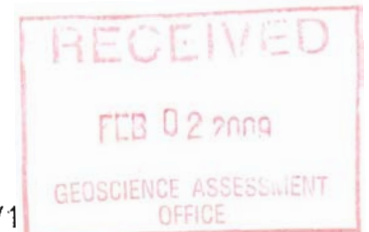


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**2008 RECONNAISSANCE DRILLING REPORT**  
**THUNDER BAY REGIONAL PROJECT and the CASRON OPTION**  
**HICKS AND GREENWICH LAKE AREAS**  
**THUNDER BAY MINING DIVISION**  
**NORTHWESTERN ONTARIO**

**2008**

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January 2009

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## Summary

The 2008 reconnaissance drilling program was designed to test a variety of airborne magnetic anomalies detected on wholly-owned Magma Metals (Canada) Limited claims (Thunder Bay North Regional claims) and one optioned claim (CasRon Option), located outside of the Current Lake and Beaver Lake Project Areas, for their economic PGE and base metals potential. The project area is located 40 to 50km northeast of Thunder Bay, Ontario, and the drilling completed between October 17, 2008 and December 13, 2008, and comprised 7 holes, totalling 2762m. A helicopter was used to support the 2 holes drilled in the Steepledge Lake area, one of the holes drilled near Lone Island Lake, and the single CasRon Option hole. The other 3 holes were accessible by road and drill trail.

The 7 reconnaissance holes were drilled on 6 claims within the contiguous claim group: LIL08-01 and LIL08-02 on claims 4214273 and 4225212, respectively, located near Lone Island Lake; SL08-01 and SL08-02 on claims 4240536 and 4225216, respectively, near Steepledge Lake; CR08-01 on claim 1246796, a short distance south of Escape Lake; and SEA08-01 and SEA08-02 on claim 4222631, located east of Escape Lake. All claims are located within the Thunder Bay Mining Division, northwest Ontario.

Both Lone Island Lake drill holes (LIL08-01 and -02, totalling 450m) encountered ultramafic intrusive bodies with associated overlying hybrid intrusive intervals. LIL08-01 intersected a strongly fractured and altered (serpentinized), apparently unmineralized ultramafic intrusive body (tentatively identified as dunite to peridotite) located below a hybrid intermediate to mafic intrusive body. The second hole (LIL08-02) encountered a similar, but narrower sequence of rocks, with a very narrow, much less altered ultramafic intrusive interval containing disseminated to blebby sulphides. The mineralized interval, which included some of the underlying country rock, contained 0.388ppm Pt, 0.383ppm Pd, 1481ppm Cu, and 435ppm Ni/3.40m.

The 2 holes targeting the Steepledge Lake anomaly (SL08-01 and -02, totalling 450m) intersected the anticipated peridotitic intrusive body. SL08-01 contained up to 8% disseminated to blebby sulphides and exhibited strongly anomalous to low-grade Pt-Pd-Cu-Ni values within several intervals. The 2 best mineralized intervals within SL08-01 graded 0.784ppm Pt, 0.874ppm Pd, 2765ppm Cu, and 1710ppm Ni/2.00m (119.00 to 121.00m) and 0.905ppm Pt, 1.02ppm Pd, 4120ppm Cu, and 2740ppm Ni/2.00m (152.00 and 154.00m), respectively.

The 252m CasRon Option hole (CR08-01) encountered only fine-grained, regionally metamorphosed Quetico-aged metasedimentary rocks, did not intersect the targeted north-south-striking magnetic anomaly, and contained no observable mineralization.

The 2 Southeast Anomaly drill holes (SEA08-01 and -02, totalling 1610m) did not intersect the anticipated/interpreted peridotite body; however, the hole did intersect moderately to strongly magnetic rocks similar to intermediate to mafic hybrid intrusive rocks observed to directly overlie the Beaver Lake Peridotite body, located to the northwest. Assays for the 2 SEA holes were not yet available at the time of writing.

## **Introduction**

Magma Metals (Canada) Limited (a wholly-owned subsidiary of Magma Metals Limited of Australia) completed 6 reconnaissance diamond drill holes (totalling 2510 metres) on the wholly-owned Lone Island Lake, Escape Lake, Steepledge Lake, and Greenwich Lake portions of their Thunder Bay North Regional Property and one hole (totalling 252m) on the CasRon Option, all located between 40 and 50km northeast of the City of Thunder Bay. The drill program commenced on October 17, 2008 and was completed on December 13, 2008.

Drill targets were based on a combination of airborne and ground geophysical surveys that detected a number of discrete magnetic anomalies and specific structural features that are of interest due to their orientation, shape, and similarity to the PGE-Cu-Ni-rich Current Lake magma conduit that is currently being drilled by Magma.

The two Lone Island Lake drill holes were drilled to test two connected, roughly circular magnetic anomalies.

The two Steepledge Lake holes were drilled on a series of linear to arcuate, probably interconnected magnetic anomalies that closely resemble those being drilled to the west in the Current Lake area.

The drill hole on the Casron option targeted a linear, weak to moderate magnetic feature that crosscut the regional structural grain.

The last two of the series of reconnaissance holes were drilled on a large diffuse magnetic anomaly (the Southeast, or SEA Anomaly) that is thought to be directly connected to the PGE-Cu-Ni-rich Beaver Lake Anomaly located a short distance to the west-northwest.

## **Property, Location, and Access**

The drill program was completed on six claims (79 units) that occur within 4 separate claim groups and one option agreement (CasRon Option) contained within the much larger Thunder Bay North Regional Project. The project area is located approximately 40 to 50 km northeast of the city of Thunder Bay, Ontario. Figure 1 shows the general project location and Table 1 lists the targeted claims.

Much of the project area is accessible by road, however, 4 of the 7 drill hole locations were only accessible by helicopter from Thunder Bay. Road access is by proceeding on the Trans-Canada Highway 17 east from Thunder Bay to Highway 527 (the Armstrong Highway); 23km north on Highway 527 to the Escape Road then east for 17km to a north turn onto the Shallowest East Road and several un-named logging roads that provide access the various claims drilled. Holes LIL08-02, SL08-01 and 02, and CR08-01 were only accessible by helicopter. Table 2 gives a road log for drill holes LIL08-01, SEA08-01 and SEA08-02.

**Table 1: List of Claims Drilled**

<b>Claim Number</b>	<b>Claim Units</b>	<b>Claim Ownership</b>	<b>Claim Due Date</b>	<b>Amount Due (\$)</b>
4214273	16	Magma Metals (Canada) Limited	12-Mar-09	6400
4225212	12	Magma Metals (Canada) Limited	13-Nov-09	\$4,800
4240536	15	Magma Metals (Canada) Limited	03-Apr-10	\$6,000
4225212	12	Magma Metals (Canada) Limited	13-Nov-09	\$4,800
1246796	12	C. Zimowski, R. Pizzolato	19-Oct-09	\$4,800
4222631	12	Magma Metals (Canada) Limited	5-Jul-09	\$4,800

**Table 2: Road Log**

<b>Km (section)</b>	<b>Location, feature</b>	<b>Notes</b>
0.0	Thunder Bay	
10.4	Hwy. 17E / Hwy. 527 turn	N up Armstrong Highway
22.7	Escape Road (turn right)	E on gravel road off Hwy. 527
17.3	Shallowest East Road	Go left (N)
5.3	Main junction to left (W)	Go left (W)
2.0	Spur on left (S) in clear-cut	Go straight (W)
1.0	Located ~north of Beaver Lake	

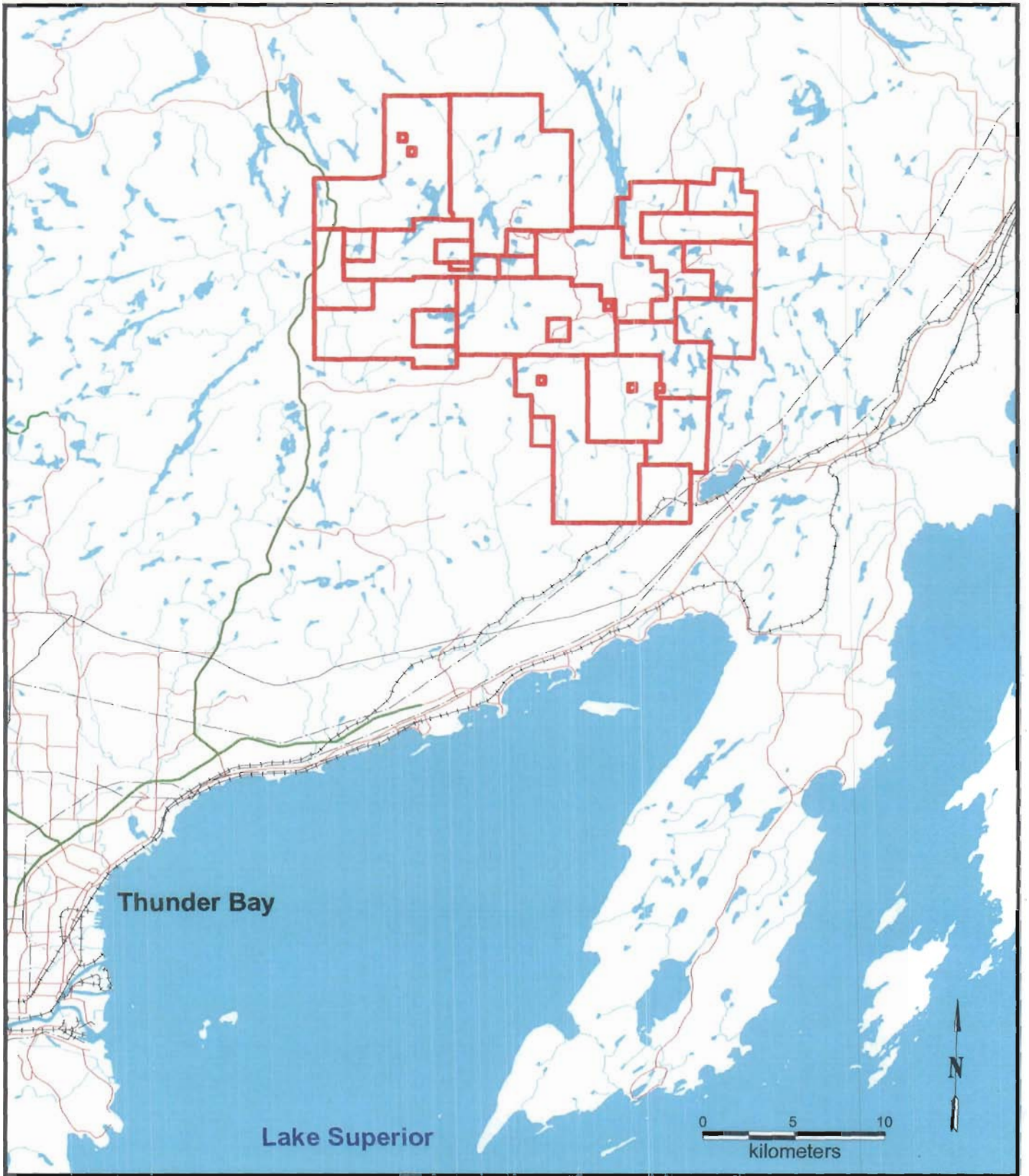
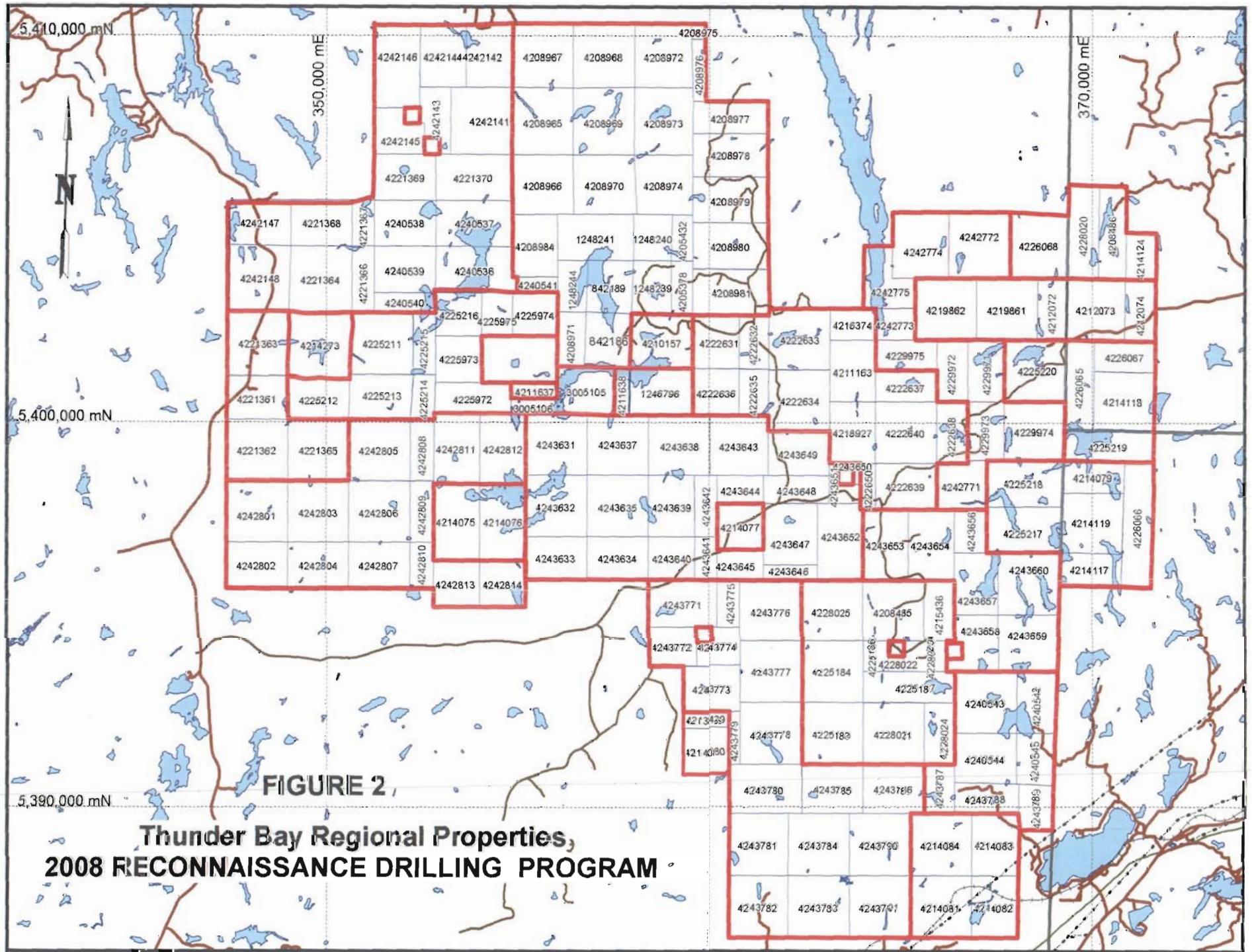


Figure 1: Property Location Map





## Exploration History

Until recently little exploration work or government mapping has been done within the project area. Known exploration in the area is summarized below.

**Pre-1993:** Early exploration within the area concentrated on uranium, more specifically the Christianson (1949) showing which is located a few km east of Current Lake, near the western shore of Greenwich Lake. Rio Tinto optioned the Christianson showing from MW Resources Ltd in January 1976 and staked additional claim units that extended west from Greenwich Lake over northern Current Lake towards Steepledge and Ray lakes (Benkis, 1977. Rio Tinto completed a program of field mapping and diamond drilling (Benkis, 1977).

**1993 to 1998:** In September 1993 G. Harper, G. Wilson, and F. Manns began preliminary exploration within the Onion Lake, Tartan Lake and Greenwich Lake areas. This work consisted of rock and soil sampling in addition to petrographic and geochemical research. The initial focus was based on airborne magnetic anomalies within the area and specifically targeted diamonds. The initial staking of the Thunder Bay North Property was completed during this period.

**1999 to 2000:** In 1999 Harper and Wilson conducted a range of prospecting and sampling work in the region, including limited soil sampling and ground magnetic surveys (Harper and Wilson, 2000; Wilson and Harper, 2000).

**2001 to 2002:** Pacific North West Capital Corporation of Vancouver optioned the Thunder Bay North Property in 2001 from Harper and Wilson. The option was based on the Wilson and Harper discovery of ultramafic boulders along the western shoreline of Current Lake. These peridotite boulders contained appreciable grades of Cu-Ni-Pt-Pd. Work completed included ground-magnetic and electromagnetic surveys over the ice on Current Lake and the small pond (Beaver Lake) located within the present property. In addition, a 6 hole, 813.50m diamond drilling program, tested three locations along the west shoreline of Current Lake in September and October 2002 (Kleinboeck and Jobin-Bevans, 2002). The drilling encountered only weak mineralization with minimal assay values within what was described as a north-south, west- dipping "gabbro" or "diabase". This dyke, not seen at surface, appeared to be  $\leq 0$  m thick and did not resemble the mineralized ultramafic boulders. Pacific North West Capital dropped the option in 2002.

**2005 to Present:** In 2005 Magma Metals Limited optioned the Thunder Bay North Property after the discovery of additional mineralized ultramafic boulders south of the original boulder discovery. In early to mid-2006 Magma completed basic mapping of Thunder Bay North claim 842189 (Wilson, 2006a) with some petrographic and additional follow-up work (Wilson, 2006b) and a McPhar Geosurveys Limited combined helicopter-borne magnetic and gamma-ray spectrometer survey over the Thunder Bay North area. Magma Metals optioned the Beaver lake property from C. Zimowski and R. Pizzolato in October 2006. Soon thereafter a Geotech Limited helicopter-borne VTEM electromagnetic survey was flown over the southern Current Lake-Beaver Lake area that outlined several moderate EM anomalies. During January and February 2007 a ground dipole-



dipole I.P. survey was completed over the southern portion of the Thunder Bay North Property and the western half of the Beaver Lake Property which outlined several chargeability and resistivity anomalies. Pole-dipole and gradient IP surveys were completed during February and March 2008 over a larger portion of the Thunder Bay North and Beaver Lake properties. Additional geological mapping was completed during the autumn of 2008. Between late November 2006 and mid-December 2008 Magma Metals completed 207 diamond drill holes, totalling greater than 35,600m, that primarily tested the Current Lake and Beaver Lake mineralized system and in late 2007 a single 387m reconnaissance drill hole located a short distance east of Lone Island Lake.

## Regional Geology

The Thunder Bay North Property is underlain by the rocks of the Quetico Subprovince, which is now referred to as the Quetico Basin, of the Superior Province of the Canadian Precambrian Shield. The Quetico is described by Williams (1991) as a roughly 70 km wide, linear strip of primarily strongly metamorphosed and deformed clastic metasedimentary rocks and their migmatitic and anatectic derivatives. The identifiable metasedimentary rocks comprising the subprovince consist mainly of turbiditic wacke and siltstone with rare iron formation, pelite, and conglomerate. Primary sedimentary features are locally preserved. Williams (1991) also states that igneous rocks include I-type biotite-hornblende-magnetite granitoid bodies of mixed felsic and mafic composition with volumetrically minor ultramafic units; and metaluminous to peraluminous, often S-type, one- and two-mica granitoids.

As mineralization occurs in ultramafic intrusive rocks of presumed Keweenawan age (roughly 1.1Ga) it is important to review the general geology of Mesoproterozoic rocks that are present in the region. Good reviews of the Mesoproterozoic geology of the area are given by Hart and MacDonald (2007) and Heaman et al. (2007) and their pertinent information is summarized below.

Mesoproterozoic rocks of the region include: intrusive and volcanic igneous rocks of the ~1.59 Ga Badwater intrusion and ~1.54Ga English Bay complex located north west of Lake Nipigon, chemical and clastic sedimentary rocks of the ~1.5-1.3 Ga Sibley Group, various ultramafic to mafic intrusions ~1.112 Ga ultramafic to mafic intrusions of the Nipigon embayment and slightly younger ~1.109 Ga sedimentary, volcanic and mafic intrusive rocks of the Midcontinent rift proper along the north shore of Lake Superior (Heaman et al. 2007).

Previously, 4 distinct ultramafic intrusive bodies have been identified within the huge volume of diabase sills comprising the Nipigon Embayment. These are the Seagull, Disreali, Hele, and Kitto intrusions, respectively. Poorly outlined mafic to ultramafic sills termed the Jackfish and Shillabeer sills have also been recently identified (e.g. Hart and MacDonald, 2007). Hart and MacDonald (2007) describe the ultramafic intrusive bodies as consisting of "pyroxene peridotite, wehrlite, lherzolite, olivine websterite to minor dunite, and olivine gabbro to olivine melagabbro, with irregular patches of monzogabbro along the margins, and ubiquitous phlogopite". The intrusions appear to be primarily sill-like with the exception of the Seagull Intrusion which, based on significant drilling, has a distinct lopolithic form. Intrusion emplacement appears to have been fault

controlled (Hart and MacDonald 2007), but no distinct magma feeder zone has been identified. Ni-Cu-PGE mineralization has been previously identified from the ultramafic bodies with the most significant most present in the Seagull intrusion (e.g. Heggie, 2005).

### 2008 Reconnaissance Drilling Program

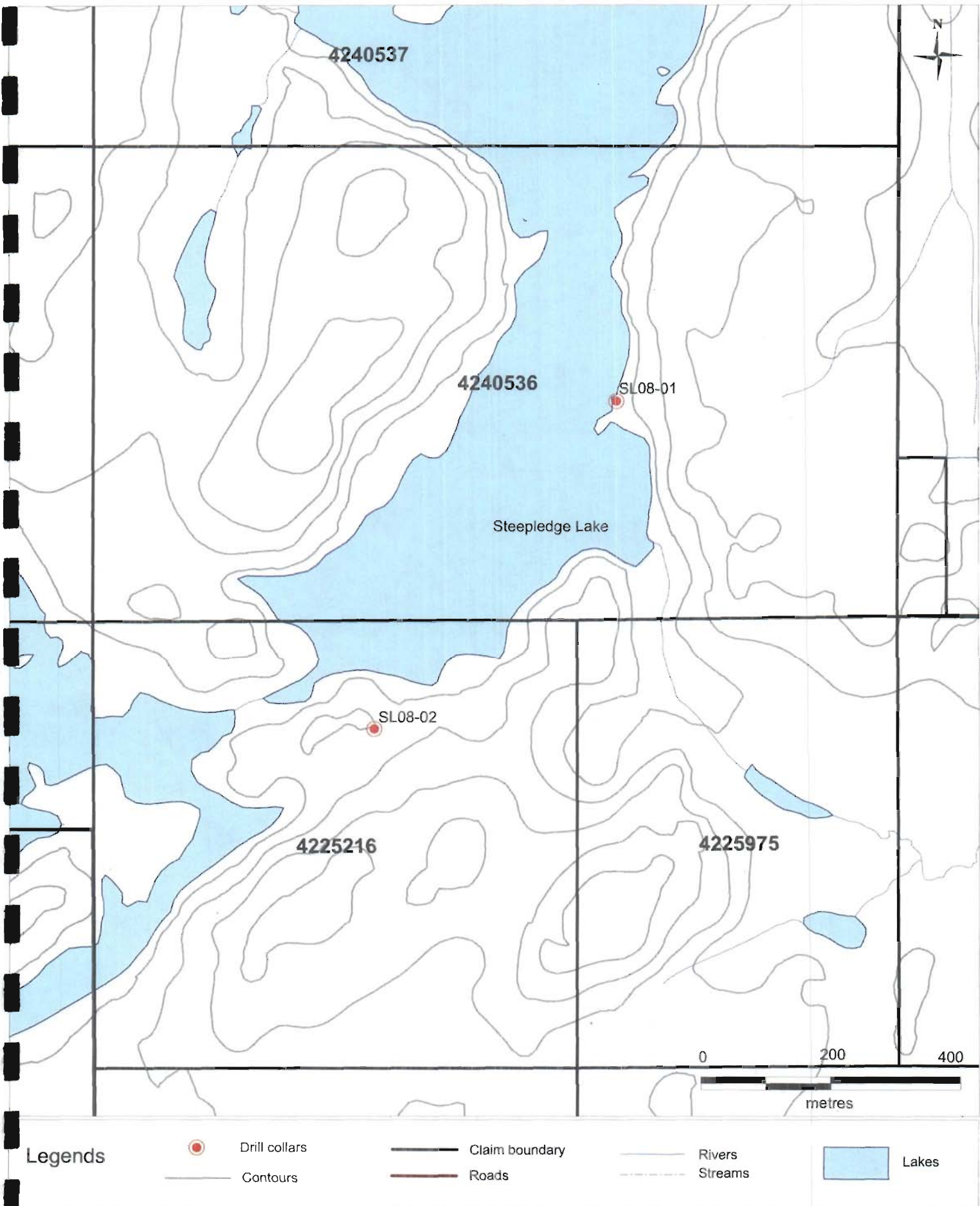
The 2008 Reconnaissance drilling program began on October 17, 2007 and ended on December 13, 2008. Locations of the various drill holes are shown on Figures 3, 4, 5, and 6 and Table 3 provides drill collar information. The drilling was contracted to George Downing Estate Drilling Limited who used a skid mounted LF-70 drill rig for the road access holes and a Duralite500 light-weight drill for the helicopter accessed holes. Both rigs produce NQ-size core. Downhole orientation surveys on vertical holes were completed at regular intervals using a Reflex EZ-Shot tool and inclined holes were surveyed with a non-magnetic Reflex Maxibor II instrument.

All core was logged at a secure location, either at the Escape Lake drill camp or at the Magma core logging facility in Thunder Bay. All core sampling was completed at Magma's secure core sawing location, also located in Thunder Bay. Intervals selected for sampling were cut by a diamond-bladed saw with half the material bagged for assay and the other half retained within the core box. Assay intervals were generally 1 metre, but lesser or greater intervals would be taken on the basis of differing lithologies and mineralization. All samples were taken to ALS Chemex prep-lab in Thunder Bay, Ontario by Magma truck and personnel where primary crushing and pulverizing took place. The pulps produced were shipped to the ALS Chemex North Vancouver, British Columbia laboratory where final analyses were completed.

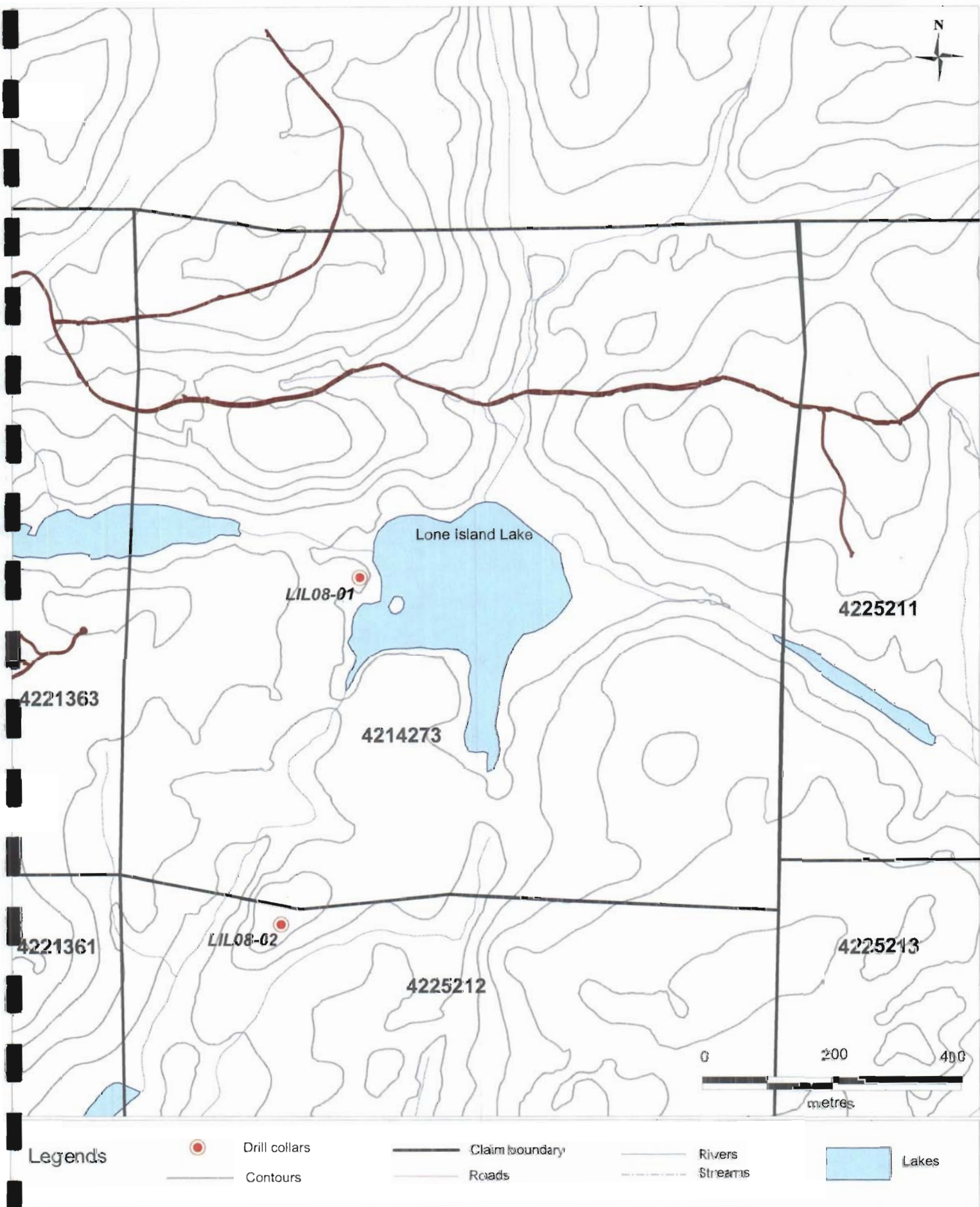
Magma's internal quality control consisted of 1 silica blank, 2 standard reference samples, 1 blind duplicate, and 1 external lab duplicate inserted into the sample sequence for every 40 samples taken. Magma technicians responsible for magnetic susceptibility measurements, rock quality data (RQD) measurements, and core sampling were J. Martin, J. Tallarico, J. Foley, G. DeRozea, R. Scott, and M. Raine. The core was logged by Magma geologists, Justin Johnson, Rosemarie Khoun, Scott Franko, and Graham Wilson.

**Table 3: Reconnaissance Drill Hole Collar Table**

Drill Hole Number	UTM Nad83 E	UTM Nad83 N	Azimuth (degrees)	Dip (degrees)	Depth (m)	Dates Drilled
LIL08-01	349560	5401940	0	-90	264.00	November 22-27, 2008
LIL08-02	349365	5401070	0	-90	189.00	December 2- 6, 2008
SL08-01	354145	5403906	270	-45	258.00	November 18-25, 2008
SL08-02	353540	5403085	0	-90	192.00	November 27-30, 2008
CR08-01	358135	5400695	0	-90	252.00	December 9-13, 2008
SEA08-01	360050	5401590	0	-90	680.00	October 17-30, 2008
SEA08-02	360330	5401480	0	-90	930.00	October 31-November 18, 2008

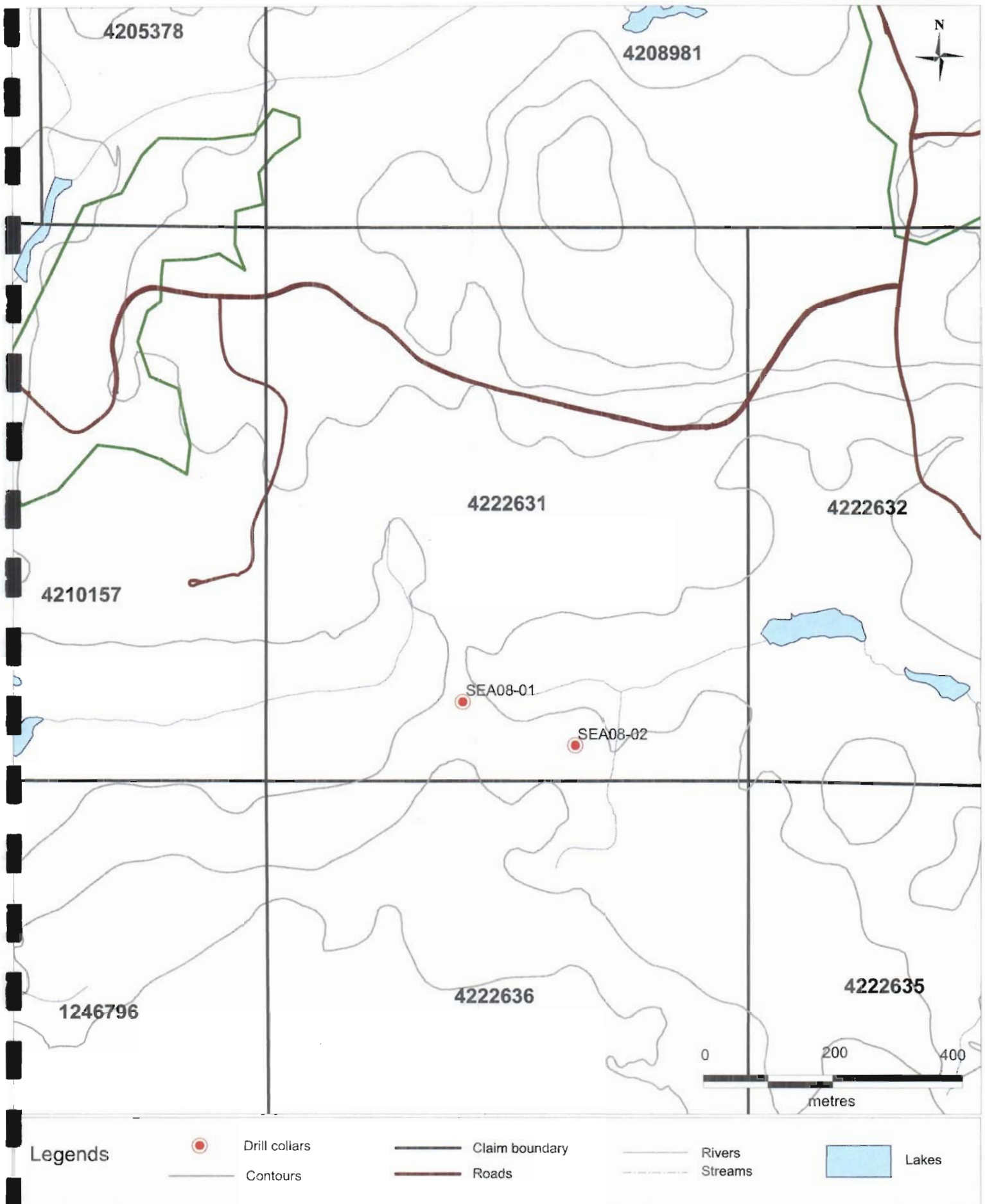


**Figure 3: Steepledge Lake Drill Hole Location Map**

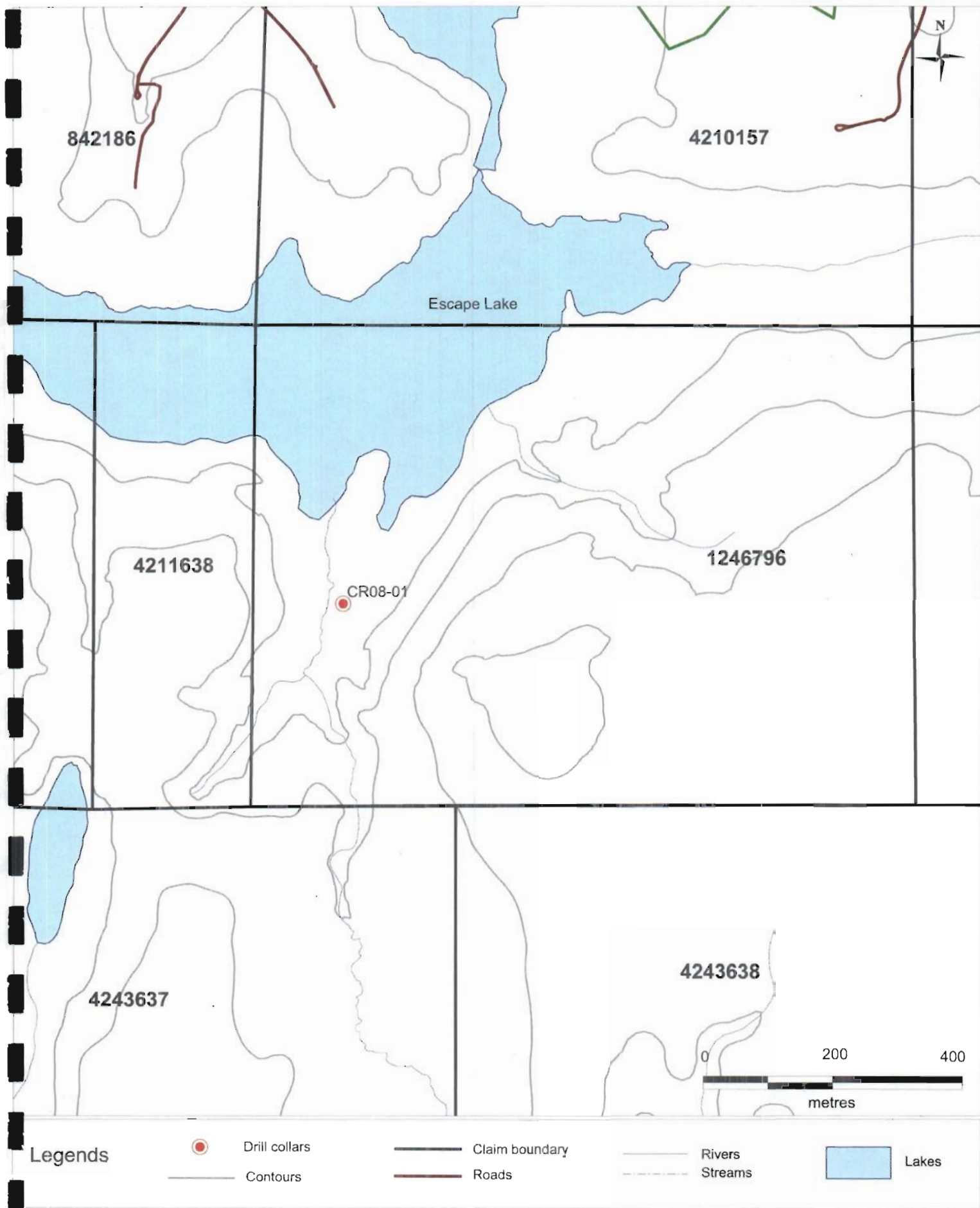


**Figure 4: Lone Island Lake Drill Hole Location Map**





**Figure 5: Southeast Anomaly Drill Hole Location Map**



**Figure 6: CasRon Option Drill Hole Location Map**

## Summary of Rock Units

The rock types encountered within the drill holes, in approximate order of decreasing age, are: fine, strongly deformed (folded, locally sheared), strongly metamorphosed (lower- to mid-amphibolite grade), clastic metasedimentary rocks; several varieties of granitoid rocks; ophitic-textured monzogabbro to olivine gabbro and olivine melagabbro, which are possibly forms of diabase; a group of variably hematized, hybrid intermediate rocks that may be a mixture of remelted country rocks and mafic to ultramafic magma; several varieties of young ultramafic rocks, including olivine-rich melagabbro grading into feldspathic peridotite and peridotite and a strongly altered and brittle deformed rock that may have once been a dunite. General descriptions of the rock units observed are described as follows.

The **granitoid rocks** are mostly, if not all, Archean in age, variable in appearance and modal composition and are comprise medium- to locally coarse-grained granite, granodiorite and tonalite that are locally cross-cut by narrow intervals of pegmatite and very fine- to fine-grained aplite dykes. Localized shearing and discrete fault zones are observed, but in general these rocks are massive to weakly foliated. Alteration consists of reddening, and occasionally a browning, of feldspars (hematitic or possibly potassic alteration) that increases in proximity to Keweenawan-age ultramafic intrusive rocks as well as a pale yellowish to cream coloured epidote alteration associated with some fractures. Chlorite is also observed along fractures, often with euhedral pyrite, and is normally abundant near zones of strong shearing.

The **metasedimentary rocks** are all Archean in age, variably schistose, wackes, siltstones, and occasionally mudstones that have been metamorphosed to quartz-biotite=chlorite±amphibole schists. Zones of intense shearing within fault zones occur but are rare. Strong deformation and evidence of folding is often visible in the core as bull's eye features. Observed alteration consists of chlorite, sericite, epidote (associated with fractures), and hematization that occurs near bodies of peridotite.

The **hybrid red and hybrid grey** units are thought to be Keweenawan in age (~1100Ma) and variable in composition with petrography (thin section analysis) identifying the rocks as fine- to locally medium-grained monzonites, diorites, and gabbros. These units may represent magma mixing between melted metasedimentary and/or granitoid country rock and multiple injections of peridotite parent magma and in part could represent injections of melt-rock before mixing has occurred. Internal contacts that define grain size variations and alteration are often sharp within the unit and in rare cases the contacts are chilled. Abundant rounded to tabular to angular quartz clasts or xenoliths up to 5cm in size occur locally. Some of the quartz clasts display recrystallization features ('sugary' texture) and/or partially preserved primary country rock features, and locally can contain specks of sulphides. Observed alteration consists of pervasive and fracture controlled red-brown to brick-red hematization that increases with proximity to ultramafic intrusive rock. Carbonate ocellae (immiscible melt drops?) and localized pervasive carbonatization are often observed.

**Peridotite**, similar to that being drilled by Magma at Current Lake and Beaver Lake, and interpreted to be Keweenawan in age, is observed within the 2 Steepledge Lake holes and the southernmost Lone Island Lake hole. It is generally massive, dark brown to greenish black in colour, medium- to fine-grained, moderately to strongly magnetic, often feldspathic (plagioclase), and grades marginally into co-magmatic olivine-rich melagabbro, as described below. Sporadic veinlets of serpentine, talc, chlorite or carbonate occur locally as do the occasional granitic dyke.

The **olivine melagabbro** is fine- to medium-grained, moderately magnetic, and is very similar in overall appearance, texture, and colour to the true peridotite described above. It is often difficult to distinguish this rock from true peridotite; however, on close inspection it is noted to contain >10%, grey to dark grey intercumulus plagioclase feldspar. Disseminated pyrrhotite, chalcopyrite, and pyrite are locally common.

A strongly serpentinized, locally strongly talcose, often strongly fractured, fine- to medium-grained ultramafic rock was observed within the northernmost Lone Island Lake hole (LIL08-01). The upper portions of this unit are tentatively identified as **dunite** (>90% olivine, <10% pyroxene). The age of this unit is indeterminate, but from contact relations and rock associations is thought to be Keweenawan in age.

Grey to dark greyish-green, ophitic-textured, moderately magnetic **monzonites**, **monzogabbros**, **olivine gabbros**, and **olivine melagabbros** are observed only in the Lone Island Lake area. They may represent a variety of Keweenawan age diabase/dolerite that is distinct from the diabase observed within the Logan and Nipigon sills. They are usually medium-grained, but fine-grained, coarse-grained, and subpegmatitic varieties have been observed.

## Drill Hole Descriptions

The drill logs for the 7 holes, totalling 2766m, completed during this reconnaissance drill program are located in Appendix 1, available 'Certificates of Analysis' are located in Appendix 2, and drill cross sections are located within the back pockets of the report. The analytical results from samples taken from drill hole SEA08-01 and SEA08-02 were not available at the time this report was written. A summary of each drill hole is presented below.

### **Lone Island Lake Area**

**LIL08-01:** This vertical, 264m drill hole collared within medium- to locally coarse-grained, ophitic-textured monzogabbro or monzodiorite (8.70 to 35.60m) which graded into an ophitic olivine gabbro between 35.60 and 46.35m and then into an olivine-melagabbro from 46.35 to 159.05m (locally monzogabbro). These rocks may be a variety of olivine diabase. The rocks below the 'diabase' (159.05 to ~186.70m) are a complex, often strongly fractured interval of alternating red hybrid and grey hybrid intrusive rocks similar in many respects to those observed to overlie the mineralized peridotite at Beaver Lake and Steepledge Lake. Brittle deformation



increases with depth and the contact with the next underlying ultramafic rock is obscured. This unit is initially identifiable as a fine-grained, serpentinized dunite, but increasing alteration and deformation with depth quickly obliterates all identifiable primary textures producing a fine-grained serpentinite. Carbonatization locally produces a talk-chlorite schist. At about 231.00m a strongly deformed Archean metasedimentary rock is intersected; however, deformation again obscures the contact. The hole was lost at 264.00m within an unconsolidated fault gouge. No mineralization was observed within the ultramafic unit and no anomalous base or precious metals values were obtained.

**LIL08-02:** The rock-types intersected within the 186m, vertical LIL08-02 were similar to those observed within LIL08-01; however, the units were thinner and much less deformed. The hole collared within a diabase-appearing ophitic-textured olivine gabbro to olivine melagabbro (2.15 to 55.95m) separated from a very narrow, mineralized feldspathic peridotite to olivine melagabbro unit (63.25 to 65.50m) by a medium-grained, reddish hybrid intrusive rock (55.95 to 63.25m). The peridotite contained 5% disseminated to blebby pyrrhotite and chalcopyrite and **0.354ppm Pt, 0.335ppm Pd, 1200ppm Cu, 445ppm Ni/2.50m**. The peridotite is underlain by strongly metamorphosed, clastic metasedimentary rocks crosscut by granitic to tonalitic dykes. The uppermost portion of the contact metamorphosed metasedimentary rock immediately below the lower contact of the peridotite contained 5 to 7% disseminated pyrrhotite and chalcopyrite and **0.483ppm Pt, 0.517ppm Pd, 2260ppm Cu, and 407ppm Ni/0.90m**. The complete mineralized interval graded **0.388ppm Pt, 0.383ppm Pd, 1481ppm Cu, and 435ppm Ni/3.40m**.

### ***Steepledge Lake Area***

**SL08-01:** This 258m inclined hole (-45°) collared into a biotite-rich clastic metasedimentary rock, but passed through granodiorite and granite, locally containing metasedimentary schists, between 14.40 and 99.10 m. A narrow, unmineralized feldspathic peridotite vein/sill was intersected between 99.10 and 103.20m. The narrow peridotite interval is separated from the main ultramafic body by a narrow reddened granitoid interval between 103.20 and 111.00m. The thick unit of peridotite, feldspathic peridotite, and olivine-rich melagabbro occurs between 111.00 and 181.00m and is variably mineralized with between 1 to 3% on average and 3 to 7% localized concentrations of disseminated to locally blebby pyrrhotite, chalcopyrite, and pyrite. Strongly anomalous to low-grade Pt-Pd-Cu-Ni values are scattered throughout. One mineralized interval, from 119.00 to 121.00m, contained up to 7% pyrrhotite-chalcopyrite and graded **0.784ppm Pt, 0.874ppm Pd, 2765ppm Cu, and 1710ppm Ni/2.00m**. A second, slightly better mineralized interval between 152.00 and 154.00m contained up to 8% disseminated to blebby pyrrhotite and chalcopyrite and graded **0.905ppm Pt, 1.02ppm Pd, 4120ppm Cu, and 2740ppm Ni/2.00m**. The footwall sequence below the peridotite consisted of granite, pegmatite granite, and biotite-quartz schists to the termination of the hole.

**SL08-02:** This vertical, 192m drill hole collared within a fine-grained, strongly magnetic brick-red hybrid intrusive rock (3.50 to 51.00m) containing numerous up to 3mm in diameter carbonate ocellae. This rock is very similar to the carbonate ocellae-rich red hybrid phases observed to the east at Current Lake. The mafic to ultramafic intrusive target was intersected

between 51.00 and 80.10m and consisted of Olivine-rich gabbro and melagabbro grading into feldspathic peridotite. Much of the unit was weakly mineralized and contained trace to 1% finely disseminated pyrrhotite and minor chalcopyrite. The overall sulphide percentages increase near the lower contact of the unit and consist of 1 to 3%, 3 to 5mm diameter blebs of pyrrhotite with rare chalcopyrite. No significant PGE or base metals values were obtained from this hole; however, the lowermost 12m of the ultramafic unit did contain weakly to moderately anomalous amounts of Pt and Pd. The rocks immediately below the ultramafic intrusive interval consisted of strongly hematized granitoid rocks that quickly graded with depth into a medium- to coarse-grained granodiorite with localized pegmatitic patches.

### ***Southeast Anomaly Area***

**SEA08-01:** The first hole drilled on the Southeast anomaly in 2008 was vertical in orientation and 684m in length. The rocks intersected between the surface and 538.30m consist of a variety of strongly metamorphosed, possibly hydrothermally altered, strongly deformed to sheared, fine clastic metasedimentary rocks that are now reduced to an assemblage of biotite, chlorite and sometimes quartz schists crosscut by numerous granitoid dykes, sills and veins (mainly leucogranite and granodiorite) of variable thickness. Most of the rocks present within this interval are Archean age and examination the supracrustal portions strongly suggest that the hole is drilling through a shear/fault zone intruded by the granitoid dykes and sills. Below 538.30m this changes dramatically. The rocks intersected between 538.30 and 547.90m are variably hematized, relatively undeformed, variably magnetic intermediate intrusive rocks (monzonite to monzogabbro?) that strongly resemble the monzonitic to monzogabbroic red hybrid rocks common in the Current Lake and Beaver Lake areas to the west-northwest. After 547.90m and down to the hole termination at 684m these identifiably intermediate, 'hybrid intrusive' rocks gradually coarsen, become more homogeneous, more magnetic, and more mafic with depth. They rocks appear to be closely related and similar in age to the 'hybrid' rocks commonly associated with the mineralized peridotites and olivine melagabbros present to the west, but are now forming a distinct , possibly separate intrusive body.

**SEA08-02:** The second vertical hole drilled on the Southeast Anomaly was taken to the limit of the drill and ended at 930m. The same progression of rock-types was observed; however, with depth the intermediate intrusive body became more mafic in composition and could be readily identified as a gabbro. Magnetism of the rock continued to increase with depth and considerable quantities of disseminated magnetite (up to 10%) were present within the core.

### ***CasRon Option***

**CR08-01:** This 252m, vertical hole only intersected, deformed Archean-age clastic metasedimentary rocks locally crosscut by a variety of granitoid dykes and sills.

## Conclusions and Recommendations

The Thunder Bay North regional and CasRon Option Reconnaissance Drill Program was successful in identifying in the Steepledge Lake area rock-types and mineralization almost identical in appearance and mode of occurrence as that presently being systematically drilled by Magma in the Current Lake and Beaver Lake Project areas.

Another success was the discovery of ultramafic rock-types, locally containing anomalous to low-grade Pt-Pd-Cu-Ni mineralization, in the Lone Island Lake area that appear to be of Neo-Proterozoic-age. The rocks observed are different in some respects to those observed at Steepledge Lake, but the presence of anomalous Pt and Pd associated with sulphide mineralization dramatically increases the potential for economic magmatic PGE-Ni-Cu deposits in the Lone Island Lake area in particular and the region in general.

The 2 drill holes testing the Southeast Anomaly intersected what are thought to be Keweenawan-age intermediate to mafic intrusive rocks. Are these rocks actually Neo-Proterozoic in age and are they related to the mineralized ultramafic rocks currently being explored in the Current Lake and Beaver Lake areas.

It is recommended that:

1. Follow-up geophysics to be completed in the Steepledge, Lone Island Lake, and Southeast Anomaly areas. These programs should include airborne time-domain EM surveys (VTEM or AeroTEM) in the Lone Island Lake and Steepledge Lake areas and large loop TEM (possibly HT Squid) in the area of the Southeast Anomaly.
2. Diamond drilling to follow-up all medium- and late time Airborne and ground TEM anomalies.

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**Certificate of Qualification**  
**Dawn-Ann Metsaranta, M.Sc.**

I, *Dawn-Ann Metsaranta* of 76 Ruttan Street, Thunder Bay, Ontario certify that:

- I graduated from Lakehead University, Thunder Bay, Ontario in 2005 with a Master of Science Degree in Geology and also hold an Honours Bachelor of Science in geology (2003) and a Bachelor of Science in Earth Sciences (2001).
- I am currently a consulting geologist for Hilldale Geoscience Inc. of 537 Hilldale Road, Thunder Bay Ontario and own one third of the company. I am the acting vice president for Hilldale Geoscience Inc.
- I am a registered member of the Association of Professional Geoscientists of Ontario as a geoscientist in training (GIT).
- I have prepared this report on behalf of the client, Magma Metals (Canada) Limited, as impartial as possible.
- My work experience includes exploration for uranium, gold, copper, nickel and geological mapping for the Ontario Geological Survey.
- I do not believe that there is any misrepresentation in the information found within this report.

Dated January 29, 2009 at Thunder Bay, Ontario



Dawn-Ann Metsaranta, M.Sc.

## Certificate of Qualification

**Allan D. MacTavish, M.Sc., P.Ge.**

I, **Allan D. MacTavish**, of 548 McMaster St., Thunder Bay, Ontario, do hereby certify that:

1. I hold a *Bachelor of Science (Honours) Degree in Geology (1977)* from Laurentian University, Sudbury, Ontario and a *Master of Science Degree in Geology (1992)* from Lakehead University, Thunder Bay, Ontario;
2. I am a Fellow of the Geological Association of Canada, a member of the Association of Professional Geoscientists of Ontario (P.Ge. Registration #0819), the Society of Economic Geologists, the Mineralogical Association of Canada, the Society for Geology Applied to Mineral Deposits, and the Canadian Institute of Mining and Metallurgy;
3. I have practiced my profession in Ontario, the Northwest Territories, and Manitoba since 1975 and have been employed directly by several large mining and exploration companies and the Ontario Geological Survey;
4. I am presently Exploration Manager-Canada of Magma Metals (Canada) Limited based in Thunder Bay;
5. I have supervised numerous projects similar to that represented by the Furcate Lake Option project, am a 'Qualified Person' in the context of National Instrument 43-101. I consider this report to be accurate in all respects.
6. Permission is granted to Magma Metals (Canada) Limited to use this report in a prospectus or other financial offering;
7. I have been granted 200,000 Magma Metals Limited share options exercisable in May 2008; 300,000 options exercisable in May 2009; and a further 500,000 options exercisable in May 2010.



Dated January 29, 2009 at Thunder Bay, Ontario.

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

Allan D. MacTavish, M.Sc., P.Ge.

**Appendix 1**

**Phase 1 Diamond Drill Logs**

Project: Lone Island Lake		Magma Metals (Canada) Limited Drill Log																
Hole#: LIL08-01		Length: 264 m										Down-hole Orientation Tests						
Start Date: 22 Nov. 2008		Azimuth: 000 °						Depth (m)		Type		Azimuth °		Dip °				
End Date: 27 Nov. 2008		Dip: -90 °																
Northing: 5401943		Logged by: R. Khoun																
Easting: 349560		Dates Logged: November 28 and 29, 2008																
Claim#: 4214273		Drilling Co.: George Downing Estate Drilling																
Core Size: NQ		Comments: Hole lost @264.00 m within brittle fault zone																
Pad:																		
From m	To m	Rock Type	Rock Code	Description	Sample	From	To	Interval	Po	Cp	Py	S1	S2	Au ppm	Pt ppb	Pd ppb	Cu ppm	Ni ppm
0.00	8.70	ovg	Ovg	broken rock 8.70 - 9.50 m, no definite m														
8.70	35.60	Monzogabbro	Mg	Medium, sometimes coarse grained pink and green intrusive rock (possibly diabase), K-feldspar, cpx, plag, oxides, trace pyrite. 14.45-15.15 m several mafic vfg "xenoliths", with oli, subrounded, elongated, with rims of pink K-feldspar, and bordered by several thin yellowish-green epidote veins, mostly 80 degrees to core axes. Rock highly magnetic. 13.90-13.95 m up to 1 cm wide epidote vein, with little crb in centre, 60 degrees to core axes. 23.60-24.70 up to 1 cm banded crb oxide vein, along core. 31.70-31.80 mafic (mg melagabbro?) inclusion/inflow/xenolith "worming in", with 3 mm cpy bleb. 31.30-34.00 thin crb veining along core.	H469501	14.40	15.40	1.00						0.002	0.0102	0.01	51	54
					H469502	23.60	24.60	1.00						0.003	0.0169	0.013	115	66
					H469503	31.50	32.50	1.00										
35.60	46.35	Olivine gabbro	Md	Medium-grained ophitic-textured olivine-gabbro (possibly diabase?) intervals, dark green to grey, some even fgr, plagioclase laths and clinopyroxene, little mica. Coarse phlogopite abundant @35.60 and @40.15 m.	H469504	36.00	37.00	1.00						0.004	0.0208	0.016	65	85
46.35	47.30	Olivine melagabbro	Mgm	Fine grained ol-melagabbro, with lower fsp content than before, but ophitic texture not well-developed.	H469505	45.35	46.35	1.00						0.004	0.0194	0.016	74	78
					H469506	46.35	47.35	1.00						0.006	0.0105	0.008	276	84
47.30	159.05	Olivine gabbro and olivine melagabbro	Mgm	Mgr olivine gabbro(diabase?) alternating with fgr olivine melagabbro. This diabase occurring in alternating intervals is very unusual, unlike the ordinary diabase mentioned higher up. Veining, fissures getting more and more abundant and thicker with depth. Rock getting more mafic, serpentinised with depth, with various intervals of highly K altered, even hybrid looking, baked intervals, continuous sampling from 144 m. Rock getting more incompetent with depth, brittle, often crumbled. Intervals identifiable as monzogabbro occur near the base of the unit.	H469507	47.35	48.35	1.00						0.004	0.0161	0.013	116	90
					H469508	54.50	55.50	1.00						0.005	0.0233	0.013	110	93
					H469509	55.50	56.50	1.00						0.005	0.0206	0.013	109	98
					H469510			ESB-B						0.097	1.25	1.11	2440	1280
					H469511	56.50	57.50	1.00						0.004	0.0227	0.013	115	99
					H469512	57.50	58.50	1.00						0.005	0.0295	0.035	95	100
					H469513	66.00	67.00	1.00						0.006	0.0228	0.017	127	108
					H469514	76.00	77.00	1.00						0.002	0.0183	0.01	69	105
					H469515	86.00	87.00	1.00						0.003	0.0193	0.011	88	104
					H469516	96.00	97.00	1.00						0.004	0.0207	0.012	175	115
					H469517	106.00	107.00	1.00						0.003	0.0218	0.009	123	117
					H469518	116.00	117.00	1.00						0.003	0.0188	0.006	111	121
					H469519	126.00	127.00	1.00						0.003	0.0254	0.01	112	127
					H469520			Silica						0.001	0.0006	<0.001	11	3
					H469521	129.00	130.00	1.00						0.003	0.0313	0.008	133	126
					H469522	130.00	131.00	1.00						0.003	0.0327	0.019	138	127
					H469523	131.00	132.00	1.00						0.003	0.0306	0.008	136	131
					H469524	136.00	137.00	1.00						0.003	0.03	0.008	150	132
					H469525	144.00	145.00	1.00						0.003	0.0284	0.008	144	133
					H469526	145.00	146.00	1.00						0.003	0.0283	0.007	138	132
					H469527	146.00	147.00	1.00						0.003	0.0296	0.009	140	136
					H469528	147.00	148.00	1.00						0.003	0.0316	0.009	137	136
					H469529	148.00	149.00	1.00						0.003	0.0274	0.008	126	135
					H469530			ESB-C						0.118	0.414	0.358	844	1250
					H469531	149.00	150.00	1.00						0.004	0.0282	0.009	150	146
					H469532	150.00	151.00	1.00						0.002	0.0247	0.007	118	141
					H469533	151.00	152.00	1.00						0.002	0.0269	0.009	131	138
					H469534	152.00	153.00	1.00						0.003	0.0219	0.007	127	136
					H469535	153.00	154.00	1.00						0.003	0.0259	0.007	124	131
					H469536	154.00	155.00	1.00						0.002	0.0304	0.005	122	124
					H469537	155.00	156.00	1.00						0.002	0.0271	0.009	131	145
					H469538	156.00	157.00	1.00						0.002	0.0171	0.007	136	153
					H469539	157.00	158.00	1.00						0.003	0.0198	0.008	133	144
					H469540	157.00	158.00	Dupl						0.003	0.0216	0.007	129	144
					H469541	158.00	159.00	1.00						0.003	0.0227	0.013	142	143
					H469542	159.00	160.00	1.00						0.003	0.0211	0.007	144	148
159.05	162.10	Grey hybrid	Hg	Very fine-grained, grey intermediate to mafic hybridized intrusive rock; chilled-appearance, with hairline carbonate veins throughout.	H469543	160.00	161.00	1.00						0.003	0.0228	0.007	124	139
					H469544	161.00	162.00	1.00						0.003	0.0225	0.006	125	135
162.10	166.40	Red hybrid	Hr	Reddish stained (hematization?) fgr monzogabbro/hybrid,	H469545	162.00	163.00	1.00						0.003	0.0272	0.008	141	133
					H469545 CRD	162.00	163.00	Dupl						0.003	0.0269	0.007	140	130
					H469546	163.00	164.00	1.00						0.003	0.0242	0.008	120	134

From m	To m	Rock Type	Rock Code	Description	Sample	From	To	Interval	Po	Cp	Py	S1	S2	Au ppm	Pt ppb	Pd ppb	Cu ppm	Ni ppm	
					H469547	164.00	165.00	1.00						0.004	0.0296	0.028	144	133	
					H469548	165.00	166.00	1.00						0.003	0.0239	0.006	139	142	
166.40	170.90	Grey hybrid		Very finegrained, massive, chill, contacts in broken rock. 166-178 in several intervals heavily broken	H469549	166.00	167.00	1.00						0.003	0.0271	0.006	150	140	
					H469550				ESB-B					0.095	1.25	1.11	2360	1320	
			Hg		H469551	167.00	168.00	1.00						0.004	0.0271	0.01	133	136	
					H469552	168.00	169.00	1.00						0.003	0.023	0.007	138	138	
					H469553	169.00	170.00	1.00						0.003	0.0222	0.007	120	134	
170.90	175.30	Grey hybrid		Medium grained grey hybrid, heavily veined throughout 173.90-174.30 hem/K alteration	H469554	170.00	171.00	1.00						0.003	0.0236	0.008	123	132	
			Hg		H469555	171.00	172.00	1.00						0.002	0.0259	0.01	128	128	
					H469556	172.00	173.00	1.00						0.002	0.0311	0.008	139	128	
					H469557	173.00	174.00	1.00						0.003	0.0261	0.008	138	133	
					H469558	174.00	175.00	1.00						0.002	0.0239	0.006	132	128	
175.30	179.00	Grey hybrid		Very finegrained chill, lighter coloured @ 177 m	H469559	175.00	176.00	1.00						0.002	0.025	0.007	134	134	
					H469560				Silica					<0.001	<0.0005	<0.001	15	3	
			Hg		H469561	176.00	177.00	1.00						0.003	0.0267	0.009	141	135	
					H469562	177.00	178.00	1.00						0.002	0.023	0.005	149	134	
					H469563	178.00	179.00	1.00						0.003	0.0243	0.009	153	137	
179.00	183.00	Grey hybrid		medium grained grey hybrid, heavily broken in intervals 182.30-182.50 heavily hematized /K altered	H469564	179.00	180.00	1.00						0.002	0.0227	0.008	136	137	
			Hg		H469565	180.00	181.00	1.00						0.003	0.0219	0.011	129	138	
					H469566	181.00	182.00	1.00						0.003	0.0249	0.008	142	143	
					H469567	182.00	183.00	1.00						0.003	0.0202	0.007	134	136	
183.00	186.70	Red hybrid		Medium grained, heavily broken rock in interval	H469568	183.00	184.00	1.00						0.003	0.0208	0.009	131	139	
			Hr		H469569	184.00	185.00	1.00						0.002	0.0217	0.006	135	136	
					H469570				ESB-C					0.103	0.358	0.318	876	1220	
					H469571	185.00	186.00	1.00						0.004	0.0241	0.009	115	131	
186.70	228.60	Altered Ultramafic Intrusive alternating with grey hybrid		Medium grained, with intervals of fine grained and even chilled character. Heavily serpentinized, some talcy veining and fracturing. 202.30-203.00 hematization, strong, massive. Increasing veining and fracturing, broken rock with depth. Ultramafic rock is a highly altered (chl, serp, in places hem), veined, fractured, medium grained ultramafic rock, oxide-rich. Ultramafic intervals becoming more and more highly altered, with depth; serpentinized, chloritized, with brittle deformation. Possibly chromite would hint as well to original ultramafic, possibly dunite source. Even troctolite as original rock possible. No primary textures visible as strongly deformed. Magnesite possible carbonate phase. Rock scratches more easily with depth. Altered ultramafic alternates with variable thicknesses of fine-grained, grey, hybrid intrusive rock. strong hematization 202.30-203.00 m two 1 cm each thick black serp veins, 35 degrees to core axes biotite/serp vein 215.00-215.05 219.70-222.30 especially heavy broken core 224.60-226.00 broken core	H469572	186.00	187.00	1.00							0.003	0.0235	0.008	165	131
					H469573	187.00	188.00	1.00						0.003	0.0228	0.009	143	132	
					H469574	188.00	189.00	1.00						0.003	0.0234	0.009	148	125	
					H469575	189.00	190.00	1.00						0.002	0.0259	0.009	137	130	
					H469576	190.00	191.00	1.00						0.003	0.0221	0.007	138	131	
					H469577	191.00	192.00	1.00						0.003	0.0223	0.007	134	121	
					H469578	192.00	193.00	1.00						0.003	0.0211	0.008	171	128	
					H469579	193.00	194.00	1.00						0.003	0.0239	0.008	164	120	
					H469580	193.00	194.00	Dupl						0.003	0.021	0.007	162	123	
					H469581	194.00	195.00	1.00						0.003	0.0216	0.008	245	123	
					H469582	195.00	196.00	1.00						0.003	0.0231	0.009	154	129	
					H469583	196.00	197.00	1.00						0.002	0.0172	0.007	157	125	
					H469584	197.00	198.00	1.00						0.003	0.0198	0.008	161	131	
					H469585	198.00	199.00	1.00						0.004	0.0242	0.011	139	128	
					H469585 CRD	198.00	199.00	Dupl						0.003	0.0231	0.011	133	124	
					H469586	199.00	200.00	1.00						0.005	0.0233	0.011	149	124	
					H469587	200.00	201.00	1.00						0.004	0.0238	0.01	167	127	
					H469588	201.00	202.00	1.00						0.004	0.0241	0.01	165	124	
					H469589	202.00	203.00	1.00						0.004	0.0256	0.011	134	124	
					H469590				ESB-B					0.09	1.24	1.21	2410	1330	
					H469591	203.00	204.00	1.00						0.004	0.023	0.01	154	124	
					H469592	204.00	205.00	1.00						0.004	0.023	0.009	148	118	
					H469593	205.00	206.00	1.00						0.003	0.0212	0.009	148	128	
					H469594	206.00	207.00	1.00						0.004	0.0247	0.01	161	125	
					H469595	207.00	208.00	1.00						0.004	0.0258	0.011	142	125	
					H469596	208.00	209.00	1.00						0.004	0.0236	0.009	142	118	
					H469597	209.00	210.00	1.00						0.004	0.025	0.009	126	125	
					H469598	210.00	211.00	1.00						0.004	0.0227	0.009	150	127	
					H469599	211.00	212.00	1.00						0.004	0.0148	0.009	144	121	
					H469600				Silica					0.001	0.0008	0.001	12	3	
					H469601	212.00	213.00	1.00						0.004	0.0147	0.011	150	127	
					H469602	213.00	214.00	1.00						0.004	0.0152	0.009	175	142	
					H469603	214.00	215.00	1.00						0.004	0.0176	0.011	129	144	
					H469604	215.00	216.00	1.00						0.002	0.0144	0.006	54	118	
					H469605	216.00	217.00	1.00						0.005	0.0211	0.012	144	156	
					H469606	217.00	218.00	1.00						0.003	0.0187	0.011	112	183	
					H469607	218.00	219.00	1.00						0.005	0.0205	0.011	159	188	
					H469608	219.00	220.00	1.00						0.003	0.0202	0.009	80	159	
					H469609	220.00	221.00	1.00						0.004	0.0287	0.014	131	163	
					H469610				ESB-C					0.116	0.394	0.348	883	1260	
					H469611	221.00	222.00	1.00						0.004	0.0223	0.012	129	172	

From m	To m	Rock Type	Rock Code	Description	Sample	From	To	Interval	Po	Cp	Py	S1	S2	Au ppm	Pt ppb	Pd ppb	Cu ppm	Ni ppm
					H469612	222.00	223.00	1.00						0.005	0.0165	0.008	154	181
					H469613	223.00	224.00	1.00						0.004	0.0135	0.008	107	215
					H469614	224.00	225.00	1.00						0.005	0.0173	0.01	157	168
					H469615	225.00	226.00	1.00						0.004	0.0227	0.013	154	157
					H469616	226.00	227.00	1.00						0.008	0.0364	0.026	202	166
					H469617	227.00	228.00	1.00						0.005	0.0287	0.025	181	226
228.60	230.60	Granitoid?	Fg	Medium-grained, brick-red, once a granitoid with incipient melt textures (wormy quartz), approx as broken rock. Lower contact sharp, but wavy, medium angle 40 degrees	H469618	228.00	229.00	1.00						0.006	0.0247	0.024	166	211
				229.20-229.30 black vfg vein, 6 cm wide, 60 degrees	H469619	229.00	230.00	1.00						0.002	0.0061	0.008	17	173
					H469620	229.00	230.00	Dupl						0.002	0.0089	0.01	21	172
230.60	231.00	Altered Ultramafic Intrusive	U	Ultramafic intrusive rock (?), fg strongly deformed and altered rock, dark green, contacts not visible as broken rock; strongly serpentinized & talcose	H469621	230.00	231.00	1.00						0.004	0.0036	0.004	30	151
231.00	253.20	Sediment	S	Dark green very fine grained sediment (fine dirty siltstone or pelite), with very heavy serp and crb veining. Major schistosity 55 degr, and various oblique and along, up to 3 cm wide.	H469622	231.00	232.00	1.00						0.002	0.0044	0.004	8	455
					H469623	252.00	253.00	1.00						0.002	0.0055	0.005	33	608
253.20	253.80	Granitoid?	Fg	Strongly metamorphosed granitic rock with melting textures (wormy quartz) in brick red granitoid. 253-256 heavily broken, crumbly	H469624	253.00	254.00	1.00						<0.001	0.002	0.002	42	160
253.80	260.70	Sediment	S	Fine-grained, brown-green coloured metasedimentary shist as above, hematized; broken rock from 258-259.7	H469625	254.00	255.00	1.00						0.002	0.003	0.003	13	93
					H469625 CRD	254.00	255.00	Dupl						0.001	0.0019	0.002	12	84
					H469626	255.00	256.00	1.00						0.001	0.0031	0.003	13	92
					H469627	256.00	257.00	1.00						0.002	0.0018	0.002	56	76
					H469628	257.00	258.00	1.00						0.003	0.0021	0.002	55	79
					H469629	258.00	259.70	1.70						0.003	0.0022	0.003	76	97
					H469630			ESB-B						0.106	1.25	1.1	2300	1300
					H469631	259.70	260.70	1.00						0.003	0.003	0.003	61	75
260.70	263.00	Granitoid?	Fg	Strongly metamorphosed granitic rock with melting textures, with green-yellowish epidote grains till 261.00, highly baked	H469632	260.70	261.70	1.00						0.003	0.002	0.001	32	9
					H469633	261.70	263.00	1.30						0.002	0.0006	0.001	65	18
263.00	264.00	Gouge Zone		Muddy fault gouge, recovered at cave-in of hole, brecciated, faultlike rock														
264.00		End of Hole		Hole was lost @264.00 m within brittle fault zone														



Project: Thunder Bay North Regional				Magma Metals (Canada) Limited Drill Log														
Hole#:		Length:																
LIL08-02		186 m		Down-hole Orientation Tests														
Start Date	1-Dec-08	Azimuth:	0 °	Depth (m)	Type	Azimuth °	Dip °	Depth (m)	Type	Azimuth °	Dip °							
End Date:	6-Dec-08	Dip:	-90 °															
Northing:	5401080	Logged by:	S. Franko															
Easting:	349364	Dates Logged:	Dec 9 - Dec 11/08															
Claim#	TB4214273	Drilling Co.:	George Downing Estate Drilling															
Core Size	NQ	Comments:	Helicopter-supported hole, no road access															
Pad:																		
From	To	Rock	Rock	Description	Sample	From	To	Interval	Po	Cp	Py	S1	S2	Au	Pt	Pd	Cu	Ni
m	m	Type	Code											ppm	ppb	ppb	ppm	ppm
0.00	2.15	Glacial till	Ovb	Glacial till - mixed sand gravel and cobbles														
2.15	17.80	Olivine Melagabbro	Mgm	Olivine Melagabbro - Olivine/plagioclase/k-spar/magnetite 45/35/15/5. Fine grained, brownish grey colour with a patchy mottled appearance of clustered white plag and pink k-spar. Occasional veinlets of k-spar 5-15mm wide. A few low angle hairline calcite fractures noted, some larger calcite veinlets display epitization. High mag sus with readings from 60-90.	H065251	2.10	3.00	0.90						0.007	0.0276	0.011	444	83
					H065252	3.00	4.00	1.00						0.008	0.0269	0.01	452	83
					H065253	4.00	5.00	1.00						0.008	0.0289	0.011	483	69
					H065254	5.00	6.00	1.00						0.013	0.0473	0.017	506	89
					H065255	6.00	7.00	1.00						0.01	0.0353	0.013	634	88
					H065256	7.00	8.00	1.00						0.008	0.028	0.014	591	91
					H065257	8.00	9.00	1.00						0.014	0.036	0.014	690	117
					H065258	9.00	10.00	1.00						0.019	0.0512	0.019	682	118
					H065259	10.00	11.00	1.00						0.019	0.0717	0.026	529	116
					H065260	0.00		ESB-B						0.079	1.14	1.02	2820	1355
					H065261	11.00	12.00	1.00						0.013	0.0563	0.022	701	118
					H065262	12.00	13.00	1.00						0.012	0.0476	0.018	638	118
					H065263	13.00	14.00	1.00						0.004	0.0326	0.018	235	120
					H065264	14.00	15.00	1.00						0.003	0.0297	0.012	260	117
					H065265	15.00	16.00	1.00						0.014	0.0418	0.017	680	105
					H065266	16.00	17.00	1.00						0.008	0.0417	0.017	467	127
					H065267	17.00	18.00	1.00						0.004	0.0255	0.009	236	123
17.80	31.55	Olivine Gabbro	Mg	Olivine Gabbro - Olivine/plagioclase/k-spar/magnetite 55/30/10/5. Finer grained than above, plag and k-spars more evenly distributed than above giving a less patchy appearance. Colour brownish grey. Mag sus still high 60-90. Occasional k-spar veinlets 5-15mm and hairline calcite fractures.	H065268	18.00	19.00	1.00						0.012	0.0487	0.019	738	134
					H065269	19.00	20.00	1.00						0.021	0.0579	0.021	925	131
					H065270	0.00		Silica						0.001	0.0006	<0.001	11	1
					H065271	20.00	21.00	1.00						0.021	0.0826	0.035	660	105
					H065272	21.00	22.00	1.00						0.012	0.0411	0.016	919	156
					H065273	22.00	23.00	1.00						0.016	0.0709	0.028	902	140
					H065274	23.00	24.00	1.00						0.025	0.0854	0.035	646	136
					H065275	24.00	25.00	1.00						0.015	0.0895	0.03	335	151
					H065276	25.00	26.00	1.00						0.014	0.138	0.054	126	179
					H065277	26.00	27.00	1.00						0.005	0.181	0.085	114	151
					H065278	27.00	28.00	1.00						0.005	0.0526	0.027	250	142
					H065279	28.00	29.00	1.00						0.005	0.0767	0.027	170	144
					H065280	0.00		ESB-C						0.103	0.378	0.323	801	1155
					H065281	29.00	30.00	1.00						0.004	0.0844	0.038	100	140
					H065282	30.00	31.00	1.00						0.002	0.0677	0.048	78	124
					H065283	31.00	32.00	1.00						0.004	0.0515	0.036	67	122
31.55	51.10	Olivine Melagabbro	Mgm	Olivine Melagabbro - Olivine/k-spar/plagioclase/magnetite/chaicopyrite? 40/35/20/3/2. Fine grained, brownish grey colour with a patchy mottled appearance of clustered white plag and pink k-spar. K-spar is more prominent than plagioclase opposed to the upper unit from 2-18m. 10mm calcite veinlet at 20deg at 42m with chloritic slickensides. Moderately magnetic with mag sus readings between 10-30.	H065284	32.00	33.00	1.00						0.004	0.0325	0.021	186	113
					H065285	33.00	34.00	1.00						0.003	0.0282	0.02	143	117
					H065286	34.00	35.00	1.00						0.004	0.0247	0.019	90	110
					H065287	35.00	36.00	1.00						0.006	0.0271	0.022	250	129
					H065288	36.00	37.00	1.00						0.004	0.0233	0.013	86	113
					H065289	37.00	38.00	1.00						0.003	0.0184	0.014	121	127
					H065290	0.00		ESB-A						0.234	2.9	2.56	6420	1585
					H065291	38.00	39.00	1.00						0.005	0.0181	0.014	239	130
					H065292	39.00	40.00	1.00						0.003	0.0198	0.015	154	130
					H065293	40.00	41.00	1.00						0.003	0.0166	0.013	119	123
					H065294	41.00	42.00	1.00						0.003	0.0152	0.011	114	120
					H065295	42.00	43.00	1.00						0.004	0.0149	0.012	175	121
					H065295 CRC	42.00	43.00	Dup						0.004	0.0158	0.012	153	121
					H065296	43.00	44.00	1.00						0.003	0.0131	0.011	109	140
					H065297	44.00	45.00	1.00						0.006	0.0143	0.012	251	142
					H065298	45.00	46.00	1.00						0.004	0.0174	0.013	117	142
					H065299	46.00	47.00	1.00						0.004	0.0186	0.013	133	145
					H065300	0.00		ESB-B						0.087	1.34	1.23	2730	1325
					H065301	47.00	48.00	1.00						0.005	0.0219	0.014	141	155
					H065302	48.00	49.00	1.00						0.004	0.0205	0.013	161	157
					H065303	49.00	50.00	1.00						0.003	0.0227	0.015	116	171

From m	To m	Rock Type	Rock Code	Description	Sample	From	To	Interval	Po	Cp	Py	S1	S2	Au ppm	Pt ppb	Pd ppb	Cu ppm	Ni ppm	
51.10	52.05	Mafic Dyke	M	Diabase? - fine grained light grey mafic dyke. Top and bottom contacts at 30deg are serpentinized and display slickensides. 15-20cm of surrounding host rock baked.	H065304	50.00	51.00	1.00						0.003	0.022	0.015	97	174	
					H065305	51.00	52.00	1.00					0.001	0.0263	0.016	38	152		
52.05	55.95	Olivine Melagabbro	Mgm	Olivine Melagabbro - as described above dyke.	H065306	52.00	53.00	1.00						0.002	0.0275	0.019	54	167	
					H065307	53.00	54.00	1.00					0.006	0.0306	0.021	161	178		
					H065308	54.00	55.00	1.00					0.005	0.0325	0.023	148	174		
					H065309	55.00	56.00	1.00					0.004	0.0423	0.029	118	170		
55.95	63.25	Red Hybrid	Hr	K-spar/olivine/plagioclase/augite/chlorite/magnetite 40/30/10/10/5/5. Pink and grey with pink becoming more prominent downwards (hematization?). Medium grained becoming coarser towards base. Lower contact displays a 20mm chill margin where this unit has eroded into the lower peridotite. High to moderate magnetism diminishing downwards from 70-25.	H065310	0.00			Siilica						0.001	0.0005	<0.001	10	1
					H065311	56.00	57.00	1.00					0.004	0.0442	0.03	132	166		
					H065312	57.00	58.00	1.00					0.011	0.0483	0.03	267	156		
					H065313	58.00	59.00	1.00					0.009	0.0283	0.017	326	142		
					H065314	59.00	60.00	1.00					0.008	0.0353	0.021	387	123		
					H065315	60.00	61.00	1.00					0.006	0.0319	0.019	142	113		
					H065316	61.00	62.00	1.00					0.002	0.0241	0.007	66	107		
					H065317	62.00	63.00	1.00					0.003	0.0269	0.017	123	105		
63.25	65.50	Peridotite	Upd	Peridotite - Olivine/augite/hornblende/pyrrhotite/chalcopryrite/chlorite 60/20/15/3/2/TR. Dark green/black colour, fine grained. Locally 5% sulphides with a higher PYO/CPY ratio than usual at 60/40 in blebs up to 10mm. Mag sus varies drastically throughout unit from 10-75 with no obvious trend.	H065318	63.00	64.00	1.00						0.027	0.42	0.361	853	431	
					H065319	64.00	65.00	1.00					0.035	0.367	0.386	1595	495		
65.50	67.85	Brecciated & Migmatized Metasediment	S	Brecciated and Migmatized Metasediments - Black and grey with white quartz and pink k-spar veining. A remobilized and brecciated segment of quartzite metasediments as seen below, migmatized by felsic fracture infilling and moderately mineralized with disseminated pyrrhotite and chalcopryrite. Top 75cm contains fragments of a brecciated milky quartz vein with infilling by pink k-spar. Lower portion less brecciated but remobilized with convoluted relic bedding and less intense migmatization by k-spar veining. Low mag sus <1.	H065320	0.00			ESB-A					0.215	2.97	2.64	6400	1560	
					H065321	65.00	65.50	0.50					0.023	0.194	0.179	1105	372		
					H065322	65.35	66.25	0.90					0.055	0.483	0.517	2260	407		
					H065323	66.25	67.00	0.75					0.008	0.0531	0.043	178	116		
65.50	67.85	Brecciated & Migmatized Metasediment	S	Brecciated and Migmatized Metasediments - Black and grey with white quartz and pink k-spar veining. A remobilized and brecciated segment of quartzite metasediments as seen below, migmatized by felsic fracture infilling and moderately mineralized with disseminated pyrrhotite and chalcopryrite. Top 75cm contains fragments of a brecciated milky quartz vein with infilling by pink k-spar. Lower portion less brecciated but remobilized with convoluted relic bedding and less intense migmatization by k-spar veining. Low mag sus <1.	H065324	67.00	67.85	0.85					0.006	0.0552	0.094	255	154		
67.85	68.90	Metasediment	S	Siltstone/Argillite - Dirty brown to grey to black colour, fine to very fine grained, varying between a fine grained quartzite and finer siltstone segments. Relic bedding at 50deg displays minor concordant milky quartz veinlets up to 5mm and hairline discordant calcite fractures.	H065325	67.85	68.90	1.05					0.008	0.0463	0.047	289	94		
68.90	69.70	Granitic Dyke	Fg	Granitic Dyke - Quartz/plagioclase/k-spar/chalcopryrite 50/30/20/TR. Overall fine grained with a small central portion medium grained over 50mm. Beige yellow pink and grey in colour. Trace amounts of globular chalcopryrite noted.	H065326	68.90	69.70	0.80						0.002	0.0011	0.001	28	6	
69.70	95.05	Metasediment	S	Siltstone/Argillite - Dirty brown to grey to black colour, fine to very fine grained, varying between a fine grained quartzite and finer siltstone segments. Relic bedding at 50deg with concordant milky quartz veins up to 50mm and hairline discordant calcite fractures. Locally highly fractured segments between 71-78m. 20cm quartz flooding at 72m. Brecciated mylonitic zone from 81.55-81.95m with sub-angular quartz vein fragments. Small veinlets of grossular garnet noted affiliated with convoluted quartz veinlets at 85m. Lower 6m of unit aphanitic and black with no bedding evident having been baked by lower intrusion of tonalite.	H065327	69.70	71.00	1.30					0.002	0.0034	0.003	60	152		
95.05	99.85	Tonalite	Fgt	Tonalite - Quartz/plagioclase/muscovite/biotite 50/30/15/5. White and grey quartz and plag with muscovite showing as greenish silver or dark grey depending on plane cut. Biotite shows as small black specks up to 3mm. Coarse to very coarse grained with some areas plag dominant over quartz displaying an interesting runic texture.															
99.85	134.00	Metasediment	S	Quartzite/Argillite - As above Tonalite. Scattered micaceous segments appearing below 105m giving a slightly schistose texture. 113.78-114.30 Highly schistose (at 50deg) micaceous segment with sheared and brecciated contacts over 20-30cm. Higher frequency of quartz veining and flooding from 130-134m.															
134.00	158.70	Metasediment	S	Micaceous Siltstone - Dark grey to black, very fine grained, moderately schistose sub parallel to core axis, residual bedding planes at 50deg are slightly chloritized. Overall more homogeneous than unit above. Some sulphides, possibly Marcasite, noted on chloritized discordant sheared planes. Minor discordant hairline calcite fractures noted. Medium grained Micaceous Tonalite vein from 157.80-158.10 at 20deg.															
158.70	161.00	Tonalite	Fgt	Tonalite - Same composition as above however finer grained and slightly more micaceous resulting in a slight greenish tinge.															
161.00	161.30	Quartz Vein	V	Quartz Vein - Milky white with finely layered zoning. Lower contact sheared and chloritic at 60deg.															
161.30	186.00	Metasediment	S	Micaceous Siltstone - As above Tonalite.															
	186.00	EOH		End of hole															

Project: Steeplegde				Magma Metals (Canada) Limited Drill Log																			
Hole#:		SL08-01	Length:	258 m												Down-hole Orientation Tests							
Start Date:		18-Nov-08	Azimuth:	270 °												Depth (m)	Type	Azimuth °	Dip °	Depth (m)	Type	Azimuth °	Dip °
End Date:		25-Nov-08	Dip:	-45 °												NO TESTS							
Northing:		5403906	Logged by:	J.R. Johnson start / G.C. Wilson 0-168 m (with assays), completed by Scott Franko. 168-258 m.																			
Easting:		354145	Dates Logged:	26-Nov-2008 to 29-Nov-2008																			
Claim#:		4240536	Drilling Co.:	George Downing Estate Drilling																			
Core Size:		NQ	Comments:	Maxibor II orientation survey completed. no Reflex E-Z Shot tests																			
Pad:		1																					
From	To	Rock	Rock	Description	Sample	From	To	Interval	S	Po	Cp	Py	S1	S2	Au	Pt	Pd	Cu	Ni				
m	m	Type	Code												ppm	ppb	ppb	ppm	ppm				
0.00	8.00	Overburden	Ovg	Overburden/casing: no recovery from first 8 m except for a 10-cm length of black cobble of a dense black rock with small white (?) plagioclase glomerocrysts in aphanitic matrix: a diabase chilled margin (?).																			
8.00	14.40	Metasediment - biotite schist to migmatite	S	Unit consists of a fine grained (fgr) metasediment, a biotite schist / gneiss. Sporadic leucosomes of feldspar+quartz occur, a biotite leucogranite melt, which locally cuts the schistose host steeply, at 15 to CA. Foliation is dominantly @30-45 to CA. Thick biotite foliae in qz-rich partial-melt sheets (leucocratic neosome). Sharp intrusive contact at base.																			
14.40	40.30	Granodiorite	Fgg	Unit is a medium-grained (mgr) to pegmatitic granodiorite, composed in the main of qz, plagioclase and chl. There is a pegmatitic variant at 15.3-21.6 m, composed largely of minor bi and trace musc with abundant feldspars (white to greenish plagioclase and buff to pinkish K-feld, the latter locally perthitic) and greyish qz. The pegmatite appears massive, post-tectonic, whereas the finer granodiorite is locally foliated. The latter has a higher colour index than the pegmatite, and contains abundant biotite, plus minor chl and trace musc, plagioclase and qz. Joint surface are coated in a pinkish, presumably Fe oxide-rich clay.																			
40.30	41.00	Biotite schist	S	Sharp contacts to a screen of dense granular biotite schist in the granitoid sequence. Pyrite thin films on fractures. No foliation evident. Biotite-rich and granular, a hornfelsed siltstone, the protolith possibly more clay-rich than the typical biotite schist / greywacke.					Tr.			Tr.	f										
41.00	60.80	Granodiorite	Fgg	A mgr-cgr biotite granodiorite, pale grey to pale pink in hue. Trace of white tabular plagioclase phenocrysts to 10 mm. Minor orangey-buff pegmatitic facies, as at 59.3-59.7 m.																			
60.80	73.90	Biotite schist	S	Dark mica schist with dm-scale widths of intercalated granitic melts (more prevalent than in the 8.00-14.40 m interval). The schist is variably foliated, and typically very biotite-rich. It is not appreciably magnetic to a pen magnet. The granitoid lenses or layers are 20-25% of this 13-m interval.																			
73.90	80.60	Granite	Fg	A rose pink, mgr granite, moderately foliated, containing circa 5 percent (30 cm) of intercalated biotite schist. There are minor biotite-rich schlieren in the granite, at 30 to CA, and cm-scale pegmatitic pods (grey qz, pink and white feldspars, and books of muscovite).																			
80.60	81.00	Breccia vein	Upd	A dark mica-rich melt breccia vein, the upper contact at 20 to CA. Two interpretations are 1) a localized pseudotachylite on a structure, with rounded feldspathic porphyroclasts in dark biotite-rich matrix, or 2) the first vein or dyke of material related to the ultramafic intrusion, the roof or flank of which lies some 30 m down-hole from this feature. High mag-sus values, averaging circa 6E-3 SI units, are consistent with the latter, but the bulk chemistry will be closer to schist and granite than peridotite.	H068501	80.60	81.00	0.40							0.002	0.0028	0.002	56	69				
81.00	93.40	Granite	Fg	Granite, with some 4 m (30%) of intercalated darker rock of low mag-sus, mostly biotite schists. Largely a mgr, pinkish granite, composed of qz, 2 feldspars, plus lesser bi, chl and musc. The rock at 87.0-90.0 m is a coarse pegmatite composed largely of grey qz and salmon-coloured K-feld, possibly a local melt of the adjacent granite.																			
93.40	99.10	Granite	Fg	Reddened coarse granite. A striking rock, with blood-red feldspar(s) as large (usually 5-10 mm) angular grains in matrix dominated by pale grey qz. Appears to be massive.																			
99.10	103.20	Peridotite vein	Upd	Sharp, steeply inclined contact against reddened granite, at 17 to CA. Start assay interval 15 cm lower, excluding angled tongue of the black vein, ensuring lithologically purer sample. High mag-sus (15, 16, 16 and 24, average 17E-3 SI units, quite strongly magnetic to pen magnet). Fgr (1 mm or less, maybe milled, resorbed) red feld crystals abundant, esp in top m of the sheet. Red mm-scale streaks appear lower down, thus the whole unit seems to be strongly contaminated by crustal, wallrock material.	H068502	99.25	100.00	0.75							0.002	0.0016	0.001	18	47				
					H068503	100.00	101.00	1.00							0.002	0.0018	0.002	72	44				
					H068504	101.00	102.00	1.00							0.002	0.0022	0.002	37	59				
					H068505	102.00	103.20	1.20							0.002	0.0025	0.002	81	80				
103.20	111.00	Granite	Fg	Predominantly pink mgr to cgr or rarely pegmatitic granite, largely red feld and grey qz, cut by chloritic fractures which lie close to CA, with trace py in discrete sub-mm crystals. Curiously, the basal 1 m of granite is very pale (no reddening, so common elsewhere). The rock is notable for green (?) chlorite rims between white qz and buff or pink feld crystals. The basal 5 cm is darkened against the UPd, and contains 3% disseminated fgr pyrite.	H068506	109.00	110.00	1.00							0.002	0.0005	<0.001	6	18				
					H068507	110.00	111.00	1.00							0.002	0.0005	<0.001	12	11				
111.00	119.00	Feldspathic Peridotite	Upd	Massive mafic-ultramafic rock beneath a sharp contact, albeit with some assimilation / contamination evident for 5 cm on either side. Very strongly magnetic, mag-sus 43-70, mostly 55 to 70, down to 150 m (the top 50% or more of the intersection). Mostly quite good ground, albeit locally broken, as at 116-117 m. Feldspathic peridotite, minor disseminated sulphide (1% po, abundant trace pyrite, as fgr disseminated	H068508	111.00	112.00	1.00							0.004	0.0225	0.021	186	629				
					H068509	112.00	113.00	1.00							0.004	0.0347	0.032	177	777				
					H068510	113.00	114.00	1.00							0.005	0.0304	0.03	272	723				
					H068511	114.00	115.00	1.00							0.009	0.0949	0.1	326	792				
					H068512	115.00	116.00	1.00							0.01	0.109	0.122	420	823				



From m	To m	Rock Type	Rock Code	Description	Sample	From	To	Interval	S	Po	Cp	Py	S1	S2	Au ppm	Pt ppb	Pd ppb	Cu ppm	Ni ppm	
				grey colour.	H068585	180.90	181.60	Duplicate							0.002	0.0015	0.001	29	18	
181.60	185.78	Red Hybrid	Hr	Brick red hybrid, fine grained mainly brownish "brick" red with some grey segments. Fracture planes are either chloritized or bear fine euhedral pyrite.	H068586	181.60	183.00	1.40							0.001	0.001	0.001	21	40	
					H068587	183.00	184.50	1.50							0.002	0.0016	0.002	39	38	
					H068588	184.50	185.78	1.28							0.002	0.0014	0.001	21	43	
185.78	186.70	Granite	Fg	Granodiorite - plag/k-feldspar/qtz - 55/25/20. Coarse to very coarse grained in segments, orange-cream, pink and grey colour, upper and lower contacts slightly hematized and devoid of plag over 10cm	H068589	185.78	186.70	0.92							0.001	0.0007	<0.001	11	7	
186.70	188.50	Grey Hybrid	Hr	Brick red to grey hybrid as described above with veins of granite 2-15cm wide at 40-45deg of similar composition to unit below.	H068590			ESB-C							0.134	0.426	0.399	790	1190	
					H068591	186.70	187.60	0.90							0.001	0.0008	0.001	34	40	
					H068592	187.60	188.50	0.90							0.002	0.0024	0.002	14	39	
188.50	190.40	Granite/hybrid	Fg	Monzogranite - k-feldspar/plag/qtz - 40/40/20. coarse grained, reddish-pink and cream coloured. Brick red hybrid vein from 189.30-189.65 at 20deg	H068593	188.50	190.40	1.90							0.002	0.001	0.001	16	23	
190.40	195.00	Grey Hybrid	Hr	Grey Hybrid - Very fine grained to aphanitic, grey with high concentration of very fine deseminated pyrite in the groundmass. Highly fractured with irregular and planar fractures being chloritic and talcose. Minor granite veins similar in composition to unit above at 40deg.	H068594	190.40	192.00	1.60							0.002	0.0017	0.001	39	45	
					H068595	192.00	193.50	1.50							0.001	0.0009	0.001	38	23	
					H068596	193.50	195.00	1.50							0.001	0.0011	0.001	27	34	
195.00	201.30	Granite	Fg	Quartz diorite varying to granodiorite in segments. Medium to coarse grained, pale greenish cream turning to pink/grey/black through central portion. Minor veins of mafic grey hybrid very fine grained at 40deg	H068597	195.00	196.50	1.50							0.001	0.0007	0.001	23	10	
					H068598	196.50	198.00	1.50							0.001	0.0009	0.001	30	14	
					H068599	198.00	199.50	1.50							0.001	0.0008	0.001	25	11	
					H068600			Silica							0.001	0.0008	<0.001	13	3	
					H068601	199.50	201.30	1.80							0.001	<0.0005	<0.001	10	12	
201.30	202.80	Diabase	Md	Diabase dyke - hornblende/plag 65/35 with minor pyrite in groundmass and along fracture planes. Fine grained, dark grey, Cl 65-70.	H068602	201.30	202.80	1.50							0.001	0.0007	<0.001	31	54	
202.80	213.70	Granite	Fg	Syenogranite k-feldspar/plag/qtz 60/20/20. Coarse to very coarse grained, reddish pink, orange and grey colour as noted above at 181m.	H068603	202.80	204.30	1.50							0.001	0.0014	0.001	17	9	
					H068604	212.20	213.70	1.50							0.001	0.0005	<0.001	9	8	
213.70	214.70	Grey Hybrid	Hg	Grey hybrid, very fine grained, light grey, very dense with fine deseminated pyrite throughout as well as small (<2mm) ocelli of calcite. Relatively high mag sus at 30-40.	H068605	213.70	214.70	1.00							0.001	<0.0005	<0.001	43	36	
214.70	217.00	Granite	Fg	Granite - k-feldspar/plag/qtz 40/30/30. Coarse grained, orange, cream and grey coloured, highly fractured/broken by drilling with fragments/lenses of assimilated biotite rich metaseds.	H068605 CRD	213.70	214.70	1.00							0.001	<0.0005	<0.001	41	35	
					H068606	214.70	215.85	1.15							0.001	0.0008	0.001	13	15	
					H068607	215.85	217.00	1.15							0.001	0.0008	0.001	26	17	
217.00	227.70	Hybrid	Hg	Grey hybrid - This core from 216-225 was badly jumbled and has not been perfectly rematched. Top 30cm very similar to grey hybrid described above at 214m. Next 70cm is porphyritic and slightly vesicular with a very fine grained dark grey groundmass and 2-3mm calcite ocelli with hematized coronas. There is a diffuse contact between this unit and a brick red type hybrid with a high concentration of hematite ocelli along the contact. The brick red hybrid grades into a grey hybrid with a greenish tinge and some areas slightly hematized displaying a reddish base. The final 70cm of this unit is a very fine grained grey chill zone. Mag sus of this unit varies between 30-60.	H068608	217.00	218.00	1.00							0.001	0.0008	0.001	15	30	
					H068609	218.00	219.50	1.50							0.001	0.0005	<0.001	19	17	
					H068610			ESB-B							0.096	1.28	1.19	2630	1350	
					H068611	219.50	221.00	1.50							0.001	0.0013	0.001	35	56	
					H068612	221.00	222.50	1.50							0.001	0.0007	<0.001	106	98	
					H068613	222.50	224.00	1.50							0.002	0.0009	0.001	50	69	
					H068614	224.00	225.50	1.50							<0.001	<0.0005	<0.001	52	84	
					H068615	225.50	227.00	1.50							0.001	0.0006	<0.001	74	58	
					H068616	227.00	227.70	0.70							0.002	0.0005	<0.001	9	36	
227.70	234.40	Granite	Fg	Granite - k-feldspar/plag/qtz/biotite 35/35/20/10 Coarse grained, reddish pink and orange coloured near top becoming lighter and more plag rich downwards. 2 x magnetic (30-40) fine grained mafic veins similar to grey chill hybrid both at 45deg from 229.75-230.25m and 230.40-230.65m. A diabase vein similar to the one described at 202m though finer grained cuts at 45deg from 231.47m-231.70m.	H068617	227.70	228.75	1.05							0.001	0.0007	<0.001	18	10	
					H068618	228.75	229.75	1.00							0.001	<0.0005	<0.001	5	3	
					H068619	229.75	230.65	0.90							0.001	<0.0005	<0.001	20	36	
					H068620	229.75	230.65	Duplicate							0.001	<0.0005	<0.001	13	30	
					H068621	230.65	232.15	1.50							0.001	0.0008	0.001	11	12	
234.40	240.20	Migmatite	Fg	Plag rich granite has assimilated the lower biotite schist resulting in a migmatite with relic bedding at 45deg. Plag/biotite/quartz 40/40/20. There is a very coarse grained quartz anorthosite vein from 239.40-240.00m at 25deg																
240.20	258.00	Metasediment	S	Quartz biotite schist grading into a homogeneous fine grained dark grey quartzite with numerous concordant grey/white quartz anorthosite veins with assimilated biotite. EOH.																
	258.00	EOH		End of hole																





From m	To m	Rock Type	Rock Code	Description	Sample	From	To	Interval	Po	Cp	Py	S1	S2	Au ppm	Pt ppb	Pd ppb	Cu ppm	Ni ppm
					H068685	80.10	81.60	1.50						0.001	0.0008	0.001	12	13
80.10	83.20	Granitoid	Fg	Reddened granitoid- hematite stained feldspar/quartz - 70/30 - mainly red with grey colour, coarse grained, lower contact grades into typical granite as described below.	H068686	81.60	83.10	1.50						0.001	0.0005	<0.001	3	4
83.20	192.00	Granite	Fgg	Granite to granodiorite - k-spar/qtz/plag /biotite 60/15/15/10. Coarse grained to pegmatoidal in segments, pink, orange, grey, black colour with scattered paler greenish yellow portions of epidization along fracture planes. EOH														
	192.00	EOH		End of Hole														

Project: CasRon				Magma Metals (Canada) Limited Drill Log																	
Hole#: CR08-01		Length: 252 m		Down-hole Orientation Tests																	
Start Date: 7-Dec-08		Azimuth: 0 °		Depth (m)	Type	Azimuth °	Dip °	Depth (m)	Type	Azimuth °	Dip °										
End Date: 13-Dec-08		Dip: -90 °																			
Northing: 5400695		Logged by: S. Franko																			
Easting: 358135		Dates Logged: December 14 to 16, 2008																			
Claim#: 1246796		Drilling Co.: George Downing Estate Drilling																			
Core Size: NQ		Comments: No untramfatic intrusive rocks or significant mineralization intersected																			
Pad:																					
From m	To m	Rock Type	Rock Code	Description	Sample	From	To	Interval	S	D	Po	Cp	Py	S1	S2	Au ppm	Pt ppb	Pd ppb	Cu ppm	Ni ppm	
0.00	13.25	Glacial Till	Ovg	Glacial till - poorly sorted mixed sedimentary and igneous gravel, pebbles and cobbles in mud.																	
13.25	20.10	Metasediment	S	Metasediment - Micaceous quartzite, fine grained, brownish grey, moderately schistose at 20deg. Occasional concordant quartz veinlets give way to whole scale silicification and quartz flooding from 18.25m to lower contact with dyke/fault zone.																	
20.10	28.45	Dyke/fault zone		Dyke - Andesitic dyke - Light greenish grey, fine grained to aphanitic with a porphyritic texture, highly fractured ground with only small fragments of core recovered over most of this unit. Central portion glassy deep green with small black porphyres. Much of this fault zone is composed of fine grained light greenish grey seds baked by the surrounding intrusions making it difficult to recognize them. Small fragment of lower leucogranite noted in fault zone thus dating this occurrence as more recent than the lower granitic intrusion. Sample taken for possible gold values where minor sulphides where noted at 30-33m.																	
28.45	36.25	Metasediment	S	Metasediment - Light greenish grey, fine grained to aphanitic in segments, relic textures overwritten by baking by surrounding intrusions.	H065351	30.5	31.5	1.5								0.001	0.0018	0.002	24	59	
36.25	56.50	Granodiorite	Fgg	Granodiorite - Quartz/plagioclase/k-spar/biotite 40/30/15/15. Medium grained, light grey with pink sometimes euhedral k-spars up to 10mm and small black specks probably biotite. Numerous xenoliths and lenses of host metasediment throughout from 50cm-200cm wide. Lower contact at 30deg.	H065352	31.5	33	1.5								0.001	0.0042	0.003	42	69	
56.50	75.20	Metasediment	S	Metasediment - Very fine grained slightly argillaceous micaceous quartzite, light grey colour with occasional concordant milky white quartz veinlets and some small granodiorite veins from 30cm-50cm wide. Scattered hairline discordant calcite fractures crosscut seds and intrusive veins of granodiorite hence dating them as a more recent event. Fracture planes are chloritized and in some places slickensided.																	
75.20	76.75	Tonalite		Tonalite - Quartz/plagioclase/biotite 45/35/20 similar in appearance to granodiorite above however lacking in pink k-spar.																	
76.75	91.60	Metasediment	S	Metasediment - as described above																	
91.60	94.35	Tonalite		Tonalite - as described above																	
94.35	120.30	Metasediment	S	Metasediment - as described above																	
120.30	135.30	Tonalite		Tonalite - as described above																	
135.30	174.83	Metasediment	S	Metasediment - as described above with a highly micaceous schistose segment from 173.90-174.50 probably due to proximity of lower intrusive tonalite.																	
174.83	176.60	Tonalite		Tonalite - as described above however central 1.50m is pegmatoidal with muscovite instead of biotite and subhedral plagioclase laths up to 40mm.																	
176.60	184.40	Metasediment	S	Metasediment - as described above.																	
184.40	186.50	Tonalite		Tonalite - Medium grained tonalite as described above, milky quartz vein from 184.45-184.70m, minor inclusions of host metasediment.																	
186.50	218.05	Metasediment	S	Metasediment - as described above.																	
218.05	219.70	Tonalite		Tonalite - as above with a central milky quartz vein from 219.00-219.60m																	
219.70	252.00	Metasediment	S	Metasediment - as described above, becoming cleaner, (less argillaceous) and dark grey to black, homogeneous with no relic bedding visible and no mica noted. No calcite veinlets and only minimal fine (<3mm) discordant milky quartz/tonalite veinlets. EOH till further notice.																	

Magma Metals (Canada) Limited Drill Log															Down-Hole Orientation Tests						
Project:	TBN-R														Depth	Azimuth	Dip	Type			
Hole#:	SEA08-01	Length:	684 metres																		
Start Date:	17-Oct-2008	Azimuth:	-- °																		
End Date:	30-Oct-2008	Dip:	-90 °																		
Northing:	5401589	Logged by:	G.C. Wilson																		
Easting:	360048	Dates Logged:	27 Oct 2008 (reccs 0-531 m, boxes 1-128), 07-09 Dec 2008																		
Claim#:	4222631	Drilling Co.:	George Downing Estate Drilling																		
Core Size:	NQ	Comments:	165 boxes (there is no box 153 due to a labelling error), 41 assays																		
From m	To m	Major rock Type	Rock Code	Description	Sample	From	To	Length	S	D	Po	Cp	Py	S1	S2	R %	Au ppm	Pt ppm	Pd ppm	Cu ppm	Ni ppm
0.00	12.00	Overburden	Ov	Recovered overburden: 35 cm of pebbles and small cobbles of diabase plus lesser Sibley siltstone and pale granite with qz veinlets.																	
12.00	20.80	Chlorite Schist	S	Chlorite schist with 10% intercalated coarse-grained (cgr) white qz-rich leucogranitic sheet and minor qz veining (granite at 18.0-18.9 m). White mm-scale qz veinlets at 10 to CA. Brecciated and sheared schist at base.																	
20.80	26.10	Biotite granodiorite, granite and leucogranite	Fgd	Pale grey granite to leucogranite and white granodiorite, mgr and massive to moderately foliated. Largely granodiorite, notable for tabular plag phenocrysts 4-10 mm in length, in fgr groundmass of qz and bi.																	
26.10	26.70	Ultramafic lamprophyre	U	A dark green, vfg 60-cm dyke with sharp, chilled margins. Remarkable unit, passing down via ocellar (rather than variolitic?) upper layer to a thin amygdaloidal layer, then fine-grained bulk of the dyke sandwiching a 4-cm-wide sharp-edged red granite screen (red, not like wallrocks), a second ocellar zone and a chilled margin. PTS at 26.15 and 26.65 m. The dyke is cut by later brittle carbonate veinlets. Age uncertain, but being unfoliated, could be Keweenaw or younger. The immediate host is best described as biotite granodiorite. The core of the dyke is strongly magnetic (10-12 x10 <sup>-3</sup> SI units), the margins much less so. Evidence of liquid immiscibility in ocellar marginal zones and in the dyke immediately below the thin amygdale-bearing layer. Complexities suggest lamprophyres, or even kimberlites. Could be a species of ultramafic lamprophyre.																	
26.70	44.60	Biotite granodiorite	Fgd	Pale biotite granodiorite with tabular plag phenocrysts, as described above. Generally appears massive. Minor white vein qz, as at 44.2 m.																	
44.60	55.50	Biotite schist	S	Biotite schist with minor contorted felsic veinlets and wider leucogranitic sheets. Locally complex qz-dominant veining in schist, as at 49.10-49.25 m. Some traces of pyrite as thin films on chloritic fracture planes, as at 55.1 m. A range of chlorite, biotite and biotite-chlorite schists extends down to about 83 m.							Tr.										
55.50	60.70	Biotite granodiorite	Fgd	Thickest granitic sheet in the schist unit. Minor brittle fracturing and white carb veinlets in this m-scale sheet. Local muscovite flakes. Granular pyrite in late brittle fractures (1% at 58.1-58.7 m).							0.9										
60.70	83.50	Biotite schist	S	More biotite and other schists. Foliation post-dated by some bleached yellowish (sericitized?) fractures, cut in turn by brittle white calcite-lined fractures, as at 62.3 m. Some modest (mostly <3 cm, max 6 cm thick) white qz veinlets within and at moderate angles to foliation, as at 66.85 m. Minor disseminated carb in the matrix of the rock. At 70.7 m, pale yellowish flowery 2-4-mm porphyroblasts of soft (?) dolomite lie along the foliation at 30 to CA.																	

From m	To m	Major rock Type	Rock Code	Description	Sample	From	To	Length	S	D	Po	Cp	Py	S1	S2	R %	Au ppm	Pt ppm	Pd ppm	Cu ppm	Ni ppm
83.50	99.30	Leucogranite	Fg	Coarse leucogranite in sharp contact with overlying biotite schist, which displays frequent qz veinlets within 20 cm of contact. The Quetico leucogranite is very distinctive, composed in the main of white feldspar(s) plus subordinate grey quartz, with much yellowish to silvery muscovite and local concentrations of brown-black biotite flakes. The mica books are very distinctive. Some intervals (e.g., 89.0-89.3 m) display a peculiar texture, with planes lined by 1-mm equant black grains seen in curving arrays on the surface of the uncut core. Near the base of the unit, for circa 20 cm around 98.65 cm, the granite is finely banded with layers alternately rich in qz, and in yellowish feld + musc + specks of blue-green (?) fluorite. Minor fgr equant black grains seen again: possibly Mn-rich garnets with Mn oxide coatings (?).																	
99.30	139.00	Biotite-chlorite schist	S	Biotite and chlorite schists. Bleached veinlets very well-displayed at 105-106 m, reminiscent of the Beaver Lake host sediments. Thin (1-10 cm) intervals of leucogranite and lesser qz veinlets are a very minor leucocratic component. A rather remarkable example at 112.0 m is a 2-cm-wide vein at 20 to CA, composed of subequal amounts of qz and mica (musc) plus a trace of (?) fluorite - rather like a coarse greisen. The schist may contain thin films of pyrite on striated fracture planes, as at 125.0 m.							Tr							Tr	fc		
139.00	186.90	Biotite schist	S	The rock is arguably rather more crystalline in appearance from box 34 onwards, the foliation somewhat better-defined - higher metamorphic grade (look for aluminosilicates?). However, garnets appear in schists elsewhere, and are not that abundant here (although they occur on the foliation, as at 150.4-151.2 m). Thus the variation in rock appearance may simply reflect a variation in protolith composition, as opposed to regional metamorphic grade. Minor qz veinlets (garnets may be concentrated adjacent to qz veinlets, as at 156.05 m). There is a good example of disruption of darker layers into a foliated dappled schist, at 144-150 m, the principal fabric at 25 to CA. Minor leucogranite sheets, the main example at 158.1-163.5 m. This example has sharp contacts which dip at 25-30 to CA. At 169.1 m a thin layer of foliation-parallel qz with bi (a vein?) is cut by late quartz veinlet with strong epidote-altered selvage (the alteration stronger in schist than in the qz-dominated layer). Strong brecciation in chlorite schist with white calcite cement in box 42, 175.0 m (calcite breccia).																	
186.90	193.80	Granodiorite	Fgd	A thin unit of plag-phyric biotite granodiorite, a mgr grey intrusive into the host schist (which is cut by qz veinlets in the 30 cm above the granodiorite). The top half of the granodiorite resembles that seen up-hole, while the lower half is more variable, darker, as the phenocrysts disappear downward. The contact with the leucogranite below is quite sharp and sheared (it is generally assumed here that the leucogranites are the final phase of Quetico granitic magmatism).																	
193.80	197.00	Leucogranite	Fg	White leucogranite, rather coarse, composed largely of white feld, pale grey qz and muscovite. Sharp contact on schist footwall.																	

From m	To m	Major rock Type	Rock Code	Description	Sample	From	To	Length	S	D	Po	Cp	Py	S1	S2	R %	Au ppm	Pt ppm	Pd ppm	Cu ppm	Ni ppm	
197.00	204.00	Biotite schist	S	Strongly deformed bi schist and lesser porphyritic granodiorite (pale grey sheet at 201.1-202.3 m, composed of feld and qz, musc and bi). Foliation and minor entrained mm-scale qz veinlets are steep to essentially vertical (subparallel to CA): the granodiorite sheet and a 2-cm qz vein just below the sheet follow the fabric, at 25 to CA.																		
204.00	226.90	Granodiorite	Fgd	Pale grey feld-phyric granodiorite with minor schist screens and qz veinlets. The host rock generally appears massive, with coarse white tabular plag phenocrysts commonly circa 5 mm in length, in a darker qz-rich groundmass with 2 micas (bi and musc).																		
226.90	230.70	Biotite schist	S	Dark biotite schist, often vfr and relatively dense, but with prominent thick crenulated foliae of dense brown-black biotite prominent in the vicinity of deformed qz veinlets, e.g., at 229.9 m.																		
230.70	233.70	Leucogranite	Fg	Leucogranite, relatively fgr, massive and granular in aspect, apparently largely fgr-mgr qz, feld and musc, with local thin wavy planes decorated by fgr (1 mm and smaller) flakes of brown mica. A thin segregation or veinlet of pegmatitic leucogranite (qz and coarsae books of musc) occurs at 232.5 m.																		
233.70	238.50	Biotite schist	S	Dark, lustrous biotite schist, with dense crenulated foliae of dark mica, cut obliquely by minor chlorite-lined joint planes.																		
238.50	294.00	Leucogranite	Fg	An solid, compact leucogranite, with small equant black (?) garnets, perhaps Fe-Mn-Al garnets with Mn oxide reaction rims (?). Black Mn oxide films and trace granular lustrous pyrite on brittle fractures. Minor intervals of lustrous biotite schist. Near the middle of the granite, at 263.2-263.3 m is a ragged dark green to black schistose schlieren of chl plus bi, rich in granular pyrite, tarnished chalcopyrite and dark brown, Fe-rich sphalerite! Assay 263.0-263.4 (pegmatitic musc granite with the inclusion) and 263.4-264.0 m (fgr leucogranite). The granite around 280.6-280.7 m contains circa 5% evident garnet, pink and (same equant habit) black. At 294 m the basal 30 cm of granite to granitic pegmatite is a coarse muscovite-bearing leucogranite, largely grey qz and white feld, cut by oblique, (?) penecontemporaneous qz veins, which are cut in turn by steep chlorite-lined joint planes. Minor chloritized biotite. Not appreciably magnetic. A thick unit, 55.5 m down-hole. The upper contact on crenulated schist appears subhorizontal to irregular, in contrast to the near-vertical foliation in the host rock.				0.9				0.5	0.5	sc	fc							
294.00	316.10	Biotite schist	S	Strongly deformed dark biotite schist with subvertical foliation. The lower contact of the up-hole intrusion lies in the same plane as joints in the granite, at circa 45 to CA (and so circa 45 to surface, cf. vertical fabric in the footwall schist). The schist is particularly lustrous and mica-rich, with minor mm-scale qz veinlets entrained in the steep fabric. Thin sheet of cgr musc leucogranite at 301.3-301.8 m. Strong foliation, with minor mm-scale qz veins within the fabric. Veinlets / fractures with bleached haloes become more prominent below 309 m. The qz veinlets and foliation lie at about 25 to CA, as at 308-309 m.																		
316.10	322.40	Leucogranite	Fg	Thin sheet. Variable in grain size, content of massive qz and of musc mica flakes and (local) blackened garnet. Cut by steep, chlorite-lined fracture planes.																		



From m	To m	Major rock Type	Rock Code	Description	Sample	From	To	Length	S	D	Po	Cp	Py	S1	S2	R	Au %	Pt ppm	Pd ppm	Cu ppm	Ni ppm
322.40	331.55	Biotite schist	S	Finely defined foliation oriented at about 40 to CA, with very minor entrained qz veinlets. Locally strongly crenulated, as around 326.0-326.5 m (where 2 generations of mm-scale calcite(pyrite) veinlets occur, the earlier within the foliation, cut by a second set with mm-scale offset).																	
331.55	356.10	Leucogranite	Fg	Top surface against schist is sharp, oriented at 45 to CA. Photos at 333-335 m show possible UST (unidirectional solidification texture) with black, non-magnetic equant (?) garnets 1-2 mm in dia. Musc leucogranite with minor screens of schist. Locally coarse musc flakes and gar grains, as around 337.9 m. Better mm-scale black bands are evident at 339-342 m, and this internal structure is cut by an unusually thick (30 cm) qz vein, at 341.65-341.95 m. A 60-cm schist screen occurs, top at 347.8 m. Extremely variable gs and textures, 348 m down to base of unit.																	
356.10	358.40	Biotite schist	S	Strongly crenulated biotite schist, numerous qz veins in low-angle (i.e., high inclination to CA) fabric.																	
358.40	369.50	Leucogranite	Fg	Leucogranite / aplite, with disseminations and mm-thick bands of fgr dark garnets in saccharoidal massive rock below subhorizontal contact with schist in roof (boxes 87-89). Aplite, pegmatite and granite textures juxtaposed (box 89). All musc leucogranite, with or without the (?) garnets. The aplite-pegmatite alternations are separated by parallel bands of fgr, relatively dark musc (e.g., 361.3 m). Small grains of a bl-green mineral here (e.g., 361.6 m) have been noted elsewhere, as on the Casron option around Escape Lake (circa 1-3 km to the west). Softer than a blade - could be apatite, but more likely fluorite. Small; schist biotite screen near base of unit.																	
369.50	389.70	Biotite schist	S	Strongly foliated schist, fabric often subvertical. Variable expressions of densely mica-rich intervals and zones with strong crenulation cleavage. Minor leucogranite injections, as at 376.7-377.5 m (some stoping of the roof schist can be seen). The schist is especially lustrous around 387 m (this area exhibits intense, near-vertical foliation). A thin, cgr granite vein at 387.8-388.0 m contains white feld, grey qz, and some purple mineral, possibly amethystine silica, or (better) dumortierite (not certain, but too hard for fluorite).																	
389.70	396.40	Leucogranite	Fg	Very variable textures, suggestive of fluctuating volatile content, from granite to pegmatite to aplite. Largely white feld plus lesser grey qz and pale musc. Minor dark garnet and bl-green fluorite towards base. Sharp, mica-decorated contact with footwall schist, curving at 70 to CA (i.e., subhorizontal).																	
396.40	403.40	Biotite schist	S	Dark biotite schist, locally with small qz veinlets, and very coarse near thin sheets of highly evolved muscovite leucogranite.																	
403.40	413.75	Leucogranite and biotite granodiorite	Fg	With a small biotite schist screen at 406.5-407.8 m. Above this, the unit is a white leucogranite. Below is more coarse to pegmatitic leucogranite which passes down, at 410.7 m, into a short, mixed interval of finer-grained musc leucogranite, schist, and a coarse, feldspathic granodiorite circa 70 cm thick, in sharp, subvertical contact with dark biotite schist.																	
413.75	416.00	Biotite schist	S	Dark, dense, strongly foliated schist. Minor mm-scale qz veinlets within and steeply cutting the foliation.																	

From m	To m	Major rock Type	Rock Code	Description	Sample	From	To	Length	S	D	Po	Cp	Py	S1	S2	R %	Au ppm	Pt ppm	Pd ppm	Cu ppm	Ni ppm	
416.00	424.00	Leucogranite	Fg	Variegated, generally cgr granitoids, related to the sequence at 403.4-413.75 m. Locally pegmatitic, in places aplitic. White and minor pale pink feldspars, grey qz, and abundant coarse muscovite. A texturally complex unit in sharp, subhorizontal contact with schist footwall.																		
424.00	431.70	Biotite schist	S	Range of schists, including an intensely crenulated mica schist at circa 431.2 to 431.7 m, the immediate hangingwall of the sulphidic minor intrusive.																		
431.70	432.50	Sulphidic diorite	ld	Granular rock with abundant sulphide, mag-sus as high as 0.6 to 1.5 x10 <sup>-3</sup> SI units. Adjacent schists are also mildly more magnetic than the usual 0.2, ranging 0.3-0.8. Apparently a feldspathic diorite dyke intruded along the foliation. Contains circa 6% fgr-cgr anhedral pyrrhotite. As the dyke, and the lower 5 cm in particular, appears moderately to distinctly foliated, this may be a late Archean minor intrusion. Assayed - a PTS also recommended (431.9 m).					6		6			d								
432.50	485.00	Biotite schist	S	Biotite schist with minor qz veinlets, and a 20-cm white bull qz vein at 432.2-432.4 m. Bands may be rich in fgr, equant, pale garnet, e.g., at 439.35-439.8 m. At 441.8-442.0 m, a 20 cm qz veinlet has minor sericite, plus trace pyrite near upper contact, and a creamy to milky-brown mineral, scratched by a scribe, softer than qz: grossular garnet or altered feldspar(?). No eff with dil HCl in powder, so probably not carbonate. Equant garnet in the schist can be scratched with a hardened steel scribe, as can vein qz. Strong foliation, and minor development of "dappled schist" by layer disruption, as at 447-450 m. At 461.3m a deformed white qz vein contains green fluorite. Subhorizontal chloritic fractures may have equant 1 mm pyrite euhedra. Strongly deformed schists, with minor mm-scale qz veinlets (flat in foliation, locally crenulated or even ptygmatically folded, comprising 3% of the rock at 467-483 m, individual veins rarely >10 mm wide. Locally speckled with pale garnets, as at 467.0 m. Some thin veinlets are strongly orangey (477.3, 480.6 and 480.7 m), perhaps with altered feldspars (?). Photos of crenulated qz veinlets (480.05 m) and deformed qz veinlets with the orangey feldspar / grossular garnet (482.9 m).					Tr		Tr			Tr	d	fc						
485.00	490.30	Granite breccia dyke	Fg	A very unusual granitoid, with biotite schist screens at 486.6-487.2 m and 488.25-488.55 m. The granitoid is mostly very coarse, with white anhedral white feldspars >10 mm, and appears to be infiltrated by a later, penecontemporaneous aplitic melt, which is more predominant down-hole in this interval. The coarse granite may contained angular shards of schist, mostly <10 mm long, some maroon with strong hematization, and some of the sheet silicates in the granite are altered to talc. Some of the coarse feldspar is rimmed by quartz, and the impression is one of magmatic brecciation and mineralogical disequilibrium, rather than later tectonic disruption and development of porphyroclasts (photo at 486.3 m). The basal 20 cm of the unit, in sharp contact with footwall schist, contains abundant columnar prisms of black schorl (iron-rich tourmaline), up to 3 mm thick and 12 mm long, in some cases cracked along columnar partings (photo).																		
490.30	497.25	Biotite schist	S	A vgr biotite schist with minor qz veinlets. Steeply dipping granite dyke (492.2-493.1 m) is strong pink in colour, apparently related to the overlying breccia dyke. Spectacular, highly folded salmon-coloured qz-feld (?) veinlet in schist at 496.2-496.4 m.																		

From m	To m	Major rock Type	Rock Code	Description	Sample	From	To	Length	S	D	Po	Cp	Py	S1	S2	R %	Au ppm	Pt ppm	Pd ppm	Cu ppm	Ni ppm
497.25	497.75	Granite breccia dyke	Fg	A second striking example of a granite "breccia vein", just 50 cm thick. It displays similar features to the larger example up-hole, including the coarse granitoid at the top, an aplitic section, and abundant tourmaline near the base. Tour is also present, relatively fgr, higher in this thin but complex dyke. Banding (a UST feature) seen near base, adding to the complexity. Minor bl-grn fluorite also present. PTS suggested at 497.7 m. Sharp contacts with schist walls.																	
497.75	528.00	Biotite-chlorite schist	S	Dark biotite and chlorite schist, strongly foliated, with local tight folding. Minor white and lesser salmon-coloured qz-dominant veinlets. Downward increase in qz veinlet / layer abundance, to as much as 8% between 522 and 528 m. The rock becomes locally responsive to a pen magnet, as near 518 m and 522.5 m. It seems that paler, more aluminous (garnet-bearing) units are less magnetic than dense, fgr, dark schists. The transition to more uniformly magnetic schists is transitional, and is placed at 528 m (a sensitive mag-sus meter would give a clearer picture of the down-hole magnetization of the schists).																	
528.00	538.30	Magnetic schist	S	Strongly foliated dark schist, initially dark grey to black but becoming reddened down-hole (this alteration becomes evident on inspection at 528-532 m), and thus the onset of reddening and of generally higher levels of mag-sus (magnetite content) are broadly coincident. Strongly folded white qz veins or layers. Weakly to quite strongly magnetic (hand magnet). The orangey to more-typically brick-red feldspar (or feldspathic melt?) forms a veinlet at 528.4 m, and becomes stronger and more frequent in veinlets several mm thick, starting at 534.5 m. Seen also in the foliation, it first became evident here that this fairly common mineral is probably an unusually altered feldspar. A good example occurs at 536.9 m: these veins tend to be close to normal to CA (i.e., subhorizontal in orientation). Strong magnetism noted first at 530.4 m: later observations indicate that it is locally present for 12 m or more up-hole from here. Dark silica-biotite-chlorite-feldspar-oxide (etc) rock.																	
538.30	545.30	Partially melted schist / hybrid rock	S	Schist shows ever-stronger reddening, but with minor qz veinlets and foliation, indicating that this is still Quetico host rock, however altered. The complexity here led to the recommendation, upon recce examination, for detailed mag-sus measurements, particularly from 480 m to EOH. Variably-reddened schist invaded by 15-20 brick-red, apparently aphanitic veinlets of feldspathic melt, mostly subhorizontal, each several mm to 10 mm or more wide (PTS, 539.7 m). These cut the steeper schistose fabric, and may contain black mm-scale masses (serpentine?) and more rarely discrete voids and crystals of calcite and pyrite, as at 542.16 m (photo). Entering the hybrid melt sheet (see below), it appears that the SEA08-01 hole, absent a few up-hole minor intrusions of uncertain age, is composed of Quetico schists and variably-evolved granitoids, and a feldspathic Keweenawan melt. There is no evidence for unusual Quetico lithologies, such as banded iron formation.																	

From m	To m	Major rock Type	Rock Code	Description	Sample	From	To	Length	S	D	Po	Cp	Py	S1	S2	R	Au	Pt	Pd	Cu	Ni	
																	%	ppm	ppm	ppm	ppm	ppm
545.30	547.90	Contaminated hybrid rock	Hr	Appearance of undoubted hybrid intrusive rock. The disappearance of vestigial foliation, supplanted by dark green wisps of chloritic, disrupted biotite schist, marks the base of reddened, variably magnetic schist. The rock is granular and fgr, the dull green (chloritized?) ferromagnesian component less evident than in the coarser mass below. This zone contains a large, at least 47x33 mm rounded white quartz bleb at 546.1 m, plausibly a thick pancake-shaped bleb, the major axes subhorizontal.																		
547.90	684.00	Red hybrid	Hr	Very strong magnetism begins with the appearance of granular, "classic red hybrid" containing calcite amygdales. The top 1m displays angular shiny pyrite (granules, rare veinlets, PTS, 548.6 m) & is esp magnetic. This hybrid is denser than the Quetico rocks. The bulk hue of the rock varies with depth & the proportions of ferromagnesian minerals to pink feldspathic matrix. Average amygdale size appears highest near the unit's roof (3-5mm). Amygdales persist downwards in considerable abundance, but are less conspicuous as they are commonly 1 mm wide. Chlorite-lined joints cut the rock at variable orientations. 566.14-616.90m present a distinctly uniform lithology, cut by numerous joints lined by greenish-black chlorite and a trace of pyrite as thin films, at angles of 0 to 70 to CA. Thin veinlets of calcite, often rimmed by chlorite, are vertical, or oblique to CA. Some large (up to 10 mm) amygdales are present, along with mm-size examples which may be rimmed by dark chl/serp. Ferromagnesian content varies, but all appears strongly magnetic. At 582.18 m the granular rock is "invaded" by an irregular vein of aphanitic, brick-red material reminiscent of the feldspathic melt veins in the hangingwall of the intrusion (photo).					Tr.					Tr	d	v						
547.90	684.00	Red hybrid rock, cont.	Hr	566.14-616.90m present a distinctly uniform lithology, cut by numerous joints lined by greenish-black chlorite and a trace of pyrite as thin films, at angles of zero (vertical) to 70 to CA. Thin brittle veinlets of calcite, often rimmed by chlorite, are vertical, or oblique to CA. Sparse large (circa 10 mm max dimension) amygdales are present, in addition to the ubiquitous mm-size examples: like the veinlets, these may be rimmed by dark chl / serp. Ferromagnesian content varies, but all appears strongly magnetic. At 582.18 m the granular rock is "invaded" by an irregular vein of aphanitic, brick-red material reminiscent of the feldspathic melt veins in the hangingwall of the intrusion (photo). At 583.18 m, a good example of a large, irregular amygdale. Despite the evident jointing, the rock makes for very good, competent ground, with many lengths of 40 cm or more, and some recovered lengths >120 cm.					Tr					Tr.	fc							

From m	To m	Major rock Type	Rock Code	Description	Sample	From	To	Length	S	D	Po	Cp	Py	S1	S2	R %	Au ppm	Pt ppm	Pd ppm	Cu ppm	Ni ppm
		Red hybrid rock, cont.	Updh	616.90-665.10m: due to a driller error, there is just 19 cm of core, ending at 630.00 m, in box 152, and there is no box 153). The ground continues to be good, with excellent recovery, despite chloritic joint planes. The grain size of the feldspar varies somewhat, being locally coarser than the norm, which is circa 1-2 mm. The fgr ferromagnesian phases plus small interstitial / vug-filling calcite complement the feldspar. The rock is cut obliquely at 625.75 m by a 2.5-cm-wide vfgr veinlet of red feldspathic melt. The margins are sharp, suggesting that the host intrusive may have been largely solidified prior to a late fracturing and emplacement of the fgr material. Additional examples are found just down-hole, and at 629.5-630.4 m there is a uniquely wide example of what appears to be a fgr, late feldspathic vein or dyke cutting the mass of the intrusion. This rock (assay H467482) has a similar gs to the host, with which it has sharp if somewhat undulose intrusive contacts (upper contact is well-preserved), but may differ principally in having a lower ferromagnesian content (colour index say 10% versus 25% in the host).																	
		Red hybrid rock, cont.	Updh	665.10-684.00 m: Massive "hybrid" continues through the last five boxes to end of hole. The rock is heavily broken at 666-670 m (an artifact of drilling?) but otherwise good ground continues to EOH. Amygdales/ocellae are small and sparse, still calcite-filled. This would be consistent with rise of volatiles to the higher levels of the intrusion, except that there are local intervals with several percent angular amygdales (calcite plus chl/serp +/- qz), as at 674-678 m, which also hosts some brittle calcite-chl fractures. Some coarse (to circa) angular amygdales are sparingly present, with a good example of coarse calcite rimmed by serp. at 671.4 m. Minor vfgr, aphanitic and feldspathic veins occur, as near 668 m, a 3-cm vein with sharp margins and some patchy coarse calcite. A striking vein 10 cm thick is assayed, between two 10-cm sections of wallrock, at 682.2-682.3 m (assay H467489, sharp margins against wall rock, photo).																	
		Red hybrid rock, cont.	Updh	The bulk rock is composed of pinkish feldspar, dull green ferromagnesian phases, plus lesser white calcite and trace pyrite. The ferromagnesian component may well include much serpentine after olivine, but some grains or masses are elongate in habit, suggestive of amphiboles. The bulk composition is probably that of a melanocratic syenite, the rock name best determined by a combination of assays (to be made 1 m every 10 m throughout the intrusion) and petrography.																	



From m	To m	Major rock Type	Rock Code	Description	Sample	From	To	Length	S	D	Po	Cp	Py	S1	S2	R	Au	Pt	Pd	Cu	Ni	
																	%	ppm	ppm	ppm	ppm	ppm
684.00	EOH			Summary of the basal 136.1 m of hole comprising red "hybrid rock" of this unusual lithology, 9.6 m of overlying, part-melted schist with veinlets and floors of orange melt material with schist and rare quartz inclusions also meets the old definition of hybrid rock. The host schist's foliation and sporadic small qz veinlets give way downwards to a more massive, homogeneous "classic red hybrid". A massive red hybrid rock, as described at Current and Beaver Lakes, proving a Keweenawan component at the Southeast Anomaly. Such a great thickness of apparently homogeneous rock is very striking. It is now time to discard our original working hypothesis that these mostly-pink, granular and massive rocks are a melt produced at peridotite-host rock interfaces. Instead it must be a separate magma. Perhaps it is a contaminated mantle melt produced by prolonged residence in an intermediate magma chamber, and then expelled along the conduits to form a first intrusive phase in the Keweenawan "chonoliths". In favourable cases, this would later be followed by a pulse of mineralized peridotite, with relatively minimal assimilation, little pyrite, and in some areas zones of potentially economic disseminated magmatic sulphides.																		

Project: TBN Regional		Magma Metals (Canada) Limited Drill Log	
Hole#:	SEA08-02	Length:	930 m
Start Date:	31-Oct-08	Azimuth:	N/A °
End Date:	18-Nov-08	Dip:	-90 °
Northing:	5401479	Logged by:	S. Franko
Easting:	360329	Dates Logged:	Nov 7th - Dec 14th intermittently
Claim#		Drilling Co.:	George Downing Estate Drilling
Core Size:	NQ	Comments:	
Pad:			

Down-hole Orientation Tests							
Depth (m)	Type	Azimuth °	Dip °	Depth (m)	Type	Azimuth °	Dip °

From m	To m	Rock Type	Rock Code	Description	Sample	From	To	Interval	S	D	Po	Cp	Py	S1	S2	Au ppm	Pt ppb	Pd ppb	Cu ppm	Ni ppm	
0.00	5.80	Overburden		Not seen-assuming glacial till, sand and mixed cobbles																	
5.80	63.85	Metasediment	S	Biotite, feldspar, quartz schist 70/15/15. Fine grained, medium to dark grey with prominent concordant quartz veins between 2mm-10mm joining in places to form wider bands. Bedding at 45 deg at top flattening to 25 deg. downwards. Sparse <1% sulphides pyr and cpy noted in groundmass. Fracture planes parallel to bedding slightly chloritic, lower 5m of unit very fine grained/baked with no relic bedding visible																	
63.85	83.20	Tonalite	Fgt	Quartz, plagioclase feldspar, biotite 60/30/10. Coarse grained, light grey and black with a mottled texture, quartz grains are the coarsest up to 10mm, feldspars up to 5mm and fine grains and interstitial masses of biotite up to 2mm. Top contact is sharp and sub-planar at 20 deg, lower contact sharp and planar at 30 deg. Overall a homogeneous unit excepting minor quartz veining and inclusions of host Metasediment as noted. Most veins display diffuse contacts having partially assimilated the host rock resulting in pegmatoidal plagioclase feldspar crystals along with laths of muscovite up to 20mm near contacts. 68.88-69.03 3cm smokey quartz vein with pegmatoidal halo of plag and muscovite. 69.25-69.80 20cm smokey quartz vein with halo of plag and musc. 71.70-71.75 Smokey quartz vein at 45 deg. 73.75-73.85 pegmatoidal plag and musc. 73.85-74.00 Inclusion/xenolith of baked very fine grained host schist. 74.00-74.20 Smokey quartz vein with a green tinge in places. 74.20-74.25 Fragment of host schist. 75.30-75.45 Lense of host schist with visible bedding at 45 deg parallel to contacts. 75.45-75.50 Smokey quartz/plag vein with minor muscovite and chloritized lower contact. 75.70-76.03 Pegmatoidal segment mainly plag with minor muscovite and some quartz. 76.41-76.60 Pegmatoidal plag with quartz and minor muscovite. 76.75-76.85 Smokey quartz vein top contact irregular bottom contact planar at 55 deg.																	
83.20	145.50	Metasediment	S	Biotite, feldspar, quartz schist 70/15/15. As above tonalite, overall finer grained and slightly baked with scattered very fine grained segments devoid of any relic bedding. Veins of tonalite and pegmatoidal plag segments as noted. 86.45-86.75 pegmatoidal vein of plag/qtz and musc at 30 deg. 89.55-89.75 tonalite vein at 30 deg. 89.85-90.00 tonalite vein at 30 deg. 97.70-98.00 tonalite vein irregular contacts. 100.00-102.75 tonalite vein with irregular contacts and a smokey qtz vein from 101.40-101.55 at 45deg. 106.20-106.70 Tonalite vein at 45deg parallel to bedding with a 5cm inclusion of host schist at 106.50. 110.45-110.70 tonalite vein at 60deg. 112.00-112.30 tonalite vein, top contact at 60deg lower contact at 25deg opposing. 114.78-116.60 series of 10-20cm tonalite veins at 40-45deg. 118.15-118.65 tonalite vein at 65deg grading into a highly micaceous segment of host schist at base which continues till 119.00. 143.10-145.50 tonalite vein with minor inclusions of host schist top contact at 25deg lower contact at 45deg. Minor quartz veining throughout the unit gives way to quartz flooding over short segments.																	
145.50	160.20	Metasediment	S	Feldspathic Quartzite 15/85. Very fine grained and only slightly shistose in minor segments, dark grey colour, homogeneous with scattered quartz veinlets. Slightly wider (8-10cm)qtz veins from 150-160m contain grossular garnet and fluorite.																	

From m	To m	Rock Type	Rock Code	Description	Sample	From	To	Interval	S	D	Po	Cp	Py	S1	S2	Au ppm	Pt ppb	Pd ppb	Cu ppm	Ni ppm
160.20	161.45	Diabase dyke	Md	Very fine grained, dark grey with 5mm black chill margins. Band of fine (1mm) calcite ocelli noted from 162.40-162.50 as well as within 2cm of contacts. Groundmass reacts moderately to acid with a bleaching effect similar to Ankorite. Sparse hairline irregular calcite fractures throughout. Top contact irregular at 90deg and lower contact irregular at 45deg.																
161.45	162.70	Metasediment	S	Feldspathic Quartzite 15/85 as above dyke, very fine grained and only slightly shistose in minor segments, dark grey colour, homogeneous with scattered quartz veinlets.																
162.70	163.33	Diabase dyke	Md	Same as dyke above with 2-3mm chill margins but no ocelli noted. Top and bottom contacts convoluted																
163.33	176.35	Metasediment	S	Feldspathic Quartzite as above dyke. Smaller segments between tonalite veins baked enough to remove any relic bedding textures. 167.80-168.30 Tonalite vein with a 10cm segment of milky qtz flooding in central portion, irregular contacts. 168.60-168.90 Tonalite vein top contact at 60deg lower contact at 20deg. 169.55-172.45 series of small (5-15cm) tonalite veins parallel to relic bedding at 45deg. 172.50-173.40 Tonalite vein with xenoliths of host quartzite. 175.00-175.30 Tonalite vein at 30deg. 175.55-175.70 Tonalite vein at 30deg.																
176.35	188.95	Leucogranite	Fg	Quartz/plagioclase feldspar/muscovite 60/30/10. Very coarse grained to pegmatoidal, overall grey and white colour with black or green laths of muscovite depending upon orientation. Overall homogeneous with minor hairline irregular fractures infilled with a fine grained hard black mineral possibly tourmaline or chloritoid.																
188.95	191.95	Mafic/chloritic dyke	M	Very fine grained, chloritic mafic dyke, dark grey to black, highly fractured to sheared with some evidence of slickensides. Central portion from 190.00-190.80 is a reconstituted quartzite with some relic bedding noted but mainly appears like a quartz vein. Top contact at 40deg, bottom contact at 20deg. Lower contact brecciated and infilled with calcite. 15cm lenses of bedded quartzite on either side of lower contact.																
191.95	195.10	Leucogranite	Fg	As above dyke, first 15cm bedded host quartzite which is migmatized by leucogranite																
195.10	196.50	Tonalite	Fgt	As described above. Top and bottom contacts sharp at 20deg.																
196.50	201.50	Metasediment	S	Feldspathic Quartzite fining downwards over 2m into a very fine grained siltstone. Relic bedding subparallel to core axis is overprinted by opposing stress fractures at 45deg with calcite infilling predominant in one orientation and chloritic in the other. This has produced a slate like effect on the unit. 200.40-200.65 Tonalite vein, top contact at 80deg lower contact at 30deg.																
201.50	204.15	Tonalite	Fgt	As described above. Top and bottom contacts sharp at 40deg. Minor inclusions of metasediment noted.																
204.15	207.75	Anorthosite grading into Leucogranite both micaceous	Fg	Plagioclase feldspar/muscovite 85/15 over top 1.30m with a sharp contact at 70deg with a 20cm portion of clean medium grained quartzite which then grades into the typical leucogranite as seen higher up in the hole. This seems to indicate an intrusion of anorthosite into quartz rich metasediments has resulted in reconstitution of the anorthosite and quartz seds into the leucogranite.																
207.75	219.37	Metasediment	S	Feldspathic micaceous quartzite 10/5/85 with minor fine disseminated pyrite throughout with higher concentrations along chloritic fracture planes. Overall fine grained, homogenous over top 3m then entering a shear zone which extends beyond unit to a depth of at least 231m. This portion displays a moderate degree of schistosity at 40deg making it difficult to break core across this plane. Numerous fractures and brecciated zones are infilled with milky quartz and/or calcite. Quartz tending towards larger veinlets up to 15mm wide and calcite filling stockworks of fine hairline fractures. Brecciated zones are infilled with quartz with calcite margins.																

From m	To m	Rock Type	Rock Code	Description	Sample	From	To	Interval	S	D	Po	Cp	Py	S1	S2	Au ppm	Pt ppb	Pd ppb	Cu ppm	Ni ppm
219.37	225.42	Leucogranite	Fg	Quartz/plagioclase feldspar/muscovite 60/30/10. Very coarse grained to pegmatoidal, dirty grey colour with small (2-5mm) black or green laths of muscovite depending upon orientation. Highly brecciated and slightly friable due to shear zone fully encompassing this unit. Vugs in brecciation at 225m infilled with milky white quartz. Orientation of shearing at 30-40deg.																
225.42	229.90	Metasediment	S	Very fine grained olive green to grey highly schistose and very friable, this unit was strongly affected by shearing at 30-40deg. Strong chloritization masks original mineral suite, feldspathic quartzite assumed. Numerous fragments of smokey quartz veins throughout unit give an almost conglomerate appearance at first glance. 2 unsheared milky white quartz veins (20-40mm) occur near top contact parallel to shear plane.																
229.90	232.50	Tonalite	Fgt	Quartz/plagioclase feldspar/biotite/muscovite 50/40/5/5. Light grey with black specs, fine to medium grained similar in composition to coarse grained tonalite above however contains muscovite as well. Only slightly affected by shearing with fracturing in top portion orientated at 40deg and minor brecciation near lower contact with quartz and calcite infilling. Inclusion of baked seds from 230.75-231.00																
232.50	249.90	Metasediment	S	Feldspathic quartz siltstone. Medium grey, very fine grained, slightly schistose over top 5m at 40deg becoming predominantly fractured in an irregular pattern with chloritic fracture planes also displaying 2-3mm circular lenses of pyrite. Numerous irregular hairline calcite fractures and some minor concordant as well as irregular quartz veining. 244.04-244.57 Smokey quartz vein with minor biotite and muscovite, brecciated near top contact. Lower portion of unit becoming slightly olive green in colour.																
249.90	250.20	Leucogranite	Fg	Quartz/plagioclase feldspar/muscovite/biotite 40/40/15/5 Light grey, fine to medium grained.																
250.20	301.50	Metasediment	S	Micaceous feldspathic quartzite. Slightly schistose. Light to medium grey, fine to very fine grained in segments. Highly fractured with chlorite slickensides varying from 45-70deg. No calcite veining noted in this unit however a high frequency of fine hairline quartz veins at 20-40deg giving the schistose appearance. Later low angle fracturing has offset some of these veinlets up to 10mm. Some larger irregular quartz veins and flooding up to 8cm wide usually carrying some biotite in planar affiliation. Some segments have a higher concentration of muscovite indicating metamorphism of more argillaceous parent rock. Minor veins of leucogranite as noted below have baked the surrounding seds erasing any relic texture. 253.75-254.15 leucogranite vein at 45deg with a high concentration of muscovite making it moderately friable. A 5-10cm segment of fault gouge at 270m with contacts at 45deg. A muscovite rich milky quartz vein from 291.20-291.45, too contact at 30deo lower contact at																
301.50	312.90	Metasediment	S	Mylonitic siltstone. Pale olive green, very fine grained, chloritic with brecciated fragments of milky quartz veins scattered throughout a mainly siliceous matrix which reacts slightly to acid in places.																
312.90	318.25	Metasediment	S	Quartz biotite muscovite schist. 40/30/30. Moderately schistose at 30-45deg. High concentration of smokey quartz veins and flooding parallel to schistosity and carrying small disseminated blebs of pyrite and some pyrrhotite.																
318.25	332.50	Metasediment	S	Siltstone, medium to dark grey, very fine grained, siliceous and homogeneous with scattered fine hairline randomly orientated planar quartz fractures.																
332.50	345.35	Metasediment	S	Micaceous feldspathic quartzite. Slightly schistose. Medium to dark grey, fine grained, similar to unit described from 250-301m. Numerous planar fine quartz veinlets with minor wavy undulations best described as squiggly. Occasional larger smokey quartz veins up to 30mm wide tend to be irregular in shape.																

From m	To m	Rock Type	Rock Code	Description	Sample	From	To	Interval	S	D	Po	Cp	Py	S1	S2	Au ppm	Pt ppb	Pd ppb	Cu ppm	Ni ppm	
345.35	353.45	Metasediment	S	Siltstone, light olive green and medium grey coloured segments, very fine grained, green segments slightly flinty. Relic bedding at 35deg with concordant quartz veining. Fine hairline calcite fractures are mainly planar but discordant.																	
353.45	358.90	Metasediment	S	Micaceous feldspathic quartzite, medium to dark grey, medium grained with some more arenaceous segments scattered throughout unit. Relic bedding at 35-45deg. A few small 5-10mm concordant quartz veins as well as scattered discordant hairline calcite fractures. This unit continues until 384.30m with tonalite and leucogranitoid intrusions noted below as separate units due to their size. 10cm smokey quartz vein from 362.45-362.55m																	
358.90	359.70	Tonalite	Fgt	Tonalite vein quartz/plagioclase feldspar/biotite/muscovite/pyrite 40/30/20/10/trace. Medium to coarse grained, light grey and black with sharp contacts at 30deg.																	
359.70	364.45	Metasediment	S	Micaceous feldspathic quartzite as described above.																	
364.45	367.85	Tonalite	Fgt	Tonalite vein as described above with top contact at 50 deg lower contact at 30deg. Assimilation of host sediments over lower 50cm results in a higher concentration of muscovite along relic bedding planes.																	
367.85	371.05	Metasediment	S	Micaceous feldspathic quartzite as described above. 20cm vein of leucogranite from 368.55-368.75m.																	
371.05	372.60	Leucogranite	Fg	Leucogranite, quartz, plagioclase feldspar, muscovite, biotite 40/35/20/5. Light grey, pegmatoidal, top contact at 20deg lower contact at 45deg.																	
372.60	384.30	Metasediment	S	Micaceous feldspathic quartzite as described above. 30cm mylonitized quartz vein has assimilated host sediment resulting in a very high mica content from 379.15-379.45 contacts sheared at 30deg.																	
384.30	423.35	Metasediment	S	Slate, very fine grained, medium grey to black with cleavage at 40deg near top of unit flattening to 30deg downwards. Vuggy 20mm calcite vein at 90deg from 388.40-388.42m. Occasional concordant 5-20mm smokey and milky quartz veins noted. Unit becoming moderately micaceous from 405m downwards.																	
423.35	433.17	MelaGabbro	Mgm	Melagabbronite? - Pyroxene/Olivine/Plagioclase 50/20/30. Fine grained, bluish grey with bronze/brown mottles. Pyroxenes possible bronzite. Minor portions of assimilated metasediment noted. 427.80-430.35 inclusion of highly micaceous moderately convoluted schist with quartz flooding.																	
433.17	521.60	Argillaceous mica schist	S	Argillaceous mica schist - fine to very fine grained, brownish to greenish grey, readily cleaves on bedding plane at 35deg. Minor concordant quartz veins throughout. Some small 1-2mm grossular garnets noted. Fracture planes slightly chloritic. Highly sheared with quartz flooding between 515-519m.																	
521.60	539.60	Tonalite	Fgt	Tonalite Quartz/plagioclase/muscovite/biotite 50/30/18/02. Very coarse grained to pegmatoidal, light grey colour with occasional patches of black specs of biotite, muscovite is silvery to grey depending upon angle cut. Scattered chloritized fracture planes.																	
539.60	564.05	Metasediment	S	Micaceous feldspathic quartzite, medium to dark grey, fine to medium grained with some more arenaceous segments scattered throughout unit. Relic bedding at 30deg. A few small 2-5mm concordant quartz veins as well as scattered discordant hairline calcite fractures. Tonalite vein with irregular contacts from 551.75-552.40. 554.10-554.40 Granite vein, quartz, k-spar, plag & biotite at 30deg. 554.90-555.15 granite vein with sheared chloritized contacts at 45deg.																	

From m	To m	Rock Type	Rock Code	Description	Sample	From	To	Interval	S	D	Po	Cp	Py	S1	S2	Au ppm	Pt ppb	Pd ppb	Cu ppm	Ni ppm
564.05	573.95	Metasediment	S	Ultramafic chloritic slate - Black with white quartz and calcite stringers. Very fine grained chloritic matrix with fine 2-3mm quartz veins along residual bedding at 30deg. Fine 1-2mm irregular discordant calcite veins throughout. Minor lenses of fine quartzite same as unit above noted.																
573.95	610.75	Granite	Fg	Granite - quartz/k-spar/plag/biotite/muscovite 35/35/20/5/5. Coarse grained to pegmatoidal varying levels of k-spar controlling colour which overall is pink, cream and grey with black specs. some segments lacking in k-spar are more grey/cream colour. Xenoliths of host metasediment noted from 583.10-583.85m and 595.92-596.04m.																
610.75	621.00	Gneiss	S	Gneiss - A highly metamorphosed unit with convoluted bedding, relic planar bedding noted at 25-30deg at 611.70m. Similar composition to the feldspathic quartzite noted above. Top 70cm migmatized by overlying granite, bottom 2m migmatized by lower red felsic intrusive. Overall grey colour with fine white quartz banding. Migmatized margins are very colourful with red and orange banding prominent. Fine disseminated clusters of sulphides noted throughout probably Pyrrhotite. Also noted was a platy blob of possibly Marcasite on a fracture plane at 616.25m. Unit is slightly magnetic with mag sus readings between 15-25.																
621.00	625.25	Hybrid breccia	Hr	K-spar groundmass with angular fragments of metasediments up to 100mm but averaging around 30-40mm. The top 30cm of this unit is nearly pure k-spar with a vesicular texture with some calcite infilling. Veinlets of this same material crosscut into the overlying migmatized metasediment. Euhedral pyrite crystals noted in some of the vugs.																
625.25	628.25	Troctolite	Mt	Troctolite - Olivine/epidotized plag/calcite/quartz 50/40/5/5. Medium grained, dark green with lime green and white grains in a cumulate texture. Feldspars are epidotized to lime green. Highly variable magnetism with mag sus readings from 35 - 130. Numerous irregular shaped calcite and quartz ocelli 5-15mm diameter. <1% sulphides noted possibly chalcopyrite. Top and bottom contacts are diffuse over 10cm.																
628.25	630.70	Hybridized Syenite	Hr	Coarser grained variation of lower Chloritic alkali feldspar syenite. K-spar/chlorite/calcite 70/25/5. 3-10mm calcite ocelli mostly enclosed by chlorite. Brick red/pinkish colour sub to euhedral k-spars with dark green/black interstitial chlorite and white calcite ocelli.																
630.70	711.30	Alkali feldspar syenite	Hr	Chloritic alkali feldspar syenite. K-spar/chlorite/calcite 70/25/5. Fine grained, brick red appearance with red/pink sub to euhedral k-spar, interstitial dark green/black chlorite and small 1-3mm white calcite ocelli. Larger ocelli often rimmed with chlorite. Slightly magnetic with mag sus between 15-30. Overall colour varies from reddish brown to reddish grey with a brick like textural appearance. Scattered veins of fine grained reddish pink felsite usually 5-15mm occasional wider veins from 50-200mm at 70-90deg to core axis. Occasional hairline calcite fractures at 10deg and some wider veinlets up to 5mm wide occur throughout. Chlorite content starts to diminish at 698.12m and by 701.15m there is <5% chlorite and the colour is a deeper red with white calcite ocelli.																
711.30	782.85	Alkali feldspar syenite	Hr	Chloritic alkali feldspar syenite. As above however slightly coarser grained than above with a higher chlorite/k-spar ratio. K-spar/chlorite/calcite 60/35/5.																



From m	To m	Rock Type	Rock Code	Description	Sample	From	To	Interval	S	D	Po	Cp	Py	S1	S2	Au ppm	Pt ppb	Pd ppb	Cu ppm	Ni ppm	
782.85	803.10	Monzodiorite	Im	Monzodiorite-Plagioclase/kspars/chlorite/serpentine/epidote/magnetite 40/25/20/5/5/5. Fine to medium grained, a bluish grey feldspar making up the bulk of this unit defines the overall colour as a bluish grey. Pink k-spar, and black chlorite and serpentine form the other major constituents. Overall fine grained with pegmatoidal veining in the central portion of the unit. Minor pyrite noted. Contacts are transitional with k-spar diminishing and bluish plag increasing.																	
803.10	808.25	Alkali feldspar syenite	Hr	Chloritic alkali feldspar syenite - as above monzodiorite. A 25mm fine grained brick red k-spar vein with epidotized margins occurs at 806.70m at 40deg																	
808.25	819.55	Monzodiorite	Im	Monzodiorite - Plagioclase/k-spar/chlorite/epidote/magnetite 40/30/20/5/5 Fine to medium grained, a bluish grey as above. Small scattered brick red fine grained felsic vein with epidotized margins and a larger vein from 816.17-816.27 at 40deg with 10cm epitotized top contact.																	
819.55	822.65	Alkali feldspar syenite	Hr	Alkali feldspar syenite - Only slightly chloritic compared to unit above most of the dark mineral content appears to be hornblende.																	
822.65	832.65	Monzodiorite	Im	Monzodiorite - as described above from 808-819m																	
832.65	837.00	Alkali feldspar syenite	Hr	Alkali feldspar syenite - as described above from 819-822m.																	
837.00	848.60	Gabbro	Mg	Gabbro - Plagioclase/augite?/hornblende?/epidote 50/20/20/10. Fine grained , greenish grey with trace ilmenite and pyrite noted.																	
848.60	853.80	Alkali feldspar syenite	Hr	Alkali feldspar syenite - as described above from 819-822m, however bearing +/- 5% lime green epidote.																	
853.80	909.00	Gabbro	Mg	Gabbro - Plagioclase/augite?/hornblende?/epidote 50/20/20/10. Fine grained , greenish grey with trace ilmenite and pyrite noted. Epidote content rises to exceed plag content around 860m resulting in a composition epidote/plag/augite/hornblende 50/20/15/15. Mag sus which has maintained a level of 20-60 from 800m downwards starts to climb around 890m reaching 100 by 900m and 140 by 915m. Occasional low angle (15-20deg) planar fractures with hematite and some calcite infilling begin to appear around 890m. Numerous elongated inclusions of subangular fragments of disseminated magnetite noted from 884-886m.																	
909.00	930.00	MelaGabbro	Mgm	Melagabbro - Hornblende/augite/plagioclase/magnetite 40/40/10/10. Fine grained, dark grey colour, highly magnetic unit with mag sus up to 225! Euhedral magnetite octahedrons (1-2mm) clearly visible. 2-3% small blebs (1-2mm) of disseminated sulphides possibly pyrrhotite or maybe only pyrite from 918.50-925.70m. Fine grained brick red felsic vein 25mm wide at 914.10m at 20deg. EOH for now...maximum depth exceeded with LF70 drill.																	
930.00		EOH		End of Hole																	

**Appendix 2**

**Certificates of Analysis**



**ALS Chemex**  
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 ALS Canada Ltd.  
 212 Brooksbank Avenue  
 North Vancouver BC V7J 2C1  
 Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: MAGMA METALS (CANADA) LIMITED  
 P.O. BOX 10628  
 THUNDER BAY ON P7B 6V1

Page: 1  
 Finalized Date: 6-JAN-2009  
 Account: MGMAM

**CERTIFICATE TB08179086**

Project: LIL  
 P.O. No.:  
 This report is for 136 Drill Core samples submitted to our lab in Thunder Bay, ON, Canada on 19-DEC-2008.  
 The following have access to data associated with this certificate:

JUSTIN JOHNSON KEITH WATKINS	PHILIP LITTLE	ALLAN MAC TAVISH
---------------------------------	---------------	------------------

**SAMPLE PREPARATION**

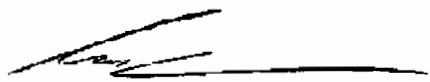
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
LOG-21d	Sample logging - ClientBarCode Dup
SPL-21d	Split sample - duplicate
PUL-31d	Pulverize Split - duplicate
SPL-34	Pulp Splitting Charge
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

**ANALYTICAL PROCEDURES**

ALS CODE	DESCRIPTION	INSTRUMENT
PGM-MS23	Pt, Pd, Au 30g FA ICP-MS	ICP-MS
PGM-ICP27	Ore grade Pt, Pd and Au by ICP	ICP-AES
ME-ICP61	33 element four acid ICP-AES	ICP-AES

To: MAGMA METALS (CANADA) LIMITED  
 ATTN: JUSTIN JOHNSON  
 P.O. BOX 10628  
 THUNDER BAY ON P7B 6V1

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:   
 Colin Ramshaw, Vancouver Laboratory Manager



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Page: 2 - A

Total # Pages: 5 (A - C)

Finalized Date: 6-JAN-2009

Account: MGMAM

Project: LIL

## CERTIFICATE OF ANALYSIS TB08179086

Sample Description	Method Analyte Units LOR	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Recvd Wt. kg	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %
H469501		2.08	<0.5	6.93	<5	200	1.6	<2	4.81	<0.5	29	100	51	6.94	20	0.66
H469502		2.62	0.5	6.13	<5	220	1.5	<2	6.33	<0.5	42	154	115	10.05	20	0.78
H469503		2.12	0.5	6.16	<5	350	1.3	2	6.31	<0.5	51	164	65	9.54	20	1.16
H469504		2.21	1.0	6.41	<5	460	1.2	<2	6.10	<0.5	52	152	74	9.24	20	1.21
H469505		2.28	0.7	6.20	<5	330	1.1	<2	6.11	<0.5	52	154	276	9.81	20	0.86
H469506		2.20	<0.5	6.25	5	520	1.2	<2	6.71	<0.5	57	157	116	9.60	20	1.15
H469507		2.35	0.9	6.11	<5	410	1.2	<2	6.39	<0.5	49	180	94	9.63	20	1.03
H469508		2.34	1.0	6.15	<5	480	1.2	<2	6.76	<0.5	58	222	110	9.20	20	1.11
H469509		2.09	0.6	6.13	<5	480	1.2	<2	6.68	<0.5	54	233	109	9.13	20	1.13
H469510		0.10	2.5	3.77	<5	180	0.7	<2	4.06	<0.5	107	2250	2440	9.39	10	0.41
H469511		3.60	0.5	5.95	<5	480	1.1	<2	6.77	<0.5	53	223	115	9.27	20	1.18
H469512		2.54	0.8	5.95	8	540	1.1	<2	6.76	<0.5	56	221	95	9.46	20	1.19
H469513		2.25	1.0	5.84	<5	510	1.1	<2	7.14	<0.5	55	256	127	9.32	20	1.10
H469514		2.46	1.0	6.05	<5	490	1.1	<2	6.64	<0.5	55	236	69	9.35	20	1.34
H469515		2.63	0.8	5.94	<5	480	1.2	<2	6.43	<0.5	52	231	88	8.95	20	1.29
H469516		2.41	0.8	5.60	<5	480	1.2	<2	6.84	<0.5	56	270	175	9.07	20	1.33
H469517		2.52	0.9	5.61	<5	430	1.2	<2	7.14	<0.5	55	292	123	8.86	20	1.17
H469518		2.37	<0.5	5.20	<5	410	1.2	<2	6.77	<0.5	52	336	111	8.26	20	1.27
H469519		2.24	0.5	5.09	<5	400	1.1	2	7.44	<0.5	51	354	112	8.31	20	0.99
H469520		0.09	<0.5	6.23	<5	880	0.9	<2	1.40	<0.5	2	24	11	1.49	10	2.06
H469521		2.57	<0.5	5.15	<5	390	1.1	3	7.56	<0.5	54	345	133	8.55	20	1.01
H469522		1.94	<0.5	5.01	<5	410	1.1	4	7.51	<0.5	52	359	138	8.62	20	1.07
H469523		2.50	<0.5	5.15	<5	420	1.1	<2	7.59	<0.5	56	354	136	8.67	20	1.03
H469524		2.84	<0.5	5.11	<5	440	1.1	3	7.51	<0.5	56	358	150	8.82	20	1.13
H469525		2.87	<0.5	4.95	<5	400	1.1	<2	7.57	<0.5	54	376	144	8.51	20	0.98
H469526		2.69	<0.5	4.95	<5	420	1.1	4	7.48	<0.5	56	363	138	8.46	20	1.04
H469527		2.80	0.7	4.99	<5	430	1.2	4	7.57	<0.5	55	385	140	8.54	20	1.01
H469528		2.56	<0.5	5.05	<5	410	1.1	5	7.54	<0.5	54	363	137	8.46	20	1.07
H469529		2.59	<0.5	5.01	<5	430	1.1	3	7.46	<0.5	53	395	126	8.55	20	1.04
H469530		0.10	1.0	3.18	<5	160	0.7	<2	3.55	<0.5	113	2550	844	9.54	10	0.35
H469531		2.15	0.6	4.93	<5	450	1.1	<2	7.40	<0.5	59	389	150	8.83	20	1.07
H469532		3.12	0.5	4.78	<5	390	1.1	2	7.37	<0.5	57	364	118	8.69	10	1.08
H469533		2.61	<0.5	4.87	5	390	1.1	6	7.55	<0.5	56	396	131	8.76	20	1.01
H469534		2.60	<0.5	5.10	<5	440	1.2	2	7.40	<0.5	55	382	127	8.67	20	1.14
H469535		2.60	<0.5	5.05	<5	400	1.2	3	6.73	<0.5	52	375	124	8.43	20	1.38
H469536		2.56	<0.5	5.15	<5	440	1.1	2	6.62	<0.5	54	341	122	8.47	20	1.44
H469537		2.92	<0.5	4.87	<5	470	1.1	3	7.33	<0.5	57	394	131	8.47	20	1.27
H469538		2.19	<0.5	4.95	<5	510	1.2	3	7.42	<0.5	59	410	136	8.83	20	1.26
H469539		1.58	<0.5	5.00	<5	540	1.2	<2	7.00	<0.5	56	383	133	8.81	20	1.46
H469540		1.60	<0.5	5.09	<5	530	1.3	5	6.98	<0.5	55	396	129	8.85	20	1.47



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Project: LIL

**CERTIFICATE OF ANALYSIS TB08179086**

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	Tl ppm
H469501		20	4.77	652	<1	2.35	54	750	6	0.03	<5	18	689	<20	1.17	<10
H469502		20	4.34	1010	1	2.68	66	1190	7	0.05	<5	27	444	<20	1.66	<10
H469503		40	4.24	1120	1	2.54	85	1390	6	0.03	<5	28	609	<20	1.62	<10
H469504		30	3.90	1085	1	2.24	78	1360	7	0.03	<5	26	882	<20	1.52	<10
H469505		20	4.46	1240	1	2.42	84	970	7	0.06	<5	27	705	<20	1.55	<10
H469506		30	4.07	1210	1	1.99	90	1260	11	0.03	<5	28	987	<20	1.59	<10
H469507		30	4.36	1310	<1	2.20	93	1170	10	0.03	<5	28	816	<20	1.54	<10
H469508		30	4.46	1180	1	1.89	105	1240	8	0.03	<5	29	950	<20	1.43	<10
H469509		30	4.65	1240	1	1.85	98	1140	8	0.03	<5	30	931	<20	1.38	<10
H469510		10	11.55	1355	1	1.01	1280	620	13	0.51	14	18	466	<20	0.84	<10
H469511		30	4.62	1255	1	1.87	99	1210	10	0.02	<5	29	867	<20	1.40	10
H469512		30	4.59	1260	1	1.82	100	1200	7	0.02	<5	29	919	<20	1.43	<10
H469513		30	4.91	1220	1	1.76	108	1180	9	0.02	<5	31	919	<20	1.36	<10
H469514		20	4.72	1300	1	2.01	105	1160	5	0.02	<5	30	837	<20	1.36	<10
H469515		30	4.69	1075	<1	1.85	104	1240	8	0.02	<5	29	835	<20	1.35	<10
H469516		30	4.93	1360	1	1.81	115	1230	14	0.02	<5	30	765	<20	1.28	<10
H469517		30	5.20	1240	1	1.80	117	1250	11	0.02	<5	31	812	<20	1.23	<10
H469518		30	5.58	1155	1	1.82	121	1190	13	0.02	<5	32	609	<20	1.16	<10
H469519		30	5.53	1275	<1	1.59	127	1140	41	0.02	6	32	697	<20	1.17	<10
H469520		10	0.20	539	<1	2.64	3	180	4	<0.01	<5	4	167	<20	0.11	<10
H469521		30	5.83	1285	1	1.62	126	1120	10	0.01	6	33	687	<20	1.16	<10
H469522		30	6.02	1280	1	1.57	127	1110	36	0.02	<5	33	644	<20	1.16	<10
H469523		30	5.61	1405	<1	1.62	131	1150	8	0.02	<5	33	734	<20	1.19	<10
H469524		30	5.79	1510	1	1.66	132	1160	8	0.02	5	33	654	<20	1.22	<10
H469525		30	5.67	1440	1	1.62	133	1160	6	0.02	5	33	663	<20	1.18	<10
H469526		30	5.69	1370	1	1.60	132	1160	8	0.02	<5	33	669	<20	1.18	<10
H469527		30	5.54	1420	<1	1.61	136	1170	10	0.02	<5	33	706	<20	1.20	<10
H469528		30	5.86	1345	<1	1.62	136	1160	11	0.02	5	33	648	<20	1.19	<10
H469529		30	5.87	1370	1	1.56	135	1150	15	0.02	<5	33	666	<20	1.18	<10
H469530		20	14.10	1395	1	0.83	1250	690	8	0.28	7	15	351	<20	0.78	<10
H469531		30	5.82	1440	1	1.55	146	1190	9	0.02	<5	33	687	<20	1.22	<10
H469532		30	5.99	1395	<1	1.56	141	1150	11	0.02	<5	33	572	<20	1.23	<10
H469533		30	5.95	1415	<1	1.55	138	1150	10	0.02	7	33	644	<20	1.21	<10
H469534		30	5.82	1340	1	1.61	136	1170	7	0.02	5	33	642	<20	1.22	<10
H469535		30	6.08	1330	1	1.77	131	1160	13	0.03	5	32	413	<20	1.21	<10
H469536		30	5.88	1365	<1	1.75	124	1170	10	0.02	<5	31	478	<20	1.17	<10
H469537		30	5.94	1440	1	1.49	145	1130	11	0.02	<5	34	581	<20	1.17	<10
H469538		30	5.97	1515	1	1.53	153	1170	10	0.02	6	34	624	<20	1.24	<10
H469539		30	5.98	1425	1	1.56	144	1290	11	0.03	<5	32	556	<20	1.23	<10
H469540		40	6.06	1415	1	1.61	144	1320	13	0.03	5	32	547	<20	1.23	<10



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 P.O. BOX 10628  
 THUNDER BAY ON P7B 6V1

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 Total # Pages: 5 (A - C)  
 Finalized Date: 6-JAN-2009  
 Account: MGMAM

Project: LIL

**CERTIFICATE OF ANALYSIS TB08179086**

Sample Description	Method	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	PGM-MS23	PGM-MS23	PGM-MS23	PGM-ICP27	PGM-ICP27	PGM-ICP27
	Analyte	U	V	W	Zn	Au	Pt	Pd	Au	Pt	Pd
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LOR		10	1	10	2	0.001	0.0005	0.001	0.03	0.03	0.03
H469501		<10	237	<10	48	0.002	0.0102	0.010			
H469502		<10	393	<10	69	0.003	0.0169	0.013			
H469503		<10	361	<10	87	0.004	0.0208	0.016			
H469504		<10	349	<10	76	0.004	0.0194	0.016			
H469505		<10	356	<10	62	0.006	0.0105	0.008			
H469506		<10	385	<10	134	0.004	0.0161	0.013			
H469507		<10	380	<10	72	0.005	0.0161	0.012			
H469508		<10	325	<10	117	0.004	0.0233	0.013			
H469509		<10	325	<10	127	0.005	0.0206	0.013			
H469510		<10	169	<10	100	0.097	>1.00	>1.00	0.09	1.25	1.11
H469511		<10	328	<10	112	0.004	0.0227	0.013			
H469512		<10	327	<10	113	0.005	0.0295	0.035			
H469513		<10	319	<10	123	0.006	0.0228	0.017			
H469514		<10	323	<10	90	0.002	0.0183	0.010			
H469515		<10	311	<10	104	0.003	0.0193	0.011			
H469516		<10	284	<10	108	0.004	0.0207	0.012			
H469517		<10	274	<10	95	0.003	0.0216	0.009			
H469518		<10	261	<10	83	0.003	0.0188	0.006			
H469519		<10	265	<10	118	0.003	0.0254	0.010			
H469520		<10	15	<10	25	0.001	0.0006	<0.001			
H469521		<10	261	<10	86	0.003	0.0313	0.008			
H469522		<10	260	<10	92	0.003	0.0327	0.019			
H469523		<10	265	<10	119	0.003	0.0306	0.008			
H469524		<10	271	<10	130	0.003	0.0300	0.008			
H469525		<10	262	<10	120	0.003	0.0284	0.008			
H469526		<10	263	<10	119	0.003	0.0283	0.007			
H469527		<10	266	<10	124	0.003	0.0296	0.009			
H469528		<10	264	<10	115	0.003	0.0316	0.009			
H469529		<10	266	<10	112	0.003	0.0274	0.008			
H469530		<10	161	<10	109	0.118	0.414	0.358			
H469531		<10	269	<10	137	0.004	0.0262	0.009			
H469532		<10	278	<10	136	0.002	0.0247	0.007			
H469533		<10	265	<10	125	0.002	0.0269	0.009			
H469534		<10	266	<10	117	0.003	0.0219	0.007			
H469535		<10	265	<10	109	0.003	0.0259	0.007			
H469536		<10	253	<10	116	0.002	0.0304	0.005			
H469537		<10	255	<10	124	0.002	0.0271	0.009			
H469538		<10	263	<10	141	0.002	0.0171	0.007			
H469539		<10	250	<10	108	0.003	0.0198	0.008			
H469540		<10	250	<10	105	0.003	0.0216	0.007			



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## CERTIFICATE OF ANALYSIS TB08179086

Sample Description	Method	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
	Analyte Units LOR	Recvd Wt. kg	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %
		0.02	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10	0.01
H469541		2.60	<0.5	5.02	<5	520	1.2	3	6.97	<0.5	54	395	142	8.55	20	1.52
H469542		2.51	<0.5	5.16	<5	510	1.2	2	7.53	<0.5	58	403	144	8.90	20	1.29
H469543		2.86	0.5	5.03	<5	620	1.2	3	7.20	<0.5	55	371	124	8.67	20	1.60
H469544		3.15	0.5	4.89	<5	730	1.2	3	6.90	<0.5	54	380	125	8.61	20	1.99
H469545		2.20	<0.5	5.04	<5	460	1.2	2	6.93	<0.5	56	379	141	8.78	20	1.60
H469545 CRD		0.03	<0.5	4.93	<5	450	1.1	3	6.72	<0.5	54	362	140	8.57	20	1.57
H469546		3.12	<0.5	4.89	<5	330	1.1	3	6.51	<0.5	55	367	120	8.63	10	1.11
H469547		2.15	<0.5	5.06	<5	250	1.1	5	6.17	<0.5	56	321	144	9.42	20	1.11
H469548		2.66	0.6	5.06	<5	320	1.2	<2	7.13	<0.5	58	397	139	8.84	10	1.12
H469549		2.52	<0.5	4.98	<5	450	1.2	6	6.99	<0.5	57	390	150	8.68	10	1.38
H469550		0.10	2.0	3.74	<5	180	0.7	<2	4.14	<0.5	105	2240	2360	9.32	10	0.42
H469551		2.70	<0.5	4.99	<5	490	1.1	4	6.73	<0.5	54	362	133	8.60	20	1.64
H469552		3.32	<0.5	4.95	<5	560	1.2	2	7.04	<0.5	54	379	138	8.77	10	1.55
H469553		2.52	<0.5	5.11	<5	510	1.2	4	7.24	<0.5	57	358	120	8.64	20	1.32
H469554		2.64	1.2	4.92	<5	620	1.1	<2	6.73	<0.5	56	350	123	8.61	20	1.63
H469555		2.73	0.8	4.96	<5	490	1.2	<2	6.72	<0.5	53	343	128	8.41	20	1.41
H469556		3.06	0.8	4.98	<5	500	1.1	<2	7.04	<0.5	56	336	139	8.55	20	1.36
H469557		2.37	0.8	5.01	<5	440	1.2	<2	6.56	<0.5	55	342	138	8.60	20	1.48
H469558		2.65	0.9	5.01	<5	430	1.2	<2	6.59	<0.5	57	327	132	8.37	20	1.42
H469559		3.49	1.2	5.07	<5	450	1.2	<2	6.58	<0.5	56	350	134	8.51	20	1.36
H469560		0.09	0.5	6.38	<5	880	1.0	<2	1.35	<0.5	3	24	15	1.52	10	2.11
H469561		1.93	1.1	5.12	<5	470	1.2	<2	6.64	<0.5	59	364	141	8.73	20	1.42
H469562		2.52	0.9	5.08	<5	470	1.2	<2	6.78	<0.5	56	358	149	8.54	20	1.17
H469563		2.83	0.6	5.14	<5	470	1.2	<2	6.97	<0.5	57	364	153	8.75	20	1.10
H469564		2.30	0.9	4.89	<5	420	1.2	<2	6.76	<0.5	56	357	136	8.63	20	1.13
H469565		2.36	0.8	5.07	<5	440	1.3	<2	6.84	<0.5	56	367	129	8.72	20	1.14
H469566		2.64	0.7	5.03	<5	460	1.2	<2	7.03	<0.5	59	367	142	8.83	20	1.09
H469567		3.34	1.0	5.02	<5	420	1.2	<2	6.38	<0.5	57	360	134	8.81	20	1.27
H469568		2.68	0.6	5.09	<5	310	1.2	<2	6.32	<0.5	55	350	131	8.93	20	1.16
H469569		3.03	0.8	4.89	<5	240	1.2	<2	5.98	0.5	55	356	135	8.46	20	1.08
H469570		0.10	1.0	3.23	6	160	0.7	<2	3.48	<0.5	113	2340	876	9.64	10	0.35
H469571		2.75	0.6	5.07	5	260	1.2	<2	5.87	<0.5	58	329	115	8.73	20	1.15
H469572		2.28	0.6	4.97	6	260	1.2	<2	6.01	<0.5	55	343	165	8.80	20	1.07
H469573		2.76	0.8	5.10	5	380	1.2	<2	6.14	<0.5	57	341	143	8.87	20	1.19
H469574		2.61	0.7	5.05	<5	420	1.2	<2	6.17	0.5	55	322	148	8.59	20	1.13
H469575		2.55	0.9	5.17	<5	400	1.3	<2	6.35	<0.5	55	346	137	8.65	20	1.20
H469576		2.93	0.9	5.14	<5	410	1.3	<2	6.09	<0.5	54	327	138	8.74	20	1.27
H469577		2.36	1.0	5.34	<5	410	1.3	<2	6.10	<0.5	50	306	134	8.47	20	1.25
H469578		2.90	0.9	5.45	<5	470	1.4	<2	6.40	<0.5	57	311	171	8.99	20	1.28
H469579		1.23	0.9	5.41	<5	470	1.4	<2	6.42	<0.5	55	290	164	8.72	20	1.19





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## CERTIFICATE OF ANALYSIS TB08179086

Sample Description	Method	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
	Analyte	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th	Ti	Tl
Units		ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
LOR		10	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01	10
H469541		30	6.08	1405	1	1.56	143	1180	22	0.03	5	33	518	<20	1.23	<10
H469542		30	6.17	1455	1	1.57	148	1170	21	0.03	<5	34	647	<20	1.25	<10
H469543		30	6.13	1430	1	1.38	139	1150	32	0.02	5	34	568	<20	1.22	<10
H469544		30	5.93	1585	<1	1.26	135	1150	11	0.03	<5	33	488	<20	1.22	<10
H469545		30	6.08	1545	1	1.70	133	1200	8	0.02	<5	34	326	<20	1.23	<10
H469545 CRD		30	5.96	1510	<1	1.66	130	1170	6	0.02	5	34	317	<20	1.21	<10
H469546		30	5.97	1550	<1	1.97	134	1110	9	0.02	<5	33	224	<20	1.21	<10
H469547		30	5.68	1710	1	2.16	133	1140	10	0.03	5	31	202	<20	1.44	<10
H469548		30	6.14	1710	1	2.11	142	1220	6	0.02	<5	35	209	<20	1.26	<10
H469549		30	5.98	1660	1	1.73	140	1180	9	0.02	<5	34	384	<20	1.25	<10
H469550		20	12.40	1365	<1	1.01	1320	620	10	0.50	10	17	437	<20	0.84	<10
H469551		30	6.12	1530	<1	1.55	136	1180	12	0.02	<5	32	430	<20	1.20	<10
H469552		30	6.11	1525	1	1.46	138	1160	9	0.02	8	33	518	<20	1.21	<10
H469553		30	5.89	1510	<1	1.58	134	1160	11	0.02	5	33	611	<20	1.22	<10
H469554		30	5.75	1520	1	1.37	132	1140	11	0.02	<5	33	561	<20	1.19	<10
H469555		30	6.05	1380	1	1.47	128	1100	12	0.02	<5	33	533	<20	1.14	<10
H469556		30	5.78	1470	1	1.44	128	1140	12	0.02	<5	34	653	<20	1.17	<10
H469557		30	6.13	1370	1	1.44	133	1120	11	0.02	<5	32	550	<20	1.18	<10
H469558		30	5.97	1365	1	1.50	128	1170	11	0.02	<5	33	561	<20	1.18	<10
H469559		30	6.09	1380	1	1.55	134	1160	13	0.02	<5	34	570	<20	1.20	<10
H469560		10	0.20	548	<1	2.64	3	180	7	<0.01	<5	4	178	<20	0.11	<10
H469561		30	6.00	1360	1	1.57	135	1190	13	0.03	<5	34	561	<20	1.23	<10
H469562		30	5.69	1370	1	1.64	134	1200	22	0.03	<5	33	621	<20	1.21	<10
H469563		30	5.77	1440	1	1.62	137	1190	16	0.02	<5	34	729	<20	1.22	<10
H469564		30	5.81	1380	1	1.62	137	1170	14	0.02	<5	33	591	<20	1.21	<10
H469565		30	6.06	1355	1	1.70	138	1230	15	0.02	<5	34	556	<20	1.22	<10
H469566		30	5.89	1380	1	1.63	143	1140	13	0.03	<5	34	609	<20	1.21	<10
H469567		30	5.87	1370	1	1.86	136	1270	14	0.03	<5	33	401	<20	1.27	<10
H469568		30	6.13	1385	1	1.99	139	1210	16	0.02	<5	33	284	<20	1.23	<10
H469569		30	6.13	1310	1	2.00	136	1140	17	0.03	<5	33	179	<20	1.23	<10
H469570		20	13.35	1385	1	0.81	1220	690	6	0.30	17	16	374	<20	0.79	<10
H469571		30	5.92	1305	1	2.12	131	1220	17	0.03	<5	31	187	<20	1.28	<10
H469572		30	6.09	1290	1	1.94	131	1160	13	0.03	<5	32	244	<20	1.22	<10
H469573		30	5.99	1320	1	1.87	132	1190	9	0.03	<5	32	402	<20	1.22	<10
H469574		30	5.68	1275	1	1.68	125	1180	13	0.02	<5	31	586	<20	1.21	<10
H469575		30	6.17	1255	1	1.64	130	1170	9	0.03	<5	32	524	<20	1.22	<10
H469576		30	6.35	1265	1	1.66	131	1190	16	0.03	<5	32	471	<20	1.21	10
H469577		30	5.99	1245	1	1.73	121	1230	24	0.03	<5	31	530	<20	1.24	<10
H469578		30	5.80	1380	1	1.75	128	1320	13	0.03	<5	32	674	<20	1.32	<10
H469579		30	5.34	1360	1	1.76	120	1290	14	0.03	<5	30	740	<20	1.28	<10



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To: MAGMA METALS (CANADA) LIMITED

P.O. BOX 10628

THUNDER BAY ON P7B 6V1

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Finalized Date: 6-JAN-2009

Account: MGMAM

Project: LIL

## CERTIFICATE OF ANALYSIS TB08179086

Sample Description	Method	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	PGM-MS23	PGM-MS23	PGM-MS23	PGM-ICP27	PGM-ICP27	PGM-ICP27
	Analyte	U	V	W	Zn	Au	Pt	Pd	Au	Pt	Pd
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LOR	10	1	10	2	0.001	0.0005	0.001	0.03	0.03	0.03	
H469541		<10	271	<10	127	0.003	0.0227	0.013			
H469542		<10	281	<10	134	0.003	0.0211	0.007			
H469543		<10	274	<10	115	0.003	0.0228	0.007			
H469544		<10	275	<10	131	0.003	0.0225	0.006			
H469545		<10	268	<10	111	0.003	0.0272	0.008			
H469545 CRD		<10	262	<10	109	0.003	0.0269	0.007			
H469546		<10	267	<10	126	0.003	0.0242	0.008			
H469547		<10	328	<10	119	0.004	0.0296	0.028			
H469548		<10	277	<10	124	0.003	0.0239	0.006			
H469549		<10	273	<10	130	0.003	0.0271	0.006			
H469550		<10	170	<10	96	0.095	>1.00	>1.00	0.09	1.25	1.11
H469551		<10	259	<10	138	0.004	0.0271	0.010			
H469552		<10	266	<10	123	0.003	0.0230	0.007			
H469553		<10	270	<10	135	0.003	0.0222	0.007			
H469554		<10	260	<10	118	0.003	0.0236	0.008			
H469555		<10	255	<10	100	0.002	0.0259	0.010			
H469556		<10	255	<10	125	0.002	0.0311	0.008			
H469557		<10	260	<10	130	0.003	0.0261	0.008			
H469558		<10	259	<10	119	0.002	0.0239	0.006			
H469559		<10	266	<10	112	0.002	0.0250	0.007			
H469560		<10	15	<10	27	<0.001	<0.0005	<0.001			
H469561		<10	266	<10	127	0.003	0.0267	0.009			
H469562		<10	254	<10	158	0.002	0.0230	0.005			
H469563		<10	265	<10	123	0.003	0.0243	0.009			
H469564		<10	260	<10	117	0.002	0.0227	0.008			
H469565		<10	263	<10	105	0.003	0.0219	0.011			
H469566		<10	263	<10	128	0.003	0.0249	0.008			
H469567		<10	263	<10	117	0.003	0.0202	0.007			
H469568		<10	256	<10	121	0.003	0.0208	0.009			
H469569		<10	261	<10	120	0.002	0.0217	0.006			
H469570		<10	158	<10	109	0.103	0.358	0.318			
H469571		<10	266	<10	104	0.004	0.0241	0.009			
H469572		<10	259	<10	103	0.003	0.0235	0.008			
H469573		<10	260	<10	106	0.003	0.0228	0.009			
H469574		<10	251	<10	127	0.003	0.0234	0.009			
H469575		<10	260	<10	97	0.002	0.0259	0.009			
H469576		<10	256	<10	106	0.003	0.0221	0.007			
H469577		<10	259	<10	101	0.003	0.0223	0.007			
H469578		<10	268	<10	142	0.003	0.0211	0.008			
H469579		<10	261	<10	125	0.003	0.0239	0.008			



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## CERTIFICATE OF ANALYSIS TB08179086

Sample Description	Method	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%
	LOR	0.02	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10	0.01
H469580		1.27	0.7	5.47	<5	470	1.4	<2	6.48	<0.5	56	299	162	8.76	20	1.20
H469581		2.06	0.9	5.22	<5	440	1.3	<2	5.62	0.5	53	305	245	8.65	20	1.34
H469582		2.51	0.8	5.03	<5	420	1.2	<2	6.08	<0.5	57	334	154	8.77	20	1.18
H469583		2.47	1.0	5.10	<5	420	1.2	<2	5.95	<0.5	54	306	157	8.65	20	1.25
H469584		2.63	0.8	5.19	<5	450	1.3	<2	6.29	<0.5	57	325	161	8.81	20	1.22
H469585		2.08	0.8	5.34	<5	450	1.4	<2	6.77	<0.5	54	328	139	8.89	20	1.14
H469585 CRD		0.03	0.6	5.23	<5	440	1.3	<2	6.56	<0.5	52	320	133	8.63	20	1.12
H469586		2.52	0.7	5.24	<5	450	1.3	<2	6.46	<0.5	55	319	149	8.85	20	1.16
H469587		2.89	0.7	5.28	<5	460	1.3	<2	6.32	<0.5	58	321	167	8.84	20	1.19
H469588		2.46	0.7	5.36	<5	500	1.3	<2	6.09	0.5	55	310	165	8.92	20	1.21
H469589		2.25	0.8	5.30	6	520	1.3	<2	6.36	<0.5	54	316	134	8.79	20	1.22
H469590		0.10	2.6	3.80	<5	180	0.7	<2	4.05	<0.5	110	2190	2410	9.33	10	0.42
H469591		3.03	0.7	5.37	<5	490	1.3	<2	6.12	<0.5	54	317	154	8.63	20	1.21
H469592		2.73	0.9	5.24	<5	460	1.3	<2	5.55	0.5	54	317	148	8.52	20	1.28
H469593		2.48	0.8	5.38	<5	440	1.3	<2	5.98	<0.5	56	332	148	8.84	20	1.17
H469594		2.01	0.7	5.55	<5	460	1.4	<2	6.20	<0.5	55	316	161	8.67	20	1.12
H469595		2.20	0.7	5.45	<5	440	1.4	<2	5.99	<0.5	55	308	142	8.56	20	1.10
H469596		1.95	0.8	5.25	<5	370	1.2	<2	4.72	<0.5	53	300	142	8.64	20	1.11
H469597		2.70	0.7	5.11	<5	360	1.2	<2	5.15	<0.5	56	305	126	8.57	20	0.99
H469598		2.67	0.9	5.24	<5	440	1.3	<2	6.18	<0.5	55	328	150	8.64	20	1.09
H469599		2.53	0.9	4.80	<5	370	1.3	<2	5.01	<0.5	51	306	144	8.51	20	1.05
H469600		0.09	<0.5	6.51	<5	880	1.0	<2	1.34	<0.5	3	28	12	1.53	10	2.13
H469601		2.63	0.9	4.98	<5	400	1.3	<2	4.93	<0.5	52	327	150	8.35	20	1.11
H469602		1.94	1.0	5.03	<5	400	1.3	<2	5.29	<0.5	59	344	175	8.99	20	1.13
H469603		2.92	1.0	4.89	<5	390	1.2	<2	4.62	<0.5	55	353	129	8.87	20	1.14
H469604		2.09	0.5	4.55	<5	220	1.1	<2	4.04	<0.5	32	349	54	7.05	20	0.83
H469605		2.79	0.5	5.03	<5	430	1.2	<2	5.24	<0.5	61	386	144	8.92	20	1.12
H469606		2.72	0.6	4.51	<5	350	1.2	<2	7.05	<0.5	57	538	112	8.60	20	0.81
H469607		2.72	0.5	4.34	<5	340	1.1	<2	6.69	<0.5	63	482	159	8.80	20	0.82
H469608		2.27	0.7	4.46	<5	340	1.1	<2	6.11	<0.5	46	449	80	7.90	20	0.94
H469609		2.03	<0.5	4.61	<5	340	1.1	<2	4.39	<0.5	51	454	131	8.90	20	1.11
H469610		0.11	1.4	3.23	<5	160	0.7	<2	3.48	<0.5	114	2400	883	9.62	10	0.35
H469611		2.33	<0.5	4.25	<5	270	1.0	<2	4.75	<0.5	54	505	129	8.40	20	0.82
H469612		2.21	0.7	4.37	<5	300	1.0	<2	5.77	<0.5	62	459	154	8.87	20	0.94
H469613		2.78	0.6	3.49	<5	290	0.8	<2	7.04	<0.5	65	649	107	8.60	10	0.65
H469614		2.52	0.9	4.63	<5	420	1.0	<2	6.29	<0.5	61	375	157	9.06	20	1.03
H469615		2.05	<0.5	4.80	<5	280	0.9	<2	4.98	<0.5	55	419	154	9.17	20	0.73
H469616		2.16	0.6	5.06	<5	330	1.0	<2	5.52	<0.5	59	492	202	9.15	20	0.76
H469617		2.64	0.5	4.59	<5	240	1.2	<2	3.28	<0.5	66	674	181	8.61	20	0.64
H469618		2.15	<0.5	5.63	<5	80	1.2	<2	0.85	<0.5	55	364	166	7.95	20	1.01



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Project: LIL

**CERTIFICATE OF ANALYSIS TB08179086**

Sample Description	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	Tl ppm
Method Analyte Units LOR	10	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01	10
H469580	30	5.39	1360	1	1.77	123	1310	15	0.03	<5	31	745	<20	1.30	<10
H469581	30	5.71	1260	1	1.63	123	1260	50	0.05	<5	30	572	<20	1.25	<10
H469582	30	5.92	1215	1	1.54	129	1250	23	0.05	<5	31	571	<20	1.24	<10
H469583	30	5.78	1180	1	1.48	125	1210	18	0.03	<5	30	573	<20	1.21	<10
H469584	30	5.84	1250	1	1.57	131	1280	17	0.04	<5	31	661	<20	1.26	<10
H469585	30	5.90	1260	1	1.68	128	1300	24	0.05	<5	32	676	<20	1.29	<10
H469585 CRD	30	5.76	1225	1	1.66	124	1290	23	0.04	<5	31	665	<20	1.26	<10
H469586	30	5.52	1320	1	1.64	124	1300	18	0.04	<5	31	706	<20	1.29	<10
H469587	30	5.53	1385	1	1.70	127	1290	14	0.02	<5	31	649	<20	1.27	<10
H469588	30	5.62	1400	1	1.82	124	1340	12	0.03	<5	31	623	<20	1.29	<10
H469589	30	5.65	1415	1	1.79	124	1300	11	0.05	<5	31	607	<20	1.27	<10
H469590	10	11.50	1345	1	1.01	1330	620	13	0.50	13	18	470	<20	0.85	<10
H469591	30	5.71	1380	1	1.75	124	1290	19	0.04	<5	31	654	<20	1.26	<10
H469592	30	6.07	1235	1	1.62	118	1260	23	0.03	<5	31	565	<20	1.25	<10
H469593	30	6.19	1305	1	1.69	128	1300	10	0.03	<5	32	631	<20	1.26	<10
H469594	30	5.62	1385	1	1.81	125	1310	10	0.03	<5	31	728	<20	1.29	<10
H469595	30	5.67	1395	1	1.82	125	1290	9	0.03	<5	31	671	<20	1.28	<10
H469596	30	6.45	1270	1	1.77	118	1220	8	0.03	<5	30	443	<20	1.20	<10
H469597	30	6.49	1280	1	1.61	125	1190	9	0.03	<5	30	500	<20	1.21	<10
H469598	30	5.97	1380	1	1.60	127	1290	8	0.03	<5	32	650	<20	1.26	<10
H469599	30	6.72	1215	1	1.30	121	1210	8	0.02	<5	28	512	<20	1.19	<10
H469600	10	0.20	556	<1	2.68	3	180	7	<0.01	<5	5	182	<20	0.11	<10
H469601	30	6.48	1145	1	1.39	127	1220	34	0.03	<5	28	520	<20	1.20	<10
H469602	30	6.69	1225	1	1.42	142	1260	10	0.03	<5	30	538	<20	1.24	<10
H469603	30	7.17	1175	1	1.31	144	1300	14	0.04	<5	30	425	<20	1.21	<10
H469604	20	6.86	1015	<1	1.42	118	1010	7	0.04	<5	26	258	<20	1.05	<10
H469605	30	6.72	1205	1	1.35	156	1260	15	0.06	<5	30	581	<20	1.20	<10
H469606	20	7.09	1380	<1	1.27	183	1090	14	0.05	<5	34	562	<20	1.17	<10
H469607	20	7.47	1435	1	1.14	188	1020	12	0.05	<5	35	507	<20	1.14	<10
H469608	20	7.53	1275	1	1.09	159	1480	8	0.05	<5	33	416	<20	1.08	<10
H469609	30	8.30	1280	1	0.95	163	1130	6	0.05	<5	33	327	<20	1.20	<10
H469610	20	13.35	1385	1	0.80	1260	690	7	0.28	14	16	373	<20	0.78	<10
H469611	30	8.00	1290	1	1.11	172	1160	7	0.05	<5	35	250	<20	1.09	<10
H469612	30	7.61	1490	1	1.21	181	1100	6	0.04	<5	35	343	<20	1.09	<10
H469613	20	8.67	1440	1	0.81	215	800	11	0.04	<5	40	328	<20	0.93	<10
H469614	30	7.31	1640	1	1.10	168	1120	13	0.04	<5	35	556	<20	1.18	<10
H469615	20	7.97	1525	<1	1.01	157	770	7	0.04	<5	32	475	<20	1.16	<10
H469616	20	6.96	1725	1	1.20	166	940	9	0.06	<5	31	635	<20	1.24	10
H469617	20	8.67	1270	1	0.67	226	1060	10	0.05	<5	31	321	<20	1.12	<10
H469618	20	9.08	693	<1	0.52	211	870	5	0.06	<5	24	90	<20	0.79	<10



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## CERTIFICATE OF ANALYSIS TB08179086

Sample Description	Method	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	PGM-MS23	PGM-MS23	PGM-MS23	PGM-ICP27	PGM-ICP27	PGM-ICP27
	Analyte	U	V	W	Zn	Au	Pt	Pd	Au	Pt	Pd
	Units LOR	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
H469580		<10	264	<10	127	0.003	0.0210	0.007			
H469581		<10	252	<10	175	0.003	0.0216	0.008			
H469582		<10	253	<10	144	0.003	0.0231	0.009			
H469583		<10	247	<10	132	0.002	0.0172	0.007			
H469584		<10	256	<10	129	0.003	0.0198	0.008			
H469585		<10	263	<10	112	0.004	0.0242	0.011			
H469585 CRD		<10	257	<10	112	0.003	0.0231	0.011			
H469586		<10	257	<10	136	0.005	0.0233	0.011			
H469587		<10	260	<10	139	0.004	0.0238	0.010			
H469588		<10	259	<10	120	0.004	0.0241	0.010			
H469589		<10	258	<10	147	0.004	0.0256	0.011			
H469590		<10	171	<10	100	0.090	>1.00	>1.00	0.09	1.24	1.21
H469591		<10	256	<10	136	0.004	0.0230	0.010			
H469592		<10	252	<10	139	0.004	0.0230	0.009			
H469593		<10	262	<10	120	0.003	0.0212	0.009			
H469594		<10	262	<10	122	0.004	0.0247	0.010			
H469595		<10	261	<10	120	0.004	0.0258	0.011			
H469596		<10	252	<10	129	0.004	0.0236	0.009			
H469597		<10	254	<10	84	0.004	0.0250	0.009			
H469598		<10	259	<10	94	0.004	0.0227	0.009			
H469599		<10	226	<10	98	0.004	0.0148	0.009			
H469600		<10	15	<10	27	0.001	0.0008	0.001			
H469601		<10	231	<10	127	0.004	0.0147	0.011			
H469602		<10	252	<10	119	0.004	0.0152	0.009			
H469603		<10	244	<10	85	0.004	0.0176	0.011			
H469604		<10	219	<10	47	0.002	0.0144	0.006			
H469605		<10	246	<10	86	0.005	0.0211	0.012			
H469606		<10	251	<10	96	0.003	0.0187	0.011			
H469607		<10	254	<10	86	0.005	0.0205	0.011			
H469608		<10	255	<10	51	0.003	0.0202	0.009			
H469609		<10	278	<10	68	0.004	0.0287	0.014			
H469610		<10	159	<10	108	0.116	0.394	0.348			
H469611		<10	245	<10	69	0.004	0.0223	0.012			
H469612		<10	243	<10	112	0.005	0.0165	0.008			
H469613		<10	232	<10	74	0.004	0.0135	0.008			
H469614		<10	265	<10	86	0.005	0.0173	0.010			
H469615		<10	323	<10	92	0.004	0.0227	0.013			
H469616		<10	285	<10	127	0.008	0.0364	0.026			
H469617		<10	235	<10	94	0.005	0.0287	0.025			
H469618		<10	194	<10	77	0.006	0.0247	0.024			



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THUNDER BAY ON P7B 6V1

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Finalized Date: 6-JAN-2009

Account: MGMAM

Project: LIL

## CERTIFICATE OF ANALYSIS TB08179086

Sample Description	Method Analyte Units LOR	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Recvd Wt. kg	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %
H469619		1.14	<0.5	7.40	<5	570	1.9	<2	0.75	<0.5	27	373	17	4.86	20	2.42
H469620		1.09	<0.5	7.67	<5	540	1.9	<2	0.65	<0.5	29	334	21	5.04	20	2.51
H469621		2.64	<0.5	8.01	<5	680	2.3	<2	0.67	<0.5	23	317	30	4.65	20	2.53
H469622		2.72	<0.5	6.20	<5	190	2.8	<2	1.82	<0.5	44	846	8	6.42	20	1.07
H469623		2.77	<0.5	6.40	6	300	2.5	<2	2.99	<0.5	75	1285	33	6.66	20	1.48
H469624		1.48	<0.5	7.24	<5	410	2.3	<2	0.49	<0.5	16	318	42	4.11	20	1.98
H469625		0.97	<0.5	6.63	<5	600	2.6	2	0.31	<0.5	18	125	13	3.11	20	3.33
H469625 CRD		0.03	<0.5	7.11	<5	600	2.5	4	0.30	<0.5	17	114	12	3.03	20	3.28
H469626		2.08	<0.5	7.24	6	430	3.4	<2	0.44	<0.5	27	127	13	3.56	20	3.13
H469627		2.44	<0.5	7.38	8	560	2.5	<2	0.47	<0.5	38	134	56	4.04	20	2.79
H469628		2.20	<0.5	7.75	<5	860	3.3	<2	0.33	<0.5	30	135	55	4.24	20	4.17
H469629		3.96	<0.5	7.62	8	750	3.4	<2	0.34	<0.5	30	169	76	4.26	20	4.29
H469630		0.10	1.6	3.57	<5	180	0.7	2	3.94	0.5	110	2180	2300	8.99	10	0.41
H469631		1.71	<0.5	7.29	6	580	3.3	<2	0.27	<0.5	24	131	61	4.04	20	3.81
H469632		2.02	<0.5	7.07	<5	600	1.8	7	0.22	<0.5	8	14	32	1.26	20	4.11
H469633		2.93	<0.5	6.61	<5	710	1.4	<2	0.20	<0.5	9	23	65	1.58	20	4.91



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**CERTIFICATE OF ANALYSIS TB08179086**

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	Ti ppm
H469619	10	0.01	4.78	446	3	1.45	173	520	3	0.03	<5	15	200	<20	0.32	<10
H469620	20		5.03	441	2	1.53	172	490	4	0.03	<5	16	201	<20	0.31	<10
H469621	10		5.25	456	<1	1.57	151	580	3	0.02	5	16	222	<20	0.23	<10
H469622	10		9.96	804	1	0.16	455	730	4	0.02	7	21	157	<20	0.28	<10
H469623	20		9.55	1255	1	0.23	608	770	4	0.03	9	26	185	<20	0.32	<10
H469624	10		4.06	461	<1	2.06	160	570	5	0.02	<5	13	186	<20	0.18	<10
H469625	10		2.48	318	<1	2.24	93	660	4	0.03	<5	11	159	<20	0.30	<10
H469625 CRD	20		2.36	308	1	2.20	84	650	3	0.03	<5	12	163	<20	0.29	<10
H469626	10		2.25	325	3	2.16	92	710	3	0.06	<5	14	167	<20	0.38	<10
H469627	20		1.92	316	3	2.06	76	660	4	0.15	9	14	176	<20	0.34	<10
H469628	30		1.87	339	2	1.28	79	650	6	0.10	5	16	165	<20	0.37	<10
H469629	20		2.09	342	3	1.09	97	720	<2	0.12	<5	15	133	<20	0.36	<10
H469630	20		11.80	1275	1	0.96	1300	600	10	0.55	5	17	431	<20	0.84	<10
H469631	20		1.83	324	2	1.25	75	630	6	0.08	<5	13	123	<20	0.32	<10
H469632	10		0.49	150	6	1.63	9	300	4	0.07	<5	5	115	<20	0.03	<10
H469633	10		0.82	197	1	1.24	18	440	8	0.09	5	4	109	<20	0.05	<10





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## CERTIFICATE OF ANALYSIS TB08179086

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	PGM-MS23	PGM-MS23	PGM-MS23	PGM-ICP27	PGM-ICP27	PGM-ICP27
		U	V	W	Zn	Au	Pt	Pd	Au	Pt	Pd
		ppm 10	ppm 1	ppm 10	ppm 2	ppm 0.001	ppm 0.0005	ppm 0.001	ppm 0.03	ppm 0.03	ppm 0.03
H469619		<10	112	<10	37	0.002	0.0061	0.008			
H469620		<10	115	<10	39	0.002	0.0089	0.010			
H469621		<10	100	<10	34	0.004	0.0036	0.004			
H469622		<10	144	<10	48	0.002	0.0044	0.004			
H469623		<10	159	<10	91	0.002	0.0055	0.005			
H469624		<10	80	<10	28	<0.001	0.0020	0.002			
H469625		<10	105	<10	19	0.002	0.0030	0.003			
H469625 CRD		<10	100	<10	18	0.001	0.0019	0.002			
H469626		<10	137	<10	17	0.001	0.0031	0.003			
H469627		<10	119	<10	16	0.002	0.0018	0.002			
H469628		<10	121	<10	19	0.003	0.0021	0.002			
H469629		<10	119	<10	21	0.003	0.0022	0.003			
H469630		<10	169	<10	95	0.106	>1.00	>1.00	0.09	1.25	1.10
H469631		<10	107	<10	17	0.003	0.0030	0.003			
H469632		10	8	<10	4	0.003	0.0020	0.001			
H469633		10	13	<10	7	0.002	0.0006	0.001			



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Finalized Date: 22-JAN-2009

Account: MGMAM

## CERTIFICATE TB09002957

Project: LONE ISLAND LAKE

P.O. No.:

This report is for 78 Drill Core samples submitted to our lab in Thunder Bay, ON, Canada on 13-JAN-2009.

The following have access to data associated with this certificate:

JUSTIN JOHNSON  
KEITH WATKINS

PHILIP LITTLE

ALLAN MAC TAVISH

## SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
LOG-21d	Sample logging - ClientBarCode Dup
SPL-21d	Split sample - duplicate
PUL-31d	Pulverize Split - duplicate
SPL-34	Pulp Splitting Charge
CRU-31	Fine crushing - 70% <2mm
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
DRY-21	High Temperature Drying

## ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
PGM-MS23	Pt, Pd, Au 30g FA ICP-MS	ICP-MS
PGM-ICP27	Ore grade Pt, Pd and Au by ICP	ICP-AES
ME-ICP61	33 element four acid ICP-AES	ICP-AES

To: MAGMA METALS (CANADA) LIMITED  
ATTN: ALLAN MAC TAVISH  
P.O. BOX 10628  
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



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Project: LONE ISLAND LAKE

## CERTIFICATE OF ANALYSIS TB09002957

Sample Description	Method Analyte Units LOR	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Recvd Wt. kg	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %
H065251		1.93	<0.5	4.52	<5	210	1.1	2	6.33	<0.5	60	62	444	11.25	20	0.31
H065252		2.47	<0.5	4.53	<5	390	1.1	<2	6.79	<0.5	55	60	452	10.65	20	0.50
H065253		2.11	<0.5	5.02	<5	680	1.1	2	5.71	<0.5	54	53	483	10.95	20	1.26
H065254		2.26	<0.5	4.44	<5	300	1.0	2	6.63	<0.5	60	79	506	11.30	20	0.79
H065255		2.23	<0.5	4.34	<5	250	1.0	<2	6.90	<0.5	57	65	634	11.20	20	0.51
H065256		2.36	<0.5	4.62	<5	490	1.0	<2	6.47	<0.5	60	57	591	11.60	20	1.14
H065257		2.63	<0.5	4.32	<5	430	1.0	<2	6.66	<0.5	67	61	690	12.30	20	1.05
H065258		2.32	<0.5	4.13	<5	290	0.9	<2	6.71	<0.5	62	92	682	11.40	20	0.92
H065259		2.34	<0.5	4.03	<5	170	0.9	3	7.37	<0.5	60	113	529	10.70	20	0.53
H065260		0.10	2.0	3.30	5	170	0.7	6	3.54	1.0	108	2020	2820	9.68	10	0.38
H065261		2.57	<0.5	3.95	6	220	0.9	5	7.26	<0.5	68	114	701	11.70	20	0.82
H065262		2.52	<0.5	4.03	<5	200	0.9	<2	7.56	<0.5	63	81	638	12.20	20	0.45
H065263		2.39	<0.5	4.05	<5	240	0.9	2	8.86	<0.5	62	59	235	11.10	20	0.29
H065264		2.34	<0.5	3.91	<5	60	0.8	<2	7.63	<0.5	78	66	260	12.60	20	0.14
H065265		2.49	<0.5	3.80	<5	70	0.8	<2	7.28	<0.5	69	67	680	12.75	20	0.19
H065266		2.49	<0.5	3.78	<5	90	0.8	2	7.57	<0.5	66	74	467	11.90	20	0.20
H065267		2.28	<0.5	3.74	<5	100	0.8	3	7.83	<0.5	65	65	236	11.80	20	0.21
H065268		2.45	<0.5	3.68	5	80	0.7	3	8.22	<0.5	59	92	738	11.45	20	0.15
H065269		2.49	<0.5	3.69	<5	80	0.7	4	7.95	<0.5	62	91	925	11.90	20	0.15
H065270		0.09	<0.5	6.10	5	860	0.9	<2	1.29	<0.5	2	22	11	1.49	10	1.99
H065271		2.53	<0.5	3.63	<5	70	0.8	2	8.08	<0.5	59	166	660	9.55	10	0.19
H065272		2.43	<0.5	3.64	<5	140	0.7	<2	7.41	<0.5	65	83	919	13.05	20	0.40
H065273		2.38	<0.5	3.72	<5	190	0.8	2	7.62	<0.5	62	132	902	11.10	10	0.60
H065274		2.41	<0.5	3.74	<5	170	0.8	3	7.80	<0.5	56	173	646	9.91	10	0.56
H065275		2.36	<0.5	3.75	<5	90	0.8	<2	8.08	<0.5	58	155	335	10.05	10	0.24
H065276		2.37	<0.5	3.52	5	80	0.7	2	8.44	<0.5	65	147	126	10.10	10	0.17
H065277		2.26	<0.5	3.52	<5	190	0.8	<2	8.33	<0.5	61	256	114	8.68	10	0.58
H065278		2.49	<0.5	3.67	<5	450	0.8	4	7.83	<0.5	59	286	250	8.39	10	1.21
H065279		2.25	<0.5	3.59	5	400	0.8	<2	8.11	<0.5	56	265	170	8.24	10	1.00
H065280		0.10	<0.5	3.03	<5	150	0.7	3	3.27	<0.5	106	2310	801	9.41	10	0.33
H065281		1.88	<0.5	3.50	<5	330	0.8	2	8.58	<0.5	50	236	100	7.58	10	0.48
H065282		2.11	<0.5	3.56	<5	220	0.8	<2	8.70	<0.5	43	259	78	6.66	10	0.26
H065283		2.36	<0.5	3.75	<5	130	0.8	2	8.56	<0.5	44	268	67	6.95	10	0.22
H065284		2.68	<0.5	3.98	<5	820	0.9	<2	8.87	<0.5	48	263	186	7.35	10	0.60
H065285		2.36	<0.5	4.05	<5	120	1.0	<2	8.05	<0.5	46	273	143	7.53	10	0.31
H065286		2.25	<0.5	3.89	<5	330	0.9	2	8.54	<0.5	42	248	90	6.68	10	0.24
H065287		2.49	<0.5	4.13	8	170	1.0	<2	8.08	0.6	50	274	250	7.97	10	0.46
H065288		2.39	<0.5	4.02	<5	220	0.9	<2	8.85	<0.5	39	275	86	6.75	10	0.22
H065289		2.42	<0.5	4.03	<5	280	1.0	<2	8.07	<0.5	48	344	121	7.71	10	0.68
H065290		0.10	5.8	3.26	5	160	0.7	8	3.58	1.3	114	2010	6420	10.20	10	0.35



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Finalized Date: 22-JAN-2009

Account: MGMAM

Project: LONE ISLAND LAKE

## CERTIFICATE OF ANALYSIS TB09002957

Sample Description	Method	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
	Analyte	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th	Ti	Ti
Units		ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
LOR		10	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01	10
H065251		20	4.89	1245	<1	1.75	83	1010	4	0.16	<5	35	420	<20	1.84	<10
H065252		20	4.46	1225	<1	1.70	83	1120	3	0.17	<5	34	528	<20	1.77	<10
H065253		30	4.55	1240	1	1.55	69	1580	6	0.18	<5	33	458	<20	1.70	<10
H065254		20	5.05	1345	1	1.53	89	1050	5	0.26	<5	37	337	<20	1.72	<10
H065255		20	4.77	1290	1	1.71	88	1090	5	0.26	<5	36	323	<20	1.75	<10
H065256		20	4.88	1340	<1	1.44	91	1040	5	0.15	<5	36	354	<20	1.83	<10
H065257		20	5.30	1430	1	1.33	117	960	6	0.16	<5	39	287	<20	1.92	<10
H065258		20	5.48	1395	1	1.33	118	950	6	0.15	<5	39	228	<20	1.74	<10
H065259		20	5.71	1335	<1	1.56	116	960	8	0.17	<5	41	216	<20	1.56	<10
H065260		20	12.10	1325	1	0.87	1355	700	6	0.53	<5	16	390	<20	0.82	<10
H065261		20	5.94	1435	1	1.25	118	900	5	0.18	<5	42	214	<20	1.71	<10
H065262		20	5.62	1410	<1	1.48	118	970	2	0.17	<5	42	274	<20	1.85	<10
H065263		10	4.79	1295	<1	1.53	120	980	<2	0.22	<5	40	406	<20	1.96	<10
H065264		10	5.64	1385	<1	1.66	117	890	5	0.26	<5	43	217	<20	1.86	10
H065265		10	5.58	1400	<1	1.52	105	910	6	0.22	<5	42	209	<20	1.85	10
H065266		10	5.58	1325	<1	1.56	127	870	4	0.17	<5	42	209	<20	1.77	<10
H065267		10	5.39	1275	<1	1.48	123	790	4	0.13	<5	42	239	<20	1.78	<10
H065268		10	5.43	1290	<1	1.55	134	820	3	0.12	<5	42	216	<20	1.68	<10
H065269		10	5.57	1305	<1	1.55	131	850	<2	0.13	<5	43	193	<20	1.67	10
H065270		10	0.19	537	<1	2.56	1	170	5	<0.01	<5	4	168	<20	0.11	<10
H065271		20	6.19	1200	<1	1.50	105	900	3	0.09	<5	43	154	<20	1.23	<10
H065272		20	5.99	1405	<1	1.26	156	820	3	0.09	<5	43	171	<20	1.79	10
H065273		20	6.28	1340	1	1.24	140	870	4	0.09	<5	44	155	<20	1.44	<10
H065274		20	6.35	1275	<1	1.32	136	890	3	0.08	<5	44	156	<20	1.19	<10
H065275		20	6.30	1300	<1	1.57	151	850	2	0.08	<5	44	199	<20	1.30	<10
H065276		10	6.32	1355	<1	1.28	179	770	3	0.09	<5	45	317	<20	1.34	<10
H065277		20	6.73	1290	<1	0.87	151	850	4	0.05	<5	44	364	<20	0.98	<10
H065278		20	6.78	1310	<1	0.79	142	890	3	0.05	<5	43	275	<20	0.93	<10
H065279		20	6.78	1340	1	0.88	144	850	4	0.05	<5	44	266	<20	0.92	<10
H065280		20	13.15	1335	1	0.78	1155	670	3	0.27	<5	15	344	<20	0.75	<10
H065281		10	6.61	1305	<1	1.18	140	820	<2	0.05	<5	44	327	<20	0.89	<10
H065282		10	6.18	1160	<1	1.47	124	890	2	0.04	<5	42	248	<20	0.89	<10
H065283		10	6.23	1155	<1	1.54	122	940	2	0.04	<5	42	305	<20	0.90	<10
H065284		20	6.27	1155	<1	1.50	113	910	2	0.08	<5	40	256	<20	0.95	<10
H065285		20	6.50	1185	<1	1.77	117	1020	<2	0.05	<5	40	208	<20	0.90	<10
H065286		10	6.09	1115	<1	1.70	110	830	<2	0.04	<5	39	263	<20	0.93	<10
H065287		20	6.53	1195	<1	1.65	129	1070	13	0.07	<5	41	223	<20	0.90	<10
H065288		10	6.25	1175	<1	1.77	113	880	5	0.02	<5	40	337	<20	0.96	<10
H065289		20	6.58	1240	<1	1.42	127	1000	2	0.04	<5	39	353	<20	0.89	<10
H065290		20	12.35	1350	1	0.84	1585	750	21	0.78	<5	16	376	<20	0.81	<10



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P.O. BOX 10628

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Finalized Date: 22-JAN-2009

Account: MGMAM

Project: LONE ISLAND LAKE

## CERTIFICATE OF ANALYSIS TB09002957

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	PGM-MS23	PGM-MS23	PGM-MS23	PGM-ICP27	PGM-ICP27	PGM-ICP27
		U	V	W	Zn	Au	Pt	Pd	Au	Pt	Pd
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		10	1	10	2	0.001	0.0005	0.001	0.03	0.03	0.03
H065251		<10	512	<10	62	0.007	0.0276	0.011			
H065252		<10	492	<10	66	0.008	0.0269	0.010			
H065253		<10	451	<10	89	0.008	0.0289	0.011			
H065254		<10	477	<10	79	0.013	0.0473	0.017			
H065255		<10	493	<10	61	0.010	0.0353	0.013			
H065256		<10	519	<10	93	0.008	0.0280	0.014			
H065257		<10	558	<10	118	0.014	0.0360	0.014			
H065258		<10	488	<10	94	0.019	0.0512	0.019			
H065259		<10	449	<10	67	0.019	0.0717	0.026			
H065260		<10	163	<10	103	0.079	>1.00	0.989	0.09	1.14	1.02
H065261		<10	500	<10	87	0.013	0.0563	0.022			
H065262		<10	579	<10	89	0.012	0.0476	0.018			
H065263		<10	607	<10	57	0.004	0.0326	0.018			
H065264		<10	586	<10	70	0.003	0.0297	0.012			
H065265		<10	594	<10	75	0.014	0.0418	0.017			
H065266		<10	627	<10	59	0.008	0.0417	0.017			
H065267		<10	612	<10	61	0.004	0.0255	0.009			
H065268		<10	568	<10	70	0.012	0.0487	0.019			
H065269		<10	573	<10	75	0.021	0.0579	0.021			
H065270		<10	15	<10	25	0.001	0.0006	<0.001			
H065271		<10	384	<10	61	0.021	0.0826	0.035			
H065272		<10	607	<10	92	0.012	0.0411	0.016			
H065273		<10	452	<10	85	0.016	0.0709	0.028			
H065274		<10	363	<10	83	0.025	0.0854	0.035			
H065275		<10	399	<10	66	0.015	0.0895	0.030			
H065276		<10	421	<10	66	0.014	0.138	0.054			
H065277		<10	259	<10	105	0.005	0.181	0.085			
H065278		<10	232	<10	106	0.005	0.0526	0.027			
H065279		<10	228	<10	98	0.005	0.0767	0.027			
H065280		<10	153	<10	101	0.103	0.378	0.323			
H065281		<10	221	<10	60	0.004	0.0844	0.038			
H065282		<10	212	<10	49	0.002	0.0677	0.048			
H065283		<10	216	<10	51	0.004	0.0515	0.036			
H065284		<10	214	<10	58	0.004	0.0325	0.021			
H065285		<10	220	<10	60	0.003	0.0282	0.020			
H065286		<10	209	<10	50	0.004	0.0247	0.019			
H065287		<10	228	<10	118	0.006	0.0271	0.022			
H065288		<10	213	<10	58	0.004	0.0233	0.013			
H065289		<10	221	<10	78	0.003	0.0184	0.014			
H065290		<10	166	<10	98	0.234	>1.00	>1.00	0.25	2.90	2.56



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Account: MGMAM

Project: LONE ISLAND LAKE

## CERTIFICATE OF ANALYSIS TB09002957

Sample Description	Method Analyte Units LOR	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Recvd Wt. kg	Ag ppm	Al ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %
		0.02	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	0.01	10	0.01	
H065291		2.06	<0.5	3.92	<5	420	0.9	<2	7.86	<0.5	49	354	239	7.88	10	1.07
H065292		2.40	<0.5	3.92	<5	280	0.9	<2	7.83	<0.5	49	357	154	7.73	10	0.83
H065293		2.42	<0.5	3.83	<5	1520	0.9	<2	8.09	0.5	47	331	119	7.34	10	0.52
H065294		2.94	<0.5	3.88	<5	350	0.9	<2	8.39	<0.5	44	310	114	7.00	10	0.48
H065295		2.56	67.8	3.76	<5	340	0.9	<2	9.68	<0.5	42	332	175	7.04	10	0.38
H065295 CRD		<0.02	46.2	3.82	<5	350	0.9	<2	9.58	<0.5	42	330	153	7.10	10	0.41
H065296		2.58	<0.5	3.97	<5	350	1.0	2	8.26	<0.5	50	405	109	7.62	10	0.59
H065297		2.26	0.5	3.68	<5	220	0.9	<2	8.01	<0.5	48	433	251	7.79	10	0.95
H065298		2.52	<0.5	3.63	<5	130	0.8	<2	8.30	<0.5	49	440	117	7.46	10	0.50
H065299		2.44	<0.5	3.63	<5	180	0.9	<2	8.29	<0.5	48	458	133	7.35	10	0.61
H065300		0.10	2.0	3.24	<5	160	0.7	4	3.52	0.8	107	2020	2730	9.50	10	0.37
H065301		2.57	<0.5	3.65	<5	380	0.9	<2	8.42	<0.5	51	514	141	7.62	10	0.88
H065302		2.43	<0.5	3.52	<5	720	0.9	<2	8.13	<0.5	55	553	161	7.54	10	1.20
H065303		2.49	<0.5	3.38	<5	190	0.8	<2	8.41	<0.5	53	644	116	7.74	10	0.65
H065304		2.28	<0.5	3.26	<5	60	0.7	2	8.19	<0.5	54	668	97	7.69	10	0.16
H065305		2.89	<0.5	3.24	7	110	0.8	<2	9.29	<0.5	45	687	38	6.78	10	0.20
H065306		2.27	<0.5	3.32	<5	170	0.8	<2	8.83	<0.5	48	706	54	7.16	10	0.24
H065307		2.29	<0.5	3.40	<5	720	0.8	3	8.30	<0.5	57	725	161	7.73	10	0.98
H065308		2.53	<0.5	3.47	<5	470	0.8	<2	7.99	<0.5	51	694	148	7.56	10	0.52
H065309		2.46	<0.5	3.49	<5	250	0.8	<2	8.20	<0.5	49	630	118	7.51	10	0.29
H065310		0.09	<0.5	5.81	<5	840	0.9	<2	1.24	<0.5	2	23	10	1.46	10	1.97
H065311		2.54	<0.5	3.64	<5	180	0.9	<2	7.67	<0.5	56	579	132	8.16	10	0.24
H065312		2.41	<0.5	3.68	<5	290	0.9	<2	7.21	<0.5	55	532	267	8.62	10	0.85
H065313		2.62	<0.5	3.70	<5	260	0.8	<2	8.18	<0.5	60	426	326	9.38	10	0.65
H065314		2.47	<0.5	3.72	<5	260	0.7	2	8.13	<0.5	59	361	387	10.60	10	0.59
H065315		2.74	<0.5	4.21	<5	630	0.9	3	8.08	<0.5	49	364	142	8.94	10	0.55
H065316		2.42	<0.5	4.62	<5	690	1.0	<2	8.24	<0.5	30	357	66	7.60	10	0.68
H065317		2.88	<0.5	4.62	<5	590	1.1	<2	8.05	<0.5	32	429	123	6.85	20	0.62
H065318		2.03	0.5	3.05	<5	330	0.8	3	5.51	1.2	86	851	853	9.38	10	0.80
H065319		2.49	0.8	2.48	<5	170	0.6	7	7.35	3.8	75	1160	1595	8.62	10	0.55
H065320		0.10	5.9	3.19	5	160	0.7	10	3.48	1.4	113	2030	6400	10.00	10	0.35
H065321		1.44	0.6	3.08	<5	160	0.7	3	6.27	<0.5	89	588	1105	11.35	10	0.50
H065322		1.83	1.1	8.00	6	880	2.3	<2	2.01	0.9	73	170	2260	6.41	20	2.25
H065323		1.66	<0.5	8.00	11	1150	2.6	<2	0.26	<0.5	34	144	178	4.50	20	4.40
H065324		1.83	<0.5	7.97	<5	1120	3.0	<2	0.51	<0.5	27	144	255	4.86	20	3.97
H065325		2.16	<0.5	7.74	<5	960	3.4	<2	0.42	<0.5	19	113	289	4.24	10	4.10
H065326		1.88	<0.5	6.57	5	640	3.3	<2	0.45	<0.5	7	14	28	0.81	20	3.40
H065327		3.10	<0.5	8.95	5	870	3.1	<2	0.55	<0.5	31	311	60	5.29	20	4.37



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Account: MGMAM

Project: LONE ISLAND LAKE

## CERTIFICATE OF ANALYSIS TB09002957

Sample Description	Method	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
	Analyte	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th	Ti	Ti
Units		ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
LOR		10	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01	10
H065291		20	6.52	1275	1	1.07	130	980	3	0.05	<5	39	330	<20	0.89	<10
H065292		20	6.53	1280	<1	1.22	130	1000	2	0.04	<5	39	307	<20	0.89	<10
H065293		20	6.50	1230	<1	1.44	123	970	3	0.08	<5	39	318	<20	0.86	<10
H065294		20	6.24	1235	<1	1.50	120	900	3	0.04	<5	39	297	<20	0.90	<10
H065295		20	6.25	1240	1	1.43	121	740	2	0.04	<5	38	280	<20	0.89	<10
H065295 CRD		20	6.30	1255	<1	1.44	121	770	3	0.04	<5	39	283	<20	0.90	<10
H065296		20	6.79	1365	<1	1.47	140	920	3	0.05	<5	42	285	<20	0.91	<10
H065297		20	6.97	1280	1	1.04	142	930	<2	0.03	<5	41	147	<20	0.85	<10
H065298		20	6.95	1280	<1	1.30	142	890	2	0.03	<5	41	177	<20	0.83	<10
H065299		20	6.94	1280	1	1.28	145	920	2	0.03	<5	41	186	<20	0.82	<10
H065300		20	11.90	1305	1	0.89	1325	680	7	0.53	<5	16	382	<20	0.79	<10
H065301		20	7.19	1365	1	1.12	155	880	<2	0.04	<5	41	216	<20	0.84	<10
H065302		20	7.24	1345	1	0.89	157	860	2	0.03	<5	41	253	<20	0.85	<10
H065303		20	7.76	1330	<1	0.97	171	840	<2	0.02	<5	42	150	<20	0.81	<10
H065304		20	7.68	1305	<1	1.13	174	770	<2	0.03	<5	42	139	<20	0.80	<10
H065305		10	7.02	1285	<1	1.03	152	700	<2	0.02	<5	40	288	<20	0.81	<10
H065306		10	7.63	1295	<1	1.17	167	770	<2	0.03	<5	40	184	<20	0.78	<10
H065307		20	7.68	1330	<1	0.91	178	790	3	0.03	<5	40	259	<20	0.84	<10
H065308		20	7.40	1315	<1	1.14	174	800	<2	0.03	<5	39	278	<20	0.85	<10
H065309		20	7.04	1275	<1	1.20	170	1010	<2	0.04	<5	37	228	<20	0.86	10
H065310		10	0.20	529	<1	2.53	1	170	5	<0.01	<5	4	161	<20	0.11	<10
H065311		20	7.03	1335	<1	1.37	166	930	2	0.05	<5	37	169	<20	0.91	<10
H065312		30	6.84	1400	<1	1.11	156	950	<2	0.05	<5	36	181	<20	1.03	<10
H065313		20	6.68	1505	1	1.20	142	870	<2	0.08	<5	41	200	<20	1.25	<10
H065314		20	6.44	1680	1	1.22	123	890	2	0.10	<5	43	208	<20	1.46	<10
H065315		20	5.58	1535	<1	1.63	113	1230	<2	0.08	<5	37	400	<20	1.41	<10
H065316		10	5.31	1245	<1	1.92	107	1400	<2	0.01	<5	33	389	<20	1.25	<10
H065317		10	5.92	1295	<1	1.92	105	1240	5	0.03	<5	34	365	<20	1.23	<10
H065318		20	9.56	1240	1	0.49	431	800	32	0.13	<5	28	187	<20	0.80	<10
H065319		20	9.85	1390	1	0.33	495	610	21	0.27	<5	38	125	<20	0.67	<10
H065320		20	12.10	1320	<1	0.82	1560	720	20	0.78	<5	16	369	<20	0.79	10
H065321		10	8.42	1830	<1	0.53	372	700	7	0.27	<5	33	167	<20	1.16	<10
H065322		30	2.89	1030	1	1.85	407	860	8	0.74	<5	16	453	<20	0.66	<10
H065323		20	1.94	408	2	1.07	116	610	6	0.26	<5	15	205	<20	0.34	10
H065324		30	2.10	581	2	1.30	154	750	13	0.26	<5	15	239	<20	0.36	<10
H065325		30	1.96	478	3	1.29	94	590	7	0.18	<5	14	230	<20	0.34	<10
H065326		10	0.24	161	1	2.06	6	220	2	0.09	<5	4	118	<20	0.02	<10
H065327		30	2.48	459	2	1.09	152	1000	5	0.21	<5	19	182	<20	0.38	<10





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## CERTIFICATE OF ANALYSIS TB09002957

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	PGM-MS23	PGM-MS23	PGM-MS23	PGM-ICP27	PGM-ICP27	PGM-ICP27
		U	V	W	Zn	Au	Pt	Pd	Au	Pt	Pd
		ppm 10	ppm 1	ppm 10	ppm 2	ppm 0.001	ppm 0.0005	ppm 0.001	ppm 0.03	ppm 0.03	ppm 0.03
H065291		<10	214	<10	95	0.005	0.0181	0.014			
H065292		<10	214	<10	68	0.003	0.0198	0.015			
H065293		<10	210	<10	69	0.003	0.0166	0.013			
H065294		<10	211	<10	61	0.003	0.0152	0.011			
H065295		<10	202	180	58	0.004	0.0149	0.012			
H065295 CRD		<10	204	130	61	0.004	0.0158	0.012			
H065296		<10	215	<10	66	0.003	0.0131	0.011			
H065297		<10	210	<10	91	0.006	0.0143	0.012			
H065298		<10	205	<10	72	0.004	0.0174	0.013			
H065299		<10	206	<10	67	0.004	0.0186	0.013			
H065300		<10	161	<10	101	0.087	>1.00	>1.00	0.11	1.34	1.23
H065301		<10	204	<10	65	0.005	0.0219	0.014			
H065302		<10	198	<10	78	0.004	0.0205	0.013			
H065303		<10	199	<10	81	0.003	0.0227	0.015			
H065304		<10	196	<10	61	0.003	0.0220	0.015			
H065305		<10	194	<10	43	0.001	0.0263	0.016			
H065306		<10	195	<10	54	0.002	0.0275	0.019			
H065307		<10	198	<10	72	0.006	0.0306	0.021			
H065308		<10	203	<10	69	0.005	0.0325	0.023			
H065309		<10	210	<10	66	0.004	0.0423	0.029			
H065310		<10	14	<10	26	0.001	0.0005	<0.001			
H065311		<10	221	<10	73	0.004	0.0442	0.030			
H065312		<10	242	<10	98	0.011	0.0483	0.030			
H065313		<10	323	<10	98	0.009	0.0283	0.017			
H065314		<10	387	<10	106	0.008	0.0353	0.021			
H065315		<10	341	<10	68	0.006	0.0319	0.019			
H065316		<10	290	<10	46	0.002	0.0241	0.007			
H065317		<10	275	<10	45	0.003	0.0269	0.017			
H065318		<10	180	<10	222	0.027	0.420	0.361			
H065319		<10	163	<10	719	0.035	0.367	0.386			
H065320		<10	162	<10	98	0.215	>1.00	>1.00	0.26	2.97	2.64
H065321		<10	330	<10	221	0.023	0.194	0.179			
H065322		<10	187	<10	333	0.055	0.483	0.517			
H065323		<10	112	<10	37	0.008	0.0531	0.043			
H065324		<10	114	<10	66	0.006	0.0552	0.094			
H065325		<10	103	<10	44	0.008	0.0463	0.047			
H065326		10	2	<10	11	0.002	0.0011	0.001			
H065327		<10	129	<10	42	0.002	0.0034	0.003			



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THUNDER BAY ON P7B 6V1

Page: 1

Finalized Date: 16-DEC-2008

Account: MGMAM

## CERTIFICATE TB08172705

Project: STEEP LEDGE

P.O. No.:

This report is for 20 Drill Core samples submitted to our lab in Thunder Bay, ON, Canada on 8-DEC-2008.

The following have access to data associated with this certificate:

JUSTIN JOHNSON  
KEITH WATKINS

PHILIP LITTLE

ALLAN MAC TAVISH

## SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

## ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
PGM-MS23	Pt, Pd, Au 30g FA ICP-MS	ICP-MS
PGM-ICP27	Ore grade Pt, Pd and Au by ICP	ICP-AES
ME-ICP61	33 element four acid ICP-AES	ICP-AES

To: MAGMA METALS (CANADA) LIMITED

ATTN: ALLAN MAC TAVISH

P.O. BOX 10628

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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



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Page: 2 - A

Total # Pages: 2 (A - C)

Finalized Date: 16-DEC-2008

Account: MGMAM

Project: STEEP LEDGE

## CERTIFICATE OF ANALYSIS TB08172705

Sample Description	Method Analyte Units LOR	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Recvd Wt. kg	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %
		0.02	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	0.01	10	0.01	
H068506		2.01	<0.5	5.49	<5	840	0.9	<2	0.42	<0.5	1	20	6	1.06	10	3.81
H068507		2.08	<0.5	6.12	<5	1040	0.8	4	0.60	<0.5	4	16	12	1.10	10	4.67
H068508		2.22	<0.5	4.10	<5	190	0.8	<2	4.41	<0.5	91	1800	186	9.63	10	0.61
H068509		2.38	<0.5	3.60	11	210	0.9	<2	3.34	<0.5	101	2420	177	9.61	10	0.52
H068510		2.19	<0.5	3.66	7	170	0.9	<2	3.82	<0.5	97	2210	272	9.71	20	0.44
H068511		2.24	<0.5	3.33	7	170	0.8	<2	4.10	<0.5	101	2220	326	9.93	10	0.48
H068512		2.21	<0.5	3.26	9	210	0.9	<2	3.35	<0.5	102	2080	420	9.48	10	0.58
H068513		2.26	<0.5	3.93	46	250	1.0	<2	3.51	<0.5	91	1880	603	8.95	10	0.51
H068514		0.99	<0.5	3.21	14	210	0.7	<2	4.32	<0.5	96	2230	311	9.09	10	0.54
H068515		0.89	<0.5	3.07	<5	190	0.7	<2	4.14	<0.5	101	2360	293	9.31	10	0.51
H068516		2.68	0.9	2.79	60	130	0.7	<2	4.05	<0.5	121	2630	1260	9.73	10	0.33
H068517		2.39	1.1	2.53	<5	140	0.5	<2	4.13	<0.5	134	2750	2290	10.05	10	0.34
H068518		2.17	1.6	2.74	<5	180	0.6	<2	3.60	<0.5	152	2580	3240	11.15	10	0.42
H068519		2.19	<0.5	3.26	<5	160	0.8	<2	3.46	<0.5	100	2110	169	9.31	10	0.36
H068520		0.07	<0.5	6.76	<5	930	1.0	<2	1.42	<0.5	2	23	13	1.55	10	2.12
H068521		2.64	<0.5	3.43	<5	170	0.8	<2	3.35	<0.5	100	2080	198	8.78	10	0.41
H068522		2.16	<0.5	2.86	<5	170	0.8	<2	2.81	<0.5	107	2180	642	9.41	10	0.42
H068523		2.14	<0.5	2.74	<5	180	0.7	<2	3.30	<0.5	115	2200	613	9.62	10	0.44
H068553		2.31	1.1	1.62	<5	90	<0.5	<2	1.81	<0.5	164	4350	2590	10.75	10	0.25
H068554		2.12	3.4	1.49	<5	110	<0.5	<2	1.73	<0.5	195	4020	5670	11.65	10	0.23



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Total # Pages: 2 (A - C)

Finalized Date: 16-DEC-2008

Account: MGMAM

Project: STEEP LEDGE

## CERTIFICATE OF ANALYSIS TB08172705

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	Tl ppm
		10	0.01	5	1	0.01	1	10	2	0.01	5	1	20	0.01	10	
H068506		20	0.50	81	2	1.23	18	270	11	0.17	<5	3	193	<20	0.09	<10
H068507		10	0.70	150	4	1.38	11	390	18	0.19	<5	2	246	<20	0.11	<10
H068508		10	11.05	1480	2	0.85	629	730	14	0.57	<5	20	373	<20	0.93	<10
H068509		20	12.45	1455	2	0.96	777	800	8	0.88	<5	15	381	<20	0.76	10
H068510		20	12.00	1535	2	0.78	723	730	11	0.80	<5	18	357	<20	0.84	<10
H068511		20	12.65	1430	1	0.70	792	660	5	0.45	<5	20	303	<20	0.82	<10
H068512		20	12.05	1310	3	0.73	823	640	10	0.70	<5	15	284	<20	0.71	<10
H068513		20	11.75	1360	3	0.71	657	850	10	1.58	<5	18	310	<20	0.72	<10
H068514		20	12.70	1425	1	0.70	730	640	13	0.70	<5	20	273	<20	0.70	<10
H068515		10	12.80	1430	1	0.68	775	620	3	0.61	<5	20	270	<20	0.71	<10
H068516		20	13.40	1610	3	0.70	1080	580	13	1.66	<5	18	277	<20	0.62	<10
H068517		10	13.35	1495	1	0.64	1550	480	11	1.11	<5	18	284	<20	0.62	<10
H068518		10	13.85	1575	<1	0.65	1870	600	8	1.46	<5	17	297	<20	0.66	<10
H068519		20	12.90	1405	1	0.94	745	760	7	0.95	<5	16	361	<20	0.73	<10
H068520		10	0.20	550	<1	2.67	4	190	3	<0.01	<5	5	176	<20	0.11	<10
H068521		20	12.80	1345	1	0.97	745	730	5	0.72	<5	15	388	<20	0.74	<10
H068522		20	13.10	1395	1	0.72	949	800	8	1.75	<5	14	277	<20	0.50	<10
H068523		10	13.30	1430	1	0.58	948	600	5	0.43	<5	15	321	<20	0.68	<10
H068553		10	17.25	1395	1	0.31	2190	360	3	1.19	<5	10	151	<20	0.40	<10
H068554		10	16.75	1465	<1	0.28	3290	340	7	2.01	<5	10	147	<20	0.36	<10



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Finalized Date: 16-DEC-2008

Account: MGMAM

Project: STEEP LEDGE

## CERTIFICATE OF ANALYSIS TB08172705

Sample Description	Method	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	PGM-MS23	PGM-MS23	PGM-MS23	PGM-ICP27	PGM-ICP27	PGM-ICP27
	Analyte	U	V	W	Zn	Au	Pt	Pd	Au	Pt	Pd
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LOR	10	1	10	2	0.001	0.0005	0.001	0.03	0.03	0.03	
H068506		10	15	<10	11	0.002	0.0005	<0.001			
H068507		10	16	<10	33	0.002	0.0005	<0.001			
H068508		<10	207	<10	189	0.004	0.0225	0.021			
H068509		<10	177	<10	163	0.004	0.0347	0.032			
H068510		<10	203	<10	138	0.005	0.0304	0.030			
H068511		<10	182	<10	127	0.009	0.0949	0.100			
H068512		<10	174	<10	143	0.010	0.109	0.122			
H068513		<10	179	<10	110	0.007	0.0710	0.073			
H068514		<10	161	<10	139	0.009	0.0505	0.047			
H068515		<10	164	<10	122	0.011	0.0634	0.062			
H068516		<10	151	<10	484	0.019	0.235	0.262			
H068517		<10	147	<10	153	0.052	0.643	0.729			
H068518		<10	149	<10	160	0.074	0.925	>1.00	0.04	0.90	1.02
H068519		<10	161	<10	109	0.005	0.0392	0.036			
H068520		10	14	<10	29	0.001	0.0005	<0.001			
H068521		<10	155	<10	102	0.005	0.0405	0.038			
H068522		<10	141	<10	110	0.019	0.206	0.231			
H068523		<10	154	<10	123	0.016	0.158	0.180			
H068553		<10	106	<10	117	0.047	0.559	0.640			
H068554		<10	100	<10	116	0.104	>1.00	>1.00	0.07	1.25	1.40



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Page: 1

Finalized Date: 20-DEC-2008

Account: MGMAM

## CERTIFICATE TB08172706

Project: STEEP LEDGE

P.O. No.:

This report is for 103 Drill Core samples submitted to our lab in Thunder Bay, ON, Canada on 8-DEC-2008.

The following have access to data associated with this certificate:

JUSTIN JOHNSON  
KEITH WATKINS

PHILIP LITTLE

ALLAN MAC TAVISH

## SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
LOG-21d	Sample logging - ClientBarCode Dup
SPL-21d	Split sample - duplicate
PUL-31d	Pulverize Split - duplicate
SPL-34	Pulp Splitting Charge
CRU-31	Fine crushing - 70% <2mm
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

## ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
PGM-MS23	Pt, Pd, Au 30g FA ICP-MS	ICP-MS
PGM-ICP27	Ore grade Pt, Pd and Au by ICP	ICP-AES
ME-ICP61	33 element four acid ICP-AES	ICP-AES

To: MAGMA METALS (CANADA) LIMITED

ATTN: ALLAN MAC TAVISH

P.O. BOX 10628

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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Colin Ramshaw, Vancouver Laboratory Manager











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Project: STEEP LEDGE

## CERTIFICATE OF ANALYSIS TB08172706

Sample Description	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
	Recvd Wt. kg	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %
	0.02	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	1	0.01	10	0.01
H068561	2.07	0.7	1.79	<5	80	<0.5	<2	2.18	<0.5	138	3280	749	9.77	<10	0.29
H068562	2.13	<0.5	0.16	<5	20	<0.5	<2	0.29	<0.5	142	3180	1255	1.20	<10	0.23
H068563	2.14	1.0	1.72	<5	80	<0.5	2	2.31	<0.5	138	3390	1230	9.92	10	0.20
H068564	2.26	0.5	1.85	<5	80	<0.5	<2	2.48	<0.5	133	3350	399	9.85	10	0.21
H068565	2.37	<0.5	1.85	<5	90	<0.5	4	2.56	<0.5	127	3290	250	9.53	<10	0.22
H068565 CRD	<0.02	<0.5	1.83	<5	80	<0.5	<2	2.53	<0.5	126	3160	235	9.35	10	0.22
H068566	2.09	<0.5	2.03	<5	90	<0.5	<2	2.56	<0.5	125	3240	288	9.48	<10	0.28
H068567	2.26	0.9	1.93	<5	80	<0.5	<2	2.59	<0.5	136	3450	842	9.92	10	0.21
H068568	2.13	<0.5	2.07	<5	90	0.5	<2	2.66	<0.5	124	3410	313	9.47	10	0.22
H068569	2.10	<0.5	2.34	<5	110	0.5	<2	2.98	<0.5	121	3300	212	9.53	10	0.32
H068570	2.36	<0.5	2.21	<5	100	0.5	3	2.92	<0.5	117	3060	260	9.25	10	0.23
H068571	2.36	0.7	2.36	<5	100	0.5	<2	3.19	<0.5	118	2970	779	9.25	10	0.29
H068572	2.28	<0.5	2.85	<5	120	0.6	<2	3.89	<0.5	107	2750	154	9.34	10	0.32
H068573	2.20	0.7	2.57	<5	100	0.5	<2	3.57	<0.5	121	3090	767	10.05	10	0.26
H068574	2.14	<0.5	2.79	<5	100	0.5	<2	3.84	<0.5	109	2890	247	9.77	10	0.25
H068575	2.15	0.5	2.93	<5	130	0.6	<2	3.90	<0.5	109	2730	557	9.54	10	0.31
H068576	2.05	0.6	3.00	<5	150	0.8	<2	3.71	<0.5	108	2650	516	9.42	10	0.36
H068577	2.31	<0.5	3.58	<5	180	0.9	<2	4.16	<0.5	101	2290	380	9.35	10	0.42
H068578	2.66	0.7	3.40	<5	160	0.8	<2	4.70	<0.5	106	2360	863	9.62	10	0.40
H068579	2.06	0.7	3.32	<5	150	0.8	<2	4.33	<0.5	110	2100	1240	9.49	10	0.36
H068580	0.06	2.9	3.14	6	170	0.8	<2	3.53	<0.5	124	2250	3430	10.40	10	0.39
H068581	2.67	<0.5	3.84	<5	180	1.0	<2	4.59	<0.5	93	2220	473	9.63	10	0.44
H068582	2.24	<0.5	4.19	<5	190	1.1	<2	4.94	<0.5	89	2230	246	9.28	10	0.45
H068583	2.08	<0.5	4.76	<5	220	1.3	<2	5.11	<0.5	79	1910	175	8.76	10	0.59
H068584	0.67	<0.5	7.17	<5	1200	0.7	<2	0.47	<0.5	4	37	21	1.50	10	4.84
H068585	0.71	<0.5	6.87	<5	1150	0.7	<2	0.47	<0.5	5	36	29	1.58	10	4.62
H068586	3.18	<0.5	8.08	5	400	1.3	<2	1.03	<0.5	14	66	21	3.37	20	3.18
H068587	3.23	<0.5	8.08	5	410	1.3	<2	0.65	<0.5	16	71	39	3.54	20	2.48
H068588	3.12	<0.5	8.13	7	430	1.3	<2	0.84	<0.5	15	66	21	3.34	20	2.46
H068589	1.87	0.5	6.60	<5	1100	0.6	<2	0.37	<0.5	2	11	11	1.08	10	4.56
H068590	0.06	1.0	3.13	<5	160	0.7	<2	3.44	<0.5	108	2360	790	9.34	10	0.35
H068591	2.10	<0.5	8.24	<5	350	1.3	<2	1.51	<0.5	13	65	34	3.13	20	2.24
H068592	1.79	<0.5	7.70	5	590	1.7	<2	1.09	<0.5	16	106	14	3.61	10	3.14
H068593	4.55	<0.5	8.26	<5	860	1.0	<2	1.14	<0.5	9	41	16	2.45	20	3.95
H068594	3.88	<0.5	8.53	5	690	1.2	<2	1.76	<0.5	16	82	39	3.67	20	2.45
H068595	3.81	0.5	9.00	8	710	1.3	<2	1.81	0.6	14	40	38	4.25	20	2.71
H068596	3.32	<0.5	8.02	<5	360	1.2	<2	1.47	<0.5	13	62	27	3.18	20	1.93
H068597	3.37	<0.5	7.49	8	960	0.7	<2	1.07	0.8	4	19	23	1.72	10	4.27
H068598	3.51	<0.5	7.67	<5	780	0.9	<2	1.12	<0.5	7	33	30	2.24	20	3.22
H068599	3.60	<0.5	8.24	7	990	1.3	<2	1.19	<0.5	7	22	25	2.53	20	3.19



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To: MAGMA METALS (CANADA) LIMITED

P.O. BOX 10628

THUNDER BAY ON P7B 6V1

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Account: MGMAM

Project: STEEP LEDGE

## CERTIFICATE OF ANALYSIS TB08172706

Sample Description	Method	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
	Analyte Units LOR	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	Tl ppm
H068561		10	17.80	1410	<1	0.34	1460	420	3	0.60	17	11	192	<20	0.42	<10
H068562		<10	5.20	412	<1	0.06	1490	90	<2	0.19	<5	3	46	<20	0.39	<10
H068563		10	17.40	1400	<1	0.38	1610	410	4	0.66	13	11	195	<20	0.44	<10
H068564		10	17.60	1410	<1	0.44	1380	390	2	0.43	15	12	210	<20	0.46	<10
H068565		10	16.85	1390	<1	0.42	1280	430	5	0.71	15	12	212	<20	0.46	<10
H068565 CRD		10	16.55	1370	<1	0.42	1260	430	4	0.70	11	12	211	<20	0.47	<10
H068566		10	16.60	1350	<1	0.49	1240	430	4	1.03	14	12	222	<20	0.45	<10
H068567		10	17.20	1400	<1	0.48	1460	460	2	0.81	14	13	218	<20	0.48	<10
H068568		10	16.40	1370	<1	0.55	1270	440	3	0.42	15	13	229	<20	0.54	<10
H068569		10	16.10	1370	<1	0.61	1220	550	4	1.32	17	14	300	<20	0.58	<10
H068570		10	15.45	1340	<1	0.58	1180	480	3	0.58	10	14	238	<20	0.57	<10
H068571		10	14.55	1310	<1	0.59	1350	470	3	1.05	12	15	264	<20	0.62	<10
H068572		10	14.70	1365	1	0.72	1020	490	6	1.16	10	17	360	<20	0.82	<10
H068573		10	15.60	1390	1	0.61	1270	470	3	0.95	9	16	311	<20	0.76	<10
H068574		10	15.05	1395	<1	0.73	1100	800	5	0.63	8	17	353	<20	0.79	<10
H068575		10	14.65	1345	<1	0.81	1200	810	<2	0.90	10	17	380	<20	0.75	<10
H068576		20	14.25	1330	1	0.93	1120	780	<2	0.41	8	16	359	<20	0.75	<10
H068577		20	13.55	1380	<1	1.06	1010	730	3	0.29	6	19	373	<20	0.92	<10
H068578		20	13.00	1350	<1	1.06	1120	600	2	0.32	10	21	385	<20	0.91	<10
H068579		20	12.30	1270	<1	1.03	1350	820	3	0.55	<5	19	381	<20	0.86	<10
H068580		20	14.05	1365	1	0.85	1560	830	10	0.71	8	16	357	<20	0.86	<10
H068581		20	11.45	1340	1	1.15	891	920	11	0.69	9	20	416	<20	0.96	<10
H068582		20	11.55	1335	1	1.29	801	840	7	0.23	6	21	456	<20	1.04	<10
H068583		20	9.78	1330	1	1.44	659	980	14	0.26	<5	20	482	<20	1.04	<10
H068584		30	0.60	145	1	1.82	16	280	13	0.42	<5	3	308	<20	0.11	<10
H068585		20	0.64	146	1	1.73	18	300	13	0.52	<5	4	294	<20	0.14	<10
H068586		20	1.42	316	<1	2.19	40	620	<2	1.11	<5	9	249	<20	0.28	<10
H068587		10	1.67	495	<1	2.70	38	650	4	0.71	<5	9	392	<20	0.29	<10
H068588		20	1.62	304	<1	2.91	43	640	3	0.62	<5	11	357	<20	0.30	<10
H068589		10	0.29	91	<1	1.80	7	670	33	0.46	<5	2	296	<20	0.06	<10
H068590		20	14.00	1325	1	0.82	1190	690	4	0.30	8	15	354	<20	0.76	<10
H068591		20	1.41	340	1	2.56	40	730	7	0.69	<5	9	378	<20	0.28	<10
H068592		40	2.41	507	<1	1.80	39	1070	8	0.54	<5	11	315	<20	0.28	<10
H068593		20	1.03	240	<1	2.44	23	1660	15	0.66	<5	7	387	<20	0.20	<10
H068594		20	1.62	495	1	2.57	45	820	12	0.59	<5	12	489	<20	0.35	<10
H068595		40	1.88	500	1	2.60	23	1380	24	0.93	<5	10	506	<20	0.38	<10
H068596		20	1.73	431	<1	2.47	34	680	29	0.83	<5	9	353	<20	0.28	<10
H068597		40	0.78	200	<1	2.17	10	430	36	0.75	<5	4	333	20	0.12	<10
H068598		60	0.85	244	<1	2.43	14	870	24	0.81	<5	6	387	30	0.19	<10
H068599		70	0.90	330	<1	2.56	11	1000	23	0.55	<5	5	470	<20	0.23	<10



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Project: STEEP LEDGE

## CERTIFICATE OF ANALYSIS TB08172706

Sample Description	Method	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	FGM-MS23	PGM-MS23	PGM-MS23	PGM-ICP27	PGM-ICP27	PGM-ICP27
	Analyte	U	V	W	Zn	Au	Pt	Pd	Au	Pt	Pd
	Units LOR	ppm 10	ppm 1	ppm 10	ppm 2	ppm 0.001	ppm 0.0005	ppm 0.001	ppm 0.03	ppm 0.03	ppm 0.03
H068561		<10	106	<10	109	0.015	0.144	0.161			
H068562		<10	95	<10	99	0.024	0.270	0.318			
H068563		<10	107	<10	99	0.025	0.265	0.309			
H068564		<10	113	<10	100	0.008	0.0826	0.090			
H068565		<10	114	<10	107	0.006	0.0492	0.052			
H068565 CRD		<10	114	<10	108	0.005	0.0462	0.049			
H068566		<10	116	<10	96	0.007	0.0541	0.058			
H068567		<10	122	<10	108	0.015	0.175	0.192			
H068568		<10	129	<10	100	0.007	0.0658	0.069			
H068569		<10	141	<10	100	0.005	0.0464	0.047			
H068570		<10	139	<10	98	0.006	0.0566	0.057			
H068571		<10	142	<10	96	0.022	0.212	0.242			
H068572		<10	161	<10	126	0.004	0.0289	0.027			
H068573		<10	160	<10	106	0.015	0.155	0.177			
H068574		<10	161	<10	104	0.004	0.0548	0.052			
H068575		<10	157	<10	102	0.012	0.124	0.138			
H068576		<10	165	<10	101	0.014	0.133	0.147			
H068577		<10	186	<10	104	0.010	0.0823	0.090			
H068578		<10	188	<10	102	0.019	0.183	0.210			
H068579		<10	179	<10	95	0.023	0.254	0.289			
H068580		<10	171	<10	119	0.122	>1.00	>1.00	0.12	1.51	1.41
H068581		<10	222	<10	114	0.007	0.0677	0.076			
H068582		<10	211	<10	101	0.006	0.0409	0.039			
H068583		<10	214	<10	134	0.004	0.0192	0.015			
H068584		<10	22	<10	11	0.002	0.0010	0.001			
H068585		<10	28	<10	9	0.002	0.0015	0.001			
H068586		<10	76	<10	23	0.001	0.0010	0.001			
H068587		<10	77	<10	32	0.002	0.0016	0.002			
H068588		10	86	<10	35	0.002	0.0014	0.001			
H068589		<10	10	<10	6	0.001	0.0007	<0.001			
H068590		<10	157	<10	101	0.134	0.426	0.399			
H068591		<10	73	<10	22	0.001	0.0008	0.001			
H068592		<10	81	<10	44	0.002	0.0024	0.002			
H068593		10	48	<10	15	0.002	0.0010	0.001			
H068594		<10	94	<10	24	0.002	0.0017	0.001			
H068595		<10	93	<10	110	0.001	0.0009	0.001			
H068596		10	73	<10	91	0.001	0.0011	0.001			
H068597		<10	25	<10	51	0.001	0.0007	0.001			
H068598		<10	37	<10	21	0.001	0.0009	0.001			
H068599		<10	42	<10	37	0.001	0.0008	0.001			



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Project: STEEP LEDGE

## CERTIFICATE OF ANALYSIS TB08172706

Sample Description	Method Analyte Units LOR	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Recvd Wt. kg	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %
		0.02	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	0.01	10	0.01	
H068600		0.05	<0.5	6.67	<5	930	1.0	<2	1.41	<0.5	3	22	13	1.55	10	2.16
H068601		4.00	<0.5	7.49	<5	1080	0.8	<2	0.80	<0.5	5	19	10	1.59	20	4.17
H068602		3.45	<0.5	8.55	<5	450	1.0	<2	1.44	<0.5	17	88	31	3.90	20	2.52
H068603		3.20	<0.5	8.07	6	1090	0.7	<2	1.02	<0.5	6	18	17	2.04	20	4.15
H068604		2.88	<0.5	6.98	<5	1110	0.6	<2	0.59	<0.5	5	18	9	1.35	10	4.44
H068605		1.44	<0.5	7.60	<5	280	1.4	<2	2.69	<0.5	40	9	43	7.54	20	1.19
H068605 CRD		0.02	<0.5	7.41	<5	270	1.4	<2	2.62	<0.5	38	9	41	7.43	20	1.16
H068606		3.85	<0.5	6.85	<5	880	0.6	<2	0.67	<0.5	6	30	13	1.78	10	3.45
H068607		3.03	<0.5	7.10	10	790	0.9	<2	0.66	<0.5	8	28	26	1.98	20	3.27
H068608		2.26	<0.5	7.92	9	370	1.5	<2	3.51	<0.5	35	7	15	8.18	20	1.21
H068609		2.58	0.6	7.60	8	270	1.7	<2	3.41	<0.5	35	5	19	8.06	20	1.07
H068610		0.06	2.4	3.61	<5	180	0.8	<2	3.94	0.5	110	2110	2630	9.58	10	0.41
H068611		3.45	0.6	7.54	9	250	1.6	<2	3.56	<0.5	49	19	35	9.58	20	0.92
H068612		3.25	0.7	7.56	6	180	1.6	<2	3.76	<0.5	70	28	106	11.70	20	0.72
H068613		3.36	0.7	7.24	8	290	1.5	<2	3.34	<0.5	55	18	50	10.30	20	0.84
H068614		3.25	0.6	7.63	5	340	1.6	<2	3.49	<0.5	62	22	52	11.10	20	0.99
H068615		3.26	0.7	7.00	<5	420	1.5	<2	3.52	<0.5	55	14	74	9.37	20	1.14
H068616		1.62	<0.5	7.12	8	320	1.4	<2	4.20	<0.5	37	7	9	8.09	20	1.14
H068617		2.75	17.6	6.85	<5	970	0.6	<2	0.62	<0.5	5	19	18	1.58	10	3.73
H068618		1.31	<0.5	6.88	<5	1030	0.7	<2	0.45	<0.5	2	6	5	0.67	10	4.32
H068619		1.47	<0.5	7.61	<5	460	1.3	<2	3.79	<0.5	36	12	20	7.43	20	1.66
H068620		0.79	<0.5	7.25	<5	600	1.1	<2	3.61	<0.5	28	8	13	6.11	20	2.23
H068621		3.36	<0.5	7.17	<5	830	1.0	<2	0.90	<0.5	5	25	11	1.50	20	3.79



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## CERTIFICATE OF ANALYSIS TB08172706

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th	Ti	Tl
		ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
		10	0.01	5	1	0.01	1	10	2	0.01	5	1	20	0.01	10	
H068600		10	0.18	561	<1	2.80	3	180	6	0.01	<5	5	183	<20	0.12	<10
H068601		30	0.63	228	<1	2.39	12	1550	28	0.24	<5	4	378	<20	0.14	<10
H068602		20	1.41	540	<1	3.00	54	780	15	0.24	<5	13	438	<20	0.35	<10
H068603		50	0.64	247	<1	2.65	9	1420	22	0.20	<5	5	421	20	0.18	<10
H068604		30	0.33	157	<1	2.01	8	330	22	0.26	<5	3	384	<20	0.14	<10
H068605		30	2.84	977	<1	2.55	36	1530	7	1.86	<5	17	386	<20	1.56	<10
H068605 CRD		30	2.81	959	<1	2.49	35	1510	4	1.77	<5	16	380	<20	1.54	<10
H068606		30	0.44	235	<1	2.01	15	380	22	0.52	<5	5	419	<20	0.15	<10
H068607		20	0.52	230	<1	2.03	17	470	23	0.85	<5	5	385	<20	0.18	<10
H068608		40	2.66	1055	<1	3.14	30	1730	6	1.36	<5	18	470	<20	1.71	<10
H068609		40	2.50	1010	<1	2.77	17	1910	2	2.10	<5	19	517	<20	1.64	<10
H068610		20	12.85	1330	<1	1.00	1350	690	9	0.63	6	17	421	<20	0.85	<10
H068611		30	3.21	1170	<1	2.62	56	1700	8	1.84	<5	19	551	<20	1.82	<10
H068612		30	3.91	1300	<1	1.89	98	1590	13	3.60	<5	20	665	<20	2.07	<10
H068613		30	3.40	1130	<1	2.43	69	1660	21	2.45	<5	18	592	<20	1.85	<10
H068614		40	3.69	1205	<1	2.66	84	1710	19	1.92	<5	19	642	<20	1.97	<10
H068615		30	2.97	1015	<1	2.41	58	1570	24	2.30	<5	18	598	<20	1.76	<10
H068616		30	2.55	914	<1	2.93	36	1660	4	0.75	<5	18	470	<20	1.71	<10
H068617		40	0.30	185	<1	2.16	10	350	19	0.41	<5	4	441	20	0.14	<10
H068618		20	0.08	83	<1	2.39	3	230	25	0.22	<5	1	419	<20	0.05	<10
H068619		30	2.42	915	<1	2.75	36	1440	8	0.70	<5	16	363	<20	1.47	<10
H068620		30	1.85	729	<1	2.52	30	1160	11	0.58	<5	12	362	<20	1.14	<10
H068621		20	0.34	225	<1	2.31	12	340	19	0.14	<5	4	374	<20	0.12	<10



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**CERTIFICATE OF ANALYSIS TB08172706**

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	PGM-MS23	PGM-MS23	PGM-MS23	PGM-ICP27	PGM-ICP27	PGM-ICP27
		U	V	W	Zn	Au	Pt	Pd	Au	Pt	Pd
		ppm 10	ppm 1	ppm 10	ppm 2	ppm 0.001	ppm 0.0005	ppm 0.001	ppm 0.03	ppm 0.03	ppm 0.03
H068600		10	15	<10	25	0.001	0.0008	<0.001			
H068601		<10	27	<10	42	0.001	<0.0005	<0.001			
H068602		<10	102	<10	87	0.001	0.0007	<0.001			
H068603		<10	30	<10	38	0.001	0.0014	0.001			
H068604		<10	23	<10	16	0.001	0.0005	<0.001			
H068605		<10	262	<10	91	0.001	<0.0005	<0.001			
H068605 CRD		<10	259	<10	89	0.001	<0.0005	<0.001			
H068606		<10	30	<10	23	0.001	0.0008	0.001			
H068607		<10	42	<10	40	0.001	0.0008	0.001			
H068608		<10	272	<10	107	0.001	0.0008	0.001			
H068609		<10	248	<10	82	0.001	0.0005	<0.001			
H068610		<10	171	<10	104	0.096	>1.00	>1.00	0.09	1.28	1.19
H068611		<10	325	<10	102	0.001	0.0013	0.001			
H068612		<10	416	<10	131	0.001	0.0007	<0.001			
H068613		<10	354	<10	124	0.002	0.0009	0.001			
H068614		<10	389	<10	133	<0.001	<0.0005	<0.001			
H068615		<10	323	<10	130	0.001	0.0006	<0.001			
H068616		<10	288	<10	109	0.002	0.0005	<0.001			
H068617		<10	24	<10	13	0.001	0.0007	<0.001			
H068618		<10	8	<10	6	0.001	<0.0005	<0.001			
H068619		<10	250	<10	110	0.001	<0.0005	<0.001			
H068620		<10	193	<10	88	0.001	<0.0005	<0.001			
H068621		<10	27	<10	26	0.001	0.0008	0.001			





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P.O. BOX 10628

THUNDER BAY ON P7B 6V1

Page: 1

Finalized Date: 30-DEC-2008

Account: MGMAM

## CERTIFICATE TB08173424

Project: STEEP LEDGE  
 P.O. No.:  
 This report is for 66 Drill Core samples submitted to our lab in Thunder Bay, ON, Canada on 10-DEC-2008.

The following have access to data associated with this certificate:

JUSTIN JOHNSON KEITH WATKINS	PHILIP LITTLE	ALLAN MAC TAVISH
---------------------------------	---------------	------------------

## SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
LOG-21d	Sample logging - ClientBarCode Dup
SPL-21d	Split sample - duplicate
PUL-31d	Pulverize Split - duplicate
SPL-34	Pulp Splitting Charge
CRU-31	Fine crushing - 70% <2mm
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

## ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
PGM-MS23	Pt, Pd, Au 30g FA ICP-MS	ICP-MS
PGM-ICP27	Ore grade Pt, Pd and Au by ICP	ICP-AES
ME-ICP61	33 element four acid ICP-AES	ICP-AES

To: MAGMA METALS (CANADA) LIMITED  
 ATTN: JUSTIN JOHNSON  
 P.O. BOX 10628  
 THUNDER BAY ON P7B 6V1

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



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Total # Pages: 3 (A - C)  
Finalized Date: 30-DEC-2008  
Account: MGMAM

Project: STEEP LEDGE

## CERTIFICATE OF ANALYSIS TB08173424

Sample Description	Method Analyte Units LOR	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Recvd Wt kg	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %
H068622		2.08	<0.5	7.26	17	430	1.9	<2	2.40	<0.5	22	3	23	6.60	20	1.61
H068623		2.90	<0.5	7.34	7	570	2.1	2	2.06	<0.5	22	1	3	6.93	20	1.66
H068624		3.17	<0.5	7.27	<5	500	2.3	<2	2.14	<0.5	26	1	3	7.25	20	1.36
H068625		2.75	0.5	7.03	5	420	1.8	2	1.89	<0.5	23	<1	2	7.69	20	1.38
H068626		2.78	<0.5	7.04	9	500	1.9	4	1.98	<0.5	25	1	4	7.39	20	1.55
H068627		3.51	<0.5	7.07	<5	430	1.9	<2	2.43	<0.5	26	<1	3	7.68	20	1.39
H068628		2.84	<0.5	7.03	6	430	2.0	3	2.17	<0.5	27	<1	10	8.44	20	1.35
H068629		3.16	<0.5	7.46	9	470	1.9	<2	1.89	<0.5	29	4	6	8.51	20	1.42
H068630		0.10	1.2	3.04	7	150	0.7	<2	3.34	<0.5	111	2310	769	9.16	10	0.33
H068631		4.45	0.7	7.30	5	560	2.3	<2	1.05	<0.5	31	8	8	7.25	20	1.43
H068632		2.83	0.5	7.57	9	430	2.0	<2	1.36	<0.5	29	4	3	7.73	20	1.62
H068633		2.24	<0.5	7.38	7	610	2.5	<2	0.79	<0.5	30	4	6	6.48	20	1.74
H068634		2.16	0.7	7.66	15	400	2.2	<2	0.57	<0.5	30	3	18	6.64	20	1.79
H068635		3.34	<0.5	7.30	8	610	2.0	<2	1.23	<0.5	32	3	3	8.29	20	1.60
H068636		3.25	<0.5	7.38	10	500	1.8	<2	2.26	<0.5	33	2	25	9.34	20	1.44
H068637		3.73	0.6	7.25	5	610	1.6	<2	2.49	<0.5	29	3	30	8.74	20	1.38
H068638		2.46	0.6	7.01	6	430	1.5	<2	2.72	<0.5	36	2	78	10.40	20	1.15
H068639		4.00	0.7	6.97	7	460	1.5	<2	2.56	<0.5	37	3	29	10.05	20	1.31
H068640		0.09	<0.5	6.18	<5	860	0.9	<2	1.28	<0.5	3	25	13	1.42	10	2.02
H068641		3.87	0.8	7.14	<5	310	1.6	<2	2.30	<0.5	41	3	5	9.14	20	1.12
H068642		2.64	0.5	6.98	9	220	1.6	<2	1.91	<0.5	43	2	7	9.83	20	1.06
H068643		2.75	<0.5	7.22	9	210	1.8	<2	1.11	<0.5	40	2	5	8.84	20	1.21
H068644		3.39	2.0	6.79	14	210	1.5	<2	2.26	<0.5	41	2	56	10.45	20	1.10
H068645		3.03	0.6	6.65	8	170	1.4	<2	2.22	<0.5	46	2	6	8.78	20	0.99
H068646		3.51	1.2	6.92	<5	160	1.5	<2	2.21	<0.5	45	3	5	10.20	20	1.03
H068647		3.87	27.4	6.24	73	1110	1.1	<2	0.02	0.9	6	4	18	2.05	20	4.39
H068648		3.34	<0.5	6.98	<5	290	1.4	<2	2.64	<0.5	54	2	12	10.80	20	1.10
H068649		3.60	0.5	7.08	<5	180	1.3	<2	2.93	<0.5	60	3	17	10.75	20	0.93
H068650		0.10	3.0	2.90	5	150	0.8	<2	3.22	0.5	119	2070	3120	9.60	10	0.36
H068651		3.49	0.6	6.99	<5	210	1.2	<2	3.16	<0.5	60	4	46	11.00	20	0.98
H068652		2.94	0.9	6.98	<5	680	1.4	<2	4.15	<0.5	54	1	69	10.45	20	1.44
H068653		2.71	0.5	6.96	7	220	1.3	<2	3.91	<0.5	57	2	84	10.60	20	0.87
H068654		4.05	<0.5	6.83	6	170	1.2	<2	5.18	<0.5	62	1	129	11.40	20	0.76
H068655		3.28	1.0	6.18	<5	160	1.0	<2	5.10	<0.5	63	1	124	11.45	20	0.79
H068656		3.50	0.7	5.80	<5	150	1.0	<2	5.75	<0.5	67	2	192	12.10	20	0.68
H068657		3.40	<0.5	4.61	<5	110	1.0	<2	6.22	<0.5	79	3	364	13.35	20	0.49
H068658		3.64	1.1	4.41	<5	110	0.9	<2	6.20	<0.5	85	9	542	14.20	20	0.50
H068659		1.52	0.7	4.34	<5	110	0.9	<2	6.76	<0.5	75	20	653	13.70	20	0.48
H068660		2.15	0.8	4.27	5	110	0.9	<2	6.78	<0.5	73	23	658	13.60	20	0.46
H068661		3.03	0.5	4.16	5	130	0.9	<2	8.15	<0.5	63	48	441	8.89	20	0.50



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Total # Pages: 3 (A - C)

Finalized Date: 30-DEC-2008

Account: MGMAM

Project: STEEP LEDGE

## CERTIFICATE OF ANALYSIS TB08173424

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	Ti ppm
		10	0.01	5	1	0.01	1	10	2	0.01	5	1	20	0.01	10	
H068622		40	2.24	1665	1	3.16	1	2090	10	0.66	<5	10	290	<20	1.28	<10
H068623		40	2.31	1355	<1	2.97	<1	2150	7	0.64	<5	11	407	<20	1.25	<10
H068624		40	2.67	1260	1	2.82	<1	1830	8	0.98	<5	12	503	<20	1.33	<10
H068625		30	2.55	1580	1	2.99	<1	1650	6	0.70	<5	12	343	<20	1.35	<10
H068626		30	2.68	1260	<1	2.64	<1	1720	7	0.71	<5	12	504	<20	1.43	<10
H068627		30	2.50	2110	1	2.74	<1	1780	7	0.52	<5	12	426	<20	1.42	<10
H068628		30	2.58	2660	1	2.55	1	1870	5	0.55	<5	14	451	<20	1.42	<10
H068629		30	2.86	1465	1	2.70	4	1820	9	0.71	<5	15	397	<20	1.44	<10
H068630		20	13.55	1305	1	0.78	1165	660	2	0.27	<5	15	336	<20	0.75	<10
H068631		30	3.03	830	<1	2.45	2	1340	3	1.40	<5	16	300	<20	1.59	<10
H068632		30	3.03	825	<1	2.76	1	1530	3	0.80	<5	14	448	<20	1.43	<10
H068633		30	3.09	733	1	2.57	3	1530	5	1.46	<5	14	266	<20	1.46	<10
H068634		20	3.20	610	1	2.85	4	1580	3	0.82	<5	14	163	<20	1.64	<10
H068635		30	2.92	943	<1	2.49	1	1460	3	1.07	<5	15	473	<20	1.45	<10
H068636		30	2.66	1875	<1	2.55	2	1410	6	0.55	<5	16	458	<20	1.54	<10
H068637		30	2.71	2040	1	2.58	2	1670	6	0.36	<5	14	488	<20	1.47	<10
H068638		30	2.95	2040	<1	2.31	3	1370	4	0.53	<5	17	482	<20	1.65	<10
H068639		30	3.02	2160	1	2.27	<1	1340	8	0.71	<5	17	445	<20	1.71	<10
H068640		10	0.19	513	1	2.57	2	170	9	<0.01	<5	4	164	<20	0.11	<10
H068641		30	3.33	1050	<1	2.44	3	1420	5	1.07	<5	18	596	<20	1.63	<10
H068642		30	3.63	1350	<1	2.27	4	1430	3	0.90	<5	19	433	<20	1.80	<10
H068643		20	3.56	855	<1	2.58	6	1320	5	0.77	<5	17	285	<20	1.68	<10
H068644		30	3.27	1855	<1	2.24	5	1190	16	0.52	<5	19	331	<20	1.78	<10
H068645		30	3.68	803	<1	2.14	7	1200	8	1.00	<5	19	649	<20	1.73	<10
H068646		30	3.79	1200	<1	2.46	5	1130	12	0.68	<5	20	599	<20	1.72	<10
H068647		20	0.24	919	3	0.16	1	200	28	<0.01	7	8	64	<20	0.26	<10
H068648		30	2.93	1645	<1	2.39	10	1110	11	0.89	<5	21	470	<20	1.74	<10
H068649		30	3.41	864	<1	2.29	14	1140	6	1.48	<5	22	619	<20	1.72	<10
H068650		30	12.85	1265	1	0.77	1475	750	8	0.63	<5	15	319	<20	0.76	<10
H068651		30	3.31	961	<1	2.32	19	1180	6	1.25	<5	22	608	<20	1.77	<10
H068652		20	3.15	2430	<1	2.11	22	1100	9	0.38	<5	23	387	<20	1.84	<10
H068653		30	3.13	1680	<1	2.40	25	1120	7	0.42	<5	24	352	<20	1.88	<10
H068654		20	3.46	1910	<1	2.49	32	990	5	0.35	<5	24	259	<20	2.01	<10
H068655		20	3.23	1290	<1	2.26	46	890	<2	0.64	<5	25	372	<20	1.93	<10
H068656		20	3.69	1415	<1	2.05	67	860	5	0.63	<5	30	337	<20	1.99	<10
H068657		20	4.37	1600	<1	1.63	100	780	<2	0.38	<5	36	172	<20	2.23	<10
H068658		20	4.52	1470	<1	1.63	142	760	2	0.43	<5	38	150	<20	2.37	<10
H068659		20	4.84	1675	<1	1.62	187	730	2	0.32	<5	41	135	<20	2.23	<10
H068660		20	4.86	1745	<1	1.59	189	710	4	0.28	<5	41	128	<20	2.24	<10
H068661		20	5.96	1585	<1	1.04	174	760	6	0.30	<5	44	373	<20	1.35	<10



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Project: STEEP LEDGE

## CERTIFICATE OF ANALYSIS TB08173424

Sample Description	Method	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	PGM-MS23	PGM-MS23	PGM-MS23	PGM-ICP27	PGM-ICP27	PGM-ICP27
	Analyte	U	V	W	Zn	Au	Pt	Pd	Au	Pt	Pd
	Units LOR	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		10	1	10	2	0.001	0.0005	0.001	0.03	0.03	0.03
H068622		<10	160	<10	137	0.001	0.0006	<0.001			
H068623		<10	164	<10	122	<0.001	<0.0005	<0.001			
H068624		<10	179	<10	127	0.003	0.0035	0.002			
H068625		<10	187	<10	114	0.002	0.0027	0.002			
H068626		<10	204	<10	120	<0.001	0.0008	0.001			
H068627		<10	203	<10	121	<0.001	0.0005	<0.001			
H068628		<10	216	<10	121	<0.001	0.0005	<0.001			
H068629		<10	228	<10	129	<0.001	0.0005	<0.001			
H068630		<10	152	<10	101	0.147	0.469	0.427			
H068631		<10	236	<10	97	0.001	0.0005	<0.001			
H068632		<10	216	<10	103	0.001	0.0005	<0.001			
H068633		10	214	<10	87	0.003	0.0005	<0.001			
H068634		10	233	<10	99	<0.001	0.0008	0.001			
H068635		10	236	<10	91	0.001	<0.0005	<0.001			
H068636		<10	257	<10	111	0.001	<0.0005	<0.001			
H068637		<10	225	<10	95	0.001	<0.0005	<0.001			
H068638		<10	276	<10	106	0.001	<0.0005	<0.001			
H068639		<10	291	<10	113	0.003	0.0007	0.001			
H068640		<10	14	<10	26	0.002	0.0007	0.001			
H068641		<10	303	<10	105	0.001	0.0005	<0.001			
H068642		<10	322	<10	129	0.001	0.0011	<0.001			
H068643		10	285	<10	118	0.001	<0.0005	<0.001			
H068644		<10	312	<10	117	0.001	0.0005	<0.001			
H068645		<10	325	<10	119	0.001	0.0006	<0.001			
H068646		<10	345	<10	115	0.001	<0.0005	<0.001			
H068647		<10	42	<10	117	0.001	0.0007	<0.001			
H068648		<10	405	<10	119	0.001	0.0005	<0.001			
H068649		<10	425	<10	124	0.001	<0.0005	<0.001			
H068650		<10	154	<10	107	0.111	>1.00	>1.00	0.12	1.56	1.44
H068651		<10	443	<10	125	0.001	0.0011	0.001			
H068652		<10	430	<10	103	0.001	0.0008	0.001			
H068653		<10	445	<10	95	0.001	0.0005	<0.001			
H068654		<10	499	<10	81	0.001	<0.0005	<0.001			
H068655		<10	505	<10	112	0.001	0.0005	<0.001			
H068656		<10	552	<10	105	0.001	<0.0005	<0.001			
H068657		<10	640	<10	81	0.001	<0.0005	<0.001			
H068658		<10	703	<10	94	0.002	0.0005	<0.001			
H068659		<10	715	<10	84	0.002	0.0008	<0.001			
H068660		<10	717	<10	82	0.002	0.0007	<0.001			
H068661		<10	339	<10	76	0.004	0.0034	0.001			



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## CERTIFICATE OF ANALYSIS TB08173424

Sample Description	Method Analyte Units LOR	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Recvd Wt kg	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %
		0.02	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	0.01	10	0.01	
H068662		3.46	<0.5	4.12	11	110	0.9	<2	8.15	<0.5	54	69	582	7.59	10	0.48
H068663		3.54	<0.5	3.81	8	70	0.9	<2	8.98	<0.5	47	136	503	7.19	10	0.44
H068664		2.46	<0.5	3.68	<5	70	0.8	<2	9.01	<0.5	47	228	319	6.94	10	0.44
H068665		2.55	<0.5	3.61	<5	70	0.7	<2	8.86	<0.5	45	330	306	7.01	10	0.41
H068665CRD		<0.02	<0.5	3.72	<5	70	0.8	<2	9.00	<0.5	47	349	312	7.27	10	0.42
H068666		3.48	<0.5	3.39	<5	70	0.8	<2	9.09	<0.5	56	525	148	7.24	10	0.37
H068667		3.22	<0.5	3.38	<5	50	0.7	<2	8.75	<0.5	52	763	195	7.21	10	0.30
H068668		2.85	0.7	3.27	10	50	0.7	<2	8.15	1.0	56	1255	162	7.07	10	0.25
H068669		2.20	<0.5	2.20	<5	90	0.5	<2	2.65	<0.5	120	1390	139	9.92	10	0.22
H068670		0.10	1.1	3.03	6	150	0.7	<2	3.40	<0.5	113	2310	836	9.47	10	0.33
H068671		2.31	<0.5	2.40	<5	90	0.5	<2	2.97	<0.5	122	1990	153	9.70	<10	0.31
H068672		2.52	<0.5	2.41	<5	100	0.6	<2	2.56	<0.5	123	2610	379	9.67	10	0.31
H068673		2.42	<0.5	2.17	<5	90	0.5	<2	2.21	<0.5	134	2670	342	10.10	<10	0.23
H068674		2.11	<0.5	2.20	5	80	<0.5	<2	2.03	<0.5	129	2460	373	10.00	<10	0.23
H068675		2.30	<0.5	2.20	<5	80	<0.5	<2	2.20	<0.5	131	2390	245	10.15	<10	0.20
H068676		2.19	<0.5	2.23	<5	80	0.5	<2	2.45	<0.5	134	2280	300	10.10	<10	0.32
H068677		2.31	<0.5	2.09	5	90	0.5	<2	2.29	<0.5	132	2110	115	9.99	<10	0.29
H068678		2.14	<0.5	2.18	<5	80	<0.5	<2	2.45	<0.5	128	1350	113	10.05	<10	0.23
H068679		2.57	<0.5	2.42	<5	100	0.6	<2	2.82	<0.5	131	882	215	10.25	<10	0.28
H068680		0.09	<0.5	5.83	<5	880	1.0	<2	1.28	<0.5	2	32	12	1.50	10	2.06
H068681		2.64	<0.5	2.79	<5	120	0.7	2	3.31	<0.5	119	598	495	10.35	10	0.32
H068682		1.55	0.5	3.45	<5	100	0.7	2	3.25	<0.5	105	480	617	9.90	10	0.43
H068683		2.28	0.8	3.52	<5	110	0.6	2	4.13	<0.5	117	369	1065	10.90	10	0.42
H068684		2.33	0.5	4.16	<5	170	0.8	<2	3.87	<0.5	111	278	524	10.75	10	0.40
H068685		2.99	<0.5	6.27	<5	650	1.1	<2	0.13	<0.5	3	22	12	1.48	20	3.97
H068686		3.17	<0.5	6.29	<5	650	1.1	<2	0.11	<0.5	2	26	3	1.23	20	3.71



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THUNDER BAY ON P7B 6V1

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Finalized Date: 30-DEC-2008

Account: MGMAM

Project: STEEP LEDGE

## CERTIFICATE OF ANALYSIS TB08173424

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		La ppm 10	Mg % 0.01	Mn ppm 5	Mo ppm 1	Na % 0.01	Ni ppm 1	P ppm 10	Pb ppm 2	S % 0.01	Sb ppm 5	Sc ppm 1	Sr ppm 1	Th ppm 20	Ti % 0.01	Tl ppm 10
H068662		20	6.14	1455	<1	1.26	182	740	5	0.32	<5	45	219	<20	1.07	<10
H068663		20	6.23	1505	<1	1.36	172	700	3	0.20	<5	48	146	<20	1.08	<10
H068664		20	6.18	1390	<1	1.33	157	680	4	0.29	<5	47	218	<20	1.01	<10
H068665		20	6.47	1465	1	1.26	165	640	4	0.19	<5	48	135	<20	0.94	<10
H068665CRD		20	6.57	1515	<1	1.32	170	640	3	0.20	<5	49	135	<20	1.00	<10
H068666		20	6.57	1195	<1	0.56	200	650	2	0.59	<5	45	532	<20	0.91	<10
H068667		20	7.47	1515	<1	0.84	218	600	4	0.19	<5	45	150	<20	0.91	<10
H068668		20	8.27	1670	1	0.60	256	600	290	0.43	<5	42	123	<20	0.88	<10
H068669		10	14.10	1425	<1	0.43	988	530	<2	0.54	<5	14	195	<20	0.58	<10
H068670		20	13.70	1320	1	0.76	1245	640	<2	0.29	14	15	348	<20	0.75	<10
H068671		10	14.80	1365	<1	0.47	1165	510	5	0.21	13	15	242	<20	0.65	<10
H068672		10	15.30	1315	<1	0.45	1375	470	2	0.25	14	13	208	<20	0.63	<10
H068673		10	16.00	1385	<1	0.41	1425	530	<2	0.27	21	13	170	<20	0.60	<10
H068674		10	15.60	1375	<1	0.36	1415	500	<2	0.28	16	13	156	<20	0.59	<10
H068675		10	15.60	1370	<1	0.40	1330	490	<2	0.24	18	12	183	<20	0.61	<10
H068676		10	15.45	1360	<1	0.37	1350	480	<2	0.11	15	12	218	<20	0.63	<10
H068677		10	15.25	1345	<1	0.43	1245	600	<2	0.10	14	12	213	<20	0.54	<10
H068678		10	14.90	1370	<1	0.46	1170	550	<2	0.17	10	12	240	<20	0.59	<10
H068679		10	14.35	1405	<1	0.54	1165	540	<2	0.18	9	14	247	<20	0.67	<10
H068680		10	0.21	540	<1	2.62	5	170	6	<0.01	<5	5	168	<20	0.11	<10
H068681		20	13.25	1415	<1	0.72	1130	580	<2	0.26	5	17	277	<20	0.73	<10
H068682		20	11.70	1425	<1	0.54	909	690	<2	1.28	<5	21	229	<20	0.90	<10
H068683		10	11.30	1475	<1	0.66	1180	590	<2	0.82	<5	22	296	<20	1.11	<10
H068684		20	9.63	1585	<1	1.02	782	820	<2	0.47	<5	18	434	<20	1.17	<10
H068685		40	0.33	107	<1	1.67	13	190	8	0.47	<5	4	98	30	0.10	<10
H068686		40	0.22	51	1	1.58	4	220	10	0.58	<5	4	83	30	0.10	<10



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Total # Pages: 3 (A - C)

Finalized Date: 30-DEC-2008

Account: MGMAM

Project: STEEP LEDGE

## CERTIFICATE OF ANALYSIS TB08173424

Sample Description	Method	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	PGM-MS23	PGM-MS23	PGM-MS23	PGM-ICP27	PGM-ICP27	PGM-ICP27
	Analyte	U	V	W	Zn	Au	Pt	Pd	Au	Pt	Pd
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LOR		10	1	10	2	0.001	0.0005	0.001	0.03	0.03	0.03
H068662		<10	247	<10	69	0.009	0.0250	0.009			
H068663		<10	254	<10	56	0.009	0.0377	0.012			
H068664		<10	243	<10	58	0.007	0.0376	0.013			
H068665		<10	234	<10	66	0.006	0.0388	0.014			
H068665CRD		<10	243	<10	74	0.008	0.0341	0.013			
H068666		<10	226	<10	83	0.008	0.0229	0.012			
H068667		<10	220	<10	87	0.005	0.0228	0.026			
H068668		<10	208	<10	302	0.002	0.0073	0.009			
H068669		<10	128	<10	101	0.003	0.0243	0.026			
H068670		<10	153	<10	99	0.121	0.415	0.400			
H068671		<10	139	<10	98	0.004	0.0320	0.032			
H068672		<10	136	<10	94	0.010	0.107	0.110			
H068673		<10	135	<10	98	0.008	0.0863	0.087			
H068674		<10	135	<10	97	0.010	0.114	0.125			
H068675		<10	131	<10	98	0.005	0.0758	0.070			
H068676		<10	132	<10	99	0.004	0.0500	0.049			
H068677		<10	124	<10	95	0.002	0.0212	0.015			
H068678		<10	121	<10	92	0.002	0.0136	0.009			
H068679		<10	138	<10	98	0.003	0.0212	0.019			
H068680		<10	14	<10	27	0.002	0.0008	<0.001			
H068681		<10	153	<10	98	0.004	0.0358	0.034			
H068682		<10	181	<10	94	0.005	0.0430	0.042			
H068683		<10	221	<10	114	0.007	0.0715	0.068			
H068684		<10	219	<10	110	0.004	0.0322	0.031			
H068685		<10	11	<10	20	0.001	0.0008	0.001			
H068686		<10	11	<10	18	0.001	0.0005	<0.001			



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P.O. BOX 10628  
THUNDER BAY ON P7B 6V1

Page: 1  
Finalized Date: 30-DEC-2008  
Account: MGMAM

## CERTIFICATE TB08173424

Project: STEEP LEDGE  
P.O. No.:  
This report is for 66 Drill Core samples submitted to our lab in Thunder Bay, ON, Canada on 10-DEC-2008.

The following have access to data associated with this certificate:

JUSTIN JOHNSON KEITH WATKINS	PHILIP LITTLE	ALLAN MAC TAVISH
---------------------------------	---------------	------------------

## SAMPLE PREPARATION

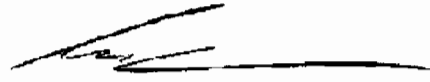
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
LOG-21d	Sample logging - ClientBarCode Dup
SPL-21d	Split sample - duplicate
PUL-31d	Pulverize Split - duplicate
SPL-34	Pulp Splitting Charge
CRU-31	Fine crushing - 70% <2mm
LOG-23	Pulp Login - Rcvd with Barcode
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

## ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
PGM-MS23	Pt, Pd, Au 30g FA ICP-MS	ICP-MS
PGM-ICP27	Ore grade Pt, Pd and Au by ICP	ICP-AES
ME-ICP61	33 element four acid ICP-AES	ICP-AES

To: MAGMA METALS (CANADA) LIMITED  
ATTN: JUSTIN JOHNSON  
P.O. BOX 10628  
THUNDER BAY ON P7B 6V1

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:   
Colin Ramshaw, Vancouver Laboratory Manager





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Project: STEEP LEDGE

**CERTIFICATE OF ANALYSIS TB08173424**

Sample Description	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
	Recvd Wt kg	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	
H068622	2.08	<0.5	7.26	17	430	1.9	<2	2.40	<0.5	22	3	23	6.60	20	1.61	
H068623	2.90	<0.5	7.34	7	570	2.1	2	2.06	<0.5	22	1	3	6.93	20	1.66	
H068624	3.17	<0.5	7.27	<5	500	2.3	<2	2.14	<0.5	26	1	3	7.25	20	1.36	
H068625	2.75	0.5	7.03	5	420	1.8	2	1.89	<0.5	23	<1	2	7.69	20	1.38	
H068626	2.78	<0.5	7.04	9	500	1.9	4	1.98	<0.5	25	1	4	7.39	20	1.55	
H068627	3.51	<0.5	7.07	<5	430	1.9	<2	2.43	<0.5	26	<1	3	7.68	20	1.39	
H068628	2.84	<0.5	7.03	6	430	2.0	3	2.17	<0.5	27	<1	10	8.44	20	1.35	
H068629	3.16	<0.5	7.46	9	470	1.9	<2	1.89	<0.5	29	4	6	8.51	20	1.42	
H068630	0.10	1.2	3.04	7	150	0.7	<2	3.34	<0.5	111	2310	769	9.16	10	0.33	
H068631	4.45	0.7	7.30	5	560	2.3	<2	1.05	<0.5	31	8	8	7.25	20	1.43	
H068632	2.83	0.5	7.57	9	430	2.0	<2	1.36	<0.5	29	4	3	7.73	20	1.62	
H068633	2.24	<0.5	7.38	7	610	2.5	<2	0.79	<0.5	30	4	6	6.48	20	1.74	
H068634	2.16	0.7	7.66	15	400	2.2	<2	0.57	<0.5	30	3	18	6.64	20	1.79	
H068635	3.34	<0.5	7.30	8	610	2.0	<2	1.23	<0.5	32	3	3	8.29	20	1.60	
H068636	3.25	<0.5	7.38	10	500	1.8	<2	2.26	<0.5	33	2	25	9.34	20	1.44	
H068637	3.73	0.6	7.25	5	610	1.6	<2	2.49	<0.5	29	3	30	8.74	20	1.38	
H068638	2.46	0.6	7.01	6	430	1.5	<2	2.72	<0.5	36	2	78	10.40	20	1.15	
H068639	4.00	0.7	6.97	7	460	1.5	<2	2.56	<0.5	37	3	29	10.05	20	1.31	
H068640	0.09	<0.5	6.18	<5	860	0.9	<2	1.28	<0.5	3	25	13	1.42	10	2.02	
H068641	3.87	0.8	7.14	<5	310	1.6	<2	2.30	<0.5	41	3	5	9.14	20	1.12	
H068642	2.64	0.5	6.98	9	220	1.6	<2	1.91	<0.5	43	2	7	9.83	20	1.06	
H068643	2.75	<0.5	7.22	9	210	1.8	<2	1.11	<0.5	40	2	5	8.84	20	1.21	
H068644	3.39	2.0	6.79	14	210	1.5	<2	2.26	<0.5	41	2	56	10.45	20	1.10	
H068645	3.03	0.6	6.65	8	170	1.4	<2	2.22	<0.5	46	2	6	8.78	20	0.99	
H068646	3.51	1.2	6.92	<5	160	1.5	<2	2.21	<0.5	45	3	5	10.20	20	1.03	
H068647	3.87	27.4	6.24	73	1110	1.1	<2	0.02	0.9	6	4	18	2.05	20	4.39	
H068648	3.34	<0.5	6.98	<5	290	1.4	<2	2.64	<0.5	54	2	12	10.80	20	1.10	
H068649	3.60	0.5	7.08	<5	180	1.3	<2	2.93	<0.5	60	3	17	10.75	20	0.93	
H068650	0.10	3.0	2.90	5	150	0.8	<2	3.22	0.5	119	2070	3120	9.60	10	0.36	
H068651	3.49	0.6	6.99	<5	210	1.2	<2	3.16	<0.5	60	4	46	11.00	20	0.98	
H068652	2.94	0.9	6.98	<5	680	1.4	<2	4.15	<0.5	54	1	69	10.45	20	1.44	
H068653	2.71	0.5	6.96	7	220	1.3	<2	3.91	<0.5	57	2	84	10.60	20	0.87	
H068654	4.05	<0.5	6.83	6	170	1.2	<2	5.18	<0.5	62	1	129	11.40	20	0.76	
H068655	3.28	1.0	6.18	<5	160	1.0	<2	5.10	<0.5	63	1	124	11.45	20	0.79	
H068656	3.50	0.7	5.80	<5	150	1.0	<2	5.75	<0.5	67	2	192	12.10	20	0.68	
H068657	3.40	<0.5	4.61	<5	110	1.0	<2	6.22	<0.5	79	3	364	13.35	20	0.49	
H068658	3.64	1.1	4.41	<5	110	0.9	<2	6.20	<0.5	85	9	542	14.20	20	0.50	
H068659	1.52	0.7	4.34	<5	110	0.9	<2	6.76	<0.5	75	20	653	13.70	20	0.48	
H068660	2.15	0.8	4.27	5	110	0.9	<2	6.78	<0.5	73	23	658	13.60	20	0.46	
H068661	3.03	0.5	4.16	5	130	0.9	<2	8.15	<0.5	63	48	441	8.89	20	0.50	



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Project: STEEP LEDGE

**CERTIFICATE OF ANALYSIS TB08173424**

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	Tl ppm
H068622		40	2.24	1665	1	3.16	1	2090	10	0.66	<5	10	290	<20	1.28	<10
H068623		40	2.31	1355	<1	2.97	<1	2150	7	0.64	<5	11	407	<20	1.25	<10
H068624		40	2.67	1260	1	2.82	<1	1830	8	0.98	<5	12	503	<20	1.33	<10
H068625		30	2.55	1580	1	2.99	<1	1650	6	0.70	<5	12	343	<20	1.35	<10
H068626		30	2.68	1260	<1	2.64	<1	1720	7	0.71	<5	12	504	<20	1.43	<10
H068627		30	2.50	2110	1	2.74	<1	1780	7	0.52	<5	12	426	<20	1.42	<10
H068628		30	2.58	2660	1	2.55	1	1870	5	0.55	<5	14	451	<20	1.42	<10
H068629		30	2.86	1465	1	2.70	4	1820	9	0.71	<5	15	397	<20	1.44	<10
H068630		20	13.55	1305	1	0.78	1165	660	2	0.27	<5	15	336	<20	0.75	<10
H068631		30	3.03	830	<1	2.45	2	1340	3	1.40	<5	16	300	<20	1.59	<10
H068632		30	3.03	825	<1	2.76	1	1530	3	0.80	<5	14	448	<20	1.43	<10
H068633		30	3.09	733	1	2.57	3	1530	5	1.46	<5	14	266	<20	1.46	<10
H068634		20	3.20	610	1	2.85	4	1580	3	0.82	<5	14	163	<20	1.64	<10
H068635		30	2.92	943	<1	2.49	1	1460	3	1.07	<5	15	473	<20	1.45	<10
H068636		30	2.66	1875	<1	2.55	2	1410	6	0.55	<5	16	458	<20	1.54	<10
H068637		30	2.71	2040	1	2.58	2	1670	6	0.36	<5	14	488	<20	1.47	<10
H068638		30	2.95	2040	<1	2.31	3	1370	4	0.53	<5	17	482	<20	1.65	<10
H068639		30	3.02	2160	1	2.27	<1	1340	8	0.71	<5	17	445	<20	1.71	<10
H068640		10	0.19	513	1	2.57	2	170	9	<0.01	<5	4	164	<20	0.11	<10
H068641		30	3.33	1050	<1	2.44	3	1420	5	1.07	<5	18	596	<20	1.63	<10
H068642		30	3.63	1350	<1	2.27	4	1430	3	0.90	<5	19	433	<20	1.80	<10
H068643		20	3.56	855	<1	2.58	6	1320	5	0.77	<5	17	285	<20	1.68	<10
H068644		30	3.27	1855	<1	2.24	5	1190	16	0.52	<5	19	331	<20	1.78	<10
H068645		30	3.68	803	<1	2.14	7	1200	8	1.00	<5	19	649	<20	1.73	<10
H068646		30	3.79	1200	<1	2.46	5	1130	12	0.68	<5	20	599	<20	1.72	<10
H068647		20	0.24	919	3	0.16	1	200	28	<0.01	7	8	64	<20	0.26	<10
H068648		30	2.93	1645	<1	2.39	10	1110	11	0.89	<5	21	470	<20	1.74	<10
H068649		30	3.41	864	<1	2.29	14	1140	6	1.48	<5	22	619	<20	1.72	<10
H068650		30	12.85	1265	1	0.77	1475	750	8	0.63	<5	15	319	<20	0.76	<10
H068651		30	3.31	961	<1	2.32	19	1180	6	1.25	<5	22	608	<20	1.77	<10
H068652		20	3.15	2430	<1	2.11	22	1100	9	0.38	<5	23	387	<20	1.84	<10
H068653		30	3.13	1680	<1	2.40	25	1120	7	0.42	<5	24	352	<20	1.88	<10
H068654		20	3.46	1910	<1	2.49	32	990	5	0.35	<5	24	259	<20	2.01	<10
H068655		20	3.23	1290	<1	2.26	46	890	<2	0.64	<5	25	372	<20	1.93	<10
H068656		20	3.69	1415	<1	2.05	67	860	5	0.63	<5	30	337	<20	1.99	<10
H068657		20	4.37	1600	<1	1.63	100	780	<2	0.38	<5	36	172	<20	2.23	<10
H068658		20	4.52	1470	<1	1.63	142	760	2	0.43	<5	38	150	<20	2.37	<10
H068659		20	4.84	1675	<1	1.62	187	730	2	0.32	<5	41	135	<20	2.23	<10
H068660		20	4.86	1745	<1	1.59	189	710	4	0.28	<5	41	128	<20	2.24	<10
H068661		20	5.96	1585	<1	1.04	174	760	6	0.30	<5	44	373	<20	1.35	<10



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Finalized Date: 30-DEC-2008

Account: MGMAM

Project: STEEP LEDGE

## CERTIFICATE OF ANALYSIS TB08173424

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	PGM-MS23	PGM-MS23	PGM-MS23	PGM-ICP27	PGM-ICP27	PGM-ICP27
		U	V	W	Zn	Au	Pt	Pd	Au	Pt	Pd
		ppm 10	ppm 1	ppm 10	ppm 2	ppm 0.001	ppm 0.0005	ppm 0.001	ppm 0.03	ppm 0.03	ppm 0.03
H068622	<10	160	<10	137	0.001	0.0006	<0.001				
H068623	<10	164	<10	122	<0.001	<0.0005	<0.001				
H068624	<10	179	<10	127	0.003	0.0035	0.002				
H068625	<10	187	<10	114	0.002	0.0027	0.002				
H068626	<10	204	<10	120	<0.001	0.0008	0.001				
H068627	<10	203	<10	121	<0.001	0.0005	<0.001				
H068628	<10	216	<10	121	<0.001	0.0005	<0.001				
H068629	<10	228	<10	129	<0.001	0.0005	<0.001				
H068630	<10	152	<10	101	0.147	0.469	0.427				
H068631	<10	236	<10	97	0.001	0.0005	<0.001				
H068632	<10	216	<10	103	0.001	0.0005	<0.001				
H068633	10	214	<10	87	0.003	0.0005	<0.001				
H068634	10	233	<10	99	<0.001	0.0008	0.001				
H068635	10	236	<10	91	0.001	<0.0005	<0.001				
H068636	<10	257	<10	111	0.001	<0.0005	<0.001				
H068637	<10	225	<10	95	0.001	<0.0005	<0.001				
H068638	<10	276	<10	106	0.001	<0.0005	<0.001				
H068639	<10	291	<10	113	0.003	0.0007	0.001				
H068640	<10	14	<10	26	0.002	0.0007	0.001				
H068641	<10	303	<10	105	0.001	0.0005	<0.001				
H068642	<10	322	<10	129	0.001	0.0011	<0.001				
H068643	10	285	<10	118	0.001	<0.0005	<0.001				
H068644	<10	312	<10	117	0.001	0.0005	<0.001				
H068645	<10	325	<10	119	0.001	0.0006	<0.001				
H068646	<10	345	<10	115	0.001	<0.0005	<0.001				
H068647	<10	42	<10	117	0.001	0.0007	<0.001				
H068648	<10	405	<10	119	0.001	0.0005	<0.001				
H068649	<10	425	<10	124	0.001	<0.0005	<0.001				
H068650	<10	154	<10	107	0.111	>1.00	>1.00	0.12	1.56	1.44	
H068651	<10	443	<10	125	0.001	0.0011	0.001				
H068652	<10	430	<10	103	0.001	0.0008	0.001				
H068653	<10	445	<10	95	0.001	0.0005	<0.001				
H068654	<10	499	<10	81	0.001	<0.0005	<0.001				
H068655	<10	505	<10	112	0.001	0.0005	<0.001				
H068656	<10	552	<10	105	0.001	<0.0005	<0.001				
H068657	<10	640	<10	81	0.001	<0.0005	<0.001				
H068658	<10	703	<10	94	0.002	0.0005	<0.001				
H068659	<10	715	<10	84	0.002	0.0008	<0.001				
H068660	<10	717	<10	82	0.002	0.0007	<0.001				
H068661	<10	339	<10	76	0.004	0.0034	0.001				



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Finalized Date: 30-DEC-2008

Account: MGMAM

Project: STEEP LEDGE

## CERTIFICATE OF ANALYSIS TB08173424

Sample Description	Method Analyte Units LOR	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Recvd Wt. kg	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %
		0.02	0.5	0.01	5	10	0.5	2	0.01	0.5	1	1	0.01	10	0.01	
H068662		3.46	<0.5	4.12	11	110	0.9	<2	8.15	<0.5	54	69	582	7.59	10	0.48
H068663		3.54	<0.5	3.81	8	70	0.9	<2	8.98	<0.5	47	136	503	7.19	10	0.44
H068664		2.46	<0.5	3.68	<5	70	0.8	<2	9.01	<0.5	47	228	319	6.94	10	0.44
H068665		2.55	<0.5	3.61	<5	70	0.7	<2	8.86	<0.5	45	330	306	7.01	10	0.41
H068665CRD		<0.02	<0.5	3.72	<5	70	0.8	<2	9.00	<0.5	47	349	312	7.27	10	0.42
H068666		3.48	<0.5	3.39	<5	70	0.8	<2	9.09	<0.5	56	525	148	7.24	10	0.37
H068667		3.22	<0.5	3.38	<5	50	0.7	<2	8.75	<0.5	52	763	195	7.21	10	0.30
H068668		2.85	0.7	3.27	10	50	0.7	<2	8.15	1.0	56	1255	162	7.07	10	0.25
H068669		2.20	<0.5	2.20	<5	90	0.5	<2	2.65	<0.5	120	1390	139	9.92	10	0.22
H068670		0.10	1.1	3.03	6	150	0.7	<2	3.40	<0.5	113	2310	836	9.47	10	0.33
H068671		2.31	<0.5	2.40	<5	90	0.5	<2	2.97	<0.5	122	1990	153	9.70	<10	0.31
H068672		2.52	<0.5	2.41	<5	100	0.6	<2	2.56	<0.5	123	2610	379	9.67	10	0.31
H068673		2.42	<0.5	2.17	<5	90	0.5	<2	2.21	<0.5	134	2670	342	10.10	<10	0.23
H068674		2.11	<0.5	2.20	5	80	<0.5	<2	2.03	<0.5	129	2460	373	10.00	<10	0.23
H068675		2.30	<0.5	2.20	<5	80	<0.5	<2	2.20	<0.5	131	2390	245	10.15	<10	0.20
H068676		2.19	<0.5	2.23	<5	80	0.5	<2	2.45	<0.5	134	2280	300	10.10	<10	0.32
H068677		2.31	<0.5	2.09	5	90	0.5	<2	2.29	<0.5	132	2110	115	9.99	<10	0.29
H068678		2.14	<0.5	2.18	<5	80	<0.5	<2	2.45	<0.5	128	1350	113	10.05	<10	0.23
H068679		2.57	<0.5	2.42	<5	100	0.6	<2	2.82	<0.5	131	882	215	10.25	<10	0.28
H068680		0.09	<0.5	5.83	<5	880	1.0	<2	1.28	<0.5	2	32	12	1.50	10	2.06
H068681		2.64	<0.5	2.79	<5	120	0.7	2	3.31	<0.5	119	598	495	10.35	10	0.32
H068682		1.55	0.5	3.45	<5	100	0.7	2	3.25	<0.5	105	480	617	9.90	10	0.43
H068683		2.28	0.8	3.52	<5	110	0.6	2	4.13	<0.5	117	369	1065	10.90	10	0.42
H068684		2.33	0.5	4.16	<5	170	0.8	<2	3.87	<0.5	111	278	524	10.75	10	0.40
H068685		2.99	<0.5	6.27	<5	650	1.1	<2	0.13	<0.5	3	22	12	1.48	20	3.97
H068686		3.17	<0.5	6.29	<5	650	1.1	<2	0.11	<0.5	2	26	3	1.23	20	3.71



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 Total # Pages: 3 (A - C)  
 Finalized Date: 30-DEC-2008  
 Account: MGMAM

Project: STEEP LEDGE

**CERTIFICATE OF ANALYSIS TB08173424**

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Tn ppm	Ti %	Tl ppm
		10	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01	10
H068662		20	6.14	1455	<1	1.26	182	740	5	0.32	<5	45	219	<20	1.07	<10
H068663		20	6.23	1505	<1	1.36	172	700	3	0.20	<5	48	146	<20	1.08	<10
H068664		20	6.18	1390	<1	1.33	157	680	4	0.29	<5	47	218	<20	1.01	<10
H068665		20	6.47	1465	1	1.26	165	640	4	0.19	<5	48	135	<20	0.94	<10
H068665CRD		20	6.57	1515	<1	1.32	170	640	3	0.20	<5	49	135	<20	1.00	<10
H068666		20	6.57	1195	<1	0.66	200	650	2	0.59	<5	45	532	<20	0.91	<10
H068667		20	7.47	1515	<1	0.84	218	600	4	0.19	<5	45	150	<20	0.91	<10
H068668		20	8.27	1670	1	0.60	256	600	290	0.43	<5	42	123	<20	0.88	<10
H068669		10	14.10	1425	<1	0.43	988	530	<2	0.54	<5	14	195	<20	0.58	<10
H068670		20	13.70	1320	1	0.76	1245	640	<2	0.29	14	15	348	<20	0.75	<10
H068671		10	14.80	1365	<1	0.47	1165	510	5	0.21	13	15	242	<20	0.65	<10
H068672		10	15.30	1315	<1	0.45	1375	470	2	0.25	14	13	208	<20	0.63	<10
H068673		10	16.00	1385	<1	0.41	1425	530	<2	0.27	21	13	170	<20	0.60	<10
H068674		10	15.60	1375	<1	0.36	1415	500	<2	0.28	16	13	156	<20	0.59	<10
H068675		10	15.60	1370	<1	0.40	1330	490	<2	0.24	18	12	183	<20	0.61	<10
H068676		10	15.45	1360	<1	0.37	1350	480	<2	0.11	15	12	218	<20	0.63	<10
H068677		10	15.25	1345	<1	0.43	1245	600	<2	0.10	14	12	213	<20	0.54	<10
H068678		10	14.90	1370	<1	0.46	1170	550	<2	0.17	10	12	240	<20	0.59	<10
H068679		10	14.35	1405	<1	0.54	1165	540	<2	0.18	9	14	247	<20	0.67	<10
H068680		10	0.21	540	<1	2.62	5	170	6	<0.01	<5	5	168	<20	0.11	<10
H068681		20	13.25	1415	<1	0.72	1130	580	<2	0.26	5	17	277	<20	0.73	<10
H068682		20	11.70	1425	<1	0.54	909	690	<2	1.28	<5	21	229	<20	0.90	<10
H068683		10	11.30	1475	<1	0.66	1180	590	<2	0.82	<5	22	296	<20	1.11	<10
H068684		20	9.63	1585	<1	1.02	782	820	<2	0.47	<5	18	434	<20	1.17	<10
H068685		40	0.33	107	<1	1.67	13	190	8	0.47	<5	4	98	30	0.10	<10
H068686		40	0.22	51	1	1.58	4	220	10	0.58	<5	4	83	30	0.10	<10



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**CERTIFICATE OF ANALYSIS TB08173424**

Sample Description	Method	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	PGM-MS23	PGM-MS23	PGM-MS23	PGM-ICP27	PGM-ICP27	PGM-ICP27
	Analyte	U	V	W	Zn	Au	Pt	Pd	Au	Pt	Pd
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LOR		10	1	10	2	0.001	0.0005	0.001	0.03	0.03	0.03
H068662		<10	247	<10	69	0.009	0.0250	0.009			
H068663		<10	254	<10	56	0.009	0.0377	0.012			
H068664		<10	243	<10	58	0.007	0.0376	0.013			
H068665		<10	234	<10	66	0.006	0.0388	0.014			
H068665CRD		<10	243	<10	74	0.008	0.0341	0.013			
H068666		<10	226	<10	83	0.008	0.0229	0.012			
H068667		<10	220	<10	87	0.005	0.0228	0.026			
H068668		<10	208	<10	302	0.002	0.0073	0.009			
H068669		<10	128	<10	101	0.003	0.0243	0.026			
H068670		<10	153	<10	99	0.121	0.415	0.400			
H068671		<10	139	<10	98	0.004	0.0320	0.032			
H068672		<10	136	<10	94	0.010	0.107	0.110			
H068673		<10	135	<10	98	0.008	0.0863	0.087			
H068674		<10	135	<10	97	0.010	0.114	0.125			
H068675		<10	131	<10	98	0.005	0.0758	0.070			
H068676		<10	132	<10	99	0.004	0.0500	0.049			
H068677		<10	124	<10	95	0.002	0.0212	0.015			
H068678		<10	121	<10	92	0.002	0.0136	0.009			
H068679		<10	138	<10	98	0.003	0.0212	0.019			
H068680		<10	14	<10	27	0.002	0.0008	<0.001			
H068681		<10	153	<10	98	0.004	0.0358	0.034			
H068682		<10	181	<10	94	0.005	0.0430	0.042			
H068683		<10	221	<10	114	0.007	0.0715	0.068			
H068684		<10	219	<10	110	0.004	0.0322	0.031			
H068685		<10	11	<10	20	0.001	0.0008	0.001			
H068686		<10	11	<10	18	0.001	0.0005	<0.001			



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**CERTIFICATE TB09003741**

Project: CASRON

P.O. No.:

This report is for 2 Drill Core samples submitted to our lab in Thunder Bay, ON, Canada on 14-JAN-2009.

The following have access to data associated with this certificate:

JUSTIN JOHNSON  
KEITH WATKINS

PHILIP LITTLE

ALLAN MAC TAVISH

**SAMPLE PREPARATION**

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

**ANALYTICAL PROCEDURES**

ALS CODE	DESCRIPTION	INSTRUMENT
PGM-MS23	Pt, Pd, Au 30g FA ICP-MS	ICP-MS
ME-ICP61	33 element four acid ICP-AES	ICP-AES

To: MAGMA METALS (CANADA) LIMITED  
ATTN: ALLAN MAC TAVISH  
P.O. BOX 10628  
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



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To: MAGMA METALS (CANADA) LIMITED

P.O. BOX 10628

THUNDER BAY ON P7B 6V1

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Finalized Date: 20-JAN-2009

Account: MGMAM

Project: CASRON

## CERTIFICATE OF ANALYSIS TB09003741

Sample Description	Method Analyte Units LOR	WEI-21	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61
		Recvd Wt	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K
		kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	%
H065351		3.45	<0.5	7.27	<5	610	2.0	<2	2.52	<0.5	17	117	24	2.73	10	2.10
H065352		3.40	0.5	7.06	<5	250	2.1	2	2.38	<0.5	16	144	42	3.90	10	1.47





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## CERTIFICATE OF ANALYSIS TB09003741

Sample Description	Method Analyte Units LOR	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	
		La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	Tl ppm
		10	0.01	5	1	0.01	1	10	2	0.01	5	1	1	20	0.01	10
H065351		20	1.03	672	1	3.19	59	740	<2	0.21	<5	13	156	<20	0.36	<10
H065352		20	1.40	723	1	3.16	69	800	<2	0.20	<5	12	129	<20	0.35	<10



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## CERTIFICATE OF ANALYSIS TB09003741

Sample Description	Method	ME-ICP61	ME-ICP61	ME-ICP61	ME-ICP61	PGM-MS23	PGM-MS23	PGM-MS23
	Analyte	U	V	W	Zn	Au	Pt	Pd
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	10	1	10	2	0.001	0.0005	0.001
H065351		10	119	<10	15	0.001	0.0018	0.002
H065352		10	107	<10	20	0.001	0.0042	0.003