	No	Moderate willow patches and grass	Shane	7128253.9	634499.6
CHYS_836_08	Moderate slope E	Average	Damp/wet	B	3	Grey	No		Kevin	7136747	634500
CHYS_833_08	Steep	Well	Damp	B	2	Brown grey	Yes	Loose rocks, boulders	Tubs	7135991	634500
CHYS_830_08	Moderate slope to S	Well	Damp	B	2	Medium to dark brown	No	Overgrown talus	Shane	7135252	634501.6
CHYS_829_08	Moderate slope	Good	Damp	B	1	Brown	Yes		Julius	7135008.2	634507.1
CHYS_820_08	Gentle W slope	Moderate	Wet	B	4	Grey	No	N side of creek, veg. getting thick	Archie	7128746.1	634507.5
CHYS_819_08	Steep slope facing NW, rocky some scree and cliffs, thin soil patches	Well	Moist	B	3	Brown		Sample from B mostly but soil appears to be slightly mixed	Aiden	7128497.3	634509.7
CHYS_821_08	Moderate S slope	Well	Damp	A	1	Brown	No	Beside boulder field, veg. present	Archie	7129016.3	634510.1
CHYS_815_08	Top of hill, on crest	Well	Damp		4	Dark brown	No	Dense clay underlain by dark grey clay?	Daithi	7127518.8	634541.8
CHYS_832_08	Gentle slope. Bottom of mtn.	Well	Wet	B	3	Brown	Yes	Slope to next point (808) is too steep - cliff	Archie	7135781	634663
CHYS_841_08	Steep slope S	Well	Damp	B	4	Medium dark brown	No	Clay with silt and chips, area full of willow	Daithi	7128056.4	634687.8

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_840_08	Bottom of steep slope near stream	Well	Damp	B	3	Dark brown	Gritty clay with some chips		Daithi	7127762.8	634707.3
CHYS_839_08	Crest of hill, steep slope E	Well	Damp	B	4	Light brown with slight orangey tinge	Good sample, clay free from too many chips		Daithi	7127504.6	634721.9
CHYS_856_08	Moderate	Well	Damp	B	2	Brown grey	Yes	Loose rocks	Tubs	7135992	634722
CHYS_855_08	Moderate N slope	Well	Wet	B	3	Brownish green	Yes	Beside waterfall, veg. present	Archie	7135743	634733
CHYS_848_08	Gentle N slope	Well	Wet	B	3	Greyish brown	No	Grass and mosses present	Archie	7134000.7	634741.2
CHYS_853_08	Steep slope to gully and S	Well	Damp	B	1	Medium brown	Yes, small one between here and 830	Outcrop is extremely oxidised, qtz arenite, overgrown talus slope here	Shane	7135241.5	634746.8
CHYS_844_08	Flat	Poor	Wet	B	4	Grey	No	Beside stream, veg. thick	Archie	7128747.5	634747.6
CHYS_851_08	Moderate slope S, creek 60m	Well	Damp	B	3	Light brown	No		Kevin	7134756.9	634747.9
CHYS_838_08	Flat, creek	Moderate	Damp	B	1	Dark brown	Yes		Julius	7127264	634748
CHYS_847_08	Gentle S slope	Well	Damp	B	3	Brown	Yes, to S 100m	Grass and mosses present	Archie	7133760.4	634749.5
CHYS_850_08	Flat	Moderate	Damp	B	4	Brown	No		Thomas	7134501.8	634749.8
CHYS_842_08	Steep slope to E	Moderate	Damp	B	2	Medium brown/grey	Yes, to NW	Thick willow overgrowth	Shane	7128252.1	634751.5
CHYS_858_08	Flat area, bottom of valley, 40m from creek	Poor	Damp	B	4	Brown grey	No		Thomas	7136500	634752
CHYS_843_08	Gentle sloping area near top of ridge, some soil	Well	Moist/wet	B	3	Brown	Yes, on ridge	Thin vegetation	Aiden	7128502.2	634752
CHYS_859_08	Flat, creek 30m E	Well	Wet	B	4	Grey	No		Kevin	7136746	634752
CHYS_849_08	Moderate	Well	Damp	B	3	Brown grey	Yes	Boulders, veg.	Tubs	7134250.9	634752.1
CHYS_857_08	Flat, beside creek	Moderate	Wet	B	4	Brown		Sample is clay	Aiden	7136255	634754
CHYS_845_08	Moderate S slope	Well	Damp	B	2	Brown	No	Boulders present, veg. present	Archie	7128992	634758
CHYS_852_08	Slope	Good	Damp	B	2	Brown			Julius	7135009.9	634762.9

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_854_08	Rock fractured ridge trending N off main E-W ridge, steep-sided	Well	Damp	B	1	yellowish brown and reddish brown	Yes, plenty	This is as close as it is possible to get to 854 without ropes or a helicopter	Shane	7135304	634769
CHYS_846_08	Flat, 2m from creek	Moderate	Damp	B	3	Brown	Yes, at 40m		Thomas	7133601.5	634809.3
CHYS_861_08	Steep slope	Moderate	Damp	B	1	Brown	Yes		Julius	7127254	634951
CHYS_864_08	Steep valley, lots of slump under, grass and willow covered	Well	Damp	B	4	Light brown	No	Gritty clay with small chips	Daithi	7128073.3	634967.8
CHYS_882_08	Steep	Well	Damp	B	1	Brown	Yes	Loose boulders	Tubs	7135988	634986
CHYS_872_08	Gentle slope to E, 2m from creek	Well	Damp	B	4	Brown	Yes, at 50m		Thomas	7133554.7	634989.3
CHYS_879_08	Steep talus slope to SE and gully	Well	Damp	B	2	Medium to dark brown	No		Shane	7135241.5	634989.4
CHYS_866_08	Moderate slope facing S, some grass and soil	Well	Moist	B	3	Brown	Yes, at top of hill		Aiden	7128509.6	634990.3
CHYS_884_08	Moderate slope to SW	Poor	Damp	B	2	Grey	No		Thomas	7136501	634992
CHYS_871_08	Moderate slope E, boulders	Well	Damp	B	3	Brown	Yes		Kevin	7130244	634993
CHYS_875_08	Flat	Well	Damp	B	2	Brown	Yes	Boulders, veg.	Tubs	7134246.9	634995.2
CHYS_868_08	Gentle SW slope	Well	Wet	B	3	Brownish grey	No	Rock field, beside mountain creek, veg. visible	Archie	7128977.7	634996.4
CHYS_865_08	Moderate slope to SE	Well	Damp	B	3	Medium brown	No	Grassy hillside, some willow	Shane	7128249.8	634996.8
CHYS_883_08	Moderate slope	Well	Damp	B	2	Brown		Gritty brown soil	Aiden	7136251	634997
CHYS_877_08	Moderate slope S, creek 40m	Well	Damp	B	3	Brown	Yes, 200m N		Kevin	7134752.6	634999.6
CHYS_874_08	Gentle NE slope	Well	Wet	B	2	Brown	Yes	Boulder field, grass, moss and shrubs present	Archie	7133998.9	634999.6
CHYS_876_08	Flat plateau in valley	Moderate	Damp	B	4	Brown	No		Thomas	7134502.8	635001.3
CHYS_873_08	Gentle E slope	Well	Damp	B	2	Brown	Yes, 125m S	Grass, moss and shrubs present	Archie	7133692.4	635003.5
CHYS_863_08	Steep	Well	Damp	B	3	Grey	Yes	Willows	Tubs	7127751.6	635005.2
CHYS_867_08	Steep W slope	Well	Damp	A	1	Black	Yes	Grass and moss visible, very rocky	Archie	7128738.6	635013
CHYS_878_08	Steep slope S	Moderate	Damp	B	1	Brown			Julius	7135009.6	635017.2
CHYS_862_08	Moderate	Well	Damp	B	2	Grey brown	Yes	Willows	Tubs	7127518.8	635026.7
CHYS_869_08	Steep S slope, boulder field	Well	Wet	B	3	Brown	No	Vegetation present	Archie	7129271	635046

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_881_08	Steep NW slope	Well	Damp	A	2	Brown	Yes	Closest to GPS point possible with soil present. Plants also present	Archie	7135792	635065
CHYS_880_08	On ridge top, extremely steep to NW, moderate to SE	Well	Damp	B	3	Brown	Yes, along ridge, very weathered and fractured, some very oxidised unit between here and 911	880 waypoint is inaccessible, taken from this point instead	Shane	7135368	635077
CHYS_870_08	Steep SW slope	Well	Damp	B	3	Brown	No	Boulder field, very little vegetation	Archie	7129470	635113
CHYS_902_08	Flat area between slopes	Well	Damp	B	4	Brown	Yes, at 40m		Thomas	7133274.9	635183.2
CHYS_914_08	Moderate slope, bottom of scree slope	Well	Damp	B	1	Brown		Sample is brown, gritty soil	Aiden	7136295	635196
CHYS_894_08	Gentle SW slope	Well	Wet	A	2	Brown	Yes	Rock field, no dirt at station, got as close as possible, moss growing	Archie	7129032.6	635198.4
CHYS_887_08	Steep slope	Moderate	Damp	B	1	Dark brown	Yes		Julius	7127238	635229
CHYS_886_08	Steep slope	Moderate		B	2	Light grey	Yes		Julius	7127023	635229
CHYS_888_08	Steep	Well	Damp	B	2	Brown grey	Yes	Willows	Tubs	7127526.5	635228.7
CHYS_890_08	Top of flat ridge	Moderate	Wet	B	4	Chocolate brown	Light brown	Dense clay with gravel chips	Daithi	7128027.3	635241.3
CHYS_910_08	Moderate talus slope to SE and creek	Well	Damp	A	3	Medium brown	No	Overgrown talus	Shane	7135254.9	635244.5
CHYS_905_08	Moderate E slope	Well	Wet	B	2	Brown	No	Brush is getting thick	Archie	7134000.5	635246.6
CHYS_904_08	Steep S slope	Well	Damp	B	1	Brown	Yes	Beside creek, 50m S, straight and down, veg. abundant	Archie	7133733.9	635247.1
CHYS_908_08	Steep SW, creek 40m	Well	Damp	B	3	Brown	No		Kevin	7134751.4	635248.3
CHYS_896_08	Steep S slope, N slope is a cliff, on top of mtn	Well	Damp	A	2	Black	Yes	Boulder field, very little vegetation	Archie	7129508	635248
CHYS_906_08	Flat	Well	Damp	B	3	Brown grey	Yes	Boulders, veg.	Tubs	7134251.4	635248.6
CHYS_912_08	Steep NW slope, steep drop off, goes into a bowl	Well	Damp	B	1	Brown	Yes	Grass and mosses present	Archie	7135755	635250
CHYS_915_08	Moderate slope to SW	Moderate	Damp	B	3	Grey	No		Thomas	7136497	635250
CHYS_900_08	Steep boulder slope to S	Well	Damp	B	2	Medium brown	Yes, to NW	Overgrown boulder talus slope	Shane	7130496	635252

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_913_08	Flat	Well	Damp	B	2	Brown grey	Yes	Lots of veg.	Tubs	7135990	635253
CHYS_891_08	Moderate to S	Well	Damp	B	2	Medium brown	No	Grassy scrub/willow	Shane	7128252.5	635253.2
CHYS_907_08	Moderate slope to E	Moderate	Damp	B	3	Brown	No		Thomas	7134506.4	635253.3
CHYS_895_08	Moderate S slope, boulder field with grassy patches	Well	Damp	B	1	Sandy brown	No		Archie	7129252	635253
CHYS_909_08	Steep slope S	Moderate	Damp	B	1	Brown			Julius	7135010.8	635254.9
CHYS_889_08	Moderate	Well	Damp	B	2	Grey	Yes	Veg.	Tubs	7127750.9	635258.4
CHYS_901_08	Steep scree slope facing N, under cliff, no soil	Well	Damp		1		Yes, lots in cliff - granodiorite?		Aiden	7130729	635261
CHYS_899_08	Gentle slope S, boulders	Moderate	Damp/wet	B	3	Grey	Yes		Kevin	7130293	635263
CHYS_911_08	Very steep boulder strewn slope to NW	Well	Damp	B	1	Medium brown	Yes, along ridge and slope to S, SW, and W	Cannot get any closer to 911	Shane	7135541	635267
CHYS_885_08	Steep slope	Moderate	Damp	B	1	Brown	Yes		Julius	7126982	635268
CHYS_892_08	Steep hillside facing S, scree, patchy soil	Well	Dry	B	2	Brown	Yes, uphill	Sample has som grit	Aiden	7128520.2	635274.9
CHYS_903_08	Moderate slope to E	Well	Damp	B	4	Brown	No		Thomas	7133495.1	635292.1
CHYS_893_08	Steep slope N	Well	Damp	B	1	Sand brown	Yes	Rocky field, little grass and moss visible	Archie	7128802.3	635311.5
CHYS_897_08	Steep N slope, bottom of cliff	Well	Damp	B	2	Brown	Yes	Boulder field, grass and moss present	Archie	7129768	635312
CHYS_898_08	Flat, base of mtn, boulders 10m to W	Well	Damp	B	3	Brown	Yes		Kevin	7129994	635374
CHYS_924_08	Steep W slope	Well	Damp	B	1	Brown	Yes	Couldn't get to top of mtn, mostly sand, rock pile	Archie	7128754.1	635400.2
CHYS_925_08	Steep W slope, cliff E slope	Well	Wet	A	3	Greyish brown	Yes	On top of mtn, grass and moss sparse	Archie	7129036.8	635404.8
CHYS_921_08	Steep slope in slumped	Well	Damp	B	3	Dark brown	Yes	Lots of chips in sample, gritty clay with some organic mixed in	Daithi	7128062	635448.9
CHYS_930_08	Gentle slope S, boulders	Well	Damp	B	4	Brown	No		Kevin	7130221	635458
CHYS_916_08	Steep slope	Moderate	Damp	B	1	Light brown	No		Julius	7126797	635467
CHYS_923_08	Steep slope facing SE, cliffs and scree nearby, thin patchy soil	Well	Moist	B	2	Brown			Aiden	7128512.4	635485.4
CHYS_938_08	Moderate E slope	Well	Wet	B	3	Greyish brown	No	Thick willows	Archie	7133996.5	635489.9

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_926_08	Steep E slope, boulder field	Well	Damp	B	1	Brown	Yes	Grass and moss in pockets	Archie	7129251	635492
CHYS_946_08	Steep	Well	Damp	B	2	Grey	Yes	Vegetation present	Tubs	7136005	635492
CHYS_920_08	Moderate	Well	Damp	B	2	Brown	Yes	Willows	Tubs	7127765.7	635495.3
CHYS_937_08	Gentle E slope	Moderate	Damp	B	3	Brown	Yes		Archie	7133743	635496
CHYS_935_08	Flat	Moderate	Wet	B	2	Brown	No	Bushy	Archie	7133253.9	635496.5
CHYS_936_08	Gentle E slope	Well	Wet	B	3	Greyish brown	No	Very bushy	Archie	7133505.1	635499.9
CHYS_945_08	Moderate E slope	Well	Damp	B	1	Brown	Yes	Sample on crater, flat	Archie	7135752	635500
CHYS_939_08	Moderate	Well	Damp	B	2	Brown grey	Yes	Boulders, veg.	Tubs	7134232.1	635500.7
CHYS_943_08	Moderate slope to S	Well	Damp	B	2	Medium to dark brown	Yes	Overgrown talus, stunted willows	Shane	7135244.6	635501.1
CHYS_942_08	Steep slope SE	Good	Damp	B	1	Brown			Julius	7135013.9	635501.4
CHYS_944_08	Steep open hillside to SE	Well	Damp	B	1	Medium to dark brown	Yes, to S and NE		Shane	7135501	635503
CHYS_922_08	Steep slope to E and gully	Well	Damp	B	1	Dark brown	Yes	Overgrown talus, scrub willows	Shane	7128251.5	635502.9
CHYS_927_08	Steep N slope, bottom of cliff	Well	Damp	B	2	Brown	Yes	Vegetation present	Archie	7129528	635503
CHYS_929_08	Flat, swampy	Poor	Wet	B	3	Brown grey	No		Kevin	7129996	635504
CHYS_941_08	Steep SW, creek 80m, base of small cliff	Well	Damp	B	4	Brown	Yes		Kevin	7134760.7	635504.6
CHYS_940_08	Flat	Moderate	Damp	B	3	Brown	No		Thomas	7134495.1	635505.3
CHYS_931_08	Steep boulder/talus slope to S, some grassy areas	Well	Damp	B	1	Light brown/grey	No	Quite a sandy sample	Shane	7130493	635510
CHYS_928_08	Steep N slope	Well	Damp	B	2	Brown	No	Boulder field, little vegetation	Archie	7129772	635515
CHYS_919_08	Moderate	Well	Damp	B	2	Brown grey	No	Willows	Tubs	7127479.9	635515.5
CHYS_947_08	Top of ridge, moderate slope	Well	Damp	B	1		Yes, purple shale at 5m		Aiden	7136263	635518
CHYS_918_08	Steep	Well	Damp	B	2	Brown black	Yes	Willows	Tubs	7127260.4	635520.5
CHYS_917_08	Steep slope	Moderate	Damp	B	2	Brown	Yes		Julius	7126959	635528
CHYS_932_08	Steep scree slope facing W, large boulders	Well	Damp		1	Rusty	Yes, intrusives	gritty sample	Aiden	7130716	635530
CHYS_948_08	Gentle slope	Moderate	Damp	B	1	Brown	Yes		Julius	7126983	635622

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_950_08	Steep	Well	Damp	B	2	Brown grey	Yes	Willows, boulders	Tubs	7127452.9	635696.4
CHYS_964_08	Moderate	Well	Wet	B	3	Greyish brown	No	Bottom of boulder field, veg. thick	Archie	7132996.7	635722.6
CHYS_958_08	Gentle slope N, bottom of mountain	Well	Damp	B	2	Brown	No	Boulder field, vegetation visible	Archie	7129518	635730
CHYS_949_08	Flat	Well	Damp	B	2	Brown grey	Yes	Willows	Tubs	7127259.2	635731
CHYS_967_08	Gentle E slope, beside creek	Moderate	Damp	B	2	Brown	No	Very bushy	Archie	7133790	635736.3
CHYS_965_08	Steep NE slope	Well	Wet	B	3	Greyish brown	Yes	Boulder field	Archie	7133258.7	635737.1
CHYS_957_08	Gentle slope E, bottom of mtn, boulder field ends	Well	Damp	B	1	Sandy brown	No	Bush and grass more visible	Archie	7129253	635742
CHYS_969_08	Steep to creek	Well	Damp	B	3	Brown grey	Yes	Vegetation present	Tubs	7134248	635745
CHYS_951_08	Steep	Well	Damp	B	3	Brown	Yes	Willows	Tubs	7127756.6	635746.9
CHYS_968_08	Gentle E slope	Moderate	Damp	B	2	Brown	No	Bushy, near creek	Archie	7134000.3	635747.7
CHYS_973_08	Steep to E	Well	Damp	B	1		No	Dwarf willow overgrown talus slope, very gritty sample	Shane	7135249.9	635747.9
CHYS_972_08	Moderate slope to E	Moderate	Damp	B	2	Brown	No		Thomas	7135002.4	635747.9
CHYS_970_08	Gentle slope to SE	Moderate	Damp	B	3	Brown	No		Thomas	7134499.4	635748.4
CHYS_962_08	Steep boulder scree slope to S	Well	Damp	B	1	Light brown	No	Very poor sample taken from clay pocket amongst boulders, majority of boulders are qtz monzonite	Shane	7130496	635750
CHYS_953_08	Moderate to SE	Moderate	Damp	B	2	Medium brown	Yes	Good horizon A layer, about 5cm; grassy mountainside with scrub willow, 5m accuracy on waypoint	Shane	7128245.7	635750.2
CHYS_975_08	Moderate E slope	Well	Wet	B	2	Greyish brown	Yes	Vegetation present	Archie	7135750	635750
CHYS_974_08	Steep slope to S and dry creek, light willow cover	Well	Damp	B	1	Light brown	Yes, upslope to SW, lots of phyllite talus in creek		Shane	7135505	635751
CHYS_959_08	Flat, 2m from creek	Moderate	Damp	B	4	Brown	No		Kevin	7129748	635751
CHYS_971_08	Moderate slope S	Well	Damp/dry	A	3	Dark brown	No		Kevin	7134754.6	635751.2
CHYS_977_08	Moderate E facing slope	Well	Moist	B	1	Brown	Yes, 5m S	Soil is gritty	Aiden	7136252	635752

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_966_08	Gentle W slope, E side of creek	Well	Wet	B	3	Brownish grey	Yes	Very bushy	Archie	7133499.8	635752.4
CHYS_976_08	Steep	Well	Damp	B	2	Grey	Yes	Lots of veg, willows	Tubs	7136006	635759
CHYS_963_08	Top of mtn, loose boulder, near edge of cliff to the N	Well	Damp		1	Brown	Yes, intrusives	Very little soil, very gritty sample with some clay	Aiden	7130744	635766
CHYS_960_08	Flat, swampy, boulders N	Moderate	Damp	B	4	Brown	No		Kevin	7129966	635766
CHYS_954_08	Steep hillside facing S, some thin soil, rocky and scree	Well	Moist		2	Brown		Sample is grit and clay	Aiden	7128528.7	635774.9
CHYS_956_08	Steep N slope, bottom cliff, boulder field	Well	Wet	B	1	Brown	Yes	Little vegetation	Archie	7129026	635795
CHYS_961_08	Moderate slope S	Well	Damp	B	4	Brown grey	No		Kevin	7130259	635798
CHYS_955_08	Steep slope to S	Well	Damp	B	4	Brown	Yes, at 5m		Thomas	7128770.2	635808.2
CHYS_952_08	Steep W facing slope	Well	Damp	B	4	Dark brown	Yes	Slumped, gritty clay with some organic parts	Daithi	7127997.3	635816.3
CHYS_979_08	Steep	Well	Damp	B	2	Brown	Yes	Willows	Tubs	7127769.6	635968.8
CHYS_985_08	Gentle E slope, on valley floor	Moderate	Wet	B	3	Greyish brown	No	Vegetation thick, end of rock pile	Archie	7129258	635989
CHYS_989_08	Moderate slope S	Well	Damp	B	4	Brown	No		Kevin	7130278	635990
CHYS_992_08	Steep SE facing slope	Well	Damp	B	3	Orangey brown	Yes, lots	Boulder field with little islands of soil, soil has lots of grit and chips	Daithi	7131001	635992
CHYS_999_08	Moderate	Well	Damp	B	3	Brown grey	Yes	Boulders, veg.	Tubs	7134252.2	635994.2
CHYS_986_08	Gentle slope NE	Moderate	Wet	B	3	Greyish brown	No	Bushes starting, vegetaion is thick	Archie	7129501	635995
CHYS_995_08	Gentle slope, plateau	Moderate	Wet	B	3	Greyish brown	No	Bottom of rock pile, veg. plentiful	Archie	7133260.1	635996.2
CHYS_990_08	Steep overgrown boulder slope to SE	Well	Damp	B	2	Brown	Yes		Shane	7130502	635996
CHYS_1005_08	Gentle SE slope, on plateau	Well	Wet	A	3	Grey	No	Bush and veg. present	Archie	7135750	635997
CHYS_1002_08	Gentle slope to E	Moderate	Damp	B	3	Brown	No		Thomas	7135003.1	635997.5
CHYS_988_08	Flat	Well	Damp	B	4	Brown	No		Kevin	7130004	635999
CHYS_981_08	Steep to SW	Moderate	Damp	B	2	Dark brown black/brown grey	Yes	Grassy mountainside, 2 horizons mixed through 25cm, 80% B	Shane	7128257.8	635999.2

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_991_08	Steep scree slope facing E, large loose boulder			B		Brown	Yes, intrusives, granodiorite or syenite	Little to no soil, thin patched sampled, some grit	Aiden	7130749	636000
CHYS_1001_08	Gentle slope SE	Well	Damp	B	3	Brown	No		Kevin	7134751.9	635999.9
CHYS_1004_08	Moderate slope to E and dry creek, 3ft willows	Well	Damp	B	1	Light brown	Yes, along sides of creek and between here and 1034		Shane	7135502	636000
CHYS_987_08	Flat, creek 100m to S	Well	Damp/dry	B	4	Brown	No		Kevin	7129750	636000
CHYS_983_08	Flat, on ridge	Well	Damp	B	2	Brown	Yes, at 15m		Thomas	7128727.8	636000.3
CHYS_1003_08	Steep slope to SE	Well	Damp	B	2	Golden brown	No	3-4 ft willows	Shane	7135251.2	636000.7
CHYS_980_08	Near ridge top in thick willow	Well	Damp	B	4	Light brown	Yes	Good sample, gritty clay	Daithi	7127970.4	636001.1
CHYS_1006_08	Moderate	Well	Damp	B	2	Grey	Yes	Lots of veg, willows	Tubs	7135999	636004
CHYS_997_08	Moderate slope NW	Well	Damp	B	2	Brown	Yes	Vegetation is thick	Archie	7133761.4	636003.8
CHYS_982_08	Steep hillside facing SW near valley, some soil, grass	Well	Moist	B	2	Brown	Yes, nearby	Sample is grit and clay	Aiden	7128502.9	636005.2
CHYS_998_08	Gentle, E side of creek	Well	Damp	B	2	Brown	No	Bushy	Archie	7133993	636007.2
CHYS_996_08	Moderate N slope	Well	Wet	A	2	Brown	Yes	Rock boulders everywhere, veg. present	Archie	7133501.5	636008.8
CHYS_1000_08	Gentle slope to S	Moderate	Damp	B	3	Brown	No		Thomas	7134476.1	636010.3
CHYS_984_08	Steep NW slope, bottom of cliff, boulders everywhere	Well	Damp	B	1	Brown	Yes		Archie	7129054	636029
CHYS_1025_08	Moderate N slope	Well	Damp	B	2	Brown	Yes	Bottom of rock mountain, grass and moss visible, moss only growing on mountain, no dirt or clay	Archie	7133379	636191.7
CHYS_1029_08	Moderate	Well	Damp	B	3	Brown grey	Yes	Boulders and high willows	Tubs	7134218.5	636219
CHYS_1020_08	Steep boulder field	Well	Damp	B	2		No		Daithi	7131012	636221
CHYS_1008_08	Steep S facing slope, grass and heather	Well	Damp	B	3	Light brown	Yes	Fairly good sample, some chips	Daithi	7128013.4	636223.1
CHYS_1013_08	Gentle slope NW	Moderate	Wet	B	3	Greyish brown	No	Start of bushes	Archie	7129249	636242
CHYS_1011_08	Moderate slope to NE	Well	Damp	B	4	Brown	No		Thomas	7128673.5	636243.3
CHYS_1014_08	Flat	Moderate	Wet	B	4	Grey	No	Vegetation is thick, brush is in pockets beside creek	Archie	7129498	636244
CHYS_1026_08	Gentle N slope	Well	Wet	B	3	Greyish brown	Yes	Boulder field, grass, moss and shrubs present	Archie	7133500.6	636244.7

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_1028_08	Moderate NW slope	Well	Wet	B	3	Greyish brown	Yes	Bushy, vegetation present	Archie	7133995	636246.8
CHYS_1031_08	Flat	Moderate	Damp	B	3	Dark brown	No		Kevin	7134750.7	636247.2
CHYS_1016_08	Moderate slope E, boulders	Well	Damp	B	3	Brown	Yes		Kevin	7130004	636248
CHYS_1017_08	Flat, at base of mtn	Well	Damp	B	3	Grey	No		Kevin	7130253	636248
CHYS_1033_08	Gentle slope to E	Moderate	Damp	B	3	Brown	No		Thomas	7135250.4	636249.2
CHYS_1034_08	Steep slope to E with 4ft willows	Well	Damp	B	2	Light brown	No		Shane	7135499	636250
CHYS_1035_08	Moderate E slope	Well	Wet	B	3	Greyish brown	No	Very bushy	Archie	7135753	636250
CHYS_1027_08	Moderate NW slope	Well	Damp	B	2	Brown	yes, lots to S 60m	Brush, grass and moss present, creek	Archie	7133749.5	636251
CHYS_1015_08	Gentle slope S	Well	Wet	B	4	Grey	No	Vegetation is thick, bush is not	Archie	7129749	636254
CHYS_1009_08	Steep to SE	Well	Damp	B	1	Light brown	Yes, on ridge to NE	Grassy mountainside	Shane	7128254.9	636254.5
CHYS_1021_08	Moderate	Well	Damp	B	2	Brown	Yes	Boulder field	Tubs	7131255	636255
CHYS_1032_08	Gentle slope to E	Moderate	Damp	B	4	Grey brown	No		Thomas	7135007.3	636255.4
CHYS_1030_08	Flat, near creek	Moderate	Damp	B	2	Brown	No		Thomas	7134487.2	636257.2
CHYS_1007_08	Steep	Well	Damp	B	2	Grey brown	Yes	Veg, boulders	Tubs	7127745.8	636260.5
CHYS_1010_08	Steep slope facing NE, scree, thin patchy soil	Well	Moist	B	2		Yes, lots		Aiden	7128509.3	636268.8
CHYS_1012_08	Steep N slope, OC and cliffs	Well	Damp	B	1	Sandy brown	Yes	Only vegetation available, poor ground	Archie	7129027	636287
CHYS_1018_08	Flat bench at base of boulder/talus slope	Poor	Wet/damp	B	4	Medium brown	No		Shane	7130495	636291
CHYS_1019_08	Sample taken 160m E in same valley, edge of scree, grass	Well	Damp	B	4	Brown			Aiden	7130782	636403
CHYS_1047_08	Bottom valley floor of boulders	Well	Damp	B	2	Dark brown	No	Sample has lots of chips, boulders underneath with running water? Quality not great, also some grey sandy grit in sample	Daithi	7130983	636423
CHYS_1037_08	Steep hillside sloping NE, rocky cliffs, scree with patchy soil	Well	Moist	B	2		Yes, lots	Sample is grit and clay	Aiden	7128521	636433.4

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CHYS_1063_08	Moderate E slope	Well	Wet	B	3	Greyish brown	No	Bushy	Archie	7135752	636436
CHYS_1048_08	Steep	Well	Damp	B	2	Grey	Yes	Boulders	Tubs	7131233	636478
CHYS_1059_08	Flat, creek 3m	Moderate	Damp	B	3	Light brown	No		Kevin	7134757.9	636487.7
CHYS_1061_08	Gentle slope to E	Moderate	Damp	B	3	Brown	No		Thomas	7135238.8	636489
CHYS_1055_08	Steep N slope	Well	Damp	B	2	Brown	Yes	Vegetation present	Archie	7133749.7	636497.4
CHYS_1062_08	Gentle slope to E with 6ft willows	Moderate	Damp	B	2	Light grey brown	No		Shane	7135502	636498
CHYS_1036_08	Steep slope and SW	Well	Damp	B	1	Dark brown/gr ey	Yes, to E	Overgrown talus slope	Shane	7128254.9	636498.1
CHYS_1045_08	Gentle slope to W and creek	Moderate	Damp	B	2	Brown	No	Overgrown boulders	Shane	7130500	636500
CHYS_1040_08	Gentle NW slope on plateau	Poor	Wet	B	4	Grey	No	Vegetation is thick, bush is thin	Archie	7129255	636501
CHYS_1054_08	Steep slope	Well	Damp	B	2	Brownish black	No	Vegetation is thick	Archie	7133498	636501.7
CHYS_1044_08	Flat, 3m from creek	Moderate	Damp	B	4	Brown	No		Kevin	7130252	636502
CHYS_1056_08	Moderate NW slope	Well	Damp	B	2	Brown	Yes		Archie	7133998.9	636502.3
CHYS_1042_08	Gentle S slope, S side of creek	Well	Wet	B	3	Greyish brown	No	Very bushy vegetation present	Archie	7129744	636502
CHYS_1043_08	Flat, swampy	Moderate	Damp	B	4	Brown	No		Kevin	7130004	636504
CHYS_1041_08	Gentle SE slope. Beside creek	Moderate	Wet	B	3	Brownish grey	No	Bushes and vegetation present	Archie	7129497	636507
CHYS_1057_08	Steep	Well	Damp	B	2	Brown grey	Yes	Boulders, willows	Tubs	7134232.8	636507.9
CHYS_1060_08	Flat	Poor	Damp	B	3	Brown	No		Thomas	7135004.5	636508
CHYS_1038_08	Moderate W slope, boulderfield	Well	Dry	A	1	Black	No	Grass and moss present	Archie	7128752	636509
CHYS_1039_08	Moderate slope N, rock field just beginning	Well	Wet	B	3	Greyish brown	No	Grass and moss growing	Archie	7128998	636511
CHYS_1058_08	Gentle slope to N	Moderate	Wet	B	2	Green brown	No		Thomas	7134509.4	636513.8
CHYS_1046_08	Small flat area on scree slope facing W, patchy soil	Well	Damp	B	3	Brown		Slope is nearly all scree with big loose boulders	Aiden	7130777	636586
CHYS_1064_08	Moderate slope N, rock field and cliffs at station	Well	Wet	B	3	Brownish grey	Yes	Grass and moss 100m SE	Archie	7128824	636679
CHYS_1081_08	Steep NW slope	Well	Damp	B	1	Brown	Yes	Steep rock	Archie	7134002.3	636729.7
CHYS_1065_08	Gentle N slope, bottom of mtn.	Well	Wet	B	3	Greyish brown	Yes		Archie	7129053	636733

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_1082_08	Moderate	Well	Damp	B	2	Brown grey	Yes	Boulders, veg.	Tubs	7134240.8	636738.4
CHYS_1086_08	Flat valley	Poor	Damp	B	4	Brown	No		Thomas	7135238.9	636741.1
CHYS_1071_08	Gentle slope to SSW	Well	Damp	B	3	Medium-deep brown	No	Grassy hillside, some willows, overgrown talus, good soil	Shane	7130503	636748
CHYS_1087_08	Gentle slope to E and creek, large willows	Moderate	Wet/Damp	B	3	Grey	No		Shane	7135501	636749
CHYS_1070_08	Flat	Moderate	Wet	B	4	Brown	No		Kevin	7130192	636749
CHYS_1067_08	Gentle slope E, beside creek, S side	Moderate	Wet	B	4	Greyish brown	No	Bushes and vegetation present	Archie	7129500	636749
CHYS_1083_08	Gentle slope N	Moderate	Damp	B	3	Brown	No		Thomas	7134499.5	636751.3
CHYS_1068_08	Moderate S slope, beside creek N side	Well	Wet	B	4	Grey	No	Bushy vegetation thick	Archie	7129752	636752
CHYS_1072_08	Moderate S facing slope, grassy area on scree slope	Well	Damp	B	4	Brown	No		Aiden	7130755	636752
CHYS_1084_08	Gentle slope NW	Moderate	Wet	B	4	Light brown	No		Kevin	7134751.9	636753.1
CHYS_1066_08	Gentle slope N	Well	Wet	B	3	Grey brown	No	Bushy	Archie	7129268	636753
CHYS_1085_08	Flat	Poor	Damp	B	3	Brown	No		Thomas	7135000.5	636754.1
CHYS_1079_08	Steep S slope	Well	Damp	B	2	Brown	Yes	Vegetation visible	Archie	7133520.1	636754.7
CHYS_1073_08	Top of ridge, boulders and grass	Well	Damp	B	4	Light brown with some	Yes	Very dense clay with no chips	Daithi	7131005	636760
CHYS_1069_08	Flat, swampy	Poor	Damp/wet	B	4	Grey	No		Kevin	7130002	636764
CHYS_1088_08	Gentle slope N, bottom of mtn., Boulders and cliff at 50m	Poor	Wet	B	3	Grey	Yes		Archie	7129081	636786
CHYS_1074_08	Steep	Well	Damp	B	3	Grey	Yes	Cliffs	Tubs	7131173	636801
CHYS_1106_08	Steep N facing slope	Well	Wet	B	1	Brown	Yes	This is as close to point as possible	Archie	7134071.3	636883.5
CHYS_1107_08	Steep	Well	Damp	B	3	Greyish	Yes	Boulders	Tubs	7134256	636992.4
CHYS_1095_08	Moderate S slope with scree and patchy soil	Well	Damp	B	4	Brown	No		Aiden	7130772	636992
CHYS_1089_08	Gentle N slope	Well	Wet	B	4	Grey	No	Bushy, vegetation present	Archie	7129253	636993
CHYS_1092_08	Flat	Well	Damp	B	4	Brown	No		Kevin	7129996	636994

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_1102_08	Moderate slope facing E, near top of ridge, thin patchy soil, some scree	Well	Dry	B	2	Brown	Yes, on ridge, some rusty rock		Aiden	7133002	636996
CHYS_1098_08	Gentle S slope	Well	Damp	B	3	Brown	No	Rocky area, veg. visible	Archie	7132021.7	636996.8
CHYS_1099_08	Moderate S slope	Well	Wet	B	3	Sandy brown	No	Boulder field, sandy texture, pebbles in sample	Archie	7132241	636997.4
CHYS_1091_08	Moderate SE slope, beside creek, N side	Well	Wet	B	4	Grey	No	Bushy vegetation thick	Archie	7129750	636998
CHYS_1093_08	Gentle slope S	Well	Damp/dry	B	3	Brown	No		Kevin	7130241	637000
CHYS_1109_08	Steep NW, boulders	Well	Damp	B	3	Brown	Yes		Kevin	7134751.3	637001.9
CHYS_1094_08	Gentle slope to S, grassy hillside and willows	Poor	Wet	B	4	Deep hazelnut	No		Shane	7130502	637002
CHYS_1090_08	Gentle SE slope. Beside creek	Well	Wet	B	4	Grey	No	Willows visible, vegetation present	Archie	7129501	637002
CHYS_1100_08	Moderate S slope	Well	Damp	B	2	Sandy brown	Yes	Boulder field, sample is sandy and pebbly	Archie	7132494.5	637003
CHYS_1108_08	Gentle slope to N	Moderate	Damp	B	3	Brown	No		Thomas	7134500.4	637003.9
CHYS_1096_08	Boulder field, cliff to N	Well	Damp	B	1	Light brown with grey	Yes		Daithi	7131023	637026
CHYS_1103_08	Steep hillside facing W, scree and thin patchy soil, sample taken below ridge	Well	Dry		2	Brown	Yes, lots	Sample is light and dry	Aiden	7133265	637069
CHYS_1111_08	Gentle SE slope. Beside creek	Poor	Wet	B	4	Greyish brown	No	Bushes and vegetation present	Archie	7129473	637195
CHYS_1116_08	Moderate scree slope facing S, some patches with soil	Well	Damp	B	3	Brown	No		Aiden	7130797	637230
CHYS_1126_08	Steep hillside facing E, scree with thin soil patches	Well	Damp	B	1	Brown	Yes, and some gossan 50m S	Sample is gritty clay	Aiden	7133239	637243
CHYS_1115_08	Gentle overgrown boulder/scree slope to S, some willows	Well	Dry/damp	B	2	Golden brown	No		Shane	7130498	637246
CHYS_1132_08	Gentle slope W	Well	Damp	B	3	Brown	Yes		Kevin	7134749.8	637247.5
CHYS_1117_08	Steep S facing slope into large valley, boulder field	Well	Damp	B	2	Reddy brown	Yes	Clay is gritty and looks to have some oxides in int, Only little islands of soil on slope, so not great representation, cliff to NW had large gossan/oxi rock - is it in our claim block?	Daithi	7131080	637248

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_1125_08	Steep hillside facing E, scree, very little soil	Well	Dry	B	2	Brown	No		Aiden	7133008	637249
CHYS_1131_08	Moderate slope to NW	Moderate	Damp	B	2	Brown	No		Thomas	7134495.4	637249.2
CHYS_1130_08	Steep	Well	Damp	B	2	Greyish	Yes	Boulders, veg.	Tubs	7134252.6	637250.2
CHYS_1114_08	Gentle slope S	Well	Damp	B	4	Brown	No		Kevin	7130286	637251
CHYS_1112_08	Gentle E slope, beside creek	Moderate	Wet	B	4	Grey	No	Bushy vegetation thick	Archie	7129748	637252
CHYS_1113_08	Flat, boulders	Well	Damp	B	4	Dark brown	No		Kevin	7130033	637255
CHYS_1123_08	Steep slope W	Well	Damp	B	1	Brown	Yes		Julius	7132509.4	637258.7
CHYS_1119_08	Steep slope	Moderate	Damp	B	1	Brown	Yes		Julius	7131470	637290
CHYS_1118_08	Steep	Well	Damp	B	2	Brown	Yes	Cliffs, boulders	Tubs	7131192	637325
CHYS_1139_08	Steep slope	Moderate	Damp	B	1	Brown	Yes	Had to scrape to get sample	Julius	7131471	637455
CHYS_1151_08	Moderate slope to NW	Moderate	Damp	B	2	Brown	No		Thomas	7134489.5	637466.7
CHYS_1138_08	Steep	Well	Damp	B	2	Brown grey	Yes	Boulders	Tubs	7131257	637471
CHYS_1136_08	Moderate S scree slope, some soil patches	Moderate	Damp	B	2	Brown	No		Aiden	7130778	637484
CHYS_1150_08	Steep	Well	Wet	B	2	Grey	Yes	Boulders, rocks	Tubs	7134239.1	637493.1
CHYS_1147_08	Steep	Well	Damp	B	2	Brown	Yes	Boulder fields, veg.	Tubs	7133501.7	637493.4
CHYS_1135_08	Gentle slope to S, willows, grass patches and boulders	Well	Damp	B	3	Medium brown	No		Shane	7130503	637498
CHYS_1148_08	Steep	Well	Damp	B	2	Brown	Yes	Veg., boulders	Tubs	7133746.7	637498.9
CHYS_1134_08	Gentle slope S	Well	Damp/dry	B	3	Brown	No		Kevin	7130312	637502
CHYS_1149_08	Steep	Well	Damp	B	2	Brown	Yes	Veg., loose rocks	Tubs	7133997.1	637514.4
CHYS_1133_08	Flat, bushes	Moderate	Damp	B	3	Brown	No		Kevin	7130064	637516
CHYS_1143_08	Gentle slope E	Moderate	Damp	B	2				Julius	7132506.2	637525.4
CHYS_1144_08	Gentle slope	Moderate	Damp	B	1	Brown	Yes		Julius	7132727.4	637529.5
CHYS_1137_08	Steep boulder and scree slope	Well	Damp	B	3	Light earthy brown	No	Soft earthy clay, fine and fluffy, no chips; amazing gossan on hill to S, almost looks like a contact	Daithi	7131090	637578
CHYS_1152_08	Gentle slope S	Well	Damp	B	3	Brown	No		Kevin	7130315	637664
CHYS_1157_08	Moderate slope	Moderate	Wet	B	1	Brown	Yes	Had to dig to get sample	Julius	7131521	637696
CHYS_1162_08	Flat	Moderate	Dry	B	1	Brown			Julius	7132763.5	637737.7
CHYS_1165_08	Steep	Well	Damp	B	2	Brown	Yes	Boulder fields	Tubs	7133513.9	637738.7
CHYS_1153_08	Gentle slope to S	Well	Damp	B	4	Light golden brown	No	Taken to N of exposed boulders, overgrown boulders, willows	Shane	7130516	637740
CHYS_1154_08	Moderate slope, low bush and grass, scree uphill	Well	Damp	B	4	Brown	No		Aiden	7130760	637744

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_1166_08	Steep	Well	Damp	B	2	Brown-black	Yes	Rocks, boulders	RJ	7133752.9	637745
CHYS_1168_08	Steep	Well	Damp	B	2	Brown	Yes	Lots of veg., boulders	Tubs	7134245.2	637747.7
CHYS_1155_08	Steep boulder and scree slope	Well	Damp	B	2	Light earthy brown	No		Daithi	7131016	637751
CHYS_1167_08	Steep	Well	Damp	B	2	Brown grey	Yes	Loose rocks, veg.	Tubs	7134003.9	637750.7
CHYS_1163_08	Moderate facing E, near bottom of valley, rock ground, low bush	Well	Damp	B	3	Brown			Aiden	7133006	637752
CHYS_1161_08	Gentle slope W	Poor	Damp	B	1		Yes		Julius	7132504.4	637759.6
CHYS_1156_08	Steep	Well	Damp	A	1	Brown	Yes	Boulders	Tubs	7131282	637765
CHYS_1164_08	Moderate slope facing E, rocky, thin soil	Well	Damp	B	2	Brown	No		Aiden	7133220	637770
CHYS_1158_08	Steep		Damp	B		Brown	Yes		Tubs	7131640	637820
CHYS_1182_08	Moderate	Well	Damp	B	2	Brown grey	Yes	Boulders, veg.	Tubs	7133489.9	637974.4
CHYS_1172_08	Steep slope, willow and scree	Well	Damp	B	2	Dark brown	Yes	Sample gritty with chips, slumped area with willow, lots of scree and boulders	Daithi	7131035	637975
CHYS_1184_08	Steep	Well	Damp	B	2	Brown	Yes	Loose boulders, veg.	Tubs	7134005.3	637987.9
CHYS_1181_08	Gentle sloping area to E, low bushes	Well	Damp	B	3	Brown	Yes, 100m NW		Aiden	7133244	637990
CHYS_1171_08	Moderate SE slope, low bushes, rocky, scree uphill	Well	Damp	B	3	Brown	No		Aiden	7130750	637991
CHYS_1185_08	Steep	Well	Damp	B	2	Grey brown	Yes	Boulders, veg.	Tubs	7134276	637997.1
CHYS_1173_08	Steep	Well	Damp	B	2	Brown	Yes	Boulders, magnetic	Tubs	7131309	637998
CHYS_1170_08	Moderate slope to S, thick willows	Well	Damp	B	1	Brown	No		Shane	7130503	637999
CHYS_1180_08	Moderate W facing slope near creek,	Moderate	Damp	A	3	Black, slightly mixed	Yes, rusty OC in creek downstream	Sample is slightly mixed	Aiden	7133006	638003
CHYS_1183_08	Steep	Well	Damp	B	2	Brown	Yes	Rocks	RJ	7133746.8	638005.1
CHYS_1179_08	Moderate to steep hillside sloping W, low bush	Well	Damp	B	2	Brown	No	Some stones in sample	Aiden	7132751	638011
CHYS_1178_08	Gentle slope W	Moderate	Damp	B	1	Brown			Julius	7132495.9	638014.1

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_1174_08	Gentle slope	Moderate	Damp	B	1	Brown	No	Had to dig and scrape to get sample	Julius	7131566	638020
CHYS_1175_08	Steep	Well	Damp	B	2	Brown	Yes	Boulders	Tubs	7131663	638048
CHYS_1188_08	Valley near dry creek bed	Well	Damp	B	3	Light brown with orangey tinge	Yes	Soft well drained clay, no grit	Daithi	7131041	638231
CHYS_1191_08	Steep	Well	Damp	B	1	Brown	Yes	Boulders	Tubs	7131728	638233
CHYS_1187_08	Gentle E slope towards small gully, low bush	Well	Damp	B	3	Brown	No		Aiden	7130750	638243
CHYS_1195_08	Steep rocky hillside facing W, thin soil	Well	Damp	B	1	Brown	No	Clay and grit	Aiden	7132751	638244
CHYS_1198_08	Moderate	Well	Damp	B	2	Brown	Yes	Willows jungle	Tubs	7133510	638246.7
CHYS_1189_08	Steep	Well	Damp	A	1	Brown	Yes	Boulders	Tubs	7131259	638250
CHYS_1186_08	Moderate slope to S	Well	Damp	B	2	Orangey brown	No	Thick willow overgrowth	Shane	7130501	638251
CHYS_1200_08	Steep to creek	Well	Damp	B	2	Grey brown	Yes	Boulders, veg.	Tubs	7134008.1	638252.6
CHYS_1194_08	Steep slope W	Moderate	Damp	B	1	Brown	Yes		Julius	7132515.1	638252.8
CHYS_1196_08	Steep slope facing W, thin soil	Well	Damp	B	2	Brown	No	Sample is gritty clay	Aiden	7132999	638263
CHYS_1192_08	Gentle slope	Moderate	Damp	B	2	Brown	Yes		Julius	7132037.8	638265.2
CHYS_1190_08	Gentle slope	Moderate	Damp	B	1	Brown	Yes	Had to dig around for sample	Julius	7131570	638268
CHYS_1193_08	Gentle slope	Moderate	Damp	B	1	Light brown	Yes		Julius	7132248.1	638271.1
CHYS_1199_08	Steep	Well	Damp	B	2		Yes	Rocks	RJ	7133744.6	638313.5
CHYS_1213_08	Steep	Well	Damp	B	2		Yes	Steep with rock	RJ	7133782.6	638423.8
CHYS_1214_08	Flat, by creek	Well	Damp	B	2	Brown grey	Yes	Cliffs by creek	Tubs	7133893.6	638430.4
CHYS_1207_08	Steep	Well	Damp	A	1	Dark brown	Yes	Loose boulders	Tubs	7131781	638447
CHYS_1209_08	Gentle slope	Moderate	Damp	B	1	Brown	Yes		Julius	7132269.7	638458.9
CHYS_1210_08	Steep hillside facing W near gully, stony mossy ground, very little soil	Well	Damp	B	1		Yes, qtzite OC nearby		Aiden	7132981	638477
CHYS_1203_08	Moderate S slope, low bush	Well	Damp	B	3	Rusty brown	No	Some boulders	Aiden	7130765	638485
CHYS_1205_08	Steep	Well	Damp	A	1	Brown	Yes	Boulders	Tubs	7131249	638492

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_1204_08	Moss/thick willow slope	Moderate	Damp	B	3	Dark brown	Yes	This area is underlain by boulder field from above with moss and thick willow overtop	Daithi	7130998	638495
CHYS_1202_08	Flat area W of creek	Moderate	Damp	B	2	Dark brown	No	Thick willows	Shane	7130497	638497
CHYS_1208_08	Gentle slope	Moderate	Damp	B	1	Brown	Yes		Julius	7132027.4	638506.4
CHYS_1212_08	Moderate	Well	Damp	B	2	Grey brown	Yes, by creek	Willows	Tubs	7133500.6	638509.7
CHYS_1201_08	Flat, beside river	Moderate	Damp	B	2	Brown	No	Bushy	Archie	7130242.4	638516.9
CHYS_1206_08	Flat, top of mtn	Well	Damp	B	3	Light brown	Yes		Julius	7131528	638521
CHYS_1225_08	Steep	Well	Damp	B		Brown	Yes	Boulders	RJ	7133407.6	638586.2
CHYS_1227_08	Flat by creek, cliffs	Well	Damp	B	3	Grey brown	Yes	Cliff along creek	Tubs	7133785.2	638600.5
CHYS_1224_08	Gentle slope	Moderate	Damp	B	3	Brown	No		Julius	7132175.8	638682
CHYS_1218_08	Moderate SE slope, low bush, some boulders, thin soil		Damp	B		Brown and sandy	No		Aiden	7130748	638704
CHYS_1221_08	Steep slope	Moderate	Damp	B	1	Brown	No		Julius	7131531	638713
CHYS_1226_08	Moderate	Well	Damp	B	2	Brown	No	Willows	Tubs	7133512.4	638729.4
CHYS_1219_08	Steep V valley wall	Well	Damp	B	2	Dark grey brown	Yes	Poor sample, gritty clay, mixed unit, lots of boulders underneath	Daithi	7131023	638737
CHYS_1222_08	Steep	Well	Damp	B	2	Brown	Yes	Boulders, willows	Tubs	7131738	638739
CHYS_1215_08	Steep N slope	Well	Damp	B	1	Sandy brown	Yes	Boulder field, below OC, sandy texture	Archie	7129974.1	638743.6
CHYS_1220_08	Steep	Well	Damp	B	2	Brown	Yes	Willows, boulders	Tubs	7131256	638749
CHYS_1217_08	Flat area N of creek	Moderate	Damp	B	3	Medium-dark brown	No	Moderate willows and trees	Shane	7130499	638750
CHYS_1216_08	Gentle N slope	Well	Dry	B	2	Chocolate brown	Yes	Very thick bush and vegetation	Archie	7130236.9	638758.1
CHYS_1223_08	Gentle slope	Moderate	Damp	B	3	Brown	No		Julius	7132022.4	638760.3
CHYS_1236_08	Gentle slope	Moderate	Damp	B	3	Brown	Yes	Sample taken short, on borders	Julius	7131998	638808.9
CHYS_1234_08	Gentle slope	Moderate	Damp	B	1	Brown	No		Julius	7131478	638959

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_1232_08	Steep slope into valley	Well	Dry	B	3	Light earthy brown with orangey red	No	Heavily overgrown willow, poplar and pine; big stream 200m below and grassy, sample is gritty/silty clay	Daithi	7130992	638997
CHYS_1233_08	Moderate	Well	Damp	B	2	Brown	Yes	Willows	Tubs	7131249	638997
CHYS_1231_08	Flat	Moderate	Damp	B	4	Brown	No		Thomas	7130742	639000
CHYS_1230_08	Gentle slope to NW and creek, thick willows	Moderate	Damp/wet	B	1	Orangey brown/grey	No		Shane	7130503	639000
CHYS_1235_08	Steep	Well	Damp	B	2	Brown	Yes	Willows	Tubs	7131746	639006
CHYS_1229_08	Moderate N slope	Well	Dry	B	2	Sandy brown	Yes	Sample taken below OC	Archie	7130231.6	639007.4
CHYS_1228_08	Moderate slope to NW	Moderate	Damp	B	4	Brown	Yes, at 20m		Thomas	7129997	639022
CHYS_1245_08	Steep slope E	Moderate	Damp	B	1	Dark brown	No		Julius	7131484	639199
CHYS_1238_08	Gentle slope to W	Moderate	Damp	B	3	Grey brown	No		Thomas	7129750	639246
CHYS_1241_08	Moderate slope to NW and creek	Well	Dry/damp	A	0	Brown/grey light	Yes, to S, wine phyllites	Worst soil ever, none near here at all, just roots/sand and rocks, scraped from between rocks	Shane	7130500	639247
CHYS_1246_08	Steep	Well	Damp	B	2	Brown	Yes	Willows, trees	Tubs	7131758.2	639247.2
CHYS_1240_08	Moderate slope to NW	Moderate	Damp	B	1	Brown	No		Thomas	7130250	639250
CHYS_1239_08	Gentle slope to W	Moderate	Damp	B	3	Brown	No		Thomas	7130000	639250
CHYS_1244_08	Steep	Well	Damp	B	2	Brown	Yes	Willows, trees, rocks	Tubs	7131241	639253
CHYS_1243_08	Near valley floor 50m from stream	Well	Damp	A	3	Dark black	No	Sample is organic matter, couldn't get B horizon due to permafrost	Daithi	7131011	639267
CHYS_1242_08	Moderate slope to W	Moderate	Damp	B	2	Brown	No		Thomas	7130735	639273
CHYS_1255_08	Steep with thick bush	Moderate		B	1	Dark brown	No	Had to go further down to get sample	Julius	7131478	639378
CHYS_1250_08	Gentle slope to NW	Moderate	Damp	b	2	Grey brown	No		Thomas	7130240	639488
CHYS_1252_08	Flat	Moderate	Damp	B	3	Brown	No		Thomas	7130747	639496
CHYS_1253_08	Valley bottom, S of stream	Well	Damp	B	2	Dark brown/oxidised	Yes	Sandy clay, clay is roughly 75% of sample	Daithi	7130994	639499

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_1256_08	Moderate	Well	Damp	B	2	Brown grey	Yes	Willows	Tubs	7131755	639500
CHYS_1249_08	Moderate slope to W	Moderate	Damp	N	2	Brown	No		Thomas	7130000	639501
CHYS_1254_08	Steep	Well	Damp	B	3	Brown grey	Yes	Trees, thick bushes	Tubs	7131263	639506
CHYS_1248_08	Moderate slope to W	Moderate	Damp	B	2	Brown	Yes, at 40m		Thomas	7129753	639507
CHYS_1251_08	Moderate slope to NW	Moderate	Damp	B	1	Brown	No		Thomas	7130498	639517
CHYS_1263_08	Bottom of slope, boulders and trees	Well	Damp	B	3	Dark brown/wine oxidised	No	Sandy gritty sample with clay, area is boulders covered in moss	Daithi	7130989	639740
CHYS_1261_08	Flat, on a ridge	Moderate	Damp	B	2	Brown	No		Thomas	7130498	639747
CHYS_1258_08	Steep slope to NE	Moderate	Damp	B	1	Grey brown	Yes, at 10m		Thomas	7129756	639748
CHYS_1257_08	Moderate slope to SE	Moderate	Damp	B	3	Brown	No		Thomas	7129503	639752
CHYS_1262_08	Moderate slope to NW	Moderate	Damp	B	2	Grey	No		Thomas	7130738	639753
CHYS_1260_08	Steep slope to W	Moderate	Damp	B	2	Grey brown	No		Thomas	7130247	639754
CHYS_1259_08	Moderate slope to E	Moderate	Damp	B	2	Brown	No		Thomas	7130004	639756
CHYS_1264_08	Moderate	Well	Damp	B	2	Black, grey	Yes	Big trees	Tubs	7131248	639757
CHYS_1273_08	Steep	Well	Damp	B	2	Brown	Yes	Big trees	Tubs	7131474	639968
CHYS_1271_08	Steep slope NW, tress and moss	Poor	Wet	B	3	Light brown and dark grey	No	Silty gravelly muddy sample	Daithi	7131006	639985
CHYS_1270_08	Steep slope	Well	Damp	B	3	Light brown	No	Grit with clay	Daithi	7130766	639986
CHYS_1267_08	Moderate slope to SE	Moderate	Damp	B	3	Brown	No		Thomas	7129984	639993
CHYS_1272_08	Moderate	Well	Damp	B	3	Brown grey	Yes	Trees	Tubs	7131225	639994
CHYS_1268_08	Moderate slope to E	Well	Damp	B	2	Brown	No		Thomas	7130251	639996
CHYS_1269_08	Steep slope	Well	Damp	B	3	Light brown	Yes	Lots of chips, slope covered in lichen	Daithi	7130532	640004
CHYS_1266_08	Moderate slope to SE	Moderate	Damp	B	3	Brown	No		Thomas	7129751	640005
CHYS_1274_08	Steep slope to E	Moderate	Damp	B	2	Brown	No		Thomas	7129954	640150
CHYS_1279_08	Moderate	Well	Damp	B	2	Grey black	Yes	Big trees	Tubs	7131253	640243

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
CHYS_1276_08	Crest of hill, all frost here	Well	Damp	B	3	Light brown	No	Lots of chips, hard to get depth in sample	Daithi	7130503	640255
CHYS_1282_08	Moderate	Well	Wet	B	4	Grey	Yes	Big trees	Tubs	7131258	640442
CHYS_1281_08	Steep	Well	Damp	B	2	Brown	Yes	Trees	Tubs	7131005	640488
CHYS_165_08	Gentle slope to W, near saddle	Well	Damp	A	1	Brown	Yes	Open hillside	Shane	628255	7139003
CHYS_373_08	Top of ridge with some good soil (shallow) and grass cover	Well	Damp	B	3	Dark brown	Yes	Soil is clay, slope to S is grass covered with soil			
AJS_4_08	Gentle SE slope	Well	Wet	B	3	Greyish brown	No	Bush	Archie	7132140	637234
AJS_3_08	Gentle SE slope	Moderate	Wet	B	4	Greyish brown	No	Soil is pure clay, bushy	Archie	7132101	637240
AJS_2_08	Moderate SE slope	Moderate	Wet	B	4	Grey	No	Bushy	Archie	7132045	637243
AJS_5_08	Gentle SE slope	Well	Wet	B	1		No	Lots of sand in pebbles in sample, rock field	Archie	7132184	637244
AJS_9_08	Moderate SE slope	Well	Wet	B	2	Sandy brown	No	Rock field, sandy/pebbly sample	Archie	7132390	637244
AJS_1_08	Gentle S slope	Well	Wet	B	2	Sandy brown	No	Brush is thick, sandy and rocky texture for sample	Archie	7131999	637246
AJS_10_08	Moderate SE slope	Well	Wet	B	2	Brown	No	Rock field, sandy sample	Archie	7132446	637246
AJS_11_08	Moderate SE slope	Well	Wet	B	2	Brown	No	Rock field, sandy/pebbly sample	Archie	7132509	637250
AJS_8_08	Moderate SE slope	Well	Wet	B	2	Brown	No	Boulder field	Archie	7132347	637255
AJS_12_08	Moderate SE slope	Well	Wet	B	2	Brown	No	Sandy texture	Archie	7132545	637256
AJS_7_08	Gentle SE slope	Well	Wet	B	2	Brown	No	Boulder field, sand and pebbles in sample	Archie	7132312	637258
AJS_6_08	Gentle SE slope	Well	Wet	B	2	Brown	No	Rock field, sandy sample	Archie	7132230	637269
AJS_22_08	Moderate SE slope	Well	Damp	B	3	Brown	No	Sandy texture, rock field, vegetation visible	Archie	7132425	637328
AJS_21_08	Gentle slope	Moderate	Wet	B	1	Brown	No		Julius	7132405.9	637333.3
AJS_13_08	Gentle slope	Moderate		B	2	Brown	No		Julius	7131992.2	637340.4
AJS_16_08	Flat	Moderate	Wet	B	3	Brown	No		Julius	7132153.4	637346.2
AJS_15_08	Flat	Moderate	Damp	B	3	Brown	No		Julius	7132103.2	637347.1
AJS_20_08	Gentle slope	Moderate	Wet	B	3	Brown	No		Julius	7132339.8	637348
AJS_19_08		Moderate	Wet	B	3	Brown	No		Julius	7132299.7	637348
AJS_23_08	Moderate SE slope	Well	Wet	B	3	Brown	No	Coarse sand mixed with clay, rock field	Archie	7132469	637350
AJS_17_08	Flat	Moderate	Wet	B	2	Brown	No		Julius	7132219.8	637350.1
AJS_18_08	Flat	Moderate	Wet	B	2	Brown	No		Julius	7132254.8	637350.1
AJS_14_08	Flat	Well	Damp	B	3	Brown	No		Julius	7132052	637352.7

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
AJS_24_08	Moderate SE slope	Well	Wet	B	2	Brown	No	Rocky field, sandy/pebbly sample	Archie	7132514	637366
AJS_32_08	Moderate slope to E	Moderate	Wet	B	4	Brown	No		Thomas	7132350.4	637438.7
AJS_29_08	Flat	Moderate	Damp	B	4	Brown	No		Thomas	7132201.7	637444.4
AJS_33_08	Moderate slope to E	Moderate	Wet	B	4	Brown	No		Thomas	7132398.4	637444.9
AJS_36_08	Moderate slope to E	Moderate	Damp	B	3	Brown	No		Thomas	7132559.5	637446.2
AJS_26_08	Flat	Moderate	Damp	B	4	Brown	No		Thomas	7132048	637447.2
AJS_34_08	Moderate slope to E	Moderate	Wet	B	4	Brown	No		Thomas	7132451.1	637447.8
AJS_27_08	Flat	Moderate	Damp	B	4	Brown	No		Thomas	7132100.5	637448.4
AJS_28_08	Flat	Moderate	Damp	B	4	Brown	No		Thomas	7132149.5	637448.6
AJS_31_08	Moderate slope to NE	Moderate	Damp	B	4	Brown	No		Thomas	7132299.7	637449
AJS_30_08	Moderate slope to E	Moderate	Wet	B	4	Brown	No		Thomas	7132250.5	637449.5
AJS_35_08	Moderate slope to E	Moderate	Wet	B	3	Brown	No		Thomas	7132496.2	637451.6
AJS_25_08	Gentle slope to N	Moderate	Damp	B	4	Brown	No		Thomas	7132001.9	637455.8
AJS_47_08	Flat, 5m from small creek	Moderate	Damp	B	3	Brown	No		Thomas	7132498.7	637547.7
AJS_48_08	Moderate slope to E	Moderate	Damp	B	4	Brown	No		Thomas	7132552	637547.8
AJS_44_08	Flat	Moderate	Damp	B	4	Brown	No		Thomas	7132351.4	637548.2
AJS_41_08	Flat	Moderate	Damp	B	4	Brown	No		Thomas	7132200.3	637549
AJS_40_08	Flat	Moderate	Damp	B	3	Brown	No		Thomas	7132154.2	637549.6
AJS_38_08	Moderate slope to NE	Moderate	Damp	B	4	Brown	No		Thomas	7132048.6	637549.6
AJS_43_08	Flat, surrounded by creeks	Poor	Wet	B	4	Brown	No		Thomas	7132299.2	637550.1
AJS_46_08	Gentle slope to E, 5m from creek	Moderate	Damp	B	3	Brown	No		Thomas	7132448.8	637550.6
AJS_39_08	Gentle slope to N	Moderate	Damp	B	3	Brown	No		Thomas	7132095.8	637550.7
AJS_42_08	Gentle slope to N	Poor	Damp	B	4	Brown	No		Thomas	7132250.1	637551.1
AJS_45_08	Flat	Moderate	Damp	B	4	Brown	No		Thomas	7132400.6	637551.6
AJS_37_08	Moderate slope to NE	Moderate	Damp	B	1	Brown	No		Thomas	7132002.4	637553.9
AJS_59_08	Flat	Well	Damp	B	2	Brown	Yes	Boulders	Tubs	7132508	637643
AJS_56_08	Steep	Well	Damp	B	2	Brown	Yes	By creek	Tubs	7132341	637644
AJS_51_08	Moderate	Well	Damp	A	1	Brown	Yes	Boulders	Tubs	7132099	637646
AJS_60_08	Flat	Well	Damp	B	3	Brown	Yes	Boulders	Tubs	7132548	637646
AJS_57_08	Steep	Well	Damp	B	2	Brown	Yes	Willows	Tubs	7132400	637648
AJS_49_08	Steep	Well	Damp	A	1	Brown	Yes	Boulders	Tubs	7131999	637649
AJS_58_08	Flat	Well	Damp	B	3	Brown	Yes	Willows	Tubs	7132447	637649
AJS_50_08	Steep	Well	Damp	A	1	Brown	Yes	Boulders	Tubs	7132051	637650
AJS_52_08	Moderate	Well	Damp	A	1	Brown	Yes	Boulders	Tubs	7132151	637651
AJS_54_08	Flat	Well	Damp	B	1	Brown	Yes	By creek	Tubs	7132251	637652
AJS_53_08	Steep	Well	Damp	B	1	Brown	Yes	Cliffs	Tubs	7132195	637653
AJS_55_08	Flat	Well	Damp	B	2	Brown	Yes	By creek	Tubs	7132300	637655

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
AJS_65_08	Moderate NW slope	Well	Wet	B	3	Greyish brown	Yes, by river	Mostly clay in sample, bush in area	Archie	7132196	637745
AJS_68_08	Gentle slope	Moderate	Wet	B	3	Brown	Yes		Julius	7132340.8	637746.7
AJS_64_08	Moderate NW slope	Well	Damp	A	1	Black		Not very much clay, loose stones, shattered rock	Archie	7132146	637747
AJS_67_08	Moderate NW slope	Well	Wet	B	2	Brown	Yes	Sandy/pebbly/clay sample	Archie	7132301	637748
AJS_69_08	Gentle slope	Moderate	Wet	B	2	Brown	Yes		Julius	7132392.4	637749.1
AJS_62_08	Gentle grassy/shrubby slope nW to creek underlain by scree/boulders	Well	Damp/wet	B	1	Dark grey brown	Yes, uphill	Very rocky sample with rusted butts	Sarah	7132054	637750
AJS_70_08	Flat	Well	Wet	B	3	Brown	Yes		Julius	7132452.3	637750.4
AJS_66_08	Moderate SW slope	Well	Wet	B	2	Brown	Yes	Coarse sandy/pabbly texture, bushes and vegetation present	Archie	7132247	637751
AJS_71_08	Gentle slope, near stream	Well	Damp	B	3	Brown	Yes		Julius	7132494.5	637753.5
AJS_61_08	Gentle grassy NW slope to river	Well	Damp	B	2	Grey brown	Yes	Gritty chippy clay sample	Sarah	7132000	637754
AJS_63_08	Moderate NW slope	Well	Wet	B	2	Brown	No	Sandy/pebbly sample	Archie	7132104	637754
AJS_72_08	Gentle slope, next to creek	Well	Wet	B	3	Brown	No		Julius	7132545.3	637762.7
AJS_80_08	Gentle slope NE	Well	Damp	B	3	Brown	No		Kevin	7132339	637846
AJS_84_08	Gentle slope NE	Well	Damp/wet	B	2.5	Brown			Kevin	7132548	637846
AJS_74_08	Moderate slope on top of OC, just beside gully	Well	Damp	B	2	Light greyish brown	Yes	Some rocks in sample, but good clay	Sarah	7132048	637850
AJS_83_08	Gentle slope NE	Moderate	Wet	B	3	Brown	No		Kevin	7132499	637850
AJS_73_08	Moderate slope NW to river, patchy veg and thin soil	Well	Damp	B	3	Dark brown	Yes		Sarah	7131992	637851
AJS_75_08	Moderate grassy slope NW to valley/stream, underlain by scree, very thin soil	Well	Damp	B	0	Dark brown	Yes, uphill	Very poor sample, all rocks	Sarah	7132102	637851
AJS_81_08	Gentle slope NE	Well	Damp	B	3	Brown	No		Kevin	7132405	637852
AJS_79_08	Gentle slope NE, boulders	Well	Damp	B	3	Brown	No		Kevin	7132276	637852
AJS_77_08	Moderate slope NE, boulders	Moderate	Damp/wet	B	3	Brown	No		Kevin	7132195	637853
AJS_78_08	Gentle slope NE, boulders	Well	Damp	B	1	Brown	No		Kevin	7132258	637855
AJS_82_08	Gentle slope NE	Moderate	Damp	B	2.5	Brown	No		Kevin	7132457	637855
AJS_76_08	No notes								Kevin	7132158	637858
AJS_89_08	Steep E	Well	Wet	B	1	Brown	Yes		Kevin	7132201	637947
AJS_96_08	Gentle slope NE	Moderate	Damp	B	3	Brown	No		Kevin	7132547	637949
AJS_92_08	Moderate slope E	Well	Damp	B	2	Brown	No		Kevin	7132345	637950
AJS_87_08	Steep E	Well	Damp	B	1	Brown	Yes		Kevin	7132096	637952

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
AJS_88_08	Steep E	Well	Damp	B	1	Brown	Yes		Kevin	7132149	637952
AJS_94_08	Gentle slope E	Moderate	Damp/wet	B	2.5	Brown	No		Kevin	7132440	637952
AJS_90_08	Steep E	Well	Damp/wet	B	3	Brown	Yes		Kevin	7132250	637953
AJS_86_08	Steep E	Well	Damp	B	1	Brown	Yes		Kevin	7132055	637954
AJS_95_08	Gentle slope E	Moderate	Damp/wet	B	2	Brown	No		Kevin	7132499	637954
AJS_93_08	Gentle slope E	Well	Damp/wet	B	2	Brown	No		Kevin	7132392	637955
AJS_85_08	Steep E	Moderate	Wet	B	3	Brown	Yes		Kevin	7131989	637956
AJS_91_08	Steep E	Well	Damp	B	1	Grey	No		Kevin	7132295	637958
AJS_100_08	Steep W to river, grassy overgrown blouder/scree slope	Well	Damp	B	2	Med grey brown with some rust spots	Yes	Flagging marker rolled a couple metres downhill.	Sarah	7132149	638048
AJS_104_08	Moderate slope NW to creek, mossy, overgrown scree	Well	Damp	B	1	Dark grey brown	No	Very rocky sample	Sarah	7132351	638049
AJS_98_08	Steep scree slope NW to gulley-valley-river	Well	Damp	B	1	Medium yellowish brown	Yes	Sandy sample	Sarah	7132050	638049
AJS_102_08	Edge of gully heading NW to creek, moderate slope	Well	Damp	B	2	Reddish chocolate brown	Yes		Sarah	7132250	638050
AJS_106_08	Moderate slope NW, mossy, overgrown scree	Well	Damp	B	1	Brown	No	Very rocky sample	Sarah	7132450	638050
AJS_103_08	Moderate slope NW to valley and creek, patchy soil and veg underlain by scree, between 2 gullies	Well	Damp	B	1	Medium brown with rust tinge	No	Gritty sandy rocky sample is no good	Sarah	7132299	638050
AJS_101_08	Moderate to steep slope N to gully, overgrown scree, very patchy soil	Well	Damp	B	1	Medium brown	Yes	This sample is basically all rocks	Sarah	7132200	638051
AJS_105_08	In gully, moderate slope NW, water running, scree	Well	Damp	B	1	Light brown	Yes	Very gritty sample, includes folded rusty scree bits	Sarah	7132396	638051
AJS_107_08	Gentle slope NW, grassy	Well	Damp	B	2	Brown with rusty tinge	No	Rocky sample, some rocks rusty	Sarah	7132498	638051
AJS_108_08	Gentle slope NW with shrubs and grass	Well	Damp	B	1	Brown	Yes, at point	Very rocky sample	Sarah	7132549	638051

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
AJS_99_08	Moderate to steep slope to river, very patch soil	Well	Wet	B	1	Army green/brown	Yes, couple metres uphill	Wet sandy sample, no A horizon here	Sarah	7132101	638052
AJS_97_08	Steep scree slope NW to gulley-valley-river	Well	Damp	B	0	Medium yellowish brown	Yes, right here with good bedding, lots of parallel joints, soil is awful so would be better off sampling the	Basically no soil, sample is composed of rock chips	Sarah	7131997	638052
GWS_1_08	Moderate	Well	Damp	B	2	Brown	Yes	Flat on top	Tubs	7135618.3	628569.6
GWS_36_08	Steep S-N	Well	Damp	B	2	Light brown	Yes, to N	Very steep N/S	Tubs	7135580.1	628664.7
GWS_37_08	Flat on top, steep to N and S	Well	Damp	A	1	Dark brown	Yes	Steep N/S	Tubs	7135608	628700
GWS_70_08	Steep N/S	Well	Damp	B	2	Dark brown grey	No	Steep all around	Tubs	7135500	628729
GWS_38_08	Ridge, mt. top	Yes	Damp	B	2	Greyish brown	Yes	Could not get right to point, steep and snowy ledge	Archie	7135611	628748
GWS_71_08	Steep N/S	Well	Damp	B	1	Greyish brown	Yes	Loose rocks	Tubs	7135530	628763
GWS_104_08	Steep	Well	Damp	B	2	Dark greenish brown	No	Loose rocks	Tubs	7135424	628795
GWS_72_08	Steep S slope	Well	Dry	B	1	Brown	Yes	Rocks everywhere, had a hard time getting sample	Archie	7135560	628805
GWS_105_08	Steep	Well	Damp	A	1	Dark brown	Yes	Loose rocks	Tubs	7135462	628824
GWS_73_08	Top of mountain	Well	Damp	B	2	Brown	Yes	Mtn. top flat, but steep slopes to N and S	Archie	7135593	628844
GWS_138_08	Steep N/S	Well	Damp	B	2	Greenish brown	Yes	Loose rock	Tubs	7135351	628860
GWS_74_08	Moderate slope to N	Moderate	Damp	A	1	Black	Yes, at 15m	Just moss and rocks	Thomas	7135640	628869
GWS_106_08	Steep S slope	Yes	Dry	B	1	Black	Yes	Lots of boulders	Archie	7135495	628871
GWS_139_08	Steep N/S	Well	Damp	B	2	Dark brown, greenish	Yes	Loose rock and boulders	Tubs	7135381	628897
GWS_107_08	Steep S slope, boulders everywhere	Yes	Dry	B	2	Brown	Yes	Boulders everywhere	Archie	7135521	628904

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
GWS_75_08	Moderate slope to N	Moderate	Damp	B	1	Brown	Yes, at 10m		Thomas	7135650	628916
GWS_172_08	Steep N/S	Well	Damp	B	2	Greenish brown	Yes	Boulders	Tubs	7135268	628923
GWS_140_08	Steep S facing slope	Well	Dry	B	2	Brownish black	Yes	Rock boulders everywhere	Archie	7135402	628947
GWS_108_08	Moderate slope to N	Moderate	Damp	A		Black	No		Thomas	7135557	628948
GWS_76_08	Steep	Well	Dry	B	1	Brown	Yes		Kevin	7135690	628956
GWS_173_08	Steep N/S	Well	Damp	B	2	Greenish brown	Yes	Boulders, loose rocks	Tubs	7135302	628959
GWS_141_08	Steep slope S	Well	Dry	B	1	Brown/black	Yes	Rocks everywhere	Archie	7135448	628961
GWS_206_08	Steep N/S	Well	Damp	B	2	Greyish brown	Yes		Tubs	7135191	628984
GWS_109_08	Moderate slope to S	Moderate	Damp	B	1	Brown	No		Thomas	7135596	628988
GWS_77_08	Steep	Well	Damp	A	2	Brown	Yes		Kevin	7135723	628996
GWS_174_08	Steep SE slope	Well	Dry	B	2	Greyish brown	Yes	Rocks everywhere	Archie	7135333	628998
GWS_142_08	Moderate slope to S	Moderate	Dry	B	1	Brown	No		Thomas	7135480	629016
GWS_110_08	Steep	Well	Dry	B	1		No		Kevin	7135622	629018
GWS_207_08	Steep N/S	Well	Damp	B	2	Greenish brown	Yes	Steep, loose stones	Tubs	7135229	629022
GWS_175_08	Steep S facing slope	Well	Damp	B	2	Brown	Yes	Boulders everywhere, a little brush	Archie	7135367	629033
GWS_240_08	Steep N/S	Well	Damp	B	2	Greyish brown	Yes		Tubs	7135117	629051
GWS_143_08	Moderate slope to S	Moderate	Damp	B	2	Brown	No		Thomas	7135503	629061
GWS_208_08	Steep slope SE	Well	Damp	B	3	Brown	No	Grass and moss present	Archie	7135258	629063
GWS_78_08	On top of ridge	Well	Damp	B	3	Dark brown with some oxidised parts that are rust coloured		Lots of heavily oxi-rock fragments with rusted sulfides, looks good!	Daithi	7135706	629068
GWS_111_08	Steep	Well	Damp/dry	B	2		No		Kevin	7135702	629073
GWS_176_08	Moderate slope to SE	Moderate	Damp	B	1		No		Thomas	7135392	629083
GWS_241_08	Steep N/S	Well	Damp	B	2	Greenish	Yes	Boulders	Tubs	7135149	629084
GWS_144_08	Steep	Well	Damp/dry	B	3		No		Kevin	7135536	629089

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
GWS_112_08	Steep south facing slope	Well	Damp	A	1	Black		Soil is organic and peaty, very little soil	Daithi	7135675	629097
GWS_209_08	Steep slope SE	Well	Wet	B	2	Brown	Yes	Rocks showing, grass and lichen present	Archie	7135290	629099
GWS_177_08	Moderate slope to SE	Moderate	Damp	B	1	Brown	No		Thomas	7135410	629116
GWS_274_08	Steep N/S	Well	Damp	B	2	Brown	Yes	Willows, boulders	Tubs	7135039	629118
GWS_145_08	Steep	Well	Damp/dry	B	3		No		Kevin	7135574	629122
GWS_242_08	Steep slope SE	Well	Wet	B	3	Brown	No	Grass and moss and small brush	Archie	7135181	629126
GWS_210_08	Moderate slope to SE	Moderate	Damp	B	3		No		Thomas	7135328	629134
GWS_113_08	Steep south facing slope	Well	Damp	B	3	Orangey brown		Clay and soft soil, no real A horizon to speak of	Daithi	7135708	629140
GWS_80_08	Top of mountain, N slope cliff	Well	Wet	B	3	Brown	Yes	On the top of mountain	Archie	7135759	629143
GWS_275_08	Steep N/S	Well	Damp	B	2	Greenish brown	Yes	Willows	Tubs	7135071	629149
GWS_178_08	Steep	Well	Damp/dry	B	3		No		Kevin	7135462	629153
GWS_243_08	Steep	Well	Wet	A	1	Blackish brown	No	Grass and moss present, brush is just starting to grow	Archie	7135212	629165
GWS_146_08	Steep S facing slope, scree and boulders, little or no soil	Well	Damp	B	2	Creamy brown		Poor sample with little soil, taken a little shallow	Daithi	7135599	629165
GWS_211_08	Moderate slope to SE	Moderate	Damp	B	3		No		Thomas	7135346	629170
GWS_308_08									Tubs	7134969	629177
GWS_114_08	Steep slope SE	Well	Dry	B	1	Brown	Yes	Rocks everywhere, no grass or moss	Archie	7135740	629180
GWS_179_08	Steep	Well	Damp	B	3		No		Kevin	7135496	629188
GWS_276_08	Steep slope SE	Well	Wet	B	3	Brownish black	No	Bushy	Archie	7135101	629190
GWS_309_08	Steep	Well	Damp	B	2	Greenish brown	Yes	Willows	Tubs	7134997	629200
GWS_244_08	Moderate slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135239	629204
GWS_79_08	North slope of GW	Well	Wet	B	1	Orangey brown	Yes, lots	Very poor sample, lots of oxi/orange shale chips, very little clay soil	Daithi	7135815	629206
GWS_81_08	Top of mountain	Well	Damp	B	2	Brown	Yes	On the top of mountain	Archie	7135807	629207
GWS_115_08	Steep slope SE	Well	Dry	B	1	Brown	Yes	Rocks everywhere	Archie	7135770	629207
GWS_180_08	Steep S facing slope, scree and boulders, little or no soil	Well	Damp	B	2	Dark brown		Soil is clay	Daithi	7135520	629214
GWS_212_08	Steep	Well	Damp/dry	B	3		Yes		Kevin	7135382	629216

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
GWS_147_08	Large scree, almost boulders, little or no soil	Well	Damp	B	1			Poor sample; mainly chips with some organic, shallow depth	Daithi	7135635	629216
GWS_277_08	Steep slope SE	Well	Wet	B	2	Brown	No	Grass, moss and shrubs more plentiful	Archie	7135135	629230
GWS_245_08	Moderate slope to SE	Moderate	Damp	B	2		No		Thomas	7135278	629238
GWS_148_08	Steep slope SE	Well	Damp	B	2	Brownish black	Yes	Grass and moss starting to grow	Archie	7135675	629240
GWS_116_08	Steep	Well	Damp	B	2	Brown green	Yes	Steep E and W	Tubs	7135810	629246
GWS_310_08	Steep slope SE	Well	Wet	B	2	Brown	No	Very bushy	Archie	7135033	629251
GWS_213_08	Steep	Well	Damp	B	3	Black	No		Kevin	7135421	629254
GWS_278_08	Moderate slope to SE	Moderate	Damp	B	3	Brown	No		Thomas	7135166	629262
GWS_181_08	Steep S facing slope, scree and boulders	Well	Damp	B	3	Light to dark brown		Area looks like it may have recently slumped, so could affect the depth	Daithi	7135556	629266
GWS_343_08									Tubs	7134915	629272
GWS_149_08	Steep on ledge, SE slope	Well	Wet	B	3	Tan brown	Yes	Grass and moss present, rocks everywhere	Archie	7135696	629277
GWS_246_08	Steep	Well	Damp	B	2		Yes		Kevin	7135311	629283
GWS_117_08	Steep	Well	Damp	B	2	Brown	Yes	Loose rocks	Tubs	7135840	629288
GWS_311_08	Gentle slope to SE	Well	Wet	B	3	Brown	No	Bushy	Archie	7135059	629291
GWS_214_08	Steep S facing slope, scree and boulders	Well	Damp	A/B	2	Creamy brown clay and organic A		Mixed layering due to slumping	Daithi	7135448	629291
GWS_182_08	Steep SE slope	Well	Damp	B	2	Brownish black	Yes	Rocky area, grass and moss present	Archie	7135590	629304
GWS_279_08	Moderate slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135192	629306
GWS_376_08								No Notes	Tubs	7134804.8	629309.1
GWS_247_08	Steep	Well	Damp	B	2	Brown	No		Kevin	7135340	629318
									Kevin	7135915	629319
GWS_344_08	Gentle slope SE	Well	Wet	B	2	Brown	No	Very bushy	Archie	7134949	629319
GWS_150_08	Steep	Well	Damp	B	2	Light to dark brown	Yes	Loose rocks	Tubs	7135729	629320
GWS_215_08	Steep S facing slope, scree and boulders	Well	Damp	B	2	Creamy/o rangey brown		Little soil, lots of chips	Daithi	7135480	629327
GWS_118_08	Steep	Well	Damp	B	2	Black	No		Kevin	7135874	629328

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
GWS_312_08	Gentle slope to SE	Moderate	Damp	B	2		No		Thomas	7135089	629331
GWS_183_08	Steep SE slope	Well	Damp	B	2	Brown	No	Rocky area, a little bit of plant life	Archie	7135612	629337
GWS_280_08	Moderate slope	Well	Damp/wet	B	4	Light brown	No		Kevin	7135232	629341
GWS_377_08								No Notes	Tubs	7134839.1	629344.3
GWS_248_08	3/4 way down steep scree slope, scree, boulders, little soil	Well	Damp	B	3	Light brown with slight orangey tinge			Daithi	7135375	629355
GWS_345_08	Gentle slope SE	Well	Wet	B	3	Brown	No	Bush near bottom of mtn.	Archie	7134981	629356
GWS_151_08	Steep	Well	Damp	B	2	Brown	Yes	Loose rocks	Tubs	7135759	629356
GWS_313_08	Moderate slope to SE	Moderate	Damp	B	2		No		Thomas	7135123	629363
GWS_216_08	Steep SE slope	Well	Wet	B	2	Brown	No	Rock area; grass, moss and shrubs present	Archie	7135521	629365
GWS_119_08	Steep	Well	Damp	B	2	Black	Yes		Kevin	7135900	629367
GWS_281_08	Moderate slope	Well	Damp	B	3		No		Kevin	7135267	629378
GWS_184_08	Steep	Well	Dry	B	1	Dark brown	Yes	Loose rocks, rock sample	Tubs	7135653	629387
GWS_346_08	Flat, next to a bed of rock	Well	Damp	A	2		No		Kevin	7135011	629395
GWS_249_08	3/4 way down steep scree slope, scree, boulders, little soil	Well	Damp	B	2	Light to orangey brown		Little soil, all chips	Daithi	7135401	629396
GWS_152_08	Steep	Well	Damp/dry	B	2	Black	No		Kevin	7135793	629398
GWS_217_08	Steep slope S	Well	Dry	B	1	Brownish black	Yes	Rocky area, grass and moss present	Archie	7135559	629405
GWS_314_08	Steep	Well	Damp/wet	B	4		Yes		Kevin	7135156	629407
GWS_120_08	Moderate to SE	Moderate	Damp	A	1	Black	Yes, at 10m		Thomas	7135939	629407
GWS_282_08	Bottom of scree and boulder slope, some veg.	Well	Dry	B	2	Light brown			Daithi	7135297	629417
GWS_185_08	Steep	Well	Damp	B	2	Brown	Yes	Loose rocks	Tubs	7135686	629420
GWS_153_08	Steep	Well	Damp	B	2	Black	No		Kevin	7135833	629431
GWS_250_08	Steep slope SE	Well	Damp	B	2	Brown	No	Brush dominant	Archie	7135437	629432
GWS_347_08	Flat	Well	Wet	B	4		No		Kevin	7135049	629432
GWS_315_08	Steep	Well	Damp	A	3		No		Kevin	7135187	629442
GWS_218_08	Steep	Well	Damp	B	2	Brown	Yes	Loose rocks	Tubs	7135574	629444
GWS_121_08	Flat area on top of mountain	Moderate	Damp	B	4	Brown	Yes, at 2m		Thomas	7135955	629444

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQL	Colour	Outcrop	Notes	Name	y_proj	x_proj
GWS_186_08	Steep	Well	Damp	B	2		No		Kevin	7135722	629455
GWS_283_08	Bottom of scree and boulder slope, some veg.	Well	Damp	B	3	Light brown			Daithi	7135329	629457
GWS_154_08	Moderate slope to S	Moderate	Damp	B	2	Brown	Yes, at 40m		Thomas	7135861	629467
GWS_251_08	Steep slope SE	Well	Damp	B	1	Brown	No	Brush getting thicker	Archie	7135469	629469
GWS_219_08	Steep	Well	Damp	B	2	Dark brown	Yes	Loose rocks	Tubs	7135613	629478
GWS_348_08	Gentle slope	Well	Damp	B	2	Brown	No		Kevin	7135075	629479
GWS_316_08	Steep slope at bottom of scree, lots of veg	Well	Dry	B	3	Light brown			Daithi	7135222	629484
GWS_187_08	Steep	Well	Damp	B	2		No		Kevin	7135762	629490
GWS_284_08	Steep slope SE	Well	Wet	B	3	Brown	No	Brush and grasses covering ground	Archie	7135366	629496
GWS_122_08	Mtn. top, flat	Well	Wet	B	3	Brown	Yes	Grass and moss visible	Archie	7135979	629496
GWS_155_08	Moderate slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135886	629506
GWS_252_08	Steep	Well	Damp	B	1	Dark brown	Yes	Loose rocks	Tubs	7135497	629510
GWS_349_08	Gentle slope	Well	Damp	B	1		No		Kevin	7135144	629511
GWS_317_08	Steep slope at bottom of scree, lots of veg	Well	Dry	B	3			Underlain by big boulders and scree	Daithi	7135248	629522
GWS_220_08	Steep	Well	Damp	B	2	Brown	No		Kevin	7135637	629526
GWS_285_08	Steep	Well		B	2	Brown	No	Bushes and plant life	Archie	7135393	629531
GWS_156_08	Steep SE slope	Well	Wet	B	1	Brown	No	Rocky area	Archie	7135927	629532
GWS_382_08	Flat	Well	Wet	B	4		No		Kevin	7135002	629536
GWS_253_08	Steep	Well	Dry	B	1	Brown	Yes	Loose rocks	Tubs	7135538	629537
GWS_188_08	Moderate slope to SE	Moderate	Damp		3	Brown	No		Thomas	7135790	629539
GWS_123_08	Mtn. top, flat; N and S slope steep	Well	Wet	B	3	Brown	Yes	Grass and moss visible	Archie	7136021	629550
GWS_350_08	Small plateau at bottom of scree	Well	Dry	B	3	Light brown			Daithi	7135143	629551
GWS_221_08	Steep	Well	Damp	B	2	Brown	No		Kevin	7135681	629561
GWS_318_08	Gentle slope near bottom of mtn.	Well	Dry	B	2	Brown	No	Boulders present, thick brush	Archie	7135282	629562
GWS_383_08	Gentle slope, next to creek	Poor	Wet	B	2	Brown	No		Kevin	7135046	629570
GWS_189_08	Moderate slope to SE	Moderate	Damp	B	3	Brown	No		Thomas	7135815	629574
GWS_351_08	Small plateau at bottom of scree	Well	Dry	B	3	Light brown			Daithi	7135165	629579
GWS_286_08	Steep	Well	Damp	B	2	Brown/gr ey	Yes	Loose rocks	Tubs	7135424	629582

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
GWS_157_08	Steep SE slope	Well	Damp	B	3	Brown	No	Rocky area	Archie	7135960	629586
GWS_254_08	Steep	Well	Damp/dry	B	2	Light brown	No		Kevin	7135566	629588
GWS_319_08	Gradual slope SE	Well	Damp	B	3	Brownish black	No	Brush is getting thicker, near base of mountain	Archie	7135314	629598
GWS_222_08	Moderate slope to SE	Moderate	Damp	B	3	Brown	Yes, at 5m		Thomas	7135695	629605
GWS_287_08	Steep	Well	Damp	B	2	Brown	Yes	Loose rocks	Tubs	7135462	629608
GWS_190_08	Steep SE slope	Well	Damp	B	3	Brown	No	Rocky area, grass and moss present	Archie	7135845	629609
GWS_384_08	Flat bottom near river, river is 10m S	Well	Wet	B	2	Brown	No	Thick willows	Archie	7135083	629614
GWS_352_08	Gentle slope, near river	Well	Wet	B	4	Greyish brown	No	Lots of brush	Archie	7135207	629625
GWS_255_08	Steep	Well	Damp	B	3	Light brown	No		Kevin	7135604	629628
GWS_288_08	Steep, bedrock	Well	Damp	B	2	Brown	No		Kevin	7135675	629631
GWS_158_08	Moderate slope	Well	Damp	B	3	Dark brown	No	Boulders	Kevin	7135985	629633
GWS_125_08	Flat ridge	Poor	Wet	B	4	Light brown	Yes		Kevin	7136054	629634
GWS_385_08	Flat, 25m from river	Well	Wet	B	3	Brown	No		Archie	7135104	629637
GWS_320_08	Moderate	Well	Damp	B	1	Brown green	Yes	Willows, loose rocks	Tubs	7135346	629638
GWS_223_08	Moderate slope to SE	Moderate	Dry	B	3	Brown	No		Thomas	7135732	629641
GWS_124_08	Flat ridge	Well	Damp	B	3	Light brown	Yes		Kevin	7136067	629651
GWS_224_08	Steep SE slope	Well	Damp	B	3	Brown	No	Rocky area	Archie	7135777	629658
GWS_191_08	Steep SE slope	Well	Damp	B	2	Brown	No	Rocky area	Archie	7135875	629659
GWS_353_08	Gentle slope	Well	Wet	B	3	Browish grey	No	Bushy	Archie	7135239	629663
GWS_256_08	Moderate slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135631	629664
GWS_159_08	Moderate slope	Well	Damp/dry	B	3	Dark brown	No	Boulders	Kevin	7136019	629670
GWS_321_08	Moderate	Well	Damp	B	2	Brown	Yes	Boulders	Tubs	7135379	629671
GWS_289_08	Steep	Well	Damp	B	3	Brown	No		Kevin	7135529	629687
GWS_192_08	Moderate slope	Well	Damp	B	3	Brown	No	Boulders	Kevin	7135918	629689
GWS_386_08	Flat	Well	Damp	B	2	Dark to light brown	No	Willows, boulders	Tubs	7135130	629690

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
GWS_160_08	Scree slope/boulder field	Well	Damp	B	4	Orangey brown	No	Sample is from small island of soil in all the scree and is not really representative of the area	Daithi	7136031	629692
GWS_257_08	Moderate slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135668	629695
GWS_126_08	Top of ridge, S facing with some grass and veg., moderate soil	Well	Damp	B	2	Dark brown, slight oxidised appearance	Yes, lots to N	Sample from area with little soil, lots of chips, etc	Daithi	7136093	629704
GWS_354_08	Moderate	Well	Damp	B	2	Brown	No	High willows	Tubs	7135271	629704
GWS_225_08	Steep SE slope	Well	Damp	B	2	Brown	No	Rocky area	Archie	7135809	629716
GWS_322_08	Moderate slope	Well	Damp	B	3	Brown	No		Kevin	7135409	629716
GWS_193_08	Moderate slope	Well	Damp	B	3	Brown	No	Boulders	Kevin	7135946	629718
GWS_290_08	Steep slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135549	629719
GWS_127_08	Top of ridge, S facing with some grass and veg., moderate soil	Well	Damp	B	3	Brown with slight orange/rusty tinge	Yes, lots to N		Daithi	7136126	629721
GWS_387_08	Moderate	Well	Damp	B	2	Dark brown	No	Willows	Tubs	7135165	629728
GWS_355_08	Moderate	Well	Damp	B	2	Brown/greenish	Yes	High willows	Tubs	7135301	629733
GWS_128_08	Flat on top of mountain	Moderate	Wet	B	3	Brown	Yes, at 0.5m		Thomas	7136159	629736
GWS_161_08	Crest of S facing scree slope	Well	Dry	B?	1	Dark brown/rusty	No	Poor sample, little soil, all scree and chips	Daithi	7136083	629738
GWS_258_09	Moderate slope to SE	Well	Damp	B	3	Brown	No	Brush, grass and mosses present	Archie	7135695	629741
GWS_96_08	Flat on top, steep N/W	Well	Damp	B	2	Yes			Tubs	7136324	629743
GWS_388_08	Flat	Well	Damp	B	3	Brown grey	No	Boulders, willows	Tubs	7135196	629759
GWS_323_08	Moderate slope	Well	Damp	B	3	Brown	No		Kevin	7135445	629759
GWS_226_08	Moderate slope	Well	Damp	B	3	Brown	No	Boulders	Kevin	7135832	629761
GWS_194_08	Large scree slope	Well	Damp	B		Dark brown, rusty tinge	No	Little soil, small patch where sample was taken	Daithi	7135974	629762

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
GWS_129_08	Gentle slope to N on top of mountain	Moderate	Damp	B	3	Brown	Yes, at 5m		Thomas	7136217	629766
GWS_291_08	Moderate slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135579	629768
GWS_97_08	Flat on top, steep to N and S	Well	Damp	B	2	Light to dark brown	Yes	Loose rocks and boulders	Tubs	7136363	629770
GWS_259_08	Steep slope SE	Well	Damp	B	2	Brown	No	Rocky area, bush starting	Archie	7135731	629772
GWS_195_08	Scree/boulder slope	Well	Damp	B	4	Orangey brown	No	Sample is clay, no soil at correct spot so sample taken here. Slumped area, probably not representative	Daithi	7136006	629777
GWS_227_08	Moderate slope	Well	Dry	B	2	Brown	No	Boulders	Kevin	7135872	629781
GWS_162_08	Moderate slope to E	Moderate	Damp	B	2	Brown	No		Thomas	7136115	629787
GWS_130_08									Tubs	7136257	629791
GWS_324_08	Moderate slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135479	629791
GWS_292_08	Steep slope SE	Well	Damp	B	2	Brown	No	Rock area; grass, moss and shrubs present	Archie	7135624	629795
GWS_98_08	Gentle slope N	Well	Damp	B	2	Brown	No	Grasses and moss present	Archie	7136393	629798
GWS_356_08	Flat, bedrock	Well	Damp	A	3	Black	No		Kevin	7135391	629800
GWS_389_08	Flat	Well	Damp	B	2	Brown	No	By the creek, high willows, boulders	Tubs	7135223	629802
GWS_163_08	Moderate slope to E	Moderate	Damp	B	2	Brown	Yes, at 2m		Thomas	7136152	629808
GWS_325_08	Moderate slope to SE	Moderate	Damp	B	3	Brown	No		Thomas	7135502	629812
GWS_66_08	Steep, NW	Well	Dry	B	1	Brown	Yes		Kevin	7136534	629813
GWS_357_08	Gentle slope	Well	Damp/dry	B	2	Light brown	No		Kevin	7135373	629817
GWS_260_08	Steep	Well	Dry	B	3	Brown	No	Boulders	Kevin	7135763	629822
GWS_131_08	Steep	Well	Damp	B	2	Dark brown	Yes	Boulders	Tubs	7136279	629826
GWS_228_08	Steep slope with scree and boulders	Well	Damp	B	3	Dark brown		Sample is clay with grit	Daithi	7135903	629828
GWS_293_08	Steep slope SE	Well	Damp	A	1	Brown	No	Rocky area, no trees or shrubs	Archie	7135629	629834
GWS_196_08	Moderate slope to SE	Moderate	Damp	B	2	Brown with some orange	No		Thomas	7136038	629835
GWS_99_08	Gentle slope NE, on ridge of mountain	Well	Damp	B	2	Sandy brown	No	Grass and moss abundant	Archie	7136428	629835

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
GWS_164_08	Steep	Well	Damp	B	2	Dark brown	Yes	Loose boulders	Tubs	7136176	629842
GWS_261_08	Steep	Well	Damp	B	4	Brown	No	Boulders	Kevin	7135793	629845
GWS_358_08	Gentle slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135387	629846
GWS_390_08	Flat, creek 20m	Well	Damp/wet	B	4	Light brown	No		Kevin	7135260	629847
GWS_67_08	Steep, NW	Well	Damp	B	2	Grey	Yes		Kevin	7136570	629856
GWS_326_08	Gentle slope to SE, on lip of mtn.	Well	Damp	B	2	Brown	No	Rocky area, brush, moss and grasses present	Archie	7135550	629861
GWS_132_08	Gentle slope NE	Well	Wet	B	2	Brown	No	Grass and moss present on ground, rock piles starting	Archie	7136321	629863
GWS_229_08	Steep slope with scree and boulders	Well	Damp	B	3	Dark brown/or angey		There was more vegetation and a 10-15cm A horizon here, sample was clay	Daithi	7135930	629866
GWS_100_08	Flat	Well	Dry	B	2	Brown	No		Kevin	7136460	629874
GWS_391_08	Flat	Well	Damp	B	4	Light brown	No		Kevin	7135297	629882
GWS_165_08	Steep	Well	Damp	B	2	Brown	Yes	Boulder city	Tubs	7136206	629883
GWS_294_08	Steep	Well	Damp	B	4	Brown	No	Boulders	Kevin	7135677	629883
GWS_327_08	Steep SE slope	Well	Dry	B	2	Brown	No	Big rocks and brush	Archie	7135570	629888
GWS_262_08	Steep/rocky with boulders and scree	Well	Damp	B	4	Dark brown, rusty tinge			Daithi	7135823	629891
GWS_197_08	Moderate slope to E	Moderate	Dry	B	1	Brown	No		Thomas	7136079	629895
GWS_133_08	Gentle slope NE	Well	Wet	B	2	Brown	No	Grass and moss present	Archie	7136352	629899
GWS_230_08	Moderate slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135969	629902
GWS_359_08	Gentle slope to SE	Poor	Damp	B	3	Brown	No		Thomas	7135432	629903
GWS_392_08	Flat area	Poor	Damp	B	4	Brown	No		Thomas	7135323	629912
GWS_198_08	Steep	Well	Damp	B	1	Dark brown	Yes	Boulders	Tubs	7136112	629913
GWS_295_08	Steep	Well	Dry	B	3	Brown	No	Boulders	Kevin	7135710	629922
GWS_263_08	Steep/rocky with boulders and scree	Well	Damp	B	3	Dark brown/or angey-rust tinge		Area was slumped and disturbed	Daithi	7135842	629924
GWS_166_08	Steep NE slope	Well	Damp	B	1	Black	No	Grass and moss present, rock showing everywhere	Archie	7136225	629930
GWS_360_08	Gentle slope to SE	Well	Wet	B	3	Brown	No	Bushy, bottom of rocky area	Archie	7135457	629931

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
GWS_134_08	Gentle slope E	Well	Damp	B	3	Brown	No		Kevin	7136389	629940
GWS_328_08	Moderate slope	Well	Damp/dry	B	3	Brown	No	Boulders	Kevin	7135604	629942
GWS_231_08	Moderate slope to SE	Moderate	Damp	B	3	Brown	No		Thomas	7136003	629947
GWS_102_08	Flat, steep to N	Well	Damp	B	2	Brown	Yes		Tubs	7136526	629952
GWS_199_08	Steep	Well	Damp	B	2	Dark brown	Yes	Boulders	Tubs	7136141	629952
GWS_296_08	Steep slope of scree and boulders, little soil	Well	Damp	B	1	Dark brown/or angey		Little soil, lots of small rock chips and scree etc.	Daithi	7135750	629955
GWS_361_08	Gentle slope to SE	Well	Wet	B	3	Brown	No	Rocks and bush present	Archie	7135472	629961
GWS_393_08	Flat area	Moderate	Damp	B	4	Brown	No		Thomas	7135357	629967
GWS_167_08	Moderate slope NE	Well	Damp	B	2	Brownish black	No	Grass and moss present on ground	Archie	7136271	629969
GWS_264_08	Moderate slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135888	629970
GWS_135_08	Flat	Well	Damp/wet	B	3	Brown	No		Kevin	7136417	629976
GWS_329_08	Moderate slope	Well	Dry	B	3	Brown	No	Boulders	Kevin	7135653	629978
GWS_232_08	Steep	Well	Damp	B	2	Dark brown greyish	Yes	Loose rocks	Tubs	7136027	629982
GWS_200_08	Steep slope NE	Well	Damp	B	1	Black	No	Grass and moss present, rocks everywhere	Archie	7136163	629990
GWS_103_08	Flat, cliff to N	Well	Damp	B	2	Dark brown	Yes		Tubs	7136550	629992
GWS_297_08	Steep grassy slope, S facing	Well	Damp	B	4	Dark brown		Very good clay sample	Daithi	7135776	629995
GWS_394_08	Flat	Well	Wet	B	3	Brown	No	Thick bush, creek nearby	Archie	7135386	629995
GWS_265_08	Moderate slope to SE	Well	Dry	B	1	Brown	No		Thomas	7135916	630004
GWS_362_08	Moderate slope	Well	Damp	B	3	Brown	No	Boulders	Kevin	7135535	630006
GWS_168_08	Moderate slope W	Well	Damp	B	4	Brown	No		Kevin	7136312	630011
GWS_233_08	Steep	Well	Damp	B	1	Dark brown	Yes	Boulders	Tubs	7136060	630015
GWS_136_08	Flat, steep to SE	Well	Damp	B	2	Brown	Yes		Tubs	7136455	630019
GWS_330_08	Steep slope with moderate veg. of willow and grass etc. some soil underlain by scree	Well	Damp	B	1	Dark brown		Very poor sample	Daithi	7135669	630019
GWS_201_08	Moderate slope NE	Well	Damp	B	2	Black	No	Grass and moss present	Archie	7136200	630027
GWS_395_08	Flat	Moderate-poor	Wet	B	3	Brown	No	Bushy, near creek	Archie	7135418	630037
GWS_298_08	Moderate slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135811	630039

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
GWS_266_08	Steep	Well	Dry	B	2	Brown	Yes	Boulders and rocks	Tubs	7135955	630039
GWS_169_08	Gentle slope E	Well	Damp	B	2	Brown	No		Kevin	7136346	630040
GWS_363_08	Moderate slope	Well	Damp	B	3	Brown	No		Kevin	7135572	630044
GWS_137_08	Flat, steep to E	Well	Damp	B	2	Light to dark brown	Yes		Tubs	7136482	630057
GWS_234_08	Steep slope NE	Well	Damp	B	2	Brown	No	Grass and moss present, rocks all over	Archie	7136077	630057
GWS_331_08	Steep grassy slope with willow	Well	Damp	B	1	Dark brown		Little soil, area is underlain with old scree and boulders	Daithi	7135698	630060
GWS_202_08	Moderate slope W	Well	Damp/wet	B	3	Black	No		Kevin	7136229	630068
GWS_299_08	Moderate slope to SE	Moderate	Damp	B	3	Brown	No		Thomas	7135829	630071
GWS_396_08	Flat, down the hill where bushes start	Well	Wet	B	4	Brown	No		Kevin	7135454	630078
GWS_364_08	Near end of steep slope, grassy underlain by scree and boulders	Well	Damp	B	3	Medium dark brown with orange tinge		Sample is clay	Daithi	7135588	630084
GWS_170_08	Moderate, steep to E	Well	Damp	B	2	Brown	Yes		Tubs	7136371	630084
GWS_235_08	Steep	Well	Damp	B	1	Tan brown	No	Mostly sand and pebbles, grass and moss present, rock pile	Archie	7136109	630086
GWS_267_08	Steep	Well	Damp	B	2	Brown greenish	Yes	Boulders, rocks galore	Tubs	7135980	630091
GWS_332_08	Gentle slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135731	630098
GWS_300_08	Steep	Well	Damp	B	2	Dark to light brown	Yes		Tubs	7135863	630098
GWS_397_08	Flat	Well	Damp/dry	B	3	Brown	No	Boulders	Kevin	7135487	630103
GWS_203_08	Moderate slope W	Well	Damp	B	4	Brown	No		Kevin	7136267	630105
GWS_171_08	Moderate, steep to E	Well	Damp	B	2	Brown	Yes		Tubs	7136411	630119
GWS_365_08	Steep grassy slope with willows	Well	Damp	B	3	Dark brown with orange tinge		Clay with small chips 10%, nearing bottom of slope	Daithi	7135624	630125
GWS_268_08	Steep slope SE	Well	Wet	B	3	Tan brown	No	Grass, moss and shrubs present	Archie	7136016	630126

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
GWS_236_08	Steep, W	Well	Damp	B	3	Brown	No		Kevin	7136159	630132
GWS_333_08	Moderate slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135769	630135
GWS_398_08	Bottom of steep slope, large moss covered boulders with willow growing around	Well	Damp	B	2	Dark brown			Daithi	7135514	630145
GWS_204_08	Moderate	Well	Damp	B	2	Brown	Yes		Tubs	7136301	630147
GWS_269_08	Steep	Well	Damp	B	1	Brown	No	Grass, moss and shrubs present, lots of little rocks in sample	Archie	7136037	630158
GWS_301_08	Steep	Well	Damp	A	1	Dark brown	Yes	Boulders	Tubs	7135898	630158
GWS_366_08	Moderate slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135659	630159
GWS_334_08	Steep	Well	Damp	B	2	Light to dark brown	Yes	Willows	Tubs	7135794	630164
GWS_335_08	Steep	Well	Damp	B	2	Brown	Yes	Loose rocks	Tubs	7135793	630166
GWS_237_08	Moderate slope W	Well	Damp	B	3	Brown	No		Kevin	7136195	630170
GWS_205_08	Steep N/S	Well	Damp	B	2	Brown	Yes		Tubs	7136329	630183
GWS_302_08	Steep slope NE	Well	Damp	B	1	Tan brown	No	Plant life	Archie	7135940	630185
GWS_399_08	Bottom of steep slope, large moss covered boulders with willow growing around	Well	Damp	B	2	light to chocolate /poo brown		Was unable to get any depth to sample so not very good	Daithi	7135548	630190
GWS_367_08	Moderate slope to SE	Moderate	Dry	B	1	Brown	No		Thomas	7135686	630195
GWS_270_08	Steep, W	Well	Damp	B	2	Brown	No		Kevin	7136087	630199
GWS_238_08	Moderate	Well	Damp	B	2	Reddish orange brown	Yes	Boulders	Tubs	7136224	630212
GWS_303_08	Steep slope NE, just above the creek	Well	Damp	B	1	Brown	No	Brush, grass and mosses visible	Archie	7135968	630225
GWS_400_08	Moderate slope to SE	Moderate	Damp	B	2	Brown	No		Thomas	7135578	630225
GWS_368_08	Steep	Well	Damp	B	2	Light to dark brown	Yes	Loose rocks to run off	Tubs	7135716	630231
GWS_271_08	Steep, E	Well	Damp	B	2	Brown	No		Kevin	7136110	630236
GWS_336_08	Gradual slope SW, bottom of mountain beside river	Well	Wet	A	1	Sandy brown	Yes	Sand and rocks	Archie	7135850	630240
GWS_239_08	Moderate	Well	Damp	B	2	Brown	Yes		Tubs	7136256	630246

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
GWS_369_08	Steep N/S	Well	Damp	B	2	Brown/greenish	Yes		Tubs	7135758	630259
GWS_304_08	Steep W, next to creek	Well	Damp	B	2	Brown	No	Sample is brown clay	Kevin	7136011	630264
GWS_401_08	Flat	Moderate	Damp	B	1	Orange brown	Yes, at 5m	2m from creek	Thomas	7135611	630265
GWS_272_08	Steep	Well	Damp	B	2	Brown	Yes	Loose rocks	Tubs	7136150	630268
GWS_337_08	Steep slope SW	Well	Damp	A	2	Brown	Yes	Rocky, little veg. grass, moss and shrubs; crushed rock and outcrop visible	Archie	7135888	630292
GWS_402_08	Steep, creek NW 30m	Well	Damp	B	3	Brown	Yes		Kevin	7135641	630308
GWS_305_08	Steep, W	Well	Damp	B	1	Brown	No		Kevin	7136036	630308
GWS_370_08	Steep slope SW	Well	Wet	A	1	Tan brown	Yes	Poor ground, moss, grass and shrubs	Archie	7135800	630317
GWS_273_08	Steep	Well	Damp	B	1	Brown	Yes	Loose rocks	Tubs	7136169	630321
GWS_338_08	Steep W, creek at 50m	Well	Damp	B	4	Brown	Yes	Sample is brown clay	Kevin	7135922	630328
GWS_403_08	Steep, creek NW 75 m	Well	Damp	B	4	Brown	No		Kevin	7135685	630328
GWS_306_08	Steep	Well	Damp	B	2	Brown		Loose rocks	Tubs	7136069	630348
GWS_371_08	Steep SW	Well	Damp	B	1	Tan brown	Yes, at 2m	Grass, moss and shrubs present	Archie	7135828	630353
GWS_339_08	Steep W	Well	Damp/wet	B	3	Brown	Yes		Kevin	7135960	630367
GWS_404_08	Moderate slope	Well	Damp/wet	B	4	Brown	No	Boulders	Kevin	7135729	630378
GWS_307_08	Steep	Well	Damp	B	2	Reddish brown	Yes	Loose rocks	Tubs	7136102	630379
GWS_404B_08									Archie	7135686	630380
GWS_372_08	Steep N	Well	Damp	B	3	Brown	Yes	Sample is brown clay, right next to outcrops'	Kevin	7135846	630387
GWS_340_08	Steep	Well	Damp	B	2	Light to dark brown	Yes	Loose rocks and stones	Tubs	7135999	630409
GWS_405_08	Moderate slope	Well	Damp	B	4	Brown	No	Boulders	Kevin	7135743	630410
GWS_405B_08									Archie	7135720	630423
GWS_373_08	Steep W	Well	Damp	B	3	Brown	Yes		Kevin	7135881	630432
GWS_341_08	Steep	Well	Damp	B	2	Brown	Yes	Loose boulders and rocks	Tubs	7136020	630440
GWS_406_08	Moderate slope N	Well	Damp	B	3	Brown	No		Kevin	7135767	630458
GWS_374_08	Steep	Well	Damp	B	2	Light brown	Yes	Loose rocks	Tubs	7135914	630469
GWS_407_08	Steep N	Well	Damp	B	3	Brown	No		Kevin	7135800	630498

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
GWS_375_08	Steep	Well	Damp	B	2	Light to dark brown	Yes	Loose rocks	Tubs	7135938	630515
GWS_408_08	Steep	Well	Damp	B	2	Light to dark brown	Yes	Loose rocks and willows	Tubs	7135840	630535
GWS_409_08	Steep	Well	Damp	B	2	Light to dark brown	Yes	Loose rocks and stones	Tubs	7135882	630579
								Only 2-3 cm horizon A, then just rocks	Kevin		
JCS_1_08	Head of valley, gentle slope, grassy ground, good soil	Well	Moist	B	3	Brown	Yes	Edge of scree, not much OC	Aiden	7133750.7	632869.9
JCS_2_08	Flat/gentle slope at head of valley	Poor	Wet/damp	B	3	Light brown		2nd sample taken at 25m spacing on a NW trending line from JCS_1_08, good soil, overgrown talus	Shane	7133769.2	632850.4
JCS_3_08	Low spot, in valley, flat wet ground	Poor	Wet	B	3	Brown	No		Aiden	7133786.2	632832
JCS_4_08	Flat, swampy	Poor	Wet/damp	B	4	Mottled light and dark brown	Yes	Sample taken in swampy area by rolly OC/subcrop	Shane	7133804.4	632816.7
JCS_5_08	Low swampy spot	Poor	Wet	B	4	Brown	No		Aiden	7133823.6	632795.6
JCS_6_08	Flat swampy area at head of valley	Poor	Damp	B	3	Medium brown		A little rock here and on dryer ground	Shane	7133839.1	632780.7
JCS_7_08	Hummocky ground, in valley, some rocks	Well	Moist	B	3	Brown		Brown clay with some grit	Aiden	7133855.5	632762.2
JCS_8_08	Flat rise	Moderate	Damp	B	2	Brown		Gritty sample taken on rise above swampy area	Shane	7133872.4	632742.7
JCS_9_08	Hummocky ground in valley	Well	Moist	B	2	Brown		Rocky ground, gritty soil	Aiden	7133888.2	632725.3
JCS_10_08	Gentle slope to N and creek	Well	Damp	B	2	Medium to dark brown		This point is approx. 30-40m N of trench 4 (JC), sample taken at spacing of 28m from JCS_09_08 due to rocky subcrop	Shane	7133907.5	632704
JCS_11_08	Rocky hummocky ground	Well	Moist	B	2	Brown		Brown clay and grit, ,stony sample	Aiden	7133922.7	632686.2
JCS_12_08	Gentle slope to N and creek	Moderate	Damp	B	3	Medium brown		Open valley floor	Shane	7133938.4	632666.6

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
JCS_13_08	Hummocky ground, gentle slope NE towards creek	Well	Moist	B	2	Brown	No	Gritty sample	Aiden	7133957.9	632649.5
JCS_14_08	Gentle slope to N	Well	Damp	B	2	Medium-dark brown		Stony gritty soil	Shane	7133971	632629.1
JCS_15_08	Hummocky ground, gentle slope NE towards creek/gully	Well	Moist	A	3	Black		Dark clay	Aiden	7133987.4	632613.6
JCS_16_08	Gentle slope to N	Moderate	Damp	B	3	Dark brown		Horizon B was sampled thought it is possibly an A as a Horizon C was noted in some holes	Shane	7134006.6	632592.7
JCS_17_08	Hummocky rocky ground, thin soil	Well	Moist	B	2	Brown-black		Sample is mostly B but a little bit of black soil	Aiden	7134022.1	632577
JCS_18_08	Gentle slope to N	Moderate	Damp	B	3	Medium brown		Rocky talus area, sample could not be gotten right on flag	Shane	7134037.8	632556.5
JCS_19_08	Grassy ground, nearly flat, in valley near creek	Well	Moist	B	4	Brown	No	Brown clay	Aiden	7134056	632539.8
JCS_20_08	Gentle slope to N	Well	Damp	B	2	Medium brown			Shane	7134071.9	632522.5
JCS_21_08	Gentle slope to nW	Well	Moist	B	4	Brown	No		Aiden	7134090.8	632502.6
JCS_22_08	Gentle slope to N	Moderate	Damp/wet	B	3	Medium yellowish brown			Shane	7134105.1	632486
JCS_23_08	Flat, grassy and mossy ground	Moderate	Moist	B	3	Brown	No	Clay with minor grit	Aiden	7134124.1	632469.2
JCS_24_08	Flat	Moderate	Wet/damp	B	3	Medium yellowish brown			Shane	7134143.1	632452.6
JCS_25_08	Flat area, thin vegetation	Well	Moist	B	3	Brown	No	Brown clay	Aiden	7134153.5	632434.1
JCS_26_08	Gentle	Moderate	Damp/wet	B	2	Medium brown	Old camp about 10m to N		Shane	7134169	632414
JCS_27_08	Flat spot, site of old camp	Well	Moist	B	3	Brown	No		Aiden	7134190.2	632397.8
JCS_28_08	Gentle	Moderate	Damp	B	3	Medium brown		Scrubby willows	Shane	7134206.7	632380.2
JCS_29_08	Flat spot, site of old camp	Well	Moist	B	4	Brown	No	Brown clay	Aiden	7134222.7	632362
JCS_30_08	Gentle	Moderate	Damp	B	3	Light brown		Light scrub willow cover	Shane	7134239.4	632344
JCS_31_08	Gentle slope to nW	Well	Moist	B	3	Brown	No	Brown clay	Aiden	7134256.5	632325.2
JCS_32_08	Flat	Moderate	Damp	B	3	Light to medium brown			Shane	7134275.9	632307.1

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
JCS_33_08	Flat spot, stony ground	Well	Moist	B	3	Brown	No	Brown clay	Aiden	7134292.9	632289.3
JCS_34_08	Gentle	Well	Damp	B	3	Light to medium brown		Close to creek to NW	Shane	7134310.3	632273.5
JCS_35_08	Flat spot near creek	Well	Moist	B	1	Brown		Stony soil	Aiden	7134323.8	632251.9
JCS_36_08	Gentle by creek	Well	Damp	B	4	Golden brown		Last JC soil taken here on N side of creek. Next sample would be on overgrown base of talus slope	Shane	7134341.6	632230.3
TKS_1_08	Head of creek, base of bench	Moderate	Damp	B	2	Brown	No	Two topos are described: creek and bench. Creek has cut down through the bench and lies between the talus slope of north ridge and the bench in the valley centre. Bench lies in valley centre and has been cut both on N ridge and rusty ridge sides. The trench is cut through the W slope of the bench.	Shane	7133774	632538
TKS_2_08	Bench	Well	Damp	B	3	Golden brown	No	Plenty of organic matter in sample, but very good clay	Sarah	7133796	632525
TKS_3_08	Bench	Well	Damp	B	1	Dark brown	No	About 20m from trench	Shane	7133816	632510
TKS_4_08	Bench	Moderate	Damp	B	2	Yellow brown	No	Lots of rocks in sample	Sarah	7133837	632497
TKS_5_08	Bench	Moderate	Damp/wet	B	2	Light yellow brown	No		Shane	7133855	632484
TKS_6_08	Bench	Moderate	Damp	B	4	Golden reddish brown	No	Some organic matter, lots of chips	Sarah	7133878	632472
TKS_7_08	Creek	Moderate	Damp	B	4	Light brown-reddishbrown	No		Shane	7133897	632458
TKS_8_08	Creek	Moderate	Wet	B	3	Yellow golden brown	No		Sarah	7133918	632442

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
TKS_9_08	Creek	Moderate	Damp/wet	B	3	Light yellowish brown	No		Shane	7133942	632430
TKS_10_08	Creek	Well	Damp	B	4	Gold brown	No		Sarah	7133962	632413
TKS_11_08	Creek	Moderate	Damp	B	3	Light yellowish brown	No	Line trends 325N to TKS_12_08, then takes a turn due to talus (N ridge)	Shane	7133984	632403
TKS_12_08	Near creek	Poor	Damp	B	4	Gold brown	No	Small pools	Sarah	7134004	632393
TKS_13_08	Creek, swampy	Moderate	Damp/wet	B	4	Light brown	Yes	Trend of line is 355N, OC is in bench area	Shane	7134029	632386
TKS_14_08	Creek	Moderate	Damp	B	4	Gold brown	No		Sarah	7134055	632387
TKS_15_08	Creek, swampy	Poor	Wet	B	4	Light yellowish brown	No		Shane	7134078	632377
TKS_16_08	Creek	Poor	Wet	B	3	Yellow golden brown	No	Permafrost at about 30cm	Sarah	7134100	632373
TKS_17_08	Creek	Poor	Damp/wet	B	4	Light yellowish brown	No	4.2m accuracy on GPS	Shane	7134128	632369
TKS_18_08	Bench	Well	Damp	B	2	Medium brown	No	Gritty rocky sample with some organic matter	Sarah	7134151	632365
TKS_19_08	Bench	Well	Damp	B	3	Medium-dark brown	No	Last point of 355 line, TKS line comes to within about 35-40m of JC line at the point. New trend is 315N, approximately parallel to JCS line. GPS 2.3m accuracy.	Shane	7134175	632359
TKS_20_08	Bench	Well	Damp	B	2	Yellow golden brown	No	Some very rusted rock bits in sample	Sarah	7134194	632342
TKS_21_08	Bench, steep side near creek	Well	Damp	B	2	Brown	No		Shane	7134210	632326
TKS_22_08	Creek	Well	Damp	B	4	Golden brown with reddish tinge	No		Sarah	7134225	632307

FIELD_NUMBER	Topography	Drainage	Moisture	Horizon	SQI	Colour	Outcrop	Notes	Name	y_proj	x_proj
TKS_23_08	Creek	Poor	Damp/wet	B	4	Medium brown	No		Shane	7134242	632288
TKS_24_08	Creek	Well	Damp	B	3	Golden brown	No		Sarah	7134258	632268
TKS_25_08	Creek close to talus slope	Moderate	Damp	B	2	Yellowish brown	No	Talus on creek bed, very oxidised talus slope	Shane	7134275	632252
TKS_26_08	Creek	Well	Damp	B	3	Rusty golden brown	No		Sarah	7134292	632231
TKS_27_08	Creek close to talus slope	Well	Damp	B	4	Brown	Yes	Last sample on TKS line, approximately 25-30m from JC line	Shane	7134309	632211

APPENDIX III

CHEYENNE ROCK SAMPLING DATA

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816601		629188	7136539	1349	14-Jun	Shane	North of Golden Wall				y
816602	GWR5	629719	7136159	1655	16-Jun	Shane	Golden Wall ridge	Metagreywacke	Cross beds -> RWU fine grained dark grey unit		y
816603	816603	628730	7135608	1677	17-Jun	Shane	Golden Wall ridge	Quartzite	Quartzite with minor <5% lithics; qtz veins SOMETHING limonite staining; minor pinhead sulfides, possibly biotite/mica		y
816604	GWR5*	628789	7135600	1693	17-Jun	Shane	Golden Wall ridge	Metagreywacke	Intense Fe staining on weathered surfaces, very fractured rock, no visible bedding, minor disseminated sulphides with silver lustre (arseno?)+J141		y
816605	GWR6	628817	7135599	1703	17-Jun	Shane	Golden Wall ridge	Metagreywacke	Fine grained dark grey-purple MGW interbedded with light grey-green med. Grained MGW, intense Fe limonite staining on some weathered surfaces, concentrated in the grey-purple unit		y
816606	GWR7	628875	7135601	1690	17-Jun	Shane	Golden Wall ridge	Metagreywacke	Fine grained light grey-green MGW with limonite staining, no visible sulfides		y
816607	GWR8	628991	7135658	1665	17-Jun	Shane	Golden Wall ridge	Metagreywacke	Dark grey-purple, fine grained, no limonite staining, no visible sulfides		y
816608	GWR9	629039	7135689	1665	17-Jun	Shane	Golden Wall ridge	Breccia	Very weathered soft rock, intense Fe staining, soft and crumbly (possibly due to weathering?); alteration of minerals to green clay		y
816609	GWR10	629039	7135689	1665	17-Jun	Shane	Golden Wall ridge	Breccia altered metagreywacke	Taken 2m downslope of GWR9, fine disseminated sulfides, sample taken out of soft crumbly outcrop		y
816610	GWR11	629058	7135704	1669	17-Jun	Shane	Golden Wall ridge	Metagreywacke	Light grey-green and dark grey-purple MGW, quart- rich, limonite staining, minor visible sulfides, biotite < 3%		y
816611	GWR12	629067	7135709	1668	17-Jun	Shane	Golden Wall ridge	Metagreywacke	Quartz-rich, light to med. Grey fine grained MGW, limonite coating on weathered surfaces, minor sulfides		y
816612	GWR13	629118	7135744	1674	17-Jun	Shane	Golden Wall ridge	Metagreywacke	Very fine grained, dark grey-purple with minor limonite staining on weathered surfaces		y
816613	GWR14	629192	7135802	1663	17-Jun	Shane	Golden Wall ridge	Metagreywacke	Very fine grained, dark grey-purple, limonite stained, good bedding with small λ ripples		y
816614	GWR15	629234	7135857	1650	17-Jun	Shane	Golden Wall ridge	Quartzite	Coarse grained, light grey-brown, thick beds, limonite on weathered surfaces, no visible sulfides. Quartzite unit is only a few metres thick here and is interbedded with the MGW formation, it is a member of this formation		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816615	GWR16	629321	7135920	1654	17-Jun	Shane	Golden Wall ridge	Metagreywacke	Very fine grained dark grey-purple MGW; possibly an Argillite member, I would consider bedding to be reliable; no visible min other than minor limonite staining		y
816616	GWR17	629352	7135928	1656	18-Jun	Shane	Golden Wall ridge	Quartz-rich metagreywacke	Medium grey-pink; medium grained; 1% biotite; no visible sulfides, limonite staining on weathered surfaces		y
816617	GWR18	629397	7135944	1663	18-Jun	Shane	Golden Wall ridge	Quartz-rich metagreywacke	Medium grey-purple, v. fine grained, chertiferous zones, no visible sulfides, limonite staining on weathered surfaces		y
816618	GWR19	629430	7135952	1665	18-Jun	Shane	Golden Wall ridge	Impure quartzite	Intense Fe oxidation of a highly fractured lenticular pod of a light grey medium grained quartzite with >1% fine disseminated silvery sulfides. The vein or pod trends 110°ESE		y
816619	GWR20	629439	7135964	1657	18-Jun	Shane	Golden Wall ridge	Metagreywacke	Highly fractured and Fe oxidized zone of fine grained MGW, dark grey-purple. Pinhead disseminated sulfides. Sulfides are bigger in the medium grained quartzite than the fine grained MGW -> pore space		y
816620	GWR21	629470	7135964	1677	18-Jun	Shane	Golden Wall ridge	Metagreywacke	Medium grained light grey-faint yellow gritty MGW with SOMETHING bedding surfaces; limonite staining; <1% sulfide pinhead size rare, disseminated		y
816621	GWR22a	629513	7135987	1687	18-Jun	Shane	Golden Wall ridge	Intrusive diorite? Recrystallized metagreywacke	0-1m		y
816622	GWR22b	629513	7135987	1687	18-Jun	Shane	Golden Wall ridge	Intrusive diorite? Recrystallized metagreywacke	1-2m		y
816623	GWR22c	629513	7135987	1687	18-Jun	Shane	Golden Wall ridge	Intrusive diorite? Recrystallized metagreywacke	2-3m		y
816624	GWR23	629582	7136041	1695	18-Jun	Shane	Golden Wall ridge	Metagreywacke	Fine-grained dark grey-purple, good bedding, very little visible sulfides		y
816625	GWR24	629651	7136069	1684	18-Jun	Shane	Golden Wall ridge	Very altered metagreywacke	Extremely altered, intense Fe oxidation, abundant mineralization, micas and sulfides of a greater size than the host grain size.		y
816626	GWR25	629706	7136151	1696	19-Jun	Shane	Golden Wall ridge	Metagreywacke	Fine grained, grey/green colour, qtz-rich, possible pinhead sulphides, beds are folded and warped		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816627	GWR26	629703	7136150	1699	19-Jun	Shane	Golden Wall ridge	Quartzite	Medium grained light grey-green quartzite in weathered talus beside GWR25, intense limonite staining, definite sulphides <1%, talus is most likely close to source and due to preferential weathering of a softer more fractured bed		y
816628	GWR27	629657	7136147	1668	19-Jun	Shane	Golden Wall ridge	Metagreywacke	Medium grained, qtz-rich, medium grey colour, intense Fe oxidation on weathered surfaces, sulphides visible disseminated silver colour ≈ 1%, 3 samples across this outcrop		y
816629	Blank										
816630	Standard										
816631	GWR28	629657	7136147	1668	19-Jun	Shane	Golden Wall ridge	Metagreywacke	Secondary biotite 3-5%; sulphides (arseno?) 1-2%, intense Fe oxidation taken approx. 2-3m downslope of GWR27 from same bed		y
816632	GWR29	629652	7136147	1656	19-Jun	Shane	Golden Wall ridge	Metagreywacke	Same bed as GWR27 and GWR28, further along strike, secondary biotite and sulphides		y
816633	GWR31	629649	7136150	1654	19-Jun	Shane	Golden Wall ridge	Felsic intermediate dyke	Fine grained felsic dyke outcrop cutting st beds, grey-blue colour, limestone skarn along contact, dyke is 1.3 m thick. Sample both N and S contact limestone and two 65 cm channel samples of dyke N --> S; dyke contact zone, N side, 35 cm chip sample, gossan heavily rusted skarn contact		y
816634	GWR32	629649	7136150	1654	19-Jun	Shane	Golden Wall ridge	Felsic intermediate dyke	Fe oxidised st bed at contact with dyke (50cm sample); beds are ≈ 56° to dyke, sulfides in limestone, silicified laminations, S side		y
816635	GWR33	629649	7136150	1654	19-Jun	Shane	Golden Wall ridge	Felsic intermediate dyke	Dyke: 65 cm chip sample from N side. Fine grained quartz matrix with hornblende and biotite(?) phenocrysts, 1% disseminated sulfides		y
816636	GWR34	629649	7136150	1654	19-Jun	Shane	Golden Wall ridge	Felsic intermediate dyke	Dyke: 65 cm chip sample S side from edge to centre, fine grained grey-blue rock with biotite phenocrysts (3%) and sulfides (1-2%)		y
816637	GWR35	629655	7136164	1662	19-Jun	Shane	Golden Wall ridge	Metagreywacke/Q uartzite	Medium grained, medium grey with green tint, interbeds of quartzite, gritty quartzite and metagreywacke, thin quartz veins, limonite staining on weathered surfaces, minor pinhead size disseminated sulphides		y
816638	GWR36	629566	7136153	1613	19-Jun	Shane	Golden Wall ridge	Felsic intermediate dyke	Fine to medium grained felsic dyke outcrops in small area here, blue-grey in colour, sulphides = 3% approx. disseminated. Fe oxidation on weathered surfaces, no biotite, hornblende present 3-5%, weakly magnetic		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816639	GWR37	629568	7136148	1620	19-Jun	Shane	Golden Wall ridge	Quartzite	Green/grey, fine grained, intensely silicified, disseminated silvery sulfides 0.5-1%, intense oxidation on weathered surfaces, this is similar to the dyke at GWR31 but lacks biotite and magnetism		
816640	GWA59	629517	7136074	1635	19-Jun	AL	Golden Wall ridge	Metagreywacke	Contains sulfides, arsenopyrite and pyrite; fine grained, intense oxidation on weathered surface, outcrop has yellow stains, outcrop is jointed and there is a quartz vein parallel to the joints; rock is slightly silicified		y
816641	GWR38	629522	7136027	1668	20-Jun	Shane	Golden Wall ridge	Metagreywacke	Fine grained dark grey-blue colour, thin to medium bed thickness, Fe oxidation on weathered surfaces, trace sulfides, 2° micas		y
816642	GWR39	629513	7136041	1660	20-Jun	Shane	Golden Wall ridge	Metagreywacke	Fe oxidation (intense) trending along joints perpendicular to bedding, trace sulfides visible, dark grey-purple fine grained, pinhead disseminated sulfides		y
816643	GWR40	629455	7136041	1646	20-Jun	Shane	Golden Wall ridge	Metagreywacke	Medium grained dark grey greenish, qtz rich, thin stockworks, qtz veins and veinlets; sulfides disseminated and in stringers; veins roughly parallel to jointing		y
816644	GWR41	629408	7136011	1615	20-Jun	Shane	Golden Wall ridge	Gossan	Gossanized zone, Black colour, black clay alteration, intensely oxidised, 10m lateral extent (approx), abundant mineralization		y
816645	GWR42	629408	7136016	1615	20-Jun	Shane	Golden Wall ridge	Metagreywacke/Gossan	Medium grained MGW, intensely altered unit, intense Fe oxidation, directly above gossan, visible sulphides		y
816646	GWR43	629396	7136003	1615	20-Jun	Shane	Golden Wall ridge	Metagreywacke	Crystalline, highly altered, coarse grained, black/dark green coloured; beside gossan		y
816647	GWR44	629322	7136000	1601	20-Jun	Shane	Golden Wall ridge	Metagreywacke	Medium grained, grey-green, crystalline, visible sulfides		y
816648	GWR45	629286	7135943	1617	20-Jun	Shane	Golden Wall ridge	Breccia	Extremely oxidised joint or fracture, very weathered dark brown/black colour, light yellow-brown on some weathered surfaces; this unit follows jointing		y
816649	GWR46	629262	7135947	1639	20-Jun	Shane	Golden Wall ridge	Possible metagreywacke	Extremely altered and oxidised, dark brown on weathering surfaces, also a light yellowish/green mottled texture on some weathered surfaces; very weathered rock, a lot of clay alteration		y
816650	GWR47	629262	7135934	1616	20-Jun	Shane	Golden Wall ridge	Gossan	Very altered, lots of mineralization, sample taken 3m along wall to S of GWR46. Similar highly oxidised unit		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816651	GWR48	629254	7135930	1619	20-Jun	Shane	Golden Wall ridge	Qtz-rich Metagreywacke	Fine grained, crystalline grey-green colour, 2-3% arsenopyrite, at W end of gossanized wall	N	y
816652	GWR49	629210	7135886	1622	20-Jun	Shane	Golden Wall ridge	Gossan	Red-brown to dark brown-black in colour, very difficult to distinguish host rock		y
816653	GWR4	629731	7136163	1701	16-Jun	Shane	Golden Wall ridge	Metagreywacke	Purple-grey shaley, very fine, very rusty weathering colour, joints visible, thin laminated shale bed visible		y
816654	GWA6	629702	7136155	1693	16-Jun	AL	Golden Wall ridge	Metagreywacke and sandstone	Fine to med grained, visible biotite and finely disseminated pyrite, rock has numerous parallel joints and very rusty weathering colour locally. Some of the rock is a quartz rich sandstone		y
816655	GWA7	628768	7135613	1684	17-Jun	AL	Golden Wall ridge	Metagreywacke with quartzite beds	Thin laminations (1-2mm) visible, cross bedding indicates right way up		y
816656	GWA8	628786	7135600	1693	17-Jun	AL	Golden Wall ridge	Metagreywacke with quartzite	V. fractured, v. weathered/rusted, limonite coating, possibly contains fine pyrite		y
816657	GWA 11	628855	7135596	1697	17-Jun	AL	Golden Wall ridge	Metagreywacke	MGW with very fine pyrite, heavily rusted. Some beds are rusted more than others		y
816658	GWA12	628867	7135601	1693	17-Jun	AL	Golden Wall ridge	Metagreywacke	Very jointed, rusty weathering		y
816659	Standard										
816660	Blank										
816661	GWA13	628893	7135609	1687	17-Jun	AL	Golden Wall ridge	Metagreywacke	Very fine grained, rusty weathering underlain by qrtz sandstone		y
816662	GWA14	628893	7135609	1687	17-Jun	AL	Golden Wall ridge	Quartz sandstone	Coarse grained quartz sandstone with coarse biotite flecks		y
816663	GWA15	628924	7135629	1674	17-Jun	AL	Golden Wall ridge	Metagreywacke	Light and dark grey		y
816664	GWA16	629031	7135684	1666	17-Jun	AL	Golden Wall ridge	Metagreywacke	MGW contains sulfides, probably arsenopyrite, brecciated outcrop		y
816665	GWA17	2-3 m N of GWA16			17-Jun	AL	Golden Wall ridge	Coarse sandstone and quartzite	Contains sulfides, rusty weathering, very hard		y
816666	GWA18	629036	7135692	1667	17-Jun	AL	Golden Wall ridge	Metagreywacke with quartzite	Quartz-rich MGW/quartzite outcrop is v. jointed, brecciated appearance. Possibly contains v. fine sulfides		y
816667	GWA19	629036	7135692	1660	17-Jun	AL	Golden Wall ridge	F.G. Metagreywacke	Very rusted, v.f. sulfides		y
816668	GWA20	629045	7135697	1665	17-Jun	AL	Golden Wall ridge	Metagreywacke	Brecciated outcrop, rusty weathering, possible fracture zone. Secondary hematite		y
816669	GWA21	629059	7135695	1668	17-Jun	AL	Golden Wall ridge	Metagreywacke	Very rusted, nearby beds of qrtz sandstone with no rust. V.f. disseminated sulfides, brecciated outcrop 3m to W of grey sandstone		y
816670	GWA23	629084	7135719	1673	17-Jun	AL	Golden Wall ridge	Metagreywacke	V.f. grained, purple-grey MGW, very jointed, slight rust weathering		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816671	GWA24	629093	7135729	1673	17-Jun	AL	Golden Wall ridge	Metagreywacke	F.g. purple-grey MGW with rusty weathering, v.f. sulfides, jointed outcrop		y
816672	GWA25	629106	7135738	1678	17-Jun	AL	Golden Wall ridge	Metagreywacke	V.f. grained, purple-grey MGW, quartz rich		y
816673	GWA26	629134	7135753	1673	17-Jun	AL	Golden Wall ridge	Metagreywacke	Purple-grey MGW with slight rust weathering, jointed outcrop		y
816674	GWA27	629179	7135789	1675	17-Jun	AL	Golden Wall ridge	Metagreywacke	V.f. purple-grey MGW, jointed outcrop with rust stains		y
816675	GWA28	629217	7135827	1660	17-Jun	AL	Golden Wall ridge	Metagreywacke	V.f. purple-grey MGW, jointed outcrop with rust weathering		y
816676	GWA29	629246	7135874	1658	17-Jun	AL	Golden Wall ridge	Metagreywacke	V.f. grey (lighter in colour than purple-grey samples) MGW, jointed outcrop, light rust weathering		y
816677	GWA30	629284	7135897	1654	17-Jun	AL	Golden Wall ridge	Micaceous quartzite	Probably just a thin member		y
816678	GWA31	629296	7135912	1657	17-Jun	AL	Golden Wall ridge	Metagreywacke	F.g. MGW, nearly siltstone, some laminations visible, sulfide stringers present, slightly silica altered (very hard)		y
816679	GWA32	629336	7135927	1657	18-Jun	AL	Golden Wall ridge	Sandstone	Light grey-beige sandstone, subangular grains still visible, nearly all quartz; interbedded with finer grained greywackes-MGW. Sample is representative of $\approx$ 50cm		y
816680	GWA33	629374	7135939	1658	18-Jun	AL	Golden Wall ridge	Metagreywacke	Fine to slightly medium grained, some quartz grains visible, thin laminations visible, bedding appears to vary between here and 40 m to W along the ridge, some folding/warping. Outcrop is jointed with localised minor rust stains.		y
816681	GWA35	629420	7135952	1665	18-Jun	AL	Golden Wall ridge	Metagreywacke	Thinly-bedded, some quartz-rich MGW, very jointed outcrop, slightly rusty, fine visible finely disseminated pyrite: trace to 0.5%		y
816682	GWA37	629431	7135965	1658	18-Jun	AL	Golden Wall ridge	Metagreywacke	V.f. grained purple-grey MGW, very rusted and jointed outcrop, fine sulfides visible, possibly a fracture zone, some quartz beds in area		y
816683	GWA38	629494	7135981	1680	18-Jun	AL	Golden Wall ridge		0-1m		y
816684	GWA38	629494	7135981	1680	18-Jun	AL	Golden Wall ridge		1-2m		y
816685	GWA38	629494	7135981	1680	18-Jun	AL	Golden Wall ridge		2-3m		y
816686	GWA38	629494	7135981	1680	18-Jun	AL	Golden Wall ridge		Centre of vein		y
816687	GWA39	629523	7135993	1680	18-Jun	AL	Golden Wall ridge	Metagreywacke	Fine grained, grey-slightly purple MGW, some occasional glossy minerals - black, possibly pyroxenes and tourmaline		y
816688	GWA41	629541	7136011	1694	18-Jun	AL	Golden Wall ridge	Metagreywacke	Fine grained, grey-purple colour		y
816689	GWA43	629663	7136075	1688	18-Jun	AL	Golden Wall ridge	Metagreywacke	Rusty weathering outcrop, jointed surface; fine grained, grey-purple colour, 1% disseminated sulphides		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816690	GWA44	629654	7136071	1680	18-Jun	AL	Golden Wall ridge	Gossan/Greywacke	Gossan, possibly mineralised bed that is oxidized, appears to be a very rusted greywacke		y
816691	GWA45	629631	7136073	1678	19-Jun	AL	Golden Wall ridge	Metagreywacke	Very fine grained, slightly siliceous, grey colour, fine disseminated sulfides visible, outcrop is very rusted and jointed with a rough weathering surface, mineralisation possibly related to joints, one obvious joint set		y
816692	GWA47	629629	7136079	1670	19-Jun	AL	Golden Wall ridge	Metagreywacke	Very fine grained, grey colour, very rusted, similar to GWA45, contains sulfides, mineralisation may be related to joints, possible mineralised bed, gossan visible along strike, 2m SW of GWA47, rock is weathered out		y
816693	GWA49	629599	7136093	1656	19-Jun	AL	Golden Wall ridge	Metagreywacke/Quartzite	Obvious set of parallel joints, possible cross bedding, fine grained, purple-grey colour, quartz-rich, fine disseminated sulfides present, outcrop not rusty		y
816694	GWA50	629597	7136087	1652	19-Jun	AL	Golden Wall ridge	Metagreywacke	Rusted outcrop, fine grained, purple-grey rock, overlies GWA49 by 2m		y
816695	GWA51	629619	7136108	1641	19-Jun	AL	Golden Wall ridge	Quartzite	Blue-grey quartzite bed, jointed and rusted, contains 0.5% disseminated sulfides, overlain by competent bed of biotite quartzite, 450 cm thick, the biotite and quartzite bed is overlain by a hard fine grained silicified bed with visible laminations		y
816696	GWA53	629650	7136152	1656	19-Jun	AL	Golden Wall ridge	Limestone	Gritty limestones close to dyke contact, sample is from a rusty bed - probably a less pure bed - resembles a greywacke. The bed has a minor reaction to HCl, and possibly contains some dolomite		y
816697	GWA55	629751	7136168	1613	19-Jun	AL	Golden Wall ridge	Greywacke and gritty quartzite	Fine grained, rust coloured shaley greywacke overlies a gritty quartzite bed. Quartzite is a white-grey colour. Greywacke bed sampled next to a weakness - creek. Possibly a small fault at this point as the shaley greywacke appears to strike into a gritty quartzite. Fault strikes 40 deg, possibly a reverse fault, upthrown on W side.		y
816698	GWA56	629546	7136166	1600	19-Jun	AL	Golden Wall ridge	Metagreywacke	Fine grained purple-grey colour with some visible black biotite. Possibly subjected to thermal metamorphism, very hard, the contact with the gritty quartzite is 3m to the N, this point is W of fault mentioned above at GWA55		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816699	Blank										
816700	Standard										
816701		637616	7132175	1364	Jun-13	DM	AJ Vein	Metagreywacke	Metagreywacke with parallel veining, specks of silver sulphides; Arseno pyr and pyr area is weathered; rusty stains		y
816702		637619	7132207	1364	Jun-13	DM	AJ Vein	Arsenopyrite	Massive Arseno/pyrite from AJ vein;		y
816703		632680	7134041	1482	Jun-14	DM		Metagreywacke	Heavily oxidized outcrop has lenses of veined sulphides. Outcrop is near small stream and deserves further investigation --> still patchy snow on ground		y
816704		632871	7133843	1528	Jun-14	DM		Metagreywacke	Lots of sulphides, mildly magnetic, near Monzonite contact	y	y
816705		629578	7136072	1662	Jun-14	DM	Golden Wall	Metagreywacke	Little grit rounded qtz/qtzite, heavily oxidized	n	y
816706		629647	7136132	1657	Jun-14	DM	Golden Wall		Mainly all oxidized/rust coloured. Sulphides are pyrite - lesser chalcopyrite with peacock hue in places. Possibly some Vg. Host lithology is light grey, v. fine grained siltstone, fractures concoidly. Silstone seems to be silicified.	y	y
816707		629647	7136132	1657	Jun-14	DM	Golden Wall		Mainly all oxidized/rust coloured. Sulphides are pyrite - lesser chalcopyrite with peacock hue in places. Possibly some Vg. Host lithology is light grey, v. fine grained siltstone, fractures concoidly. Silstone seems to be silicified.		
816708		632833	7133885	1519	Jun-14	DM	Near JC	Massive Arsenopyrite	Oxidised arsenopyrite, rotten weathered	y	y
816709	GWA60	629539	7136037	1676	20-Jun	AL	Golden Wall ridge	Metagreywacke	Fine grained purple-grey MGW, OC has a rusty weathering colour, bedding is possible folded so value given is uncertain		y
816710	GWA63	629493	7136011	1660	20-Jun	AL	Golden Wall ridge	Quartzite?	Fine sulfides <1% and black prismatic glassy crystals in a vein parallel to the main joints. Outcrop is a rusty colour.		y
816711	GWA64	629475	7136012	1656	20-Jun	AL	Golden Wall ridge	Quartzite	Similar rock to GWA63, possibly an impure qtzite; there are veins with black glassy crystals and some thin rusty veinlets in the outcrop, mostly parallel		y
816712	GWA65	629407	7136007	1618	20-Jun	AL	Golden Wall ridge	Metagreywacke Gossan?	0-1m chip sample, heavily rusted		y
816713	GWA66	629407	7136007	1618	20-Jun	AL	Golden Wall ridge	Metagreywacke Gossan?	1-2m chip sample, heavily rusted		y
816714	GWA67	629407	7136007	1618	20-Jun	AL	Golden Wall ridge	Metagreywacke Gossan?	2-3, chip sample, heavily rusted, some dark glassy crystals		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816715	GWA68	629405	7136005	1617	20-Jun	AL	Golden Wall ridge	Gossan	Heavily oxidised rock, mineralisation related to joints? Set of parallel joints visible, closely spaced, control the gossan at this point		y
816716	GWA69	629407	7136007	1618	20-Jun	AL	Golden Wall ridge	Gossan	Heavily oxidised, ample from centre of gossan zone above chip sample GWA66 (1-2m), sample composed almost completely of a metallic mineral, possibly arsenopyrite		y
816717	GWA70	629360	7135972	1629	20-Jun	AL	Golden Wall ridge	Quartzite/monzonite	Appears to be a rusty weathering Qtzite (trace - 0.5%) sulfides disseminated. The Qtzite is at the joint contact of a coarse-medium grained light coloured igneous rock, there appears to be Qtzite beds in area, the igneous rock is too hard to break; it contains some biotite or hornblende, quartz and plagioclase(?) Monzonite (?_ Extent unknown		y
816718	GWA72	629291	7135935	1623	20-Jun	AL	Golden Wall ridge	Gossan	Mineralised beds, visible sulfides and heavily oxidised beds, possibly 10m of beds with significant sulfides. There is a set of parallel joints crossing oxidised beds. There is a hard silicified greywacke(?) or fine Qtzite bed 2 m uphill, it has 3% disseminated sulfides.		y
816719	GWA74	629290	7135929	1628	20-Jun	AL	Golden Wall ridge	Gossan	Mineralised beds, possibly localised in fracture zone, heavily oxidised gossan, some very fine grained hard grey rock is visible, possibly Qtzite or silicified metagreywacke		y
816720	GWA75	629270	7135925	1634	20-Jun	AL	Golden Wall ridge	Gossan	Possible metagreywacke, most of the rock is rusted and has a brecciated or rough appearance on weathered surfaces		y
816721	GWA76	629223	7135904	1628	20-Jun	AL	Golden Wall ridge	Metagreywacke-quartzite	Grey rock, very fine grained, hard, siliceous, either a fine Qtzite or a silicified MGW, contains >1% disseminated sulfides, very jointed, rusty OC, closely spaced parallel joints		y
816722	GWR48	629254	7135930	1619	20-Jun	Shane	Golden Wall ridge	Qtz-rich Metagreywacke	Fine grained, crystalline grey-green colour, 2-3% arsenopyrite, at W end of gossanized wall		y
816723	GWR49	629210	7135886	1622	20-Jun	Shane	Golden Wall ridge	Gossan	Red-brown to dark brown-black in colour, very difficult to distinguish host rock		y
816724		634631	7135949		24-Jun	Tubby/AL	Cheyenne OC	Greywacke	Random grab sample; fine grained dark grey greywacke; Heavily rust stained/limonite; contains very fine sulfides; very thin arsenopyrite(?) stringer visible		y
816725	Grab sample	634541	7136151		24-Jun	Tubby/AL	Cheyenne	Metagreywacke	Fine grained, dark grey, slightly siliceous metagreywacke; contains fine sulfides; heavily rusted/limonite on weathered surfaces		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816726	RB2	632294	7133402	1741	26-Jun	AL	Rainbow	Metagreywacke	Very rusted OC, MGW slightly qtz-rich, grey-blue colour		y
816727	RB3	632276	7133363	1763	26-Jun	AL	Rainbow	Metagreywacke	MGW contains very fine disseminated sulfides, very rusted/oxidised OC		y
816728	RB4	632322	7133363	1744	26-Jun	AL	Rainbow	Quartzite	White-grey qtzite, jointed OC, weathered surface has some rusty patches. Some of the qtzite is a darker colour and contains fine biotite which appears to be secondary		y
816729	Blank										
816730	Standard										
816731	RB5	632336	7133346	1749	26-Jun	AL	Rainbow	Metagreywacke	Dark grey coloured MGW wuth very rusted weathered surface, gossan. Probably contains very fine sulfides, but they are not obvious		y
816732	RB6	632325	7133337	1764	26-Jun	AL	Rainbow	Metagreywacke	Sulfide bearing MGW bed(?) Some fine biotite visible. Very rusted on weathered surface. Fine grained, medium grey colour, overlain by light coloured gritty quartzite		y
816733	RB7	632313	7133334	1767	26-Jun	AL	Rainbow	Quartzite	OC slightly rusty, overlain by a number of rusty beds. Sample is from a quartzite, some grains are sill visible. Bedding is shallow. Possibly some sulfides and pyrolusite in the quartzite.		y
816734	RB8	632300	7133328	1789	26-Jun	AL	Rainbow	Metagreywacke	Heavily rusted, very fine disseminated sulfides visible, make up to 4% of the rock, looks like arsenopyrite. Fresh surface is a blue-grey colour.		y
816735	RB9	632301	7133325	1790	26-Jun	AL	Rainbow	Metagreywacke	Very fine grained MGW, contains very fine sulfides? Bed has a rusty colour and a yellow weathering colour.		y
816736	RB10	632301	7133325	1790	26-Jun	AL	Rainbow	Quartzite	Quartzite bed overlying MGW from RB9. Contains visible sulfides - disseminated. Qtz grains visible, slightly gritty. Quartzite contains some fine MGW lenses. The bed is around 75cm thick, sample from bottom of bed.		y
816737	RB11	632301	7133325	1790	26-Jun	AL	Rainbow	Quartzite	Sample taken from top of RB10 bed. Disseminated sulfides <1%, biotite flakes visible		y
816738	RB12	632324	7133298	1794	26-Jun	AL	Rainbow	Metagreywacke	Fine grained MGW, very oxidised, visible sulfides 2%? Very fractured/jointed OC, possible fracture zone. Along strike from last 3 samples, probably same bed		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816739	RB13	632327	7133298	1799	26-Jun	AL	Rainbow	Metagreywacke or quartzite	Very close to RB12, very jointed and rusty rock (gossan). Fine grained qtz-rich MGW or qtzite with 5-10% disseminated sulfides. Some large blebs visible, sulfides or shiny metallic, pyrite or arsenopyrite		y
816740	RB14	632263	7133268	1843	26-Jun	AL	Rainbow	Quartzite	Quartzite with some quartz veins. Rocks has a slightly gritty texture and brownish colour. There are some rusty spots, but no sulfides visible.		y
816741	Sulphide	630386	7134447		27-Jun	DM	Cheyenne	Sulphide vein	Small sulphide vein, not much effort made to investigate as was passing doing soils		y
816742		631362	7130982		1-Jul	Tubby/AL	Cheyenne	Metagreywacke	Fine grained, blue-grey MGW, possibly slightly silicified, very rusty weathering surface, contains very fine disseminated sulfides, 1%(?)		y
816743	RS1	631412	7130982		1-Jul	Tubby/AL	Cheyenne	Metagreywacke	MGW with very rusty weathered surface, slightly quartz-rich, fine sulfides visible		y
816744		632121	7134373	1444	3-Jul	Shane	JCS line	Metagreywacke	Interbedded qtzite and MGW OC (gossan), sample is of sulfide bearing fine to medium grained purple-grey MGW. Limonite coating on weathered surface. At N end of JCS line.		y
816745		632121	7134373	1444	3-Jul	Shane	JCS line	Quartzite	Sulfide bearing qtzite with dark brown to black limonite staining on weathered surface		y
816746	RS1A	632123	7134374		3-Jul	AL	JCS line	Quartzite	Rusty weathering, medium grained qtzite, qtz grains visible, contains 1% disseminated sulfides		y
816747		632121	7134348	1434	3-Jul	Shane	JCS line	Talus	Highly oxidised intrusive with phenocrysts of plagioclase? K FSPA? Also sulfide bearing. Pyrrhotite recognised, mica (biotite) and hornblende phenocrysts also recognizable, up to 2 cm long, axis.		y
816748	Talus sam	632177	7134352		3-Jul	AL	JCS line		Calcite, peacock lustre		y
816749		632185	7134344	1438	3-Jul	AL	JCS line	Quartz vein			y
816750	Not used										
816751		637596	7132171	1368	4-Jul	AL	AJ Vein	Quartzite(?)	Fine grained quartzite or siliceous metagreywacke; from old unsampled core near river; rusty weathering colour; ≈60cm sample; hole 2 box 2 depth unknown		y
816752		637596	7132171	1368	4-Jul	AL	AJ Vein	Metagreywacke	Light grey sandy MGW, fine grained, visible pyrite and chalcopryite; ≈ 40cm sample; depth unknown		y
816753	AJA1	637670	7132379	1343	4-Jul	AL	AJ Vein	Metagreywacke	Fine grained purple-grey MGW, very rusted weathering colour, some sulfides visible		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816754	AJA2	637673	7132341	1348	4-Jul	AL	AJ Vein	Metagreywacke	Fine grained purple-grey MGW, visible fine disseminated arsenopyrite 1% or more. Very rusty OC, split by joints		y
816755	AJA3	637688	7131808	1548	4-Jul	AL	AJ Vein	Quartzite	Fine grained, light grey quartzite, very rusty on OC, disseminated sulphides (Arsenopyrite) ≈1%		y
816756	AJA4	637745	7131790	1564	4-Jul	AL	AJ Vein	Vein sample	Gossan, weathered vein area is jointed, rusty outcrops. Sample from centre of vein, most rusted		y
816757	AJA5	637745	7131790	1564	4-Jul	AL	AJ Vein	Siltstone/Metagrey wacke	Silicified siltstone/MGW. Laminations visible, N side of vein, very light colour, some disseminated sulfides		y
816758	AJA6	637740	7131780	1569	4-Jul	AL	AJ Vein	Vein sample	Weathered vein, along strike from AJA5, vein 1m(?) thick here, smells of sulfide		y
816759	AJA7	637733	7131777	1580	4-Jul	AL	AJ Vein	Vein sample	Gossan and massive arsenopyrite from vein, uphill from AJA6. Set of joints at 150/90, intersection of 2 fracture zones?		y
816760	AJA8	637723	7131778	1588	4-Jul	AL	AJ Vein	Vein sample	Fracture zone, heavily rusted. Some gossan, continuation of vein from AJA7. Some quartzite? Grey-black crystals, possibly arsenopyrite		y
816761	AJA9	637699	7131765		4-Jul	AL	AJ Vein	Vein sample	Continuation from AJA7 and AJA8. Fractured rusty OC, bunches of black radiating crystals, needle-like, looks like hornblende, some gossan		y
816762	AJA10	637716	7131784	1577	4-Jul	AL	AJ Vein	Vein sample	Fracture zone, gossan. NW side of main vein, looks like silicified MGW, very fine disseminated sulfides. Jointing 132/82E.		y
816763	AJA11	637777	7131676	1561	5-Jul	AL	AJ Vein	Metagreywacke	Very light coloured (pink-grey) silicified MGW. Very fine grained, rusty weathering colour, contains fine disseminated sulfides, 0.5%-1%		y
816764	AJA12	637765	7131787	1580	5-Jul	AL	AJ Vein	Metasediment	Very fine grained, light grey silicified metasediment, fine disseminated sulfides (0.5%), very rusty weathering surface. Joints 090/80S		y
816765	AJA13	637756	7131819	1560	5-Jul	AL	AJ Vein	Metagreywacke	Fine grained grey MGW, very rusty colour on weathered surface, probably contains very fine sulfides		y
816766	AJA14	637738	7131871	1540	5-Jul	AL	AJ Vein	Metagreywacke	Fine grained, dark grey, slightly siliceous MGW, visible sulfides - arsenopyrite? Very oxidised, limonite on surfaces		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816767	AJA15	637789	7131885	1549	5-Jul	AL	AJ Vein	Metagreywacke	Fractured OC, joints 068/80 N. MGW, very oxidised, grey on fresh surface, fine grained, radiating fibrous rotted mineral on joint surface		y
816768	AJA16	637800	7131891	1549	5-Jul	AL	AJ Vein	Quartzite	Rusty OC, joint 004/90. Fine to medium grained quartzite, light colour, some rust staining and manganese oxides (?) on joint/fracture		y
816769	AJA17	637857	7131892	1574	5-Jul	AL	AJ Vein	Metagreywacke	Fine-grained, dark grey MGW, visible disseminated sulfides, rusted weathered surface		y
816770	AJA18	637873	7131874	1597	5-Jul	AL	AJ Vein	Quartz rich rock	Very light coloured, hard silicified/cherty qtz-rich rock, rusty weathered surface. Very fine grained		y
816771	AJA19	637888	7131889	1590	5-Jul	AL	AJ Vein	Metagreywacke	Fine grained, dark grey-purple MGW, fine disseminated sulfides visible, some fine black glassy crystals - unknown. Rusty weathered surface, limonite.		y
816772	AJA20	637786	7131955	1518	5-Jul	AL	AJ Vein	Metagreywacke	Very fine-grained, dark grey MGW. Slightly silicified, very rusted weathered surface, probably very fine disseminated sulfides		y
816773	AJA21	638822	7131966	1521	6-Jul	AL	AJ Vein	Metagreywacke	Fine grained, dark grey-purple MGW, 3% disseminated sulfides, very oxidised on weathered surface. Silicified qtz vein with sulfides		y
816774	AJA22	637884	7131989	1527	6-Jul	AL	AJ Vein	Cherty rock	Light coloured, hard cherty rock, pervasively silicified, 0.5% fine disseminated arsenopyrite. Rusted weathering surface		y
816775	AJA23	637875	7132008	1527	6-Jul	AL	AJ Vein	Metagreywacke	Joint 154/80W. Jointed OC, rusty, dark grey, very fine grained MGW with lighter qtz band/vein very rusted, fine disseminated sulfides		y
816776	AJA24	637832	7132018	1506	6-Jul	AL	AJ Vein	Metagreywacke	Blue-grey MGW, fine grained, visible disseminated sulfides, very oxidised on weathered surfaces, limonite coating		y
816777	AJA25	637944	7132103	1533	6-Jul	AL	AJ Vein	Metagreywacke	Replacement mineralisation? Joint 020/90, fine grained silicified MGW, extremely oxidised		y
816778	AJA26	637942	7132106	1534	6-Jul	AL	AJ Vein	Metagreywacke	Gossan 1m fromn AJA25. Fine grained silicified MGW, gossan, very oxidised. Some fibrous rusty minerals - oxidised arsenopyrite?		y
816779	AJA27	638028	7132212	1525	6-Jul	AL	AJ Vein	Metagreywacke?	Silicified MGW? Very rusted weathered surface. Possibly contains fine sulfides. Blue-grey colour on fresh surfaces. Some very thin dark veinlets.		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816780	AJA28	638099	7132390	1463	6-Jul	AL	AJ Vein	Quartzite	Impure qtzite, qtz grains still visible. Some qtz veins, rimmed by mineral similar to specular hematite (no red streak)? No sulfides obvious, maybe a qtz rich greywacke/metagreywacke		y
816781	Not used										
816782	AJA29	637981	7132467	1407	6-Jul	AL	AJ Vein	Metagreywacke	Metagreywacke, fine grained, blue-grey, limonite staining, in small creek. No sulfides visible		y
816801		637585	7132142	1371	5-Jul	DM	AJ Vein	Metagreywacke	Rusty weathered MGW, qtz-rich, small amount of very fine disseminated sulfides		y
816802		637592	7132143	1367	5-Jul	DM	AJ Vein	Metagreywacke	Blue-grey MGW		y
816803		637599	7132150	1365	5-Jul	DM	AJ Vein	Quartzite	Dark quartzite, rusty weathering, disseminated sulfides	Y	y
816804		637597	7132158	1369	5-Jul	DM	AJ Vein	Metagreywacke	Qtz-rich blue-grey MGW, pinhead sulfides, light rust weathering	Y	y
816805		637595	7132179	1392	5-Jul	DM	AJ Vein	Quartzite	Dark grey fine grained qtzite, lots of oxidation, much fine disseminated sulfide, magnetic, pyrrhotite and arsenopyrite?	Y	y
816806		637603	7132168	1387	5-Jul	DM	AJ Vein	Quartzite	Fine to medium grained qtzite, magnetic, pyrrhotite stringers, very rusty weathering	Y	y
816807		637611	7132174	1373	5-Jul	DM	AJ Vein	Quartzite	Grey quartzite, fine grained, arsenopyrite visible		y
816808		637616	7132173	1367	5-Jul	DM	AJ Vein	Quartzite	Med grey quartzite, light rust weathering, disseminated sulfides and sulfide stringers		y
816809		637619	7132180	1365	5-Jul	DM	AJ Vein				y
816810		637622	7132190	1372	5-Jul	DM	AJ Vein				y
816811		637636	7132198	1366	5-Jul	DM	AJ Vein				y
816812		637648	7132203	1358	5-Jul	DM	AJ Vein				y
816813		637666	7132226	1376	5-Jul	DM	AJ Vein				y
816814		637680	7132236	1365	5-Jul	DM	AJ Vein				y
816815		637668	7132241	1377	5-Jul	DM	AJ Vein				y
816816		637654	7132250	1389	5-Jul	DM	AJ Vein				y
816817		637668	7132257	1364	5-Jul	DM	AJ Vein				y
816818		637657	7132263	1397	5-Jul	DM	AJ Vein				y
816819		637674	7132266	1366	5-Jul	DM	AJ Vein				y
816820		637679	7132269	1357	5-Jul	DM	AJ Vein				y
816821		637678	7132274	1359	5-Jul	DM	AJ Vein				y
816822		637677	7132272	1350	5-Jul	DM	AJ Vein		South of main vein		y
816823		637674	7132271	1353	5-Jul	DM	AJ Vein	Quartzite	1 m N of 816822, very rusty weathering, sulfide stringers		y
816824		637676	7132272	1352	5-Jul	DM	AJ Vein	Quartzite	1 m N of 816823, qtz- and sulfide-rich quartzite debris, heavily oxidised, arsenopyrite.		y
816825		637668	7132272	1357	5-Jul	DM	AJ Vein		1 m N of main AJ vein		y
816826		637676	7132274	1353	5-Jul	DM	AJ Vein				y
816827		637669	7132278	1357	5-Jul	DM	AJ Vein				y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
816828		637672	7132286	1351	5-Jul	DM	AJ Vein	Quartzite	Very heavily oxidised quartzite		y
816829	Showing 6	632731	7133933		14-Jul	DM	JC Vein	Sulfide vein	2-4 inch thick massive sulfide vein, arsenopyrite>pyrite>chalcopyrite with some quartz, distinct rusted skin		y
816830	TKR-2	632736	7133890				JC Area	Arsenopyrite and Quartz vein	ASPY is massive euhedral, and qtz is dogtooth - suggesting fracture fill		y
816831		632736	7133890		14-Jul	DM	JC Area	Arsenopyrite and Quartz vein	ASPY is massive euhedral, and qtz is dogtooth - suggesting fracture fill		y
816834	JCT-R2	632829	7133883	1524	14-Jul	DM	JC Area	Quartzite	Light grey, medium-grained quartzite/metaquartzite; pinhead sulfides; magnetic - pyrrhotite; also a lot of oxidation	Y	y
816835	JC-R1-08	632826	7133883	1526	14-Jul	DM	JC Area	Arsenopyrite and Quartz vein	Arsenopyrite vein, quartz, pyrite, etc., also euhedral tourmaline crystals		y
816836	TKR-South	632700	7133887		14-Jul	DM	TK	Metagreywacke	Very fine grained MGW with biotite and hornblende specks, lots of sulfides - mostly pyrite but some chalcopyrite, little peacock lustre in places, sharp angular fractures	Y	y
816837	GW Trench	629653	7136063	1682	14-Jun	DM	Golden Wall trench	Very rusty breccia	Orange to black rust weathering, sulfide crystals - pyrite, peacock lustre		y
816838		639843	7131434	1084	30-Jun	Tubs	Cheyenne	Metagreywacke	Very fine grained dark grey MGW, sulfides visible		y
817001	TKR1	632774	7133883	1530	26-Jun	ST	JC vein, Trench 2: 2nd trench to west of creek and JC showing. Trend of trench is 090, trench has two pods of massive arsenopyrite cross cutting metagreywacke beds. Vein trends 108/53 S, joints here trend 175/90	Quartzite	White 'sugary' quartzite with black sulphide carrying veins and stringers taken from centre of trench in the middle		y
817002	TKR2	632774	7133883	1530	26-Jun	ST	JC vein, Trench 2	Metagreywacke	Topographically above ASPY pod; highly oxidised and weathered, visible pinhead sulfides		y
817003	TKR3	632774	7133883	1530	26-Jun	ST	JC vein, Trench 2	Massive sulfides (ASPY)	Massive sulfides (ASPY) in pod or vein in white (sugary) qtzite or qtz veins		y
817004	TKR4	632703	7133952	1515	26-Jun	ST	JC vein, Trench 4	Massive arsenopyrite	Massive arsenopyrite in completely altered host rock		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
817005	TKR5	632699	7133962	1508	26-Jun	ST	JC vein, Trench 4, further N than TKR4	Massive ASPY and pyrite	Very good showings in this trench but needs to be deeper - unsure if block are float or if they are in situ. Very nice massive pyrite and ASPY in very weathered and heavily altered host rock.		y
817006	TKR6	632699	7133962	1508	26-Jun	ST	JC vein, Trench 4, 2m N of TKR5	Massive ASPY	Blacks of massive ASPY hosted in fine grained dark grey-purple MGW		y
817007	TKR7	632681	7134036	1482	26-Jun	ST	Steep slop on N side of creek	Metagreywacke	MGW with Fe oxidation on weathered surfaces, fine grained dark grey-purple colour, disseminated pinhead sulfides, moderately magnetic		y
817008	TKR8	632926	7133805	1536	26-Jun	ST	TK	Metagreywacke?	Medium grained, crystalline, slightly magnetic, strike 080/80 NW, possible contact here, joint 148/73 S, chill margin	Y	y
817009	TKTR1	632514	7133833	1499	Jul-04	Shane	1.4m W of mark	Metagreywacke	Qtz-rich MGW, blue/purple-grey crystalline; hosting 1-2% sulfides (pyrite, possible chalcopyrite & arsenopyrite); it has an intense reddish brown limonite coating on weathered surfaces, also plagioclase		y
817010	TKTR2	632514	7133833	1499	Jul-04	Shane	2.7m W of mark	Metagreywacke	Fine grained purple MGW with intense limonite staining on weathered surfaces. Hosting sulfides, mostly pinhead size, some large specks of pyrothite noted.		y
817011	TKTR3	632514	7133833	1499	Jul-04	Shane	8.6m W of mark	Shale	Very fine grained, dark grey, "greasy" looking shale with intense oxidation on weathered surfaces. Some fine laminations visible.		y
817012	TKTR4	632514	7133833	1499	Jul-04	Shane	10.8m W of mark	Shale	Very fine grained shale; oxidation on weathered surface, sulfide stringers and veinlets visible		y
817013	TKTR5	632514	7133833	1499	Jul-04	Shane	14.8m W of mark		Granular with 5% black mineral which has been weathered out in a lot of places; Fe oxidation, some hematite (oily colours!), no visible sulfides		y
817014	TKTR6	632514	7133833	1499	Jul-04	Shane	15.5m W of mark	Quartz vein	Qtz vein with large vugs; very oxidised; large fibrous hornblende crystals		y
817015	TKTR7	632514	7133833	1499	Jul-04	Shane	16m W of mark	Metagreywacke	Medium grained, granular, qtz-rich MGW with 2-3% sulfides. Rock is moderately magnetic, possibly pyrothite, very small sulfides and silvery coloured		y
817016	TKTR8	632513	7133842	1505	Jul-04	Shane	5m W of mark, 2nd hole	Sandstone	Rock has some visible sulfides		y
817017	TKTR9	632513	7133842	1505	Jul-04	Shane	5.6m W of mark, 2nd hole	Shale	Of sulfide bearing fine-grained dark grey shale unit		y
817018	TKTR10	632513	7133842	1505	Jul-04	Shane	12.6m W of mark, 3rd hole	Metagreywacke	Sulfide bearing, blue-grey MGW, possibly ASPY, most disseminated in clusters		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
817019	TKTR11	632513	7133842	1505	Jul-04	Shane	12.6m W of mark, 3rd hole	Quartzite	Light grey-white coloured medium grained qtzite cut by black sulfide bearing veinlets; arsenopyrite, chalcopyrite seen		y
817020	AJT01	637665	7132404	1336	Jul-05	Shane	AJ Vein	Metagreywacke	Fine grained purple MGW with quartz veins		y
817021	AJT02	637654	7132377	1347	Jul-05	Shane	AJ Vein	Metagreywacke	Light green-grey medium grained granular MGW, hosting pyrrhotite (silvery with rusted rims) and chalcopyrite		y
817022	Not used										
817023	AJT03	637664	7132320	1353	Jul-11	Shane	AJ Vein	Metaquartzite	Fine to medium grained, light grey/green metaquartzite, limonite on weathered surfaces, no visible sulfides		y
817024	AJT04	637654	7132267	1359	Jul-11	Shane	AJ Vein	Metagreywacke	Fine grained purple-grey siliceous MGW, with hematite and limonite on weathered surfaces, accessory sulfides $\approx$ 0.5%: pyrite, chalcopyrite and ASPY disseminated, pinhead sized		y
817025	AJT05	637645	7132257	1367	Jul-11	Shane	AJ Vein	Quartzite	Medium grained, granular, light grey-green quartzite with limonite on weathered surfaces and silvery sulfides, disseminated laths and pinheads <0.1%		y
817026	AJT06	637646	7132246	1359	Jul-11	Shane	AJ Vein	Quartzite	Medium grained, intensely oxidised qtzite, limonite, hematite and very minor sulfides, rock fractures easily and it is difficult to find a fresh surface		y
817027	AJT07	637651	7132233	1361	Jul-11	Shane	AJ Vein	Metagreywacke	Fine grained, purple-grey siliceous MGW, limonite, minor sulfides: pyrite, possibly chalcopyrite and ASPY		y
817028	AJT08	637653	7132231	1377	Jul-11	Shane	AJ Vein	Metagreywacke	Manganite and goethite in MGW host, mostly manganite, limonite		y
817029	AJT09	637650	7132228	1371	Jul-11	Shane	AJ Vein	Metagreywacke	Dark grey MGW with limonite and minor sulfides		y
817030	AJT10	637644	7132224	1364	Jul-11	Shane	AJ Vein	Metagreywacke	Fine grained dark purple-grey siliceous MGW with very fine dusty sulfides and limonite of weathered surfaces		y
817031	AJT11	637647	7132217	1370	Jul-11	Shane	AJ Vein	Metagreywacke	Fine grained dark grey-purple siliceous MGW; intense limonite on weathered surfaces and dusty sulfides		y
817032	AJT12	637631	7132221	1366	Jul-12	Shane	AJ Vein	Metagreywacke	Fine grained dark grey-purple MGW hosting (manganite?) dull black, H:3/4 sulfides (arsenopyrite) in manganite 0.5%, limonite on weathered surfaces		y
817033	AJT13	637618	7132208	1368	Jul-12	Shane	0 to 1m	Massive arsenopyrite	Channel sample, mostly vein. Massive ASPY vein		y

Sample #	Point_ID	UTM_x	UTM_y	Elev	Date	Sampler	Location	Lithology	Description	Dupl	Photo
817034	AJT13	637618	7132208	1368	Jul-12	Shane	1 to 2m	Arsenopyrite and manganite	Channel sample. ASPY and manganite along the edge of the vein; limonite on weathered surfaces		y
817035	AJT13	637618	7132208	1368	Jul-12	Shane	2 to 3m	Manganite and arsenopyrite	Channel sample. Manganite; arsenopyrite ≈2% and limonite on weathered surfaces. Beside/close to massive ASPY vein.		y
817036	AJT14	637613	7132204	1367	Jul-12	Shane	AJ Vein	Quartzite	Qtzite with manganite, intense oxidation, no visible sulfides, very difficult to find a fresh surface, possible cubic pyrite (well developed), manganite crystals		y
817037	AJT15	637612	7132201	1368	Jul-12	Shane	AJ Vein	Metagreywacke	Medium grained granular siliceous MGW with 5% manganite and intense limonite on weathered surfaces		y
817038	AJT16	637613	7132198	1368	Jul-12	Shane	AJ Vein	Metagreywacke	Dark grey siliceous MGW with minor (≈0.1%) sulfides and limonite on weathered surfaces		y
817039		630358	7135909	1452	Jul-16	Shane	Gossan gouge or shear possible, joint trend about 100 cuts through bedding, really good bedding structure in creek to W	Metagreywacke	Grab sample taken from fractured shear zone. Medium grained green-blue-grey, intensely silicified (qtz-rich) MGW with limonite on weathered surfaces. Disseminated ASPY visible.		y

APPENDIX IV

SOIL ANALYTICAL CERTIFICATES



Certificate of Analysis

Work Order: TO101348

To: **Logan Resources Ltd.**

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

Date: Aug 18, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 54
Date Submitted Jul 02, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 54 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_1_08	16	227	40	<0.1	2620	1	20	35	75	35
*Rep CHYS_1_08	19	253	40	0.2	2470	1	20	35	74	34
CHYS_2_08	2	244	40	0.2	2720	2	20	37	92	897
CHYS_04_08	5	110	20	<0.1	5430	<1	250	73	273	417
CHYS_05_08	8	>300	40	<0.1	1730	1	20	12	251	143
CHYS_06_08	3	171	40	0.1	1750	4	20	33	25	63
CHYS_14_08	13	37	10	<0.1	1880	<1	370	6	47	10
CHYS_15_08	1	124	30	<0.1	2740	3	210	8	143	675
CHYS_16_08	7	256	30	<0.1	2280	2	40	8	223	438
CHYS_17_08	17	220	10	<0.1	520	<1	90	8	200	393
CHYS_18_08	2	216	<10	<0.1	6230	<1	190	19	127	380
CHYS_23_08	<1	284	<10	<0.1	3010	<1	20	14	314	71
CHYS_24_08	2	>300	<10	<0.1	690	<1	20	16	10	34
CHYS_25_08	1	198	<10	<0.1	2260	<1	270	17	102	44
*Rep CHYS_25_08	1	186	<10	<0.1	1960	<1	260	15	93	38
CHYS_26_08	2	88	70	0.1	2430	2	190	14	81	402
CHYS_27_08	<1	>300	<10	0.1	1660	<1	20	18	184	201
CHYS_28_08	<1	175	<10	<0.1	1500	<1	40	15	84	115
CHYS_29_08	2	254	<10	<0.1	1510	<1	100	7	71	91
CHYS_37_08	3	229	<10	<0.1	2060	<1	170	6	109	72
CHYS_68_08	141	111	<10	0.5	1990	<1	360	41	43	8
CHYS_69_08	9	107	30	0.4	1840	2	170	12	174	557
CHYS_70_08	3	37	30	0.1	2280	2	150	11	20	278
CHYS_71_08	7	234	10	0.4	1630	<1	20	8	221	353
CHYS_72_08	4	>300	10	<0.1	660	<1	30	8	113	99
CHYS_73_08	11	189	<10	<0.1	2540	<1	130	6	102	786
CHYS_74_08	<1	178	10	<0.1	2800	1	50	9	75	517
*Rep CHYS_74_08	2	177	10	<0.1	2990	<1	50	10	67	542
CHYS_75_08	<1	234	10	<0.1	660	2	<10	4	31	41
CHYS_76_08	<1	>300	10	0.1	2310	<1	30	20	91	227
CHYS_87_08	3	94	10	0.1	3740	<1	310	13	127	268
CHYS_88_08	10	60	<10	0.2	1810	<1	310	17	188	314
CHYS_89_08	8	77	<10	0.1	1590	<1	430	31	53	110
CHYS_90_08	13	139	<10	<0.1	2210	<1	530	8	92	287
CHYS_91_08	<1	90	<10	<0.1	700	<1	680	15	14	33
CHYS_92_08	<1	74	<10	<0.1	470	<1	670	8	8	11
CHYS_93_08	8	85	10	<0.1	950	<1	440	5	29	119
CHYS_94_08	<1	100	20	<0.1	3080	2	80	16	66	388
CHYS_95_08	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
CHYS_96_08	2	187	<10	<0.1	3150	1	160	53	19	343
*Rep CHYS_96_08	2	185	<10	<0.1	3000	1	160	46	28	267
CHYS_97_08	<1	>300	20	<0.1	1650	<1	70	17	39	270
CHYS_98_08	7	37	<10	<0.1	1710	<1	480	25	100	107
CHYS_110_08	2	253	<10	<0.1	3020	<1	150	16	118	57
CHYS_111_08	2	205	<10	0.5	2730	<1	280	10	44	44
CHYS_112_08	2	113	<10	<0.1	800	<1	640	8	27	31

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_113_08	2	133	<10	<0.1	4090	1	260	5	86	906
CHYS_114_08	<1	35	<10	<0.1	760	<1	250	9	7	70
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
CHYS_115_08	2	158	<10	<0.1	960	<1	400	32	73	56
CHYS_116_08	<1	244	10	<0.1	860	1	20	8	97	254
CHYS_153_08	<1	213	<10	<0.1	3030	<1	30	1	94	60
CHYS_154_08	2	>300	<10	<0.1	1520	<1	<10	32	66	62
CHYS_155_08	<1	214	<10	<0.1	1960	<1	190	19	61	53
*Rep CHYS_155_08	<1	195	<10	<0.1	1810	<1	190	24	71	58
CHYS_156_08	4	114	<10	<0.1	1710	<1	460	9	90	514
CHYS_157_08	3	>300	<10	<0.1	720	<1	20	5	64	349
CHYS_159_08	<1	121	<10	<0.1	1610	<1	550	14	35	78
CHYS_160_08	<1	2	<10	0.1	130	<1	60	1	<5	139
CHYS_198_08	24	75	10	0.7	490	<1	350	43	225	103
*Std MMISRM16	20	51	20	34.1	100	<1	280	4	15	69
*Std MMISRM16	18	51	20	32.7	40	<1	290	4	15	67
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	90	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_1_08	100	320	28	12.5	7.0	296	31	29	<5	2
*Rep CHYS_1_08	<100	390	30	13.4	7.4	304	33	29	<5	1
CHYS_2_08	100	980	26	10.4	7.2	434	32	33	<5	6
CHYS_04_08	<100	440	92	28.0	28.0	161	140	75	10	60
CHYS_05_08	200	260	44	15.2	14.6	168	64	84	5	2
CHYS_06_08	<100	450	10	5.4	1.7	625	8	11	9	6
CHYS_14_08	<100	840	50	19.6	19.2	9	93	10	<5	50
CHYS_15_08	<100	1510	29	12.8	9.0	307	43	50	6	29
CHYS_16_08	100	860	36	13.5	10.7	296	50	75	<5	3
CHYS_17_08	<100	400	51	19.3	18.3	75	87	68	<5	10
CHYS_18_08	<100	270	71	30.2	15.5	46	87	43	6	17
CHYS_23_08	<100	330	188	81.9	43.1	34	217	99	<5	3
CHYS_24_08	<100	90	23	14.3	2.5	155	14	4	<5	3
CHYS_25_08	<100	90	45	17.2	11.9	61	61	32	<5	15
*Rep CHYS_25_08	<100	80	40	15.5	11.2	53	55	28	<5	14
CHYS_26_08	<100	1470	22	10.3	6.3	411	29	27	<5	34
CHYS_27_08	<100	400	28	10.2	8.6	71	37	50	<5	2
CHYS_28_08	<100	120	58	29.3	10.2	203	56	31	<5	7
CHYS_29_08	<100	250	25	9.9	6.4	154	31	26	<5	7
CHYS_37_08	<100	90	38	15.6	9.3	74	46	30	<5	14
CHYS_68_08	<100	540	76	32.1	23.4	6	123	38	<5	150
CHYS_69_08	<100	1930	85	37.1	25.7	314	130	66	<5	31
CHYS_70_08	<100	130	8	3.9	2.0	412	11	9	17	51
CHYS_71_08	<100	1100	42	17.5	10.8	177	48	94	<5	1
CHYS_72_08	<100	230	22	8.2	5.7	66	30	40	<5	2
CHYS_73_08	<100	810	70	37.1	12.9	213	71	45	<5	29
CHYS_74_08	<100	980	46	25.8	8.4	351	48	31	<5	15
*Rep CHYS_74_08	<100	910	48	27.3	7.9	328	45	27	<5	18
CHYS_75_08	<100	90	5	2.9	1.0	292	4	16	<5	2
CHYS_76_08	<100	200	30	12.3	6.6	201	34	31	<5	3
CHYS_87_08	<100	2160	56	25.6	15.4	156	85	50	<5	94
CHYS_88_08	<100	1780	50	22.2	19.2	109	88	82	<5	16
CHYS_89_08	<100	980	37	17.7	10.1	49	50	24	<5	61
CHYS_90_08	<100	1060	32	13.6	10.6	38	45	25	<5	21
CHYS_91_08	<100	20	4	1.8	1.2	31	6	5	6	43
CHYS_92_08	<100	30	4	2.0	1.5	11	7	3	<5	12
CHYS_93_08	<100	1570	12	5.3	3.6	39	18	11	<5	35
CHYS_94_08	<100	970	16	7.7	4.1	447	20	28	<5	13
CHYS_95_08	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
CHYS_96_08	<100	700	103	62.8	9.6	330	57	9	9	14
*Rep CHYS_96_08	<100	690	101	60.1	11.8	316	69	13	8	14
CHYS_97_08	<100	90	12	6.4	1.8	375	10	16	7	10
CHYS_98_08	<100	760	26	11.7	9.0	75	40	34	17	33
CHYS_110_08	<100	200	80	31.9	17.9	66	97	37	<5	21
CHYS_111_08	<100	110	40	17.4	8.3	50	43	15	<5	19
CHYS_112_08	<100	220	11	4.6	3.7	29	17	10	6	14

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_113_08	<100	900	11	4.7	2.9	265	17	15	<5	40
CHYS_114_08	<100	440	7	4.3	1.6	51	9	4	<5	21
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
CHYS_115_08	<100	70	32	13.5	8.7	59	39	19	<5	13
CHYS_116_08	<100	310	33	14.4	7.3	237	33	34	<5	3
CHYS_153_08	<100	260	72	46.9	7.1	196	46	45	<5	10
CHYS_154_08	<100	220	38	17.5	6.7	130	36	18	8	2
CHYS_155_08	<100	110	69	30.0	13.5	57	77	35	7	14
*Rep CHYS_155_08	<100	70	87	41.4	14.8	53	87	38	8	14
CHYS_156_08	<100	850	21	9.6	6.8	56	30	31	<5	20
CHYS_157_08	<100	280	17	6.4	5.1	127	22	18	6	2
CHYS_159_08	<100	80	22	9.6	5.9	40	31	10	11	24
CHYS_160_08	<100	50	<1	1.3	<0.5	7	<1	<1	<5	5
CHYS_198_08	<100	1150	49	25.2	19.2	35	75	103	<5	6
*Std MMISRM16	<100	720	2	0.9	1.0	3	4	4	<5	36
*Std MMISRM16	<100	650	3	1.0	1.1	3	5	4	<5	35
*Bik BLANK	<100	<10	<1	<0.5	<0.5	1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1_08	33	3.8	68	177	100	<1	13	<1	76	7
*Rep CHYS_1_08	37	3.3	72	180	100	<1	13	<1	87	8
CHYS_2_08	13	4.3	56	430	200	<1	12	<1	227	3
CHYS_04_08	7	<0.5	290	582	240	<1	52	<1	181	2
CHYS_05_08	9	3.5	151	129	1200	<1	32	<1	300	3
CHYS_06_08	46	1.2	18	149	80	<1	4	<1	260	7
CHYS_14_08	<5	<0.5	85	192	80	<1	10	<1	88	<1
CHYS_15_08	11	1.9	89	356	230	<1	19	<1	119	2
CHYS_16_08	8	4.8	105	186	540	<1	24	<1	250	2
CHYS_17_08	7	1.2	138	82	880	<1	28	<1	221	<1
CHYS_18_08	5	<0.5	108	428	1330	<1	20	<1	126	1
CHYS_23_08	<5	<0.5	333	169	790	<1	62	<1	146	<1
CHYS_24_08	<5	<0.5	11	104	450	<1	2	<1	50	<1
CHYS_25_08	<5	<0.5	84	317	730	<1	15	<1	129	<1
*Rep CHYS_25_08	<5	<0.5	75	300	700	<1	14	<1	126	<1
CHYS_26_08	6	<0.5	55	498	390	<1	11	<1	50	2
CHYS_27_08	<5	1.0	72	155	2310	<1	16	<1	156	<1
CHYS_28_08	<5	0.6	67	83	470	<1	13	<1	21	<1
CHYS_29_08	<5	1.0	49	197	940	<1	10	<1	127	<1
CHYS_37_08	<5	<0.5	80	281	900	<1	15	<1	166	<1
CHYS_68_08	<5	<0.5	153	177	2250	<1	23	<1	145	<1
CHYS_69_08	6	<0.5	220	600	2730	1	38	<1	138	4
CHYS_70_08	8	<0.5	18	310	630	<1	4	<1	26	3
CHYS_71_08	5	0.8	128	135	420	<1	30	<1	182	1
CHYS_72_08	<5	1.0	59	217	1150	<1	13	<1	163	<1
CHYS_73_08	<5	<0.5	98	285	890	<1	20	<1	167	<1
CHYS_74_08	<5	2.1	66	249	330	<1	13	<1	159	<1
*Rep CHYS_74_08	<5	1.7	61	258	370	<1	12	<1	159	<1
CHYS_75_08	<5	5.4	13	89	240	<1	4	<1	32	<1
CHYS_76_08	<5	1.5	52	307	750	<1	11	<1	149	<1
CHYS_87_08	7	<0.5	142	482	450	<1	27	<1	67	<1
CHYS_88_08	<5	<0.5	219	435	720	<1	37	<1	26	7
CHYS_89_08	7	<0.5	85	528	120	<1	14	<1	23	<1
CHYS_90_08	<5	<0.5	83	415	150	<1	15	<1	61	<1
CHYS_91_08	<5	<0.5	9	84	140	<1	2	<1	47	<1
CHYS_92_08	<5	<0.5	9	78	90	<1	2	<1	6	<1
CHYS_93_08	7	<0.5	32	78	140	<1	6	<1	153	<1
CHYS_94_08	7	2.0	46	222	130	<1	10	<1	53	<1
CHYS_95_08	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
CHYS_96_08	<5	<0.5	39	259	810	<1	6	<1	62	<1
*Rep CHYS_96_08	<5	<0.5	53	274	790	<1	8	<1	82	<1
CHYS_97_08	<5	3.8	20	176	1190	<1	4	<1	28	<1
CHYS_98_08	<5	<0.5	81	477	370	<1	16	<1	93	<1
CHYS_110_08	<5	<0.5	104	318	1280	<1	19	<1	166	<1
CHYS_111_08	<5	<0.5	47	152	480	<1	8	<1	80	<1
CHYS_112_08	<5	<0.5	26	179	120	<1	5	<1	39	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_113_08	<5	<0.5	27	306	320	<1	5	<1	67	<1
CHYS_114_08	<5	<0.5	10	187	370	<1	2	<1	8	<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
CHYS_115_08	<5	<0.5	60	189	670	<1	11	<1	100	<1
CHYS_116_08	<5	2.3	65	128	170	<1	14	<1	127	<1
CHYS_153_08	<5	0.6	69	86	380	<1	16	<1	37	<1
CHYS_154_08	<5	1.2	48	185	380	<1	9	<1	102	<1
CHYS_155_08	<5	<0.5	90	125	380	<1	17	<1	72	<1
*Rep CHYS_155_08	<5	<0.5	98	98	340	<1	18	<1	46	<1
CHYS_156_08	<5	<0.5	73	300	90	<1	14	<1	59	<1
CHYS_157_08	<5	0.7	34	233	580	<1	7	<1	164	<1
CHYS_159_08	<5	<0.5	36	232	600	<1	6	<1	43	<1
CHYS_160_08	6	<0.5	2	522	10	<1	<1	<1	<5	<1
CHYS_198_08	<5	<0.5	227	943	420	<1	39	<1	92	3
*Std MMISRM16	65	<0.5	14	254	60	29	2	<1	356	<1
*Std MMISRM16	58	<0.5	13	227	60	26	2	<1	305	<1
*Bik BLANK	<5	<0.5	1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1_08	87	25	<1	170	2	5	<10	22.4	1220	1.0
*Rep CHYS_1_08	88	26	<1	150	2	5	<10	22.7	1070	1.3
CHYS_2_08	57	23	<1	250	1	5	<10	49.4	1380	1.0
CHYS_04_08	129	102	<1	690	1	21	<10	65.5	116	0.8
CHYS_05_08	55	52	<1	90	1	10	<10	89.0	1720	1.2
CHYS_06_08	50	6	<1	310	1	2	<10	25.7	249	6.0
CHYS_14_08	19	58	<1	2750	1	11	<10	60.0	5	0.8
CHYS_15_08	39	31	<1	920	1	6	<10	43.7	703	1.0
CHYS_16_08	53	39	<1	210	1	8	<10	83.9	2570	1.2
CHYS_17_08	56	61	<1	160	1	12	<10	86.8	755	0.6
CHYS_18_08	73	52	1	670	<1	14	<10	57.7	274	0.6
CHYS_23_08	107	140	<1	160	1	34	<10	39.5	314	0.6
CHYS_24_08	39	7	<1	160	<1	3	<10	10.7	278	0.6
CHYS_25_08	58	40	<1	800	<1	9	<10	42.9	159	<0.5
*Rep CHYS_25_08	51	37	<1	750	<1	8	<10	40.4	134	<0.5
CHYS_26_08	71	21	<1	1010	<1	4	<10	48.1	332	0.6
CHYS_27_08	51	28	<1	90	<1	6	<10	64.2	658	0.7
CHYS_28_08	29	31	<1	240	<1	10	<10	12.0	457	<0.5
CHYS_29_08	39	20	<1	200	<1	5	<10	37.4	605	<0.5
CHYS_37_08	46	32	<1	320	<1	7	<10	50.9	156	<0.5
CHYS_68_08	33	84	<1	1820	<1	16	<10	25.3	4	<0.5
CHYS_69_08	100	99	<1	570	<1	18	<10	86.4	326	1.0
CHYS_70_08	26	7	<1	510	<1	2	<10	15.9	280	<0.5
CHYS_71_08	84	39	<1	70	<1	8	<10	49.9	679	1.1
CHYS_72_08	38	20	<1	120	<1	5	<10	43.2	779	0.6
CHYS_73_08	81	39	<1	870	<1	12	<10	48.9	241	0.8
CHYS_74_08	59	28	<1	420	<1	8	<10	34.9	1040	<0.5
*Rep CHYS_74_08	56	25	<1	500	<1	8	<10	32.8	949	<0.5
CHYS_75_08	35	3	<1	80	1	<1	<10	14.8	2170	<0.5
CHYS_76_08	46	21	<1	110	<1	6	<10	43.7	721	<0.5
CHYS_87_08	61	55	<1	870	<1	11	<10	33.2	96	<0.5
CHYS_88_08	37	69	<1	860	2	10	<10	36.9	49	0.5
CHYS_89_08	25	35	<1	730	<1	7	<10	20.2	26	<0.5
CHYS_90_08	30	34	<1	1850	<1	6	<10	17.0	11	<0.5
CHYS_91_08	8	3	<1	2340	<1	<1	<10	5.6	37	<0.5
CHYS_92_08	<5	4	<1	2180	<1	<1	<10	1.9	4	<0.5
CHYS_93_08	13	12	<1	930	<1	2	<10	21.1	162	<0.5
CHYS_94_08	38	15	<1	390	<1	3	<10	23.8	1080	<0.5
CHYS_95_08	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
CHYS_96_08	44	25	<1	780	<1	14	<10	21.8	179	<0.5
*Rep CHYS_96_08	51	32	<1	720	<1	15	<10	27.0	210	<0.5
CHYS_97_08	38	7	<1	270	<1	2	<10	40.1	1270	<0.5
CHYS_98_08	21	29	<1	1730	<1	5	<10	43.6	58	<0.5
CHYS_110_08	102	53	<1	340	<1	15	<10	56.4	156	<0.5
CHYS_111_08	37	26	<1	770	<1	7	<10	19.6	100	<0.5
CHYS_112_08	9	11	<1	1750	<1	2	<10	11.1	16	<0.5

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_113_08	26	10	<1	620	<1	2	<10	38.4	156	<0.5
CHYS_114_08	7	4	<1	520	<1	1	<10	2.2	16	<0.5
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_115_08	36	26	<1	560	<1	6	<10	40.7	66	<0.5
CHYS_116_08	64	25	<1	70	<1	5	<10	49.4	1160	0.5
CHYS_153_08	29	23	<1	260	<1	10	<10	18.9	475	<0.5
CHYS_154_08	66	24	<1	40	<1	7	<10	59.6	678	0.7
CHYS_155_08	70	42	<1	600	<1	13	<10	38.4	281	<0.5
*Rep CHYS_155_08	64	45	<1	650	<1	15	<10	36.9	219	<0.5
CHYS_156_08	30	23	<1	850	<1	4	<10	25.7	36	<0.5
CHYS_157_08	30	16	<1	60	<1	3	<10	42.8	485	0.8
CHYS_159_08	11	18	<1	1150	<1	4	<10	9.5	40	<0.5
CHYS_160_08	<5	<1	<1	260	<1	<1	<10	<0.5	<3	<0.5
CHYS_198_08	10	60	<1	620	2	8	<10	38.4	6	1.6
*Std MMISRM16	8	4	<1	440	<1	<1	<10	22.4	5	<0.5
*Std MMISRM16	8	4	<1	400	<1	<1	<10	21.9	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1_08	16	<1	131	9	520	120
*Rep CHYS_1_08	17	<1	141	10	510	123
CHYS_2_08	23	<1	114	7	850	155
CHYS_04_08	14	<1	410	16	1280	68
CHYS_05_08	29	<1	168	11	360	233
CHYS_06_08	18	<1	44	5	1790	122
CHYS_14_08	81	<1	246	14	80	100
CHYS_15_08	46	<1	149	10	280	167
CHYS_16_08	37	2	139	10	150	281
CHYS_17_08	46	<1	201	14	140	305
CHYS_18_08	63	<1	360	21	860	220
CHYS_23_08	34	<1	872	55	530	104
CHYS_24_08	7	<1	115	11	800	30
CHYS_25_08	23	<1	196	11	880	115
*Rep CHYS_25_08	22	<1	177	10	820	105
CHYS_26_08	45	<1	109	9	530	124
CHYS_27_08	20	<1	92	8	240	146
CHYS_28_08	13	<1	291	21	510	36
CHYS_29_08	31	<1	96	8	680	165
CHYS_37_08	19	<1	167	10	520	98
CHYS_68_08	112	<1	407	20	300	94
CHYS_69_08	95	<1	410	29	380	347
CHYS_70_08	48	<1	41	4	480	91
CHYS_71_08	35	<1	170	13	110	129
CHYS_72_08	17	<1	81	6	110	107
CHYS_73_08	100	<1	353	28	140	148
CHYS_74_08	66	<1	227	21	220	99
*Rep CHYS_74_08	65	<1	235	22	210	93
CHYS_75_08	9	<1	20	3	640	72
CHYS_76_08	19	<1	123	9	680	88
CHYS_87_08	86	<1	302	21	150	105
CHYS_88_08	39	<1	283	18	210	59
CHYS_89_08	33	<1	212	14	580	37
CHYS_90_08	40	<1	164	10	70	36
CHYS_91_08	10	<1	21	1	1180	19
CHYS_92_08	20	<1	25	1	1110	7
CHYS_93_08	12	<1	56	4	110	35
CHYS_94_08	22	1	72	6	280	53
CHYS_95_08	I.S.	I.S.	I.S.	I.S.	I.S.	I.S.
CHYS_96_08	30	<1	618	46	570	35
*Rep CHYS_96_08	32	<1	609	43	720	45
CHYS_97_08	10	<1	53	5	2360	85
CHYS_98_08	50	<1	136	10	410	56
CHYS_110_08	44	<1	327	22	640	81
CHYS_111_08	18	<1	200	12	310	37
CHYS_112_08	25	<1	55	4	350	21

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_113_08	18	<1	46	4	120	91
CHYS_114_08	18	<1	47	3	1020	8
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
CHYS_115_08	32	<1	133	10	900	77
CHYS_116_08	24	<1	117	10	230	76
CHYS_153_08	16	<1	327	34	100	56
CHYS_154_08	19	<1	137	14	750	66
CHYS_155_08	43	<1	269	21	1110	46
*Rep CHYS_155_08	43	<1	355	30	1440	40
CHYS_156_08	45	<1	105	8	170	39
CHYS_157_08	12	<1	52	5	410	74
CHYS_159_08	24	<1	107	7	940	19
CHYS_160_08	24	<1	7	2	70	<5
CHYS_198_08	46	<1	309	20	560	71
*Std MMISRM16	57	<1	10	<1	300	18
*Std MMISRM16	55	<1	12	<1	250	15
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101349

To: **Logan Resources Ltd.**

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

Date: Aug 14, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 53
Date Submitted Jul 02, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 53 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_199_08	2	231	<10	<0.1	1890	<1	70	41	78	78
*Rep CHYS_199_08	2	250	<10	<0.1	1840	<1	70	41	84	84
CHYS_200_08	11	55	<10	0.1	1090	<1	620	7	73	60
CHYS_201_08	18	52	<10	<0.1	1120	<1	560	9	6	15
CHYS_202_08	31	77	<10	0.1	1360	<1	440	107	111	25
CHYS_203_08	<1	8	<10	<0.1	180	<1	90	13	6	14
CHYS_204_08	<1	82	<10	<0.1	1880	<1	510	56	35	23
CHYS_205_08	144	7	<10	<0.1	430	<1	350	83	<5	41
CHYS_206_08	5	150	<10	<0.1	1220	<1	360	12	53	20
CHYS_207_08	4	282	<10	<0.1	1680	<1	60	18	78	90
CHYS_208_08	18	83	<10	0.2	1360	<1	490	10	168	131
CHYS_209_08	2	147	<10	<0.1	1660	<1	260	19	68	55
CHYS_210_08	<1	34	<10	<0.1	860	<1	440	4	15	34
CHYS_222_08	<1	72	490	6.4	570	42	250	21	96	338
*Rep CHYS_222_08	<1	59	590	6.6	510	58	240	28	88	298
CHYS_223_08	<1	195	10	<0.1	1420	1	60	5	66	182
CHYS_224_08	<1	126	20	<0.1	2320	3	30	4	58	252
CHYS_225_08	1	62	<10	<0.1	450	<1	480	62	7	<5
CHYS_226_08	1	68	<10	0.1	1110	<1	430	31	49	153
CHYS_227_08	55	110	<10	0.1	1390	<1	390	7	199	16
CHYS_228_08	40	13	<10	0.1	370	<1	350	6	<5	15
CHYS_229_08	6	176	<10	<0.1	950	<1	290	7	36	53
CHYS_230_08	<1	94	<10	<0.1	1260	<1	500	8	18	19
CHYS_231_08	5	193	<10	<0.1	2630	<1	200	14	181	224
CHYS_232_08	1	196	<10	<0.1	1470	<1	200	17	81	49
CHYS_233_08	<1	107	<10	<0.1	2080	<1	450	18	24	15
CHYS_245_08	36	111	70	10.8	590	1	460	367	796	74
*Rep CHYS_245_08	37	109	70	10.6	530	1	440	314	624	80
CHYS_246_08	7	71	60	0.3	1040	2	380	17	353	189
CHYS_247_08	3	177	20	<0.1	1370	2	60	4	98	260
CHYS_248_08	12	91	<10	<0.1	670	<1	480	287	62	13
CHYS_249_08	<1	103	<10	<0.1	350	<1	340	138	8	<5
CHYS_250_08	1	193	10	<0.1	1410	1	40	14	81	474
CHYS_251_08	<1	209	<10	<0.1	1340	1	70	35	15	144
CHYS_252_08	7	162	<10	<0.1	2590	<1	280	12	221	65
CHYS_253_08	4	135	<10	<0.1	2360	<1	510	11	101	494
CHYS_254_08	3	>300	<10	<0.1	1660	<1	30	48	165	106
CHYS_255_08	<1	100	<10	<0.1	2110	<1	390	19	54	40
CHYS_269_08	<1	96	10	0.1	1790	2	310	5	308	321
CHYS_270_08	9	165	40	0.6	1190	4	190	9	250	162
*Rep CHYS_270_08	11	176	40	0.7	1180	3	200	11	266	189
CHYS_271_08	29	24	70	0.4	1210	<1	390	14	749	193
CHYS_272_08	1	143	<10	<0.1	1060	<1	370	23	39	25
CHYS_273_08	5	219	30	0.2	1090	2	60	21	185	293
CHYS_274_08	1	182	20	0.1	1800	2	<10	2	86	88
CHYS_275_08	18	>300	<10	<0.1	1510	<1	40	26	92	45

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_276_08	9	295	60	<0.1	870	4	10	32	172	132
CHYS_277_08	9	>300	<10	<0.1	530	2	10	4	26	34
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
CHYS_278_08	2	62	<10	<0.1	1170	<1	560	79	30	12
CHYS_293_08	2	103	20	3.0	1020	2	170	18	481	383
CHYS_294_08	4	265	20	0.2	1130	1	<10	3	82	103
CHYS_295_08	20	249	320	1.0	1860	14	30	22	755	460
CHYS_296_08	2	232	30	0.2	1050	1	<10	1	99	44
*Rep CHYS_296_08	<1	230	20	<0.1	990	1	<10	2	95	61
CHYS_297_08	2	>300	150	0.7	1220	11	10	19	495	232
CHYS_298_08	5	243	140	0.8	1730	4	10	18	295	426
CHYS_299_08	<1	149	10	0.1	1390	<1	70	34	75	411
CHYS_300_08	2	75	20	0.1	2360	2	200	7	120	754
*Std MMISRM16	17	45	20	29.0	100	<1	220	4	12	55
*Std MMISRM16	18	45	20	29.4	130	<1	210	4	14	57
*BIK BLANK	<1	<1	<10	<0.1	120	<1	<10	<1	<5	<5
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_199_08	<100	120	34	16.3	7.6	65	39	31	<5	8
*Rep CHYS_199_08	<100	120	39	17.7	8.4	73	44	35	<5	8
CHYS_200_08	<100	760	13	5.5	6.2	39	26	32	<5	4
CHYS_201_08	<100	440	10	4.0	3.3	13	15	<1	<5	6
CHYS_202_08	<100	510	80	31.5	29.4	69	128	47	<5	22
CHYS_203_08	<100	90	4	2.1	0.8	6	5	1	<5	3
CHYS_204_08	<100	60	14	6.6	3.7	41	18	16	<5	12
CHYS_205_08	<100	270	5	2.1	0.9	6	6	<1	<5	3
CHYS_206_08	<100	80	19	8.1	6.3	29	27	13	<5	7
CHYS_207_08	<100	120	36	12.8	9.6	84	49	19	<5	9
CHYS_208_08	<100	680	19	8.6	8.0	68	32	48	<5	3
CHYS_209_08	<100	50	32	14.9	8.2	60	39	26	<5	7
CHYS_210_08	<100	90	8	3.4	3.1	30	13	9	<5	6
CHYS_222_08	<100	6960	15	9.3	3.6	205	16	63	<5	5
*Rep CHYS_222_08	<100	6630	14	8.8	3.2	206	14	58	<5	5
CHYS_223_08	<100	400	17	8.7	3.6	242	17	24	<5	5
CHYS_224_08	<100	190	6	3.6	1.4	382	7	14	<5	6
CHYS_225_08	<100	10	2	0.9	<0.5	7	2	1	<5	9
CHYS_226_08	<100	1110	11	5.7	4.3	87	18	26	<5	10
CHYS_227_08	<100	2090	81	30.5	40.6	12	132	94	<5	20
CHYS_228_08	<100	240	6	2.9	1.7	8	8	<1	<5	5
CHYS_229_08	<100	180	23	9.7	7.5	42	38	12	6	10
CHYS_230_08	<100	150	12	5.8	3.8	30	16	11	<5	2
CHYS_231_08	<100	140	37	16.0	11.5	74	48	57	<5	10
CHYS_232_08	<100	100	32	14.1	8.5	75	38	27	<5	8
CHYS_233_08	<100	20	8	3.6	2.4	28	11	9	<5	9
CHYS_245_08	<100	860	41	20.8	17.9	18	69	352	<5	24
*Rep CHYS_245_08	<100	930	38	19.0	15.9	22	63	306	<5	22
CHYS_246_08	<100	1720	34	15.0	13.4	97	65	205	<5	43
CHYS_247_08	<100	590	8	4.2	2.4	311	10	30	<5	4
CHYS_248_08	<100	70	17	7.6	5.5	29	24	19	<5	6
CHYS_249_08	<100	20	6	4.7	1.0	5	5	2	<5	6
CHYS_250_08	<100	310	12	5.7	3.1	307	14	21	<5	5
CHYS_251_08	<100	60	7	4.6	0.9	163	5	5	<5	8
CHYS_252_08	<100	110	55	20.5	18.8	30	81	75	<5	24
CHYS_253_08	<100	310	10	4.7	2.9	45	14	19	<5	17
CHYS_254_08	<100	120	24	10.1	5.5	111	25	40	<5	7
CHYS_255_08	<100	60	38	19.7	7.3	44	42	12	<5	16
CHYS_269_08	<100	610	28	12.3	8.8	173	41	123	<5	14
CHYS_270_08	<100	1100	22	9.6	6.1	80	28	73	<5	8
*Rep CHYS_270_08	<100	1150	21	9.4	6.0	81	28	73	<5	8
CHYS_271_08	<100	1810	44	17.5	20.6	44	95	394	<5	13
CHYS_272_08	<100	60	22	10.4	6.3	42	32	21	<5	7
CHYS_273_08	100	510	26	12.9	6.7	194	28	46	<5	2
CHYS_274_08	<100	650	13	6.1	3.1	426	15	37	<5	4
CHYS_275_08	<100	90	31	13.0	7.7	58	37	37	<5	9

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_276_08	<100	300	38	17.8	9.2	137	40	68	<5	3
CHYS_277_08	<100	90	5	3.5	0.9	170	4	13	<5	6
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
CHYS_278_08	<100	70	11	4.4	4.1	15	18	12	<5	9
CHYS_293_08	<100	2660	94	46.0	20.9	192	108	303	<5	18
CHYS_294_08	<100	290	25	13.1	4.3	97	20	33	<5	1
CHYS_295_08	100	1470	75	34.8	22.0	183	105	290	<5	3
CHYS_296_08	100	400	16	8.2	3.1	245	15	42	<5	2
*Rep CHYS_296_08	<100	290	16	9.8	2.9	218	14	40	<5	2
CHYS_297_08	100	350	43	18.7	13.3	129	58	183	<5	3
CHYS_298_08	<100	760	31	15.2	8.2	214	35	129	<5	3
CHYS_299_08	<100	290	15	8.1	3.4	296	16	26	19	11
CHYS_300_08	<100	1080	33	14.2	9.6	270	49	42	9	19
*Std MMISRM16	<100	590	2	0.7	0.9	2	4	2	<5	34
*Std MMISRM16	<100	630	2	0.8	0.9	3	4	2	<5	34
*BIK BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*BIK BLANK	<100	<10	<1	<0.5	<0.5	1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_199_08	<5	1.0	68	251	380	<1	13	<1	181	<1
*Rep CHYS_199_08	<5	1.1	76	246	380	<1	14	<1	172	<1
CHYS_200_08	<5	<0.5	76	251	40	<1	15	<1	8	<1
CHYS_201_08	<5	<0.5	15	258	20	<1	2	<1	16	<1
CHYS_202_08	<5	<0.5	167	621	1910	<1	28	<1	61	2
CHYS_203_08	<5	<0.5	7	190	50	<1	1	<1	6	<1
CHYS_204_08	<5	<0.5	38	253	2190	<1	7	<1	6	<1
CHYS_205_08	<5	<0.5	2	144	930	<1	<1	<1	38	<1
CHYS_206_08	<5	<0.5	45	158	400	<1	8	<1	116	<1
CHYS_207_08	<5	0.9	71	213	1480	<1	11	<1	182	<1
CHYS_208_08	<5	<0.5	114	303	80	<1	23	<1	15	<1
CHYS_209_08	<5	0.7	71	145	260	<1	13	<1	92	<1
CHYS_210_08	<5	<0.5	30	171	60	<1	5	<1	19	<1
CHYS_222_08	<5	<0.5	66	564	180	<1	16	<1	52	19
*Rep CHYS_222_08	<5	<0.5	58	389	270	<1	15	<1	48	20
CHYS_223_08	<5	2.8	35	176	80	<1	8	<1	87	<1
CHYS_224_08	5	5.4	19	124	100	<1	4	<1	21	1
CHYS_225_08	<5	<0.5	5	89	50	<1	1	<1	5	<1
CHYS_226_08	7	0.7	59	501	600	<1	12	<1	10	8
CHYS_227_08	<5	<0.5	276	239	30	<1	46	<1	122	<1
CHYS_228_08	<5	<0.5	5	155	20	<1	<1	<1	40	<1
CHYS_229_08	<5	<0.5	41	201	680	<1	7	<1	151	<1
CHYS_230_08	<5	<0.5	33	220	150	<1	6	<1	21	1
CHYS_231_08	<5	1.1	119	177	380	<1	24	<1	303	<1
CHYS_232_08	<5	0.7	71	183	810	<1	13	<1	171	<1
CHYS_233_08	<5	<0.5	23	118	120	<1	4	<1	37	<1
CHYS_245_08	<5	<0.5	326	979	3630	<1	83	<1	105	10
*Rep CHYS_245_08	<5	<0.5	297	840	3360	<1	72	<1	104	10
CHYS_246_08	9	1.2	307	284	1010	<1	67	<1	70	47
CHYS_247_08	7	2.4	36	198	150	<1	9	<1	105	2
CHYS_248_08	<5	<0.5	54	255	2120	<1	10	<1	59	7
CHYS_249_08	<5	<0.5	7	131	280	<1	2	<1	16	<1
CHYS_250_08	5	4.2	35	216	250	<1	8	<1	120	1
CHYS_251_08	<5	1.7	9	90	820	<1	2	<1	63	<1
CHYS_252_08	<5	<0.5	179	183	530	<1	34	<1	100	<1
CHYS_253_08	<5	0.6	45	230	60	<1	9	<1	88	<1
CHYS_254_08	<5	2.0	69	137	1500	<1	15	<1	169	2
CHYS_255_08	<5	<0.5	40	129	430	<1	7	<1	20	<1
CHYS_269_08	10	0.7	185	238	130	<1	42	<1	32	5
CHYS_270_08	5	0.9	106	68	230	<1	24	<1	247	2
*Rep CHYS_270_08	5	1.0	106	77	230	<1	25	<1	266	3
CHYS_271_08	11	<0.5	563	470	230	<1	129	<1	75	14
CHYS_272_08	<5	1.0	52	113	350	<1	10	<1	97	<1
CHYS_273_08	6	3.2	80	152	3000	<1	18	<1	220	4
CHYS_274_08	<5	5.1	39	251	460	<1	9	<1	107	1
CHYS_275_08	<5	1.1	80	112	7710	<1	15	<1	194	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_276_08	<5	3.3	115	127	3310	<1	25	<1	343	3
CHYS_277_08	<5	2.8	11	79	140	<1	3	<1	73	<1
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_278_08	<5	<0.5	36	237	530	<1	7	<1	22	<1
CHYS_293_08	<5	<0.5	430	510	260	<1	99	<1	237	5
CHYS_294_08	<5	2.7	48	103	370	<1	11	<1	94	1
CHYS_295_08	7	4.1	394	206	770	<1	92	<1	274	14
CHYS_296_08	<5	5.8	46	111	120	<1	11	<1	69	2
*Rep CHYS_296_08	<5	5.3	43	105	150	<1	11	<1	48	1
CHYS_297_08	8	3.6	226	121	2460	<1	54	<1	246	12
CHYS_298_08	9	4.1	135	263	480	<1	33	<1	189	8
CHYS_299_08	<5	2.5	43	275	190	<1	9	<1	77	3
CHYS_300_08	6	1.0	98	701	210	<1	19	<1	41	6
*Std MMISRM16	56	<0.5	11	241	60	26	2	<1	333	<1
*Std MMISRM16	61	<0.5	12	244	60	26	2	<1	346	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_199_08	46	25	<1	320	<1	6	<10	42.9	424	<0.5
*Rep CHYS_199_08	50	29	<1	300	<1	7	<10	45.7	493	<0.5
CHYS_200_08	7	22	<1	1910	<1	3	<10	23.4	16	<0.5
CHYS_201_08	5	9	<1	1550	<1	2	<10	15.1	<3	<0.5
CHYS_202_08	19	80	<1	780	<1	17	<10	67.9	18	<0.5
CHYS_203_08	<5	3	<1	480	<1	<1	<10	1.4	<3	<0.5
CHYS_204_08	16	13	<1	1650	<1	3	<10	9.9	4	<0.5
CHYS_205_08	7	3	<1	850	<1	<1	<10	6.2	<3	<0.5
CHYS_206_08	12	19	<1	1040	<1	4	<10	15.0	68	<0.5
CHYS_207_08	37	37	<1	220	<1	7	<10	66.2	492	<0.5
CHYS_208_08	19	30	<1	1060	<1	4	<10	26.4	18	<0.5
CHYS_209_08	30	27	<1	620	<1	6	<10	26.1	207	<0.5
CHYS_210_08	<5	10	<1	1240	<1	2	<10	11.5	<3	<0.5
CHYS_222_08	54	14	<1	960	<1	2	<10	39.7	30	1.6
*Rep CHYS_222_08	54	12	<1	950	<1	2	<10	42.3	36	1.7
CHYS_223_08	38	12	<1	290	<1	3	<10	38.0	991	0.8
CHYS_224_08	34	5	<1	180	<1	1	<10	34.3	2240	0.5
CHYS_225_08	<5	2	<1	1150	<1	<1	<10	2.2	6	<0.5
CHYS_226_08	23	16	<1	1410	<1	2	<10	19.9	82	<0.5
CHYS_227_08	43	96	<1	1150	<1	17	<10	40.0	7	<0.5
CHYS_228_08	14	4	<1	780	<1	1	<10	6.7	<3	<0.5
CHYS_229_08	21	24	<1	410	<1	5	<10	30.4	120	<0.5
CHYS_230_08	10	12	<1	1200	<1	2	<10	5.3	6	<0.5
CHYS_231_08	58	38	<1	440	<1	7	<10	48.2	538	0.9
CHYS_232_08	46	27	<1	500	<1	6	<10	32.2	282	<0.5
CHYS_233_08	9	8	<1	1320	<1	2	<10	8.1	39	<0.5
CHYS_245_08	30	63	<1	1210	<1	9	<10	56.3	5	0.9
*Rep CHYS_245_08	26	57	<1	1140	<1	8	<10	57.0	4	0.9
CHYS_246_08	18	62	<1	1150	<1	8	<10	81.7	118	1.7
CHYS_247_08	28	9	<1	490	<1	2	<10	56.4	963	1.1
CHYS_248_08	12	18	<1	940	<1	3	<10	26.7	40	<0.5
CHYS_249_08	<5	3	<1	1240	<1	<1	<10	1.8	3	<0.5
CHYS_250_08	39	11	<1	230	<1	2	<10	57.7	1720	0.8
CHYS_251_08	40	3	<1	370	<1	<1	<10	23.8	625	0.5
CHYS_252_08	32	64	<1	540	<1	11	<10	51.4	236	0.6
CHYS_253_08	23	13	<1	1600	<1	2	<10	14.9	45	0.5
CHYS_254_08	28	19	<1	160	<1	4	<10	31.7	840	0.5
CHYS_255_08	21	21	<1	1500	<1	6	<10	7.6	21	<0.5
CHYS_269_08	30	38	<1	940	<1	6	<10	34.7	187	0.8
CHYS_270_08	36	24	<1	260	<1	4	<10	43.4	368	1.9
*Rep CHYS_270_08	39	25	<1	260	<1	4	<10	46.6	405	2.2
CHYS_271_08	16	103	<1	910	<1	11	<10	103	26	1.4
CHYS_272_08	18	21	<1	930	<1	4	<10	10.4	212	0.5
CHYS_273_08	79	23	<1	90	<1	5	<10	78.9	1810	1.1
CHYS_274_08	29	11	<1	100	<1	2	<10	47.0	1920	0.8
CHYS_275_08	37	27	<1	200	<1	5	<10	42.8	667	0.8

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_276_08	45	33	<1	70	<1	7	<10	56.8	1840	0.8
CHYS_277_08	13	3	<1	120	<1	<1	<10	22.2	903	0.6
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_278_08	5	13	<1	1160	<1	2	<10	14.2	9	<0.5
CHYS_293_08	95	94	<1	480	<1	16	<10	82.1	102	3.2
CHYS_294_08	72	15	<1	50	<1	4	<10	68.7	892	1.4
CHYS_295_08	131	91	<1	130	<1	15	<10	137	2210	3.3
CHYS_296_08	45	11	<1	40	<1	3	<10	57.8	1500	1.1
*Rep CHYS_296_08	45	11	<1	40	<1	3	<10	49.9	1430	0.8
CHYS_297_08	61	53	<1	100	<1	8	<10	127	1360	1.7
CHYS_298_08	50	32	<1	110	<1	6	<10	81.3	1740	1.8
CHYS_299_08	90	13	<1	450	<1	3	<10	85.2	886	0.7
CHYS_300_08	66	36	<1	740	<1	7	<10	86.3	304	0.7
*Std MMISRM16	7	4	<1	430	<1	<1	<10	20.7	<3	<0.5
*Std MMISRM16	6	4	<1	440	<1	<1	<10	21.8	11	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	5	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_199_08	19	<1	150	13	1260	68
*Rep CHYS_199_08	22	<1	156	13	1280	73
CHYS_200_08	44	<1	64	4	60	13
CHYS_201_08	55	<1	45	3	290	6
CHYS_202_08	61	<1	368	22	680	55
CHYS_203_08	33	<1	23	1	160	<5
CHYS_204_08	28	<1	80	5	1440	17
CHYS_205_08	6	<1	23	2	590	10
CHYS_206_08	10	<1	86	6	350	31
CHYS_207_08	12	<1	121	9	420	56
CHYS_208_08	19	<1	99	7	40	21
CHYS_209_08	15	<1	156	10	460	36
CHYS_210_08	14	<1	48	3	150	5
CHYS_222_08	276	<1	93	8	160	53
*Rep CHYS_222_08	237	<1	88	8	200	52
CHYS_223_08	23	<1	79	7	120	68
CHYS_224_08	12	1	26	3	110	68
CHYS_225_08	5	<1	10	<1	1160	<5
CHYS_226_08	98	<1	66	5	900	33
CHYS_227_08	27	<1	431	19	70	41
CHYS_228_08	3	<1	29	2	130	8
CHYS_229_08	18	<1	106	7	370	73
CHYS_230_08	12	<1	77	4	110	13
CHYS_231_08	15	<1	166	12	370	72
CHYS_232_08	13	<1	150	10	1000	79
CHYS_233_08	14	<1	45	3	410	18
CHYS_245_08	176	<1	251	17	5490	34
*Rep CHYS_245_08	151	<1	213	15	4870	31
CHYS_246_08	64	2	158	12	150	97
CHYS_247_08	24	<1	34	4	90	64
CHYS_248_08	26	<1	76	6	6530	28
CHYS_249_08	38	<1	43	4	2010	6
CHYS_250_08	13	<1	50	5	190	81
CHYS_251_08	8	<1	33	4	680	58
CHYS_252_08	14	<1	234	13	240	67
CHYS_253_08	10	<1	45	3	180	24
CHYS_254_08	7	<1	96	7	1280	56
CHYS_255_08	22	<1	214	13	270	12
CHYS_269_08	35	2	143	8	40	59
CHYS_270_08	31	2	89	7	130	71
*Rep CHYS_270_08	33	2	88	7	150	78
CHYS_271_08	43	<1	218	13	60	61
CHYS_272_08	15	<1	126	7	640	48
CHYS_273_08	29	2	108	11	290	141
CHYS_274_08	13	<1	49	5	140	103
CHYS_275_08	10	<1	132	9	400	68

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_276_08	15	<1	176	12	740	72
CHYS_277_08	9	<1	24	3	50	37
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
CHYS_278_08	24	<1	57	3	410	12
CHYS_293_08	121	<1	525	35	110	99
CHYS_294_08	29	<1	105	10	80	151
CHYS_295_08	51	4	368	27	370	250
CHYS_296_08	16	<1	61	7	70	124
*Rep CHYS_296_08	14	<1	65	8	90	105
CHYS_297_08	30	<1	187	14	600	155
CHYS_298_08	31	1	139	12	750	117
CHYS_299_08	24	<1	71	7	450	135
CHYS_300_08	47	<1	153	11	380	119
*Std MMISRM16	51	<1	8	<1	250	15
*Std MMISRM16	53	<1	9	<1	250	16
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101350

To: **Logan Resources Ltd.**

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

Date: Aug 15, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 54
Date Submitted Jul 02, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 54 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_3_08	3	193	<10	<0.1	1540	<1	170	5	249	34
*Rep CHYS_3_08	3	187	<10	<0.1	1830	<1	170	5	261	32
CHYS_8_08	2	97	20	0.2	3400	2	210	40	37	649
CHYS_9_08	2	250	20	0.2	1560	2	10	4	149	91
CHYS_10_08	<1	188	10	<0.1	1540	3	30	16	26	206
CHYS_11_08	5	>300	<10	<0.1	610	<1	<10	36	14	164
CHYS_12_08	4	>300	10	<0.1	1580	<1	50	5	271	30
CHYS_20_08	11	187	<10	<0.1	1970	<1	160	10	205	101
CHYS_22_08	4	>300	<10	<0.1	500	<1	<10	5	22	30
CHYS_31_08	33	>300	20	<0.1	740	<1	<10	12	94	64
CHYS_32_08	6	196	10	<0.1	1520	<1	210	16	532	74
CHYS_35_08	8	257	10	<0.1	1840	<1	60	11	138	318
CHYS_36_08	4	>300	<10	<0.1	1160	<1	30	5	74	35
CHYS_38_08	5	67	<10	0.1	3500	<1	210	4	137	25
*Rep CHYS_38_08	5	63	<10	0.1	3350	<1	200	4	133	23
CHYS_39_08	13	108	<10	<0.1	1820	<1	250	10	148	12
CHYS_40_08	1	194	<10	<0.1	3530	<1	170	9	61	134
CHYS_41_08	<1	243	<10	<0.1	1850	<1	50	16	56	341
CHYS_42_08	27	14	<10	<0.1	1090	<1	320	38	38	14
CHYS_43_08	6	112	<10	<0.1	1280	<1	390	12	112	75
CHYS_44_08	9	255	10	<0.1	2100	<1	100	10	270	288
CHYS_45_08	<1	216	10	0.1	2070	<1	10	2	96	193
CHYS_46_08	5	160	<10	<0.1	1760	<1	250	14	100	193
CHYS_47_08	<1	162	<10	<0.1	1710	<1	50	2	41	89
CHYS_48_08	3	179	20	<0.1	4930	<1	160	18	456	494
CHYS_49_08	5	>300	10	<0.1	960	<1	10	14	67	350
CHYS_50_08	4	>300	20	<0.1	460	<1	20	9	171	29
*Rep CHYS_50_08	4	>300	20	<0.1	450	<1	20	9	165	31
CHYS_51_08	3	173	10	0.1	410	<1	10	3	143	23
CHYS_52_08	13	228	<10	<0.1	2840	<1	110	70	264	378
CHYS_53_08	2	192	<10	<0.1	1870	<1	180	27	152	72
CHYS_54_08	675	148	<10	<0.1	1530	<1	250	9	274	67
CHYS_55_08	11	86	<10	<0.1	2150	<1	390	8	74	18
CHYS_56_08	4	204	<10	<0.1	1290	<1	240	9	60	40
CHYS_57_08	13	>300	<10	<0.1	670	<1	10	9	80	64
CHYS_58_08	2	>300	<10	<0.1	710	<1	30	10	188	34
CHYS_59_08	5	264	<10	<0.1	820	<1	40	6	84	45
CHYS_60_08	1	162	20	<0.1	1120	2	30	3	37	83
CHYS_64_08	<1	168	<10	<0.1	2060	<1	140	9	46	72
CHYS_65_08	3	>300	20	<0.1	640	<1	40	10	185	23
*Rep CHYS_65_08	3	>300	20	<0.1	870	<1	30	9	203	30
CHYS_66_08	4	>300	10	<0.1	2410	<1	50	10	199	48
CHYS_67_08	8	105	<10	<0.1	3580	<1	220	15	173	102
CHYS_83_08	4	>300	20	<0.1	1430	<1	40	3	140	66
CHYS_84_08	17	122	<10	0.1	3090	<1	260	6	117	41
CHYS_85_08	<1	286	<10	<0.1	2310	<1	70	10	112	62

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_86_08	5	18	<10	<0.1	4620	<1	340	6	12	<5
CHYS_106_08	9	>300	<10	<0.1	4620	<1	160	27	2730	436
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
CHYS_128_08	10	100	<10	<0.1	6020	<1	350	4	101	223
CHYS_129_08	26	216	<10	<0.1	2030	<1	130	6	93	291
CHYS_130_08	2	224	<10	<0.1	3800	<1	100	9	55	116
CHYS_131_08	36	142	20	0.1	1980	1	170	263	79	286
CHYS_132_08	2	84	10	<0.1	1020	<1	280	4	64	253
*Rep CHYS_132_08	<1	77	<10	<0.1	860	<1	280	6	50	259
CHYS_133_08	19	76	<10	<0.1	970	<1	510	6	56	65
CHYS_134_08	5	24	<10	<0.1	160	<1	550	2	<5	12
CHYS_175_08	8	>300	30	0.1	1010	<1	30	13	287	280
CHYS_176_08	9	283	40	0.2	1270	1	30	13	397	344
CHYS_177_08	4	272	20	<0.1	1080	<1	30	6	88	496
*Std MMISRM16	20	33	20	30.4	70	<1	220	4	13	50
*Std MMISRM16	17	33	20	29.9	90	<1	230	3	12	44
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_3_08	<100	80	99	25.6	33.3	33	161	82	5	29
*Rep CHYS_3_08	<100	80	105	28.4	34.8	34	163	84	<5	33
CHYS_8_08	<100	1200	28	12.7	6.9	188	35	12	<5	46
CHYS_9_08	<100	490	23	10.0	5.8	315	27	71	<5	3
CHYS_10_08	<100	710	8	5.3	1.6	354	8	11	<5	6
CHYS_11_08	<100	140	11	6.1	1.3	171	7	6	<5	4
CHYS_12_08	<100	60	42	21.1	12.0	60	52	115	5	12
CHYS_20_08	<100	310	62	24.7	18.1	55	91	77	<5	26
CHYS_22_08	<100	110	5	2.6	0.9	174	5	10	<5	3
CHYS_31_08	<100	260	27	13.1	6.0	114	29	40	6	3
CHYS_32_08	<100	430	118	57.4	37.5	42	192	200	<5	23
CHYS_35_08	<100	180	32	14.9	10.9	96	50	48	<5	6
CHYS_36_08	<100	70	32	15.3	6.3	67	32	33	<5	5
CHYS_38_08	<100	180	47	20.0	14.4	10	78	43	6	51
*Rep CHYS_38_08	<100	170	44	18.9	13.9	10	75	43	7	47
CHYS_39_08	<100	370	128	54.6	50.3	9	221	65	7	23
CHYS_40_08	<100	140	29	13.6	7.4	82	39	15	<5	17
CHYS_41_08	<100	140	41	27.8	6.8	145	38	16	<5	11
CHYS_42_08	<100	380	27	10.2	12.0	4	72	12	7	100
CHYS_43_08	<100	260	29	14.0	8.8	19	45	49	8	37
CHYS_44_08	<100	290	48	19.6	14.5	72	76	88	14	9
CHYS_45_08	<100	550	29	18.3	6.3	153	30	42	7	3
CHYS_46_08	<100	230	45	22.9	13.2	57	69	40	9	28
CHYS_47_08	<100	60	11	16.5	2.9	183	14	19	9	9
CHYS_48_08	<100	430	77	39.6	21.8	122	116	218	<5	18
CHYS_49_08	<100	160	14	7.6	4.1	61	19	27	9	3
CHYS_50_08	100	150	40	15.5	14.1	68	71	54	8	2
*Rep CHYS_50_08	100	160	39	16.2	13.5	70	69	53	6	2
CHYS_51_08	<100	140	17	6.2	4.3	33	20	47	12	1
CHYS_52_08	<100	210	53	22.3	17.3	48	94	87	8	10
CHYS_53_08	<100	240	88	39.0	23.7	83	121	38	8	38
CHYS_54_08	<100	340	115	49.7	44.4	38	193	72	9	32
CHYS_55_08	<100	330	58	24.6	18.1	20	99	34	<5	85
CHYS_56_08	<100	190	28	12.8	6.9	33	38	21	5	15
CHYS_57_08	<100	160	19	9.5	5.2	98	24	33	<5	2
CHYS_58_08	<100	140	27	13.6	7.8	31	36	61	<5	5
CHYS_59_08	<100	170	21	10.4	5.0	115	26	30	<5	6
CHYS_60_08	<100	460	5	2.9	1.3	376	5	16	<5	9
CHYS_64_08	<100	170	27	13.5	6.7	80	40	18	<5	12
CHYS_65_08	<100	160	30	12.5	11.0	41	49	58	7	2
*Rep CHYS_65_08	100	180	30	12.7	11.2	55	51	64	8	2
CHYS_66_08	<100	210	60	22.6	18.4	51	97	67	9	4
CHYS_67_08	<100	160	63	28.3	17.8	34	104	50	8	59
CHYS_83_08	100	170	22	8.6	7.9	81	39	49	8	5
CHYS_84_08	<100	500	103	50.0	38.0	17	184	66	7	21
CHYS_85_08	<100	80	36	16.8	9.8	106	51	34	<5	12

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_86_08	<100	150	19	7.8	6.4	4	38	2	<5	97
CHYS_106_08	<100	30	560	347	131	18	661	838	<5	25
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
CHYS_128_08	<100	560	20	8.3	6.8	48	37	36	<5	99
CHYS_129_08	<100	180	31	12.5	9.4	73	52	28	<5	29
CHYS_130_08	<100	100	25	13.2	5.0	108	30	17	<5	28
CHYS_131_08	<100	1880	45	24.9	9.9	154	49	31	8	41
CHYS_132_08	<100	650	13	7.7	4.1	239	17	28	11	14
*Rep CHYS_132_08	<100	780	10	6.3	2.9	239	13	21	13	13
CHYS_133_08	<100	310	37	16.1	18.3	27	74	15	14	53
CHYS_134_08	<100	220	4	2.2	1.3	9	7	<1	<5	14
CHYS_175_08	100	360	37	15.0	13.1	74	65	98	13	2
CHYS_176_08	100	760	56	27.3	18.3	179	86	117	14	2
CHYS_177_08	<100	430	13	6.6	3.9	201	18	25	13	4
*Std MMISRM16	<100	610	2	0.7	0.6	4	3	4	<5	37
*Std MMISRM16	<100	540	2	0.8	0.7	2	3	3	<5	38
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_3_08	<5	<0.5	221	265	450	<1	39	<1	165	<1
*Rep CHYS_3_08	<5	<0.5	230	242	470	<1	40	<1	172	<1
CHYS_8_08	25	0.6	42	776	220	<1	7	<1	61	3
CHYS_9_08	6	12.8	69	172	190	<1	17	<1	28	<1
CHYS_10_08	<5	3.0	15	361	240	<1	3	<1	16	<1
CHYS_11_08	<5	1.4	9	256	500	<1	2	<1	141	<1
CHYS_12_08	<5	4.4	174	91	980	<1	38	<1	170	<1
CHYS_20_08	<5	0.5	148	431	1810	<1	30	<1	130	<1
CHYS_22_08	<5	1.5	10	67	70	<1	3	<1	155	<1
CHYS_31_08	<5	3.5	50	181	2300	<1	11	<1	179	1
CHYS_32_08	<5	1.0	333	172	1610	<1	68	<1	164	<1
CHYS_35_08	7	2.5	90	166	650	<1	18	<1	250	<1
CHYS_36_08	<5	1.7	55	102	610	<1	11	<1	181	<1
CHYS_38_08	<5	<0.5	113	454	420	<1	19	<1	163	<1
*Rep CHYS_38_08	<5	<0.5	112	419	380	<1	18	<1	153	<1
CHYS_39_08	<5	<0.5	311	94	240	<1	44	<1	193	<1
CHYS_40_08	<5	<0.5	41	505	680	<1	7	<1	166	<1
CHYS_41_08	<5	0.7	33	184	1940	<1	6	<1	48	<1
CHYS_42_08	<5	<0.5	56	205	870	<1	8	<1	43	<1
CHYS_43_08	5	<0.5	81	335	300	<1	17	<1	85	<1
CHYS_44_08	<5	1.9	118	402	1510	<1	26	<1	146	<1
CHYS_45_08	<5	1.7	52	95	260	<1	12	<1	98	<1
CHYS_46_08	<5	0.6	88	308	600	<1	16	<1	98	<1
CHYS_47_08	<5	0.5	25	58	70	<1	6	<1	12	<1
CHYS_48_08	<5	1.8	284	392	680	<1	64	<1	198	1
CHYS_49_08	6	3.5	36	153	520	<1	8	<1	198	<1
CHYS_50_08	<5	4.5	102	63	1330	<1	19	<1	284	1
*Rep CHYS_50_08	<5	4.6	98	69	1310	<1	19	<1	282	1
CHYS_51_08	<5	1.0	45	74	170	<1	11	<1	98	<1
CHYS_52_08	<5	1.1	157	258	1890	<1	31	<1	215	<1
CHYS_53_08	<5	<0.5	138	735	1650	<1	22	<1	151	<1
CHYS_54_08	<5	<0.5	293	647	770	<1	45	<1	137	<1
CHYS_55_08	<5	<0.5	105	237	320	<1	17	<1	68	<1
CHYS_56_08	<5	<0.5	43	219	1220	<1	8	<1	210	<1
CHYS_57_08	<5	3.0	44	153	970	<1	10	<1	160	<1
CHYS_58_08	<5	0.9	80	143	770	<1	18	<1	151	<1
CHYS_59_08	<5	1.7	43	200	1130	<1	9	<1	161	<1
CHYS_60_08	<5	6.4	15	222	70	<1	4	<1	67	1
CHYS_64_08	<5	0.7	42	142	500	<1	8	<1	107	<1
CHYS_65_08	<5	2.0	95	64	1080	<1	19	<1	325	<1
*Rep CHYS_65_08	<5	2.8	99	70	1050	<1	21	<1	309	<1
CHYS_66_08	<5	2.3	130	154	1670	<1	25	<1	314	<1
CHYS_67_08	<5	0.5	124	425	2250	<1	22	<1	147	<1
CHYS_83_08	6	2.3	66	132	940	<1	14	<1	156	<1
CHYS_84_08	<5	<0.5	233	127	450	<1	37	<1	223	<1
CHYS_85_08	<5	4.3	73	160	890	<1	13	<1	166	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_86_08	<5	<0.5	26	98	130	<1	3	<1	84	<1
CHYS_106_08	<5	<0.5	1840	211	310	<1	390	<1	111	<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
CHYS_128_08	<5	<0.5	65	231	180	<1	13	<1	43	<1
CHYS_129_08	<5	<0.5	58	200	24100	<1	11	<1	180	1
CHYS_130_08	<5	0.7	36	228	1140	<1	7	<1	103	<1
CHYS_131_08	<5	0.7	70	2360	4110	<1	13	<1	80	7
CHYS_132_08	<5	<0.5	47	641	100	<1	10	<1	12	2
*Rep CHYS_132_08	<5	<0.5	34	669	110	<1	7	<1	12	2
CHYS_133_08	<5	<0.5	67	302	280	<1	10	<1	50	<1
CHYS_134_08	<5	<0.5	3	161	30	<1	<1	<1	16	<1
CHYS_175_08	5	2.7	126	127	670	<1	29	<1	293	1
CHYS_176_08	9	6.2	184	120	360	<1	39	<1	246	2
CHYS_177_08	<5	3.6	34	184	220	<1	8	<1	250	<1
*Std MMISRM16	53	<0.5	11	209	40	25	2	<1	363	<1
*Std MMISRM16	61	<0.5	10	186	40	25	2	<1	328	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_3_08	88	106	<1	240	<1	22	<10	50.4	85	0.6
*Rep CHYS_3_08	90	111	<1	290	<1	22	<10	51.5	84	0.7
CHYS_8_08	56	22	<1	1430	<1	5	<10	36.5	134	0.9
CHYS_9_08	41	20	<1	100	<1	4	<10	44.3	3070	<0.5
CHYS_10_08	24	5	<1	290	<1	1	<10	23.8	940	<0.5
CHYS_11_08	20	4	<1	60	<1	2	<10	17.5	414	0.6
CHYS_12_08	62	41	<1	370	<1	7	<10	21.9	2200	0.8
CHYS_20_08	55	61	<1	400	<1	12	<10	57.4	195	0.6
CHYS_22_08	34	3	<1	70	<1	<1	<10	23.8	467	0.6
CHYS_31_08	46	19	<1	40	<1	5	<10	63.0	1660	0.9
CHYS_32_08	127	127	<1	500	<1	26	<10	72.8	593	0.6
CHYS_35_08	46	38	<1	190	<1	7	<10	65.0	1210	1.6
CHYS_36_08	59	21	<1	80	<1	6	<10	34.8	641	0.6
CHYS_38_08	24	50	<1	1210	<1	10	<10	49.5	32	0.7
*Rep CHYS_38_08	25	48	<1	1160	<1	10	<10	46.8	28	0.7
CHYS_39_08	47	166	<1	680	<1	29	<10	79.9	59	0.8
CHYS_40_08	40	23	<1	640	<1	6	<10	47.5	175	<0.5
CHYS_41_08	59	19	<1	280	<1	7	<10	23.7	230	0.5
CHYS_42_08	11	34	<1	2420	<1	8	<10	19.2	<3	<0.5
CHYS_43_08	14	31	<1	1540	<1	6	<10	40.3	40	<0.5
CHYS_44_08	58	48	<1	260	<1	11	<10	64.0	988	0.6
CHYS_45_08	62	21	<1	90	<1	5	<10	52.5	943	0.7
CHYS_46_08	39	40	<1	720	<1	10	<10	33.9	278	<0.5
CHYS_47_08	28	10	<1	390	<1	2	<10	9.2	197	<0.5
CHYS_48_08	86	91	<1	660	<1	16	<10	77.2	725	1.3
CHYS_49_08	39	14	<1	40	<1	3	<10	46.8	1570	1.1
CHYS_50_08	68	49	<1	<10	<1	9	<10	70.1	2470	1.4
*Rep CHYS_50_08	71	48	<1	<10	<1	9	<10	73.7	2480	1.5
CHYS_51_08	33	16	<1	10	<1	4	<10	54.5	355	1.8
CHYS_52_08	48	74	<1	270	<1	12	<10	64.7	456	1.7
CHYS_53_08	90	77	<1	560	<1	18	<10	94.1	141	1.1
CHYS_54_08	42	144	<1	880	<1	26	<10	64.9	115	0.9
CHYS_55_08	18	60	<1	2010	<1	13	<10	60.0	20	<0.5
CHYS_56_08	31	21	<1	630	<1	6	<10	17.9	116	0.5
CHYS_57_08	35	16	<1	50	<1	4	<10	22.8	1600	0.8
CHYS_58_08	37	27	<1	70	<1	6	<10	42.9	389	0.6
CHYS_59_08	48	17	<1	60	<1	4	<10	28.1	727	0.6
CHYS_60_08	25	5	<1	170	<1	<1	<10	23.8	2950	<0.5
CHYS_64_08	34	24	<1	330	<1	6	<10	21.2	271	<0.5
CHYS_65_08	63	41	<1	30	<1	7	<10	70.0	1110	1.5
*Rep CHYS_65_08	69	42	<1	30	<1	7	<10	80.9	1670	1.6
CHYS_66_08	70	65	<1	50	<1	14	<10	78.6	1130	1.6
CHYS_67_08	40	68	<1	650	<1	14	<10	65.4	156	0.9
CHYS_83_08	39	30	<1	60	<1	5	<10	70.8	1220	1.1
CHYS_84_08	38	133	<1	810	<1	23	<10	67.4	130	0.8
CHYS_85_08	54	35	<1	250	<1	8	<10	55.8	708	0.8

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_86_08	8	20	<1	2210	<1	5	<10	18.6	5	<0.5
CHYS_106_08	303	543	<1	1180	<1	104	<10	182	25	1.0
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
CHYS_128_08	16	25	<1	1210	<1	5	<10	31.6	40	<0.5
CHYS_129_08	34	31	<1	360	<1	7	<10	37.7	192	1.0
CHYS_130_08	53	17	<1	520	<1	5	<10	27.3	320	<0.5
CHYS_131_08	166	32	<1	660	<1	8	<10	36.3	259	0.7
CHYS_132_08	55	14	<1	1030	<1	3	<10	45.5	108	<0.5
*Rep CHYS_132_08	54	11	<1	1020	<1	2	<10	36.6	102	<0.5
CHYS_133_08	14	47	<1	1230	<1	9	<10	39.3	24	<0.5
CHYS_134_08	6	3	<1	1850	<1	<1	<10	5.8	25	<0.5
CHYS_175_08	93	47	<1	40	<1	9	<10	78.4	1620	1.5
CHYS_176_08	121	66	<1	50	<1	12	<10	108	3740	1.4
CHYS_177_08	41	14	<1	90	<1	3	<10	53.9	1640	1.1
*Std MMISRM16	8	3	<1	470	<1	<1	<10	17.2	8	<0.5
*Std MMISRM16	6	3	<1	470	<1	<1	<10	15.5	4	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Order:

Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_3_08	7	<1	422	12	220	45
*Rep CHYS_3_08	7	<1	452	13	240	45
CHYS_8_08	67	<1	129	10	620	119
CHYS_9_08	26	<1	99	7	180	166
CHYS_10_08	17	<1	38	5	150	93
CHYS_11_08	10	<1	51	4	340	47
CHYS_12_08	8	<1	266	15	70	74
CHYS_20_08	44	<1	280	17	840	142
CHYS_22_08	8	<1	21	2	260	49
CHYS_31_08	24	<1	108	10	180	201
CHYS_32_08	53	<1	595	41	210	193
CHYS_35_08	25	<1	139	10	530	130
CHYS_36_08	23	<1	155	9	390	73
CHYS_38_08	22	<1	271	12	180	89
*Rep CHYS_38_08	21	<1	257	11	180	86
CHYS_39_08	61	<1	619	34	180	118
CHYS_40_08	20	<1	122	9	1080	83
CHYS_41_08	14	<1	191	24	2250	59
CHYS_42_08	60	<1	121	7	150	46
CHYS_43_08	132	<1	133	10	440	37
CHYS_44_08	45	<1	194	13	370	178
CHYS_45_08	36	<1	127	15	180	92
CHYS_46_08	30	<1	238	16	580	88
CHYS_47_08	28	1	58	23	160	14
CHYS_48_08	65	<1	421	28	590	157
CHYS_49_08	28	<1	65	6	490	122
CHYS_50_08	41	1	143	11	180	194
*Rep CHYS_50_08	43	1	143	11	190	205
CHYS_51_08	17	<1	62	4	80	212
CHYS_52_08	47	<1	241	15	1610	171
CHYS_53_08	67	<1	390	26	1140	254
CHYS_54_08	51	<1	552	32	400	159
CHYS_55_08	48	<1	278	16	230	62
CHYS_56_08	24	<1	127	8	750	70
CHYS_57_08	11	<1	86	7	240	85
CHYS_58_08	13	<1	116	9	430	60
CHYS_59_08	24	<1	86	8	880	81
CHYS_60_08	12	<1	20	3	120	95
CHYS_64_08	18	<1	130	10	1150	56
CHYS_65_08	24	1	115	9	160	164
*Rep CHYS_65_08	26	1	113	9	250	200
CHYS_66_08	45	1	219	16	430	160
CHYS_67_08	59	<1	284	20	430	151
CHYS_83_08	19	1	76	6	210	136
CHYS_84_08	67	<1	531	35	240	155
CHYS_85_08	18	<1	164	12	1010	137

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_86_08	30	<1	91	5	100	28
CHYS_106_08	49	2	3420	232	260	37
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
CHYS_128_08	19	<1	90	6	190	44
CHYS_129_08	11	<1	124	9	1060	119
CHYS_130_08	17	<1	123	10	450	70
CHYS_131_08	35	<1	241	20	11600	184
CHYS_132_08	97	<1	73	7	470	64
*Rep CHYS_132_08	103	<1	57	6	620	52
CHYS_133_08	40	<1	189	11	550	36
CHYS_134_08	15	<1	24	2	130	5
CHYS_175_08	37	<1	140	10	320	194
CHYS_176_08	54	2	240	21	200	216
CHYS_177_08	21	<1	51	5	230	97
*Std MMISRM16	45	<1	7	<1	300	16
*Std MMISRM16	45	<1	7	<1	260	13
*Bik BLANK	<1	<1	<5	<1	80	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101351

To: **Logan Resources Ltd.**

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

Date: Aug 15, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 42
Date Submitted Jul 02, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 42 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_178_08	4	270	<10	<0.1	2100	<1	50	11	79	53
*Rep CHYS_178_08	3	267	<10	<0.1	1820	<1	50	11	81	53
CHYS_179_08	25	23	<10	0.1	2150	<1	440	5	167	108
CHYS_180_08	2	>300	<10	<0.1	1510	<1	20	7	72	32
CHYS_181_08	8	106	<10	0.2	1950	<1	460	57	71	11
CHYS_182_08	27	49	<10	0.1	760	<1	450	17	10	8
CHYS_183_08	4	254	<10	<0.1	610	<1	<10	12	42	92
CHYS_184_08	<1	57	<10	<0.1	580	<1	440	18	28	50
CHYS_185_08	<1	62	<10	<0.1	510	<1	420	6	10	9
CHYS_186_08	<1	112	<10	<0.1	1340	<1	360	17	22	26
CHYS_307_08	3	163	<10	0.2	1490	<1	180	72	277	159
CHYS_308_08	13	232	30	0.2	700	<1	130	19	118	29
CHYS_309_08	4	96	510	3.5	1320	8	220	39	474	722
CHYS_330_08	31	130	<10	0.4	950	<1	410	60	61	15
*Rep CHYS_330_08	32	129	<10	0.4	810	<1	370	59	62	16
CHYS_331_08	<1	205	30	<0.1	700	15	<10	3	65	69
CHYS_332_08	16	203	270	0.5	1120	3	190	88	495	162
CHYS_354_08	8	219	<10	0.3	1730	<1	120	9	132	76
CHYS_355_08	3	203	40	0.4	620	2	<10	3	79	81
CHYS_356_08	2	208	290	0.2	1040	8	20	23	110	200
CHYS_357_08	6	236	500	2.1	2750	14	30	145	285	615
CHYS_358_08	30	80	110	0.5	500	<1	380	16	47	97
CHYS_359_08	424	43	190	1.1	1650	<1	440	202	<5	8
CHYS_360_08	6	>300	30	<0.1	1070	2	40	22	94	37
CHYS_376_08	2	283	20	0.2	610	<1	110	27	179	288
CHYS_377_08	4	8	120	2.8	240	1	220	3	14	226
CHYS_378_08	3	178	70	0.6	1120	3	40	37	123	223
*Rep CHYS_378_08	4	186	70	0.7	1210	3	40	22	120	250
CHYS_379_08	5	197	250	1.5	1870	7	10	61	225	303
CHYS_403_08	63	64	10	4.3	290	<1	570	15	765	17
CHYS_404_08	6	65	10	6.4	880	<1	560	69	238	182
CHYS_405_08	5	>300	50	0.3	590	1	10	16	75	71
CHYS_406_08	3	245	60	0.2	540	1	<10	2	71	52
CHYS_407_08	3	248	20	0.1	550	<1	<10	42	139	53
CHYS_408_08	57	205	270	1.3	1280	4	130	19	368	36
CHYS_435_08	135	64	80	6.3	590	<1	320	28	377	24
CHYS_437_08	11	239	250	1.1	1310	8	10	8	247	238
CHYS_438_08	2	236	150	0.3	2610	4	90	63	281	161
CHYS_439_08	2	207	60	0.2	1090	7	20	20	100	165
CHYS_468_08	3	206	80	6.0	210	12	<10	5	212	57
*Rep CHYS_468_08	3	210	110	5.4	230	17	<10	4	232	50
CHYS_469_08	11	229	130	1.3	1490	1	80	5	157	64
CHYS_470_08	1	239	80	0.3	690	2	<10	9	85	97
CHYS_471_08	5	289	40	0.6	780	1	10	22	99	194
CHYS_472_08	16	>300	240	0.4	1030	4	70	22	468	107
CHYS_473_08	8	252	50	0.9	590	2	20	12	165	114

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
*Std MMISRM16	21	48	20	34.8	110	<1	210	4	17	58
*Std MMISRM16	22	48	20	34.5	50	<1	200	6	16	59
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
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Order:

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_178_08	<100	130	32	12.2	7.5	81	44	26	9	8
*Rep CHYS_178_08	<100	130	33	12.4	7.8	77	45	25	<5	8
CHYS_179_08	<100	3980	26	11.1	14.8	39	49	52	6	14
CHYS_180_08	<100	70	36	14.5	7.3	71	38	19	<5	3
CHYS_181_08	<100	90	23	10.3	7.4	12	35	30	<5	8
CHYS_182_08	<100	100	4	1.8	1.2	6	6	2	<5	4
CHYS_183_08	<100	420	12	6.5	2.0	85	8	14	<5	<1
CHYS_184_08	<100	30	9	4.6	3.4	14	15	6	<5	6
CHYS_185_08	<100	30	4	2.3	1.1	12	5	2	<5	3
CHYS_186_08	<100	<10	16	8.8	3.1	29	15	6	<5	13
CHYS_307_08	<100	630	43	21.0	10.4	61	52	143	<5	11
CHYS_308_08	<100	190	24	11.8	6.0	49	26	70	<5	7
CHYS_309_08	<100	7930	37	21.4	11.9	107	55	227	<5	15
CHYS_330_08	<100	480	22	11.1	5.1	18	26	50	6	7
*Rep CHYS_330_08	<100	460	21	10.4	4.8	18	25	48	<5	6
CHYS_331_08	<100	680	11	7.5	1.9	185	9	29	<5	<1
CHYS_332_08	<100	730	52	24.9	16.1	60	71	222	<5	12
CHYS_354_08	<100	340	56	29.8	10.0	37	48	73	<5	13
CHYS_355_08	<100	740	9	6.0	1.8	228	8	40	<5	1
CHYS_356_08	<100	720	9	4.4	2.3	248	9	41	<5	3
CHYS_357_08	<100	540	32	18.4	7.2	166	31	100	<5	7
CHYS_358_08	<100	1600	6	3.3	1.8	17	9	7	<5	2
CHYS_359_08	<100	670	8	4.0	1.2	6	8	<1	<5	31
CHYS_360_08	<100	190	20	9.9	4.6	33	20	33	8	2
CHYS_376_08	<100	210	35	19.1	6.8	45	34	69	8	10
CHYS_377_08	<100	20	2	2.0	<0.5	33	2	4	5	16
CHYS_378_08	<100	1070	21	12.5	3.6	178	16	51	<5	3
*Rep CHYS_378_08	<100	1330	19	12.0	3.2	191	15	49	8	3
CHYS_379_08	<100	820	39	26.7	7.6	118	32	108	9	2
CHYS_403_08	<100	760	104	51.2	30.4	16	179	771	17	66
CHYS_404_08	<100	1370	24	14.5	6.2	29	29	84	8	35
CHYS_405_08	<100	400	13	6.6	2.6	65	10	32	13	2
CHYS_406_08	<100	480	7	4.0	2.0	131	8	39	<5	1
CHYS_407_08	<100	180	19	9.7	3.1	62	17	61	<5	1
CHYS_408_08	<100	450	86	38.7	28.6	13	124	216	<5	3
CHYS_435_08	<100	1050	39	17.2	13.2	6	72	105	<5	29
CHYS_437_08	<100	1020	59	35.5	8.3	195	41	105	<5	2
CHYS_438_08	<100	710	77	42.6	17.5	40	81	122	<5	13
CHYS_439_08	<100	560	9	4.2	2.2	248	8	31	<5	5
CHYS_468_08	<100	6730	203	137	20.8	59	108	48	<5	<1
*Rep CHYS_468_08	<100	6720	158	118	16.5	95	84	56	<5	<1
CHYS_469_08	<100	590	70	36.7	12.7	36	63	93	<5	11
CHYS_470_08	<100	450	15	9.0	2.6	116	11	30	<5	1
CHYS_471_08	<100	480	15	7.5	3.0	48	12	42	<5	4
CHYS_472_08	<100	190	33	13.4	9.2	51	41	132	<5	6
CHYS_473_08	<100	410	52	24.3	11.1	18	53	61	<5	<1

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	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
*Std MMISRM16	<100	710	3	1.0	1.1	2	5	3	<5	34
*Std MMISRM16	<100	730	3	1.0	1.0	3	4	3	<5	35
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
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_178_08	<5	1.3	53	166	390	<1	10	<1	203	<1
*Rep CHYS_178_08	<5	1.4	56	160	410	<1	10	<1	199	<1
CHYS_179_08	8	<0.5	136	452	70	<1	26	<1	15	2
CHYS_180_08	<5	1.4	46	119	950	<1	9	<1	185	<1
CHYS_181_08	<5	<0.5	80	175	1250	<1	15	<1	24	<1
CHYS_182_08	<5	<0.5	10	231	30	<1	2	<1	19	<1
CHYS_183_08	<5	0.7	20	129	540	<1	5	<1	156	<1
CHYS_184_08	<5	<0.5	23	110	160	<1	5	<1	8	<1
CHYS_185_08	<5	<0.5	8	61	100	<1	2	<1	<5	<1
CHYS_186_08	<5	<0.5	20	45	130	<1	4	<1	49	<1
CHYS_307_08	<5	<0.5	194	173	2930	<1	47	<1	175	4
CHYS_308_08	<5	0.9	89	70	850	<1	22	<1	145	1
CHYS_309_08	22	<0.5	252	441	710	<1	61	<1	146	24
CHYS_330_08	<5	<0.5	77	137	1460	<1	17	<1	69	<1
*Rep CHYS_330_08	<5	<0.5	75	133	1410	<1	16	<1	63	<1
CHYS_331_08	<5	1.2	30	46	590	<1	8	<1	65	2
CHYS_332_08	<5	0.8	289	400	2990	<1	69	<1	214	7
CHYS_354_08	<5	<0.5	140	117	2590	<1	30	<1	47	<1
CHYS_355_08	<5	2.1	29	63	170	<1	8	<1	116	1
CHYS_356_08	5	2.8	39	132	350	<1	10	<1	84	3
CHYS_357_08	6	1.6	117	256	7720	<1	29	<1	206	18
CHYS_358_08	<5	<0.5	22	158	50	<1	4	<1	146	1
CHYS_359_08	<5	<0.5	1	66	4400	<1	<1	<1	141	2
CHYS_360_08	<5	1.2	58	95	460	<1	12	<1	201	2
CHYS_376_08	<5	<0.5	99	495	690	<1	22	<1	236	<1
CHYS_377_08	6	<0.5	6	689	140	<1	2	<1	62	29
CHYS_378_08	<5	0.9	54	174	790	<1	13	<1	147	16
*Rep CHYS_378_08	<5	1.0	50	204	720	<1	13	<1	150	15
CHYS_379_08	<5	1.7	123	142	1880	<1	31	<1	182	5
CHYS_403_08	7	<0.5	775	467	110	<1	185	<1	84	<1
CHYS_404_08	6	<0.5	95	1550	350	<1	22	<1	24	10
CHYS_405_08	<5	1.7	30	169	540	<1	8	<1	212	1
CHYS_406_08	<5	3.2	31	49	110	<1	9	<1	157	<1
CHYS_407_08	<5	2.4	68	113	1060	<1	17	<1	132	<1
CHYS_408_08	<5	<0.5	501	54	2440	<1	105	<1	197	2
CHYS_435_08	8	<0.5	204	207	770	<1	38	<1	134	9
CHYS_437_08	5	2.5	127	166	620	<1	31	<1	119	5
CHYS_438_08	6	1.9	227	261	630	<1	48	<1	340	4
CHYS_439_08	<5	3.7	31	140	150	<1	8	<1	222	<1
CHYS_468_08	<5	<0.5	204	43	2450	<1	38	<1	111	4
*Rep CHYS_468_08	<5	<0.5	184	31	2230	<1	38	<1	119	6
CHYS_469_08	5	0.6	163	147	780	<1	34	<1	107	2
CHYS_470_08	<5	2.0	33	74	300	<1	8	<1	110	1
CHYS_471_08	<5	1.1	41	151	720	<1	11	<1	185	1
CHYS_472_08	<5	1.7	160	91	450	<1	40	<1	197	2
CHYS_473_08	<5	0.6	131	63	470	<1	26	<1	136	2

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Order:

	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
*Std MMISRM16	63	<0.5	13	277	80	30	3	<1	343	<1
*Std MMISRM16	62	<0.5	12	285	80	31	2	<1	339	<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
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1



Order:

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_178_08	45	25	<1	190	<1	6	<10	32.1	433	<0.5
*Rep CHYS_178_08	41	27	<1	160	<1	7	<10	31.3	432	<0.5
CHYS_179_08	26	43	<1	1370	<1	6	<10	56.1	13	<0.5
CHYS_180_08	37	24	<1	120	<1	7	<10	29.0	348	0.8
CHYS_181_08	10	27	<1	1400	<1	4	<10	15.2	33	<0.5
CHYS_182_08	<5	4	<1	870	<1	<1	<10	7.4	19	<0.5
CHYS_183_08	28	7	<1	30	<1	2	<10	16.2	212	<0.5
CHYS_184_08	<5	10	<1	2030	<1	2	<10	4.8	5	<0.5
CHYS_185_08	<5	4	<1	960	<1	<1	<10	1.8	7	<0.5
CHYS_186_08	10	9	<1	1250	<1	2	<10	5.3	31	<0.5
CHYS_307_08	48	46	<1	450	<1	8	<10	38.1	102	1.8
CHYS_308_08	28	22	<1	250	<1	4	<10	40.6	227	<0.5
CHYS_309_08	48	48	<1	540	<1	7	<10	68.2	100	4.6
CHYS_330_08	17	20	<1	710	<1	4	<10	18.8	8	1.8
*Rep CHYS_330_08	16	20	<1	630	<1	4	<10	19.3	8	1.9
CHYS_331_08	29	8	<1	70	<1	2	<10	30.4	354	0.9
CHYS_332_08	54	66	<1	380	<1	10	<10	121	266	2.0
CHYS_354_08	36	36	<1	1060	<1	8	<10	24.9	38	0.9
CHYS_355_08	20	7	<1	70	<1	1	<10	65.5	521	1.1
CHYS_356_08	23	9	<1	170	<1	1	<10	43.5	873	0.9
CHYS_357_08	57	27	<1	270	<1	5	<10	105	599	2.5
CHYS_358_08	<5	7	<1	1160	<1	1	<10	10.2	6	1.5
CHYS_359_08	6	3	<1	1360	<1	1	<10	22.1	3	0.6
CHYS_360_08	24	17	<1	180	<1	3	<10	36.8	282	1.3
CHYS_376_08	34	26	<1	380	<1	6	<10	61.5	142	1.1
CHYS_377_08	7	2	<1	700	<1	<1	<10	4.0	5	<0.5
CHYS_378_08	41	13	<1	220	<1	3	<10	78.1	431	1.2
*Rep CHYS_378_08	42	12	<1	210	<1	3	<10	79.0	434	1.6
CHYS_379_08	72	29	<1	120	<1	6	<10	63.8	577	1.5
CHYS_403_08	40	164	<1	1260	<1	22	<10	401	4	1.0
CHYS_404_08	17	23	<1	1950	<1	4	<10	38.9	<3	0.9
CHYS_405_08	24	8	<1	60	<1	2	<10	44.2	350	1.3
CHYS_406_08	26	8	<1	20	<1	1	<10	39.6	748	0.6
CHYS_407_08	34	16	<1	70	<1	3	<10	109	457	<0.5
CHYS_408_08	59	122	<1	380	<1	17	<10	37.7	133	1.5
CHYS_435_08	9	55	<1	1260	<1	8	<10	70.2	<3	0.7
CHYS_437_08	91	32	<1	100	<1	8	<10	77.7	744	4.5
CHYS_438_08	92	62	<1	570	<1	13	<10	63.4	656	1.4
CHYS_439_08	26	7	<1	140	<1	1	<10	23.6	1380	1.0
CHYS_468_08	24	67	<1	50	<1	25	<10	26.9	57	1.8
*Rep CHYS_468_08	25	56	<1	60	<1	20	<10	27.9	83	2.6
CHYS_469_08	85	46	<1	370	<1	11	<10	69.9	259	1.7
CHYS_470_08	38	8	<1	40	<1	2	<10	37.8	716	1.5
CHYS_471_08	25	10	<1	100	<1	2	<10	58.2	361	2.1
CHYS_472_08	37	38	<1	230	<1	6	<10	73.6	563	2.3
CHYS_473_08	42	41	<1	150	<1	9	<10	44.1	252	1.6

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Order:

	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
*Std MMISRM16	7	5	<1	430	<1	<1	<10	19.8	<3	<0.5
*Std MMISRM16	6	4	<1	420	<1	<1	<10	19.6	<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
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5



Order:

Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_178_08	21	<1	121	8	320	86
*Rep CHYS_178_08	21	<1	123	8	310	85
CHYS_179_08	80	1	133	9	30	47
CHYS_180_08	19	<1	131	9	200	66
CHYS_181_08	15	<1	121	7	230	23
CHYS_182_08	16	<1	22	1	60	8
CHYS_183_08	7	<1	50	5	230	54
CHYS_184_08	12	<1	54	4	1090	8
CHYS_185_08	3	<1	27	2	420	6
CHYS_186_08	8	<1	91	6	740	17
CHYS_307_08	34	<1	219	15	380	53
CHYS_308_08	17	<1	123	9	460	28
CHYS_309_08	222	2	228	19	290	45
CHYS_330_08	18	<1	123	8	1290	16
*Rep CHYS_330_08	17	<1	117	7	1360	17
CHYS_331_08	19	<1	50	7	100	56
CHYS_332_08	110	1	254	20	1740	84
CHYS_354_08	38	<1	327	22	1380	26
CHYS_355_08	51	<1	40	5	140	50
CHYS_356_08	24	1	36	3	440	57
CHYS_357_08	77	1	153	16	1590	106
CHYS_358_08	6	<1	37	3	80	11
CHYS_359_08	32	<1	34	3	1070	27
CHYS_360_08	18	<1	94	7	370	70
CHYS_376_08	41	<1	176	15	890	32
CHYS_377_08	21	<1	15	3	230	9
CHYS_378_08	150	<1	100	10	340	56
*Rep CHYS_378_08	158	<1	91	10	310	59
CHYS_379_08	70	1	201	22	130	82
CHYS_403_08	406	<1	582	38	100	18
CHYS_404_08	463	<1	155	12	480	23
CHYS_405_08	30	<1	53	5	950	33
CHYS_406_08	24	<1	26	3	70	62
CHYS_407_08	53	<1	88	8	560	41
CHYS_408_08	44	2	414	28	170	61
CHYS_435_08	51	<1	220	12	440	23
CHYS_437_08	48	1	275	26	190	118
CHYS_438_08	93	3	452	32	1160	86
CHYS_439_08	12	1	35	4	90	60
CHYS_468_08	81	1	775	101	130	27
*Rep CHYS_468_08	79	<1	595	92	80	34
CHYS_469_08	211	<1	401	26	80	51
CHYS_470_08	24	<1	63	8	190	82
CHYS_471_08	39	<1	58	6	710	48
CHYS_472_08	20	<1	122	9	210	99
CHYS_473_08	33	<1	238	17	90	99

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Order:

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
*Std MMISRM16	51	<1	11	<1	250	16
*Std MMISRM16	51	<1	10	<1	260	16
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101352

To: **Logan Resources Ltd.**

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

Date: Aug 18, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 49
Date Submitted Jul 02, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 49 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
GWS_80_08	4	269	40	0.3	940	<1	20	8	87	208
*Rep GWS_80_08	7	254	30	0.5	780	<1	10	5	95	178
GWS_81_08	10	200	50	0.6	420	3	90	3	290	42
GWS_114_08	2	188	80	0.9	900	22	190	11	108	321
GWS_115_08	38	103	120	3.7	200	<1	530	17	24	83
GWS_116_08	2	233	50	0.6	690	15	20	19	79	654
GWS_117_08	1	201	90	4.1	1550	59	50	30	54	611
GWS_118_08	12	102	670	2.4	300	147	290	14	160	1260
GWS_119_08	2	190	220	4.6	1430	84	60	16	159	622
GWS_120_08	7	258	20	0.2	770	2	20	34	139	71
GWS_121_08	7	278	40	0.1	1630	<1	10	12	130	928
GWS_122_08	6	270	170	3.3	1180	13	20	56	465	335
GWS_123_08	1	218	20	0.4	660	4	<10	3	49	256
GWS_126_08	59	295	20	0.6	310	<1	<10	37	69	20
*Rep GWS_126_08	74	>300	20	0.5	310	<1	<10	36	79	20
GWS_127_08	15	132	<10	0.3	950	<1	250	25	94	46
GWS_148_08	<1	113	10	0.2	600	2	310	33	55	71
GWS_149_08	<1	265	40	<0.1	920	13	20	10	188	322
GWS_150_08	7	82	320	12.0	420	51	360	16	141	1300
GWS_151_08	9	106	20	3.2	1510	<1	440	14	119	341
GWS_152_08	1	99	170	5.1	810	9	330	24	95	204
GWS_153_08	19	128	40	6.1	380	5	340	5	50	53
GWS_154_08	83	121	60	20.6	310	12	320	20	717	78
GWS_155_08	103	181	160	27.4	1330	24	210	100	938	876
GWS_156_08	198	64	40	12.9	280	<1	460	85	244	30
GWS_157_08	5	252	30	0.6	1310	9	70	28	185	52
GWS_160_08	78	151	20	21.4	2560	14	320	38	333	10
*Rep GWS_160_08	74	145	20	19.5	2700	12	320	33	279	8
GWS_161_08	4	>300	10	<0.1	920	<1	20	36	127	64
GWS_182_08	5	135	50	0.7	1210	3	290	19	55	69
GWS_183_08	15	134	260	21.8	600	8	340	7	228	400
GWS_184_08	18	104	140	1.4	230	2	220	6	47	34
GWS_185_08	12	156	90	0.9	790	7	280	12	117	74
GWS_186_08	4	140	70	1.5	720	8	330	18	548	55
GWS_187_08	3	142	30	1.9	730	10	310	56	112	89
GWS_188_08	59	142	<10	1.0	1460	<1	360	22	281	84
GWS_189_08	36	55	40	1.3	1110	<1	370	11	258	335
GWS_190_08	265	23	<10	3.3	660	<1	510	346	<5	106
GWS_191_08	105	66	70	15.2	1380	<1	380	30	11	13
GWS_194_08	19	243	20	0.2	2410	<1	150	106	344	107
*Rep GWS_194_08	36	238	20	0.2	1970	<1	160	103	394	76
GWS_195_08	71	>300	<10	0.6	4280	<1	320	160	739	62
GWS_216_08	<1	14	20	<0.1	70	<1	70	9	<5	71
GWS_217_08	<1	55	<10	<0.1	560	<1	260	16	18	58
GWS_218_08	3	157	30	<0.1	1620	2	160	18	238	264
GWS_219_08	4	128	40	2.7	1420	2	230	9	68	155

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
GWS_220_08	<1	147	20	2.1	1320	<1	290	26	862	44
GWS_221_08	87	87	<10	3.5	960	<1	570	11	75	<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
GWS_222_08	33	80	20	1.9	1680	<1	440	18	207	169
GWS_223_08	27	174	40	2.2	1560	2	250	36	381	93
GWS_228_08	262	155	40	1.6	2830	1	280	186	255	13
GWS_229_08	3	175	<10	0.2	3040	<1	380	43	606	231
GWS_250_08	1	226	20	0.1	1150	2	90	41	66	193
*Rep GWS_250_08	2	268	20	0.1	1070	2	50	64	110	236
*Std MMISRM16	22	44	20	34.4	50	<1	220	5	14	69
*Std MMISRM16	23	46	20	36.2	70	<1	230	4	16	72
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	10	<1	5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
GWS_80_08	<100	340	18	8.9	4.0	16	18	34	<5	2
*Rep GWS_80_08	<100	310	27	14.1	5.4	11	25	34	<5	<1
GWS_81_08	<100	540	32	13.7	10.9	46	43	114	<5	5
GWS_114_08	<100	800	31	17.5	6.4	25	31	40	<5	9
GWS_115_08	<100	2670	9	6.5	2.5	9	11	13	<5	17
GWS_116_08	<100	210	9	5.4	1.7	85	7	38	<5	2
GWS_117_08	<100	440	7	3.8	1.2	152	7	18	<5	8
GWS_118_08	<100	1010	14	7.7	6.3	62	23	112	<5	13
GWS_119_08	<100	160	29	15.3	7.6	79	28	68	<5	4
GWS_120_08	<100	330	40	24.2	7.6	18	32	52	<5	1
GWS_121_08	<100	480	17	8.9	3.7	33	18	51	<5	1
GWS_122_08	<100	340	48	22.3	12.6	34	55	175	<5	2
GWS_123_08	<100	640	7	4.6	1.4	139	6	20	<5	2
GWS_126_08	<100	140	11	6.2	2.0	51	9	23	<5	<1
*Rep GWS_126_08	<100	160	12	6.6	2.6	56	10	25	<5	<1
GWS_127_08	<100	300	18	10.7	4.4	13	20	58	<5	5
GWS_148_08	<100	130	12	8.5	3.4	56	11	26	<5	13
GWS_149_08	<100	190	22	10.3	4.4	79	19	64	<5	2
GWS_150_08	<100	5420	8	4.3	4.3	56	14	60	<5	9
GWS_151_08	<100	2470	10	4.9	3.1	33	13	53	<5	17
GWS_152_08	<100	500	29	16.8	10.9	24	33	61	<5	13
GWS_153_08	<100	540	17	9.5	4.2	31	19	44	<5	13
GWS_154_08	<100	1980	40	19.3	22.0	28	88	667	<5	13
GWS_155_08	<100	1830	84	44.8	31.8	34	134	1060	<5	9
GWS_156_08	<100	1650	36	15.6	24.3	8	76	338	<5	8
GWS_157_08	<100	430	23	11.5	5.5	21	23	68	<5	4
GWS_160_08	<100	1520	86	43.7	30.6	18	112	406	<5	24
*Rep GWS_160_08	<100	1520	95	47.2	35.1	16	129	465	<5	23
GWS_161_08	<100	200	33	17.0	6.6	68	31	40	<5	1
GWS_182_08	<100	140	11	5.6	2.9	14	13	33	<5	9
GWS_183_08	<100	2580	33	19.4	9.3	38	42	192	<5	35
GWS_184_08	<100	1410	14	7.3	5.2	20	22	81	<5	9
GWS_185_08	<100	290	46	22.3	12.5	33	59	149	<5	8
GWS_186_08	<100	180	53	25.3	18.0	51	86	489	<5	16
GWS_187_08	<100	70	16	9.1	3.1	41	16	37	<5	18
GWS_188_08	<100	1720	52	25.9	15.3	16	70	296	<5	14
GWS_189_08	<100	1960	16	8.0	6.1	50	25	75	<5	25
GWS_190_08	<100	2810	8	5.8	1.1	8	7	<1	<5	36
GWS_191_08	<100	2490	20	12.3	4.2	9	24	12	<5	29
GWS_194_08	<100	600	50	24.0	14.9	46	59	213	<5	15
*Rep GWS_194_08	<100	650	52	24.7	16.1	43	63	252	<5	14
GWS_195_08	<100	180	93	47.4	18.7	38	97	542	<5	62
GWS_216_08	<100	<10	<1	0.8	<0.5	12	<1	<1	<5	12
GWS_217_08	<100	20	2	1.7	<0.5	31	2	5	<5	18
GWS_218_08	<100	610	28	14.2	5.6	121	32	77	<5	11
GWS_219_08	<100	1390	39	28.5	5.1	52	25	63	<5	10

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	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
GWS_220_08	<100	80	59	31.9	16.0	49	71	317	<5	14
GWS_221_08	<100	740	38	17.8	18.7	14	63	83	<5	23
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
GWS_222_08	<100	880	21	10.0	7.9	34	33	74	<5	18
GWS_223_08	<100	370	65	33.2	19.7	36	72	160	<5	9
GWS_228_08	<100	1110	117	63.1	29.8	16	147	368	<5	31
GWS_229_08	<100	190	167	89.5	28.2	71	185	388	<5	73
GWS_250_08	<100	60	11	5.7	1.9	95	10	20	<5	14
*Rep GWS_250_08	<100	90	17	8.4	3.3	62	15	32	<5	8
*Std MMISRM16	<100	770	2	0.8	0.7	2	3	1	<5	33
*Std MMISRM16	<100	800	3	0.9	0.9	2	4	4	<5	36
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	3	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	2	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_80_08	6	2.5	45	84	810	<1	11	<1	179	1
*Rep GWS_80_08	<5	1.4	57	65	900	<1	13	<1	165	1
GWS_81_08	7	2.5	160	45	80	2	38	<1	225	18
GWS_114_08	6	0.6	77	269	240	<1	16	<1	134	2
GWS_115_08	<5	<0.5	25	270	80	<1	5	<1	24	1
GWS_116_08	6	2.1	28	89	380	<1	8	<1	85	2
GWS_117_08	<5	1.2	18	172	250	<1	5	<1	94	1
GWS_118_08	<5	<0.5	110	743	60	<1	27	<1	25	4
GWS_119_08	6	0.7	79	307	670	<1	19	<1	240	2
GWS_120_08	7	<0.5	88	104	8670	<1	20	<1	95	3
GWS_121_08	<5	0.8	60	260	1350	<1	16	<1	141	1
GWS_122_08	<5	0.7	230	197	4900	<1	53	<1	129	2
GWS_123_08	<5	1.6	19	158	100	<1	6	<1	96	<1
GWS_126_08	5	1.1	24	113	26900	<1	7	<1	173	65
*Rep GWS_126_08	<5	1.2	29	112	27600	<1	7	<1	167	89
GWS_127_08	<5	<0.5	70	55	160	<1	17	<1	72	<1
GWS_148_08	<5	<0.5	31	101	150	<1	8	<1	33	<1
GWS_149_08	<5	1.3	59	151	540	<1	16	<1	78	<1
GWS_150_08	10	<0.5	72	366	100	<1	17	<1	38	6
GWS_151_08	7	<0.5	54	169	100	<1	14	<1	110	3
GWS_152_08	<5	<0.5	82	360	180	<1	18	<1	69	2
GWS_153_08	<5	<0.5	55	380	80	<1	12	<1	18	4
GWS_154_08	<5	<0.5	634	271	250	<1	161	<1	69	<1
GWS_155_08	6	<0.5	881	553	9230	<1	244	<1	141	4
GWS_156_08	<5	<0.5	395	180	450	<1	89	<1	36	1
GWS_157_08	<5	<0.5	80	166	1010	<1	20	<1	191	<1
GWS_160_08	<5	<0.5	404	103	810	<1	94	<1	188	1
*Rep GWS_160_08	<5	<0.5	464	86	710	<1	108	<1	176	1
GWS_161_08	<5	1.2	75	172	3440	<1	16	<1	129	10
GWS_182_08	<5	<0.5	38	111	220	<1	9	<1	93	<1
GWS_183_08	<5	<0.5	161	573	80	<1	42	<1	73	2
GWS_184_08	<5	<0.5	91	113	70	<1	22	<1	103	1
GWS_185_08	5	<0.5	192	164	290	<1	44	<1	131	1
GWS_186_08	<5	<0.5	464	319	180	<1	119	<1	148	3
GWS_187_08	<5	<0.5	48	125	730	<1	12	<1	114	2
GWS_188_08	<5	<0.5	287	149	400	<1	71	<1	108	2
GWS_189_08	14	<0.5	107	207	210	<1	24	<1	17	8
GWS_190_08	15	<0.5	<1	507	1050	<1	<1	<1	20	20
GWS_191_08	<5	<0.5	27	83	90	<1	5	<1	96	<1
GWS_194_08	<5	0.6	220	237	6040	<1	51	<1	171	11
*Rep GWS_194_08	<5	0.6	241	221	5710	<1	57	<1	164	12
GWS_195_08	<5	<0.5	430	877	12300	<1	113	<1	63	1
GWS_216_08	7	<0.5	<1	35	70	<1	<1	<1	21	2
GWS_217_08	<5	<0.5	5	135	90	<1	2	<1	120	<1
GWS_218_08	7	<0.5	107	233	620	<1	25	<1	236	9
GWS_219_08	<5	<0.5	75	308	250	<1	18	<1	46	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_220_08	<5	<0.5	323	173	330	<1	84	<1	72	5
GWS_221_08	<5	<0.5	147	206	40	<1	28	<1	45	<1
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_222_08	5	<0.5	109	202	150	<1	24	<1	110	2
GWS_223_08	5	<0.5	214	119	1790	<1	49	<1	196	4
GWS_228_08	<5	<0.5	473	239	5910	<1	105	<1	162	5
GWS_229_08	<5	<0.5	566	194	330	<1	121	<1	78	<1
GWS_250_08	<5	0.7	26	170	460	<1	7	<1	304	<1
*Rep GWS_250_08	<5	0.6	45	204	580	<1	11	<1	224	<1
*Std MMISRM16	62	<0.5	8	260	70	29	2	<1	360	<1
*Std MMISRM16	63	<0.5	11	267	70	29	2	<1	370	<1
*Bik BLANK	<5	<0.5	1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_80_08	38	13	<1	110	3	3	<10	39.1	239	4.0
*Rep GWS_80_08	50	18	<1	90	2	4	<10	34.8	207	2.2
GWS_81_08	45	38	<1	380	1	6	<10	62.5	893	3.1
GWS_114_08	42	23	<1	470	<1	5	<10	50.8	78	1.7
GWS_115_08	12	8	<1	1490	<1	2	<10	70.3	7	0.6
GWS_116_08	24	6	<1	170	<1	1	<10	44.6	446	1.7
GWS_117_08	16	5	<1	560	<1	1	<10	29.4	291	1.3
GWS_118_08	17	20	<1	250	<1	3	<10	38.6	60	0.6
GWS_119_08	26	20	<1	340	<1	5	<10	81.0	221	1.5
GWS_120_08	41	24	<1	230	<1	6	<10	53.2	102	0.8
GWS_121_08	33	15	<1	130	<1	3	<10	33.5	183	1.9
GWS_122_08	54	50	<1	190	<1	9	<10	50.9	198	1.1
GWS_123_08	21	5	<1	50	<1	1	<10	18.2	415	1.1
GWS_126_08	32	7	<1	<10	<1	2	<10	43.4	373	1.6
*Rep GWS_126_08	35	8	<1	<10	<1	2	<10	48.3	420	1.7
GWS_127_08	21	16	<1	630	<1	3	<10	13.4	26	1.0
GWS_148_08	18	8	<1	650	<1	2	<10	21.6	51	0.5
GWS_149_08	29	14	<1	130	<1	3	<10	49.2	332	1.1
GWS_150_08	9	13	<1	530	<1	2	<10	113	11	0.8
GWS_151_08	10	11	<1	1060	<1	2	<10	20.4	<3	1.0
GWS_152_08	21	25	<1	430	<1	5	<10	22.8	28	<0.5
GWS_153_08	22	14	<1	420	<1	3	<10	19.1	10	<0.5
GWS_154_08	29	102	<1	500	<1	10	<10	49.5	18	0.7
GWS_155_08	104	147	<1	610	<1	17	<10	282	80	2.0
GWS_156_08	17	77	<1	430	<1	8	<10	50.0	4	1.3
GWS_157_08	25	18	<1	400	<1	4	<10	40.7	116	0.9
GWS_160_08	69	92	<1	1090	<1	16	<10	55.4	42	1.6
*Rep GWS_160_08	72	106	<1	1090	<1	18	<10	53.8	39	1.4
GWS_161_08	49	23	<1	90	<1	5	<10	40.4	374	2.1
GWS_182_08	13	10	<1	700	<1	2	<10	27.4	28	0.7
GWS_183_08	44	33	<1	880	<1	6	<10	54.7	22	0.7
GWS_184_08	17	19	<1	500	<1	3	<10	51.3	44	0.5
GWS_185_08	35	46	<1	390	<1	8	<10	39.8	76	0.5
GWS_186_08	34	82	<1	530	<1	11	<10	82.8	55	<0.5
GWS_187_08	22	13	<1	590	<1	3	<10	36.0	42	<0.5
GWS_188_08	36	61	<1	1090	<1	10	<10	43.9	7	1.4
GWS_189_08	15	23	<1	800	<1	3	<10	90.0	19	0.5
GWS_190_08	23	2	<1	1100	<1	1	<10	55.3	<3	<0.5
GWS_191_08	23	13	<1	1940	<1	3	<10	62.6	<3	<0.5
GWS_194_08	81	50	<1	1090	<1	9	<10	99.8	194	1.7
*Rep GWS_194_08	87	54	<1	960	<1	9	<10	103	180	1.8
GWS_195_08	54	73	<1	2740	<1	16	<10	233	18	1.1
GWS_216_08	<5	<1	<1	190	<1	<1	<10	0.8	7	0.6
GWS_217_08	10	2	<1	250	<1	<1	<10	5.8	11	<0.5
GWS_218_08	36	26	<1	630	<1	5	<10	57.0	143	0.8
GWS_219_08	49	17	<1	800	<1	5	<10	45.9	5	<0.5

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_220_08	72	61	<1	550	<1	10	<10	167	36	0.8
GWS_221_08	10	49	<1	980	<1	7	<10	17.5	<3	<0.5
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_222_08	14	27	<1	750	<1	4	<10	31.7	<3	1.1
GWS_223_08	102	57	<1	550	<1	11	<10	112	164	1.8
GWS_228_08	127	119	<1	1400	<1	20	<10	91.6	44	1.1
GWS_229_08	122	144	<1	1850	<1	28	<10	115	11	0.8
GWS_250_08	32	7	<1	320	<1	2	<10	47.1	259	<0.5
*Rep GWS_250_08	28	12	<1	230	<1	3	<10	40.5	214	<0.5
*Std MMISRM16	8	3	<1	470	<1	<1	<10	19.6	<3	0.5
*Std MMISRM16	9	4	<1	490	<1	<1	<10	20.3	<3	<0.5
*Bik BLANK	<5	<1	<1	20	<1	<1	<10	<0.5	4	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_80_08	13	4	81	6	180	76
*Rep GWS_80_08	15	2	131	9	120	72
GWS_81_08	28	2	164	10	100	1140
GWS_114_08	58	<1	172	14	580	162
GWS_115_08	137	<1	62	7	150	55
GWS_116_08	24	<1	42	4	640	64
GWS_117_08	13	<1	34	3	650	34
GWS_118_08	74	<1	86	7	2250	37
GWS_119_08	58	2	157	11	950	43
GWS_120_08	34	<1	234	20	330	51
GWS_121_08	17	<1	83	7	210	48
GWS_122_08	28	<1	221	16	1330	53
GWS_123_08	8	<1	32	4	210	52
GWS_126_08	19	<1	46	5	1440	76
*Rep GWS_126_08	20	<1	52	5	1460	85
GWS_127_08	61	<1	115	9	120	14
GWS_148_08	115	<1	82	8	2310	23
GWS_149_08	14	<1	91	7	680	51
GWS_150_08	89	<1	50	4	150	33
GWS_151_08	32	<1	56	4	120	17
GWS_152_08	110	<1	194	14	1420	21
GWS_153_08	54	<1	110	7	380	20
GWS_154_08	83	<1	226	15	1140	25
GWS_155_08	409	1	509	38	1420	102
GWS_156_08	76	1	202	12	400	9
GWS_157_08	30	2	115	8	350	22
GWS_160_08	102	<1	521	31	830	48
*Rep GWS_160_08	112	<1	579	34	790	46
GWS_161_08	23	<1	160	13	890	52
GWS_182_08	27	<1	62	4	590	17
GWS_183_08	83	<1	212	15	570	53
GWS_184_08	45	<1	82	7	460	45
GWS_185_08	42	<1	238	16	330	53
GWS_186_08	88	<1	296	18	1000	42
GWS_187_08	24	<1	83	7	2360	19
GWS_188_08	73	1	305	18	320	21
GWS_189_08	77	1	91	7	70	44
GWS_190_08	257	1	45	6	1900	15
GWS_191_08	531	<1	122	11	570	12
GWS_194_08	70	<1	278	18	1950	45
*Rep GWS_194_08	70	<1	280	17	1760	49
GWS_195_08	79	<1	760	32	4940	40
GWS_216_08	2	<1	<5	<1	660	<5
GWS_217_08	10	<1	12	2	870	7
GWS_218_08	19	<1	139	11	290	60
GWS_219_08	78	<1	284	23	620	21

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_220_08	71	<1	328	23	640	40
GWS_221_08	91	<1	234	13	410	13
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_222_08	47	<1	114	7	200	17
GWS_223_08	59	<1	306	25	410	63
GWS_228_08	328	<1	770	47	1760	33
GWS_229_08	175	<1	1040	66	1140	14
GWS_250_08	8	<1	51	5	1020	33
*Rep GWS_250_08	9	<1	80	6	790	29
*Std MMISRM16	50	<1	8	<1	300	13
*Std MMISRM16	51	<1	12	<1	320	13
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101353

To: **Logan Resources Ltd.**

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

Date: Aug 12, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 53
Date Submitted Jul 02, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 54 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
GWS_251_08	1	>300	40	0.2	1390	3	40	45	216	155
*Rep GWS_251_08	2	284	40	<0.1	1460	3	60	45	213	122
GWS_252_08	6	185	20	<0.1	790	<1	220	20	94	47
GWS_253_08	9	189	10	<0.1	1040	<1	220	27	131	41
GWS_254_08	3	238	20	<0.1	870	<1	70	32	111	84
GWS_255_08	3	>300	30	0.1	750	2	30	18	165	75
GWS_256_08	9	234	40	0.1	770	2	140	84	102	74
GWS_257_08	6	296	20	0.1	860	4	50	21	79	100
GWS_261_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_262_08	5	295	30	0.2	740	<1	60	30	123	68
GWS_284_08	<1	150	60	0.2	1060	3	200	45	127	109
GWS_285_08	<1	108	40	0.3	770	2	320	51	39	108
GWS_286_08	18	127	100	0.5	3570	<1	240	8	102	30
GWS_287_08	22	151	70	0.7	1960	2	150	15	222	99
*Rep GWS_287_08	20	155	80	0.6	1900	2	140	17	254	165
GWS_288_08	24	118	90	2.1	2140	3	230	35	120	105
GWS_289_08	23	140	20	0.4	630	<1	190	20	17	10
GWS_290_08	6	>300	20	0.1	1090	2	20	31	150	57
GWS_291_08	8	260	40	0.2	890	3	60	85	109	117
GWS_296_08	13	294	100	0.3	1120	1	30	35	418	139
GWS_297_08	1	49	100	0.1	1470	3	200	3	120	278
GWS_318_08	<1	221	20	<0.1	630	3	30	36	43	83
GWS_319_08	<1	223	30	<0.1	1290	3	70	80	142	130
GWS_320_08	3	237	60	0.6	760	55	40	67	151	165
GWS_321_08	<1	98	360	3.3	770	52	70	24	212	472
GWS_322_08	2	132	150	0.3	1290	9	30	6	85	450
GWS_323_08	3	299	80	0.2	510	2	<10	29	180	121
*Rep GWS_323_08	3	>300	80	0.2	510	2	<10	29	184	121
GWS_324_08	1	220	10	<0.1	640	1	30	21	24	51
GWS_325_08	4	208	110	1.6	2180	2	30	17	489	352
GWS_330_08	5	143	20	0.1	1900	<1	240	27	56	28
GWS_331_08	<1	161	20	0.1	1230	<1	80	11	58	258
GWS_352_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_353_08	3	120	150	1.7	1110	37	90	7	93	254
GWS_354_08	6	178	160	1.9	820	19	50	4	204	263
GWS_356_08	<1	126	20	<0.1	2550	<1	470	1320	42	275
GWS_357_08	5	289	120	0.2	600	5	30	36	106	75
GWS_358_08	1	143	50	0.1	960	1	270	51	54	45
GWS_359_08	46	92	40	1.9	3440	<1	330	17	211	98
GWS_364_08	26	150	170	1.2	740	2	80	12	102	61
*Rep GWS_364_08	23	168	170	1.0	700	2	70	15	118	89
GWS_365_08	7	265	60	0.3	760	1	30	20	53	75
GWS_384_08	2	217	80	0.3	580	4	40	43	170	375
GWS_385_08	12	282	200	1.5	660	20	<10	17	383	103
GWS_386_08	11	>300	210	2.1	620	41	20	18	351	148
GWS_387_08	1	283	40	0.1	550	6	<10	16	157	133

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
GWS_388_08	11	144	210	6.8	1180	40	110	3	195	584
GWS_389_08	20	44	440	1.9	930	3	260	30	306	863
Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
GWS_390_08	<1	112	410	1.0	1240	30	90	5	92	258
GWS_391_08	4	77	110	3.0	2030	<1	320	12	109	333
GWS_392_08	11	117	150	3.1	2800	2	140	10	156	537
GWS_393_08	35	158	110	1.6	1880	1	110	11	101	22
GWS_398_08	3	269	90	0.2	530	2	<10	25	111	63
*Rep GWS_398_08	4	271	100	0.3	470	2	<10	22	116	71
GWS_399_08	3	278	60	0.2	870	1	<10	58	135	121
GWS_263_08	<1	2	<10	<0.1	<10	<1	<10	<1	<5	<5
GWS_332_08	<1	2	<10	<0.1	<10	<1	<10	<1	<5	<5
GWS_355_08	<1	141	100	2.5	570	12	170	4	262	195
*Std MMISRM16	17	38	20	28.5	70	<1	180	4	14	51
*Std MMISRM16	17	39	20	28.7	50	<1	180	4	15	52
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
GWS_251_08	<100	120	25	12.5	5.0	50	24	52	<5	9
*Rep GWS_251_08	<100	120	22	11.3	4.6	47	22	51	<5	9
GWS_252_08	<100	50	11	5.1	2.3	19	13	37	<5	10
GWS_253_08	<100	120	21	9.6	4.9	14	25	56	<5	15
GWS_254_08	<100	180	16	8.3	3.3	32	17	36	<5	7
GWS_255_08	<100	150	20	9.3	5.0	35	23	52	<5	5
GWS_256_08	<100	90	14	6.1	3.4	36	17	36	<5	4
GWS_257_08	<100	110	12	5.5	3.1	70	14	33	<5	7
GWS_261_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_262_08	<100	200	26	11.2	6.3	30	28	45	<5	4
GWS_284_08	<100	80	14	7.0	3.7	39	16	59	<5	10
GWS_285_08	<100	30	5	3.0	1.3	22	7	16	<5	17
GWS_286_08	<100	670	13	5.8	4.1	15	19	79	<5	11
GWS_287_08	<100	820	37	17.7	11.3	39	52	174	<5	5
*Rep GWS_287_08	<100	1050	34	17.0	10.1	57	46	159	<5	5
GWS_288_08	<100	910	22	10.9	6.3	22	30	64	<5	10
GWS_289_08	<100	340	15	7.5	4.1	10	21	35	<5	3
GWS_290_08	<100	180	18	8.5	5.1	37	20	53	<5	3
GWS_291_08	<100	150	14	6.5	3.3	78	14	39	<5	6
GWS_296_08	<100	270	25	10.2	8.7	63	33	130	<5	2
GWS_297_08	<100	70	13	7.6	3.9	143	17	61	<5	19
GWS_318_08	<100	110	4	3.5	0.8	162	4	23	<5	10
GWS_319_08	<100	150	42	24.8	7.5	48	36	88	<5	11
GWS_320_08	<100	160	18	9.3	4.4	61	19	54	<5	8
GWS_321_08	<100	2840	21	12.0	5.5	197	25	120	<5	4
GWS_322_08	<100	370	9	5.5	2.1	247	10	40	9	4
GWS_323_08	<100	520	26	12.4	5.9	33	27	68	<5	1
*Rep GWS_323_08	<100	520	26	12.3	5.7	31	27	72	<5	1
GWS_324_08	<100	110	13	7.6	1.5	111	8	11	<5	7
GWS_325_08	<100	1180	104	68.6	20.1	44	97	335	<5	2
GWS_330_08	<100	180	21	11.1	5.3	32	25	84	<5	13
GWS_331_08	<100	130	19	12.0	3.3	80	15	42	<5	4
GWS_352_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_353_08	<100	980	13	6.8	3.8	156	16	121	<5	6
GWS_354_08	<100	480	44	30.6	7.6	47	36	122	<5	1
GWS_356_08	<100	60	6	2.9	1.5	42	7	22	19	27
GWS_357_08	<100	150	16	8.4	4.6	82	18	41	5	3
GWS_358_08	<100	80	14	7.4	3.5	43	17	40	5	15
GWS_359_08	<100	2820	35	17.1	10.5	16	53	113	<5	20
GWS_364_08	<100	560	37	19.2	11.5	26	52	84	<5	2
*Rep GWS_364_08	<100	600	38	20.3	11.1	32	50	85	<5	2
GWS_365_08	<100	280	13	7.0	2.6	66	11	19	<5	4
GWS_384_08	<100	1650	98	68.8	11.7	36	60	84	<5	7
GWS_385_08	<100	540	58	29.8	15.8	48	64	197	<5	<1
GWS_386_08	<100	430	30	14.1	10.0	39	39	180	<5	1
GWS_387_08	<100	320	38	19.6	6.9	61	33	77	<5	1

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
GWS_388_08	<100	2100	30	18.5	6.2	102	29	122	<5	4
GWS_389_08	<100	10100	17	9.2	6.3	49	28	113	<5	34
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
GWS_390_08	<100	2010	15	10.3	3.3	200	15	58	7	5
GWS_391_08	<100	3760	14	8.4	4.2	31	19	63	<5	49
GWS_392_08	<100	3610	33	22.8	6.4	92	32	100	6	11
GWS_393_08	<100	1030	71	39.4	11.2	15	60	119	<5	11
GWS_398_08	<100	430	25	14.5	4.9	44	22	40	<5	2
*Rep GWS_398_08	<100	400	24	13.3	5.0	44	21	42	<5	2
GWS_399_08	<100	620	49	29.1	9.1	30	40	63	<5	3
GWS_263_08	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
GWS_332_08	<100	<10	<1	<0.5	<0.5	<1	<1	2	<5	<1
GWS_355_08	<100	590	69	42.8	13.3	38	68	221	<5	8
*Std MMISRM16	<100	580	2	0.6	0.8	2	3	4	<5	34
*Std MMISRM16	<100	590	2	0.9	0.9	2	4	4	<5	34
*BIK BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*BIK BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	2	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_251_08	<5	1.1	71	230	780	<1	17	<1	233	2
*Rep GWS_251_08	<5	1.0	67	233	800	<1	16	<1	229	2
GWS_252_08	<5	<0.5	43	111	450	<1	10	<1	113	1
GWS_253_08	<5	<0.5	71	85	1230	<1	17	<1	195	2
GWS_254_08	<5	0.8	48	100	1830	<1	11	<1	217	2
GWS_255_08	<5	0.8	69	81	810	<1	16	<1	173	2
GWS_256_08	5	0.9	45	73	2450	<1	10	<1	171	3
GWS_257_08	<5	1.1	36	220	4320	<1	9	<1	211	2
GWS_261_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_262_08	5	0.8	74	138	2190	<1	16	<1	238	4
GWS_284_08	<5	<0.5	62	99	360	<1	16	<1	163	2
GWS_285_08	<5	<0.5	19	86	190	<1	5	<1	178	1
GWS_286_08	<5	<0.5	76	59	420	<1	19	<1	143	2
GWS_287_08	6	0.6	192	84	630	<1	48	<1	175	5
*Rep GWS_287_08	9	0.7	175	112	620	<1	43	<1	179	6
GWS_288_08	5	<0.5	101	165	270	<1	22	<1	184	4
GWS_289_08	<5	<0.5	53	15	360	<1	11	<1	180	2
GWS_290_08	<5	1.2	66	106	1670	<1	15	<1	198	2
GWS_291_08	<5	1.4	44	117	2910	<1	11	<1	276	2
GWS_296_08	8	2.1	141	81	1820	<1	35	<1	222	3
GWS_297_08	8	<0.5	71	174	110	<1	17	<1	54	6
GWS_318_08	<5	2.4	15	58	210	<1	4	<1	118	<1
GWS_319_08	<5	0.6	113	79	490	<1	26	<1	144	1
GWS_320_08	<5	<0.5	75	132	1590	<1	18	<1	88	1
GWS_321_08	7	<0.5	116	286	100	<1	31	<1	84	8
GWS_322_08	11	2.4	37	93	190	<1	10	<1	110	5
GWS_323_08	<5	0.9	83	158	1460	<1	20	<1	145	1
*Rep GWS_323_08	<5	0.8	88	153	1500	<1	21	<1	149	1
GWS_324_08	<5	1.1	16	87	880	<1	4	<1	82	1
GWS_325_08	<5	0.6	340	107	1060	<1	88	<1	101	4
GWS_330_08	<5	0.7	85	76	720	<1	20	<1	116	1
GWS_331_08	<5	0.7	45	66	1750	<1	11	<1	101	2
GWS_352_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_353_08	6	0.6	83	108	90	<1	24	<1	64	4
GWS_354_08	<5	<0.5	126	129	600	<1	32	<1	79	5
GWS_356_08	<5	<0.5	25	92	50	<1	6	<1	205	1
GWS_357_08	<5	3.7	59	69	1090	<1	13	<1	195	3
GWS_358_08	<5	0.7	48	84	1250	<1	11	<1	119	2
GWS_359_08	<5	<0.5	160	85	220	<1	35	<1	140	2
GWS_364_08	<5	0.9	145	26	1010	<1	30	<1	163	3
*Rep GWS_364_08	<5	1.0	139	37	1100	<1	29	<1	189	3
GWS_365_08	<5	1.4	31	82	1010	<1	7	<1	216	1
GWS_384_08	9	<0.5	140	295	2200	<1	30	<1	168	3
GWS_385_08	5	1.1	242	76	1430	<1	58	<1	178	5
GWS_386_08	5	0.9	178	68	480	<1	46	<1	112	5
GWS_387_08	<5	2.8	98	86	550	<1	23	<1	95	3

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_388_08	<5	<0.5	110	187	350	<1	29	<1	69	8
GWS_389_08	84	<0.5	136	912	310	<1	32	<1	153	23
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_390_08	17	0.8	54	171	310	<1	14	<1	92	9
GWS_391_08	20	<0.5	80	150	200	<1	19	<1	76	4
GWS_392_08	12	<0.5	111	137	420	<1	27	<1	133	7
GWS_393_08	6	<0.5	164	66	2320	<1	35	<1	131	4
GWS_398_08	<5	1.8	62	103	1490	<1	14	<1	125	2
*Rep GWS_398_08	5	1.8	64	110	1350	<1	15	<1	128	2
GWS_399_08	<5	1.5	104	153	660	<1	22	<1	178	2
GWS_263_08	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
GWS_332_08	<5	<0.5	2	<5	<10	<1	<1	<1	<5	<1
GWS_355_08	<5	<0.5	234	149	370	<1	57	<1	60	5
*Std MMISRM16	48	<0.5	12	204	60	25	2	<1	321	<1
*Std MMISRM16	48	<0.5	12	215	60	25	2	<1	319	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_251_08	46	19	<1	340	<1	4	<10	85.4	397	0.7
*Rep GWS_251_08	41	18	<1	320	<1	4	<10	83.4	398	0.7
GWS_252_08	16	11	<1	760	<1	2	<10	128	83	<0.5
GWS_253_08	24	20	<1	720	<1	4	<10	52.1	91	<0.5
GWS_254_08	25	14	<1	220	<1	3	<10	53.1	378	0.7
GWS_255_08	36	18	<1	130	<1	4	<10	73.0	372	1.0
GWS_256_08	26	13	<1	330	<1	2	<10	51.5	433	0.8
GWS_257_08	25	10	<1	140	<1	2	<10	54.7	416	0.9
GWS_261_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_262_08	38	22	<1	200	<1	4	<10	70.7	312	1.8
GWS_284_08	28	14	<1	430	<1	3	<10	71.6	167	0.9
GWS_285_08	8	5	<1	820	<1	<1	<10	17.5	49	0.5
GWS_286_08	14	17	<1	1030	<1	3	<10	57.9	85	1.6
GWS_287_08	53	45	<1	450	<1	7	<10	107	301	1.8
*Rep GWS_287_08	54	40	<1	420	<1	7	<10	111	342	1.9
GWS_288_08	20	26	<1	770	<1	4	<10	48.5	88	1.2
GWS_289_08	21	16	<1	240	<1	3	<10	22.0	143	0.7
GWS_290_08	35	17	1	170	<1	3	<10	66.3	509	1.3
GWS_291_08	32	12	<1	210	<1	2	<10	68.1	623	1.2
GWS_296_08	56	33	<1	130	<1	5	<10	224	872	1.5
GWS_297_08	23	16	<1	650	<1	2	<10	40.5	103	0.7
GWS_318_08	17	3	<1	220	<1	<1	<10	42.4	500	0.7
GWS_319_08	30	27	<1	460	<1	6	<10	40.9	248	0.8
GWS_320_08	23	16	<1	370	<1	3	<10	84.6	132	<0.5
GWS_321_08	65	24	<1	270	<1	4	<10	79.1	147	1.4
GWS_322_08	52	9	<1	250	<1	2	<10	70.8	1080	2.2
GWS_323_08	34	21	<1	50	<1	5	<10	88.7	287	1.2
*Rep GWS_323_08	35	22	<1	40	<1	4	<10	88.8	277	1.3
GWS_324_08	20	5	<1	190	<1	2	<10	26.3	373	0.8
GWS_325_08	128	78	<1	300	<1	16	<10	183	256	2.0
GWS_330_08	21	20	<1	840	<1	4	<10	38.0	302	0.8
GWS_331_08	41	11	<1	400	<1	3	<10	49.5	263	1.4
GWS_352_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_353_08	24	15	<1	420	<1	2	<10	41.8	234	1.4
GWS_354_08	74	28	<1	210	<1	6	<10	116	198	1.2
GWS_356_08	11	6	<1	2370	<1	1	<10	15.6	58	2.7
GWS_357_08	43	15	1	140	<1	3	<10	77.8	1220	1.8
GWS_358_08	23	13	<1	610	<1	2	<10	31.0	203	0.8
GWS_359_08	19	41	<1	1930	<1	7	<10	42.4	7	1.3
GWS_364_08	66	40	<1	210	<1	7	<10	69.0	476	1.6
*Rep GWS_364_08	70	39	<1	180	<1	7	<10	68.9	532	1.8
GWS_365_08	28	9	<1	140	<1	2	<10	53.4	584	1.0
GWS_384_08	52	39	<1	240	<1	13	<10	65.7	120	3.2
GWS_385_08	65	55	<1	50	<1	10	<10	153	416	2.6
GWS_386_08	44	37	<1	80	<1	6	<10	110	312	1.6
GWS_387_08	51	25	<1	60	<1	6	<10	44.6	867	1.5

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_388_08	60	24	<1	350	<1	5	<10	98.5	118	1.8
GWS_389_08	12	26	<1	1180	<1	4	<10	81.3	46	3.8
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_390_08	45	12	<1	390	<1	2	<10	55.4	399	2.1
GWS_391_08	27	17	<1	1270	<1	3	<10	29.9	35	1.5
GWS_392_08	103	26	<1	920	<1	5	<10	101	135	2.5
GWS_393_08	79	42	<1	540	<1	10	<10	79.3	107	1.7
GWS_398_08	37	17	<1	50	<1	4	<10	54.7	493	2.1
*Rep GWS_398_08	35	17	<1	40	<1	4	<10	52.1	551	2.2
GWS_399_08	53	29	<1	100	<1	7	<10	44.4	499	2.1
GWS_263_08	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
GWS_332_08	<5	<1	<1	<10	<1	<1	<10	0.5	<3	<0.5
GWS_355_08	47	50	<1	410	<1	11	<10	54.5	108	1.2
*Std MMISRM16	7	4	<1	480	<1	<1	<10	20.1	<3	0.6
*Std MMISRM16	6	4	<1	480	<1	<1	<10	20.5	<3	0.7
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	3	0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_251_08	12	<1	109	10	2860	57
*Rep GWS_251_08	12	<1	91	8	2420	53
GWS_252_08	23	<1	53	4	510	28
GWS_253_08	10	<1	99	7	230	43
GWS_254_08	10	<1	69	6	540	49
GWS_255_08	21	<1	80	7	270	55
GWS_256_08	15	<1	56	4	560	51
GWS_257_08	16	<1	53	4	550	51
GWS_261_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_262_08	37	1	93	8	830	78
GWS_284_08	25	<1	63	6	1590	40
GWS_285_08	13	<1	29	2	4650	13
GWS_286_08	22	<1	63	4	750	27
GWS_287_08	84	2	174	14	380	74
*Rep GWS_287_08	86	2	159	13	310	76
GWS_288_08	57	2	104	9	1070	43
GWS_289_08	26	<1	77	6	110	26
GWS_290_08	22	<1	73	6	230	63
GWS_291_08	30	<1	52	5	2520	53
GWS_296_08	79	2	89	8	650	102
GWS_297_08	153	1	74	7	50	29
GWS_318_08	14	<1	18	4	920	25
GWS_319_08	30	<1	226	19	830	27
GWS_320_08	21	<1	84	7	400	24
GWS_321_08	131	1	114	11	80	66
GWS_322_08	83	2	44	5	120	91
GWS_323_08	84	<1	111	9	940	42
*Rep GWS_323_08	86	<1	111	9	900	40
GWS_324_08	13	<1	63	5	1470	21
GWS_325_08	858	2	633	57	180	118
GWS_330_08	52	<1	128	7	210	22
GWS_331_08	86	<1	98	10	370	39
GWS_352_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_353_08	28	<1	73	5	30	34
GWS_354_08	96	<1	246	24	50	65
GWS_356_08	144	<1	31	3	31200	9
GWS_357_08	31	1	74	7	1040	78
GWS_358_08	65	<1	83	6	2070	42
GWS_359_08	829	<1	201	13	830	20
GWS_364_08	157	2	179	14	140	51
*Rep GWS_364_08	155	2	192	15	170	59
GWS_365_08	28	<1	52	5	1050	47
GWS_384_08	284	<1	572	54	810	21
GWS_385_08	167	<1	277	22	140	88
GWS_386_08	57	<1	124	10	380	64
GWS_387_08	27	<1	184	15	290	137

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_388_08	106	<1	166	16	110	65
GWS_389_08	254	3	113	8	260	18
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_390_08	191	1	86	9	170	53
GWS_391_08	323	1	87	7	310	21
GWS_392_08	1270	1	202	20	200	42
GWS_393_08	1750	<1	405	30	130	34
GWS_398_08	110	<1	115	11	690	45
*Rep GWS_398_08	109	<1	108	10	710	46
GWS_399_08	61	<1	250	22	1110	40
GWS_263_08	<1	<1	<5	<1	<20	<5
GWS_332_08	2	<1	<5	<1	<20	<5
GWS_355_08	168	<1	444	31	90	55
*Std MMISRM16	49	<1	7	<1	250	14
*Std MMISRM16	51	<1	9	<1	250	14
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101354

To: **Logan Resources Ltd.**

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

Date: Aug 15, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 50
Date Submitted Jul 02, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 50 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
GWS_36_08	1	281	<10	<0.1	610	<1	30	7	82	17
*Rep GWS_36_08	1	295	<10	<0.1	670	<1	30	10	84	44
GWS_37_08	2	215	<10	<0.1	930	<1	110	32	51	50
GWS_38_08	3	231	<10	<0.1	670	<1	80	13	96	65
GWS_96_08	3	199	<10	<0.1	440	<1	<10	<1	9	40
GWS_97_08	5	264	<10	<0.1	720	<1	<10	11	97	403
GWS_124_08	59	151	3980	231	430	1340	30	5	432	438
GWS_125_08	62	40	30	15.1	210	1	490	1	181	72
GWS_128_08	6	288	20	0.2	710	<1	<10	9	109	748
GWS_129_08	4	289	10	0.2	860	<1	<10	17	33	434
GWS_130_08	<1	243	10	<0.1	1000	9	<10	10	49	315
GWS_131_08	9	139	20	0.2	3540	<1	200	22	493	38
GWS_158_08	9	118	10	3.4	2190	10	270	12	49	20
GWS_159_08	6	254	10	0.7	1460	46	50	43	149	111
*Rep GWS_159_08	8	278	10	0.9	970	41	30	33	188	127
GWS_162_08	2	>300	<10	<0.1	1540	<1	30	13	240	57
GWS_163_08	6	>300	<10	<0.1	840	<1	10	7	65	75
GWS_164_08	11	253	<10	<0.1	2500	<1	80	28	438	148
GWS_165_08	10	>300	20	<0.1	1120	<1	30	11	299	54
GWS_192_08	29	145	<10	2.1	1600	1	220	131	894	28
GWS_193_08	2	260	20	0.7	940	27	20	27	263	73
GWS_196_08	54	195	<10	0.4	1260	<1	140	61	593	22
GWS_197_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_198_08	307	33	100	326	860	23	510	16	70	405
GWS_199_08	41	30	<10	0.9	990	<1	500	35	27	21
GWS_224_08	36	117	20	3.2	2800	<1	290	41	176	11
GWS_225_08	1	105	40	1.0	2300	<1	290	55	240	103
*Rep GWS_225_08	3	102	40	1.8	2910	<1	340	38	232	71
GWS_226_08	270	88	60	5.3	3470	<1	340	45	111	15
GWS_227_08	31	76	<10	2.0	2610	1	320	44	334	14
GWS_230_08	32	66	10	0.3	1580	<1	260	32	862	237
GWS_231_08	23	155	<10	0.1	1490	<1	170	74	105	160
GWS_232_08	<1	111	<10	<0.1	550	<1	300	198	33	10
GWS_233_08	1	103	50	<0.1	630	8	110	82	18	67
GWS_240_08	2	23	<10	<0.1	360	<1	400	10	21	13
GWS_241_08	27	58	<10	0.1	1640	<1	460	8	41	8
GWS_242_08	6	28	<10	<0.1	260	<1	190	8	54	80
GWS_243_08	<1	25	<10	0.1	220	<1	330	17	23	10
GWS_244_08	5	79	<10	<0.1	1320	<1	410	19	35	10
GWS_245_08	33	13	<10	0.4	530	<1	500	10	<5	8
*Rep GWS_245_08	33	13	<10	0.5	390	<1	320	10	<5	6
GWS_246_08	<1	127	20	<0.1	730	1	260	53	134	115
GWS_247_08	10	151	40	0.3	650	5	220	25	85	27
GWS_248_08	7	237	140	1.2	790	27	90	31	139	123
GWS_249_08	6	185	90	0.8	1350	8	190	19	200	73
GWS_258_08	12	80	40	2.0	2980	<1	350	41	274	421

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
GWS_259_08	<1	104	20	0.3	1330	2	290	18	170	119
GWS_260_08	22	174	30	0.8	2440	1	210	22	551	11
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
GWS_261_08	17	116	20	0.9	3690	<1	300	50	618	102
GWS_264_08	114	43	<10	0.6	2320	<1	520	120	281	243
GWS_265_08	85	270	10	0.1	710	2	60	40	162	71
GWS_266_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_267_08	10	245	20	<0.1	550	2	30	26	109	89
*Rep GWS_267_08	10	243	10	<0.1	670	1	20	27	83	164
GWS_282_08	<1	197	100	0.8	1470	31	70	56	78	480
*Std MMISRM16	20	44	20	32.2	80	<1	210	4	19	59
*Std MMISRM16	20	48	20	32.9	80	<1	210	4	17	62
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
GWS_36_08	<100	60	24	11.7	5.0	43	21	22	<5	2
*Rep GWS_36_08	<100	50	27	12.5	5.5	38	24	22	<5	3
GWS_37_08	<100	70	27	15.0	5.0	51	23	17	<5	5
GWS_38_08	<100	140	46	23.7	10.5	23	43	34	<5	4
GWS_96_08	<100	220	2	1.3	<0.5	204	1	7	<5	2
GWS_97_08	<100	530	14	7.0	3.0	121	14	49	<5	2
GWS_124_08	<100	2710	38	18.7	14.0	44	53	232	<5	<1
GWS_125_08	<100	3330	14	8.1	9.0	4	24	135	<5	16
GWS_128_08	<100	440	31	17.9	6.0	32	26	45	<5	<1
GWS_129_08	<100	260	11	6.6	1.7	38	8	15	<5	1
GWS_130_08	<100	390	61	46.9	4.9	67	26	23	<5	2
GWS_131_08	<100	230	88	43.7	24.0	16	117	267	<5	25
GWS_158_08	<100	230	13	5.8	3.9	10	18	36	<5	13
GWS_159_08	<100	420	33	16.8	8.6	37	31	61	<5	5
*Rep GWS_159_08	<100	590	39	18.9	11.1	30	39	75	<5	3
GWS_162_08	<100	100	63	22.8	12.0	23	83	72	<5	6
GWS_163_08	<100	410	22	8.2	4.4	24	22	23	<5	3
GWS_164_08	<100	290	53	23.5	12.7	38	67	252	<5	11
GWS_165_08	<100	230	47	20.2	13.2	35	62	87	<5	2
GWS_192_08	<100	660	210	110	53.0	31	259	985	<5	30
GWS_193_08	<100	260	34	17.9	8.9	49	37	112	<5	2
GWS_196_08	<100	220	91	41.3	31.6	22	111	294	<5	13
GWS_197_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_198_08	<100	3340	48	27.3	12.2	13	60	76	<5	15
GWS_199_08	<100	200	8	3.4	2.8	15	14	19	<5	12
GWS_224_08	<100	360	86	42.2	32.0	8	126	517	<5	19
GWS_225_08	<100	340	53	31.0	12.6	39	57	135	<5	28
*Rep GWS_225_08	<100	370	61	32.3	16.5	46	75	186	<5	36
GWS_226_08	<100	1020	98	52.3	29.5	7	132	364	<5	35
GWS_227_08	<100	270	83	40.1	28.3	13	127	475	<5	31
GWS_230_08	<100	910	55	26.3	27.5	29	93	340	<5	21
GWS_231_08	<100	250	28	15.8	7.6	28	26	50	<5	8
GWS_232_08	<100	50	11	7.3	2.0	18	9	14	<5	15
GWS_233_08	<100	10	10	7.7	1.5	145	7	11	<5	7
GWS_240_08	<100	50	7	3.2	2.2	9	11	9	<5	7
GWS_241_08	<100	170	31	11.4	12.6	11	58	76	<5	6
GWS_242_08	<100	420	8	3.5	3.2	25	14	43	<5	6
GWS_243_08	<100	30	8	4.9	2.0	5	11	13	<5	6
GWS_244_08	<100	30	15	6.1	4.8	9	23	31	<5	6
GWS_245_08	<100	430	4	2.1	0.8	5	5	1	<5	6
*Rep GWS_245_08	<100	420	3	2.1	<0.5	4	3	<1	<5	6
GWS_246_08	<100	90	25	14.0	5.6	36	28	54	<5	6
GWS_247_08	<100	150	13	6.0	3.9	19	17	42	<5	12
GWS_248_08	<100	190	16	7.8	4.7	37	16	50	<5	6
GWS_249_08	<100	90	13	5.6	4.5	24	18	70	<5	5
GWS_258_08	<100	1670	25	15.0	9.1	49	36	149	<5	30

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
GWS_259_08	<100	280	50	33.0	9.3	70	46	79	7	20
GWS_260_08	<100	300	253	143	54.7	15	292	737	<5	17
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
GWS_261_08	<100	740	174	103	34.3	28	179	461	<5	14
GWS_264_08	<100	520	32	15.4	12.9	29	52	119	7	6
GWS_265_08	<100	140	26	13.1	7.7	26	28	54	<5	5
GWS_266_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_267_08	<100	220	30	15.4	6.0	35	24	40	<5	1
*Rep GWS_267_08	<100	220	21	12.5	3.5	35	15	31	<5	1
GWS_282_08	<100	880	45	35.3	5.8	101	24	50	<5	3
*Std MMISRM16	<100	590	2	0.9	1.2	2	5	9	<5	37
*Std MMISRM16	<100	620	3	1.0	1.2	2	5	6	<5	39
*BIK BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*BIK BLANK	<100	<10	<1	<0.5	<0.5	1	1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_36_08	<5	0.7	56	85	610	<1	11	<1	138	<1
*Rep GWS_36_08	<5	0.5	58	93	590	<1	12	<1	142	<1
GWS_37_08	<5	<0.5	45	143	1000	<1	8	<1	112	<1
GWS_38_08	<5	<0.5	85	248	620	<1	16	<1	146	<1
GWS_96_08	<5	4.0	6	71	<10	<1	2	<1	23	<1
GWS_97_08	<5	1.5	48	217	170	<1	13	<1	191	<1
GWS_124_08	<5	<0.5	222	88	90	<1	58	<1	38	7
GWS_125_08	<5	<0.5	120	82	20	<1	29	<1	38	<1
GWS_128_08	<5	0.9	67	174	620	<1	15	<1	131	2
GWS_129_08	<5	0.8	20	140	420	<1	5	<1	124	<1
GWS_130_08	<5	1.0	38	93	960	<1	8	<1	54	1
GWS_131_08	<5	0.8	393	81	540	<1	90	<1	223	4
GWS_158_08	<5	<0.5	54	49	250	<1	12	<1	134	<1
GWS_159_08	<5	<0.5	98	306	2330	<1	22	<1	92	<1
*Rep GWS_159_08	<5	<0.5	127	314	2150	<1	28	<1	89	1
GWS_162_08	<5	<0.5	164	179	3540	<1	34	<1	61	<1
GWS_163_08	<5	0.6	48	142	680	<1	10	<1	122	<1
GWS_164_08	<5	0.7	218	199	1580	<1	54	<1	101	<1
GWS_165_08	6	1.7	159	102	870	<1	35	<1	207	4
GWS_192_08	<5	<0.5	1060	204	2390	<1	269	<1	136	1
GWS_193_08	<5	0.7	160	76	2210	<1	39	<1	68	2
GWS_196_08	<5	<0.5	409	129	6540	<1	95	<1	178	4
GWS_197_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_198_08	<5	<0.5	125	205	80	<1	25	<1	21	1
GWS_199_08	<5	<0.5	35	227	30	<1	7	<1	39	<1
GWS_224_08	<5	<0.5	535	69	1600	<1	131	<1	160	<1
GWS_225_08	<5	<0.5	179	138	700	<1	41	<1	53	1
*Rep GWS_225_08	<5	<0.5	248	160	680	<1	56	<1	47	1
GWS_226_08	<5	<0.5	451	63	2950	<1	102	<1	101	2
GWS_227_08	<5	<0.5	561	110	1310	<1	136	<1	118	1
GWS_230_08	<5	<0.5	452	181	570	<1	107	<1	113	3
GWS_231_08	<5	<0.5	69	339	2240	<1	17	<1	179	2
GWS_232_08	<5	<0.5	22	72	440	<1	5	<1	27	<1
GWS_233_08	12	1.2	15	22	220	<1	4	<1	8	3
GWS_240_08	<5	<0.5	21	125	60	<1	4	<1	12	<1
GWS_241_08	<5	<0.5	162	116	120	<1	32	<1	59	<1
GWS_242_08	<5	<0.5	67	206	50	<1	15	<1	18	2
GWS_243_08	<5	<0.5	27	102	50	<1	6	<1	20	<1
GWS_244_08	<5	<0.5	73	94	110	<1	15	<1	116	<1
GWS_245_08	<5	<0.5	2	162	40	<1	<1	<1	10	<1
*Rep GWS_245_08	<5	<0.5	<1	169	40	<1	<1	<1	6	<1
GWS_246_08	<5	<0.5	86	135	740	<1	19	<1	124	<1
GWS_247_08	<5	0.5	59	48	370	<1	14	<1	128	<1
GWS_248_08	<5	0.7	63	176	990	<1	16	<1	137	2
GWS_249_08	<5	<0.5	76	76	320	<1	20	<1	139	2
GWS_258_08	6	<0.5	174	419	90	<1	42	<1	80	3

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_259_08	<5	<0.5	128	132	1700	<1	28	<1	8	2
GWS_260_08	<5	<0.5	1090	88	830	<1	256	<1	83	<1
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_261_08	<5	0.6	556	209	2070	<1	134	<1	59	5
GWS_264_08	<5	<0.5	182	433	940	<1	41	<1	37	2
GWS_265_08	<5	1.0	78	111	37900	<1	18	<1	234	8
GWS_266_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_267_08	<5	0.7	69	48	1390	<1	15	<1	119	1
*Rep GWS_267_08	<5	0.6	44	67	1340	<1	11	<1	136	<1
GWS_282_08	<5	<0.5	64	80	550	<1	15	<1	61	2
*Std MMISRM16	51	<0.5	20	219	100	25	4	<1	310	<1
*Std MMISRM16	55	<0.5	19	243	110	27	3	<1	330	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_36_08	30	16	<1	130	<1	4	<10	18.1	186	0.8
*Rep GWS_36_08	30	17	<1	130	<1	4	<10	16.9	139	0.8
GWS_37_08	34	16	<1	330	<1	4	<10	19.3	130	0.6
GWS_38_08	37	29	<1	180	<1	7	<10	15.8	124	0.6
GWS_96_08	17	1	<1	40	<1	<1	<10	16.0	801	0.5
GWS_97_08	24	12	<1	60	<1	2	<10	24.0	349	2.1
GWS_124_08	39	48	<1	50	<1	8	10	20.3	138	0.7
GWS_125_08	8	22	<1	2610	<1	3	<10	3.1	3	<0.5
GWS_128_08	50	20	<1	50	<1	5	<10	30.8	257	1.5
GWS_129_08	22	6	<1	70	<1	2	<10	16.4	206	1.2
GWS_130_08	46	15	<1	100	<1	7	<10	26.4	185	1.1
GWS_131_08	44	91	<1	1910	<1	17	<10	40.6	150	5.2
GWS_158_08	11	16	<1	1090	<1	2	<10	13.6	31	1.7
GWS_159_08	28	25	<1	310	<1	5	<10	24.2	87	1.7
*Rep GWS_159_08	27	32	<1	190	<1	7	<10	24.0	98	1.4
GWS_162_08	21	52	<1	300	<1	13	<10	17.6	74	1.6
GWS_163_08	15	15	<1	90	<1	4	<10	15.9	191	1.2
GWS_164_08	29	53	<1	610	<1	10	<10	37.1	189	2.5
GWS_165_08	48	48	<1	120	<1	9	<10	70.5	603	1.7
GWS_192_08	160	231	<1	1260	<1	39	<10	230	20	1.5
GWS_193_08	34	33	<1	180	<1	6	<10	57.2	155	1.4
GWS_196_08	58	100	<1	430	<1	17	<10	74.7	88	1.8
GWS_197_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_198_08	7	41	<1	770	<1	9	<10	4.1	5	0.9
GWS_199_08	<5	11	<1	730	<1	2	<10	3.6	4	<0.5
GWS_224_08	43	116	<1	1550	<1	17	<10	52.1	14	1.1
GWS_225_08	68	46	<1	1120	<1	9	<10	44.8	22	0.7
*Rep GWS_225_08	83	62	<1	1290	<1	11	<10	41.0	20	0.7
GWS_226_08	29	111	<1	1740	<1	18	<10	24.9	4	0.7
GWS_227_08	23	123	<1	1490	<1	17	<10	86.5	25	0.9
GWS_230_08	17	94	<1	720	<1	12	<10	32.9	32	3.5
GWS_231_08	38	20	<1	590	<1	5	<10	24.9	39	2.0
GWS_232_08	14	7	<1	690	<1	2	<10	4.2	30	0.5
GWS_233_08	29	5	<1	330	<1	1	<10	12.4	569	0.7
GWS_240_08	<5	8	<1	1120	<1	1	<10	2.7	9	<0.5
GWS_241_08	6	49	<1	1430	<1	7	<10	10.4	9	<0.5
GWS_242_08	<5	15	<1	810	<1	2	<10	4.4	12	<0.5
GWS_243_08	<5	9	<1	810	<1	2	<10	2.3	9	<0.5
GWS_244_08	6	21	<1	960	<1	3	<10	4.3	14	0.6
GWS_245_08	<5	2	<1	1270	<1	<1	<10	2.6	5	<0.5
*Rep GWS_245_08	<5	<1	<1	1040	<1	<1	<10	1.7	3	<0.5
GWS_246_08	20	23	<1	620	<1	4	<10	19.3	94	0.6
GWS_247_08	16	15	<1	440	<1	3	<10	25.5	214	0.6
GWS_248_08	23	15	<1	330	<1	3	<10	60.1	253	0.6
GWS_249_08	17	17	<1	400	<1	3	<10	38.2	123	<0.5
GWS_258_08	45	35	<1	1270	<1	5	<10	44.1	16	1.8

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_259_08	41	36	<1	1190	<1	8	<10	39.8	38	0.6
GWS_260_08	177	260	<1	950	<1	44	<10	156	37	1.0
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_261_08	140	141	<1	2220	<1	29	<10	116	18	1.8
GWS_264_08	10	45	<1	1340	<1	7	<10	12.8	11	0.8
GWS_265_08	42	23	<1	220	<1	5	<10	51.1	461	2.3
GWS_266_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_267_08	36	19	<1	100	<1	5	<10	21.9	346	1.0
*Rep GWS_267_08	29	12	<1	100	<1	3	<10	21.4	222	1.2
GWS_282_08	46	17	<1	330	<1	6	<10	61.4	160	0.8
*Std MMISRM16	12	5	<1	520	<1	<1	<10	22.1	5	0.7
*Std MMISRM16	13	6	<1	540	<1	<1	<10	24.4	9	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_36_08	7	<1	121	8	550	28
*Rep GWS_36_08	7	<1	131	8	500	23
GWS_37_08	9	<1	139	11	1250	28
GWS_38_08	9	<1	263	16	360	36
GWS_96_08	3	<1	8	2	120	37
GWS_97_08	11	<1	59	5	450	44
GWS_124_08	21	<1	189	16	160	58
GWS_125_08	25	<1	103	6	100	<5
GWS_128_08	20	<1	153	14	220	105
GWS_129_08	7	<1	49	5	490	37
GWS_130_08	28	<1	294	39	400	58
GWS_131_08	40	<1	508	32	470	153
GWS_158_08	25	<1	62	4	230	14
GWS_159_08	20	<1	169	12	1970	15
*Rep GWS_159_08	26	<1	193	13	1450	19
GWS_162_08	7	<1	298	13	1160	16
GWS_163_08	7	<1	85	5	590	32
GWS_164_08	19	<1	301	16	550	56
GWS_165_08	25	<1	191	14	280	141
GWS_192_08	577	1	1240	84	2200	34
GWS_193_08	65	<1	166	14	460	17
GWS_196_08	47	<1	406	28	780	57
GWS_197_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_198_08	54	<1	375	20	290	7
GWS_199_08	15	<1	44	2	1200	<5
GWS_224_08	312	<1	528	30	600	21
GWS_225_08	219	<1	332	24	760	18
*Rep GWS_225_08	268	<1	367	24	560	19
GWS_226_08	1260	<1	666	39	1280	14
GWS_227_08	181	<1	428	29	780	46
GWS_230_08	47	<1	287	19	270	38
GWS_231_08	32	<1	155	13	450	24
GWS_232_08	8	<1	73	6	7120	12
GWS_233_08	9	<1	54	7	2310	25
GWS_240_08	17	<1	35	2	500	<5
GWS_241_08	30	<1	150	7	240	8
GWS_242_08	30	<1	45	3	130	<5
GWS_243_08	9	<1	48	3	390	<5
GWS_244_08	10	<1	70	4	1900	<5
GWS_245_08	5	<1	24	2	160	<5
*Rep GWS_245_08	5	<1	16	1	210	<5
GWS_246_08	23	<1	140	10	1650	27
GWS_247_08	14	1	57	4	150	21
GWS_248_08	19	<1	71	6	1350	40
GWS_249_08	10	<1	56	4	600	32
GWS_258_08	151	<1	177	14	780	30

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_259_08	380	<1	307	27	310	16
GWS_260_08	501	1	1500	110	620	36
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_261_08	980	1	1070	80	510	41
GWS_264_08	91	<1	197	12	3930	17
GWS_265_08	23	<1	116	10	710	76
GWS_266_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_267_08	17	<1	144	10	250	45
*Rep GWS_267_08	18	<1	104	8	250	39
GWS_282_08	96	<1	285	33	3860	33
*Std MMISRM16	41	<1	11	<1	290	12
*Std MMISRM16	45	<1	11	<1	300	13
*BIK BLANK	<1	<1	<5	<1	20	<5
*BIK BLANK	1	<1	5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101355

To: **Logan Resources Ltd.**

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

Date: Aug 15, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 41
Date Submitted Jul 02, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 41 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
GWS_283_08	<1	116	40	0.7	1150	2	230	18	84	64
*Rep GWS_283_08	<1	116	30	0.5	1090	2	230	24	83	59
GWS_292_08	4	139	10	1.5	2710	<1	360	41	162	22
GWS_293_08	79	128	30	2.4	4850	<1	320	37	259	7
GWS_294_08	5	250	60	0.5	2760	1	50	132	593	126
GWS_295_08	136	107	170	3.5	3150	<1	330	54	394	7
GWS_298_08	20	270	<10	<0.1	750	<1	20	142	79	122
GWS_299_08	<1	59	40	0.1	1110	2	210	4	25	178
GWS_300_08	55	270	40	<0.1	770	1	40	36	115	153
GWS_301_08	<1	15	<10	<0.1	50	<1	200	62	<5	10
GWS_316_08	5	>300	190	0.6	1870	16	50	33	344	149
GWS_317_08	<1	243	80	0.2	1150	13	20	65	96	278
GWS_326_08	16	248	100	0.4	2500	2	100	28	558	73
GWS_327_08	2	184	60	0.3	2530	3	190	116	67	149
*Rep GWS_327_08	<1	213	50	0.5	2980	4	190	128	120	97
GWS_328_08	47	112	160	2.6	2980	<1	310	23	89	44
GWS_329_08	4	294	50	0.2	1410	<1	10	21	576	99
GWS_332_08	1	248	30	<0.1	760	2	30	24	44	44
GWS_333_08	3	>300	20	<0.1	1030	2	50	65	61	57
GWS_334_08	8	173	20	0.2	2720	<1	260	41	78	83
GWS_335_08	38	106	250	2.9	1860	<1	370	56	119	98
GWS_360_08	2	91	170	2.5	4060	3	240	49	194	319
GWS_361_08	14	272	310	1.8	3060	4	80	32	729	315
GWS_362_08	46	204	180	2.0	860	1	140	27	265	43
GWS_363_08	8	>300	140	0.5	1090	2	20	26	178	105
GWS_366_08	1	171	190	0.3	1100	4	30	14	83	151
GWS_367_08	6	>300	140	0.4	1080	2	30	32	116	108
*Rep GWS_367_08	7	>300	160	0.5	1060	3	30	31	151	106
GWS_368_08	74	28	200	3.7	1040	<1	390	52	<5	138
GWS_369_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_376_08	7	232	70	0.5	560	<1	<10	3	95	51
GWS_377_08	8	>300	130	0.5	930	2	10	4	104	91
GWS_382_08	2	144	940	1.7	1540	41	70	2	214	515
GWS_383_08	2	74	70	2.0	1690	5	400	44	224	230
GWS_394_08	25	178	170	1.3	2080	1	70	7	299	127
GWS_395_08	21	132	190	1.9	2510	2	100	8	436	198
GWS_396_08	4	108	1250	1.7	1610	3	110	10	106	419
GWS_397_08	23	234	100	0.7	1480	2	30	25	257	84
GWS_400_08	2	>300	30	0.1	740	<1	<10	18	102	109
GWS_401_08	168	47	230	2.7	1040	<1	380	65	32	32
*Rep GWS_401_08	183	56	160	1.8	1150	<1	400	79	87	59
GWS_402_08	10	300	230	1.0	780	5	20	36	671	289
GWS_403_08	1	231	150	0.5	1040	4	<10	140	136	988
GWS_404_08	4	253	30	0.2	430	<1	10	32	54	171
GWS_405_08	3	179	180	0.7	680	4	10	22	87	734
*Std MMISRM16	20	47	20	34.4	40	<1	210	4	13	63

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Order:

	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
*Std MMISRM16	21	47	20	33.5	50	<1	210	5	14	63
*Bik 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
*Bik BLANK	1	1	<10	<0.1	<10	<1	<10	<1	<5	<5



Order:

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
GWS_283_08	<100	290	40	27.4	7.7	25	34	132	<5	11
*Rep GWS_283_08	<100	300	43	30.0	8.2	25	36	137	<5	11
GWS_292_08	<100	400	53	30.9	11.8	16	59	131	<5	26
GWS_293_08	<100	1820	118	59.6	34.4	17	170	417	<5	28
GWS_294_08	<100	890	295	167	43.5	28	243	367	<5	9
GWS_295_08	<100	1250	92	43.7	27.9	12	152	983	<5	36
GWS_298_08	<100	120	14	6.1	3.0	55	12	27	<5	3
GWS_299_08	<100	90	3	2.0	1.2	194	4	9	<5	24
GWS_300_08	<100	240	18	8.4	5.2	79	20	44	<5	4
GWS_301_08	<100	20	<1	0.6	<0.5	4	<1	<1	<5	4
GWS_316_08	<100	440	23	10.0	7.0	83	28	109	<5	3
GWS_317_08	<100	190	30	14.0	5.1	149	22	59	<5	3
GWS_326_08	<100	510	78	38.9	22.7	38	108	396	<5	4
GWS_327_08	<100	220	41	29.8	4.0	104	24	34	<5	40
*Rep GWS_327_08	<100	290	85	49.3	9.2	101	55	62	<5	40
GWS_328_08	<100	1560	32	15.5	9.7	19	50	169	<5	21
GWS_329_08	<100	400	74	38.6	16.6	26	85	350	<5	<1
GWS_332_08	<100	90	24	13.2	4.2	77	18	13	<5	3
GWS_333_08	<100	110	12	6.0	3.5	92	13	24	<5	5
GWS_334_08	<100	160	28	15.5	6.6	53	29	54	<5	10
GWS_335_08	<100	2010	22	11.0	6.4	25	30	72	<5	19
GWS_360_08	<100	2290	46	30.7	7.8	123	43	142	<5	35
GWS_361_08	<100	2110	121	63.7	32.3	62	152	554	<5	1
GWS_362_08	<100	1190	90	45.3	23.7	18	119	364	<5	4
GWS_363_08	<100	840	35	18.1	9.3	32	39	118	<5	3
GWS_366_08	<100	1090	10	4.7	2.4	278	10	42	<5	4
GWS_367_08	<100	590	19	9.3	3.5	100	15	44	<5	10
*Rep GWS_367_08	<100	670	21	9.8	4.4	99	20	58	<5	9
GWS_368_08	<100	7980	14	8.1	2.5	13	16	<1	<5	27
GWS_369_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_376_08	<100	850	15	13.3	3.2	138	13	36	<5	<1
GWS_377_08	<100	500	17	7.9	3.3	116	14	34	<5	<1
GWS_382_08	<100	2940	23	13.3	5.2	331	24	101	<5	3
GWS_383_08	<100	1450	24	12.4	7.7	62	37	114	<5	10
GWS_394_08	<100	1230	119	76.4	16.1	33	89	230	<5	3
GWS_395_08	<100	1890	97	64.0	14.9	44	81	265	<5	9
GWS_396_08	<100	4670	18	11.3	3.7	190	18	62	<5	3
GWS_397_08	<100	1350	139	82.9	20.4	31	102	138	<5	3
GWS_400_08	<100	340	29	15.7	5.2	43	24	44	<5	3
GWS_401_08	<100	1780	21	8.4	7.9	12	36	65	<5	21
*Rep GWS_401_08	<100	2260	28	12.6	10.3	19	49	93	<5	22
GWS_402_08	<100	1000	122	69.1	37.0	61	154	352	5	1
GWS_403_08	<100	800	21	13.8	3.6	105	16	71	<5	2
GWS_404_08	<100	370	7	4.0	1.5	91	6	21	<5	2
GWS_405_08	<100	710	11	7.0	2.6	93	11	44	<5	1
*Std MMISRM16	<100	700	2	0.8	0.9	3	4	3	<5	36

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Order:

	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
*Std MMISRM16	<100	720	2	0.8	0.9	3	4	3	<5	36
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<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
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1



Order:

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_283_08	<5	<0.5	132	52	290	<1	33	<1	115	1
*Rep GWS_283_08	<5	<0.5	140	48	300	<1	36	<1	116	1
GWS_292_08	<5	<0.5	167	147	300	<1	38	<1	73	<1
GWS_293_08	<5	<0.5	558	58	400	<1	120	<1	138	1
GWS_294_08	<5	<0.5	736	81	5900	<1	155	<1	148	3
GWS_295_08	<5	<0.5	786	58	1330	<1	198	<1	71	6
GWS_298_08	<5	0.8	35	144	17600	<1	9	<1	236	1
GWS_299_08	<5	1.1	10	139	240	<1	3	<1	79	3
GWS_300_08	6	2.6	52	98	6330	<1	13	<1	310	3
GWS_301_08	<5	<0.5	<1	77	90	<1	<1	<1	22	<1
GWS_316_08	6	1.7	108	147	910	<1	28	<1	151	2
GWS_317_08	<5	1.6	63	66	440	<1	16	<1	94	1
GWS_326_08	6	1.1	440	80	1170	<1	106	<1	171	4
GWS_327_08	<5	0.6	57	86	1990	<1	12	<1	60	3
*Rep GWS_327_08	<5	<0.5	126	122	2870	<1	25	<1	63	2
GWS_328_08	7	<0.5	189	84	450	<1	44	<1	141	3
GWS_329_08	5	0.6	390	98	2310	<1	98	<1	148	1
GWS_332_08	<5	0.9	37	74	3180	<1	7	<1	121	<1
GWS_333_08	<5	2.2	32	95	2530	<1	8	<1	386	1
GWS_334_08	<5	<0.5	81	151	2080	<1	18	<1	146	1
GWS_335_08	6	<0.5	101	258	340	<1	22	<1	121	2
GWS_360_08	8	<0.5	152	147	430	<1	38	<1	231	7
GWS_361_08	9	0.7	595	121	2030	<1	147	<1	148	6
GWS_362_08	8	<0.5	440	35	2190	<1	103	<1	150	4
GWS_363_08	8	1.2	137	82	1410	<1	33	<1	153	2
GWS_366_08	9	2.7	37	109	110	<1	10	<1	140	2
GWS_367_08	5	2.6	45	128	930	<1	11	<1	157	1
*Rep GWS_367_08	6	2.8	61	141	1020	<1	15	<1	159	1
GWS_368_08	8	<0.5	10	402	60	<1	1	<1	108	2
GWS_369_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_376_08	<5	2.4	43	88	210	<1	11	<1	200	2
GWS_377_08	<5	1.9	43	115	660	<1	10	<1	162	4
GWS_382_08	13	1.1	96	419	570	<1	25	<1	112	20
GWS_383_08	13	0.5	163	371	380	<1	38	<1	119	7
GWS_394_08	10	<0.5	275	142	2960	<1	64	<1	125	8
GWS_395_08	9	<0.5	270	132	3110	<1	65	<1	120	9
GWS_396_08	68	<0.5	62	160	270	<1	16	<1	75	7
GWS_397_08	8	<0.5	261	183	2680	<1	55	<1	173	1
GWS_400_08	<5	1.5	64	110	790	<1	15	<1	156	<1
GWS_401_08	8	<0.5	126	150	760	<1	25	<1	163	4
*Rep GWS_401_08	7	<0.5	172	250	1140	<1	35	<1	177	6
GWS_402_08	7	1.1	564	447	2970	<1	129	<1	202	6
GWS_403_08	6	1.2	60	115	500	<1	16	<1	159	2
GWS_404_08	<5	0.9	20	86	1590	<1	6	<1	101	<1
GWS_405_08	6	0.7	42	85	530	<1	11	<1	124	7
*Std MMISRM16	57	<0.5	11	248	80	31	2	<1	352	<1

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Order:

	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
*Std MMISRM16	56	<0.5	11	242	80	30	2	<1	351	<1
*Bik 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
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1



Order:

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_283_08	28	25	<1	630	<1	6	<10	30.3	29	<0.5
*Rep GWS_283_08	30	27	<1	610	<1	6	<10	29.4	22	<0.5
GWS_292_08	50	44	<1	1490	<1	9	<10	61.6	30	<0.5
GWS_293_08	65	138	<1	1970	<1	22	<10	136	26	<0.5
GWS_294_08	178	183	<1	660	<1	44	<10	241	115	0.9
GWS_295_08	41	144	<1	1800	<1	19	<10	422	22	<0.5
GWS_298_08	25	10	<1	150	<1	2	<10	49.1	288	<0.5
GWS_299_08	10	3	<1	660	<1	<1	<10	9.2	330	<0.5
GWS_300_08	38	16	<1	100	<1	3	<10	45.2	1490	1.5
GWS_301_08	<5	<1	<1	930	<1	<1	<10	0.7	8	<0.5
GWS_316_08	28	25	<1	190	<1	4	<10	146	553	<0.5
GWS_317_08	43	17	<1	130	<1	5	<10	61.2	577	<0.5
GWS_326_08	108	95	<1	420	<1	15	<10	231	412	0.6
GWS_327_08	103	17	<1	1600	<1	5	<10	170	130	0.6
*Rep GWS_327_08	118	38	<1	1690	<1	12	<10	201	78	0.6
GWS_328_08	18	44	<1	1010	<1	6	<10	102	45	<0.5
GWS_329_08	87	77	<1	100	<1	13	<10	205	251	<0.5
GWS_332_08	30	13	<1	120	<1	4	<10	26.6	351	<0.5
GWS_333_08	23	10	<1	130	<1	2	<10	31.8	1000	<0.5
GWS_334_08	27	22	<1	580	<1	5	<10	36.5	122	1.0
GWS_335_08	11	25	<1	860	<1	4	<10	76.6	32	0.6
GWS_360_08	142	35	<1	1380	<1	7	<10	125	40	1.7
GWS_361_08	107	132	<1	350	<1	22	<10	229	275	2.3
GWS_362_08	92	100	<1	260	<1	16	<10	189	184	1.0
GWS_363_08	46	34	<1	160	<1	6	<10	94.1	561	1.3
GWS_366_08	23	9	<1	160	<1	2	<10	62.4	1170	0.8
GWS_367_08	32	12	<1	190	<1	3	<10	88.6	912	0.5
*Rep GWS_367_08	34	16	<1	170	<1	3	<10	99.2	944	0.5
GWS_368_08	9	7	<1	1590	<1	2	<10	43.5	<3	<0.5
GWS_369_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_376_08	69	11	<1	20	<1	2	<10	43.3	788	0.7
GWS_377_08	38	12	<1	70	<1	3	<10	63.0	668	1.1
GWS_382_08	47	21	<1	300	<1	4	<10	113	451	2.0
GWS_383_08	14	35	<1	910	<1	5	<10	40.6	60	1.4
GWS_394_08	109	66	<1	370	<1	17	<10	107	223	1.2
GWS_395_08	122	61	<1	450	<1	14	<10	120	100	1.3
GWS_396_08	58	15	<1	590	<1	3	<10	44.3	132	1.1
GWS_397_08	104	70	<1	230	<1	20	<10	79.2	84	0.8
GWS_400_08	33	18	<1	70	<1	5	<10	33.0	498	0.8
GWS_401_08	9	31	<1	960	<1	4	<10	44.5	8	1.1
*Rep GWS_401_08	11	42	<1	990	<1	6	<10	52.2	7	1.7
GWS_402_08	127	134	<1	60	<1	22	<10	173	576	1.7
GWS_403_08	32	13	<1	70	<1	3	<10	93.9	361	1.2
GWS_404_08	15	5	<1	60	<1	1	<10	36.9	245	0.7
GWS_405_08	18	9	<1	110	<1	2	<10	55.9	246	0.7
*Std MMISRM16	5	4	<1	460	<1	<1	<10	20.1	19	<0.5

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Order:

	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
*Std MMISRM16	6	4	<1	450	<1	<1	<10	20.1	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	0.6	<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
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5



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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_283_08	51	<1	285	20	440	12
*Rep GWS_283_08	53	<1	305	22	450	11
GWS_292_08	325	<1	329	24	1680	28
GWS_293_08	1240	<1	766	45	1130	36
GWS_294_08	844	2	1720	125	930	44
GWS_295_08	925	<1	561	33	1190	44
GWS_298_08	26	<1	54	5	960	36
GWS_299_08	11	<1	18	2	220	18
GWS_300_08	15	<1	72	7	510	93
GWS_301_08	5	<1	<5	<1	3240	<5
GWS_316_08	50	2	91	8	320	82
GWS_317_08	29	<1	112	10	1490	52
GWS_326_08	267	2	423	29	1810	81
GWS_327_08	276	<1	211	27	960	37
*Rep GWS_327_08	351	<1	420	39	1390	32
GWS_328_08	1090	2	166	12	200	30
GWS_329_08	350	1	373	31	320	77
GWS_332_08	17	<1	115	10	810	26
GWS_333_08	14	<1	53	4	530	45
GWS_334_08	35	<1	148	12	1470	31
GWS_335_08	137	<1	116	8	1070	25
GWS_360_08	1010	1	286	27	350	49
GWS_361_08	729	3	730	51	460	99
GWS_362_08	551	2	473	35	210	94
GWS_363_08	101	2	166	13	1030	65
GWS_366_08	49	2	41	4	180	49
GWS_367_08	48	1	78	7	1650	49
*Rep GWS_367_08	51	1	86	7	1530	54
GWS_368_08	209	<1	88	7	870	14
GWS_369_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
GWS_376_08	76	<1	71	14	110	86
GWS_377_08	115	<1	54	6	110	87
GWS_382_08	219	2	118	12	70	72
GWS_383_08	52	<1	133	11	510	36
GWS_394_08	1820	1	752	57	130	51
GWS_395_08	1560	1	600	50	490	49
GWS_396_08	16200	2	109	10	30	40
GWS_397_08	4870	1	896	60	410	44
GWS_400_08	29	<1	127	11	500	41
GWS_401_08	106	<1	106	7	750	29
*Rep GWS_401_08	111	<1	153	9	810	32
GWS_402_08	163	3	664	56	520	135
GWS_403_08	108	1	96	12	180	54
GWS_404_08	27	<1	27	3	210	25
GWS_405_08	63	<1	55	5	70	34
*Std MMISRM16	49	<1	9	<1	300	16

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	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
*Std MMISRM16	50	<1	9	<1	300	15
*Bik 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
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101356

To: **Logan Resources Ltd.**

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

Date: Aug 15, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 76
Date Submitted Jul 02, 2008
Report Comprises Pages 1 to 16
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 76 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
GWS_1_08	16	256	10	0.2	660	3	<10	6	62	162
*Rep GWS_1_08	13	214	<10	0.2	560	3	<10	3	44	154
GWS_70_8	8	105	<10	<0.1	1010	<1	400	16	22	51
GWS_71_8	23	134	<10	1.5	700	<1	240	8	29	8
GWS_72_8	9	124	<10	0.7	780	<1	250	15	49	67
GWS_73_8	3	268	<10	0.1	530	<1	<10	9	40	61
GWS_74_8	2	168	<10	<0.1	1420	1	110	5	37	264
GWS_75_8	46	249	80	3.8	270	6	10	26	1400	255
GWS_76_8	69	85	<10	1.1	150	<1	190	30	199	35
GWS_77_8	6	67	110	14.5	160	17	320	19	120	913
GWS_78_8	21	112	10	0.6	180	1	210	3	85	64
GWS_79_8	24	121	20	0.4	90	3	<10	<1	453	12
GWS_104_8	4	162	<10	<0.1	1260	<1	190	17	71	13
GWS_105_8	<1	51	<10	<0.1	480	1	160	19	8	154
*Rep GWS_105_8	<1	76	<10	<0.1	790	2	200	30	23	108
GWS_106_8	3	107	<10	0.2	520	<1	360	21	15	10
GWS_107_8	11	124	<10	0.5	350	<1	320	29	13	17
GWS_108_8	<1	96	<10	0.1	860	1	280	76	33	118
GWS_109_8	11	173	<10	1.0	560	2	140	92	96	115
GWS_110_8	17	17	<10	1.4	350	<1	540	19	<5	28
GWS_111_8	6	117	10	0.2	750	2	250	25	115	113
GWS_112_8	<1	87	10	0.2	570	<1	230	21	23	110
GWS_113_8	10	56	<10	0.4	40	<1	410	5	373	7
GWS_138_8	27	115	<10	0.2	970	<1	350	13	47	90
GWS_139_8	8	116	<10	<0.1	1870	<1	350	8	96	44
GWS_140_8	29	57	<10	0.4	1540	<1	470	9	29	15
GWS_141_8	<1	115	<10	<0.1	1480	1	290	76	21	40
*Rep GWS_141_8	<1	132	<10	<0.1	1260	1	250	39	29	32
GWS_142_8	33	25	70	5.1	360	<1	330	51	<5	70
GWS_143_8	12	167	30	1.5	1260	4	160	60	557	179
GWS_144_8	5	268	40	0.2	1410	9	60	23	143	75
GWS_145_8	74	19	60	2.8	300	<1	310	32	<5	101
GWS_146_8	<1	73	70	1.0	1030	2	220	17	44	688
GWS_147_8	4	147	100	2.1	880	19	190	14	100	137
GWS_172_8	6	122	<10	<0.1	1000	<1	350	7	13	29
GWS_173_8	5	210	<10	<0.1	1610	<1	120	14	89	89
GWS_174_8	3	104	<10	0.1	1750	<1	400	9	85	19
GWS_175_8	4	174	20	0.1	2040	<1	160	12	171	195
GWS_176_8	5	164	10	<0.1	1730	<1	160	13	185	60
GWS_177_8	5	224	20	<0.1	1710	<1	120	10	216	80
*Rep GWS_177_8	5	214	20	0.1	1600	<1	120	9	243	80
GWS_178_8	13	203	30	0.2	1410	1	140	18	239	100
GWS_179_8	8	15	100	1.0	520	2	320	9	37	184
GWS_180_8	5	121	60	0.1	1360	2	130	25	107	452
GWS_181_8	13	162	110	3.8	810	20	190	9	138	42
GWS_206_8	<1	111	10	<0.1	2160	<1	170	22	45	124

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
GWS_207_8	4	144	<10	<0.1	1670	<1	270	16	50	52
GWS_208_8	23	79	<10	0.3	1960	<1	430	6	49	10
Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
GWS_209_8	8	165	10	0.1	1320	<1	140	8	458	275
GWS_210_8	4	118	<10	<0.1	1360	<1	300	10	60	32
GWS_211_8	1	40	<10	0.2	830	<1	220	8	60	186
GWS_212_8	134	50	40	446	1090	5	490	31	134	49
GWS_213_8	<1	19	<10	0.3	260	<1	110	33	9	61
*Rep GWS_213_8	1	21	<10	0.2	320	<1	130	30	8	40
GWS_214_8	4	92	<10	0.2	310	<1	460	13	16	7
GWS_215_8	7	98	20	1.0	790	<1	380	44	168	18
GWS_274_8	3	126	10	0.1	1150	<1	160	11	120	468
GWS_275_8	<1	63	<10	<0.1	490	<1	380	45	30	32
GWS_276_8	<1	112	<10	<0.1	1410	<1	290	24	159	46
GWS_277_8	1	157	10	<0.1	1180	<1	140	40	144	37
GWS_278_8	<1	3	<10	0.2	160	<1	130	4	<5	165
GWS_279_8	14	137	10	0.5	1740	<1	270	16	320	75
GWS_280_8	<1	61	3950	7.1	2210	46	270	14	593	1290
GWS_281_8	3	264	30	0.1	600	3	<10	44	142	55
GWS_308_8	13	194	50	0.2	1010	2	<10	5	113	525
GWS_309_8	<1	113	20	<0.1	1170	1	60	23	56	218
*Rep GWS_309_8	<1	111	20	<0.1	1190	1	60	19	59	233
GWS_310_8	<1	108	10	<0.1	1850	<1	180	39	101	203
GWS_311_8	1	223	20	0.1	860	1	10	56	121	164
GWS_312_8	1	224	20	<0.1	1410	<1	40	42	135	119
GWS_313_8	<1	102	100	0.1	1020	4	100	4	38	197
GWS_314_8	<1	63	150	1.3	1020	4	230	4	103	456
GWS_315_8	2	38	<10	0.1	120	<1	230	17	<5	8
GWS_343_8	2	231	<10	<0.1	730	<1	30	5	38	79
GWS_344_8	<1	204	20	<0.1	760	1	50	18	40	80
GWS_345_8	1	219	20	<0.1	970	1	20	14	197	111
GWS_346_8	<1	174	20	0.2	440	3	<10	<1	24	58
GWS_347_8	<1	110	250	0.7	1480	34	110	2	137	140
GWS_348_8	10	137	30	1.1	920	3	270	36	408	165
*Rep GWS_348_8	17	131	30	1.4	1010	3	290	41	404	161
GWS_349_8	27	71	70	3.8	930	4	300	17	293	287
GWS_350_8	9	138	80	1.4	1550	4	170	10	94	141
GWS_351_8	3	222	90	0.3	910	8	30	23	149	98
*Std MMISRM16	19	44	20	32.8	100	<1	190	4	14	62
*Std MMISRM16	19	45	20	33.0	60	<1	200	4	15	62
*Std MMISRM16	19	44	20	33.1	90	<1	190	4	15	63
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Order:

	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5



Order:

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
GWS_1_08	<100	400	9	5.3	2.3	168	9	23	<5	1
*Rep GWS_1_08	<100	450	6	3.3	1.5	206	5	17	<5	1
GWS_70_8	<100	160	4	2.1	1.3	8	5	10	<5	<1
GWS_71_8	<100	440	24	13.0	7.9	7	29	34	<5	2
GWS_72_8	<100	230	9	4.9	2.5	12	12	19	<5	3
GWS_73_8	<100	300	15	8.9	2.6	59	10	16	<5	1
GWS_74_8	<100	40	26	30.0	2.2	80	11	15	<5	8
GWS_75_8	<100	1990	281	141	99.0	39	388	439	<5	<1
GWS_76_8	<100	1270	132	64.4	40.9	9	210	150	<5	2
GWS_77_8	<100	1790	10	5.8	5.0	34	16	46	<5	11
GWS_78_8	<100	1090	18	9.4	10.7	43	29	43	<5	9
GWS_79_8	<100	410	38	16.8	15.8	141	59	170	<5	<1
GWS_104_8	<100	170	23	12.7	5.5	20	25	33	<5	4
GWS_105_8	<100	20	7	8.1	0.7	51	4	4	<5	6
*Rep GWS_105_8	<100	40	15	12.3	2.2	62	10	10	<5	6
GWS_106_8	<100	80	5	2.6	1.1	6	5	10	<5	3
GWS_107_8	<100	700	8	5.0	1.5	6	8	17	<5	2
GWS_108_8	<100	30	12	10.2	1.3	45	8	12	<5	11
GWS_109_8	<100	340	26	14.8	5.9	34	29	41	<5	5
GWS_110_8	<100	870	3	1.8	0.7	6	4	3	<5	8
GWS_111_8	<100	540	17	8.9	6.5	46	19	34	<5	12
GWS_112_8	<100	380	6	4.6	1.8	61	6	9	<5	8
GWS_113_8	<100	1750	34	21.5	23.3	17	56	92	9	23
GWS_138_8	<100	320	12	5.6	4.4	13	18	29	<5	1
GWS_139_8	<100	190	33	15.3	12.4	17	51	55	<5	6
GWS_140_8	<100	360	21	8.4	8.1	10	40	43	<5	10
GWS_141_8	<100	30	10	7.7	1.2	54	7	8	<5	13
*Rep GWS_141_8	<100	30	13	8.2	2.4	63	11	10	<5	10
GWS_142_8	<100	1600	7	4.8	1.0	11	6	<1	<5	4
GWS_143_8	<100	720	157	88.5	34.9	64	174	309	<5	8
GWS_144_8	<100	320	29	12.7	6.4	29	30	46	<5	6
GWS_145_8	<100	1420	3	2.0	<0.5	6	2	<1	<5	4
GWS_146_8	<100	3420	11	7.2	2.6	159	10	22	<5	12
GWS_147_8	<100	190	13	6.2	4.9	60	19	44	<5	7
GWS_172_8	<100	60	5	2.4	1.2	26	7	6	7	11
GWS_173_8	<100	90	21	9.4	4.6	74	25	29	<5	9
GWS_174_8	<100	150	27	11.6	8.0	15	44	49	<5	11
GWS_175_8	<100	120	17	6.8	4.6	72	24	43	<5	14
GWS_176_8	<100	130	15	6.6	4.1	94	20	51	6	21
GWS_177_8	<100	160	21	8.9	5.9	88	29	87	<5	11
*Rep GWS_177_8	<100	170	20	8.3	6.2	86	29	97	<5	10
GWS_178_8	<100	330	80	35.7	17.8	46	94	169	<5	13
GWS_179_8	<100	7010	11	6.0	3.2	39	15	13	<5	11
GWS_180_8	<100	510	8	4.1	2.2	83	9	30	<5	7
GWS_181_8	<100	290	35	16.4	11.6	18	45	100	<5	10
GWS_206_8	<100	160	11	5.3	2.3	78	12	15	<5	7

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Order:

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
GWS_207_8	<100	130	15	6.9	3.0	34	17	19	<5	13
GWS_208_8	<100	210	17	6.7	6.8	12	32	66	<5	10
Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
GWS_209_8	<100	520	27	11.3	7.4	69	37	115	<5	5
GWS_210_8	<100	30	9	4.4	1.9	56	10	16	<5	14
GWS_211_8	<100	670	4	2.0	1.4	22	7	23	<5	9
GWS_212_8	<100	3180	22	9.8	12.4	19	45	123	<5	16
GWS_213_8	<100	80	2	2.2	<0.5	16	2	4	<5	15
*Rep GWS_213_8	<100	140	3	2.9	<0.5	13	2	5	<5	12
GWS_214_8	<100	70	3	1.4	0.6	7	3	7	<5	5
GWS_215_8	<100	60	29	14.7	8.6	25	36	77	<5	17
GWS_274_8	<100	510	11	5.2	2.5	140	12	26	<5	6
GWS_275_8	<100	30	9	4.9	1.9	17	11	11	5	4
GWS_276_8	<100	90	43	21.2	9.1	57	48	77	5	12
GWS_277_8	<100	60	24	11.3	6.4	45	31	80	<5	6
GWS_278_8	<100	460	<1	<0.5	<0.5	7	<1	<1	<5	3
GWS_279_8	<100	340	44	22.2	11.4	21	57	169	<5	7
GWS_280_8	<100	1360	37	18.4	13.2	221	54	231	<5	12
GWS_281_8	<100	220	20	8.8	4.5	45	20	43	<5	<1
GWS_308_8	<100	740	12	5.7	2.9	236	14	47	<5	2
GWS_309_8	<100	220	9	4.9	1.9	212	9	34	<5	3
*Rep GWS_309_8	<100	210	9	5.2	1.9	217	9	33	<5	3
GWS_310_8	<100	230	18	9.9	3.7	116	19	46	<5	6
GWS_311_8	<100	170	29	12.9	4.1	118	22	39	<5	3
GWS_312_8	<100	160	29	13.3	6.3	53	30	64	<5	4
GWS_313_8	<100	500	4	2.4	1.2	221	5	24	<5	4
GWS_314_8	<100	600	9	5.0	2.5	118	12	37	<5	8
GWS_315_8	<100	60	<1	0.7	<0.5	4	<1	<1	<5	2
GWS_343_8	<100	140	22	12.4	2.9	78	16	15	<5	3
GWS_344_8	<100	110	13	7.5	1.8	154	9	17	<5	6
GWS_345_8	<100	130	51	21.8	10.8	73	53	92	<5	4
GWS_346_8	<100	30	2	1.8	<0.5	147	2	13	6	<1
GWS_347_8	<100	410	14	7.3	3.5	286	16	70	<5	3
GWS_348_8	<100	320	42	19.8	14.1	37	65	167	<5	6
*Rep GWS_348_8	<100	310	45	20.9	14.1	35	69	171	<5	7
GWS_349_8	<100	2710	25	12.1	11.0	44	47	193	<5	6
GWS_350_8	<100	450	20	10.4	4.9	35	21	58	<5	6
GWS_351_8	<100	230	29	14.3	6.8	99	29	94	<5	1
*Std MMISRM16	<100	660	2	0.7	0.8	2	4	4	<5	30
*Std MMISRM16	<100	660	2	0.7	0.9	2	4	4	<5	30
*Std MMISRM16	<100	670	2	0.7	0.9	2	4	4	<5	30
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	2	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Order:

	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
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	1	<5	<1



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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_1_08	<5	2.5	26	120	1070	<1	7	<1	158	2
*Rep GWS_1_08	<5	1.8	17	104	930	<1	4	<1	147	2
GWS_70_8	<5	<0.5	15	152	30	<1	4	<1	30	<1
GWS_71_8	<5	<0.5	71	59	70	<1	14	<1	151	<1
GWS_72_8	<5	<0.5	37	145	230	<1	8	<1	152	1
GWS_73_8	<5	1.1	22	141	310	<1	5	<1	53	<1
GWS_74_8	<5	0.6	22	95	540	<1	5	<1	21	<1
GWS_75_8	11	1.5	1250	454	1920	2	247	<1	115	3
GWS_76_8	<5	<0.5	641	116	230	<1	112	<1	433	2
GWS_77_8	<5	<0.5	77	781	70	<1	18	<1	35	2
GWS_78_8	<5	<0.5	109	336	60	<1	21	<1	28	<1
GWS_79_8	<5	<0.5	282	15	490	4	69	<1	296	11
GWS_104_8	<5	<0.5	58	169	260	<1	12	<1	233	<1
GWS_105_8	<5	<0.5	6	48	250	<1	2	<1	10	<1
*Rep GWS_105_8	<5	<0.5	19	59	350	<1	4	<1	12	<1
GWS_106_8	<5	<0.5	14	108	130	<1	3	<1	72	<1
GWS_107_8	<5	<0.5	23	201	470	<1	5	<1	73	<1
GWS_108_8	<5	<0.5	18	68	490	<1	4	<1	86	<1
GWS_109_8	<5	<0.5	74	232	1860	<1	16	<1	201	<1
GWS_110_8	<5	<0.5	6	237	60	<1	1	<1	127	<1
GWS_111_8	<5	<0.5	70	379	90	<1	16	<1	39	<1
GWS_112_8	<5	<0.5	16	356	30	<1	4	<1	31	1
GWS_113_8	<5	<0.5	192	1190	<10	<1	37	<1	11	<1
GWS_138_8	<5	<0.5	55	135	70	<1	12	<1	118	<1
GWS_139_8	<5	<0.5	129	250	210	<1	24	<1	80	<1
GWS_140_8	<5	<0.5	110	129	70	<1	21	<1	43	<1
GWS_141_8	<5	<0.5	13	40	2980	<1	3	<1	30	<1
*Rep GWS_141_8	<5	0.6	20	63	2070	<1	4	<1	26	<1
GWS_142_8	<5	<0.5	<1	711	270	<1	<1	<1	39	<1
GWS_143_8	<5	<0.5	515	516	1000	<1	115	<1	112	4
GWS_144_8	<5	0.7	83	230	1090	<1	18	<1	260	<1
GWS_145_8	<5	<0.5	<1	235	60	<1	<1	<1	21	<1
GWS_146_8	<5	<0.5	30	413	60	<1	7	<1	16	3
GWS_147_8	<5	<0.5	62	325	80	<1	15	<1	66	1
GWS_172_8	<5	<0.5	11	96	120	<1	2	<1	60	<1
GWS_173_8	<5	1.0	54	447	550	<1	11	<1	182	<1
GWS_174_8	<5	<0.5	92	196	280	<1	19	<1	72	<1
GWS_175_8	<5	1.1	64	316	1120	<1	14	<1	231	1
GWS_176_8	<5	1.7	65	215	190	<1	16	<1	320	2
GWS_177_8	<5	2.2	106	170	370	<1	26	<1	379	4
*Rep GWS_177_8	<5	2.2	118	151	350	<1	28	<1	373	4
GWS_178_8	<5	0.6	299	346	1530	<1	63	<1	266	2
GWS_179_8	13	0.5	44	601	130	<1	8	<1	21	8
GWS_180_8	5	0.6	32	214	650	<1	8	<1	205	2
GWS_181_8	<5	<0.5	138	60	530	<1	31	<1	90	1
GWS_206_8	<5	0.9	24	225	270	<1	5	<1	128	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_207_8	<5	<0.5	31	180	380	<1	7	<1	175	<1
GWS_208_8	<5	<0.5	117	100	60	<1	25	<1	119	<1
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_209_8	<5	0.6	139	210	240	<1	35	<1	273	3
GWS_210_8	<5	0.5	26	113	180	<1	6	<1	91	<1
GWS_211_8	6	<0.5	32	153	40	<1	8	<1	65	2
GWS_212_8	<5	<0.5	176	459	70	<1	38	<1	30	1
GWS_213_8	<5	<0.5	4	135	110	<1	1	<1	76	<1
*Rep GWS_213_8	<5	<0.5	5	157	100	<1	2	<1	66	<1
GWS_214_8	<5	<0.5	9	236	30	<1	2	<1	11	<1
GWS_215_8	<5	<0.5	119	177	320	<1	27	<1	53	<1
GWS_274_8	8	1.1	37	155	130	<1	9	<1	163	1
GWS_275_8	<5	<0.5	19	66	220	<1	4	<1	11	<1
GWS_276_8	<5	<0.5	127	258	480	<1	28	<1	25	<1
GWS_277_8	<5	1.3	108	86	290	<1	25	<1	168	1
GWS_278_8	6	<0.5	<1	129	<10	<1	<1	<1	118	1
GWS_279_8	<5	<0.5	201	194	330	<1	49	<1	269	1
GWS_280_8	18	<0.5	310	159	160	<1	74	<1	78	10
GWS_281_8	<5	1.2	62	118	390	<1	14	<1	155	1
GWS_308_8	<5	4.5	45	119	160	<1	12	<1	186	1
GWS_309_8	<5	2.0	31	72	40	<1	8	<1	82	<1
*Rep GWS_309_8	<5	1.8	32	70	40	<1	8	<1	110	1
GWS_310_8	<5	0.6	58	178	180	<1	14	<1	104	1
GWS_311_8	<5	2.1	55	166	560	<1	13	<1	177	<1
GWS_312_8	<5	0.8	97	87	900	<1	22	<1	139	<1
GWS_313_8	8	1.3	22	84	30	<1	6	<1	124	1
GWS_314_8	6	<0.5	48	108	140	<1	12	<1	157	1
GWS_315_8	<5	<0.5	<1	97	30	<1	<1	<1	31	<1
GWS_343_8	<5	1.0	30	62	360	<1	6	<1	84	<1
GWS_344_8	<5	1.9	23	96	530	<1	6	<1	85	<1
GWS_345_8	<5	1.4	157	90	480	<1	34	<1	173	1
GWS_346_8	<5	1.0	6	41	20	<1	2	<1	153	<1
GWS_347_8	5	1.5	69	119	160	<1	18	<1	66	4
GWS_348_8	<5	0.5	250	245	1530	<1	57	<1	194	3
*Rep GWS_348_8	<5	<0.5	259	253	1600	<1	59	<1	191	2
GWS_349_8	9	<0.5	262	269	160	<1	62	<1	140	11
GWS_350_8	<5	<0.5	67	76	330	<1	16	<1	140	2
GWS_351_8	6	2.6	101	61	390	<1	25	<1	103	2
*Std MMISRM16	60	<0.5	10	243	60	28	2	<1	338	<1
*Std MMISRM16	60	<0.5	11	242	70	28	2	<1	349	<1
*Std MMISRM16	60	<0.5	10	241	60	28	2	<1	347	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Order:

	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
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1



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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_1_08	32	8	2	40	<1	2	<10	50.3	846	3.4
*Rep GWS_1_08	22	5	1	40	<1	<1	<10	35.5	572	3.8
GWS_70_8	<5	5	1	1060	<1	<1	<10	4.6	6	0.8
GWS_71_8	14	22	<1	630	<1	4	<10	14.0	14	1.1
GWS_72_8	6	11	<1	860	<1	2	<10	21.7	46	0.9
GWS_73_8	23	8	1	60	<1	2	<10	13.6	229	1.2
GWS_74_8	28	7	1	450	<1	3	<10	19.5	123	0.8
GWS_75_8	122	335	<1	20	<1	54	<10	133	778	1.6
GWS_76_8	19	184	<1	640	<1	27	<10	21.0	30	3.4
GWS_77_8	5	15	<1	380	<1	2	<10	17.4	16	1.0
GWS_78_8	11	28	2	110	<1	4	<10	38.2	83	0.6
GWS_79_8	83	59	5	10	<1	8	<10	229	256	3.1
GWS_104_8	28	18	3	450	<1	4	<10	27.5	108	1.1
GWS_105_8	<5	2	<1	420	<1	<1	<10	3.2	42	0.5
*Rep GWS_105_8	13	7	<1	530	<1	2	<10	6.7	85	0.5
GWS_106_8	<5	4	<1	470	<1	<1	<10	4.5	12	<0.5
GWS_107_8	9	6	<1	380	<1	1	<10	7.7	<3	0.7
GWS_108_8	14	6	<1	550	<1	2	<10	14.9	50	0.5
GWS_109_8	19	22	<1	240	<1	4	<10	24.0	93	1.3
GWS_110_8	<5	3	<1	1040	<1	<1	<10	2.9	3	0.8
GWS_111_8	18	17	<1	310	<1	3	<10	55.3	36	0.5
GWS_112_8	13	5	<1	190	<1	<1	<10	14.7	56	0.5
GWS_113_8	<5	48	<1	660	<1	7	<10	13.9	<3	<0.5
GWS_138_8	7	16	<1	740	<1	2	<10	12.8	8	0.6
GWS_139_8	10	42	<1	1020	<1	7	<10	23.4	35	<0.5
GWS_140_8	<5	34	<1	1440	<1	5	<10	39.1	<3	<0.5
GWS_141_8	15	5	<1	780	<1	1	<10	10.3	111	0.5
*Rep GWS_141_8	22	7	<1	580	<1	2	<10	15.5	154	<0.5
GWS_142_8	5	2	<1	1070	<1	<1	<10	7.5	8	<0.5
GWS_143_8	73	141	<1	600	<1	27	<10	110	121	1.6
GWS_144_8	31	24	<1	310	<1	5	<10	49.0	265	1.3
GWS_145_8	<5	<1	<1	1050	<1	<1	<10	1.9	<3	<0.5
GWS_146_8	22	8	<1	640	<1	2	<10	26.4	36	1.2
GWS_147_8	28	15	<1	220	<1	3	<10	52.3	132	0.6
GWS_172_8	<5	5	<1	980	<1	<1	<10	4.2	46	<0.5
GWS_173_8	33	18	<1	370	<1	4	<10	38.4	344	0.6
GWS_174_8	5	30	2	940	<1	6	<10	18.5	16	<0.5
GWS_175_8	27	19	<1	350	<1	3	<10	61.3	376	1.0
GWS_176_8	24	18	<1	320	<1	3	<10	50.5	483	0.8
GWS_177_8	37	26	<1	280	<1	4	<10	63.6	647	1.2
*Rep GWS_177_8	36	28	<1	260	<1	4	<10	68.5	701	1.3
GWS_178_8	37	78	<1	460	<1	14	<10	75.9	180	1.6
GWS_179_8	8	13	<1	720	<1	2	<10	47.7	7	1.0
GWS_180_8	24	8	<1	320	<1	1	<10	40.3	186	0.9
GWS_181_8	39	36	<1	410	<1	6	<10	73.7	63	0.6
GWS_206_8	18	9	<1	530	<1	2	<10	21.6	330	0.6

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_207_8	15	11	<1	670	<1	3	<10	21.3	102	<0.5
GWS_208_8	6	29	<1	1100	<1	4	<10	27.0	<3	<0.5
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_209_8	28	33	<1	320	<1	5	<10	46.6	186	1.7
GWS_210_8	14	8	<1	680	<1	2	<10	9.1	103	0.5
GWS_211_8	<5	6	<1	570	<1	<1	<10	13.8	9	0.7
GWS_212_8	7	40	<1	1070	<1	5	<10	27.2	<3	<0.5
GWS_213_8	5	1	<1	150	<1	<1	<10	1.4	<3	<0.5
*Rep GWS_213_8	<5	2	<1	190	<1	<1	<10	1.5	<3	<0.5
GWS_214_8	<5	3	<1	1140	<1	<1	<10	3.9	7	<0.5
GWS_215_8	27	32	<1	800	<1	5	<10	24.8	7	<0.5
GWS_274_8	23	10	<1	450	<1	2	<10	30.0	336	1.0
GWS_275_8	<5	7	<1	1070	<1	2	<10	3.0	5	<0.5
GWS_276_8	29	37	<1	900	<1	8	<10	27.4	30	<0.5
GWS_277_8	34	27	<1	270	<1	5	<10	34.6	492	0.7
GWS_278_8	<5	<1	<1	90	<1	<1	<10	<0.5	<3	0.6
GWS_279_8	42	49	<1	610	<1	8	<10	44.1	38	1.1
GWS_280_8	82	59	<1	990	<1	7	<10	112	110	1.5
GWS_281_8	27	17	<1	50	<1	4	<10	49.0	344	0.9
GWS_308_8	26	12	<1	60	<1	2	<10	59.0	1440	1.3
GWS_309_8	22	8	<1	300	<1	1	<10	23.0	576	0.6
*Rep GWS_309_8	23	8	<1	320	<1	1	<10	23.3	593	0.6
GWS_310_8	22	16	<1	700	<1	3	<10	24.7	164	0.6
GWS_311_8	35	17	<1	50	<1	4	<10	58.6	533	0.8
GWS_312_8	33	25	<1	230	<1	5	<10	52.7	301	0.7
GWS_313_8	13	5	<1	340	<1	<1	<10	26.7	383	0.9
GWS_314_8	22	11	<1	660	<1	2	<10	17.4	43	0.9
GWS_315_8	<5	<1	<1	980	<1	<1	<10	1.7	<3	<0.5
GWS_343_8	28	10	<1	170	<1	3	<10	22.3	306	0.9
GWS_344_8	17	7	<1	270	<1	2	<10	36.5	547	0.6
GWS_345_8	42	43	<1	130	<1	9	<10	41.0	424	1.0
GWS_346_8	15	2	<1	90	<1	<1	<10	23.2	308	1.0
GWS_347_8	26	15	<1	500	<1	2	<10	40.6	436	1.2
GWS_348_8	33	59	<1	520	<1	9	<10	79.2	106	1.2
*Rep GWS_348_8	33	64	<1	580	<1	9	<10	74.0	90	1.3
GWS_349_8	12	51	<1	630	<1	6	<10	56.3	31	1.7
GWS_350_8	34	17	<1	410	<1	3	<10	34.6	161	1.1
GWS_351_8	32	24	<1	120	<1	5	<10	46.9	652	1.4
*Std MMISRM16	6	4	<1	430	<1	<1	<10	19.7	<3	<0.5
*Std MMISRM16	7	4	<1	430	<1	<1	<10	19.5	<3	<0.5
*Std MMISRM16	6	4	<1	430	<1	<1	<10	19.9	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Order:

	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
*BIK BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5



Order:

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_1_08	14	<1	38	4	120	122
*Rep GWS_1_08	10	<1	23	2	70	86
GWS_70_8	9	<1	25	2	80	8
GWS_71_8	40	<1	142	10	290	25
GWS_72_8	23	<1	44	4	430	35
GWS_73_8	10	<1	70	7	600	39
GWS_74_8	11	<1	170	30	190	28
GWS_75_8	190	2	1410	106	970	375
GWS_76_8	58	<1	769	43	420	41
GWS_77_8	72	<1	63	5	630	17
GWS_78_8	41	<1	95	6	240	44
GWS_79_8	29	<1	202	13	120	1090
GWS_104_8	19	<1	141	10	530	42
GWS_105_8	8	<1	59	9	2350	10
*Rep GWS_105_8	12	<1	108	11	2810	21
GWS_106_8	10	<1	32	2	270	10
GWS_107_8	20	<1	58	4	200	7
GWS_108_8	19	<1	81	10	4370	14
GWS_109_8	34	<1	158	11	1130	30
GWS_110_8	17	<1	20	1	360	7
GWS_111_8	69	<1	86	7	1430	27
GWS_112_8	32	<1	42	4	1640	24
GWS_113_8	193	<1	250	17	500	18
GWS_138_8	15	<1	68	4	90	17
GWS_139_8	26	<1	195	11	170	42
GWS_140_8	58	<1	104	6	100	28
GWS_141_8	12	<1	58	7	2160	22
*Rep GWS_141_8	13	<1	76	6	1770	28
GWS_142_8	95	<1	42	4	640	10
GWS_143_8	88	2	941	68	3160	104
GWS_144_8	22	<1	126	8	720	69
GWS_145_8	20	<1	18	2	130	6
GWS_146_8	132	<1	77	7	160	42
GWS_147_8	31	<1	66	5	1690	64
GWS_172_8	8	<1	27	2	460	17
GWS_173_8	15	<1	96	7	630	55
GWS_174_8	39	<1	141	8	260	33
GWS_175_8	21	<1	61	5	770	98
GWS_176_8	14	<1	64	5	900	85
GWS_177_8	17	<1	89	6	490	117
*Rep GWS_177_8	17	<1	85	5	400	123
GWS_178_8	42	<1	406	23	620	69
GWS_179_8	78	2	65	5	20	36
GWS_180_8	20	<1	38	4	1010	51
GWS_181_8	72	<1	186	12	210	64
GWS_206_8	9	<1	51	4	860	35

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Order:

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_207_8	16	<1	66	5	850	38
GWS_208_8	23	<1	87	4	70	15
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_209_8	20	<1	115	8	210	46
GWS_210_8	10	<1	47	3	290	18
GWS_211_8	32	<1	23	2	200	8
GWS_212_8	62	<1	135	6	760	18
GWS_213_8	26	<1	15	3	2650	<5
*Rep GWS_213_8	21	<1	23	3	1680	<5
GWS_214_8	18	<1	19	1	150	6
GWS_215_8	28	<1	166	11	1460	21
GWS_274_8	33	<1	48	4	390	44
GWS_275_8	16	<1	55	4	320	5
GWS_276_8	37	<1	252	15	660	23
GWS_277_8	14	<1	123	8	1960	53
GWS_278_8	8	<1	<5	<1	80	<5
GWS_279_8	57	<1	258	16	490	30
GWS_280_8	42	2	204	16	100	51
GWS_281_8	13	<1	79	6	1530	52
GWS_308_8	22	1	48	4	80	63
GWS_309_8	20	<1	42	4	140	40
*Rep GWS_309_8	19	1	43	4	130	38
GWS_310_8	24	<1	105	8	760	27
GWS_311_8	22	<1	110	9	1580	57
GWS_312_8	27	<1	135	9	1910	32
GWS_313_8	17	2	23	2	70	26
GWS_314_8	39	<1	56	4	100	16
GWS_315_8	24	<1	6	<1	130	<5
GWS_343_8	17	<1	108	9	140	36
GWS_344_8	11	<1	61	6	230	40
GWS_345_8	28	<1	241	15	240	49
GWS_346_8	10	<1	11	4	<20	9
GWS_347_8	30	<1	70	6	70	57
GWS_348_8	42	<1	217	15	430	65
*Rep GWS_348_8	44	<1	237	16	580	61
GWS_349_8	51	<1	146	9	130	38
GWS_350_8	52	<1	106	8	380	35
GWS_351_8	27	<1	147	10	520	117
*Std MMISRM16	50	<1	8	<1	290	15
*Std MMISRM16	49	<1	9	<1	290	14
*Std MMISRM16	49	<1	9	<1	270	15
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Order:

	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
*BIK BLANK	<1	<1	<5	<1	<20	<5



Certificate of Analysis

Work Order: TO101357

To: **Logan Resources Ltd.**

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

Date: Aug 27, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 66
Date Submitted Jul 02, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 66 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_103_08	1	258	<10	<0.1	630	<1	<10	17	18	52
*Rep CHYS_103_08	1	250	<10	<0.1	640	<1	<10	21	16	54
CHYS_104_08	3	243	<10	<0.1	1740	<1	70	12	47	48
CHYS_105_08	9	77	<10	<0.1	2210	<1	270	9	108	31
CHYS_125_08	8	259	<10	<0.1	790	<1	20	20	144	106
CHYS_126_08	5	>300	<10	<0.1	410	<1	<10	4	58	47
CHYS_127_08	2	292	<10	<0.1	500	<1	<10	17	44	34
CHYS_148_08	6	227	<10	<0.1	1320	<1	70	10	26	68
CHYS_149_08	2	161	<10	<0.1	3250	<1	200	12	156	38
CHYS_150_08	<1	66	<10	<0.1	1510	<1	370	14	41	93
CHYS_151_08	13	108	<10	<0.1	2080	<1	180	10	78	143
CHYS_152_08	19	88	20	<0.1	1680	<1	170	6	120	299
CHYS_170_08	11	291	10	<0.1	950	<1	20	5	106	64
CHYS_171_08	5	295	<10	<0.1	810	<1	10	13	126	64
*Rep CHYS_171_08	4	>300	10	<0.1	900	<1	10	14	127	80
CHYS_172_08	2	144	<10	<0.1	830	<1	240	35	62	37
CHYS_173_08	8	94	<10	<0.1	1280	<1	400	11	18	<5
CHYS_174_08	64	31	<10	<0.1	1190	<1	380	31	213	247
CHYS_191_08	1	242	10	<0.1	360	<1	10	<1	9	128
CHYS_192_08	8	130	<10	<0.1	2740	<1	210	48	47	53
CHYS_193_08	<1	84	10	<0.1	2100	<1	160	9	15	301
CHYS_194_08	18	154	<10	<0.1	1070	<1	230	13	31	38
CHYS_195_08	11	139	<10	<0.1	1720	<1	280	16	120	24
CHYS_196_08	<1	216	<10	<0.1	820	2	80	18	39	80
CHYS_197_08	4	204	<10	<0.1	690	<1	40	20	32	334
CHYS_206_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_214_08	10	175	90	0.2	1300	2	40	5	67	320
*Rep CHYS_214_08	12	201	90	0.2	1420	3	30	7	81	368
CHYS_215_08	3	281	10	<0.1	870	<1	10	22	104	110
CHYS_216_08	5	95	<10	0.1	850	<1	370	21	37	17
CHYS_217_08	11	284	100	0.2	530	2	30	17	143	152
CHYS_218_08	11	129	<10	<0.1	1790	<1	320	8	91	119
CHYS_219_08	39	134	10	6.1	1900	1	390	57	3580	37
CHYS_257_08	8	150	<10	<0.1	900	<1	60	<1	15	178
CHYS_258_08	2	222	10	<0.1	720	1	20	5	22	171
CHYS_259_08	3	288	30	0.2	1560	1	20	48	254	348
CHYS_261_08	<1	10	<10	<0.1	50	<1	160	16	<5	55
CHYS_262_08	3	231	20	0.1	340	<1	20	14	338	21
CHYS_263_08	8	185	170	2.6	1020	17	40	2	155	354
CHYS_279_08	<1	115	<10	<0.1	530	<1	290	20	20	21
*Rep CHYS_279_08	<1	115	<10	<0.1	460	<1	280	19	16	23
CHYS_280_08	<1	15	<10	<0.1	80	<1	170	24	<5	24
CHYS_281_08	<1	65	<10	<0.1	650	<1	100	3	12	147
CHYS_282_08	5	33	<10	<0.1	340	<1	330	8	38	33
CHYS_283_08	<1	181	<10	<0.1	1090	<1	40	26	98	143
CHYS_284_08	15	245	20	0.2	700	<1	50	34	313	41

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Order:

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_285_08	1	162	10	<0.1	520	2	20	2	10	14
CHYS_317_08	2	236	20	<0.1	810	1	10	13	44	107
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
CHYS_318_08	2	148	100	<0.1	810	3	20	<1	27	30
CHYS_340_08	<1	63	1310	0.5	1140	8	230	11	213	197
CHYS_363_08	39	93	30	12.9	1430	1	370	199	1530	389
CHYS_386_08	403	50	30	3.7	1000	<1	430	361	1030	40
CHYS_413_08	8	245	20	2.8	1820	<1	110	27	73	611
*Rep CHYS_413_08	15	237	20	1.9	1850	<1	110	27	68	467
CHYS_445_08	25	105	50	2.2	1640	<1	280	66	226	441
CHYS_478_08	6	116	270	1.3	1550	14	80	5	68	285
CHYS_514_08	7	130	20	<0.1	1600	<1	110	2	32	201
CHYS_549_08	<1	154	20	<0.1	750	<1	160	69	116	63
CHYS_583_08	9	>300	30	0.3	680	1	10	24	86	115
CHYS_616_08	64	>300	20	0.6	1130	1	20	46	164	54
CHYS_646_08	144	36	10	13.4	1630	<1	370	64	115	17
CHYS_675_08	3	204	<10	<0.1	1260	<1	130	28	51	254
CHYS_703_08	2	242	<10	<0.1	2390	<1	150	26	380	78
CHYS_731_08	<1	210	<10	<0.1	1070	<1	20	3	8	42
CHYS_759_08	9	232	<10	<0.1	1790	<1	80	41	135	90
CHYS_787_08	41	164	60	0.7	840	1	130	27	275	102
*Rep CHYS_787_08	33	162	50	1.0	820	1	120	31	202	119
CHYS_19_08	1	58	<10	<0.1	1500	<1	360	10	21	140
CHYS_95_08	<1	143	10	<0.1	2750	1	80	98	119	495
CHYS_256_08	1	225	<10	<0.1	2870	<1	90	32	94	231
CHYS_260_08	29	62	20	0.9	1440	<1	350	23	134	31
CHYS_353_08	2	196	<10	0.3	1460	<1	50	26	85	475
*Std MMISRM16	18	45	10	31.3	80	<1	190	4	10	55
*Std MMISRM16	18	47	20	32.0	80	<1	210	4	28	57
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	6	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_103_08	<100	100	14	10.0	1.3	128	7	8	<5	2
*Rep CHYS_103_08	<100	110	15	11.0	1.2	124	7	7	<5	2
CHYS_104_08	<100	130	43	20.3	8.4	85	43	14	<5	10
CHYS_105_08	<100	170	62	23.0	22.1	26	110	38	<5	40
CHYS_125_08	<100	170	29	11.0	8.5	56	41	48	<5	2
CHYS_126_08	<100	170	34	13.6	6.5	47	35	16	<5	1
CHYS_127_08	<100	120	21	10.1	4.0	44	19	13	<5	1
CHYS_148_08	<100	90	11	4.7	1.9	90	11	9	<5	23
CHYS_149_08	<100	180	194	87.9	51.4	42	271	74	<5	18
CHYS_150_08	<100	40	15	8.5	3.6	19	18	9	<5	16
CHYS_151_08	<100	460	34	13.5	9.7	67	51	31	<5	46
CHYS_152_08	<100	2120	20	8.1	6.4	39	33	35	<5	59
CHYS_170_08	<100	170	22	8.3	5.9	70	29	29	<5	2
CHYS_171_08	<100	180	60	26.7	13.1	62	71	35	<5	2
*Rep CHYS_171_08	<100	180	60	26.8	12.9	72	70	36	<5	2
CHYS_172_08	<100	70	21	12.6	3.7	50	17	14	<5	2
CHYS_173_08	<100	60	4	2.1	1.4	11	6	7	<5	58
CHYS_174_08	<100	1420	37	15.6	19.2	39	68	106	<5	25
CHYS_191_08	<100	170	2	1.3	<0.5	196	1	4	<5	4
CHYS_192_08	<100	180	36	19.2	7.6	35	39	23	<5	67
CHYS_193_08	<100	620	19	10.3	3.5	264	19	12	<5	10
CHYS_194_08	<100	80	23	8.5	5.8	63	34	13	<5	36
CHYS_195_08	<100	130	64	27.3	19.5	30	92	57	<5	15
CHYS_196_08	<100	70	21	12.2	3.9	68	17	14	<5	3
CHYS_197_08	<100	200	21	13.2	2.9	40	13	12	<5	3
CHYS_206_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_214_08	<100	970	12	7.5	2.5	262	11	31	<5	5
*Rep CHYS_214_08	<100	900	17	10.7	3.3	251	14	37	<5	5
CHYS_215_08	<100	170	33	14.9	6.2	106	33	43	<5	4
CHYS_216_08	<100	200	22	11.2	5.2	9	29	18	27	93
CHYS_217_08	<100	240	16	7.9	4.8	70	19	56	<5	2
CHYS_218_08	<100	160	39	17.5	10.1	32	55	55	<5	7
CHYS_219_08	<100	430	445	199	149	19	741	2500	<5	39
CHYS_257_08	<100	280	3	3.0	0.6	197	3	4	<5	5
CHYS_258_08	<100	130	5	6.8	0.7	142	3	7	<5	5
CHYS_259_08	<100	400	74	35.8	15.7	81	73	107	<5	4
CHYS_261_08	<100	20	2	2.7	<0.5	6	1	<1	<5	12
CHYS_262_08	<100	440	112	53.4	24.1	18	108	229	<5	<1
CHYS_263_08	<100	950	43	30.6	6.3	161	30	84	<5	1
CHYS_279_08	<100	140	27	18.6	4.3	32	20	14	<5	5
*Rep CHYS_279_08	<100	150	23	17.3	3.0	33	15	11	<5	5
CHYS_280_08	<100	10	<1	0.6	<0.5	4	<1	<1	<5	6
CHYS_281_08	<100	20	9	8.1	0.8	109	4	5	<5	4
CHYS_282_08	<100	770	5	2.6	1.7	23	8	20	<5	5
CHYS_283_08	<100	250	47	24.7	7.4	96	38	39	<5	4
CHYS_284_08	<100	310	69	35.0	18.2	19	84	157	<5	1

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_285_08	<100	390	1	1.2	<0.5	182	1	6	<5	6
CHYS_317_08	<100	60	17	10.9	2.4	98	11	19	<5	2
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
CHYS_318_08	<100	420	7	4.4	0.9	220	4	13	<5	3
CHYS_340_08	<100	120	27	14.9	7.3	156	35	119	<5	22
CHYS_363_08	<100	1680	151	77.0	44.4	31	195	656	<5	40
CHYS_386_08	<100	910	101	50.3	36.7	21	148	437	6	85
CHYS_413_08	<100	480	120	74.5	10.7	72	57	34	<5	21
*Rep CHYS_413_08	<100	450	124	76.6	10.8	91	59	30	<5	20
CHYS_445_08	<100	520	46	26.6	10.1	64	44	140	<5	48
CHYS_478_08	<100	1510	13	9.8	2.2	256	10	35	<5	20
CHYS_514_08	<100	500	7	4.3	1.0	237	5	10	<5	11
CHYS_549_08	<100	310	111	73.7	15.1	18	77	76	8	15
CHYS_583_08	<100	260	18	9.2	3.1	93	14	32	<5	2
CHYS_616_08	<100	180	26	11.3	7.3	31	29	59	<5	2
CHYS_646_08	<100	270	63	29.8	23.8	12	88	104	<5	71
CHYS_675_08	<100	300	51	30.7	7.2	38	33	20	<5	9
CHYS_703_08	<100	150	166	82.9	22.9	48	133	112	<5	39
CHYS_731_08	<100	20	2	1.8	<0.5	189	2	4	5	7
CHYS_759_08	<100	560	251	134	38.0	70	184	57	<5	6
CHYS_787_08	200	2650	154	73.7	42.9	166	193	91	<5	9
*Rep CHYS_787_08	200	3060	148	74.9	37.1	174	170	67	<5	10
CHYS_19_08	<100	620	5	2.4	1.1	230	6	6	<5	16
CHYS_95_08	<100	700	152	84.9	27.4	200	145	43	<5	16
CHYS_256_08	<100	160	60	29.0	13.8	131	62	31	<5	15
CHYS_260_08	<100	1010	28	13.9	10.1	12	45	110	<5	10
CHYS_353_08	<100	580	35	24.1	4.6	45	21	35	<5	3
*Std MMISRM16	<100	540	3	0.9	1.2	2	5	5	<5	39
*Std MMISRM16	<100	560	3	1.1	1.4	3	6	8	<5	41
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_103_08	<5	2.3	9	71	580	<1	2	<1	121	<1
*Rep CHYS_103_08	<5	1.8	8	77	530	<1	2	<1	112	6
CHYS_104_08	<5	0.5	56	126	430	<1	9	<1	59	<1
CHYS_105_08	<5	<0.5	140	174	1120	<1	23	<1	167	<1
CHYS_125_08	<5	1.4	84	125	550	<1	18	<1	176	<1
CHYS_126_08	<5	0.7	37	98	1660	<1	7	<1	193	<1
CHYS_127_08	<5	1.5	31	76	450	<1	6	<1	197	<1
CHYS_148_08	<5	1.3	13	239	1360	<1	3	<1	140	<1
CHYS_149_08	<5	<0.5	257	183	480	<1	42	<1	124	<1
CHYS_150_08	<5	<0.5	28	81	410	<1	5	<1	59	<1
CHYS_151_08	<5	0.5	70	219	1500	<1	14	<1	119	<1
CHYS_152_08	10	0.7	63	96	200	<1	13	<1	184	2
CHYS_170_08	<5	1.7	52	105	1720	<1	11	<1	219	<1
CHYS_171_08	5	1.8	99	109	760	<1	19	<1	183	<1
*Rep CHYS_171_08	5	1.8	102	117	770	<1	19	<1	193	<1
CHYS_172_08	<5	<0.5	31	75	180	<1	6	<1	11	<1
CHYS_173_08	<5	<0.5	13	60	430	<1	3	<1	116	<1
CHYS_174_08	6	<0.5	223	620	230	<1	46	<1	27	4
CHYS_191_08	<5	2.4	2	53	10	<1	1	<1	106	<1
CHYS_192_08	<5	<0.5	61	220	420	<1	11	<1	90	<1
CHYS_193_08	<5	0.5	24	150	250	<1	5	<1	40	2
CHYS_194_08	<5	<0.5	33	184	870	<1	6	<1	145	<1
CHYS_195_08	<5	<0.5	169	164	830	<1	31	<1	152	<1
CHYS_196_08	<5	0.7	35	79	470	<1	7	<1	95	<1
CHYS_197_08	<5	<0.5	26	166	520	<1	5	<1	76	<1
CHYS_206_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_214_08	8	2.6	34	200	170	<1	9	<1	120	3
*Rep CHYS_214_08	8	3.0	42	207	320	<1	11	<1	136	3
CHYS_215_08	<5	2.7	68	142	830	<1	15	<1	162	<1
CHYS_216_08	<5	<0.5	40	198	220	<1	8	<1	72	<1
CHYS_217_08	5	2.9	70	146	520	<1	17	<1	194	1
CHYS_218_08	<5	<0.5	111	160	420	<1	22	<1	160	<1
CHYS_219_08	<5	<0.5	3460	362	1450	<1	798	<1	91	<1
CHYS_257_08	<5	<0.5	9	48	20	<1	3	<1	114	<1
CHYS_258_08	6	1.8	9	69	80	<1	3	<1	43	<1
CHYS_259_08	<5	1.3	186	154	1380	<1	41	<1	128	2
CHYS_261_08	<5	<0.5	<1	24	70	<1	<1	<1	28	<1
CHYS_262_08	<5	<0.5	394	42	1430	<1	93	<1	96	<1
CHYS_263_08	5	0.6	105	157	970	<1	26	<1	78	5
CHYS_279_08	<5	<0.5	29	79	230	<1	6	<1	19	<1
*Rep CHYS_279_08	<5	<0.5	20	78	220	<1	4	<1	18	<1
CHYS_280_08	<5	<0.5	<1	16	80	<1	<1	<1	11	<1
CHYS_281_08	6	0.5	7	41	130	<1	2	<1	19	<1
CHYS_282_08	<5	<0.5	32	164	50	<1	7	<1	8	1
CHYS_283_08	<5	<0.5	97	71	480	<1	19	<1	110	<1
CHYS_284_08	<5	0.5	303	51	1480	<1	68	<1	174	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_285_08	<5	2.0	3	31	20	<1	1	<1	6	<1
CHYS_317_08	<5	3.4	24	45	290	<1	6	<1	46	<1
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_318_08	5	2.0	12	77	120	<1	4	<1	45	1
CHYS_340_08	9	<0.5	154	355	190	<1	37	<1	44	13
CHYS_363_08	<5	<0.5	812	1760	2890	<1	200	<1	115	8
CHYS_386_08	<5	<0.5	592	612	6380	<1	135	<1	126	14
CHYS_413_08	<5	<0.5	95	136	11100	<1	19	<1	64	6
*Rep CHYS_413_08	<5	<0.5	92	123	12800	<1	17	<1	61	6
CHYS_445_08	<5	<0.5	148	252	9890	<1	37	<1	51	16
CHYS_478_08	<5	0.5	37	238	1170	<1	10	<1	192	42
CHYS_514_08	<5	0.6	12	186	80	<1	3	<1	118	1
CHYS_549_08	<5	<0.5	171	209	530	<1	35	<1	55	2
CHYS_583_08	5	1.9	39	156	1440	<1	10	<1	191	2
CHYS_616_08	<5	0.6	88	93	3030	<1	20	<1	147	2
CHYS_646_08	<5	<0.5	224	146	460	<1	43	<1	63	2
CHYS_675_08	<5	<0.5	57	149	1360	<1	10	<1	126	<1
CHYS_703_08	<5	<0.5	336	116	400	<1	65	<1	103	<1
CHYS_731_08	<5	1.1	3	46	20	<1	1	<1	24	<1
CHYS_759_08	5	<0.5	281	393	330	<1	44	<1	62	<1
CHYS_787_08	27	0.8	430	402	280	<1	76	<1	132	6
*Rep CHYS_787_08	28	0.8	345	441	310	<1	58	<1	150	7
CHYS_19_08	10	0.8	11	188	340	<1	3	<1	7	2
CHYS_95_08	<5	0.6	147	382	1160	<1	25	<1	65	<1
CHYS_256_08	<5	1.3	108	124	1380	<1	19	<1	103	1
CHYS_260_08	<5	<0.5	165	111	250	<1	36	<1	185	1
CHYS_353_08	<5	<0.5	55	338	2220	<1	13	<1	118	<1
*Std MMISRM16	48	<0.5	15	182	110	25	3	<1	332	<1
*Std MMISRM16	50	<0.5	18	185	120	24	4	<1	346	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_103_08	36	4	<1	130	<1	2	<10	31.4	334	0.9
*Rep CHYS_103_08	37	4	<1	140	<1	2	<10	28.2	275	0.8
CHYS_104_08	40	28	<1	450	<1	7	<10	23.7	137	<0.5
CHYS_105_08	14	74	<1	1290	<1	14	<10	25.5	29	0.7
CHYS_125_08	35	31	<1	80	<1	6	<10	35.4	469	0.6
CHYS_126_08	36	19	<1	80	<1	6	<10	35.0	295	0.9
CHYS_127_08	48	13	<1	80	<1	4	<10	40.9	371	1.0
CHYS_148_08	22	6	<1	440	<1	2	<10	30.9	515	0.6
CHYS_149_08	78	160	<1	720	<1	38	<10	63.1	69	0.5
CHYS_150_08	<5	12	<1	1140	<1	3	<10	5.9	33	<0.5
CHYS_151_08	53	31	<1	850	<1	7	<10	29.9	113	0.6
CHYS_152_08	18	23	<1	1050	<1	4	<10	35.2	151	1.2
CHYS_170_08	31	20	<1	120	<1	4	<10	49.6	807	0.7
CHYS_171_08	77	46	<1	100	<1	12	<10	67.1	495	0.9
*Rep CHYS_171_08	77	46	<1	110	<1	12	<10	68.5	488	1.0
CHYS_172_08	16	12	<1	930	<1	3	<10	10.9	70	<0.5
CHYS_173_08	<5	5	<1	2610	<1	<1	<10	4.0	11	0.6
CHYS_174_08	12	62	<1	1750	<1	8	<10	50.1	12	0.9
CHYS_191_08	12	1	<1	140	<1	<1	<10	10.4	792	0.5
CHYS_192_08	47	27	<1	530	<1	6	<10	18.8	146	<0.5
CHYS_193_08	42	11	<1	850	<1	3	<10	18.3	194	<0.5
CHYS_194_08	24	19	<1	760	<1	5	<10	28.9	45	<0.5
CHYS_195_08	25	70	<1	1060	<1	13	<10	26.2	44	0.7
CHYS_196_08	24	13	<1	410	<1	3	<10	24.4	179	<0.5
CHYS_197_08	23	9	<1	240	<1	3	<10	12.5	200	<0.5
CHYS_206_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_214_08	32	10	<1	300	<1	2	<10	58.8	862	1.1
*Rep CHYS_214_08	38	12	<1	280	<1	3	<10	67.9	1000	1.3
CHYS_215_08	31	22	<1	150	<1	6	<10	45.5	625	0.8
CHYS_216_08	7	17	<1	3630	<1	4	<10	5.2	30	<0.5
CHYS_217_08	34	17	<1	180	<1	3	<10	57.2	1130	0.8
CHYS_218_08	14	37	<1	1020	<1	8	<10	16.0	36	0.6
CHYS_219_08	114	715	<1	1830	<1	93	<10	83.1	17	2.1
CHYS_257_08	9	3	<1	400	<1	<1	<10	8.9	71	1.5
CHYS_258_08	24	3	<1	140	<1	<1	<10	33.6	555	0.7
CHYS_259_08	58	54	<1	200	<1	13	<10	104	412	1.1
CHYS_261_08	<5	<1	<1	390	<1	<1	<10	<0.5	12	<0.5
CHYS_262_08	47	88	<1	80	<1	19	<10	45.1	163	1.0
CHYS_263_08	58	25	<1	200	<1	6	<10	61.7	296	1.5
CHYS_279_08	11	11	<1	1080	<1	4	<10	4.7	98	0.5
*Rep CHYS_279_08	11	8	<1	1030	<1	3	<10	4.3	92	<0.5
CHYS_280_08	<5	<1	<1	740	<1	<1	<10	<0.5	19	<0.5
CHYS_281_08	12	3	<1	410	<1	1	<10	4.3	247	<0.5
CHYS_282_08	<5	8	<1	1170	<1	1	<10	5.1	16	<0.5
CHYS_283_08	27	27	<1	260	<1	7	<10	24.0	116	0.8
CHYS_284_08	51	75	<1	110	<1	13	<10	56.2	232	1.3

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_285_08	7	1	<1	160	<1	<1	<10	11.4	435	<0.5
CHYS_317_08	39	8	<1	80	<1	2	<10	27.6	758	0.7
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_318_08	18	3	<1	140	<1	<1	<10	18.6	533	1.0
CHYS_340_08	48	32	<1	810	<1	5	<10	28.3	81	1.0
CHYS_363_08	116	183	<1	1310	<1	28	<10	61.5	11	7.0
CHYS_386_08	39	138	<1	1630	<1	20	<10	78.5	9	2.8
CHYS_413_08	87	35	<1	1050	<1	15	<10	93.4	22	3.6
*Rep CHYS_413_08	83	35	<1	1010	<1	16	<10	77.3	22	4.1
CHYS_445_08	95	36	<1	1790	<1	8	<10	75.3	18	3.2
CHYS_478_08	44	9	<1	750	<1	2	<10	60.4	234	4.3
CHYS_514_08	23	4	<1	970	<1	<1	<10	14.8	198	1.8
CHYS_549_08	27	50	<1	660	<1	15	<10	9.3	45	1.2
CHYS_583_08	36	11	<1	120	<1	3	<10	49.9	522	1.4
CHYS_616_08	23	24	<1	100	<1	5	<10	44.7	234	2.5
CHYS_646_08	10	69	<1	1570	<1	13	<10	32.8	13	1.3
CHYS_675_08	30	20	<1	700	<1	7	<10	13.5	55	1.4
CHYS_703_08	75	95	<1	1240	<1	26	<10	33.4	42	1.0
CHYS_731_08	30	1	<1	190	<1	<1	<10	6.6	162	0.7
CHYS_759_08	70	114	<1	620	<1	37	<10	22.2	116	0.7
CHYS_787_08	149	152	1	490	<1	29	<10	65.0	345	1.8
*Rep CHYS_787_08	146	130	4	530	<1	27	<10	61.3	302	2.0
CHYS_19_08	20	4	<1	1800	<1	<1	<10	9.8	124	<0.5
CHYS_95_08	114	82	<1	710	<1	25	<10	89.8	213	0.8
CHYS_256_08	78	45	<1	640	<1	10	<10	69.8	369	<0.5
CHYS_260_08	10	42	<1	1000	<1	6	<10	57.1	23	1.0
CHYS_353_08	51	15	<1	1250	<1	5	<10	75.5	50	1.9
*Std MMISRM16	11	5	<1	540	<1	<1	<10	26.2	11	<0.5
*Std MMISRM16	12	6	<1	580	<1	<1	<10	27.0	11	1.1
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_103_08	11	<1	60	10	330	40
*Rep CHYS_103_08	10	<1	64	10	400	33
CHYS_104_08	11	<1	222	14	210	38
CHYS_105_08	35	<1	284	15	380	76
CHYS_125_08	8	<1	119	8	100	62
CHYS_126_08	8	<1	113	8	180	50
CHYS_127_08	14	<1	76	8	320	86
CHYS_148_08	12	<1	42	4	420	63
CHYS_149_08	42	<1	944	57	350	95
CHYS_150_08	9	<1	67	7	1890	12
CHYS_151_08	25	<1	144	10	260	111
CHYS_152_08	27	<1	84	6	60	79
CHYS_170_08	10	<1	78	6	70	82
CHYS_171_08	30	<1	237	19	440	121
*Rep CHYS_171_08	29	<1	245	20	580	118
CHYS_172_08	6	<1	130	9	720	21
CHYS_173_08	11	<1	23	1	230	9
CHYS_174_08	50	<1	193	12	540	47
CHYS_191_08	3	<1	7	1	20	25
CHYS_192_08	9	<1	207	14	570	24
CHYS_193_08	36	<1	101	8	490	34
CHYS_194_08	15	<1	91	6	630	36
CHYS_195_08	18	<1	318	17	510	38
CHYS_196_08	13	<1	105	9	930	30
CHYS_197_08	10	<1	114	9	570	23
CHYS_206_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_214_08	47	<1	64	6	320	53
*Rep CHYS_214_08	51	1	88	9	350	60
CHYS_215_08	12	<1	143	11	720	48
CHYS_216_08	488	<1	138	8	620	7
CHYS_217_08	19	<1	75	6	400	52
CHYS_218_08	23	<1	204	11	160	25
CHYS_219_08	129	2	2720	121	1380	48
CHYS_257_08	11	<1	15	3	30	11
CHYS_258_08	35	<1	23	7	110	26
CHYS_259_08	49	<1	356	25	560	55
CHYS_261_08	20	<1	14	3	1110	<5
CHYS_262_08	123	<1	596	37	110	23
CHYS_263_08	74	1	259	24	60	63
CHYS_279_08	12	<1	207	13	690	16
*Rep CHYS_279_08	12	<1	174	13	760	16
CHYS_280_08	1	<1	<5	<1	6130	<5
CHYS_281_08	3	<1	54	9	710	16
CHYS_282_08	14	<1	35	2	70	6
CHYS_283_08	10	<1	259	17	300	21
CHYS_284_08	46	1	362	25	210	52

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_285_08	7	<1	6	2	<20	17
CHYS_317_08	12	<1	82	9	1290	66
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_318_08	15	<1	29	4	120	32
CHYS_340_08	86	<1	168	12	180	66
CHYS_363_08	320	<1	909	59	1380	57
CHYS_386_08	230	<1	585	39	6430	22
CHYS_413_08	111	<1	699	52	660	13
*Rep CHYS_413_08	91	<1	714	55	580	11
CHYS_445_08	307	<1	266	23	1560	24
CHYS_478_08	77	<1	63	8	80	41
CHYS_514_08	24	<1	37	4	50	22
CHYS_549_08	96	<1	781	48	580	9
CHYS_583_08	25	<1	75	7	370	64
CHYS_616_08	19	<1	116	8	450	61
CHYS_646_08	102	<1	346	20	480	19
CHYS_675_08	21	<1	288	20	1080	16
CHYS_703_08	17	<1	825	53	580	14
CHYS_731_08	4	<1	9	3	160	15
CHYS_759_08	43	<1	1260	86	1020	42
CHYS_787_08	124	1	726	56	610	238
*Rep CHYS_787_08	141	1	721	57	680	217
CHYS_19_08	20	<1	25	2	620	23
CHYS_95_08	77	<1	748	66	1460	205
CHYS_256_08	16	<1	280	20	1730	76
CHYS_260_08	59	<1	153	10	270	16
CHYS_353_08	59	<1	206	20	290	29
*Std MMISRM16	42	<1	11	<1	230	13
*Std MMISRM16	43	<1	13	<1	240	13
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101614

To: **Logan Resources Ltd.**

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

Date: Sep 04, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 66
Date Submitted Jul 14, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 66 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_341_08	1	74	20	0.1	1170	<1	320	39	41	102
*Rep CHYS_341_08	1	73	30	<0.1	1100	<1	300	29	50	111
CHYS_342_08	9	173	<10	<0.1	2700	<1	270	31	102	166
CHYS_343_08	4	181	<10	<0.1	3550	<1	230	25	72	151
CHYS_344_08	1	58	<10	<0.1	1390	<1	530	3	52	89
CHYS_362_08	4	146	120	0.6	610	3	240	72	301	233
CHYS_364_08	2	133	90	0.2	540	1	160	11	16	152
CHYS_365_08	<1	123	<10	<0.1	1320	<1	300	459	27	98
CHYS_366_08	6	160	<10	0.3	2780	<1	220	8	67	365
CHYS_367_08	27	15	<10	<0.1	3730	<1	460	6	16	36
CHYS_387_08	10	190	40	0.2	2260	3	60	20	137	276
CHYS_388_08	4	299	10	0.1	1600	<1	10	24	153	106
CHYS_389_08	11	137	<10	<0.1	3940	<1	240	9	146	25
CHYS_390_08	9	76	<10	<0.1	3590	<1	470	8	127	199
*Rep CHYS_390_08	10	75	<10	<0.1	3890	<1	480	10	156	266
CHYS_391_08	26	138	<10	0.1	3560	<1	370	4	102	110
CHYS_392_08	9	178	<10	<0.1	2360	<1	180	11	147	86
CHYS_412_08	10	37	590	5.2	1340	2	440	17	750	354
CHYS_414_08	1	79	<10	<0.1	1600	<1	570	120	29	23
CHYS_415_08	<1	175	<10	<0.1	2490	1	160	28	16	171
CHYS_416_08	1	206	<10	<0.1	1240	<1	90	49	39	132
CHYS_417_08	4	32	10	0.2	1480	<1	460	6	287	278
CHYS_418_08	10	72	<10	<0.1	2870	<1	510	21	203	27
CHYS_419_08	9	188	<10	<0.1	1960	<1	240	13	98	29
CHYS_420_08	10	114	<10	<0.1	4000	<1	270	5	127	43
CHYS_444_08	5	69	390	1.7	1530	5	330	52	128	262
CHYS_447_08	2	221	<10	<0.1	910	<1	40	54	31	193
*Rep CHYS_447_08	2	231	<10	<0.1	790	<1	30	51	42	160
CHYS_448_08	8	127	<10	<0.1	2020	<1	350	16	65	38
CHYS_449_08	6	68	<10	0.1	3140	<1	430	5	73	7
CHYS_450_08	1	96	<10	0.1	3200	1	160	10	48	278
CHYS_451_08	6	113	<10	<0.1	6570	<1	470	11	328	21
CHYS_477_08	1	83	220	<0.1	950	8	320	169	177	455
CHYS_479_08	3	>300	20	<0.1	760	<1	10	13	142	119
CHYS_480_08	1	273	<10	<0.1	1530	<1	70	26	78	103
CHYS_481_08	2	294	<10	<0.1	1960	<1	60	16	73	24
CHYS_482_08	5	163	<10	<0.1	4190	<1	300	27	80	56
CHYS_483_08	5	85	<10	<0.1	5610	<1	310	2	71	21
CHYS_484_08	6	128	<10	<0.1	4910	<1	330	9	255	29
CHYS_513_08	44	122	50	0.8	1210	1	470	143	760	199
*Rep CHYS_513_08	25	114	70	0.8	1050	2	490	116	592	169
CHYS_515_08	9	>300	20	0.3	910	3	20	8	545	33
CHYS_516_08	2	238	<10	<0.1	2510	<1	100	10	62	185
CHYS_517_08	3	>300	10	<0.1	1130	<1	20	4	320	38
CHYS_518_08	3	130	<10	<0.1	3580	<1	340	5	143	98
CHYS_519_08	6	61	<10	0.2	10200	<1	450	3	166	35

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_548_08	8	257	50	0.8	1150	2	20	6	205	104
CHYS_550_08	11	>300	50	0.1	1010	2	10	24	130	56
Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_551_08	54	87	<10	0.1	1170	<1	520	172	41	22
CHYS_553_08	5	244	<10	0.2	1660	<1	170	19	93	26
CHYS_582_08	8	111	20	0.5	1060	<1	350	2	87	122
CHYS_583_08	9	173	<10	0.1	1770	1	110	21	76	507
CHYS_584_08	26	>300	400	0.7	520	10	<10	22	47	39
*Rep CHYS_584_08	26	>300	430	0.5	470	11	<10	23	50	39
CHYS_586_08	20	30	<10	0.6	1680	<1	320	5	125	48
CHYS_587_08	31	193	30	<0.1	1120	2	100	5	870	13
CHYS_615_08	26	39	110	2.4	2540	2	270	16	692	319
CHYS_617_08	12	>300	60	0.1	1040	6	20	27	142	33
CHYS_618_08	1	94	20	0.1	2890	1	300	5	92	445
CHYS_619_08	4	297	<10	<0.1	1130	<1	20	20	32	214
CHYS_645_08	22	210	30	0.3	1080	1	190	16	234	32
CHYS_647_08	19	204	50	0.2	3500	4	160	36	90	121
CHYS_649_08	7	183	10	0.1	2750	1	150	6	135	243
CHYS_674_08	8	>300	20	<0.1	580	<1	<10	12	57	43
CHYS_676_08	16	213	<10	0.4	3440	<1	330	96	448	11
CHYS_702_08	33	236	20	0.3	960	<1	140	17	113	193
*Rep CHYS_702_08	39	248	10	0.2	1020	<1	110	22	72	287
CHYS_730_08	5	230	<10	<0.1	780	<1	60	14	73	34
CHYS_732_08	9	82	<10	<0.1	3750	<1	310	51	177	57
CHYS_758_08	18	71	<10	0.1	2120	<1	450	12	408	33
CHYS_786_08	54	38	<10	0.2	3820	<1	690	24	131	12
CHYS_552_08	22	65	<10	0.3	2870	<1	610	5	25	13
*Std MMISRM16	17	48	20	29.5	90	<1	210	3	21	54
*Std MMISRM16	19	51	20	30.5	70	<1	230	4	20	58
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	5	<5
*Bik BLANK	<1	1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_341_08	<100	210	7	3.7	1.7	118	7	9	<5	61
*Rep CHYS_341_08	<100	320	7	3.2	1.7	171	8	11	<5	57
CHYS_342_08	<100	110	26	11.3	6.7	53	30	26	<5	8
CHYS_343_08	<100	140	43	18.8	9.7	90	51	16	<5	23
CHYS_344_08	<100	580	9	4.6	3.4	149	13	22	<5	4
CHYS_362_08	<100	440	61	32.9	14.0	89	65	121	<5	14
CHYS_364_08	<100	1330	8	6.1	1.2	203	5	9	<5	4
CHYS_365_08	<100	20	8	6.7	1.5	59	6	10	<5	18
CHYS_366_08	<100	380	54	28.6	9.6	122	47	21	8	16
CHYS_367_08	<100	720	12	5.4	4.7	5	21	9	<5	3
CHYS_387_08	<100	720	35	19.6	5.9	312	27	62	<5	11
CHYS_388_08	<100	210	51	20.8	9.9	180	50	48	<5	3
CHYS_389_08	<100	90	72	28.2	24.4	26	108	68	<5	28
CHYS_390_08	<100	330	22	7.9	8.6	23	38	22	<5	22
*Rep CHYS_390_08	<100	320	21	7.6	8.3	22	35	22	<5	23
CHYS_391_08	<100	160	40	20.5	8.9	18	42	44	<5	11
CHYS_392_08	<100	90	44	15.8	12.2	64	66	54	7	35
CHYS_412_08	<100	3780	53	29.2	18.4	170	76	310	<5	70
CHYS_414_08	<100	60	12	7.5	3.3	8	15	17	52	85
CHYS_415_08	<100	20	5	4.3	1.4	177	5	6	7	26
CHYS_416_08	<100	50	15	9.3	2.7	111	13	12	<5	8
CHYS_417_08	<100	600	33	14.9	14.8	77	60	120	<5	42
CHYS_418_08	<100	360	112	47.4	34.0	73	148	70	<5	13
CHYS_419_08	<100	100	76	31.3	18.8	32	100	44	<5	14
CHYS_420_08	<100	60	43	13.1	13.1	69	71	21	<5	36
CHYS_444_08	<100	830	22	13.3	5.6	272	24	62	<5	54
CHYS_447_08	<100	80	10	7.2	1.5	221	7	7	5	10
*Rep CHYS_447_08	<100	80	16	9.2	2.5	217	13	10	<5	7
CHYS_448_08	<100	60	25	10.4	7.6	34	35	17	<5	10
CHYS_449_08	<100	110	38	15.4	13.3	28	52	20	<5	24
CHYS_450_08	<100	390	21	9.4	5.4	309	24	16	<5	15
CHYS_451_08	<100	70	107	39.1	36.8	20	183	124	<5	23
CHYS_477_08	<100	70	22	12.8	5.1	66	24	48	10	41
CHYS_479_08	<100	190	27	11.9	6.5	105	27	39	<5	1
CHYS_480_08	<100	130	52	25.6	8.7	83	41	19	6	9
CHYS_481_08	<100	120	63	27.3	13.2	67	63	26	<5	9
CHYS_482_08	<100	40	45	16.6	12.4	58	66	19	<5	29
CHYS_483_08	<100	670	76	23.9	25.4	15	133	30	<5	64
CHYS_484_08	<100	40	88	30.3	31.5	52	141	73	7	22
CHYS_513_08	<100	410	164	78.6	50.3	36	231	480	<5	55
*Rep CHYS_513_08	<100	530	134	63.4	41.3	44	188	412	<5	58
CHYS_515_08	<100	310	235	88.9	54.5	29	262	142	<5	2
CHYS_516_08	<100	120	20	9.1	4.4	158	21	16	<5	14
CHYS_517_08	100	610	77	24.4	21.8	50	107	101	<5	<1
CHYS_518_08	<100	660	73	25.8	20.7	56	109	29	5	39
CHYS_519_08	<100	770	124	45.0	39.3	10	219	62	<5	92

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_548_08	<100	840	34	16.2	9.2	97	36	85	<5	<1
CHYS_550_08	<100	300	60	25.7	10.9	37	54	43	<5	2
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
CHYS_551_08	<100	50	11	4.7	4.3	17	17	20	<5	6
CHYS_553_08	<100	40	46	18.0	11.9	60	54	28	<5	9
CHYS_582_08	<100	1660	16	7.7	4.4	46	19	27	<5	50
CHYS_583_08	<100	480	44	19.6	9.9	192	50	30	<5	17
CHYS_584_08	<100	370	18	8.8	2.9	155	15	17	<5	<1
*Rep CHYS_584_08	<100	380	22	10.2	3.5	153	17	18	<5	<1
CHYS_586_08	<100	180	61	22.1	18.9	8	93	45	<5	7
CHYS_587_08	<100	830	228	98.4	80.5	99	366	188	<5	5
CHYS_615_08	<100	3970	73	41.0	27.7	166	101	301	<5	43
CHYS_617_08	<100	120	45	18.7	9.3	73	48	39	<5	3
CHYS_618_08	<100	1160	25	10.7	7.4	209	36	26	<5	43
CHYS_619_08	<100	570	18	10.9	2.4	151	13	10	<5	3
CHYS_645_08	<100	420	58	29.3	17.8	25	70	198	<5	4
CHYS_647_08	<100	340	35	17.7	7.4	75	40	28	<5	24
CHYS_649_08	<100	500	57	23.6	12.5	114	75	36	<5	50
CHYS_674_08	<100	170	23	11.0	3.8	81	18	19	<5	1
CHYS_676_08	<100	260	216	114	44.2	27	232	583	<5	32
CHYS_702_08	<100	650	47	20.1	13.3	58	57	50	<5	4
*Rep CHYS_702_08	<100	690	42	20.4	9.4	61	44	25	<5	6
CHYS_730_08	<100	100	33	13.9	6.9	203	32	28	<5	5
CHYS_732_08	<100	870	146	60.4	39.3	55	202	41	13	71
CHYS_758_08	<100	120	102	39.8	35.9	12	156	174	<5	76
CHYS_786_08	<100	660	67	28.0	23.3	16	100	90	7	59
CHYS_552_08	<100	250	19	8.5	7.2	12	33	23	<5	2
*Std MMISRM16	<100	510	3	1.1	1.3	1	6	3	<5	30
*Std MMISRM16	<100	560	3	1.0	1.3	1	5	3	<5	33
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_341_08	8	1.4	18	109	280	<1	3	<1	157	2
*Rep CHYS_341_08	9	1.4	22	106	230	<1	4	<1	144	2
CHYS_342_08	<5	1.1	55	207	580	<1	10	<1	221	<1
CHYS_343_08	<5	0.6	64	243	1450	<1	10	<1	166	<1
CHYS_344_08	6	0.9	44	236	130	<1	9	<1	6	2
CHYS_362_08	<5	<0.5	192	478	1820	<1	42	<1	142	14
CHYS_364_08	<5	0.7	12	145	190	<1	2	<1	74	1
CHYS_365_08	<5	<0.5	14	28	250	<1	3	<1	58	<1
CHYS_366_08	<5	<0.5	69	297	330	<1	12	<1	159	<1
CHYS_367_08	<5	<0.5	33	63	120	<1	5	<1	93	<1
CHYS_387_08	<5	4.4	66	244	1070	<1	15	<1	73	3
CHYS_388_08	<5	4.2	95	258	790	<1	18	<1	197	<1
CHYS_389_08	<5	0.6	206	96	400	<1	36	<1	220	<1
CHYS_390_08	<5	<0.5	76	244	180	<1	13	<1	118	1
*Rep CHYS_390_08	<5	<0.5	77	261	160	<1	13	<1	121	1
CHYS_391_08	<5	<0.5	76	297	170	<1	15	<1	100	<1
CHYS_392_08	<5	1.2	103	135	440	<1	21	<1	177	<1
CHYS_412_08	17	<0.5	401	309	1590	<1	93	<1	70	163
CHYS_414_08	<5	<0.5	29	58	80	<1	5	<1	88	<1
CHYS_415_08	<5	0.5	10	53	90	<1	1	<1	52	<1
CHYS_416_08	<5	1.8	22	64	240	<1	4	<1	65	<1
CHYS_417_08	7	<0.5	228	394	200	<1	48	<1	45	2
CHYS_418_08	<5	<0.5	234	620	1130	<1	40	<1	39	1
CHYS_419_08	<5	0.5	114	151	650	<1	20	<1	163	<1
CHYS_420_08	<5	<0.5	69	211	1260	<1	11	<1	117	<1
CHYS_444_08	6	<0.5	82	214	5950	<1	18	<1	53	48
CHYS_447_08	<5	1.7	12	119	540	<1	2	<1	92	<1
*Rep CHYS_447_08	<5	2.0	20	105	610	<1	3	<1	87	<1
CHYS_448_08	<5	<0.5	56	103	270	<1	9	<1	135	<1
CHYS_449_08	<5	<0.5	85	124	220	<1	13	<1	95	<1
CHYS_450_08	6	1.2	46	194	180	<1	8	<1	113	2
CHYS_451_08	<5	<0.5	344	237	620	<1	59	<1	150	<1
CHYS_477_08	<5	0.7	88	111	5780	<1	19	<1	35	10
CHYS_479_08	<5	3.4	67	87	540	<1	14	<1	301	1
CHYS_480_08	<5	1.5	66	98	520	<1	11	<1	47	<1
CHYS_481_08	<5	1.5	103	99	410	<1	16	<1	94	<1
CHYS_482_08	<5	0.5	91	98	520	<1	13	<1	142	<1
CHYS_483_08	<5	<0.5	179	180	160	<1	25	<1	169	<1
CHYS_484_08	<5	<0.5	292	188	780	<1	48	<1	188	<1
CHYS_513_08	<5	<0.5	802	448	3740	<1	176	<1	91	7
*Rep CHYS_513_08	<5	<0.5	654	393	3970	<1	143	<1	94	11
CHYS_515_08	<5	<0.5	530	91	4450	<1	97	<1	207	3
CHYS_516_08	<5	1.1	35	146	670	<1	6	<1	142	<1
CHYS_517_08	<5	3.3	223	90	210	<1	42	<1	231	<1
CHYS_518_08	<5	<0.5	136	423	110	<1	20	<1	195	<1
CHYS_519_08	<5	<0.5	282	458	60	<1	43	<1	204	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_548_08	9	2.7	110	80	610	<1	25	<1	159	3
CHYS_550_08	<5	2.2	108	109	340	<1	20	<1	167	2
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_551_08	<5	<0.5	47	61	4880	<1	8	<1	54	<1
CHYS_553_08	<5	0.6	92	104	780	<1	15	<1	162	<1
CHYS_582_08	7	0.8	48	56	190	<1	10	<1	140	6
CHYS_583_08	6	1.5	73	247	650	<1	13	<1	202	2
CHYS_584_08	<5	2.4	28	113	230	<1	5	<1	140	5
*Rep CHYS_584_08	<5	2.4	31	116	270	<1	6	<1	143	6
CHYS_586_08	<5	<0.5	172	180	170	<1	27	<1	51	4
CHYS_587_08	<5	<0.5	872	62	2270	<1	156	<1	593	<1
CHYS_615_08	15	0.6	440	409	880	<1	97	<1	42	35
CHYS_617_08	<5	1.0	101	151	2510	<1	19	<1	198	2
CHYS_618_08	8	0.9	72	151	890	<1	13	<1	118	1
CHYS_619_08	<5	1.3	18	188	610	<1	3	<1	249	<1
CHYS_645_08	12	<0.5	259	51	1150	<1	58	<1	202	1
CHYS_647_08	<5	0.9	64	642	990	<1	12	<1	188	1
CHYS_649_08	6	1.4	108	197	610	<1	18	<1	255	2
CHYS_674_08	<5	2.5	36	96	840	<1	7	<1	138	1
CHYS_676_08	<5	<0.5	796	81	2560	<1	176	<1	71	<1
CHYS_702_08	7	1.3	121	149	380	<1	22	<1	212	4
*Rep CHYS_702_08	6	1.1	74	183	380	<1	12	<1	244	3
CHYS_730_08	<5	3.5	69	79	210	<1	13	<1	45	<1
CHYS_732_08	<5	<0.5	359	997	120	<1	51	<1	95	<1
CHYS_758_08	<5	<0.5	458	182	70	<1	85	<1	68	<1
CHYS_786_08	<5	<0.5	243	483	80	<1	43	<1	22	<1
CHYS_552_08	<5	<0.5	67	98	80	<1	11	<1	96	<1
*Std MMISRM16	46	<0.5	17	226	100	26	2	<1	289	<1
*Std MMISRM16	49	<0.5	16	231	100	27	2	<1	308	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_341_08	23	6	<1	2840	<1	1	<10	19.1	169	<0.5
*Rep CHYS_341_08	25	7	<1	2700	<1	1	<10	21.8	198	<0.5
CHYS_342_08	44	22	<1	860	<1	5	<10	74.6	366	0.6
CHYS_343_08	44	33	<1	650	<1	8	<10	47.1	136	<0.5
CHYS_344_08	21	12	<1	1220	<1	2	<10	10.2	80	<0.5
CHYS_362_08	57	51	<1	420	<1	10	<10	56.6	89	2.1
CHYS_364_08	27	4	<1	720	<1	1	<10	20.5	171	1.1
CHYS_365_08	14	5	<1	1130	<1	1	<10	18.0	36	0.5
CHYS_366_08	58	31	<1	1030	<1	8	<10	44.6	44	0.8
CHYS_367_08	10	14	<1	880	<1	3	<10	13.0	<3	0.7
CHYS_387_08	58	20	<1	330	<1	5	<10	192	1700	0.8
CHYS_388_08	56	36	<1	90	<1	9	<10	89.8	954	0.7
CHYS_389_08	51	83	<1	670	<1	14	<10	63.6	278	0.9
CHYS_390_08	8	30	<1	1410	<1	5	<10	32.3	12	1.2
*Rep CHYS_390_08	8	29	<1	1530	<1	4	<10	31.1	11	1.6
CHYS_391_08	65	28	<1	1280	<1	7	<10	16.9	28	1.0
CHYS_392_08	43	40	<1	660	<1	9	<10	32.2	379	0.8
CHYS_412_08	125	80	<1	1150	<1	10	<10	82.2	27	2.6
CHYS_414_08	7	10	<1	4170	<1	2	<10	10.0	31	0.6
CHYS_415_08	27	4	<1	940	<1	<1	<10	14.3	105	0.6
CHYS_416_08	78	9	<1	290	<1	2	<10	48.6	550	0.6
CHYS_417_08	28	59	<1	1980	<1	7	<10	58.0	27	1.0
CHYS_418_08	51	99	<1	1240	<1	21	<10	46.8	21	<0.5
CHYS_419_08	74	60	<1	680	<1	14	<10	58.6	211	0.7
CHYS_420_08	45	45	<1	820	<1	9	<10	99.0	99	<0.5
CHYS_444_08	77	20	<1	1540	<1	4	<10	60.8	84	2.6
CHYS_447_08	26	5	<1	230	<1	2	<10	32.4	559	0.8
*Rep CHYS_447_08	33	9	<1	170	<1	2	<10	37.1	632	0.6
CHYS_448_08	18	25	<1	1030	<1	5	<10	15.9	61	0.6
CHYS_449_08	11	39	<1	1090	<1	7	<10	33.8	21	<0.5
CHYS_450_08	45	18	<1	810	<1	4	<10	28.4	338	0.6
CHYS_451_08	23	137	<1	1410	<1	22	<10	33.0	25	0.6
CHYS_477_08	33	23	<1	790	<1	4	<10	30.3	86	0.9
CHYS_479_08	61	22	<1	40	<1	5	<10	72.4	1160	1.1
CHYS_480_08	93	27	<1	340	<1	8	<10	64.3	488	0.6
CHYS_481_08	55	43	<1	270	<1	11	<10	37.0	494	<0.5
CHYS_482_08	40	44	<1	820	<1	9	<10	32.9	124	<0.5
CHYS_483_08	16	89	<1	1530	<1	17	<10	45.4	27	<0.5
CHYS_484_08	33	109	<1	930	<1	18	<10	46.5	58	<0.5
CHYS_513_08	50	201	<1	1310	<1	31	<10	30.3	22	1.1
*Rep CHYS_513_08	49	162	<1	1380	<1	25	<10	30.6	23	1.4
CHYS_515_08	168	185	<1	100	<1	43	<10	73.5	150	2.4
CHYS_516_08	42	15	<1	360	<1	3	<10	48.5	436	0.8
CHYS_517_08	95	85	<1	30	<1	16	<10	93.0	1280	1.1
CHYS_518_08	42	73	<1	820	<1	15	<10	37.2	75	<0.5
CHYS_519_08	26	137	<1	2380	<1	27	<10	50.8	13	<0.5

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Order:

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_548_08	75	30	<1	60	<1	6	<10	195	1020	1.5
CHYS_550_08	67	39	<1	70	<1	10	<10	41.8	704	1.2
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
CHYS_551_08	6	15	<1	990	<1	2	<10	9.1	26	<0.5
CHYS_553_08	39	40	<1	520	<1	9	<10	39.2	177	0.5
CHYS_582_08	31	15	<1	3150	<1	3	<10	28.2	150	1.4
CHYS_583_08	50	31	<1	650	<1	8	<10	58.3	427	1.3
CHYS_584_08	43	11	<1	40	<1	3	<10	72.0	568	1.8
*Rep CHYS_584_08	45	12	<1	20	<1	3	<10	71.9	594	1.8
CHYS_586_08	16	63	<1	720	<1	12	<10	57.0	8	0.9
CHYS_587_08	298	309	<1	340	<1	47	<10	538	46	5.0
CHYS_615_08	89	97	<1	790	<1	14	<10	110	80	1.5
CHYS_617_08	40	35	<1	90	<1	8	<10	46.3	305	1.8
CHYS_618_08	66	27	<1	3720	<1	5	<10	48.1	140	0.9
CHYS_619_08	40	8	<1	130	<1	3	<10	39.4	320	1.7
CHYS_645_08	48	61	<1	630	<1	10	<10	181	102	1.4
CHYS_647_08	31	26	<1	550	<1	6	<10	65.6	300	1.5
CHYS_649_08	79	47	<1	1200	<1	11	<10	86.3	520	1.1
CHYS_674_08	40	13	<1	50	<1	4	<10	37.7	926	1.3
CHYS_676_08	200	198	<1	3300	<1	35	<10	201	34	1.7
CHYS_702_08	51	44	3	270	<1	8	<10	39.4	348	1.2
*Rep CHYS_702_08	48	30	<1	280	<1	7	<10	31.8	248	1.2
CHYS_730_08	63	24	<1	160	<1	6	<10	36.4	1020	0.8
CHYS_732_08	34	152	<1	870	<1	28	<10	25.7	24	0.5
CHYS_758_08	20	136	<1	1100	<1	20	<10	61.7	9	<0.5
CHYS_786_08	10	79	<1	2660	<1	13	<10	35.1	<3	<0.5
CHYS_552_08	10	25	<1	1250	<1	4	<10	21.1	22	0.5
*Std MMISRM16	13	6	<1	420	<1	<1	<10	33.3	<3	<0.5
*Std MMISRM16	13	6	<1	490	<1	<1	<10	33.8	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Order:

Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_341_08	78	<1	28	3	1100	20
*Rep CHYS_341_08	81	<1	29	3	710	23
CHYS_342_08	22	<1	115	8	460	75
CHYS_343_08	14	<1	170	12	1280	49
CHYS_344_08	20	<1	53	4	140	19
CHYS_362_08	39	<1	323	23	1940	38
CHYS_364_08	181	<1	57	5	230	26
CHYS_365_08	21	<1	38	10	6490	9
CHYS_366_08	50	<1	290	18	200	42
CHYS_367_08	18	<1	70	4	400	21
CHYS_387_08	76	1	138	14	1320	86
CHYS_388_08	15	<1	186	14	240	81
CHYS_389_08	16	<1	309	17	60	56
CHYS_390_08	19	<1	93	5	100	37
*Rep CHYS_390_08	18	<1	88	4	90	37
CHYS_391_08	38	<1	217	15	250	42
CHYS_392_08	17	<1	178	10	630	73
CHYS_412_08	176	<1	312	27	170	29
CHYS_414_08	127	<1	71	5	2890	7
CHYS_415_08	8	<1	28	8	930	16
CHYS_416_08	8	<1	63	8	1320	66
CHYS_417_08	52	<1	164	11	280	55
CHYS_418_08	43	<1	527	30	760	98
CHYS_419_08	28	<1	351	19	200	60
CHYS_420_08	34	<1	134	8	270	68
CHYS_444_08	186	<1	137	12	440	38
CHYS_447_08	4	<1	45	7	330	26
*Rep CHYS_447_08	6	<1	62	7	280	31
CHYS_448_08	11	<1	112	6	360	30
CHYS_449_08	29	<1	157	10	140	45
CHYS_450_08	32	<1	95	6	210	59
CHYS_451_08	22	<1	450	21	230	27
CHYS_477_08	22	<1	100	12	4690	22
CHYS_479_08	19	<1	101	8	410	86
CHYS_480_08	16	<1	240	18	1120	76
CHYS_481_08	9	<1	300	17	610	43
CHYS_482_08	15	<1	177	10	530	36
CHYS_483_08	25	<1	278	13	190	42
CHYS_484_08	11	<1	367	16	300	33
CHYS_513_08	119	<1	921	51	2340	31
*Rep CHYS_513_08	107	<1	751	41	2210	32
CHYS_515_08	45	<1	1070	52	220	64
CHYS_516_08	7	<1	79	7	1510	53
CHYS_517_08	20	<1	254	14	120	135
CHYS_518_08	12	<1	256	16	720	42
CHYS_519_08	44	<1	501	26	280	38

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_548_08	107	3	149	12	140	107
CHYS_550_08	30	<1	246	16	530	71
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_551_08	6	<1	52	3	680	14
CHYS_553_08	9	<1	192	10	730	34
CHYS_582_08	132	<1	68	6	40	49
CHYS_583_08	23	<1	190	14	640	80
CHYS_584_08	42	<1	60	7	320	102
*Rep CHYS_584_08	45	<1	71	7	360	101
CHYS_586_08	17	<1	288	12	70	46
CHYS_587_08	233	<1	1020	84	330	233
CHYS_615_08	219	1	429	37	150	92
CHYS_617_08	12	<1	182	12	340	46
CHYS_618_08	64	<1	103	8	170	80
CHYS_619_08	21	<1	90	7	730	63
CHYS_645_08	367	<1	304	22	230	34
CHYS_647_08	26	<1	187	14	1520	112
CHYS_649_08	33	<1	226	16	280	131
CHYS_674_08	18	<1	91	7	430	79
CHYS_676_08	540	<1	1310	83	2070	128
CHYS_702_08	47	<1	207	13	520	77
*Rep CHYS_702_08	47	<1	197	13	550	60
CHYS_730_08	16	<1	143	9	960	75
CHYS_732_08	83	<1	634	37	400	68
CHYS_758_08	13	<1	494	21	90	19
CHYS_786_08	23	<1	349	16	90	12
CHYS_552_08	10	<1	99	5	80	20
*Std MMISRM16	45	<1	12	<1	180	16
*Std MMISRM16	47	<1	12	<1	190	17
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101615

To: **Logan Resources Ltd.**

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

Date: Oct 09, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 38
Date Submitted Jul 14, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 38 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Final : TO101615 Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_831_08	4	>300	<10	0.2	10700	<1	710	5	303	27
*Rep CHYS_831_08	4	>300	<10	0.2	11000	<1	740	5	318	27
CHYS_832_08	19	185	140	3.7	600	<1	20	29	51	211
CHYS_833_08	230	178	60	4.2	320	<1	160	105	276	61
CHYS_834_08	2	107	<10	<0.1	620	<1	350	39	30	91
CHYS_835_08	17	283	80	0.4	1130	1	20	20	127	527
CHYS_836_08	5	183	<10	<0.1	8420	<1	340	7	9	96
CHYS_854_08	161	288	10	2.4	<10	2	<10	2	2070	20
CHYS_855_08	18	>300	<10	0.4	5290	<1	500	15	195	559
CHYS_856_08	12	112	<10	0.5	1670	<1	860	40	27	29
CHYS_857_08	9	239	<10	0.3	460	<1	10	9	50	117
CHYS_858_08	18	187	20	0.3	2600	<1	90	36	53	197
CHYS_880_08	4	277	<10	<0.1	710	<1	10	3	10	28
CHYS_881_08	2	130	<10	<0.1	2530	<1	380	5	173	20
*Rep CHYS_881_08	2	129	<10	<0.1	2240	<1	370	6	176	21
CHYS_882_08	2	192	<10	<0.1	1190	<1	60	34	14	128
CHYS_883_08	7	>300	20	0.1	1630	<1	10	9	131	210
CHYS_884_08	13	213	30	<0.1	1230	2	20	15	94	239
CHYS_911_08	58	112	<10	0.2	4060	<1	610	57	393	26
CHYS_912_08	9	188	20	0.1	3450	<1	150	3	674	49
CHYS_913_08	2	292	<10	<0.1	3540	2	40	6	43	222
CHYS_914_08	4	>300	30	<0.1	1730	1	20	5	144	154
CHYS_915_08	37	260	20	0.2	1240	2	10	40	66	160
CHYS_944_08	5	>300	<10	<0.1	1190	<1	10	2	86	66
CHYS_945_08	3	>300	10	<0.1	2550	1	20	11	37	106
CHYS_946_08	8	>300	70	<0.1	3030	2	20	21	143	120
CHYS_947_08	5	>300	<10	<0.1	1880	<1	10	5	72	66
*Rep CHYS_947_08	5	>300	10	<0.1	1870	<1	10	5	79	75
CHYS_974_08	4	>300	20	<0.1	1300	1	<10	15	144	130
CHYS_975_08	4	223	<10	<0.1	730	<1	<10	<1	26	28
CHYS_976_08	17	60	<10	0.2	1190	<1	570	46	86	67
CHYS_977_08	3	>300	10	<0.1	1090	<1	20	9	52	74
CHYS_1004_08	10	>300	50	<0.1	2060	2	<10	19	147	466
CHYS_1005_08	8	>300	30	<0.1	1740	<1	<10	9	51	269
CHYS_1006_08	3	284	<10	<0.1	2550	<1	50	66	187	145
CHYS_1034_08	37	>300	40	0.2	2120	<1	<10	3	84	54
CHYS_1035_08	1	278	<10	<0.1	2230	<1	10	4	14	55
CHYS_1062_08	<1	222	10	<0.1	760	<1	10	4	26	36
CHYS_1063_08	<1	223	10	<0.1	2600	<1	30	6	20	145
CHYS_1087_08	2	69	240	0.2	1850	3	170	4	43	331
*Rep CHYS_1087_08	4	82	170	0.2	2040	2	190	6	84	464
CHYS_836_08-A	6	293	<10	<0.1	1760	1	30	17	27	134
*Std MMISRM16	19	63	10	27.4	90	<1	220	4	32	63

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Final : TO101615 Order:

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
*Std MMISRM16	21	64	20	29.9	90	<1	230	4	28	68
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	1	<10	<0.1	<10	<1	<10	<1	<5	<5



Final : TO101615 Order:

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_831_08	<100	40	137	94.9	10.1	17	64	224	10	63
*Rep CHYS_831_08	<100	40	142	93.6	11.1	18	68	227	11	66
CHYS_832_08	<100	4450	82	98.3	5.2	120	21	23	<5	2
CHYS_833_08	<100	3360	303	172	57.7	80	265	86	<5	9
CHYS_834_08	<100	470	22	15.0	3.3	89	16	12	<5	13
CHYS_835_08	100	620	20	10.0	4.5	156	20	45	<5	3
CHYS_836_08	<100	110	19	42.5	1.5	81	5	3	<5	72
CHYS_854_08	<100	2140	148	65.5	109	36	291	574	<5	2
CHYS_855_08	<100	1130	409	508	16.2	33	90	140	7	66
CHYS_856_08	<100	660	21	12.9	4.9	14	20	27	<5	15
CHYS_857_08	<100	600	36	23.5	3.1	77	15	22	<5	<1
CHYS_858_08	<100	680	42	33.4	4.4	69	20	16	<5	3
CHYS_880_08	<100	60	2	2.8	<0.5	143	1	2	<5	3
CHYS_881_08	<100	330	38	16.9	8.5	25	43	24	<5	4
*Rep CHYS_881_08	<100	330	39	16.4	8.9	21	46	26	<5	3
CHYS_882_08	<100	80	6	7.0	0.7	140	3	5	<5	16
CHYS_883_08	<100	750	31	13.6	6.5	126	32	46	<5	1
CHYS_884_08	<100	1590	45	27.2	5.4	249	30	31	<5	2
CHYS_911_08	<100	510	115	72.1	21.3	8	128	63	<5	49
CHYS_912_08	<100	1470	263	97.4	64.8	30	379	307	6	26
CHYS_913_08	<100	200	11	14.9	1.9	197	8	18	5	14
CHYS_914_08	<100	810	32	11.5	8.3	67	40	44	6	2
CHYS_915_08	<100	1010	78	40.6	7.6	172	46	19	<5	3
CHYS_944_08	<100	70	13	11.8	3.0	74	14	43	<5	3
CHYS_945_08	<100	120	12	13.8	1.6	200	7	15	11	10
CHYS_946_08	200	610	76	34.5	13.6	250	74	49	11	6
CHYS_947_08	<100	1090	65	24.9	11.3	65	61	23	10	4
*Rep CHYS_947_08	<100	1080	65	26.0	12.0	68	65	27	8	4
CHYS_974_08	100	560	51	23.2	8.3	61	45	45	7	3
CHYS_975_08	<100	60	7	5.2	1.3	151	6	11	<5	2
CHYS_976_08	<100	1820	28	13.3	8.9	47	45	25	37	40
CHYS_977_08	<100	170	24	10.9	3.9	88	20	15	6	3
CHYS_1004_08	200	250	29	14.8	5.7	187	26	50	12	3
CHYS_1005_08	<100	230	26	15.0	2.9	134	13	18	<5	1
CHYS_1006_08	<100	260	168	63.9	35.1	56	212	72	10	17
CHYS_1034_08	<100	190	8	6.8	1.8	216	8	39	<5	3
CHYS_1035_08	<100	30	2	1.3	0.6	243	2	5	10	7
CHYS_1062_08	<100	50	4	5.7	0.6	181	2	13	<5	3
CHYS_1063_08	<100	30	2	1.2	0.7	260	2	8	11	15
CHYS_1087_08	<100	610	5	2.4	1.1	362	5	13	28	55
*Rep CHYS_1087_08	<100	780	9	4.9	2.2	314	11	25	21	51
CHYS_836_08-A	<100	240	18	16.4	1.9	191	10	11	<5	11
*Std MMISRM16	<100	580	5	2.0	2.0	3	9	7	<5	31

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Final : TO101615 Order:

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
*Std MMISRM16	<100	640	5	1.9	1.9	3	8	7	<5	33
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1



Final : TO101615 Order:

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_831_08	<5	<0.5	146	79	2040	<1	39	<1	15	<1
*Rep CHYS_831_08	<5	<0.5	159	81	2240	<1	41	<1	16	<1
CHYS_832_08	7	1.2	36	180	3300	<1	8	<1	147	16
CHYS_833_08	10	<0.5	352	1260	370	<1	54	<1	171	26
CHYS_834_08	6	<0.5	25	146	420	<1	5	<1	176	5
CHYS_835_08	11	5.0	59	182	290	<1	14	<1	278	48
CHYS_836_08	<5	<0.5	6	82	60	<1	1	<1	124	3
CHYS_854_08	<5	<0.5	1520	59	5850	<1	292	<1	407	4
CHYS_855_08	<5	<0.5	144	359	1180	<1	31	<1	88	<1
CHYS_856_08	<5	<0.5	46	220	180	<1	9	<1	345	<1
CHYS_857_08	<5	1.7	30	97	830	<1	7	<1	108	1
CHYS_858_08	6	<0.5	37	220	310	<1	8	<1	368	43
CHYS_880_08	<5	0.8	3	52	<10	<1	1	<1	99	<1
CHYS_881_08	<5	<0.5	59	189	450	<1	12	<1	71	<1
*Rep CHYS_881_08	<5	<0.5	64	185	340	<1	12	<1	87	<1
CHYS_882_08	5	0.9	5	34	70	<1	2	<1	32	<1
CHYS_883_08	<5	2.9	70	132	400	<1	15	<1	158	1
CHYS_884_08	18	3.4	58	164	230	<1	12	<1	210	6
CHYS_911_08	<5	<0.5	188	332	2780	<1	30	<1	152	<1
CHYS_912_08	<5	1.1	792	314	390	<1	149	<1	202	2
CHYS_913_08	<5	2.5	20	64	310	1	5	<1	111	<1
CHYS_914_08	<5	1.7	82	94	810	<1	17	<1	239	2
CHYS_915_08	12	1.5	68	136	140	<1	12	<1	286	4
CHYS_944_08	6	3.3	40	60	50	<1	10	<1	136	<1
CHYS_945_08	6	4.2	17	71	190	<1	4	<1	128	<1
CHYS_946_08	21	5.4	127	286	370	<1	23	<1	347	7
CHYS_947_08	<5	2.3	80	174	300	<1	13	<1	157	<1
*Rep CHYS_947_08	<5	2.9	91	175	430	<1	15	<1	159	<1
CHYS_974_08	7	4.7	84	145	550	<1	17	<1	262	2
CHYS_975_08	<5	2.1	15	39	40	1	3	<1	75	<1
CHYS_976_08	18	1.1	89	444	210	2	15	<1	88	2
CHYS_977_08	<5	2.6	35	135	480	<1	7	<1	270	<1
CHYS_1004_08	7	9.0	72	281	660	<1	16	<1	343	3
CHYS_1005_08	7	3.7	28	111	360	<1	6	<1	314	2
CHYS_1006_08	7	1.6	250	313	650	<1	40	<1	216	2
CHYS_1034_08	<5	5.7	29	72	90	<1	8	<1	199	2
CHYS_1035_08	<5	2.2	7	50	10	1	2	<1	124	<1
CHYS_1062_08	<5	8.1	9	36	140	<1	3	<1	12	<1
CHYS_1063_08	<5	1.9	9	73	20	1	2	<1	144	<1
CHYS_1087_08	100	2.8	17	123	140	1	4	<1	53	8
*Rep CHYS_1087_08	77	3.0	36	136	180	1	8	<1	71	7
CHYS_836_08-A	<5	1.6	18	125	290	<1	4	<1	224	5
*Std MMISRM16	50	<0.5	25	311	180	28	5	<1	300	1

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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
*Std MMISRM16	60	<0.5	24	320	190	30	4	<1	318	1
*Bik BLANK	<5	<0.5	<1	<5	<10	1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1



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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_831_08	60	39	<1	4620	<1	19	<10	118	<3	2.3
*Rep CHYS_831_08	62	42	<1	4750	<1	20	<10	118	<3	2.2
CHYS_832_08	61	12	<1	70	1	7	<10	34.3	200	3.9
CHYS_833_08	220	145	<1	230	<1	45	<10	39.2	159	7.3
CHYS_834_08	20	9	<1	1150	<1	3	<10	8.0	58	2.1
CHYS_835_08	44	17	<1	140	<1	3	<10	70.1	1760	3.0
CHYS_836_08	146	3	<1	3820	<1	2	<10	19.3	69	2.5
CHYS_854_08	1260	393	<1	30	<1	31	<10	598	27	12.4
CHYS_855_08	318	51	<1	4090	<1	33	<10	649	5	7.3
CHYS_856_08	15	13	<1	2430	<1	3	<10	14.4	10	2.9
CHYS_857_08	42	10	<1	80	<1	4	<10	59.5	412	3.0
CHYS_858_08	44	12	<1	680	<1	5	<10	35.1	209	3.9
CHYS_880_08	20	1	<1	100	<1	<1	<10	11.2	188	3.4
CHYS_881_08	18	27	<1	1570	<1	7	<10	16.6	51	<0.5
*Rep CHYS_881_08	18	29	<1	1470	<1	8	<10	15.2	60	<0.5
CHYS_882_08	31	2	<1	350	<1	<1	<10	9.8	331	1.2
CHYS_883_08	43	25	<1	60	<1	5	<10	54.7	1220	1.2
CHYS_884_08	71	20	<1	270	<1	6	<10	72.0	1120	1.7
CHYS_911_08	23	70	<1	6280	<1	18	<10	29.5	7	1.2
CHYS_912_08	120	258	<1	690	<1	52	<10	123	560	0.9
CHYS_913_08	44	6	<1	390	<1	1	<10	22.4	726	1.2
CHYS_914_08	58	30	<1	90	<1	6	<10	75.9	824	1.1
CHYS_915_08	68	26	<1	440	<1	10	<10	73.7	585	2.2
CHYS_944_08	59	11	<1	130	<1	2	<10	30.7	745	1.9
CHYS_945_08	62	5	<1	260	<1	1	<10	32.5	1410	1.6
CHYS_946_08	70	50	1	290	<1	13	<10	103	1450	2.0
CHYS_947_08	79	37	<1	120	<1	11	<10	63.6	687	1.1
*Rep CHYS_947_08	77	42	<1	120	<1	11	<10	67.0	910	1.2
CHYS_974_08	63	32	<1	90	<1	8	<10	61.5	1680	1.6
CHYS_975_08	28	5	<1	90	<1	1	<10	13.7	743	1.1
CHYS_976_08	14	32	<1	2780	<1	6	<10	10.8	98	1.1
CHYS_977_08	41	13	<1	170	<1	4	<10	35.5	1100	1.6
CHYS_1004_08	78	22	1	100	<1	5	<10	122	4370	1.8
CHYS_1005_08	60	10	<1	120	<1	3	<10	51.4	1810	2.0
CHYS_1006_08	66	121	<1	440	<1	32	<10	49.9	871	1.2
CHYS_1034_08	40	7	<1	170	<1	1	<10	283	1640	2.1
CHYS_1035_08	21	2	<1	210	<1	<1	<10	20.8	608	1.4
CHYS_1062_08	42	2	1	220	<1	<1	<10	79.3	2000	0.7
CHYS_1063_08	27	2	<1	290	<1	<1	<10	17.8	565	1.0
CHYS_1087_08	31	4	<1	1340	<1	<1	<10	68.4	883	0.5
*Rep CHYS_1087_08	39	9	<1	1360	<1	2	<10	115	649	0.5
CHYS_836_08-A	41	7	<1	340	<1	2	<10	39.3	562	1.4
*Std MMISRM16	15	9	<1	410	<1	1	<10	40.0	5	0.9

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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
*Std MMISRM16	15	8	<1	460	<1	1	<10	39.0	5	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5



Final : TO101615 Order:

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_831_08	27	<1	823	63	220	26
*Rep CHYS_831_08	27	<1	857	62	210	26
CHYS_832_08	111	1	409	85	1320	45
CHYS_833_08	172	1	1660	111	1530	120
CHYS_834_08	29	<1	131	11	820	11
CHYS_835_08	51	<1	57	8	560	122
CHYS_836_08	59	<1	80	87	400	19
CHYS_854_08	185	<1	404	55	450	1090
CHYS_855_08	1590	2	2240	539	520	48
CHYS_856_08	38	<1	117	10	340	9
CHYS_857_08	98	<1	137	18	150	45
CHYS_858_08	71	<1	203	25	440	35
CHYS_880_08	16	<1	6	5	120	34
CHYS_881_08	27	<1	172	11	2030	24
*Rep CHYS_881_08	26	<1	166	10	2270	23
CHYS_882_08	9	<1	21	8	6350	47
CHYS_883_08	19	<1	85	9	430	96
CHYS_884_08	97	<1	147	19	770	156
CHYS_911_08	211	<1	501	50	1590	143
CHYS_912_08	52	<1	1030	51	280	171
CHYS_913_08	9	<1	42	19	1700	60
CHYS_914_08	19	<1	81	8	230	145
CHYS_915_08	112	<1	291	25	1340	134
CHYS_944_08	19	<1	38	18	200	73
CHYS_945_08	22	<1	41	15	1290	105
CHYS_946_08	75	<1	246	24	1340	363
CHYS_947_08	16	<1	192	16	350	106
*Rep CHYS_947_08	16	<1	198	16	350	125
CHYS_974_08	31	<1	151	15	640	174
CHYS_975_08	20	<1	18	6	230	44
CHYS_976_08	154	<1	120	10	340	16
CHYS_977_08	13	<1	73	7	740	79
CHYS_1004_08	43	1	91	11	750	231
CHYS_1005_08	25	<1	79	11	620	102
CHYS_1006_08	27	<1	559	37	1140	74
CHYS_1034_08	160	2	27	7	130	86
CHYS_1035_08	13	<1	7	2	100	49
CHYS_1062_08	41	2	13	8	280	47
CHYS_1063_08	14	<1	6	3	330	33
CHYS_1087_08	267	3	17	2	150	38
*Rep CHYS_1087_08	311	2	31	4	160	53
CHYS_836_08-A	30	<1	64	15	1650	64
*Std MMISRM16	60	<1	15	1	250	17

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Final : TO101615 Order:

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
*Std MMISRM16	60	<1	14	1	250	17
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5



Certificate of Analysis

Work Order: TO101616

To: **Logan Resources Ltd.**

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

Date: Aug 29, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 64
Date Submitted Jul 14, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 64 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_82_08	5	155	<10	<0.1	2530	<1	270	19	50	67
*Rep CHYS_82_08	5	159	<10	<0.1	2630	<1	260	18	59	70
CHYS_411_08	107	16	20	4.2	900	<1	720	79	134	35
CHYS_443_08	191	13	10	3.4	660	<1	690	218	<5	19
CHYS_476_08	436	33	190	1.8	540	<1	490	162	405	95
CHYS_511_08	<1	77	<10	<0.1	660	<1	470	18	22	106
CHYS_512_08	129	87	90	1.0	1520	<1	540	59	483	12
CHYS_546_08	13	230	50	0.1	630	3	150	23	251	73
CHYS_547_08	6	249	<10	0.1	710	<1	<10	3	307	24
CHYS_579_08	110	81	10	1.9	1180	<1	1000	7	402	237
CHYS_580_08	14	194	30	1.1	1250	9	250	75	325	144
CHYS_581_08	8	198	20	0.4	1320	3	110	31	150	48
CHYS_612_08	14	88	10	0.3	2230	2	550	63	1130	167
CHYS_613_08	4	170	20	0.1	860	2	30	10	41	226
*Rep CHYS_613_08	5	162	20	<0.1	890	1	30	11	35	239
CHYS_614_08	3	203	10	<0.1	1560	<1	10	20	103	152
CHYS_642_08	13	>300	<10	0.2	3040	<1	40	11	660	273
CHYS_643_08	13	262	50	0.2	1290	<1	130	9	326	21
CHYS_644_08	4	136	140	0.1	1560	2	50	20	178	360
CHYS_671_08	5	>300	20	<0.1	1230	<1	20	63	284	156
CHYS_672_08	5	268	<10	<0.1	3520	<1	120	22	175	291
CHYS_673_08	18	169	10	0.2	1320	1	150	17	288	149
CHYS_699_08	2	136	30	0.1	580	<1	70	8	89	154
CHYS_700_08	9	165	<10	<0.1	2330	<1	70	74	108	340
CHYS_701_08	1	294	<10	<0.1	840	<1	10	10	92	42
CHYS_727_08	3	277	<10	<0.1	780	<1	20	36	104	39
CHYS_728_08	6	>300	10	<0.1	1420	<1	60	9	234	36
*Rep CHYS_728_08	6	>300	<10	<0.1	1350	<1	50	8	206	38
CHYS_729_08	1	213	10	<0.1	1130	<1	40	32	30	115
CHYS_755_08	2	183	20	<0.1	2040	1	40	33	84	443
CHYS_756_08	<1	189	10	<0.1	1800	<1	30	25	41	385
CHYS_757_08	8	85	<10	<0.1	2150	<1	510	20	234	13
CHYS_780_08	15	228	20	0.2	1940	<1	230	29	642	352
CHYS_783_08	5	148	20	0.1	1920	<1	150	89	107	1200
CHYS_784_08	23	126	<10	2.5	1810	<1	390	20	336	27
CHYS_785_08	54	39	<10	0.3	1300	<1	630	40	83	47
CHYS_807_08	6	>300	<10	0.1	2850	<1	550	13	4010	46
CHYS_809_08	37	121	10	2.7	1420	<1	310	83	1010	92
CHYS_810_08	<1	196	<10	<0.1	920	<1	30	12	25	205
CHYS_811_08	18	227	30	0.4	1390	<1	40	52	259	971
*Rep CHYS_811_08	17	231	40	0.3	1240	<1	30	50	244	972
CHYS_812_08	3	272	30	<0.1	4170	1	80	6	475	65
CHYS_813_08	6	>300	<10	<0.1	900	<1	<10	13	55	54
GWS_98_08	1	247	<10	<0.1	640	<1	<10	9	27	63
GWS_99_08	5	>300	<10	0.1	990	<1	<10	13	307	19
GWS_100_08	4	>300	<10	<0.1	720	<1	<10	13	203	46

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
GWS_102_08	1	212	<10	<0.1	1560	1	30	3	92	49
GWS_103_08	7	223	30	<0.1	3000	<1	60	9	1030	246
Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
GWS_168_08	2	82	10	0.1	1290	<1	270	17	72	117
GWS_169_08	8	275	20	<0.1	1140	1	20	8	409	61
GWS_234_08	192	205	100	0.4	1840	16	130	19	566	74
GWS_235_08	27	97	<10	0.3	640	<1	320	102	126	11
GWS_236_08	179	245	10	0.5	1600	<1	120	37	255	81
*Rep GWS_236_08	168	237	20	0.5	1600	<1	110	34	253	98
GWS_237_08	3	138	<10	<0.1	1000	<1	320	46	83	73
GWS_238_08	46	94	20	0.4	730	1	300	95	281	20
GWS_239_08	28	211	30	<0.1	1270	<1	120	86	521	23
GWS_268_08	4	88	30	0.3	1800	7	400	66	289	56
GWS_269_08	15	>300	50	0.2	680	7	30	52	186	32
GWS_270_08	16	277	20	<0.1	1510	1	80	27	241	52
GWS_271_08	28	>300	40	0.2	360	4	20	66	341	19
GWS_272_08	25	250	50	0.1	530	2	30	32	1090	24
GWS_273_08	63	187	60	0.3	1050	15	80	77	2110	128
GWS_370_08	22	277	90	0.5	750	3	40	229	218	166
GWS_371_08	12	140	20	0.3	480	2	20	7	489	30
GWS_372_08	<1	158	20	0.1	150	1	<10	<1	81	27
*Rep GWS_372_08	1	184	20	<0.1	150	2	<10	1	89	35
GWS_373_08	7	229	20	<0.1	490	2	<10	15	118	112
GWS_374_08	4	230	40	<0.1	4670	49	70	122	58	82
GWS_375_08	25	124	230	1.0	2390	25	340	22	71	21
*Std MMISRM16	14	45	10	23.0	90	<1	210	4	<5	55
*Std MMISRM16	13	40	20	20.0	80	<1	200	4	32	46
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_82_08	<100	110	19	9.5	4.4	47	22	15	<5	21
*Rep CHYS_82_08	<100	120	20	10.0	4.7	45	23	17	<5	20
CHYS_411_08	<100	860	46	23.5	9.6	18	59	58	14	112
CHYS_443_08	<100	1280	6	3.5	1.3	13	6	<1	<5	130
CHYS_476_08	<100	1140	43	18.8	16.1	16	80	126	7	69
CHYS_511_08	<100	40	6	3.1	1.1	34	6	7	5	30
CHYS_512_08	<100	1320	104	47.0	40.0	13	178	453	<5	46
CHYS_546_08	<100	420	49	23.9	12.6	41	58	95	<5	7
CHYS_547_08	<100	400	69	31.6	16.5	35	72	101	<5	<1
CHYS_579_08	<100	1350	172	90.4	52.4	19	227	351	<5	41
CHYS_580_08	<100	700	169	92.9	26.7	53	144	215	<5	20
CHYS_581_08	<100	720	77	47.5	11.3	164	51	60	<5	26
CHYS_612_08	<100	4300	145	72.6	35.9	37	186	512	<5	82
CHYS_613_08	<100	560	13	9.5	1.5	217	7	20	<5	4
*Rep CHYS_613_08	<100	390	16	12.2	1.5	208	7	17	<5	4
CHYS_614_08	<100	260	45	28.5	5.3	136	26	53	<5	3
CHYS_642_08	<100	790	322	179	47.1	31	266	304	<5	8
CHYS_643_08	100	340	53	21.9	14.7	34	67	159	<5	7
CHYS_644_08	<100	1540	24	12.8	5.9	278	25	67	<5	4
CHYS_671_08	<100	560	35	15.9	8.9	64	35	106	<5	4
CHYS_672_08	<100	150	48	24.7	9.1	61	43	68	<5	19
CHYS_673_08	<100	1110	153	87.0	32.1	83	151	169	<5	17
CHYS_699_08	<100	880	32	20.2	5.4	185	23	42	<5	15
CHYS_700_08	<100	600	85	53.1	11.4	158	54	35	<5	11
CHYS_701_08	<100	110	25	12.0	4.3	69	21	34	<5	3
CHYS_727_08	<100	170	25	14.1	3.0	55	18	36	<5	5
CHYS_728_08	100	340	41	16.4	10.9	57	49	85	<5	1
*Rep CHYS_728_08	100	310	42	16.6	10.3	56	46	76	<5	1
CHYS_729_08	<100	90	8	5.9	1.2	164	6	11	5	10
CHYS_755_08	<100	770	29	18.5	4.5	218	21	30	<5	7
CHYS_756_08	<100	190	10	7.5	1.3	214	5	15	<5	9
CHYS_757_08	<100	90	54	23.8	17.2	33	70	94	<5	24
CHYS_780_08	<100	520	70	39.8	9.8	127	77	391	13	38
CHYS_783_08	<100	1320	34	25.0	4.5	179	23	30	<5	37
CHYS_784_08	<100	260	52	20.2	13.7	32	71	90	<5	31
CHYS_785_08	<100	1890	53	24.0	19.9	30	78	60	6	48
CHYS_807_08	<100	370	245	132	53.0	39	333	2490	<5	110
CHYS_809_08	<100	1320	198	108	62.7	26	247	420	<5	67
CHYS_810_08	<100	190	16	12.4	1.4	149	7	10	<5	7
CHYS_811_08	<100	1810	44	21.3	10.5	107	45	70	<5	4
*Rep CHYS_811_08	100	1730	43	21.1	9.8	140	42	66	6	5
CHYS_812_08	100	1130	55	17.5	16.1	50	84	144	9	17
CHYS_813_08	<100	300	34	16.7	4.8	89	25	21	<5	4
GWS_98_08	<100	100	12	9.0	1.4	115	8	11	<5	4
GWS_99_08	100	200	33	12.0	10.4	46	48	149	<5	1
GWS_100_08	200	220	21	9.0	5.7	47	26	81	<5	1

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
GWS_102_08	<100	100	40	44.6	2.9	109	16	84	<5	4
GWS_103_08	200	240	59	22.2	19.7	90	94	598	<5	8
Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
GWS_168_08	<100	1010	11	6.4	2.8	184	13	34	<5	6
GWS_169_08	<100	150	60	23.5	16.1	82	76	198	<5	2
GWS_234_08	<100	190	55	22.3	15.2	49	75	189	<5	8
GWS_235_08	<100	70	47	21.2	14.1	25	67	72	<5	17
GWS_236_08	<100	620	99	46.8	20.7	41	104	140	<5	14
*Rep GWS_236_08	<100	620	93	46.1	19.9	43	99	147	<5	14
GWS_237_08	<100	210	62	37.4	9.1	53	50	51	<5	6
GWS_238_08	<100	340	39	19.4	11.2	39	56	110	<5	41
GWS_239_08	<100	260	85	38.1	29.2	48	131	393	<5	5
GWS_268_08	<100	540	57	30.4	15.4	72	69	210	<5	13
GWS_269_08	<100	170	20	8.5	5.2	51	24	54	<5	<1
GWS_270_08	<100	160	28	12.6	8.3	48	36	108	<5	5
GWS_271_08	<100	140	30	11.8	7.5	39	35	109	<5	2
GWS_272_08	100	330	87	36.0	30.3	35	133	548	<5	1
GWS_273_08	<100	330	95	40.1	33.5	42	159	980	<5	7
GWS_370_08	<100	640	31	16.3	7.3	51	32	75	<5	2
GWS_371_08	<100	1070	71	36.9	33.6	21	103	113	<5	<1
GWS_372_08	<100	1390	12	9.0	2.1	278	9	37	<5	2
*Rep GWS_372_08	<100	1770	17	13.6	2.6	236	11	41	<5	1
GWS_373_08	100	270	25	14.2	4.5	56	20	37	<5	<1
GWS_374_08	<100	100	19	11.3	2.8	57	12	16	<5	7
GWS_375_08	200	300	33	17.1	8.6	23	44	58	<5	5
*Std MMISRM16	<100	560	3	0.9	1.4	4	6	8	<5	31
*Std MMISRM16	200	500	2	0.9	1.2	4	5	8	<5	29
*BIK BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*BIK BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_82_08	<5	0.6	30	128	420	<1	7	<1	100	<1
*Rep CHYS_82_08	<5	0.5	34	147	440	<1	8	<1	103	<1
CHYS_411_08	10	<0.5	108	93	240	<1	23	<1	101	15
CHYS_443_08	<5	<0.5	2	57	680	<1	<1	<1	57	6
CHYS_476_08	<5	<0.5	254	347	5880	<1	59	<1	90	37
CHYS_511_08	<5	0.5	11	128	140	<1	3	<1	44	<1
CHYS_512_08	<5	<0.5	612	69	840	<1	154	<1	137	6
CHYS_546_08	<5	0.8	146	208	1610	<1	37	<1	242	3
CHYS_547_08	<5	0.9	204	31	500	<1	52	<1	114	<1
CHYS_579_08	<5	<0.5	487	349	230	<1	120	<1	88	4
CHYS_580_08	<5	<0.5	354	198	2390	<1	89	<1	96	2
CHYS_581_08	<5	0.6	108	147	4730	<1	27	<1	23	4
CHYS_612_08	20	<0.5	632	985	3610	<1	189	<1	50	11
CHYS_613_08	<5	2.4	17	92	430	<1	5	<1	115	2
*Rep CHYS_613_08	<5	2.0	15	88	480	<1	4	<1	117	1
CHYS_614_08	<5	2.1	58	86	410	<1	16	<1	74	<1
CHYS_642_08	<5	<0.5	646	79	1190	<1	159	<1	107	<1
CHYS_643_08	<5	<0.5	188	81	1250	<1	50	<1	205	2
CHYS_644_08	6	2.8	75	261	640	<1	21	<1	160	5
CHYS_671_08	<5	1.1	107	219	810	<1	30	<1	203	1
CHYS_672_08	<5	<0.5	102	207	1210	<1	26	<1	257	<1
CHYS_673_08	<5	<0.5	346	290	7760	<1	83	<1	81	2
CHYS_699_08	10	1.1	51	98	410	<1	14	<1	163	2
CHYS_700_08	<5	<0.5	87	523	270	<1	20	<1	132	2
CHYS_701_08	<5	2.6	50	84	450	<1	13	<1	140	<1
CHYS_727_08	<5	0.8	48	86	1030	<1	13	<1	55	<1
CHYS_728_08	<5	1.6	125	105	390	<1	33	<1	116	4
*Rep CHYS_728_08	<5	1.2	125	110	400	<1	31	<1	121	3
CHYS_729_08	8	3.2	12	81	80	<1	3	<1	210	<1
CHYS_755_08	7	5.3	45	196	260	<1	11	<1	155	8
CHYS_756_08	<5	5.5	14	96	140	<1	4	<1	136	5
CHYS_757_08	<5	<0.5	182	176	330	<1	45	<1	58	<1
CHYS_780_08	5	0.8	297	245	1170	<1	92	<1	126	1
CHYS_783_08	<5	1.6	52	1240	920	<1	13	<1	154	5
CHYS_784_08	<5	<0.5	138	293	310	<1	33	<1	174	4
CHYS_785_08	<5	<0.5	157	442	80	<1	33	<1	56	2
CHYS_807_08	<5	<0.5	1930	133	2990	<1	529	<1	51	<1
CHYS_809_08	<5	<0.5	621	581	370	1	156	<1	239	2
CHYS_810_08	<5	4.5	12	69	340	<1	3	<1	117	<1
CHYS_811_08	12	5.6	118	940	80	<1	30	<1	207	18
*Rep CHYS_811_08	14	8.1	106	970	80	1	28	<1	201	20
CHYS_812_08	6	0.7	176	251	450	<1	46	<1	265	3
CHYS_813_08	<5	2.2	38	103	110	<1	9	<1	261	<1
GWS_98_08	<5	2.5	14	109	280	<1	4	<1	78	<1
GWS_99_08	<5	0.7	178	53	1910	<1	51	<1	192	<1
GWS_100_08	<5	0.9	97	183	340	<1	28	<1	194	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_102_08	<5	<0.5	50	90	590	<1	17	<1	25	<1
GWS_103_08	<5	3.8	422	256	480	<1	143	<1	217	3
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
GWS_168_08	<5	<0.5	40	114	100	<1	11	<1	122	3
GWS_169_08	<5	3.2	261	118	4040	<1	74	<1	268	2
GWS_234_08	<5	0.7	211	156	23800	<1	61	<1	184	7
GWS_235_08	<5	<0.5	135	178	900	<1	32	<1	105	<1
GWS_236_08	<5	<0.5	226	272	1420	<1	59	<1	180	<1
*Rep GWS_236_08	<5	0.5	226	274	1310	<1	58	<1	174	1
GWS_237_08	<5	<0.5	80	80	600	<1	19	<1	86	<1
GWS_238_08	<5	<0.5	162	151	3510	<1	41	<1	89	3
GWS_239_08	<5	1.2	513	72	5360	<1	147	<1	200	4
GWS_268_08	<5	<0.5	202	133	1430	<1	59	<1	103	3
GWS_269_08	<5	1.3	69	92	8020	<1	19	<1	190	3
GWS_270_08	<5	0.8	114	80	1310	<1	33	<1	210	<1
GWS_271_08	<5	0.7	129	55	10400	<1	37	<1	158	2
GWS_272_08	<5	1.1	589	31	3040	2	179	<1	289	3
GWS_273_08	<5	0.6	884	201	15100	2	303	<1	287	16
GWS_370_08	<5	0.8	92	441	1230	<1	26	<1	220	7
GWS_371_08	<5	<0.5	346	56	260	<1	83	<1	154	<1
GWS_372_08	<5	1.0	29	95	70	<1	9	<1	134	2
*Rep GWS_372_08	<5	1.2	32	81	110	<1	10	<1	132	2
GWS_373_08	<5	<0.5	49	49	880	<1	13	<1	127	1
GWS_374_08	<5	<0.5	31	75	1060	<1	8	<1	69	<1
GWS_375_08	<5	<0.5	122	30	180	<1	28	<1	117	1
*Std MMISRM16	47	<0.5	21	215	100	25	3	<1	293	<1
*Std MMISRM16	41	<0.5	20	183	100	22	5	<1	282	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Order:

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_82_08	23	13	<1	850	<1	4	<10	15.5	115	<0.5
*Rep CHYS_82_08	24	15	<1	770	<1	5	<10	19.2	133	<0.5
CHYS_411_08	38	40	<1	2890	<1	11	<10	37.6	9	1.1
CHYS_443_08	18	2	<1	2800	<1	1	<10	8.9	4	0.8
CHYS_476_08	16	68	<1	1170	<1	12	<10	58.6	9	2.3
CHYS_511_08	<5	4	<1	1290	<1	1	<10	3.4	40	0.6
CHYS_512_08	14	150	<1	2850	<1	28	<10	43.5	9	1.7
CHYS_546_08	23	44	<1	590	<1	11	<10	55.1	102	2.1
CHYS_547_08	74	55	<1	40	<1	16	<10	33.5	233	1.8
CHYS_579_08	11	151	<1	3550	<1	40	<10	22.9	<3	1.3
CHYS_580_08	43	95	<1	1370	<1	33	<10	56.0	17	2.2
CHYS_581_08	80	34	<1	600	<1	14	<10	114	95	0.9
CHYS_612_08	77	159	<1	2290	<1	36	<10	220	12	2.3
CHYS_613_08	23	5	<1	260	<1	2	<10	59.7	678	2.0
*Rep CHYS_613_08	21	4	<1	250	<1	2	<10	52.8	557	1.9
CHYS_614_08	22	17	<1	190	<1	8	<10	28.6	474	1.3
CHYS_642_08	184	186	<1	590	<1	65	<10	424	56	3.5
CHYS_643_08	28	52	<1	560	<1	13	<10	84.8	145	2.7
CHYS_644_08	35	21	<1	250	<1	6	<10	47.7	821	1.2
CHYS_671_08	58	28	<1	250	<1	8	<10	226	398	2.0
CHYS_672_08	50	31	<1	840	<1	10	<10	95.9	119	0.6
CHYS_673_08	64	107	<1	690	<1	31	<10	30.6	88	1.2
CHYS_699_08	65	16	<1	380	<1	6	<10	60.0	300	2.1
CHYS_700_08	90	34	<1	600	<1	15	<10	52.3	124	1.8
CHYS_701_08	23	16	<1	120	<1	5	<10	25.0	465	1.0
CHYS_727_08	20	13	<1	260	<1	5	<10	98.7	118	1.9
CHYS_728_08	21	36	<1	230	<1	10	<10	29.2	345	2.4
*Rep CHYS_728_08	20	35	<1	230	<1	10	<10	24.3	303	2.4
CHYS_729_08	36	4	<1	280	<1	1	<10	26.0	818	0.5
CHYS_755_08	42	14	<1	420	<1	5	<10	45.3	875	1.5
CHYS_756_08	26	4	<1	250	<1	1	<10	32.2	941	1.9
CHYS_757_08	6	56	<1	1460	<1	13	<10	15.0	23	<0.5
CHYS_780_08	95	67	<1	1470	<1	16	<10	1020	92	2.1
CHYS_783_08	50	16	<1	790	<1	6	<10	69.9	240	4.9
CHYS_784_08	21	47	<1	1320	<1	13	<10	36.2	22	1.8
CHYS_785_08	9	56	<1	2100	<1	14	<10	26.0	18	<0.5
CHYS_807_08	48	269	<1	4100	<1	62	<10	979	24	1.7
CHYS_809_08	121	181	<1	1450	<1	46	<10	132	17	2.8
CHYS_810_08	27	4	<1	200	<1	2	<10	13.2	510	1.3
CHYS_811_08	42	35	<1	220	<1	10	<10	49.5	998	2.3
*Rep CHYS_811_08	48	33	<1	210	<1	10	<10	51.5	1580	2.1
CHYS_812_08	32	60	<1	440	<1	15	<10	115	170	1.0
CHYS_813_08	56	17	<1	130	<1	7	<10	52.5	430	2.2
GWS_98_08	21	5	<1	90	<1	2	<10	24.5	296	2.3
GWS_99_08	26	42	<1	50	<1	9	<10	38.3	222	2.4
GWS_100_08	25	23	<1	40	<1	5	<10	28.2	309	1.9

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_102_08	13	11	<1	240	<1	5	<10	5.6	138	0.8
GWS_103_08	53	82	<1	240	<1	17	<10	62.5	1040	2.9
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
GWS_168_08	27	10	<1	960	<1	3	<10	8.3	71	1.2
GWS_169_08	47	65	<1	100	<1	15	<10	74.5	835	3.1
GWS_234_08	33	58	<1	340	<1	14	<10	60.5	223	3.1
GWS_235_08	6	44	<1	500	<1	12	<10	9.7	31	0.6
GWS_236_08	53	68	2	700	<1	22	<10	40.0	155	2.2
*Rep GWS_236_08	52	65	<1	650	<1	21	<10	41.8	153	2.1
GWS_237_08	20	28	<1	1230	<1	12	<10	13.7	51	0.9
GWS_238_08	19	43	<1	500	<1	10	<10	9.8	44	1.8
GWS_239_08	66	115	<1	200	<1	22	<10	47.4	520	2.0
GWS_268_08	50	51	<1	670	<1	13	<10	19.8	12	1.4
GWS_269_08	28	19	<1	50	<1	5	<10	45.0	459	1.4
GWS_270_08	27	29	<1	340	<1	7	<10	43.4	206	1.3
GWS_271_08	21	30	<1	100	<1	7	<10	52.0	258	1.7
GWS_272_08	79	125	<1	50	<1	24	<10	123	402	3.6
GWS_273_08	107	161	<1	230	<1	27	<10	194	193	5.3
GWS_370_08	23	26	<1	190	<1	7	<10	86.8	211	1.1
GWS_371_08	49	118	<1	150	<1	18	<10	89.5	138	4.0
GWS_372_08	14	7	<1	40	<1	2	<10	35.9	197	1.5
*Rep GWS_372_08	18	8	<1	30	<1	3	<10	44.8	253	2.0
GWS_373_08	41	15	<1	40	<1	5	<10	43.9	133	1.6
GWS_374_08	13	8	<1	790	<1	3	<10	22.6	40	0.9
GWS_375_08	21	34	<1	1220	<1	8	<10	19.9	8	1.4
*Std MMISRM16	9	6	<1	520	<1	<1	<10	28.8	8	<0.5
*Std MMISRM16	11	5	<1	560	<1	<1	<10	30.0	10	<0.5
*BIK BLANK	<5	<1	<1	<10	<1	<1	<10	0.9	5	<0.5
*BIK BLANK	<5	<1	<1	<10	<1	<1	<10	0.9	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_82_08	17	<1	124	7	1190	30
*Rep CHYS_82_08	17	<1	129	8	1250	34
CHYS_411_08	157	<1	399	18	660	<5
CHYS_443_08	58	<1	52	3	2060	<5
CHYS_476_08	65	<1	297	12	2080	25
CHYS_511_08	7	<1	35	2	5210	11
CHYS_512_08	117	<1	637	31	780	56
CHYS_546_08	27	<1	311	17	750	65
CHYS_547_08	38	<1	418	22	360	56
CHYS_579_08	112	<1	1190	59	190	23
CHYS_580_08	102	<1	1160	58	1070	30
CHYS_581_08	104	1	440	35	1270	53
CHYS_612_08	1630	<1	802	52	1060	57
CHYS_613_08	72	1	82	8	1460	38
*Rep CHYS_613_08	65	<1	97	9	880	33
CHYS_614_08	25	<1	310	19	2140	30
CHYS_642_08	657	1	1990	125	370	55
CHYS_643_08	62	<1	326	14	380	51
CHYS_644_08	34	<1	149	10	770	65
CHYS_671_08	134	3	189	12	1300	81
CHYS_672_08	54	<1	338	17	1450	30
CHYS_673_08	113	1	855	62	1120	31
CHYS_699_08	145	1	215	15	130	59
CHYS_700_08	63	<1	433	36	1920	51
CHYS_701_08	10	<1	129	9	1250	38
CHYS_727_08	49	<1	144	10	950	13
CHYS_728_08	28	<1	255	10	240	46
*Rep CHYS_728_08	26	<1	262	10	220	38
CHYS_729_08	20	<1	43	5	4680	74
CHYS_755_08	34	1	183	14	710	80
CHYS_756_08	16	<1	55	6	2570	51
CHYS_757_08	14	<1	358	16	1050	16
CHYS_780_08	660	<1	494	34	2050	27
CHYS_783_08	78	<1	277	20	2970	72
CHYS_784_08	39	<1	318	12	530	58
CHYS_785_08	68	<1	404	16	1380	17
CHYS_807_08	435	<1	2140	86	550	23
CHYS_809_08	393	<1	1120	84	1130	167
CHYS_810_08	8	<1	93	10	770	24
CHYS_811_08	65	<1	248	16	850	123
*Rep CHYS_811_08	66	<1	232	16	860	143
CHYS_812_08	18	<1	285	10	1330	91
CHYS_813_08	54	<1	162	12	1720	98
GWS_98_08	6	<1	67	8	310	31
GWS_99_08	12	<1	172	7	140	71
GWS_100_08	6	<1	113	6	450	53

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_102_08	2	<1	264	41	150	9
GWS_103_08	21	1	366	13	350	123
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_168_08	39	<1	88	6	190	23
GWS_169_08	24	<1	288	14	370	109
GWS_234_08	23	<1	295	15	600	60
GWS_235_08	20	<1	314	13	1690	16
GWS_236_08	50	3	524	30	1410	50
*Rep GWS_236_08	49	3	514	30	1320	53
GWS_237_08	42	<1	562	25	690	14
GWS_238_08	54	<1	316	13	470	36
GWS_239_08	26	<1	479	27	360	88
GWS_268_08	105	<1	500	22	910	25
GWS_269_08	13	<1	105	6	250	64
GWS_270_08	21	<1	171	9	420	59
GWS_271_08	21	<1	167	7	560	64
GWS_272_08	69	<1	497	25	260	274
GWS_273_08	77	<1	537	29	1140	292
GWS_370_08	69	<1	190	12	330	42
GWS_371_08	221	2	296	37	70	88
GWS_372_08	30	<1	80	7	40	44
*Rep GWS_372_08	31	<1	116	12	60	55
GWS_373_08	19	<1	152	10	180	61
GWS_374_08	7	<1	126	8	200	13
GWS_375_08	23	<1	246	13	110	17
*Std MMISRM16	50	<1	14	<1	200	14
*Std MMISRM16	48	<1	13	<1	240	15
*BIK BLANK	<1	<1	<5	<1	<20	<5
*BIK BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101617

To: **Logan Resources Ltd.**

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

Date: Aug 29, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 47
Date Submitted Jul 14, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 47 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_693_08	20	124	60	4.1	2940	<1	460	24	572	329
*Rep CHYS_693_08	35	130	50	3.1	3100	<1	490	37	1390	245
CHYS_694_08	4	179	80	1.1	1820	2	250	19	612	1090
CHYS_720_08	3	199	10	<0.1	510	<1	10	<1	40	158
CHYS_721_08	34	69	<10	1.4	800	<1	520	12	1440	104
CHYS_724_08	31	181	<10	0.4	2080	<1	490	36	2960	7
CHYS_725_08	12	155	<10	0.2	1550	<1	690	18	1580	20
CHYS_727_08	27	128	380	6.2	1580	2	200	14	965	70
CHYS_748_08	11	296	<10	0.3	270	<1	<10	6	68	58
CHYS_749_08	31	154	10	2.2	3030	<1	250	35	2630	340
CHYS_750_08	19	258	20	1.1	290	<1	10	7	562	37
CHYS_751_08	11	191	10	0.6	4340	<1	280	17	3090	126
CHYS_752_08	86	54	<10	1.2	1200	<1	750	78	7700	56
CHYS_753_08	140	12	<10	3.1	690	<1	900	25	854	6
*Rep CHYS_753_08	119	12	<10	2.5	580	<1	850	25	893	8
CHYS_774_08	39	69	10	4.3	160	<1	740	21	821	10
CHYS_775_08	6	102	450	3.0	1020	3	60	5	79	253
CHYS_776_08	18	228	30	0.9	460	<1	30	5	1070	27
CHYS_777_08	4	237	<10	0.2	560	<1	<10	1	101	93
CHYS_778_08	65	160	70	0.7	3650	<1	160	45	5220	110
CHYS_779_08	14	>300	<10	0.1	580	<1	20	14	617	7
CHYS_781_08	45	100	<10	1.0	1750	<1	850	23	872	14
CHYS_801_08	9	189	100	2.5	980	2	320	100	486	176
CHYS_802_08	3	237	30	0.2	570	2	20	9	49	157
CHYS_803_08	25	297	30	1.0	370	<1	<10	7	411	56
CHYS_804_08	9	>300	20	0.1	270	<1	<10	11	160	78
CHYS_805_08	14	282	60	0.1	850	1	60	17	670	25
*Rep CHYS_805_08	15	279	50	0.2	870	1	50	17	631	24
CHYS_806_08	7	237	20	0.2	1190	1	10	15	516	88
CHYS_825_08	5	169	160	0.1	520	1	20	5	61	86
CHYS_826_08	3	132	270	0.5	670	1	120	11	113	267
CHYS_827_08	23	287	40	0.6	250	<1	<10	6	219	65
CHYS_828_08	13	118	100	<0.1	560	<1	170	11	216	232
CHYS_829_08	32	>300	<10	<0.1	1070	<1	20	18	213	120
CHYS_830_08	10	220	10	0.3	2810	<1	190	11	779	19
CHYS_848_08	9	159	440	1.1	1180	4	30	8	314	227
CHYS_849_08	31	163	1380	2.5	3130	4	60	29	3590	227
CHYS_850_08	12	190	20	0.3	550	<1	<10	7	79	129
CHYS_851_08	4	>300	20	<0.1	800	<1	10	7	119	41
CHYS_852_08	8	194	20	0.4	4490	1	180	20	169	37
*Rep CHYS_852_08	8	199	20	0.2	4660	1	180	21	168	46
CHYS_853_08	6	>300	10	0.1	790	<1	20	15	216	84
CHYS_874_08	3	>300	180	0.1	420	<1	<10	8	209	80
CHYS_875_08	13	>300	180	0.2	370	1	10	9	226	25
CHYS_876_08	30	198	60	0.9	2730	<1	40	19	2370	195
CHYS_877_08	6	294	<10	<0.1	760	<1	<10	19	123	131

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_878_08	32	187	<10	0.5	3000	<1	110	47	237	133
CHYS_879_08	19	>300	<10	0.1	880	<1	<10	45	109	149
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
CHYS_905_08	5	229	10	<0.1	430	<1	<10	2	27	70
CHYS_906_08	23	188	60	0.8	940	<1	20	2	584	20
CHYS_907_08	15	284	20	0.9	460	<1	<10	17	262	106
*Std MMISRM16	20	46	20	31.3	60	<1	230	3	39	51
*Std MMISRM16	17	41	10	25.7	80	<1	190	3	25	43
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	21	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_693_08	<100	1010	61	34.7	15.2	34	70	314	<5	56
*Rep CHYS_693_08	<100	630	82	48.2	18.4	37	86	367	<5	58
CHYS_694_08	<100	3300	85	55.3	12.3	163	71	300	<5	23
CHYS_720_08	<100	860	5	3.1	1.0	286	4	20	<5	1
CHYS_721_08	<100	810	58	28.3	19.1	29	82	259	<5	72
CHYS_724_08	<100	440	224	111	59.0	13	287	2730	<5	51
CHYS_725_08	<100	190	168	89.2	43.8	43	213	1820	<5	74
CHYS_727_08	<100	580	33	14.1	15.5	17	59	666	<5	7
CHYS_748_08	<100	690	23	12.5	3.6	71	16	32	<5	<1
CHYS_749_08	<100	1090	368	225	57.5	27	328	1600	<5	29
CHYS_750_08	<100	340	70	31.5	19.6	24	85	277	<5	<1
CHYS_751_08	<100	570	385	214	62.4	33	391	1960	<5	32
CHYS_752_08	<100	2050	242	115	56.7	16	400	1640	23	103
CHYS_753_08	<100	180	260	115	76.0	3	561	1960	<5	108
*Rep CHYS_753_08	<100	160	243	110	69.6	3	512	1900	<5	103
CHYS_774_08	<100	1420	143	64.9	31.0	14	237	860	<5	57
CHYS_775_08	<100	7300	26	31.7	3.8	315	15	65	<5	4
CHYS_776_08	<100	270	61	23.1	21.4	19	95	555	<5	<1
CHYS_777_08	<100	610	7	4.0	1.6	218	8	74	<5	1
CHYS_778_08	<100	350	241	127	66.8	25	357	4860	<5	9
CHYS_779_08	<100	110	41	16.3	11.7	14	58	303	<5	<1
CHYS_781_08	<100	1160	109	54.7	29.5	17	170	818	6	70
CHYS_801_08	<100	500	84	47.3	13.6	88	78	360	<5	35
CHYS_802_08	<100	400	14	10.6	1.8	110	7	31	<5	2
CHYS_803_08	<100	280	41	17.1	11.9	31	51	199	<5	<1
CHYS_804_08	<100	160	16	7.4	3.5	30	15	90	<5	<1
CHYS_805_08	<100	180	55	25.6	18.8	29	78	443	<5	2
*Rep CHYS_805_08	<100	170	57	26.3	19.0	26	78	423	<5	2
CHYS_806_08	<100	430	134	72.2	22.2	49	109	253	<5	<1
CHYS_825_08	<100	570	14	10.6	1.3	178	8	40	<5	2
CHYS_826_08	<100	1010	12	7.2	2.6	235	12	55	<5	16
CHYS_827_08	<100	240	33	14.2	9.6	37	35	99	<5	<1
CHYS_828_08	<100	1420	24	12.7	7.9	133	27	80	<5	25
CHYS_829_08	<100	290	62	29.5	22.3	44	56	89	<5	2
CHYS_830_08	<100	300	101	47.0	37.4	17	118	599	<5	11
CHYS_848_08	<100	1480	29	19.7	5.2	310	23	147	<5	3
CHYS_849_08	<100	1560	200	104	69.4	97	309	3240	<5	4
CHYS_850_08	<100	890	10	7.4	2.1	246	8	41	<5	1
CHYS_851_08	<100	240	20	8.5	5.5	59	20	46	<5	2
CHYS_852_08	<100	610	91	41.8	34.6	28	116	158	<5	21
*Rep CHYS_852_08	<100	620	88	42.4	31.9	32	111	143	<5	20
CHYS_853_08	<100	420	53	23.2	12.7	52	50	69	<5	2
CHYS_874_08	<100	1040	43	20.5	13.7	66	39	62	<5	<1
CHYS_875_08	<100	240	33	15.3	7.5	31	32	104	<5	<1
CHYS_876_08	<100	880	239	122	75.5	66	321	1240	<5	2
CHYS_877_08	<100	330	36	18.4	8.1	40	32	47	<5	1

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_878_08	<100	840	95	51.4	19.3	24	92	65	5	13
CHYS_879_08	<100	1240	59	25.5	9.3	44	45	35	<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
CHYS_905_08	<100	160	4	2.6	0.9	184	3	14	<5	1
CHYS_906_08	<100	470	202	94.9	63.5	34	282	641	<5	<1
CHYS_907_08	<100	270	30	16.7	5.1	69	25	132	<5	<1
*Std MMISRM16	<100	530	3	1.0	1.3	2	6	28	<5	35
*Std MMISRM16	<100	470	3	0.9	1.2	2	5	10	<5	30
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	25	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	2	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_693_08	<5	<0.5	318	220	140	<1	82	<1	78	2
*Rep CHYS_693_08	<5	<0.5	359	271	190	<1	92	<1	64	2
CHYS_694_08	6	<0.5	282	331	530	<1	74	<1	91	3
CHYS_720_08	<5	2.0	16	136	<10	<1	4	<1	44	<1
CHYS_721_08	<5	<0.5	355	358	50	<1	82	<1	47	1
CHYS_724_08	6	<0.5	1500	32	1780	<1	416	<1	65	<1
CHYS_725_08	<5	<0.5	1010	111	1390	<1	264	<1	22	<1
CHYS_727_08	11	1.2	408	37	880	<1	118	<1	122	4
CHYS_748_08	<5	1.9	39	63	550	<1	9	<1	100	<1
CHYS_749_08	<5	<0.5	1340	439	1210	<1	342	<1	34	2
CHYS_750_08	<5	1.0	338	45	1460	<1	78	<1	78	3
CHYS_751_08	<5	<0.5	1560	292	1880	<1	399	<1	62	1
CHYS_752_08	<5	<0.5	1570	628	340	<1	361	<1	67	2
CHYS_753_08	<5	<0.5	2280	74	280	<1	458	<1	36	1
*Rep CHYS_753_08	<5	<0.5	2130	76	250	<1	436	<1	35	1
CHYS_774_08	7	<0.5	1020	103	140	<1	230	<1	61	<1
CHYS_775_08	10	<0.5	59	345	140	<1	14	<1	162	9
CHYS_776_08	<5	0.9	503	24	660	<1	131	<1	97	2
CHYS_777_08	<5	2.0	42	102	120	<1	12	<1	63	<1
CHYS_778_08	7	1.4	2400	59	4770	<1	716	<1	107	9
CHYS_779_08	<5	0.7	297	40	840	<1	76	<1	133	<1
CHYS_781_08	<5	0.5	738	107	220	<1	177	<1	92	<1
CHYS_801_08	<5	<0.5	318	135	2990	<1	79	<1	50	1
CHYS_802_08	<5	2.6	22	83	450	<1	6	<1	88	<1
CHYS_803_08	6	1.7	218	39	990	<1	53	<1	82	11
CHYS_804_08	<5	1.8	63	48	650	<1	17	<1	97	1
CHYS_805_08	8	2.1	384	49	1650	<1	100	<1	107	2
*Rep CHYS_805_08	7	1.8	385	47	1700	<1	97	<1	105	1
CHYS_806_08	10	0.9	353	64	3630	<1	81	<1	99	1
CHYS_825_08	<5	0.6	29	75	320	<1	8	<1	64	1
CHYS_826_08	61	2.1	46	145	190	<1	12	<1	147	9
CHYS_827_08	6	1.8	126	36	2470	<1	28	<1	87	3
CHYS_828_08	87	1.8	95	119	310	<1	22	<1	263	29
CHYS_829_08	<5	1.6	140	150	1150	<1	29	<1	407	2
CHYS_830_08	<5	0.6	494	49	1140	<1	127	<1	150	1
CHYS_848_08	6	1.5	104	115	200	<1	29	<1	111	2
CHYS_849_08	25	3.7	1820	215	920	<1	524	<1	121	17
CHYS_850_08	6	2.0	31	75	270	<1	8	<1	119	3
CHYS_851_08	<5	3.3	60	81	330	<1	13	<1	193	2
CHYS_852_08	<5	0.8	304	150	580	<1	61	<1	254	4
*Rep CHYS_852_08	<5	0.9	278	169	630	<1	56	<1	240	4
CHYS_853_08	<5	2.1	132	245	440	<1	27	<1	155	3
CHYS_874_08	5	2.1	111	122	1040	<1	24	<1	94	1
CHYS_875_08	12	1.5	125	59	1380	<1	30	<1	59	2
CHYS_876_08	7	4.1	1340	115	4900	<1	332	<1	146	8
CHYS_877_08	<5	1.5	88	103	750	<1	19	<1	183	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_878_08	<5	0.9	165	198	400	<1	31	<1	108	2
CHYS_879_08	<5	1.1	81	253	120	<1	15	<1	93	<1
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_905_08	<5	2.1	11	68	60	<1	3	<1	88	<1
CHYS_906_08	6	2.4	1060	31	290	<1	235	<1	183	3
CHYS_907_08	5	2.6	105	93	1940	<1	28	<1	83	5
*Std MMISRM16	49	<0.5	28	194	80	27	6	<1	300	<1
*Std MMISRM16	42	<0.5	20	170	70	24	4	<1	275	<1
*BIK BLANK	<5	<0.5	9	<5	<10	<1	3	<1	<5	<1
*BIK BLANK	<5	<0.5	7	<5	<10	<1	2	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_693_08	48	65	1	1800	<1	10	<10	38.5	5	1.3
*Rep CHYS_693_08	64	78	2	1970	<1	13	<10	46.5	7	1.6
CHYS_694_08	90	61	2	1740	<1	12	<10	686	60	2.1
CHYS_720_08	19	4	<1	120	<1	<1	<10	25.0	397	0.7
CHYS_721_08	18	80	<1	770	<1	11	<10	46.9	<3	3.7
CHYS_724_08	117	277	<1	6060	<1	39	<10	1940	<3	1.5
CHYS_725_08	99	191	<1	4130	<1	29	<10	679	<3	0.8
CHYS_727_08	35	67	<1	4090	<1	7	<10	987	187	1.0
CHYS_748_08	43	11	<1	160	<1	3	<10	44.1	409	1.1
CHYS_749_08	209	277	<1	2250	<1	54	<10	973	12	1.6
CHYS_750_08	64	77	<1	110	<1	12	<10	381	345	1.7
CHYS_751_08	205	333	<1	2220	<1	60	<10	1280	20	2.0
CHYS_752_08	49	376	<1	3370	<1	47	<10	242	<3	1.2
CHYS_753_08	30	525	<1	2430	<1	55	<10	1160	<3	0.8
*Rep CHYS_753_08	29	487	<1	2300	<1	51	<10	1010	<3	0.8
CHYS_774_08	38	225	<1	3220	<1	27	<10	458	<3	0.7
CHYS_775_08	35	13	<1	530	<1	3	<10	37.5	96	6.4
CHYS_776_08	61	101	<1	110	<1	12	<10	338	398	2.0
CHYS_777_08	19	8	<1	110	<1	1	<10	148	352	1.5
CHYS_778_08	148	386	<1	1710	<1	45	<10	854	413	2.8
CHYS_779_08	27	58	<1	130	<1	8	<10	147	181	1.7
CHYS_781_08	39	155	<1	4020	<1	20	<10	297	<3	1.1
CHYS_801_08	73	69	<1	2330	<1	13	<10	624	12	1.0
CHYS_802_08	24	5	<1	180	<1	2	<10	80.4	345	1.1
CHYS_803_08	48	49	<1	70	<1	7	<10	474	542	1.2
CHYS_804_08	24	14	<1	60	<1	2	<10	328	440	1.0
CHYS_805_08	42	79	<1	280	<1	10	<10	1040	556	1.0
*Rep CHYS_805_08	43	79	<1	280	<1	11	<10	1020	462	1.0
CHYS_806_08	83	88	<1	240	<1	20	<10	1480	235	1.1
CHYS_825_08	21	7	<1	260	<1	2	<10	131	182	1.3
CHYS_826_08	28	10	<1	670	<1	2	<10	77.5	584	1.1
CHYS_827_08	45	31	<1	70	<1	6	<10	410	499	1.2
CHYS_828_08	41	23	<1	560	<1	4	<10	29.3	821	1.1
CHYS_829_08	91	42	<1	130	<1	10	<10	82.1	597	1.8
CHYS_830_08	71	104	<1	870	<1	17	<10	386	180	1.7
CHYS_848_08	78	22	<1	230	<1	4	<10	345	633	2.4
CHYS_849_08	163	308	1	360	<1	38	<10	568	1990	4.8
CHYS_850_08	38	7	<1	80	<1	1	<10	141	812	1.3
CHYS_851_08	44	17	<1	70	<1	3	<10	56.5	1180	1.2
CHYS_852_08	108	93	<1	630	<1	16	<10	34.2	416	1.1
*Rep CHYS_852_08	110	85	<1	640	<1	16	<10	35.3	485	1.1
CHYS_853_08	77	41	<1	110	<1	9	<10	72.0	554	2.9
CHYS_874_08	49	31	<1	60	<1	7	<10	74.6	410	1.1
CHYS_875_08	40	29	<1	100	<1	5	<10	215	360	1.6
CHYS_876_08	244	293	<1	190	<1	43	<10	255	2430	1.4
CHYS_877_08	65	26	<1	60	<1	6	<10	52.5	602	1.2

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_878_08	70	59	<1	630	<1	15	<10	46.3	404	1.2
CHYS_879_08	35	29	<1	110	<1	9	<10	32.4	280	2.0
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_905_08	20	3	<1	70	<1	<1	<10	33.6	569	0.8
CHYS_906_08	199	250	<1	70	<1	37	<10	51.4	1350	0.9
CHYS_907_08	27	22	<1	70	<1	4	<10	270	592	0.9
*Std MMISRM16	9	6	<1	510	<1	<1	<10	34.2	<3	<0.5
*Std MMISRM16	9	5	<1	420	<1	<1	<10	27.1	<3	<0.5
*Bik BLANK	<5	1	<1	<10	<1	<1	<10	<0.5	5	0.8
*Bik BLANK	<5	1	<1	<10	<1	<1	<10	0.7	<3	<0.5

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Order:

Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_693_08	219	<1	395	28	120	11
*Rep CHYS_693_08	270	<1	555	38	110	11
CHYS_694_08	1170	<1	500	47	240	32
CHYS_720_08	25	<1	20	3	100	60
CHYS_721_08	160	<1	315	22	330	27
CHYS_724_08	2870	<1	1510	81	150	29
CHYS_725_08	762	<1	1120	70	190	20
CHYS_727_08	850	18	162	11	110	56
CHYS_748_08	34	<1	108	9	150	100
CHYS_749_08	4730	1	2920	176	750	35
CHYS_750_08	380	5	349	21	130	66
CHYS_751_08	2710	1	2860	163	250	55
CHYS_752_08	4090	<1	1600	85	510	19
CHYS_753_08	703	<1	1510	76	50	12
*Rep CHYS_753_08	657	<1	1320	74	50	12
CHYS_774_08	1260	<1	790	47	450	10
CHYS_775_08	179	<1	156	30	80	30
CHYS_776_08	126	4	273	15	90	83
CHYS_777_08	59	<1	30	4	110	38
CHYS_778_08	2290	10	1620	104	290	91
CHYS_779_08	83	1	193	11	60	34
CHYS_781_08	1560	<1	662	40	340	25
CHYS_801_08	1280	<1	513	39	2690	29
CHYS_802_08	91	<1	71	8	290	31
CHYS_803_08	199	4	180	12	150	72
CHYS_804_08	105	3	69	5	70	55
CHYS_805_08	641	9	295	19	290	63
*Rep CHYS_805_08	661	8	301	19	280	60
CHYS_806_08	2370	3	759	51	110	60
CHYS_825_08	263	<1	79	8	70	23
CHYS_826_08	507	4	64	6	150	33
CHYS_827_08	356	6	148	9	200	68
CHYS_828_08	9900	3	120	11	220	41
CHYS_829_08	108	<1	299	22	620	72
CHYS_830_08	716	1	570	31	90	61
CHYS_848_08	381	2	152	16	90	60
CHYS_849_08	1580	10	1660	80	240	138
CHYS_850_08	116	3	48	7	160	49
CHYS_851_08	23	1	79	5	470	65
CHYS_852_08	41	<1	507	30	490	77
*Rep CHYS_852_08	41	<1	486	30	610	83
CHYS_853_08	51	<1	209	15	730	235
CHYS_874_08	64	<1	191	14	160	69
CHYS_875_08	251	2	155	11	170	42
CHYS_876_08	330	6	1570	92	1240	108
CHYS_877_08	28	1	172	13	680	70

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_878_08	78	<1	530	41	830	112
CHYS_879_08	82	<1	235	18	600	104
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
CHYS_905_08	18	<1	18	2	110	46
CHYS_906_08	330	2	1210	67	80	93
CHYS_907_08	116	<1	168	11	220	38
*Std MMISRM16	44	<1	13	<1	200	14
*Std MMISRM16	39	<1	10	<1	180	15
*BIK BLANK	1	<1	<5	<1	<20	<5
*BIK BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101618

To: **Logan Resources Ltd.**

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

Date: Aug 29, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 48
Date Submitted Jul 14, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 48 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_908_08	12	>300	<10	<0.1	510	<1	<10	10	60	62
*Rep CHYS_908_08	13	>300	<10	<0.1	400	<1	<10	13	63	52
CHYS_909_08	7	>300	<10	0.1	870	<1	10	9	137	59
CHYS_910_08	2	135	<10	<0.1	760	<1	190	64	142	144
CHYS_935_08	23	225	420	3.9	1270	6	50	3	168	39
CHYS_936_08	9	167	500	0.3	890	3	30	3	60	144
CHYS_938_08	4	143	290	0.3	350	4	<10	<1	50	20
CHYS_939_08	30	256	350	0.9	1710	2	110	21	1630	51
CHYS_940_08	14	160	110	0.9	410	1	20	5	698	102
CHYS_941_08	8	263	<10	0.2	270	<1	<10	15	128	77
CHYS_942_08	6	266	10	<0.1	1140	<1	30	46	125	76
CHYS_943_08	3	299	<10	<0.1	820	<1	<10	5	56	25
CHYS_966_08	4	161	690	1.1	670	11	50	13	105	492
CHYS_967_08	26	297	380	1.5	910	19	40	14	1360	142
*Rep CHYS_967_08	22	276	400	1.0	980	21	40	23	619	195
CHYS_968_08	9	150	510	0.7	1900	5	120	15	825	670
CHYS_969_08	11	223	80	1.1	210	<1	<10	12	122	56
CHYS_970_08	13	237	100	0.6	550	2	<10	6	300	162
CHYS_971_08	1	289	10	<0.1	790	<1	10	39	48	109
CHYS_973_08	2	291	<10	<0.1	800	<1	20	20	43	264
CHYS_998_08	16	291	110	0.7	640	2	10	8	257	40
CHYS_999_08	5	211	110	1.0	390	<1	<10	5	298	71
CHYS_1000_08	6	166	60	0.2	530	1	10	4	41	162
CHYS_1001_08	2	127	420	0.3	1290	6	30	3	153	150
CHYS_1003_08	6	>300	10	<0.1	870	<1	10	21	108	197
CHYS_1029_08	2	56	60	0.8	1170	1	390	17	224	320
CHYS_1030_08	11	238	440	0.9	1850	8	50	44	200	461
*Rep CHYS_1030_08	11	221	500	1.0	1650	8	40	42	161	537
CHYS_1031_08	3	100	210	0.2	1660	5	50	19	193	579
CHYS_1057_08	16	194	40	0.4	970	1	10	10	119	400
CHYS_1058_08	21	200	40	0.5	1200	7	50	8	192	358
CHYS_1059_08	12	93	460	1.3	1230	3	240	19	741	203
CHYS_1081_08	9	>300	10	<0.1	450	<1	10	8	309	134
CHYS_1082_08	17	149	80	0.4	3200	17	120	16	1610	896
CHYS_1083_08	11	213	30	0.3	1320	4	20	6	76	118
CHYS_1084_08	3	249	40	0.3	990	2	<10	5	149	81
CHYS_1106_08	17	289	<10	<0.1	2480	<1	50	29	225	37
CHYS_1107_08	23	133	10	0.6	2820	2	220	26	505	292
CHYS_1108_08	7	253	20	0.3	1010	1	10	5	146	382
CHYS_1109_08	7	288	10	0.1	910	<1	20	23	210	355
*Rep CHYS_1109_08	8	294	10	0.2	930	<1	20	22	202	251
CHYS_1130_08	3	292	<10	<0.1	1070	<1	20	30	93	20
CHYS_1131_08	10	>300	30	<0.1	1350	<1	20	13	651	63
CHYS_1132_08	3	277	<10	<0.1	1690	<1	30	6	120	64
CHYS_1150_08	6	115	<10	<0.1	3220	<1	200	19	422	677
CHYS_1151_08	3	292	20	<0.1	1070	5	20	13	42	127

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_1166_08	12	156	30	<0.1	840	4	<10	6	35	30
CHYS_1168_08	3	267	<10	<0.1	900	<1	20	16	22	84
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
CHYS_1185_08	2	258	<10	<0.1	410	<1	<10	9	20	84
CHYS_1198_08	3	221	90	0.4	660	1	<10	5	71	134
CHYS_1199_08	2	275	<10	<0.1	720	2	<10	39	11	179
CHYS_1225_08	7	>300	80	0.2	1140	4	20	9	295	89
*Std MMISRM16	20	35	<10	33.6	70	<1	220	3	16	42
*Std MMISRM16	19	34	10	33.4	50	<1	220	3	15	43
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	7	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_908_08	<100	200	24	11.5	3.6	37	16	24	<5	1
*Rep CHYS_908_08	<100	220	25	11.8	4.0	32	17	23	<5	<1
CHYS_909_08	<100	540	49	20.2	10.3	37	48	48	<5	1
CHYS_910_08	<100	1010	164	112	23.6	31	140	53	12	40
CHYS_935_08	<100	2020	22	13.5	3.4	184	15	105	<5	3
CHYS_936_08	<100	840	14	8.6	3.1	259	10	39	<5	5
CHYS_938_08	<100	1640	6	3.9	1.2	320	5	27	<5	1
CHYS_939_08	<100	830	94	41.3	25.5	51	122	1090	<5	19
CHYS_940_08	<100	450	69	31.0	25.8	44	109	355	<5	<1
CHYS_941_08	<100	380	34	17.0	6.3	56	29	43	<5	<1
CHYS_942_08	<100	190	28	12.1	6.9	134	32	57	<5	6
CHYS_943_08	<100	230	27	11.9	4.8	48	25	20	<5	2
CHYS_966_08	<100	3020	49	32.1	9.1	102	31	45	<5	5
CHYS_967_08	<100	1450	150	70.0	37.4	65	159	578	<5	5
*Rep CHYS_967_08	<100	1440	129	67.2	24.4	76	112	305	<5	7
CHYS_968_08	<100	2750	85	47.0	21.0	212	92	408	<5	14
CHYS_969_08	<100	440	25	12.7	4.8	22	20	53	<5	<1
CHYS_970_08	<100	990	23	11.2	6.1	149	24	119	<5	<1
CHYS_971_08	<100	220	27	17.1	3.0	43	14	24	<5	4
CHYS_973_08	<100	260	24	11.5	3.7	93	20	21	<5	8
CHYS_998_08	<100	480	53	25.0	13.8	60	52	105	<5	2
CHYS_999_08	<100	440	69	33.9	16.4	71	72	147	<5	<1
CHYS_1000_08	<100	1060	4	2.5	0.9	307	3	24	<5	3
CHYS_1001_08	<100	1210	12	6.1	3.1	419	13	73	<5	8
CHYS_1003_08	<100	190	43	17.4	8.3	104	45	44	<5	3
CHYS_1029_08	<100	1190	23	12.2	8.4	174	33	121	<5	61
CHYS_1030_08	<100	910	40	23.7	7.3	172	31	98	<5	9
*Rep CHYS_1030_08	<100	1140	33	19.9	5.5	196	22	83	<5	8
CHYS_1031_08	<100	2040	23	13.0	5.0	382	22	105	8	13
CHYS_1057_08	<100	1330	37	22.3	6.0	218	30	45	<5	2
CHYS_1058_08	<100	1320	43	22.8	9.5	177	43	79	<5	6
CHYS_1059_08	<100	1790	48	23.6	17.6	85	69	393	<5	35
CHYS_1081_08	<100	380	66	26.6	15.6	38	74	86	<5	1
CHYS_1082_08	<100	1990	110	52.0	35.6	176	153	575	<5	18
CHYS_1083_08	<100	770	15	9.0	3.0	250	13	33	<5	3
CHYS_1084_08	100	680	27	12.7	6.0	250	26	57	<5	1
CHYS_1106_08	<100	330	45	19.1	9.8	50	47	83	<5	21
CHYS_1107_08	<100	1560	81	39.4	23.5	85	105	218	<5	34
CHYS_1108_08	<100	710	35	16.0	7.0	191	35	49	<5	1
CHYS_1109_08	<100	250	35	12.5	10.4	64	46	76	<5	1
*Rep CHYS_1109_08	<100	260	36	13.5	11.0	60	48	74	<5	2
CHYS_1130_08	<100	140	98	46.5	16.1	36	83	32	<5	4
CHYS_1131_08	100	300	146	60.4	46.3	96	207	228	10	3
CHYS_1132_08	<100	90	32	13.6	7.9	157	35	39	5	4
CHYS_1150_08	<100	430	79	36.1	27.2	35	135	194	<5	34
CHYS_1151_08	<100	160	14	7.8	2.6	152	11	17	6	4

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Order:

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	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
CHYS_1166_08	<100	270	6	4.6	1.0	379	4	20	<5	3
CHYS_1168_08	<100	130	14	7.9	1.6	129	8	10	5	6
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
CHYS_1185_08	<100	140	11	5.3	1.2	244	6	9	<5	2
CHYS_1198_08	<100	340	28	14.4	4.1	203	18	29	<5	2
CHYS_1199_08	<100	110	5	5.5	<0.5	99	2	5	<5	4
CHYS_1225_08	200	470	47	19.4	13.7	184	62	113	11	3
*Std MMISRM16	<100	480	2	0.6	0.8	2	3	6	<5	34
*Std MMISRM16	<100	490	2	0.6	0.8	2	3	4	<5	35
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_908_08	5	3.1	35	101	470	<1	7	<1	132	<1
*Rep CHYS_908_08	<5	2.3	39	108	500	<1	8	<1	136	<1
CHYS_909_08	<5	2.3	105	102	320	<1	20	<1	178	<1
CHYS_910_08	<5	0.6	171	198	400	<1	29	<1	142	<1
CHYS_935_08	6	1.2	60	45	1760	<1	17	<1	47	2
CHYS_936_08	25	1.8	33	76	350	<1	9	<1	66	3
CHYS_938_08	5	2.4	17	52	60	<1	5	<1	39	1
CHYS_939_08	<5	1.5	672	316	1040	<1	192	<1	199	1
CHYS_940_08	8	2.6	463	25	1250	<1	110	<1	147	8
CHYS_941_08	<5	1.1	80	81	1180	<1	17	<1	120	<1
CHYS_942_08	5	2.8	78	137	340	<1	17	<1	116	<1
CHYS_943_08	<5	1.4	52	115	850	<1	10	<1	92	<1
CHYS_966_08	7	<0.5	65	148	670	<1	14	<1	119	3
CHYS_967_08	<5	0.6	725	158	5810	<1	178	<1	132	<1
*Rep CHYS_967_08	<5	0.6	412	175	5100	<1	97	<1	169	<1
CHYS_968_08	12	1.3	383	564	1160	<1	99	<1	103	13
CHYS_969_08	8	0.6	60	33	700	<1	14	<1	123	2
CHYS_970_08	9	3.1	100	67	800	<1	26	<1	126	3
CHYS_971_08	<5	1.8	27	86	950	<1	6	<1	142	<1
CHYS_973_08	<5	1.5	31	130	370	<1	6	<1	124	<1
CHYS_998_08	<5	1.3	181	73	950	<1	40	<1	77	<1
CHYS_999_08	<5	1.6	246	49	630	<1	52	<1	111	2
CHYS_1000_08	10	1.6	16	107	80	<1	4	<1	98	1
CHYS_1001_08	18	2.7	55	101	150	<1	14	<1	128	6
CHYS_1003_08	<5	2.4	81	145	710	<1	16	<1	165	<1
CHYS_1029_08	21	0.6	172	377	120	<1	40	<1	26	5
CHYS_1030_08	10	3.2	95	297	1710	<1	23	<1	174	4
*Rep CHYS_1030_08	11	3.4	71	309	1440	<1	18	<1	191	5
CHYS_1031_08	17	4.0	82	366	650	<1	21	<1	204	8
CHYS_1057_08	12	2.1	77	168	330	<1	17	<1	154	6
CHYS_1058_08	9	2.2	135	197	750	<1	29	<1	181	5
CHYS_1059_08	16	1.1	344	327	710	<1	90	<1	153	11
CHYS_1081_08	<5	2.1	222	101	100	<1	45	<1	169	1
CHYS_1082_08	13	1.4	770	429	790	<1	187	<1	269	10
CHYS_1083_08	7	3.6	40	103	180	<1	10	<1	167	2
CHYS_1084_08	6	5.0	71	70	240	<1	17	<1	246	2
CHYS_1106_08	<5	1.2	153	144	510	<1	32	<1	209	<1
CHYS_1107_08	8	0.9	408	189	290	<1	88	<1	226	4
CHYS_1108_08	6	3.9	75	164	420	<1	17	<1	169	2
CHYS_1109_08	<5	1.7	126	116	340	<1	28	<1	276	<1
*Rep CHYS_1109_08	<5	1.7	127	96	320	<1	27	<1	286	<1
CHYS_1130_08	<5	2.0	137	121	930	<1	22	<1	135	<1
CHYS_1131_08	6	5.2	639	111	340	<1	119	<1	181	2
CHYS_1132_08	<5	5.0	91	99	410	<1	18	<1	163	1
CHYS_1150_08	<5	<0.5	418	395	500	<1	82	<1	199	2
CHYS_1151_08	5	4.9	22	119	350	<1	5	<1	240	3

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Order:

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1166_08	13	5.5	17	38	250	<1	5	<1	99	5
CHYS_1168_08	<5	2.9	12	122	710	<1	3	<1	152	1
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1185_08	<5	6.8	10	75	450	<1	2	<1	144	<1
CHYS_1198_08	6	5.2	43	117	310	<1	9	<1	159	2
CHYS_1199_08	<5	3.6	4	59	190	<1	1	<1	87	1
CHYS_1225_08	9	9.1	191	101	570	<1	42	<1	257	17
*Std MMISRM16	43	<0.5	12	143	60	23	3	<1	296	<1
*Std MMISRM16	44	<0.5	12	145	60	23	2	<1	296	<1
*Bik BLANK	<5	<0.5	2	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_908_08	50	12	1	60	2	3	<10	59.4	467	0.5
*Rep CHYS_908_08	47	13	<1	40	1	4	<10	56.0	398	0.5
CHYS_909_08	50	36	<1	70	<1	8	<10	49.4	708	1.0
CHYS_910_08	87	76	<1	1140	<1	25	<10	36.0	70	0.9
CHYS_935_08	33	13	<1	670	<1	3	<10	401	146	1.3
CHYS_936_08	37	9	<1	320	<1	2	<10	135	696	1.0
CHYS_938_08	23	4	<1	60	<1	<1	<10	128	553	0.8
CHYS_939_08	63	116	<1	500	<1	18	<10	291	279	1.3
CHYS_940_08	93	104	<1	60	<1	14	<10	353	1140	1.2
CHYS_941_08	33	22	<1	30	<1	5	<10	69.6	190	1.3
CHYS_942_08	32	23	<1	180	<1	5	<10	39.4	1050	0.6
CHYS_943_08	31	17	<1	60	<1	5	<10	35.5	370	0.5
CHYS_966_08	52	19	<1	280	<1	7	<10	120	110	1.0
CHYS_967_08	68	145	<1	520	<1	27	<10	606	104	1.9
*Rep CHYS_967_08	67	92	<1	590	<1	21	<10	612	120	1.8
CHYS_968_08	97	87	<1	760	<1	15	<10	712	281	2.1
CHYS_969_08	43	17	<1	40	<1	4	<10	160	206	1.1
CHYS_970_08	51	23	<1	40	<1	4	<10	415	1060	1.7
CHYS_971_08	42	9	<1	160	<1	3	<10	74.9	344	1.4
CHYS_973_08	36	13	<1	210	<1	4	<10	45.2	405	0.7
CHYS_998_08	45	43	<1	100	<1	9	<10	78.3	180	1.4
CHYS_999_08	99	61	<1	40	<1	12	<10	145	566	1.0
CHYS_1000_08	15	3	<1	140	<1	<1	<10	97.7	453	1.2
CHYS_1001_08	41	12	<1	250	<1	2	<10	221	1090	1.0
CHYS_1003_08	33	29	<1	110	<1	8	<10	44.9	883	0.7
CHYS_1029_08	40	33	<1	1130	<1	4	<10	24.8	58	0.9
CHYS_1030_08	84	25	<1	500	<1	6	<10	685	626	1.8
*Rep CHYS_1030_08	78	18	<1	460	<1	5	<10	612	705	2.0
CHYS_1031_08	44	19	<1	380	<1	4	<10	277	1120	1.8
CHYS_1057_08	96	22	<1	70	<1	5	<10	69.3	802	2.0
CHYS_1058_08	63	36	<1	190	<1	7	<10	64.0	970	2.5
CHYS_1059_08	39	69	<1	910	<1	9	<10	319	252	2.0
CHYS_1081_08	59	63	<1	60	<1	12	<10	96.2	354	2.5
CHYS_1082_08	96	150	<1	510	<1	21	<10	131	359	5.7
CHYS_1083_08	48	11	<1	130	<1	2	<10	74.2	1320	2.4
CHYS_1084_08	70	22	<1	50	<1	5	<10	104	2100	2.0
CHYS_1106_08	35	38	<1	400	<1	8	<10	33.5	190	1.4
CHYS_1107_08	74	91	<1	980	<1	15	<10	42.4	212	2.4
CHYS_1108_08	72	26	<1	80	<1	6	<10	95.6	1580	1.3
CHYS_1109_08	48	38	<1	70	<1	7	<10	62.0	626	1.7
*Rep CHYS_1109_08	48	41	29	70	<1	7	<10	58.3	656	1.8
CHYS_1130_08	79	53	<1	180	<1	16	<10	22.7	727	2.4
CHYS_1131_08	150	180	1	60	<1	28	<10	137	2550	1.3
CHYS_1132_08	63	28	1	120	<1	5	<10	43.7	1530	0.9
CHYS_1150_08	91	112	<1	1260	<1	17	<10	85.3	131	1.8
CHYS_1151_08	53	8	1	120	<1	2	<10	48.7	1810	1.7

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1166_08	32	4	1	160	<1	<1	<10	37.3	1530	1.9
CHYS_1168_08	38	5	<1	150	<1	2	<10	41.6	1070	0.9
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1185_08	23	4	<1	60	<1	2	<10	18.5	1870	<0.5
CHYS_1198_08	71	13	<1	80	<1	4	<10	62.3	1730	0.6
CHYS_1199_08	54	1	<1	70	<1	<1	<10	21.1	1490	0.5
CHYS_1225_08	91	54	2	60	<1	9	<10	105	4340	1.5
*Std MMISRM16	7	4	<1	490	<1	<1	<10	23.4	5	<0.5
*Std MMISRM16	8	4	<1	480	<1	<1	<10	22.7	<3	<0.5
*Bik BLANK	<5	<1	<1	10	<1	<1	<10	0.6	4	0.6
*Bik BLANK	<5	<1	<1	20	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_908_08	27	5	90	8	540	75
*Rep CHYS_908_08	27	3	97	8	580	71
CHYS_909_08	25	2	202	14	330	95
CHYS_910_08	153	2	893	90	2160	56
CHYS_935_08	1250	1	121	9	90	35
CHYS_936_08	579	3	72	7	80	33
CHYS_938_08	105	2	25	4	<20	43
CHYS_939_08	178	2	595	28	780	48
CHYS_940_08	272	9	327	22	190	70
CHYS_941_08	28	<1	165	12	580	32
CHYS_942_08	22	<1	123	8	1160	80
CHYS_943_08	13	<1	113	8	170	39
CHYS_966_08	296	<1	290	24	200	30
CHYS_967_08	1450	1	911	49	240	34
*Rep CHYS_967_08	1600	1	791	47	480	34
CHYS_968_08	1950	3	507	39	330	55
CHYS_969_08	348	2	119	9	90	38
CHYS_970_08	196	8	91	8	190	84
CHYS_971_08	51	1	128	13	1170	26
CHYS_973_08	14	<1	97	7	1160	58
CHYS_998_08	56	<1	278	16	260	39
CHYS_999_08	336	2	369	24	90	49
CHYS_1000_08	88	1	16	2	50	22
CHYS_1001_08	281	3	55	5	50	60
CHYS_1003_08	21	<1	181	11	530	72
CHYS_1029_08	71	<1	135	10	150	37
CHYS_1030_08	793	2	200	19	1700	67
*Rep CHYS_1030_08	838	2	165	17	1600	65
CHYS_1031_08	730	5	120	11	780	49
CHYS_1057_08	57	1	176	17	200	128
CHYS_1058_08	50	1	206	17	340	107
CHYS_1059_08	1700	4	260	19	600	51
CHYS_1081_08	37	<1	255	17	260	204
CHYS_1082_08	54	<1	588	37	870	179
CHYS_1083_08	31	<1	69	7	340	112
CHYS_1084_08	30	2	95	9	110	168
CHYS_1106_08	25	<1	253	12	1320	43
CHYS_1107_08	50	<1	466	26	260	79
CHYS_1108_08	35	1	131	12	250	147
CHYS_1109_08	27	<1	125	8	210	107
*Rep CHYS_1109_08	27	<1	134	9	270	103
CHYS_1130_08	16	<1	463	31	570	53
CHYS_1131_08	31	2	715	40	250	177
CHYS_1132_08	10	<1	133	9	1350	82
CHYS_1150_08	36	<1	397	27	1060	113
CHYS_1151_08	12	1	58	6	1210	114

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1166_08	30	<1	29	4	540	90
CHYS_1168_08	9	<1	58	6	1410	65
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1185_08	6	<1	43	4	780	54
CHYS_1198_08	41	2	107	11	150	89
CHYS_1199_08	8	<1	26	7	300	60
CHYS_1225_08	29	3	177	13	250	232
*Std MMISRM16	35	<1	7	<1	160	12
*Std MMISRM16	35	<1	7	<1	170	12
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101619

To: **Logan Resources Ltd.**

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

Date: Aug 29, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 50
Date Submitted Jul 14, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 50 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_352_08	4	216	<10	0.6	550	3	30	6	14	44
*Rep CHYS_352_08	3	211	<10	0.7	510	6	30	5	16	34
CHYS_374_08	9	>300	40	0.1	690	2	<10	9	120	42
CHYS_375_08	120	12	10	12.8	900	<1	740	25	255	59
CHYS_401_08	10	>300	<10	<0.1	290	<1	20	15	130	51
CHYS_402_08	9	136	<10	0.2	1950	<1	500	19	98	69
CHYS_433_08	35	292	<10	0.2	1010	4	<10	27	94	645
CHYS_434_08	53	>300	110	2.8	520	20	30	14	411	182
CHYS_436_08	7	248	20	0.4	330	1	<10	4	53	147
CHYS_467_08	62	196	20	5.4	230	2	40	4	1010	27
CHYS_503_08	110	160	120	10.5	600	5	230	12	1530	66
CHYS_504_08	13	245	10	0.3	180	<1	<10	9	26	28
CHYS_505_08	15	255	50	0.8	1110	<1	110	4	176	22
CHYS_538_08	26	33	100	98.5	320	<1	410	135	40	405
*Rep CHYS_538_08	18	35	130	85.2	320	2	390	150	67	347
CHYS_539_08	19	251	470	2.9	2070	4	30	14	631	159
CHYS_540_08	10	227	70	0.6	1960	1	110	51	313	65
CHYS_572_08	4	88	650	3.0	3240	4	190	3	161	671
CHYS_573_08	4	184	330	2.0	1540	3	160	35	214	1010
CHYS_574_08	5	101	110	1.0	1130	1	330	49	287	132
CHYS_605_08	4	84	870	1.9	1080	3	140	33	198	395
CHYS_606_08	13	215	190	1.2	1840	<1	160	42	602	56
CHYS_607_08	41	103	200	14.3	2120	<1	640	19	841	19
CHYS_635_08	18	>300	70	3.0	3490	<1	160	28	653	70
CHYS_636_08	4	>300	<10	0.2	3710	<1	100	10	758	32
CHYS_637_08	8	173	<10	0.4	2880	<1	510	19	2200	45
CHYS_665_08	520	21	120	5.3	690	<1	300	453	161	16
*Rep CHYS_665_08	439	20	120	7.2	840	<1	320	426	163	13
CHYS_824_08	6	275	30	<0.1	470	1	20	12	92	41
CHYS_847_08	6	287	90	0.2	160	1	<10	7	391	10
CHYS_873_08	1	>300	60	<0.1	660	1	20	17	101	56
CHYS_904_08	40	246	390	0.6	910	11	110	28	438	126
CHYS_937_08	3	219	100	0.1	1310	2	70	6	215	89
CHYS_964_08	2	96	3040	2.2	1820	3	170	12	136	944
CHYS_965_08	19	170	820	9.5	1310	12	60	48	204	375
CHYS_995_08	4	143	630	2.7	930	2	30	22	188	176
CHYS_996_08	47	291	1050	9.6	1250	3	50	11	2140	102
CHYS_997_08	13	259	450	3.2	820	2	20	9	537	140
CHYS_1025_08	57	207	50	6.9	2730	<1	470	31	12300	1260
CHYS_1026_08	10	148	1470	13.7	1360	1	160	45	566	1400
*Rep CHYS_1026_08	14	145	1410	13.0	1690	1	160	49	619	1690
CHYS_1027_08	28	242	310	2.9	570	4	10	5	645	63
CHYS_1028_08	3	87	120	0.4	1710	3	190	10	100	170
CHYS_1054_08	13	278	90	0.3	440	4	<10	13	47	66
CHYS_1055_08	3	270	30	<0.1	790	9	20	16	212	216
CHYS_1056_08	3	60	40	2.7	1030	1	450	17	359	189

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_1079_08	6	205	140	<0.1	1290	3	90	31	134	170
CHYS_1123_08	13	220	410	1.1	1370	<1	130	9	1840	33
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
CHYS_1143_08	12	191	400	4.9	4030	<1	180	46	583	787
CHYS_1144_08	10	297	130	0.4	1000	1	10	56	136	153
CHYS_1148_08	6	299	<10	<0.1	2830	1	30	44	161	92
CHYS_1149_08	3	>300	20	<0.1	1120	1	20	14	101	100
CHYS_1161_08	27	230	650	6.7	4260	3	140	13	562	200
*Rep CHYS_1161_08	25	245	550	4.6	3540	2	110	14	524	248
CHYS_1162_08	32	175	810	2.5	3030	8	220	43	248	280
*Std MMISRM16	18	36	10	28.9	50	<1	210	3	17	41
*Std MMISRM16	21	51	20	39.4	50	<1	230	4	20	64
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	6	<5
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_352_08	<100	210	2	2.4	<0.5	169	1	6	<5	3
*Rep CHYS_352_08	<100	230	2	2.2	<0.5	186	1	7	<5	3
CHYS_374_08	<100	340	31	15.0	7.1	46	32	42	<5	1
CHYS_375_08	<100	130	26	13.1	7.1	5	38	37	10	28
CHYS_401_08	<100	310	30	14.1	7.0	37	27	37	<5	2
CHYS_402_08	<100	230	22	10.9	6.8	16	27	55	<5	21
CHYS_433_08	<100	1110	16	8.8	3.6	130	13	24	<5	<1
CHYS_434_08	<100	1380	98	50.3	24.0	40	96	149	<5	2
CHYS_436_08	<100	510	20	10.6	3.3	58	14	22	<5	<1
CHYS_467_08	<100	1520	103	46.5	46.7	25	154	261	<5	<1
CHYS_503_08	<100	700	151	82.1	53.7	18	188	729	<5	15
CHYS_504_08	<100	230	7	5.0	1.1	79	4	12	<5	<1
CHYS_505_08	<100	460	19	8.8	5.1	24	24	73	<5	8
CHYS_538_08	<100	34000	3	2.2	1.0	5	4	20	10	157
*Rep CHYS_538_08	<100	33000	5	3.4	1.7	12	6	35	8	144
CHYS_539_08	<100	1040	164	83.6	37.5	34	166	282	<5	2
CHYS_540_08	<100	1450	132	59.8	30.8	22	134	203	<5	18
CHYS_572_08	<100	5820	27	25.6	4.1	330	18	95	<5	15
CHYS_573_08	<100	1650	46	29.5	9.1	161	37	83	<5	28
CHYS_574_08	<100	2740	65	32.3	17.8	74	76	123	<5	9
CHYS_605_08	<100	5030	45	27.3	12.9	287	48	108	<5	23
CHYS_606_08	<100	270	75	34.8	28.2	27	111	422	<5	10
CHYS_607_08	<100	800	124	71.9	32.6	9	153	311	<5	47
CHYS_635_08	<100	350	65	29.5	18.0	14	62	361	<5	26
CHYS_636_08	<100	100	46	20.3	14.4	15	58	382	<5	16
CHYS_637_08	<100	460	151	73.4	40.4	32	192	1600	<5	77
CHYS_665_08	<100	1730	33	16.8	17.2	9	50	101	<5	30
*Rep CHYS_665_08	<100	1760	31	15.2	16.6	8	49	103	<5	33
CHYS_824_08	<100	80	15	11.4	1.6	97	9	39	<5	3
CHYS_847_08	<100	110	35	15.1	8.2	10	39	186	<5	<1
CHYS_873_08	<100	190	23	15.1	3.7	48	15	52	<5	4
CHYS_904_08	<100	420	24	12.3	3.8	159	25	184	<5	34
CHYS_937_08	<100	250	42	21.4	9.9	103	41	118	<5	11
CHYS_964_08	<100	5050	21	16.4	4.1	233	15	68	<5	11
CHYS_965_08	<100	6030	46	28.6	9.2	91	36	135	<5	2
CHYS_995_08	<100	6630	32	20.7	6.8	220	22	112	<5	3
CHYS_996_08	<100	2020	49	19.2	23.8	39	83	1400	<5	1
CHYS_997_08	<100	810	44	20.6	14.2	47	54	237	<5	<1
CHYS_1025_08	<100	450	396	219	133	16	631	15400	<5	79
CHYS_1026_08	<100	7780	94	60.0	19.6	151	70	328	<5	14
*Rep CHYS_1026_08	<100	6670	84	52.3	20.9	142	72	369	<5	15
CHYS_1027_08	<100	1350	139	65.1	51.9	66	185	233	<5	<1
CHYS_1028_08	<100	920	28	15.5	7.9	171	31	45	<5	74
CHYS_1054_08	<100	250	12	8.9	1.7	157	7	19	<5	2
CHYS_1055_08	<100	320	97	64.5	15.7	94	72	81	<5	6
CHYS_1056_08	<100	5820	60	33.8	15.3	196	66	211	<5	57

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_1079_08	100	190	17	9.2	4.1	205	18	44	11	11
CHYS_1123_08	<100	270	67	29.2	24.6	20	99	860	<5	2
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
CHYS_1143_08	<100	1650	79	46.4	16.8	75	72	336	<5	20
CHYS_1144_08	<100	470	26	12.6	5.7	85	23	56	<5	2
CHYS_1148_08	<100	240	51	24.4	9.8	83	48	64	<5	15
CHYS_1149_08	100	230	25	10.6	6.0	82	27	34	<5	3
CHYS_1161_08	<100	1560	79	36.9	20.4	47	99	270	<5	9
*Rep CHYS_1161_08	<100	1540	86	40.6	20.3	48	102	225	<5	8
CHYS_1162_08	<100	1680	22	10.5	6.5	63	26	140	<5	16
*Std MMISRM16	<100	470	2	0.7	0.9	2	3	4	<5	33
*Std MMISRM16	<100	630	3	1.2	1.3	2	6	5	<5	34
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	2	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_352_08	<5	0.9	6	43	280	<1	1	<1	37	1
*Rep CHYS_352_08	<5	1.4	7	40	270	<1	2	<1	36	1
CHYS_374_08	<5	1.3	84	55	590	<1	18	<1	134	3
CHYS_375_08	10	<0.5	80	133	430	<1	14	<1	125	1
CHYS_401_08	<5	0.8	74	184	5110	<1	16	<1	80	<1
CHYS_402_08	<5	<0.5	80	101	700	<1	17	<1	90	1
CHYS_433_08	<5	1.4	32	453	330	<1	7	<1	85	2
CHYS_434_08	<5	0.8	293	189	4710	<1	61	<1	150	9
CHYS_436_08	<5	0.8	33	64	450	<1	7	<1	114	<1
CHYS_467_08	<5	<0.5	747	61	3740	<1	159	<1	185	1
CHYS_503_08	<5	<0.5	841	108	820	<1	200	<1	161	4
CHYS_504_08	<5	1.5	13	57	510	<1	3	<1	114	<1
CHYS_505_08	<5	<0.5	93	61	540	<1	21	<1	80	<1
CHYS_538_08	22	<0.5	21	134	100	<1	5	<1	82	17
*Rep CHYS_538_08	13	<0.5	38	128	180	<1	9	<1	83	15
CHYS_539_08	<5	<0.5	576	93	1720	<1	121	<1	84	4
CHYS_540_08	<5	<0.5	364	160	740	<1	74	<1	419	1
CHYS_572_08	<5	<0.5	80	357	90	<1	20	<1	82	7
CHYS_573_08	<5	<0.5	103	850	270	<1	24	<1	194	5
CHYS_574_08	<5	<0.5	202	311	630	<1	42	<1	139	3
CHYS_605_08	11	0.6	158	356	280	<1	34	<1	253	16
CHYS_606_08	<5	<0.5	498	60	480	<1	118	<1	190	<1
CHYS_607_08	<5	<0.5	425	81	120	<1	85	<1	100	<1
CHYS_635_08	<5	<0.5	241	214	830	<1	60	<1	82	<1
CHYS_636_08	<5	<0.5	326	32	320	<1	86	<1	45	<1
CHYS_637_08	<5	<0.5	919	258	690	<1	231	<1	52	<1
CHYS_665_08	11	<0.5	169	82	7230	<1	32	<1	122	2
*Rep CHYS_665_08	11	<0.5	166	75	6590	<1	32	<1	123	2
CHYS_824_08	<5	1.1	31	45	410	<1	8	<1	88	<1
CHYS_847_08	<5	0.7	189	33	870	<1	50	<1	49	<1
CHYS_873_08	<5	1.7	50	73	740	<1	12	<1	156	<1
CHYS_904_08	<5	2.0	126	135	2890	<1	35	<1	324	1
CHYS_937_08	<5	1.7	137	83	900	<1	31	<1	124	<1
CHYS_964_08	37	<0.5	59	371	330	<1	16	<1	72	12
CHYS_965_08	9	<0.5	132	134	1630	<1	33	<1	63	3
CHYS_995_08	23	0.9	89	109	3190	<1	23	<1	122	8
CHYS_996_08	7	1.4	576	43	2570	<1	176	<1	76	3
CHYS_997_08	5	1.5	246	62	1670	<1	59	<1	98	2
CHYS_1025_08	<5	<0.5	6240	1010	660	<1	1960	<1	48	<1
CHYS_1026_08	9	<0.5	277	393	1020	<1	74	<1	70	7
*Rep CHYS_1026_08	11	<0.5	304	465	950	<1	82	<1	77	8
CHYS_1027_08	7	3.3	635	127	700	<1	126	<1	152	4
CHYS_1028_08	10	0.6	81	183	210	<1	16	<1	126	3
CHYS_1054_08	<5	3.9	20	69	510	<1	5	<1	68	<1
CHYS_1055_08	<5	1.1	187	157	970	<1	36	<1	95	1
CHYS_1056_08	11	<0.5	276	588	190	<1	63	<1	12	10

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1079_08	7	6.1	60	90	310	<1	14	<1	151	3
CHYS_1123_08	17	0.8	582	31	1360	<1	165	<1	58	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
CHYS_1143_08	11	<0.5	286	285	330	<1	75	<1	73	4
CHYS_1144_08	9	1.6	78	130	930	<1	18	<1	110	1
CHYS_1148_08	<5	3.8	152	148	620	<1	30	<1	317	2
CHYS_1149_08	<5	4.0	59	121	570	<1	12	<1	205	2
CHYS_1161_08	13	1.0	364	116	980	<1	82	<1	143	11
*Rep CHYS_1161_08	14	1.0	334	133	1010	<1	74	<1	152	11
CHYS_1162_08	7	1.2	119	261	700	<1	30	<1	177	5
*Std MMISRM16	40	<0.5	15	156	60	24	3	<1	285	<1
*Std MMISRM16	53	<0.5	19	247	110	31	3	<1	315	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Order:

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_352_08	15	1	<1	120	<1	<1	<10	9.9	238	1.0
*Rep CHYS_352_08	17	1	<1	120	<1	<1	<10	11.6	376	0.8
CHYS_374_08	42	24	<1	100	<1	5	<10	55.9	297	1.4
CHYS_375_08	11	26	<1	2790	<1	5	<10	47.9	<3	1.5
CHYS_401_08	34	22	<1	50	<1	5	<10	38.4	255	0.9
CHYS_402_08	15	22	<1	1810	<1	4	<10	30.5	13	0.9
CHYS_433_08	25	10	<1	60	<1	3	<10	43.5	476	2.4
CHYS_434_08	60	78	<1	210	<1	16	<10	90.5	168	2.5
CHYS_436_08	35	10	<1	30	<1	3	<10	34.0	236	2.1
CHYS_467_08	88	185	<1	160	<1	20	<10	133	76	3.7
CHYS_503_08	76	177	<1	690	<1	27	<10	92.7	44	5.0
CHYS_504_08	16	3	<1	20	<1	<1	<10	15.9	201	1.6
CHYS_505_08	26	21	<1	590	<1	4	<10	87.2	97	0.9
CHYS_538_08	7	4	<1	1910	<1	<1	<10	5.3	<3	6.2
*Rep CHYS_538_08	13	7	<1	1830	<1	<1	<10	7.4	<3	5.3
CHYS_539_08	173	135	<1	470	<1	28	<10	159	147	2.2
CHYS_540_08	94	100	<1	780	<1	22	<10	117	47	1.6
CHYS_572_08	108	17	<1	1580	<1	3	<10	339	86	4.3
CHYS_573_08	109	29	<1	1040	<1	7	<10	162	66	3.4
CHYS_574_08	62	58	<1	780	<1	12	<10	24.4	29	3.7
CHYS_605_08	97	39	<1	760	<1	7	<10	75.4	191	4.0
CHYS_606_08	78	105	<1	830	<1	15	<10	174	121	3.1
CHYS_607_08	47	112	<1	3550	<1	21	<10	32.8	<3	1.4
CHYS_635_08	53	50	<1	1530	<1	11	<10	82.9	20	1.4
CHYS_636_08	31	53	<1	1730	<1	9	<10	37.9	51	2.9
CHYS_637_08	169	177	<1	2480	<1	27	<10	313	8	1.3
CHYS_665_08	30	44	<1	1270	<1	6	<10	261	6	0.8
*Rep CHYS_665_08	30	42	<1	1650	<1	6	<10	247	6	0.8
CHYS_824_08	26	7	<1	220	<1	2	<10	187	239	1.1
CHYS_847_08	29	38	<1	30	<1	6	<10	164	163	1.0
CHYS_873_08	41	12	<1	200	<1	3	<10	224	451	1.2
CHYS_904_08	29	25	<1	920	<1	4	<10	551	256	0.8
CHYS_937_08	57	33	<1	480	<1	7	<10	267	432	0.8
CHYS_964_08	58	12	<1	1650	<1	3	<10	247	101	2.3
CHYS_965_08	78	31	<1	600	<1	7	<10	309	87	1.6
CHYS_995_08	90	19	<1	290	<1	4	<10	430	263	2.5
CHYS_996_08	49	94	<1	210	<1	11	<10	842	378	2.5
CHYS_997_08	53	51	<1	120	<1	8	<10	365	386	1.2
CHYS_1025_08	584	675	<1	2420	<1	80	<10	1040	4	2.7
CHYS_1026_08	114	56	<1	1680	<1	13	<10	251	53	3.7
*Rep CHYS_1026_08	107	60	<1	1700	<1	12	<10	246	62	3.6
CHYS_1027_08	151	166	<1	20	<1	26	<10	67.9	1440	5.8
CHYS_1028_08	51	23	<1	710	<1	5	<10	14.3	207	1.1
CHYS_1054_08	37	5	<1	70	<1	2	<10	40.2	709	1.5
CHYS_1055_08	64	52	<1	140	<1	14	<10	41.2	287	4.5
CHYS_1056_08	95	58	<1	1050	<1	10	<10	39.3	29	2.1

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Order:

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1079_08	68	15	2	260	<1	3	<10	86.9	1640	2.0
CHYS_1123_08	71	105	<1	560	<1	13	<10	1710	289	1.3
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
CHYS_1143_08	106	61	<1	1990	<1	13	<10	347	118	5.1
CHYS_1144_08	47	20	<1	160	<1	4	<10	162	536	2.0
CHYS_1148_08	59	39	<1	270	<1	8	<10	72.2	946	3.3
CHYS_1149_08	63	20	<1	100	<1	4	<10	71.4	1640	1.4
CHYS_1161_08	60	84	<1	950	<1	15	<10	71.6	466	3.1
*Rep CHYS_1161_08	65	83	<1	750	<1	15	<10	70.9	485	3.2
CHYS_1162_08	35	25	<1	980	<1	4	<10	113	322	1.1
*Std MMISRM16	8	4	<1	450	<1	<1	<10	26.7	<3	<0.5
*Std MMISRM16	11	6	<1	470	<1	<1	<10	33.0	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	0.9	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_352_08	3	<1	11	4	350	9
*Rep CHYS_352_08	3	<1	10	3	240	13
CHYS_374_08	29	<1	145	10	390	111
CHYS_375_08	67	<1	130	9	70	9
CHYS_401_08	19	<1	137	9	920	48
CHYS_402_08	32	<1	128	8	330	18
CHYS_433_08	47	<1	59	7	870	119
CHYS_434_08	92	<1	502	36	550	90
CHYS_436_08	23	<1	98	7	200	39
CHYS_467_08	139	<1	356	40	190	60
CHYS_503_08	63	<1	925	63	180	25
CHYS_504_08	9	<1	33	4	210	21
CHYS_505_08	40	<1	92	6	420	28
CHYS_538_08	58	<1	19	2	260	<5
*Rep CHYS_538_08	96	<1	31	4	350	<5
CHYS_539_08	248	<1	1020	61	360	43
CHYS_540_08	217	<1	696	40	350	45
CHYS_572_08	1110	<1	149	26	30	47
CHYS_573_08	206	<1	257	24	1230	44
CHYS_574_08	98	<1	374	23	500	29
CHYS_605_08	566	1	270	23	330	77
CHYS_606_08	150	<1	420	25	420	38
CHYS_607_08	275	<1	1030	49	280	34
CHYS_635_08	65	<1	359	19	960	23
CHYS_636_08	34	<1	294	12	90	18
CHYS_637_08	247	<1	896	51	790	34
CHYS_665_08	1990	2	219	14	6960	23
*Rep CHYS_665_08	1910	2	210	13	6580	20
CHYS_824_08	107	<1	68	10	910	20
CHYS_847_08	124	<1	167	10	150	17
CHYS_873_08	123	2	105	12	1090	36
CHYS_904_08	103	3	121	10	960	19
CHYS_937_08	353	1	226	15	260	49
CHYS_964_08	1550	<1	133	14	200	21
CHYS_965_08	2880	<1	290	22	460	30
CHYS_995_08	2240	1	173	16	110	47
CHYS_996_08	840	3	228	13	340	42
CHYS_997_08	279	3	217	15	250	50
CHYS_1025_08	363	<1	3380	155	890	27
CHYS_1026_08	2060	<1	614	43	380	27
*Rep CHYS_1026_08	2060	<1	563	41	340	30
CHYS_1027_08	100	2	731	47	260	139
CHYS_1028_08	82	<1	163	13	230	38
CHYS_1054_08	16	<1	56	7	760	44
CHYS_1055_08	21	<1	562	50	1750	56
CHYS_1056_08	194	<1	385	25	170	60

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Order:

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1079_08	25	1	73	7	2760	117
CHYS_1123_08	1650	2	313	22	90	101
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1143_08	1210	<1	541	36	290	41
CHYS_1144_08	148	<1	114	9	860	42
CHYS_1148_08	18	<1	242	16	2090	68
CHYS_1149_08	14	1	92	7	670	129
CHYS_1161_08	167	2	439	25	430	81
*Rep CHYS_1161_08	186	2	466	28	370	82
CHYS_1162_08	78	3	113	8	1630	55
*Std MMISRM16	37	<1	8	<1	170	12
*Std MMISRM16	51	<1	13	<1	220	15
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101620

To: **Logan Resources Ltd.**

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

Date: Sep 18, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 47
Date Submitted Jul 14, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 47 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Final : TO101620 Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_1167_08	7	>300	10	<0.1	980	<1	40	10	138	80
*Rep CHYS_1167_08	7	>300	10	<0.1	880	<1	30	10	132	74
CHYS_1178_08	5	>300	100	<0.1	730	<1	10	10	303	69
CHYS_1182_08	22	297	60	0.7	740	5	10	17	341	58
CHYS_1183_08	5	189	30	0.4	730	3	<10	3	74	145
CHYS_1184_08	27	>300	20	<0.1	350	14	10	9	287	90
CHYS_1194_08	3	>300	10	<0.1	750	<1	20	14	163	172
CHYS_1200_08	12	170	10	0.1	1420	11	150	14	791	97
CHYS_1212_08	4	241	30	0.5	860	1	10	7	92	534
CHYS_1213_08	6	197	50	0.4	770	<1	<10	3	121	52
CHYS_1214_08	6	107	<10	<0.1	2410	3	330	61	208	93
CHYS_1226_08	9	244	80	0.2	1410	2	10	5	165	741
CHYS_1227_08	6	247	10	<0.1	1140	1	30	36	20	88
GWS_66_08	5	98	20	<0.1	6470	<1	130	7	2840	34
*Rep GWS_66_08	5	95	20	<0.1	7330	<1	140	7	2720	36
GWS_67_08	11	179	30	0.1	3110	1	200	9	1930	106
GWS_132_08	20	229	30	0.4	2060	1	30	18	740	556
GWS_133_08	11	259	<10	<0.1	1000	1	<10	5	30	58
GWS_134_08	4	>300	<10	<0.1	570	<1	<10	11	55	95
GWS_135_08	2	176	<10	<0.1	810	<1	<10	<1	17	85
GWS_136_08	7	281	<10	<0.1	620	<1	10	11	74	31
GWS_137_08	56	76	10	0.4	3290	<1	350	15	546	173
GWS_166_08	3	97	<10	<0.1	700	<1	560	21	33	17
GWS_167_08	5	230	<10	<0.1	1940	<1	150	41	156	99
GWS_170_08	23	129	120	0.3	3250	4	160	7	3270	448
GWS_171_08	12	40	<10	<0.1	210	<1	360	22	7	5
GWS_200_08	2	65	<10	<0.1	590	<1	590	30	18	7
*Rep GWS_200_08	<1	59	<10	<0.1	580	<1	620	33	13	12
GWS_201_08	3	134	<10	<0.1	760	<1	350	37	61	30
GWS_202_08	11	184	<10	<0.1	1380	<1	300	51	61	30
GWS_203_08	4	63	40	0.3	1370	<1	600	12	98	345
GWS_204_08	132	>300	50	0.3	520	74	20	14	324	54
GWS_205_08	26	259	60	0.6	1030	14	40	20	1580	46
GWS_302_08	16	159	<10	0.3	3460	1	370	82	253	18
GWS_303_08	35	191	20	<0.1	1410	1	230	76	73	43
GWS_304_08	301	21	20	1.3	460	<1	450	44	258	38
GWS_305_08	8	288	50	<0.1	580	2	60	66	229	50
GWS_306_08	11	247	210	0.1	840	8	130	62	197	88
GWS_307_08	44	70	110	2.6	820	1	490	105	383	21
GWS_336_08	120	34	30	0.7	2370	<1	340	58	365	28
*Rep GWS_336_08	132	36	30	0.8	2510	<1	360	62	377	33
GWS_337_08	15	259	120	0.1	750	4	60	13	376	63
GWS_338_08	4	238	<10	<0.1	270	<1	50	33	229	98

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Final : TO101620 Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
GWS_339_08	2	99	2230	0.1	1110	62	90	1	64	152
GWS_340_08	15	194	250	0.3	570	8	200	56	149	105
GWS_341_08	83	138	390	2.2	220	12	40	35	738	28
GWS_406_08	7	241	50	0.1	100	3	<10	13	198	23
GWS_407_08	10	284	190	<0.1	490	6	20	81	132	61
GWS_408_08	13	224	50	<0.1	180	4	20	26	127	18
GWS_409_08	14	292	40	<0.1	300	3	10	31	84	52
CHYS_1213_08-A	3	241	40	0.2	820	<1	<10	5	103	88
*Std MMISRM16	25	49	10	36.6	90	<1	260	3	20	58
*Std MMISRM16	25	49	20	36.5	90	<1	260	4	24	59
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_1167_08	100	240	27	10.4	7.6	63	34	45	<5	2
*Rep CHYS_1167_08	100	240	28	10.8	7.5	61	34	43	<5	2
CHYS_1178_08	<100	640	34	13.3	8.4	66	39	117	<5	1
CHYS_1182_08	<100	1260	97	43.9	18.3	60	88	117	<5	<1
CHYS_1183_08	<100	900	11	6.4	2.6	308	10	30	<5	<1
CHYS_1184_08	<100	320	28	10.6	10.1	87	37	89	<5	<1
CHYS_1194_08	<100	170	48	19.9	9.9	48	52	61	<5	2
CHYS_1200_08	<100	350	178	67.2	64.0	50	290	383	<5	19
CHYS_1212_08	<100	750	17	7.7	4.3	153	19	38	<5	1
CHYS_1213_08	<100	720	30	22.7	5.5	198	24	48	<5	2
CHYS_1214_08	<100	100	56	23.8	16.5	49	77	70	13	69
CHYS_1226_08	<100	730	32	15.5	7.2	208	34	53	<5	1
CHYS_1227_08	<100	150	10	6.1	1.1	156	5	9	<5	8
GWS_66_08	<100	110	198	75.6	71.0	19	381	6100	6	19
*Rep GWS_66_08	<100	100	193	74.6	69.4	17	374	5960	6	20
GWS_67_08	<100	310	97	34.9	37.5	50	169	922	<5	15
GWS_132_08	<100	860	88	39.3	26.1	171	113	308	<5	2
GWS_133_08	<100	120	7	5.6	1.0	186	4	17	<5	1
GWS_134_08	<100	130	21	10.0	3.6	73	17	26	<5	2
GWS_135_08	<100	300	2	1.3	<0.5	366	1	9	<5	2
GWS_136_08	<100	110	22	10.5	4.5	154	21	38	<5	1
GWS_137_08	<100	690	46	19.8	17.9	51	72	254	<5	19
GWS_166_08	<100	50	7	4.0	1.6	16	8	14	<5	8
GWS_167_08	<100	220	60	30.6	10.4	49	54	45	<5	5
GWS_170_08	<100	740	209	85.8	73.5	110	337	1680	<5	11
GWS_171_08	<100	30	3	1.9	0.5	6	3	3	<5	2
GWS_200_08	<100	20	4	2.6	1.0	11	5	10	<5	2
*Rep GWS_200_08	<100	20	3	1.9	0.8	8	4	7	<5	3
GWS_201_08	<100	130	30	16.5	5.0	44	26	29	<5	4
GWS_202_08	<100	360	70	44.1	8.2	47	46	36	<5	4
GWS_203_08	<100	2160	15	9.2	4.7	142	19	47	<5	5
GWS_204_08	100	210	47	17.7	13.6	96	57	110	<5	<1
GWS_205_08	100	310	106	39.2	39.9	83	177	782	<5	2
GWS_302_08	<100	300	116	60.3	28.3	33	133	395	<5	31
GWS_303_08	<100	120	25	11.9	6.2	45	28	64	<5	8
GWS_304_08	<100	200	31	11.8	12.8	7	58	99	<5	43
GWS_305_08	<100	90	33	14.7	7.1	68	32	58	<5	5
GWS_306_08	<100	70	22	10.8	5.5	95	24	48	<5	10
GWS_307_08	<100	60	49	21.3	20.4	26	83	204	<5	35
GWS_336_08	<100	790	64	27.5	26.6	11	112	211	<5	34
*Rep GWS_336_08	<100	820	66	28.9	27.1	11	115	206	<5	36
GWS_337_08	<100	270	60	28.3	17.8	27	76	153	<5	2
GWS_338_08	<100	290	82	39.3	17.7	27	77	77	<5	3

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
GWS_339_08	<100	40	7	4.0	1.8	274	8	23	<5	12
GWS_340_08	<100	320	26	12.9	7.4	32	32	62	<5	3
GWS_341_08	<100	450	101	47.4	39.4	19	148	484	<5	<1
GWS_406_08	<100	230	30	13.5	7.1	24	31	62	<5	<1
GWS_407_08	<100	170	21	10.5	5.1	42	22	42	<5	1
GWS_408_08	<100	170	24	11.0	6.2	22	26	44	<5	<1
GWS_409_08	<100	220	17	7.5	3.7	45	16	25	<5	<1
CHYS_1213_08-A	<100	330	32	18.9	4.8	244	21	43	<5	1
*Std MMISRM16	<100	620	2	0.9	1.1	2	4	8	<5	42
*Std MMISRM16	<100	620	2	0.9	1.0	2	4	6	<5	41
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1167_08	7	4.6	79	110	610	<1	16	<1	206	2
*Rep CHYS_1167_08	6	3.9	77	109	630	<1	16	<1	202	1
CHYS_1178_08	<5	3.9	151	81	190	<1	36	<1	215	5
CHYS_1182_08	5	4.1	266	94	1170	<1	54	<1	93	2
CHYS_1183_08	<5	4.3	36	64	80	<1	9	<1	268	3
CHYS_1184_08	<5	3.2	139	93	170	<1	33	<1	268	5
CHYS_1194_08	6	3.0	126	122	150	<1	25	<1	194	3
CHYS_1200_08	<5	1.5	859	372	390	<1	166	<1	194	4
CHYS_1212_08	<5	1.9	55	135	150	<1	12	<1	214	4
CHYS_1213_08	5	4.9	74	47	80	<1	16	<1	123	2
CHYS_1214_08	<5	0.9	168	179	680	1	31	<1	375	3
CHYS_1226_08	18	4.2	83	131	150	<1	18	<1	152	15
CHYS_1227_08	<5	2.8	11	97	310	<1	2	<1	73	<1
GWS_66_08	<5	<0.5	3240	161	300	<1	917	<1	393	6
*Rep GWS_66_08	<5	0.5	3150	164	260	<1	892	<1	402	4
GWS_67_08	<5	1.3	946	271	620	<1	238	<1	203	5
GWS_132_08	<5	2.1	409	215	1870	<1	98	<1	187	13
GWS_133_08	<5	2.5	15	84	450	1	3	<1	102	<1
GWS_134_08	<5	1.1	43	169	580	1	9	<1	199	<1
GWS_135_08	<5	1.8	7	125	10	1	2	<1	97	<1
GWS_136_08	<5	2.3	56	103	580	<1	12	<1	277	1
GWS_137_08	9	<0.5	355	179	50	1	83	<1	123	2
GWS_166_08	<5	<0.5	21	78	120	1	4	<1	91	<1
GWS_167_08	<5	<0.5	102	178	620	<1	20	<1	196	<1
GWS_170_08	<5	2.4	1620	222	520	<1	401	<1	228	17
GWS_171_08	<5	<0.5	6	92	20	1	1	<1	9	<1
GWS_200_08	<5	<0.5	13	44	120	1	3	<1	7	<1
*Rep GWS_200_08	<5	<0.5	9	43	140	1	2	<1	11	<1
GWS_201_08	<5	<0.5	53	81	1110	1	11	<1	34	<1
GWS_202_08	<5	<0.5	80	105	670	1	15	<1	64	<1
GWS_203_08	5	<0.5	70	135	260	1	15	<1	122	5
GWS_204_08	<5	3.4	186	90	22500	<1	40	<1	218	10
GWS_205_08	<5	3.6	1030	81	3410	<1	257	<1	225	20
GWS_302_08	<5	<0.5	460	103	1250	1	106	<1	86	<1
GWS_303_08	<5	<0.5	83	116	2980	1	18	<1	106	<1
GWS_304_08	<5	<0.5	209	170	390	2	39	<1	31	1
GWS_305_08	<5	1.8	103	85	3540	<1	21	<1	174	1
GWS_306_08	<5	1.6	77	121	5170	<1	16	<1	149	3
GWS_307_08	<5	<0.5	343	121	1730	1	73	<1	74	2
GWS_336_08	<5	<0.5	427	248	630	1	81	<1	77	1
*Rep GWS_336_08	<5	<0.5	422	255	750	1	80	<1	76	1
GWS_337_08	<5	0.8	266	92	800	<1	57	<1	147	3
GWS_338_08	<5	0.6	222	316	490	1	43	<1	191	<1

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GWS_339_08	<5	<0.5	31	63	50	1	7	<1	282	14
GWS_340_08	<5	<0.5	102	159	1290	1	22	<1	178	1
GWS_341_08	<5	<0.5	711	34	6290	<1	170	<1	301	2
GWS_406_08	<5	0.5	124	50	1460	1	27	<1	77	<1
GWS_407_08	<5	1.3	77	87	3810	1	17	<1	160	2
GWS_408_08	<5	0.6	89	63	820	<1	18	<1	186	1
GWS_409_08	<5	1.0	48	85	1580	<1	10	<1	145	1
CHYS_1213_08-A	<5	5.8	59	84	140	<1	13	<1	204	2
*Std MMISRM16	54	0.6	17	202	90	32	3	<1	350	<1
*Std MMISRM16	53	<0.5	18	205	100	31	4	<1	348	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	5	<10	<1	<1	<1	<5	<1

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CHYS_1167_08	58	26	2	140	2	5	<10	89.8	1380	1.5
*Rep CHYS_1167_08	59	27	1	90	1	5	<10	88.3	1290	1.5
CHYS_1178_08	28	35	<1	80	<1	6	<10	65.0	680	2.0
CHYS_1182_08	77	69	<1	80	<1	16	<10	68.9	607	2.0
CHYS_1183_08	77	9	<1	40	<1	2	<10	56.2	1650	1.6
CHYS_1184_08	52	35	1	40	<1	5	<10	37.3	1300	3.1
CHYS_1194_08	40	40	<1	130	<1	8	<10	48.9	795	1.8
CHYS_1200_08	144	258	<1	370	<1	37	<10	120	450	3.0
CHYS_1212_08	45	16	<1	80	<1	3	<10	56.9	681	1.6
CHYS_1213_08	136	20	<1	60	<1	4	<10	75.7	2300	1.3
CHYS_1214_08	30	58	<1	1150	<1	11	<10	34.3	260	1.3
CHYS_1226_08	87	27	<1	80	<1	6	<10	82.2	2100	1.2
CHYS_1227_08	41	3	<1	260	<1	1	<10	58.2	680	0.8
GWS_66_08	53	395	<1	540	<1	44	<10	96.4	105	2.1
*Rep GWS_66_08	52	384	<1	600	<1	44	<10	92.2	86	2.3
GWS_67_08	64	178	<1	470	<1	21	<10	110	404	2.8
GWS_132_08	145	102	<1	120	<1	16	<10	120	958	7.1
GWS_133_08	29	3	<1	60	<1	<1	<10	26.2	535	3.5
GWS_134_08	27	12	<1	50	<1	3	<10	24.5	267	2.5
GWS_135_08	14	2	<1	90	<1	<1	<10	12.6	403	2.0
GWS_136_08	49	17	<1	60	<1	4	<10	47.8	752	1.3
GWS_137_08	15	74	<1	490	<1	9	<10	43.4	55	3.5
GWS_166_08	7	6	<1	1310	<1	1	<10	4.6	17	1.1
GWS_167_08	50	34	<1	720	<1	10	<10	46.6	131	1.9
GWS_170_08	132	335	1	330	<1	43	<10	185	1280	5.2
GWS_171_08	<5	2	<1	860	<1	<1	<10	2.5	19	0.9
GWS_200_08	<5	4	<1	920	<1	<1	<10	2.2	13	0.8
*Rep GWS_200_08	<5	3	<1	970	<1	<1	<10	1.5	19	0.5
GWS_201_08	24	17	<1	900	<1	4	<10	14.1	37	0.9
GWS_202_08	23	26	<1	1550	<1	9	<10	16.3	34	1.3
GWS_203_08	31	16	<1	2680	<1	3	<10	12.2	34	1.6
GWS_204_08	94	51	1	70	<1	9	<10	141	1170	4.7
GWS_205_08	105	204	1	100	<1	23	<10	145	1700	9.4
GWS_302_08	98	110	<1	2540	<1	20	<10	95.6	33	2.5
GWS_303_08	25	22	<1	420	<1	4	<10	29.3	181	1.7
GWS_304_08	13	53	<1	710	<1	7	<10	21.8	4	1.5
GWS_305_08	43	27	<1	170	<1	5	<10	82.1	818	1.7
GWS_306_08	37	20	<1	310	<1	4	<10	95.1	609	1.5
GWS_307_08	9	81	<1	640	<1	10	<10	20.8	30	1.5
GWS_336_08	12	104	<1	740	<1	13	<10	40.0	9	1.2
*Rep GWS_336_08	13	103	<1	780	<1	14	<10	40.3	10	1.3
GWS_337_08	44	67	<1	270	<1	11	<10	107	298	1.9
GWS_338_08	34	59	<1	270	<1	14	<10	27.8	227	2.1

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GWS_339_08	30	7	1	400	<1	1	<10	19.6	82	0.8
GWS_340_08	30	27	<1	300	<1	5	<10	39.9	115	1.4
GWS_341_08	86	151	<1	70	<1	20	<10	76.1	120	3.0
GWS_406_08	35	28	<1	10	<1	5	<10	47.7	207	1.1
GWS_407_08	36	19	<1	80	<1	4	<10	48.2	569	1.2
GWS_408_08	37	22	<1	40	<1	4	<10	39.7	233	1.0
GWS_409_08	24	13	<1	50	<1	3	<10	38.3	407	1.3
CHYS_1213_08-A	83	17	<1	50	<1	5	<10	48.1	1830	1.1
*Std MMISRM16	13	5	<1	530	<1	<1	<10	36.5	8	0.6
*Std MMISRM16	11	5	<1	520	<1	<1	<10	32.2	4	0.8
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1167_08	17	5	92	7	580	137
*Rep CHYS_1167_08	16	3	94	7	630	137
CHYS_1178_08	30	<1	123	8	230	84
CHYS_1182_08	51	1	445	28	210	138
CHYS_1183_08	20	1	41	6	60	106
CHYS_1184_08	14	1	99	8	350	127
CHYS_1194_08	19	<1	199	12	680	87
CHYS_1200_08	46	<1	819	42	800	193
CHYS_1212_08	18	<1	62	6	160	96
CHYS_1213_08	44	1	159	21	130	114
CHYS_1214_08	40	<1	226	16	3150	60
CHYS_1226_08	51	2	129	13	170	150
CHYS_1227_08	25	<1	43	4	1440	40
GWS_66_08	23	<1	1240	38	140	136
*Rep GWS_66_08	23	<1	1230	38	150	133
GWS_67_08	27	<1	415	20	410	129
GWS_132_08	45	<1	395	27	750	185
GWS_133_08	6	<1	32	5	530	36
GWS_134_08	6	<1	91	7	540	32
GWS_135_08	5	<1	7	1	60	19
GWS_136_08	15	<1	89	7	500	52
GWS_137_08	15	<1	225	13	160	31
GWS_166_08	13	<1	42	3	740	8
GWS_167_08	24	<1	322	23	820	52
GWS_170_08	40	2	965	56	440	205
GWS_171_08	5	<1	18	1	140	<5
GWS_200_08	4	<1	26	2	2380	<5
*Rep GWS_200_08	4	<1	21	1	2400	<5
GWS_201_08	29	<1	190	11	1220	14
GWS_202_08	40	<1	533	32	400	12
GWS_203_08	82	<1	101	9	70	25
GWS_204_08	42	<1	164	11	520	239
GWS_205_08	46	1	430	25	380	199
GWS_302_08	122	<1	710	41	2040	34
GWS_303_08	23	<1	139	8	2110	25
GWS_304_08	21	<1	180	8	780	13
GWS_305_08	14	<1	143	9	900	78
GWS_306_08	20	<1	95	7	1940	77
GWS_307_08	19	<1	245	13	1540	18
GWS_336_08	63	<1	366	19	1460	28
*Rep GWS_336_08	69	<1	377	19	1600	28
GWS_337_08	70	<1	290	20	80	75
GWS_338_08	29	<1	460	24	180	36

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Final : TO101620 Order:

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
GWS_339_08	17	<1	35	3	20	21
GWS_340_08	17	<1	136	10	440	37
GWS_341_08	36	<1	535	37	150	56
GWS_406_08	42	<1	147	9	30	30
GWS_407_08	16	<1	104	8	1610	46
GWS_408_08	14	<1	120	8	300	37
GWS_409_08	9	<1	74	5	230	55
CHYS_1213_08-A	17	1	145	15	180	97
*Std MMISRM16	45	1	10	<1	220	14
*Std MMISRM16	45	<1	10	<1	220	14
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101621

To: **Logan Resources Ltd.**

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

Date: Sep 02, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 50
Date Submitted Jul 14, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 50 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_301_08	6	179	<10	<0.1	2680	<1	190	12	122	225
*Rep CHYS_301_08	4	187	<10	<0.1	2450	<1	190	16	132	174
CHYS_302_08	3	260	<10	<0.1	1340	<1	60	12	63	72
CHYS_303_08	7	235	<10	<0.1	920	<1	110	49	127	67
CHYS_304_08	53	>300	20	0.2	880	<1	20	6	1500	52
CHYS_305_08	4	>300	<10	<0.1	1280	<1	60	17	382	94
CHYS_306_08	6	214	<10	<0.1	2210	<1	260	16	166	15
CHYS_323_08	<1	99	<10	<0.1	1340	<1	340	7	46	53
CHYS_324_08	5	222	<10	<0.1	2050	<1	180	48	64	140
CHYS_325_08	6	>300	10	0.2	1420	<1	20	18	495	23
CHYS_326_08	6	191	<10	<0.1	1110	<1	200	58	284	49
CHYS_328_08	28	243	<10	6.0	1460	6	180	92	1340	35
CHYS_329_08	8	261	<10	<0.1	980	3	30	21	58	119
CHYS_346_08	2	95	<10	0.2	3130	<1	430	12	111	34
*Rep CHYS_346_08	2	95	<10	0.2	2920	<1	390	11	121	32
CHYS_347_08	<1	198	<10	<0.1	3550	<1	150	28	26	213
CHYS_348_08	2	180	<10	<0.1	1730	<1	260	38	147	87
CHYS_349_08	16	>300	<10	<0.1	1090	<1	60	98	114	43
CHYS_350_08	4	>300	<10	<0.1	1620	<1	30	10	219	93
CHYS_351_08	18	300	70	0.3	650	2	70	26	418	78
CHYS_368_08	<1	132	10	<0.1	5640	1	200	27	138	453
CHYS_369_08	5	>300	10	<0.1	780	2	<10	11	87	101
CHYS_370_08	8	223	20	<0.1	6710	<1	50	12	410	79
CHYS_371_08	5	292	20	<0.1	2210	<1	110	16	357	122
CHYS_372_08	1	252	<10	<0.1	1060	<1	40	19	37	57
CHYS_373_08	3	>300	<10	<0.1	300	<1	<10	7	17	61
CHYS_395_08	<1	145	<10	<0.1	5980	2	260	4	105	328
*Rep CHYS_395_08	<1	161	<10	<0.1	6940	2	270	5	82	325
CHYS_398_08	5	>300	20	<0.1	700	2	10	11	97	85
CHYS_399_08	5	>300	<10	<0.1	810	<1	<10	17	134	129
CHYS_400_08	7	>300	10	<0.1	2050	2	20	8	132	71
CHYS_424_08	3	279	20	0.1	1110	<1	10	10	233	159
CHYS_426_08	11	>300	10	<0.1	670	1	<10	11	114	20
CHYS_427_08	32	178	<10	0.2	2490	7	180	6	1570	308
CHYS_430_08	3	>300	10	<0.1	1040	1	20	12	29	90
CHYS_431_08	11	214	30	<0.1	3950	1	140	26	182	232
CHYS_432_08	3	>300	20	<0.1	730	4	<10	7	34	44
CHYS_455_08	11	>300	90	0.6	2010	5	20	9	472	117
CHYS_456_08	17	>300	250	1.0	1060	2	20	26	394	59
CHYS_458_08	17	>300	10	<0.1	850	1	<10	17	133	183
*Rep CHYS_458_08	13	>300	10	<0.1	860	2	<10	19	122	129
CHYS_459_08	6	>300	10	<0.1	1040	1	<10	11	193	47
CHYS_462_08	5	>300	10	<0.1	580	<1	<10	6	38	42
CHYS_463_08	3	>300	<10	<0.1	1090	<1	10	10	178	80
CHYS_464_08	13	249	20	0.4	1230	<1	180	8	515	56
CHYS_465_08	3	>300	10	<0.1	710	1	<10	9	31	38

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_466_08	58	45	16600	10.0	70	9	<10	2	366	6
CHYS_488_08	8	234	60	0.1	1100	9	70	12	542	239
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
CHYS_490_08	14	274	270	2.4	1070	2	30	6	362	62
CHYS_491_08	2	>300	30	<0.1	620	2	<10	21	58	81
CHYS_493_08	4	226	10	<0.1	710	4	30	11	15	43
CHYS_494_08	4	208	20	<0.1	1640	1	140	35	83	62
CHYS_495_08	17	>300	30	0.2	1680	3	<10	25	205	103
*Rep CHYS_495_08	16	>300	40	0.3	1650	3	<10	22	234	80
CHYS_498_08	11	296	40	0.2	820	2	<10	15	130	352
*Std MMISRM16	13	42	20	22.7	80	<1	190	3	20	41
*Std MMISRM16	13	45	20	22.4	70	<1	190	3	19	42
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Order:

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_301_08	<100	210	33	16.0	8.5	129	37	42	<5	9
*Rep CHYS_301_08	<100	130	36	17.2	9.9	107	42	44	<5	10
CHYS_302_08	<100	130	31	13.7	6.5	98	28	19	<5	8
CHYS_303_08	<100	140	39	16.7	12.0	57	48	38	<5	4
CHYS_304_08	<100	370	92	33.8	40.6	30	153	550	<5	1
CHYS_305_08	<100	50	35	14.5	7.8	68	37	74	<5	5
CHYS_306_08	<100	70	31	14.7	8.1	14	41	101	<5	17
CHYS_323_08	<100	80	32	17.2	8.1	68	35	26	<5	12
CHYS_324_08	<100	110	19	9.0	4.7	85	21	23	<5	24
CHYS_325_08	<100	150	70	20.9	28.3	23	112	179	<5	1
CHYS_326_08	<100	130	62	25.3	17.8	51	75	106	<5	9
CHYS_328_08	<100	200	136	50.6	39.7	29	185	668	<5	24
CHYS_329_08	<100	370	15	8.1	2.6	26	12	21	<5	2
CHYS_346_08	<100	980	70	32.0	20.2	9	90	42	<5	40
*Rep CHYS_346_08	<100	960	75	34.0	21.5	9	96	47	<5	37
CHYS_347_08	<100	130	20	13.2	2.4	172	13	8	<5	27
CHYS_348_08	<100	90	28	12.8	7.5	42	35	45	<5	25
CHYS_349_08	<100	260	46	19.2	9.9	33	48	47	<5	9
CHYS_350_08	<100	120	48	18.3	10.1	59	53	67	<5	7
CHYS_351_08	<100	240	50	20.6	16.5	27	70	177	<5	3
CHYS_368_08	<100	420	42	22.3	8.7	159	47	28	25	43
CHYS_369_08	<100	5990	48	24.3	7.1	146	35	87	<5	3
CHYS_370_08	<100	190	44	16.5	13.1	23	63	174	<5	3
CHYS_371_08	<100	170	44	17.1	12.6	37	60	148	<5	8
CHYS_372_08	<100	140	66	40.7	6.3	118	37	16	<5	7
CHYS_373_08	<100	130	11	7.3	1.1	51	5	7	<5	<1
CHYS_395_08	<100	2600	118	89.6	13.1	53	87	67	11	18
*Rep CHYS_395_08	<100	2630	95	83.4	9.5	58	63	47	9	20
CHYS_398_08	<100	210	19	8.3	4.2	65	20	33	<5	3
CHYS_399_08	<100	330	29	10.8	7.4	44	35	43	<5	2
CHYS_400_08	<100	250	31	13.9	9.5	40	39	43	8	2
CHYS_424_08	<100	550	47	20.3	11.2	64	47	91	<5	3
CHYS_426_08	<100	240	18	7.7	4.8	59	20	45	<5	1
CHYS_427_08	<100	660	101	39.2	33.8	20	170	866	<5	19
CHYS_430_08	<100	190	16	10.1	1.9	78	9	14	10	6
CHYS_431_08	<100	430	29	13.0	9.2	37	38	69	9	11
CHYS_432_08	<100	290	22	13.2	3.1	122	13	15	<5	3
CHYS_455_08	<100	1150	94	51.4	26.6	141	113	187	<5	1
CHYS_456_08	<100	530	38	16.9	11.6	44	43	175	<5	3
CHYS_458_08	<100	260	51	22.5	6.9	76	33	53	<5	3
*Rep CHYS_458_08	<100	250	57	25.1	7.8	76	38	46	<5	3
CHYS_459_08	<100	220	28	11.1	7.1	65	31	61	<5	1
CHYS_462_08	<100	200	16	12.0	2.1	104	9	15	<5	<1
CHYS_463_08	<100	210	44	19.8	9.0	64	41	56	<5	3
CHYS_464_08	<100	480	62	27.7	20.1	18	85	373	<5	21
CHYS_465_08	<100	170	11	8.6	1.8	143	7	15	5	2

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_466_08	<100	330	13	6.2	8.5	197	26	180	<5	1
CHYS_488_08	<100	1770	134	62.3	38.2	231	182	200	6	14
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
CHYS_490_08	<100	720	38	16.1	11.8	64	48	166	<5	3
CHYS_491_08	<100	290	30	18.8	3.9	57	18	23	<5	2
CHYS_493_08	<100	70	4	3.2	0.6	147	3	7	5	10
CHYS_494_08	<100	270	11	5.9	2.3	122	11	23	<5	8
CHYS_495_08	<100	370	30	13.8	5.7	80	26	74	<5	5
*Rep CHYS_495_08	<100	370	30	12.9	6.5	79	28	85	<5	4
CHYS_498_08	<100	400	10	6.8	1.9	150	9	46	<5	2
*Std MMISRM16	<100	500	2	0.7	1.0	2	4	5	<5	35
*Std MMISRM16	<100	510	2	0.8	1.1	2	4	5	<5	36
*Bik BLANK	<100	<10	<1	<0.5	<0.5	1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Order:

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_301_08	<5	1.2	82	199	370	<1	17	<1	145	1
*Rep CHYS_301_08	<5	1.2	93	158	430	<1	19	<1	124	<1
CHYS_302_08	<5	0.9	54	142	840	<1	10	<1	158	<1
CHYS_303_08	<5	0.6	99	243	840	<1	19	<1	207	<1
CHYS_304_08	<5	1.1	709	84	790	<1	185	<1	207	5
CHYS_305_08	<5	0.7	136	162	570	<1	31	<1	120	<1
CHYS_306_08	<5	<0.5	141	65	380	<1	33	<1	169	<1
CHYS_323_08	<5	<0.5	62	103	260	<1	12	<1	16	3
CHYS_324_08	<5	1.2	44	151	390	<1	9	<1	113	<1
CHYS_325_08	<5	0.7	374	45	230	<1	81	<1	280	4
CHYS_326_08	<5	<0.5	226	213	830	<1	47	<1	173	2
CHYS_328_08	<5	<0.5	780	377	5180	<1	194	<1	152	2
CHYS_329_08	<5	<0.5	32	81	2200	<1	7	<1	106	<1
CHYS_346_08	<5	<0.5	139	130	150	<1	24	<1	64	<1
*Rep CHYS_346_08	<5	<0.5	161	121	120	<1	27	<1	54	<1
CHYS_347_08	<5	0.6	20	96	160	<1	4	<1	113	<1
CHYS_348_08	<5	<0.5	100	159	440	<1	20	<1	116	<1
CHYS_349_08	<5	<0.5	113	197	15400	<1	22	<1	310	4
CHYS_350_08	<5	0.8	140	221	660	<1	29	<1	325	<1
CHYS_351_08	<5	0.7	273	104	1900	<1	66	<1	200	3
CHYS_368_08	<5	0.9	89	194	460	<1	17	<1	118	<1
CHYS_369_08	<5	2.1	104	119	320	<1	25	<1	177	1
CHYS_370_08	<5	0.9	251	84	330	<1	62	<1	180	2
CHYS_371_08	<5	0.9	230	183	500	<1	54	<1	210	2
CHYS_372_08	<5	0.7	47	82	200	<1	9	<1	111	<1
CHYS_373_08	<5	0.5	10	82	180	<1	2	<1	97	<1
CHYS_395_08	<5	<0.5	117	177	1050	<1	24	<1	24	<1
*Rep CHYS_395_08	<5	<0.5	80	176	890	<1	17	<1	34	<1
CHYS_398_08	<5	2.4	59	112	520	<1	13	<1	293	2
CHYS_399_08	<5	1.0	86	272	2290	<1	18	<1	164	1
CHYS_400_08	<5	1.2	86	50	470	<1	18	<1	129	1
CHYS_424_08	<5	1.3	147	131	310	<1	34	<1	159	1
CHYS_426_08	<5	1.8	67	61	790	<1	16	<1	251	2
CHYS_427_08	<5	<0.5	864	227	560	<1	228	<1	257	9
CHYS_430_08	6	2.4	18	126	200	<1	4	<1	212	1
CHYS_431_08	<5	1.2	108	144	900	<1	25	<1	157	4
CHYS_432_08	7	1.8	26	97	320	<1	5	<1	93	2
CHYS_455_08	12	6.1	375	89	300	<1	82	<1	199	12
CHYS_456_08	<5	2.2	199	67	580	<1	51	<1	130	6
CHYS_458_08	<5	1.9	81	99	550	<1	18	<1	215	2
*Rep CHYS_458_08	<5	1.8	84	103	600	<1	18	<1	221	2
CHYS_459_08	<5	1.9	101	85	590	<1	23	<1	245	3
CHYS_462_08	<5	2.0	21	54	240	<1	5	<1	72	<1
CHYS_463_08	<5	1.1	120	192	320	<1	26	<1	127	<1
CHYS_464_08	<5	0.5	321	88	350	<1	85	<1	139	2
CHYS_465_08	<5	1.7	18	118	180	<1	4	<1	84	1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_466_08	7	<0.5	174	19	2220	1	46	<1	141	115
CHYS_488_08	11	2.7	526	433	190	<1	102	<1	269	15
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
CHYS_490_08	6	2.6	195	86	500	<1	48	<1	191	6
CHYS_491_08	<5	2.9	41	74	320	<1	8	<1	135	2
CHYS_493_08	<5	3.4	8	73	380	<1	2	<1	105	1
CHYS_494_08	<5	1.8	34	180	330	<1	8	<1	112	2
CHYS_495_08	<5	2.4	86	181	340	<1	21	<1	242	4
*Rep CHYS_495_08	<5	2.3	101	175	320	<1	25	<1	250	4
CHYS_498_08	<5	3.1	36	261	300	<1	10	<1	89	2
*Std MMISRM16	39	<0.5	17	166	70	19	3	<1	277	<1
*Std MMISRM16	38	<0.5	16	182	80	19	3	<1	271	<1
*BIK BLANK	<5	<0.5	<1	6	<10	<1	<1	<1	<5	<1
*BIK BLANK	<5	<0.5	<1	5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_301_08	33	29	<1	620	<1	6	<10	37.4	469	0.7
*Rep CHYS_301_08	35	32	<1	560	<1	7	<10	39.0	509	0.6
CHYS_302_08	37	20	<1	270	<1	5	<10	31.9	272	0.8
CHYS_303_08	29	38	<1	300	<1	8	<10	34.5	307	0.7
CHYS_304_08	63	159	<1	50	<1	21	<10	128	595	4.1
CHYS_305_08	26	33	<1	260	<1	7	<10	75.4	278	1.1
CHYS_306_08	27	36	<1	1330	<1	6	<10	68.1	26	1.3
CHYS_323_08	18	24	<1	1150	<1	5	<10	9.5	45	<0.5
CHYS_324_08	28	16	<1	680	<1	4	<10	36.4	609	0.5
CHYS_325_08	72	110	<1	70	<1	16	<10	113	396	7.2
CHYS_326_08	45	66	<1	1000	<1	12	<10	59.8	67	2.2
CHYS_328_08	86	169	<1	450	<1	28	<10	136	70	7.2
CHYS_329_08	15	9	<1	170	<1	2	<10	18.0	78	1.1
CHYS_346_08	5	63	<1	1320	<1	13	<10	5.6	22	0.5
*Rep CHYS_346_08	5	71	<1	1230	<1	14	<10	5.4	18	<0.5
CHYS_347_08	20	8	<1	1050	<1	3	<10	24.6	193	<0.5
CHYS_348_08	19	30	<1	880	<1	5	<10	55.0	101	0.5
CHYS_349_08	23	37	<1	370	<1	8	<10	57.4	172	2.6
CHYS_350_08	32	44	<1	150	<1	9	<10	86.6	269	2.2
CHYS_351_08	33	67	<1	100	<1	10	<10	108	475	1.6
CHYS_368_08	33	35	<1	1790	<1	7	<10	35.5	311	0.9
CHYS_369_08	22	27	<1	100	<1	7	<10	32.0	536	1.3
CHYS_370_08	38	63	<1	310	<1	9	<10	144	388	2.7
CHYS_371_08	29	58	<1	310	<1	9	<10	104	382	1.4
CHYS_372_08	35	20	<1	440	<1	9	<10	26.0	250	1.8
CHYS_373_08	13	3	<1	50	<1	1	<10	8.1	138	1.6
CHYS_395_08	8	47	<1	2770	<1	17	<10	16.8	46	<0.5
*Rep CHYS_395_08	11	33	<1	3080	<1	14	<10	20.2	46	<0.5
CHYS_398_08	25	17	<1	110	<1	3	<10	55.4	773	1.6
CHYS_399_08	18	27	<1	80	<1	6	<10	36.7	404	2.3
CHYS_400_08	26	29	<1	180	<1	6	<10	46.4	523	1.1
CHYS_424_08	65	40	<1	70	<1	8	<10	53.5	629	0.7
CHYS_426_08	32	17	2	50	<1	3	<10	61.1	847	1.8
CHYS_427_08	62	162	<1	580	<1	23	<10	135	134	6.7
CHYS_430_08	37	6	<1	220	<1	2	<10	30.6	805	1.1
CHYS_431_08	18	31	<1	1210	<1	6	<10	43.4	444	2.1
CHYS_432_08	36	9	<1	90	<1	3	<10	36.4	593	1.1
CHYS_455_08	108	103	<1	100	<1	17	<10	138	2090	2.6
CHYS_456_08	26	41	<1	340	<1	7	<10	86.2	752	1.0
CHYS_458_08	50	25	<1	60	<1	8	<10	71.9	680	2.0
*Rep CHYS_458_08	55	27	<1	60	<1	9	<10	62.6	722	2.1
CHYS_459_08	39	27	<1	50	<1	5	<10	62.7	733	3.9
CHYS_462_08	32	6	<1	40	<1	2	<10	32.4	462	0.7
CHYS_463_08	26	33	<1	110	<1	7	<10	50.4	334	1.2
CHYS_464_08	24	72	<1	900	<1	12	<10	80.7	200	1.7
CHYS_465_08	31	5	<1	70	<1	2	<10	18.6	630	1.6

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_466_08	41	34	<1	<10	<1	3	10	206	32	0.5
CHYS_488_08	88	159	<1	300	<1	27	<10	129	548	3.6
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
CHYS_490_08	40	44	<1	220	<1	7	<10	192	969	0.8
CHYS_491_08	48	13	<1	70	<1	4	<10	35.8	949	1.0
CHYS_493_08	59	2	<1	150	<1	<1	<10	29.7	1690	<0.5
CHYS_494_08	30	9	<1	350	<1	2	<10	55.4	722	1.6
CHYS_495_08	53	24	<1	70	<1	5	<10	91.4	855	3.0
*Rep CHYS_495_08	53	27	<1	70	<1	5	<10	97.0	898	3.1
CHYS_498_08	24	8	<1	60	<1	2	<10	66.4	839	2.5
*Std MMISRM16	5	5	<1	490	<1	<1	<10	26.8	5	<0.5
*Std MMISRM16	6	5	<1	470	<1	<1	<10	26.4	5	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_301_08	11	<1	165	10	280	39
*Rep CHYS_301_08	10	<1	181	12	370	36
CHYS_302_08	11	<1	134	9	780	43
CHYS_303_08	14	<1	175	11	1090	53
CHYS_304_08	21	<1	353	21	50	149
CHYS_305_08	8	<1	139	9	140	34
CHYS_306_08	11	<1	172	10	170	37
CHYS_323_08	20	<1	206	11	130	17
CHYS_324_08	12	<1	89	6	1620	44
CHYS_325_08	33	<1	220	12	70	196
CHYS_326_08	23	<1	266	15	1080	76
CHYS_328_08	55	<1	568	29	1250	60
CHYS_329_08	7	<1	77	5	160	21
CHYS_346_08	40	<1	398	18	420	13
*Rep CHYS_346_08	41	<1	410	20	330	13
CHYS_347_08	11	<1	89	10	4250	27
CHYS_348_08	17	<1	123	8	1550	38
CHYS_349_08	20	<1	199	12	2270	62
CHYS_350_08	14	<1	178	10	210	88
CHYS_351_08	22	<1	213	13	140	108
CHYS_368_08	8	<1	182	19	4310	49
CHYS_369_08	12	<1	190	16	820	54
CHYS_370_08	27	<1	142	12	260	150
CHYS_371_08	22	<1	160	11	1020	114
CHYS_372_08	26	<1	288	26	730	19
CHYS_373_08	9	<1	50	5	110	14
CHYS_395_08	12	<1	803	69	280	14
*Rep CHYS_395_08	18	<1	656	71	350	17
CHYS_398_08	10	<1	72	5	460	55
CHYS_399_08	10	<1	107	6	720	44
CHYS_400_08	40	<1	118	11	290	135
CHYS_424_08	27	<1	183	13	350	70
CHYS_426_08	14	<1	68	5	150	89
CHYS_427_08	37	2	465	23	260	198
CHYS_430_08	13	<1	64	8	2010	62
CHYS_431_08	20	<1	125	9	1040	92
CHYS_432_08	21	<1	89	10	900	108
CHYS_455_08	80	2	476	40	310	270
CHYS_456_08	74	1	179	10	280	31
CHYS_458_08	27	<1	178	13	690	104
*Rep CHYS_458_08	24	<1	204	16	770	95
CHYS_459_08	18	<1	97	7	150	116
CHYS_462_08	14	<1	76	10	210	50
CHYS_463_08	14	<1	191	12	510	50
CHYS_464_08	28	<1	336	18	220	135
CHYS_465_08	11	<1	53	7	270	63

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_466_08	41	<1	52	6	350	375
CHYS_488_08	155	<1	575	43	410	247
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_490_08	102	2	153	11	200	54
CHYS_491_08	20	<1	130	13	650	81
CHYS_493_08	8	<1	18	3	2330	84
CHYS_494_08	12	<1	45	4	1040	67
CHYS_495_08	20	<1	100	9	1200	147
*Rep CHYS_495_08	20	<1	100	9	970	161
CHYS_498_08	33	<1	42	5	950	64
*Std MMISRM16	41	<1	8	<1	200	13
*Std MMISRM16	42	<1	8	<1	200	12
*Blk BLANK	<1	<1	<5	<1	<20	<5
*Blk BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101622

To: **Logan Resources Ltd.**

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

Date: Sep 04, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 45
Date Submitted Jul 14, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 45 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_499_08	18	>300	410	11.7	1350	9	20	19	915	207
*Rep CHYS_499_08	26	>300	520	18.7	1460	5	20	20	924	222
CHYS_500_08	3	>300	30	0.3	900	<1	<10	9	149	46
CHYS_502_08	54	>300	1130	17.4	700	21	50	7	314	166
CHYS_523_08	4	243	20	<0.1	1700	5	130	5	216	1060
CHYS_525_08	9	>300	70	0.2	1030	11	20	40	97	79
CHYS_526_08	1	228	40	<0.1	630	7	20	39	78	87
CHYS_528_08	4	240	40	0.3	580	2	<10	6	61	222
CHYS_529_08	2	275	20	<0.1	1240	1	20	26	20	59
CHYS_530_08	13	290	80	0.4	690	2	20	8	474	68
CHYS_531_08	58	249	60	6.3	1300	1	60	14	1690	25
CHYS_532_08	19	254	260	1.1	1700	<1	40	6	1890	157
CHYS_533_08	203	29	30	98.7	380	<1	430	36	74	19
CHYS_534_08	10	>300	20	0.2	470	<1	10	6	261	20
*Rep CHYS_534_08	10	>300	10	0.2	410	<1	<10	6	239	18
CHYS_537_08	41	245	80	6.1	490	10	50	24	238	316
CHYS_559_08	6	270	50	0.3	580	1	<10	23	32	92
CHYS_561_08	24	269	20	<0.1	1760	2	20	18	111	172
CHYS_562_08	11	>300	80	0.4	910	17	40	23	304	134
CHYS_563_08	6	196	50	0.8	900	7	150	78	449	552
CHYS_565_08	15	>300	20	1.4	1690	<1	20	11	2060	24
CHYS_571_08	322	209	60	20.0	660	5	80	29	113	168
CHYS_593_08	3	159	440	0.9	950	3	90	31	294	450
CHYS_594_08	6	278	70	0.4	920	2	20	23	70	141
CHYS_595_08	19	220	40	0.3	470	<1	30	11	259	16
CHYS_596_08	34	213	<10	0.2	3410	<1	340	7	822	10
CHYS_599_08	5	>300	<10	<0.1	910	2	30	22	40	123
*Rep CHYS_599_08	6	>300	10	<0.1	620	1	20	18	45	77
CHYS_604_08	4	263	30	0.2	250	<1	<10	14	70	114
CHYS_625_08	10	228	80	1.1	380	<1	10	11	285	14
CHYS_626_08	4	>300	20	<0.1	770	<1	10	45	95	151
CHYS_627_08	4	286	10	0.4	1150	1	60	17	62	76
CHYS_628_08	7	235	20	1.0	610	3	<10	1	15	70
CHYS_634_08	3	193	610	0.7	1090	7	20	25	212	394
CHYS_656_08	11	188	240	2.1	1190	2	100	20	167	152
CHYS_657_08	10	278	50	<0.1	920	2	20	14	39	93
CHYS_663_08	7	198	490	1.1	660	5	50	6	827	181
CHYS_664_08	17	247	130	1.0	880	<1	60	11	669	34
CHYS_686_08	5	277	30	0.1	1000	1	10	5	59	44
CHYS_687_08	10	>300	120	0.4	1670	<1	40	30	158	73
*Rep CHYS_687_08	9	>300	90	0.3	1570	<1	40	23	154	58
CHYS_691_08	7	>300	10	<0.1	390	<1	<10	16	57	93
CHYS_692_08	21	>300	50	2.5	830	2	20	6	448	819
CHYS_717_08	1	264	130	0.9	1870	2	30	17	224	157
CHYS_718_08	2	>300	60	0.3	700	2	10	19	49	64
CHYS_746_08	14	154	620	1.7	3120	2	60	11	1040	29

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_772_08	213	94	540	46.4	1150	<1	570	43	1380	291
CHYS_798_08	5	157	1310	2.6	1480	4	180	22	251	194
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
CHYS_823_08	35	143	40	15.2	8130	<1	520	7	884	<5
*Std MMISRM16	15	39	20	26.0	70	<1	190	4	18	50
*Std MMISRM16	15	44	20	25.3	80	<1	180	4	14	52
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_499_08	<100	990	105	46.1	26.6	50	133	330	<5	2
*Rep CHYS_499_08	<100	1050	112	52.3	28.4	52	143	343	<5	2
CHYS_500_08	<100	270	33	14.5	6.8	41	34	41	<5	3
CHYS_502_08	<100	1470	37	14.4	11.3	102	48	167	<5	6
CHYS_523_08	<100	2190	505	326	44.8	129	283	69	<5	31
CHYS_525_08	<100	310	24	10.6	4.2	98	22	39	<5	4
CHYS_526_08	<100	90	13	8.5	2.3	140	13	35	<5	6
CHYS_528_08	<100	370	10	9.4	1.0	147	5	38	<5	2
CHYS_529_08	<100	140	8	6.2	0.8	179	4	11	<5	7
CHYS_530_08	<100	460	52	19.8	16.2	50	73	205	<5	2
CHYS_531_08	<100	640	288	128	97.1	13	426	702	<5	4
CHYS_532_08	<100	1720	285	131	108	31	413	670	<5	5
CHYS_533_08	<100	1300	54	36.1	6.2	5	43	31	7	129
CHYS_534_08	<100	270	31	12.4	8.1	19	39	111	<5	<1
*Rep CHYS_534_08	<100	250	31	11.2	8.1	21	39	99	<5	<1
CHYS_537_08	<100	2380	51	22.5	14.2	32	59	96	<5	6
CHYS_559_08	<100	450	15	10.4	2.1	133	9	19	<5	2
CHYS_561_08	<100	690	33	17.7	4.8	79	26	39	<5	4
CHYS_562_08	<100	460	62	27.7	11.9	32	63	112	<5	6
CHYS_563_08	<100	2550	330	197	38.7	78	250	169	<5	12
CHYS_565_08	<100	2270	202	76.5	59.5	36	313	621	<5	2
CHYS_571_08	<100	28900	61	49.4	5.6	59	27	43	<5	20
CHYS_593_08	<100	2690	68	39.8	13.9	89	62	120	<5	13
CHYS_594_08	<100	820	52	28.2	6.7	100	35	31	<5	3
CHYS_595_08	<100	440	46	21.4	14.6	24	65	112	<5	<1
CHYS_596_08	<100	350	208	121	25.6	6	194	585	<5	54
CHYS_599_08	<100	390	21	15.5	2.5	81	12	19	<5	5
*Rep CHYS_599_08	<100	510	25	16.4	3.4	67	16	22	<5	4
CHYS_604_08	<100	450	46	21.5	6.4	44	30	32	<5	<1
CHYS_625_08	<100	620	43	18.6	12.8	16	60	139	<5	<1
CHYS_626_08	<100	240	24	11.5	4.2	41	18	33	<5	4
CHYS_627_08	<100	330	23	11.0	4.5	43	18	25	<5	11
CHYS_628_08	<100	2320	6	5.3	0.7	161	3	10	<5	2
CHYS_634_08	<100	1560	32	21.7	6.5	183	25	96	<5	4
CHYS_656_08	<100	1230	24	12.4	6.5	120	25	72	<5	10
CHYS_657_08	<100	180	15	8.4	2.9	152	11	22	<5	4
CHYS_663_08	<100	1350	128	65.7	40.4	84	163	318	<5	2
CHYS_664_08	<100	310	102	46.8	43.0	30	150	423	<5	2
CHYS_686_08	<100	390	37	24.9	4.0	108	19	32	<5	2
CHYS_687_08	<100	380	34	16.3	9.6	100	36	74	<5	5
*Rep CHYS_687_08	<100	360	33	15.4	10.0	86	35	73	<5	4
CHYS_691_08	<100	660	26	12.0	5.5	31	21	21	<5	1
CHYS_692_08	<100	950	122	61.4	31.7	37	114	197	<5	1
CHYS_717_08	<100	1020	57	30.2	10.0	47	47	91	<5	4
CHYS_718_08	<100	170	9	7.4	1.4	106	6	30	<5	3
CHYS_746_08	<100	560	45	20.8	14.3	23	73	514	<5	2

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_772_08	<100	4060	70	37.8	25.5	23	104	420	<5	51
CHYS_798_08	<100	870	43	24.5	8.7	119	42	107	<5	17
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
CHYS_823_08	<100	230	209	98.7	108	7	343	879	<5	107
*Std MMISRM16	<100	510	4	1.4	1.4	2	7	8	<5	31
*Std MMISRM16	<100	510	2	1.0	1.1	4	5	6	<5	32
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_499_08	<5	3.1	577	160	210	<1	137	<1	189	3
*Rep CHYS_499_08	<5	3.0	621	153	210	<1	142	<1	225	3
CHYS_500_08	<5	1.3	81	96	480	<1	18	<1	154	1
CHYS_502_08	<5	1.9	190	196	1850	<1	47	<1	185	39
CHYS_523_08	<5	<0.5	372	643	570	<1	60	<1	173	3
CHYS_525_08	<5	1.9	56	141	420	<1	14	<1	213	1
CHYS_526_08	<5	3.2	39	41	210	<1	11	<1	97	1
CHYS_528_08	<5	1.6	19	58	200	<1	7	<1	78	<1
CHYS_529_08	<5	3.4	6	122	170	<1	3	<1	99	<1
CHYS_530_08	6	3.1	312	63	170	<1	75	<1	201	5
CHYS_531_08	<5	0.9	1900	37	90	<1	404	<1	211	5
CHYS_532_08	<5	0.6	1610	74	80	<1	329	<1	137	15
CHYS_533_08	<5	<0.5	48	599	140	<1	10	<1	67	<1
CHYS_534_08	<5	1.4	145	62	160	<1	36	<1	85	<1
*Rep CHYS_534_08	<5	1.5	137	60	180	<1	33	<1	85	1
CHYS_537_08	<5	<0.5	149	72	940	<1	35	<1	136	2
CHYS_559_08	<5	1.7	18	69	410	<1	5	<1	73	<1
CHYS_561_08	<5	2.7	64	89	140	<1	15	<1	352	4
CHYS_562_08	<5	0.7	205	233	340	<1	46	<1	230	2
CHYS_563_08	<5	<0.5	592	170	2780	<1	114	<1	253	2
CHYS_565_08	<5	0.7	1630	57	60	<1	364	<1	49	5
CHYS_571_08	<5	<0.5	68	141	280	<1	18	<1	158	1
CHYS_593_08	13	0.5	178	1020	530	<1	40	<1	223	27
CHYS_594_08	<5	1.2	62	121	310	<1	13	<1	187	2
CHYS_595_08	7	1.1	223	35	170	<1	48	<1	275	3
CHYS_596_08	<5	<0.5	677	59	230	<1	165	<1	103	<1
CHYS_599_08	<5	2.2	25	145	110	<1	7	<1	108	<1
*Rep CHYS_599_08	<5	2.1	35	164	120	<1	8	<1	96	<1
CHYS_604_08	<5	0.8	61	82	1390	<1	13	<1	91	<1
CHYS_625_08	<5	0.6	230	39	430	<1	51	<1	100	2
CHYS_626_08	<5	0.9	47	149	450	<1	12	<1	152	<1
CHYS_627_08	<5	1.4	44	178	120	<1	10	<1	298	<1
CHYS_628_08	<5	3.2	5	83	10	<1	3	<1	58	<1
CHYS_634_08	9	2.1	90	217	720	<1	24	<1	100	5
CHYS_656_08	10	0.8	78	101	330	<1	20	<1	156	11
CHYS_657_08	<5	4.2	23	102	250	<1	7	<1	107	<1
CHYS_663_08	17	1.9	567	106	300	<1	131	<1	121	4
CHYS_664_08	<5	1.4	598	29	2220	<1	144	<1	157	2
CHYS_686_08	<5	2.9	38	74	260	<1	10	<1	78	<1
CHYS_687_08	6	2.5	106	134	290	<1	25	<1	135	2
*Rep CHYS_687_08	6	2.3	104	123	280	<1	25	<1	122	2
CHYS_691_08	<5	0.7	44	198	240	<1	10	<1	137	<1
CHYS_692_08	<5	0.9	327	205	490	<1	76	<1	125	1
CHYS_717_08	6	1.5	144	59	820	<1	33	<1	157	1
CHYS_718_08	<5	4.8	16	52	320	<1	6	<1	83	<1
CHYS_746_08	6	1.6	422	39	310	<1	120	<1	143	1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_772_08	12	<0.5	398	332	150	<1	98	<1	106	121
CHYS_798_08	7	0.5	132	74	240	<1	32	<1	167	10
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
CHYS_823_08	<5	<0.5	1430	97	100	<1	305	<1	235	<1
*Std MMISRM16	42	<0.5	17	192	80	22	4	<1	288	<1
*Std MMISRM16	41	<0.5	12	195	90	21	3	<1	284	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_499_08	104	124	<1	80	<1	20	<10	72.5	776	2.3
*Rep CHYS_499_08	106	131	<1	80	<1	22	<10	70.5	899	2.8
CHYS_500_08	28	25	<1	50	<1	6	<10	27.9	371	1.4
CHYS_502_08	38	44	2	160	<1	7	<10	78.3	543	2.0
CHYS_523_08	76	159	<1	1130	<1	67	<10	90.7	20	1.8
CHYS_525_08	29	17	<1	160	<1	4	<10	44.9	640	1.5
CHYS_526_08	33	11	<1	140	<1	2	<10	49.6	844	1.0
CHYS_528_08	27	5	<1	60	<1	1	<10	38.1	417	0.7
CHYS_529_08	38	3	<1	210	<1	1	<10	26.9	1210	0.6
CHYS_530_08	63	70	<1	40	<1	11	<10	74.5	1250	2.9
CHYS_531_08	232	431	<1	190	<1	59	<10	120	347	4.5
CHYS_532_08	149	410	<1	110	<1	58	<10	65.9	225	7.8
CHYS_533_08	31	17	<1	2640	<1	8	<10	10.1	<3	4.3
CHYS_534_08	36	35	<1	50	<1	6	<10	42.9	391	3.3
*Rep CHYS_534_08	32	34	<1	20	<1	6	<10	42.2	407	3.0
CHYS_537_08	31	46	<1	170	<1	10	<10	42.6	137	2.5
CHYS_559_08	33	6	<1	90	<1	2	<10	38.4	516	1.4
CHYS_561_08	40	21	<1	200	<1	5	<10	52.5	549	2.0
CHYS_562_08	30	52	<1	270	<1	11	<10	69.6	163	2.4
CHYS_563_08	50	174	<1	1000	<1	47	<10	50.1	39	2.8
CHYS_565_08	229	307	<1	120	<1	44	<10	89.2	175	3.9
CHYS_571_08	44	22	<1	560	<1	7	<10	166	25	4.1
CHYS_593_08	45	49	<1	380	<1	11	<10	103	183	3.5
CHYS_594_08	52	23	<1	120	<1	7	<10	46.8	366	2.0
CHYS_595_08	38	58	<1	50	<1	9	<10	44.5	346	1.9
CHYS_596_08	50	146	<1	3840	<1	33	<10	20.7	27	2.0
CHYS_599_08	36	9	<1	250	<1	3	<10	19.9	335	2.0
*Rep CHYS_599_08	36	12	<1	170	<1	3	<10	19.5	290	1.3
CHYS_604_08	35	21	<1	40	<1	7	<10	99.2	111	1.3
CHYS_625_08	42	53	<1	70	<1	9	<10	89.7	177	0.6
CHYS_626_08	26	14	<1	80	<1	4	<10	46.3	262	1.0
CHYS_627_08	23	14	<1	440	<1	4	<10	17.8	251	0.8
CHYS_628_08	22	3	<1	110	<1	<1	<10	18.3	265	1.8
CHYS_634_08	59	22	<1	200	<1	5	<10	215	702	1.6
CHYS_656_08	38	22	<1	420	<1	4	<10	160	267	1.6
CHYS_657_08	27	8	<1	140	<1	2	<10	21.8	955	0.7
CHYS_663_08	98	141	<1	130	<1	24	<10	47.8	854	2.9
CHYS_664_08	89	137	<1	240	<1	21	<10	471	490	1.6
CHYS_686_08	51	13	<1	110	<1	5	<10	37.7	486	1.9
CHYS_687_08	42	29	<1	240	<1	6	<10	73.2	897	1.2
*Rep CHYS_687_08	37	30	<1	220	<1	6	<10	68.2	806	0.9
CHYS_691_08	17	15	<1	60	<1	4	<10	13.5	125	1.3
CHYS_692_08	63	89	<1	100	<1	20	<10	46.0	206	3.2
CHYS_717_08	64	37	<1	280	<1	9	<10	272	261	1.5
CHYS_718_08	29	5	<1	130	<1	1	<10	311	1160	<0.5
CHYS_746_08	52	77	<1	420	<1	10	<10	418	371	0.7

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	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
CHYS_772_08	52	88	<1	3820	<1	14	<10	121	3	1.5
CHYS_798_08	49	35	<1	1510	<1	7	<10	70.6	124	1.4
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
CHYS_823_08	93	304	<1	7220	<1	43	<10	21.1	<3	1.0
*Std MMISRM16	8	6	<1	480	<1	<1	<10	24.3	4	0.6
*Std MMISRM16	8	5	<1	430	<1	<1	<10	29.3	7	<0.5
*BIK BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*BIK BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Order:

Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_499_08	62	1	474	34	690	238
*Rep CHYS_499_08	62	1	538	38	430	246
CHYS_500_08	12	<1	138	10	650	57
CHYS_502_08	32	2	156	10	500	123
CHYS_523_08	174	2	2530	237	220	76
CHYS_525_08	14	<1	98	7	680	62
CHYS_526_08	10	<1	53	9	730	67
CHYS_528_08	28	<1	46	10	430	27
CHYS_529_08	7	<1	37	6	1200	47
CHYS_530_08	33	<1	213	13	240	278
CHYS_531_08	128	1	1330	89	190	312
CHYS_532_08	136	1	1090	114	550	110
CHYS_533_08	145	<1	310	22	340	6
CHYS_534_08	18	<1	129	9	130	110
*Rep CHYS_534_08	16	<1	122	8	130	102
CHYS_537_08	74	2	243	15	150	88
CHYS_559_08	38	<1	81	9	520	31
CHYS_561_08	32	<1	158	14	100	84
CHYS_562_08	30	<1	280	18	240	78
CHYS_563_08	183	1	2050	133	610	59
CHYS_565_08	46	<1	933	45	420	92
CHYS_571_08	1460	<1	258	41	960	19
CHYS_593_08	253	1	397	27	550	31
CHYS_594_08	53	<1	231	19	870	51
CHYS_595_08	30	<1	232	14	50	48
CHYS_596_08	33	<1	1390	81	90	38
CHYS_599_08	11	<1	107	14	810	27
*Rep CHYS_599_08	12	<1	124	13	800	27
CHYS_604_08	90	<1	198	14	500	29
CHYS_625_08	83	<1	210	13	100	29
CHYS_626_08	14	<1	93	8	1100	41
CHYS_627_08	7	<1	110	7	1230	16
CHYS_628_08	25	<1	24	5	70	36
CHYS_634_08	264	1	170	18	410	65
CHYS_656_08	192	<1	113	9	330	38
CHYS_657_08	11	<1	68	6	620	32
CHYS_663_08	146	<1	710	49	440	76
CHYS_664_08	373	3	519	32	180	71
CHYS_686_08	73	<1	205	19	300	17
CHYS_687_08	34	<1	158	11	870	52
*Rep CHYS_687_08	32	<1	151	11	750	47
CHYS_691_08	21	<1	122	8	810	23
CHYS_692_08	51	<1	612	40	140	52
CHYS_717_08	273	<1	260	22	300	50
CHYS_718_08	70	<1	45	7	920	35
CHYS_746_08	276	6	221	16	170	53

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_772_08	2370	<1	474	30	570	18
CHYS_798_08	148	<1	245	19	160	26
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_823_08	113	<1	1360	59	130	35
*Std MMISRM16	41	<1	21	<1	200	14
*Std MMISRM16	43	<1	10	<1	220	14
*BIK BLANK	<1	<1	<5	<1	<20	<5
*BIK BLANK	1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101623

To: **Logan Resources Ltd.**

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

Date: Sep 04, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 83
Date Submitted Jul 14, 2008
Report Comprises Pages 1 to 16
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 83 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_820_08	8	282	<10	0.4	4280	<1	80	41	81	231
*Rep CHYS_820_08	6	279	<10	0.3	4750	<1	80	36	38	261
CHYS_821_08	25	184	<10	0.7	3600	<1	240	18	138	10
CHYS_838_08	3	32	<10	<0.1	2320	<1	530	38	48	23
CHYS_839_08	5	295	<10	<0.1	1860	<1	50	5	226	35
CHYS_840_08	7	>300	20	<0.1	1770	<1	20	48	250	278
CHYS_841_08	6	>300	20	<0.1	1160	1	<10	12	180	162
CHYS_842_08	8	195	<10	<0.1	4450	<1	310	11	162	42
CHYS_843_08	7	>300	<10	<0.1	1650	<1	10	11	71	164
CHYS_844_08	2	68	40	0.4	460	<1	530	23	82	119
CHYS_845_08	6	283	10	0.1	960	1	<10	17	167	69
CHYS_861_08	5	213	<10	<0.1	2020	<1	80	143	119	128
CHYS_864_08	6	299	10	<0.1	4460	<1	20	39	285	110
CHYS_865_08	6	288	<10	<0.1	2220	<1	40	47	114	62
*Rep CHYS_865_08	9	>300	<10	<0.1	2080	<1	40	36	119	60
CHYS_866_08	7	198	<10	<0.1	3810	<1	510	26	210	62
CHYS_867_08	2	131	<10	<0.1	1040	<1	390	77	41	54
CHYS_868_08	44	153	20	1.3	3320	7	180	19	2490	203
CHYS_885_08	2	33	<10	<0.1	2250	<1	630	19	56	8
CHYS_886_08	11	9	<10	<0.1	3190	<1	570	6	27	9
CHYS_887_08	38	42	<10	<0.1	5460	<1	600	33	37	16
CHYS_890_08	4	>300	<10	<0.1	4810	<1	20	14	255	488
CHYS_891_08	3	238	<10	<0.1	1540	<1	140	27	69	36
CHYS_892_08	16	>300	<10	<0.1	5020	<1	140	49	103	359
CHYS_893_08	12	>300	<10	<0.1	3010	<1	130	13	458	55
CHYS_894_08	27	195	20	0.5	1990	<1	40	28	1040	46
CHYS_900_08	7	252	90	0.5	3210	1	170	13	778	37
*Rep CHYS_900_08	7	255	80	0.6	3280	1	190	12	703	35
CHYS_916_08	21	20	<10	<0.1	2790	<1	670	5	7	<5
CHYS_917_08	20	224	20	0.2	3370	2	30	49	185	707
CHYS_921_08	15	175	<10	0.2	2010	<1	250	101	86	129
CHYS_922_08	17	281	<10	<0.1	990	<1	20	29	52	53
CHYS_923_08	1	250	30	0.1	2460	<1	230	58	103	212
CHYS_924_08	21	268	40	0.6	2130	<1	210	14	443	75
CHYS_925_08	8	271	<10	<0.1	3490	<1	60	9	258	141
CHYS_931_08	12	>300	90	2.2	2090	2	640	11	1370	43
CHYS_948_08	5	160	<10	<0.1	3600	<1	300	74	362	101
CHYS_952_08	10	282	<10	<0.1	2070	<1	60	33	103	39
CHYS_953_08	17	188	<10	<0.1	550	<1	<10	2	23	99
CHYS_954_08	<1	123	<10	<0.1	760	<1	310	122	62	69
*Rep CHYS_954_08	<1	140	<10	<0.1	1120	<1	290	117	54	82
CHYS_962_08	37	209	530	2.2	1570	3	400	24	365	64
CHYS_980_08	4	273	<10	<0.1	3990	<1	80	11	198	54
CHYS_981_08	2	224	<10	<0.1	420	<1	<10	<1	15	38
CHYS_982_08	5	289	50	<0.1	1890	<1	120	12	77	238
CHYS_990_08	5	236	810	2.2	2210	34	80	20	254	327

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_1008_08	5	257	<10	<0.1	1390	<1	80	67	97	61
CHYS_1009_08	14	167	<10	0.2	790	<1	250	37	78	59
Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_1010_08	<1	124	<10	<0.1	1380	<1	360	22	40	166
CHYS_1018_08	7	172	1270	3.4	3070	11	100	7	145	69
CHYS_1036_08	3	262	<10	<0.1	2410	<1	110	13	94	263
CHYS_1037_08	34	112	<10	1.0	720	<1	1030	65	133	53
CHYS_1045_08	6	259	140	0.4	1620	<1	10	7	791	20
*Rep CHYS_1045_08	5	254	120	0.4	1660	<1	10	8	694	33
CHYS_1071_08	2	250	<10	<0.1	610	<1	<10	3	30	23
CHYS_1094_08	1	117	490	0.1	910	3	90	14	103	75
CHYS_1115_08	8	264	20	0.2	3100	<1	40	14	459	21
CHYS_1119_08	10	182	20	0.5	3140	<1	740	9	701	8
CHYS_1135_08	<1	251	20	<0.1	1980	<1	40	50	124	93
CHYS_1139_08	<1	270	<10	<0.1	2570	<1	70	10	131	100
CHYS_1147_08	254	243	1130	5.1	580	87	50	35	1370	130
CHYS_1153_08	3	254	<10	<0.1	1150	<1	20	29	172	21
CHYS_1157_08	3	280	<10	0.2	1230	<1	20	21	86	100
CHYS_1165_08	10	280	200	0.3	1050	33	40	99	186	130
CHYS_1170_08	10	232	30	0.3	1990	<1	50	9	326	74
CHYS_1174_08	2	263	<10	<0.1	1370	1	30	32	30	142
*Rep CHYS_1174_08	2	266	10	<0.1	1290	1	30	32	39	142
CHYS_1186_08	3	295	130	<0.1	3560	1	30	17	308	84
CHYS_1190_08	7	>300	50	0.1	1140	1	30	7	185	155
CHYS_1202_08	5	182	220	0.2	2230	2	180	44	586	416
CHYS_1206_08	4	232	<10	<0.1	690	<1	20	6	155	16
CHYS_1217_08	5	110	460	0.8	1750	3	120	19	51	274
CHYS_1221_08	2	261	<10	<0.1	520	<1	10	7	293	29
CHYS_1230_08	1	164	<10	0.1	550	1	10	7	25	109
CHYS_1234_08	1	254	10	<0.1	640	<1	<10	14	48	66
CHYS_1241_08	<1	160	<10	<0.1	1800	3	80	46	54	371
CHYS_1245_08	10	134	<10	<0.1	1140	<1	270	33	282	82
CHYS_862_08	3	236	20	<0.1	960	<1	30	33	345	119
CHYS_863_08	3	170	<10	<0.1	2380	<1	260	26	83	18
*Rep CHYS_863_08	1	174	<10	<0.1	2620	<1	270	29	85	21
CHYS_888_08	2	231	<10	<0.1	1250	<1	10	11	16	63
CHYS_889_08	9	128	<10	<0.1	4710	<1	420	14	97	<5
CHYS_918_08	8	163	<10	<0.1	5000	<1	280	93	408	27
CHYS_920_08	6	240	<10	<0.1	3260	<1	90	14	1120	30
CHYS_949_08	6	212	20	<0.1	1720	<1	180	10	127	149
CHYS_950_08	4	>300	<10	<0.1	1000	<1	40	29	226	55
CHYS_951_08	7	271	<10	<0.1	2910	<1	30	30	301	216
CHYS_979_08	3	280	<10	<0.1	2760	<1	20	9	210	124

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Order:

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_981_08-A	<1	127	<10	<0.1	560	<1	210	25	46	231
CHYS_1007_08	10	16	<10	<0.1	2820	<1	750	8	33	13
*Std MMISRM16	15	48	10	20.2	90	<1	200	4	29	50
*Std MMISRM16	14	49	20	20.3	80	<1	200	4	29	52
*Std MMISRM16	15	52	20	21.8	90	<1	220	4	32	56
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Order:

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_820_08	<100	740	137	77.2	12.9	47	66	37	<5	9
*Rep CHYS_820_08	<100	640	96	68.9	5.5	52	28	21	<5	10
CHYS_821_08	<100	280	46	22.8	12.7	15	52	123	<5	23
CHYS_838_08	<100	80	16	6.9	4.4	23	21	17	<5	97
CHYS_839_08	<100	80	35	16.2	9.5	47	44	96	<5	18
CHYS_840_08	<100	470	96	49.2	15.7	87	75	93	7	6
CHYS_841_08	<100	380	53	21.6	12.9	101	62	51	<5	<1
CHYS_842_08	<100	190	65	31.9	12.7	58	60	62	<5	47
CHYS_843_08	<100	220	34	16.8	5.1	35	24	25	<5	<1
CHYS_844_08	<100	2400	27	16.6	5.9	100	27	35	<5	23
CHYS_845_08	<100	410	72	35.6	12.1	55	55	65	<5	<1
CHYS_861_08	<100	90	105	54.1	10.4	174	57	32	<5	10
CHYS_864_08	<100	700	135	65.1	28.7	63	128	121	<5	3
CHYS_865_08	<100	300	50	24.0	9.8	32	44	45	<5	6
*Rep CHYS_865_08	<100	270	45	21.3	9.7	34	42	51	<5	5
CHYS_866_08	<100	210	45	24.5	8.5	34	40	77	<5	17
CHYS_867_08	<100	310	17	9.7	3.8	17	15	17	<5	12
CHYS_868_08	<100	650	185	102	54.0	23	249	1200	<5	6
CHYS_885_08	<100	30	17	7.8	5.3	12	25	31	<5	8
CHYS_886_08	<100	150	12	5.2	4.0	6	19	19	<5	9
CHYS_887_08	<100	810	45	18.1	14.0	15	60	41	<5	24
CHYS_890_08	<100	310	43	22.1	8.6	96	36	75	<5	7
CHYS_891_08	<100	80	14	6.8	3.1	43	13	24	<5	15
CHYS_892_08	<100	1080	86	42.3	16.1	38	64	46	<5	19
CHYS_893_08	<100	900	151	76.3	49.7	13	153	175	<5	15
CHYS_894_08	<100	400	113	61.3	33.8	25	153	499	<5	1
CHYS_900_08	<100	580	67	30.0	26.0	31	88	408	<5	8
*Rep CHYS_900_08	<100	580	63	28.9	24.3	30	81	377	<5	9
CHYS_916_08	<100	210	13	5.5	4.5	10	21	37	<5	8
CHYS_917_08	<100	770	65	39.6	8.8	236	40	66	<5	7
CHYS_921_08	<100	500	17	12.2	3.8	52	15	35	<5	7
CHYS_922_08	<100	440	37	18.7	4.4	125	23	20	<5	2
CHYS_923_08	<100	800	69	36.7	13.2	47	48	35	<5	27
CHYS_924_08	<100	1120	151	79.8	48.2	20	156	168	<5	31
CHYS_925_08	<100	190	26	14.3	4.4	35	22	109	<5	2
CHYS_931_08	<100	1110	99	52.4	77.4	14	174	1500	<5	29
CHYS_948_08	<100	170	123	63.3	24.0	84	114	132	<5	54
CHYS_952_08	<100	190	32	16.5	7.0	27	30	45	<5	6
CHYS_953_08	<100	340	3	3.0	0.8	272	3	11	<5	<1
CHYS_954_08	<100	100	23	16.7	3.3	42	18	23	<5	18
*Rep CHYS_954_08	<100	130	25	17.2	3.2	51	18	21	<5	19
CHYS_962_08	<100	1380	27	14.0	12.7	40	38	318	<5	12
CHYS_980_08	<100	120	47	19.2	9.3	69	47	52	<5	22
CHYS_981_08	<100	40	2	1.5	<0.5	260	1	7	6	2
CHYS_982_08	<100	330	24	12.8	4.3	52	21	25	<5	18
CHYS_990_08	<100	5510	42	20.0	9.7	105	40	112	<5	4

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_1008_08	<100	140	28	15.4	5.5	35	24	38	<5	7
CHYS_1009_08	<100	870	27	14.5	6.3	24	30	54	<5	11
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
CHYS_1010_08	<100	230	8	6.3	1.1	85	6	13	<5	27
CHYS_1018_08	<100	4980	49	24.5	8.7	127	33	72	<5	3
CHYS_1036_08	<100	230	34	17.6	6.1	117	30	33	<5	8
CHYS_1037_08	<100	1030	42	30.8	9.6	24	41	51	12	108
CHYS_1045_08	<100	670	111	49.0	32.5	25	131	373	<5	<1
*Rep CHYS_1045_08	<100	690	111	48.9	30.5	27	126	322	<5	<1
CHYS_1071_08	<100	40	9	8.9	0.9	106	4	17	<5	<1
CHYS_1094_08	<100	370	25	13.8	4.4	162	21	45	<5	12
CHYS_1115_08	<100	170	52	22.4	17.8	19	75	232	<5	<1
CHYS_1119_08	<100	100	77	39.0	33.3	10	110	618	<5	22
CHYS_1135_08	<100	110	43	23.5	8.5	61	36	49	<5	6
CHYS_1139_08	<100	120	41	25.9	9.1	63	32	42	<5	2
CHYS_1147_08	<100	23500	113	49.7	27.2	147	130	493	<5	3
CHYS_1153_08	<100	160	39	17.6	10.3	15	42	79	<5	2
CHYS_1157_08	<100	650	44	25.1	7.3	67	28	36	<5	2
CHYS_1165_08	<100	2020	44	22.2	9.1	98	44	74	<5	5
CHYS_1170_08	<100	290	26	11.3	10.2	38	35	148	<5	1
CHYS_1174_08	<100	200	29	20.2	3.0	91	14	14	<5	6
*Rep CHYS_1174_08	<100	190	31	19.1	3.9	89	18	17	<5	6
CHYS_1186_08	<100	320	32	15.5	8.4	153	36	142	<5	2
CHYS_1190_08	<100	1460	54	21.4	19.5	80	60	74	<5	1
CHYS_1202_08	<100	270	31	14.7	8.7	121	47	268	5	14
CHYS_1206_08	<100	190	23	9.7	7.4	13	28	56	<5	<1
CHYS_1217_08	<100	1700	13	9.6	1.7	313	8	24	<5	14
CHYS_1221_08	<100	340	51	22.8	13.6	17	60	96	<5	<1
CHYS_1230_08	<100	490	10	9.0	1.0	253	5	12	<5	3
CHYS_1234_08	<100	330	22	11.8	3.3	229	15	20	<5	2
CHYS_1241_08	<100	170	23	23.7	3.0	181	15	18	8	20
CHYS_1245_08	<100	270	96	40.5	26.2	95	118	123	<5	29
CHYS_862_08	100	140	83	31.1	19.8	219	88	96	<5	2
CHYS_863_08	<100	90	43	19.3	10.2	60	45	46	<5	9
*Rep CHYS_863_08	<100	80	47	22.6	10.8	62	48	47	<5	10
CHYS_888_08	<100	70	7	5.1	0.7	218	3	7	<5	5
CHYS_889_08	<100	140	55	22.0	18.8	16	82	114	<5	9
CHYS_918_08	<100	140	100	39.8	27.8	60	122	156	<5	23
CHYS_920_08	<100	170	307	136	98.5	41	444	697	<5	6
CHYS_949_08	<100	280	33	16.4	7.4	69	34	43	<5	7
CHYS_950_08	<100	120	88	28.0	14.1	26	70	73	<5	6
CHYS_951_08	<100	170	75	36.8	14.7	127	65	101	<5	10
CHYS_979_08	<100	60	123	62.0	21.2	44	107	55	<5	3

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_981_08-A	<100	230	10	6.6	1.8	147	8	21	<5	44
CHYS_1007_08	<100	250	16	6.3	6.4	12	26	28	<5	7
*Std MMISRM16	<100	500	3	1.1	1.5	3	6	7	<5	31
*Std MMISRM16	<100	510	3	1.2	1.6	3	7	7	<5	30
*Std MMISRM16	<100	530	4	1.3	1.8	3	7	8	<5	33
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_820_08	<5	<0.5	94	113	1180	<1	18	<1	52	2
*Rep CHYS_820_08	<5	<0.5	34	112	950	<1	7	<1	52	2
CHYS_821_08	<5	0.5	152	49	250	<1	35	<1	347	1
CHYS_838_08	<5	<0.5	41	170	170	<1	8	<1	20	<1
CHYS_839_08	<5	2.2	176	41	460	<1	40	<1	133	<1
CHYS_840_08	5	2.7	167	287	310	<1	37	<1	165	3
CHYS_841_08	<5	3.3	120	95	380	<1	23	<1	244	2
CHYS_842_08	<5	<0.5	134	279	500	<1	28	<1	200	<1
CHYS_843_08	<5	0.5	51	108	220	<1	11	<1	244	<1
CHYS_844_08	27	1.0	68	275	260	<1	15	<1	93	9
CHYS_845_08	<5	3.6	126	69	400	<1	27	<1	87	1
CHYS_861_08	<5	0.7	100	85	16500	<1	19	<1	79	<1
CHYS_864_08	<5	2.5	320	167	580	<1	65	<1	291	2
CHYS_865_08	<5	2.3	112	127	810	<1	23	<1	255	<1
*Rep CHYS_865_08	<5	3.0	107	131	660	<1	23	<1	248	1
CHYS_866_08	<5	<0.5	104	115	550	<1	24	<1	110	<1
CHYS_867_08	<5	<0.5	29	228	340	<1	6	<1	111	<1
CHYS_868_08	8	<0.5	1130	38	950	<1	311	<1	123	5
CHYS_885_08	<5	<0.5	71	104	30	<1	15	<1	13	<1
CHYS_886_08	<5	<0.5	50	96	10	<1	9	<1	18	<1
CHYS_887_08	<5	<0.5	107	294	60	<1	20	<1	35	<1
CHYS_890_08	<5	3.7	112	223	350	<1	27	<1	240	1
CHYS_891_08	<5	0.8	39	114	240	<1	9	<1	166	<1
CHYS_892_08	<5	<0.5	131	174	1630	<1	26	<1	147	<1
CHYS_893_08	<5	<0.5	353	283	970	<1	79	<1	86	<1
CHYS_894_08	<5	0.6	658	30	520	<1	176	<1	198	2
CHYS_900_08	5	0.9	431	56	980	<1	114	<1	65	<1
*Rep CHYS_900_08	5	0.9	385	52	930	<1	103	<1	68	<1
CHYS_916_08	<5	<0.5	69	129	10	<1	15	<1	17	<1
CHYS_917_08	8	2.6	111	470	4720	<1	26	<1	81	8
CHYS_921_08	<5	<0.5	47	167	1790	<1	12	<1	338	4
CHYS_922_08	8	4.2	40	122	100	<1	8	<1	242	<1
CHYS_923_08	<5	<0.5	98	176	780	<1	19	<1	175	<1
CHYS_924_08	<5	<0.5	315	637	460	<1	67	<1	84	2
CHYS_925_08	<5	0.6	88	69	340	<1	26	<1	84	<1
CHYS_931_08	<5	<0.5	1160	57	860	<1	334	<1	30	<1
CHYS_948_08	<5	0.5	278	244	330	<1	62	<1	95	<1
CHYS_952_08	<5	0.9	94	113	1120	<1	20	<1	459	3
CHYS_953_08	5	2.9	11	52	20	<1	3	<1	143	<1
CHYS_954_08	<5	<0.5	38	63	270	<1	9	<1	120	<1
*Rep CHYS_954_08	<5	<0.5	36	74	330	<1	8	<1	148	<1
CHYS_962_08	32	0.6	177	80	1000	<1	52	<1	51	2
CHYS_980_08	<5	1.3	131	90	820	<1	27	<1	328	<1
CHYS_981_08	<5	4.8	6	39	20	<1	2	<1	169	<1
CHYS_982_08	<5	0.7	54	143	480	<1	12	<1	66	1
CHYS_990_08	16	1.5	141	132	1220	<1	34	<1	137	3

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1008_08	<5	0.6	78	64	1910	<1	17	<1	463	<1
CHYS_1009_08	6	1.4	90	83	270	<1	20	<1	136	2
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1010_08	<5	<0.5	19	162	320	<1	5	<1	51	2
CHYS_1018_08	25	1.1	92	36	1410	<1	22	<1	60	5
CHYS_1036_08	<5	3.3	59	172	480	<1	13	<1	109	3
CHYS_1037_08	<5	<0.5	92	540	230	<1	20	<1	59	2
CHYS_1045_08	<5	0.7	505	40	1370	<1	129	<1	89	<1
*Rep CHYS_1045_08	<5	0.7	463	43	1350	<1	117	<1	81	<1
CHYS_1071_08	<5	2.4	11	29	270	<1	3	<1	37	<1
CHYS_1094_08	10	0.6	62	73	310	<1	15	<1	134	7
CHYS_1115_08	<5	0.6	310	35	1100	<1	78	<1	150	<1
CHYS_1119_08	<5	<0.5	471	35	1170	<1	128	<1	111	<1
CHYS_1135_08	<5	1.5	94	53	400	<1	20	<1	83	<1
CHYS_1139_08	<5	0.6	98	42	1020	<1	21	<1	50	<1
CHYS_1147_08	7	3.8	517	79	11700	1	142	<1	152	12
CHYS_1153_08	<5	0.6	149	58	540	<1	35	<1	151	<1
CHYS_1157_08	<5	2.5	67	115	330	<1	14	<1	110	<1
CHYS_1165_08	6	2.9	124	129	2070	<1	29	<1	107	3
CHYS_1170_08	<5	0.8	139	28	570	<1	37	<1	198	3
CHYS_1174_08	7	1.4	23	109	220	<1	5	<1	149	<1
*Rep CHYS_1174_08	7	1.6	32	122	190	<1	6	<1	148	<1
CHYS_1186_08	<5	7.0	143	63	910	<1	38	<1	192	2
CHYS_1190_08	6	2.7	152	180	270	<1	32	<1	110	4
CHYS_1202_08	9	4.8	246	162	820	<1	69	<1	130	7
CHYS_1206_08	<5	<0.5	99	78	380	<1	23	<1	138	<1
CHYS_1217_08	13	1.2	24	302	410	<1	6	<1	113	13
CHYS_1221_08	<5	0.7	201	58	350	<1	44	<1	290	<1
CHYS_1230_08	<5	3.2	14	31	70	<1	3	<1	45	11
CHYS_1234_08	<5	10.0	33	81	180	<1	7	<1	121	1
CHYS_1241_08	<5	1.4	30	103	680	<1	7	<1	175	<1
CHYS_1245_08	<5	<0.5	303	355	270	<1	65	<1	189	<1
CHYS_862_08	<5	3.0	209	147	390	<1	45	<1	207	3
CHYS_863_08	<5	0.6	102	100	120	<1	21	<1	68	<1
*Rep CHYS_863_08	<5	0.6	104	92	140	<1	21	<1	68	<1
CHYS_888_08	<5	3.1	8	69	170	<1	2	<1	56	<1
CHYS_889_08	<5	<0.5	219	112	70	<1	46	<1	110	<1
CHYS_918_08	<5	0.6	317	206	260	<1	69	<1	67	<1
CHYS_920_08	<5	1.2	1660	209	230	<1	367	<1	190	<1
CHYS_949_08	<5	2.3	85	260	420	<1	18	<1	196	2
CHYS_950_08	<5	<0.5	167	100	210	<1	40	<1	95	<1
CHYS_951_08	<5	1.6	186	208	240	<1	44	<1	160	<1
CHYS_979_08	<5	0.9	229	202	160	<1	40	<1	206	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_981_08-A	<5	0.8	29	88	380	<1	7	<1	31	5
CHYS_1007_08	<5	<0.5	73	190	10	<1	14	<1	10	<1
*Std MMISRM16	42	<0.5	24	187	110	21	4	<1	315	<1
*Std MMISRM16	44	<0.5	24	201	110	22	5	<1	317	<1
*Std MMISRM16	46	<0.5	26	207	120	24	5	<1	323	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Order:

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_820_08	45	36	<1	1070	<1	18	<10	65.7	67	3.4
*Rep CHYS_820_08	46	13	<1	1220	<1	10	<10	50.9	49	3.0
CHYS_821_08	44	40	<1	1450	<1	8	<10	70.6	72	3.3
CHYS_838_08	<5	15	<1	2640	<1	3	<10	6.9	6	0.5
CHYS_839_08	38	38	<1	310	<1	7	<10	15.7	1240	1.1
CHYS_840_08	101	54	<1	150	<1	15	<10	98.7	1070	1.7
CHYS_841_08	61	48	<1	20	<1	11	<10	101	1540	1.3
CHYS_842_08	38	41	<1	1800	<1	11	<10	33.6	26	1.2
CHYS_843_08	17	17	<1	170	<1	5	<10	21.9	137	3.8
CHYS_844_08	23	19	<1	2120	<1	4	<10	8.4	49	2.2
CHYS_845_08	52	38	<1	120	<1	12	<10	82.3	393	3.0
CHYS_861_08	72	36	<1	400	<1	15	<10	64.1	175	0.8
CHYS_864_08	93	95	<1	170	<1	23	<10	61.9	698	4.1
CHYS_865_08	32	32	<1	410	<1	8	<10	25.4	421	2.4
*Rep CHYS_865_08	35	32	<1	360	<1	8	<10	34.9	527	2.3
CHYS_866_08	22	27	<1	4570	<1	8	<10	35.7	10	2.1
CHYS_867_08	11	9	<1	920	<1	3	<10	9.1	15	0.7
CHYS_868_08	113	225	<1	2220	<1	37	<10	400	65	7.1
CHYS_885_08	5	21	<1	2210	<1	4	<10	14.0	3	<0.5
CHYS_886_08	8	16	<1	1730	<1	3	<10	10.7	<3	<0.5
CHYS_887_08	7	41	<1	2750	<1	9	<10	11.9	<3	<0.5
CHYS_890_08	54	31	<1	150	<1	7	<10	84.6	542	2.9
CHYS_891_08	22	10	<1	560	<1	2	<10	33.7	187	0.6
CHYS_892_08	30	41	<1	2650	<1	14	<10	42.7	81	1.8
CHYS_893_08	56	105	<1	1650	<1	27	<10	35.7	67	1.1
CHYS_894_08	133	141	<1	300	<1	22	<10	199	259	3.7
CHYS_900_08	41	83	<1	5550	<1	14	<10	460	157	1.1
*Rep CHYS_900_08	42	76	<1	5990	<1	13	<10	465	149	1.0
CHYS_916_08	11	19	<1	2210	<1	3	<10	10.8	<3	<0.5
CHYS_917_08	124	31	<1	300	<1	9	<10	103	921	1.3
CHYS_921_08	18	11	<1	1390	<1	3	<10	28.0	44	3.5
CHYS_922_08	34	15	<1	150	<1	6	<10	36.0	499	2.4
CHYS_923_08	26	30	<1	6680	<1	11	<10	49.7	74	1.3
CHYS_924_08	62	101	<1	1340	<1	27	<10	42.7	56	0.9
CHYS_925_08	36	19	<1	1530	<1	4	<10	320	174	1.5
CHYS_931_08	30	172	<1	7960	<1	22	<10	314	8	0.7
CHYS_948_08	107	87	<1	2190	<1	21	<10	72.2	138	<0.5
CHYS_952_08	24	23	<1	730	<1	6	<10	32.0	242	1.7
CHYS_953_08	18	3	<1	40	<1	<1	<10	18.3	860	2.1
CHYS_954_08	18	11	<1	760	<1	3	<10	14.0	34	1.2
*Rep CHYS_954_08	23	11	<1	960	<1	4	<10	18.2	74	1.2
CHYS_962_08	16	35	<1	6670	<1	5	<10	389	28	1.6
CHYS_980_08	32	36	<1	610	<1	9	<10	57.9	456	1.4
CHYS_981_08	12	1	<1	90	<1	<1	<10	10.3	1180	0.9
CHYS_982_08	31	15	<1	1840	<1	4	<10	26.9	192	0.7
CHYS_990_08	17	33	<1	2500	<1	7	<10	701	272	1.8

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1008_08	22	19	<1	620	<1	5	<10	26.0	195	1.3
CHYS_1009_08	28	24	<1	950	<1	5	<10	15.7	246	1.9
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1010_08	18	5	<1	2820	<1	1	<10	26.3	56	<0.5
CHYS_1018_08	33	24	<1	1690	<1	7	<10	249	288	2.6
CHYS_1036_08	23	20	<1	940	<1	6	<10	76.9	553	1.1
CHYS_1037_08	20	27	<1	3390	<1	7	<10	10.6	<3	1.0
CHYS_1045_08	79	114	<1	170	<1	22	<10	199	277	1.7
*Rep CHYS_1045_08	75	107	<1	180	<1	21	<10	198	248	1.6
CHYS_1071_08	28	3	<1	90	<1	1	<10	35.3	504	1.0
CHYS_1094_08	38	17	<1	720	<1	4	<10	47.0	200	1.5
CHYS_1115_08	38	70	<1	570	<1	11	<10	146	183	2.4
CHYS_1119_08	23	91	<1	13700	<1	15	<10	148	5	2.1
CHYS_1135_08	35	26	<1	470	<1	7	<10	49.5	454	1.1
CHYS_1139_08	25	25	<1	5350	<1	6	<10	63.8	124	1.7
CHYS_1147_08	120	116	<1	100	<1	22	<10	132	737	5.2
CHYS_1153_08	38	36	<1	200	<1	7	<10	50.0	215	1.5
CHYS_1157_08	30	19	<1	360	<1	6	<10	18.6	235	2.3
CHYS_1165_08	59	35	<1	200	<1	8	<10	51.8	1260	1.9
CHYS_1170_08	41	32	<1	450	<1	5	<10	166	258	2.5
CHYS_1174_08	30	8	<1	350	<1	4	<10	22.0	393	1.2
*Rep CHYS_1174_08	29	12	<1	330	<1	4	<10	26.2	359	1.1
CHYS_1186_08	46	33	<1	670	<1	6	<10	309	1380	1.2
CHYS_1190_08	49	50	<1	130	<1	10	<10	41.4	660	1.5
CHYS_1202_08	44	49	<1	1380	<1	7	<10	368	843	1.0
CHYS_1206_08	21	24	<1	80	<1	5	<10	15.5	107	1.5
CHYS_1217_08	30	6	<1	1100	<1	2	<10	106	243	1.9
CHYS_1221_08	47	52	<1	60	<1	10	<10	57.9	131	2.3
CHYS_1230_08	14	4	<1	120	<1	1	<10	25.7	609	0.9
CHYS_1234_08	38	11	<1	60	<1	3	<10	28.2	1540	0.7
CHYS_1241_08	30	10	<1	730	<1	3	<10	20.0	279	1.6
CHYS_1245_08	79	95	<1	940	<1	18	<10	30.4	88	1.0
CHYS_862_08	102	69	<1	110	<1	16	<10	91.7	1120	1.1
CHYS_863_08	54	33	<1	820	<1	8	<10	17.9	134	<0.5
*Rep CHYS_863_08	54	33	<1	880	<1	8	<10	20.5	131	<0.5
CHYS_888_08	26	2	<1	110	<1	<1	<10	12.8	883	<0.5
CHYS_889_08	18	65	<1	1170	<1	12	<10	9.7	30	0.6
CHYS_918_08	69	97	<1	1060	<1	20	<10	37.6	188	0.5
CHYS_920_08	222	418	<1	230	<1	64	<10	154	514	1.2
CHYS_949_08	44	25	<1	730	<1	6	<10	48.2	666	1.4
CHYS_950_08	42	48	<1	280	<1	16	<10	14.1	28	0.7
CHYS_951_08	86	53	<1	190	<1	13	<10	81.5	609	0.9
CHYS_979_08	108	76	<1	130	<1	20	<10	89.8	297	1.2

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_981_08-A	19	7	<1	890	<1	2	<10	19.9	183	1.0
CHYS_1007_08	<5	23	<1	2680	<1	3	<10	12.8	<3	<0.5
*Std MMISRM16	10	7	<1	490	<1	<1	<10	33.1	3	<0.5
*Std MMISRM16	10	7	<1	490	<1	<1	<10	31.1	<3	<0.5
*Std MMISRM16	10	8	<1	500	<1	<1	<10	34.3	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	4	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_820_08	335	<1	752	49	480	9
*Rep CHYS_820_08	268	<1	558	48	430	8
CHYS_821_08	193	<1	262	15	90	45
CHYS_838_08	13	<1	88	4	690	6
CHYS_839_08	5	<1	200	10	100	26
CHYS_840_08	32	1	451	32	1410	146
CHYS_841_08	24	<1	201	15	90	158
CHYS_842_08	16	<1	372	20	320	19
CHYS_843_08	16	<1	170	10	120	31
CHYS_844_08	133	<1	194	13	110	30
CHYS_845_08	142	<1	352	23	190	81
CHYS_861_08	21	<1	511	29	2580	44
CHYS_864_08	36	1	731	43	980	89
CHYS_865_08	18	<1	256	15	1400	36
*Rep CHYS_865_08	20	<1	225	14	1000	52
CHYS_866_08	19	<1	267	16	350	35
CHYS_867_08	24	<1	112	7	540	18
CHYS_868_08	1200	1	1120	75	180	97
CHYS_885_08	9	<1	98	5	420	<5
CHYS_886_08	3	<1	75	4	100	<5
CHYS_887_08	25	<1	261	10	270	11
CHYS_890_08	17	<1	191	14	210	101
CHYS_891_08	10	<1	69	5	1250	25
CHYS_892_08	29	<1	483	29	1350	29
CHYS_893_08	69	<1	875	55	490	47
CHYS_894_08	687	2	611	49	130	73
CHYS_900_08	556	<1	356	19	140	25
*Rep CHYS_900_08	562	<1	344	19	130	26
CHYS_916_08	3	<1	80	4	80	<5
CHYS_917_08	133	<1	317	25	2260	156
CHYS_921_08	22	<1	132	10	460	27
CHYS_922_08	60	<1	158	12	730	84
CHYS_923_08	21	<1	388	25	1570	29
CHYS_924_08	115	<1	941	59	1020	79
CHYS_925_08	178	<1	127	10	60	67
CHYS_931_08	1520	<1	801	37	130	17
CHYS_948_08	62	<1	680	42	1030	48
CHYS_952_08	11	<1	192	11	420	29
CHYS_953_08	22	<1	14	3	90	74
CHYS_954_08	11	<1	151	13	4270	9
*Rep CHYS_954_08	15	<1	164	13	3830	13
CHYS_962_08	1430	<1	177	11	790	16
CHYS_980_08	12	<1	212	11	90	59
CHYS_981_08	4	<1	8	2	60	33
CHYS_982_08	30	<1	134	9	430	25
CHYS_990_08	1200	<1	211	12	590	17

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1008_08	8	<1	166	11	500	21
CHYS_1009_08	15	<1	160	10	280	25
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
CHYS_1010_08	22	<1	56	6	1100	11
CHYS_1018_08	1130	<1	261	15	40	36
CHYS_1036_08	29	<1	169	12	370	87
CHYS_1037_08	155	<1	343	27	880	27
CHYS_1045_08	295	1	567	32	60	49
*Rep CHYS_1045_08	287	1	567	32	80	46
CHYS_1071_08	30	<1	44	8	60	30
CHYS_1094_08	864	3	132	10	70	22
CHYS_1115_08	263	1	241	16	130	40
CHYS_1119_08	275	<1	517	26	30	18
CHYS_1135_08	88	<1	235	16	590	44
CHYS_1139_08	60	<1	214	20	320	13
CHYS_1147_08	48	2	447	37	470	278
CHYS_1153_08	74	<1	196	12	380	31
CHYS_1157_08	30	<1	238	17	600	19
CHYS_1165_08	24	1	216	16	1960	98
CHYS_1170_08	153	1	113	8	60	42
CHYS_1174_08	26	<1	152	14	1680	32
*Rep CHYS_1174_08	28	<1	161	13	1740	37
CHYS_1186_08	70	3	143	10	210	86
CHYS_1190_08	28	<1	206	14	440	149
CHYS_1202_08	169	3	142	11	2870	55
CHYS_1206_08	8	<1	117	6	80	25
CHYS_1217_08	713	1	80	7	170	22
CHYS_1221_08	28	<1	224	15	90	65
CHYS_1230_08	21	<1	47	8	130	37
CHYS_1234_08	14	<1	92	8	400	92
CHYS_1241_08	6	<1	114	27	3550	38
CHYS_1245_08	21	<1	474	26	520	44
CHYS_862_08	18	<1	327	17	710	127
CHYS_863_08	13	<1	234	12	1080	33
*Rep CHYS_863_08	15	<1	248	14	1170	31
CHYS_888_08	4	<1	31	4	420	38
CHYS_889_08	14	<1	307	12	130	15
CHYS_918_08	14	<1	514	22	1760	43
CHYS_920_08	27	<1	1670	87	230	110
CHYS_949_08	23	<1	185	11	290	75
CHYS_950_08	7	<1	446	12	250	9
CHYS_951_08	18	<1	366	23	560	66
CHYS_979_08	14	<1	682	40	270	44

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_981_08-A	33	<1	60	6	300	17
CHYS_1007_08	7	<1	86	4	80	<5
*Std MMISRM16	49	<1	13	<1	210	16
*Std MMISRM16	49	<1	13	<1	210	17
*Std MMISRM16	54	<1	15	<1	210	17
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101624

To: **Logan Resources Ltd.**

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

Date: Sep 04, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 72
Date Submitted Jul 14, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 72 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_393_08	5	202	60	0.3	1260	14	20	2	70	179
*Rep CHYS_393_08	6	197	70	0.3	940	18	10	4	93	233
CHYS_422_08	4	>300	30	<0.1	860	5	20	10	46	222
CHYS_453_08	1	235	<10	<0.1	720	2	10	4	11	89
CHYS_485_08	13	296	<10	<0.1	850	<1	70	7	36	43
CHYS_487_08	3	>300	<10	<0.1	1040	<1	10	4	156	73
CHYS_520_08	7	>300	50	0.1	2350	2	40	5	369	201
CHYS_522_08	3	168	20	<0.1	1920	8	220	25	328	481
CHYS_556_08	8	294	50	0.2	2270	4	50	9	350	254
CHYS_558_08	9	131	20	0.3	3710	2	280	8	380	256
CHYS_590_08	17	>300	20	0.3	2160	6	40	8	169	81
CHYS_592_08	4	>300	20	<0.1	700	<1	40	12	210	235
CHYS_620_08	2	133	<10	0.1	1280	<1	500	34	110	604
CHYS_622_08	2	82	70	2.0	1580	16	350	10	845	436
*Rep CHYS_622_08	3	90	60	1.4	1410	12	350	10	1850	465
CHYS_624_08	8	178	<10	0.9	480	4	30	5	51	201
CHYS_650_08	10	249	30	<0.1	1640	1	30	7	86	556
CHYS_651_08	4	>300	<10	<0.1	1030	<1	<10	39	87	278
CHYS_654_08	114	>300	40	1.5	190	29	20	3	387	43
CHYS_655_08	7	113	130	2.3	620	59	40	9	44	67
CHYS_678_08	4	>300	<10	<0.1	820	<1	10	13	284	43
CHYS_679_08	13	>300	40	0.1	800	<1	20	29	387	37
CHYS_680_08	7	>300	30	0.1	620	1	<10	22	148	291
CHYS_681_08	5	186	60	0.2	980	5	30	12	271	1560
CHYS_684_08	2040	>300	190	14.5	550	6	80	8	720	371
CHYS_685_08	5	141	1500	3.4	2560	17	60	14	206	199
CHYS_706_08	59	129	<10	0.2	2350	<1	390	10	316	9
*Rep CHYS_706_08	53	120	<10	0.2	2180	<1	370	9	380	7
CHYS_707_08	4	106	<10	0.2	2150	<1	300	6	139	417
CHYS_708_08	4	82	<10	<0.1	1320	<1	370	47	41	109
CHYS_709_08	13	>300	40	<0.1	2300	<1	10	22	181	104
CHYS_710_08	11	>300	30	<0.1	1310	<1	10	13	221	80
CHYS_711_08	7	219	40	0.4	2460	2	50	14	90	958
CHYS_712_08	9	144	<10	0.2	7840	<1	340	10	95	19
CHYS_714_08	74	149	<10	5.2	2360	<1	770	10	1850	114
CHYS_715_08	39	93	20	2.7	1670	<1	570	15	406	131
CHYS_716_08	2	233	10	<0.1	500	<1	10	2	<5	60
CHYS_733_08	9	287	<10	<0.1	2170	<1	70	15	382	68
CHYS_734_08	67	26	<10	0.4	2820	<1	610	69	33	111
CHYS_734B_08	1	12	<10	<0.1	1460	<1	630	76	<5	23
*Rep CHYS_734B_08	1	16	<10	<0.1	1550	<1	630	108	<5	24
CHYS_735_08	40	14	<10	0.1	890	<1	580	52	15	41
CHYS_736_08	1	101	<10	<0.1	1170	<1	460	166	22	137
CHYS_737_08	8	>300	40	0.1	1540	<1	20	7	123	53
CHYS_738_08	9	275	30	0.1	1530	<1	100	34	61	166
CHYS_739_08	6	88	150	2.6	1350	1	160	17	41	399

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_740_08	6	82	760	4.8	3230	3	230	51	75	863
CHYS_742_08	2	260	<10	<0.1	360	<1	10	4	11	187
Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_743_08	18	124	50	1.2	1120	<1	350	13	228	82
CHYS_744_08	22	149	690	26.9	2860	3	260	8	265	502
CHYS_760_08	12	93	<10	0.1	4320	<1	570	7	26	10
CHYS_761_08	13	20	<10	<0.1	3880	<1	750	20	47	18
CHYS_763_08	35	11	<10	0.1	1180	<1	600	9	38	34
*Rep CHYS_763_08	35	11	<10	0.2	1100	<1	570	9	50	25
CHYS_764_08	6	32	20	0.3	1480	<1	330	9	78	483
CHYS_765_08	2	196	10	0.1	860	1	130	38	63	140
CHYS_766_08	<1	89	<10	<0.1	310	<1	560	12	<5	32
CHYS_767_08	5	262	<10	<0.1	1960	<1	90	16	86	64
CHYS_768_08	10	146	50	2.4	2970	<1	110	2	79	231
CHYS_770_08	168	163	90	8.7	2680	<1	280	65	1810	55
CHYS_771_08	7	64	830	14.5	1230	2	350	18	525	1190
CHYS_788_08	11	279	10	0.1	1570	<1	20	77	147	44
CHYS_789_08	3	293	20	0.1	1270	<1	30	17	218	44
CHYS_790_08	9	288	<10	<0.1	1050	<1	30	13	74	58
CHYS_791_08	35	280	20	<0.1	1200	<1	40	63	648	64
CHYS_792_08	2	36	<10	0.1	770	<1	470	7	35	94
*Rep CHYS_792_08	4	35	<10	0.1	950	<1	490	7	46	98
CHYS_793_08	12	99	20	0.6	1560	<1	100	4	32	212
CHYS_794_08	4	294	<10	<0.1	1500	<1	20	18	71	100
CHYS_795_08	3	219	<10	0.3	1640	<1	40	72	22	116
CHYS_797_08	10	9	<10	2.1	<10	<1	30	1	108	<5
CHYS_815_08	35	>300	50	1.1	660	<1	10	17	141	45
CHYS_816_08	27	14	<10	<0.1	780	<1	650	9	15	20
CHYS_816B_08	1	27	<10	<0.1	440	<1	610	15	29	8
CHYS_817_08	3	265	<10	<0.1	2330	<1	60	121	199	91
CHYS_818_08	7	>300	10	0.1	720	<1	10	11	45	40
CHYS_819_08	3	167	<10	<0.1	1230	<1	290	5	7	373
CHYS_762_08	11	137	10	<0.1	1100	<1	60	31	77	32
*Std MMISRM16	20	70	20	31.7	60	<1	230	4	27	70
*Std MMISRM16	23	47	10	35.8	70	<1	240	4	15	54
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_393_08	200	700	8	4.3	2.1	478	8	34	<5	3
*Rep CHYS_393_08	200	1000	11	5.2	3.0	499	12	41	<5	2
CHYS_422_08	100	230	13	5.9	2.4	182	11	23	<5	3
CHYS_453_08	<100	100	6	5.5	0.7	271	3	9	<5	4
CHYS_485_08	<100	160	29	12.0	5.5	46	29	16	<5	17
CHYS_487_08	<100	350	78	33.1	12.9	76	69	47	<5	2
CHYS_520_08	100	310	69	27.9	20.5	156	101	157	<5	4
CHYS_522_08	<100	860	106	50.9	23.9	160	134	117	18	57
CHYS_556_08	100	370	72	32.6	17.8	104	89	182	<5	4
CHYS_558_08	<100	1380	96	38.3	24.1	26	134	102	11	59
CHYS_590_08	<100	260	59	26.8	12.0	94	55	73	<5	5
CHYS_592_08	<100	450	73	33.3	10.9	34	62	94	<5	5
CHYS_620_08	<100	390	69	42.9	14.1	54	69	71	<5	47
CHYS_622_08	<100	2920	18	9.3	6.6	339	23	179	<5	22
*Rep CHYS_622_08	<100	3020	25	12.6	10.5	290	37	328	<5	19
CHYS_624_08	<100	4090	45	57.9	2.4	158	12	26	<5	3
CHYS_650_08	<100	430	24	12.4	5.3	238	26	37	<5	7
CHYS_651_08	<100	280	27	13.2	5.0	59	24	34	<5	2
CHYS_654_08	<100	2940	98	45.3	40.6	90	120	106	<5	<1
CHYS_655_08	<100	10500	8	8.5	2.2	342	8	21	<5	10
CHYS_678_08	<100	190	105	39.6	21.2	58	101	79	<5	3
CHYS_679_08	<100	490	448	175	90.9	93	406	109	<5	1
CHYS_680_08	<100	570	45	20.4	8.8	87	42	53	<5	1
CHYS_681_08	<100	2020	44	23.8	9.8	344	45	90	<5	8
CHYS_684_08	<100	16100	177	106	39.3	24	156	282	<5	13
CHYS_685_08	<100	5610	27	16.9	6.2	368	23	100	<5	9
CHYS_706_08	<100	580	253	109	70.5	12	334	120	<5	15
*Rep CHYS_706_08	<100	530	226	91.7	69.0	14	312	116	<5	14
CHYS_707_08	<100	620	36	19.3	7.5	204	34	54	<5	16
CHYS_708_08	<100	330	27	15.9	5.5	34	26	20	9	57
CHYS_709_08	<100	820	88	39.9	16.6	110	79	70	<5	2
CHYS_710_08	<100	560	100	39.2	21.1	83	100	73	<5	2
CHYS_711_08	<100	1000	24	14.2	4.0	300	20	33	<5	7
CHYS_712_08	<100	310	34	16.3	10.9	12	40	42	<5	18
CHYS_714_08	<100	1400	194	111	71.5	17	230	1090	<5	107
CHYS_715_08	<100	1560	85	50.5	25.3	11	88	85	5	80
CHYS_716_08	<100	120	2	4.4	<0.5	124	1	8	<5	1
CHYS_733_08	<100	180	106	37.8	26.5	93	119	110	<5	10
CHYS_734_08	<100	1280	12	5.4	3.8	21	16	17	<5	30
CHYS_734B_08	<100	60	4	2.5	0.9	4	4	2	<5	32
*Rep CHYS_734B_08	<100	40	4	2.3	0.8	5	4	2	<5	31
CHYS_735_08	<100	2810	35	15.3	10.3	14	53	6	9	39
CHYS_736_08	<100	80	29	19.9	5.2	48	24	25	6	25
CHYS_737_08	<100	810	56	28.6	8.5	172	38	56	<5	3
CHYS_738_08	<100	380	36	18.0	5.4	99	26	29	<5	5
CHYS_739_08	<100	6490	11	7.0	2.7	375	10	24	<5	26

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_740_08	<100	4600	24	16.2	6.4	337	23	38	6	46
CHYS_742_08	<100	570	15	15.4	1.5	82	5	9	<5	2
Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_743_08	<100	910	139	83.2	38.6	9	134	66	<5	100
CHYS_744_08	<100	4750	76	40.8	13.8	107	62	134	<5	20
CHYS_760_08	<100	80	28	11.4	9.9	9	44	57	<5	9
CHYS_761_08	<100	200	28	11.1	9.0	13	44	38	<5	19
CHYS_763_08	<100	420	33	14.7	12.3	21	50	25	<5	41
*Rep CHYS_763_08	<100	450	44	19.1	16.2	23	65	33	<5	42
CHYS_764_08	<100	1370	16	8.1	4.9	212	21	25	<5	41
CHYS_765_08	<100	590	58	41.8	7.3	155	34	32	26	21
CHYS_766_08	<100	130	5	4.0	1.0	16	5	4	<5	7
CHYS_767_08	<100	160	25	13.1	5.7	37	22	35	<5	13
CHYS_768_08	<100	2440	12	9.3	3.4	209	13	38	<5	12
CHYS_770_08	<100	590	124	67.2	38.5	16	172	740	<5	19
CHYS_771_08	<100	7320	43	26.5	12.5	322	56	280	<5	28
CHYS_788_08	<100	150	114	48.0	14.2	106	80	44	<5	4
CHYS_789_08	100	150	50	18.3	13.0	95	56	64	<5	4
CHYS_790_08	100	300	32	15.7	8.6	110	43	30	<5	3
CHYS_791_08	<100	370	169	74.2	49.8	90	231	223	<5	2
CHYS_792_08	<100	540	15	7.1	4.5	44	20	24	<5	31
*Rep CHYS_792_08	<100	800	15	6.6	4.7	74	21	31	<5	32
CHYS_793_08	<100	2530	9	7.2	1.7	274	7	17	<5	3
CHYS_794_08	<100	540	44	23.6	7.0	70	34	26	<5	3
CHYS_795_08	<100	290	83	53.7	5.1	103	32	10	<5	9
CHYS_797_08	<100	290	9	4.9	3.4	2	13	51	<5	2
CHYS_815_08	<100	2090	88	30.3	15.1	119	76	52	<5	<1
CHYS_816_08	<100	170	18	7.6	5.5	8	26	22	<5	10
CHYS_816B_08	<100	10	16	7.6	4.9	10	24	19	<5	11
CHYS_817_08	<100	240	137	63.7	23.5	59	120	77	<5	10
CHYS_818_08	<100	120	24	10.4	5.0	67	25	18	<5	2
CHYS_819_08	<100	250	14	9.9	1.6	105	8	5	<5	24
CHYS_762_08	<100	170	59	24.4	9.4	334	47	28	<5	8
*Std MMISRM16	100	610	4	1.5	2.0	4	7	8	<5	33
*Std MMISRM16	<100	570	3	1.0	1.3	2	5	7	<5	38
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	2	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_393_08	10	11.2	29	133	120	<1	7	<1	235	16
*Rep CHYS_393_08	12	10.8	40	100	160	<1	10	<1	309	20
CHYS_422_08	<5	4.6	24	148	300	<1	5	<1	285	7
CHYS_453_08	<5	3.7	7	106	180	<1	1	<1	152	2
CHYS_485_08	<5	0.8	45	312	420	<1	7	<1	160	<1
CHYS_487_08	<5	2.0	127	179	490	<1	23	<1	269	1
CHYS_520_08	6	6.6	246	131	540	<1	51	<1	248	5
CHYS_522_08	7	0.8	300	1100	340	<1	56	<1	315	6
CHYS_556_08	7	5.3	253	120	250	<1	56	<1	332	10
CHYS_558_08	<5	0.9	289	504	450	<1	53	<1	377	3
CHYS_590_08	<5	2.0	140	197	390	<1	28	<1	332	6
CHYS_592_08	<5	0.8	147	223	550	<1	31	<1	170	7
CHYS_620_08	<5	0.6	138	182	360	<1	28	<1	195	2
CHYS_622_08	6	0.9	154	303	360	<1	41	<1	132	13
*Rep CHYS_622_08	7	1.2	259	310	410	<1	71	<1	124	12
CHYS_624_08	<5	<0.5	29	398	80	<1	7	<1	163	5
CHYS_650_08	<5	4.2	55	172	420	<1	12	<1	178	3
CHYS_651_08	<5	1.7	49	271	580	<1	10	<1	230	1
CHYS_654_08	<5	1.5	372	95	380	<1	72	<1	146	8
CHYS_655_08	6	0.5	25	93	170	<1	6	<1	277	21
CHYS_678_08	<5	1.5	276	125	320	<1	51	<1	178	1
CHYS_679_08	6	1.6	691	185	910	<1	104	<1	126	12
CHYS_680_08	7	3.0	87	162	550	<1	18	<1	246	5
CHYS_681_08	11	4.3	137	330	210	<1	31	<1	239	86
CHYS_684_08	<5	<0.5	488	505	410	<1	105	<1	130	29
CHYS_685_08	19	3.0	91	88	410	<1	23	<1	153	56
CHYS_706_08	<5	<0.5	534	291	70	<1	82	<1	127	1
*Rep CHYS_706_08	<5	<0.5	541	257	70	<1	81	<1	123	2
CHYS_707_08	<5	0.6	103	289	110	<1	21	<1	50	1
CHYS_708_08	<5	<0.5	47	199	210	<1	9	<1	20	<1
CHYS_709_08	10	6.5	171	208	180	<1	32	<1	203	4
CHYS_710_08	7	4.1	217	136	250	<1	38	<1	358	2
CHYS_711_08	6	3.7	47	258	900	<1	10	<1	191	12
CHYS_712_08	<5	0.5	85	69	120	<1	16	<1	163	1
CHYS_714_08	<5	<0.5	1020	2240	270	<1	245	<1	86	4
CHYS_715_08	8	<0.5	159	959	110	<1	28	<1	120	16
CHYS_716_08	<5	1.5	2	46	40	<1	<1	<1	51	<1
CHYS_733_08	<5	1.2	290	219	270	<1	55	<1	110	1
CHYS_734_08	15	<0.5	40	387	210	<1	7	<1	15	16
CHYS_734B_08	<5	<0.5	3	78	190	<1	<1	<1	9	8
*Rep CHYS_734B_08	<5	<0.5	3	92	310	<1	<1	<1	10	11
CHYS_735_08	11	<0.5	61	250	20	<1	7	<1	81	<1
CHYS_736_08	<5	0.7	45	57	160	<1	9	<1	16	1
CHYS_737_08	14	6.4	88	153	130	<1	18	<1	188	5
CHYS_738_08	7	6.3	51	96	140	<1	10	<1	169	4
CHYS_739_08	23	0.9	32	333	70	<1	7	<1	160	39

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_740_08	38	3.8	63	859	210	<1	13	<1	171	169
CHYS_742_08	<5	1.5	7	138	730	<1	1	<1	109	1
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_743_08	<5	0.7	198	823	80	<1	32	<1	96	6
CHYS_744_08	5	0.7	176	158	510	<1	39	<1	54	61
CHYS_760_08	<5	<0.5	127	63	50	<1	25	<1	70	<1
CHYS_761_08	<5	<0.5	98	191	40	<1	17	<1	22	<1
CHYS_763_08	<5	<0.5	91	356	20	<1	14	<1	23	<1
*Rep CHYS_763_08	<5	<0.5	123	337	30	<1	19	<1	25	<1
CHYS_764_08	46	0.7	65	387	90	<1	12	<1	19	11
CHYS_765_08	<5	2.4	65	305	90	<1	12	<1	160	4
CHYS_766_08	<5	<0.5	7	55	60	<1	1	<1	142	<1
CHYS_767_08	<5	0.7	68	237	730	<1	14	<1	60	<1
CHYS_768_08	<5	<0.5	42	101	30	<1	9	<1	92	6
CHYS_770_08	<5	0.5	797	76	6490	<1	196	<1	109	16
CHYS_771_08	17	<0.5	272	437	170	<1	67	<1	247	127
CHYS_788_08	<5	1.1	132	163	400	<1	23	<1	105	2
CHYS_789_08	<5	2.3	143	139	200	<1	28	<1	145	3
CHYS_790_08	<5	2.5	72	183	760	<1	13	<1	323	<1
CHYS_791_08	<5	1.9	697	221	340	<1	133	<1	169	1
CHYS_792_08	<5	<0.5	50	241	140	<1	10	<1	<5	4
*Rep CHYS_792_08	<5	<0.5	62	368	120	<1	13	<1	<5	3
CHYS_793_08	7	<0.5	19	78	110	<1	4	<1	116	4
CHYS_794_08	8	2.6	67	129	100	<1	12	<1	174	2
CHYS_795_08	<5	0.5	35	110	200	<1	5	<1	41	1
CHYS_797_08	<5	<0.5	53	<5	30	<1	12	<1	14	8
CHYS_815_08	7	1.8	143	112	80	<1	27	<1	243	9
CHYS_816_08	<5	<0.5	52	190	<10	<1	8	<1	41	<1
CHYS_816B_08	<5	<0.5	45	66	30	<1	8	<1	6	<1
CHYS_817_08	<5	0.9	253	139	190	<1	44	<1	81	<1
CHYS_818_08	<5	1.7	41	112	740	<1	7	<1	280	23
CHYS_819_08	<5	<0.5	12	136	310	<1	2	<1	79	<1
CHYS_762_08	6	1.0	87	109	90	<1	17	<1	253	3
*Std MMISRM16	57	<0.5	20	294	160	29	3	<1	312	<1
*Std MMISRM16	50	<0.5	16	194	100	29	2	<1	336	<1
*Bik BLANK	<5	<0.5	2	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_393_08	39	8	2	90	1	1	<10	94.0	3950	1.2
*Rep CHYS_393_08	54	11	2	50	1	2	<10	110	4210	1.3
CHYS_422_08	33	8	<1	60	<1	2	<10	53.8	1750	1.5
CHYS_453_08	22	2	<1	80	<1	<1	<10	32.6	689	1.1
CHYS_485_08	22	19	<1	360	<1	5	<10	31.3	391	0.7
CHYS_487_08	69	45	<1	60	<1	13	<10	53.1	472	2.0
CHYS_520_08	82	77	<1	90	<1	14	<10	153	3650	1.7
CHYS_522_08	82	100	<1	1000	<1	20	<10	109	113	2.4
CHYS_556_08	71	71	<1	270	<1	13	<10	165	2450	2.9
CHYS_558_08	38	99	<1	3620	<1	18	<10	85.5	48	3.2
CHYS_590_08	38	40	<1	440	<1	9	<10	63.9	515	3.0
CHYS_592_08	33	44	<1	410	<1	11	<10	93.3	234	2.1
CHYS_620_08	27	44	<1	2830	<1	11	<10	30.2	115	2.3
CHYS_622_08	30	27	<1	1490	<1	3	<10	36.5	226	2.9
*Rep CHYS_622_08	32	42	<1	1340	<1	5	<10	43.8	204	2.9
CHYS_624_08	26	8	<1	630	<1	4	<10	52.7	50	4.5
CHYS_650_08	39	18	<1	390	<1	4	<10	79.2	1950	1.4
CHYS_651_08	31	17	<1	100	<1	4	<10	58.8	454	1.5
CHYS_654_08	124	111	2	60	<1	18	<10	231	337	2.3
CHYS_655_08	12	7	<1	520	<1	1	<10	32.0	121	10.3
CHYS_678_08	97	82	<1	50	<1	18	<10	78.1	531	2.5
CHYS_679_08	261	270	<1	100	<1	74	<10	117	597	1.7
CHYS_680_08	66	30	<1	40	<1	8	<10	94.8	1170	2.0
CHYS_681_08	44	37	<1	320	<1	7	<10	119	1230	2.8
CHYS_684_08	157	125	<1	970	<1	27	<10	79.1	39	7.8
CHYS_685_08	84	20	<1	520	<1	4	<10	222	1330	4.0
CHYS_706_08	36	216	<1	610	<1	46	<10	15.1	12	1.5
*Rep CHYS_706_08	29	215	<1	530	<1	42	<10	14.7	10	1.3
CHYS_707_08	57	28	<1	950	<1	6	<10	30.3	122	0.9
CHYS_708_08	10	17	<1	1390	<1	4	<10	4.7	58	0.8
CHYS_709_08	85	56	<1	100	<1	14	<10	63.6	1790	1.8
CHYS_710_08	92	75	<1	50	<1	17	<10	75.4	1390	2.0
CHYS_711_08	43	15	<1	870	<1	4	<10	77.4	970	1.7
CHYS_712_08	18	29	<1	8450	<1	6	<10	32.2	93	1.2
CHYS_714_08	97	195	<1	5790	<1	33	<10	78.2	6	1.5
CHYS_715_08	17	52	<1	3120	<1	14	<10	27.6	<3	2.0
CHYS_716_08	21	1	<1	140	<1	<1	<10	45.8	433	1.4
CHYS_733_08	105	92	<1	190	<1	19	<10	79.5	558	0.8
CHYS_734_08	7	12	<1	2000	<1	2	<10	14.1	7	<0.5
CHYS_734B_08	<5	2	<1	2200	<1	<1	<10	1.0	42	<0.5
*Rep CHYS_734B_08	<5	3	<1	2220	<1	<1	<10	1.4	45	<0.5
CHYS_735_08	8	33	<1	1640	<1	7	<10	15.9	<3	<0.5
CHYS_736_08	17	16	<1	1400	<1	4	<10	6.7	192	<0.5
CHYS_737_08	73	28	<1	150	<1	8	<10	63.3	1940	1.9
CHYS_738_08	29	17	<1	400	<1	5	<10	21.5	1490	0.9
CHYS_739_08	53	8	<1	920	<1	2	<10	18.5	425	3.4

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_740_08	58	18	2	1570	4	4	<10	63.4	342	3.0
CHYS_742_08	29	3	<1	50	2	1	<10	15.9	227	1.7
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_743_08	33	77	<1	1600	2	22	<10	43.7	10	1.6
CHYS_744_08	123	47	<1	3610	2	11	<10	252	63	2.9
CHYS_760_08	12	39	<1	1420	2	6	<10	20.9	8	0.9
CHYS_761_08	11	33	<1	2630	2	6	<10	25.6	18	0.6
CHYS_763_08	11	34	<1	1280	1	6	<10	30.9	5	<0.5
*Rep CHYS_763_08	12	46	<1	1210	1	8	<10	36.6	7	<0.5
CHYS_764_08	65	18	<1	1290	1	3	<10	51.3	96	<0.5
CHYS_765_08	62	21	<1	1240	1	7	<10	176	396	1.2
CHYS_766_08	6	3	<1	1020	1	<1	<10	6.8	40	0.8
CHYS_767_08	31	18	<1	520	1	4	<10	43.5	161	<0.5
CHYS_768_08	26	11	<1	1260	1	2	<10	38.4	70	2.0
CHYS_770_08	73	154	<1	2340	1	23	<10	70.4	93	1.5
CHYS_771_08	119	54	<1	3950	1	8	<10	195	50	3.0
CHYS_788_08	91	49	<1	150	1	17	<10	95.2	349	1.1
CHYS_789_08	82	45	<1	100	1	9	<10	77.0	811	1.1
CHYS_790_08	49	30	<1	90	1	6	<10	52.2	772	1.4
CHYS_791_08	121	199	<1	60	1	32	<10	70.2	476	2.4
CHYS_792_08	6	16	<1	1360	1	3	<10	5.6	13	<0.5
*Rep CHYS_792_08	11	17	<1	1500	1	3	<10	7.2	15	<0.5
CHYS_793_08	45	5	<1	360	1	1	<10	43.0	108	2.1
CHYS_794_08	52	23	<1	200	1	7	<10	46.8	477	2.0
CHYS_795_08	80	16	<1	280	1	10	<10	35.3	110	2.7
CHYS_797_08	6	13	<1	250	1	2	<10	24.8	<3	<0.5
CHYS_815_08	82	51	<1	180	1	15	<10	46.4	598	2.0
CHYS_816_08	17	19	<1	1100	1	3	<10	11.8	8	<0.5
CHYS_816B_08	<5	17	<1	990	1	3	<10	4.6	9	<0.5
CHYS_817_08	60	83	<1	300	1	21	<10	33.0	388	0.7
CHYS_818_08	42	16	<1	40	1	4	<10	51.6	575	1.1
CHYS_819_08	16	5	<1	2790	1	2	<10	22.4	68	1.4
CHYS_762_08	71	32	<1	320	1	9	<10	43.9	362	1.4
*Std MMISRM16	14	7	<1	420	<1	<1	<10	40.8	5	0.9
*Std MMISRM16	11	6	<1	490	1	<1	<10	35.0	5	0.8
*Bik BLANK	<5	1	<1	<10	<1	<1	<10	<0.5	<3	0.6
*Bik BLANK	<5	<1	<1	<10	2	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_393_08	20	3	32	4	130	206
*Rep CHYS_393_08	27	3	40	4	140	227
CHYS_422_08	16	1	50	4	790	129
CHYS_453_08	9	<1	25	6	480	51
CHYS_485_08	8	<1	137	7	350	38
CHYS_487_08	25	<1	311	21	190	89
CHYS_520_08	24	3	295	19	310	216
CHYS_522_08	91	1	489	36	1410	152
CHYS_556_08	75	8	330	22	770	245
CHYS_558_08	73	1	405	25	240	150
CHYS_590_08	26	2	267	17	530	69
CHYS_592_08	52	<1	318	23	220	90
CHYS_620_08	65	1	381	31	1180	52
CHYS_622_08	48	1	84	8	220	43
*Rep CHYS_622_08	47	1	117	11	260	51
CHYS_624_08	182	<1	303	46	170	44
CHYS_650_08	28	1	105	10	550	107
CHYS_651_08	13	1	113	10	1590	82
CHYS_654_08	168	1	369	36	300	340
CHYS_655_08	186	3	36	16	80	47
CHYS_678_08	19	<1	463	22	360	67
CHYS_679_08	32	1	2640	91	250	160
CHYS_680_08	39	1	176	14	1350	247
CHYS_681_08	78	3	201	18	210	173
CHYS_684_08	75	8	1040	84	480	64
CHYS_685_08	396	6	137	13	90	84
CHYS_706_08	51	1	1270	58	140	76
*Rep CHYS_706_08	45	<1	1130	49	130	72
CHYS_707_08	26	<1	211	13	210	31
CHYS_708_08	11	<1	171	11	860	11
CHYS_709_08	53	1	419	25	680	143
CHYS_710_08	44	1	442	23	760	193
CHYS_711_08	50	2	117	10	1260	133
CHYS_712_08	20	1	163	11	280	79
CHYS_714_08	149	1	1290	78	860	119
CHYS_715_08	54	<1	524	35	960	33
CHYS_716_08	51	<1	9	7	80	17
CHYS_733_08	13	<1	414	20	190	79
CHYS_734_08	24	<1	67	4	660	9
CHYS_734B_08	2	<1	25	2	2880	<5
*Rep CHYS_734B_08	3	<1	23	2	2780	6
CHYS_735_08	90	<1	180	10	160	28
CHYS_736_08	14	<1	201	13	2680	23
CHYS_737_08	79	1	256	20	190	136
CHYS_738_08	27	1	185	11	1040	75
CHYS_739_08	84	1	63	6	120	49

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_740_08	481	1	136	14	370	48
CHYS_742_08	19	<1	72	13	290	15
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
CHYS_743_08	120	<1	812	67	890	41
CHYS_744_08	1610	<1	479	29	100	23
CHYS_760_08	16	1	126	6	100	8
CHYS_761_08	13	1	142	7	230	9
CHYS_763_08	24	1	201	9	90	10
*Rep CHYS_763_08	25	1	257	12	60	12
CHYS_764_08	78	<1	78	6	300	82
CHYS_765_08	348	1	362	37	940	37
CHYS_766_08	8	<1	42	3	860	6
CHYS_767_08	13	<1	134	8	630	22
CHYS_768_08	124	<1	69	8	30	16
CHYS_770_08	275	1	874	45	590	33
CHYS_771_08	2730	1	272	24	160	31
CHYS_788_08	28	<1	486	25	1330	53
CHYS_789_08	14	1	186	11	840	83
CHYS_790_08	22	<1	147	13	220	151
CHYS_791_08	25	<1	887	46	460	131
CHYS_792_08	14	<1	83	5	330	9
*Rep CHYS_792_08	18	<1	80	5	440	10
CHYS_793_08	190	1	56	6	30	24
CHYS_794_08	54	<1	198	17	990	71
CHYS_795_08	45	<1	403	37	1500	15
CHYS_797_08	110	<1	56	4	30	<5
CHYS_815_08	74	<1	359	14	90	129
CHYS_816_08	4	<1	105	5	90	<5
CHYS_816B_08	2	<1	86	5	910	<5
CHYS_817_08	20	1	684	37	1040	32
CHYS_818_08	12	<1	94	7	610	70
CHYS_819_08	5	<1	96	7	370	10
CHYS_762_08	54	<1	259	12	850	82
*Std MMISRM16	54	<1	17	1	220	19
*Std MMISRM16	44	<1	11	<1	190	14
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101625

To: **Logan Resources Ltd.**

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

Date: Aug 29, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 77
Date Submitted Jul 14, 2008
Report Comprises Pages 1 to 16
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 77 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_7_08	4	>300	<10	<0.1	730	<1	20	8	<5	153
*Rep CHYS_7_08	5	>300	<10	<0.1	670	<1	<10	9	<5	209
CHYS_13_08	<1	>300	<10	<0.1	760	<1	50	10	<5	30
CHYS_21_08	33	264	<10	<0.1	1600	<1	<10	25	20	878
CHYS_33_08	<1	105	10	<0.1	2050	<1	90	20	40	146
CHYS_34_08	<1	120	20	<0.1	2330	2	110	13	158	508
CHYS_61_08	9	269	<10	<0.1	1670	<1	20	9	74	184
CHYS_62_08	8	168	40	0.4	3270	2	40	7	260	310
CHYS_63_08	3	111	30	0.1	2990	1	10	2	60	46
CHYS_77_08	2	140	10	<0.1	930	<1	200	21	275	190
CHYS_78_08	3	284	30	<0.1	2340	1	50	15	380	174
CHYS_79_08	14	29	20	0.1	4590	<1	420	48	270	246
CHYS_80_08	2	160	<10	0.1	2790	<1	<10	6	170	197
CHYS_107_08	3	92	<10	<0.1	3510	<1	400	12	77	64
*Rep CHYS_107_08	4	96	<10	<0.1	3750	<1	430	11	67	57
CHYS_108_08	2	210	<10	<0.1	3560	<1	130	8	66	188
CHYS_109_08	5	251	<10	<0.1	2990	<1	80	15	249	50
CHYS_135_08	2	70	<10	<0.1	1250	<1	470	14	61	48
CHYS_136_08	5	73	<10	<0.1	1080	<1	530	31	69	64
CHYS_137_08	3	115	<10	<0.1	2670	<1	350	39	93	128
CHYS_138_08	2	98	<10	<0.1	1190	<1	500	46	102	18
CHYS_139_08	20	228	<10	<0.1	1320	<1	160	20	42	44
CHYS_140_08	2	93	<10	<0.1	3390	<1	620	17	37	18
CHYS_141_08	1	102	<10	<0.1	800	<1	610	34	56	106
CHYS_143_08	2	279	<10	<0.1	1170	<1	110	8	16	108
CHYS_158_08	18	14	<10	<0.1	1960	<1	460	21	14	156
CHYS_161_08	2	33	<10	<0.1	1240	<1	630	24	22	46
*Rep CHYS_161_08	2	32	<10	<0.1	1230	<1	590	23	22	47
CHYS_162_08	<1	57	<10	<0.1	1190	<1	600	11	54	13
CHYS_163_08	<1	113	<10	<0.1	1020	<1	420	18	24	63
CHYS_164_08	<1	228	10	<0.1	1450	<1	50	19	82	333
CHYS_165_08	7	182	<10	0.9	1530	<1	420	36	110	65
CHYS_166_08	<1	164	<10	<0.1	1400	<1	340	162	64	195
CHYS_187_08	4	20	<10	<0.1	1700	<1	620	2	127	261
CHYS_188_08	<1	132	<10	<0.1	900	<1	320	56	28	129
CHYS_211_08	22	56	<10	0.2	3780	<1	800	8	34	30
CHYS_870_08	4	>300	10	0.2	4800	<1	140	10	794	192
CHYS_896_08	4	>300	<10	<0.1	4450	<1	70	14	746	22
CHYS_897_08	1	261	<10	<0.1	1180	<1	20	3	132	95
CHYS_927_08	1	238	10	<0.1	1120	<1	50	4	108	69
*Rep CHYS_927_08	2	257	20	<0.1	1220	<1	50	4	105	62
CHYS_928_08	20	113	<10	0.9	1460	<1	1000	6	675	15
CHYS_958_08	<1	227	<10	<0.1	1120	<1	40	2	54	19
CHYS_986_08	4	252	20	<0.1	900	<1	60	8	149	33
CHYS_992_08	36	278	210	3.5	1910	<1	340	89	1240	22
CHYS_1014_08	8	196	110	0.3	1110	<1	80	10	228	68

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Order:

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_1015_08	3	263	20	0.1	840	<1	20	7	70	643
CHYS_1020_08	33	138	50	2.8	1540	<1	900	8	282	<5
Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_1041_08	7	274	30	0.2	670	<1	20	6	173	23
CHYS_1042_08	11	231	160	0.1	770	<1	50	11	109	71
CHYS_1047_08	30	177	670	0.9	11000	<1	260	37	1010	15
CHYS_1067_08	6	281	10	<0.1	600	<1	30	26	82	110
CHYS_1068_08	6	263	10	<0.1	510	<1	20	8	27	53
*Rep CHYS_1068_08	4	272	10	<0.1	550	<1	20	6	25	56
CHYS_1073_08	5	>300	20	0.7	3400	<1	460	16	76	680
CHYS_1088_08	7	75	100	1.3	1470	<1	720	28	642	590
CHYS_1090_08	8	268	400	0.8	3970	3	60	9	884	84
CHYS_1091_08	1	110	810	0.1	1220	<1	140	9	53	319
CHYS_1096_08	20	242	10	0.6	2860	<1	120	17	797	11
CHYS_1111_08	2	187	50	<0.1	1370	1	70	2	69	48
CHYS_1112_08	4	150	380	0.3	1820	<1	90	7	131	316
CHYS_1117_08	5	>300	10	0.1	3330	<1	340	50	1700	49
CHYS_1137_08	27	270	40	0.9	5120	5	370	103	990	24
CHYS_1155_08	5	>300	10	<0.1	3260	<1	70	21	413	28
CHYS_1172_08	2	>300	20	0.1	2140	2	60	19	54	61
CHYS_1188_08	3	283	50	0.1	2010	<1	70	15	151	97
*Rep CHYS_1188_08	3	296	60	0.2	2430	<1	60	15	134	96
CHYS_1204_08	12	290	10	0.3	2030	<1	30	41	315	24
CHYS_1219_08	5	216	20	<0.1	860	<1	20	1	29	42
CHYS_1228_08	4	156	40	1.3	900	<1	20	28	76	468
CHYS_1232_08	7	253	20	<0.1	1390	<1	130	62	35	74
CHYS_1238_08	8	158	40	0.2	1660	3	30	4	187	140
CHYS_1239_08	4	249	20	0.2	2130	<1	30	8	122	300
CHYS_1243_08	<1	88	340	0.1	740	<1	190	6	34	154
CHYS_1248_08	4	233	<10	<0.1	760	<1	20	23	21	32
CHYS_1249_08	4	>300	20	<0.1	860	2	20	8	76	51
CHYS_1253_08	5	273	90	0.2	820	<1	20	14	127	84
CHYS_1257_08	3	293	20	<0.1	1080	<1	20	27	66	286
CHYS_1263_08	2	246	60	<0.1	760	<1	20	9	28	125
*Rep CHYS_1263_08	1	231	40	<0.1	800	<1	20	5	27	97
CHYS_1269_08	4	255	20	<0.1	1310	<1	60	17	233	85
CHYS_1270_08	1	251	20	<0.1	810	<1	20	23	59	100
CHYS_1271_08	47	32	30	0.3	2300	<1	540	27	190	172
CHYS_1276_08	2	190	<10	<0.1	1440	<1	60	27	44	66
*Std MMISRM16	15	48	20	24.5	90	<1	210	4	34	57
*Std MMISRM16	14	46	20	22.3	70	<1	220	4	31	55
*Std MMISRM16	14	46	20	23.7	70	<1	210	4	32	54
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Order:

	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5



Order:

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_7_08	<100	40	<1	0.6	<0.5	131	<1	<1	<5	6
*Rep CHYS_7_08	<100	60	2	1.8	<0.5	92	<1	<1	<5	5
CHYS_13_08	<100	10	<1	0.9	<0.5	58	<1	<1	<5	6
CHYS_21_08	<100	1020	34	40.5	3.0	102	15	10	<5	2
CHYS_33_08	<100	500	38	31.0	4.5	256	25	17	<5	31
CHYS_34_08	<100	650	33	15.8	8.5	196	44	53	<5	30
CHYS_61_08	<100	290	29	15.1	4.8	145	26	25	<5	5
CHYS_62_08	<100	1550	44	22.2	10.9	352	53	81	<5	7
CHYS_63_08	<100	1340	7	3.8	1.8	425	8	25	<5	5
CHYS_77_08	<100	690	527	267	90.4	66	570	156	<5	28
CHYS_78_08	<100	280	50	19.3	15.6	100	73	140	7	6
CHYS_79_08	<100	1670	55	23.7	19.0	111	87	83	<5	86
CHYS_80_08	<100	1120	36	19.4	10.0	271	47	76	<5	3
CHYS_107_08	<100	130	49	24.0	11.2	60	63	30	5	90
*Rep CHYS_107_08	<100	150	46	22.8	9.9	50	57	29	7	105
CHYS_108_08	<100	130	77	40.7	9.9	74	65	25	<5	48
CHYS_109_08	<100	420	125	52.1	25.2	57	148	91	<5	17
CHYS_135_08	<100	250	43	21.9	13.3	59	61	28	<5	6
CHYS_136_08	<100	140	25	12.4	8.3	43	41	29	5	12
CHYS_137_08	<100	60	42	21.3	11.7	86	55	39	7	21
CHYS_138_08	<100	230	47	24.2	13.2	30	59	42	<5	8
CHYS_139_08	<100	110	13	5.7	3.3	51	17	14	<5	16
CHYS_140_08	<100	80	33	18.9	7.6	26	36	48	<5	13
CHYS_141_08	<100	30	5	3.0	1.2	58	5	8	<5	11
CHYS_143_08	<100	20	5	8.2	0.6	119	3	7	<5	15
CHYS_158_08	<100	810	8	3.2	3.1	10	14	<1	5	5
CHYS_161_08	<100	150	11	5.2	3.3	32	16	8	<5	12
*Rep CHYS_161_08	<100	170	11	5.2	3.3	31	16	9	<5	11
CHYS_162_08	<100	40	26	10.7	7.7	28	37	18	<5	9
CHYS_163_08	<100	50	19	13.2	3.5	59	16	9	<5	7
CHYS_164_08	<100	110	17	9.6	3.3	242	14	26	7	8
CHYS_165_08	<100	140	29	18.0	6.8	51	27	45	5	24
CHYS_166_08	<100	140	27	24.8	2.9	59	18	29	<5	12
CHYS_187_08	<100	370	10	4.5	4.6	75	18	33	6	19
CHYS_188_08	<100	80	15	11.5	2.2	82	11	9	<5	6
CHYS_211_08	<100	280	25	10.3	9.7	21	41	30	<5	19
CHYS_870_08	<100	440	92	45.1	19.5	45	106	435	<5	7
CHYS_896_08	<100	270	82	35.3	17.7	32	108	329	<5	2
CHYS_897_08	<100	640	28	20.0	3.7	69	20	50	<5	2
CHYS_927_08	<100	220	10	10.8	1.8	157	10	53	<5	7
*Rep CHYS_927_08	<100	270	10	11.3	1.7	156	10	52	<5	6
CHYS_928_08	<100	1010	140	74.5	46.8	36	206	621	<5	90
CHYS_958_08	<100	80	3	2.4	0.8	205	4	29	<5	7
CHYS_986_08	<100	310	25	14.4	5.2	46	24	64	<5	7
CHYS_992_08	<100	190	96	51.7	25.3	33	128	842	<5	30
CHYS_1014_08	<100	290	51	31.2	10.1	30	49	182	<5	7

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Order:

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_1015_08	<100	120	14	11.3	2.0	33	9	26	<5	2
CHYS_1020_08	<100	350	36	16.7	25.9	21	74	643	<5	45
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
CHYS_1041_08	<100	300	33	16.8	7.0	39	33	67	<5	1
CHYS_1042_08	<100	360	60	34.2	11.8	37	53	71	<5	5
CHYS_1047_08	<100	590	32	14.2	13.2	34	54	687	<5	8
CHYS_1067_08	<100	200	28	16.0	3.6	28	18	32	<5	6
CHYS_1068_08	<100	110	11	9.0	1.1	75	6	12	<5	3
*Rep CHYS_1068_08	<100	90	9	8.0	0.8	91	4	11	<5	4
CHYS_1073_08	<100	700	89	97.5	6.3	58	22	54	<5	30
CHYS_1088_08	<100	4310	31	18.6	11.6	153	46	351	<5	45
CHYS_1090_08	<100	1040	139	69.1	42.0	51	176	571	<5	4
CHYS_1091_08	<100	760	9	5.9	1.9	303	8	27	<5	21
CHYS_1096_08	<100	280	50	22.5	16.9	21	72	375	<5	1
CHYS_1111_08	<100	810	7	3.9	1.4	303	6	30	<5	9
CHYS_1112_08	<100	1970	15	10.8	3.4	290	14	59	<5	7
CHYS_1117_08	<100	350	223	131	54.4	34	265	793	<5	165
CHYS_1137_08	<100	1150	253	143	65.3	34	270	607	<5	29
CHYS_1155_08	<100	220	47	22.7	13.0	27	57	161	<5	2
CHYS_1172_08	<100	230	19	12.2	3.7	59	13	22	<5	5
CHYS_1188_08	<100	340	45	25.1	9.1	58	38	51	<5	6
*Rep CHYS_1188_08	<100	330	38	20.7	7.7	67	33	50	<5	7
CHYS_1204_08	<100	580	62	28.8	15.6	23	70	131	<5	1
CHYS_1219_08	<100	320	2	1.7	0.6	346	2	14	<5	3
CHYS_1228_08	<100	6120	11	10.2	1.9	208	9	37	<5	2
CHYS_1232_08	<100	150	11	7.9	1.3	120	7	15	<5	50
CHYS_1238_08	<100	2930	42	27.1	7.1	325	37	86	<5	4
CHYS_1239_08	<100	640	30	17.5	5.3	132	25	52	<5	4
CHYS_1243_08	<100	690	6	6.0	1.1	220	5	18	37	23
CHYS_1248_08	<100	200	12	9.1	1.3	168	6	8	<5	6
CHYS_1249_08	<100	220	26	11.0	5.3	67	27	24	<5	2
CHYS_1253_08	<100	230	15	10.7	2.3	128	12	63	<5	4
CHYS_1257_08	<100	240	19	8.6	3.8	68	19	23	<5	2
CHYS_1263_08	<100	90	8	6.6	0.8	182	4	13	<5	4
*Rep CHYS_1263_08	<100	60	3	3.7	0.5	186	2	13	9	6
CHYS_1269_08	<100	270	58	18.2	15.7	78	92	77	<5	7
CHYS_1270_08	<100	150	18	9.5	3.2	159	16	20	<5	3
CHYS_1271_08	<100	2300	18	8.8	6.0	76	28	58	9	54
CHYS_1276_08	<100	200	77	54.0	6.6	141	39	14	<5	9
*Std MMISRM16	<100	580	3	1.1	1.5	5	6	7	<5	31
*Std MMISRM16	<100	590	3	1.1	1.4	5	6	6	<5	31
*Std MMISRM16	100	600	3	1.1	1.4	5	6	6	<5	30
*Bik BLANK	<100	<10	<1	<0.5	<0.5	2	<1	<1	<5	<1

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Order:

	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
*Bik BLANK	<100	<10	<1	<0.5	<0.5	1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1



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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_7_08	<5	<0.5	<1	47	<10	<1	<1	<1	64	<1
*Rep CHYS_7_08	<5	<0.5	1	35	30	<1	<1	<1	84	<1
CHYS_13_08	<5	<0.5	<1	61	30	<1	<1	<1	42	<1
CHYS_21_08	<5	<0.5	18	218	630	<1	4	<1	115	<1
CHYS_33_08	<5	1.4	31	89	480	<1	8	<1	66	<1
CHYS_34_08	<5	5.5	72	319	760	<1	19	<1	42	1
CHYS_61_08	<5	1.9	39	283	990	<1	10	<1	178	<1
CHYS_62_08	6	8.1	114	140	190	2	30	<1	145	3
CHYS_63_08	<5	5.1	24	134	40	<1	7	<1	114	2
CHYS_77_08	<5	<0.5	431	251	1590	<1	91	<1	119	<1
CHYS_78_08	6	5.8	152	96	1250	2	42	<1	290	3
CHYS_79_08	11	<0.5	187	1270	120	<1	43	<1	58	16
CHYS_80_08	<5	1.5	109	223	50	<1	28	<1	157	<1
CHYS_107_08	<5	<0.5	66	232	640	<1	15	<1	26	<1
*Rep CHYS_107_08	<5	<0.5	60	238	650	<1	14	<1	32	<1
CHYS_108_08	<5	<0.5	58	134	1020	<1	13	<1	138	<1
CHYS_109_08	<5	0.6	182	376	2200	1	41	<1	217	<1
CHYS_135_08	<5	<0.5	79	230	610	<1	17	<1	17	<1
CHYS_136_08	<5	<0.5	69	194	1110	<1	16	<1	38	<1
CHYS_137_08	<5	<0.5	90	245	1240	<1	21	<1	119	<1
CHYS_138_08	<5	<0.5	107	217	1110	<1	24	<1	31	<1
CHYS_139_08	<5	<0.5	25	120	2880	<1	6	<1	147	<1
CHYS_140_08	<5	<0.5	70	80	300	<1	17	<1	69	<1
CHYS_141_08	<5	<0.5	12	95	120	<1	3	<1	25	<1
CHYS_143_08	<5	0.6	7	41	70	<1	2	<1	118	<1
CHYS_158_08	<5	<0.5	7	146	610	<1	<1	<1	54	<1
CHYS_161_08	<5	<0.5	21	228	370	<1	5	<1	24	<1
*Rep CHYS_161_08	<5	<0.5	21	229	380	<1	5	<1	26	<1
CHYS_162_08	<5	<0.5	57	121	250	<1	12	<1	46	<1
CHYS_163_08	<5	<0.5	21	43	210	<1	5	<1	7	<1
CHYS_164_08	<5	3.4	34	103	580	<1	9	<1	101	<1
CHYS_165_08	<5	<0.5	59	175	850	<1	16	<1	189	<1
CHYS_166_08	<5	<0.5	38	39	550	<1	10	<1	72	<1
CHYS_187_08	<5	<0.5	64	535	100	<1	16	<1	18	1
CHYS_188_08	<5	<0.5	18	45	230	<1	4	<1	10	<1
CHYS_211_08	<5	<0.5	78	166	60	<1	16	<1	37	<1
CHYS_870_08	<5	0.8	422	82	790	<1	128	<1	72	<1
CHYS_896_08	<5	1.7	429	42	1150	<1	123	<1	91	<1
CHYS_897_08	<5	1.4	64	33	380	<1	18	<1	86	<1
CHYS_927_08	<5	3.9	39	28	90	<1	13	<1	76	<1
*Rep CHYS_927_08	<5	4.0	39	32	100	<1	12	<1	90	<1
CHYS_928_08	<5	<0.5	662	99	100	<1	179	<1	103	<1
CHYS_958_08	<5	5.8	17	30	30	<1	6	<1	33	<1
CHYS_986_08	16	1.7	76	69	1100	<1	21	<1	113	5
CHYS_992_08	<5	<0.5	597	86	3820	<1	205	<1	49	1
CHYS_1014_08	37	0.5	156	71	320	<1	47	<1	73	12

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1015_08	<5	1.3	25	46	110	<1	7	<1	77	3
CHYS_1020_08	<5	<0.5	441	42	490	<1	149	<1	50	<1
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1041_08	<5	1.4	102	46	610	<1	27	<1	120	3
CHYS_1042_08	<5	0.6	129	94	350	<1	31	<1	129	3
CHYS_1047_08	<5	1.7	308	42	580	<1	115	<1	168	2
CHYS_1067_08	<5	1.3	45	83	580	<1	12	<1	245	1
CHYS_1068_08	<5	1.2	12	91	220	<1	3	<1	98	<1
*Rep CHYS_1068_08	<5	1.6	9	93	210	<1	3	<1	96	<1
CHYS_1073_08	<5	<0.5	43	84	550	<1	13	<1	40	<1
CHYS_1088_08	46	1.5	234	221	500	<1	77	<1	81	16
CHYS_1090_08	6	0.9	700	61	1940	<1	207	<1	63	3
CHYS_1091_08	32	1.8	27	88	60	<1	8	<1	238	8
CHYS_1096_08	<5	<0.5	309	18	610	<1	97	<1	127	<1
CHYS_1111_08	18	3.7	21	93	100	<1	7	<1	47	5
CHYS_1112_08	16	1.4	50	91	100	<1	15	<1	169	11
CHYS_1117_08	<5	<0.5	1120	60	1480	<1	340	<1	43	<1
CHYS_1137_08	<5	<0.5	917	76	2920	<1	253	<1	80	2
CHYS_1155_08	<5	<0.5	204	61	840	<1	58	<1	176	<1
CHYS_1172_08	<5	3.5	32	61	750	<1	8	<1	141	<1
CHYS_1188_08	<5	1.6	99	70	570	<1	24	<1	104	1
*Rep CHYS_1188_08	8	2.2	80	75	540	<1	21	<1	99	2
CHYS_1204_08	<5	0.7	216	89	480	<1	56	<1	238	1
CHYS_1219_08	<5	8.6	10	53	10	<1	3	<1	89	<1
CHYS_1228_08	6	<0.5	34	253	490	<1	11	<1	131	7
CHYS_1232_08	<5	1.7	17	102	860	<1	4	<1	123	<1
CHYS_1238_08	13	2.0	98	184	290	<1	27	<1	183	14
CHYS_1239_08	<5	2.8	62	102	320	<1	17	<1	289	2
CHYS_1243_08	28	1.2	16	59	90	<1	5	<1	8	5
CHYS_1248_08	<5	3.9	12	87	450	<1	3	<1	68	<1
CHYS_1249_08	<5	2.8	46	91	180	<1	11	<1	371	3
CHYS_1253_08	<5	4.3	46	74	910	<1	15	<1	164	2
CHYS_1257_08	<5	2.2	33	114	590	<1	8	<1	275	1
CHYS_1263_08	<5	5.9	11	66	270	<1	3	<1	131	<1
*Rep CHYS_1263_08	<5	6.2	9	47	190	<1	3	<1	95	1
CHYS_1269_08	<5	2.3	138	163	480	<1	33	<1	296	2
CHYS_1270_08	<5	3.4	31	109	340	<1	8	<1	244	2
CHYS_1271_08	6	0.8	93	491	360	<1	24	<1	17	11
CHYS_1276_08	<5	0.8	41	113	220	<1	8	<1	90	<1
*Std MMISRM16	45	<0.5	22	223	120	25	5	<1	305	<1
*Std MMISRM16	43	<0.5	21	236	120	24	5	<1	276	<1
*Std MMISRM16	44	<0.5	22	237	120	25	5	<1	269	<1
*Bik BLANK	<5	<0.5	1	<5	<10	<1	<1	<1	<5	<1

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Order:

	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
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1



Order:

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_7_08	<5	<1	<1	200	<1	<1	<10	3.1	58	<0.5
*Rep CHYS_7_08	5	<1	<1	190	<1	<1	<10	5.9	30	0.5
CHYS_13_08	<5	<1	<1	450	<1	<1	<10	2.3	<3	<0.5
CHYS_21_08	62	8	<1	110	<1	5	<10	36.6	15	0.6
CHYS_33_08	41	13	<1	670	<1	6	<10	21.1	304	<0.5
CHYS_34_08	36	26	<1	610	<1	8	<10	42.3	1500	<0.5
CHYS_61_08	34	15	<1	180	<1	6	<10	39.2	452	0.6
CHYS_62_08	95	39	<1	270	<1	11	<10	114	2810	1.3
CHYS_63_08	19	6	<1	190	<1	2	<10	36.3	829	0.7
CHYS_77_08	77	239	<1	1690	<1	117	<10	34.3	<3	0.6
CHYS_78_08	76	51	1	150	<1	14	<10	110	2320	1.1
CHYS_79_08	101	61	<1	4490	<1	15	<10	58.5	<3	1.0
CHYS_80_08	32	34	<1	110	<1	9	<10	29.9	318	0.6
CHYS_107_08	27	31	<1	1350	<1	12	<10	9.6	<3	<0.5
*Rep CHYS_107_08	5	28	<1	1500	<1	11	<10	8.5	<3	<0.5
CHYS_108_08	28	27	<1	870	<1	15	<10	21.4	80	0.6
CHYS_109_08	117	79	<1	420	<1	30	<10	60.8	200	1.4
CHYS_135_08	18	38	<1	1800	<1	11	<10	12.2	<3	<0.5
CHYS_136_08	7	27	<1	1440	<1	7	<10	12.1	<3	<0.5
CHYS_137_08	18	37	<1	980	<1	10	<10	21.4	40	<0.5
CHYS_138_08	<5	40	<1	1210	<1	11	<10	7.5	3	<0.5
CHYS_139_08	12	11	<1	720	<1	3	<10	22.9	157	<0.5
CHYS_140_08	<5	23	<1	2190	<1	7	<10	3.9	<3	<0.5
CHYS_141_08	10	4	<1	1710	<1	1	<10	6.5	22	<0.5
CHYS_143_08	22	2	<1	1590	<1	<1	<10	24.8	103	<0.5
CHYS_158_08	6	7	<1	2220	<1	2	<10	5.9	<3	0.6
CHYS_161_08	<5	9	<1	1730	<1	3	<10	10.2	<3	<0.5
*Rep CHYS_161_08	<5	9	<1	1690	<1	3	<10	11.2	<3	<0.5
CHYS_162_08	<5	24	<1	1810	<1	6	<10	8.1	<3	<0.5
CHYS_163_08	<5	9	<1	1450	<1	4	<10	3.8	16	<0.5
CHYS_164_08	68	11	<1	220	<1	3	<10	58.5	644	<0.5
CHYS_165_08	29	18	<1	1170	<1	6	<10	12.6	6	1.0
CHYS_166_08	30	11	<1	760	<1	4	<10	31.5	50	0.6
CHYS_187_08	16	17	<1	1700	<1	3	<10	30.2	<3	<0.5
CHYS_188_08	20	6	<1	1010	<1	3	<10	6.6	34	<0.5
CHYS_211_08	15	29	<1	2580	<1	7	<10	14.2	<3	<0.5
CHYS_870_08	23	88	<1	4410	<1	21	<10	345	76	2.8
CHYS_896_08	59	97	<1	1140	<1	21	<10	166	180	1.1
CHYS_897_08	20	17	<1	600	<1	5	<10	95.5	97	1.6
CHYS_927_08	19	9	<1	660	<1	2	<10	218	359	1.7
*Rep CHYS_927_08	23	8	<1	660	<1	2	<10	220	392	2.0
CHYS_928_08	56	168	<1	6680	<1	36	<10	168	<3	0.8
CHYS_958_08	12	3	<1	570	<1	<1	<10	47.3	783	0.9
CHYS_986_08	28	18	<1	420	<1	5	<10	125	331	1.5
CHYS_992_08	80	106	<1	3480	<1	24	<10	387	7	1.8
CHYS_1014_08	52	38	<1	620	<1	11	<10	152	169	1.7

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1015_08	43	7	<1	190	<1	2	<10	72.5	364	2.7
CHYS_1020_08	21	69	<1	15500	<1	11	<10	210	6	0.6
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1041_08	53	25	<1	120	<1	7	<10	85.5	382	1.7
CHYS_1042_08	62	36	<1	470	<1	12	<10	61.0	225	1.4
CHYS_1047_08	47	49	<1	3940	<1	10	<10	265	335	1.8
CHYS_1067_08	43	13	<1	220	<1	5	<10	46.4	316	0.6
CHYS_1068_08	29	4	<1	150	<1	2	<10	21.9	275	0.6
*Rep CHYS_1068_08	24	3	<1	180	<1	1	<10	22.9	390	0.7
CHYS_1073_08	35	13	<1	12900	<1	10	<10	103	<3	1.4
CHYS_1088_08	25	42	<1	6220	<1	8	<10	111	47	1.7
CHYS_1090_08	100	146	<1	1100	<1	34	<10	312	274	1.7
CHYS_1091_08	25	7	<1	890	<1	2	<10	48.5	490	0.7
CHYS_1096_08	24	66	<1	1820	<1	13	<10	267	74	2.3
CHYS_1111_08	12	5	<1	520	<1	1	<10	67.0	1070	1.2
CHYS_1112_08	52	12	<1	590	<1	3	<10	94.0	527	2.3
CHYS_1117_08	80	195	<1	4400	<1	52	<10	219	<3	3.7
CHYS_1137_08	112	204	<1	8260	<1	57	<10	188	12	2.1
CHYS_1155_08	43	48	<1	850	<1	11	<10	83.2	138	1.6
CHYS_1172_08	32	9	<1	660	<1	4	<10	20.5	453	2.1
CHYS_1188_08	52	27	<1	560	<1	9	<10	29.1	385	1.3
*Rep CHYS_1188_08	49	23	<1	820	<1	8	<10	35.3	510	1.3
CHYS_1204_08	65	54	<1	200	<1	15	<10	29.1	199	1.1
CHYS_1219_08	10	2	<1	160	<1	<1	<10	12.5	1430	0.9
CHYS_1228_08	18	8	<1	220	<1	2	<10	14.9	134	4.6
CHYS_1232_08	17	5	<1	1640	<1	2	<10	78.2	503	<0.5
CHYS_1238_08	32	28	<1	240	<1	8	<10	55.5	651	2.5
CHYS_1239_08	21	18	<1	270	<1	6	<10	34.0	526	3.8
CHYS_1243_08	5	4	<1	1050	<1	1	<10	41.4	184	<0.5
CHYS_1248_08	20	4	<1	120	<1	2	<10	14.6	481	0.9
CHYS_1249_08	35	19	<1	70	<1	6	<10	46.3	775	1.7
CHYS_1253_08	11	10	<1	260	<1	3	<10	111	553	1.2
CHYS_1257_08	25	13	<1	70	<1	4	<10	44.1	866	1.4
CHYS_1263_08	17	3	<1	220	<1	1	<10	35.7	692	0.6
*Rep CHYS_1263_08	19	2	<1	230	<1	<1	<10	28.5	700	0.7
CHYS_1269_08	48	58	<1	170	<1	17	<10	75.7	850	1.3
CHYS_1270_08	22	11	<1	100	<1	4	<10	35.9	768	1.0
CHYS_1271_08	14	23	<1	1830	<1	5	<10	51.9	25	<0.5
CHYS_1276_08	46	20	<1	490	<1	12	<10	23.0	181	0.9
*Std MMISRM16	<5	6	<1	580	<1	<1	<10	32.5	<3	<0.5
*Std MMISRM16	6	6	<1	540	<1	<1	<10	32.2	10	<0.5
*Std MMISRM16	12	6	<1	530	<1	<1	<10	31.7	9	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	0.5	<3	<0.5

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Order:

	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
*BIK BLANK	<5	<1	<1	20	<1	<1	<10	<0.5	<3	<0.5
*BIK BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	4	<0.5



Order:

Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_7_08	1	<1	<5	1	140	10
*Rep CHYS_7_08	3	<1	10	2	140	16
CHYS_13_08	<1	<1	<5	1	120	7
CHYS_21_08	80	<1	174	43	110	73
CHYS_33_08	38	<1	263	26	410	57
CHYS_34_08	31	2	194	13	860	113
CHYS_61_08	23	<1	160	13	790	103
CHYS_62_08	53	2	229	20	240	322
CHYS_63_08	13	<1	36	4	50	92
CHYS_77_08	138	2	3210	170	410	74
CHYS_78_08	30	1	247	14	260	237
CHYS_79_08	65	<1	350	18	660	49
CHYS_80_08	19	<1	223	17	40	52
CHYS_107_08	34	<1	289	17	360	29
*Rep CHYS_107_08	37	<1	275	17	360	29
CHYS_108_08	21	<1	519	28	270	52
CHYS_109_08	42	<1	603	35	470	147
CHYS_135_08	58	<1	319	17	460	26
CHYS_136_08	36	<1	175	10	1240	18
CHYS_137_08	23	<1	279	16	4100	45
CHYS_138_08	19	<1	347	17	1100	27
CHYS_139_08	9	<1	71	4	780	44
CHYS_140_08	21	<1	309	12	770	10
CHYS_141_08	15	<1	33	2	500	21
CHYS_143_08	11	<1	40	12	70	20
CHYS_158_08	26	<1	48	2	230	11
CHYS_161_08	12	<1	79	3	580	8
*Rep CHYS_161_08	12	<1	76	4	540	8
CHYS_162_08	12	<1	147	7	160	11
CHYS_163_08	6	<1	158	10	750	16
CHYS_164_08	14	<1	96	8	790	77
CHYS_165_08	17	<1	240	13	670	24
CHYS_166_08	96	<1	233	22	3870	22
CHYS_187_08	9	<1	74	4	100	8
CHYS_188_08	8	<1	125	10	1900	22
CHYS_211_08	20	<1	173	6	70	9
CHYS_870_08	763	<1	634	31	260	28
CHYS_896_08	89	<1	468	24	160	120
CHYS_897_08	90	<1	184	17	160	17
CHYS_927_08	144	<1	62	16	160	20
*Rep CHYS_927_08	145	<1	61	15	170	24
CHYS_928_08	605	<1	864	60	80	38
CHYS_958_08	26	<1	19	5	50	58
CHYS_986_08	155	2	162	10	230	46
CHYS_992_08	1720	<1	675	41	1320	38
CHYS_1014_08	4420	1	426	23	220	42

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Order:

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1015_08	113	<1	93	9	500	50
CHYS_1020_08	494	<1	323	13	30	34
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
CHYS_1041_08	116	1	208	12	270	43
CHYS_1042_08	442	<1	495	26	310	32
CHYS_1047_08	277	3	235	11	200	52
CHYS_1067_08	46	<1	163	11	460	35
CHYS_1068_08	20	<1	62	8	340	21
*Rep CHYS_1068_08	21	<1	51	7	250	23
CHYS_1073_08	344	<1	720	96	520	19
CHYS_1088_08	2450	<1	264	16	180	40
CHYS_1090_08	1100	2	828	51	170	54
CHYS_1091_08	276	2	59	5	320	31
CHYS_1096_08	790	2	343	16	70	28
CHYS_1111_08	71	1	35	3	220	46
CHYS_1112_08	545	2	103	10	170	51
CHYS_1117_08	226	<1	2070	97	270	8
CHYS_1137_08	760	1	1950	111	1230	24
CHYS_1155_08	117	1	330	16	220	37
CHYS_1172_08	18	<1	118	10	400	46
CHYS_1188_08	41	<1	334	17	170	37
*Rep CHYS_1188_08	43	<1	269	14	200	52
CHYS_1204_08	41	<1	439	20	890	49
CHYS_1219_08	9	<1	15	2	30	49
CHYS_1228_08	80	<1	90	10	140	27
CHYS_1232_08	59	<1	73	7	2460	20
CHYS_1238_08	79	<1	238	23	250	94
CHYS_1239_08	18	5	182	12	530	44
CHYS_1243_08	1430	1	49	6	200	13
CHYS_1248_08	15	<1	75	7	1000	48
CHYS_1249_08	21	<1	118	7	480	91
CHYS_1253_08	50	1	92	10	600	24
CHYS_1257_08	18	<1	95	6	530	78
CHYS_1263_08	15	<1	48	6	660	28
*Rep CHYS_1263_08	15	<1	20	5	380	24
CHYS_1269_08	20	<1	255	11	310	97
CHYS_1270_08	10	<1	99	7	200	60
CHYS_1271_08	95	<1	133	7	160	15
CHYS_1276_08	23	<1	445	44	690	21
*Std MMISRM16	55	<1	16	<1	220	17
*Std MMISRM16	56	<1	15	<1	220	16
*Std MMISRM16	54	<1	15	<1	220	15
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Order:

	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
*BIK BLANK	<1	<1	<5	<1	<20	<5
*BIK BLANK	<1	<1	<5	<1	<20	<5



Certificate of Analysis

Work Order: TO101626

To: **Logan Resources Ltd.**

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

Date: Sep 15, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 63
Date Submitted Jul 14, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 63 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Final : TO101626 Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_869_08	2	107	60	0.8	2290	2	140	4	270	714
*Rep CHYS_869_08	2	117	50	0.6	2140	2	140	6	231	591
CHYS_871_08	3	144	1600	4.9	1970	5	70	12	225	310
CHYS_895_08	16	185	60	0.2	3430	<1	170	23	849	59
CHYS_898_08	18	253	100	1.5	1250	3	140	8	821	85
CHYS_899_08	2	44	4060	1.3	1820	3	620	12	742	165
CHYS_901_08	107	24	2120	17.7	150	<1	930	35	<5	14
CHYS_926_08	21	145	30	3.5	1570	<1	280	16	1760	20
CHYS_929_08	3	68	4350	3.1	2010	35	210	5	726	518
CHYS_930_08	2	101	1240	2.6	2330	5	370	17	239	288
CHYS_932_08	96	17	520	16.9	40	<1	840	14	<5	10
CHYS_956_08	26	61	20	0.9	950	<1	740	9	811	13
CHYS_957_08	13	263	30	0.2	1430	<1	70	14	1020	41
CHYS_959_08	3	84	440	0.9	2380	2	220	2	107	208
*Rep CHYS_959_08	3	91	230	0.9	2400	<1	220	5	113	187
CHYS_960_08	1	85	620	1.2	1130	3	50	4	82	197
CHYS_961_08	4	64	4210	1.9	2600	6	450	10	553	255
CHYS_963_08	153	15	1010	1.2	30	<1	900	16	<5	10
CHYS_984_08	13	116	10	0.2	970	<1	590	17	831	13
CHYS_985_08	12	241	10	0.8	2480	<1	180	5	2680	172
CHYS_987_08	6	252	20	0.2	630	<1	10	9	308	13
CHYS_988_08	9	110	1160	1.8	3010	4	100	4	93	118
CHYS_989_08	13	120	740	2.8	2320	6	270	16	695	356
CHYS_991_08	129	205	1840	1.0	2620	13	140	17	873	10
CHYS_1016_08	4	177	180	0.2	970	<1	40	11	91	103
CHYS_1017_08	2	79	2880	3.3	2030	20	120	58	293	238
CHYS_1019_08	15	167	840	1.6	3010	5	210	19	471	369
*Rep CHYS_1019_08	10	139	1560	1.4	3040	6	170	12	185	287
CHYS_1043_08	8	217	60	<0.1	640	<1	10	17	81	67
CHYS_1044_08	5	226	90	0.2	740	<1	10	12	94	154
CHYS_1046_08	8	221	30	0.2	1410	<1	20	15	325	10
CHYS_1069_08	1	81	140	<0.1	1360	<1	80	3	44	350
CHYS_1070_08	2	116	70	0.1	810	<1	20	2	115	84
CHYS_1072_08	15	168	70	1.3	4580	<1	120	24	422	233
CHYS_1092_08	3	102	440	0.1	1300	<1	100	5	42	68
CHYS_1093_08	3	224	20	<0.1	820	<1	20	17	289	39
CHYS_1095_08	4	167	30	0.3	3320	<1	40	4	108	70
CHYS_1102_08	6	251	70	0.3	840	<1	50	15	365	152
CHYS_1103_08	2	>300	<10	<0.1	6230	<1	180	35	1330	74
CHYS_1113_08	2	166	140	0.2	1770	<1	80	15	88	140
*Rep CHYS_1113_08	2	166	160	0.2	1660	<1	80	13	120	124
CHYS_1114_08	1	222	20	<0.1	1430	<1	40	52	106	19
CHYS_1116_08	5	220	20	<0.1	1500	<1	30	13	123	68

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Final : TO101626 Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_1125_08	8	238	60	0.5	1890	<1	100	39	156	315
CHYS_1126_08	4	157	30	0.2	1020	1	110	24	335	258
CHYS_1133_08	<1	109	60	0.3	540	<1	10	<1	40	21
CHYS_1134_08	3	193	20	0.1	1210	1	70	36	177	67
CHYS_1136_08	8	150	40	0.3	3220	2	100	16	362	61
CHYS_1152_08	2	195	20	<0.1	1210	<1	20	19	228	100
CHYS_1154_08	7	189	20	0.1	4090	<1	60	24	536	16
CHYS_1163_08	45	197	260	12.7	530	4	<10	17	80	76
CHYS_1164_08	1400	158	310	10.3	520	<1	70	23	24	22
CHYS_1171_08	3	283	30	0.1	910	<1	<10	16	56	106
*Rep CHYS_1171_08	3	264	30	0.3	760	<1	<10	14	80	97
CHYS_1179_08	2	166	70	<0.1	1260	<1	150	19	239	117
CHYS_1180_08	2	76	190	0.2	480	<1	310	30	59	36
CHYS_1181_08	4	257	50	0.2	710	1	<10	10	55	92
CHYS_1187_08	2	153	40	0.1	780	1	<10	2	15	46
CHYS_1195_08	4	276	80	0.2	510	2	<10	23	127	285
CHYS_1196_08	9	>300	80	0.2	930	1	<10	11	456	135
CHYS_1203_08	2	241	20	<0.1	540	<1	<10	10	8	35
CHYS_1210_08	6	>300	320	<0.1	3760	4	50	16	760	197
CHYS_1218_08	9	280	70	0.1	930	<1	40	26	149	81
CHYS_1258_08	12	295	20	<0.1	780	<1	10	11	209	99
CHYS_1259_08	5	>300	10	0.1	400	<1	<10	13	91	28
CHYS_1266_08	4	289	40	0.1	910	1	30	7	167	413
*Rep CHYS_1266_08	5	255	30	0.1	880	1	10	7	91	483
CHYS_1267_08	4	268	10	<0.1	1200	<1	20	71	254	91
CHYS_1274_08	4	246	20	<0.1	1320	<1	90	22	121	199
*Std MMISRM16	14	33	20	26.7	70	<1	200	4	28	41
*Std MMISRM16	17	35	20	27.0	40	<1	200	3	14	48
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	1	1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Final : TO101626 Order:

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_869_08	<100	2680	34	28.8	4.8	319	25	130	<5	23
*Rep CHYS_869_08	<100	2870	39	34.5	4.7	290	24	108	<5	21
CHYS_871_08	<100	1840	27	16.0	4.6	240	25	90	<5	9
CHYS_895_08	<100	280	38	15.7	12.3	50	63	592	<5	7
CHYS_898_08	<100	560	102	47.4	25.9	56	127	412	<5	13
CHYS_899_08	<100	5970	18	9.4	11.9	149	38	392	<5	21
CHYS_901_08	<100	4270	7	3.6	1.9	22	8	<1	<5	24
CHYS_926_08	<100	460	210	114	44.1	31	283	967	<5	27
CHYS_929_08	<100	4320	42	23.9	14.7	420	58	343	<5	11
CHYS_930_08	<100	5510	24	16.8	8.4	260	26	157	<5	16
CHYS_932_08	<100	1640	32	20.8	4.8	17	34	3	6	22
CHYS_956_08	<100	460	34	16.4	14.2	16	66	408	<5	37
CHYS_957_08	<100	780	97	45.5	31.0	46	147	664	<5	3
CHYS_959_08	<100	3210	12	9.7	2.3	283	10	52	<5	7
*Rep CHYS_959_08	<100	2820	20	15.9	2.8	224	14	53	<5	8
CHYS_960_08	<100	3660	8	6.0	1.9	228	8	43	<5	6
CHYS_961_08	<100	5120	20	11.3	10.9	273	33	284	<5	19
CHYS_963_08	<100	3770	46	25.9	5.4	18	47	2	11	16
CHYS_984_08	<100	120	60	32.1	15.6	18	92	810	<5	19
CHYS_985_08	<100	640	266	129	69.3	17	364	1180	<5	6
CHYS_987_08	<100	230	42	17.5	10.2	13	53	125	<5	<1
CHYS_988_08	<100	2650	24	20.2	3.5	162	13	49	<5	4
CHYS_989_08	<100	3660	60	35.4	12.2	157	72	380	<5	24
CHYS_991_08	<100	1890	27	12.0	16.8	44	51	452	<5	<1
CHYS_1016_08	<100	260	24	12.3	4.8	34	22	51	<5	4
CHYS_1017_08	<100	11700	17	10.1	6.1	323	22	157	<5	9
CHYS_1019_08	<100	5790	66	41.5	17.3	110	59	244	<5	9
*Rep CHYS_1019_08	<100	6510	37	27.5	7.5	208	24	96	<5	7
CHYS_1043_08	<100	320	32	15.9	4.6	48	24	32	<5	2
CHYS_1044_08	<100	580	25	15.6	3.2	72	17	48	<5	2
CHYS_1046_08	<100	410	37	15.9	10.7	33	48	130	<5	<1
CHYS_1069_08	<100	550	7	4.5	1.7	236	7	23	<5	10
CHYS_1070_08	<100	750	14	9.4	2.7	275	13	64	<5	2
CHYS_1072_08	<100	4690	60	34.2	15.1	59	62	177	<5	12
CHYS_1092_08	<100	1720	9	6.1	1.8	246	8	22	<5	7
CHYS_1093_08	<100	150	41	18.6	9.0	23	47	108	<5	2
CHYS_1095_08	<100	780	18	13.9	2.9	94	12	55	<5	2
CHYS_1102_08	<100	1710	61	27.1	14.9	32	72	119	<5	6
CHYS_1103_08	<100	350	179	72.1	39.9	15	254	872	<5	33
CHYS_1113_08	<100	310	27	17.1	4.5	119	19	44	<5	8
*Rep CHYS_1113_08	<100	370	34	20.5	5.7	121	27	61	<5	7
CHYS_1114_08	<100	100	22	11.9	4.6	44	22	49	<5	9
CHYS_1116_08	<100	180	19	9.1	4.0	46	18	46	<5	2

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_1125_08	<100	620	21	9.5	5.3	25	22	68	<5	15
CHYS_1126_08	<100	560	36	17.3	9.4	77	47	164	9	12
CHYS_1133_08	<100	640	4	2.1	0.9	393	3	19	<5	4
CHYS_1134_08	<100	200	26	12.3	6.7	23	29	90	<5	7
CHYS_1136_08	<100	450	41	22.5	12.5	50	50	159	<5	3
CHYS_1152_08	<100	170	31	16.9	7.5	41	33	94	<5	1
CHYS_1154_08	<100	230	93	45.9	23.8	14	114	258	<5	2
CHYS_1163_08	<100	1950	32	17.1	2.9	90	16	34	<5	<1
CHYS_1164_08	<100	26000	7	6.3	0.7	81	5	21	9	11
CHYS_1171_08	<100	170	17	11.1	2.2	82	10	27	<5	2
*Rep CHYS_1171_08	<100	180	28	14.9	5.0	51	21	30	<5	<1
CHYS_1179_08	<100	390	72	38.7	14.5	57	82	127	<5	8
CHYS_1180_08	<100	760	13	8.1	2.9	17	17	32	13	25
CHYS_1181_08	<100	450	23	12.8	3.2	152	16	22	<5	1
CHYS_1187_08	<100	290	3	2.4	<0.5	278	2	7	<5	2
CHYS_1195_08	<100	1670	26	11.8	5.5	55	27	41	<5	<1
CHYS_1196_08	<100	460	53	19.4	13.6	51	70	179	<5	<1
CHYS_1203_08	<100	40	4	3.8	<0.5	133	2	4	<5	2
CHYS_1210_08	300	410	50	21.9	13.7	250	70	299	102	19
CHYS_1218_08	<100	260	19	8.8	4.9	89	20	71	<5	6
CHYS_1258_08	<100	480	58	20.4	18.0	83	86	66	<5	1
CHYS_1259_08	<100	150	41	14.7	9.5	30	47	27	<5	<1
CHYS_1266_08	<100	210	43	15.5	14.5	103	66	57	<5	4
*Rep CHYS_1266_08	<100	260	31	12.4	7.8	136	37	32	<5	4
CHYS_1267_08	<100	210	85	31.6	21.4	36	103	76	<5	6
CHYS_1274_08	<100	270	38	16.6	10.8	86	54	37	<5	13
*Std MMISRM16	<100	500	2	0.8	1.0	4	4	8	<5	31
*Std MMISRM16	<100	530	2	0.6	0.8	2	3	3	<5	34
*Bik BLANK	<100	<10	<1	<0.5	<0.5	1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_869_08	14	0.7	88	166	90	<1	29	<1	141	7
*Rep CHYS_869_08	13	0.7	81	167	120	<1	26	<1	151	6
CHYS_871_08	10	1.4	83	103	120	<1	25	<1	192	232
CHYS_895_08	6	1.9	325	65	390	<1	111	<1	167	2
CHYS_898_08	<5	<0.5	444	85	1230	<1	126	<1	70	28
CHYS_899_08	104	5.4	249	101	280	<1	83	<1	97	17
CHYS_901_08	<5	0.6	2	91	250	<1	<1	<1	36	3
CHYS_926_08	<5	<0.5	1130	114	690	<1	331	<1	192	3
CHYS_929_08	31	3.7	276	151	380	<1	87	<1	160	669
CHYS_930_08	9	1.1	104	90	280	<1	34	<1	71	10
CHYS_932_08	5	<0.5	4	173	90	<1	<1	<1	65	3
CHYS_956_08	<5	0.5	298	68	230	<1	89	<1	142	1
CHYS_957_08	5	1.6	651	59	670	<1	196	<1	113	2
CHYS_959_08	12	0.8	41	107	40	<1	13	<1	45	17
*Rep CHYS_959_08	8	0.5	45	106	80	<1	14	<1	41	19
CHYS_960_08	51	0.7	30	62	110	<1	10	<1	135	10
CHYS_961_08	43	3.6	177	63	270	<1	59	<1	56	14
CHYS_963_08	6	<0.5	7	70	60	<1	<1	<1	35	1
CHYS_984_08	<5	<0.5	432	46	260	<1	148	<1	62	<1
CHYS_985_08	<5	<0.5	1740	99	1480	<1	535	<1	38	1
CHYS_987_08	<5	1.0	176	44	530	<1	49	<1	131	2
CHYS_988_08	11	0.6	37	41	720	<1	12	<1	37	9
CHYS_989_08	11	<0.5	293	63	440	<1	95	<1	63	7
CHYS_991_08	<5	1.1	276	19	1580	<1	94	<1	47	2
CHYS_1016_08	8	<0.5	61	58	300	<1	17	<1	85	4
CHYS_1017_08	59	2.5	109	112	460	<1	36	<1	176	15
CHYS_1019_08	9	<0.5	207	87	960	<1	63	<1	27	3
*Rep CHYS_1019_08	13	0.6	76	74	510	<1	24	<1	29	3
CHYS_1043_08	<5	1.3	49	73	400	<1	12	<1	120	<1
CHYS_1044_08	5	1.2	42	76	280	<1	13	<1	128	2
CHYS_1046_08	<5	<0.5	162	44	300	<1	46	<1	117	<1
CHYS_1069_08	41	0.9	23	63	30	<1	6	<1	47	6
CHYS_1070_08	9	1.2	46	62	80	<1	15	<1	74	3
CHYS_1072_08	<5	<0.5	200	47	410	<1	60	<1	56	1
CHYS_1092_08	9	0.7	23	120	70	<1	7	<1	49	5
CHYS_1093_08	<5	0.9	158	48	500	<1	45	<1	137	<1
CHYS_1095_08	<5	<0.5	40	33	350	<1	13	<1	64	1
CHYS_1102_08	<5	1.5	207	125	190	<1	53	<1	130	<1
CHYS_1103_08	<5	<0.5	1280	96	470	<1	399	<1	54	<1
CHYS_1113_08	<5	0.7	48	62	640	<1	13	<1	64	2
*Rep CHYS_1113_08	<5	0.5	65	68	700	<1	19	<1	51	3
CHYS_1114_08	5	1.5	64	60	160	<1	17	<1	105	<1
CHYS_1116_08	<5	0.5	52	39	700	<1	15	<1	131	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1125_08	<5	<0.5	68	527	200	<1	19	<1	97	<1
CHYS_1126_08	<5	0.9	167	295	390	<1	50	<1	140	1
CHYS_1133_08	<5	6.8	13	41	30	<1	4	<1	60	3
CHYS_1134_08	6	0.5	98	48	530	<1	28	<1	143	4
CHYS_1136_08	<5	<0.5	170	35	1270	<1	52	<1	120	3
CHYS_1152_08	6	0.7	112	36	550	<1	32	<1	135	2
CHYS_1154_08	<5	<0.5	388	46	1800	<1	104	<1	107	2
CHYS_1163_08	<5	1.5	34	40	810	<1	10	<1	52	2
CHYS_1164_08	<5	<0.5	15	318	<10	<1	5	<1	100	1
CHYS_1171_08	6	2.7	28	67	520	<1	7	<1	153	1
*Rep CHYS_1171_08	<5	1.6	55	81	780	<1	12	<1	105	1
CHYS_1179_08	14	1.1	219	311	210	<1	47	<1	72	4
CHYS_1180_08	18	<0.5	51	1350	100	<1	11	<1	87	8
CHYS_1181_08	5	3.0	37	99	380	<1	8	<1	185	1
CHYS_1187_08	5	3.4	7	80	30	<1	2	<1	42	<1
CHYS_1195_08	<5	1.9	70	111	190	<1	16	<1	233	4
CHYS_1196_08	5	3.4	239	184	300	<1	57	<1	301	6
CHYS_1203_08	<5	3.0	4	57	200	<1	<1	<1	58	<1
CHYS_1210_08	17	27.9	264	269	660	1	72	<1	759	65
CHYS_1218_08	8	2.2	78	121	1090	<1	19	<1	140	1
CHYS_1258_08	9	3.8	193	123	260	<1	35	<1	265	2
CHYS_1259_08	<5	1.9	83	130	280	<1	15	<1	221	<1
CHYS_1266_08	7	3.9	126	150	960	<1	24	<1	328	1
*Rep CHYS_1266_08	6	3.2	65	155	870	<1	13	<1	307	<1
CHYS_1267_08	<5	1.1	236	188	1350	<1	45	<1	188	<1
CHYS_1274_08	6	2.1	116	401	450	<1	21	<1	225	1
*Std MMISRM16	39	<0.5	18	151	80	21	4	<1	265	<1
*Std MMISRM16	50	<0.5	11	192	60	23	2	<1	333	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*BIK BLANK	<5	<0.5	<1	16	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_869_08	75	19	<1	1560	<1	6	<10	205	132	7.4
*Rep CHYS_869_08	83	18	<1	1480	<1	6	<10	228	122	8.3
CHYS_871_08	110	22	<1	1020	<1	6	<10	190	315	2.7
CHYS_895_08	70	60	<1	1150	<1	11	<10	357	399	1.9
CHYS_898_08	88	98	<1	1560	<1	24	<10	481	97	4.4
CHYS_899_08	39	40	<1	3740	<1	6	<10	162	284	1.4
CHYS_901_08	24	3	<1	4780	<1	1	<10	26.6	20	0.7
CHYS_926_08	270	231	<1	1430	<1	52	<10	558	35	2.7
CHYS_929_08	123	56	<1	2190	<1	11	<10	666	673	5.6
CHYS_930_08	66	21	<1	4010	<1	5	<10	407	110	2.1
CHYS_932_08	33	8	<1	5290	<1	7	<10	119	24	1.0
CHYS_956_08	32	58	<1	11800	<1	10	<10	413	32	1.4
CHYS_957_08	104	130	<1	830	<1	26	<10	444	367	2.8
CHYS_959_08	57	9	<1	2030	<1	2	<10	113	172	2.5
*Rep CHYS_959_08	71	11	<1	2070	<1	3	<10	145	124	2.4
CHYS_960_08	57	6	<1	560	<1	2	<10	119	209	2.4
CHYS_961_08	52	31	<1	4490	<1	6	<10	402	300	1.5
CHYS_963_08	32	14	<1	4750	<1	10	<10	41.9	21	0.7
CHYS_984_08	31	78	<1	8220	<1	16	<10	437	27	1.1
CHYS_985_08	76	305	<1	4900	<1	69	<10	377	25	2.1
CHYS_987_08	56	42	<1	70	<1	10	<10	57.3	270	1.5
CHYS_988_08	55	9	<1	1410	<1	4	<10	234	134	1.7
CHYS_989_08	106	61	<1	2540	<1	14	<10	351	57	2.5
CHYS_991_08	42	50	<1	2050	<1	8	<10	424	147	1.2
CHYS_1016_08	55	16	<1	350	<1	5	<10	110	152	1.5
CHYS_1017_08	81	20	<1	1320	<1	4	<10	247	375	3.7
CHYS_1019_08	73	42	<1	2560	<1	14	<10	574	83	1.5
*Rep CHYS_1019_08	66	17	<1	2280	<1	6	<10	514	100	1.7
CHYS_1043_08	45	16	<1	110	<1	6	<10	73.3	322	1.0
CHYS_1044_08	60	11	<1	110	<1	4	<10	90.0	343	1.0
CHYS_1046_08	50	39	<1	250	<1	9	<10	57.7	145	1.5
CHYS_1069_08	46	6	<1	960	<1	1	<10	25.5	297	1.6
CHYS_1070_08	46	10	<1	170	<1	3	<10	58.0	469	1.2
CHYS_1072_08	81	47	<1	3030	<1	13	<10	150	45	1.5
CHYS_1092_08	36	6	<1	450	<1	2	<10	40.9	230	1.2
CHYS_1093_08	52	37	<1	160	<1	10	<10	55.2	233	1.1
CHYS_1095_08	34	9	<1	1190	<1	3	<10	216	105	2.3
CHYS_1102_08	48	58	<1	210	<1	15	<10	77.9	302	2.3
CHYS_1103_08	31	159	<1	3520	<1	47	<10	13.4	19	0.8
CHYS_1113_08	55	14	<1	940	<1	5	<10	105	249	1.3
*Rep CHYS_1113_08	65	17	<1	900	<1	6	<10	90.2	229	1.7
CHYS_1114_08	56	16	<1	390	<1	5	<10	92.0	434	0.5
CHYS_1116_08	36	13	<1	370	<1	4	<10	67.6	157	1.7

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1125_08	34	16	<1	1010	<1	5	<10	23.6	124	1.3
CHYS_1126_08	48	38	<1	800	<1	9	<10	83.9	247	3.0
CHYS_1133_08	41	3	<1	60	<1	<1	<10	86.8	877	0.8
CHYS_1134_08	47	23	<1	520	<1	6	<10	91.8	173	0.9
CHYS_1136_08	72	39	<1	1220	<1	10	<10	200	152	2.0
CHYS_1152_08	52	27	<1	220	<1	7	<10	185	232	1.1
CHYS_1154_08	91	87	<1	1140	<1	22	<10	155	110	1.7
CHYS_1163_08	49	10	<1	40	<1	5	<10	55.4	296	2.0
CHYS_1164_08	29	3	<1	300	<1	1	<10	14.6	82	3.8
CHYS_1171_08	38	8	<1	130	<1	2	10	67.0	588	1.7
*Rep CHYS_1171_08	37	15	<1	80	<1	4	<10	41.6	305	1.7
CHYS_1179_08	23	62	<1	840	<1	13	<10	20.4	240	1.1
CHYS_1180_08	<5	13	<1	1830	<1	2	<10	2.0	16	1.3
CHYS_1181_08	37	12	<1	50	<1	3	<10	42.4	619	2.8
CHYS_1187_08	16	2	<1	140	<1	<1	<10	40.5	805	0.5
CHYS_1195_08	26	22	<1	80	<1	5	<10	69.7	512	2.0
CHYS_1196_08	54	61	<1	60	<1	11	<10	100	1030	3.4
CHYS_1203_08	25	1	<1	160	<1	<1	<10	24.7	578	0.5
CHYS_1210_08	215	60	13	220	2	10	<10	166	8640	10.2
CHYS_1218_08	26	17	<1	440	<1	3	<10	141	408	0.6
CHYS_1258_08	73	74	<1	80	<1	12	<10	83.9	858	2.1
CHYS_1259_08	43	33	<1	20	<1	8	<10	41.1	631	1.0
CHYS_1266_08	56	53	<1	120	<1	9	<10	79.1	1800	1.3
*Rep CHYS_1266_08	47	28	<1	140	<1	6	<10	62.5	1430	1.1
CHYS_1267_08	55	76	<1	230	<1	17	<10	41.0	311	1.1
CHYS_1274_08	40	43	<1	360	<1	8	<10	40.9	899	0.5
*Std MMISRM16	29	5	<1	540	<1	<1	<10	28.0	23	<0.5
*Std MMISRM16	6	3	<1	530	<1	<1	<10	21.8	<3	<0.5
*Bik BLANK	25	<1	<1	<10	<1	<1	<10	2.5	22	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Final : TO101626 Order:

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_869_08	898	1	291	25	50	39
*Rep CHYS_869_08	984	1	317	29	50	38
CHYS_871_08	409	3	177	14	130	41
CHYS_895_08	317	3	221	13	430	40
CHYS_898_08	478	<1	764	34	380	19
CHYS_899_08	1250	2	130	9	50	16
CHYS_901_08	856	<1	50	3	330	<5
CHYS_926_08	882	<1	1360	91	240	36
CHYS_929_08	913	2	286	23	100	59
CHYS_930_08	1590	<1	203	14	140	23
CHYS_932_08	897	<1	295	17	320	7
CHYS_956_08	1070	<1	253	12	100	32
CHYS_957_08	798	1	632	34	210	54
CHYS_959_08	629	<1	86	9	<20	22
*Rep CHYS_959_08	764	<1	144	14	30	22
CHYS_960_08	739	2	55	5	30	23
CHYS_961_08	1430	1	142	10	30	25
CHYS_963_08	1070	<1	344	20	70	<5
CHYS_984_08	1180	<1	471	25	110	14
CHYS_985_08	1430	<1	1760	93	100	26
CHYS_987_08	71	1	229	12	220	44
CHYS_988_08	837	<1	186	17	<20	21
CHYS_989_08	888	1	402	31	50	31
CHYS_991_08	889	2	160	9	70	31
CHYS_1016_08	306	<1	157	9	190	26
CHYS_1017_08	1540	3	120	10	120	43
CHYS_1019_08	2490	<1	565	33	170	26
*Rep CHYS_1019_08	2360	<1	309	24	40	23
CHYS_1043_08	47	<1	160	11	610	35
CHYS_1044_08	98	1	143	11	620	52
CHYS_1046_08	85	1	197	11	100	32
CHYS_1069_08	309	2	44	4	80	22
CHYS_1070_08	113	1	89	8	80	30
CHYS_1072_08	522	<1	444	26	250	24
CHYS_1092_08	277	2	59	5	90	21
CHYS_1093_08	55	<1	228	12	610	28
CHYS_1095_08	427	<1	110	11	40	19
CHYS_1102_08	33	<1	321	20	720	67
CHYS_1103_08	13	<1	1600	36	1010	11
CHYS_1113_08	441	<1	175	12	160	27
*Rep CHYS_1113_08	641	<1	223	15	210	27
CHYS_1114_08	74	<1	120	9	1030	47
CHYS_1116_08	62	<1	101	6	130	15

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Final : TO101626 Order:

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1125_08	17	<1	133	7	720	23
CHYS_1126_08	36	<1	204	13	1320	61
CHYS_1133_08	35	<1	14	2	30	85
CHYS_1134_08	104	2	151	9	610	25
CHYS_1136_08	383	2	237	18	170	34
CHYS_1152_08	150	1	188	13	440	51
CHYS_1154_08	342	<1	610	33	180	29
CHYS_1163_08	76	<1	143	12	290	48
CHYS_1164_08	179	<1	56	4	260	14
CHYS_1171_08	51	<1	78	9	290	53
*Rep CHYS_1171_08	49	<1	124	11	250	39
CHYS_1179_08	40	<1	435	26	720	25
CHYS_1180_08	113	<1	92	7	450	<5
CHYS_1181_08	20	<1	99	10	300	43
CHYS_1187_08	24	<1	14	2	100	35
CHYS_1195_08	30	<1	99	8	180	87
CHYS_1196_08	29	<1	192	12	650	129
CHYS_1203_08	11	<1	21	4	330	15
CHYS_1210_08	41	7	212	16	1050	456
CHYS_1218_08	58	1	91	7	550	19
CHYS_1258_08	57	<1	207	13	630	255
CHYS_1259_08	18	<1	148	9	760	63
CHYS_1266_08	18	1	157	10	450	95
*Rep CHYS_1266_08	16	<1	111	8	530	73
CHYS_1267_08	11	<1	368	18	1210	38
CHYS_1274_08	9	<1	171	11	1130	49
*Std MMISRM16	46	<1	10	<1	190	11
*Std MMISRM16	38	<1	7	<1	230	11
*BIK BLANK	2	<1	<5	<1	<20	<5
*BIK BLANK	<1	<1	<5	<1	40	<5

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Certificate of Analysis

Work Order: TO101627

To: **Logan Resources Ltd.**

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

Date: Aug 28, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 36
Date Submitted Jul 14, 2008
Report Comprises Pages 1 to 6
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 36 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_1012_08	12	178	<10	0.3	1340	<1	430	10	1640	10
*Rep CHYS_1012_08	13	213	<10	0.6	1440	<1	390	12	2140	12
CHYS_1013_08	8	179	<10	0.3	2110	1	140	16	209	354
CHYS_1021_08	13	190	410	0.6	4080	<1	70	13	1120	66
CHYS_1038_08	2	232	<10	<0.1	1050	<1	50	10	140	33
CHYS_1039_08	2	80	100	0.5	990	1	190	16	331	72
CHYS_1040_08	12	162	<10	0.3	2550	<1	90	3	539	45
CHYS_1048_08	20	103	20	0.6	1200	<1	500	6	514	6
CHYS_1064_08	12	187	<10	0.7	1670	<1	150	9	126	579
CHYS_1065_08	7	116	30	0.3	1980	<1	130	9	145	58
CHYS_1066_08	7	238	<10	<0.1	750	<1	<10	2	126	38
CHYS_1074_08	6	46	<10	0.2	210	<1	750	4	<5	10
CHYS_1089_08	5	233	<10	0.2	2090	<1	230	3	102	528
CHYS_1118_08	278	130	50	2.8	2360	2	460	143	513	32
*Rep CHYS_1118_08	306	118	50	2.9	2160	1	510	160	566	35
CHYS_1138_08	11	250	20	0.6	2990	<1	270	18	1380	28
CHYS_1156_08	<1	147	<10	<0.1	540	2	40	8	25	41
CHYS_1158_08	4	264	<10	0.3	3310	<1	60	15	225	78
CHYS_1173_08	4	279	10	0.3	660	<1	<10	13	101	161
CHYS_1175_08	4	255	30	1.3	2680	<1	80	12	190	52
CHYS_1191_08	14	65	<10	0.5	1100	<1	470	18	540	81
CHYS_1205_08	10	187	20	0.3	1720	<1	150	50	116	100
CHYS_1220_08	2	179	<10	<0.1	680	<1	80	30	54	59
CHYS_1231_08	5	142	140	0.2	1170	<1	120	6	91	186
CHYS_1233_08	4	129	20	0.1	510	<1	<10	8	53	261
CHYS_1240_08	1	281	20	<0.1	1070	1	20	9	159	80
CHYS_1242_08	16	261	1280	3.1	980	7	40	24	341	480
*Rep CHYS_1242_08	12	245	990	2.1	920	8	30	26	254	598
CHYS_1244_08	12	218	60	0.1	1590	2	50	11	195	129
CHYS_1250_08	2	>300	<10	<0.1	290	<1	20	4	<5	72
CHYS_1251_08	2	240	30	<0.1	910	2	50	26	81	201
CHYS_1252_08	7	258	50	0.2	510	2	30	14	54	159
CHYS_1254_08	7	140	20	<0.1	1300	1	60	2	35	68
CHYS_1260_08	8	136	<10	<0.1	1210	<1	230	20	111	55
CHYS_1261_08	18	294	20	<0.1	910	<1	20	30	248	77
CHYS_1262_08	1	189	<10	<0.1	630	1	50	48	62	182
CHYS_1264_08	1	27	<10	<0.1	380	<1	430	74	17	27
CHYS_1268_08	7	220	<10	<0.1	1260	<1	120	28	260	119
CHYS_1272_08	9	293	280	0.6	2150	2	10	20	430	331
*Std MMISRM16	15	36	20	21.3	70	<1	140	3	22	37
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Order:

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_1012_08	<100	250	87	47.4	25.1	24	129	1200	7	48
*Rep CHYS_1012_08	<100	260	98	54.4	26.1	24	145	1590	<5	44
CHYS_1013_08	<100	840	66	47.0	7.1	131	36	95	<5	9
CHYS_1021_08	<100	730	51	19.9	20.3	41	79	668	8	3
CHYS_1038_08	<100	190	34	18.5	6.2	55	26	55	6	4
CHYS_1039_08	<100	970	15	9.1	4.6	109	20	172	<5	11
CHYS_1040_08	<100	240	92	46.8	21.5	20	107	431	<5	7
CHYS_1048_08	<100	420	43	20.7	26.8	15	78	527	<5	21
CHYS_1064_08	<100	1950	78	47.8	10.1	77	44	51	<5	12
CHYS_1065_08	<100	1280	18	10.5	3.8	144	17	68	<5	9
CHYS_1066_08	<100	150	24	13.9	4.5	52	20	49	<5	<1
CHYS_1074_08	<100	350	7	4.8	2.3	11	7	<1	<5	133
CHYS_1089_08	<100	440	61	46.0	8.1	68	28	46	<5	13
CHYS_1118_08	<100	1000	47	34.5	8.3	11	47	248	<5	59
*Rep CHYS_1118_08	<100	970	44	32.2	8.3	10	49	241	<5	65
CHYS_1138_08	<100	340	193	99.4	56.1	22	252	860	<5	61
CHYS_1156_08	<100	60	5	7.2	0.8	126	4	12	<5	7
CHYS_1158_08	<100	310	40	17.5	13.9	31	43	87	<5	4
CHYS_1173_08	<100	1950	22	11.0	5.6	45	19	37	<5	1
CHYS_1175_08	<100	400	49	21.6	10.5	15	52	63	<5	3
CHYS_1191_08	<100	1810	80	42.8	25.3	14	108	137	<5	26
CHYS_1205_08	<100	580	18	10.1	4.4	27	19	49	<5	9
CHYS_1220_08	<100	150	13	7.1	2.9	55	12	21	<5	3
CHYS_1231_08	<100	610	17	10.1	3.2	83	15	41	<5	4
CHYS_1233_08	<100	620	12	9.3	1.6	160	7	19	<5	2
CHYS_1240_08	<100	1260	55	23.4	12.6	53	62	53	5	4
CHYS_1242_08	<100	1640	26	12.6	9.1	134	33	149	6	4
*Rep CHYS_1242_08	<100	1710	21	10.3	6.8	157	25	112	6	3
CHYS_1244_08	<100	360	17	9.7	3.2	146	17	98	<5	19
CHYS_1250_08	<100	80	5	3.6	<0.5	64	2	1	<5	3
CHYS_1251_08	<100	120	13	5.2	2.9	100	15	25	5	13
CHYS_1252_08	<100	430	19	9.4	3.3	115	15	21	<5	5
CHYS_1254_08	<100	860	5	4.6	0.7	260	3	19	6	14
CHYS_1260_08	<100	150	38	14.1	11.2	46	57	34	5	20
CHYS_1261_08	<100	310	61	24.3	15.4	76	74	78	<5	4
CHYS_1262_08	<100	90	28	17.8	4.2	148	20	17	8	8
CHYS_1264_08	<100	120	4	2.2	1.2	24	6	6	26	31
CHYS_1268_08	<100	120	43	16.9	10.7	63	50	86	<5	17
CHYS_1272_08	<100	610	31	14.2	9.5	76	39	167	<5	3
*Std MMISRM16	<100	470	2	0.8	1.1	3	5	5	<5	28
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Order:

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1012_08	<5	0.6	764	86	400	<1	272	<1	82	<1
*Rep CHYS_1012_08	<5	<0.5	897	99	470	<1	332	<1	75	<1
CHYS_1013_08	<5	0.5	97	96	690	<1	28	<1	56	2
CHYS_1021_08	21	1.2	419	145	520	1	154	<1	80	4
CHYS_1038_08	<5	0.9	79	52	340	<1	22	<1	86	<1
CHYS_1039_08	73	0.9	107	77	420	<1	36	<1	152	11
CHYS_1040_08	<5	<0.5	438	37	680	<1	131	<1	46	1
CHYS_1048_08	<5	0.5	378	44	310	<1	115	<1	52	<1
CHYS_1064_08	<5	<0.5	84	504	1620	<1	21	<1	45	<1
CHYS_1065_08	8	0.6	56	49	630	<1	17	<1	94	5
CHYS_1066_08	<5	1.1	63	40	410	<1	18	<1	53	<1
CHYS_1074_08	<5	1.3	2	83	70	<1	<1	<1	28	<1
CHYS_1089_08	<5	<0.5	57	50	420	<1	15	<1	17	<1
CHYS_1118_08	<5	<0.5	150	248	3240	<1	44	<1	72	2
*Rep CHYS_1118_08	<5	<0.5	156	262	3340	<1	45	<1	68	3
CHYS_1138_08	<5	<0.5	1120	105	200	<1	313	<1	129	2
CHYS_1156_08	<5	0.6	11	44	160	<1	3	<1	28	<1
CHYS_1158_08	<5	1.0	119	74	340	<1	31	<1	145	2
CHYS_1173_08	<5	0.9	55	155	650	<1	15	<1	62	2
CHYS_1175_08	<5	0.8	139	52	240	<1	34	<1	86	<1
CHYS_1191_08	5	0.5	275	461	90	1	61	<1	208	2
CHYS_1205_08	<5	<0.5	64	363	1360	<1	17	<1	115	2
CHYS_1220_08	<5	1.5	32	85	340	<1	8	<1	216	1
CHYS_1231_08	13	<0.5	42	101	280	<1	12	<1	85	4
CHYS_1233_08	5	3.1	19	42	180	<1	6	<1	117	2
CHYS_1240_08	6	2.3	111	139	200	1	26	<1	128	3
CHYS_1242_08	14	4.9	126	156	1530	1	40	<1	254	35
*Rep CHYS_1242_08	13	5.2	91	171	1500	1	29	<1	239	30
CHYS_1244_08	<5	2.3	67	87	530	<1	22	<1	102	4
CHYS_1250_08	<5	<0.5	2	18	140	<1	<1	<1	80	<1
CHYS_1251_08	<5	1.4	30	242	590	1	8	<1	185	4
CHYS_1252_08	5	2.9	32	144	720	<1	8	<1	245	4
CHYS_1254_08	<5	2.3	12	113	20	<1	4	<1	86	2
CHYS_1260_08	<5	<0.5	91	194	690	<1	19	<1	208	2
CHYS_1261_08	8	1.5	184	154	210	1	43	<1	221	4
CHYS_1262_08	<5	0.9	40	60	320	<1	9	<1	76	<1
CHYS_1264_08	11	<0.5	12	566	70	<1	3	<1	70	2
CHYS_1268_08	<5	0.5	142	218	270	<1	37	<1	121	<1
CHYS_1272_08	<5	2.4	150	121	1210	<1	47	<1	188	7
*Std MMISRM16	38	<0.5	21	161	70	20	3	<1	238	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1012_08	36	123	<1	9130	<1	22	<10	262	8	1.0
*Rep CHYS_1012_08	41	136	<1	8360	<1	25	<10	323	9	1.0
CHYS_1013_08	24	25	<1	4410	<1	11	<10	296	75	1.9
CHYS_1021_08	46	76	<1	560	<1	14	<10	780	533	1.2
CHYS_1038_08	30	20	<1	650	<1	6	<10	56.6	195	1.5
CHYS_1039_08	23	20	<1	1590	<1	4	<10	181	146	2.3
CHYS_1040_08	48	88	<1	1720	<1	21	<10	362	92	2.1
CHYS_1048_08	28	76	<1	4320	<1	12	<10	125	7	0.7
CHYS_1064_08	21	26	<1	2720	<1	13	<10	71.0	31	3.1
CHYS_1065_08	26	14	<1	920	<1	4	<10	72.1	143	2.2
CHYS_1066_08	26	16	<1	100	<1	5	<10	80.5	303	2.1
CHYS_1074_08	<5	2	<1	6120	<1	1	<10	53.0	<3	0.5
CHYS_1089_08	15	17	<1	6480	<1	9	<10	152	24	1.5
CHYS_1118_08	34	30	<1	5900	<1	9	<10	32.3	<3	2.1
*Rep CHYS_1118_08	27	31	<1	5890	<1	9	<10	20.3	<3	1.9
CHYS_1138_08	156	222	<1	5100	<1	46	<10	180	11	6.9
CHYS_1156_08	20	3	<1	300	<1	<1	<10	21.0	279	<0.5
CHYS_1158_08	35	33	<1	1110	<1	9	<10	28.1	215	2.9
CHYS_1173_08	33	15	<1	160	<1	4	<10	22.7	277	1.2
CHYS_1175_08	28	40	<1	1310	<1	11	<10	28.0	128	1.4
CHYS_1191_08	33	78	<1	7080	<1	18	<10	14.0	6	1.0
CHYS_1205_08	17	16	<1	1430	<1	4	<10	28.8	109	1.2
CHYS_1220_08	20	9	<1	350	<1	3	<10	22.3	496	1.4
CHYS_1231_08	21	11	<1	650	<1	3	<10	50.7	141	2.6
CHYS_1233_08	40	5	<1	70	<1	2	<10	44.9	1100	1.1
CHYS_1240_08	54	45	<1	120	<1	13	<10	38.0	794	0.9
CHYS_1242_08	37	29	<1	290	<1	6	<10	106	1240	1.7
*Rep CHYS_1242_08	33	22	<1	250	<1	5	<10	94.3	1210	1.7
CHYS_1244_08	20	14	<1	770	<1	4	<10	143	641	0.9
CHYS_1250_08	5	<1	<1	120	<1	<1	<10	9.1	139	1.0
CHYS_1251_08	22	11	<1	360	<1	3	<10	38.5	739	0.7
CHYS_1252_08	14	10	<1	250	<1	4	<10	21.9	743	1.1
CHYS_1254_08	18	3	<1	620	<1	<1	<10	87.3	463	0.6
CHYS_1260_08	15	39	<1	940	<1	10	<10	20.3	164	1.1
CHYS_1261_08	47	60	<1	140	<1	15	<10	69.9	527	3.1
CHYS_1262_08	40	14	<1	320	<1	5	<10	36.2	321	<0.5
CHYS_1264_08	<5	4	<1	910	<1	<1	<10	3.0	<3	<0.5
CHYS_1268_08	31	42	<1	620	<1	10	<10	57.8	268	0.6
CHYS_1272_08	34	35	<1	260	<1	8	<10	103	510	1.5
*Std MMISRM16	9	5	<1	440	<1	<1	<10	30.3	3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	0.6	<3	<0.5

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Order:

Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1012_08	429	<1	606	39	120	23
*Rep CHYS_1012_08	407	<1	694	43	160	22
CHYS_1013_08	1240	<1	527	37	50	18
CHYS_1021_08	588	6	299	14	230	82
CHYS_1038_08	89	<1	203	14	470	23
CHYS_1039_08	4500	2	107	9	70	16
CHYS_1040_08	1580	<1	568	33	50	18
CHYS_1048_08	497	<1	321	15	90	23
CHYS_1064_08	243	<1	644	32	380	23
CHYS_1065_08	355	<1	124	8	90	26
CHYS_1066_08	89	<1	143	11	70	30
CHYS_1074_08	965	<1	38	4	70	10
CHYS_1089_08	483	<1	487	36	30	6
CHYS_1118_08	1000	<1	565	24	4040	12
*Rep CHYS_1118_08	1100	<1	618	23	4560	10
CHYS_1138_08	863	<1	1300	72	220	22
CHYS_1156_08	11	<1	35	9	420	10
CHYS_1158_08	55	<1	241	11	170	51
CHYS_1173_08	11	<1	118	8	130	36
CHYS_1175_08	68	<1	279	15	70	47
CHYS_1191_08	64	<1	658	31	390	40
CHYS_1205_08	13	<1	130	8	360	21
CHYS_1220_08	10	<1	87	5	190	35
CHYS_1231_08	348	<1	118	8	120	17
CHYS_1233_08	33	<1	69	7	130	40
CHYS_1240_08	39	<1	262	16	980	151
CHYS_1242_08	103	2	151	10	450	79
*Rep CHYS_1242_08	96	2	119	8	670	70
CHYS_1244_08	37	1	111	7	210	28
CHYS_1250_08	3	<1	33	3	1160	10
CHYS_1251_08	14	<1	62	4	1150	58
CHYS_1252_08	16	<1	116	6	670	34
CHYS_1254_08	61	<1	33	4	70	21
CHYS_1260_08	19	<1	205	9	1310	31
CHYS_1261_08	29	<1	327	16	700	117
CHYS_1262_08	6	<1	167	14	970	32
CHYS_1264_08	42	<1	33	2	1110	<5
CHYS_1268_08	14	<1	229	10	670	43
CHYS_1272_08	57	1	163	11	380	59
*Std MMISRM16	48	<1	12	<1	200	13
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101878

To: **Logan Resources Ltd.**

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

Date: Sep 03, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 55
Date Submitted Jul 22, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_117_08	11	86	<10	<0.1	2800	<1	690	25	27	6
*Rep CHYS_117_08	8	89	<10	<0.1	2890	<1	710	28	21	6
CHYS_118_08	49	26	<10	0.1	5890	<1	800	19	190	44
CHYS_119_08	15	58	<10	<0.1	2230	<1	810	15	55	7
CHYS_120_08	5	57	<10	0.2	1000	2	290	98	41	132
CHYS_121_08	1	193	<10	<0.1	1150	<1	150	101	38	129
CHYS_122_08	5	293	<10	<0.1	690	<1	60	17	218	168
CHYS_123_08	2	57	90	0.2	3470	5	60	9	61	388
CHYS_142_08	2	159	20	<0.1	1010	4	310	177	<5	126
CHYS_144_08	13	>300	<10	<0.1	380	<1	20	19	69	63
CHYS_145_08	2	141	<10	0.1	1060	<1	110	137	67	269
CHYS_167_08	1	24	<10	<0.1	560	<1	580	45	<5	<5
CHYS_189_08	<1	56	<10	<0.1	470	<1	250	26	18	76
CHYS_382_08	194	5	30	1.8	1240	<1	870	63	<5	<5
*Rep CHYS_382_08	164	4	40	1.8	1380	<1	870	55	<5	<5
CHYS_383_08	1080	19	40	10.9	560	<1	510	381	288	19
CHYS_409_08	453	204	1280	15.7	590	39	80	244	1290	65
CHYS_410_08	297	7	160	16.8	560	<1	830	596	<5	6
CHYS_441_08	17	286	520	0.9	1000	13	50	14	735	67
CHYS_442_08	96	179	120	1.0	960	<1	300	42	1220	49
CHYS_474_08	3440	24	<10	3.3	350	<1	470	294	31	67
CHYS_475_08	829	100	40	13.0	530	4	630	73	1030	77
CHYS_510_08	54	123	90	0.8	550	<1	560	57	823	70
CHYS_578_08	7	>300	60	0.2	930	11	10	13	165	432
CHYS_579A_08	32	123	30	0.5	750	<1	460	13	752	101
CHYS_611_08	46	242	30	0.4	230	<1	30	7	339	129
CHYS_612A_08	10	54	80	0.8	1270	<1	480	25	1310	204
*Rep CHYS_612A_08	15	54	60	1.1	1390	<1	620	32	1740	238
CHYS_642A_08	5	259	<10	<0.1	1060	<1	50	11	112	25
HDIS_306_08	5	>300	30	0.2	740	<1	10	4	213	105
HDIS_329_08	596	25	1370	36.9	370	2	510	20	43	51
TKS_1_08	5	255	90	0.5	740	10	10	6	108	43
TKS_2_08	9	293	50	0.2	210	1	10	8	137	89
TKS_3_08	8	>300	40	0.3	320	3	<10	9	127	72
TKS_4_08	32	190	2190	7.9	3080	11	150	13	2460	81
TKS_5_08	16	224	160	1.7	2530	6	70	10	1820	107
TKS_6_08	5	180	90	0.8	910	11	30	7	171	52
TKS_7_08	14	74	120	6.7	350	4	240	12	321	301
TKS_8_08	2	95	180	2.8	260	13	150	6	184	184
TKS_9_08	48	70	220	5.6	140	4	200	37	249	122
*Rep TKS_9_08	52	71	160	5.8	120	3	200	37	354	137
TKS_10_08	10	144	180	6.1	340	24	40	2	338	121
TKS_11_08	1	67	140	4.2	150	9	120	17	540	239
TKS_12_08	32	96	60	7.6	110	6	90	14	569	747
TKS_13_08	12	123	490	6.4	240	49	80	34	350	315
TKS_14_08	65	109	110	14.9	130	21	80	17	581	116

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
TKS_15_08	13	162	100	5.5	130	18	20	2	111	59
TKS_16_08	26	207	90	6.2	140	7	40	16	314	719
Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
TKS_17_08	18	198	80	6.2	180	11	60	20	308	204
TKS_18_08	4	>300	30	0.4	380	3	10	23	123	163
TKS_19_08	8	>300	10	0.4	160	<1	<10	6	112	51
TKS_20_08	23	152	250	6.1	12000	3	310	14	1910	106
TKS_21_08	36	189	420	3.8	4320	9	100	27	2140	420
*Rep TKS_21_08	37	231	320	3.8	2810	7	70	23	2450	610
TKS_22_08	19	215	80	8.2	780	6	20	9	299	817
TKS_23_08	2	83	360	6.0	530	11	120	12	78	289
TKS_24_08	96	227	100	6.6	350	5	40	14	199	220
TKS_25_08	55	234	90	14.1	400	15	20	52	217	154
TKS_26_08	95	268	70	6.4	530	14	10	7	34	68
TKS_27_08	263	225	200	30.4	510	6	30	35	84	1030
*Std MMISRM16	17	40	10	26.4	80	<1	210	3	18	43
*Std MMISRM16	19	44	20	25.5	50	<1	220	4	24	48
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_117_08	<100	80	45	19.6	11.0	16	58	17	<5	16
*Rep CHYS_117_08	<100	70	48	22.6	10.3	14	56	15	<5	17
CHYS_118_08	<100	280	21	8.4	9.9	15	35	63	<5	8
CHYS_119_08	<100	120	16	6.7	5.9	21	24	31	<5	10
CHYS_120_08	<100	100	26	15.3	5.0	48	25	19	<5	26
CHYS_121_08	<100	100	37	32.1	2.7	67	15	14	<5	44
CHYS_122_08	<100	220	46	22.3	12.6	33	46	72	<5	6
CHYS_123_08	<100	1360	15	7.9	3.8	586	15	27	<5	17
CHYS_142_08	<100	120	19	24.3	1.3	83	5	1	<5	17
CHYS_144_08	<100	220	37	16.2	6.5	77	27	26	<5	3
CHYS_145_08	<100	390	60	39.5	10.4	160	38	28	<5	23
CHYS_167_08	<100	30	4	2.0	0.8	8	4	2	13	71
CHYS_189_08	<100	20	9	5.5	2.0	68	8	8	<5	12
CHYS_382_08	<100	360	8	3.9	2.2	4	6	<1	<5	23
*Rep CHYS_382_08	<100	370	6	3.1	1.9	4	5	<1	<5	23
CHYS_383_08	<100	1230	48	19.5	21.4	7	93	176	<5	84
CHYS_409_08	<100	800	148	73.0	43.3	59	187	1200	<5	8
CHYS_410_08	<100	450	5	2.7	0.7	6	4	<1	10	77
CHYS_441_08	<100	190	43	15.6	15.3	40	62	286	<5	3
CHYS_442_08	<100	220	223	105	66.5	8	301	1140	<5	24
CHYS_474_08	<100	510	3	1.7	1.0	6	5	16	<5	109
CHYS_475_08	<100	1060	120	58.8	44.2	10	160	263	<5	30
CHYS_510_08	<100	660	107	50.3	42.3	20	183	757	<5	27
CHYS_578_08	<100	480	28	11.7	6.4	51	25	69	<5	1
CHYS_579A_08	<100	580	154	75.0	47.0	20	195	346	<5	16
CHYS_611_08	<100	4050	69	33.4	18.1	40	80	99	<5	<1
CHYS_612A_08	<100	8170	112	59.8	30.7	119	151	623	<5	65
*Rep CHYS_612A_08	<100	7080	127	65.0	34.4	88	175	716	<5	84
CHYS_642A_08	<100	180	48	22.8	8.9	54	39	46	<5	8
HDIS_306_08	100	390	54	20.5	16.8	116	70	64	<5	<1
HDIS_329_08	<100	750	18	8.4	5.9	29	23	16	<5	39
TKS_1_08	<100	590	44	23.0	9.4	75	34	37	<5	<1
TKS_2_08	<100	400	29	13.0	8.0	62	29	57	<5	<1
TKS_3_08	<100	550	24	11.3	6.1	72	23	43	<5	<1
TKS_4_08	<100	830	181	91.6	52.8	67	243	1340	<5	11
TKS_5_08	<100	650	135	64.0	45.2	34	169	616	<5	3
TKS_6_08	<100	1810	105	63.2	13.1	180	60	85	<5	2
TKS_7_08	<100	49600	63	35.4	17.4	73	64	165	<5	61
TKS_8_08	<100	10700	71	50.7	10.6	194	45	81	<5	44
TKS_9_08	<100	86600	62	34.7	17.3	58	68	308	<5	43
*Rep TKS_9_08	<100	91400	82	49.4	22.7	50	94	442	<5	41
TKS_10_08	<100	17300	117	82.3	12.7	181	60	181	<5	13
TKS_11_08	<100	8030	133	86.3	21.1	174	116	342	<5	37
TKS_12_08	<100	11200	178	110	26.5	23	130	262	<5	27
TKS_13_08	<100	28400	103	63.0	14.5	125	71	167	<5	21
TKS_14_08	<100	17800	180	99.5	30.2	32	153	190	<5	21

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
TKS_15_08	<100	23900	52	43.5	4.5	160	23	38	<5	7
TKS_16_08	<100	9030	237	130	26.6	62	147	103	<5	12
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
TKS_17_08	<100	11400	375	207	44.1	67	246	101	<5	16
TKS_18_08	<100	1140	70	44.4	7.9	62	35	65	<5	2
TKS_19_08	<100	320	24	9.8	6.1	39	22	38	<5	<1
TKS_20_08	<100	2130	348	185	111	32	481	1840	<5	34
TKS_21_08	<100	1180	186	91.2	60.1	61	253	1230	<5	8
*Rep TKS_21_08	<100	1110	167	83.0	53.8	49	224	1230	<5	6
TKS_22_08	<100	6820	156	88.5	20.3	70	93	100	<5	2
TKS_23_08	<100	7950	18	12.9	3.4	265	14	40	<5	32
TKS_24_08	<100	17900	128	83.6	10.8	62	59	79	<5	10
TKS_25_08	<100	27200	109	60.7	12.4	71	62	69	<5	4
TKS_26_08	<100	5650	71	52.0	3.0	95	15	19	<5	2
TKS_27_08	<100	8850	73	42.8	8.5	34	36	31	<5	22
*Std MMISRM16	<100	450	3	0.7	1.3	2	4	5	<5	31
*Std MMISRM16	<100	510	5	1.4	1.9	3	7	4	<5	33
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_117_08	<5	0.8	67	257	1170	<1	10	<1	47	<1
*Rep CHYS_117_08	<5	<0.5	59	212	1350	<1	9	<1	48	<1
CHYS_118_08	<5	<0.5	115	180	120	<1	23	<1	15	<1
CHYS_119_08	<5	<0.5	63	249	80	<1	12	<1	27	<1
CHYS_120_08	<5	<0.5	41	77	1020	<1	8	<1	<5	1
CHYS_121_08	<5	<0.5	29	29	410	<1	5	<1	141	<1
CHYS_122_08	<5	1.0	127	151	550	<1	27	<1	150	<1
CHYS_123_08	65	2.2	39	426	110	<1	8	<1	22	11
CHYS_142_08	<5	<0.5	5	77	810	<1	1	<1	6	<1
CHYS_144_08	<5	1.7	59	132	250	<1	12	<1	52	<1
CHYS_145_08	5	<0.5	61	127	210	<1	12	<1	83	3
CHYS_167_08	<5	<0.5	7	153	20	<1	1	<1	<5	<1
CHYS_189_08	<5	<0.5	19	60	90	<1	4	<1	23	<1
CHYS_382_08	7	<0.5	<1	26	280	<1	<1	<1	8	2
*Rep CHYS_382_08	6	<0.5	<1	22	250	<1	<1	<1	8	2
CHYS_383_08	6	<0.5	333	188	5750	<1	59	<1	43	4
CHYS_409_08	<5	<0.5	996	93	55000	<1	266	<1	194	160
CHYS_410_08	<5	<0.5	<1	28	1590	<1	<1	<1	52	47
CHYS_441_08	<5	1.3	304	79	1540	<1	76	<1	251	8
CHYS_442_08	<5	<0.5	1420	45	930	<1	339	<1	142	2
CHYS_474_08	<5	<0.5	28	44	62700	<1	5	<1	68	11
CHYS_475_08	<5	<0.5	513	1060	3260	<1	101	<1	120	17
CHYS_510_08	<5	<0.5	862	217	1010	<1	198	<1	150	3
CHYS_578_08	<5	1.2	77	160	930	<1	18	<1	114	1
CHYS_579A_08	<5	<0.5	598	786	330	<1	125	<1	198	5
CHYS_611_08	<5	1.1	204	66	360	<1	44	<1	231	2
CHYS_612A_08	19	<0.5	706	346	570	<1	169	<1	111	19
*Rep CHYS_612A_08	11	<0.5	765	379	650	<1	186	<1	76	10
CHYS_642A_08	<5	0.9	103	83	450	<1	20	<1	84	<1
HDIS_306_08	<5	2.6	141	93	810	<1	27	<1	171	10
HDIS_329_08	<5	<0.5	36	469	920	<1	6	<1	41	14
TKS_1_08	<5	0.7	84	42	590	<1	16	<1	141	2
TKS_2_08	<5	1.4	103	103	270	<1	22	<1	99	1
TKS_3_08	6	1.0	76	101	370	<1	16	<1	142	1
TKS_4_08	17	1.9	1280	61	350	<1	328	<1	139	14
TKS_5_08	5	1.3	769	39	650	<1	186	<1	128	3
TKS_6_08	7	<0.5	139	89	900	<1	29	<1	83	8
TKS_7_08	12	<0.5	223	75	170	<1	52	<1	180	14
TKS_8_08	8	<0.5	114	190	660	<1	26	<1	125	7
TKS_9_08	11	<0.5	260	86	60	<1	66	<1	241	6
*Rep TKS_9_08	12	<0.5	377	103	40	<1	98	<1	221	5
TKS_10_08	<5	<0.5	178	139	1020	<1	45	<1	147	9
TKS_11_08	11	<0.5	404	459	470	<1	109	<1	225	8
TKS_12_08	<5	<0.5	371	185	1090	<1	86	<1	110	4
TKS_13_08	6	<0.5	218	284	1770	<1	50	<1	100	18
TKS_14_08	<5	<0.5	459	212	1640	<1	96	<1	219	5

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
TKS_15_08	<5	<0.5	74	126	360	<1	17	<1	154	3
TKS_16_08	<5	<0.5	325	277	820	<1	66	<1	131	3
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
TKS_17_08	<5	<0.5	494	300	1050	<1	86	<1	146	4
TKS_18_08	<5	1.2	80	128	870	<1	17	<1	219	<1
TKS_19_08	<5	0.5	75	70	360	<1	16	<1	106	<1
TKS_20_08	7	0.6	2060	123	600	<1	467	<1	139	5
TKS_21_08	12	2.2	1310	297	720	<1	334	<1	210	11
*Rep TKS_21_08	10	1.6	1190	340	820	<1	310	<1	205	8
TKS_22_08	<5	<0.5	219	258	1070	<1	45	<1	109	4
TKS_23_08	8	<0.5	48	511	100	<1	11	<1	182	8
TKS_24_08	<5	<0.5	140	207	740	<1	33	<1	132	2
TKS_25_08	<5	<0.5	145	138	3980	<1	31	<1	123	3
TKS_26_08	<5	<0.5	22	53	7230	<1	5	<1	60	1
TKS_27_08	<5	<0.5	70	276	6510	<1	14	<1	96	3
*Std MMISRM16	41	<0.5	18	165	80	23	3	<1	279	<1
*Std MMISRM16	42	<0.5	16	181	80	24	5	<1	305	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_117_08	15	32	<1	1790	1	8	<10	20.7	<3	<0.5
*Rep CHYS_117_08	13	29	<1	2000	<1	8	<10	12.9	<3	<0.5
CHYS_118_08	31	31	<1	2550	<1	5	<10	47.4	4	<0.5
CHYS_119_08	9	19	<1	2430	<1	3	<10	9.3	<3	<0.5
CHYS_120_08	15	15	<1	1000	<1	4	<10	11.5	34	<0.5
CHYS_121_08	36	9	<1	1070	<1	4	<10	59.3	90	<0.5
CHYS_122_08	47	36	<1	290	<1	8	<10	56.9	218	0.6
CHYS_123_08	73	11	<1	590	<1	3	<10	45.9	738	<0.5
CHYS_142_08	20	2	<1	1210	<1	2	<10	11.7	65	<0.5
CHYS_144_08	29	17	<1	120	<1	6	<10	16.4	541	0.6
CHYS_145_08	59	23	<1	870	<1	8	<10	24.5	132	0.5
CHYS_167_08	5	2	<1	1360	<1	<1	<10	2.7	5	<0.5
CHYS_189_08	13	6	<1	530	<1	1	<10	9.0	34	<0.5
CHYS_382_08	6	2	<1	3240	<1	1	<10	4.8	<3	1.1
*Rep CHYS_382_08	6	1	<1	3210	<1	<1	<10	4.0	<3	1.2
CHYS_383_08	15	80	<1	1220	<1	10	<10	53.9	<3	1.3
CHYS_409_08	123	168	3	150	<1	27	<10	95.8	231	3.3
CHYS_410_08	13	<1	<1	2190	<1	<1	<10	5.1	<3	1.0
CHYS_441_08	54	63	<1	130	<1	9	<10	107	567	3.6
CHYS_442_08	117	296	<1	900	<1	42	<10	152	31	2.4
CHYS_474_08	11	5	<1	2420	<1	<1	<10	7.4	<3	1.4
CHYS_475_08	16	131	<1	2110	<1	22	<10	42.2	<3	1.8
CHYS_510_08	62	178	<1	2420	<1	22	<10	66.3	13	2.7
CHYS_578_08	31	19	<1	150	<1	5	<10	74.0	273	2.1
CHYS_579A_08	42	160	<1	1370	<1	28	<10	79.5	10	2.0
CHYS_611_08	78	61	<1	70	<1	13	<10	97.7	629	2.5
CHYS_612A_08	205	148	<1	1630	<1	21	<10	472	8	1.2
*Rep CHYS_612A_08	180	167	<1	2080	<1	24	<10	474	6	1.6
CHYS_642A_08	55	29	<1	340	<1	8	<10	61.3	322	1.2
HDIS_306_08	83	58	<1	40	<1	11	<10	107	1060	1.3
HDIS_329_08	7	14	<1	1530	<1	3	<10	5.6	<3	0.7
TKS_1_08	51	25	<1	70	<1	7	<10	42.5	275	4.0
TKS_2_08	49	26	<1	20	<1	5	<10	32.5	584	2.0
TKS_3_08	36	20	<1	20	<1	4	<10	40.4	304	2.1
TKS_4_08	89	227	1	620	<1	33	<10	70.4	553	1.0
TKS_5_08	100	162	<1	300	<1	25	<10	117	310	1.8
TKS_6_08	71	40	<1	300	<1	14	<10	59.7	171	<0.5
TKS_7_08	81	55	<1	850	<1	10	<10	33.0	24	1.1
TKS_8_08	77	31	<1	640	<1	9	<10	52.5	39	2.7
TKS_9_08	50	55	<1	680	<1	11	<10	19.0	28	0.7
*Rep TKS_9_08	50	73	<1	640	<1	14	<10	18.2	34	0.7
TKS_10_08	75	42	<1	190	<1	14	<10	84.8	71	9.3
TKS_11_08	78	70	<1	540	<1	20	<10	46.1	39	2.0
TKS_12_08	72	90	<1	350	<1	25	<10	44.5	44	22.1
TKS_13_08	78	52	<1	330	<1	14	<10	67.8	104	13.6
TKS_14_08	97	118	<1	260	<1	28	<10	65.0	45	18.4

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
TKS_15_08	38	18	<1	70	<1	6	<10	43.4	48	17.5
TKS_16_08	77	90	<1	190	<1	33	<10	71.0	48	13.4
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
TKS_17_08	79	155	<1	270	<1	52	<10	85.6	53	10.3
TKS_18_08	78	23	<1	60	<1	9	<10	31.0	406	6.6
TKS_19_08	32	19	<1	<10	<1	4	<10	19.7	143	1.5
TKS_20_08	130	433	<1	3010	<1	63	<10	50.3	219	2.0
TKS_21_08	149	246	<1	450	<1	35	<10	93.5	937	4.2
*Rep TKS_21_08	148	217	<1	350	<1	32	<10	98.1	755	4.5
TKS_22_08	125	64	<1	140	<1	22	<10	111	58	6.9
TKS_23_08	64	11	<1	630	<1	3	<10	35.0	84	1.3
TKS_24_08	61	36	<1	180	<1	15	<10	126	58	4.7
TKS_25_08	70	41	<1	120	<1	15	<10	269	36	2.3
TKS_26_08	32	8	<1	100	<1	7	<10	64.3	34	1.9
TKS_27_08	58	22	<1	180	<1	9	<10	76.2	14	2.6
*Std MMISRM16	13	5	<1	440	<1	<1	<10	35.3	<3	<0.5
*Std MMISRM16	14	6	<1	450	<1	<1	<10	33.5	<3	1.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_117_08	16	2	253	12	220	10
*Rep CHYS_117_08	17	<1	279	13	240	9
CHYS_118_08	9	<1	107	6	120	14
CHYS_119_08	20	<1	101	4	80	6
CHYS_120_08	4	<1	145	13	490	11
CHYS_121_08	29	<1	224	27	1900	14
CHYS_122_08	20	<1	218	14	770	38
CHYS_123_08	32	<1	65	6	320	81
CHYS_142_08	18	<1	151	26	630	14
CHYS_144_08	9	<1	177	9	270	25
CHYS_145_08	29	<1	341	29	1960	16
CHYS_167_08	4	<1	26	1	420	<5
CHYS_189_08	3	<1	58	6	510	14
CHYS_382_08	32	<1	47	3	300	<5
*Rep CHYS_382_08	29	<1	40	2	300	<5
CHYS_383_08	82	<1	290	11	3460	12
CHYS_409_08	61	<1	1070	49	5560	131
CHYS_410_08	48	<1	28	2	7650	<5
CHYS_441_08	33	<1	174	10	190	84
CHYS_442_08	131	<1	1290	67	100	32
CHYS_474_08	33	<1	20	1	1140	12
CHYS_475_08	144	<1	730	38	480	102
CHYS_510_08	382	<1	625	34	490	39
CHYS_578_08	36	<1	114	7	510	46
CHYS_579A_08	83	<1	873	51	300	81
CHYS_611_08	54	<1	310	26	80	191
CHYS_612A_08	3030	<1	648	51	380	79
*Rep CHYS_612A_08	2550	<1	724	51	470	62
CHYS_642A_08	69	<1	232	14	470	36
HDIS_306_08	15	<1	203	14	110	169
HDIS_329_08	29	<1	112	6	90	10
TKS_1_08	48	<1	223	16	40	47
TKS_2_08	20	<1	136	9	90	67
TKS_3_08	19	<1	119	8	100	51
TKS_4_08	131	3	1270	61	100	77
TKS_5_08	137	1	758	44	60	118
TKS_6_08	133	<1	663	40	50	38
TKS_7_08	281	<1	374	28	130	26
TKS_8_08	210	<1	487	36	160	24
TKS_9_08	339	<1	532	26	320	18
*Rep TKS_9_08	305	<1	809	34	270	19
TKS_10_08	181	<1	893	47	90	43
TKS_11_08	236	<1	1140	48	380	31
TKS_12_08	176	<1	1570	68	220	20
TKS_13_08	182	<1	678	41	440	45
TKS_14_08	165	<1	1160	62	240	32

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Order:

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
TKS_15_08	99	<1	244	32	110	26
TKS_16_08	169	<1	1760	72	520	28
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
TKS_17_08	143	1	2710	114	490	26
TKS_18_08	40	<1	365	34	530	37
TKS_19_08	13	<1	108	6	50	26
TKS_20_08	168	4	2990	120	210	42
TKS_21_08	89	10	1190	63	270	121
*Rep TKS_21_08	82	6	1090	56	200	121
TKS_22_08	182	<1	1040	57	310	42
TKS_23_08	110	<1	112	10	130	34
TKS_24_08	372	<1	735	46	610	32
TKS_25_08	597	<1	646	36	1200	34
TKS_26_08	94	<1	385	39	260	16
TKS_27_08	167	<1	534	26	920	18
*Std MMISRM16	40	<1	11	<1	170	15
*Std MMISRM16	42	<1	28	<1	180	16
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101879

To: **Logan Resources Ltd.**

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

Date: Sep 04, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 56
Date Submitted Jul 22, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 56 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_102_08	4	244	20	<0.1	1290	<1	50	10	71	171
*Rep CHYS_102_08	4	233	10	<0.1	1330	<1	30	11	48	244
CHYS_124_08	4	174	20	0.1	1280	1	10	13	75	281
CHYS_146_08	3	249	20	<0.1	680	<1	<10	5	110	77
CHYS_147_08	6	234	40	0.1	1230	1	20	6	159	133
CHYS_168_08	1	91	10	0.1	2380	1	60	17	36	188
CHYS_190_08	7	129	<10	0.1	3960	<1	170	19	120	267
CHYS_212_08	2	84	10	0.1	2100	2	210	11	190	271
CHYS_213_08	7	180	<10	0.2	810	<1	<10	3	92	54
CHYS_235_08	21	87	100	1.5	3930	1	220	26	529	27
CHYS_236_08	92	181	70	1.8	440	13	20	13	118	155
CHYS_237_08	5	212	40	0.3	1150	2	40	10	170	49
CHYS_238_08	2	153	20	<0.1	500	2	100	32	58	104
CHYS_239_08	7	146	70	0.3	1740	5	10	11	195	191
*Rep CHYS_239_08	6	125	60	0.3	1640	4	<10	8	152	169
CHYS_396_08	2	80	20	0.3	1970	1	50	11	73	183
CHYS_397_08	8	50	10	0.2	640	<1	210	14	244	231
CHYS_428_08	10	195	<10	0.3	400	<1	<10	5	69	126
CHYS_429_08	1	208	<10	<0.1	570	<1	<10	12	88	48
CHYS_460_08	63	73	50	1.1	2340	5	150	7	4170	106
CHYS_461_08	9	145	<10	0.3	890	<1	<10	24	29	341
CHYS_496_08	5	197	<10	<0.1	460	1	<10	6	235	10
CHYS_497_08	53	79	510	15.7	170	28	<10	2	3000	42
CHYS_506_08	14	158	130	1.6	1840	2	50	23	522	86
CHYS_507_08	<1	166	<10	<0.1	230	2	<10	9	50	13
CHYS_508_08	8	183	<10	<0.1	510	<1	10	25	60	21
CHYS_509_08	22	169	60	1.6	1740	3	80	103	1970	70
*Rep CHYS_509_08	24	161	80	1.6	1630	3	100	100	1690	46
CHYS_536_08	<1	82	50	0.6	590	7	20	5	52	231
CHYS_541_08	7	72	20	0.8	1170	<1	200	17	294	31
CHYS_542_08	9	183	50	1.0	1040	3	<10	42	685	136
CHYS_543_08	5	171	30	0.1	1230	<1	20	28	135	5
CHYS_544_08	1	182	<10	<0.1	650	<1	<10	15	54	75
CHYS_569_08	10	184	10	0.8	180	4	<10	7	650	167
CHYS_575_08	43	79	90	6.1	2670	<1	270	7	492	22
CHYS_576_08	65	107	10	10.2	1600	<1	360	7	7060	6
CHYS_577_08	30	161	110	6.0	2620	20	130	24	1620	25
CHYS_608_08	4	157	<10	6.5	1070	1	<10	6	145	123
CHYS_609_08	11	184	160	0.4	480	6	<10	7	80	127
CHYS_610_08	7	204	<10	<0.1	360	<1	<10	8	24	293
*Rep CHYS_610_08	8	204	<10	<0.1	370	<1	<10	8	23	322
CHYS_633_08	3	155	200	0.4	280	5	<10	2	87	44
CHYS_661_08	173	42	2580	76.1	310	4	240	35	1570	254
CHYS_662_08	3	185	70	0.2	930	1	10	101	261	214
CHYS_690_08	2	69	120	0.5	1370	2	90	55	69	205
CHYS_972_08	3	217	10	<0.1	590	<1	<10	10	83	69

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_1002_08	4	196	110	0.1	790	2	<10	12	124	53
CHYS_1032_08	7	71	<10	0.1	1910	<1	280	14	231	12
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
CHYS_1033_08	1	158	<10	<0.1	520	1	<10	17	34	62
CHYS_1060_08	16	91	60	1.4	1940	<1	190	20	442	354
CHYS_1061_08	10	67	30	<0.1	1150	<1	200	11	170	21
CHYS_1085_08	2	156	<10	<0.1	1640	1	20	14	95	121
CHYS_1086_08	7	90	<10	0.1	2280	1	160	52	377	210
*Rep CHYS_1086_08	6	86	<10	0.2	2470	1	170	62	316	329
HDIS_87_08	470	6	50	4.1	180	<1	120	778	23	18
HDIS_110_08	25	153	<10	0.2	1060	<1	50	11	303	43
HDIS_134_08	5	185	<10	<0.1	830	<1	<10	16	103	137
HDIS_160_08	3	105	<10	<0.1	680	<1	120	21	21	29
HDIS_187_08	5	198	20	0.2	980	<1	<10	23	122	26
HDIS_214_08	4	124	50	0.1	850	<1	70	23	78	53
HDIS_330_08	3	107	<10	<0.1	1310	<1	160	27	79	43
*Std MMISRM16	13	36	20	23.7	70	<1	200	3	21	43
*Std MMISRM16	12	29	10	24.1	60	<1	140	3	19	33
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_102_08	<100	180	46	21.2	9.2	56	51	23	8	5
*Rep CHYS_102_08	<100	200	37	19.9	5.9	66	33	16	14	5
CHYS_124_08	<100	610	20	10.5	3.8	213	19	23	<5	3
CHYS_146_08	<100	270	36	16.1	7.5	112	38	37	14	<1
CHYS_147_08	100	340	57	30.0	13.4	98	68	54	8	3
CHYS_168_08	<100	900	24	11.6	4.5	310	25	18	<5	18
CHYS_190_08	<100	560	46	21.5	10.0	98	50	42	<5	32
CHYS_212_08	<100	1610	73	35.3	18.2	175	92	61	7	29
CHYS_213_08	<100	530	66	38.4	8.9	95	45	28	11	<1
CHYS_235_08	<100	720	88	45.4	30.7	31	145	633	<5	19
CHYS_236_08	<100	640	26	12.2	4.5	94	22	43	9	2
CHYS_237_08	<100	190	22	10.1	5.5	52	24	75	10	<1
CHYS_238_08	<100	70	16	9.1	3.5	92	17	24	6	9
CHYS_239_08	<100	960	31	17.6	6.5	192	30	78	7	2
*Rep CHYS_239_08	<100	1110	23	13.2	4.9	198	22	60	<5	1
CHYS_396_08	<100	3430	43	24.7	6.9	106	36	24	5	9
CHYS_397_08	<100	2970	44	24.7	11.4	21	59	53	<5	7
CHYS_428_08	<100	390	26	9.9	4.9	54	22	23	9	<1
CHYS_429_08	<100	540	33	15.5	6.4	25	32	35	17	<1
CHYS_460_08	<100	310	229	83.9	89.1	7	473	2140	<5	20
CHYS_461_08	<100	440	9	7.1	1.2	96	5	11	<5	2
CHYS_496_08	<100	170	17	7.7	4.9	30	19	78	6	<1
CHYS_497_08	<100	1050	174	74.0	72.1	33	346	1410	<5	<1
CHYS_506_08	<100	710	94	42.7	25.5	19	113	318	<5	8
CHYS_507_08	<100	140	20	10.6	3.3	30	13	15	16	<1
CHYS_508_08	<100	260	15	5.6	3.1	18	14	16	17	3
CHYS_509_08	<100	230	318	138	77.8	15	434	797	<5	12
*Rep CHYS_509_08	<100	220	273	119	67.9	17	364	786	<5	12
CHYS_536_08	<100	1180	17	11.5	2.2	178	11	19	<5	5
CHYS_541_08	<100	830	65	34.9	12.7	33	63	88	<5	33
CHYS_542_08	<100	860	163	79.4	40.4	16	168	288	7	1
CHYS_543_08	<100	80	17	7.9	6.1	17	21	51	<5	1
CHYS_544_08	<100	110	24	14.2	3.4	62	15	15	21	3
CHYS_569_08	<100	1770	176	74.6	32.8	37	186	214	13	<1
CHYS_575_08	<100	690	113	55.8	37.4	14	166	332	<5	39
CHYS_576_08	<100	280	189	84.9	93.1	8	415	7440	<5	21
CHYS_577_08	<100	340	212	111	70.5	13	303	1330	<5	8
CHYS_608_08	<100	590	19	8.5	4.9	8	21	56	11	<1
CHYS_609_08	<100	1240	38	18.9	6.6	65	25	31	18	<1
CHYS_610_08	<100	580	7	3.9	1.1	65	5	9	12	<1
*Rep CHYS_610_08	<100	510	7	3.9	1.1	58	5	8	17	<1
CHYS_633_08	<100	2220	20	17.7	2.9	113	13	77	17	1
CHYS_661_08	<100	12200	65	33.4	22.9	27	135	864	<5	36
CHYS_662_08	<100	440	110	55.2	19.5	32	98	103	6	1
CHYS_690_08	<100	1080	25	16.8	5.1	119	20	21	<5	8
CHYS_972_08	<100	320	41	17.4	7.5	42	41	27	27	2

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_1002_08	<100	340	31	13.6	6.8	64	33	47	15	<1
CHYS_1032_08	<100	220	61	33.5	13.1	22	69	134	62	52
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
CHYS_1033_08	<100	140	17	15.4	1.3	96	7	19	26	2
CHYS_1060_08	<100	1280	67	38.8	15.0	25	68	288	<5	11
CHYS_1061_08	<100	280	35	14.6	11.3	24	58	84	8	21
CHYS_1085_08	<100	220	56	29.8	9.0	105	51	34	7	7
CHYS_1086_08	<100	640	112	55.3	24.3	48	129	133	<5	16
*Rep CHYS_1086_08	<100	520	78	37.5	20.1	50	100	127	<5	17
HDIS_87_08	<100	680	11	5.5	4.4	2	19	11	<5	14
HDIS_110_08	<100	160	141	58.0	43.9	43	210	77	10	3
HDIS_134_08	<100	190	17	7.4	4.1	71	17	20	5	1
HDIS_160_08	<100	50	12	6.6	2.9	55	12	6	<5	4
HDIS_187_08	<100	90	46	20.6	10.6	30	48	32	8	1
HDIS_214_08	<100	100	64	31.8	13.2	34	61	26	<5	7
HDIS_330_08	<100	180	107	51.2	19.1	49	93	33	<5	7
*Std MMISRM16	<100	490	2	0.8	1.1	3	4	5	<5	28
*Std MMISRM16	<100	410	2	0.8	1.0	2	4	5	<5	20
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_102_08	<5	1.7	62	167	790	<1	11	<1	176	<1
*Rep CHYS_102_08	<5	1.4	37	195	700	<1	7	<1	161	<1
CHYS_124_08	<5	2.6	35	193	420	<1	8	<1	163	1
CHYS_146_08	<5	2.9	77	146	550	<1	16	<1	132	<1
CHYS_147_08	<5	5.1	109	69	560	<1	22	<1	191	2
CHYS_168_08	<5	1.6	34	291	2350	<1	7	<1	106	3
CHYS_190_08	<5	<0.5	90	460	160	<1	18	<1	92	<1
CHYS_212_08	<5	0.5	140	918	1220	<1	28	<1	50	2
CHYS_213_08	<5	1.4	84	66	330	<1	16	<1	83	<1
CHYS_235_08	<5	0.6	596	82	1150	<1	148	<1	128	3
CHYS_236_08	<5	1.1	60	168	8640	<1	14	<1	144	29
CHYS_237_08	<5	1.3	86	70	1460	<1	21	<1	81	2
CHYS_238_08	<5	1.1	41	142	1310	<1	9	<1	238	<1
CHYS_239_08	<5	1.9	93	155	700	<1	23	<1	128	3
*Rep CHYS_239_08	<5	1.4	69	141	500	<1	17	<1	116	3
CHYS_396_08	9	<0.5	65	118	370	<1	12	<1	82	6
CHYS_397_08	11	<0.5	165	152	320	<1	30	<1	109	5
CHYS_428_08	<5	1.1	45	93	360	<1	9	<1	125	<1
CHYS_429_08	<5	1.5	69	65	380	<1	14	<1	90	<1
CHYS_460_08	<5	<0.5	2940	136	280	1	673	<1	253	12
CHYS_461_08	<5	<0.5	14	120	110	<1	3	<1	127	<1
CHYS_496_08	<5	0.7	99	58	90	<1	28	<1	163	1
CHYS_497_08	<5	<0.5	1850	39	160	2	416	<1	108	31
CHYS_506_08	<5	<0.5	407	121	1480	<1	96	<1	89	1
CHYS_507_08	<5	1.0	29	43	330	<1	6	<1	78	<1
CHYS_508_08	<5	<0.5	32	174	900	<1	7	<1	131	<1
CHYS_509_08	<5	<0.5	1710	172	1070	<1	372	<1	77	<1
*Rep CHYS_509_08	<5	<0.5	1460	195	1150	<1	315	<1	85	1
CHYS_536_08	<5	<0.5	28	191	110	<1	6	<1	183	5
CHYS_541_08	<5	<0.5	119	258	130	<1	26	<1	70	1
CHYS_542_08	<5	<0.5	592	572	2290	<1	132	<1	128	<1
CHYS_543_08	<5	<0.5	80	21	650	<1	18	<1	80	<1
CHYS_544_08	<5	0.6	31	145	610	<1	6	<1	66	<1
CHYS_569_08	<5	<0.5	509	138	780	<1	105	<1	90	<1
CHYS_575_08	<5	<0.5	514	354	160	<1	111	<1	84	<1
CHYS_576_08	<5	<0.5	3350	66	1510	1	1030	<1	23	<1
CHYS_577_08	<5	<0.5	1400	30	550	<1	347	<1	126	<1
CHYS_608_08	<5	<0.5	72	40	610	<1	17	<1	89	<1
CHYS_609_08	<5	<0.5	50	97	1700	<1	11	<1	65	2
CHYS_610_08	<5	1.1	11	104	630	<1	3	<1	72	<1
*Rep CHYS_610_08	<5	1.0	11	106	640	<1	3	<1	91	<1
CHYS_633_08	<5	1.6	49	56	200	<1	14	<1	70	1
CHYS_661_08	6	<0.5	807	362	1020	<1	202	<1	518	3
CHYS_662_08	<5	<0.5	237	138	700	<1	49	<1	56	<1
CHYS_690_08	28	<0.5	44	273	290	<1	9	<1	157	6
CHYS_972_08	<5	1.8	68	123	310	<1	12	<1	104	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1002_08	<5	2.7	77	83	800	<1	16	<1	119	1
CHYS_1032_08	<5	<0.5	168	250	600	<1	36	<1	67	<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
CHYS_1033_08	<5	3.4	16	73	900	<1	4	<1	15	<1
CHYS_1060_08	<5	<0.5	252	878	280	<1	67	<1	51	2
CHYS_1061_08	<5	<0.5	147	145	320	<1	30	<1	129	<1
CHYS_1085_08	<5	1.6	82	355	990	<1	15	<1	90	<1
CHYS_1086_08	<5	<0.5	289	1220	780	<1	60	<1	123	1
*Rep CHYS_1086_08	<5	<0.5	255	1360	410	<1	53	<1	121	2
HDIS_87_08	<5	<0.5	34	98	38700	<1	5	<1	34	30
HDIS_110_08	<5	1.1	309	273	730	<1	50	<1	116	2
HDIS_134_08	<5	1.1	36	189	910	<1	7	<1	54	2
HDIS_160_08	<5	0.7	19	70	1130	<1	3	<1	121	2
HDIS_187_08	<5	0.9	97	97	3190	<1	18	<1	158	8
HDIS_214_08	<5	<0.5	85	155	1220	<1	15	<1	116	6
HDIS_330_08	<5	<0.5	119	132	1420	<1	19	<1	46	<1
*Std MMISRM16	38	<0.5	17	211	90	20	3	<1	265	<1
*Std MMISRM16	30	<0.5	16	183	100	19	3	<1	207	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_102_08	50	30	<1	190	<1	8	<10	44.8	893	1.2
*Rep CHYS_102_08	46	18	<1	190	<1	6	<10	41.4	669	1.1
CHYS_124_08	46	13	<1	140	<1	3	<10	43.6	1120	1.1
CHYS_146_08	44	24	<1	70	<1	7	<10	22.5	603	0.9
CHYS_147_08	84	42	<1	100	<1	11	<10	59.5	2730	1.3
CHYS_168_08	50	14	<1	490	<1	4	<10	30.6	519	0.8
CHYS_190_08	63	33	<1	490	<1	8	<10	30.3	151	<0.5
CHYS_212_08	68	57	<1	1130	<1	14	<10	41.2	165	<0.5
CHYS_213_08	77	29	<1	40	<1	9	<10	40.3	325	0.8
CHYS_235_08	47	122	<1	1670	<1	18	<10	136	132	1.8
CHYS_236_08	20	16	<1	130	<1	4	<10	54.8	219	3.0
CHYS_237_08	19	21	<1	200	<1	4	<10	189	298	1.8
CHYS_238_08	21	12	<1	390	<1	3	<10	57.5	347	<0.5
CHYS_239_08	36	23	<1	130	<1	5	<10	96.6	578	1.5
*Rep CHYS_239_08	31	18	<1	110	<1	4	<10	83.8	451	1.6
CHYS_396_08	47	25	<1	750	<1	7	<10	31.4	86	1.8
CHYS_397_08	6	50	<1	1180	<1	8	<10	14.2	23	4.5
CHYS_428_08	20	15	<1	30	<1	4	<10	21.6	204	1.9
CHYS_429_08	20	22	<1	60	<1	6	<10	26.7	338	1.6
CHYS_460_08	61	497	<1	870	<1	56	<10	106	70	11.7
CHYS_461_08	7	4	<1	170	<1	1	<10	26.4	52	4.0
CHYS_496_08	23	18	<1	30	<1	3	<10	100	237	2.9
CHYS_497_08	138	354	<1	30	<1	41	<10	206	102	10.4
CHYS_506_08	46	92	<1	350	<1	17	<10	191	117	4.1
CHYS_507_08	17	9	<1	40	<1	3	<10	15.7	131	1.8
CHYS_508_08	6	10	<1	110	<1	3	<10	19.1	75	1.3
CHYS_509_08	54	378	<1	540	<1	63	<10	141	20	3.0
*Rep CHYS_509_08	53	324	<1	620	<1	55	<10	137	19	3.0
CHYS_536_08	22	8	<1	380	<1	2	<10	52.5	89	2.5
CHYS_541_08	31	38	<1	860	<1	11	<10	37.4	15	2.9
CHYS_542_08	44	135	<1	220	<1	28	<10	146	26	2.3
CHYS_543_08	12	18	<1	280	<1	3	<10	24.4	33	0.9
CHYS_544_08	17	10	<1	100	<1	3	<10	26.1	118	1.9
CHYS_569_08	27	134	<1	20	<1	32	<10	102	89	4.3
CHYS_575_08	61	129	<1	1720	<1	22	<10	55.8	<3	2.6
CHYS_576_08	63	435	<1	2750	<1	50	<10	519	<3	2.8
CHYS_577_08	92	263	<1	1920	<1	42	<10	178	18	2.5
CHYS_608_08	15	17	<1	440	<1	3	<10	75.2	31	2.9
CHYS_609_08	17	16	<1	170	<1	6	<10	76.1	63	1.9
CHYS_610_08	12	3	<1	40	<1	<1	<10	23.8	184	2.0
*Rep CHYS_610_08	12	4	<1	30	<1	<1	<10	22.0	176	2.1
CHYS_633_08	16	11	<1	70	<1	3	<10	51.3	390	2.6
CHYS_661_08	11	133	<1	1490	<1	15	<10	161	8	2.5
CHYS_662_08	33	64	<1	240	<1	18	<10	65.1	155	2.2
CHYS_690_08	41	14	<1	510	<1	4	<10	26.6	139	5.7
CHYS_972_08	22	26	<1	80	<1	7	<10	36.1	687	0.8

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1002_08	28	23	<1	60	<1	5	<10	125	978	1.3
CHYS_1032_08	26	48	<1	2660	<1	11	<10	91.8	9	0.8
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
CHYS_1033_08	29	4	<1	110	<1	2	<10	120	758	<0.5
CHYS_1060_08	34	57	<1	1830	<1	11	<10	228	31	3.6
CHYS_1061_08	6	44	<1	1270	<1	8	<10	50.8	78	0.8
CHYS_1085_08	35	31	<1	280	<1	9	<10	79.6	306	1.3
CHYS_1086_08	49	88	<1	1400	<1	20	<10	67.7	54	1.9
*Rep CHYS_1086_08	36	75	<1	1500	<1	15	<10	43.7	74	1.9
HDIS_87_08	8	13	<1	670	<1	2	<10	16.2	<3	0.6
HDIS_110_08	48	155	<1	170	<1	28	<10	105	264	0.9
HDIS_134_08	18	13	<1	80	<1	3	<10	46.1	323	1.1
HDIS_160_08	20	8	<1	450	<1	2	<10	26.9	209	<0.5
HDIS_187_08	28	35	<1	100	<1	8	<10	50.5	315	1.9
HDIS_214_08	34	37	<1	580	<1	11	<10	39.3	73	0.8
HDIS_330_08	17	50	<1	1380	<1	16	<10	18.1	33	<0.5
*Std MMISRM16	7	5	<1	430	<1	<1	<10	27.1	<3	<0.5
*Std MMISRM16	5	4	<1	440	<1	<1	<10	28.3	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_102_08	21	1	186	15	650	100
*Rep CHYS_102_08	22	<1	151	14	610	87
CHYS_124_08	39	<1	79	9	400	91
CHYS_146_08	17	<1	138	12	530	75
CHYS_147_08	31	1	237	23	360	151
CHYS_168_08	33	<1	100	8	1040	87
CHYS_190_08	17	<1	204	17	560	32
CHYS_212_08	149	<1	352	28	430	100
CHYS_213_08	31	1	283	29	380	69
CHYS_235_08	263	5	537	33	800	20
CHYS_236_08	34	<1	88	9	470	42
CHYS_237_08	54	<1	81	7	420	36
CHYS_238_08	28	<1	72	7	1310	36
CHYS_239_08	66	1	127	13	330	73
*Rep CHYS_239_08	60	<1	95	10	210	63
CHYS_396_08	118	<1	177	21	60	51
CHYS_397_08	77	3	200	21	20	22
CHYS_428_08	17	<1	75	6	140	33
CHYS_429_08	16	<1	107	10	400	54
CHYS_460_08	50	1	736	58	230	139
CHYS_461_08	20	<1	29	5	1010	21
CHYS_496_08	17	<1	52	5	700	121
CHYS_497_08	118	5	572	58	130	296
CHYS_506_08	222	2	381	30	120	41
CHYS_507_08	8	<1	65	7	160	29
CHYS_508_08	6	<1	44	3	910	10
CHYS_509_08	51	1	1310	81	930	40
*Rep CHYS_509_08	52	1	1100	71	1010	43
CHYS_536_08	80	1	76	9	80	35
CHYS_541_08	177	<1	334	26	360	33
CHYS_542_08	212	<1	585	59	160	38
CHYS_543_08	21	<1	59	6	70	8
CHYS_544_08	11	<1	86	11	1000	14
CHYS_569_08	74	<1	666	43	100	47
CHYS_575_08	338	<1	555	38	110	16
CHYS_576_08	831	<1	875	65	140	148
CHYS_577_08	585	<1	1050	89	140	30
CHYS_608_08	169	<1	69	6	80	15
CHYS_609_08	116	<1	139	12	200	19
CHYS_610_08	18	<1	21	3	250	30
*Rep CHYS_610_08	18	<1	21	3	230	28
CHYS_633_08	277	2	93	14	150	50
CHYS_661_08	1360	1	374	28	1130	11
CHYS_662_08	197	<1	479	36	720	24
CHYS_690_08	170	<1	109	15	100	31
CHYS_972_08	19	<1	115	11	790	43

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1002_08	88	2	87	10	690	62
CHYS_1032_08	1100	<1	308	23	220	11
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1033_08	89	<1	64	14	510	34
CHYS_1060_08	3080	<1	326	34	190	18
CHYS_1061_08	116	<1	126	10	580	19
CHYS_1085_08	35	<1	187	21	1950	59
CHYS_1086_08	172	<1	428	38	1080	52
*Rep CHYS_1086_08	142	<1	305	27	1020	53
HDIS_87_08	17	<1	67	4	7870	10
HDIS_110_08	35	<1	427	40	330	105
HDIS_134_08	10	<1	45	6	430	51
HDIS_160_08	11	<1	43	5	1840	32
HDIS_187_08	15	<1	137	14	1160	49
HDIS_214_08	93	<1	251	22	1280	26
HDIS_330_08	27	<1	452	33	920	15
*Std MMISRM16	46	<1	8	<1	220	12
*Std MMISRM16	49	<1	6	<1	190	9
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101880

To: **Logan Resources Ltd.**

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

Date: Sep 03, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 61
Date Submitted Jul 22, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 61 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
HDIS_243_08	18	133	200	0.2	1350	<1	290	15	97	36
*Rep HDIS_243_08	13	127	160	0.2	1420	<1	310	18	81	31
HDIS_268_08	8	135	<10	0.1	2670	<1	330	29	42	65
HDIS_269_08	44	185	<10	0.2	1380	<1	230	59	43	36
HDIS_270_08	7	49	380	0.7	2330	<1	520	21	60	21
HDIS_271_08	10	155	160	0.4	800	<1	250	22	103	66
HDIS_296_08	2	26	10	<0.1	550	<1	650	72	30	465
HDIS_297_08	13	95	<10	1.1	480	<1	480	6	98	36
HDIS_298_08	23	152	20	0.6	2460	<1	260	108	88	50
HDIS_299_08	57	97	40	1.4	1270	<1	600	25	49	<5
HDIS_300_08	78	178	110	0.8	560	2	160	84	172	222
HDIS_325_08	4	50	<10	<0.1	300	<1	460	10	20	8
HDIS_326_08	5	74	<10	<0.1	620	<1	430	60	47	<5
HDIS_327_08	3	95	<10	2.7	2210	2	230	20	<5	71
*Rep HDIS_327_08	5	119	<10	2.2	2260	2	230	27	43	58
HDIS_328_08	19	194	60	0.1	970	2	40	9	219	61
JCS_1_08	12	72	10	2.5	1270	<1	570	7	765	819
JCS_2_08	10	78	10	2.5	1010	<1	510	4	559	494
JCS_3_08	6	87	20	1.8	940	<1	410	4	613	472
JCS_4_08	7	193	10	1.8	2130	<1	290	24	1060	920
JCS_5_08	5	202	<10	2.8	580	<1	220	16	312	2330
JCS_6_08	8	198	60	0.4	90	4	<10	11	35	165
JCS_7_08	117	247	420	11.0	370	16	<10	10	584	97
JCS_8_08	58	196	370	1.1	480	6	<10	10	29	35
JCS_9_08	46	201	290	3.0	2060	3	70	14	697	522
JCS_10_08	20	251	300	0.6	430	2	<10	16	249	41
JCS_11_08	28	193	280	3.5	1270	6	50	18	1090	527
*Rep JCS_11_08	22	183	310	3.0	1250	7	30	15	799	770
JCS_12_08	2	127	130	1.3	1330	5	60	44	146	361
JCS_13_08	20	252	90	1.5	570	1	<10	15	73	46
JCS_14_08	15	223	60	0.9	1070	1	20	30	106	208
JCS_15_08	6	147	20	0.2	450	1	<10	<1	<5	27
JCS_16_08	3	197	10	0.1	380	<1	<10	5	33	47
JCS_17_08	1	186	<10	<0.1	450	<1	<10	2	<5	32
JCS_18_08	4	196	30	0.5	910	1	20	19	173	294
JCS_19_08	3	179	20	0.2	900	<1	30	37	225	97
JCS_20_08	8	258	90	0.7	510	2	10	3	301	41
JCS_21_08	8	208	30	0.5	270	2	<10	6	61	78
JCS_22_08	8	214	30	0.8	250	<1	<10	3	282	22
HDIS_161_08	1	103	<10	<0.1	700	<1	250	33	42	29
*Rep HDIS_161_08	4	112	<10	0.2	690	<1	260	30	94	18
HDIS_188_08	4	235	<10	<0.1	500	<1	<10	11	44	181
HDIS_189_08	6	167	<10	<0.1	360	<1	<10	<1	<5	49
HDIS_215_08	5	206	10	<0.1	980	<1	20	57	30	216
HDIS_244_08	2	85	230	0.3	1070	4	140	21	26	159
HDIS_272_08	1	107	280	0.9	1190	<1	240	43	56	64

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
HDIS_301_08	10	113	20	<0.1	630	<1	240	26	540	152
HDIS_302_08	14	44	<10	0.2	510	<1	390	4	17	19
Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
HDIS_303_08	33	6	<10	<0.1	580	<1	390	3	<5	47
HDIS_304_08	114	47	30	2.5	520	<1	460	336	65	19
HDIS_305_08	47	121	100	0.3	660	<1	230	45	96	21
JCS_23_08	11	230	40	0.7	380	1	<10	5	146	60
JCS_24_08	8	211	20	0.7	280	<1	<10	3	128	36
*Rep JCS_24_08	7	224	30	0.6	310	1	<10	3	156	45
JCS_25_08	6	231	20	0.4	330	1	<10	6	38	144
JCS_26_08	9	238	30	0.5	230	<1	<10	3	97	24
JCS_27_08	5	215	30	0.6	290	<1	<10	<1	31	49
JCS_28_08	10	226	30	1.0	290	1	<10	2	145	23
JCS_29_08	9	249	20	1.0	340	1	<10	3	91	21
JCS_30_08	11	229	10	0.5	230	<1	<10	4	61	42
JCS_31_08	4	185	10	0.5	320	<1	<10	<1	25	43
JCS_32_08	13	192	50	0.5	380	3	<10	4	42	55
JCS_33_08	10	185	<10	0.2	240	<1	<10	<1	15	58
JCS_34_08	4	166	30	0.5	370	15	<10	1	<5	100
JCS_35_08	7	233	300	5.7	470	28	<10	11	327	272
JCS_36_08	23	188	130	12.0	420	11	30	18	318	237
*Rep JCS_36_08	18	163	90	10.9	500	9	20	17	363	437
*Std MMISRM16	18	43	20	27.6	70	<1	220	3	17	47
*Std MMISRM16	18	36	20	29.6	60	<1	190	3	17	43
*Bik BLANK	<1	1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
HDIS_243_08	<100	110	33	13.7	9.8	36	44	31	<5	32
*Rep HDIS_243_08	<100	90	30	12.8	9.0	34	40	27	<5	36
HDIS_268_08	<100	460	91	47.9	15.9	78	79	19	<5	22
HDIS_269_08	<100	250	127	66.1	15.5	64	82	14	<5	20
HDIS_270_08	<100	410	29	13.4	9.8	41	41	28	<5	51
HDIS_271_08	<100	180	92	44.7	17.8	94	80	51	<5	14
HDIS_296_08	<100	430	17	7.9	4.3	10	21	6	5	8
HDIS_297_08	<100	1480	91	44.6	20.1	19	90	29	7	35
HDIS_298_08	<100	590	143	73.7	23.4	89	117	31	5	22
HDIS_299_08	<100	310	26	11.7	8.3	9	32	19	<5	35
HDIS_300_08	<100	390	80	37.8	24.2	73	99	52	<5	4
HDIS_325_08	<100	100	17	7.9	4.8	5	20	5	<5	20
HDIS_326_08	<100	100	32	15.5	7.6	12	34	16	<5	9
HDIS_327_08	<100	950	56	86.0	2.2	135	11	1	<5	16
*Rep HDIS_327_08	<100	1020	168	108	14.7	105	82	17	<5	16
HDIS_328_08	<100	270	125	53.7	29.7	34	141	126	<5	<1
JCS_1_08	<100	2740	87	51.1	30.2	27	96	312	<5	42
JCS_2_08	<100	3840	146	85.0	41.2	53	142	333	<5	40
JCS_3_08	<100	5340	161	99.8	39.8	70	144	342	<5	34
JCS_4_08	<100	4330	421	259	92.0	48	319	403	<5	32
JCS_5_08	<100	2760	430	299	50.3	35	214	110	<5	21
JCS_6_08	<100	760	36	21.2	3.9	39	17	13	<5	<1
JCS_7_08	<100	4430	159	87.1	24.0	58	133	237	<5	2
JCS_8_08	<100	800	23	18.3	1.6	197	10	16	<5	2
JCS_9_08	<100	9410	177	108	32.7	95	150	355	<5	10
JCS_10_08	<100	770	51	22.3	11.0	67	50	110	<5	<1
JCS_11_08	<100	3440	105	52.4	25.9	103	118	623	<5	7
*Rep JCS_11_08	<100	4000	81	40.7	17.9	159	85	454	<5	5
JCS_12_08	<100	2760	93	66.9	9.9	177	51	86	<5	12
JCS_13_08	<100	590	21	10.7	3.6	99	16	28	<5	<1
JCS_14_08	<100	730	33	19.7	5.5	143	26	50	<5	6
JCS_15_08	<100	540	3	4.7	<0.5	173	<1	2	<5	1
JCS_16_08	<100	430	34	26.6	2.8	88	14	19	<5	<1
JCS_17_08	<100	160	6	6.9	<0.5	95	<1	2	<5	<1
JCS_18_08	<100	1370	151	85.7	18.1	42	90	64	<5	2
JCS_19_08	<100	910	122	66.1	20.0	46	92	85	<5	4
JCS_20_08	<100	570	43	18.3	13.9	36	51	127	<5	<1
JCS_21_08	<100	830	31	15.6	5.2	81	21	28	<5	<1
JCS_22_08	<100	510	50	20.3	16.0	27	60	123	<5	<1
HDIS_161_08	<100	50	39	22.2	7.2	86	33	16	<5	7
*Rep HDIS_161_08	<100	40	61	29.0	15.2	58	63	30	<5	7
HDIS_188_08	<100	110	38	17.4	4.9	55	26	13	<5	<1
HDIS_189_08	<100	90	2	2.0	<0.5	225	1	1	<5	2
HDIS_215_08	<100	100	20	11.1	2.5	100	12	10	<5	7
HDIS_244_08	<100	220	20	11.2	3.1	242	15	8	<5	13
HDIS_272_08	<100	150	56	28.3	10.8	56	51	27	<5	14

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
HDIS_301_08	<100	360	111	45.0	31.6	50	147	139	<5	11
HDIS_302_08	<100	340	15	5.2	6.4	10	26	11	<5	14
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
HDIS_303_08	<100	450	5	2.1	2.1	4	7	<1	7	13
HDIS_304_08	<100	270	37	17.1	12.7	45	46	28	<5	11
HDIS_305_08	<100	130	50	21.1	14.8	42	63	40	<5	7
JCS_23_08	<100	760	46	20.3	10.6	42	40	51	<5	<1
JCS_24_08	<100	480	64	30.8	12.2	41	50	45	<5	<1
*Rep JCS_24_08	<100	500	59	28.5	12.2	50	50	58	<5	<1
JCS_25_08	<100	410	15	7.7	2.2	48	8	14	<5	<1
JCS_26_08	<100	480	35	16.0	6.2	47	26	32	<5	<1
JCS_27_08	<100	650	5	3.8	1.1	104	3	14	<5	<1
JCS_28_08	<100	450	57	27.5	11.9	43	47	47	<5	<1
JCS_29_08	<100	600	28	12.1	6.0	37	23	32	<5	<1
JCS_30_08	<100	500	34	16.3	5.4	43	24	20	<5	<1
JCS_31_08	<100	610	10	9.6	1.1	131	3	11	<5	<1
JCS_32_08	<100	810	21	17.0	1.9	109	8	21	<5	<1
JCS_33_08	<100	370	2	2.1	0.5	159	1	7	<5	<1
JCS_34_08	<100	350	2	2.9	<0.5	169	<1	2	<5	1
JCS_35_08	<100	2500	112	70.5	15.6	98	74	166	<5	2
JCS_36_08	<100	5950	260	138	33.5	25	167	132	<5	6
*Rep JCS_36_08	<100	5580	225	137	25.4	44	128	138	<5	5
*Std MMISRM16	<100	500	3	1.0	1.3	3	4	3	<5	32
*Std MMISRM16	<100	480	3	0.9	1.2	2	4	3	<5	26
*Bik BLANK	<100	<10	1	<0.5	<0.5	<1	1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
HDIS_243_08	<5	2.1	86	100	490	<1	15	<1	160	5
*Rep HDIS_243_08	<5	1.1	75	103	450	<1	13	<1	141	4
HDIS_268_08	<5	0.6	77	405	2170	<1	11	<1	80	3
HDIS_269_08	<5	<0.5	80	237	4480	<1	11	<1	44	4
HDIS_270_08	<5	<0.5	81	248	440	<1	14	<1	52	21
HDIS_271_08	<5	0.5	127	238	1710	<1	23	<1	88	9
HDIS_296_08	<5	<0.5	29	526	330	<1	4	<1	73	1
HDIS_297_08	<5	<0.5	111	386	3350	<1	18	<1	97	1
HDIS_298_08	<5	<0.5	119	339	5020	<1	19	<1	78	7
HDIS_299_08	<5	<0.5	52	259	580	<1	9	<1	68	4
HDIS_300_08	<5	0.5	186	616	3760	<1	31	<1	130	33
HDIS_325_08	<5	<0.5	27	151	280	<1	4	<1	17	<1
HDIS_326_08	<5	<0.5	47	132	960	<1	8	<1	37	5
HDIS_327_08	<5	<0.5	8	98	3480	<1	1	<1	57	19
*Rep HDIS_327_08	<5	<0.5	75	187	6150	<1	11	<1	57	14
HDIS_328_08	<5	0.6	297	187	3170	<1	54	<1	102	6
JCS_1_08	<5	<0.5	314	650	130	<1	72	<1	58	2
JCS_2_08	<5	<0.5	388	403	450	<1	87	<1	44	3
JCS_3_08	<5	<0.5	388	243	730	<1	87	<1	53	4
JCS_4_08	<5	<0.5	808	1250	1640	<1	166	<1	30	1
JCS_5_08	<5	<0.5	348	462	220	<1	62	<1	28	<1
JCS_6_08	<5	0.9	27	97	440	<1	5	<1	70	<1
JCS_7_08	6	2.1	409	123	1030	<1	89	<1	77	3
JCS_8_08	<5	3.0	17	106	1150	<1	3	<1	28	3
JCS_9_08	9	1.3	448	299	380	<1	102	<1	82	5
JCS_10_08	<5	2.8	161	130	1140	<1	36	<1	93	3
JCS_11_08	10	2.5	490	418	350	<1	127	<1	104	4
*Rep JCS_11_08	12	2.7	329	436	290	<1	87	<1	105	4
JCS_12_08	6	0.7	113	268	480	<1	24	<1	137	5
JCS_13_08	<5	5.2	42	125	520	<1	9	<1	70	1
JCS_14_08	<5	3.1	73	413	670	<1	16	<1	125	1
JCS_15_08	<5	1.0	1	45	20	<1	<1	<1	26	<1
JCS_16_08	<5	2.0	22	97	380	<1	4	<1	52	<1
JCS_17_08	<5	1.3	1	56	160	<1	<1	<1	33	<1
JCS_18_08	<5	0.9	168	147	710	<1	31	<1	115	<1
JCS_19_08	<5	0.7	221	142	560	<1	42	<1	107	<1
JCS_20_08	10	1.8	190	59	430	<1	42	<1	109	3
JCS_21_08	<5	1.5	43	73	420	<1	9	<1	109	1
JCS_22_08	<5	1.0	203	28	370	<1	44	<1	101	1
HDIS_161_08	<5	<0.5	42	88	600	<1	7	<1	23	2
*Rep HDIS_161_08	<5	<0.5	91	135	480	<1	15	<1	56	2
HDIS_188_08	<5	1.6	32	90	1850	<1	5	<1	162	<1
HDIS_189_08	<5	0.7	1	45	40	<1	<1	<1	33	<1
HDIS_215_08	<5	2.0	16	115	880	<1	3	<1	127	3
HDIS_244_08	<5	0.9	21	128	700	<1	3	<1	60	6
HDIS_272_08	<5	<0.5	69	82	800	<1	11	<1	59	14

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
HDIS_301_08	<5	<0.5	324	1120	1120	<1	61	<1	102	2
HDIS_302_08	<5	<0.5	49	158	70	<1	7	<1	121	<1
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
HDIS_303_08	<5	<0.5	1	182	70	<1	<1	<1	48	2
HDIS_304_08	<5	<0.5	78	1050	9720	<1	13	<1	21	87
HDIS_305_08	<5	<0.5	113	152	8070	<1	19	<1	145	74
JCS_23_08	6	1.6	116	55	470	<1	23	<1	127	2
JCS_24_08	<5	1.1	120	32	500	<1	23	<1	113	<1
*Rep JCS_24_08	<5	1.9	131	39	470	<1	26	<1	113	1
JCS_25_08	<5	1.1	19	85	540	<1	4	<1	76	<1
JCS_26_08	<5	1.7	66	34	450	<1	13	<1	73	1
JCS_27_08	<5	1.4	12	56	80	<1	3	<1	73	<1
JCS_28_08	<5	1.1	125	31	370	<1	24	<1	114	1
JCS_29_08	<5	1.0	61	36	570	<1	12	<1	66	<1
JCS_30_08	<5	1.4	50	59	450	<1	9	<1	67	<1
JCS_31_08	<5	2.4	11	52	120	<1	2	<1	45	<1
JCS_32_08	<5	2.5	19	75	790	<1	4	<1	76	2
JCS_33_08	<5	0.7	5	50	40	<1	1	<1	79	<1
JCS_34_08	<5	1.5	1	49	30	<1	<1	<1	28	<1
JCS_35_08	6	2.0	206	223	860	<1	45	<1	124	7
JCS_36_08	<5	<0.5	323	222	4930	<1	61	<1	88	3
*Rep JCS_36_08	<5	<0.5	279	212	1380	<1	59	<1	96	3
*Std MMISRM16	45	<0.5	16	205	80	20	2	<1	295	<1
*Std MMISRM16	45	<0.5	14	195	90	22	2	<1	274	<1
*Bik BLANK	<5	<0.5	1	<5	10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
HDIS_243_08	33	31	1	1300	2	6	<10	31.7	185	<0.5
*Rep HDIS_243_08	26	28	<1	1450	1	6	<10	21.1	151	<0.5
HDIS_268_08	64	42	<1	1690	<1	14	<10	34.1	16	<0.5
HDIS_269_08	42	39	<1	1590	<1	18	<10	14.6	23	<0.5
HDIS_270_08	17	29	<1	3410	<1	6	<10	12.6	24	<0.5
HDIS_271_08	64	48	<1	960	<1	15	<10	26.5	84	<0.5
HDIS_296_08	<5	12	<1	1750	<1	3	<10	9.9	21	<0.5
HDIS_297_08	27	51	<1	2470	<1	15	<10	13.4	6	<0.5
HDIS_298_08	96	63	<1	1800	<1	22	<10	60.4	38	<0.5
HDIS_299_08	11	21	<1	2430	<1	5	<10	4.7	6	<0.5
HDIS_300_08	45	70	<1	420	<1	14	<10	50.3	225	<0.5
HDIS_325_08	5	12	<1	2580	<1	3	<10	3.5	6	<0.5
HDIS_326_08	18	20	<1	1510	<1	5	<10	6.5	17	<0.5
HDIS_327_08	33	4	<1	1490	<1	4	<10	11.3	9	<0.5
*Rep HDIS_327_08	54	35	<1	1460	<1	20	<10	22.3	17	<0.5
HDIS_328_08	61	93	<1	240	<1	22	<10	53.0	216	<0.5
JCS_1_08	65	73	<1	1830	<1	14	<10	43.4	4	1.9
JCS_2_08	73	102	<1	1560	<1	23	<10	89.4	8	1.7
JCS_3_08	97	99	<1	1340	<1	24	<10	139	13	2.5
JCS_4_08	111	214	<1	2040	<1	61	<10	270	6	4.8
JCS_5_08	83	118	<1	1020	<1	53	<10	111	5	2.8
JCS_6_08	47	10	<1	20	<1	5	<10	48.7	259	1.5
JCS_7_08	97	97	<1	50	<1	24	<10	205	365	3.6
JCS_8_08	38	5	<1	80	<1	3	<10	65.6	316	2.0
JCS_9_08	147	111	<1	510	<1	27	<10	209	142	5.2
JCS_10_08	41	40	<1	40	<1	9	<10	64.4	575	3.0
JCS_11_08	77	98	<1	280	<1	18	<10	196	407	4.3
*Rep JCS_11_08	74	69	<1	230	<1	14	<10	212	531	6.1
JCS_12_08	63	31	<1	510	<1	11	<10	114	207	4.6
JCS_13_08	40	11	<1	60	<1	3	<10	32.3	427	3.9
JCS_14_08	49	19	<1	180	<1	5	<10	70.0	370	4.1
JCS_15_08	19	<1	<1	60	<1	<1	<10	6.5	316	1.8
JCS_16_08	39	7	<1	50	<1	4	<10	15.4	442	1.9
JCS_17_08	25	<1	<1	70	<1	<1	<10	8.0	190	1.4
JCS_18_08	54	53	<1	140	<1	20	<10	34.0	190	2.5
JCS_19_08	52	62	<1	220	<1	18	<10	33.2	156	1.5
JCS_20_08	39	45	<1	40	<1	8	<10	51.8	520	3.9
JCS_21_08	37	13	<1	20	<1	5	<10	25.5	391	2.7
JCS_22_08	49	49	<1	<10	<1	9	<10	33.9	298	2.8
HDIS_161_08	39	18	<1	870	<1	6	<10	16.5	113	0.7
*Rep HDIS_161_08	48	38	<1	760	<1	10	<10	23.4	121	0.5
HDIS_188_08	42	15	<1	50	<1	6	<10	45.5	428	1.2
HDIS_189_08	7	<1	<1	50	<1	<1	<10	11.6	228	0.5
HDIS_215_08	37	6	<1	140	<1	3	<10	49.4	641	0.6
HDIS_244_08	34	8	<1	840	<1	3	<10	14.4	352	<0.5
HDIS_272_08	25	28	<1	970	<1	9	<10	9.3	113	<0.5

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
HDIS_301_08	40	109	<1	790	<1	21	<10	59.7	84	<0.5
HDIS_302_08	<5	19	<1	2440	<1	3	<10	10.9	25	<0.5
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
HDIS_303_08	6	3	<1	2140	<1	<1	<10	5.1	<3	<0.5
HDIS_304_08	12	30	<1	2240	<1	7	<10	13.8	43	<0.5
HDIS_305_08	26	43	<1	690	<1	9	<10	32.9	112	<0.5
JCS_23_08	52	30	<1	40	<1	7	<10	32.5	448	2.0
JCS_24_08	60	35	<1	20	<1	10	<10	24.7	330	1.7
*Rep JCS_24_08	61	36	<1	10	<1	9	<10	31.2	542	2.4
JCS_25_08	26	5	<1	20	<1	2	<10	17.8	221	0.8
JCS_26_08	42	19	<1	<10	<1	5	<10	26.6	377	0.9
JCS_27_08	21	3	<1	20	<1	<1	<10	23.6	373	1.6
JCS_28_08	50	34	<1	<10	<1	9	<10	27.4	185	2.5
JCS_29_08	30	16	<1	10	<1	5	<10	22.3	175	2.2
JCS_30_08	42	16	<1	<10	<1	5	<10	26.0	231	1.2
JCS_31_08	36	3	<1	20	<1	1	<10	27.0	282	<0.5
JCS_32_08	34	5	<1	20	<1	2	<10	25.8	474	0.9
JCS_33_08	12	1	<1	10	<1	<1	<10	10.2	134	<0.5
JCS_34_08	17	<1	<1	50	<1	<1	<10	9.5	344	<0.5
JCS_35_08	58	53	<1	60	<1	15	<10	48.5	411	1.5
JCS_36_08	53	96	<1	230	<1	36	<10	86.4	45	2.9
*Rep JCS_36_08	87	79	<1	230	<1	29	<10	84.3	47	5.5
*Std MMISRM16	12	5	<1	520	<1	<1	<10	26.7	4	<0.5
*Std MMISRM16	11	4	<1	450	<1	<1	<10	27.2	5	<0.5
*Bik BLANK	<5	<1	<1	20	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
HDIS_243_08	29	8	150	9	650	41
*Rep HDIS_243_08	26	3	139	8	690	32
HDIS_268_08	124	2	481	31	630	57
HDIS_269_08	28	1	755	42	460	19
HDIS_270_08	43	<1	170	10	150	19
HDIS_271_08	112	<1	549	30	240	40
HDIS_296_08	20	<1	74	5	2030	7
HDIS_297_08	181	<1	512	27	320	28
HDIS_298_08	58	<1	806	49	1370	49
HDIS_299_08	85	<1	160	8	50	14
HDIS_300_08	38	<1	403	27	3960	84
HDIS_325_08	43	<1	86	5	340	5
HDIS_326_08	65	<1	175	10	310	14
HDIS_327_08	59	<1	380	78	130	14
*Rep HDIS_327_08	102	<1	1050	75	220	18
HDIS_328_08	28	<1	632	32	140	67
JCS_1_08	283	<1	523	40	120	16
JCS_2_08	452	<1	836	64	130	27
JCS_3_08	439	<1	951	78	190	32
JCS_4_08	547	1	2960	193	620	15
JCS_5_08	633	1	2940	222	530	10
JCS_6_08	60	<1	156	16	240	42
JCS_7_08	151	<1	867	64	220	68
JCS_8_08	41	<1	105	15	290	27
JCS_9_08	336	<1	986	82	330	53
JCS_10_08	66	<1	211	14	160	22
JCS_11_08	319	1	549	36	430	46
*Rep JCS_11_08	347	1	378	29	300	50
JCS_12_08	310	<1	563	47	730	22
JCS_13_08	33	<1	89	8	480	34
JCS_14_08	53	<1	156	15	1090	36
JCS_15_08	7	<1	15	7	<20	9
JCS_16_08	13	<1	183	20	310	33
JCS_17_08	8	<1	26	6	90	13
JCS_18_08	65	<1	827	57	210	26
JCS_19_08	61	<1	627	43	420	23
JCS_20_08	45	<1	185	12	40	61
JCS_21_08	32	<1	138	10	70	39
JCS_22_08	37	<1	214	13	40	49
HDIS_161_08	9	<1	201	15	2010	29
*Rep HDIS_161_08	11	<1	293	20	1420	35
HDIS_188_08	11	<1	136	11	360	77
HDIS_189_08	2	<1	9	2	50	16
HDIS_215_08	9	<1	73	8	2750	51
HDIS_244_08	17	<1	94	7	360	25
HDIS_272_08	16	<1	293	17	1600	17

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
HDIS_301_08	43	<1	464	29	860	55
HDIS_302_08	19	<1	62	3	330	15
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
HDIS_303_08	6	<1	25	1	180	12
HDIS_304_08	38	<1	194	12	2500	32
HDIS_305_08	18	<1	228	13	490	61
JCS_23_08	40	<1	192	13	190	45
JCS_24_08	41	<1	307	20	50	34
*Rep JCS_24_08	41	<1	274	19	30	48
JCS_25_08	13	<1	62	5	30	28
JCS_26_08	23	<1	150	11	20	38
JCS_27_08	13	<1	21	3	30	25
JCS_28_08	45	<1	260	18	<20	29
JCS_29_08	23	<1	117	8	30	28
JCS_30_08	21	<1	144	10	30	35
JCS_31_08	18	<1	44	9	20	34
JCS_32_08	24	<1	99	13	50	41
JCS_33_08	8	<1	10	2	30	18
JCS_34_08	6	<1	11	3	30	22
JCS_35_08	67	1	584	52	660	75
JCS_36_08	173	<1	1860	81	290	35
*Rep JCS_36_08	220	1	1520	86	270	39
*Std MMISRM16	40	<1	11	<1	170	15
*Std MMISRM16	39	<1	10	<1	150	14
*Bik BLANK	<1	<1	8	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101881

To: **Logan Resources Ltd.**

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

Date: Sep 03, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 57
Date Submitted Jul 22, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
AJS_1_08	9	124	130	0.8	3550	<1	230	15	789	426
*Rep AJS_1_08	14	115	130	0.7	3330	<1	280	19	979	540
AJS_2_08	4	139	210	1.1	3110	<1	40	5	137	232
AJS_3_08	4	104	200	0.6	1530	1	40	1	65	146
AJS_4_08	9	177	150	3.4	3290	<1	180	8	285	798
AJS_5_08	3	288	100	0.3	1090	<1	70	18	264	134
AJS_6_08	70	105	190	4.6	7130	<1	530	54	1940	803
AJS_7_08	19	272	90	0.9	1810	<1	30	18	284	256
AJS_8_08	1	79	1890	1.0	2970	4	130	10	98	473
AJS_9_08	10	267	120	1.5	640	<1	10	18	165	587
AJS_10_08	10	177	660	14.4	2690	1	170	37	2360	2630
AJS_11_08	13	208	180	0.5	2190	<1	180	29	907	76
AJS_12_08	2	244	230	0.6	1260	2	50	49	251	395
AJS_22_08	3	264	230	0.8	2130	1	50	54	403	784
*Rep AJS_22_08	6	280	370	1.5	1830	1	70	36	1180	629
AJS_23_08	14	213	430	3.0	1470	1	120	18	548	103
AJS_24_08	23	224	550	6.7	1330	<1	110	15	653	27
AJS_63_08	41	287	110	1.2	1140	9	20	12	207	291
AJS_64_08	5	280	20	0.2	400	2	<10	15	148	75
AJS_65_08	9	176	70	0.8	840	7	80	34	108	183
AJS_66_08	16	255	40	0.8	810	2	20	70	23	76
AJS_67_08	213	246	490	31.2	400	69	<10	7	22	18
HDIS_331_08	47	167	10	0.2	600	<1	210	17	163	98
HDIS_332_08	35	147	10	0.2	850	<1	300	27	144	59
HDIS_333_08	2	38	40	0.8	780	<1	450	3	73	300
HDIS_334_08	3	86	<10	0.1	210	<1	190	18	13	152
HDIS_354_08	128	59	<10	<0.1	930	<1	530	15	74	73
*Rep HDIS_354_08	122	61	<10	<0.1	940	<1	530	14	74	61
HDIS_355_08	<1	193	<10	<0.1	420	<1	20	4	22	135
HDIS_356_08	8	207	10	0.2	220	<1	<10	3	368	22
HDIS_357_08	11	234	90	0.4	1030	<1	20	5	667	82
HDIS_358_08	37	11	90	0.8	1190	<1	340	38	46	166
AJS_49_08	36	256	240	2.9	890	11	120	41	203	280
AJS_50_08	1	168	190	0.6	560	7	50	13	35	177
AJS_51_08	4	205	50	2.8	2240	4	50	5	50	118
AJS_52_08	12	251	40	1.5	1260	3	30	9	90	106
AJS_53_08	15	239	40	0.8	1060	2	20	19	193	132
AJS_54_08	47	21	830	22.5	620	<1	990	21	238	1920
AJS_55_08	43	62	240	9.7	1120	<1	1060	55	507	858
AJS_56_08	<1	129	840	0.5	880	6	40	<1	43	133
*Rep AJS_56_08	<1	113	1020	0.5	800	7	30	<1	49	157
AJS_57_08	3	243	290	0.5	660	<1	10	18	42	483
AJS_58_08	7	218	190	1.1	1150	<1	<10	5	64	139
AJS_59_08	1	93	5770	2.4	1980	7	50	5	147	526
AJS_60_08	2	184	360	4.6	1060	4	30	3	27	369
AJS_61_08	73	>300	100	1.7	1560	<1	60	28	162	169

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
AJS_62_08	21	274	20	0.5	460	1	<10	10	39	176
HDIS_107_08	46	93	<10	0.3	3930	<1	220	5	168	21
Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
HDIS_108_08	7	131	<10	<0.1	1590	<1	310	6	107	15
HDIS_109_08	5	109	<10	0.2	1330	<1	350	45	173	49
HDIS_130_08	151	12	30	0.5	5100	<1	260	41	17	50
HDIS_131_08	58	14	70	0.6	7950	<1	210	24	20	30
HDIS_132_08	10	229	<10	0.2	240	<1	<10	10	102	10
*Rep HDIS_132_08	11	242	<10	0.2	190	<1	<10	10	94	12
HDIS_133_08	40	>300	20	0.8	430	<1	<10	43	139	34
HDIS_157_08	10	>300	110	0.3	600	1	10	9	159	87
HDIS_158_08	1	141	140	<0.1	780	<1	350	93	34	53
HDIS_159_08	69	119	10	0.5	1380	<1	220	33	84	14
HDIS_184_08	1	266	<10	0.3	2730	<1	40	15	68	289
HDIS_185_08	4	134	40	0.1	1040	<1	350	95	42	31
HDIS_186_08	27	179	110	0.2	1080	<1	250	38	89	45
HDIS_211_08	2	226	<10	<0.1	1290	<1	100	128	59	71
*Std MMISRM16	25	49	10	39.6	80	<1	250	4	18	61
*Std MMISRM16	18	48	10	32.1	80	<1	220	3	20	56
*BIK BLANK	<1	<1	10	<0.1	<10	<1	<10	<1	5	<5
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
AJS_1_08	<100	2500	62	35.0	18.8	205	77	400	<5	17
*Rep AJS_1_08	<100	2570	70	40.4	25.0	156	97	599	<5	19
AJS_2_08	<100	1910	21	13.5	3.8	228	16	66	<5	3
AJS_3_08	<100	1360	7	4.1	1.5	327	6	34	<5	5
AJS_4_08	<100	520	40	23.3	8.5	23	37	193	<5	5
AJS_5_08	<100	110	26	12.3	5.6	44	26	123	<5	3
AJS_6_08	<100	2440	85	48.0	33.6	15	131	964	<5	39
AJS_7_08	<100	670	21	10.0	6.1	50	23	136	<5	<1
AJS_8_08	<100	600	7	4.0	2.0	284	7	63	<5	17
AJS_9_08	<100	670	58	35.5	7.0	65	37	83	<5	<1
AJS_10_08	<100	480	97	54.5	23.5	37	111	1650	<5	13
AJS_11_08	<100	280	58	27.5	17.3	25	75	503	<5	9
AJS_12_08	<100	420	41	20.1	6.9	73	33	119	<5	4
AJS_22_08	<100	500	97	51.8	17.1	74	78	197	<5	6
*Rep AJS_22_08	<100	540	73	32.9	24.2	61	99	740	<5	4
AJS_23_08	<100	620	58	26.1	21.3	26	82	660	<5	3
AJS_24_08	<100	400	78	37.7	26.5	15	107	516	<5	1
AJS_63_08	<100	2720	121	65.5	17.4	80	95	67	<5	<1
AJS_64_08	<100	1400	63	34.1	10.4	54	52	50	<5	<1
AJS_65_08	<100	1390	45	23.7	6.8	48	36	60	<5	4
AJS_66_08	<100	750	15	8.6	2.2	145	10	9	<5	1
AJS_67_08	<100	6790	6	3.4	1.3	194	4	10	<5	<1
HDIS_331_08	<100	210	87	37.7	27.7	38	107	74	<5	3
HDIS_332_08	<100	140	60	26.4	19.8	69	71	37	<5	9
HDIS_333_08	<100	160	13	6.3	4.9	95	19	19	7	53
HDIS_334_08	<100	50	3	2.0	0.8	5	4	2	<5	27
HDIS_354_08	<100	1170	74	33.1	19.0	6	90	10	15	31
*Rep HDIS_354_08	<100	1130	74	34.1	19.8	7	90	10	15	31
HDIS_355_08	<100	480	12	8.5	1.5	172	6	8	<5	2
HDIS_356_08	<100	210	88	38.2	27.9	21	116	109	<5	<1
HDIS_357_08	<100	370	153	60.0	60.7	43	257	282	<5	<1
HDIS_358_08	<100	1600	12	5.3	5.6	21	19	13	<5	10
AJS_49_08	<100	2130	71	38.2	16.8	61	65	86	<5	3
AJS_50_08	<100	1470	7	6.9	1.8	201	7	13	<5	9
AJS_51_08	<100	2830	23	23.2	2.2	143	9	23	<5	2
AJS_52_08	<100	3460	41	35.2	4.6	117	21	30	<5	2
AJS_53_08	<100	2620	195	106	25.5	57	131	63	<5	<1
AJS_54_08	<100	5560	21	10.4	7.8	15	29	57	<5	31
AJS_55_08	<100	2940	29	13.9	12.3	15	43	133	<5	94
AJS_56_08	<100	920	7	5.8	1.2	328	4	24	<5	4
*Rep AJS_56_08	<100	1130	6	4.7	1.3	396	5	24	<5	3
AJS_57_08	<100	320	14	8.7	1.9	89	8	18	<5	2
AJS_58_08	<100	760	12	8.2	2.3	116	9	28	<5	<1
AJS_59_08	<100	1190	13	8.8	3.0	373	12	85	<5	3
AJS_60_08	<100	510	5	3.6	0.6	250	3	12	<5	5
AJS_61_08	<100	1470	76	35.8	14.3	42	71	53	<5	<1

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
AJS_62_08	<100	1260	19	10.2	2.8	89	12	14	<5	<1
HDIS_107_08	<100	940	322	125	127	5	567	66	<5	23
Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
HDIS_108_08	<100	130	53	18.4	19.0	18	83	26	<5	11
HDIS_109_08	<100	70	94	43.1	29.6	38	121	55	<5	10
HDIS_130_08	<100	1190	32	10.7	11.7	5	62	3	<5	51
HDIS_131_08	<100	1270	36	12.7	13.2	6	66	5	<5	48
HDIS_132_08	<100	110	36	15.0	8.8	8	36	26	<5	<1
*Rep HDIS_132_08	<100	100	33	13.3	8.5	7	35	23	<5	<1
HDIS_133_08	<100	170	38	12.9	11.3	25	47	40	<5	<1
HDIS_157_08	100	320	35	15.1	10.8	89	43	40	7	2
HDIS_158_08	<100	70	26	13.7	6.2	51	28	16	6	46
HDIS_159_08	<100	260	120	57.1	28.4	14	127	51	<5	2
HDIS_184_08	<100	200	48	27.7	6.4	80	33	23	<5	9
HDIS_185_08	<100	60	24	11.6	5.3	23	25	18	<5	25
HDIS_186_08	<100	110	27	12.4	7.1	32	33	29	<5	11
HDIS_211_08	<100	240	112	51.8	15.5	44	79	14	5	13
*Std MMISRM16	<100	630	2	0.9	1.1	3	4	4	<5	38
*Std MMISRM16	<100	530	3	1.0	1.2	2	5	3	<5	32
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
AJS_1_08	78	4.8	353	72	580	<1	92	<1	68	6
*Rep AJS_1_08	89	3.3	518	76	370	<1	134	<1	68	7
AJS_2_08	21	1.5	61	115	540	<1	16	<1	74	3
AJS_3_08	19	1.4	25	68	200	<1	7	<1	72	3
AJS_4_08	6	0.6	152	98	1030	<1	41	<1	34	2
AJS_5_08	<5	1.8	120	69	1450	<1	31	<1	69	2
AJS_6_08	9	<0.5	708	169	260	<1	188	<1	69	2
AJS_7_08	<5	0.7	102	96	1210	<1	28	<1	62	<1
AJS_8_08	11	0.9	38	89	310	<1	12	<1	103	3
AJS_9_08	<5	0.6	100	126	7730	<1	24	<1	117	<1
AJS_10_08	5	<0.5	673	146	1570	<1	208	<1	59	2
AJS_11_08	8	0.6	362	105	1290	<1	97	<1	60	3
AJS_12_08	7	0.9	101	98	1750	<1	26	<1	98	2
AJS_22_08	<5	0.6	274	116	4460	<1	63	<1	93	1
*Rep AJS_22_08	8	1.2	546	170	3060	<1	151	<1	89	2
AJS_23_08	12	0.7	449	29	1900	<1	127	<1	85	3
AJS_24_08	6	0.5	529	27	1330	<1	136	<1	62	1
AJS_63_08	6	1.2	193	225	1070	<1	35	<1	98	16
AJS_64_08	5	1.4	126	128	820	<1	25	<1	100	3
AJS_65_08	6	<0.5	93	157	1910	<1	20	<1	100	5
AJS_66_08	<5	3.8	18	104	250	<1	4	<1	91	1
AJS_67_08	7	2.9	11	46	2090	<1	3	<1	118	19
HDIS_331_08	<5	<0.5	190	143	1220	<1	34	<1	160	2
HDIS_332_08	<5	<0.5	121	338	2320	<1	21	<1	89	6
HDIS_333_08	6	0.6	55	425	510	<1	10	<1	29	71
HDIS_334_08	<5	<0.5	5	491	20	<1	1	<1	63	2
HDIS_354_08	<5	<0.5	69	478	830	<1	9	<1	86	<1
*Rep HDIS_354_08	<5	<0.5	72	462	840	<1	9	<1	87	<1
HDIS_355_08	<5	0.8	12	82	220	<1	3	<1	150	<1
HDIS_356_08	<5	1.0	347	26	1350	<1	64	<1	309	5
HDIS_357_08	<5	1.7	744	68	2120	<1	143	<1	241	27
HDIS_358_08	<5	<0.5	41	309	610	<1	7	<1	25	66
AJS_49_08	9	0.5	157	535	2170	<1	32	<1	159	9
AJS_50_08	<5	0.8	20	92	540	<1	5	<1	162	3
AJS_51_08	<5	<0.5	25	107	4680	<1	6	<1	79	3
AJS_52_08	5	0.5	54	169	10500	<1	12	<1	172	14
AJS_53_08	<5	<0.5	233	94	5950	<1	39	<1	67	7
AJS_54_08	20	<0.5	106	1980	50	<1	22	<1	77	12
AJS_55_08	32	<0.5	173	1160	100	<1	39	<1	48	4
AJS_56_08	16	1.5	18	124	110	<1	5	<1	240	6
*Rep AJS_56_08	22	1.9	19	154	120	<1	5	<1	247	6
AJS_57_08	7	1.5	21	75	330	<1	5	<1	172	3
AJS_58_08	5	1.0	31	48	310	<1	8	<1	137	3
AJS_59_08	43	0.8	59	103	530	<1	17	<1	77	7
AJS_60_08	28	1.1	10	184	40	<1	3	<1	46	3
AJS_61_08	6	1.5	158	179	530	<1	30	<1	133	4

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
AJS_62_08	8	1.6	23	116	190	<1	5	<1	144	3
HDIS_107_08	<5	<0.5	509	202	1970	<1	68	<1	164	<1
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
HDIS_108_08	<5	<0.5	134	170	380	<1	20	<1	227	<1
HDIS_109_08	<5	<0.5	203	131	420	<1	33	<1	49	2
HDIS_130_08	<5	<0.5	45	210	230	<1	5	<1	88	2
HDIS_131_08	<5	<0.5	63	158	150	<1	7	<1	122	3
HDIS_132_08	<5	<0.5	87	26	3380	<1	17	<1	82	3
*Rep HDIS_132_08	<5	<0.5	84	26	3210	<1	15	<1	81	3
HDIS_133_08	<5	0.5	99	88	2880	<1	19	<1	94	8
HDIS_157_08	<5	3.4	96	126	1610	<1	18	<1	176	18
HDIS_158_08	<5	0.7	41	76	740	<1	7	<1	100	2
HDIS_159_08	<5	<0.5	170	199	1680	<1	27	<1	146	5
HDIS_184_08	<5	1.8	51	105	560	<1	10	<1	76	<1
HDIS_185_08	<5	<0.5	41	73	990	<1	8	<1	98	8
HDIS_186_08	<5	0.8	62	120	1230	<1	12	<1	286	39
HDIS_211_08	<5	0.5	89	97	950	<1	13	<1	96	2
*Std MMISRM16	54	<0.5	15	217	110	30	3	<1	338	<1
*Std MMISRM16	52	<0.5	16	218	100	25	3	<1	305	<1
*Blk BLANK	<5	<0.5	2	<5	<10	<1	<1	<1	<5	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
AJS_1_08	152	72	1	2510	5	11	20	421	565	1.8
*Rep AJS_1_08	143	97	<1	2870	2	13	<10	384	580	2.2
AJS_2_08	102	15	<1	460	2	3	<10	393	219	1.6
AJS_3_08	34	6	<1	360	2	1	<10	224	283	1.3
AJS_4_08	64	31	<1	2110	1	6	<10	266	41	2.1
AJS_5_08	28	24	<1	670	1	4	<10	313	203	1.2
AJS_6_08	72	126	<1	4970	1	16	<10	202	4	1.8
AJS_7_08	40	22	<1	340	1	3	<10	240	174	1.8
AJS_8_08	35	7	<1	1310	1	1	<10	260	169	1.6
AJS_9_08	80	26	<1	110	1	8	<10	278	77	1.5
AJS_10_08	117	110	<1	1440	1	17	<10	569	30	1.9
AJS_11_08	53	71	<1	1370	1	11	<10	897	115	1.3
AJS_12_08	41	25	<1	720	1	6	<10	485	213	2.5
AJS_22_08	65	65	<1	730	1	15	<10	712	121	2.0
*Rep AJS_22_08	71	101	<1	570	1	14	<10	992	159	1.8
AJS_23_08	64	85	<1	550	1	11	<10	955	198	1.5
AJS_24_08	72	109	<1	520	1	15	<10	865	129	1.4
AJS_63_08	61	66	<1	290	1	18	<10	83.4	188	3.8
AJS_64_08	50	39	<1	70	1	10	<10	36.1	248	1.8
AJS_65_08	36	25	<1	390	<1	7	<10	27.9	86	2.6
AJS_66_08	31	6	<1	120	1	2	<10	21.8	371	1.1
AJS_67_08	29	3	<1	50	1	<1	<10	33.0	286	3.7
HDIS_331_08	68	74	<1	490	<1	16	<10	70.6	141	0.8
HDIS_332_08	47	50	<1	1140	<1	11	<10	75.3	23	0.6
HDIS_333_08	15	17	<1	2450	<1	3	<10	27.3	36	<0.5
HDIS_334_08	13	2	<1	910	<1	<1	<10	4.4	61	1.7
HDIS_354_08	7	44	<1	2840	<1	13	<10	14.4	<3	0.6
*Rep HDIS_354_08	7	45	<1	2860	<1	13	<10	13.8	<3	0.6
HDIS_355_08	35	4	<1	140	1	2	<10	15.7	212	1.0
HDIS_356_08	108	99	<1	<10	1	16	<10	26.2	551	2.1
HDIS_357_08	149	229	<1	40	1	32	<10	103	959	1.7
HDIS_358_08	11	15	<1	2020	<1	2	<10	44.9	44	<0.5
AJS_49_08	37	46	<1	2120	<1	11	<10	60.0	135	2.4
AJS_50_08	21	6	<1	270	<1	1	<10	21.5	317	1.8
AJS_51_08	16	7	<1	810	<1	2	<10	21.7	83	3.8
AJS_52_08	45	17	<1	270	<1	5	<10	89.8	119	5.9
AJS_53_08	45	82	<1	230	<1	27	<10	39.2	95	3.4
AJS_54_08	<5	27	<1	4430	<1	4	<10	47.0	<3	1.9
AJS_55_08	13	40	<1	6550	<1	6	<10	87.4	<3	1.4
AJS_56_08	19	4	<1	400	<1	<1	<10	78.9	417	1.3
*Rep AJS_56_08	18	4	<1	320	<1	<1	<10	81.5	587	1.2
AJS_57_08	37	7	<1	110	<1	2	<10	90.8	446	1.0
AJS_58_08	43	8	<1	100	<1	2	<10	76.3	413	2.0
AJS_59_08	58	13	<1	490	<1	2	<10	283	305	1.5
AJS_60_08	20	2	<1	360	<1	<1	<10	51.1	354	2.0
AJS_61_08	53	50	<1	510	<1	12	<10	46.0	251	2.9

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
AJS_62_08	28	8	<1	60	<1	3	<10	22.2	357	1.8
HDIS_107_08	47	363	<1	940	1	68	<10	28.9	10	<0.5
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
HDIS_108_08	13	63	<1	1080	<1	11	<10	18.5	61	0.6
HDIS_109_08	19	85	<1	920	<1	17	<10	13.3	60	<0.5
HDIS_130_08	14	35	<1	1420	<1	7	<10	19.3	<3	<0.5
HDIS_131_08	15	43	<1	1180	<1	8	<10	20.4	<3	<0.5
HDIS_132_08	45	27	<1	20	<1	6	<10	7.2	139	1.9
*Rep HDIS_132_08	42	25	<1	20	<1	6	<10	8.3	129	1.9
HDIS_133_08	36	37	<1	50	<1	7	<10	31.1	253	1.5
HDIS_157_08	75	38	<1	50	1	7	<10	111	1460	1.6
HDIS_158_08	30	18	<1	2430	<1	4	<10	13.5	263	<0.5
HDIS_159_08	92	79	<1	690	<1	20	<10	28.1	54	0.7
HDIS_184_08	79	20	<1	290	<1	7	<10	44.6	569	0.6
HDIS_185_08	20	16	<1	1250	<1	4	<10	7.1	152	0.6
HDIS_186_08	33	24	<1	620	<1	5	<10	29.3	407	1.2
HDIS_211_08	45	45	<1	700	<1	16	<10	13.0	255	0.7
*Std MMISRM16	11	4	<1	540	<1	<1	<10	32.4	<3	<0.5
*Std MMISRM16	11	5	<1	470	<1	<1	<10	33.1	<3	<0.5
*BIK BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*BIK BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
AJS_1_08	3600	2	340	30	360	80
*Rep AJS_1_08	3730	<1	408	35	400	80
AJS_2_08	1220	<1	108	12	<20	48
AJS_3_08	672	<1	32	4	<20	36
AJS_4_08	2210	2	262	17	20	25
AJS_5_08	132	2	122	8	1330	31
AJS_6_08	8100	2	601	39	540	36
AJS_7_08	358	2	91	8	120	36
AJS_8_08	1290	2	37	3	80	23
AJS_9_08	656	1	347	28	510	64
AJS_10_08	2340	1	607	43	120	45
AJS_11_08	1380	2	301	19	1680	42
AJS_12_08	1190	1	187	13	1840	26
AJS_22_08	1490	1	495	36	2080	23
*Rep AJS_22_08	1850	2	363	24	1460	38
AJS_23_08	3480	3	289	20	190	66
AJS_24_08	2640	2	410	28	120	78
AJS_63_08	107	1	605	49	2790	120
AJS_64_08	42	1	308	25	660	52
AJS_65_08	89	1	263	16	440	25
AJS_66_08	29	1	65	6	1690	42
AJS_67_08	43	3	21	2	260	54
HDIS_331_08	54	1	392	25	120	67
HDIS_332_08	36	1	262	18	550	59
HDIS_333_08	59	1	66	5	100	23
HDIS_334_08	37	1	16	2	110	14
HDIS_354_08	140	1	347	19	470	17
*Rep HDIS_354_08	139	1	354	19	450	17
HDIS_355_08	11	1	62	6	190	58
HDIS_356_08	21	1	445	26	50	54
HDIS_357_08	31	1	695	40	130	147
HDIS_358_08	19	1	63	4	210	29
AJS_49_08	121	1	374	27	1090	64
AJS_50_08	64	1	34	7	1060	26
AJS_51_08	76	1	117	20	160	21
AJS_52_08	148	1	178	32	550	94
AJS_53_08	92	1	1100	71	390	56
AJS_54_08	191	1	111	9	<20	8
AJS_55_08	1980	1	160	11	90	30
AJS_56_08	427	2	34	5	<20	22
*Rep AJS_56_08	365	2	29	4	<20	24
AJS_57_08	83	1	58	6	370	55
AJS_58_08	123	1	57	6	210	42
AJS_59_08	2400	3	71	8	<20	52
AJS_60_08	66	1	20	3	80	26
AJS_61_08	74	2	370	23	560	86

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
AJS_62_08	54	1	84	7	200	48
HDIS_107_08	96	1	1300	81	140	63
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
HDIS_108_08	16	1	216	11	60	38
HDIS_109_08	13	1	451	28	950	26
HDIS_130_08	26	<1	136	6	280	17
HDIS_131_08	24	<1	160	8	220	22
HDIS_132_08	7	<1	166	9	<20	18
*Rep HDIS_132_08	7	<1	153	8	60	23
HDIS_133_08	9	1	136	8	830	63
HDIS_157_08	25	1	124	11	510	203
HDIS_158_08	57	1	142	9	3370	31
HDIS_159_08	43	1	693	36	290	54
HDIS_184_08	14	1	227	20	1570	135
HDIS_185_08	14	1	127	8	880	24
HDIS_186_08	21	1	128	8	590	58
HDIS_211_08	14	1	534	32	3170	22
*Std MMISRM16	46	<1	10	<1	200	13
*Std MMISRM16	45	<1	10	<1	140	14
*BIK BLANK	<1	<1	<5	<1	<20	<5
*BIK BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101882

To: **Logan Resources Ltd.**

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

Date: Sep 08, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 26
Date Submitted Jul 22, 2008
Report Comprises Pages 1 to 6
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 26 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
AJS_76_08	4	111	280	0.9	780	5	140	17	88	828
*Rep AJS_76_08	2	86	320	0.9	810	5	100	15	53	701
AJS_77_08	13	<1	160	1.8	700	3	20	17	243	607
AJS_78_08	9	<1	430	0.4	1750	3	60	16	228	114
AJS_79_08	12	100	70	1.5	1020	<1	90	37	77	800
AJS_80_08	1	85	500	0.4	880	5	60	16	77	561
AJS_81_08	23	<1	210	0.5	1280	2	20	10	621	96
AJS_82_08	3	131	140	0.4	1060	3	<10	3	90	198
AJS_83_08	14	<1	160	0.6	840	2	<10	6	176	197
AJS_84_08	11	<1	140	0.4	2220	3	30	43	265	606
AJS_85_08	10	<1	60	0.2	310	<1	<10	9	63	138
AJS_86_08	3	124	40	0.3	850	<1	40	14	65	371
AJS_87_08	14	136	80	0.5	690	1	200	25	147	104
AJS_88_08	<1	80	60	0.2	610	3	60	4	17	380
*Rep AJS_88_08	<1	78	60	0.2	650	3	60	5	20	362
AJS_89_08	14	<1	170	0.3	350	1	10	5	265	82
AJS_90_08	3	<1	20	0.2	920	1	10	13	56	286
AJS_91_08	40	<1	1260	0.7	1030	3	30	19	1010	505
AJS_92_08	47	<1	110	0.5	910	2	10	30	334	125
AJS_93_08	4	159	40	0.3	1220	1	10	4	105	194
AJS_94_08	22	<1	100	0.5	1440	1	20	12	298	148
AJS_95_08	27	179	430	0.8	1090	2	80	17	548	709
AJS_96_08	3	<1	240	0.3	1150	2	10	9	220	285
HDIS_212_08	22	<1	10	<0.1	1120	<1	80	30	51	25
HDIS_213_08	6	152	50	<0.1	870	<1	240	11	26	16
HDIS_240_08	131	23	<10	0.3	3860	<1	430	42	22	425
HDIS_241_08	19	102	30	0.2	2100	<1	260	10	88	135
*Rep HDIS_241_08	16	99	40	0.3	1870	<1	240	9	93	257
HDIS_242_08	<1	22	990	0.3	1000	<1	350	3	54	92
*Std MMISRM16	26	49	20	30.7	80	<1	210	4	26	61
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Order:

Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
AJS_76_08	<100	4530	9	5.8	2.3	223	10	31	<5	7
*Rep AJS_76_08	<100	5590	6	4.0	1.3	307	6	18	<5	7
AJS_77_08	<100	4470	34	20.1	7.3	111	36	97	<5	<1
AJS_78_08	<100	580	22	8.9	6.4	60	28	93	<5	2
AJS_79_08	<100	2900	35	23.3	6.8	95	36	36	<5	8
AJS_80_08	<100	210	15	10.1	2.5	349	14	37	<5	12
AJS_81_08	<100	620	73	31.1	23.9	98	105	314	<5	1
AJS_82_08	<100	1820	11	7.1	2.3	366	10	36	<5	2
AJS_83_08	<100	630	56	30.6	11.5	72	55	65	<5	<1
AJS_84_08	<100	1360	30	16.1	5.1	198	26	116	<5	5
AJS_85_08	<100	610	18	10.0	3.6	49	16	20	<5	<1
AJS_86_08	<100	3330	11	6.9	1.8	170	9	22	<5	3
AJS_87_08	<100	1170	35	19.4	8.0	43	41	61	<5	8
AJS_88_08	<100	1160	2	1.2	<0.5	328	2	5	<5	7
*Rep AJS_88_08	<100	1470	2	1.2	<0.5	323	2	6	<5	6
AJS_89_08	<100	820	45	20.0	14.8	81	57	88	<5	<1
AJS_90_08	<100	700	13	8.7	1.7	111	8	25	<5	1
AJS_91_08	<100	1740	46	19.7	14.1	159	67	377	<5	3
AJS_92_08	<100	800	78	35.8	16.3	85	80	127	<5	2
AJS_93_08	<100	1980	9	5.6	2.0	302	10	51	<5	3
AJS_94_08	<100	650	96	50.4	20.7	70	104	132	<5	2
AJS_95_08	<100	2220	80	41.5	19.5	125	98	209	<5	4
AJS_96_08	<100	1100	21	12.2	4.1	221	19	141	<5	3
HDIS_212_08	<100	140	42	20.5	7.5	37	35	16	<5	7
HDIS_213_08	<100	60	12	6.0	2.5	85	12	9	<5	27
HDIS_240_08	<100	1410	19	8.5	4.6	10	25	5	10	93
HDIS_241_08	<100	570	20	9.5	5.9	57	24	22	<5	17
*Rep HDIS_241_08	<100	970	15	6.9	4.4	110	18	21	<5	16
HDIS_242_08	<100	380	11	6.1	3.7	133	15	21	6	34
*Std MMISRM16	<100	710	3	1.1	1.4	3	6	6	<5	42
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Order:

Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
AJS_76_08	8	0.6	40	231	410	<1	9	<1	142	11
*Rep AJS_76_08	8	<0.5	22	242	350	<1	5	<1	170	9
AJS_77_08	<5	0.6	121	111	450	<1	30	<1	166	5
AJS_78_08	8	1.8	105	138	280	<1	26	<1	206	17
AJS_79_08	8	<0.5	85	118	280	<1	17	<1	251	10
AJS_80_08	18	1.0	44	813	170	<1	10	<1	299	31
AJS_81_08	6	5.6	448	48	440	<1	106	<1	292	16
AJS_82_08	8	2.7	40	179	70	<1	10	<1	254	17
AJS_83_08	7	3.4	141	46	520	<1	29	<1	211	14
AJS_84_08	6	1.8	107	251	500	<1	28	<1	134	35
AJS_85_08	7	1.1	39	36	210	<1	8	<1	206	5
AJS_86_08	8	<0.5	31	236	260	<1	7	<1	101	8
AJS_87_08	8	0.7	118	105	580	<1	25	<1	124	8
AJS_88_08	8	0.7	7	212	30	<1	2	<1	223	5
*Rep AJS_88_08	10	0.7	7	214	40	<1	2	<1	228	5
AJS_89_08	14	2.7	187	52	100	<1	41	<1	190	10
AJS_90_08	<5	1.1	24	97	150	<1	6	<1	210	2
AJS_91_08	12	2.9	346	149	560	<1	99	<1	226	73
AJS_92_08	5	3.0	262	178	560	<1	56	<1	256	22
AJS_93_08	<5	1.5	45	212	40	<1	12	<1	167	10
AJS_94_08	<5	3.0	290	38	1300	<1	59	<1	237	9
AJS_95_08	7	2.0	352	79	230	<1	78	<1	342	21
AJS_96_08	6	3.3	93	142	100	<1	26	<1	203	7
HDIS_212_08	<5	<0.5	54	159	2000	<1	9	<1	162	5
HDIS_213_08	<5	0.8	22	57	1030	<1	4	<1	32	7
HDIS_240_08	<5	<0.5	23	701	410	<1	3	<1	26	4
HDIS_241_08	<5	<0.5	52	74	500	<1	10	<1	172	15
*Rep HDIS_241_08	<5	<0.5	45	71	390	<1	9	<1	170	18
HDIS_242_08	<5	0.8	45	310	180	<1	9	<1	21	182
*Std MMISRM16	54	<0.5	20	278	130	27	4	<1	350	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Order:

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
AJS_76_08	19	9	<1	880	<1	2	<10	19.0	107	2.7
*Rep AJS_76_08	19	5	<1	930	<1	1	<10	15.1	76	2.8
AJS_77_08	30	31	<1	280	<1	6	<10	37.8	245	3.0
AJS_78_08	24	25	<1	190	<1	4	<10	39.9	651	3.1
AJS_79_08	51	25	<1	700	<1	6	<10	15.1	140	3.7
AJS_80_08	24	11	<1	440	<1	2	<10	27.1	316	0.7
AJS_81_08	73	100	1	80	<1	15	<10	77.6	2940	4.2
AJS_82_08	38	9	<1	90	<1	2	<10	36.0	936	2.8
AJS_83_08	69	42	<1	40	<1	9	<10	48.9	1560	3.2
AJS_84_08	43	23	<1	320	<1	5	<10	68.4	408	6.6
AJS_85_08	26	12	<1	30	<1	3	<10	28.4	338	2.5
AJS_86_08	24	7	<1	980	<1	2	<10	22.3	110	2.9
AJS_87_08	24	33	<1	1350	<1	6	<10	28.0	166	2.1
AJS_88_08	11	2	<1	260	<1	<1	<10	8.8	193	1.2
*Rep AJS_88_08	11	2	<1	260	<1	<1	<10	9.3	227	1.2
AJS_89_08	44	52	<1	40	<1	9	<10	62.5	1180	2.4
AJS_90_08	21	6	<1	140	<1	2	<10	28.3	321	2.3
AJS_91_08	45	68	8	120	<1	10	<10	166	1140	5.0
AJS_92_08	62	67	<1	100	<1	14	<10	65.0	553	3.5
AJS_93_08	20	9	<1	130	<1	2	<10	30.2	421	5.0
AJS_94_08	85	80	<1	150	<1	16	<10	46.8	1530	3.9
AJS_95_08	56	85	<1	330	<1	15	<10	71.4	557	3.7
AJS_96_08	23	18	<1	130	<1	3	<10	44.8	1120	3.0
HDIS_212_08	31	22	<1	510	<1	7	<10	17.2	124	0.9
HDIS_213_08	21	8	<1	990	<1	2	<10	17.2	171	<0.5
HDIS_240_08	8	13	<1	2310	<1	3	<10	22.5	<3	0.7
HDIS_241_08	20	18	<1	1160	<1	4	<10	11.9	87	1.1
*Rep HDIS_241_08	24	14	<1	1030	<1	3	<10	12.1	111	1.3
HDIS_242_08	16	13	<1	1980	<1	2	<10	10.4	59	<0.5
*Std MMISRM16	11	6	<1	510	<1	<1	<10	31.0	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	0.6	4	<0.5

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Order:

Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
AJS_76_08	56	2	58	5	230	29
*Rep AJS_76_08	49	2	38	4	150	23
AJS_77_08	135	3	162	16	190	39
AJS_78_08	26	1	91	6	350	119
AJS_79_08	108	<1	217	19	240	52
AJS_80_08	96	<1	91	8	340	74
AJS_81_08	66	2	341	22	220	234
AJS_82_08	39	<1	52	6	220	95
AJS_83_08	71	<1	298	22	580	130
AJS_84_08	57	<1	152	11	1040	135
AJS_85_08	54	<1	77	7	140	113
AJS_86_08	35	<1	60	6	80	31
AJS_87_08	47	<1	199	14	190	63
AJS_88_08	28	<1	10	1	100	20
*Rep AJS_88_08	28	<1	10	1	100	22
AJS_89_08	97	<1	195	14	180	250
AJS_90_08	19	<1	62	6	200	63
AJS_91_08	67	2	205	15	580	352
AJS_92_08	65	<1	356	24	620	189
AJS_93_08	30	<1	40	5	210	58
AJS_94_08	63	<1	520	34	330	120
AJS_95_08	121	<1	431	29	350	210
AJS_96_08	31	<1	94	10	410	80
HDIS_212_08	20	<1	220	13	430	25
HDIS_213_08	11	<1	60	4	320	43
HDIS_240_08	105	<1	87	6	450	15
HDIS_241_08	24	<1	100	7	170	31
*Rep HDIS_241_08	22	<1	71	5	120	33
HDIS_242_08	118	<1	69	6	250	18
*Std MMISRM16	50	<1	13	<1	240	16
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101883

To: **Logan Resources Ltd.**

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

Date: Sep 29, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 83
Date Submitted Jul 22, 2008
Report Comprises Pages 1 to 16
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 83 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Final : TO101883 Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
AJS_13_08	1	131	220	0.6	2440	1	50	3	120	249
*Rep AJS_13_08	1	136	200	0.6	1790	<1	50	3	111	294
AJS_14_08	5	216	110	0.5	1080	<1	20	7	47	145
AJS_15_08	2	112	5320	2.0	2610	7	180	3	185	793
AJS_16_08	1	155	620	0.2	650	2	30	<1	31	151
AJS_17_08	2	110	1800	1.0	1470	4	210	3	63	549
AJS_18_08	2	171	1140	1.0	850	2	40	1	51	177
AJS_19_08	3	207	80	0.2	1640	<1	20	<1	77	198
AJS_20_08	13	234	550	1.6	2530	2	120	8	1370	75
AJS_21_08	12	282	600	0.4	1900	1	120	26	501	141
AJS_25_08	4	99	1920	1.7	2500	16	240	2	78	710
AJS_26_08	<1	174	40	<0.1	410	1	<10	<1	22	25
AJS_27_08	3	112	1570	3.5	1730	<1	100	3	51	782
AJS_28_08	10	227	90	0.9	1470	<1	50	4	372	109
*Rep AJS_28_08	9	229	90	1.1	1510	<1	50	4	290	137
AJS_29_08	4	214	180	3.5	2340	<1	130	6	253	726
AJS_30_08	5	204	130	1.6	860	<1	20	7	84	231
AJS_31_08	2	128	1300	1.4	2610	1	90	2	42	421
AJS_32_08	18	178	290	3.5	3410	<1	230	172	507	1920
AJS_33_08	2	70	3130	1.2	1530	2	390	6	467	391
AJS_34_08	5	182	1080	1.3	3580	<1	70	4	211	1030
AJS_35_08	13	148	2000	6.1	4050	4	140	15	1300	325
AJS_36_08	5	221	1070	7.1	2670	3	120	16	956	373
AJS_37_08	48	136	480	2.0	970	3	350	54	184	362
AJS_38_08	7	125	3210	12.5	2080	23	160	5	43	703
AJS_39_08	4	106	3440	2.5	1160	27	260	1	41	188
AJS_40_08	3	213	140	0.4	1460	2	20	2	57	191
*Rep AJS_40_08	4	196	110	0.5	1630	2	20	2	49	221
AJS_41_08	6	167	90	0.4	690	<1	<10	<1	26	123
AJS_42_08	<1	162	110	<0.1	610	<1	30	5	16	53
AJS_43_08	4	192	560	1.9	1740	<1	70	5	51	564
AJS_44_08	4	194	400	1.9	1350	<1	30	5	48	159
AJS_45_08	5	204	420	1.8	1390	1	20	6	140	291
AJS_46_08	2	108	5650	1.6	2570	4	80	6	268	1290
AJS_47_08	3	143	1660	2.0	1150	6	30	4	112	290
AJS_48_08	3	170	1000	0.3	900	4	30	2	141	233
AJS_68_08	3	174	160	0.8	660	6	10	<1	41	78
AJS_69_08	5	134	150	2.4	1370	4	50	9	40	672
AJS_70_08	13	>300	210	1.0	1320	3	30	15	427	153
AJS_71_08	4	160	1460	1.4	1420	5	70	8	219	789
*Rep AJS_71_08	5	168	1030	1.7	1350	4	60	10	147	736
AJS_72_08	4	178	580	2.0	2060	6	20	2	71	250
AJS_73_08	2	174	130	0.4	1210	4	30	2	33	205

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Final : TO101883 Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
AJS_74_08	7	160	10	0.2	1440	<1	290	29	81	149
AJS_75_08	5	253	60	<0.1	740	4	140	30	94	99
AJS_97_08	12	274	350	0.9	880	12	40	7	668	96
AJS_98_08	11	245	70	0.2	1020	3	30	12	486	459
AJS_99_08	14	201	80	0.4	940	2	60	11	501	187
AJS_100_08	3	240	30	<0.1	1440	2	180	41	202	62
AJS_101_08	39	>300	570	1.2	350	2	10	5	74	19
AJS_102_08	9	260	120	0.1	1110	3	80	15	365	140
AJS_103_08	146	>300	220	0.4	500	3	10	7	80	21
AJS_104_08	8	>300	70	0.1	750	1	60	19	163	237
*Rep AJS_104_08	9	>300	110	0.2	620	1	50	13	172	257
AJS_105_08	32	137	20	0.4	2580	<1	580	80	956	683
AJS_106_08	6	297	700	2.5	720	3	<10	5	238	448
AJS_107_08	4	278	540	0.4	1480	2	60	17	267	941
AJS_108_08	7	246	310	0.1	1150	<1	220	11	294	177
CHYS_1192_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_1193_08	<1	158	40	0.1	880	<1	250	8	28	152
CHYS_1208_08	10	>300	20	0.1	960	<1	20	15	221	29
CHYS_1209_08	7	>300	<10	<0.1	1200	<1	50	14	231	102
CHYS_1223_08	4	215	20	0.1	670	1	<10	<1	38	131
CHYS_1224_08	6	216	20	0.2	2820	1	130	11	279	343
CHYS_1236_08	7	135	10	<0.1	2130	<1	280	17	151	622
HDIS_412_08	95	41	<10	0.2	980	<1	320	12	28	214
*Rep HDIS_412_08	100	42	<10	0.2	1020	<1	310	10	35	355
HDIS_413_08	2	104	70	0.4	700	5	90	9	44	642
HDIS_414_08	2	158	10	<0.1	1050	<1	280	37	76	133
HDIS_441_08	39	51	<10	<0.1	690	<1	360	22	113	110
HDIS_442_08	5	110	<10	0.1	660	<1	300	17	78	99
HDIS_443_08	7	86	<10	<0.1	590	<1	510	13	89	62
HDIS_456_08	19	104	160	0.2	1300	2	400	32	144	150
HDIS_457_08	4	193	40	0.1	650	1	30	2	56	491
HDIS_458_08	14	47	20	0.2	1430	<1	480	3	60	210
HDIS_459_08	1	98	230	<0.1	1210	10	260	19	91	270
HDIS_460_08	8	36	40	0.2	610	<1	430	4	77	283
HDIS_461_08	2	94	20	<0.1	1250	2	110	7	64	264
HDIS_462_08	3	65	30	<0.1	1120	<1	270	5	43	220
*Rep HDIS_462_08	3	67	30	<0.1	1080	<1	250	4	49	283
HDIS_463_08	11	66	<10	<0.1	1490	<1	340	4	51	17
HDIS_464_08	8	83	<10	<0.1	2120	<1	300	7	224	195
HDIS_465_08	10	276	<10	<0.1	2220	<1	40	10	341	594
HDIS_471_08	5	116	<10	0.3	570	<1	240	13	89	91
HDIS_472_08	392	3	40	0.3	160	<1	400	3	<5	6
HDIS_473_08	35	74	30	0.4	870	<1	230	30	399	624

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Final : TO101883 Order:

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
HDIS_520_08	11	133	30	0.2	1220	<1	230	24	136	99
HDIS_545_08	2	146	<10	<0.1	1540	<1	80	15	20	365
HDIS_496_08	2	117	<10	<0.1	960	<1	260	31	130	108
CHYS_1193_08A	3	172	40	<0.1	720	2	20	<1	38	124
*Std MMISRM16	16	48	20	28.2	80	<1	220	3	21	51
*Std MMISRM16	15	48	<10	28.4	80	<1	230	3	19	49
*Std MMISRM16	15	41	20	25.3	70	<1	200	4	20	46
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	2	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
AJS_13_08	<100	1660	13	8.6	3.1	295	12	66	16	5
*Rep AJS_13_08	<100	1690	12	7.6	2.9	295	12	59	14	5
AJS_14_08	<100	480	21	15.1	2.5	69	12	35	8	1
AJS_15_08	<100	690	16	11.7	3.6	352	15	118	9	15
AJS_16_08	<100	510	3	2.1	0.7	338	3	19	8	3
AJS_17_08	<100	180	6	3.3	1.3	211	6	39	6	25
AJS_18_08	<100	840	5	3.9	1.1	290	4	29	12	4
AJS_19_08	<100	690	5	3.1	1.3	264	5	43	9	<1
AJS_20_08	<100	450	99	44.0	41.6	38	169	1270	11	3
AJS_21_08	<100	180	21	9.3	6.5	104	28	258	9	8
AJS_25_08	<100	870	14	11.0	3.2	421	11	41	9	14
AJS_26_08	<100	390	3	1.6	0.7	415	3	14	<5	2
AJS_27_08	<100	2200	10	9.6	1.5	235	7	39	6	8
AJS_28_08	<100	420	60	29.3	18.6	31	78	222	<5	<1
*Rep AJS_28_08	<100	500	49	25.1	14.2	46	60	170	8	<1
AJS_29_08	<100	480	51	30.8	10.2	19	45	167	5	10
AJS_30_08	<100	490	38	22.6	6.3	36	29	49	7	1
AJS_31_08	<100	2460	9	9.1	1.3	245	5	24	6	8
AJS_32_08	<100	1820	63	37.7	17.5	81	66	327	<5	21
AJS_33_08	<100	1070	23	11.9	8.2	147	36	275	5	40
AJS_34_08	<100	1630	14	8.3	3.2	336	13	120	5	13
AJS_35_08	<100	2040	68	34.3	29.7	137	112	1060	<5	7
AJS_36_08	<100	860	37	16.4	16.5	58	61	644	5	5
AJS_37_08	<100	1220	27	14.2	8.1	40	33	109	6	23
AJS_38_08	<100	6650	8	6.1	2.0	372	7	24	<5	12
AJS_39_08	<100	290	14	11.0	2.8	418	10	21	<5	26
AJS_40_08	<100	1040	7	4.5	1.5	248	6	26	<5	2
*Rep AJS_40_08	<100	1280	6	4.1	1.3	248	5	22	<5	2
AJS_41_08	<100	790	5	4.1	1.0	220	4	14	<5	1
AJS_42_08	<100	300	1	0.6	<0.5	411	2	11	<5	6
AJS_43_08	<100	780	24	17.0	2.8	95	13	42	<5	4
AJS_44_08	<100	980	9	6.3	1.5	189	6	24	<5	2
AJS_45_08	<100	550	65	37.7	9.5	47	46	72	<5	1
AJS_46_08	<100	1480	32	20.9	7.2	445	34	130	<5	18
AJS_47_08	<100	2720	13	9.7	2.6	349	11	66	<5	3
AJS_48_08	<100	330	10	6.2	2.5	308	10	94	<5	7
AJS_68_08	<100	2770	12	10.5	1.7	209	8	20	<5	1
AJS_69_08	<100	4530	20	23.4	1.7	221	9	19	<5	4
AJS_70_08	<100	1280	96	41.8	21.8	63	111	188	<5	2
AJS_71_08	<100	5060	55	34.6	10.4	409	55	123	6	8
*Rep AJS_71_08	<100	5150	59	44.6	8.4	307	45	82	<5	8
AJS_72_08	<100	3410	11	7.5	1.7	314	8	34	<5	3
AJS_73_08	<100	1340	6	4.1	1.1	290	5	15	<5	3

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
AJS_74_08	<100	360	13	8.2	2.7	28	14	38	<5	16
AJS_75_08	<100	480	15	7.1	3.9	79	18	41	5	6
AJS_97_08	<100	350	103	47.7	24.8	39	137	345	7	4
AJS_98_08	<100	370	103	47.8	25.9	27	132	193	<5	2
AJS_99_08	<100	390	99	45.5	26.8	17	130	205	7	3
AJS_100_08	<100	200	56	28.3	11.0	84	56	169	8	14
AJS_101_08	<100	270	13	7.4	2.9	157	13	36	<5	2
AJS_102_08	<100	720	61	28.9	16.7	158	81	171	6	9
AJS_103_08	<100	180	14	7.0	3.4	110	15	37	8	2
AJS_104_08	<100	430	41	17.2	9.5	71	47	74	12	6
*Rep AJS_104_08	<100	480	38	16.6	9.8	80	48	72	13	4
AJS_105_08	<100	4460	77	37.7	21.1	14	110	355	14	37
AJS_106_08	<100	1920	17	8.4	3.5	255	18	106	7	2
AJS_107_08	<100	880	47	24.2	9.5	134	49	124	6	6
AJS_108_08	<100	450	39	17.2	11.2	41	56	167	15	12
CHYS_1192_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_1193_08	<100	1510	16	12.2	2.3	215	11	11	7	8
CHYS_1208_08	<100	430	55	22.4	14.9	38	65	72	7	1
CHYS_1209_08	<100	410	85	37.0	20.9	35	104	77	12	3
CHYS_1223_08	<100	720	4	2.1	1.2	437	5	18	7	2
CHYS_1224_08	<100	1170	86	49.0	21.3	110	94	144	<5	10
CHYS_1236_08	<100	740	16	8.0	4.0	202	19	35	<5	14
HDIS_412_08	<100	930	26	10.4	12.1	8	47	14	<5	43
*Rep HDIS_412_08	<100	1190	22	9.5	10.2	7	40	15	<5	43
HDIS_413_08	<100	390	11	5.9	2.6	421	11	11	6	21
HDIS_414_08	<100	200	66	33.5	13.0	96	61	32	<5	22
HDIS_441_08	<100	360	52	20.5	20.9	10	91	37	5	11
HDIS_442_08	<100	190	38	17.3	14.3	41	44	26	<5	4
HDIS_443_08	<100	430	39	17.5	14.3	14	51	31	8	14
HDIS_456_08	<100	430	23	12.2	8.0	94	33	87	<5	9
HDIS_457_08	<100	740	7	3.5	2.0	340	8	19	<5	2
HDIS_458_08	<100	690	6	2.7	2.9	46	11	17	<5	5
HDIS_459_08	<100	390	33	18.1	9.3	271	35	33	<5	10
HDIS_460_08	<100	750	19	9.1	9.7	101	31	35	<5	5
HDIS_461_08	<100	80	19	8.0	7.6	247	26	15	<5	7
HDIS_462_08	<100	550	25	11.7	8.2	266	34	18	<5	8
*Rep HDIS_462_08	<100	580	26	12.6	9.0	295	37	21	<5	7
HDIS_463_08	<100	200	71	24.3	25.7	13	115	28	<5	18
HDIS_464_08	<100	1210	45	21.5	16.3	65	69	72	<5	9
HDIS_465_08	<100	180	88	33.8	27.6	37	116	73	5	3
HDIS_471_08	<100	80	16	7.0	5.3	46	21	18	9	7
HDIS_472_08	<100	130	4	1.6	1.6	3	7	2	8	3
HDIS_473_08	<100	1710	97	41.6	35.7	79	138	126	<5	10

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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
HDIS_520_08	<100	80	20	7.9	6.5	21	32	38	43	20
HDIS_545_08	<100	290	10	5.8	1.8	278	7	6	6	9
HDIS_496_08	<100	120	54	26.0	15.3	110	61	30	5	11
CHYS_1193_08A	<100	620	5	2.7	1.0	319	4	21	<5	2
*Std MMISRM16	<100	520	3	1.0	1.3	4	5	7	<5	38
*Std MMISRM16	<100	490	2	0.9	1.2	3	5	6	<5	39
*Std MMISRM16	<100	460	2	1.0	1.2	3	5	5	8	34
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	4	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	1	<1	1	<5	<1
*Bik BLANK	<100	20	<1	<0.5	<0.5	<1	1	2	<5	<1

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AJS_13_08	18	1.9	54	61	160	<1	15	<1	135	4
*Rep AJS_13_08	17	1.5	48	64	130	<1	13	<1	126	4
AJS_14_08	6	0.9	33	50	540	<1	9	<1	63	2
AJS_15_08	34	2.0	71	112	330	<1	22	<1	62	19
AJS_16_08	7	2.7	10	121	50	<1	3	<1	58	3
AJS_17_08	56	1.6	25	64	160	<1	8	<1	95	8
AJS_18_08	12	2.4	17	82	70	<1	6	<1	49	3
AJS_19_08	<5	1.7	25	84	70	<1	8	<1	91	1
AJS_20_08	7	1.4	916	32	1590	<1	267	<1	85	4
AJS_21_08	5	2.4	148	123	3430	<1	45	<1	118	2
AJS_25_08	11	<0.5	40	255	330	<1	11	<1	80	20
AJS_26_08	<5	4.2	9	58	20	<1	3	<1	38	<1
AJS_27_08	19	<0.5	25	67	150	<1	8	<1	86	9
AJS_28_08	<5	0.8	278	35	530	<1	67	<1	109	2
*Rep AJS_28_08	<5	1.0	204	43	500	<1	50	<1	105	3
AJS_29_08	<5	<0.5	171	91	1130	<1	45	<1	31	3
AJS_30_08	<5	<0.5	73	53	820	<1	17	<1	88	2
AJS_31_08	10	<0.5	18	47	80	<1	6	<1	53	3
AJS_32_08	8	<0.5	250	126	4870	<1	70	<1	75	2
AJS_33_08	80	2.6	206	84	690	<1	58	<1	120	14
AJS_34_08	7	0.7	63	162	110	<1	20	<1	67	2
AJS_35_08	13	1.8	727	42	860	<1	219	<1	95	6
AJS_36_08	6	0.9	391	62	790	<1	122	<1	92	3
AJS_37_08	7	0.6	117	189	1000	<1	27	<1	267	6
AJS_38_08	6	<0.5	23	703	200	<1	6	<1	119	15
AJS_39_08	19	0.7	27	382	360	<1	7	<1	126	33
AJS_40_08	5	2.0	22	99	70	<1	6	<1	118	2
*Rep AJS_40_08	<5	1.6	19	103	70	<1	6	<1	121	2
AJS_41_08	<5	1.0	12	51	30	<1	4	<1	129	2
AJS_42_08	<5	3.1	6	80	10	<1	2	<1	249	<1
AJS_43_08	8	<0.5	38	82	610	<1	10	<1	42	4
AJS_44_08	12	0.9	21	55	140	<1	6	<1	87	4
AJS_45_08	6	<0.5	116	60	3660	<1	26	<1	73	3
AJS_46_08	38	2.2	132	181	240	<1	34	<1	76	15
AJS_47_08	22	2.6	47	181	220	<1	14	<1	91	9
AJS_48_08	10	4.2	53	93	620	<1	16	<1	57	2
AJS_68_08	<5	0.8	21	77	160	<1	6	<1	98	6
AJS_69_08	6	<0.5	24	214	140	<1	6	<1	167	13
AJS_70_08	5	2.7	343	89	1120	<1	75	<1	154	8
AJS_71_08	60	2.6	172	188	340	<1	41	<1	93	29
*Rep AJS_71_08	40	1.7	126	190	390	<1	29	<1	86	19
AJS_72_08	11	2.3	30	119	160	<1	8	<1	109	17
AJS_73_08	6	0.7	15	220	130	<1	4	<1	128	10

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AJS_74_08	<5	<0.5	46	45	500	<1	12	<1	149	2
AJS_75_08	6	2.5	53	192	480	<1	13	<1	114	7
AJS_97_08	<5	1.0	468	77	160	<1	110	<1	118	69
AJS_98_08	5	1.1	343	43	130	<1	76	<1	164	16
AJS_99_08	5	0.6	389	36	190	<1	85	<1	296	9
AJS_100_08	<5	1.0	198	210	270	<1	48	<1	69	4
AJS_101_08	8	7.0	44	63	39800	<1	11	<1	67	87
AJS_102_08	11	5.8	284	221	260	<1	63	<1	204	17
AJS_103_08	<5	3.4	48	41	8410	<1	11	<1	148	20
AJS_104_08	7	1.7	141	124	120	<1	29	<1	250	6
*Rep AJS_104_08	8	2.1	145	99	120	<1	30	<1	266	8
AJS_105_08	<5	<0.5	392	668	80	<1	91	<1	149	3
AJS_106_08	<5	3.5	85	112	150	<1	25	<1	176	12
AJS_107_08	5	1.9	167	269	150	<1	41	<1	191	13
AJS_108_08	6	1.2	203	205	90	<1	49	<1	231	13
CHYS_1192_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_1193_08	6	<0.5	22	108	110	<1	5	<1	203	7
CHYS_1208_08	<5	2.3	197	68	110	<1	40	<1	318	9
CHYS_1209_08	<5	0.8	254	104	80	<1	47	<1	267	1
CHYS_1223_08	<5	4.0	17	82	30	<1	5	<1	227	2
CHYS_1224_08	<5	1.4	279	179	260	<1	61	<1	301	4
CHYS_1236_08	<5	1.0	57	325	210	<1	13	<1	195	2
HDIS_412_08	<5	<0.5	69	180	260	<1	10	<1	111	<1
*Rep HDIS_412_08	<5	<0.5	62	225	210	<1	10	<1	103	1
HDIS_413_08	<5	1.5	22	503	420	<1	5	<1	95	25
HDIS_414_08	<5	<0.5	81	185	920	<1	15	<1	111	1
HDIS_441_08	<5	<0.5	153	333	490	<1	24	<1	93	2
HDIS_442_08	<5	<0.5	71	256	180	<1	14	<1	82	<1
HDIS_443_08	<5	<0.5	85	403	260	<1	16	<1	54	<1
HDIS_456_08	<5	0.6	122	257	90	<1	29	<1	36	3
HDIS_457_08	<5	3.1	21	180	50	<1	5	<1	175	2
HDIS_458_08	<5	<0.5	31	100	280	<1	7	<1	76	2
HDIS_459_08	8	1.5	69	436	310	<1	14	<1	20	19
HDIS_460_08	5	0.8	84	323	120	<1	17	<1	16	12
HDIS_461_08	5	1.4	44	118	270	<1	8	<1	66	7
HDIS_462_08	<5	0.8	58	375	230	<1	10	<1	18	8
*Rep HDIS_462_08	6	0.9	66	385	240	<1	12	<1	19	8
HDIS_463_08	<5	<0.5	163	90	240	<1	23	<1	168	1
HDIS_464_08	7	0.8	194	151	170	<1	38	<1	121	2
HDIS_465_08	<5	1.3	234	231	4640	<1	42	<1	276	3
HDIS_471_08	<5	0.5	44	72	420	<1	9	<1	85	1
HDIS_472_08	<5	<0.5	5	24	70	<1	<1	<1	42	<1
HDIS_473_08	<5	<0.5	338	864	760	<1	65	<1	129	18

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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
HDIS_520_08	<5	<0.5	54	128	6800	<1	11	<1	64	16
HDIS_545_08	<5	1.0	9	116	370	<1	2	<1	71	<1
HDIS_496_08	<5	<0.5	97	170	840	<1	18	<1	51	1
CHYS_1193_08A	6	4.1	16	68	20	<1	5	<1	228	4
*Std MMISRM16	40	<0.5	18	172	110	24	4	<1	302	2
*Std MMISRM16	37	<0.5	17	166	100	22	3	<1	288	<1
*Std MMISRM16	36	<0.5	17	139	90	21	3	<1	289	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
AJS_13_08	55	12	<1	990	<1	2	<10	134	670	1.6
*Rep AJS_13_08	56	11	<1	570	<1	2	<10	133	567	1.6
AJS_14_08	49	8	<1	140	<1	3	<10	108	284	1.7
AJS_15_08	56	14	<1	1720	<1	3	<10	227	367	1.5
AJS_16_08	17	2	<1	250	<1	<1	<10	78.5	775	1.2
AJS_17_08	27	5	<1	1770	<1	<1	<10	89.8	283	2.2
AJS_18_08	24	4	<1	310	<1	<1	<10	66.4	523	2.0
AJS_19_08	16	5	<1	350	<1	<1	<10	103	377	1.5
AJS_20_08	135	167	<1	610	<1	22	<10	394	746	1.7
AJS_21_08	40	28	<1	610	<1	4	<10	684	546	0.8
AJS_25_08	49	10	<1	5930	<1	2	<10	71.8	95	0.7
AJS_26_08	22	2	<1	110	<1	<1	<10	14.6	1270	0.9
AJS_27_08	48	6	<1	760	<1	1	<10	105	116	3.0
AJS_28_08	85	67	<1	270	<1	12	<10	118	376	2.2
*Rep AJS_28_08	80	50	<1	260	<1	9	<10	126	445	2.2
AJS_29_08	65	35	<1	1250	<1	8	<10	197	37	2.2
AJS_30_08	62	20	<1	190	<1	6	<10	82.7	143	1.8
AJS_31_08	39	4	<1	1570	<1	1	<10	60.4	126	2.3
AJS_32_08	122	54	<1	2630	<1	11	<10	117	52	3.0
AJS_33_08	38	35	<1	1480	<1	5	<10	189	287	1.1
AJS_34_08	48	12	<1	830	<1	2	<10	228	246	2.3
AJS_35_08	110	118	<1	1090	<1	15	<10	491	642	2.6
AJS_36_08	44	66	<1	540	<1	8	<10	291	389	2.2
AJS_37_08	23	29	<1	4080	<1	5	<10	30.7	74	1.5
AJS_38_08	21	6	<1	2510	<1	1	<10	22.2	82	3.0
AJS_39_08	23	8	<1	2720	<1	2	<10	20.7	132	0.6
AJS_40_08	27	5	<1	260	<1	1	<10	34.0	706	1.5
*Rep AJS_40_08	23	5	<1	250	<1	<1	<10	29.6	536	1.7
AJS_41_08	32	4	<1	50	<1	<1	<10	19.4	469	2.0
AJS_42_08	8	2	<1	280	<1	<1	<10	12.4	789	<0.5
AJS_43_08	43	9	<1	630	<1	3	<10	118	203	1.8
AJS_44_08	38	5	<1	240	<1	1	<10	52.1	431	1.6
AJS_45_08	88	31	<1	180	<1	10	<10	150	239	1.8
AJS_46_08	116	29	<1	820	<1	6	<10	185	890	2.4
AJS_47_08	52	10	<1	320	<1	2	<10	110	803	2.9
AJS_48_08	29	10	<1	270	<1	2	<10	111	1470	1.1
AJS_68_08	22	6	<1	70	<1	2	<10	15.0	293	1.4
AJS_69_08	44	7	<1	430	<1	2	<10	25.5	219	3.4
AJS_70_08	92	93	<1	130	<1	18	<10	57.0	1330	2.8
AJS_71_08	86	44	<1	410	<1	9	<10	50.8	1390	2.7
*Rep AJS_71_08	85	34	<1	400	<1	9	<10	39.9	892	2.8
AJS_72_08	37	7	<1	190	<1	2	<10	41.4	821	3.9
AJS_73_08	17	4	<1	420	<1	<1	<10	24.0	174	1.7

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
AJS_74_08	25	12	<1	1760	<1	2	<10	24.5	60	0.9
AJS_75_08	29	14	<1	280	<1	3	<10	28.1	592	0.9
AJS_97_08	66	115	<1	170	<1	21	<10	68.5	322	2.3
AJS_98_08	89	103	<1	60	<1	21	<10	64.6	503	2.4
AJS_99_08	81	105	<1	160	<1	20	<10	59.0	216	3.5
AJS_100_08	55	45	<1	650	<1	10	<10	32.3	260	3.4
AJS_101_08	65	12	<1	50	<1	2	<10	37.1	1080	1.6
AJS_102_08	85	73	<1	220	<1	12	<10	85.3	1220	3.0
AJS_103_08	34	13	<1	60	<1	3	<10	38.4	537	2.4
AJS_104_08	37	39	<1	270	<1	8	<10	45.0	528	2.1
*Rep AJS_104_08	39	41	<1	190	<1	8	<10	47.1	783	2.2
AJS_105_08	14	93	<1	1440	<1	16	<10	12.7	11	4.4
AJS_106_08	35	18	<1	50	<1	3	<10	57.6	1270	4.9
AJS_107_08	64	41	<1	270	<1	8	<10	68.6	893	2.9
AJS_108_08	33	49	<1	610	<1	8	<10	56.4	462	3.0
CHYS_1192_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_1193_08	27	8	<1	470	<1	2	<10	21.5	137	2.9
CHYS_1208_08	59	56	<1	70	<1	11	<10	67.5	689	4.4
CHYS_1209_08	55	80	<1	180	<1	16	<10	45.3	290	4.2
CHYS_1223_08	27	5	<1	40	<1	<1	<10	38.8	1610	1.6
CHYS_1224_08	110	75	<1	380	<1	16	<10	78.0	625	6.0
CHYS_1236_08	26	16	<1	760	<1	3	<10	27.9	466	1.0
HDIS_412_08	<5	34	<1	1560	<1	6	<10	19.6	13	1.9
*Rep HDIS_412_08	<5	30	<1	1530	<1	5	<10	19.1	12	2.5
HDIS_413_08	29	8	<1	560	<1	2	<10	22.5	629	<0.5
HDIS_414_08	48	36	<1	1440	<1	11	<10	23.9	123	<0.5
HDIS_441_08	<5	65	<1	940	<1	12	<10	32.1	19	1.3
HDIS_442_08	30	31	<1	2230	<1	7	<10	5.2	31	0.6
HDIS_443_08	5	34	<1	1550	<1	8	<10	3.2	18	<0.5
HDIS_456_08	44	30	<1	600	<1	5	<10	25.0	181	<0.5
HDIS_457_08	24	7	<1	80	<1	1	<10	28.5	1220	0.9
HDIS_458_08	<5	9	<1	930	<1	1	<10	12.3	86	<0.5
HDIS_459_08	50	26	<1	1190	<1	6	<10	53.8	248	0.7
HDIS_460_08	20	28	<1	1010	<1	4	<10	27.1	18	0.5
HDIS_461_08	33	22	<1	410	<1	4	<10	34.8	429	<0.5
HDIS_462_08	36	26	<1	1040	<1	5	<10	17.9	119	<0.5
*Rep HDIS_462_08	36	29	<1	960	<1	5	<10	20.1	149	<0.5
HDIS_463_08	6	84	<1	1820	<1	15	<10	27.9	13	0.7
HDIS_464_08	19	60	<1	850	<1	9	<10	31.9	82	1.3
HDIS_465_08	81	99	<1	130	<1	18	<10	116	449	2.4
HDIS_471_08	14	16	<1	590	<1	3	<10	20.3	137	0.6
HDIS_472_08	6	4	<1	830	<1	<1	<10	2.4	<3	0.5
HDIS_473_08	30	112	<1	810	<1	20	<10	38.6	65	1.9

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
HDIS_520_08	35	23	<1	620	<1	4	<10	76.7	21	1.0
HDIS_545_08	38	4	<1	400	<1	1	<10	18.0	345	0.7
HDIS_496_08	61	41	<1	670	<1	10	<10	36.3	133	<0.5
CHYS_1193_08A	22	4	<1	100	<1	<1	<10	33.1	1200	1.9
*Std MMISRM16	10	5	<1	440	<1	<1	<10	25.2	7	<0.5
*Std MMISRM16	9	5	<1	410	<1	<1	<10	25.4	9	<0.5
*Std MMISRM16	10	5	<1	430	<1	<1	<10	23.9	3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	0.6	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
AJS_13_08	1270	1	66	7	60	49
*Rep AJS_13_08	1320	1	58	6	70	47
AJS_14_08	918	<1	120	11	140	38
AJS_15_08	1730	1	93	11	70	53
AJS_16_08	155	<1	12	2	80	39
AJS_17_08	849	<1	31	3	100	29
AJS_18_08	435	<1	23	3	100	34
AJS_19_08	81	<1	21	2	50	23
AJS_20_08	857	2	520	29	150	99
AJS_21_08	215	<1	91	7	1460	57
AJS_25_08	549	<1	82	10	100	24
AJS_26_08	13	<1	11	2	70	41
AJS_27_08	1520	<1	63	8	40	23
AJS_28_08	289	<1	316	20	180	56
*Rep AJS_28_08	297	<1	256	17	230	57
AJS_29_08	1660	<1	345	23	120	19
AJS_30_08	995	<1	214	16	150	28
AJS_31_08	620	<1	45	8	100	18
AJS_32_08	831	<1	400	28	1320	28
AJS_33_08	2580	2	131	10	90	37
AJS_34_08	820	<1	65	6	110	30
AJS_35_08	2150	4	379	27	270	91
AJS_36_08	375	2	174	12	210	44
AJS_37_08	73	<1	144	11	1260	25
AJS_38_08	137	<1	45	5	100	19
AJS_39_08	198	<1	73	9	190	30
AJS_40_08	42	<1	29	4	230	53
*Rep AJS_40_08	44	<1	25	3	230	44
AJS_41_08	75	<1	23	3	70	36
AJS_42_08	12	<1	5	<1	160	24
AJS_43_08	1260	<1	142	12	110	22
AJS_44_08	114	<1	41	4	320	34
AJS_45_08	851	<1	370	28	690	33
AJS_46_08	3080	<1	175	19	460	82
AJS_47_08	916	<1	63	8	180	58
AJS_48_08	318	<1	49	5	380	60
AJS_68_08	52	<1	55	9	60	34
AJS_69_08	98	<1	106	21	70	53
AJS_70_08	89	<1	448	28	820	126
AJS_71_08	282	2	298	27	370	98
*Rep AJS_71_08	281	<1	321	36	410	73
AJS_72_08	181	<1	42	6	110	64
AJS_73_08	37	<1	27	3	100	46

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
AJS_74_08	16	<1	80	7	230	21
AJS_75_08	21	<1	69	5	1000	57
AJS_97_08	73	<1	559	33	180	212
AJS_98_08	86	<1	438	33	120	255
AJS_99_08	73	<1	457	32	120	219
AJS_100_08	43	<1	277	20	840	48
AJS_101_08	45	<1	49	6	400	182
AJS_102_08	87	<1	269	21	600	241
AJS_103_08	22	<1	61	5	450	218
AJS_104_08	45	<1	174	12	590	122
*Rep AJS_104_08	50	<1	163	11	350	126
AJS_105_08	121	<1	406	24	1120	62
AJS_106_08	69	<1	63	7	360	121
AJS_107_08	63	<1	239	17	290	140
AJS_108_08	58	<1	188	11	240	115
CHYS_1192_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_1193_08	41	<1	94	9	320	29
CHYS_1208_08	50	<1	229	14	350	103
CHYS_1209_08	41	<1	409	23	320	86
CHYS_1223_08	13	<1	15	2	80	97
CHYS_1224_08	56	<1	493	35	240	92
CHYS_1236_08	13	<1	80	6	270	30
HDIS_412_08	38	<1	134	7	250	34
*Rep HDIS_412_08	36	<1	115	6	220	34
HDIS_413_08	29	<1	53	5	310	58
HDIS_414_08	40	<1	363	23	1530	43
HDIS_441_08	55	<1	242	13	240	41
HDIS_442_08	54	<1	222	11	130	15
HDIS_443_08	77	<1	219	11	270	12
HDIS_456_08	19	<1	119	10	510	48
HDIS_457_08	12	<1	25	3	120	58
HDIS_458_08	11	<1	30	2	130	18
HDIS_459_08	37	4	186	14	420	66
HDIS_460_08	24	2	108	8	240	25
HDIS_461_08	20	1	78	6	110	78
HDIS_462_08	30	1	140	9	260	36
*Rep HDIS_462_08	31	<1	143	10	170	38
HDIS_463_08	35	<1	282	14	240	40
HDIS_464_08	29	<1	217	17	340	51
HDIS_465_08	29	<1	307	22	520	160
HDIS_471_08	12	<1	69	5	1010	42
HDIS_472_08	6	<1	27	<1	80	<5
HDIS_473_08	71	<1	439	31	380	119

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Element	U	W	Y	Yb	Zn	Zr
Method	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5	MMI-M5
Det.Lim.	1	1	5	1	20	5
Units	PPB	PPB	PPB	PPB	PPB	PPB
HDIS_520_08	17	<1	109	5	950	114
HDIS_545_08	7	<1	45	5	1050	32
HDIS_496_08	13	<1	245	18	3160	51
CHYS_1193_08A	29	<1	17	2	150	80
*Std MMISRM16	47	<1	11	<1	220	14
*Std MMISRM16	48	<1	10	<1	250	14
*Std MMISRM16	42	<1	10	<1	230	13
*BIK BLANK	2	<1	<5	<1	<20	<5
*BIK BLANK	<1	<1	<5	<1	20	<5
*BIK BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101885

To: **Logan Resources Ltd.**

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

Date: Sep 05, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 89
Date Submitted Jul 22, 2008
Report Comprises Pages 1 to 16
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 89 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_291_08	<1	130	<10	<0.1	1820	<1	230	32	111	153
*Rep CHYS_291_08	<1	109	<10	<0.1	2070	<1	260	31	101	112
CHYS_313_08	22	64	<10	0.1	1900	<1	500	5	22	<5
CHYS_314_08	9	124	160	0.5	9390	4	70	13	7820	303
CHYS_335_08	61	48	30	0.5	1580	<1	460	89	121	34
CHYS_336_08	2	84	30	<0.1	810	<1	120	14	70	349
CHYS_337_08	47	111	90	0.3	2870	<1	210	10	358	35
CHYS_380_08	1	>300	140	<0.1	630	3	20	23	95	45
CHYS_381_08	11	>300	600	0.8	750	30	60	61	110	134
HDIS_152_08	2	>300	<10	<0.1	2710	<1	20	5	40	353
HDIS_153_08	3	>300	<10	<0.1	1050	<1	10	7	83	73
HDIS_154_08	4	175	<10	<0.1	1480	<1	50	8	460	107
HDIS_155_08	3	128	<10	<0.1	27200	<1	190	2	558	44
HDIS_179_08	1	>300	10	<0.1	2200	<1	20	7	151	285
*Rep HDIS_179_08	2	>300	20	<0.1	2130	<1	20	8	159	230
HDIS_180_08	<1	135	10	<0.1	1990	1	30	3	31	183
HDIS_181_08	3	125	30	<0.1	5340	<1	30	3	476	56
HDIS_182_08	1	6	<10	<0.1	9420	<1	440	<1	<5	8
HDIS_183_08	17	112	<10	<0.1	3360	<1	210	6	205	19
HDIS_206_08	<1	>300	<10	<0.1	5640	<1	30	10	69	100
HDIS_207_08	<1	144	<10	<0.1	1200	<1	20	<1	26	56
HDIS_208_08	3	>300	20	<0.1	1620	<1	20	5	142	53
HDIS_209_08	1	>300	10	<0.1	1510	<1	<10	7	96	516
HDIS_235_08	2	159	<10	<0.1	8290	<1	150	4	104	47
HDIS_236_08	4	>300	20	<0.1	1800	<1	20	6	337	34
HDIS_237_08	5	>300	<10	<0.1	330	<1	<10	8	42	221
HDIS_238_08	5	75	<10	<0.1	22400	<1	460	2	429	<5
*Rep HDIS_238_08	6	59	<10	<0.1	21700	<1	450	2	324	<5
HDIS_400_08	15	>300	20	0.1	1040	<1	10	9	145	167
HDIS_411_08	21	154	50	0.2	3050	<1	100	21	534	100
HDIS_492_08	12	85	<10	0.5	5500	<1	240	14	290	219
HDIS_497_08	20	9	<10	<0.1	1510	<1	450	9	152	414
HDIS_498_08	19	85	<10	<0.1	690	<1	260	14	752	86
HDIS_499_08	189	93	140	1.6	830	<1	190	1160	592	95
HDIS_500_08	34	69	<10	<0.1	2530	<1	210	25	244	57
HDIS_501_08	104	93	20	0.4	1020	<1	300	125	171	55
HDIS_503_08	44	148	150	0.5	3700	<1	200	22	819	29
HDIS_506_08	5	138	<10	<0.1	4950	<1	140	6	361	73
HDIS_507_08	1	100	<10	<0.1	3380	<1	410	31	126	31
HDIS_508_08	14	62	<10	0.4	3210	<1	430	11	190	149
*Rep HDIS_508_08	13	58	20	0.4	3270	<1	380	10	242	175
HDIS_524_08	35	82	<10	<0.1	1580	<1	370	7	135	56
HDIS_525_08	<1	20	<10	<0.1	380	<1	260	6	15	145
HDIS_526_08	37	66	90	0.9	630	<1	440	343	68	31
HDIS_527_08	127	40	20	0.5	890	<1	450	56	40	44
HDIS_528_08	15	87	20	<0.1	1150	<1	290	22	53	119

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
HDIS_529_08	18	25	30	0.2	770	<1	450	91	73	60
HDIS_531_08	13	137	<10	<0.1	1690	<1	330	15	129	21
Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
HDIS_532_08	9	159	10	<0.1	2050	<1	260	19	112	96
HDIS_532A_08	5	79	<10	0.3	2550	<1	350	13	83	157
HDIS_533_08	4	65	<10	<0.1	5650	<1	450	13	42	109
HDIS_534_08	5	117	10	0.2	6110	<1	240	5	568	17
HDIS_539_08	1	>300	20	<0.1	2380	<1	110	19	133	107
*Rep HDIS_539_08	2	>300	20	<0.1	2470	<1	140	18	192	104
HDIS_540_08	18	110	<10	<0.1	2080	<1	260	5	209	22
HDIS_541_08	31	92	<10	<0.1	2900	<1	350	10	90	24
HDIS_542_08	3	72	<10	<0.1	1370	<1	410	38	100	64
HDIS_546_08	2	137	20	0.1	1360	<1	90	6	173	1170
HDIS_547_08	6	188	<10	<0.1	3530	<1	280	6	86	96
HDIS_549_08	65	14	<10	<0.1	1430	<1	380	8	64	165
HDIS_550_08	6	184	20	0.2	5440	<1	190	5	268	164
HDIS_551_08	<1	138	<10	<0.1	510	<1	340	13	40	23
HDIS_552_08	4	70	410	0.8	1270	<1	370	26	98	82
HDIS_553_08	32	54	<10	0.1	690	<1	610	19	75	20
HDIS_554_08	21	83	30	1.1	1040	<1	290	196	154	475
HDIS_555_08	83	190	<10	0.3	1600	<1	420	103	70	24
*Rep HDIS_555_08	81	182	<10	0.3	1590	<1	440	126	68	18
HDIS_556_08	15	31	<10	0.2	2540	<1	470	8	130	305
HDIS_557_08	33	129	10	0.3	6930	<1	240	6	1210	80
HDIS_558_08	2	123	40	0.1	1280	1	20	1	28	38
HDIS_559_08	4	>300	40	0.2	910	<1	<10	2	76	76
HDIS_560_08	1	>300	10	<0.1	590	<1	10	13	98	46
HDIS_570_08	8	>300	<10	<0.1	3250	<1	180	5	163	67
HDIS_571_08	1	68	<10	0.2	1870	<1	380	5	101	772
HDIS_572_08	7	>300	10	0.2	710	<1	20	6	54	214
HDIS_577_08	16	18	<10	<0.1	2210	<1	510	12	128	247
HDIS_578_08	7	33	<10	0.2	2510	<1	450	9	218	386
HDIS_579_08	1	152	30	0.1	1660	<1	20	1	79	72
HDIS_580_08	2	132	30	0.1	1130	1	10	1	39	69
*Rep HDIS_580_08	2	120	30	0.1	1260	1	<10	1	41	65
HDIS_581_08	6	>300	20	0.1	1050	<1	<10	7	54	234
HDIS_582_08	<1	157	30	0.2	1010	<1	10	<1	78	40
HDIS_583_08	3	>300	60	0.4	1420	1	20	4	346	83
HDIS_584_08	3	>300	20	<0.1	1700	<1	20	5	244	43
HDIS_585_08	<1	159	<10	<0.1	1740	<1	320	48	90	54
HDIS_586_08	3	194	<10	<0.1	1500	<1	270	18	93	22
HDIS_587_08	11	89	10	0.2	2340	<1	280	6	95	21
HDIS_591_08	19	31	10	<0.1	4590	<1	380	8	179	275

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
HDIS_592_08	20	109	<10	<0.1	1250	<1	370	10	115	40
HDIS_593_08	3	69	40	0.4	1030	<1	480	6	73	212
HDIS_594_08	5	184	<10	<0.1	1690	<1	180	4	104	147
HDIS_595_08	11	47	<10	0.2	1120	<1	560	6	38	35
*Rep HDIS_595_08	10	54	<10	<0.1	1220	<1	550	8	65	61
HDIS_596_08	<1	33	<10	<0.1	320	<1	560	8	66	43
HDIS_597_08	<1	105	30	0.1	3470	1	200	6	51	78
HDIS_598_08	<1	141	80	0.3	4040	2	30	<1	130	1020
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
HDIS_599_08	<1	150	80	0.2	2880	3	20	3	152	459
*Std MMISRM16	20	44	20	29.6	80	<1	230	4	24	56
*Std MMISRM16	21	59	20	33.6	80	<1	250	5	26	68
*Std MMISRM16	21	65	20	34.6	80	<1	270	5	26	72
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_291_08	<100	110	22	11.3	4.7	95	25	57	<5	22
*Rep CHYS_291_08	<100	100	19	9.0	4.1	77	22	51	<5	26
CHYS_313_08	<100	280	14	7.0	4.3	11	22	24	<5	2
CHYS_314_08	<100	1460	507	222	194	135	857	3290	<5	9
CHYS_335_08	<100	460	33	15.8	14.0	32	59	108	<5	9
CHYS_336_08	<100	520	6	3.7	1.5	283	7	13	<5	20
CHYS_337_08	<100	180	21	8.3	7.7	25	36	115	<5	17
CHYS_380_08	<100	140	18	10.6	3.5	174	16	40	<5	3
CHYS_381_08	<100	590	18	8.6	4.3	36	19	39	<5	11
HDIS_152_08	<100	460	28	15.2	3.5	178	20	14	<5	6
HDIS_153_08	<100	220	29	12.4	7.5	26	38	23	<5	<1
HDIS_154_08	<100	190	114	36.1	41.1	30	222	151	<5	5
HDIS_155_08	<100	2270	296	119	91.8	36	459	96	<5	47
HDIS_179_08	<100	1130	109	47.4	23.9	91	124	72	<5	4
*Rep HDIS_179_08	<100	1050	132	57.8	28.2	58	148	73	<5	3
HDIS_180_08	<100	690	19	11.4	2.6	289	16	10	<5	7
HDIS_181_08	<100	180	69	23.3	22.5	51	116	258	<5	3
HDIS_182_08	<100	100	<1	<0.5	<0.5	5	2	<1	<5	222
HDIS_183_08	<100	1460	112	39.6	39.4	17	178	57	<5	26
HDIS_206_08	<100	460	245	120	34.4	76	203	28	<5	13
HDIS_207_08	<100	570	19	11.2	2.2	263	13	11	<5	3
HDIS_208_08	<100	410	70	23.0	23.0	100	107	49	<5	2
HDIS_209_08	<100	1330	20	8.2	5.7	210	25	24	<5	2
HDIS_235_08	<100	170	149	56.3	40.9	68	242	55	<5	39
HDIS_236_08	<100	640	98	35.3	33.9	46	162	134	<5	1
HDIS_237_08	<100	1960	8	4.0	1.6	76	7	14	<5	<1
HDIS_238_08	<100	180	74	27.3	27.3	11	134	242	<5	39
*Rep HDIS_238_08	<100	160	75	27.1	28.8	10	144	228	<5	39
HDIS_400_08	<100	250	36	16.4	10.2	126	41	48	<5	<1
HDIS_411_08	<100	380	186	83.3	62.7	79	276	311	<5	7
HDIS_492_08	<100	960	72	29.8	26.8	61	118	96	<5	17
HDIS_497_08	<100	11700	17	7.4	6.1	20	27	28	7	10
HDIS_498_08	<100	1160	272	105	99.6	20	407	192	<5	17
HDIS_499_08	<100	430	253	102	89.0	33	363	221	<5	10
HDIS_500_08	<100	1540	139	54.6	47.7	14	213	87	<5	16
HDIS_501_08	<100	240	72	31.4	25.7	57	100	57	7	20
HDIS_503_08	<100	980	214	98.6	62.8	40	261	297	<5	17
HDIS_506_08	<100	150	94	32.5	34.4	68	174	114	<5	33
HDIS_507_08	<100	340	91	46.5	21.0	32	104	56	<5	44
HDIS_508_08	<100	2030	43	17.7	16.2	81	72	71	<5	42
*Rep HDIS_508_08	<100	2470	49	21.6	18.4	145	77	88	<5	35
HDIS_524_08	<100	910	100	36.2	43.0	18	176	71	<5	16
HDIS_525_08	<100	440	8	5.6	1.9	62	8	5	<5	15
HDIS_526_08	<100	540	30	12.4	10.8	63	46	27	<5	21
HDIS_527_08	<100	550	26	10.4	12.3	21	46	23	<5	6
HDIS_528_08	<100	170	23	10.1	6.2	85	31	18	5	19

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
HDIS_529_08	<100	410	38	16.6	14.4	41	56	26	<5	10
HDIS_531_08	<100	450	102	54.8	18.8	30	87	57	<5	17
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
HDIS_532_08	<100	190	44	19.0	12.4	76	55	45	<5	13
HDIS_532A_08	<100	1220	39	16.5	13.7	96	59	39	<5	38
HDIS_533_08	<100	510	11	5.1	3.1	80	16	14	6	52
HDIS_534_08	<100	590	180	77.0	67.6	33	284	255	<5	18
HDIS_539_08	<100	130	70	37.7	14.6	93	61	40	<5	10
*Rep HDIS_539_08	<100	130	67	32.1	16.6	73	70	57	<5	10
HDIS_540_08	<100	190	93	36.2	36.5	14	163	74	<5	14
HDIS_541_08	<100	250	52	21.3	20.3	20	88	45	<5	11
HDIS_542_08	<100	230	33	14.9	14.0	93	51	43	<5	9
HDIS_546_08	<100	2710	42	19.4	12.4	176	52	25	<5	10
HDIS_547_08	<100	170	31	12.7	7.8	27	40	30	<5	23
HDIS_549_08	<100	690	22	9.1	10.8	11	41	23	<5	8
HDIS_550_08	<100	1210	62	26.6	18.3	53	83	100	<5	5
HDIS_551_08	<100	140	26	14.4	5.5	42	22	14	<5	20
HDIS_552_08	<100	570	34	15.3	10.2	63	46	42	<5	11
HDIS_553_08	<100	220	15	6.2	4.8	14	21	15	<5	9
HDIS_554_08	<100	900	56	26.5	19.2	137	72	50	<5	12
HDIS_555_08	<100	190	61	29.0	13.5	52	61	29	<5	34
*Rep HDIS_555_08	<100	170	59	28.4	13.0	54	58	28	<5	38
HDIS_556_08	<100	2500	41	19.5	16.0	108	66	52	<5	22
HDIS_557_08	<100	810	383	174	133	34	578	670	<5	18
HDIS_558_08	<100	1190	4	2.2	0.9	528	4	13	<5	5
HDIS_559_08	100	680	12	7.1	2.7	350	12	31	<5	1
HDIS_560_08	<100	150	20	8.1	5.8	93	22	31	<5	1
HDIS_570_08	<100	850	328	169	64.2	39	294	58	<5	21
HDIS_571_08	<100	1460	55	28.7	21.6	85	81	37	<5	75
HDIS_572_08	<100	810	13	7.8	2.6	213	11	17	<5	2
HDIS_577_08	<100	3080	26	12.6	10.5	75	40	44	<5	10
HDIS_578_08	<100	2720	39	20.3	13.7	164	53	67	<5	10
HDIS_579_08	<100	1460	13	7.1	2.8	456	13	35	<5	6
HDIS_580_08	<100	1160	7	4.1	1.1	506	5	17	<5	4
*Rep HDIS_580_08	<100	1130	7	4.2	1.2	516	6	17	<5	3
HDIS_581_08	<100	370	10	6.0	1.8	298	8	22	<5	2
HDIS_582_08	<100	730	11	6.2	2.6	475	11	34	<5	3
HDIS_583_08	200	440	86	38.2	24.6	184	100	113	<5	2
HDIS_584_08	<100	180	66	27.2	18.4	78	78	90	<5	2
HDIS_585_08	<100	60	59	33.4	13.4	86	61	43	<5	12
HDIS_586_08	<100	100	49	24.3	12.6	47	51	40	<5	7
HDIS_587_08	<100	310	74	29.4	34.9	16	132	45	<5	14
HDIS_591_08	<100	3460	49	21.6	19.5	43	88	44	<5	25

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
HDIS_592_08	<100	220	58	22.0	21.3	38	94	35	8	18
HDIS_593_08	<100	700	18	8.4	6.7	133	25	30	<5	11
HDIS_594_08	<100	270	70	37.7	11.5	114	53	30	<5	12
HDIS_595_08	<100	1450	9	3.3	3.4	11	16	14	<5	5
*Rep HDIS_595_08	<100	2260	8	3.4	3.3	19	15	17	<5	5
HDIS_596_08	<100	150	11	5.4	3.6	22	17	19	<5	7
HDIS_597_08	<100	1600	18	10.4	3.6	387	15	17	<5	15
HDIS_598_08	<100	1480	22	13.1	5.1	527	24	53	<5	6
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
HDIS_599_08	<100	1590	24	12.7	5.4	533	25	63	<5	7
*Std MMISRM16	<100	700	3	0.9	1.2	3	5	6	<5	43
*Std MMISRM16	<100	770	3	1.1	1.3	3	6	6	<5	53
*Std MMISRM16	<100	820	3	1.1	1.3	4	6	6	<5	53
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_291_08	<5	1.3	73	128	1030	<1	16	<1	201	2
*Rep CHYS_291_08	<5	1.0	65	140	1120	<1	15	<1	217	2
CHYS_313_08	<5	<0.5	59	27	40	<1	11	<1	105	<1
CHYS_314_08	<5	2.2	3770	312	940	2	913	<1	242	18
CHYS_335_08	<5	<0.5	186	387	700	<1	37	<1	61	1
CHYS_336_08	<5	0.9	23	192	230	<1	5	<1	181	2
CHYS_337_08	<5	0.5	152	52	700	<1	35	<1	221	6
CHYS_380_08	10	6.1	49	69	500	<1	11	<1	150	1
CHYS_381_08	<5	0.5	65	220	690	<1	14	<1	271	1
HDIS_152_08	<5	1.3	28	156	650	<1	5	<1	163	<1
HDIS_153_08	<5	1.3	57	39	420	<1	10	<1	217	<1
HDIS_154_08	<5	1.3	418	83	510	<1	77	<1	241	<1
HDIS_155_08	<5	<0.5	634	420	690	<1	99	<1	200	<1
HDIS_179_08	6	1.9	186	243	310	<1	33	<1	140	<1
*Rep HDIS_179_08	5	1.9	200	214	370	<1	35	<1	159	<1
HDIS_180_08	<5	1.4	24	167	260	<1	4	<1	179	<1
HDIS_181_08	<5	3.6	299	28	320	<1	67	<1	306	1
HDIS_182_08	<5	<0.5	2	21	<10	<1	<1	<1	94	<1
HDIS_183_08	<5	<0.5	298	162	460	<1	46	<1	128	1
HDIS_206_08	<5	1.2	175	208	200	<1	24	<1	73	<1
HDIS_207_08	<5	1.5	19	100	40	<1	4	<1	143	<1
HDIS_208_08	<5	3.6	167	136	290	<1	28	<1	171	<1
HDIS_209_08	5	2.7	52	221	320	<1	10	<1	73	<1
HDIS_235_08	<5	0.8	268	296	320	<1	41	<1	131	<1
HDIS_236_08	<5	2.4	330	95	170	<1	61	<1	152	<1
HDIS_237_08	<5	1.4	21	82	140	<1	4	<1	142	<1
HDIS_238_08	<5	<0.5	530	18	20	<1	103	<1	186	<1
*Rep HDIS_238_08	<5	<0.5	564	18	10	<1	107	<1	174	<1
HDIS_400_08	<5	2.6	86	132	2160	<1	18	<1	192	4
HDIS_411_08	<5	2.4	731	149	1560	<1	142	<1	259	25
HDIS_492_08	<5	0.9	272	171	310	<1	48	<1	174	2
HDIS_497_08	6	<0.5	65	373	230	<1	12	<1	52	2
HDIS_498_08	<5	<0.5	848	621	860	<1	136	<1	161	<1
HDIS_499_08	<5	<0.5	781	1090	1940	<1	135	<1	265	60
HDIS_500_08	<5	<0.5	377	265	680	<1	57	<1	160	2
HDIS_501_08	<5	<0.5	190	379	3310	<1	33	<1	106	41
HDIS_503_08	<5	0.8	620	339	6630	<1	125	<1	265	13
HDIS_506_08	<5	1.1	330	199	720	<1	58	<1	103	<1
HDIS_507_08	<5	<0.5	151	274	300	<1	27	<1	32	<1
HDIS_508_08	<5	<0.5	169	219	190	<1	31	<1	109	2
*Rep HDIS_508_08	5	<0.5	208	212	240	<1	40	<1	111	3
HDIS_524_08	<5	<0.5	329	396	460	<1	50	<1	228	1
HDIS_525_08	<5	<0.5	15	259	100	<1	3	<1	74	1
HDIS_526_08	<5	<0.5	95	345	22900	<1	16	<1	61	227
HDIS_527_08	<5	<0.5	85	283	1050	<1	13	<1	70	23
HDIS_528_08	<5	<0.5	56	211	1030	<1	10	<1	123	2

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
HDIS_529_08	<5	<0.5	93	386	2790	<1	15	<1	55	32
HDIS_531_08	<5	<0.5	132	286	920	<1	24	<1	96	1
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
HDIS_532_08	<5	0.9	117	194	380	<1	21	<1	205	1
HDIS_532A_08	<5	<0.5	117	398	360	<1	20	<1	68	<1
HDIS_533_08	<5	<0.5	35	393	190	<1	7	<1	48	3
HDIS_534_08	<5	0.7	657	220	460	<1	122	<1	174	1
HDIS_539_08	<5	0.8	112	142	850	<1	20	<1	98	2
*Rep HDIS_539_08	<5	0.9	148	162	770	<1	27	<1	122	2
HDIS_540_08	<5	<0.5	290	130	820	<1	47	<1	145	<1
HDIS_541_08	<5	<0.5	158	196	660	<1	25	<1	155	4
HDIS_542_08	<5	<0.5	120	307	400	<1	21	<1	41	4
HDIS_546_08	7	0.8	95	282	790	<1	16	<1	150	3
HDIS_547_08	<5	<0.5	64	217	780	<1	12	<1	255	<1
HDIS_549_08	<5	<0.5	82	362	290	<1	12	<1	55	2
HDIS_550_08	<5	0.9	188	115	570	<1	38	<1	192	2
HDIS_551_08	<5	<0.5	35	135	380	<1	6	<1	62	<1
HDIS_552_08	<5	<0.5	100	296	590	<1	19	<1	47	21
HDIS_553_08	<5	<0.5	45	311	100	<1	8	<1	15	2
HDIS_554_08	<5	<0.5	160	800	3440	<1	28	<1	72	65
HDIS_555_08	<5	<0.5	84	381	4720	<1	14	<1	53	7
*Rep HDIS_555_08	<5	<0.5	81	412	6840	<1	14	<1	43	7
HDIS_556_08	<5	<0.5	163	694	100	<1	28	<1	34	2
HDIS_557_08	<5	0.7	1430	464	560	<1	275	<1	107	1
HDIS_558_08	<5	5.4	14	176	20	<1	3	<1	99	1
HDIS_559_08	<5	8.9	38	142	50	<1	9	<1	156	2
HDIS_560_08	<5	2.1	60	114	530	<1	12	<1	243	<1
HDIS_570_08	<5	<0.5	307	567	2990	<1	44	<1	213	<1
HDIS_571_08	10	0.5	169	750	300	<1	26	<1	36	3
HDIS_572_08	<5	1.3	28	212	150	<1	6	<1	257	2
HDIS_577_08	6	<0.5	113	1110	50	<1	21	<1	30	2
HDIS_578_08	<5	<0.5	158	504	40	<1	31	<1	42	<1
HDIS_579_08	<5	3.7	42	207	20	<1	10	<1	127	1
HDIS_580_08	<5	4.3	18	171	30	<1	4	<1	144	1
*Rep HDIS_580_08	<5	4.7	18	181	30	<1	4	<1	154	1
HDIS_581_08	<5	5.5	25	111	80	<1	6	<1	152	<1
HDIS_582_08	6	7.8	39	86	30	<1	9	<1	186	2
HDIS_583_08	8	8.3	258	120	430	1	50	<1	257	4
HDIS_584_08	<5	2.5	196	151	440	<1	38	<1	299	1
HDIS_585_08	<5	0.5	106	79	490	<1	19	<1	39	<1
HDIS_586_08	<5	<0.5	102	212	350	<1	19	<1	116	<1
HDIS_587_08	<5	<0.5	198	185	110	<1	30	<1	138	<1
HDIS_591_08	<5	<0.5	190	386	270	<1	30	<1	92	4

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
HDIS_592_08	<5	<0.5	145	342	420	<1	22	<1	141	2
HDIS_593_08	<5	0.6	75	375	130	<1	14	<1	28	5
HDIS_594_08	<5	<0.5	76	231	450	<1	14	<1	234	1
HDIS_595_08	<5	<0.5	41	106	30	<1	7	<1	47	<1
*Rep HDIS_595_08	6	<0.5	45	158	40	<1	8	<1	42	<1
HDIS_596_08	<5	<0.5	46	208	140	<1	8	<1	17	<1
HDIS_597_08	<5	0.8	33	868	350	<1	7	<1	61	3
HDIS_598_08	8	4.5	70	257	80	<1	16	<1	162	6
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
HDIS_599_08	7	6.7	77	268	80	<1	17	<1	158	3
*Std MMISRM16	56	<0.5	19	241	110	28	3	<1	379	<1
*Std MMISRM16	60	<0.5	20	315	130	30	4	<1	406	<1
*Std MMISRM16	62	<0.5	20	340	130	31	4	<1	415	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_291_08	22	19	<1	590	<1	4	<10	30.7	207	2.8
*Rep CHYS_291_08	18	16	<1	700	<1	3	<10	26.3	137	2.2
CHYS_313_08	5	17	<1	2690	<1	3	<10	9.9	5	2.0
CHYS_314_08	194	803	1	420	<1	110	<10	195	964	5.5
CHYS_335_08	8	49	<1	720	<1	7	<10	20.4	14	1.2
CHYS_336_08	17	6	<1	270	<1	1	<10	8.4	254	1.0
CHYS_337_08	16	35	<1	320	<1	5	<10	39.9	145	5.7
CHYS_380_08	44	12	<1	90	<1	3	<10	93.4	1460	1.4
CHYS_381_08	16	17	<1	390	<1	3	<10	28.8	135	1.4
HDIS_152_08	51	12	<1	190	<1	4	<10	49.9	416	1.1
HDIS_153_08	47	26	<1	20	<1	6	<10	42.9	461	1.4
HDIS_154_08	73	173	<1	160	<1	28	<10	74.8	489	1.0
HDIS_155_08	134	336	<1	1570	<1	62	<10	74.8	69	0.7
HDIS_179_08	47	87	<1	140	<1	20	<10	39.2	672	0.7
*Rep HDIS_179_08	58	100	<1	110	<1	24	<10	47.0	642	0.7
HDIS_180_08	49	10	<1	220	<1	3	<10	46.7	423	0.9
HDIS_181_08	60	90	<1	150	<1	16	<10	53.0	1890	2.2
HDIS_182_08	<5	1	<1	3400	<1	<1	<10	1.2	5	<0.5
HDIS_183_08	32	140	<1	650	<1	24	<10	43.4	79	0.6
HDIS_206_08	95	107	<1	290	<1	38	<10	26.6	438	0.7
HDIS_207_08	27	8	<1	130	<1	3	<10	17.7	379	0.7
HDIS_208_08	50	82	<1	50	<1	15	<10	50.7	1260	0.9
HDIS_209_08	31	22	<1	50	<1	4	<10	40.7	905	0.8
HDIS_235_08	45	145	<1	650	<1	31	<10	21.9	283	<0.5
HDIS_236_08	63	131	<1	80	<1	22	<10	61.7	1010	0.9
HDIS_237_08	19	7	<1	20	<1	1	<10	25.7	410	1.0
HDIS_238_08	127	136	<1	3430	<1	17	<10	34.4	8	1.6
*Rep HDIS_238_08	119	151	<1	3310	<1	18	<10	33.3	5	1.2
HDIS_400_08	56	34	<1	50	<1	7	<10	87.1	944	1.2
HDIS_411_08	134	237	<1	300	<1	37	<10	130	1280	1.4
HDIS_492_08	29	97	<1	1040	<1	15	<10	57.4	293	2.1
HDIS_497_08	8	21	<1	1490	<1	3	<10	20.7	26	<0.5
HDIS_498_08	22	321	<1	950	<1	56	<10	51.6	47	0.7
HDIS_499_08	95	284	<1	500	<1	52	<10	123	53	1.9
HDIS_500_08	13	153	<1	880	<1	29	<10	54.8	41	0.6
HDIS_501_08	17	75	1	1170	<1	14	<10	43.1	67	0.9
HDIS_503_08	126	193	<1	1050	<1	40	<10	64.9	378	1.9
HDIS_506_08	48	139	<1	500	<1	22	<10	67.0	508	<0.5
HDIS_507_08	21	65	<1	1680	<1	16	<10	8.0	25	<0.5
HDIS_508_08	27	57	<1	1870	<1	9	<10	28.0	58	<0.5
*Rep HDIS_508_08	55	66	<1	1700	<1	10	<10	37.2	81	<0.5
HDIS_524_08	8	135	<1	1760	<1	22	<10	24.2	11	0.8
HDIS_525_08	15	6	<1	760	<1	1	<10	3.4	19	<0.5
HDIS_526_08	6	35	<1	1470	<1	6	<10	11.3	20	<0.5
HDIS_527_08	5	34	<1	1780	<1	6	<10	22.1	11	<0.5
HDIS_528_08	11	22	<1	950	<1	4	<10	22.1	127	<0.5

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
HDIS_529_08	5	39	<1	1530	<1	7	<10	31.0	23	0.9
HDIS_531_08	58	52	<1	1700	<1	16	<10	19.4	30	0.8
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
HDIS_532_08	39	41	<1	750	<1	8	<10	32.1	366	0.9
HDIS_532A_08	24	42	<1	1470	<1	8	<10	12.9	21	<0.5
HDIS_533_08	10	12	<1	2420	<1	2	<10	16.0	35	<0.5
HDIS_534_08	68	228	<1	970	<1	37	<10	60.1	309	0.6
HDIS_539_08	79	44	<1	400	<1	11	<10	63.5	351	<0.5
*Rep HDIS_539_08	73	53	<1	380	<1	11	<10	69.7	403	<0.5
HDIS_540_08	15	125	<1	730	<1	21	<10	29.2	42	0.6
HDIS_541_08	11	66	<1	1270	<1	11	<10	20.3	47	0.5
HDIS_542_08	18	43	<1	1080	<1	7	<10	13.6	31	<0.5
HDIS_546_08	62	39	<1	350	<1	8	<10	61.3	279	1.5
HDIS_547_08	22	26	<1	1150	<1	6	<10	20.9	57	1.2
HDIS_549_08	7	31	<1	1960	<1	5	<10	25.7	7	0.5
HDIS_550_08	49	63	<1	640	<1	12	<10	50.3	416	1.1
HDIS_551_08	20	14	<1	1460	<1	4	<10	7.7	55	<0.5
HDIS_552_08	9	35	<1	910	<1	7	<10	15.1	80	<0.5
HDIS_553_08	<5	16	<1	1880	<1	3	<10	3.8	6	<0.5
HDIS_554_08	40	57	<1	1100	<1	10	<10	39.8	33	1.4
HDIS_555_08	30	37	<1	2540	<1	10	<10	23.2	21	<0.5
*Rep HDIS_555_08	32	36	<1	2760	<1	10	<10	23.6	17	<0.5
HDIS_556_08	32	56	<1	1930	<1	9	<10	46.4	11	<0.5
HDIS_557_08	145	462	<1	1090	<1	76	<10	77.0	283	0.5
HDIS_558_08	19	4	<1	160	<1	<1	<10	25.6	970	<0.5
HDIS_559_08	62	10	<1	50	<1	2	<10	56.6	1410	0.6
HDIS_560_08	34	19	<1	50	<1	4	<10	24.9	600	0.6
HDIS_570_08	152	168	<1	1190	<1	52	<10	127	17	0.9
HDIS_571_08	32	66	<1	2360	<1	11	<10	54.2	22	<0.5
HDIS_572_08	37	9	<1	110	<1	2	<10	38.6	536	2.4
HDIS_577_08	19	33	<1	2060	<1	5	<10	55.2	16	<0.5
HDIS_578_08	57	44	<1	1850	<1	7	<10	55.1	29	<0.5
HDIS_579_08	37	11	<1	160	<1	2	<10	34.9	754	0.6
HDIS_580_08	24	4	<1	110	<1	<1	<10	33.7	1120	0.5
*Rep HDIS_580_08	23	5	<1	110	<1	1	<10	37.5	1220	0.5
HDIS_581_08	34	7	<1	50	<1	1	<10	48.8	911	<0.5
HDIS_582_08	48	10	<1	90	<1	2	<10	47.9	2170	0.8
HDIS_583_08	137	82	<1	50	<1	16	<10	107	3900	1.3
HDIS_584_08	77	64	<1	80	<1	12	<10	56.6	1210	1.7
HDIS_585_08	35	41	<1	910	<1	10	<10	17.8	171	<0.5
HDIS_586_08	47	36	<1	640	<1	8	<10	21.0	134	<0.5
HDIS_587_08	12	106	<1	860	<1	16	<10	34.7	60	<0.5
HDIS_591_08	10	72	<1	1710	<1	11	<10	50.5	27	0.9

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
HDIS_592_08	11	69	<1	1440	<1	12	<10	16.3	63	0.5
HDIS_593_08	23	22	<1	1650	<1	4	<10	13.2	61	<0.5
HDIS_594_08	45	31	<1	1210	<1	11	<10	26.0	163	1.4
HDIS_595_08	<5	13	<1	1290	<1	2	<10	10.8	16	<0.5
*Rep HDIS_595_08	<5	13	<1	1310	<1	2	<10	12.7	13	<0.5
HDIS_596_08	7	14	<1	1210	<1	2	<10	9.9	54	<0.5
HDIS_597_08	67	11	<1	1010	<1	3	<10	38.0	152	<0.5
HDIS_598_08	77	19	<1	210	<1	4	<10	59.9	1620	0.6
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
HDIS_599_08	62	21	<1	170	<1	4	<10	62.6	2410	0.5
*Std MMISRM16	10	6	<1	520	<1	<1	<10	27.7	9	<0.5
*Std MMISRM16	12	6	<1	550	<1	<1	<10	30.5	<3	<0.5
*Std MMISRM16	13	6	<1	570	<1	<1	<10	29.3	5	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	5	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_291_08	12	<1	129	7	1440	41
*Rep CHYS_291_08	12	<1	109	6	1490	34
CHYS_313_08	18	<1	86	5	30	6
CHYS_314_08	59	3	2850	148	670	413
CHYS_335_08	40	<1	218	12	2650	20
CHYS_336_08	10	<1	40	3	280	26
CHYS_337_08	9	<1	92	6	70	55
CHYS_380_08	45	<1	90	9	220	54
CHYS_381_08	11	<1	84	6	500	30
HDIS_152_08	27	<1	118	10	440	105
HDIS_153_08	33	<1	113	9	120	107
HDIS_154_08	31	<1	442	23	220	180
HDIS_155_08	63	<1	1210	82	660	150
HDIS_179_08	30	<1	457	30	1080	64
*Rep HDIS_179_08	35	<1	556	37	910	80
HDIS_180_08	30	<1	80	9	460	103
HDIS_181_08	23	<1	337	14	230	155
HDIS_182_08	13	<1	<5	<1	50	<5
HDIS_183_08	37	<1	454	26	180	115
HDIS_206_08	30	<1	1020	78	1190	49
HDIS_207_08	21	<1	67	9	100	44
HDIS_208_08	17	<1	231	14	670	126
HDIS_209_08	7	<1	69	6	280	82
HDIS_235_08	36	<1	665	35	570	38
HDIS_236_08	28	<1	400	22	350	124
HDIS_237_08	10	<1	28	3	220	50
HDIS_238_08	15	<1	316	17	50	35
*Rep HDIS_238_08	13	<1	333	17	40	30
HDIS_400_08	19	<1	141	12	240	149
HDIS_411_08	69	1	951	63	710	206
HDIS_492_08	45	<1	357	22	390	121
HDIS_497_08	33	<1	103	6	160	20
HDIS_498_08	78	<1	1280	66	260	107
HDIS_499_08	46	<1	1120	71	10800	277
HDIS_500_08	60	<1	652	37	380	123
HDIS_501_08	30	<1	361	22	3020	105
HDIS_503_08	118	<1	1170	69	470	118
HDIS_506_08	17	<1	374	21	220	98
HDIS_507_08	27	<1	612	30	270	17
HDIS_508_08	55	<1	210	13	160	59
*Rep HDIS_508_08	60	<1	241	16	130	81
HDIS_524_08	45	<1	473	22	250	52
HDIS_525_08	72	<1	51	6	140	21
HDIS_526_08	41	<1	149	8	4040	24
HDIS_527_08	17	<1	140	7	730	20
HDIS_528_08	13	<1	116	7	2050	47

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
HDIS_529_08	22	<1	211	12	1530	44
HDIS_531_08	90	<1	649	38	130	38
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
HDIS_532_08	27	<1	222	12	750	67
HDIS_532A_08	29	<1	218	12	570	25
HDIS_533_08	15	<1	59	4	860	26
HDIS_534_08	35	<1	1030	53	170	127
HDIS_539_08	15	<1	354	27	520	67
*Rep HDIS_539_08	14	<1	324	23	520	81
HDIS_540_08	24	<1	433	24	90	50
HDIS_541_08	29	<1	250	14	190	50
HDIS_542_08	24	<1	184	11	750	30
HDIS_546_08	60	<1	184	16	330	183
HDIS_547_08	16	<1	165	8	330	69
HDIS_549_08	27	<1	137	6	150	25
HDIS_550_08	112	<1	332	18	150	94
HDIS_551_08	19	<1	175	11	230	41
HDIS_552_08	27	<1	174	11	1070	44
HDIS_553_08	35	<1	81	5	130	7
HDIS_554_08	51	<1	310	20	3170	117
HDIS_555_08	24	<1	353	20	2400	23
*Rep HDIS_555_08	25	<1	351	20	2850	25
HDIS_556_08	58	<1	240	17	140	43
HDIS_557_08	51	1	2270	125	210	139
HDIS_558_08	9	<1	19	2	30	66
HDIS_559_08	20	<1	52	6	90	150
HDIS_560_08	8	<1	79	5	500	62
HDIS_570_08	167	<1	1790	120	400	242
HDIS_571_08	159	<1	359	24	180	95
HDIS_572_08	27	<1	62	6	190	80
HDIS_577_08	47	<1	166	10	140	41
HDIS_578_08	28	<1	231	18	100	90
HDIS_579_08	16	<1	60	6	30	73
HDIS_580_08	10	<1	28	3	60	80
*Rep HDIS_580_08	11	<1	28	3	50	85
HDIS_581_08	11	<1	44	5	260	102
HDIS_582_08	18	<1	52	5	60	131
HDIS_583_08	34	2	372	26	260	286
HDIS_584_08	18	<1	294	18	290	124
HDIS_585_08	10	<1	386	23	1430	32
HDIS_586_08	10	<1	284	17	350	35
HDIS_587_08	36	<1	374	20	170	91
HDIS_591_08	55	<1	281	16	150	54

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
HDIS_592_08	72	<1	291	15	430	47
HDIS_593_08	22	<1	110	7	490	28
HDIS_594_08	19	<1	425	26	110	67
HDIS_595_08	25	<1	48	2	90	9
*Rep HDIS_595_08	29	<1	47	3	70	11
HDIS_596_08	6	<1	69	4	440	12
HDIS_597_08	59	<1	112	8	260	85
HDIS_598_08	35	<1	121	11	110	182
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
HDIS_599_08	29	1	113	10	200	149
*Std MMISRM16	47	<1	11	<1	230	15
*Std MMISRM16	49	<1	12	<1	280	16
*Std MMISRM16	49	<1	14	<1	300	16
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO101887

To: **Logan Resources Ltd.**

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

Date: Sep 04, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 60
Date Submitted Jul 22, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 60 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_1279_08	4	40	10	0.4	2110	<1	410	6	13	116
*Rep CHYS_1279_08	2	41	30	0.3	2180	<1	430	3	18	161
HDIS_150_08	4	256	<10	<0.1	1370	<1	60	5	413	46
HDIS_151_08	6	292	<10	<0.1	830	<1	40	8	68	56
HDIS_177_08	12	63	<10	<0.1	3620	<1	370	3	18	17
HDIS_178_08	5	300	<10	<0.1	2850	<1	10	10	93	77
HDIS_202_08	1	132	<10	<0.1	1080	<1	270	15	100	14
HDIS_287_08	3	>300	<10	<0.1	720	<1	10	17	94	86
HDIS_288_08	3	253	<10	<0.1	1300	<1	50	15	98	68
HDIS_289_08	2	160	<10	<0.1	10200	<1	190	6	43	63
HDIS_290_08	5	203	30	0.1	2270	1	40	3	336	51
HDIS_291_08	3	251	10	0.1	1840	<1	10	5	71	169
HDIS_609_08	3	>300	20	0.2	1450	<1	20	10	213	217
HDIS_610_08	8	36	<10	<0.1	5900	<1	560	3	103	46
*Rep HDIS_610_08	8	42	<10	<0.1	5440	<1	530	3	143	38
HDIS_611_08	3	137	<10	<0.1	2480	<1	220	4	59	49
HDIS_612_08	12	94	<10	<0.1	2220	<1	450	14	61	45
HDIS_613_08	74	78	50	1.7	2860	<1	200	15	353	530
HDIS_614_08	7	63	<10	0.2	1080	<1	460	6	85	67
HDIS_615_08	4	270	<10	<0.1	1250	<1	20	10	66	76
HDIS_616_08	7	159	30	0.3	3390	1	50	4	120	197
HDIS_617_08	6	140	20	0.2	1030	1	10	<1	73	18
HDIS_618_08	4	223	<10	0.2	990	<1	10	2	59	44
HDIS_619_08	2	>300	30	<0.1	2200	1	10	11	160	127
HDIS_620_08	4	263	<10	0.2	810	<1	10	5	124	244
HDIS_621_08	3	>300	<10	<0.1	1030	<1	10	16	117	82
HDIS_622_08	2	263	<10	<0.1	1300	<1	30	14	69	48
*Rep HDIS_622_08	4	281	10	<0.1	1870	<1	30	10	123	61
HDIS_623_08	10	161	<10	<0.1	1070	<1	170	18	140	45
HDIS_624_08	7	133	<10	<0.1	2490	<1	190	13	133	189
HDIS_625_08	37	111	<10	0.1	3480	<1	270	26	307	177
HDIS_626_08	3	215	<10	<0.1	2170	<1	60	10	53	437
HDIS_628_08	6	115	30	0.2	5890	<1	180	31	741	167
HDIS_629_08	5	258	<10	<0.1	1120	<1	<10	17	83	232
HDIS_630_08	2	280	<10	<0.1	670	<1	30	10	19	66
HDIS_631_08	6	249	30	<0.1	6320	2	30	25	242	238
HDIS_636_08	8	274	10	<0.1	1840	1	20	11	158	85
HDIS_637_08	7	48	<10	0.1	940	<1	540	11	36	16
HDIS_638_08	6	127	<10	<0.1	4380	<1	370	14	168	73
HDIS_639_08	13	239	<10	<0.1	1930	<1	40	6	196	192
*Rep HDIS_639_08	12	243	<10	<0.1	1400	<1	40	4	148	137
HDIS_640_08	6	140	10	0.1	3160	4	120	3	37	104
CHYS_384_08	161	20	<10	6.2	240	<1	510	50	83	12
CHYS_1146_08	5	292	<10	<0.1	1610	<1	30	36	19	142
CHYS_1189_08	4	269	<10	<0.1	340	<1	<10	8	102	9
CHYS_1207_08	2	186	<10	<0.1	350	<1	120	51	64	455

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_1222_08	5	231	20	<0.1	260	<1	<10	7	32	24
CHYS_1235_08	12	266	20	<0.1	1190	<1	60	172	308	189
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
CHYS_1249_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_1255_08	6	136	<10	<0.1	1000	4	180	96	43	202
CHYS_1256_08	9	264	30	0.2	2020	2	10	12	108	81
CHYS_1273_08	2	106	10	0.2	2050	<1	450	232	24	397
CHYS_1280_08	9	219	<10	<0.1	1070	2	20	16	31	242
*Rep CHYS_1280_08	11	198	20	<0.1	1870	2	20	17	60	426
HDIS_204_08	15	11	<10	0.2	17400	<1	370	2	41	145
HDIS_205_08	4	270	<10	<0.1	1860	<1	10	6	184	21
HDIS_231_08	1	108	<10	<0.1	3290	<1	290	14	76	64
HDIS_233_08	6	>300	30	0.2	1060	1	10	8	261	78
HDIS_234_08	3	152	<10	<0.1	570	<1	<10	<1	15	69
HDIS_259_08	2	264	<10	<0.1	730	<1	20	11	20	111
HDIS_260_08	2	253	<10	<0.1	430	<1	10	8	16	59
HDIS_261_08	8	186	<10	<0.1	3620	<1	120	8	160	25
HDIS_262_08	4	245	<10	<0.1	2680	<1	20	4	28	72
HDIS_263_08	5	>300	10	<0.1	1220	<1	20	6	58	125
CHYS_1246_08	20	196	<10	<0.1	3910	<1	210	19	348	21
*Std MMISRM16	21	55	10	35.7	80	<1	200	5	19	67
*Std MMISRM16	22	56	10	36.2	120	<1	200	4	21	68
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_1279_08	<100	1560	5	3.2	1.3	221	5	6	<5	31
*Rep CHYS_1279_08	<100	1150	4	2.4	1.3	158	5	7	<5	34
HDIS_150_08	<100	150	165	57.0	37.1	41	239	116	<5	12
HDIS_151_08	<100	90	35	12.4	7.1	82	42	17	<5	11
HDIS_177_08	<100	510	93	31.7	37.4	9	183	16	<5	35
HDIS_178_08	<100	600	86	34.0	13.7	54	76	39	6	2
HDIS_202_08	<100	470	64	32.1	13.3	15	65	50	<5	7
HDIS_287_08	<100	270	48	18.2	9.4	57	46	25	<5	2
HDIS_288_08	<100	110	52	21.3	12.9	81	62	30	<5	4
HDIS_289_08	<100	3300	412	239	67.3	48	378	53	<5	43
HDIS_290_08	<100	150	69	30.0	28.3	63	116	138	<5	6
HDIS_291_08	<100	830	31	17.0	5.7	155	25	37	<5	2
HDIS_609_08	100	300	53	19.3	13.9	143	65	66	8	2
HDIS_610_08	<100	80	94	34.3	25.8	8	160	26	13	50
*Rep HDIS_610_08	<100	80	117	42.0	32.3	10	196	36	11	48
HDIS_611_08	<100	60	20	8.8	6.1	43	27	17	7	20
HDIS_612_08	<100	50	23	10.2	7.7	37	35	22	6	8
HDIS_613_08	<100	1030	28	11.6	9.6	133	36	37	<5	16
HDIS_614_08	<100	120	39	16.6	11.4	43	53	23	<5	17
HDIS_615_08	<100	160	49	27.8	6.0	152	28	24	<5	3
HDIS_616_08	<100	910	33	19.9	6.5	341	25	49	<5	2
HDIS_617_08	<100	760	9	5.8	2.2	412	9	32	<5	1
HDIS_618_08	<100	290	18	12.3	2.3	208	9	25	<5	1
HDIS_619_08	<100	200	65	30.5	12.1	191	54	56	6	3
HDIS_620_08	<100	370	24	11.1	5.1	83	22	42	<5	1
HDIS_621_08	<100	180	59	23.8	12.7	49	60	36	5	2
HDIS_622_08	<100	150	55	24.2	10.6	84	45	20	<5	3
*Rep HDIS_622_08	<100	180	52	21.7	12.9	99	52	34	<5	3
HDIS_623_08	<100	170	99	41.8	27.9	23	124	38	<5	4
HDIS_624_08	<100	250	35	15.3	10.3	64	43	31	<5	7
HDIS_625_08	<100	360	68	33.4	18.7	22	81	53	<5	3
HDIS_626_08	<100	190	16	9.1	3.5	103	14	11	<5	6
HDIS_628_08	<100	900	202	102	58.8	82	260	320	<5	14
HDIS_629_08	<100	150	63	35.2	8.4	226	37	27	<5	<1
HDIS_630_08	<100	90	27	13.1	3.4	116	16	6	<5	5
HDIS_631_08	100	260	77	38.8	16.9	225	76	113	<5	7
HDIS_636_08	<100	170	67	32.7	10.8	181	47	39	12	2
HDIS_637_08	<100	60	21	9.0	7.7	16	31	14	<5	7
HDIS_638_08	<100	110	161	72.5	33.5	20	191	55	<5	17
HDIS_639_08	<100	670	411	190	68.2	104	319	52	<5	2
*Rep HDIS_639_08	<100	640	409	194	63.2	82	290	37	<5	2
HDIS_640_08	<100	1690	11	10.3	2.9	386	11	15	<5	4
CHYS_384_08	<100	420	30	20.3	5.8	3	40	75	<5	174
CHYS_1146_08	<100	180	14	7.4	1.5	83	7	17	11	8
CHYS_1189_08	<100	160	29	12.9	6.6	25	26	35	<5	<1
CHYS_1207_08	<100	2680	35	21.3	6.8	22	26	27	<5	2

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_1222_08	<100	210	22	12.8	2.6	78	12	13	<5	<1
CHYS_1235_08	<100	1460	109	52.1	19.3	120	84	79	<5	11
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
CHYS_1249_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_1255_08	<100	710	79	62.4	8.4	168	44	18	9	25
CHYS_1256_08	<100	360	49	24.9	7.4	210	33	42	<5	2
CHYS_1273_08	<100	70	6	3.5	1.4	88	6	9	<5	42
CHYS_1280_08	<100	420	22	12.2	1.9	211	10	12	<5	3
*Rep CHYS_1280_08	<100	600	20	11.3	2.7	274	13	20	<5	4
HDIS_204_08	<100	3090	30	11.0	16.8	7	59	7	<5	37
HDIS_205_08	<100	270	102	38.0	20.9	29	112	57	<5	1
HDIS_231_08	<100	60	28	14.0	7.2	43	33	23	<5	36
HDIS_233_08	<100	550	108	40.4	28.7	90	127	77	<5	1
HDIS_234_08	<100	260	2	1.3	0.7	403	3	7	<5	2
HDIS_259_08	<100	260	8	5.9	1.1	114	5	8	6	7
HDIS_260_08	<100	60	12	8.8	1.1	146	5	5	<5	1
HDIS_261_08	<100	1670	467	221	85.5	29	386	69	<5	7
HDIS_262_08	<100	240	75	41.4	7.0	101	40	10	<5	3
HDIS_263_08	<100	270	21	7.1	4.2	85	21	20	<5	7
CHYS_1246_08	<100	1400	166	76.0	34.7	47	164	125	<5	27
*Std MMISRM16	<100	640	3	1.2	1.4	2	5	4	<5	34
*Std MMISRM16	<100	640	4	1.3	1.5	2	6	5	<5	34
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1279_08	25	<0.5	11	281	80	<1	3	<1	11	10
*Rep CHYS_1279_08	36	<0.5	14	345	40	<1	3	<1	8	6
HDIS_150_08	<5	0.9	349	272	1170	<1	63	<1	213	<1
HDIS_151_08	<5	1.6	51	178	1080	<1	9	<1	184	<1
HDIS_177_08	<5	<0.5	151	71	150	<1	18	<1	168	<1
HDIS_178_08	5	2.8	95	153	340	<1	17	<1	206	<1
HDIS_202_08	<5	<0.5	129	140	430	<1	24	<1	125	<1
HDIS_287_08	<5	2.4	68	149	560	<1	12	<1	181	<1
HDIS_288_08	<5	1.8	93	142	870	<1	15	<1	133	<1
HDIS_289_08	<5	<0.5	293	240	710	<1	42	<1	67	<1
HDIS_290_08	<5	4.8	324	32	600	<1	65	<1	196	3
HDIS_291_08	6	4.2	53	81	210	<1	12	<1	105	<1
HDIS_609_08	<5	3.1	136	212	480	<1	27	<1	296	4
HDIS_610_08	<5	<0.5	192	150	530	<1	23	<1	78	<1
*Rep HDIS_610_08	<5	<0.5	260	148	650	<1	33	<1	83	<1
HDIS_611_08	<5	<0.5	47	138	1120	<1	9	<1	166	<1
HDIS_612_08	<5	<0.5	65	280	620	<1	11	<1	92	<1
HDIS_613_08	6	2.2	95	283	560	<1	19	<1	118	7
HDIS_614_08	<5	<0.5	88	213	430	<1	15	<1	54	<1
HDIS_615_08	<5	2.4	46	166	700	<1	9	<1	104	<1
HDIS_616_08	5	3.0	69	251	200	<1	16	<1	123	3
HDIS_617_08	<5	4.9	31	55	20	<1	8	<1	139	1
HDIS_618_08	<5	4.7	30	71	100	<1	7	<1	148	<1
HDIS_619_08	6	8.0	111	119	610	<1	22	<1	240	3
HDIS_620_08	<5	1.7	56	92	540	<1	13	<1	203	<1
HDIS_621_08	<5	3.2	102	124	460	<1	18	<1	184	<1
HDIS_622_08	<5	2.6	68	111	410	<1	11	<1	66	<1
*Rep HDIS_622_08	<5	3.7	89	132	380	<1	16	<1	152	2
HDIS_623_08	<5	0.5	177	219	530	<1	27	<1	147	<1
HDIS_624_08	<5	1.2	86	158	810	<1	16	<1	142	1
HDIS_625_08	<5	<0.5	156	261	200	<1	29	<1	149	1
HDIS_626_08	<5	0.9	27	244	140	<1	5	<1	213	<1
HDIS_628_08	<5	1.2	651	555	740	<1	133	<1	47	3
HDIS_629_08	<5	1.5	62	138	620	<1	12	<1	307	2
HDIS_630_08	<5	2.1	19	81	550	<1	3	<1	97	<1
HDIS_631_08	<5	6.2	181	226	650	<1	39	<1	55	2
HDIS_636_08	<5	3.1	81	163	750	<1	16	<1	186	3
HDIS_637_08	<5	<0.5	50	154	70	<1	8	<1	24	<1
HDIS_638_08	<5	<0.5	228	209	580	<1	35	<1	227	<1
HDIS_639_08	<5	0.5	327	328	1410	<1	47	<1	159	1
*Rep HDIS_639_08	<5	<0.5	278	380	1400	<1	38	<1	151	<1
HDIS_640_08	<5	2.6	25	325	190	<1	5	<1	77	6
CHYS_384_08	35	<0.5	78	42	390	<1	14	<1	23	2
CHYS_1146_08	<5	1.0	14	163	820	<1	3	<1	278	<1
CHYS_1189_08	<5	0.6	78	44	560	<1	17	<1	98	<1
CHYS_1207_08	<5	<0.5	65	610	720	<1	13	<1	61	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1222_08	<5	4.3	27	45	200	<1	5	<1	196	2
CHYS_1235_08	9	0.9	179	1020	260	<1	36	<1	418	3
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_1249_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_1255_08	<5	0.6	55	276	790	<1	10	<1	141	2
CHYS_1256_08	7	6.1	74	104	310	<1	15	<1	147	5
CHYS_1273_08	6	0.9	16	72	120	<1	4	<1	80	<1
CHYS_1280_08	<5	3.1	17	111	420	<1	4	<1	174	3
*Rep CHYS_1280_08	5	4.1	30	167	390	<1	7	<1	223	5
HDIS_204_08	<5	<0.5	60	263	110	<1	7	<1	69	<1
HDIS_205_08	<5	1.8	183	87	440	<1	32	<1	118	<1
HDIS_231_08	<5	<0.5	72	46	180	<1	13	<1	87	<1
HDIS_233_08	7	3.7	234	108	830	<1	42	<1	224	1
HDIS_234_08	<5	4.4	7	96	40	<1	2	<1	92	<1
HDIS_259_08	6	2.5	10	143	110	<1	2	<1	76	<1
HDIS_260_08	<5	1.9	8	59	310	<1	2	<1	49	<1
HDIS_261_08	<5	<0.5	409	356	820	<1	60	<1	159	<1
HDIS_262_08	<5	1.6	35	86	560	<1	6	<1	103	<1
HDIS_263_08	<5	3.4	32	116	290	<1	7	<1	154	<1
CHYS_1246_08	<5	<0.5	360	249	480	<1	65	<1	63	1
*Std MMISRM16	54	<0.5	18	260	140	31	3	<1	329	<1
*Std MMISRM16	55	<0.5	19	274	140	30	3	<1	337	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	2	<5	<10	<1	<1	<1	<5	<1

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Order:

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1279_08	36	4	<1	2250	<1	<1	<10	4.3	51	<0.5
*Rep CHYS_1279_08	27	4	<1	2320	<1	<1	<10	4.8	51	<0.5
HDIS_150_08	136	147	<1	290	<1	35	<10	92.9	276	0.8
HDIS_151_08	38	26	<1	260	<1	7	<10	52.4	552	0.7
HDIS_177_08	9	115	<1	2410	<1	21	<10	20.7	<3	0.5
HDIS_178_08	77	44	<1	80	<1	14	<10	41.1	932	0.7
HDIS_202_08	38	46	<1	650	<1	11	<10	15.7	124	<0.5
HDIS_287_08	64	31	<1	50	<1	8	<10	37.9	711	0.8
HDIS_288_08	45	45	<1	150	<1	10	<10	52.3	716	1.1
HDIS_289_08	109	193	<1	1410	<1	63	<10	28.7	8	<0.5
HDIS_290_08	123	101	<1	130	<1	14	<10	39.0	2270	0.6
HDIS_291_08	36	20	<1	60	<1	5	<10	22.9	1410	0.7
HDIS_609_08	61	52	<1	60	<1	10	<10	81.8	1050	1.7
HDIS_610_08	10	95	<1	3420	<1	19	<10	93.8	8	0.5
*Rep HDIS_610_08	10	124	<1	3120	<1	24	<10	102	<3	0.5
HDIS_611_08	21	20	<1	820	<1	4	<10	24.9	122	0.6
HDIS_612_08	14	26	<1	1550	<1	5	<10	9.0	30	<0.5
HDIS_613_08	34	30	<1	960	<1	5	<10	57.7	571	1.6
HDIS_614_08	10	37	<1	1670	<1	7	<10	10.1	15	<0.5
HDIS_615_08	63	18	<1	110	<1	7	<10	41.2	641	<0.5
HDIS_616_08	86	21	<1	270	<1	5	<10	63.8	985	0.8
HDIS_617_08	40	8	<1	50	<1	1	<10	33.9	927	0.8
HDIS_618_08	57	8	<1	40	<1	2	<10	52.1	856	0.8
HDIS_619_08	94	40	1	80	<1	10	<10	77.1	3210	1.2
HDIS_620_08	47	17	<1	40	<1	4	<10	42.0	668	1.5
HDIS_621_08	72	44	<1	50	<1	10	<10	56.4	1220	1.1
HDIS_622_08	77	30	<1	160	<1	9	<10	40.0	831	0.8
*Rep HDIS_622_08	89	39	<1	120	<1	9	<10	82.9	1400	1.3
HDIS_623_08	61	92	<1	320	<1	18	<10	41.2	242	0.6
HDIS_624_08	30	34	<1	630	<1	6	<10	38.3	516	0.7
HDIS_625_08	33	58	<1	780	<1	12	<10	17.6	50	1.1
HDIS_626_08	36	12	<1	380	<1	3	<10	35.0	339	1.3
HDIS_628_08	187	204	<1	720	<1	37	<10	96.8	560	<0.5
HDIS_629_08	72	26	<1	50	<1	8	<10	61.9	360	0.7
HDIS_630_08	41	9	<1	180	<1	4	<10	24.3	856	<0.5
HDIS_631_08	118	58	<1	190	<1	13	<10	99.7	1840	<0.5
HDIS_636_08	116	32	<1	70	<1	10	<10	114	927	1.0
HDIS_637_08	6	22	<1	1480	<1	4	<10	6.6	15	<0.5
HDIS_638_08	42	118	<1	810	<1	29	<10	24.2	60	0.5
HDIS_639_08	159	180	<1	280	<1	65	<10	75.4	204	0.9
*Rep HDIS_639_08	165	161	<1	280	<1	63	<10	61.4	112	0.8
HDIS_640_08	42	9	<1	820	<1	2	<10	49.7	649	1.0
CHYS_384_08	14	23	<1	2830	<1	5	<10	20.6	<3	1.9
CHYS_1146_08	23	4	<1	300	<1	2	<10	17.8	283	1.3
CHYS_1189_08	41	21	<1	30	<1	5	<10	33.2	164	0.9
CHYS_1207_08	14	18	<1	520	<1	5	<10	6.0	33	0.6

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1222_08	45	8	<1	20	<1	3	<10	23.7	1560	2.0
CHYS_1235_08	93	60	<1	350	<1	17	<10	68.1	349	1.3
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_1249_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_1255_08	68	23	<1	880	<1	9	<10	15.8	173	<0.5
CHYS_1256_08	94	24	<1	100	<1	7	<10	52.1	1980	1.3
CHYS_1273_08	31	5	<1	2460	<1	<1	<10	8.5	230	0.7
CHYS_1280_08	43	6	<1	120	<1	3	<10	38.5	991	0.8
*Rep CHYS_1280_08	57	10	<1	130	<1	3	<10	52.9	1540	1.2
HDIS_204_08	14	40	<1	1310	<1	7	<10	18.6	3	<0.5
HDIS_205_08	88	73	<1	60	<1	19	<10	15.6	442	1.0
HDIS_231_08	57	26	<1	2240	<1	5	<10	7.5	100	<0.5
HDIS_233_08	133	97	<1	40	<1	20	<10	85.8	1380	1.1
HDIS_234_08	15	2	<1	50	<1	<1	<10	11.3	1280	0.6
HDIS_259_08	34	4	<1	100	<1	1	<10	23.8	901	<0.5
HDIS_260_08	36	3	<1	50	<1	1	<10	12.3	342	0.8
HDIS_261_08	139	220	<1	700	<1	74	<10	43.2	19	0.5
HDIS_262_08	93	21	<1	140	<1	10	<10	21.6	439	0.7
HDIS_263_08	31	14	<1	270	<1	4	<10	32.0	1250	1.0
CHYS_1246_08	117	118	1	890	<1	28	<10	36.9	39	<0.5
*Std MMISRM16	14	6	<1	460	<1	<1	<10	31.0	<3	<0.5
*Std MMISRM16	15	6	<1	480	<1	<1	<10	31.2	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1279_08	32	<1	34	2	120	12
*Rep CHYS_1279_08	26	<1	26	2	90	13
HDIS_150_08	32	<1	649	35	190	185
HDIS_151_08	15	<1	120	8	700	91
HDIS_177_08	52	<1	377	18	100	44
HDIS_178_08	30	<1	347	21	550	97
HDIS_202_08	26	<1	359	22	1030	44
HDIS_287_08	14	<1	178	11	870	96
HDIS_288_08	14	<1	230	14	940	81
HDIS_289_08	160	1	2700	157	280	72
HDIS_290_08	22	<1	328	23	110	101
HDIS_291_08	15	1	134	12	310	92
HDIS_609_08	20	<1	181	12	840	215
HDIS_610_08	33	<1	361	16	230	11
*Rep HDIS_610_08	31	<1	454	19	360	14
HDIS_611_08	13	<1	86	6	560	83
HDIS_612_08	54	<1	119	7	870	31
HDIS_613_08	21	<1	109	9	460	114
HDIS_614_08	30	<1	195	11	550	18
HDIS_615_08	12	<1	230	20	420	70
HDIS_616_08	33	<1	148	15	160	124
HDIS_617_08	13	<1	34	6	<20	85
HDIS_618_08	16	<1	74	10	150	98
HDIS_619_08	18	1	272	20	400	184
HDIS_620_08	12	<1	91	7	210	82
HDIS_621_08	20	1	233	15	490	101
HDIS_622_08	16	<1	225	16	920	90
*Rep HDIS_622_08	22	<1	196	15	580	178
HDIS_623_08	23	<1	482	26	400	73
HDIS_624_08	20	<1	150	10	770	91
HDIS_625_08	60	<1	348	24	170	70
HDIS_626_08	11	<1	65	6	300	52
HDIS_628_08	55	1	1120	79	540	169
HDIS_629_08	29	<1	262	23	440	93
HDIS_630_08	7	<1	121	9	310	48
HDIS_631_08	24	2	379	25	1090	169
HDIS_636_08	27	<1	272	24	720	160
HDIS_637_08	11	<1	110	6	600	8
HDIS_638_08	36	<1	746	47	320	72
HDIS_639_08	82	<1	2470	122	180	78
*Rep HDIS_639_08	76	<1	2450	128	160	54
HDIS_640_08	31	<1	52	10	30	105
CHYS_384_08	108	<1	164	14	490	<5
CHYS_1146_08	6	<1	53	5	2640	33
CHYS_1189_08	25	<1	130	9	70	52
CHYS_1207_08	17	<1	267	15	830	10

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1222_08	29	<1	114	9	110	66
CHYS_1235_08	79	<1	495	37	570	162
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_1249_08	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
CHYS_1255_08	23	<1	476	52	1180	29
CHYS_1256_08	27	1	217	16	360	152
CHYS_1273_08	6	<1	26	4	1020	26
CHYS_1280_08	14	<1	93	8	480	58
*Rep CHYS_1280_08	19	<1	84	8	450	83
HDIS_204_08	28	<1	144	7	60	28
HDIS_205_08	23	<1	411	23	180	46
HDIS_231_08	9	<1	134	9	900	12
HDIS_233_08	32	1	414	27	500	230
HDIS_234_08	4	<1	9	1	150	37
HDIS_259_08	7	<1	34	5	1610	82
HDIS_260_08	5	<1	51	8	1020	30
HDIS_261_08	99	<1	3190	137	180	55
HDIS_262_08	18	<1	295	26	460	41
HDIS_263_08	14	<1	64	4	290	83
CHYS_1246_08	18	<1	911	45	970	36
*Std MMISRM16	52	<1	12	<1	240	15
*Std MMISRM16	54	<1	14	<1	220	16
*Bik BLANK	<1	<1	<5	<1	<20	<5
*Bik BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO102016

To: **Logan Resources Ltd.**

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

Date: Sep 05, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 57
Date Submitted Jul 28, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_319_08	18	10	50	0.8	960	<1	590	53	148	178
*Rep CHYS_319_08	17	10	70	0.7	890	<1	590	49	213	175
CHYS_320_08	3	80	10	0.3	2280	<1	550	8	87	69
CHYS_321_08	1	17	<10	<0.1	820	<1	450	35	<5	100
CHYS_322_08	8	264	<10	<0.1	2350	<1	40	32	38	206
CHYS_338_08	<1	69	<10	<0.1	480	1	310	9	30	86
CHYS_339_08	99	47	20	2.4	700	<1	400	25	58	20
CHYS_361_08	80	53	<10	8.3	990	<1	850	25	225	14
CHYS_384_08	26	96	10	1.9	1250	<1	700	50	1020	6
CHYS_1201_08	1	248	160	0.2	1740	2	70	130	120	498
CHYS_1215_08	3	>300	640	12.2	360	<1	40	36	17	182
CHYS_1216_08	1	228	40	<0.1	310	1	<10	6	15	92
CHYS_1229_08	<1	227	<10	<0.1	260	<1	20	27	26	314
HDIS_24_08	2	>300	10	<0.1	1810	<1	20	6	73	54
*Rep HDIS_24_08	2	293	10	<0.1	1910	<1	30	5	98	50
HDIS_39_08	5	263	10	<0.1	2730	<1	50	11	302	53
HDIS_40_08	2	>300	20	<0.1	360	1	<10	6	114	85
HDIS_56_08	4	285	<10	<0.1	240	<1	<10	6	77	56
HDIS_57_08	3	>300	<10	<0.1	960	<1	10	9	64	67
HDIS_58_08	1	145	<10	<0.1	2290	<1	270	30	37	57
HDIS_59_08	3	296	20	<0.1	1140	<1	10	4	73	100
HDIS_74_08	2	261	<10	<0.1	1480	<1	30	20	176	139
HDIS_75_08	3	191	10	<0.1	1100	1	20	3	211	68
HDIS_95_08	<1	90	<10	<0.1	4790	<1	160	2	30	310
HDIS_96_08	4	99	<10	<0.1	1860	<1	340	5	42	7
HDIS_97_08	9	60	<10	<0.1	2070	<1	400	3	42	8
HDIS_98_08	27	22	<10	0.3	620	<1	410	27	25	26
*Rep HDIS_98_08	24	23	<10	0.3	560	<1	400	27	27	35
HDIS_121_08	4	106	<10	<0.1	1060	<1	410	9	73	40
HDIS_122_08	13	103	<10	0.2	2080	<1	290	8	297	125
HDIS_123_08	2	>300	<10	<0.1	1050	<1	20	2	117	38
HDIS_217_08	2	216	<10	<0.1	730	<1	20	1	8	62
HDIS_502_08	7	171	<10	0.1	1130	<1	130	12	397	171
HDIS_530_08	20	236	10	0.3	700	<1	20	7	36	383
HDIS_573_08	<1	163	<10	<0.1	1060	<1	250	23	31	53
HDIS_574_08	13	57	<10	<0.1	770	<1	510	19	30	11
HDIS_575_08	2	145	100	<0.1	550	3	170	26	30	111
HDIS_576_08	34	93	20	0.2	460	<1	210	27	558	140
HDIS_632_08	<1	262	<10	<0.1	1080	<1	30	39	14	215
HDIS_633_08	1	251	<10	<0.1	1090	<1	70	20	53	322
*Rep HDIS_633_08	1	258	<10	<0.1	940	<1	50	23	49	378
HDIS_634_08	1	101	10	<0.1	1340	2	210	35	98	237
HDIS_29_08	7	174	<10	<0.1	1150	<1	200	9	292	51
HDIS_45_08	1	300	<10	<0.1	830	<1	10	9	59	40
HDIS_44_08	<1	184	<10	<0.1	980	<1	40	18	23	57
HDIS_62_08	12	92	<10	<0.1	1480	<1	330	3	138	22

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
HDIS_63_08	3	146	<10	<0.1	2850	<1	270	13	164	52
HDIS_83_08	1	>300	<10	<0.1	1830	<1	<10	35	46	117
Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
HDIS_105_08	6	164	<10	<0.1	470	<1	10	8	975	34
HDIS_129_08	2	77	<10	<0.1	5940	<1	230	4	97	34
HDIS_169_08	3	99	<10	<0.1	2840	<1	390	34	51	30
HDIS_170_08	1	128	<10	<0.1	3570	<1	390	9	95	42
HDIS_196_08	2	200	<10	<0.1	1850	<1	200	13	114	122
*Rep HDIS_196_08	3	184	<10	<0.1	1560	<1	230	13	133	111
HDIS_197_08	5	229	<10	<0.1	1820	<1	150	15	202	100
HDIS_224_08	6	>300	<10	<0.1	1160	<1	40	9	91	133
HDIS_225_08	1	199	<10	<0.1	1250	<1	190	30	43	151
HDIS_340_08	<1	144	<10	<0.1	2160	<1	250	12	22	258
HDIS_368B_08	2	181	<10	<0.1	2180	<1	250	11	177	135
HDIS_374_08	11	108	20	<0.1	6420	<1	280	6	151	35
HDIS_401_08	21	83	10	0.3	2460	<1	370	27	190	134
HDIS_430_08	37	88	<10	<0.1	1690	<1	430	26	92	164
*Std MMISRM16	15	42	10	33.0	70	<1	260	3	13	48
*Std MMISRM16	22	61	20	34.6	140	<1	310	5	24	79
*Bik BLANK	<1	1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Bik BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_319_08	<100	1930	11	5.1	3.8	27	19	55	25	56
*Rep CHYS_319_08	<100	2200	14	6.7	5.2	34	25	86	22	54
CHYS_320_08	<100	500	32	15.3	7.7	60	40	45	<5	61
CHYS_321_08	<100	50	5	4.9	0.5	8	3	<1	<5	18
CHYS_322_08	<100	410	108	57.1	10.7	50	64	10	<5	1
CHYS_338_08	<100	20	12	8.3	1.9	42	11	15	<5	24
CHYS_339_08	<100	560	18	7.4	7.0	13	33	43	<5	57
CHYS_361_08	<100	340	54	24.1	14.7	9	85	99	<5	85
CHYS_384_08	<100	180	246	147	64.6	13	296	862	7	190
CHYS_1201_08	<100	300	24	14.4	3.2	207	17	58	10	14
CHYS_1215_08	<100	270	19	11.0	1.9	137	11	6	<5	20
CHYS_1216_08	<100	160	6	4.9	0.6	175	3	7	<5	3
CHYS_1229_08	<100	950	33	23.4	3.0	26	16	9	<5	2
HDIS_24_08	<100	140	27	11.5	6.4	91	31	23	<5	4
*Rep HDIS_24_08	<100	150	25	9.9	6.9	97	33	31	<5	4
HDIS_39_08	<100	760	103	35.1	34.4	65	167	94	<5	5
HDIS_40_08	<100	240	27	9.0	7.9	87	40	27	<5	<1
HDIS_56_08	<100	140	26	10.6	5.8	37	28	23	<5	<1
HDIS_57_08	<100	770	38	14.8	8.9	48	47	19	<5	3
HDIS_58_08	<100	90	13	6.1	2.9	89	15	8	<5	10
HDIS_59_08	<100	220	19	6.6	5.3	140	26	22	<5	3
HDIS_74_08	<100	110	49	17.6	12.7	97	65	36	<5	4
HDIS_75_08	<100	100	31	11.4	8.6	67	49	70	<5	3
HDIS_95_08	<100	2910	15	7.5	2.8	290	15	12	<5	10
HDIS_96_08	<100	60	18	5.8	6.8	11	32	14	<5	12
HDIS_97_08	<100	160	44	14.7	19.9	11	88	19	<5	42
HDIS_98_08	<100	9500	39	13.5	22.0	6	75	15	<5	5
*Rep HDIS_98_08	<100	9700	38	14.0	21.5	7	74	15	<5	4
HDIS_121_08	<100	60	37	13.5	14.1	15	58	22	<5	6
HDIS_122_08	<100	530	96	36.0	47.5	16	165	79	<5	16
HDIS_123_08	<100	90	27	9.4	9.4	66	40	34	<5	1
HDIS_217_08	<100	110	3	2.8	<0.5	255	2	3	<5	4
HDIS_502_08	<100	580	140	62.8	40.1	42	175	196	<5	9
HDIS_530_08	<100	480	18	7.7	3.4	123	15	11	<5	2
HDIS_573_08	<100	60	36	17.4	5.6	91	30	10	<5	13
HDIS_574_08	<100	200	14	6.4	5.1	12	22	11	<5	6
HDIS_575_08	<100	70	15	8.3	3.2	170	15	8	<5	8
HDIS_576_08	<100	1430	206	84.5	87.2	19	280	215	<5	5
HDIS_632_08	<100	110	20	14.2	1.6	92	9	5	<5	10
HDIS_633_08	<100	130	31	12.7	6.0	104	31	13	<5	16
*Rep HDIS_633_08	<100	120	31	13.7	6.2	84	32	12	<5	12
HDIS_634_08	<100	210	47	22.6	13.0	219	57	25	6	8
HDIS_29_08	<100	250	203	76.1	70.6	22	339	114	<5	17
HDIS_45_08	<100	70	38	17.9	6.5	60	32	13	<5	2
HDIS_44_08	<100	60	86	56.0	7.5	150	47	7	<5	5
HDIS_62_08	<100	100	64	20.0	18.9	12	108	30	<5	30

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
HDIS_63_08	<100	80	43	13.8	11.4	27	61	26	<5	24
HDIS_83_08	<100	170	35	19.7	3.6	46	21	11	<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
HDIS_105_08	<100	750	279	85.8	108	15	509	201	<5	<1
HDIS_129_08	<100	120	82	32.3	18.3	5	114	41	<5	46
HDIS_169_08	<100	50	29	10.7	9.8	21	44	17	<5	26
HDIS_170_08	<100	330	48	21.4	11.5	24	60	35	<5	19
HDIS_196_08	<100	90	50	21.4	12.5	28	57	25	<5	13
*Rep HDIS_196_08	<100	70	42	17.2	13.2	24	58	28	<5	13
HDIS_197_08	<100	80	84	30.7	22.5	30	111	39	6	7
HDIS_224_08	<100	190	39	15.3	8.1	77	42	26	<5	4
HDIS_225_08	<100	60	50	29.0	6.9	74	33	10	9	24
HDIS_340_08	<100	90	13	8.3	2.1	224	10	8	<5	6
HDIS_368B_08	<100	120	72	33.7	18.7	62	80	45	<5	5
HDIS_374_08	<100	610	63	24.6	23.2	38	107	86	<5	18
HDIS_401_08	<100	280	95	38.2	43.5	19	167	62	<5	22
HDIS_430_08	<100	420	26	10.8	11.3	25	45	26	<5	22
*Std MMISRM16	<100	500	2	0.7	0.8	3	3	2	<5	42
*Std MMISRM16	<100	720	3	1.4	1.6	4	6	5	<5	41
*BIK BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	1	<5	<1
*BIK BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_319_08	<5	<0.5	73	448	510	<1	17	<1	30	8
*Rep CHYS_319_08	6	<0.5	109	487	580	<1	25	<1	21	9
CHYS_320_08	<5	<0.5	74	228	510	<1	16	<1	48	<1
CHYS_321_08	<5	<0.5	2	38	140	<1	<1	<1	14	<1
CHYS_322_08	<5	<0.5	57	89	5350	<1	9	<1	107	<1
CHYS_338_08	<5	<0.5	25	32	790	<1	5	<1	35	<1
CHYS_339_08	<5	<0.5	100	70	350	<1	18	<1	187	1
CHYS_361_08	<5	<0.5	214	296	370	<1	40	<1	64	<1
CHYS_384_08	<5	<0.5	998	185	650	<1	226	<1	62	<1
CHYS_1201_08	<5	2.1	54	73	1850	<1	14	<1	152	6
CHYS_1215_08	<5	1.2	17	171	30	<1	3	<1	61	19
CHYS_1216_08	<5	2.4	6	59	360	<1	2	<1	51	2
CHYS_1229_08	<5	<0.5	25	130	250	<1	5	<1	94	2
HDIS_24_08	<5	3.0	60	108	420	<1	11	<1	80	<1
*Rep HDIS_24_08	<5	3.9	71	100	400	<1	14	<1	95	<1
HDIS_39_08	<5	1.2	284	253	630	<1	50	<1	110	<1
HDIS_40_08	<5	2.1	72	90	500	<1	13	<1	161	<1
HDIS_56_08	<5	<0.5	57	72	800	<1	11	<1	142	<1
HDIS_57_08	<5	1.4	62	186	270	<1	10	<1	114	<1
HDIS_58_08	<5	1.0	22	87	260	<1	4	<1	22	<1
HDIS_59_08	<5	2.9	42	154	290	<1	9	<1	126	<1
HDIS_74_08	<5	0.8	121	168	1040	<1	21	<1	111	<1
HDIS_75_08	<5	1.5	108	54	420	<1	24	<1	223	<1
HDIS_95_08	<5	<0.5	30	394	30	<1	6	<1	52	<1
HDIS_96_08	<5	<0.5	58	68	210	<1	9	<1	164	<1
HDIS_97_08	<5	<0.5	138	102	50	<1	18	<1	63	<1
HDIS_98_08	<5	<0.5	123	100	40	<1	15	<1	45	<1
*Rep HDIS_98_08	<5	<0.5	120	106	50	<1	15	<1	51	<1
HDIS_121_08	<5	<0.5	99	153	210	<1	16	<1	70	<1
HDIS_122_08	<5	<0.5	340	415	140	<1	57	<1	126	<1
HDIS_123_08	<5	2.2	77	77	400	<1	15	<1	123	<1
HDIS_217_08	<5	1.9	3	100	200	<1	<1	<1	39	<1
HDIS_502_08	<5	<0.5	403	219	910	<1	82	<1	89	<1
HDIS_530_08	<5	<0.5	25	320	3760	<1	5	<1	183	4
HDIS_573_08	<5	<0.5	35	60	1080	<1	6	<1	34	<1
HDIS_574_08	<5	<0.5	40	142	450	<1	7	<1	12	2
HDIS_575_08	<5	1.3	23	64	560	<1	4	<1	29	5
HDIS_576_08	<5	<0.5	615	1050	1080	<1	114	<1	123	1
HDIS_632_08	<5	1.1	10	94	350	<1	2	<1	13	<1
HDIS_633_08	<5	0.7	39	183	650	<1	7	<1	85	<1
*Rep HDIS_633_08	<5	0.6	40	158	640	<1	6	<1	72	<1
HDIS_634_08	<5	1.0	85	283	1240	<1	15	<1	25	2
HDIS_29_08	<5	<0.5	499	77	910	<1	83	<1	179	<1
HDIS_45_08	<5	1.2	51	75	680	<1	9	<1	100	<1
HDIS_44_08	<5	<0.5	39	63	590	<1	5	<1	16	<1
HDIS_62_08	<5	<0.5	184	67	680	<1	28	<1	132	<1

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
HDIS_63_08	<5	<0.5	99	306	820	<1	16	<1	105	<1
HDIS_83_08	<5	0.7	24	164	180	<1	4	<1	161	<1
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
HDIS_105_08	<5	<0.5	1050	64	620	<1	175	<1	138	<1
HDIS_129_08	<5	<0.5	123	718	130	<1	20	<1	86	<1
HDIS_169_08	<5	<0.5	72	68	330	<1	11	<1	121	<1
HDIS_170_08	<5	<0.5	98	158	330	<1	18	<1	39	<1
HDIS_196_08	<5	<0.5	93	179	350	<1	15	<1	117	<1
*Rep HDIS_196_08	<5	<0.5	100	174	310	<1	17	<1	124	<1
HDIS_197_08	<5	0.7	159	139	560	<1	25	<1	85	<1
HDIS_224_08	<5	2.7	71	193	160	<1	12	<1	97	<1
HDIS_225_08	<5	0.7	38	92	460	<1	6	<1	93	<1
HDIS_340_08	<5	0.6	15	69	150	<1	3	<1	13	<1
HDIS_368B_08	<5	<0.5	143	197	210	<1	25	<1	114	<1
HDIS_374_08	<5	1.0	214	131	240	<1	41	<1	112	1
HDIS_401_08	<5	<0.5	271	516	550	<1	43	<1	149	2
HDIS_430_08	<5	<0.5	81	265	500	<1	14	<1	87	2
*Std MMISRM16	44	<0.5	10	165	80	18	2	<1	249	<1
*Std MMISRM16	71	<0.5	19	294	130	30	4	<1	375	<1
*BIK BLANK	<5	<0.5	1	<5	<10	<1	<1	<1	<5	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_319_08	17	16	<1	2660	<1	2	<10	87.6	<3	0.9
*Rep CHYS_319_08	18	23	<1	2680	<1	3	<10	118	<3	0.7
CHYS_320_08	32	25	<1	2990	<1	6	<10	20.9	13	<0.5
CHYS_321_08	6	1	<1	1240	<1	<1	<10	0.8	14	<0.5
CHYS_322_08	58	30	<1	300	<1	15	<10	34.1	82	0.8
CHYS_338_08	13	7	<1	450	<1	2	<10	6.0	72	0.6
CHYS_339_08	8	27	<1	620	<1	4	<10	11.6	8	1.6
CHYS_361_08	13	63	<1	1260	<1	11	<10	30.3	<3	2.1
CHYS_384_08	78	232	<1	2650	<1	43	<10	36.9	<3	0.8
CHYS_1201_08	43	13	<1	960	<1	3	<10	379	424	2.6
CHYS_1215_08	32	7	<1	310	<1	2	<10	15.1	193	1.4
CHYS_1216_08	19	2	<1	50	<1	<1	<10	14.6	543	<0.5
CHYS_1229_08	18	9	<1	160	<1	4	<10	7.5	115	1.7
HDIS_24_08	52	22	<1	130	<1	5	<10	30.4	1080	0.6
*Rep HDIS_24_08	49	25	<1	120	<1	5	<10	38.3	1480	0.7
HDIS_39_08	68	122	<1	140	<1	22	<10	87.1	661	0.6
HDIS_40_08	37	29	<1	20	<1	6	<10	72.9	1150	<0.5
HDIS_56_08	25	20	<1	10	<1	5	<10	18.8	231	<0.5
HDIS_57_08	37	31	<1	70	<1	7	<10	43.0	662	<0.5
HDIS_58_08	42	10	<1	440	<1	2	<10	22.2	363	<0.5
HDIS_59_08	35	19	<1	40	<1	4	<10	45.7	1500	0.5
HDIS_74_08	42	49	<1	130	<1	10	<10	66.1	387	<0.5
HDIS_75_08	46	36	<1	70	<1	7	<10	45.6	911	1.1
HDIS_95_08	55	10	<1	530	<1	3	<10	13.2	137	<0.5
HDIS_96_08	7	25	4	700	<1	4	<10	10.8	57	<0.5
HDIS_97_08	8	68	<1	1220	<1	10	<10	18.9	6	<0.5
HDIS_98_08	11	58	<1	760	<1	9	<10	20.1	<3	<0.5
*Rep HDIS_98_08	11	57	<1	730	<1	9	<10	21.3	<3	<0.5
HDIS_121_08	11	41	<1	1040	<1	8	<10	6.5	20	<0.5
HDIS_122_08	27	132	<1	1060	<1	21	<10	14.9	9	<0.5
HDIS_123_08	38	30	<1	70	<1	6	<10	61.0	705	1.3
HDIS_217_08	14	1	<1	120	<1	<1	<10	18.0	314	0.6
HDIS_502_08	97	125	<1	290	<1	26	<10	63.2	148	0.6
HDIS_530_08	27	10	<1	150	<1	3	<10	30.3	130	0.9
HDIS_573_08	39	16	<1	990	<1	6	<10	25.6	66	<0.5
HDIS_574_08	5	16	<1	1260	<1	3	<10	4.1	5	<0.5
HDIS_575_08	45	9	<1	340	<1	2	<10	29.1	476	<0.5
HDIS_576_08	32	204	<1	410	<1	41	<10	66.6	25	0.9
HDIS_632_08	27	5	<1	190	<1	2	<10	16.9	388	<0.5
HDIS_633_08	32	19	<1	220	<1	5	<10	59.0	344	<0.5
*Rep HDIS_633_08	31	20	<1	160	<1	5	<10	53.1	308	<0.5
HDIS_634_08	61	38	<1	570	<1	9	<10	53.9	348	<0.5
HDIS_29_08	94	236	<1	450	<1	44	<10	59.6	171	0.5
HDIS_45_08	50	21	<1	80	<1	6	<10	42.9	310	0.6
HDIS_44_08	32	23	<1	310	<1	11	<10	17.0	163	<0.5
HDIS_62_08	9	76	<1	1180	<1	14	<10	18.4	9	<0.5

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
HDIS_63_08	34	43	<1	690	<1	9	<10	57.1	70	<0.5
HDIS_83_08	57	12	<1	20	<1	5	<10	59.3	262	<0.5
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
HDIS_105_08	135	425	<1	20	<1	66	<10	176	166	<0.5
HDIS_129_08	67	63	<1	700	<1	17	<10	22.9	6	<0.5
HDIS_169_08	13	31	<1	780	<1	6	<10	14.4	169	<0.5
HDIS_170_08	49	39	<1	1030	<1	9	<10	17.9	95	<0.5
HDIS_196_08	44	39	<1	440	<1	9	<10	40.3	162	<0.5
*Rep HDIS_196_08	40	41	<1	440	<1	8	<10	39.3	159	<0.5
HDIS_197_08	58	78	<1	200	<1	17	<10	78.3	290	1.9
HDIS_224_08	45	28	<1	140	<1	7	<10	41.7	1260	<0.5
HDIS_225_08	37	19	<1	760	<1	7	<10	35.8	289	0.6
HDIS_340_08	33	6	<1	830	<1	2	<10	18.7	212	<0.5
HDIS_368B_08	53	58	<1	770	<1	13	<10	53.6	129	0.7
HDIS_374_08	35	85	<1	770	<1	14	<10	38.1	581	0.6
HDIS_401_08	<5	131	<1	850	<1	20	<10	30.5	77	0.7
HDIS_430_08	<5	34	<1	1360	<1	6	<10	13.0	49	0.5
*Std MMISRM16	12	3	<1	450	<1	<1	<10	25.8	<3	<0.5
*Std MMISRM16	<5	7	<1	580	<1	<1	<10	34.4	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

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_319_08	110	1	54	5	410	6
*Rep CHYS_319_08	134	1	71	6	320	7
CHYS_320_08	286	1	155	10	80	11
CHYS_321_08	3	<1	27	5	1520	<5
CHYS_322_08	23	1	469	37	170	23
CHYS_338_08	5	1	64	6	610	9
CHYS_339_08	17	1	81	5	120	10
CHYS_361_08	16	1	214	15	190	13
CHYS_384_08	113	2	1570	115	600	17
CHYS_1201_08	294	3	98	12	1720	21
CHYS_1215_08	30	1	77	8	2150	13
CHYS_1216_08	5	<1	23	5	930	20
CHYS_1229_08	13	1	154	17	310	9
HDIS_24_08	12	1	94	8	470	39
*Rep HDIS_24_08	13	1	84	7	370	52
HDIS_39_08	28	1	335	23	190	65
HDIS_40_08	13	1	71	6	250	94
HDIS_56_08	5	1	100	6	60	23
HDIS_57_08	14	1	118	9	480	41
HDIS_58_08	10	1	50	5	1720	47
HDIS_59_08	11	1	47	5	230	66
HDIS_74_08	9	1	156	11	240	35
HDIS_75_08	17	1	96	8	120	98
HDIS_95_08	41	1	66	6	110	15
HDIS_96_08	8	1	61	4	70	11
HDIS_97_08	26	1	162	9	60	19
HDIS_98_08	27	1	167	9	3300	24
*Rep HDIS_98_08	27	1	172	9	3250	26
HDIS_121_08	24	1	149	8	220	14
HDIS_122_08	100	1	391	24	110	27
HDIS_123_08	15	1	80	7	130	104
HDIS_217_08	4	1	12	3	140	23
HDIS_502_08	42	1	611	47	800	71
HDIS_530_08	20	1	55	5	330	27
HDIS_573_08	15	1	144	11	1260	25
HDIS_574_08	43	1	64	4	200	7
HDIS_575_08	9	1	58	6	2360	42
HDIS_576_08	95	1	830	60	680	122
HDIS_632_08	6	1	76	11	1870	14
HDIS_633_08	16	1	106	8	620	44
*Rep HDIS_633_08	9	1	107	8	760	37
HDIS_634_08	26	1	191	16	2840	74
HDIS_29_08	40	1	711	49	70	53
HDIS_45_08	11	1	129	12	190	39
HDIS_44_08	11	1	365	38	1030	10
HDIS_62_08	26	1	224	11	100	29

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
HDIS_63_08	15	1	135	9	310	36
HDIS_83_08	8	1	122	15	430	49
Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
HDIS_105_08	46	1	766	57	130	144
HDIS_129_08	17	1	326	22	360	29
HDIS_169_08	14	1	101	7	660	18
HDIS_170_08	42	1	206	14	740	25
HDIS_196_08	15	1	189	14	230	41
*Rep HDIS_196_08	14	1	160	12	180	44
HDIS_197_08	15	1	260	19	250	57
HDIS_224_08	18	1	136	10	580	49
HDIS_225_08	11	1	216	20	920	28
HDIS_340_08	12	1	60	6	200	20
HDIS_368B_08	13	2	353	23	160	48
HDIS_374_08	20	1	320	16	310	74
HDIS_401_08	39	1	427	25	460	68
HDIS_430_08	30	1	129	7	550	31
*Std MMISRM16	39	<1	6	<1	170	10
*Std MMISRM16	50	1	15	<1	280	18
*BIK BLANK	<1	<1	<5	<1	<20	<5
*BIK BLANK	<1	<1	<5	<1	<20	<5

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Certificate of Analysis

Work Order: TO102017

To: **Logan Resources Ltd.**

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

Date: Sep 04, 2008

P.O. No. :
Project No. : DEFAULT
No. Of Samples 68
Date Submitted Jul 28, 2008
Report Comprises Pages 1 to 11
(Inclusive of Cover Sheet)

Distribution of unused material:

Discard after 90 days: 68 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 <http://www.scc.ca/en/programs/lab/mineral.shtml>

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

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Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
AJ_AUGER_TEST_1_08	3	221	10	0.3	650	<1	<10	<1	19	11
*Rep AJ_AUGER_TEST_1_08	3	178	30	0.3	630	<1	<10	<1	21	14
AJ_AUGER_TEST_2_08	7	239	40	0.6	590	<1	<10	1	47	26
AJ_AUGER_TEST_3_08	6	252	30	0.3	760	<1	<10	3	220	32
AJ_AUGER_TEST_4_08	7	230	20	0.2	690	<1	<10	6	214	70
AJ_AUGER_TEST_5_08	3	256	20	0.1	910	<1	<10	5	48	70
AJ_AUGER_TEST_6_08	3	268	20	0.2	1190	<1	<10	3	54	89
AJ_PLASTIC_TEST_1_08	3	287	20	0.2	850	<1	<10	14	64	39
AJ_PLASTIC_TEST_2_08	10	213	30	0.5	630	<1	<10	3	111	65
AJ_PLASTIC_TEST_3_08	7	232	20	0.3	770	<1	<10	6	128	112
AJ_PLASTIC_TEST_4_08	6	205	20	0.3	730	<1	<10	6	38	275
AJ_PLASTIC_TEST_5_08	4	219	20	0.2	1290	<1	<10	5	155	79
AJ_PLASTIC_TEST_6_08	4	259	20	0.2	1180	<1	<10	4	91	26
CHYS_099_08	2	290	20	<0.1	3910	2	20	25	24	176
*Rep CHYS_099_08	2	>300	<10	<0.1	2930	2	20	25	12	177
CHYS_100_08	2	97	80	0.4	3870	2	140	7	81	170
CHYS_101_08	1	93	100	0.2	3070	5	110	4	59	192
CHYS_292_08	5	201	70	3.7	1110	4	160	14	459	40
CHYS_315_08	28	162	250	0.5	2570	8	270	26	1010	50
CHYS_316_08	2	136	60	0.8	500	4	20	3	44	119
CHYS_394_08	2	191	70	0.3	1340	9	<10	4	142	255
CHYS_421_08	8	289	<10	<0.1	2130	1	40	3	111	181
CHYS_423_08	4	231	20	0.1	940	5	<10	7	88	93
CHYS_425_08	18	>300	290	0.7	1080	2	30	32	235	66
CHYS_452_08	2	217	<10	<0.1	2610	1	160	40	274	441
CHYS_454_08	71	258	<10	0.6	690	24	10	17	203	44
CHYS_457_08	6	>300	90	0.3	2220	4	20	7	129	523
*Rep CHYS_457_08	5	216	60	0.2	1770	3	10	3	66	376
CHYS_486_08	6	>300	30	0.1	2380	3	40	16	285	207
CHYS_489_08	14	279	150	0.6	1240	3	110	52	113	336
CHYS_492_08	32	299	310	0.5	1020	2	150	112	301	346
CHYS_521_08	2	255	<10	<0.1	1440	2	60	16	28	215
CHYS_524_08	13	242	270	1.6	1080	2	<10	6	104	113
CHYS_527_08	8	239	90	0.3	770	<1	20	8	30	35
CHYS_555_08	5	>300	<10	<0.1	900	<1	<10	11	120	100
CHYS_557_08	3	>300	<10	<0.1	900	2	<10	11	55	100
CHYS_560_08	17	224	50	0.6	460	<1	180	4	90	20
CHYS_589_08	2	293	<10	<0.1	1920	2	80	16	115	202
CHYS_590B_08	5	287	30	0.1	1820	8	90	27	233	201
CHYS_614B_08	5	>300	20	<0.1	1880	<1	40	7	385	73
*Rep CHYS_614B_08	5	>300	20	<0.1	1920	<1	30	7	196	104
CHYS_621_08	6	292	10	<0.1	1350	2	110	5	163	122
CHYS_638_08	62	92	260	4.3	50	<1	650	3	33	13
CHYS_639_08	46	203	20	4.0	1130	<1	510	25	1640	18
CHYS_640_08	104	11	110	6.4	330	<1	950	59	<5	308
CHYS_641_08	4	60	100	1.1	550	<1	600	29	556	470

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	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_652_08	7	227	<10	0.1	1000	<1	270	28	165	1000
CHYS_653_08	11	>300	<10	0.2	700	2	10	7	163	248
Element Method Det.Lim. Units	Ag MMI-M5 1 PPB	Al MMI-M5 1 PPM	As MMI-M5 10 PPB	Au MMI-M5 0.1 PPB	Ba MMI-M5 10 PPB	Bi MMI-M5 1 PPB	Ca MMI-M5 10 PPM	Cd MMI-M5 1 PPB	Ce MMI-M5 5 PPB	Co MMI-M5 5 PPB
CHYS_666_08	40	122	90	2.6	1270	<1	810	25	775	8
CHYS_667_08	45	30	20	1.6	80	<1	740	37	508	41
CHYS_668_08	49	20	70	1.3	200	<1	820	30	100	71
CHYS_669_08	9	239	20	0.2	590	<1	230	18	1110	116
CHYS_670_08	15	86	20	1.1	1160	<1	860	11	700	381
*Rep CHYS_670_08	8	76	30	0.9	1060	<1	740	10	480	420
CHYS_682_08	3	>300	<10	<0.1	3260	<1	100	21	79	674
CHYS_683_08	20	297	10	0.2	2100	<1	730	2	2530	54
CHYS_713_08	9	>300	10	0.3	1880	1	120	11	415	1200
CHYS_741_08	34	295	90	0.9	420	<1	20	10	48	39
CHYS_768B_08	3	158	<10	0.2	2060	<1	460	33	61	69
CHYS_846_08	66	>300	330	4.3	1390	6	200	5	3150	215
CHYS_872_08	4	93	3030	3.7	990	20	250	32	263	232
CHYS_902_08	6	164	590	2.6	1060	13	60	5	155	105
CHYS_903_08	7	>300	250	0.3	510	3	<10	10	76	84
CHYS_955_08	3	184	<10	1.2	3460	<1	100	15	226	431
CHYS_983_08	2	>300	<10	<0.1	3380	<1	60	13	12	96
CHYS_1011_08	<1	205	<10	<0.1	1720	<1	240	13	32	113
*Rep CHYS_1011_08	<1	186	<10	<0.1	1520	<1	240	11	18	168
CHYS_1098_08	7	247	<10	1.7	1600	<1	10	8	96	177
CHYS_1099_08	20	239	40	1.0	3470	<1	80	15	229	29
CHYS_1100_08	52	163	1850	24.5	2050	<1	330	16	1680	119
CHYS_1265B_08	5	169	10	0.1	1060	<1	270	50	128	96
CHYS_1282B_08	2	74	170	0.3	4730	2	280	17	251	141
GWS_404B_08	7	217	70	0.4	960	3	50	32	107	107
GWS_405B_08	15	296	360	1.1	1760	6	70	28	430	119
*Std MMISRM16	19	57	10	38.2	80	<1	280	4	26	65
*Std MMISRM16	19	59	20	38.3	80	<1	280	4	24	65
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*BIK BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

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Element Method Det.Lim. Units	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
AJ_AUGER_TEST_1_08	<100	310	3	2.7	0.6	158	2	9	8	<1
*Rep AJ_AUGER_TEST_1_08	<100	410	3	2.5	0.6	229	2	10	9	<1
AJ_AUGER_TEST_2_08	<100	840	14	10.7	2.0	90	8	18	18	<1
AJ_AUGER_TEST_3_08	<100	730	79	38.8	14.6	53	67	65	10	<1
AJ_AUGER_TEST_4_08	<100	530	70	33.6	14.4	27	66	78	<5	<1
AJ_AUGER_TEST_5_08	<100	320	29	16.1	3.9	85	16	18	5	<1
AJ_AUGER_TEST_6_08	<100	380	29	17.6	3.7	55	16	22	15	<1
AJ_PLASTIC_TEST_1_08	<100	280	24	11.1	4.3	53	18	23	<5	<1
AJ_PLASTIC_TEST_2_08	<100	550	68	35.4	10.7	40	49	35	6	<1
AJ_PLASTIC_TEST_3_08	<100	460	57	26.9	10.2	37	47	43	9	<1
AJ_PLASTIC_TEST_4_08	<100	500	29	18.5	2.9	49	15	15	8	<1
AJ_PLASTIC_TEST_5_08	<100	400	64	31.2	13.2	40	57	61	<5	<1
AJ_PLASTIC_TEST_6_08	<100	260	35	17.6	6.5	44	27	31	<5	<1
CHYS_099_08	<100	260	17	8.4	4.1	157	16	9	14	20
*Rep CHYS_099_08	<100	250	12	6.9	1.9	155	8	4	18	19
CHYS_100_08	<100	3340	11	6.2	2.7	386	10	41	6	15
CHYS_101_08	<100	1750	8	3.8	2.3	491	8	29	8	20
CHYS_292_08	<100	170	107	51.9	21.8	57	106	157	<5	30
CHYS_315_08	<100	250	99	38.8	33.6	52	149	445	<5	30
CHYS_316_08	<100	1020	3	1.8	0.8	270	3	10	<5	2
CHYS_394_08	<100	2570	15	7.5	4.1	345	18	61	6	2
CHYS_421_08	<100	570	282	135	36.3	82	218	31	<5	11
CHYS_423_08	<100	840	19	12.3	3.6	258	16	38	<5	3
CHYS_425_08	<100	700	54	22.6	11.8	47	52	87	6	4
CHYS_452_08	<100	340	107	44.8	29.2	99	158	74	16	32
CHYS_454_08	<100	2490	162	84.0	27.3	156	130	82	<5	2
CHYS_457_08	200	470	15	6.5	3.7	236	16	43	12	5
*Rep CHYS_457_08	100	730	7	3.7	1.8	367	7	24	5	6
CHYS_486_08	100	710	130	56.3	31.4	113	158	84	5	6
CHYS_489_08	<100	3610	141	82.3	15.6	101	82	37	8	21
CHYS_492_08	<100	5900	134	69.6	23.6	63	102	144	6	13
CHYS_521_08	<100	260	36	19.5	3.8	153	21	9	<5	18
CHYS_524_08	<100	2750	13	7.7	2.8	156	12	51	<5	1
CHYS_527_08	<100	660	27	20.0	2.1	178	11	13	<5	4
CHYS_555_08	<100	310	66	32.7	10.5	49	57	45	<5	1
CHYS_557_08	<100	270	30	16.6	3.8	76	19	21	<5	2
CHYS_560_08	<100	430	8	3.6	2.4	68	11	47	<5	18
CHYS_589_08	<100	250	64	35.5	11.0	92	59	60	5	13
CHYS_590B_08	<100	500	76	36.2	16.9	89	74	103	6	9
CHYS_614B_08	<100	250	79	29.8	19.6	87	88	97	<5	6
*Rep CHYS_614B_08	<100	280	43	19.7	8.1	109	37	51	<5	8
CHYS_621_08	<100	210	42	19.3	9.9	100	44	65	<5	18
CHYS_638_08	<100	1240	36	18.0	21.9	12	83	9	<5	65
CHYS_639_08	<100	1120	274	152	54.8	29	339	1320	<5	64
CHYS_640_08	<100	4840	8	5.8	0.6	11	6	<1	16	177
CHYS_641_08	<100	3810	35	18.6	12.3	54	55	288	<5	86

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	Cr MMI-M5 100 PPB	Cu MMI-M5 10 PPB	Dy MMI-M5 1 PPB	Er MMI-M5 0.5 PPB	Eu MMI-M5 0.5 PPB	Fe MMI-M5 1 PPM	Gd MMI-M5 1 PPB	La MMI-M5 1 PPB	Li MMI-M5 5 PPB	Mg MMI-M5 1 PPM
CHYS_652_08	<100	870	91	52.7	14.7	85	76	79	18	76
CHYS_653_08	<100	2320	173	93.2	19.4	68	103	47	<5	3
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
CHYS_666_08	<100	980	189	102	31.5	18	238	543	<5	38
CHYS_667_08	<100	3820	105	53.9	19.3	17	169	311	11	56
CHYS_668_08	<100	4220	22	10.6	4.7	16	34	27	15	138
CHYS_669_08	<100	1370	159	78.3	25.3	64	192	622	6	27
CHYS_670_08	<100	2770	75	39.0	18.9	72	106	528	9	114
*Rep CHYS_670_08	<100	4510	56	31.6	13.0	104	71	369	7	103
CHYS_682_08	<100	810	83	43.3	10.9	25	52	22	5	21
CHYS_683_08	<100	130	428	247	106	15	529	2140	<5	162
CHYS_713_08	<100	1410	94	45.7	24.6	31	100	153	<5	3
CHYS_741_08	<100	2320	106	66.7	9.5	166	58	13	7	9
CHYS_768B_08	<100	740	44	29.8	6.7	37	32	44	<5	29
CHYS_846_08	<100	4850	543	296	95.3	35	561	1470	<5	14
CHYS_872_08	<100	12000	31	21.7	5.0	225	26	183	<5	26
CHYS_902_08	<100	10900	20	18.7	2.8	156	11	89	<5	2
CHYS_903_08	<100	1390	28	17.2	3.7	41	15	43	6	<1
CHYS_955_08	<100	1080	39	24.7	5.2	52	27	89	<5	2
CHYS_983_08	<100	350	36	28.9	2.2	78	10	5	<5	9
CHYS_1011_08	<100	140	33	24.6	3.9	59	16	13	<5	39
*Rep CHYS_1011_08	<100	90	26	23.6	2.3	80	10	8	<5	40
CHYS_1098_08	<100	1080	30	17.7	4.3	34	19	52	<5	<1
CHYS_1099_08	<100	330	65	33.1	20.5	15	76	335	<5	2
CHYS_1100_08	<100	470	44	20.8	22.8	17	103	1780	<5	21
CHYS_1265B_08	<100	940	81	40.5	15.3	83	69	35	9	58
CHYS_1282B_08	<100	5660	29	13.4	8.6	256	34	89	<5	20
GWS_404B_08	<100	940	58	34.1	9.8	22	43	64	<5	2
GWS_405B_08	<100	1480	71	35.3	22.1	74	82	260	<5	2
*Std MMISRM16	100	740	3	1.0	1.3	4	5	6	<5	40
*Std MMISRM16	100	740	3	1.0	1.2	4	5	6	<5	41
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Bik BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
AJ_AUGER_TEST_1_08	<5	2.4	8	45	10	<1	2	<1	46	<1
*Rep AJ_AUGER_TEST_1_08	<5	2.6	9	61	<10	<1	2	<1	47	<1
AJ_AUGER_TEST_2_08	<5	1.1	26	44	170	<1	6	<1	150	1
AJ_AUGER_TEST_3_08	<5	1.2	183	37	410	<1	36	<1	100	1
AJ_AUGER_TEST_4_08	<5	1.0	184	52	410	<1	38	<1	94	1
AJ_AUGER_TEST_5_08	<5	1.4	35	73	400	<1	7	<1	84	<1
AJ_AUGER_TEST_6_08	<5	1.2	33	89	490	<1	7	<1	52	<1
AJ_PLASTIC_TEST_1_08	<5	0.9	44	117	340	<1	10	<1	127	<1
AJ_PLASTIC_TEST_2_08	<5	0.9	113	44	420	<1	21	<1	115	1
AJ_PLASTIC_TEST_3_08	<5	1.2	118	90	360	<1	23	<1	89	<1
AJ_PLASTIC_TEST_4_08	<5	1.0	27	84	320	<1	5	<1	82	1
AJ_PLASTIC_TEST_5_08	<5	1.0	160	67	480	<1	32	<1	104	<1
AJ_PLASTIC_TEST_6_08	<5	1.1	69	56	620	<1	14	<1	70	<1
CHYS_099_08	<5	1.8	24	164	750	<1	4	<1	147	3
*Rep CHYS_099_08	<5	1.8	10	160	560	<1	2	<1	123	2
CHYS_100_08	19	2.1	40	407	60	<1	10	<1	101	6
CHYS_101_08	19	4.1	28	272	100	<1	7	<1	105	4
CHYS_292_08	<5	<0.5	325	131	410	<1	68	<1	79	2
CHYS_315_08	<5	0.5	615	310	740	<1	146	<1	323	5
CHYS_316_08	<5	1.0	11	200	100	<1	3	<1	130	2
CHYS_394_08	8	4.8	71	252	50	<1	18	<1	260	10
CHYS_421_08	<5	0.5	222	422	1270	<1	31	<1	210	<1
CHYS_423_08	6	4.0	49	179	140	<1	12	<1	204	6
CHYS_425_08	<5	1.5	159	212	850	<1	36	<1	138	18
CHYS_452_08	<5	0.7	276	688	640	<1	47	<1	186	2
CHYS_454_08	7	1.8	233	244	1020	<1	40	<1	202	7
CHYS_457_08	8	7.9	47	108	260	1	11	<1	260	12
*Rep CHYS_457_08	7	6.1	25	135	150	<1	6	<1	232	9
CHYS_486_08	7	2.5	308	257	1510	<1	53	<1	233	5
CHYS_489_08	<5	<0.5	130	550	390	<1	22	<1	229	17
CHYS_492_08	12	<0.5	250	1730	550	<1	53	<1	254	4
CHYS_521_08	<5	0.5	26	187	830	<1	4	<1	142	<1
CHYS_524_08	6	2.3	51	99	80	<1	13	<1	151	7
CHYS_527_08	<5	2.2	22	117	490	<1	5	<1	156	<1
CHYS_555_08	<5	1.9	112	103	510	<1	22	<1	177	1
CHYS_557_08	<5	1.7	35	165	260	<1	7	<1	238	1
CHYS_560_08	<5	1.7	41	38	360	<1	10	<1	222	1
CHYS_589_08	<5	1.9	127	103	310	<1	26	<1	167	2
CHYS_590B_08	<5	1.0	192	227	380	<1	40	<1	302	5
CHYS_614B_08	<5	2.7	257	112	240	<1	53	<1	168	1
*Rep CHYS_614B_08	<5	2.6	99	117	200	<1	22	<1	166	1
CHYS_621_08	<5	2.8	128	123	9540	<1	26	<1	188	3
CHYS_638_08	<5	<0.5	214	26	<10	<1	24	<1	121	<1
CHYS_639_08	<5	<0.5	1340	390	1220	<1	329	<1	98	<1
CHYS_640_08	29	<0.5	<1	675	110	<1	<1	<1	73	1
CHYS_641_08	38	<0.5	293	475	160	<1	75	<1	94	5

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	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_652_08	<5	0.9	134	677	450	<1	28	<1	297	2
CHYS_653_08	<5	0.9	156	270	300	<1	27	<1	111	3
Element Method Det.Lim. Units	Mo MMI-M5 5 PPB	Nb MMI-M5 0.5 PPB	Nd MMI-M5 1 PPB	Ni MMI-M5 5 PPB	Pb MMI-M5 10 PPB	Pd MMI-M5 1 PPB	Pr MMI-M5 1 PPB	Pt MMI-M5 1 PPB	Rb MMI-M5 5 PPB	Sb MMI-M5 1 PPB
CHYS_666_08	<5	<0.5	704	342	380	<1	161	<1	100	<1
CHYS_667_08	15	<0.5	486	600	30	<1	98	<1	110	2
CHYS_668_08	29	<0.5	79	296	40	<1	13	<1	83	3
CHYS_669_08	5	<0.5	755	383	500	<1	182	<1	79	1
CHYS_670_08	9	<0.5	486	516	130	<1	131	<1	22	4
*Rep CHYS_670_08	11	<0.5	339	495	110	<1	89	<1	20	4
CHYS_682_08	<5	<0.5	96	473	50	<1	17	<1	115	3
CHYS_683_08	<5	<0.5	2580	283	1800	<1	640	<1	24	2
CHYS_713_08	<5	0.5	261	953	350	<1	59	<1	184	5
CHYS_741_08	7	1.1	73	168	30	<1	11	<1	116	10
CHYS_768B_08	<5	<0.5	67	212	580	<1	14	<1	90	<1
CHYS_846_08	5	<0.5	2320	82	2900	<1	533	<1	34	2
CHYS_872_08	29	<0.5	133	80	680	<1	38	<1	106	4
CHYS_902_08	20	0.6	54	49	850	<1	17	<1	81	3
CHYS_903_08	6	1.6	40	46	3030	<1	10	<1	99	1
CHYS_955_08	18	<0.5	105	90	960	<1	28	<1	79	2
CHYS_983_08	<5	1.9	11	133	160	<1	2	<1	91	<1
CHYS_1011_08	<5	<0.5	35	75	380	<1	7	<1	46	1
*Rep CHYS_1011_08	<5	<0.5	18	72	330	<1	4	<1	36	<1
CHYS_1098_08	<5	<0.5	51	77	1750	<1	13	<1	59	<1
CHYS_1099_08	<5	<0.5	304	32	2010	<1	80	<1	120	<1
CHYS_1100_08	<5	<0.5	975	81	900	<1	304	<1	91	3
CHYS_1265B_08	<5	<0.5	119	437	330	<1	22	<1	70	3
CHYS_1282B_08	83	1.5	135	269	1010	<1	32	<1	96	61
GWS_404B_08	<5	<0.5	117	98	6130	<1	25	<1	143	5
GWS_405B_08	<5	0.9	315	138	3620	<1	79	<1	93	18
*Std MMISRM16	51	<0.5	20	298	120	25	4	<1	353	<1
*Std MMISRM16	49	<0.5	18	292	120	24	4	<1	341	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*BIK BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

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Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
AJ_AUGER_TEST_1_08	21	2	<1	60	<1	<1	<10	18.4	384	2.2
*Rep AJ_AUGER_TEST_1_08	17	2	<1	60	<1	<1	<10	15.3	440	1.8
AJ_AUGER_TEST_2_08	49	7	<1	30	<1	2	<10	30.2	464	2.1
AJ_AUGER_TEST_3_08	92	51	<1	50	<1	13	<10	25.0	616	2.0
AJ_AUGER_TEST_4_08	84	51	<1	50	<1	13	<10	27.3	475	1.6
AJ_AUGER_TEST_5_08	42	11	<1	110	<1	4	<10	22.6	453	1.9
AJ_AUGER_TEST_6_08	34	10	<1	100	<1	4	<10	30.0	291	1.4
AJ_PLASTIC_TEST_1_08	28	13	<1	70	<1	4	<10	16.7	247	1.6
AJ_PLASTIC_TEST_2_08	66	35	<1	30	<1	11	<10	27.3	403	1.4
AJ_PLASTIC_TEST_3_08	63	34	<1	50	<1	10	<10	24.9	525	1.4
AJ_PLASTIC_TEST_4_08	46	9	<1	50	<1	4	<10	25.4	429	1.3
AJ_PLASTIC_TEST_5_08	62	43	<1	120	<1	11	<10	23.7	418	2.1
AJ_PLASTIC_TEST_6_08	35	20	<1	130	<1	6	<10	26.0	299	1.5
CHYS_099_08	30	11	<1	260	<1	3	<10	34.5	475	<0.5
*Rep CHYS_099_08	28	5	<1	270	<1	2	<10	21.7	420	<0.5
CHYS_100_08	55	9	<1	980	<1	2	<10	76.7	470	1.4
CHYS_101_08	35	7	<1	830	<1	1	<10	57.9	845	1.2
CHYS_292_08	80	87	<1	480	<1	19	<10	67.8	88	2.5
CHYS_315_08	57	138	<1	700	<1	22	<10	73.2	138	3.9
CHYS_316_08	10	3	<1	90	<1	<1	<10	14.6	411	2.4
CHYS_394_08	25	17	<1	90	<1	3	<10	53.9	951	2.4
CHYS_421_08	127	120	<1	420	<1	46	<10	56.7	112	2.5
CHYS_423_08	36	14	<1	100	<1	3	<10	43.0	1360	1.8
CHYS_425_08	42	42	<1	240	<1	10	<10	105	668	0.6
CHYS_452_08	78	114	<1	850	<1	24	<10	68.8	231	1.4
CHYS_454_08	95	84	<1	130	<1	27	<10	60.3	257	4.0
CHYS_457_08	62	13	1	110	<1	3	<10	139	3600	2.0
*Rep CHYS_457_08	36	7	<1	120	<1	1	<10	94.2	2430	1.7
CHYS_486_08	112	121	<1	230	<1	26	<10	97.1	1060	2.3
CHYS_489_08	83	51	<1	770	<1	20	<10	156	115	4.1
CHYS_492_08	57	69	<1	690	<1	22	<10	109	133	3.0
CHYS_521_08	31	12	<1	420	<1	5	<10	30.8	194	0.6
CHYS_524_08	30	11	<1	120	<1	2	<10	66.9	587	2.6
CHYS_527_08	23	7	<1	190	<1	3	<10	17.7	510	1.3
CHYS_555_08	87	38	<1	60	<1	12	<10	50.2	652	1.9
CHYS_557_08	44	12	<1	170	<1	5	<10	46.1	347	4.0
CHYS_560_08	15	9	<1	920	<1	2	<10	58.5	570	0.7
CHYS_589_08	36	41	<1	790	<1	11	<10	71.0	788	1.4
CHYS_590B_08	32	54	<1	710	<1	14	<10	57.1	256	2.7
CHYS_614B_08	104	73	<1	170	<1	15	<10	70.3	1420	0.9
*Rep CHYS_614B_08	76	29	<1	160	<1	7	<10	78.3	1490	1.0
CHYS_621_08	36	36	<1	790	<1	8	<10	51.3	927	1.6
CHYS_638_08	42	77	<1	7670	<1	9	<10	25.9	<3	3.3
CHYS_639_08	374	299	<1	2560	<1	52	<10	489	5	1.8
CHYS_640_08	15	<1	<1	2760	<1	1	<10	16.6	<3	2.0
CHYS_641_08	57	56	<1	1940	<1	8	<10	122	<3	3.4

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	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_652_08	53	43	<1	3610	<1	14	<10	70.6	38	1.0
CHYS_653_08	51	58	<1	140	<1	26	<10	46.2	105	3.4
Element Method Det.Lim. Units	Sc MMI-M5 5 PPB	Sm MMI-M5 1 PPB	Sn MMI-M5 1 PPB	Sr MMI-M5 10 PPB	Ta MMI-M5 1 PPB	Tb MMI-M5 1 PPB	Te MMI-M5 10 PPB	Th MMI-M5 0.5 PPB	Ti MMI-M5 3 PPB	Tl MMI-M5 0.5 PPB
CHYS_666_08	158	184	<1	1900	<1	35	<10	272	<3	1.1
CHYS_667_08	61	134	<1	2920	<1	23	<10	405	<3	0.7
CHYS_668_08	17	26	<1	5050	<1	5	<10	166	5	1.3
CHYS_669_08	100	169	<1	2060	<1	32	<10	583	78	1.2
CHYS_670_08	99	102	<1	2570	<1	16	<10	217	<3	1.6
*Rep CHYS_670_08	122	70	<1	2400	<1	12	<10	220	7	1.8
CHYS_682_08	33	33	<1	770	<1	13	<10	20.7	27	3.4
CHYS_683_08	567	446	<1	3530	<1	84	<10	110	<3	0.6
CHYS_713_08	38	73	<1	770	<1	17	<10	66.4	169	4.0
CHYS_741_08	57	33	<1	60	<1	15	<10	51.6	260	1.3
CHYS_768B_08	25	20	<1	1300	<1	7	<10	16.9	14	0.7
CHYS_846_08	127	485	<1	1870	<1	101	<10	799	26	3.2
CHYS_872_08	46	24	<1	2190	<1	5	<10	327	74	4.6
CHYS_902_08	35	10	<1	660	<1	3	<10	536	115	1.7
CHYS_903_08	35	11	<1	70	<1	4	<10	162	572	1.5
CHYS_955_08	23	23	<1	5680	<1	6	<10	261	60	1.8
CHYS_983_08	43	5	<1	470	<1	4	<10	9.8	177	2.0
CHYS_1011_08	21	10	<1	1900	<1	4	<10	12.3	102	0.7
*Rep CHYS_1011_08	18	5	<1	1830	<1	3	<10	13.4	84	0.9
CHYS_1098_08	37	14	<1	170	<1	4	<10	220	137	1.4
CHYS_1099_08	73	69	<1	320	<1	13	<10	381	208	1.3
CHYS_1100_08	25	122	<1	1600	<1	12	<10	244	30	1.3
CHYS_1265B_08	53	46	<1	1530	<1	14	<10	38.5	146	<0.5
CHYS_1282B_08	90	32	<1	890	<1	6	<10	76.0	270	<0.5
GWS_404B_08	53	32	<1	190	<1	9	<10	84.7	119	1.4
GWS_405B_08	64	73	<1	220	<1	14	<10	138	383	2.2
*Std MMISRM16	11	6	<1	510	<1	<1	<10	30.3	6	<0.5
*Std MMISRM16	13	5	<1	510	<1	<1	<10	31.3	<3	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	15	<0.5
*Bik BLANK	<5	<1	<1	<10	<1	<1	<10	0.5	<3	<0.5

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Element Method Det.Lim. Units	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
AJ_AUGER_TEST_1_08	15	<1	13	3	30	27
*Rep AJ_AUGER_TEST_1_08	11	<1	14	3	20	27
AJ_AUGER_TEST_2_08	70	<1	73	8	60	52
AJ_AUGER_TEST_3_08	35	<1	430	29	160	59
AJ_AUGER_TEST_4_08	43	<1	357	23	140	60
AJ_AUGER_TEST_5_08	22	<1	134	11	210	42
AJ_AUGER_TEST_6_08	25	<1	145	12	150	37
AJ_PLASTIC_TEST_1_08	18	<1	103	7	90	27
AJ_PLASTIC_TEST_2_08	74	<1	331	25	60	46
AJ_PLASTIC_TEST_3_08	31	<1	263	18	110	60
AJ_PLASTIC_TEST_4_08	38	<1	138	12	110	49
AJ_PLASTIC_TEST_5_08	44	<1	338	21	70	35
AJ_PLASTIC_TEST_6_08	23	<1	161	12	50	29
CHYS_099_08	14	<1	67	7	2170	83
*Rep CHYS_099_08	10	<1	58	5	2750	68
CHYS_100_08	149	<1	54	5	470	89
CHYS_101_08	36	<1	36	3	550	108
CHYS_292_08	34	<1	537	33	460	73
CHYS_315_08	32	1	399	24	580	90
CHYS_316_08	7	<1	12	1	40	31
CHYS_394_08	48	<1	67	5	270	101
CHYS_421_08	42	<1	1290	88	960	69
CHYS_423_08	27	<1	84	10	1010	97
CHYS_425_08	78	1	255	14	970	42
CHYS_452_08	29	<1	546	28	1280	92
CHYS_454_08	98	<1	753	58	1540	114
CHYS_457_08	32	2	47	5	560	256
*Rep CHYS_457_08	24	2	25	3	470	175
CHYS_486_08	66	1	616	39	740	238
CHYS_489_08	388	<1	720	61	2850	76
CHYS_492_08	1230	1	775	47	3720	32
CHYS_521_08	12	<1	160	13	1330	25
CHYS_524_08	85	<1	57	6	500	61
CHYS_527_08	17	<1	150	15	520	26
CHYS_555_08	26	<1	311	23	480	90
CHYS_557_08	20	<1	125	11	710	105
CHYS_560_08	21	<1	41	2	350	29
CHYS_589_08	36	1	328	25	950	52
CHYS_590B_08	32	2	395	23	1510	60
CHYS_614B_08	19	<1	342	17	260	81
*Rep CHYS_614B_08	20	<1	169	12	280	74
CHYS_621_08	24	<1	187	12	320	55
CHYS_638_08	68	<1	227	12	70	39
CHYS_639_08	775	<1	1760	116	460	86
CHYS_640_08	781	<1	48	5	460	<5
CHYS_641_08	3330	<1	207	17	80	22

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	U MMI-M5 1 PPB	W MMI-M5 1 PPB	Y MMI-M5 5 PPB	Yb MMI-M5 1 PPB	Zn MMI-M5 20 PPB	Zr MMI-M5 5 PPB
CHYS_652_08	47	<1	594	35	1020	139
CHYS_653_08	63	<1	819	68	920	70
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
CHYS_666_08	1470	<1	1300	79	210	42
CHYS_667_08	1920	<1	730	39	660	14
CHYS_668_08	2870	<1	132	9	300	8
CHYS_669_08	1160	<1	869	57	760	44
CHYS_670_08	3010	<1	429	32	170	28
*Rep CHYS_670_08	3170	<1	343	28	110	29
CHYS_682_08	36	<1	502	27	530	27
CHYS_683_08	216	1	2900	197	1210	80
CHYS_713_08	88	<1	486	34	140	105
CHYS_741_08	242	<1	469	50	850	106
CHYS_768B_08	72	<1	321	22	430	11
CHYS_846_08	6150	2	3570	219	420	27
CHYS_872_08	6260	<1	200	17	100	25
CHYS_902_08	4940	3	113	15	100	38
CHYS_903_08	470	2	131	13	450	36
CHYS_955_08	1840	<1	211	17	180	16
CHYS_983_08	20	<1	185	22	440	11
CHYS_1011_08	106	<1	211	20	490	12
*Rep CHYS_1011_08	110	<1	181	20	280	12
CHYS_1098_08	1420	<1	150	12	160	38
CHYS_1099_08	1590	1	317	25	90	65
CHYS_1100_08	3140	<1	323	16	150	46
CHYS_1265B_08	71	<1	389	26	810	71
CHYS_1282B_08	142	<1	134	10	200	80
GWS_404B_08	136	<1	315	25	220	31
GWS_405B_08	115	1	348	27	410	88
*Std MMISRM16	51	<1	12	<1	240	15
*Std MMISRM16	50	<1	11	<1	240	15
*BIK BLANK	<1	<1	<5	<1	<20	<5
*BIK BLANK	<1	<1	<5	<1	<20	<5

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