

<b>TYPE OF REPORT (type of survey(s))</b>	<b>TOTAL COST</b>	<b>\$19,751.49</b>
Geochemical Sampling		

AUTHOR(S) \_\_\_\_\_ SIGNATURE(S) \_\_\_\_\_  
SB Butrenchuk, RT Henneberry, GL Wesa "signed and sealed"

NOTICE OF WORK NUMBER(S) / DATE(S) \_\_\_\_\_ YEAR OF WORK 2009

STATEMENT OF WORK – CASH PAYMENT EVENT NUMBERS / DATE(S) 4478311

PROPERTY NAME Placer Creek

CLAIM NAME(S) (on which work was done) \_\_\_\_\_  
Placer Creek 1, Placer Creek 2

COMMODITIES SOUGHT Porphyry copper, Shear Hosted Gold  
MINERAL INVENTORY MINFILE NUMBERS, IF KNOWN \_\_\_\_\_  
MINING DIVISION Similkameen  
NTS: 092H/01, 092H/02 TRIM 092H018, 092H028

LATITUDE \_\_\_\_\_ LONGITUDE \_\_\_\_\_ (at centre of work)  
NORTHING 5451200 EASTING 680700 UTM ZONE 10 MAP DATUM NAD 83

OWNER 1 Sydney Wilson OWNER 2 \_\_\_\_\_

MAILING ADDRESS \_\_\_\_\_  
4766 West 4<sup>th</sup> Avenue \_\_\_\_\_  
Vancouver, B.C. V6T 1C2 \_\_\_\_\_

OPERATORS (who paid for work) \_\_\_\_\_  
same \_\_\_\_\_

MAILING ADDRESS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size, attitude)  
The claims are largely underlain by Triassic Nicola Group sediments and volcanics in the general vicinity of Cretaceous intrusives. A Mobile Metal Ion (MMI) survey and limited rock sampling was completed.  
Three multi-element anomalous clusters were detected. Further exploration is recommended.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS  
30652

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (In Metric Units)	On Which Claims	Project Costs Apportioned
-----------------------------	----------------------------------	-----------------	---------------------------

GEOLOGICAL (scale, area)

- Ground, mapping
- Photo Interpretation

GEOPHYSICAL (line kilometres)

- Ground
  - Magnetic
  - Electromagnetic
  - Induced Polarization
  - Radiometric
  - Siesmic
  - Other
- Airborne

GEOCHEMICAL

(number of samples analyzed for)

Soil	120	Placer Creek 1,2
Silt		
Rock	7	Placer Creek 1,2
Other		

DRILLING

(total metres, number of holes, size)

- Core
- Non-core

RELATED TECHNICAL

- Sampling / assaying
- Petrographic
- Mineralogical
- Metallurgic

PROSPECTING (scale, area)

PREPARATION / PHYSICAL

- Line/grid (kilometres)
- Topographic / Photogrammatic (scale, area)
- Legal Surveys (scale, area)
- Road, local access (kilometres)
- Trench (metres)
- Underground dev. (metres)
- Other

TOTAL COST      **\$19,751.49**

# **MAMMOTH GEOLOGICAL LTD.**

2446 Bidston Road  
Mill Bay, B.C. Canada V0R 2P4

Phone : (250) 743-8228 Fax : (250) 743-4430  
email : mammothgeo@shaw.ca

**BC Geological Survey  
Assessment Report  
31491**

## **GEOLOGICAL AND GEOCHEMICAL REPORT**

### **PLACER CREEK PROJECT**

Similkameen Mining Division  
TRIM Sheet 092H018, 092H028  
UTM (NAD 83) ZONE 10 680700E 5451200N

**FOR**

**Mr. Sydney Wilson.**  
4766 West 4<sup>th</sup> Avenue  
Vancouver, B.C. V6T 1C2

By: Stephen B. Butrenchuk, P.Geol.  
R.Tim Henneberry, P.Geo.  
Gary L. Wesa, FGAC  
December 31, 2009

-2-  
SUMMARY

Mr. Sydney Wilson is exploring the Placer Creek property for its polymetallic precious metal vein potential. The 2,660 hectare property is road accessible and lies 37 kilometres south of Princeton, British Columbia. The Placer Creek property claims are currently held by staking by Mr. Sydney Wilson of Vancouver, B.C.

The Placer Creek Property is underlain by Triassic Nicola Group sediments and volcanics in proximity to Jurassic to Cretaceous intrusive rocks. As well, the old Silver Moon gold showing in the northwest section of the property suggests the possibility of shear hosted vein gold mineralization.

A three line grid, comprising 120 MMI soil geochemical samples, was completed in the fall of 2009 as a follow up to the reconnaissance 2008 MMI soil survey. This survey was successful in identifying 4 multi-element linear anomalies and 3 multi-element cluster anomalies that require further exploration.

The next phase of the exploration on the Placer Creek property should consist of infill MMI soil sampling. The area between the three 2009 soil lines requires fill in sampling along 100 metre spaced lines. Two lines should also be established to the west of the current westernmost line and two lines should also be established to the east of the current easternmost line. All lines should be sampled at 25 metre intervals. This will result in an additional 12 line kilometres of soil sampling totaling 492 samples. The total cost of the MMI soil sampling is estimated at \$85,000.

The cost of the June and August 2009 exploration program was \$19,751.49. Combined with the July and September 2008 MMI survey of \$12,469.77 the total expenditures to date on the Placer Creek property are \$32,221.26.

TABLE OF CONTENTS

INTRODUCTION ..... 5  
RELIANCE ON OTHER EXPERTS ..... 5  
PROPERTY DESCRIPTION AND LOCATION ..... 7  
ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND  
PHYSIOGRAPHY ..... 8  
HISTORY ..... 9  
GEOLOGICAL SETTING ..... 10  
    Placer Creek Property Geology ..... 11  
DEPOSIT TYPES ..... 12  
MINERALIZATION ..... 13  
EXPLORATION ..... 18  
DRILLING ..... 25  
SAMPLING METHOD AND APPROACH ..... 25  
SAMPLE PREPARATION, ANALYSES AND SECURITY ..... 26  
DATA VERIFICATION ..... 28  
ADJACENT PROPERTIES ..... 28  
MINERAL PROCESSING AND METALLURGICAL TESTING ..... 29  
MINERAL RESOURCES AND MINERAL RESERVE ESTIMATES ..... 29  
OTHER RELEVANT DATA AND INFORMATION ..... 29  
INTERPRETATION AND CONCLUSIONS ..... 29  
RECOMMENDATIONS ..... 30  
REFERENCES ..... 31  
STATEMENT OF COSTS ..... 32  
COST ESTIMATES ..... 33  
CERTIFICATE STEPHEN B. BUTRENCHUK ..... 34  
CERTIFICATE R. TIMOTHY HENNEBERRY ..... 35  
STATEMENT OF QUALIFICATIONS GARY L. WESA ..... 36

LIST OF TABLES

Table 1. List of Mineral Tenures ..... 7  
Table 2. Geochemical Statistics for ppb data and Response Ratio data ..... 22  
Table 3. Placer Creek Rock Samples ..... 25  
Table 4. Placer Creek Duplicate and Standard Samples ..... 27

LIST OF FIGURES

Figure 1. Location Map ..... 6  
Figure 2. Claim Map ..... 7  
Figure 3. Regional Geology ..... 10  
Figure 4. Preliminary Property Geology..... 11  
Figure 5. Anomalous Zones..... 14  
Figure 6a. Placer Creek Property - MMI ppb Cu ..... 15  
Figure 6b. Placer Creek Property - MMI ppb Mo ..... 15  
Figure 6c. Placer Creek Property - MMI ppb Ag ..... 16  
Figure 6d. Placer Creek Property - MMI ppb Au ..... 16  
Figure 6e. Placer Creek Property - MMI ppb Pb..... 17  
Figure 6f. Placer Creek Property - MMI ppb Zn..... 17  
Figure 7a. Placer Creek Property - MMI Response Ratio Cu ..... 19  
Figure 7b. Placer Creek Property - MMI Response Ratio Mo ..... 19  
Figure 7c. Placer Creek Property - MMI Response Ratio Ag ..... 20  
Figure 7d. Placer Creek Property - MMI Response Ratio Au ..... 20  
Figure 7e. Placer Creek Property - MMI Response Ratio Pb..... 21  
Figure 7f. Placer Creek Property - MMI Response Ratio Zn ..... 21  
Figure 8. Placer Creek Property - Rock Sampling..... 24  
Figure 9. Placer Creek Property - 2009 Rock and Soil Sample Locations ..... 38

LIST OF APPENDICIES

Appendix 1. MMI Soil Sample Locations ..... 39  
Appendix 2. 2009 Rock Sample Locations..... 42  
Appendix 3. Certificates of Analysis ..... 43

## INTRODUCTION

The purpose of this Technical Report is to compile the results of a 2009 prospecting, rock sampling and MMI soil sampling program on the Placer Creek property for assessment credit. While the focus of the exploration program was the Placer Creek property, part of the assessment credits have been applied to contiguous claims held by Mr. Sydney Wilson. These additional claims have been identified in Table 1 on page 7. This report has concentrated only on the claims comprising the Placer Creek property.

This report was commissioned by Mr. Sydney Wilson, the property owner.

Stephen B. Butrenchuk, P.Geol. and R.Tim Henneberry, P.Geo. serve as the Qualified Persons responsible for preparing the Technical Report.

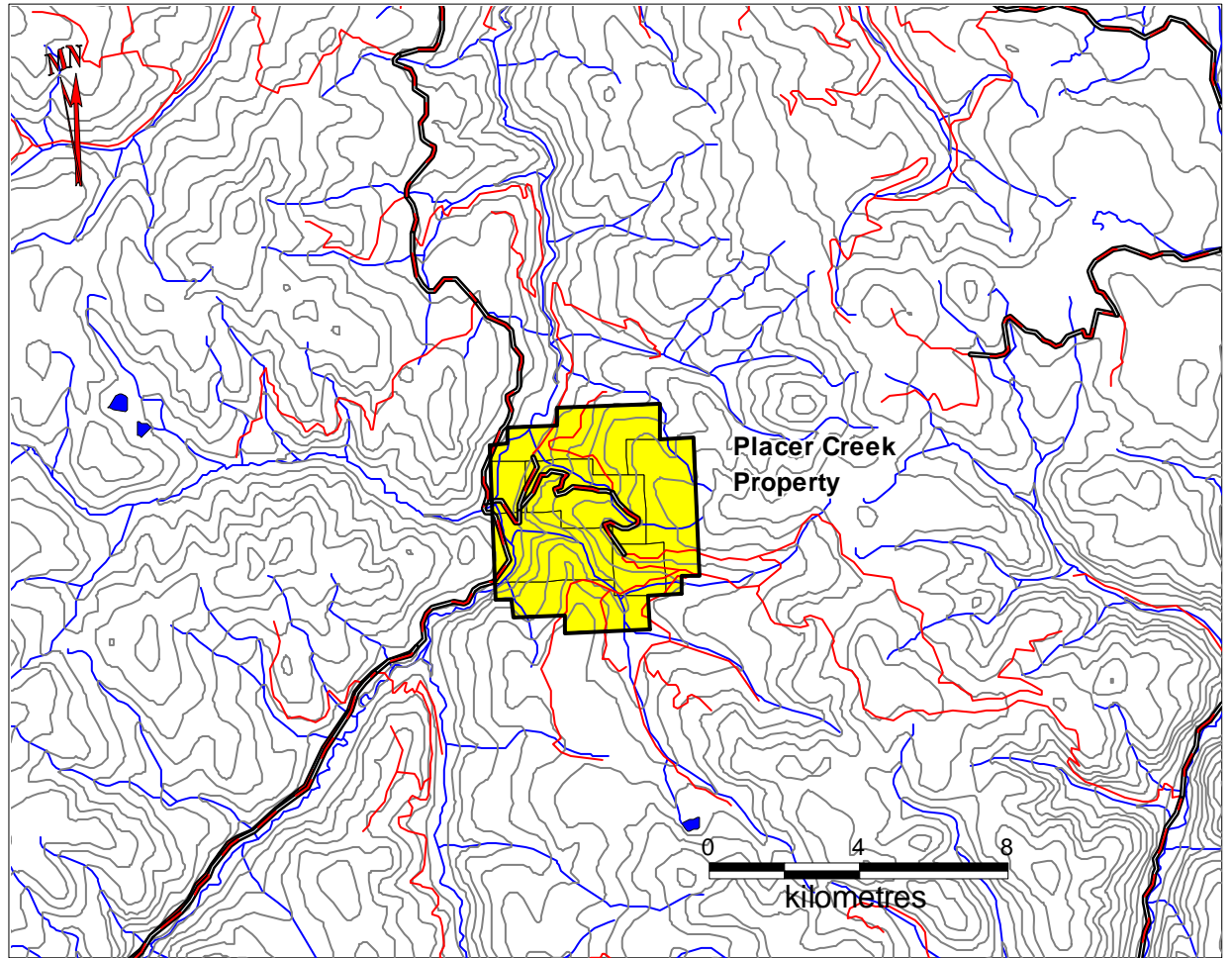
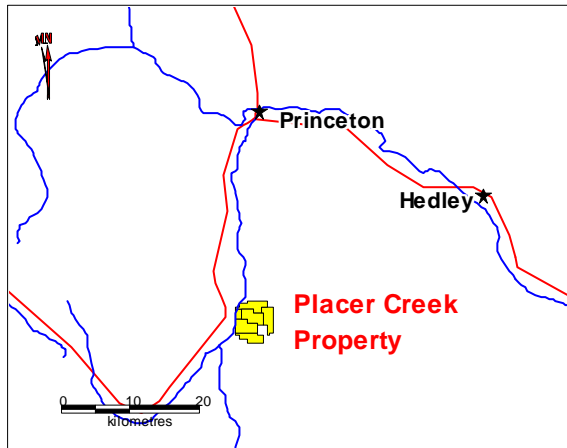
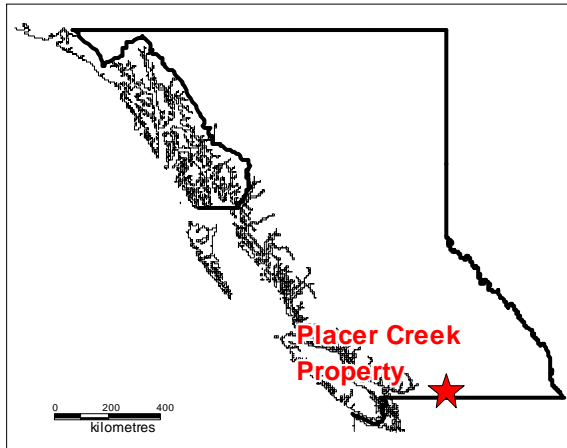
In preparing this report, the authors relied on geological reports listed in the References (Section 21) of this report and their years of extensive mineral exploration experience in British Columbia. Mr. Henneberry supervised the 2009 exploration program completed by Mammoth Geological Ltd of Mill Bay, B.C.

Mr. Butrenchuk completed the prospecting and rock sampling program on the Placer Creek property from June 14 to June 16, 2009. Mr. Henneberry has not yet visited the Placer Creek Property.

## RELIANCE ON OTHER EXPERTS

The authors are not relying on a report or opinion of any experts. The ownership of the claims comprising the property and the ownership of the surrounding claims has been taken from the Mineral Titles Online database maintained by the British Columbia Ministry of Energy and Mines. The data on this site is assumed to be correct.

The section on the History of the property area has been taken from the British Columbia Ministry of Energy and Mines Assessment Files. The geological assessment reports have been written by competent geologists and engineers to the industry standards of the day. The rock, soil and silt analyses were completed by reputable Canadian assay labs in accord with industry standards of the day.



Projection is UTM NAD83 Zone 10

**PLACER CREEK PROJECT  
LOCATION**  
Figure 1



PROPERTY DESCRIPTION AND LOCATION

The Placer Creek Property, consisting of 6 claims totaling 2660.2135 hectares, is situated on TRIM claim sheet 092H018 and 092H028 in the Similkameen Mining Division. The claims were acquired by map staking under the provincial Mineral Titles Online system. The geographic center of the property is approximately 680700E 5451200N in UTM ZONE 10 (NAD 83).

All claims are held 100% by Mr. Sydney Wilson of Vancouver, B.C. Assessment credits were also applied to additional continuous claims held by Mr. Wilson as shown in the bottom section of Table 1 and also shown on Figure 2.

**Table 1. List of Mineral Tenures**

Tenure Number	Claim Name	Owner	Tenure Type	Map Number	Good To Date	Area (ha)
577664	Placer Creek 1	129188 (100%)	Mineral	092H	2011/mar/01	527.9106
577665	Placer Creek 2	129188 (100%)	Mineral	092H	2011/mar/01	527.7797
577668	Placer Creek 4	129188 (100%)	Mineral	092H	2011/mar/01	527.795
577670	Placer Creek 5	129188 (100%)	Mineral	092H	2011/mar/01	527.6209
590051	Placer Creek West	129188 (100%)	Mineral	092H	2011/mar/01	126.6588
600228	Placer Creek 3	129188 (100%)	Mineral	092H	2010/mar/02	422.4485
						<b>2660.2135</b>

Tenure Number	Claim Name	Owner	Tenure Type	Map Number	Good To Date	Area (ha)
577671	Placer Mountain 1	129188 (100%)	Mineral	092H	2011/mar/01	528.2894
577672	Placer Mountain 2	129188 (100%)	Mineral	092H	2011/mar/01	528.2888
577674	Placer Mountain 3	129188 (100%)	Mineral	092H	2011/mar/01	528.5112
577679	Placer Mountain 6	129188 (100%)	Mineral	092H	2011/mar/01	528.1184
600232	Placer Mountain 4	129188 (100%)	Mineral	092H	2011/mar/01	528.2195
						2641.4273

\* pending approval of 2009 work program for assessment credit

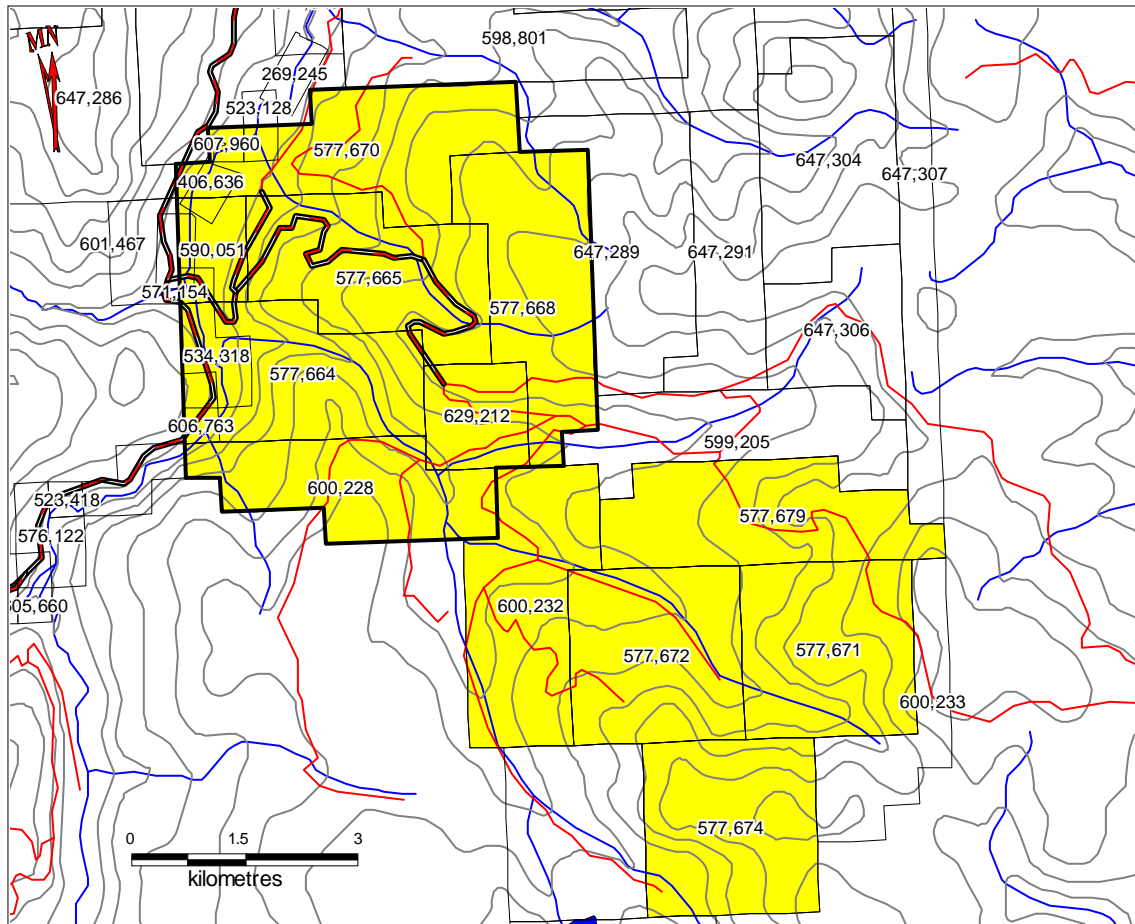
There is currently no known bedrock mineralization on the Placer Creek property. There are 3 cluster MMI soil geochemical anomalies on the property as shown in Figure 5.

There are no environmental liabilities associated with the Placer Creek property to the best of the author's knowledge.

Should the next phase of MMI soil sampling be successful then the following exploration programs on the Placer Creek property will be consist of geophysics and possibly mechanical trenching. An exploration permit is not required for ground geophysics unless it is an Induced Polarization (IP) survey. A permit to conduct an IP survey is usually acquired under the provincial Notice of Work program within a few months. A permit is required to conduct mechanical trenching and is usually acquired under the provincial Notice of Work program within a few months. A reclamation bond will generally be required before the work proposed in the permit can commence.

ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND  
PHYSIOGRAPHY

The Placer Creek property is located 37 kilometres south of Princeton, British Columbia. Road access is via Highway 3 south from Princeton to Placer Mountain Forest Service Road a distance of approximately 37 kilometres. This forest service road and several active and abandoned spurs proved access to most of the property. The western boundary of the property parallels Highway 3 from kilometre 32 to 37. The first 5 kilometres of the Placer Mountain Forest Service Road transects across the property.



UTM NAD 83 Zone 10

**PLACER CREEK PROPERTY**  
**Claim Location (092H018, 092H028)**

Figure 2

The topographic relief on the Placer Creek property is moderate to steep with elevations ranging from 945 metres above sea level (ASL) at the Similkameen River on the western boundary of the property to 1700 metres ASL along the eastern boundary. Vegetation consists of thick stands of jack pine and spruce on north facing slopes with significantly sparser vegetation on the remaining slopes. The jack pine is falling victim to the Mountain Pine Beetle infestation. Underbrush is limited but heavy deadfall is prevalent in many areas. Rock outcrops are rare except along ridges, in road cuts and within incised valleys.

The climate in this region of the province is typical of the central interior of British Columbia. The summer field season is generally warm and dry and extends from mid- May through to mid-October. Winters are cold with significant snow accumulations. Temperatures can dip to minus 20 Celsius for extended periods during the winter months.

The logistics of working in this part of the province are excellent. Gravel road access will allow for the easy movement of supplies and equipment. Heavy equipment, supplies and fuel are available in Princeton as is accommodation.

## HISTORY

The British Columbia Ministry of Energy, Mines and Petroleum Resources MINFILE database indicates there has been some limited work completed on a series of shear zones hosting thin quartz veins along the Similkameen River on current tenure 590051 (MINFILE Number 092HSE071).

According to the British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report Database the ground presently comprising the current Placer Creek property has no exploration history, however there have been a few historical exploration programs conducted within 1-2 kilometres of the property.

Teknol Mining Co. Ltd. (Larsen, 1972) completed 32 line kilometres of VLF-EM and magnetometer surveys over the EE and Ram Claim groups, located about 1.5 kilometers north of current claim 577670. The VLF-EM survey showed a series of linear anomalies which probably reflects a conjugate fracture system or possibly some form of mineralized intrusion. The magnetometer survey showed a relative even distribution suggesting the survey area is underlain by a single rock type.

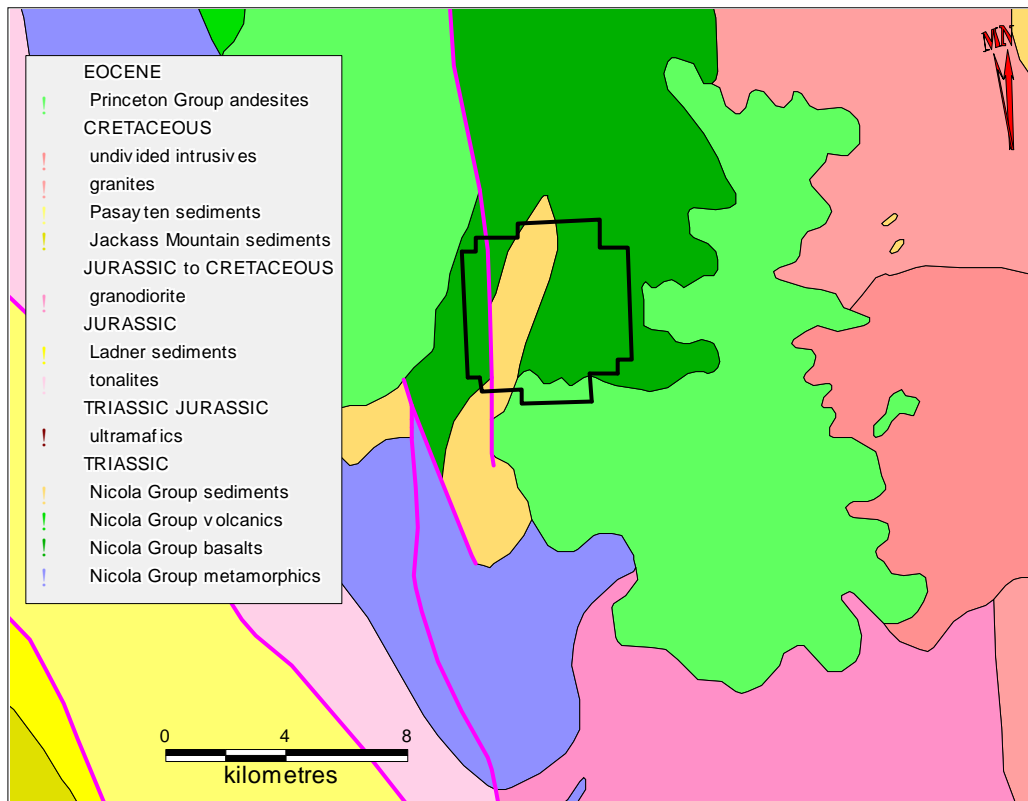
Cascadia Resources Ltd. (Ramani, 1974) completed geological mapping, and 34 line kilometres of geochemical soil sampling and magnetometer survey over the Holt and Davis claims during the summer of 1973. These claims were located approximately 1 kilometer east of the eastern boundary of current tenure 577668. A coincidental magnetic high and weak copper soil anomaly were located on the eastern edge of the property.

The Au 2 claim block, surrounded by current tenures 577668, 577665, 577664 and 577666, was examined in August 2007 by the property owner (Diakow, 2007). Soil sampling along roads traversing the property returned anomalous zinc and copper values, which resulted in a recommendation of additional work.

A preliminary MMI soil geochemical survey was completed on the Placer Creek property in 2008 (Henneberry, 2009). Forty samples were collected along 6.8 line kilometres at 150 metre spacings on one north-south line and on east-west line that crossed at their centres. The copper, molybdenum, gold and zinc plots show considerable scatter across the lines. The silver and lead appear to be coincident over the north-central portion of the north-south line (900 lineal metres) and also over the west-central portion of the east-west line (1500 lineal metres).

GEOLOGICAL SETTING  
(Summarized from MINFILE 092HSE)

The Placer Creek property is located at the southern end of the Intermontane Belt and the adjoining eastern margin of the Coast Belt. This region of British Columbia is underlain by the southern end of the Intermontane Belt and the adjoining eastern margin of the Coast Belt. The southern Intermontane Belt is dominated by volcanic rocks and sediments of the Upper Triassic Nicola Group, comprising the Quesnel Terrane. These rocks are intruded by comagmatic plutons of the Late Triassic and Early Jurassic Copper Mountain and Hedley intrusions that comprise a west-facing magmatic arc. The island arc assemblage is cut by post-accretionary intrusions of the Late Jurassic and Cretaceous Eagle Plutonic Complex and Osprey Lake batholith, and is unconformably overlain by volcanic rocks and clastic sediments of the Cretaceous and Tertiary Spences Bridge and Princeton groups. This post-accretionary volcanism and sedimentation is in part controlled by a system of northerly-striking strike-slip faults.



UTM NAD 83 Zone 10  
Geology from MapPlace

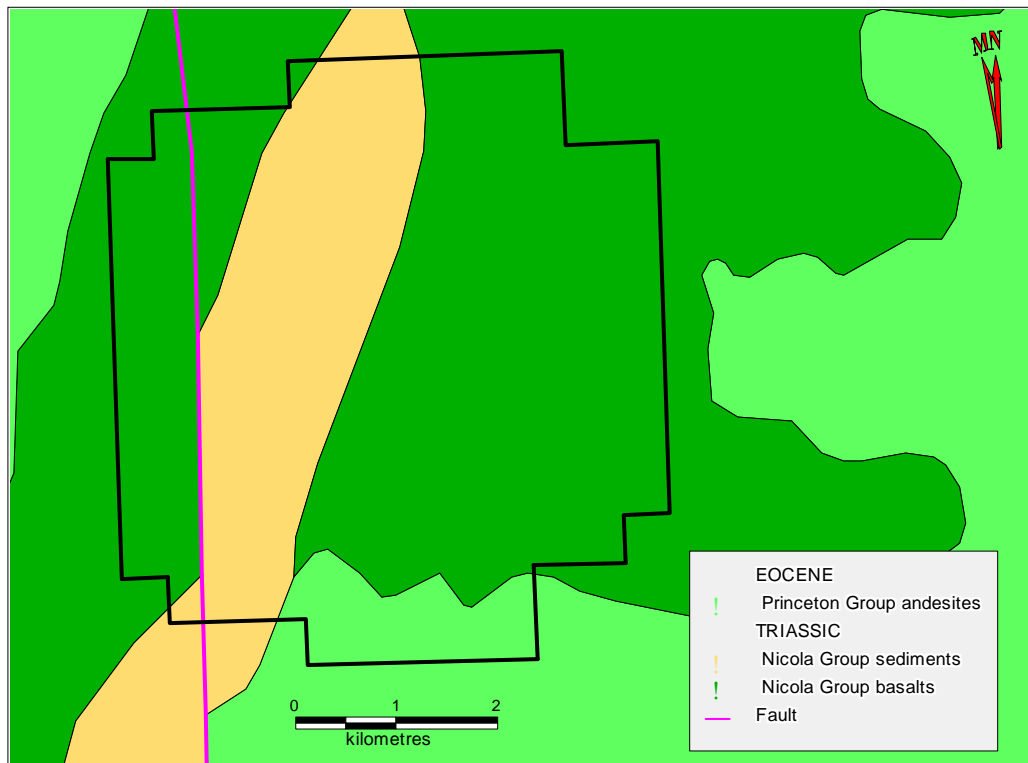
**PLACER CREEK PROPERTY**  
**Regional Geology**  
Figure 3

The Methow Terrane lies across the Pasayten fault to the west, and occupies the eastern margin of the Coast Belt in the Princeton map area. This terrane comprises a wedge of clastic sediments derived in part from Quesnellia rocks to the east. The sequence consists of fine-grained sediments and mafic volcanics of the Lower to Middle Jurassic Ladner Group, overlain by a thin section of sandstone and conglomerate of the Upper Jurassic "Thunder Lake sequence", which is in turn followed by a thick section of coarse clastics of the partly coeval Cretaceous Jackass Mountain and Pasayten groups.

The oldest rocks in the Placer Creek area belong to the Triassic Nicola Group. These consist of basaltic and undivided volcanics which overlie clastic sediments. These rocks are metamorphosed to amphibolite grade in the central portion of the map area.

The Nicola Group rocks have been intruded by early Jurassic granites and undivided intrusives, Jurassic tonalites and Jurassic to Cretaceous granodiorites. The youngest units are Eocene andesites of the Princeton Group.

The southwestern corner of the map area lies across the Pasayten Fault and is underlain by clastic sediments of the Jurassic Ladner and Jackass Mountain Groups and the Cretaceous Pasayten Group.



UTM NAD 83 Zone 10  
Geology from MapPlace

**PLACER CREEK PROPERTY**  
**Preliminary Property Geology**

Figure 4

### Placer Creek Property Geology

Only reconnaissance geological mapping has been completed on the Placer Creek property.

The geological map of the area from the British Columbia Ministry of Energy and Mines MapPlace website (Figure 4) shows the Placer Creek property is underlain largely by Nicola basalts, andesite, pyroclastic volcanics and clastic sediments. Andesites of the Eocene Princeton Group lie along the southern boundary of the claim group.

The Placer Creek property is being explored for polymetallic quartz veins. The following summary is condensed from British Columbia Ore Deposit Models (Lefebure and Church, 1996).

Polymetallic veins occur in virtually all tectonic settings except oceanic, including continental margins, island arcs, continental volcanics and cratonic sequences. They are usually divided into metasediment hosted veins and igneous hosted veins. The polymetallic veins at Maroon would be classified as metasediment hosted. Metasediment hosted veins are emplaced along faults and fractures in sedimentary basins dominated by clastic rocks that have been deformed, metamorphosed and intruded by igneous rocks. Veins postdate deformation and metamorphism. Many veins are associated with dikes following the same structures. The age of these veins is Proterozoic or younger; though mainly Cretaceous to Tertiary in British Columbia.

Polymetallic veins are typically steeply dipping, narrow, tabular or splayed. They commonly occur as sets of parallel and offset veins. Individual veins vary from centimetres up to more than 3 metres wide and can be followed from a few hundred to more than 1000 metres in length and depth. Veins may widen to tens of metres in stockwork zones. Compound veins with a complex paragenetic sequence are common. The veins display a wide variety of textures, including cockade texture, colloform banding and crustifications and locally drusy. Veins may grade into broad zones of stockwork or breccia. Coarse-grained sulphides occur as patches and pods, and fine-grained disseminations are confined to veins.

Regional faults, fault sets and fractures are an important ore control, however, veins are typically associated with second order structures. Significant polymetallic veins are often restricted to competent lithologies. Dikes are often emplaced along the same faults and in some camps are believed to be roughly contemporaneous with mineralization. Some polymetallic veins are found surrounding intrusions with porphyry deposits or prospects.

Metasediment hosted polymetallic veins are generally comprised of carbonates (most commonly siderite with minor dolomite, ankerite and calcite) and/or quartz, with lesser barite, fluorite, magnetite and bitumen.

Mineralization within the veins consists of: galena, sphalerite, tetrahedrite-tennantite, with lesser sulphosalts including pyrargyrite, stephanite, bournonite and acanthite, native silver, chalcopyrite, pyrite, arsenopyrite and stibnite. Silver minerals often occur as inclusions in galena. Some deposits include native gold and electrum. Rhythmic compositional banding is sometimes present in sphalerite. Some veins contain more chalcopyrite and gold at depth and Au grades are normally low for the amount of sulphides present.

Wall rock alteration is typically limited in extent (measured in metres or less). The metasediments typically display sericitization, silicification and pyritization. Thin veining of siderite or ankerite may be locally developed adjacent to veins.

Black manganese oxide stains are common weathering products and can be used as guide for prospecting. Polymetallic veins are generally strongly structurally controlled and commonly occur in clusters, therefore the best place to explore for new veins is in the area of known veins. Geochemically, there are generally elevated levels of Zn, Pb, Ag, Mn, Cu, Ba and As associated with the veins. Geophysically, polymetallic veins may have elongate zones of low magnetic response and/or electromagnetic, self potential or induced polarization anomalies related to ore zones.

Individual vein systems range from several hundred to several million tonnes grading from 5 to 1500 g/t Ag, 0.5 to 20% Pb and 0.5 to 8% Zn. Average grades are strongly influenced by the minimum size of deposit included in the population. For B.C. deposits larger than 20 000 t the average size is 161 000 t with grades of 304 g/t Ag, 3.47 % Pb and 2.66 % Zn. Copper and gold are reported in less than half the occurrences, with average grades of 0.09 % Cu and 4 g/t Au.

Polymetallic veins usually support small to medium-size underground mines. The mineralization may contain arsenic which typically reduces smelting credits.

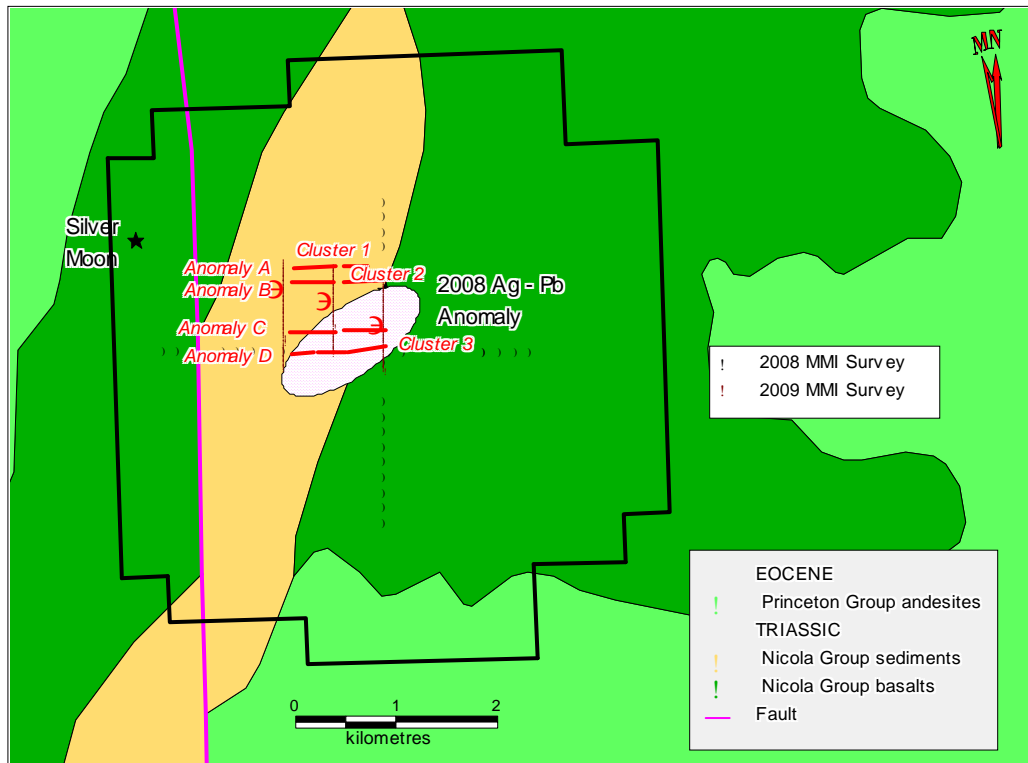
British Columbia examples of metasediment hosted polymetallic vein deposits include: the Slocan-New Denver-Ainsworth district, the Trout Lake Camp and St. Eugene Mine. Other examples are the Mayo District in the Yukon and the Couer d'Alene District in Idaho.

## MINERALIZATION

The Placer Creek Project is being explored for polymetallic quartz vein mineralization.

There are historic workings in the northwestern corner of the property on the old Silver Moon showing (Figure 5). The Silver Moon showing (BC MINFILE 092HSE071) consists of five flat-lying quartz and calcite veins up to 0.4 metre wide hosted within a series of vertical, irregular branching and reticulating shear zones striking roughly north and totaling 4.6 metres in width. The veins have been exposed over lengths of up to 10 metres and are locally mineralized with massive or disseminated arsenopyrite. Native gold is reported to occur in tiny veinlets cutting the arsenopyrite. Two samples collected from the flat veins assayed 6.17 and 1123 grams per tonne gold, and trace and 309 grams per tonne silver respectively (Minister of Mines Annual Report 1938, page D24). Between 1938 and 1940, about 7 tonnes of ore were mined, producing 1,027 grams of gold and 374 grams of silver. The showing was not examined during the current exploration program as new houses have or are being constructed where this occurrence is postulated to be present.

A second mineralized locality was discovered during the 2009 prospecting and mapping exploration program. Seven rock samples (Table3), were collected from this location.



UTM NAD 83 Zone 10  
Geology from MapPlace

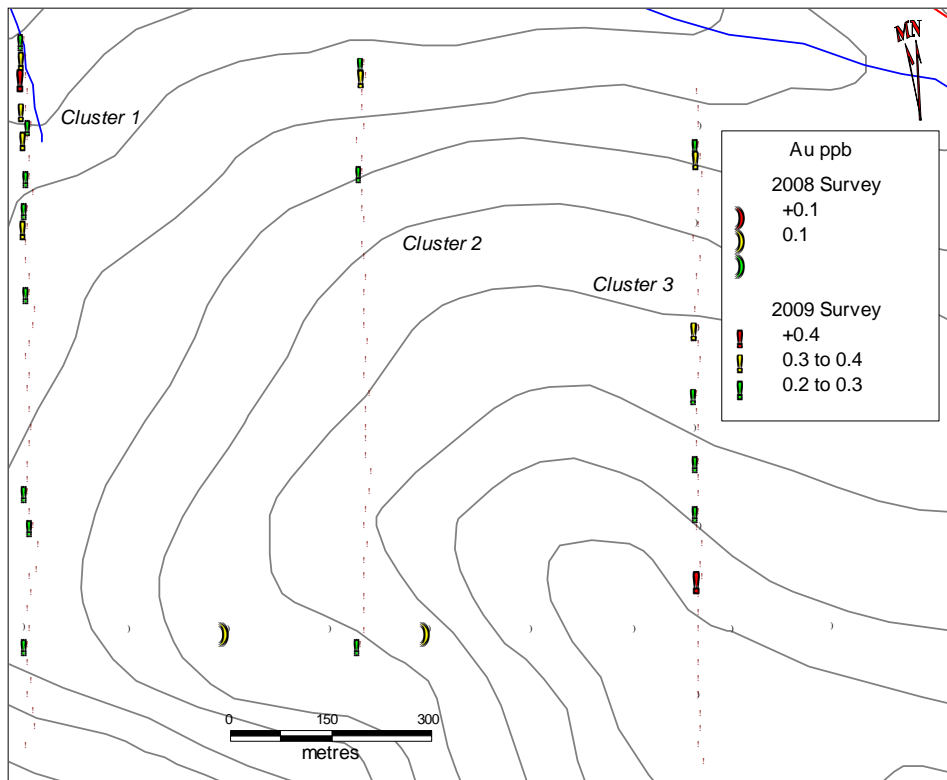
**PLACER CREEK PROPERTY**  
**Anomalous Zones**  
**Figure 5**

Arsenopyrite and pyrite varying in amounts of 1-10% are present in sheared and altered volcanoclastic and andesitic flows along the main logging road near the eastern side of the property. Traces of copper may also be present. Locally, minor quartz veining is also present. The shearing trends generally east-west with vertical to near vertical dips. Sulphide mineralization is present both as disseminations and small massive lenses. Alteration is mainly in the form of silicification and carbonatization. Analytical results for samples collected at this locality were sub-economic.

The 2009 MMI soil survey consisted of 3 north-south lines spaced 500 metres apart with sample stations located at 25 metre intervals. This survey covered the northern section of the 2008 coincident silver-lead anomaly. Three cluster anomalies were identified and are summarized as follows:

- Cluster Anomaly 1 lying at the northern end of the western line is a 12 station semi-continuous gold cluster, also found in the copper, molybdenum and zinc plots.
- Cluster Anomaly 2 lying at the north central section of the centre line is a 7 station semi-continuous lead cluster, also found in the silver and zinc plots.
- Cluster Anomaly 3 lying at the central section of the western line is a 12 station semi-continuous silver cluster, also found in the molybdenum and lead plots.



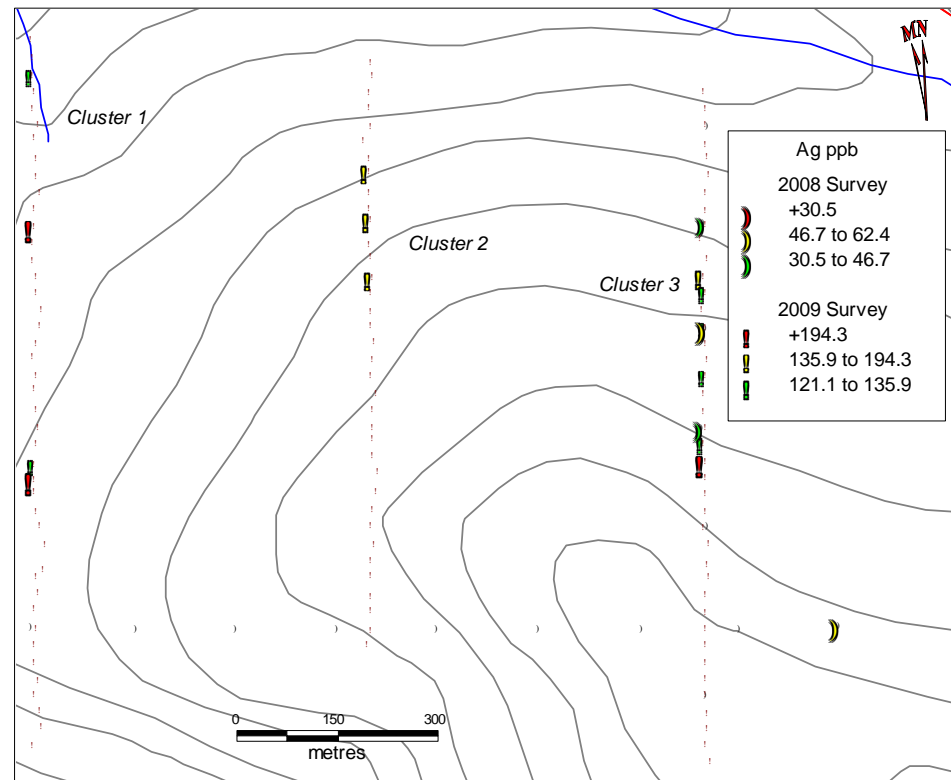


Projection UTM NAD 83 Zone 10

**PLACER CREEK PROJECT**

**MMI ppb Au**

Figure 6a

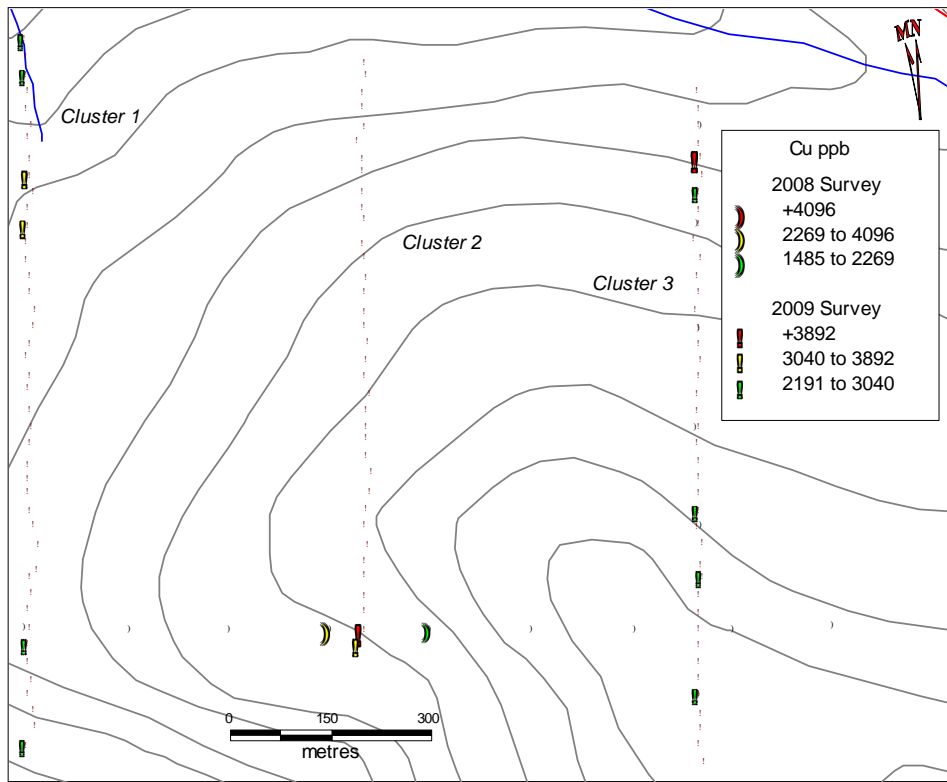


Projection UTM NAD 83 Zone 10

**PLACER CREEK PROJECT**

**MMI ppb Ag**

Figure 6b

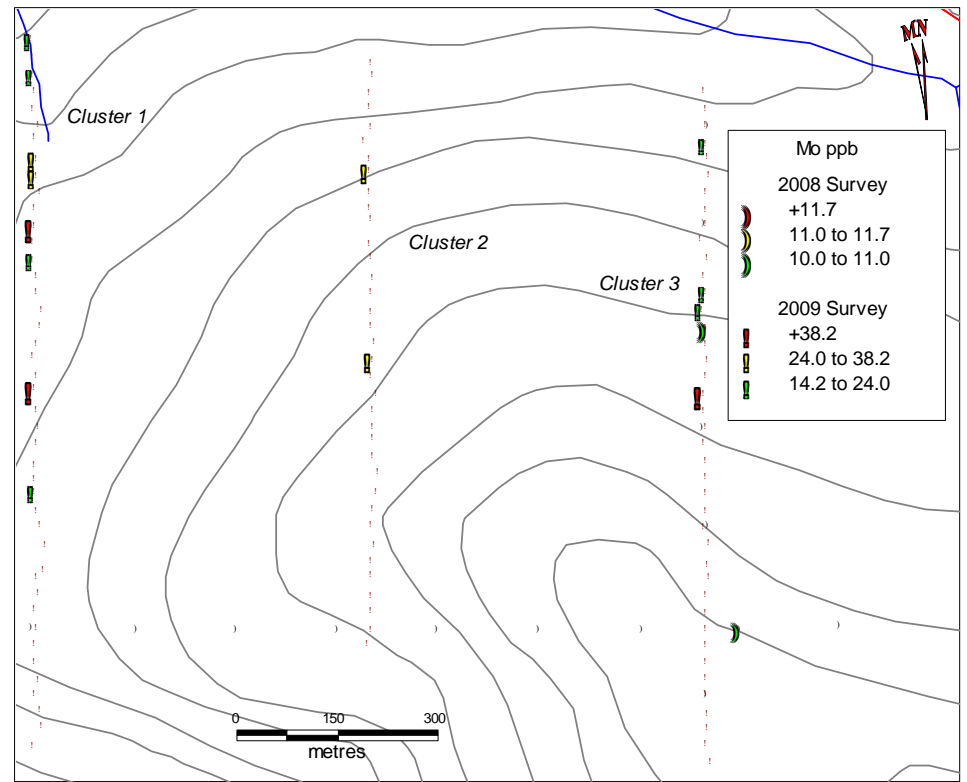


Projection UTM NAD 83 Zone 10

**PLACER CREEK PROJECT**

**MMI ppb Cu**

Figure 6c

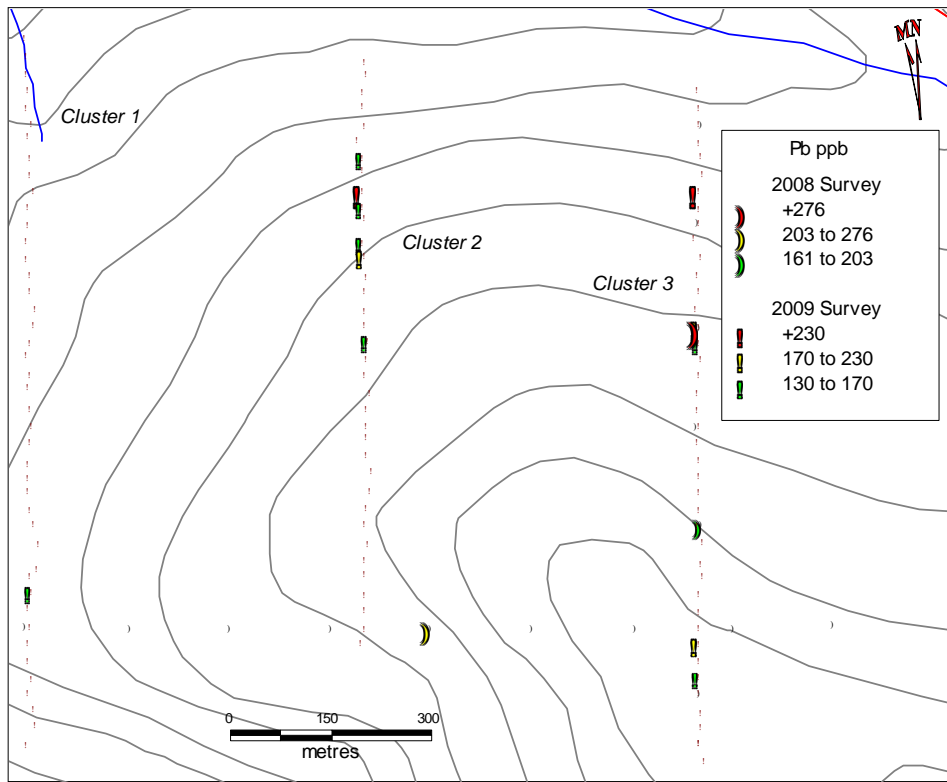


Projection UTM NAD 83 Zone 10

**PLACER CREEK PROJECT**

**MMI ppb Mo**

Figure 6d

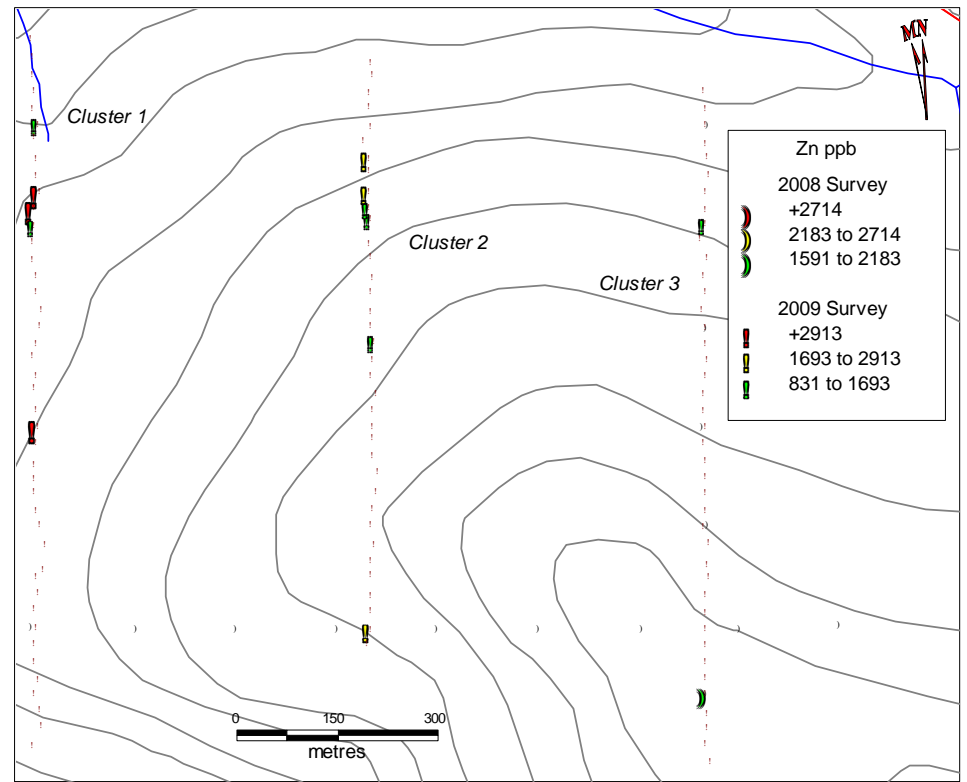


Projection UTM NAD 83 Zone 10

**PLACER CREEK PROJECT**

**MMI ppb Pb**

Figure 6e



Projection UTM NAD 83 Zone 10

**PLACER CREEK PROJECT**

**MMI ppb Zn**

Figure 6f

The 2009 Placer Creek exploration program consisted of a three line MMI soil survey, reconnaissance geological mapping and preliminary prospecting and rock sampling. MMI was utilized over conventional geochemistry as it has been proven to detect deeper mineralization, including that masked by barren overlying rock units.

Mobile Metal Ion (MMI) technology is a relatively new geochemical process. It is based on the widely held belief that mobile metal ions are transported from deeply buried ore bodies to the surface. These mobile metal ions move into the weathering zone and become weakly or loosely attached to surface soil particles.

The theory on MMI technology (taken from the MMI website [www.mmigeochem.com](http://www.mmigeochem.com)) is summarized below:

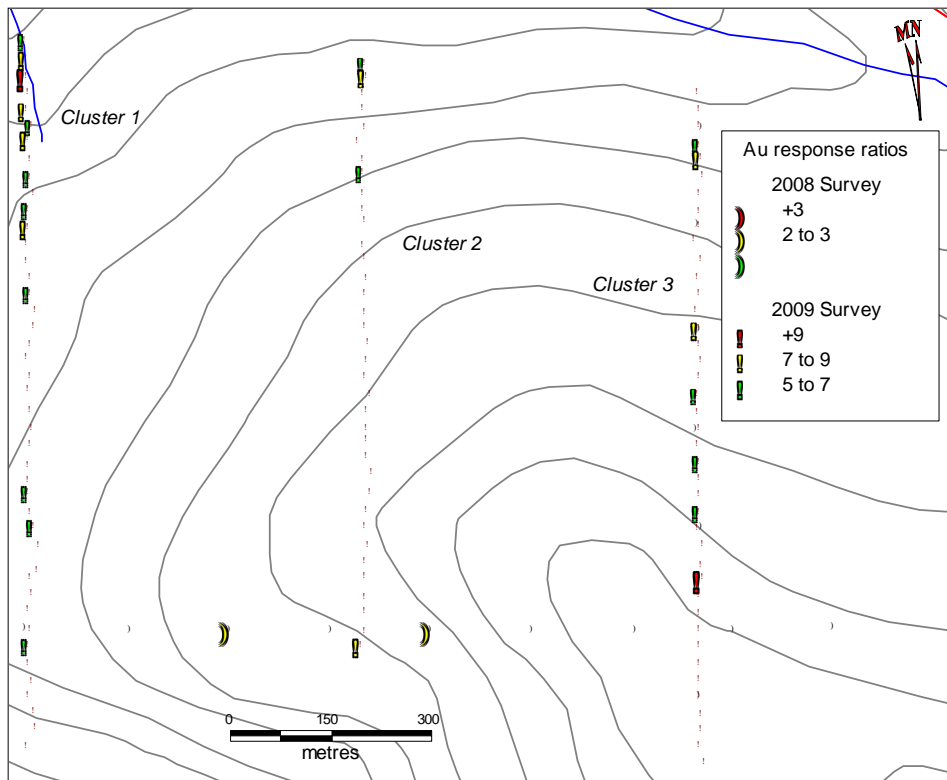
*Mobile Metal Ions is a term used to describe ions which have moved in the weathering zone and that are only weakly or loosely attached to surface soil particles. It has now been proven in a CAMIRO study using Pb isotopes that these Mobile Metal Ions are transported from deeply-buried ore bodies to the surface. Scientists from around the world have been studying this phenomenon for many years.*

*Convection, electrochemistry, diffusion, capillary rise and seismic pumping are some of the theories which have been put forward. However, research and case studies over known ore-bodies have shown that mobile metal ions accumulate in surface soils above mineralization, indicating that the metals are derived from oxidation of the mineralization source. Capillary rise is thought to be a very important process in the near surface environment which is responsible for maintenance of anomalies and dictates depth for sampling. The hypothetical model suggests mobile ions are released from ore bodies, migrate vertically and accumulate in surface soils.*

*As the ions reach the surface, they attach themselves weakly to the soil particles. These are the ions that are measured by the MMI Technique to find mineralization at depths. The weakly attached ions are at very low concentrations. Because the ions have recently arrived to the surface they provide a precise 'signal' on where the ore-bodies are.*

*When the mobile metal ions have arrived at the surface they have a limited lifetime as 'mobile' ions. At the surface the ions are subject to weathering and are bound up by soil forming processes (i.e. they become part of the soil). Bound ions are subject to lateral movement away from the mineralization. Mobile ions, however, do not move away from the source (mineralization) because they have a limited lifetime before they are converted to a bound form.*

*By only measuring the mobile metal ions in the surface soils, MMI Geochemistry will produce very sharp responses (anomalies) directly over the source of mobile ions. This source is ore-bodies at depth, which emit metal ions, which make up that ore-body. For example a Cu, Pb, Zn base metal deposit will emit (release) Cu, Pb and Zn ions.*

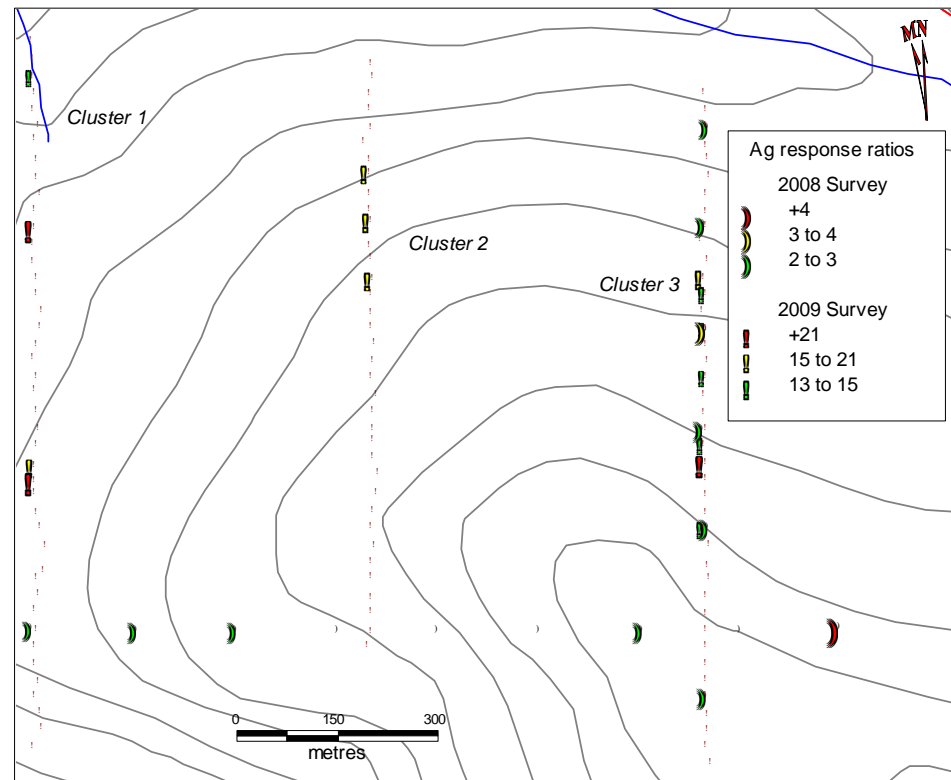


Projection UTM NAD 83 Zone 10

**PLACER CREEK PROJECT**

**Au Response Ratios**

Figure 7a

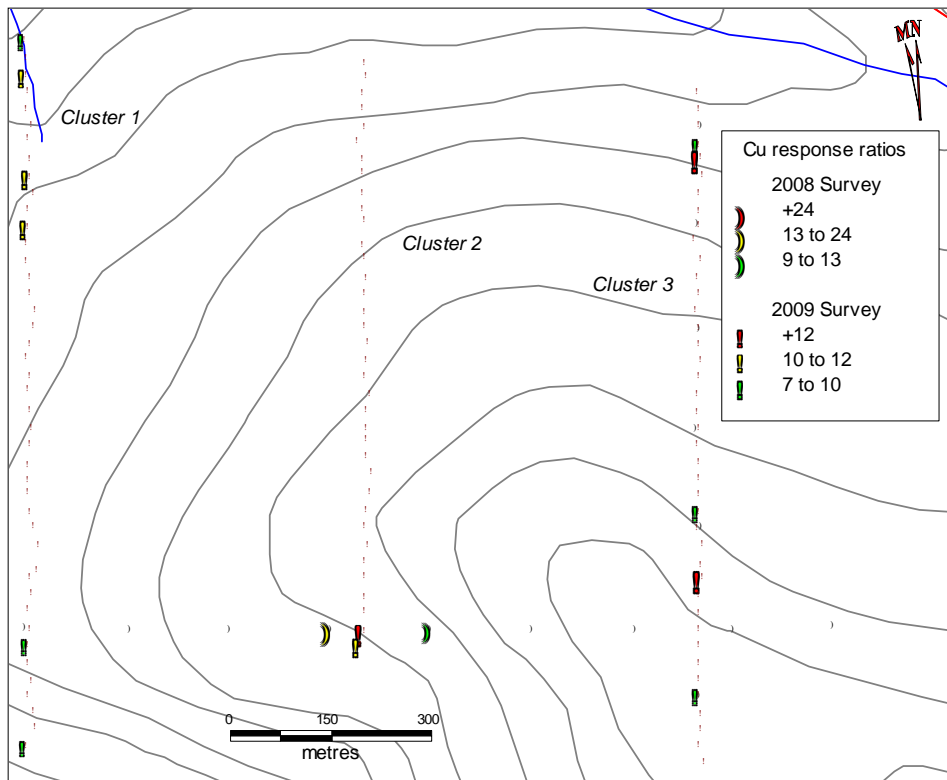


Projection UTM NAD 83 Zone 10

**PLACER CREEK PROJECT**

**Ag Response Ratios**

Figure 7b

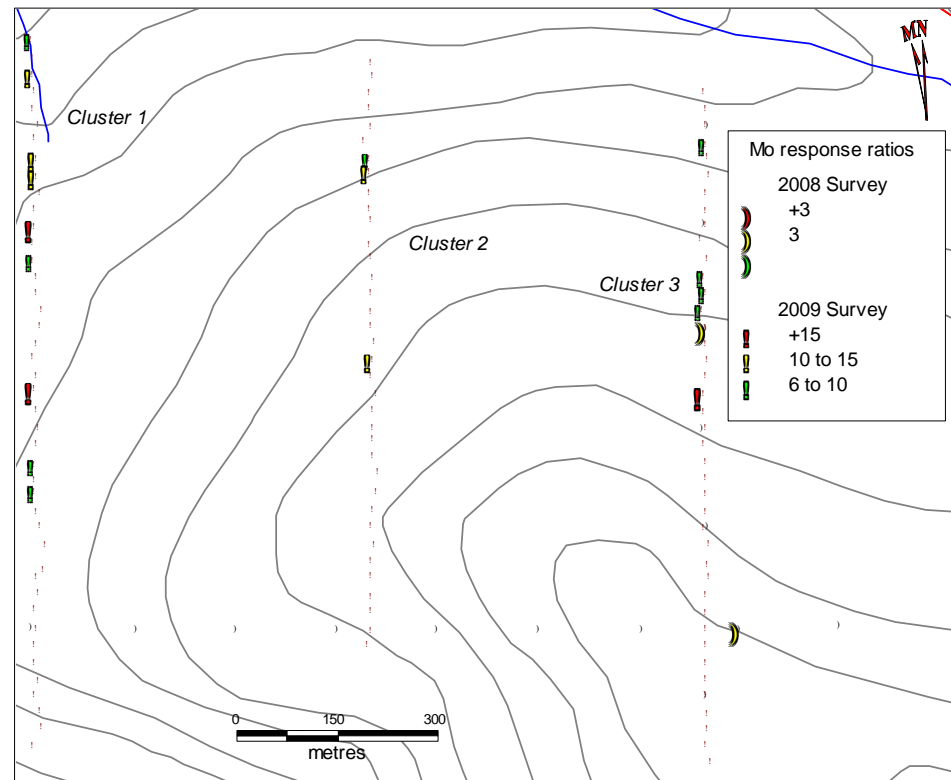


Projection UTM NAD 83 Zone 10

### PLACER CREEK PROJECT

#### Cu Response Ratios

Figure 7c

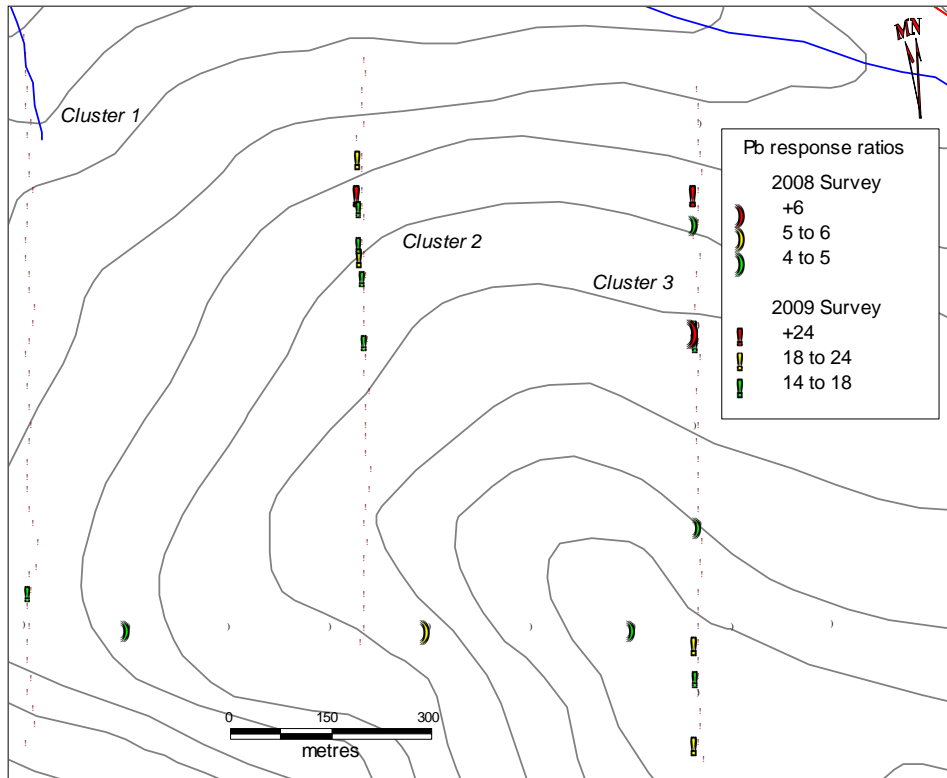


Projection UTM NAD 83 Zone 10

### PLACER CREEK PROJECT

#### Mo Response Ratios

Figure 7d

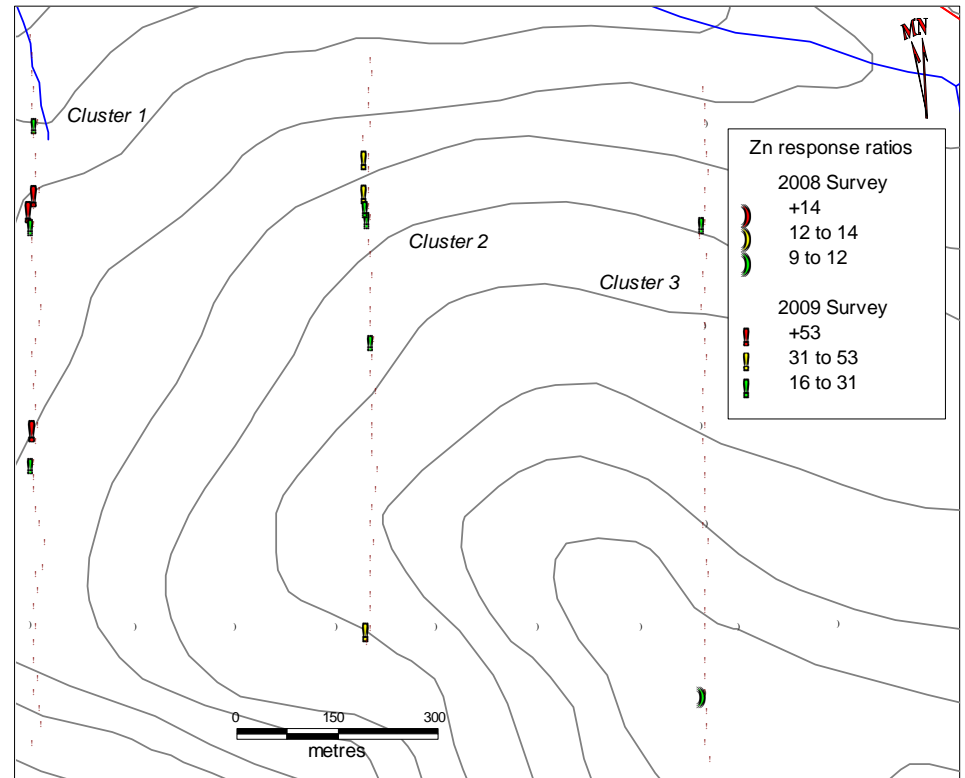


Projection UTM NAD 83 Zone 10

**PLACER CREEK PROJECT**

**Pb Response Ratios**

Figure 7e



Projection UTM NAD 83 Zone 10

**PLACER CREEK PROJECT**

**Zn Response Ratios**

Figure 7f

The 2009 MMI soil geochemical survey consisted of a three north-south oriented lines spaced 500 metres apart. The three lines ranged in length from 850 metres to 1050 metres and were sampled at 25 metre intervals. A total of 120 samples were taken from a consistent depth of 10 to 25 centimetres below the organics / inorganic interface. All samples were analyzed for the MMI-M multi element suite.

Bubble plots were completed for gold, silver, copper, molybdenum, lead and zinc (Figures 6a through 6f) utilizing the 90<sup>th</sup>, 95<sup>th</sup> and 98<sup>th</sup> percentiles. The elements tested show combinations of 5 linear anomalies and three line cluster anomalies.

**Gold:** The gold plot (Figure 6a) shows one cluster anomaly that is the semi-continuous 12 station group of samples along the northern portion of the western line. The Cluster 1 anomaly is shown on the gold, copper, molybdenum and zinc plots.

**Table 2: Geochemical Statistics for ppb data and Response Ratio data**

Percentile	Ag ppb	Au ppb	Cu ppb	Mo ppb	Pb ppb	Zn ppb	Ag RR	Au RR	Cu RR	Mo RR	Pb RR	Zn RR
25th	14.8	0.1	475.0	2.5	20.0	80.0	2.0	1.0	2.0	1.0	3.0	2.0
50th	29.0	0.1	790.0	5.0	45.0	160.0	4.0	1.0	3.0	2.0	5.5	3.0
75th	53.3	0.1	1192.5	8.0	80.0	362.5	6.0	2.0	4.0	4.0	9.0	7.3
90th	121.1	0.2	2191.0	14.2	130.0	831.0	13.0	5.0	7.0	6.1	14.0	16.0
95th	135.9	0.3	3039.5	24.0	170.0	1693.5	15.1	7.0	10.1	10.0	18.0	31.5
98th	194.3	0.4	3892.8	38.2	230.0	2913.8	20.9	9.0	12.6	15.6	24.0	53.6
Maximum	218.0	0.7	4600.0	155.0	390.0	3330.0	23.0	14.0	15.0	62.0	41.0	61.0

**Silver:** The silver plot (Figure 6b) shows two cluster anomalies (Cluster 2 and Cluster 3). The strongest anomaly is the semi-continuous 12 station Cluster 3 anomaly along the central portion of the eastern line. The Cluster 3 anomaly is shown on the silver, molybdenum and lead plots. The Cluster 2 anomaly appears on the silver, lead and zinc plots, and is strongest on the lead plot.

**Copper:** The copper plot (Figure 6c) shows one cluster anomaly (1). None of the anomalies appear to be very strong on the copper plot. The Cluster 1 anomaly is shown on the copper, gold, molybdenum and zinc plots.

**Molybdenum:** The molybdenum plot (Figure 6d) shows two cluster anomalies (1 and 3). The strongest anomaly is the semi-continuous 14 station Cluster 1 anomaly along the northern portion of the western line. The Cluster 1 anomaly is shown on the molybdenum, gold, copper and zinc plots. The Cluster 3 anomaly is shown on the molybdenum, silver and lead plots.

**Lead:** The lead plot (Figure 6e) shows two cluster anomalies (2 and 3). The strongest anomaly is the semi-continuous 7 station Cluster 2 anomaly along the northern portion of the central line. The Cluster 2 anomaly is shown on the lead, silver and zinc plots.



**Zinc:** The zinc plot (Figure 6d) shows two cluster anomalies (1 and 2). None of the anomalies appear to be very strong on the zinc plot. The Cluster 1 anomaly is shown on the zinc, copper, gold and molybdenum plots. The Cluster 2 anomaly is shown on the zinc, silver and lead plots.

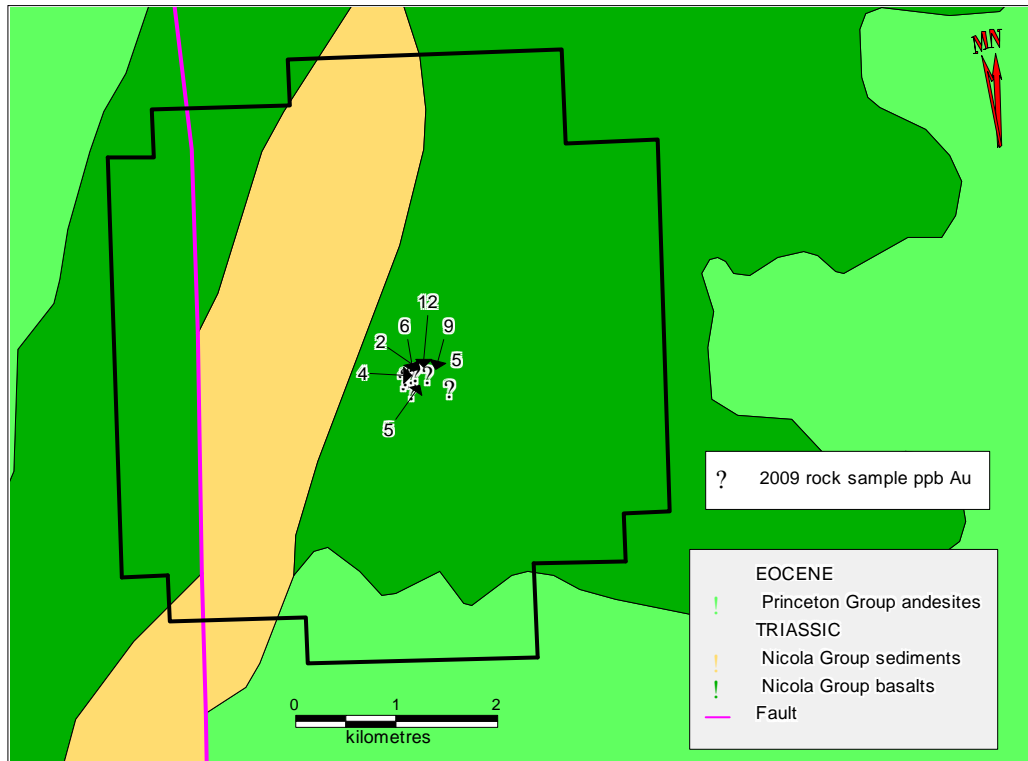
The MMI Technology manual strongly recommends that Response Ratios be calculated for each element to facilitate interpretation. Response ratios were calculated and plotted for each of the 6 elements: Cu, Mo, Ag, Au, Pb and Zn (Figures 7a through 7f). Response ratios are calculated for each individual element as follows:

- the lowest 25% of the data for all samples in the survey area is determined
- all values less than the detection limit are included and a values of  $\frac{1}{2}$  the detection limit is assigned
- the average of the lowest quartile (25%) is calculated to determine the background value
- the response ratio is then calculated by dividing each sample value by the background value for that element. The numbers are then rounded to give whole numbers greater than or equal to 1
- samples with response ratios of 2 or less are considered background, while samples with response ratios greater than 5 are considered anomalous.

The benefits behind response ratios as the main interpretive method for analyzing MMI data is summarized below:

- Reduce the effects of dissolution variables during extraction, for example time and temperature;
- Allow the splicing of different data batches or data from varying regolith situations;
- Reduce the effects of sampling in different regolith units; and
- Facilitate multi-element data presentations for interpretation.

The Response Ratios for each of the six elements are shown in Table 2, with the corresponding Response Ratio plots shown in Figures 7a through 7f. The Response Ratios verify the elemental plots for all six of the elements.



UTM NAD 83 Zone 10  
Geology from MapPlace

**PLACER CREEK PROPERTY**  
**Rock Sampling**  
Figure 8

Seven grab rock samples were taken from the Placer Creek property as shown in Figure 8 and Table 3. Shear zones in andesitic volcanic were sampled twice returning gold values of 5 ppb over 4 metres and 12 ppb from a random grab sample. Intensely oxidized andesitic volcanic were sampled twice returning gold values of 4 ppb and 6 ppb respectively, each over 1 metre. One sample of well mineralized rusty silicified andesitic volcanic returned 2 ppb Au from a select grab. A random grab sample of quartz vein material in andesitic volcanics returned 9 ppb Au. A select grab of rusty quartz carbonate rock returned a gold value of 5 ppb.

**Table 3: Placer Creek Rock Samples (NAD 83 Zone 10)**

Sample	83Z10E	83Z10N	Rock Type	m width	Au ppb	Ag ppm	Cu ppm	Mo ppm	Pb ppm	Zn ppm
7R40859	681020	5450753	shear zone	4	5	<0.2	112	17	12	159
7R40860	680939	5450836	volcanics	1	4	<0.2	58	2	6	57
7R40861	680965	5450893	volcanics	1	6	<0.2	112	5	10	40
7R40862	681006	5450899	volcanics	select grab	2	<0.2	144	2	8	63
7R40863	681046	5450917	shear zone	grab	12	<0.2	98	8	16	43
7R40864	681177	5450911	quartz vein	grab	9	<0.2	55	4	6	28
7R40865	681388	5450770	carbonate rock	select grab	5	<0.2	62	1	6	33

## DRILLING

There is no record of diamond drilling on the Placer Creek property.

## SAMPLING METHOD AND APPROACH

The 2009 sampling program on the Placer Creek property consisted of MMI soil geochemistry and preliminary rock sampling. A total of 120 soil samples and 7 rock samples were taken.

Three north-south, GPS-oriented, flagged soil lines were sampled to test the coincident silver-lead anomaly delineated by the 2008 MMI soil program. The three lines were spaced 500 metres apart and sampled at 25 metre intervals. Samples were collected at a consistent depth of 10 to 25 centimetres below the organic / inorganic (or true soil) interface. Each sample, comprising a minimum of 250 grams, was placed in a 90 by 150 millimetre snap seal (Ziploc) bag. A sequentially numbered assay ticket was also placed in the corresponding bag. The location was marked as a waypoint, stored in the memory of a Garmin GPSmap 60CSx unit. The waypoint coordinates and assay ticket numbers were also recorded in a field notebook at the corresponding sample location as back-up. Details on soil color and proximal rock outcrop were also recorded in the field notes. The GPS data was downloaded daily into an Excel spreadsheet. The corresponding sample number and the soil color and proximal outcrop were also entered.

A total of 7 rock samples were taken during prospecting of the 2008 grid. Approximately 1-2 kilograms of rock was taken from outcrop and placed in a poly sample bag. A sequentially numbered assay ticket was also placed in the corresponding bag. The location was marked as a waypoint, stored in the memory of a Garmin GPSmap 60CSx or Garmin 76 GPS unit and marked on the ground by a sample flag. The waypoint coordinates and assay ticket numbers were also recorded in a field notebook at the corresponding sample location as back-up. Brief descriptions of the rock sample and source outcrop were also recorded in the notebook.

The authors are not aware of any sampling factors that could materially impact the accuracy and reliability of the MMI soil sample or rock sample results. At this preliminary stage of the exploration program, a sample spacing of 25 metres along parallel north-south lines at a 500 metre line spacing is sufficient to initially test for gold veins and is therefore considered representative. There is no chance of bias as sample medium is soil at regular intervals along sample lines. The rock sampling consisted of grab or chip samples from existing outcrops and is considered representative.

The main lithology identified on the Placer Creek property is andesitic volcanics which commonly exhibits oxidation and local silicification. Seven random grab, select grab or chip samples from outcrops and sub crops were collected to the southeast of the grid area. Pyrite and arsenopyrite, ranging from trace to 12% combined were noted in five of the seven samples. Only one of the seven gold assays exceeded background returning 12 ppb.

Economic bedrock mineralization has not yet been encountered on the Placer Creek property. This was a preliminary exploration program focused on ground truthing the 2008 soil geochemical anomalies by further soil sampling, prospecting and rock sampling.

#### SAMPLE PREPARATION, ANALYSIS AND SECURITY

The soil sampling, prospecting and rock sampling was completed by independent contractor Mammoth Geological Ltd. personnel: Steve Butrenchuk, Gary Wesa and Brian Janes under the supervision of R. Tim Henneberry, P.Geol.

The soil samples were packaged and delivered directly to the Vancouver Greyhound Bus Depot by Mr. Wesa for shipment to SGS Minerals Services in Toronto, Ontario. The rock samples were packaged and delivered to Eco Tech Laboratory in Kamloops, British Columbia by Mr. Butrenchuk.

The MMI Process uses leachant solutions which have been specially developed to selectively 'release' the adsorbed ions from the soil material. The aim of the selective leaching is to remove metals which are loosely bound on the surface of particles within existing soil profiles, without attacking or influencing the natural mineralization of the soil or specific substrates. Using sensitive ICPMS instrumentation, the MMI Process is able to detect Mobile Metal Ions in digest solutions at sub-parts per billion level. SGS Mineral Services in Toronto, Ontario is the only Canadian lab licensed to undertake Mobile Metal Ion Analysis. SGS Mineral Services is ISO/IEC 17025:2005 certified by the Standards Council of Canada.

Eco Tech's rock sample preparation procedures are as follows: samples are first catalogued and dried; then they are two stage crushed to minus 10 mesh and a 250 gram sub-sample is pulverized on a ring mill pulverizer to -140 mesh; finally the sub-sample is rolled, homogenized and bagged in a pre-numbered bag. Samples for gold geochemical analysis are weighed to 30 grams and fused along with proper fluxing materials. The bead is digested in aqua regia and analyzed on an atomic absorption instrument. Over-range values for rocks are re-analyzed using gold assay methods. The remaining elements are analyzed by multi-element ICP-MS. A 0.5 gram sample is digested with 3 ml of a 3:1:2 (HCl:HN03:H2O) which contains beryllium that acts as an internal standard for 90 minutes in a water bath at 95°C. The sample is then diluted to 10 ml with water. The sample is analyzed on a Jarrell Ash ICP unit. Eco Tech Laboratory Ltd., part of the Alex Stewart Group, is ISO 9001 certified by International Organization for Standardization.

**Table 4: Placer Creek Duplicate and Standard Samples**

SGS Mineral Services Duplicates														
Sample	Ag ppb	Au ppb	Cu ppb	Mo ppb	Pb ppb	Zn ppb		Duplicate	Ag ppb	Au ppb	Cu ppb	Mo ppb	Pb ppb	Zn ppb
266544	30	0.2	1340	12	<10	1500		266544	28	0.2	1220	11	<10	1020
266552	36	<0.1	750	17	<10	70		266552	40	<0.1	760	18	<10	70
266572	8	<0.1	1050	<5	110	80		266572	7	<0.1	990	<5	80	80
266581	14	0.1	610	<5	30	60		266581	14	<0.1	590	<5	30	70
266593	19	<0.1	240	<5	130	1670		266593	19	<0.1	240	<5	140	1660
266607	26	<0.1	500	<5	40	210		266607	27	<0.1	470	<5	40	210
266617	11	<0.1	570	<5	100	30		266617	11	<0.1	610	<5	110	30
266632	30	<0.1	1100	<5	60	70		266632	35	<0.1	1090	<5	50	50
266649	116	<0.1	1470	6	30	60		266649	128	0.1	1420	7	30	70
266663	5	<0.1	460	<5	170	190		266663	6	<0.1	480	<5	170	160

SGS Mineral Services Standards and Blanks														
Standard	Ag ppb	Au ppb	Cu ppb	Mo ppb	Pb ppb	Zn ppb		Blank	Ag ppb	Au ppb	Cu ppb	Mo ppb	Pb ppb	Zn ppb
MMISRM18	21	8.6	780	34	150	610		BLANK	<1	<0.1	<10	<5	<10	<20
MMISRM16	16	24.2	610	50	50	190		BLANK	<1	<0.1	<10	<5	<10	<20
MMISRM18	24	10.8	870	34	180	680		BLANK	<1	<0.1	<10	<5	<10	<20
MMISRM16	17	32.9	610	47	50	210		BLANK	<1	<0.1	<10	<5	<10	<20

Wilson Standards to SGS Mineral Services														
Sample	Ag ppb	Au ppb	Cu ppb	Mo ppb	Pb ppb	Zn ppb		Sample	Ag ppb	Au ppb	Cu ppb	Mo ppb	Pb ppb	Zn ppb
266540	8	87	100042	493	4270	4380		266620	2	115	70200	1370	2850	4970
266560	14	49.8	84600	30000	480	360		266640	15	69	94400	47900	580	480
266580	8	90.4	96300	486	4420	4320		266660	1	106	62300	1370	3590	4650
266600	15	46.5	84500	28700	430	390								

Wilson Standards to Eco Tech Labs														
Sample	Ag ppb	Au ppb	Cu ppb	Mo ppb	Pb ppb	Zn ppb		Sample	Ag ppb	Au ppb	Cu ppb	Mo ppb	Pb ppb	Zn ppb

7R40853	548	2.8	4583	29	36	173		7R40875	276	<0.2	3170	492	14	60
---------	-----	-----	------	----	----	-----	--	---------	-----	------	------	-----	----	----

-28-

Mammoth Geological Ltd. submitted CDN Resource Labs Ltd. standards CM-5 and CGS-15 at regular intervals throughout the soil sample stream and rock sample stream as shown in Table 4. Standard CM5 is 294 ppb Au  $\pm$  46 ppb (or 248 to 340 ppb Au), 0.319% Cu  $\pm$  0.02% (or 3170 to 3210 ppm Cu) and 0.050% Mo  $\pm$  0.005% (or 495 to 505 ppm Mo). Standard CGS15 is 570 ppb Au  $\pm$  60 ppb (or 510 to 630 ppb Au) and 0.451% Cu  $\pm$  0.02% (or 4310 to 4710 ppm Cu). A total of 7 analyses of this standard were completed by SGS Mineral Services. The MMI analysis is not a complete digestion so the results of the standard analyses are not expected to be within the limits. A total of 2 analyses, one of each standard, were completed by Eco Tech. All gold analyses returned values within the upper and lower limit of the standards. All copper analyses also returned values within the upper and lower limit of the standards.

SGS Mineral Services completed 10 duplicate samples where they obtained two samples from the same soil sample pulp. The results are shown in Table 4. The duplicate samples performed generally quite well, as did their blanks. Background information on the ranges of the two SGS Mineral Services standards was not provided so a comment cannot be made on these standards.

The authors feel the 25 metre sample spacing along the three soil lines was adequate for this stage of the Placer Creek exploration program. There are no issues with sample security. The sample preparation and analytical procedures were also adequate for this phase of the Placer Creek exploration program.

#### DATA VERIFICATION

The 2009 prospecting and follow up MMI soil sampling surveys are preliminary exploration programs. Quality control measures for preliminary prospecting, rock sampling and soil sampling generally consist of in house lab duplicates and standards, supplemented by client standards inserted into the sample stream. The duplicates and standards allow the authors to have confidence in the assay data.

The rock samples were collected by or under the supervision of Mr. Butrenchuk so no further verification is required. The soil sampling was completed by or under the supervision of Mr. Wesa. While Mr. Wesa is not a Qualified Person under NI43-101, he has close to 40 years of exploration experience and is more than qualified to undertake soil sampling, prospecting and rock sampling surveys. The authors feel no further verification of his work is required.

After reviewing the exploration program and assay results, the authors feel they have adequately verified the data.

#### ADJACENT PROPERTIES

This report is not relying on information from adjacent properties.

## MINERAL PROCESSING AND METALLURGICAL TESTING

There has been no mineral processing or metallurgical testing undertaken on the Placer Creek property.

## MINERAL RESOURCES AND MINERAL RESERVE ESTIMATES

There are presently no mineral reserves or mineral resources on the Placer Creek property.

## OTHER RELEVANT DATA AND INFORMATION

There is no additional relevant data or information known that is not disclosed on the Placer Creek property.

## INTERPRETATION AND CONCLUSIONS

The Placer Creek property lies within an area of high geological potential in the Princeton area. The claims overlie Triassic Nicola Group sediments and volcanics in the general vicinity of Jurassic to Cretaceous intrusive rocks, a favourable setting for polymetallic gold veins, as well as porphyry copper deposits. Further, the presence of shear hosted auriferous vein mineralization near the western boundary of the property enhances the possibility of shear hosted polymetallic gold.

The 2009 three line grid MMI soil survey was successful in identifying 4 multi-element linear anomalies and 3 multi-element cluster anomalies that require further exploration.

It is recommended that the next phase of exploration on the Placer Creek property should consist of infill MMI soil sampling along one kilometre long 100 metre spaced lines within the areas bounded by the three completed 2009 lines needs. Two lines should also be established to the west of the current westernmost line and two lines should also be established to the east of the current easternmost line. All lines should be sampled at 25 metre intervals. This will result in an additional 12 line kilometres of soil sampling totaling 492 samples.

## RECOMMENDATIONS

It is recommended that the next phase of exploration on the Placer Creek property should consist of infill MMI soil sampling along one kilometre long 100 metre spaced lines within the areas bounded by the three completed 2009 lines needs. Two lines should also be established to the west of the current westernmost line and two lines should also be established to the east of the current easternmost line. All lines should be sampled at 25 metre intervals. This will result in an additional 12 line kilometres of soil sampling totaling 492 samples. The total cost of the MMI soil sampling is estimated at \$85,000.

The cost of the June and August 2009 exploration program was \$19,751.49. Combined with the cost of the July and September 2008 MMI survey of \$12,469.77 the total expenditures to date on the Placer Creek property are \$32,221.26.



-31-  
REFERENCES

[www.em.gov.bc.ca/Mining/Geosurv/Minfile/default.htm](http://www.em.gov.bc.ca/Mining/Geosurv/Minfile/default.htm). The British Columbia Ministry of Energy and Mines Minfile website provided a geological summary on the 092HSE map sheet.

[www.em.gov.bc.ca/Mining/Geosurv/MapPlace/default.htm](http://www.em.gov.bc.ca/Mining/Geosurv/MapPlace/default.htm). The British Columbia Ministry of Energy and Mines MapPlace website provided the regional geological map and legend.

[www.mmigeochem.com](http://www.mmigeochem.com). The Mobile Metal Ion Technology Website. The applicable case studies are:

- CS-05 - Base Metal Exploration in Manitoba, Canada
- CS-06 - MMI at the San Jorge Porphyry Copper Deposit, Mendoza Province, Argentina
- CS-36 - MMI Geochemistry, Jacks Pond, Buchans District, Newfoundland

Diakow, G. (2007). Prospecting Report on the AU 2 Claims, Princeton Area, Similkameen Mining Division, BC Ministry of Energy, Mines and Petroleum Resources Assessment Report 29518.

Henneberry, R.T. (2009). Geological Report Placer Creek Project. BC Ministry of Energy, Mines and Petroleum Resources Assessment Report 30652.

Larson, H.A. (1972). Geophysical Report on Magnetic and VLF-EM Surveys, EE & Ram Claim Groups, Belgie Creek Area, Similkameen Mining Division, BC Ministry of Energy, Mines and Petroleum Resources Assessment Report 03597.

Lefebure, D.V. and Church, B. N. (1996): Polymetallic Veins Ag-Pb-Zn+/-Au, in Selected British Columbia Mineral Deposit Profiles, Volume 2 - Metallic Deposits, Lefebure, D.V. and Höy, T, Editors, British Columbia Ministry of Energy of Employment and Investment, Open File 1996-13, pages 67-70.

MMI Manual for Mobile Metal Ion Geochemical Soil Surveys. Version 5.04. Wamtech Pty. Ltd. 2004. Found at [www.mmigeochem.com](http://www.mmigeochem.com).

Ramani, S.V. (1974). Geological Report on the Holt and Davis Claims for Cascadia Resources Ltd, BC Ministry of Energy, Mines and Petroleum Resources Assessment Report 04986.

-32-  
STATEMENT OF COSTS

	Dates Worked				
Steve Butrenchuk	Jun 14,15,16				
Brian Janes	Aug 15,16,17,18,22				
Gary Wesa	Jun 14,15,16; Aug 15,16,17,18,22				
 Tim Henneberry					
 Field Crew					
Steve Butrenchuk	3 days	@ \$ 550 /day		\$ 1,650.00	
Brian Janes	5 days	@ \$ 450 /day		\$ 2,250.00	
Gary Wesa	8 days	@ \$ 500 /day		\$ 4,000.00	
Steve Vehicle	1047 kms	@ \$ 0.75 /km		\$ 785.25	
 Supervision					
Tim Henneberry	8 hours	@ \$ 100 /hour		\$ 800.00	
 Documentation					
Tim Henneberry	20 hours	@ \$ 100 /hour		\$ 2,000.00	
Total Services				\$ 11,485.25	
GST on Services GST No. 133959049				\$ 495.00	
Expenses (attached)				\$ 2,868.16	
	Butrenchuk - June		878.4		
	Wesa - June, August		1989.76		
Analysis				\$ 4,903.08	
	ASG - AK09-0249		176.4		
	CDN Standards		59.43		
	SGS - TO107408		2315.25		
	SGS - TO107409		2352		
<hr/> Total Cost				\$ 19,751.49	

-33-  
COST ESTIMATES

**PLACER CREEK PROJECT  
PRELIMINARY BUDGET FOR 2010 EXPLORATION SEASON**

<b>MMI Grid Sampling</b>	18 days
2009 Grid	
Fill in and expand east and west 2009 soil grid	
12 lines of 1000 metres at 25 metre intervals along each of the lines	
41 samples per line by 12 lines = 492 samples	
492 samples / 8 samples per man day = 62 man days	
One day travel at each end, one rain days = 72 man days	
Geologist	18 days @ \$ 500 /day \$ 9,000
Prospector	18 days @ \$ 450 /day \$ 8,100
Assistant	18 days @ \$ 400 /day \$ 7,200
Assistant	18 days @ \$ 400 /day \$ 7,200
Room & Board	72 days @ \$ 100 /day \$ 7,200
Vehicle + Fuel	38 days @ \$ 150 /day \$ 5,700
Vehicle km's	3500 kms @ \$ 0.5 /km \$ 1,750
Analysis - soil	492 sample @ \$ 35 /sample \$ 17,220
Analysis - standards	25 sample @ \$ 35 /sample \$ 875
Travel	\$ 2,000
Sundries	\$ 1,000
Contingency	\$ 10,255
Report	\$ 7,500
<b>MMI Grid Sampling Budget</b>	<b>\$ 85,000</b>

-34-  
CERTIFICATE

I, Stephen B. Butrenchuk, P.Geol. of 34 Temple Crescent West, Lethbridge, Alberta, T1K 4T4 do hereby certify that: I am the Qualified Person for:

**Mr. Sydney Wilson**  
4766 West 4<sup>th</sup> Avenue  
Vancouver, B.C. V6T 1C2

I earned a Bachelor of Science degree majoring in geology from the University of Manitoba (1966) and a Master of Science degree in geology from the same university in 1970.

I am registered with the Association of Professional Engineers, Geologists and Geophysicists in the Province of Alberta as a Professional Geologist.

I have practiced my profession continuously for 40 years since graduation.

I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a ‘qualified person’ for the purposes of NI 43-101. My relevant experience for the purpose of this Technical Report is:

- 40 years of exploration experience for base and precious metals in the Canadian Cordillera

I am responsible for the preparation of the technical report titled “Geological Report Placer Creek Project” and dated December 31, 2009, relating to the Placer Creek property. I prospected and mapped the grid on the Willis Creek property from June 14 to June 16, 2009.

I have not had prior involvement with the property that is the subject of the Technical Report.

As of December 31, 2009, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

I am independent of the issuer after applying all of the tests in section 1.4 of NI 43-101.

I have read NI 43-101 and Form 43-101F, and the Technical Report has been prepared in compliance with that instrument and form.

I consent to the public filing of the Technical Report with the British Columbia Ministry of Energy and Mines in support of assessment work requirements.

I make this Technical Report effective December 31, 2009.

“signed and sealed”

\_\_\_\_\_  
Stephen B. Butrenchuk, P.Geol.

-35-  
CERTIFICATE

I, R.Tim Henneberry, P.Geo. of 2446 Bidston Road, Mill Bay, B.C. V0R 2P4 do hereby certify that: I am the Qualified Person for:

**Mr. Sydney Wilson**  
4766 West 4<sup>th</sup> Avenue  
Vancouver, B.C. V6T 1C2

I earned a Bachelor of Science Degree majoring in geology from Dalhousie University, graduating in May 1980.

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

I have practiced my profession continuously for 29 years since graduation.

I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101. My relevant experience for the purpose of this Technical Report is:

- 29 years of exploration experience for base and precious metals in the Canadian Cordillera

I am responsible for the preparation of the technical report titled “Geological Report Placer Creek Project” and dated December 31, 2009, relating to the Placer Creek property. I supervised and directed the exploration programs described in this report on behalf of Mr. Sydney Wilson. I have not yet visited the Placer Creek property.

I have not had prior involvement with the property that is the subject of the Technical Report.

As of December 31, 2009, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

I am independent of the issuer after applying all of the tests in section 1.4 of NI 43-101.

I have read NI 43-101 and Form 43-101F, and the Technical Report has been prepared in compliance with that instrument and form.

I consent to the public filing of the Technical Report with the British Columbia Ministry of Energy and Mines in support of assessment work requirements.

I make this report effective as of the 31<sup>st</sup> day of December, 2009.

“signed and sealed”

---

R.Tim Henneberry, P.Geo

STATEMENT OF QUALIFICATIONS

I, Gary L. Wesa , of 309 – 6669 Telford Avenue, Burnaby, British Columbia, V5H 4A1 do hereby certify that:

I hold a Bachelor of Science degree in Geology from the University of Saskatchewan, awarded in 1974.

I am registered as a Fellow of the Geological Association of Canada and work professionally as a Geologist.

I have worked in the mineral exploration and mining industry for over 39 years in Canada, parts of the western United States, Brazil and British Guyana. Duties and responsibilities have included direct involvement in all phases of regional mineral exploration, base metal and precious metal property examinations and evaluations, regional and property scale mapping, supervision of regional and property scale exploration programs and diamond drilling programs.

I assisted in the prospecting and rock sampling program on the Placer Creek Property with Steve Butrenchuk, P.Geol. from June 14 to June 16, 2009 and I supervised and completed the MMI soil sampling program on the Placer Creek Property with the assistance of Brian Janes, B.Sc. from August 15 to August 18 and August 22, 2009.

I have no interest, direct, indirect or contingent in the Placer Creek claims nor do I expect to acquire any such interest in the future.

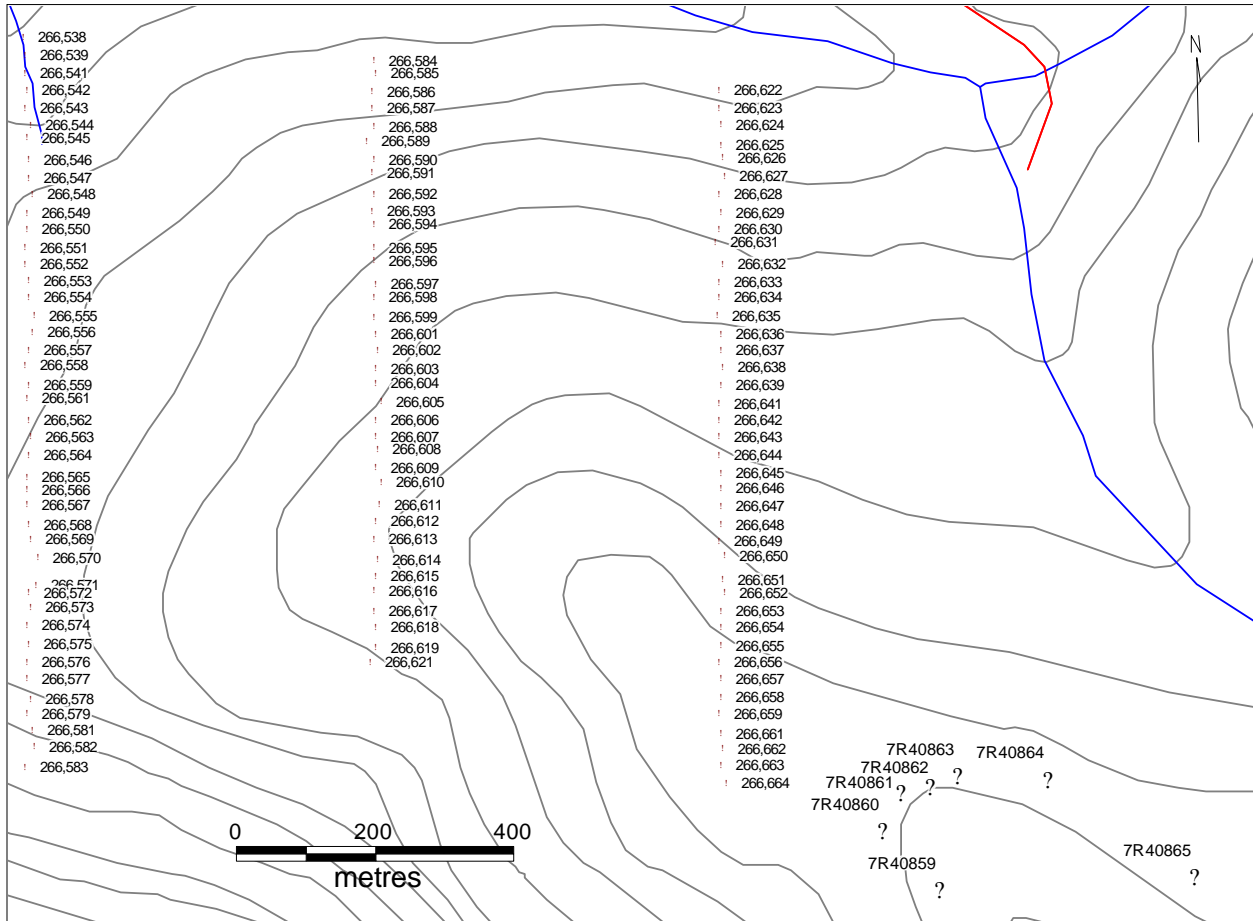
I am co-author in the preparation of this report titled “Geological Report Placer Creek Project” dated December 31, 2009.

Dated this December 31, 2009.

“signed and sealed”

---

Gary L. Wesa, B.Sc., F.G.A.C.



UTM NAD 83 Zone 10

**PLACER CREEK PROPERTY**  
**2009 Rock and Soil Sample Locations**  
Figure 9

APPENDIX 1. Placer Creek 2009 MMI Soil Sample Locations (UTM NAD83 Zone 10)

Sample No.	83Z10_E	83Z10_N	Depth(cm)	Colour	Comments	Ag ppb	Ag RR	Au ppb	Au RR	Cu ppb	Cu RR	Mo ppb	Mo RR	Pb ppb	Pb RR	Zn ppb	Zn RR
266538	679695	5451976	10-25	brn		94	10	0.2	5	2250	7	14	6	10	2	20	2
266539	679698	5451950	10-25	brn		27	3	0.4	9	960	3	6	3	10	2	50	3
266541	679696	5451925	10-25	brn		124	13	0.6	12	3020	10	23	10	<10	1	11	2
266542	679700	5451900	10-25	lt brn		24	3	0.1	2	590	2	<5	1	40	5	73	2
266543	679696	5451874	10-25	lt brn	creek gully	54	6	0.3	7	860	3	8	4	30	4	119	2
266544	679704	5451850	5-20	brn	creek gully	30	4	0.2	5	1340	5	12	5	<10	1	10	28
266545	679700	5451831	10-25	brn	road bank	34	4	0.3	7	820	3	10	4	10	2	11	1
266546	679703	5451800	25-35	black	organic soil	29	4	<0.1	1	740	3	24	10	<10	1	<5	1
266547	679703	5451774	10-25	lt brn		29	4	0.2	5	3410	11	37	15	10	2	13	1
266548	679707	5451750	10-25	lt brn		63	7	0.1	2	880	3	12	5	10	2	19	58
266549	679700	5451724	10-25	lt brn		98	11	0.2	5	430	2	7	3	20	3	44	57
266550	679700	5451699	10-25	brn		212	23	0.3	7	3530	11	155	62	<10	1	6	18
266551	679697	5451674	10-25	brn		14	2	<0.1	1	570	2	8	4	40	5	92	3
266552	679698	5451649	10-25	brn		36	4	<0.1	1	750	3	17	7	<10	1	80	2
266553	679702	5451625	10-25	brn		42	5	<0.1	1	720	3	6	3	40	5	198	14
266554	679701	5451600	10-25	brn		36	4	0.2	5	1180	4	8	4	30	4	135	14
266555	679709	5451575	10-25	brn		41	5	<0.1	1	340	2	12	5	30	4	68	8
266556	679707	5451550	10-25	brn		13	2	<0.1	1	740	3	5	2	30	4	157	5
266557	679702	5451524	10-25	brn		28	3	0.1	2	1040	4	<5	1	20	3	133	6
266558	679698	5451504	10-25	brn		32	4	<0.1	1	930	3	6	3	10	2	86	5
266559	679702	5451475	10-25	brn		35	4	0.1	2	1060	4	10	4	10	2	69	9
266561	679700	5451456	10-25	brn	boulders near surface; poor soil	37	4	<0.1	1	600	2	39	16	30	4	132	5
266562	679703	5451424	10-20	brn		36	4	0.1	2	610	2	12	5	40	5	87	5
266563	679704	5451400	10-25	brn	boulder talus; poor soil	18	2	<0.1	1	750	3	8	4	20	3	75	61
266564	679703	5451375	10-25	brn		29	4	<0.1	1	1020	4	5	2	40	5	133	7
266565	679700	5451343	10-25	brn		134	15	<0.1	1	790	3	13	6	40	5	230	16
266566	679700	5451323	5-20	brn		208	22	0.1	2	670	3	8	4	70	8	238	9
266567	679700	5451302	5-20	brn	roots and organics in soil	98	11	0.2	5	1850	6	21	9	30	4	222	14
266568	679703	5451273	0-5	brn		41	5	<0.1	1	970	3	7	3	40	5	176	2
266569	679706	5451253	0-4	brn	soil from uprooted trees	33	4	0.2	5	1790	6	<5	1	40	5	94	1
266570	679715	5451225	2-5	brn	soil fines from between boulders	9	1	<0.1	1	790	3	<5	1	10	2	25	1



266571	679712	5451187	2-15	brn	thin soil + moss over outcrop	7	1	<0.1	1	270	1	<5	1	50	6	75	3
266572	679702	5451175	2-7	brn	thin soil + moss over broken outcrop	8	1	<0.1	1	1050	4	<5	1	110	12	256	2
266573	679704	5451153	0-7	brn	thin soil + moss over broken outcrop	5	1	<0.1	1	510	2	<5	1	140	15	136	3
266574	679700	5451127	2-18	brn	thin, patchy soil over outcrop	5	1	<0.1	1	170	1	<5	1	40	5	94	5
266575	679703	5451100	2-15	brn	area underlain by outcrop; soil rare	7	1	<0.1	1	620	2	<5	1	60	7	98	3
266576	679700	5451076	2-7	brn	thin soil veneer over outcrop	5	1	0.2	5	2470	8	9	4	20	3	89	1
266577	679700	5451050	0-7	brn	soil fines from areas near tree roots	11	2	<0.1	1	840	3	<5	1	<10	1	35	1
266578	679704	5451023	5-10	brn	soil fines from areas near tree roots	21	3	0.1	2	1530	5	<5	1	<10	1	17	1
266579	679700	5451000	5-10	lt brn	thin soil veneer over outcrop	9	1	<0.1	1	480	2	<5	1	10	2	22	1
266581	679708	5450977	5-10	brn	mainly moss cover over outcrop	14	2	0.1	2	610	2	<5	1	30	4	66	2
266582	679710	5450953	0-7	brn	mainly moss cover over outcrop	16	2	<0.1	1	1240	4	<5	1	30	4	76	3
266583	679696	5450925	5-12	brn	mainly moss cover over outcrop	13	2	<0.1	1	2650	9	6	3	10	2	125	1
266584	680200	5451943	10-25	brn	sample from road bank	12	2	0.2	5	1380	5	7	3	30	4	41	4
266585	680202	5451924	10-25	brn		8	1	0.4	9	1050	4	<5	1	30	4	30	1
266586	680197	5451898	10-25	brn		8	1	<0.1	1	190	1	9	4	20	3	12	2
266587	680197	5451875	10-25	brn		22	3	<0.1	1	230	1	8	4	50	6	56	1
266588	680200	5451847	10-25	brn		14	2	<0.1	1	210	1	8	4	80	9	189	1
266589	680190	5451825	10-25	brn		13	2	<0.1	1	250	1	6	3	60	7	56	2
266590	680199	5451800	5-20	brn	talus fines	13	2	<0.1	1	330	2	13	6	170	18	88	48
266591	680197	5451781	10-25	brn		135	15	0.2	5	780	3	29	12	70	8	84	3
266592	680199	5451750	10-25	brn		41	5	0.1	2	1130	4	<5	1	390	41	126	47
266593	680198	5451725	10-20	brn	talus fines	19	2	<0.1	1	240	1	<5	1	130	14	104	31
266594	680200	5451708	0-10	brn		166	18	<0.1	1	800	3	<5	1	80	9	178	22
266595	680199	5451673	0-7	brn		30	4	<0.1	1	320	1	<5	1	140	15	129	4
266596	680200	5451654	0-5	brn	thin soil from depression in outcrop	29	4	<0.1	1	270	1	<5	1	200	21	134	7
266597	680202	5451621	10-20	brn	talus fines	152	16	<0.1	1	430	2	<5	1	110	12	117	10
266598	680200	5451600	0-20	brn	talus fines	46	5	<0.1	1	250	1	9	4	60	7	216	15
266599	680200	5451572	0-10	brn	talus fines near outcrop	44	5	<0.1	1	270	1	<5	1	80	9	142	8
266601	680201	5451549	0-7	brn	talus fines near outcrop	71	8	<0.1	1	330	2	<5	1	80	9	86	5
266602	680205	5451525	0-10	brn	talus fines near outcrop	46	5	<0.1	1	200	1	<5	1	130	14	128	16
266603	680202	5451499	10-25	brn	talus fines	96	11	<0.1	1	800	3	24	10	10	2	45	9
266604	680201	5451476	5-15	brn	talus fines	46	5	<0.1	1	1100	4	5	2	<10	1	32	3
266605	680209	5451450	10-25	dk brn	talus fines in boulder field	33	4	<0.1	1	790	3	<5	1	30	4	13	7

266606	680203	5451424	10-25	brn		78	9	<0.1	1	460	2	8	4	50	6	142	3
266607	680203	5451400	10-25	lt brn		26	3	<0.1	1	500	2	<5	1	40	5	105	4
266608	680204	5451382	10-20	brn	boulders & crse gravel at surface	42	5	<0.1	1	390	2	<5	1	50	6	137	4
266609	680202	5451356	5-20	brn	boulders & crse gravel at surface	22	3	<0.1	1	290	1	<5	1	80	9	151	3
266610	680210	5451333	10-25	brn		28	3	0.1	2	1060	4	<5	1	40	5	212	3
266611	680208	5451302	10-20	brn	poor soil; no profile	18	2	<0.1	1	1160	4	<5	1	80	9	311	4
266612	680202	5451278	5-10	brn	talus fines in boulder field at surface	28	3	<0.1	1	520	2	<5	1	90	10	167	3
266613	680200	5451252	5-10	brn	talus fines in boulder field at surface	37	4	<0.1	1	290	1	7	3	90	10	172	4
266614	680206	5451224	10-25	brn		16	2	<0.1	1	530	2	<5	1	90	10	119	2
266615	680201	5451200	10-20	brn	thin soil veneer covered with moss	21	3	<0.1	1	700	3	<5	1	60	7	101	3
266616	680200	5451178	0-10	brn	talus fines in surface boulders	10	2	<0.1	1	360	2	<5	1	80	9	61	3
266617	680200	5451148	0-10	brn	soil in shallow depression in outcrop	11	2	<0.1	1	570	2	<5	1	100	11	65	1
266618	680201	5451125	0-7	brn	soil in shallow depression in outcrop	8	1	<0.1	1	1490	5	<5	1	100	11	103	2
266619	680201	5451097	0-5	brn	talus fines; poor sample	15	2	<0.1	1	4060	13	<5	1	40	5	30	40
266621	680194	5451075	10-25	brn	talus fines; poor sample	26	3	0.3	7	3620	12	<5	1	<10	1	26	3
266622	680696	5451900	10-25	brn		22	3	<0.1	1	1080	4	<5	1	<10	1	57	1
266623	680698	5451873	10-25	brn		26	3	<0.1	1	1400	5	<5	1	50	6	98	3
266624	680700	5451850	10-25	brn		33	4	<0.1	1	650	2	<5	1	50	6	64	1
266625	680700	5451821	10-25	brn		17	2	0.2	5	2070	7	14	6	<10	1	19	4
266626	680702	5451802	10-25	brn		6	1	0.3	7	4600	15	<5	1	<10	1	32	2
266627	680704	5451776	10-25	brn	lg boulders at surface; poor sample	10	2	<0.1	1	1010	4	5	2	80	9	218	3
266628	680698	5451750	10-20	brn	boulders and roots at surface	71	8	<0.1	1	2190	7	<5	1	280	29	222	2
266629	680700	5451723	10-25	brn	boulders and roots at surface	24	3	<0.1	1	390	2	<5	1	110	12	197	3
266630	680698	5451700	10-25	brn	boulders and roots at surface	7	1	<0.1	1	450	2	11	5	50	6	180	16
266631	680691	5451680	10-25	brn	large area of deadfall	4	1	<0.1	1	450	2	7	3	80	9	225	8
266632	680702	5451650	10-25	brn		30	4	<0.1	1	1100	4	<5	1	60	7	117	2
266633	680697	5451623	10-25	brn		172	19	<0.1	1	690	3	13	6	50	6	42	3
266634	680698	5451600	10-25	brn		133	14	<0.1	1	600	2	16	7	40	5	92	3
266635	680694	5451575	10-25	lt brn		109	12	<0.1	1	430	2	17	7	40	5	135	3
266636	680700	5451548	10-25	brn		122	13	0.4	9	1360	5	8	4	230	24	229	2
266637	680699	5451524	10-25	brn		65	7	<0.1	1	600	2	5	2	160	17	184	5
266638	680703	5451500	10-25	brn		35	4	<0.1	1	570	2	<5	1	80	9	258	5
266639	680699	5451475	10-25	brn		133	14	<0.1	1	850	3	6	3	80	9	151	13

266641	680697	5451448	10-25	brn	lg boulders at surface; poor sample	74	8	0.2	5	1600	5	101	41	70	8	150	7
266642	680696	5451423	10-25	brn		48	6	<0.1	1	390	2	12	5	80	9	117	5
266643	680698	5451400	10-25	brn		44	5	<0.1	1	300	1	8	4	100	11	189	9
266644	680697	5451375	10-25	brn	finer between boulders; poor sample	121	13	<0.1	1	1230	4	<5	1	120	13	67	12
266645	680700	5451348	10-25	brn		218	23	0.2	5	1550	5	8	4	30	4	63	4
266646	680699	5451325	10-25	brn		56	6	<0.1	1	1260	4	5	2	100	11	123	2
266647	680700	5451300	10-25	brn		30	4	<0.1	1	940	3	5	2	<10	1	51	1
266648	680700	5451273	10-25	brn		65	7	0.2	5	2620	9	6	3	40	5	80	2
266649	680697	5451250	10-25	brn		116	13	<0.1	1	1470	5	6	3	30	4	55	2
266650	680704	5451227	10-25	brn		38	4	<0.1	1	600	2	<5	1	70	8	210	3
266651	680703	5451194	10-25	brn		81	9	<0.1	1	920	3	9	4	30	4	89	7
266652	680704	5451175	10-25	brn	finer between boulders; poor sample	105	11	0.7	14	4320	14	8	4	<10	1	35	4
266653	680699	5451150	10-25	brn	mainly gravel and roots; organics	25	3	<0.1	1	1080	4	<5	1	50	6	140	10
266654	680700	5451124	10-25	brn	finer between boulders; poor sample	53	6	<0.1	1	740	3	<5	1	20	3	39	2
266655	680700	5451098	10-25	brn	outcrop at surface; poor soil	9	1	<0.1	1	1440	5	<5	1	60	7	219	7
266656	680698	5451076	10-25	brn	outcrop at surface; poor soil	12	2	<0.1	1	1390	5	<5	1	230	24	138	2
266657	680699	5451050	10-25	brn		16	2	<0.1	1	1140	4	7	3	80	9	107	1
266658	680699	5451025	10-25	brn		20	3	<0.1	1	1100	4	<5	1	150	16	448	6
266659	680698	5451000	10-25	brn		24	3	<0.1	1	2200	7	<5	1	60	7	159	3
266661	680701	5450971	10-20	brn	boulders and thick organic layer	7	1	0.1	2	380	2	7	3	100	11	74	14
266662	680703	5450950	10-25	brn	mainly boulders & gravel; poor soil	15	2	<0.1	1	740	3	<5	1	100	11	76	14
266663	680700	5450926	10-15	brn	mainly boulders & gravel; poor soil	5	1	<0.1	1	460	2	<5	1	170	18	106	4
266664	680707	5450900	10-20	brn	outcrop at surface; poor soil	24	3	<0.1	1	890	3	<5	1	80	9	87	3

APPENDIX 2. Placer Creek 2009 Rock Sample Locations (UTM NAD83 Zone 10)

Sample	83Z10E	83Z10N	Rock Type and Alteration	Mineralization	m width	Au ppb	Ag ppm	Cu ppm	Mo ppm	Pb ppm	Zn ppm
7R40859	681020	5450753	shear zone in andesitic volcanics	no visible mineralization	4	5	<0.2	112	17	12	159
7R40860	680939	5450836	intensely oxidized andesitic volcanic	trace to 1% pyrite, arsenopyrite	1	4	<0.2	58	2	6	57
7R40861	680965	5450893	intensely oxidized andesitic volcanic	5% to 7% pyrite, arsenopyrite	1	6	<0.2	112	5	10	40
7R40862	681006	5450899	rusty, silicified andesitic volcanic	10% to 12% pyrite, arsenopyrite	select grab	2	<0.2	144	2	8	63
7R40863	681046	5450917	shear zone in andesitic volcanics	no visible mineralization	grab	12	<0.2	98	8	16	43
7R40864	681177	5450911	quartz vein in andesite	disseminated pyrite	grab	9	<0.2	55	4	6	28
7R40865	681388	5450770	rusty, tan brown quartz, carbonate rock	4% to 5% pyrite, arsenopyrite	select grab	5	<0.2	62	1	6	33

Stewart Group  
**ECO TECH LABORATORY LTD.**  
 10041 Dallas Drive  
**KAMLOOPS, B.C.**  
 V2C 6T4

**ICP CERTIFICATE OF ANALYSIS AK 2009- 0263**

**Mammoth Geological**  
 2446 Bidston Road  
**Mill Bay, B.C.**  
 V0R 2P4

Phone: 250-573-5700  
 Fax : 250-573-4557

No. of samples received: 15  
 Sample Type: Soils  
**Project: White Pelican**  
 Submitted by: S.B. Butrenchuk

**Values in ppm unless otherwise reported**

Et #.	Tag #	Au																												
		ppb	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
1	201464A	3	<0.2	2.42	<5	55	<5	0.48	2	14	30	69	4.30	<10	0.99	368	1	0.02	17	600	10	<5	<20	29	0.15	<10	104	<10	5	75
2	201474A	8	<0.2	0.86	<5	70	<5	0.22	<1	7	34	10	1.80	<10	0.32	194	<1	0.01	25	310	8	<5	<20	13	0.07	<10	29	<10	2	43
3	201475A	1	<0.2	0.87	<5	80	<5	0.25	<1	7	28	8	1.54	<10	0.27	313	<1	0.02	21	270	6	<5	<20	15	0.07	<10	27	<10	2	47
4	201482A	6	<0.2	1.34	<5	105	<5	0.40	1	14	53	16	3.82	<10	0.64	245	1	0.02	47	300	8	<5	<20	19	0.09	<10	50	<10	3	32
5	201483A	4	<0.2	1.37	<5	115	<5	0.20	<1	11	46	15	2.61	<10	0.45	208	1	0.01	43	480	6	<5	<20	14	0.08	<10	45	<10	2	44
6	201487A	2	<0.2	1.07	<5	115	<5	0.41	1	13	66	27	3.96	<10	0.99	319	1	0.02	65	340	8	<5	<20	17	0.08	<10	67	<10	8	42
7	201494A	2	0.2	0.67	<5	75	<5	0.18	<1	8	27	9	1.96	<10	0.22	319	1	0.01	24	570	4	<5	<20	9	0.06	<10	36	<10	1	40
8	201509A	11	<0.2	1.33	<5	85	<5	0.37	1	12	43	12	2.84	<10	0.38	252	<1	0.02	26	120	8	<5	<20	19	0.09	<10	43	<10	2	34
9	201510A	13	<0.2	1.18	<5	95	<5	0.48	1	20	43	19	3.30	<10	0.75	477	<1	0.04	50	340	8	<5	<20	23	0.08	<10	43	<10	5	38
10	201523A	3	<0.2	0.89	<5	65	<5	0.51	1	10	33	18	3.12	<10	0.63	123	<1	0.06	52	570	6	<5	<20	27	0.07	<10	26	<10	7	26
11	771613A	1	<0.2	1.01	<5	100	<5	0.22	<1	12	40	19	2.62	<10	0.63	285	<1	0.01	50	390	6	<5	<20	12	0.07	<10	48	<10	3	42
12	771614A	2	<0.2	1.16	<5	105	<5	0.26	<1	11	47	22	2.66	<10	0.53	217	<1	0.02	46	390	6	<5	<20	16	0.09	<10	49	<10	3	33
13	771626A	2	<0.2	0.67	<5	120	<5	1.51	<1	11	29	16	2.67	<10	0.53	328	<1	0.05	34	560	4	<5	<20	41	0.07	<10	27	<10	7	25
14	771640A	1	<0.2	1.61	<5	200	<5	0.37	1	12	56	42	3.57	<10	0.55	353	2	0.02	46	460	10	<5	<20	25	0.07	<10	53	<10	8	58
15	771663A	3	<0.2	1.05	<5	105	<5	0.27	<1	11	41	19	2.49	<10	0.52	387	1	0.02	39	430	8	<5	<20	14	0.07	<10	45	<10	2	50

**QC DATA:**

**Repeat:**

1	201464A		<0.2	2.42	<5	60	<5	0.48	2	14	31	68	4.33	<10	0.99	373	1	0.02	17	600	10	<5	<20	29	0.15	<10	104	<10	5	76
7	201494A	1																												
10	201523A	1	<0.2	0.89	<5	65	<5	0.50	<1	10	33	18	3.09	<10	0.62	122	<1	0.06	51	560	6	<5	<20	27	0.07	<10	26	<10	7	25

**Standard:**

Till-3			1.5	1.03	75	35	<5	0.46	<1	10	58	21	1.98	10	0.56	299	1	0.02	28	450	20	<5	<20	14	0.05	<10	38	<10	5	39
OXE74		610																												

**ICP: Aqua Regia Digest / ICP- AES Finish.**

**Ag : Aqua Regia Digest / AA Finish.**

**Au: 30g Fire Assay/ AA Finish.**



## Certificate of Analysis

Work Order: TO107408

To: **Tim Henneberry**  
**COD SGS Minerals**  
2446 Bidston Road  
Mill Bay  
BC V0R 2P4

Date: Oct 14, 2009

P.O. No. : MAMMOTH GEOLOGICAL LTD; Placer Creek  
Project No. : -  
No. Of Samples : 63  
Date Submitted : Sep 04, 2009  
Report Comprises : Pages 1 to 11  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE:

Certified By :

Gavin McGill  
Operations Manager

**SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at <http://www.scc.ca/en/programs/lab/mineral.shtml>**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	Ag MMI-M5 1 ppb	Al MMI-M5 1 ppm	As MMI-M5 10 ppb	Au MMI-M5 0.1 ppb	Ba MMI-M5 10 ppb	Bi MMI-M5 1 ppb	Ca MMI-M5 10 ppm	Cd MMI-M5 1 ppb	Ce MMI-M5 5 ppb	Co MMI-M5 5 ppb
266538	94	15	<10	0.2	2270	<1	720	46	21	69
266539	27	30	10	0.4	1900	<1	410	5	136	37
266540	8	37	120	87.0	2520	<1	200	65	23	168
266541	124	8	<10	0.6	1750	<1	590	13	<5	290
266542	24	76	<10	0.1	1210	<1	400	17	314	44
266543	54	29	<10	0.3	3260	<1	600	9	222	61
266544	30	12	<10	0.2	960	<1	540	24	<5	20
266545	34	6	<10	0.3	2060	<1	580	44	16	64
266546	29	11	<10	<0.1	490	<1	430	204	<5	11
266547	29	6	10	0.2	2500	<1	520	65	8	186
266548	63	12	<10	0.1	2990	<1	560	669	10	57
266549	98	26	<10	0.2	4200	<1	510	305	114	26
266550	212	5	<10	0.3	670	<1	280	82	26	277
266551	14	105	<10	<0.1	880	<1	160	18	92	10
266552	36	24	<10	<0.1	3260	<1	270	10	162	94
266553	42	62	<10	<0.1	7910	<1	320	50	648	129
266554	36	52	<10	0.2	8160	<1	340	46	588	35
266555	41	86	<10	<0.1	720	<1	190	79	52	12
266556	13	64	<10	<0.1	2290	<1	230	15	127	52
266557	28	44	<10	0.1	2200	<1	320	15	296	66
266558	32	62	<10	<0.1	2450	<1	220	36	85	17
266559	35	58	<10	0.1	1850	<1	220	48	109	17
266560	14	31	110	49.8	3300	<1	180	76	18	109
266561	37	92	<10	<0.1	1400	<1	160	51	94	11
266562	36	76	<10	0.1	1480	<1	80	99	60	9
266563	18	107	<10	<0.1	260	<1	80	186	43	184
266564	29	58	<10	<0.1	3870	<1	330	30	299	69
266565	134	83	<10	<0.1	2930	<1	110	147	228	18
266566	208	111	<10	0.1	2250	<1	110	134	314	32
266567	98	75	<10	0.2	5930	<1	140	188	349	137
266568	41	102	<10	<0.1	2100	<1	80	33	201	105
266569	33	70	<10	0.2	940	<1	90	15	172	48
266570	9	54	<10	<0.1	760	<1	220	21	33	5
266571	7	97	<10	<0.1	500	<1	120	20	65	20
266572	8	106	<10	<0.1	2690	<1	140	3	501	71
266573	5	152	<10	<0.1	700	<1	90	10	105	27
266574	5	94	<10	<0.1	1220	<1	150	33	83	11
266575	7	104	<10	<0.1	340	<1	90	17	112	38
266576	5	70	<10	0.2	160	<1	90	10	40	79
266577	11	56	<10	<0.1	880	<1	240	14	32	7
266578	21	51	<10	0.1	220	<1	300	11	15	9
266579	9	53	<10	<0.1	440	<1	240	11	19	8
266580	8	37	120	90.4	2470	<1	190	67	25	164

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	Ag MMI-M5 1 ppb	Al MMI-M5 1 ppm	As MMI-M5 10 ppb	Au MMI-M5 0.1 ppb	Ba MMI-M5 10 ppb	Bi MMI-M5 1 ppb	Ca MMI-M5 10 ppm	Cd MMI-M5 1 ppb	Ce MMI-M5 5 ppb	Co MMI-M5 5 ppb
266581	14	53	<10	0.1	1620	<1	250	15	133	13
266582	16	68	<10	<0.1	510	<1	220	15	135	21
266583	13	68	<10	<0.1	850	<1	150	10	162	125
266584	12	41	<10	0.2	920	<1	310	31	132	33
266585	8	38	<10	0.4	1210	<1	640	4	109	83
266586	8	46	<10	<0.1	1090	<1	380	5	9	8
266587	22	110	<10	<0.1	1060	<1	160	2	23	39
266588	14	134	<10	<0.1	1190	<1	100	3	130	16
266589	13	117	<10	<0.1	1310	<1	290	4	20	22
266590	13	142	<10	<0.1	830	<1	160	514	96	33
266591	135	76	<10	0.2	360	<1	100	22	85	17
266592	41	163	<10	0.1	1340	<1	120	41	122	238
266593	19	151	<10	<0.1	1170	<1	110	42	68	15
266594	166	134	<10	<0.1	1110	<1	100	81	171	26
266595	30	122	<10	<0.1	750	<1	30	16	215	26
266596	29	162	<10	<0.1	890	<1	90	27	102	31
266597	152	109	<10	<0.1	1270	<1	80	87	144	33
266598	46	106	<10	<0.1	1360	<1	100	82	229	16
266599	44	120	<10	<0.1	2140	<1	130	185	164	30
266600	15	29	110	46.5	3380	<1	170	72	15	101
*Rep 266544	28	13	<10	0.2	920	<1	540	25	<5	17
*Rep 266552	40	27	<10	<0.1	2600	<1	260	8	183	104
*Rep 266572	7	101	<10	<0.1	2800	<1	140	3	378	80
*Rep 266581	14	52	<10	<0.1	1600	<1	270	15	119	14
*Rep 266593	19	151	<10	<0.1	1170	<1	100	43	56	16
*Std MMISRM18	24	27	20	10.8	120	<1	130	81	20	72
*Std MMISRM16	17	43	20	32.9	50	<1	150	4	14	56
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.





Element Method Det.Lim. Units	Cr MMI-M5 100 ppb	Cu MMI-M5 10 ppb	Dy MMI-M5 1 ppb	Er MMI-M5 0.5 ppb	Eu MMI-M5 0.5 ppb	Fe MMI-M5 1 ppm	Gd MMI-M5 1 ppb	La MMI-M5 1 ppb	Li MMI-M5 5 ppb	Mg MMI-M5 1 ppm
266538	<100	2250	11	5.4	2.8	9	15	12	17	48
266539	<100	960	11	6.0	3.1	33	16	36	6	26
266540	<100	100042	10	6.7	2.5	115	10	9	36	113
266541	<100	3020	5	3.0	1.0	7	6	<1	18	40
266542	<100	590	31	16.0	8.0	31	39	73	<5	43
266543	<100	860	35	17.6	8.2	20	43	65	17	55
266544	<100	1340	3	1.2	0.7	7	4	3	<5	32
266545	<100	820	5	2.6	0.6	6	5	<1	32	44
266546	<100	740	2	1.1	<0.5	6	3	2	30	23
266547	<100	3410	6	3.2	1.1	12	6	2	24	34
266548	<100	880	7	4.3	1.1	8	8	2	22	26
266549	<100	430	9	4.2	2.7	22	13	33	<5	46
266550	<100	3530	11	5.6	6.2	8	20	22	<5	11
266551	<100	570	19	11.0	4.5	31	23	36	<5	11
266552	<100	750	10	5.6	3.2	45	17	60	<5	18
266553	<100	720	36	18.8	8.8	38	44	109	<5	24
266554	<100	1180	65	31.9	19.3	31	93	180	<5	35
266555	<100	340	5	2.5	1.5	27	7	17	<5	14
266556	<100	740	10	4.4	2.6	36	12	33	<5	28
266557	<100	1040	24	11.4	6.9	36	32	87	<5	64
266558	<100	930	8	3.7	2.1	24	11	32	<5	20
266559	<100	1060	10	4.6	2.7	32	13	35	<5	26
266560	<100	84600	9	5.6	2.1	94	9	7	31	102
266561	<100	600	12	6.4	3.2	33	16	35	<5	9
266562	<100	610	15	7.3	4.5	15	23	57	<5	6
266563	<100	750	6	3.3	1.2	112	6	12	<5	4
266564	<100	1020	28	13.5	8.0	43	38	104	<5	65
266565	<100	790	37	18.7	9.8	22	48	98	<5	10
266566	<100	670	50	25.0	12.9	29	61	127	<5	9
266567	<100	1850	36	18.3	10.0	79	47	124	<5	16
266568	<100	970	21	11.6	5.8	55	29	87	<5	11
266569	<100	1790	30	18.7	8.1	13	41	95	<5	9
266570	<100	790	3	2.1	0.9	12	5	8	<5	15
266571	<100	270	12	6.8	2.4	28	13	23	<5	10
266572	<100	1050	30	14.8	9.7	86	43	211	<5	9
266573	<100	510	24	16.0	4.6	28	24	41	<5	8
266574	<100	170	7	4.2	1.4	24	8	17	<5	11
266575	<100	620	24	16.1	4.7	47	25	42	<5	3
266576	<100	2470	9	6.1	1.9	68	9	22	<5	6
266577	<100	840	5	3.0	1.2	13	7	12	<5	8
266578	<100	1530	2	1.1	0.5	13	3	5	<5	20
266579	<100	480	2	1.2	0.6	19	3	6	<5	18
266580	<100	96300	10	6.9	2.6	120	10	9	37	109

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	Cr MMI-M5 100 ppb	Cu MMI-M5 10 ppb	Dy MMI-M5 1 ppb	Er MMI-M5 0.5 ppb	Eu MMI-M5 0.5 ppb	Fe MMI-M5 1 ppm	Gd MMI-M5 1 ppb	La MMI-M5 1 ppb	Li MMI-M5 5 ppb	Mg MMI-M5 1 ppm
266581	<100	610	14	7.4	4.3	24	21	46	<5	9
266582	<100	1240	14	7.8	5.4	27	23	51	<5	18
266583	<100	2650	9	5.1	2.9	124	13	49	<5	6
266584	<100	1380	26	15.5	8.3	37	38	69	<5	118
266585	<100	1050	33	21.1	10.2	42	48	67	<5	300
266586	<100	190	1	0.7	<0.5	28	2	3	<5	114
266587	<100	230	3	2.1	0.7	59	3	6	<5	67
266588	<100	210	16	8.5	3.6	56	18	40	<5	21
266589	<100	250	4	2.5	0.7	56	4	6	<5	71
266590	<100	330	20	11.4	4.4	47	20	30	<5	19
266591	<100	780	21	12.1	5.0	16	25	49	<5	6
266592	<100	1130	27	14.9	5.7	34	29	70	<5	22
266593	<100	240	18	10.6	3.7	50	18	27	<5	5
266594	<100	800	45	26.8	7.3	40	46	64	<5	5
266595	<100	320	79	47.6	13.5	27	75	105	<5	2
266596	<100	270	22	12.3	4.8	25	23	35	<5	4
266597	<100	430	46	26.7	9.1	21	51	86	<5	6
266598	<100	250	40	19.6	10.1	41	50	90	<5	15
266599	<100	270	28	14.0	6.5	50	33	58	<5	18
266600	<100	84500	7	4.8	1.7	66	7	5	39	98
*Rep 266544	<100	1220	2	1.1	0.7	7	3	2	<5	31
*Rep 266552	<100	760	11	5.9	3.5	58	18	68	<5	18
*Rep 266572	<100	990	24	11.5	7.3	99	34	152	<5	11
*Rep 266581	<100	590	12	6.7	3.8	23	19	42	<5	10
*Rep 266593	<100	240	17	10.2	3.2	49	16	23	<5	5
*Std MMISRM18	<100	870	2	1.0	0.9	3	4	6	<5	94
*Std MMISRM16	<100	610	2	0.6	0.7	2	3	3	<5	35
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	Mo MMI-M5 5 ppb	Nb MMI-M5 0.5 ppb	Nd MMI-M5 1 ppb	Ni MMI-M5 5 ppb	Pb MMI-M5 10 ppb	Pd MMI-M5 1 ppb	Pr MMI-M5 1 ppb	Pt MMI-M5 1 ppb	Rb MMI-M5 5 ppb	Sb MMI-M5 1 ppb
266538	14	0.6	35	342	10	<1	6	<1	25	<1
266539	6	<0.5	64	83	10	<1	13	<1	50	<1
266540	493	<0.5	25	160	4270	4	4	<1	819	111
266541	23	<0.5	7	502	<10	<1	<1	<1	29	1
266542	<5	0.8	135	140	40	<1	29	<1	109	<1
266543	8	1.0	139	213	30	<1	29	<1	30	<1
266544	12	<0.5	8	242	<10	<1	1	<1	53	<1
266545	10	<0.5	4	146	10	<1	<1	<1	28	<1
266546	24	<0.5	6	915	<10	<1	<1	<1	20	<1
266547	37	<0.5	12	635	10	<1	2	<1	21	3
266548	12	<0.5	11	410	10	<1	2	<1	38	<1
266549	7	0.7	53	166	20	<1	11	<1	89	<1
266550	155	<0.5	51	3040	<10	1	8	<1	24	<1
266551	8	0.8	75	99	40	<1	15	<1	177	<1
266552	17	1.1	99	57	<10	<1	22	<1	114	<1
266553	6	0.8	181	56	40	<1	41	<1	92	<1
266554	8	<0.5	342	118	30	<1	70	<1	79	<1
266555	12	1.1	28	52	30	<1	6	<1	209	<1
266556	5	3.0	50	46	30	<1	11	<1	106	<1
266557	<5	1.3	130	123	20	<1	29	<1	71	<1
266558	6	1.5	47	31	10	<1	10	<1	202	<1
266559	10	1.0	56	59	10	<1	12	<1	142	<1
266560	30000	<0.5	19	119	480	29	3	<1	755	66
266561	39	1.3	61	52	30	<1	13	<1	177	<1
266562	12	<0.5	99	36	40	<1	21	<1	149	<1
266563	8	1.6	20	249	20	<1	4	<1	79	<1
266564	5	1.1	152	209	40	<1	34	<1	31	<1
266565	13	0.6	175	50	40	<1	38	<1	108	1
266566	8	1.1	212	52	70	<1	46	<1	98	2
266567	21	1.6	194	58	30	<1	44	<1	130	2
266568	7	0.8	131	42	40	<1	30	<1	157	<1
266569	<5	<0.5	167	20	40	<1	35	<1	183	<1
266570	<5	<0.5	17	109	10	<1	3	<1	411	<1
266571	<5	<0.5	41	74	50	<1	9	<1	111	<1
266572	<5	2.7	226	24	110	1	55	<1	47	<1
266573	<5	<0.5	74	43	140	<1	15	<1	213	<1
266574	<5	0.5	28	73	40	<1	6	<1	185	<1
266575	<5	<0.5	81	43	60	<1	16	<1	101	<1
266576	9	<0.5	36	61	20	<1	8	<1	116	<1
266577	<5	<0.5	23	40	<10	<1	5	<1	365	<1
266578	<5	0.7	10	36	<10	<1	2	<1	347	<1
266579	<5	<0.5	12	50	10	<1	2	<1	309	<1
266580	486	<0.5	25	140	4420	4	4	<1	783	120

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	Mo MMI-M5 5 ppb	Nb MMI-M5 0.5 ppb	Nd MMI-M5 1 ppb	Ni MMI-M5 5 ppb	Pb MMI-M5 10 ppb	Pd MMI-M5 1 ppb	Pr MMI-M5 1 ppb	Pt MMI-M5 1 ppb	Rb MMI-M5 5 ppb	Sb MMI-M5 1 ppb
266581	<5	0.9	87	34	30	<1	18	<1	127	<1
266582	<5	1.0	103	48	30	<1	20	<1	123	<1
266583	6	1.3	70	27	10	<1	16	<1	130	<1
266584	7	<0.5	139	407	30	<1	26	<1	34	<1
266585	<5	<0.5	170	213	30	<1	28	<1	11	<1
266586	9	<0.5	5	244	20	<1	1	<1	53	<1
266587	8	1.1	11	188	50	<1	2	<1	243	<1
266588	8	1.8	66	157	80	<1	15	<1	264	<1
266589	6	0.7	11	221	60	<1	2	<1	195	<1
266590	13	1.1	53	265	170	<1	11	<1	86	<1
266591	29	<0.5	84	303	70	<1	18	<1	188	<1
266592	<5	1.2	91	360	390	<1	21	<1	87	<1
266593	<5	2.2	50	185	130	<1	10	<1	76	<1
266594	<5	1.4	119	804	80	<1	24	<1	79	<1
266595	<5	<0.5	214	74	140	<1	43	<1	72	<1
266596	<5	1.2	65	64	200	<1	13	<1	105	<1
266597	<5	0.6	158	125	110	<1	33	<1	96	<1
266598	9	3.3	159	108	60	<1	33	<1	126	<1
266599	<5	2.8	101	174	80	<1	22	<1	103	<1
266600	28700	<0.5	17	96	430	28	3	<1	746	59
*Rep 266544	11	<0.5	8	206	<10	<1	1	<1	51	<1
*Rep 266552	18	1.0	108	67	<10	<1	24	<1	114	<1
*Rep 266572	<5	2.3	170	25	80	<1	41	<1	74	<1
*Rep 266581	<5	0.9	77	35	30	<1	16	<1	124	<1
*Rep 266593	<5	2.0	43	189	140	<1	8	<1	80	<1
*Std MMISRM18	34	<0.5	15	578	180	16	3	6	159	<1
*Std MMISRM16	47	<0.5	10	221	50	25	2	<1	303	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Blk BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	Sc MMI-M5 5 ppb	Sm MMI-M5 1 ppb	Sn MMI-M5 1 ppb	Sr MMI-M5 10 ppb	Ta MMI-M5 1 ppb	Tb MMI-M5 1 ppb	Te MMI-M5 10 ppb	Th MMI-M5 0.5 ppb	Ti MMI-M5 3 ppb	Tl MMI-M5 0.5 ppb
266538	<5	11	<1	1860	<1	2	<10	7.1	<3	<0.5
266539	11	15	<1	1910	<1	2	<10	12.2	8	<0.5
266540	25	8	2	15600	<1	2	<10	9.4	<3	1.2
266541	<5	3	<1	1720	<1	<1	<10	1.7	<3	<0.5
266542	26	34	<1	1380	<1	6	<10	19.8	21	<0.5
266543	8	36	<1	2070	<1	6	<10	33.9	21	<0.5
266544	<5	3	<1	1330	<1	<1	<10	1.1	10	<0.5
266545	<5	2	<1	1950	<1	<1	<10	3.2	31	<0.5
266546	<5	2	<1	960	<1	<1	<10	0.5	<3	<0.5
266547	<5	5	<1	1440	<1	<1	<10	4.4	<3	<0.5
266548	<5	5	<1	1630	<1	1	<10	3.4	<3	<0.5
266549	7	12	<1	1710	<1	2	<10	11.0	9	<0.5
266550	5	14	<1	600	<1	2	<10	1.7	<3	<0.5
266551	32	19	<1	380	<1	3	<10	4.9	73	<0.5
266552	11	18	<1	940	<1	2	<10	8.1	65	<0.5
266553	56	41	<1	1700	<1	6	<10	17.9	33	<0.5
266554	40	82	<1	1480	<1	12	<10	17.4	10	<0.5
266555	10	6	<1	500	<1	<1	<10	5.4	104	<0.5
266556	17	12	<1	1060	<1	2	<10	14.8	181	<0.5
266557	26	29	<1	1720	<1	4	<10	20.5	34	<0.5
266558	9	11	<1	1110	<1	2	<10	7.0	66	<0.5
266559	14	12	<1	1200	<1	2	<10	6.9	45	<0.5
266560	19	6	2	16100	<1	1	<10	8.9	<3	<0.5
266561	24	15	<1	560	<1	2	<10	7.1	211	<0.5
266562	31	22	<1	320	<1	3	<10	5.2	52	0.6
266563	13	5	<1	250	<1	<1	<10	4.3	364	<0.5
266564	28	35	<1	2100	<1	5	<10	20.3	35	<0.5
266565	39	43	<1	360	<1	7	<10	12.9	145	0.6
266566	41	53	<1	360	<1	9	<10	17.6	357	0.7
266567	43	44	<1	640	<1	6	<10	16.1	417	0.5
266568	40	27	<1	240	<1	4	<10	12.3	289	0.7
266569	68	38	<1	180	<1	5	<10	8.0	32	0.6
266570	6	4	<1	300	<1	<1	<10	2.4	56	<0.5
266571	15	11	<1	230	<1	2	<10	6.4	82	<0.5
266572	47	43	<1	830	<1	6	<10	29.8	834	<0.5
266573	32	20	<1	280	<1	4	<10	13.9	166	<0.5
266574	16	7	<1	390	<1	1	<10	6.9	125	<0.5
266575	34	21	<1	110	<1	4	<10	9.2	65	<0.5
266576	28	8	<1	150	<1	1	<10	4.3	48	<0.5
266577	<5	6	<1	560	<1	<1	<10	3.1	37	<0.5
266578	<5	2	<1	610	<1	<1	<10	1.7	48	<0.5
266579	<5	3	<1	500	<1	<1	<10	2.1	24	<0.5
266580	24	8	2	15100	<1	2	<10	9.3	<3	1.4

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	Sc MMI-M5 5 ppb	Sm MMI-M5 1 ppb	Sn MMI-M5 1 ppb	Sr MMI-M5 10 ppb	Ta MMI-M5 1 ppb	Tb MMI-M5 1 ppb	Te MMI-M5 10 ppb	Th MMI-M5 0.5 ppb	Ti MMI-M5 3 ppb	Tl MMI-M5 0.5 ppb
266581	18	20	<1	620	<1	3	<10	9.3	77	<0.5
266582	26	23	<1	370	<1	3	<10	11.8	81	<0.5
266583	25	14	<1	270	<1	2	<10	9.0	186	<0.5
266584	25	32	<1	3110	<1	5	<10	6.8	27	<0.5
266585	34	39	<1	9330	<1	6	<10	2.6	6	<0.5
266586	<5	1	<1	2760	<1	<1	<10	0.9	55	<0.5
266587	12	3	<1	1000	<1	<1	<10	3.4	284	<0.5
266588	25	16	<1	470	<1	3	<10	10.9	527	<0.5
266589	13	3	<1	1860	<1	<1	<10	3.9	112	<0.5
266590	14	16	<1	820	<1	3	<10	10.2	249	<0.5
266591	21	21	<1	390	<1	4	<10	5.8	36	<0.5
266592	14	23	<1	820	<1	4	<10	11.1	272	<0.5
266593	16	15	<1	320	<1	3	<10	9.4	465	<0.5
266594	24	34	<1	380	<1	7	<10	14.5	401	<0.5
266595	38	57	<1	160	<1	12	<10	13.0	166	<0.5
266596	12	18	<1	200	<1	4	<10	11.4	364	<0.5
266597	31	41	<1	470	<1	8	<10	9.0	226	<0.5
266598	33	41	<1	500	<1	7	<10	16.5	695	<0.5
266599	20	27	<1	540	<1	5	<10	11.4	579	<0.5
266600	14	6	1	15900	<1	1	<10	7.9	<3	<0.5
*Rep 266544	<5	3	<1	1300	<1	<1	<10	0.8	14	<0.5
*Rep 266552	13	20	<1	850	<1	2	<10	7.1	74	<0.5
*Rep 266572	42	33	<1	770	<1	5	<10	27.4	663	<0.5
*Rep 266581	15	18	<1	640	<1	2	<10	9.4	55	<0.5
*Rep 266593	15	13	<1	330	<1	3	<10	8.4	425	<0.5
*Std MMISRM18	<5	4	<1	1090	<1	<1	<10	21.8	<3	<0.5
*Std MMISRM16	<5	3	<1	480	<1	<1	<10	22.3	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	U MMI-M5 1 ppb	W MMI-M5 1 ppb	Y MMI-M5 5 ppb	Yb MMI-M5 1 ppb	Zn MMI-M5 20 ppb	Zr MMI-M5 5 ppb
266538	12	<1	62	4	80	20
266539	10	<1	56	5	130	50
266540	43	6	62	6	4380	48
266541	7	<1	31	2	60	11
266542	13	<1	145	12	80	73
266543	12	<1	152	14	60	119
266544	7	<1	15	<1	1500	10
266545	4	<1	23	2	<20	11
266546	10	<1	15	<1	<20	<5
266547	10	<1	34	3	<20	13
266548	6	<1	62	3	3140	19
266549	19	<1	43	3	3100	44
266550	7	<1	101	4	950	6
266551	19	<1	104	8	160	92
266552	11	<1	57	5	70	80
266553	46	<1	161	16	710	198
266554	39	<1	340	23	750	135
266555	10	<1	24	2	420	68
266556	13	<1	42	3	250	157
266557	14	<1	114	8	320	133
266558	11	<1	40	3	220	86
266559	12	<1	48	4	470	69
266560	34	40	52	5	360	39
266561	12	<1	59	5	230	132
266562	11	<1	75	6	270	87
266563	7	<1	28	3	3330	75
266564	16	<1	147	10	330	133
266565	19	<1	183	15	860	230
266566	17	<1	242	18	470	238
266567	20	<1	181	14	730	222
266568	12	<1	115	10	80	176
266569	21	<1	178	17	30	94
266570	7	<1	18	2	50	25
266571	12	<1	65	6	150	75
266572	12	<1	158	11	80	256
266573	12	<1	141	13	150	136
266574	9	<1	37	4	240	94
266575	11	<1	142	14	130	98
266576	13	<1	56	5	30	89
266577	8	<1	27	3	50	35
266578	5	<1	11	<1	50	17
266579	4	<1	11	1	40	22
266580	45	7	61	7	4320	48

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	U MMI-M5 1 ppb	W MMI-M5 1 ppb	Y MMI-M5 5 ppb	Yb MMI-M5 1 ppb	Zn MMI-M5 20 ppb	Zr MMI-M5 5 ppb
266581	7	<1	68	7	60	66
266582	15	<1	78	7	110	76
266583	13	<1	48	5	30	125
266584	9	<1	167	13	210	41
266585	7	<1	223	17	<20	30
266586	2	<1	7	<1	70	12
266587	4	<1	17	2	40	56
266588	8	<1	75	7	40	189
266589	4	<1	22	2	70	56
266590	6	<1	108	8	2610	88
266591	15	<1	114	10	150	84
266592	8	<1	139	10	2540	126
266593	6	<1	96	8	1670	104
266594	10	<1	287	18	1180	178
266595	12	<1	482	35	170	129
266596	4	<1	119	9	350	134
266597	11	<1	268	20	540	117
266598	10	<1	195	14	790	216
266599	6	<1	133	9	420	142
266600	35	39	44	5	390	34
*Rep 266544	7	<1	14	<1	1020	10
*Rep 266552	12	<1	62	6	70	78
*Rep 266572	11	<1	119	9	80	234
*Rep 266581	6	<1	61	6	70	65
*Rep 266593	6	<1	95	8	1660	91
*Std MMISRM18	22	<1	15	<1	680	22
*Std MMISRM16	45	<1	6	<1	210	13
*Blk BLANK	<1	<1	<5	<1	<20	<5
*Blk BLANK	<1	<1	<5	<1	<20	<5

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.





## Certificate of Analysis

Work Order: TO107409

To: **Tim Henneberry**  
**COD SGS Minerals**  
2446 Bidston Road  
Mill Bay  
BC V0R 2P4

Date: Oct 09, 2009

P.O. No. : MAMMOTH GEOLOGICAL LTD; Placer Creek  
Project No. : -  
No. Of Samples : 64  
Date Submitted : Sep 04, 2009  
Report Comprises : Pages 1 to 11  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

STORE:

Certified By :

Gavin McGill  
Operations Manager

**SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at <http://www.scc.ca/en/programs/lab/mineral.shtml>**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	Ag MMI-M5 1 ppb	Al MMI-M5 1 ppm	As MMI-M5 10 ppb	Au MMI-M5 0.1 ppb	Ba MMI-M5 10 ppb	Bi MMI-M5 1 ppb	Ca MMI-M5 10 ppm	Cd MMI-M5 1 ppb	Ce MMI-M5 5 ppb	Co MMI-M5 5 ppb
266601	71	89	<10	<0.1	1780	<1	140	50	86	39
266602	46	135	<10	<0.1	1050	<1	60	102	144	18
266603	96	26	<10	<0.1	5100	<1	690	212	504	167
266604	46	16	<10	<0.1	5600	<1	490	22	40	30
266605	33	62	<10	<0.1	600	<1	330	48	24	9
266606	78	94	<10	<0.1	580	<1	250	47	126	32
266607	26	56	<10	<0.1	3100	<1	270	18	181	38
266608	42	79	<10	<0.1	1910	<1	180	23	315	31
266609	22	88	<10	<0.1	1750	<1	250	15	197	27
266610	28	83	<10	0.1	3510	<1	380	12	360	68
266611	18	157	10	<0.1	1960	<1	170	6	395	266
266612	28	191	<10	<0.1	950	<1	60	23	174	77
266613	37	122	<10	<0.1	290	<1	30	36	83	11
266614	16	130	<10	<0.1	670	<1	150	13	109	10
266615	21	96	<10	<0.1	350	<1	160	22	96	13
266616	10	88	<10	<0.1	440	<1	190	18	86	15
266617	11	86	<10	<0.1	190	<1	50	7	286	11
266618	8	109	<10	<0.1	280	<1	60	17	103	79
266619	15	142	<10	<0.1	580	<1	390	44	198	1240
266620	2	81	100	115	810	<1	370	109	33	500
266621	26	26	<10	0.3	1270	<1	580	13	88	405
266622	22	17	<10	<0.1	5000	<1	680	3	109	128
266623	26	92	<10	<0.1	2740	<1	270	7	184	47
266624	33	86	<10	<0.1	1490	<1	160	9	155	25
266625	17	17	<10	0.2	1380	<1	570	19	52	100
266626	6	12	<10	0.3	980	<1	370	3	14	57
266627	10	138	<10	<0.1	1230	<1	130	6	257	49
266628	71	138	<10	<0.1	4680	<1	280	22	264	49
266629	24	152	<10	<0.1	590	<1	130	38	128	59
266630	7	196	<10	<0.1	1450	<1	160	126	68	281
266631	4	202	<10	<0.1	2190	<1	250	57	101	234
266632	30	87	<10	<0.1	2390	<1	300	11	201	41
266633	172	55	<10	<0.1	4550	<1	210	41	63	27
266634	133	76	<10	<0.1	4590	<1	260	52	112	52
266635	109	98	<10	<0.1	1840	<1	140	35	87	25
266636	122	101	<10	0.4	3870	<1	140	10	309	38
266637	65	129	<10	<0.1	1170	<1	130	44	204	40
266638	35	113	<10	<0.1	3760	<1	210	42	319	38
266639	133	105	<10	<0.1	1920	<1	200	242	161	21
266640	15	53	130	69.0	2200	<1	330	133	27	200
266641	74	97	<10	0.2	4230	<1	220	30	167	35
266642	48	112	<10	<0.1	1310	<1	170	22	133	44
266643	44	142	<10	<0.1	1650	<1	190	24	173	27

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	Ag MMI-M5 1 ppb	Al MMI-M5 1 ppm	As MMI-M5 10 ppb	Au MMI-M5 0.1 ppb	Ba MMI-M5 10 ppb	Bi MMI-M5 1 ppb	Ca MMI-M5 10 ppm	Cd MMI-M5 1 ppb	Ce MMI-M5 5 ppb	Co MMI-M5 5 ppb
266644	121	99	<10	<0.1	1480	<1	90	35	70	30
266645	218	63	<10	0.2	3020	<1	500	28	164	53
266646	56	111	<10	<0.1	1850	<1	220	9	200	58
266647	30	45	<10	<0.1	2300	<1	360	3	27	23
266648	65	58	<10	0.2	5570	<1	460	8	168	68
266649	116	63	<10	<0.1	3400	<1	330	6	48	18
266650	38	133	<10	<0.1	1630	<1	190	34	291	39
266651	81	83	<10	<0.1	1230	<1	250	158	49	28
266652	105	18	<10	0.7	3390	<1	800	20	71	62
266653	25	101	<10	<0.1	1220	<1	390	48	509	62
266654	53	73	<10	<0.1	340	<1	310	18	31	11
266655	9	129	<10	<0.1	1280	<1	170	21	241	71
266656	12	117	<10	<0.1	460	<1	80	13	202	51
266657	16	102	<10	<0.1	270	<1	30	10	219	70
266658	20	142	<10	<0.1	4270	<1	220	13	1080	105
266659	24	86	<10	<0.1	1120	<1	250	12	202	99
266660	1	82	110	106	910	<1	370	103	34	472
266661	7	134	<10	0.1	1020	<1	280	46	42	43
266662	15	155	10	<0.1	810	<1	250	52	46	63
266663	5	150	<10	<0.1	390	<1	40	24	52	144
266664	24	85	<10	<0.1	1260	<1	330	13	118	20
*Rep 266607	27	56	<10	<0.1	3080	<1	260	17	173	37
*Rep 266617	11	90	<10	<0.1	200	<1	50	6	270	10
*Rep 266632	35	80	<10	<0.1	2470	<1	290	13	178	35
*Rep 266649	128	68	<10	0.1	3450	<1	350	7	48	19
*Rep 266663	6	160	<10	<0.1	350	<1	40	22	72	146
*Std MMISRM18	21	23	10	8.6	130	<1	180	79	22	69
*Std MMISRM16	16	43	20	24.2	40	<1	210	4	17	60
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5
*Blk BLANK	<1	<1	<10	<0.1	<10	<1	<10	<1	<5	<5

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	Cr MMI-M5 100 ppb	Cu MMI-M5 10 ppb	Dy MMI-M5 1 ppb	Er MMI-M5 0.5 ppb	Eu MMI-M5 0.5 ppb	Fe MMI-M5 1 ppm	Gd MMI-M5 1 ppb	La MMI-M5 1 ppb	Li MMI-M5 5 ppb	Mg MMI-M5 1 ppm
266601	<100	330	24	15.1	3.9	28	22	39	<5	18
266602	<100	200	33	22.2	5.1	42	28	41	<5	5
266603	<100	800	43	18.3	18.5	24	75	210	<5	77
266604	<100	1100	10	4.8	3.2	14	15	29	<5	20
266605	<100	790	4	2.3	1.2	15	6	11	<5	11
266606	<100	460	15	8.5	3.6	39	18	43	<5	13
266607	<100	500	22	11.4	5.9	33	31	72	<5	26
266608	<100	390	33	16.0	9.3	32	42	107	<5	25
266609	<100	290	19	9.2	4.7	42	22	71	<5	24
266610	<100	1060	52	28.2	13.6	31	66	172	<5	30
266611	<100	1160	44	23.3	11.6	86	52	161	<5	22
266612	<100	520	27	14.4	5.5	61	25	58	<5	5
266613	<100	290	17	11.1	3.2	29	16	30	<5	1
266614	<100	530	16	9.1	3.7	29	17	41	<5	6
266615	<100	700	17	9.6	3.7	22	19	43	<5	6
266616	<100	360	10	5.6	2.8	17	13	30	<5	7
266617	<100	570	57	32.5	12.3	13	62	123	<5	2
266618	<100	1490	32	21.2	5.5	22	30	52	<5	2
266619	<100	4060	21	14.0	5.1	110	22	56	<5	81
266620	400	70200	13	9.6	3.1	206	12	13	36	198
266621	<100	3620	11	6.5	4.0	17	17	35	<5	52
266622	<100	1080	11	5.4	3.7	19	16	39	<5	104
266623	<100	1400	35	19.6	10.0	34	44	106	<5	49
266624	<100	650	27	15.6	7.9	22	36	87	<5	19
266625	<100	2070	13	7.3	4.6	13	21	24	<5	92
266626	<100	4600	19	10.8	6.4	12	29	30	10	46
266627	<100	1010	24	12.5	7.0	67	29	78	<5	17
266628	<100	2190	113	78.4	21.6	70	108	153	20	42
266629	<100	390	19	10.8	4.8	51	22	55	<5	9
266630	<100	450	9	5.2	2.0	105	9	23	<5	23
266631	<100	450	17	12.5	3.9	114	16	34	<5	49
266632	<100	1100	23	13.3	6.5	37	30	89	<5	58
266633	<100	690	6	3.1	1.9	12	9	25	<5	15
266634	<100	600	14	7.1	4.4	20	21	61	<5	25
266635	<100	430	8	4.7	2.1	18	10	28	<5	12
266636	<100	1360	86	43.5	23.4	26	106	153	<5	21
266637	<100	600	39	20.7	9.2	39	43	72	<5	11
266638	<100	570	27	12.9	7.2	40	34	108	<5	27
266639	<100	850	74	37.8	19.4	29	93	136	<5	17
266640	<100	94400	11	8.2	2.9	131	12	12	43	141
266641	<100	1600	76	43.4	18.5	33	89	105	<5	23
266642	<100	390	17	8.7	4.4	50	19	40	<5	17
266643	<100	300	20	10.9	4.9	53	24	56	<5	12

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	Cr MMI-M5 100 ppb	Cu MMI-M5 10 ppb	Dy MMI-M5 1 ppb	Er MMI-M5 0.5 ppb	Eu MMI-M5 0.5 ppb	Fe MMI-M5 1 ppm	Gd MMI-M5 1 ppb	La MMI-M5 1 ppb	Li MMI-M5 5 ppb	Mg MMI-M5 1 ppm
266644	<100	1230	40	27.9	6.1	21	33	37	<5	10
266645	<100	1550	187	111	41.6	16	202	220	<5	46
266646	<100	1260	46	23.6	11.3	38	53	90	<5	22
266647	<100	940	6	2.9	1.6	15	7	16	<5	24
266648	<100	2620	90	50.2	23.1	16	113	138	13	43
266649	<100	1470	23	13.7	6.3	13	30	48	<5	21
266650	<100	600	29	15.2	7.3	47	35	88	<5	14
266651	<100	920	8	4.8	2.3	21	11	29	<5	13
266652	<100	4320	53	27.5	13.8	16	66	77	21	51
266653	<100	1080	78	40.5	19.3	53	91	177	<5	29
266654	<100	740	10	6.0	2.8	16	13	25	<5	6
266655	<100	1440	42	25.5	9.9	35	46	105	<5	8
266656	<100	1390	71	39.0	17.4	19	77	161	<5	2
266657	<100	1140	36	20.2	8.9	25	40	82	<5	2
266658	<100	1100	185	105	41.8	50	196	401	<5	20
266659	<100	2200	31	17.9	7.9	29	38	93	<5	24
266660	400	62300	13	9.6	3.2	242	12	13	27	202
266661	<100	380	5	3.2	1.1	51	5	13	<5	11
266662	<100	740	6	3.9	1.7	71	7	18	<5	17
266663	<100	460	14	9.4	2.0	36	9	19	<5	3
266664	<100	890	17	11.1	4.3	35	21	51	<5	14
*Rep 266607	<100	470	22	11.1	5.7	32	29	69	<5	25
*Rep 266617	<100	610	49	28.5	11.1	15	54	116	<5	2
*Rep 266632	<100	1090	22	12.2	6.1	31	30	82	<5	56
*Rep 266649	<100	1420	26	14.9	6.6	14	32	53	<5	22
*Rep 266663	<100	480	15	9.3	2.7	37	13	26	<5	2
*Std MMISRM18	<100	780	2	1.0	0.9	3	4	7	<5	90
*Std MMISRM16	<100	610	2	0.7	0.8	3	3	4	<5	32
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1
*Blk BLANK	<100	<10	<1	<0.5	<0.5	<1	<1	<1	<5	<1

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	Mo MMI-M5 5 ppb	Nb MMI-M5 0.5 ppb	Nd MMI-M5 1 ppb	Ni MMI-M5 5 ppb	Pb MMI-M5 10 ppb	Pd MMI-M5 1 ppb	Pr MMI-M5 1 ppb	Pt MMI-M5 1 ppb	Rb MMI-M5 5 ppb	Sb MMI-M5 1 ppb
266601	<5	0.8	62	109	80	<1	14	<1	244	<1
266602	<5	1.7	76	88	130	<1	17	<1	71	<1
266603	24	0.6	318	856	10	<1	74	<1	12	<1
266604	5	1.4	53	70	<10	<1	11	<1	41	<1
266605	<5	0.8	21	65	30	<1	5	<1	56	<1
266606	8	1.7	66	80	50	<1	16	<1	106	<1
266607	<5	1.8	113	63	40	<1	27	<1	93	<1
266608	<5	1.7	161	48	50	<1	39	<1	77	<1
266609	<5	3.0	82	57	80	<1	22	<1	96	<1
266610	<5	0.8	252	64	40	<1	61	<1	149	<1
266611	<5	3.3	211	70	80	1	53	<1	69	<1
266612	<5	1.9	84	64	90	<1	21	<1	132	<1
266613	7	1.0	52	64	90	<1	12	<1	109	<1
266614	<5	1.0	60	30	90	<1	15	<1	104	<1
266615	<5	<0.5	68	39	60	<1	16	<1	113	<1
266616	<5	<0.5	52	46	80	<1	12	<1	135	<1
266617	<5	<0.5	228	22	100	<1	54	<1	155	<1
266618	<5	<0.5	94	48	100	<1	22	<1	103	<1
266619	<5	0.7	85	673	40	<1	21	<1	52	<1
266620	1370	<0.5	29	674	2850	9	6	<1	993	219
266621	<5	<0.5	68	90	<10	1	14	<1	34	<1
266622	<5	1.0	69	169	<10	<1	16	<1	86	<1
266623	<5	<0.5	167	96	50	<1	39	<1	56	<1
266624	<5	<0.5	143	41	50	<1	33	<1	170	<1
266625	14	<0.5	60	384	<10	<1	11	<1	6	<1
266626	<5	<0.5	86	87	<10	<1	15	<1	18	<1
266627	5	2.7	114	53	80	<1	29	<1	125	<1
266628	<5	0.8	284	66	280	<1	64	<1	113	<1
266629	<5	2.0	85	85	110	<1	21	<1	193	<1
266630	11	3.3	32	271	50	<1	8	<1	363	<1
266631	7	3.0	51	158	80	<1	12	<1	479	<1
266632	<5	0.7	122	97	60	<1	30	<1	181	<1
266633	13	0.6	36	103	50	<1	9	<1	107	<1
266634	16	0.7	83	133	40	<1	20	<1	213	<1
266635	17	0.7	37	126	40	<1	9	<1	230	<1
266636	8	1.0	287	62	230	<1	63	<1	95	<1
266637	5	1.3	132	143	160	<1	30	<1	100	<1
266638	<5	2.2	135	50	80	<1	35	<1	109	<1
266639	6	1.0	268	88	80	<1	59	<1	91	<1
266640	47900	<0.5	26	144	580	48	5	<1	931	145
266641	101	0.7	218	68	70	<1	46	<1	107	<1
266642	12	2.0	62	112	80	<1	15	<1	105	<1
266643	8	2.7	79	165	100	<1	20	<1	126	<1

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	Mo MMI-M5 5 ppb	Nb MMI-M5 0.5 ppb	Nd MMI-M5 1 ppb	Ni MMI-M5 5 ppb	Pb MMI-M5 10 ppb	Pd MMI-M5 1 ppb	Pr MMI-M5 1 ppb	Pt MMI-M5 1 ppb	Rb MMI-M5 5 ppb	Sb MMI-M5 1 ppb
266644	<5	<0.5	73	201	120	<1	15	<1	123	<1
266645	8	<0.5	471	407	30	<1	99	<1	48	<1
266646	5	1.1	154	66	100	<1	35	<1	82	<1
266647	5	0.7	29	31	<10	<1	6	<1	105	<1
266648	6	<0.5	299	85	40	<1	62	<1	36	<1
266649	6	<0.5	93	40	30	<1	20	<1	55	<1
266650	<5	2.2	133	67	70	<1	33	<1	125	<1
266651	9	0.7	44	69	30	<1	11	<1	139	<1
266652	8	<0.5	177	239	<10	<1	35	<1	21	<1
266653	<5	1.1	301	169	50	<1	70	<1	75	<1
266654	<5	<0.5	45	37	20	<1	10	<1	90	<1
266655	<5	0.9	161	88	60	<1	39	<1	132	<1
266656	<5	<0.5	259	33	230	<1	60	<1	120	<1
266657	7	<0.5	148	20	80	<1	36	<1	142	<1
266658	<5	1.8	649	44	150	2	158	<1	100	<1
266659	<5	0.5	150	47	60	<1	35	<1	183	<1
266660	1370	<0.5	29	814	3590	7	6	<1	1010	217
266661	7	1.5	18	67	100	<1	4	<1	102	<1
266662	<5	2.6	25	116	100	<1	6	<1	115	<1
266663	<5	0.9	30	53	170	<1	7	<1	89	<1
266664	<5	0.7	76	32	80	<1	18	<1	62	<1
*Rep 266607	<5	1.9	110	57	40	<1	26	<1	94	<1
*Rep 266617	<5	<0.5	206	22	110	<1	48	<1	159	<1
*Rep 266632	<5	0.8	115	77	50	<1	27	<1	186	<1
*Rep 266649	7	<0.5	98	43	30	<1	21	<1	61	<1
*Rep 266663	<5	1.1	42	61	170	<1	10	<1	92	<1
*Std MMISRM18	34	<0.5	15	538	150	14	3	5	167	<1
*Std MMISRM16	50	<0.5	12	240	50	26	2	<1	309	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1
*Bik BLANK	<5	<0.5	<1	<5	<10	<1	<1	<1	<5	<1

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	Sc MMI-M5 5 ppb	Sm MMI-M5 1 ppb	Sn MMI-M5 1 ppb	Sr MMI-M5 10 ppb	Ta MMI-M5 1 ppb	Tb MMI-M5 1 ppb	Te MMI-M5 10 ppb	Th MMI-M5 0.5 ppb	Ti MMI-M5 3 ppb	Tl MMI-M5 0.5 ppb
266601	19	17	<1	530	<1	4	<10	5.2	79	1.1
266602	19	21	<1	230	<1	5	<10	10.6	295	0.7
266603	5	69	<1	2030	<1	10	<10	20.7	8	<0.5
266604	<5	13	<1	1430	<1	2	<10	5.0	20	<0.5
266605	<5	5	<1	420	<1	<1	<10	1.3	59	<0.5
266606	18	16	<1	430	<1	3	<10	8.1	235	<0.5
266607	15	27	<1	1230	<1	4	<10	8.2	169	<0.5
266608	26	39	<1	730	<1	7	<10	11.5	290	<0.5
266609	14	20	<1	780	<1	4	<10	12.3	449	<0.5
266610	74	58	<1	1230	<1	10	<10	14.5	110	<0.5
266611	61	47	<1	700	<1	8	<10	29.0	1270	<0.5
266612	22	21	<1	130	<1	5	<10	16.5	399	<0.5
266613	16	14	<1	50	<1	3	<10	9.9	247	<0.5
266614	11	15	<1	250	<1	3	<10	9.1	177	<0.5
266615	17	17	<1	360	<1	3	<10	6.1	91	<0.5
266616	6	12	<1	380	<1	2	<10	5.0	77	<0.5
266617	34	55	<1	110	<1	10	<10	6.3	49	<0.5
266618	31	24	<1	190	<1	5	<10	9.7	64	<0.5
266619	40	20	<1	1500	<1	4	<10	17.0	99	<0.5
266620	51	9	4	17700	<1	2	<10	14.8	163	1.0
266621	7	15	<1	3410	<1	2	<10	8.9	5	<0.5
266622	10	16	<1	3500	<1	2	<10	11.8	26	<0.5
266623	91	39	<1	2220	<1	7	<10	8.1	96	<0.5
266624	52	33	<1	900	<1	6	<10	4.6	35	0.6
266625	<5	16	<1	2680	<1	3	<10	3.8	9	<0.5
266626	24	22	<1	2740	<1	4	<10	4.5	6	<0.5
266627	62	27	<1	550	<1	5	<10	17.1	908	<0.5
266628	100	82	<1	2700	<1	19	<10	30.8	137	<0.5
266629	24	21	<1	370	<1	4	<10	13.2	477	<0.5
266630	24	8	<1	880	<1	2	<10	12.5	839	<0.5
266631	50	14	<1	1580	<1	3	<10	17.5	753	0.8
266632	44	27	<1	1850	<1	5	<10	8.0	76	<0.5
266633	<5	8	<1	1070	<1	1	<10	3.4	61	<0.5
266634	13	18	<1	930	<1	3	<10	5.6	109	0.6
266635	19	9	<1	440	<1	2	<10	3.9	119	0.5
266636	62	84	<1	650	<1	17	<10	15.3	297	<0.5
266637	46	36	<1	430	<1	7	<10	13.8	395	<0.5
266638	35	31	<1	910	<1	5	<10	16.2	571	<0.5
266639	35	75	<1	590	<1	14	<10	8.8	212	<0.5
266640	28	8	1	18200	<1	2	<10	12.4	70	1.2
266641	54	67	<1	850	<1	14	<10	9.4	87	<0.5
266642	21	17	<1	440	<1	3	<10	9.4	507	<0.5
266643	20	20	<1	390	<1	4	<10	13.1	583	<0.5

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.





Element Method Det.Lim. Units	Sc MMI-M5 5 ppb	Sm MMI-M5 1 ppb	Sn MMI-M5 1 ppb	Sr MMI-M5 10 ppb	Ta MMI-M5 1 ppb	Tb MMI-M5 1 ppb	Te MMI-M5 10 ppb	Th MMI-M5 0.5 ppb	Ti MMI-M5 3 ppb	Tl MMI-M5 0.5 ppb
266644	26	22	<1	420	<1	6	<10	5.3	68	<0.5
266645	44	144	<1	2250	<1	33	<10	5.1	5	<0.5
266646	42	43	<1	690	<1	9	<10	13.8	225	<0.5
266647	<5	7	<1	1110	<1	1	<10	5.9	49	<0.5
266648	25	87	<1	2180	<1	17	<10	6.8	16	<0.5
266649	12	25	<1	1300	<1	4	<10	3.5	18	<0.5
266650	34	32	<1	540	<1	6	<10	16.1	554	<0.5
266651	9	10	<1	530	<1	2	<10	5.3	69	<0.5
266652	14	48	<1	2390	<1	10	<10	9.7	5	<0.5
266653	60	76	<1	1140	<1	15	<10	14.8	109	<0.5
266654	<5	11	<1	530	<1	2	<10	2.9	40	<0.5
266655	37	40	<1	400	<1	8	<10	16.7	211	<0.5
266656	36	64	<1	170	<1	13	<10	13.5	95	<0.5
266657	34	37	<1	60	<1	7	<10	12.1	129	<0.5
266658	216	166	<1	1560	<1	34	<10	38.7	682	<0.5
266659	40	34	<1	630	<1	6	<10	11.7	68	<0.5
266660	48	9	4	18400	<1	2	<10	15.5	115	<0.5
266661	9	4	<1	940	<1	<1	<10	5.3	242	<0.5
266662	13	6	<1	570	<1	1	<10	6.0	516	<0.5
266663	12	8	<1	140	<1	2	<10	8.1	179	<0.5
266664	22	18	<1	630	<1	3	<10	6.7	61	<0.5
*Rep 266607	15	25	<1	1180	<1	4	<10	7.8	160	<0.5
*Rep 266617	31	49	<1	110	<1	9	<10	6.7	76	<0.5
*Rep 266632	38	25	<1	1780	<1	4	<10	6.9	58	<0.5
*Rep 266649	14	27	<1	1350	<1	5	<10	3.4	14	<0.5
*Rep 266663	15	11	<1	110	<1	2	<10	9.6	213	<0.5
*Std MMISRM18	<5	4	<1	1070	<1	<1	<10	17.4	5	<0.5
*Std MMISRM16	<5	3	<1	480	<1	<1	<10	21.0	<3	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	5	<0.5
*Blk BLANK	<5	<1	<1	<10	<1	<1	<10	<0.5	<3	<0.5

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	U MMI-M5 1 ppb	W MMI-M5 1 ppb	Y MMI-M5 5 ppb	Yb MMI-M5 1 ppb	Zn MMI-M5 20 ppb	Zr MMI-M5 5 ppb
266601	10	<1	157	11	220	86
266602	7	<1	213	17	840	128
266603	17	<1	235	12	470	45
266604	15	<1	60	4	110	32
266605	4	<1	27	2	330	13
266606	12	<1	84	7	160	142
266607	9	<1	125	9	210	105
266608	9	<1	176	12	190	137
266609	7	<1	97	7	120	151
266610	19	<1	289	22	160	212
266611	14	<1	261	17	170	311
266612	10	<1	146	11	160	167
266613	9	<1	99	10	190	172
266614	10	<1	93	7	70	119
266615	11	<1	103	8	120	101
266616	16	<1	57	5	110	61
266617	13	<1	336	26	30	65
266618	12	<1	215	18	80	103
266619	10	<1	159	12	2140	30
266620	76	20	96	10	4970	80
266621	13	<1	78	5	140	26
266622	20	<1	61	4	20	57
266623	10	<1	211	15	160	98
266624	10	<1	168	13	50	64
266625	10	<1	91	5	200	19
266626	8	<1	128	9	80	32
266627	8	<1	120	10	160	218
266628	42	<1	720	69	60	222
266629	9	<1	110	9	130	197
266630	8	<1	52	5	830	180
266631	15	<1	119	12	400	225
266632	12	<1	146	11	70	117
266633	7	<1	34	3	120	42
266634	12	<1	82	6	140	92
266635	15	<1	47	4	150	135
266636	18	<1	484	31	80	229
266637	11	<1	222	15	270	184
266638	12	<1	144	10	250	258
266639	15	<1	451	25	680	151
266640	56	67	83	8	480	61
266641	21	<1	502	30	350	150
266642	7	<1	87	7	270	117
266643	8	<1	114	9	470	189

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Element Method Det.Lim. Units	U MMI-M5 1 ppb	W MMI-M5 1 ppb	Y MMI-M5 5 ppb	Yb MMI-M5 1 ppb	Zn MMI-M5 20 ppb	Zr MMI-M5 5 ppb
266644	10	<1	298	20	630	67
266645	84	<1	1110	70	200	63
266646	16	<1	247	16	100	123
266647	14	<1	32	2	50	51
266648	94	<1	534	36	60	80
266649	50	<1	157	10	60	55
266650	12	<1	160	12	140	210
266651	14	<1	49	4	350	89
266652	16	<1	268	19	190	35
266653	21	<1	421	28	510	140
266654	9	<1	71	5	100	39
266655	19	<1	252	21	350	219
266656	16	<1	424	29	90	138
266657	12	<1	193	16	40	107
266658	32	<1	994	80	290	448
266659	22	<1	185	14	150	159
266660	77	20	95	10	4650	82
266661	6	<1	31	3	730	74
266662	4	<1	40	4	730	76
266663	7	<1	82	8	190	106
266664	21	<1	119	10	110	87
*Rep 266607	9	<1	119	8	210	105
*Rep 266617	13	<1	294	23	30	72
*Rep 266632	12	<1	133	9	50	104
*Rep 266649	56	<1	175	11	70	58
*Rep 266663	7	<1	86	8	160	131
*Std MMISRM18	22	<1	15	<1	610	21
*Std MMISRM16	46	<1	8	<1	190	15
*Blk BLANK	<1	<1	<5	<1	<20	<5
*Blk BLANK	<1	<1	<5	<1	<20	<5

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

**WARNING:** The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.