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**ASSESSMENT REPORT**

describing

**DIAMOND DRILLING**

at the

**MOR PROPERTY**

|         |                 |
|---------|-----------------|
| MOR 1-4 | YB89771-YB89774 |
| 5-8     | YB91626-YB91629 |
| 9-12    | YB91820-YB91823 |
| 13-52   | YB92029-YB92068 |
| 53-106  | YC71599-YC71652 |
| 107-184 | YC72301-YC72378 |
| 185-196 | YC72379-YC72390 |
| 197-204 | YC72391-YC72398 |
| 205-216 | YC72399-YC72410 |
| 217-224 | YC72411-YC72418 |
| 225-290 | YC73523-YC73588 |

NTS 105C/01

Latitude 60°06'N; Longitude 132°05'W

in the

Watson Lake Mining District,  
Yukon Territory

prepared by

Archer, Cathro & Associates (1981) Limited

for

**TARSIS RESOURCES LTD.**

by

H. Smith, P. Geo.

August 2010

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## **INTRODUCTION**

The MOR property covers a volcanic hosted massive sulphide (VHMS) prospect located in southern Yukon. Tarsis Resources Ltd. owns the property 100%.

This report describes results of a diamond drill program that consisted of two holes totalling 443.83 m. The work was conducted with daily helicopter support from Teslin using a temporary staging area located at the Morley River, two kilometres south of the property. The program was completed between June 5 and 19. Exploration was funded by Tarsis and managed by Archer, Cathro & Associates (1981) Limited. The author participated in and supervised the work program. The author's Statement of Qualifications appears in Appendix I.

## **PROPERTY LOCATION, CLAIM DATA AND ACCESS**

The MOR property consists of 290 contiguous mineral claims located in southern Yukon on NTS map sheet 105C/01 at latitude 60°06'N and longitude 132°05'W (Figure 1). The claims are registered with the Watson Lake Mining Recorder in the name of Tarsis. The locations of individual claims are shown on Figure 2 while claim registration information is listed below.

| <u>Claim Name</u> | <u>Grant Number</u> | <u>Expiry Date *</u> |
|-------------------|---------------------|----------------------|
| MOR 1-4           | YB89771-YB89774     | April 29, 2024       |
| 5-8               | YB91626-YB91629     | April 29, 2021       |
| 9-12              | YB91820-YB91823     | April 29, 2021       |
| 13-52             | YB92029-YB92068     | April 29, 2022       |
| 53-106            | YC71599-YC71652     | April 29, 2018       |
| 107-184           | YC72301-YC72378     | April 29, 2017       |
| 185-196           | YC72379-YC72390     | April 29, 2013       |
| 197-204           | YC72391-YC72398     | April 29, 2017       |
| 205-216           | YC72399-YC72410     | April 29, 2013       |
| 217-224           | YC72411-YC72418     | April 29, 2017       |
| 225-290           | YC73523-YC73588     | April 29, 2018       |

\*Expiry dates do not include 2010 work which has not yet been filed for assessment credit.

The MOR property is located 35 km east of Teslin, a village that lies alongside the Alaska Highway approximately 183 km by road southeast of Whitehorse. In 2010, mobilization to and from the property and daily crew moves were performed with a Hughes 500D operated by Ocean View Helicopters, from Teslin or the temporary staging area at Morley River.

## **HISTORY**

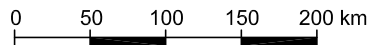
In 1980, Regional Resources Limited conducted regional-scale stream sediment sampling in the MOR area and discovered a small zone of anomalous base and precious metal values in soil near a subcrop of gossanous schist (Discovery Showing). No claims were staked at this time.

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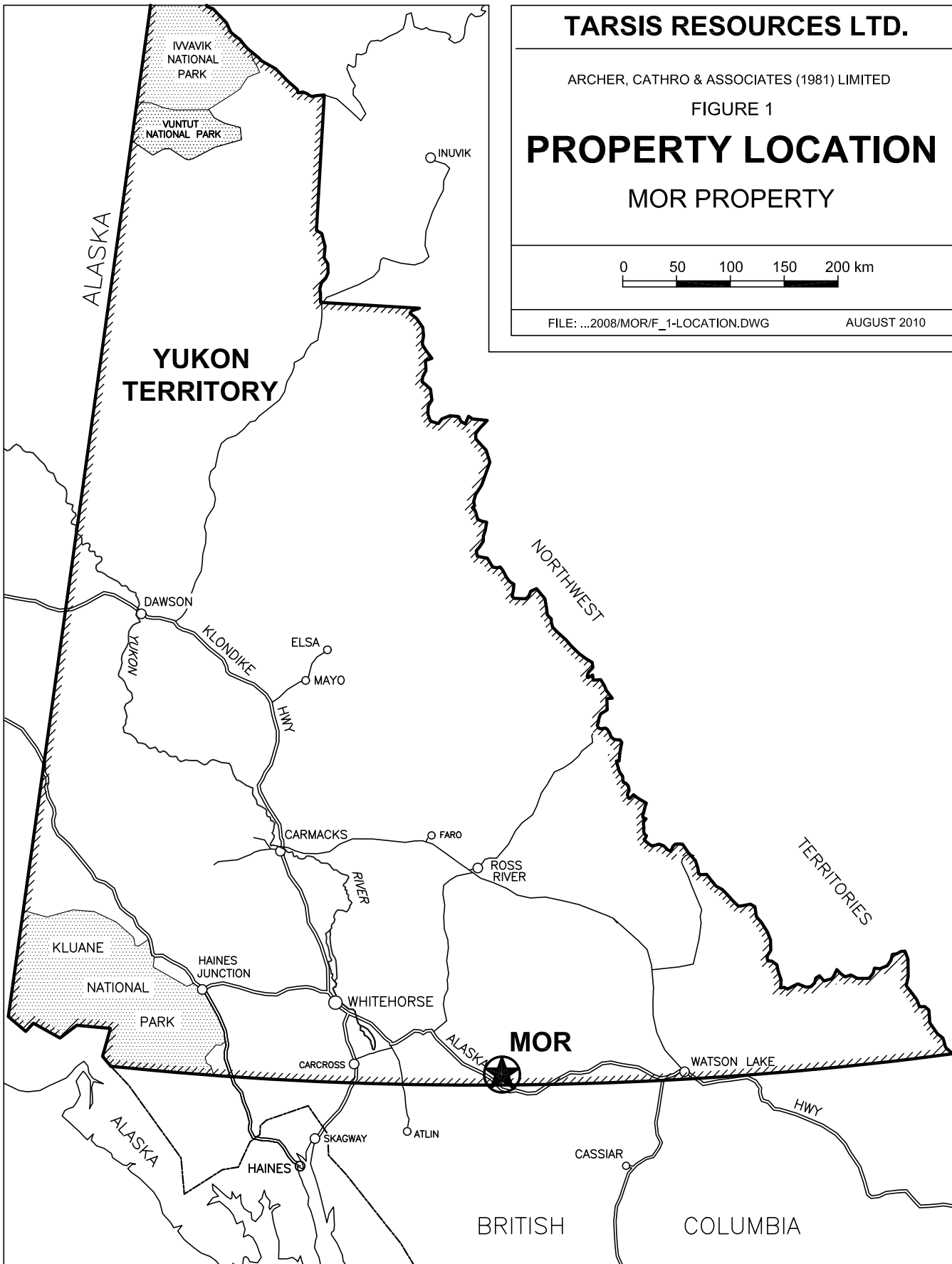
FIGURE 1

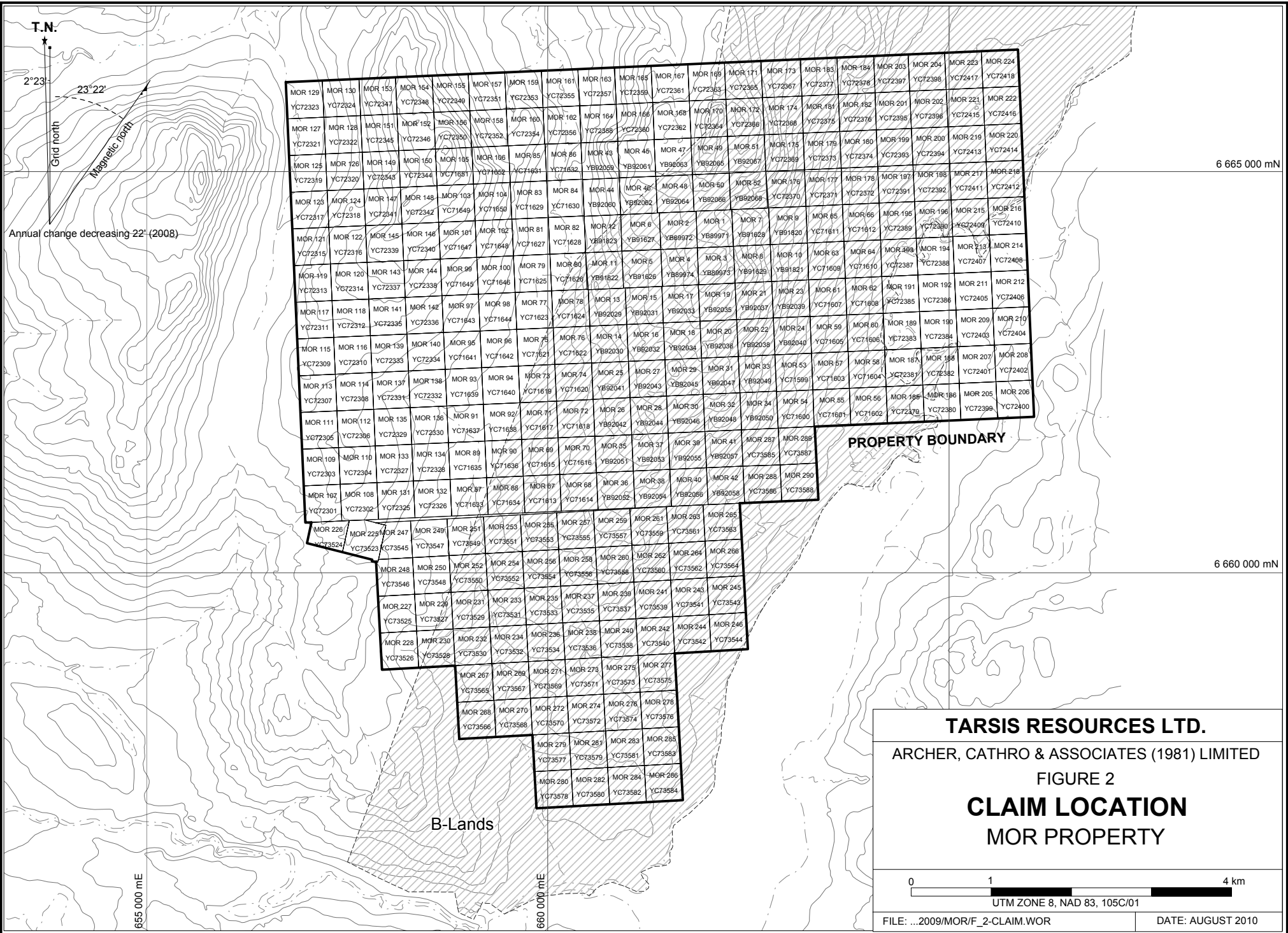
## PROPERTY LOCATION MOR PROPERTY



FILE: ...2008/MOR/F\_1-LOCATION.DWG

AUGUST 2010





Annual change decreasing 22" (2008)

665 000 mE

660 000 mE

6 665 000 mN

6 660 000 mN

PROPERTY BOUNDARY

B-Lands

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FIGURE 2

**CLAIM LOCATION**

**MOR PROPERTY**

0 1 4 km

UTM ZONE 8, NAD 83, 105C/01

FILE: ...2009/MOR/F\_2-CLAIM.WOR

DATE: AUGUST 2010

In 1997, Fairfield Minerals Ltd. revisited the area and staked four claims (MOR 1- 4) to cover the Discovery Showing. Exploration that year consisted of hand pitting and trenching followed by reconnaissance-scale prospecting and silt, soil and rock sampling across the claims. In 1998, Fairfield staked another eight claims (MOR 5-12) and carried out grid soil sampling and ground magnetic and VLF-EM geophysical surveys. Limited blast trenching, prospecting and reconnaissance rock sampling were also conducted in the area of the Discovery Showing.

In 1999, the property was optioned to Brett Resources Inc., which staked an additional 40 claims (MOR 13-52). Exploration that year entailed soil geochemical sampling (22 line km/442 samples), property-wide geological mapping at 1:10,000 scale, and detailed geological mapping (1:1500) in areas of known mineralization. In December 1999, Brett relinquished its option due to a corporate merger and shift in exploration focus.

Field work by Fairfield in 2000 consisted of additional grid soil sampling and ground magnetic and VLF-EM surveys, which were done in conjunction with detailed grid-based soil profile and bedrock sampling by portable power auger. The following summer, geochemically anomalous areas were followed up by in-fill auger sampling and prospecting. A total of 1223 samples were collected for multi-element analysis. This work identified a linear, 2000 m long east-trending band of anomalous copper, lead and zinc-in-soil values, which is up centered on the Discovery Showing.

In 2002, Fairfield merged with Almaden Resources Corporation to form Almaden Minerals Ltd. and the MOR mineral title was subsequently transferred.

In 2003, Kobex Resources Ltd. acquired a 60% interest in the MOR property and in 2004 it conducted a two phase work program consisting of an induced polarization geophysical survey followed by a two hole diamond drilling program. Results confirmed the presence of VHMS style mineralization (Discovery Horizon); however, grades were sub-economic and Kobex returned the property to Almaden in September 2005.

Tarsis purchased the property from Almaden in April 2007 and explored the following summer with a four hole diamond drill program, widely spaced soil sampling and 285 line km of helicopter-borne Versatile Time Domain Electromagnetic (VTEM) surveys. Diamond drilling focused on the Discovery Horizon, confirming the geometry of the system. The holes encountered gently dipping VHMS mineralization in two or three stacked horizons beneath near surface intersections previously reported by Kobex. The mineralization was traced along strike for 300 m. VTEM surveys identified a series of intermittent conductors coincident with the projected surface trace of the Discovery Horizon in the northern part of the property, which collectively totalled over five kilometres of the strike length. Another isolated but fairly intense VTEM anomaly was identified two kilometres south of the Discovery Horizon.

In 2008, Tarsis significantly expanded the claim block to cover potential for mineralization higher in the stratigraphic sequence. More VTEM surveys were flown to cover the new claims, and soil sampling, mapping, prospecting, diamond drilling and orientation style ground gravity surveys were conducted. Ground supported exploration focused largely on extending the known mineralization along strike to the east and downdip at the Discovery Horizon. This exploration

returned mixed results and suggested the sulphide horizons are locally folded/displaced and/or thinning distally from the vent. The orientation gravity surveys identified a 1 mg anomaly directly overtop the thickest accumulation of VHMS mineralization cut in 2007.

Work in 2008 also discovered a new area of mineralization (SD Zone) in the vicinity of the VTEM anomaly two kilometres southwest of the Discovery Zone. At this locale, semi-massive sulphide is hosted in strongly chlorite altered, stacked or fold repeated volcanoclastic units. Two diamond drill holes spaced approximately 200 m apart encountered narrow intervals of sulphide bearing volcanoclastic tuff. Orientation gravity surveys across this zone identified a localized 1 mg anomaly inferred to represent potential mineralization deeper in the stratigraphy. The drill holes did not extend deep enough to test the gravity anomaly.

In 2009, exploration consisted of detailed gravity surveys and lithochemical studies.

### **GEOMORPHOLOGY**

The property lies along the northwestern flank of the Cassiar Mountains. It is mostly situated between Mount Morley to west and the Morley River Valley to the east and encompasses two moderately steep, north trending ridges that flank a narrow upland valley. Local topography is subdued with elevations ranging from 900 m in the valley bottom to 1400 m atop the westernmost ridge. The best exposures are on glacially scoured hummocks along the ridge crest and on oversteepened hillsides where soil has been washed away.

A small, unnamed lake surrounded by marshland is located in the centre of the property. This lake is fed by tributaries of Hassell Lake from the north and by numerous small creeks and streams that drain from the surrounding ridges. All of the creeks on the property are tributaries of the Morley River, which is part of the Yukon River watershed.

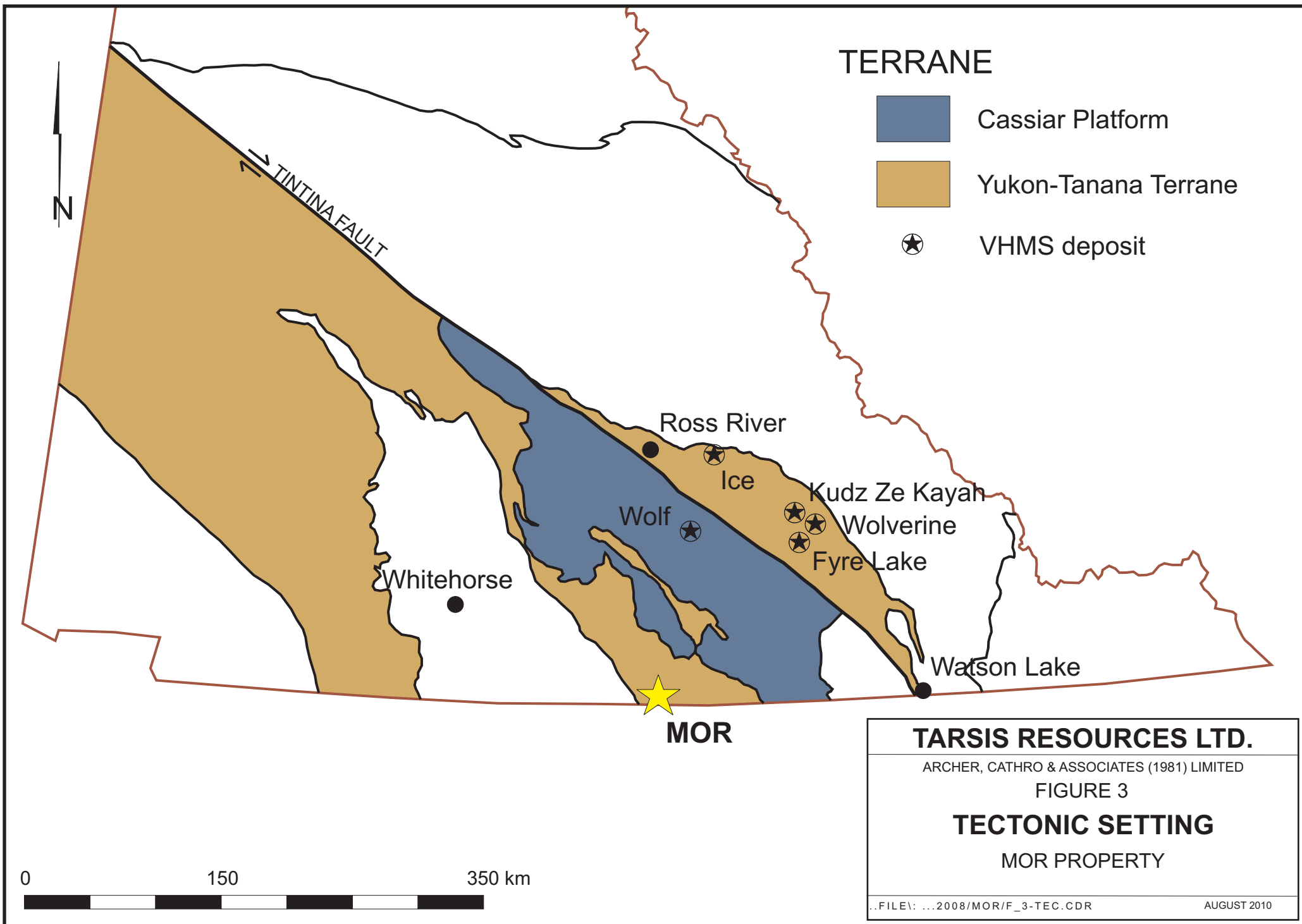
The claim block is well vegetated with spruce, balsam, pine, alder and tamarack on hillsides and willow along creeks and in marshes. Treeline in the vicinity of the MOR property is at 1450 m.

### **GEOLOGY**




#### **Regional Geology**

The property lies within a belt of Yukon-Tanana Terrane rocks on the southwest side of the Tintina Fault Zone (Figure 3). Yukon-Tanana Terrane underlie much of west-central Yukon, including a displaced block immediately northeast of the Tintina Fault Zone, referred to as the Finlayson Lake District, which hosts a number of VHMS deposits and prospects.

The most recent mapping of the Yukon-Tanana Terrane southwest of the Tintina Fault Zone near the B.C.-Yukon border was addressed in a special paper published by the Geological Association of Canada in 2006. This portion of the Northern Cordillera is segregated into the eastern, central and western belts, all three of which comprise stratigraphy associated with Permian and older sedimentation, arc related volcanism and coeval intrusions (Roots et al., 2006). Stratigraphy within each belt has been intruded by Eocene to early Jurassic plutons.



**TERRANE**

-  Cassiar Platform
-  Yukon-Tanana Terrane
-  VHMS deposit

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FIGURE 3

**TECTONIC SETTING**

MOR PROPERTY

The western belt hosts the MOR property. It is bound by the strike-slip Teslin Fault to the west and an unnamed fault to the northeast (Figure 4). Stratigraphic units within it mostly belong to the Devonian to Mississippian Big Salmon Complex and comprise bimodal arc-volcanic rocks, phyllite, siliceous metasedimentary rocks and minor carbonate units. Coeval orthogneiss is common throughout the sequence and ranges in age from late Devonian to Jurassic. The upper portion of the Big Salmon Complex is marked by a rose coloured manganiferous metachert believed to represent an exhalative volcanic pulse (Mihalynuk et al, 2006). The metavolcanic rocks of the Big Salmon Complex are considered age equivalent to the Finlayson Assemblage, which hosts VHMS deposits northeast of the Tintina Fault Zone (Colpron et al, 2006). The magnetic cycles associated with these rocks span upper Devonian to mid-Mississippian and are age equivalent to the Finlayson and Wolverine Magmatic Cycles (Figure 5).

Klinkit Group unconformably overlies stratigraphy of the Big Salmon Complex. It consists of pale coloured marble and intermediate to mafic tuffs plus volcanic-derived metasedimentary rocks with lesser volcanic flows, quartz sandstone and interlayered dark siltstone. Volcanic rocks are more abundant near the base of the succession. These sequences were deposited between mid-Mississippian and Permian.

The main lithologies in the vicinity of the MOR property are summarized on the Table I.

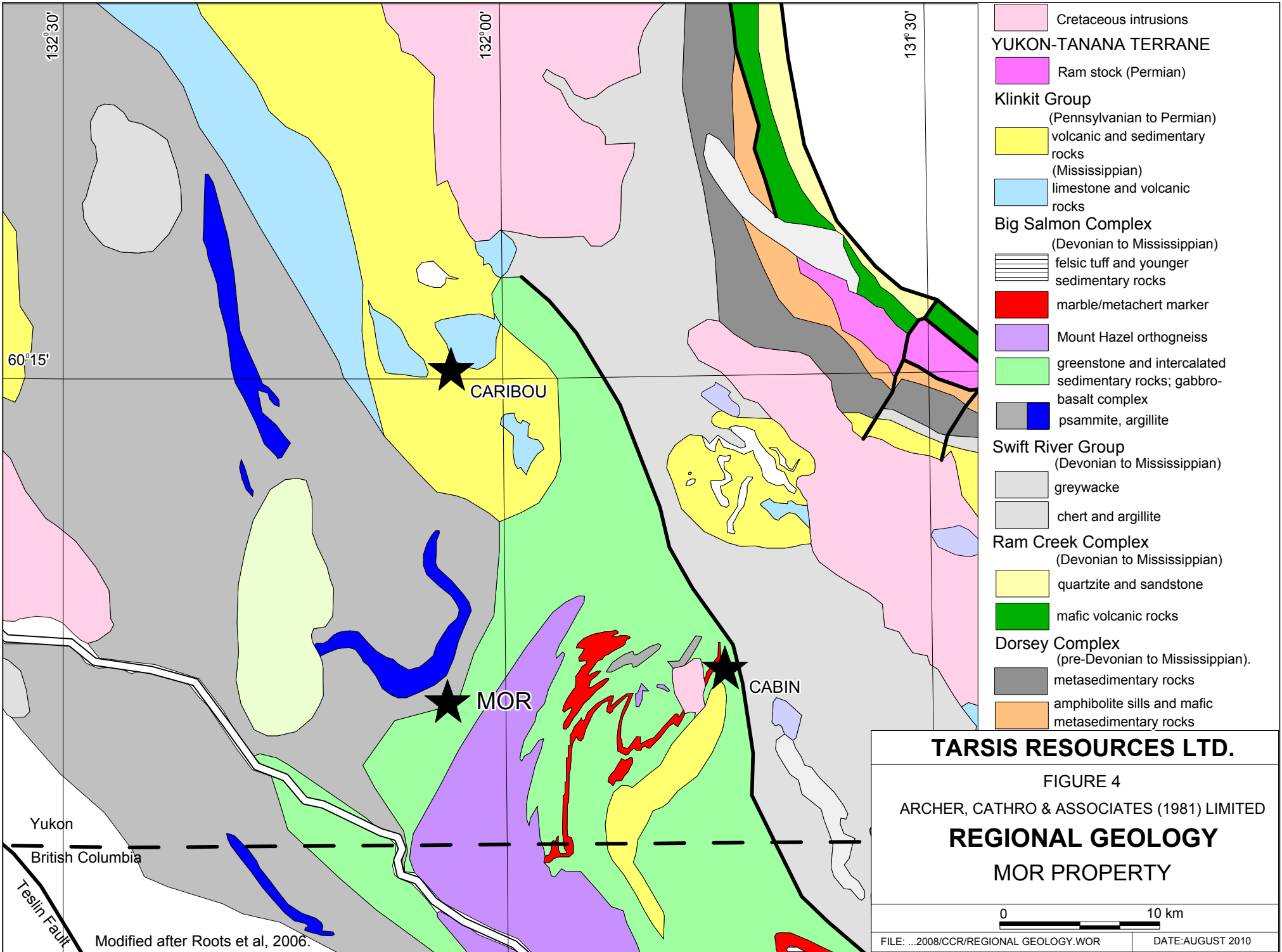
**Table I: Main Lithological Units**

|  |   |
|--|---|
| <u>Quarternary</u><br>Overburden                         | Glacial till, lateral and terminal moraines and glaciofluvial outwash |
| <u>Mid-Cretaceous or Early Tertiary</u><br>Cassiar Suite | Granodiorite and biotite-quartz monzonite porphyry                    |
| <u>Mississippian to Permian</u><br>Klinkit Group         | Volcaniclastic and sedimentary rocks including limestone              |
| <u>Devonian to Mississippian</u><br>Big Salmon Complex   | Mount Hazel orthogneiss   |
|  | Greenstone and intercalated sedimentary rocks                         |

### Property Geology

The MOR property is mostly underlain by mafic and felsic metavolcaniclastic rocks of the Big Salmon Complex (Figure 6). The following stratigraphic descriptions are based on work by previous authors (Ritcey and Balon, 1998 and Wengzynowski, 2010).

The MOR property is mainly underlain by a thick sequence of pale green-grey chlorite±quartz schist whose protolith is interpreted to be primarily mafic to intermediate volcaniclastic tuff. These schists contain varying amounts of layer parallel quartz and feldspar. Quartzite/chert is observed locally as interbeds within the mafic dominated succession, but these interbeds are never sufficiently thick enough to form a mappable unit. All rocks in this sequence are strongly deformed and exhibit pervasive schistosity, which generally strikes east and dips moderately to the south. The sequence has been significantly thickened by tight high amplitude folds, which are observed in outcrops and drill core. Metamorphic grade is middle greenschist facies.



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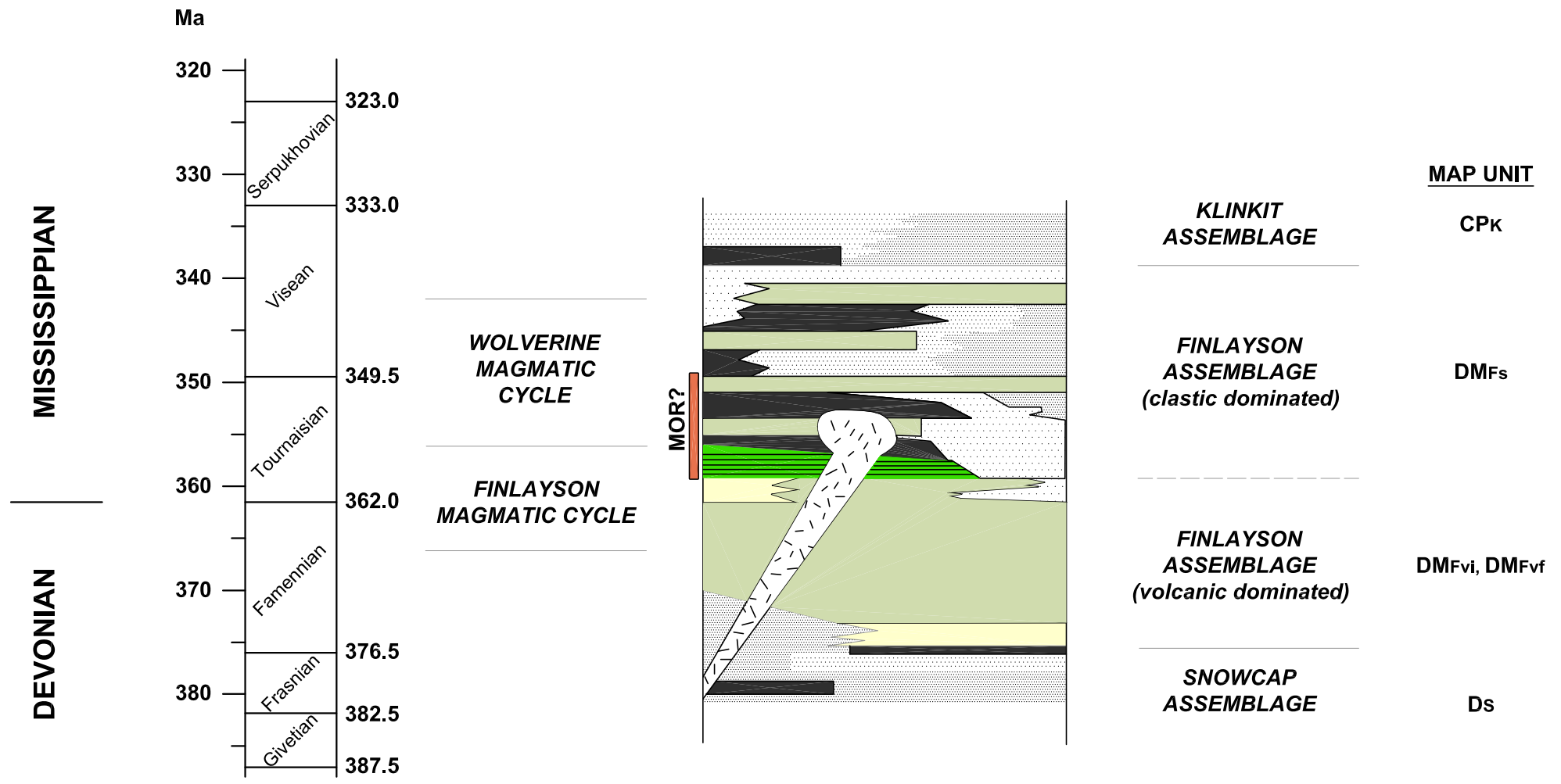
FIGURE 4

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**REGIONAL GEOLOGY**

MOR PROPERTY

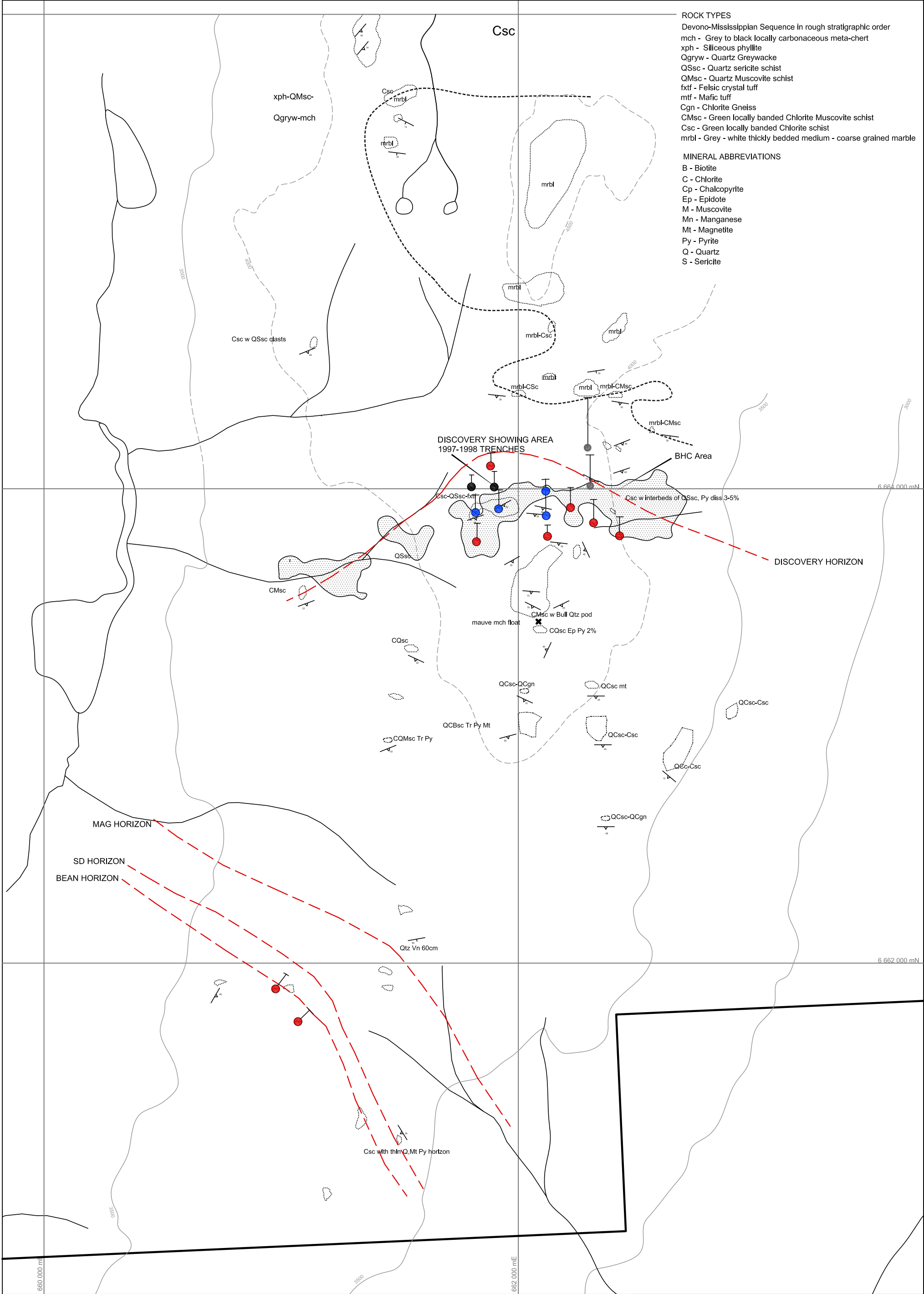
FILE: ...2008/CCR/REGIONAL GEOLOGY.WOR      DATE:AUGUST 2010



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**FIGURE 5**  
**STRATIGRAPHIC COLUMN**  
**YUKON TANANA TERRANE**  
**TESLIN AREA**  
 YUKON AND NORTHERN BRITISH COLUMBIA

after Mihalynuk et al (2000)

- ROCK TYPES**  
 Devono-Mississippian Sequence in rough stratigraphic order  
 mch - Grey to black locally carbonaceous meta-chert  
 xph - Siliceous phyllite  
 Qgryw - Quartz Greywacke  
 QSsc - Quartz sericite schist  
 QMsc - Quartz Muscovite schist  
 fxtf - Felsic crystal tuff  
 mtf - Mafic tuff  
 Cgn - Chlorite Gneiss  
 CMsc - Green locally banded Chlorite Muscovite schist  
 Csc - Green locally banded Chlorite schist  
 mrbl - Grey - white thickly bedded medium - coarse grained marble
- MINERAL ABBREVIATIONS**  
 B - Biotite  
 C - Chlorite  
 Cp - Chalcopyrite  
 Ep - Epidote  
 M - Muscovite  
 Mn - Manganese  
 Mt - Magnetite  
 Py - Pyrite  
 Q - Quartz  
 S - Sericite



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**FIGURE 6**  
**PROPERTY GEOLOGY**  
**MOR PROPERTY**

This assemblage of dominantly mafic metavolcanic rocks correlate with the “greenstone sequence” of the Big Salmon Complex mapped by Mihalynuk et al. (1998).

The chlorite±quartz schist sequence contains coeval pale grey to white orthogneiss sills, which are texturally sucrosic and very difficult to distinguish from some felsic and intermediate sections of the metavolcaniclastic stratigraphy. The orthogneiss was likely emplaced as a fairly fine grained intrusive because augens are virtually non-existent.

Basement stratigraphy in the northeast portion of the property consists of grey to white, thick bedded, medium- to coarse-grained limestone/marble. This unit appears to be conformable with the overlying volcanoclastic sequence. Bedding attitudes strike east and dip approximately 30° to the south.

A single traverse north of the limestone/marble unit (outside the MOR claim boundary) revealed a third geological unit comprising a highly variable sequence of grey, siliceous, phyllitic metasediments with interbedded 1-10 m thick, dark grey to black, carbonaceous cherts. This unit strikes northeasterly and dips to the southeast.

An inferred stratigraphic column for the Teslin area showing the postulated position of the MOR mineralization appear on Figure 6. This theory is supported by geochronological data obtained from MOR drill core, which yielded a morphologically simple population of zircon, permissive of magmatic origin with Devonian to Mississippian dates between 347 and 365 Ma (M. Colpron pers. comm., 2008).

### **MINERALIZATION**

VHMS style mineralization occurs in two parts of the MOR property. The Discovery Horizon located in the northern part of the claim block has been the primary focus of exploration. The other area (SD Zone) comprises several mineralized outcrops situated approximately two kilometres south of the Discovery Horizon.

Mineralization at the Discovery Horizon comprises medium- and coarse-grained massive and semi-massive sulphides. The most common “ore” sulphide is chalcopyrite, which occurs as interstitial grains and blebby aggregates within a pyrite dominant matrix. Sphalerite and galena are rarely observed as trace disseminations.

Massive and semi-massive sulphide horizons are stacked within an envelope of mafic dominant volcanoclastic stratigraphy that is weakly to moderately mineralized with coarse disseminated pyrite and rare chalcopyrite. Medium- to coarse-grained magnetite is irregularly disseminated throughout the stratigraphic column. Alteration associated with the volcanoclastic rocks is dominated by a combination of pale to medium green chlorite and sericite. Darker chlorite is developed nearer the massive sulphide sections and narrow felsic volcanoclastic pulses coincide with some of the stronger mineralization.

The SD Zone is defined by northwest trending, gently southwest dipping sulphide and/or oxide bearing mafic and felsic metavolcanic horizons.

Three distinct horizons (Mag, SD and Bean Horizons) have been identified within a 250 m thick package of bimodal mafic and felsic metavolcaniclastic stratigraphy units that appears to have been subjected to fairly intense hydrothermal alteration.

Sulphides in the SD and Bean Horizons are dominated by thinly laminated and strongly magnetic pyrrhotite with lower concentrations of blebby interstitial and disseminated chalcopyrite. Coarse pyrite is less common than pyrrhotite at the SD Horizon and visa versa at the Bean Horizon. Where pyrite is present, it occurs as foliation-parallel grains and aggregates. Magnetite appears as fine grained massive bands and medium to coarse disseminated grains. The Mag Horizon is characterized by medium to coarse disseminated magnetite and minor amounts of coarse foliation-parallel pyrite.

### **HISTORICAL SOIL GEOCHEMISTRY**

The results (copper, lead, zinc, silver and gold) for all soil geochemical surveys that have been done on the property are compiled on Figures 7 through 11 respectively. These figures show coincident, easterly trending copper-lead-zinc-silver anomalies that extends for a distance of approximately 2500 m along the surface trace of the Discovery Horizon. Copper, lead and zinc exhibit the strongest contrast relative to the background values.

Geochemical response in the vicinity of the SD Zone is spotty. The three known mineralized horizons are best marked by intermittent copper (up to 721 ppm) and silver (up to 2.6 ppm) point anomalies, scattered along a 1500 m strike length. Lead and zinc response in this area is subdued.

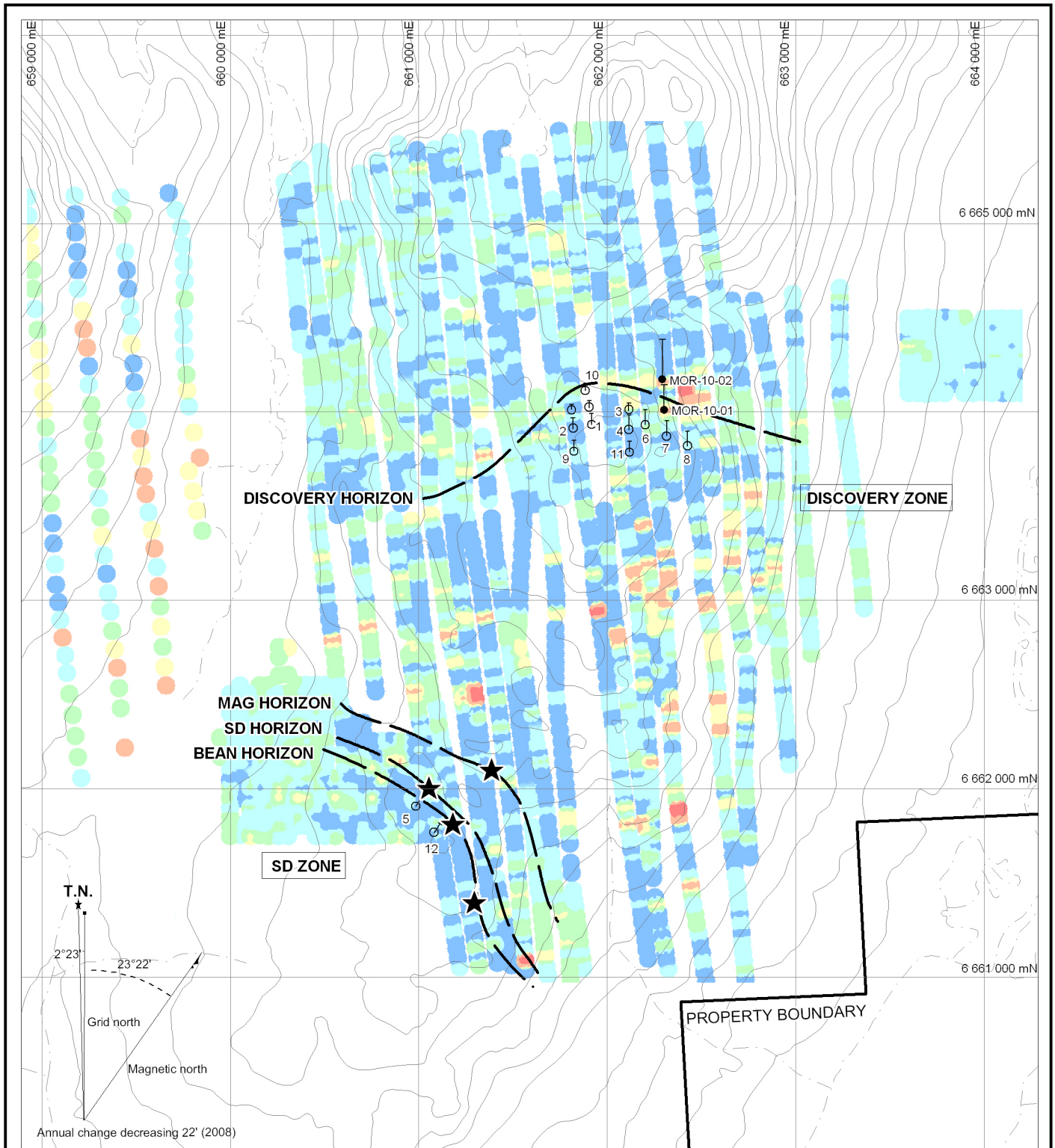
Sampling elsewhere on the property identified broad areas of elevated copper response. Some of these areas coincide with VTEM anomalies or pyritic felsic volcanics, but none has been systematically evaluated. Many parts of the property were not sampled due to poor soil development or deep organic material.

### **2009 GRAVITY SURVEYS**

Approximately 13 line km of ground-based Bouguer gravity surveys were conducted in 2009 by MWH Geo-Surveys Inc. of Reno, Nevada. Roughly 4 line km were completed along the eastern extension of the Discovery Horizon while the remaining 9 km were done along strike of the mineralized horizons comprising the SD Zone. The Bouguer results are shown on Figure 12.

Condor Consulting Ltd. was retained to model and interpret encouraging Bouguer results from the Discovery Horizon, which are referred to as the DHG anomaly. This anomaly is a northerly elongated, 800 m long by 100 to 250 m wide target, the strongest portion of which is a 250 by 200 m feature interpreted to lie stratigraphically beneath the Discovery Horizon mineralization. A voxel model was constructed with inverted data (Figure 13). While the rocks associated with the anomaly are denser than the surrounding units, the absolute difference is not known.

Gravity response downdip and along strike of SD Zone mineralized horizons is subdued and indicates only subtle contrast with the surrounding volcaniclastic rocks. A feature referred to as



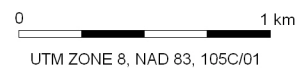
**Copper (ppm)**

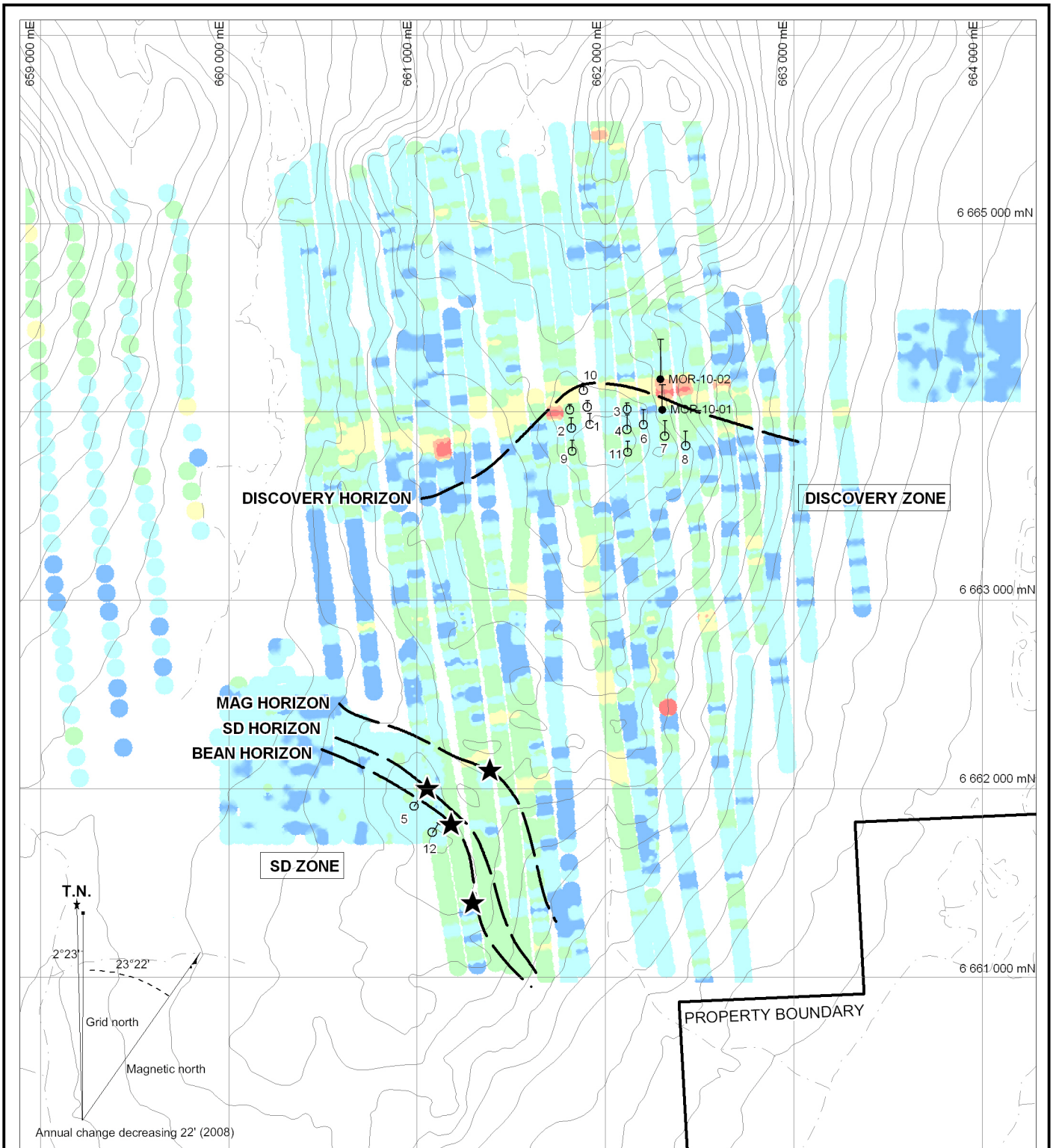
- $\geq 500$
- $\geq 200 < 500$
- $\geq 100 < 200$
- $\geq 50 < 100$
- $\geq 25 < 50$
- $\geq 0 < 25$

- 2010 diamond drill hole
- Pre-2010 diamond drill hole
- Mineralized horizon
- ★ Mineralized showing

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**FIGURE 7**  
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**HISTORICAL COPPER GEOCHEMISTRY**  
**MOR PROPERTY**





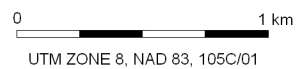
**Lead (ppm)**

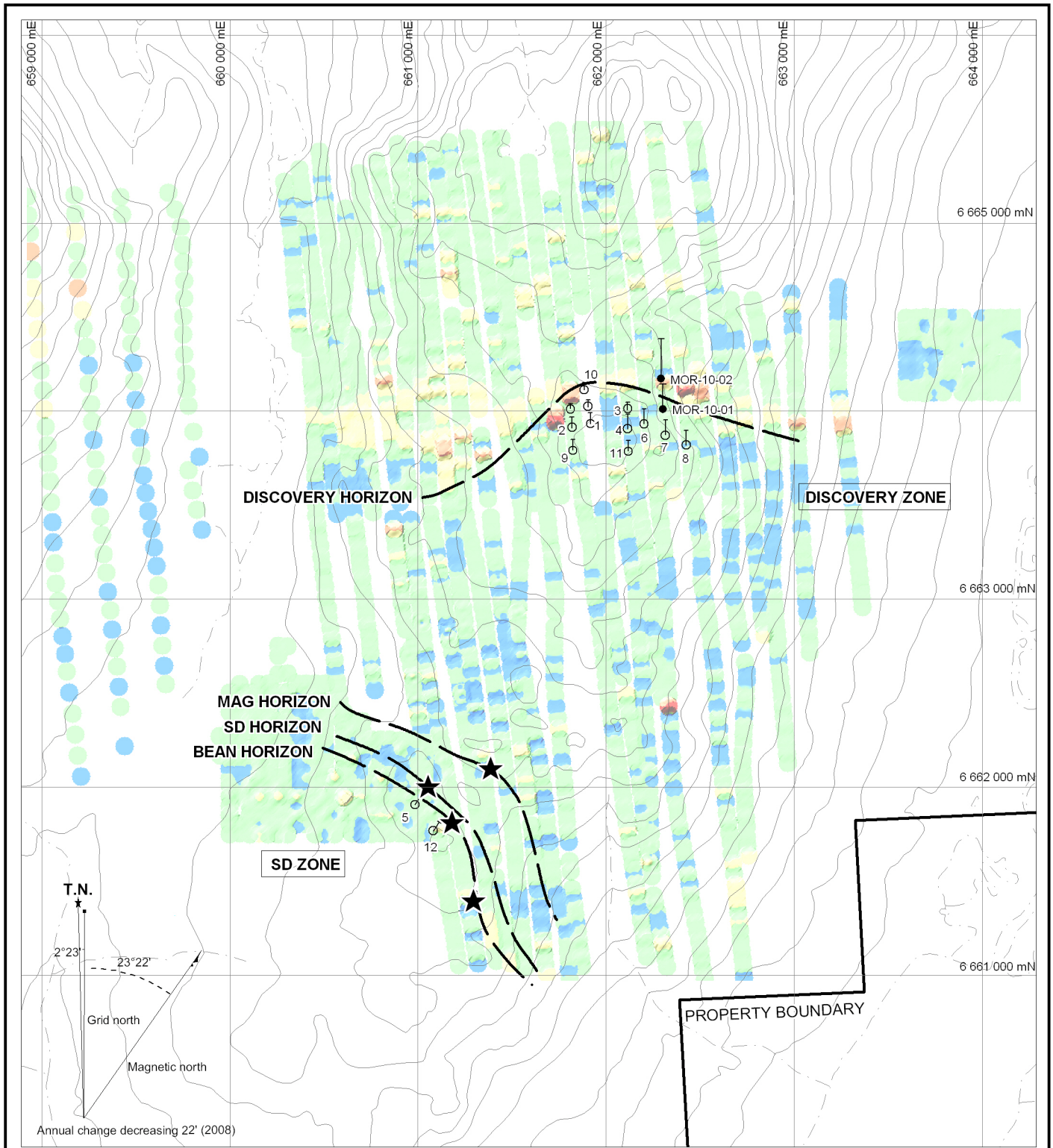
- $\geq 100$
- $\geq 50 < 100$
- $\geq 20 < 50$
- $\geq 10 < 20$
- $\geq 5 < 10$
- $\geq 0 < 5$

- T 2010 diamond drill hole
- T Pre-2010 diamond drill hole
- Mineralized horizon
- ★ Mineralized showing

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**FIGURE 8**  
**ARCHER, CATHRO & ASSOCIATES (1981) LIMITED**  
**HISTORICAL LEAD GEOCHEMISTRY**  
**MOR PROPERTY**





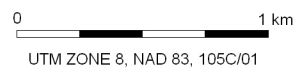
**Zinc (ppm)**

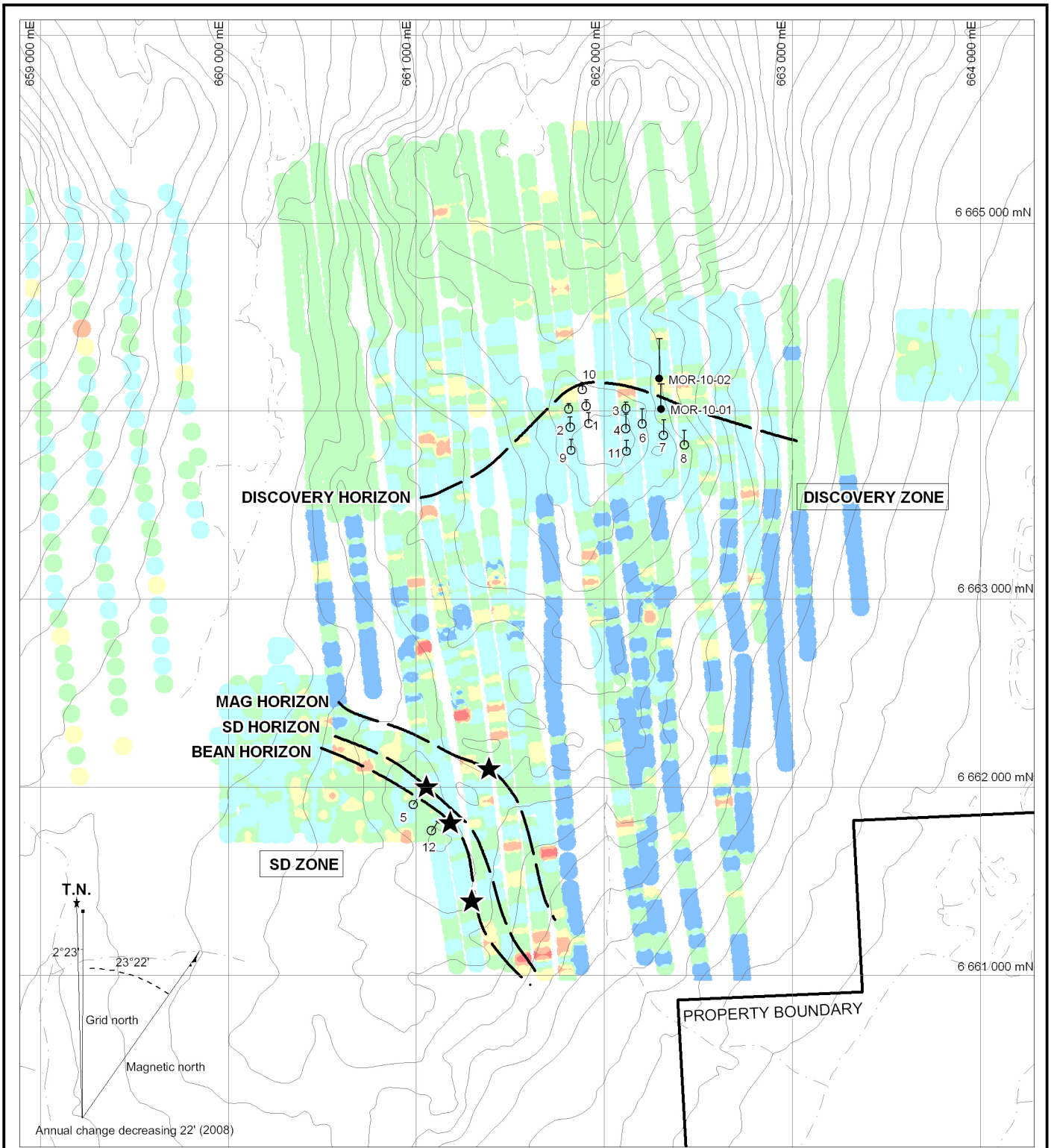
- $\geq 500$
- $\geq 200 < 500$
- $\geq 100 < 200$
- $\geq 50 < 100$
- $\geq 0 < 50$

- 2010 diamond drill hole
- Pre-2010 diamond drill hole
- Mineralized horizon
- ★ Mineralized showing

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**FIGURE 9**  
**ARCHER, CATHRO & ASSOCIATES (1981) LIMITED**  
**HISTORICAL ZINC GEOCHEMISTRY**  
**MOR PROPERTY**





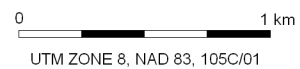
**Silver (ppm)**

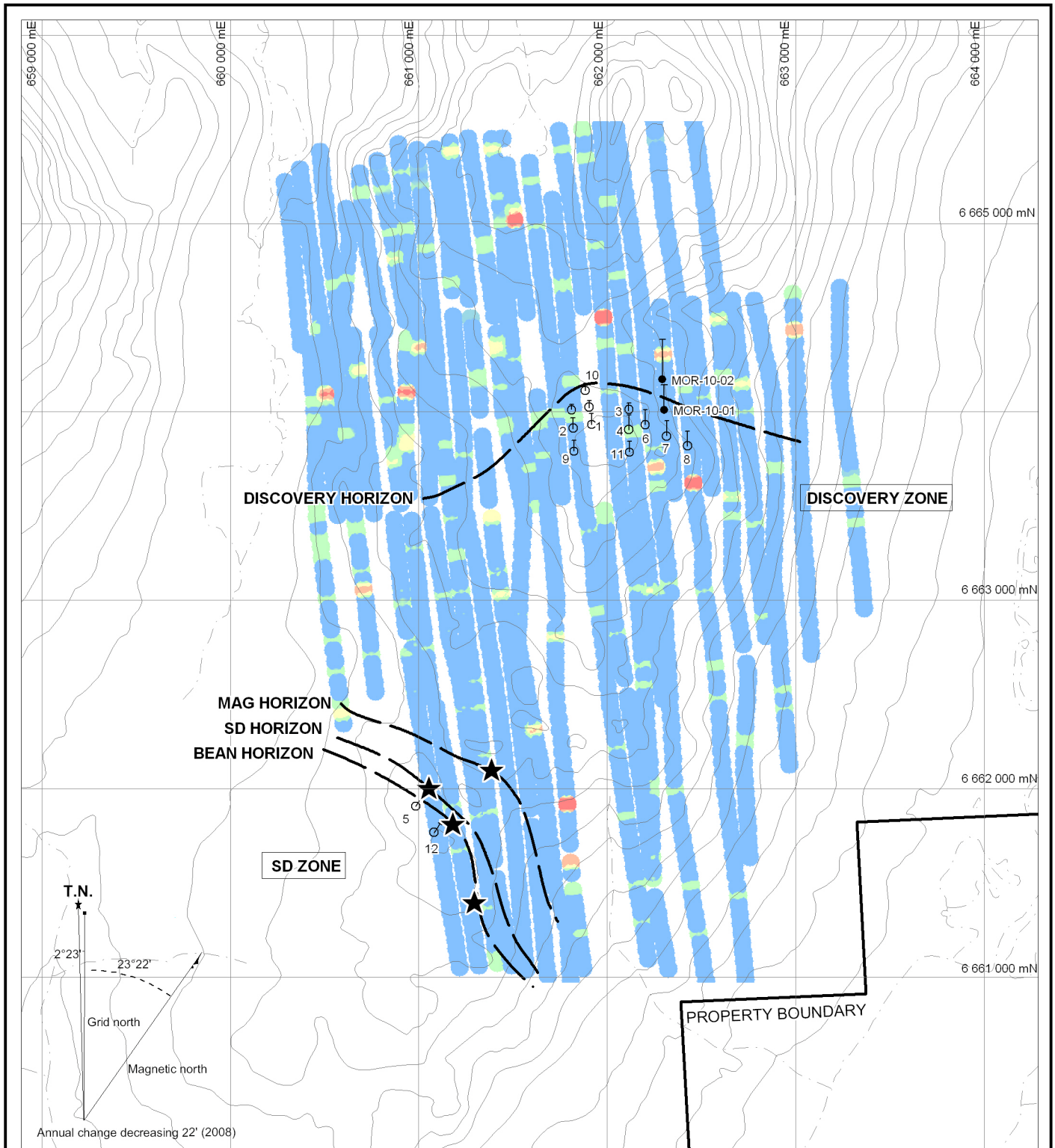
- ≥2.0
- ≥1.0 <2.0
- ≥0.5 <1.0
- ≥0.2 <0.5
- ≥0.1 <0.2
- ≥0 <0.1

- 2010 diamond drill hole
- Pre-2010 diamond drill hole
- Mineralized horizon
- ★ Mineralized showing

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**FIGURE 10**  
**ARCHER, CATHRO & ASSOCIATES (1981) LIMITED**  
**HISTORICAL SILVER GEOCHEMISTRY**  
**MOR PROPERTY**





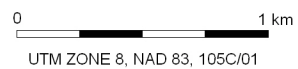
Gold (ppb)

- ≥100
- ≥50 <100
- ≥25 <50
- ≥10 <25
- ≥0 <10

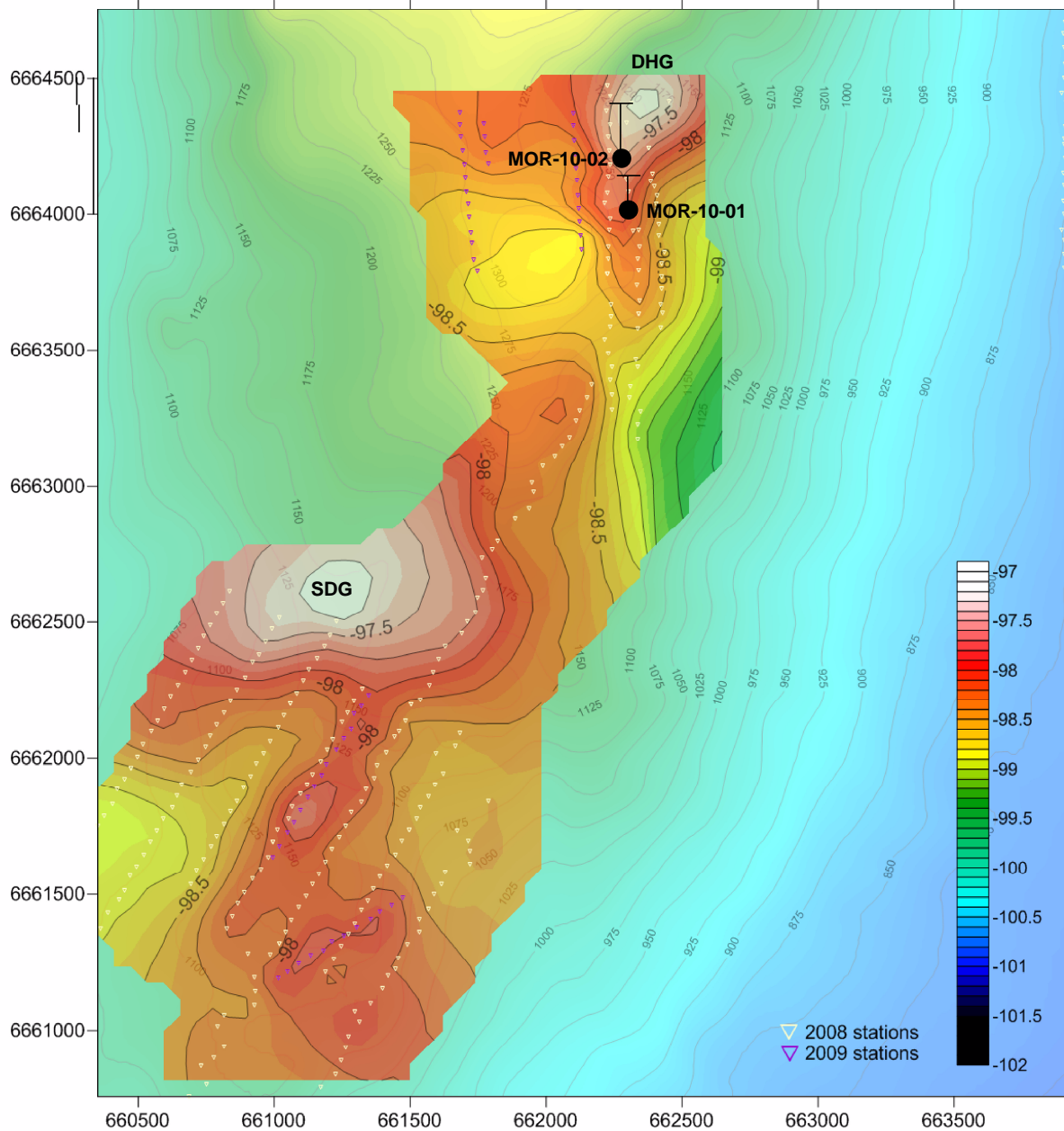
- 2010 diamond drill hole
- Pre-2010 diamond drill hole
- Mineralized horizon
- ★ Mineralized showing

**TARSIS RESOURCES LTD.**

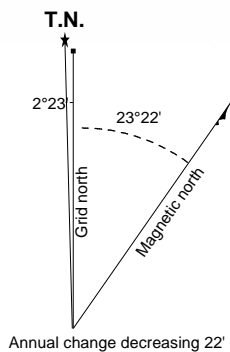
**FIGURE 11**  
**ARCHER, CATHRO & ASSOCIATES (1981) LIMITED**  
**HISTORICAL GOLD GEOCHEMISTRY**  
**MOR PROPERTY**



Bouguer Gravity:  
MOR Property, Yukon  
Tarsis Capital Corp



UTM Zone 8N NAD83  
Bouguer density 2.67 gm/cc  
Terrain Corrections:  
to 10,000m radius with acquired DEM / clino



**DHG** Gravity anomaly described in text  
● | 2010 diamond drill hole

**TARSIS RESOURCES LTD.**

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
FIGURE 12

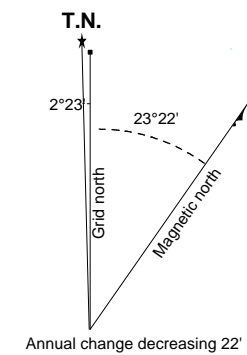
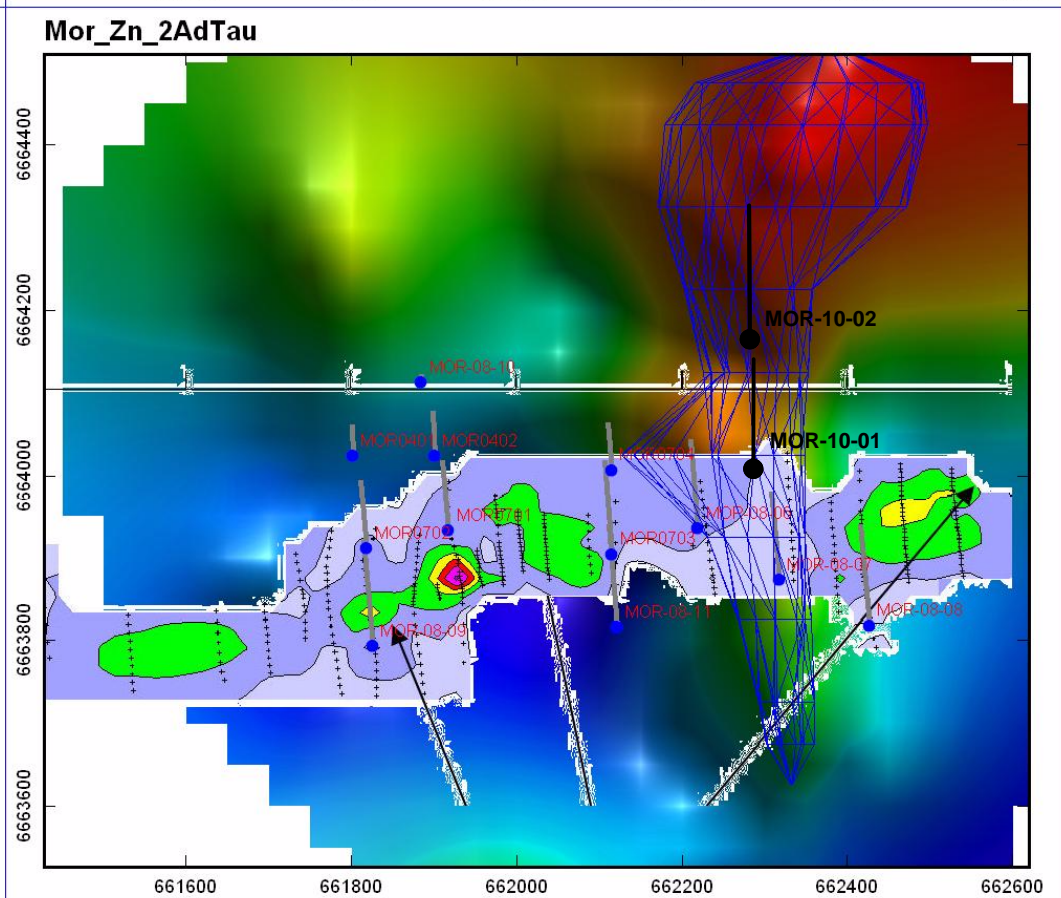
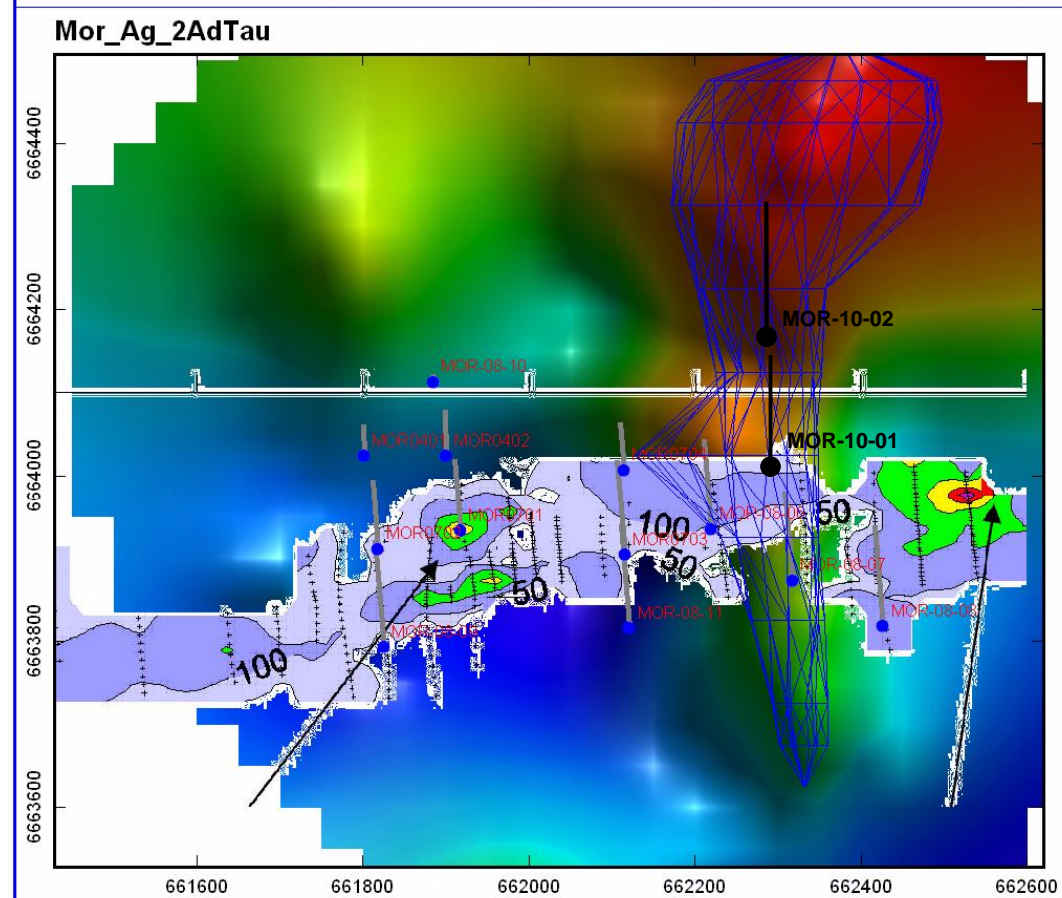
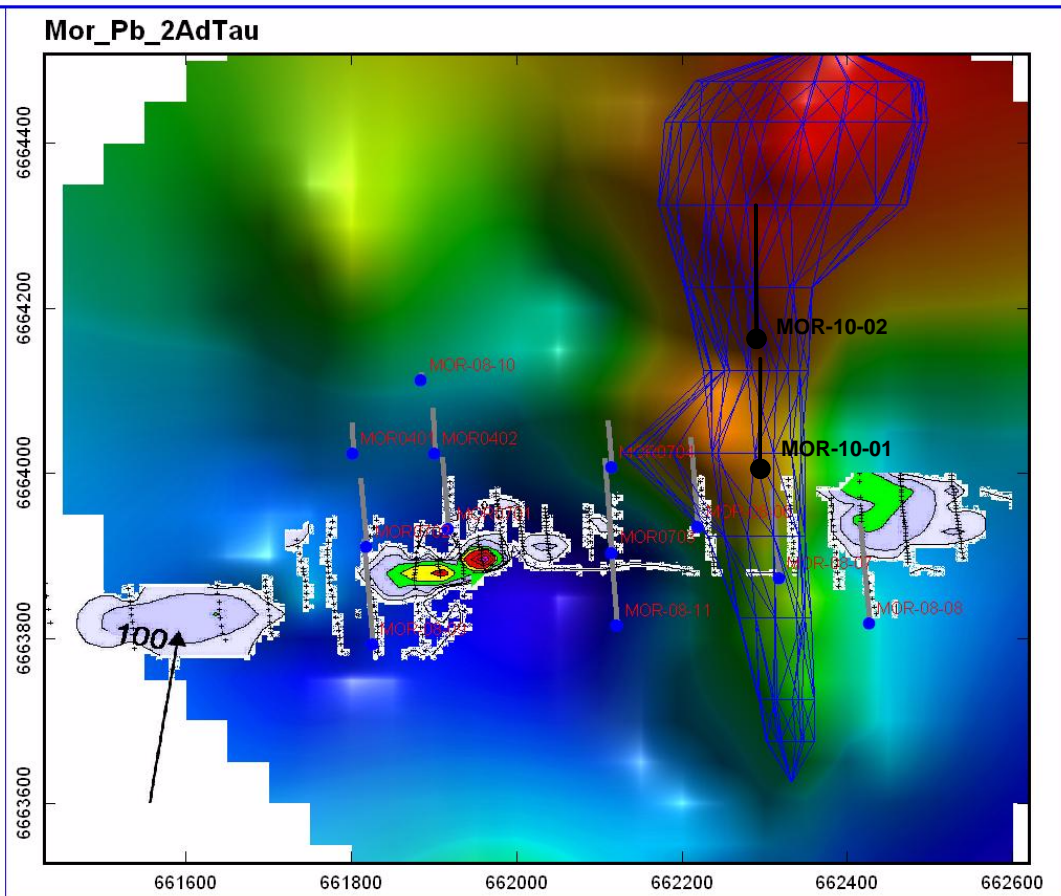
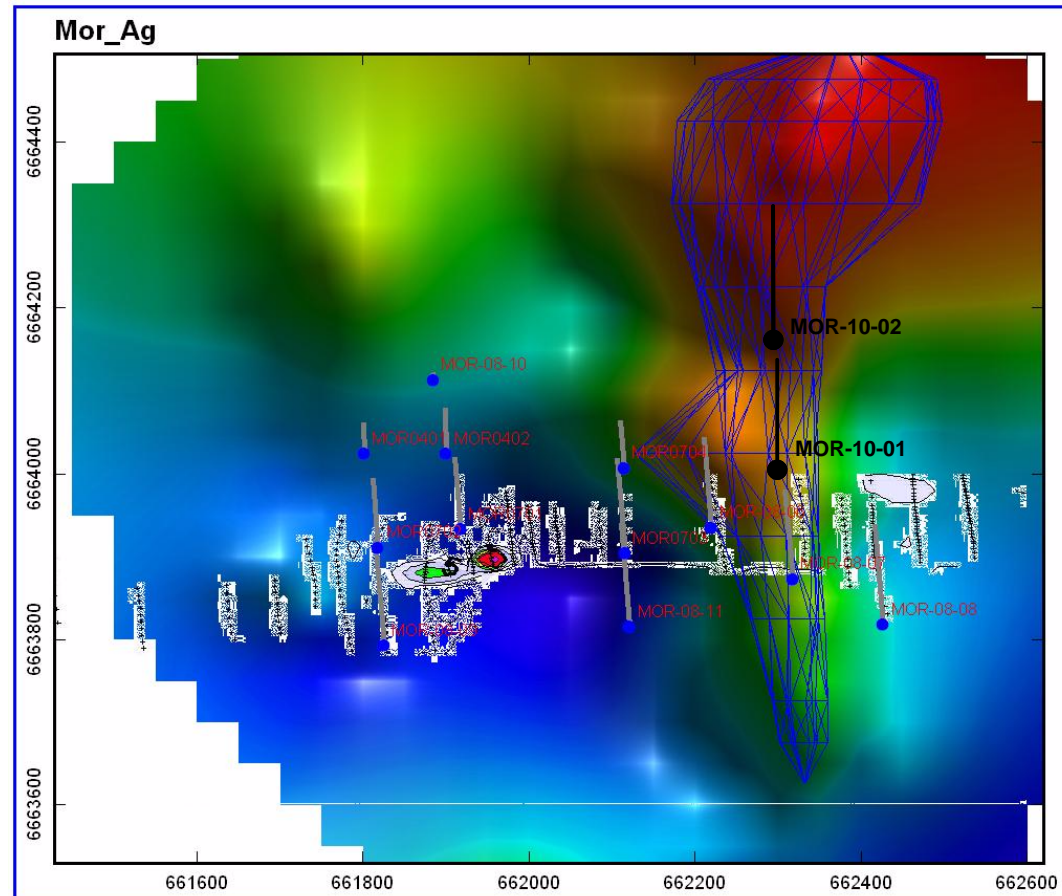
**BOUGUER GRAVITY  
MOR PROPERTY**

0 1 km

UTM ZONE 8, NAD 83, 105C/01

FILE: ...2009/MOR/F\_2-CLAIM.WOR

DATE: AUGUST 2010



● 2010 Diamond Drill Hole

**TARSIS RESOURCES LTD.**  
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED  
 FIGURE 13  
**GRAVITY VOXEL MODEL**  
**PLAN VIEW**  
**MOR PROPERTY**

0 ————— 1 km  
 UTM ZONE 8, NAD 83, 105C/01

FILE: ...2009/MOR      DATE: AUGUST 2010

the SDG anomaly coincides with the edge of the survey block, but it may be attributed to an “edge effect.”

## **2010 DRILL PROGRAM**

### **General**

The 2010 diamond drill program consisted of two holes totalling 443.83 m. The holes were intended to test the DHG anomaly and to explore for VHMS mineralization below the limestone/marble unit, which underlies the volcanoclastic sequence hosting the Discovery Horizon.

The drilling was contracted to Top Rank Diamond Drilling Ltd. of Ste. Rose Du Lac, Manitoba. It was done with a helicopter portable JKS 300 drill using BTW equipment. Data concerning the drill program is summarized in Table II below.

**Table II – 2010 Diamond**

| <b>Hole Number</b> | <b>Azimuth</b> | <b>Dip</b> | <b>Final Depth</b> |
|--------------------|----------------|------------|--------------------|
| MOR-10-01          | 360            | -50        | 168.60             |
| MOR-10-02          | 360            | -50        | 275.23             |

Core from the holes was transported from the property to the Archer Cathro compound in Whitehorse, where it was geologically and geotechnically logged and split using a manual core splitter or sawn using a rock saw. Appendix II contains the geological and geotechnical logs.

Samples were stored in the locked container until they were taken to a preparation laboratory operated by ALS Chemex in Whitehorse. Pulps from that lab were shipped by ALS Chemex to its analytical lab in North Vancouver where they were analyzed for gold using fire assay preparation followed by atomic absorption spectroscopy (Au-AA24) and 34 other elements by inductively coupled plasma-atomic emission spectrometry (ME-ICP41). Overlimit results from the geochemical analyses were assayed to obtain full values. Certificates of Analysis appear in Appendix III.

Analyses were done in 36 sample batches with each batch including two blank samples, two standard samples and one duplicate sample. All blank, standard and duplicate samples returned results that were acceptable under QAQC protocols.

### **Results**

The first hole (MOR-10-01) was abandoned in the limestone/marble unit short of its target depth (Figure 14). Fortunately, it intersected VHMS style mineralization in the Discovery Horizon before reaching the limestone/ marble contact. The mineralization consisted of several thin bands of heavily disseminated to massive sulphides within a stratigraphic interval that averaged 0.71% Cu, 0.80% Zn and 0.414 g/t Au over 7.80 m. The best mineralized band within the

**MOR-10-02**

AZM: 360°  
DIP: -50°

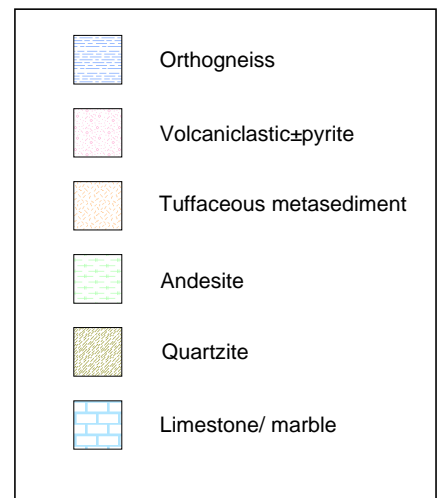
**MOR-10-01**

AZM: 360°  
DIP: -50°

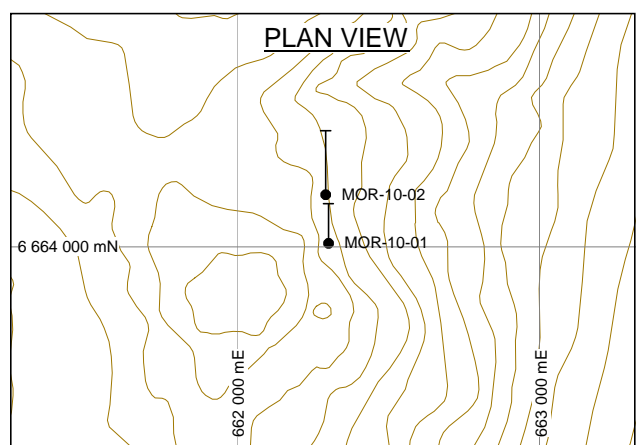
0.41 g/t Au, 0.71% Cu, 0.80% Zn  
7.80 m

EOH  
168.60 m

EOH  
211.4 m



PLAN VIEW



**TARSIS RESOURCES LTD.**

FIGURE 14

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

**2010 DRILL SECTIONS**

MOR PROPERTY



interval graded 1.43% Cu, 1.98% Zn and 1.13 g/t Au across an intersected length of 0.65 m. The mineralized interval lies about 38 m above the limestone/marble contact.

The second hole (MOR-10-02) successfully crossed the limestone/marble unit and extended 104 m into the underlying stratigraphy. No mineralization or lithology was observed that would explain the gravity anomaly. Although this hole cut some of the favourable volcanoclastic stratigraphy overlying the limestone/marble unit, it was collared too far forward to have intersected the mineralization in the Discovery Horizon. The highest geochemical values from the stratigraphy below the limestone/marble unit were 0.62% Cu and 0.50% Zn.

### **DISCUSSION AND CONCLUSIONS**

The VHMS mineralization on the MOR property is regionally important because it demonstrates potential for VHMS discoveries outside of the Finlayson Lake District.

Although the rocks beneath the limestone/ marble unit were not mineralized where intersected, the lithologies appear to be potential favourable hosts. Lithogeochemical studies should be done on core from below the limestone/ marble unit and if results of these studies are positive, additional holes should be drilled.

Although the 2010 drill program failed to explain the DHG anomaly, one of the two holes returned encouraging results from the Discovery Horizon. The MOR massive sulphide system has not been fully delineated and there are still geochemical and geophysical anomalies on the property that have not yet been drill tested.

Respectfully submitted,

Archer, Cathro & Associates (1981) Limited

H. Smith, P.Geo.

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**APPENDIX I**  
**STATEMENT OF QUALIFICATIONS**



## **STATEMENT OF QUALIFICATIONS**

I, Heather Smith, geologist, with business addresses in Vancouver, British Columbia and Whitehorse, Yukon Territory and residential address at #604-175 West 1 Street, North Vancouver, British Columbia, V7M 3N9 do hereby certify that:

1. I graduated from the University of British Columbia in 2006 with a B. Sc in Geological Sciences.
2. From 2004 to present, I have been actively engaged in mineral exploration in the Yukon Territory, British Columbia and Northwest Territories.
3. I am a Professional Geoscientist (P.Ge.) with the Association of Professional Engineers and Geoscientists of British Columbia (Member Number 150000).
4. I have personally directed the fieldwork reported herein and have interpreted all data resulting from this work.

Heather Smith, B.Sc., P.Ge.

**APPENDIX II**  
**GEOLOGICAL AND GEOTECHNICAL LOGS**

# MOR PROPERTY

| Grid East | Grid North | Easting | Northing | Elev. (m) | Depth (m) |
|-----------|------------|---------|----------|-----------|-----------|
|           |            | 662303  | 6664012  | 1248      | 168.60    |

**ZONE:** UTM 8

**SECTION:** 3000 E

**HOLE:** MOR-10-01

**CLAIM:** MOR3 YB89973

Contractor: Top Rank Drilling

Drill: JKS 300

Core size: BTW

Casing depth: 5.48 (m) in / out

Drilling dates: June 6 - 11, 2010

Geology logged by: Oliver Fu

| SURVEY    |         |       |         |           |         |     |        |
|-----------|---------|-------|---------|-----------|---------|-----|--------|
| Depth (m) | Azimuth | Dip   | Method  | Depth (m) | Azimuth | Dip | Method |
| collar    | 335     | -50.0 | compass |           |         |     |        |
|           |         |       |         |           |         |     |        |
|           |         |       |         |           |         |     |        |

**TARGET:** Geophysical Target

| SUMMARY  |        |          |      |          |
|----------|--------|----------|------|----------|
| From (m) | To (m) | Interval | Unit | Comments |
| 0.00     | 0.51   | 0.51     | OVB  |          |
| 0.51     | 17.14  | 16.63    | TMS  |          |
| 17.14    | 24.00  | 6.86     | OGN  |          |
| 24.00    | 35.52  | 11.52    | TMS  |          |
| 35.52    | 46.60  | 11.08    | OGN  |          |
| 46.60    | 63.30  | 16.70    | AND  |          |
| 63.30    | 73.75  | 10.45    | PCS  |          |
| 73.75    | 77.30  | 3.55     | OGN  |          |
| 77.30    | 82.50  | 5.20     | TMS  |          |
| 82.50    | 85.10  | 2.60     | OGN  |          |
| 85.10    | 93.05  | 7.95     | VCL  |          |
| 93.05    | 98.80  | 5.75     | OGN  |          |
| 98.80    | 105.70 | 6.90     | PCS  |          |
| 105.70   | 108.75 | 3.05     | AND  |          |
| 108.75   | 130.25 | 21.50    | TMS  |          |
| 130.25   | 159.75 | 29.50    | MRB  |          |
| 159.75   | 168.60 | 8.85     | VCL  |          |
| EOH      |        |          |      |          |

| SAMPLES                         |
|---------------------------------|
| Numbers: G0557051 to G0557090   |
|                                 |
| Total: 40                       |
| Batch: 1 (G0557051 to G0557086) |
| Batch: 2 (G0557087 to G0557090) |
| Date Sent: <u>June 21, 2010</u> |
| Certificate:                    |

| COMMENTS   |
|--|
| The hole intersected all of the lithologies expected. Main mineralization was Py>Cp>Mt and hosted in volcaniclastic, tuffaceous metasedimentary, and orthogneissic layers. Sub-massive Py is exclusively hosted in the volcaniclastic layers with accessory Cp, and trace Bo. Py mineralization in the tuffaceous and orthogneissic layers occur as disseminations and interstitially. Andesitic bands host the majority of Mt. Dominant foliation orientation is at 70°. Drilling targets to IP and gravity anomalies were not reached due to drilling problems. Based on foliation angles, the orthogneiss will cut-off the mineralized volcaniclastic layer ~85m before its projected intersection in hole MOR-10-02. |

## GEOLOGY LOG

HOLE MOR-10-01

| INTERVAL |        |              | SUB-INTERVAL |        |              | LITHOLOGY |                                 |         | ALTERATION |          |           |           |       |           | STRUCTURE |                |                |                       | MINERALS |           |              |       |           |       | Photo | DETAILED DESCRIPTION |   |
|----------|--------|--------------|--------------|--------|--------------|-----------|---------------------------------|---------|------------|----------|-----------|-----------|-------|-----------|-----------|----------------|----------------|-----------------------|----------|-----------|--------------|-------|-----------|-------|-------|----------------------|---|
| From (m) | To (m) | Interval (m) | From (m)     | To (m) | Interval (m) | Unit      | Modifier                        | Texture | Sericite   | Chlorite | Carbonate | Oxidation | Other |           | Type      | Attitude (tca) | Attitude (tfa) | Density (frequency/m) | Pyrite   | Magnetite | Chalcopyrite | Other |           | Other |       |                      |   |
|          |        |              |              |        |              |           |                                 |         |            |          |           |           | Type  | Intensity |           |                |                |                       |          |           |              | Type  | Intensity | Type  |       |                      | Intensity   |
| 0.00     | 0.51   | 0.51         |              |        |              | OVB       |                                 |         |            |          |           |           |       |           |           |                |                |                       |          |           |              |       |           |       |       |                      | No recovery   |
| 0.51     | 17.14  | 16.63        |              |        |              | TMS       | WH-GN                           |         |            |          |           |           |       |           |           |                |                |                       |          |           |              |       |           |       |       |                      | Tuffaceous Meta-Sediment (TMS) with narrow bands of orthogneiss. Py crystals are DI (1-2mm). Sparse rusty spotting on fractured surfaces.   |
|          |        |              | 0.51         | 10.27  | 9.76         |           | DI                              |         |            |          |           |           |       |           | FO        | 55             |                |                       |          | W         |              |       |           |       |       |                      |   |
|          |        |              |              |        |              |           | F.M.-G                          |         |            |          |           |           |       |           |           |                |                |                       |          |           |              |       |           |       |       |                      |   |
|          |        |              | 10.27        | 14.90  | 4.63         |           |                                 |         |            |          |           |           |       |           | DE        |                |                |                       |          | T         |              |       |           |       |       |                      | Bands of Orthogneiss (OGN) are 5-40cm wide  |
|          |        |              | 14.90        | 17.14  | 2.24         |           | Rusty GN-WH                     |         | M          | W        |           | M         |       |           |           |                |                |                       |          |           |              |       |           |       |       |                      | Highly oxidized on fractured surfaces.  |
| 17.14    | 24.00  | 6.86         |              |        |              | OGN       | WH-GN<br>DI-IN                  |         | W          | W        | T         | W         |       |           | DE        |                |                |                       |          | W         |              |       |           |       |       |                      | Orthogneiss. Py is DI & IN (whispy in some areas) with subhedral to euhedral crystals (2-10mm). Lighter colour due to an increase in felsic minerals. Sharp lower contact displayed by an increase in chlorite alteration and deformation.  |
| 24.00    | 35.52  | 11.52        |              |        |              | TMS       | DK GN-WH<br>M.F.-G              |         | W          | M        | W         |           |       |           | FO        | 75             |                |                       |          | W         | T            |       |           |       |       |                      | Tuffaceous Meta-Sediment. FG sections display well developed foliation (of mafics & chlorite minerals). Py is sparse and subhedral (1-10mm). Trace Mt veinlets are 1mm in width and sparse. Few Qz veins (1-3cm) occur along fractured surfaces.  |
| 35.52    | 46.60  | 11.08        |              |        |              | OGN       | DK GN-Rusty-WH<br>DI-IN<br>M.G. |         | W          | M        | T         | M         |       |           | FX        |                |                |                       |          | F         |              |       |           |       |       |                      | Orthogneiss. Intensely fractured section and moderately chloritized. Py is DI & IN, appears to concentrate in chlorite-rich zones, subhedral to euhedral crystals are 1-3cm. Soft, sparse, emerald green mineral occurs along rusty fractures, fuchsite? Abundant rusty patches, fractures and vugs throughout the section. |

## GEOLOGY LOG

| INTERVAL |        |              | SUB-INTERVAL |        |              | LITHOLOGY |                        |         | ALTERATION |          |           |           |       |           | STRUCTURE |                |                |                       | MINERALS |           |              |       |           |       | Photo | DETAILED DESCRIPTION |  |  |   |                               |
|----------|--------|--------------|--------------|--------|--------------|-----------|------------------------|---------|------------|----------|-----------|-----------|-------|-----------|-----------|----------------|----------------|-----------------------|----------|-----------|--------------|-------|-----------|-------|-------|----------------------|--|--|---|-------------------------------|
| From (m) | To (m) | Interval (m) | From (m)     | To (m) | Interval (m) | Unit      | Modifier               | Texture | Sericite   | Chlorite | Carbonate | Oxidation | Other |           | Type      | Attitude (tca) | Attitude (tfa) | Density (frequency/m) | Pyrite   | Magnetite | Chalcopyrite | Other |           | Other |       |                      |  |  |   |                               |
|          |        |              |              |        |              |           |                        |         |            |          |           |           | Type  | Intensity |           |                |                |                       |          |           |              | Type  | Intensity |       |       |                      |  |  |   |                               |
| 46.60    | 63.30  | 16.70        |              |        |              | AND       | F.M.-G.                |         |            |          |           |           |       |           |           |                |                |                       |          |           |              |       |           |       |       |                      |  |  | Andesite (AND) with narrow lenses of TMS. Mt veinlets are 1-2mm thick and speckled throughout the sections (1-2mm subhedral to anhedral crystals). Qz crystals are subrounded, 1-2mm and resembled cloudy white Qz eyes. Sparse 1cm lean Qz veins are scattered. Py is DI.  |                               |
|          |        |              | 46.60        | 51.35  | 4.75         |           | LT<br>GY-<br>GN        |         | W          | W        |           |           |       |           |           | FO             | 70             |                       |          | T         | M            |       |           |       |       |                      |  |  |   |                               |
|          |        |              | 51.35        | 58.45  | 7.10         |           | LT-<br>DK<br>GY        |         | W          | W        | W         | T         |       |           |           | DE<br>Qz<br>VN |                | 70                    |          | W         |              |       |           |       |       |                      |  |  |   | TMS lens.                     |
|          |        |              | 58.45        | 63.10  | 4.65         |           | LT<br>GY-<br>GN        |         | W          | W        |           |           |       |           |           | FO             | 70             |                       |          | W         | W            |       |           |       |       |                      |  |  |   | Andesite                      |
|          |        |              | 63.10        | 63.30  | 0.20         |           | DK<br>GN-<br>WH        |         |            | M        |           |           |       |           |           |                |                |                       |          |           |              |       |           |       |       |                      |  |  | Chloritized TMS. Sharp lower contact displayed by an increase in chlorite alteration (forest green color) and a 15cm band of OGN at the end of the section. Py is concentrated in narrow zones, crystals are 1-2mm in size.   |                               |
|          |        |              |              |        |              |           | DI-IN                  |         |            |          |           |           |       |           |           |                |                |                       |          | F         |              |       |           |       |       |                      |  |  |   |                               |
| 63.30    | 73.75  | 10.45        |              |        |              | PCS       | LT-<br>DK<br>GY-<br>GN |         |            |          |           |           |       |           |           |                |                |                       |          |           |              |       |           |       |       |                      |  |  |   | Pyritic Chlorite Schist (PCS) |
|          |        |              |              |        |              |           | M.C.-<br>G.            |         |            |          |           |           |       |           |           |                |                |                       |          |           |              |       |           |       |       |                      |  |  |   |                               |
|          |        |              | 63.30        | 70.30  | 7.00         |           | DI-IN                  |         | W          | M        |           | T         |       |           |           | FO             | 60             |                       |          | M         | W            |       | Bo        | T     |       |                      |  |  | Well developed foliation. Py occurs as DI-IN, subhedral to euhedral crystals are 2-15mm. Sub-MA Py section occurs between 65.69-65.79m with minor Cp and Bo mineralized interstitially. Sparse 1cm lean Qz veins. Minor potassic alteration - K-spar & plag are readily present (plag > k-spar). Weakly magnetized AND section from 67.0-67.1m. |                               |

**GEOLOGY LOG**

| INTERVAL |        |              | SUB-INTERVAL |        |              | LITHOLOGY |                     |         | ALTERATION |          |           |           |       | STRUCTURE |      |                |                | MINERALS              |        |           |              |       |           | Photo | DETAILED DESCRIPTION |      |           |      |           |  |  |
|----------|--------|--------------|--------------|--------|--------------|-----------|---------------------|---------|------------|----------|-----------|-----------|-------|-----------|------|----------------|----------------|-----------------------|--------|-----------|--------------|-------|-----------|-------|----------------------|------|-----------|------|-----------|--|--|
| From (m) | To (m) | Interval (m) | From (m)     | To (m) | Interval (m) | Unit      | Modifier            | Texture | Sericite   | Chlorite | Carbonate | Oxidation | Other |           | Type | Attitude (tca) | Attitude (tfa) | Density (frequency/m) | Pyrite | Magnetite | Chalcopyrite | Other |           |       |                      | Type | Intensity | Type | Intensity |  |  |
|          |        |              |              |        |              |           |                     |         |            |          |           |           | Type  | Intensity |      |                |                |                       |        |           |              | Type  | Intensity |       |                      | Type | Intensity |      |           |  |  |
|          |        |              | 70.30        | 73.75  | 3.45         |           | MD-DK GN            |         | S          | M        | W         | T         |       |           |      | DE             |                |                       |        | M         |              |       | Cp        | T     |                      |      |           |      |           |  | Increase in metamorphic grade observed by strong seritization. FO still present although underwent deformation. Py crystals show a gradational increase in size from the previous interval and are now 7-11mm in size. Mafics also increase in concentration giving the section a darker GN-BK color. Sharp lower contact shown by loss of Py and increase in felsics; resulting in a lighter color. |
| 73.75    | 77.30  | 3.55         |              |        |              | OGN       | WH LT-GN            |         | W          | W        |           | T         |       |           |      | DE             |                |                       |        |           |              |       |           |       |                      |      |           |      |           |  | Orthogneiss. Py are DI and subhedral (1-2mm). Sparse rusty spots on fractured surfaces.  |
|          |        |              |              |        |              |           | DI F.M.-G.          |         |            |          |           |           |       |           |      |                |                |                       |        |           |              |       |           |       |                      |      |           |      |           |  |  |
| 77.30    | 82.50  | 5.20         |              |        |              | TMS       | GY-GN F.M.-G.       |         | W          | W        |           | W         |       |           |      |                |                |                       |        | T         |              |       |           |       |                      |      |           |      |           |  | Tuffaceous Meta-Sediment with narrow OGN lens (@ 79.6-80m). Highly fractured, surfaces are rusty. Poorly developed fabric.   |
| 82.50    | 85.10  | 2.60         |              |        |              | OGN       | WH LT-GN DI F.M.-G. |         | W          | W        | W         | T         |       |           |      | DE             |                |                       |        | M         |              |       |           |       |                      |      |           |      |           |  | Orthogneiss. Py crystals are speckled, subhedral to euhedral, 1-3mm and appear to concentrate in chlorite-rich zones. Sparse lean Qz zones are 1-2cm wide.   |
| 85.10    | 93.05  | 7.95         |              |        |              | VCL       | GY                  |         |            | W        |           |           |       |           |      | FO             | 80             |                       |        |           |              |       |           |       |                      |      |           |      |           |  | Volcaniclastic (VCL) with sub-MA Py zones and narrow bands of OGN. Sub-MA Py appears speckled, and occurs in narrow bands 5-15cm. Py veins are also observed and are 1-2mm wide. Cp wisps and subhedral crystals occur alongside and interstitially in sub-MA Py zones. Mafics and chlorite also appear speckled, and show evidence of deformed FO.  |
|          |        |              |              |        |              |           | Sub-MA M.G.         |         |            |          |           |           |       |           |      |                |                |                       |        | 50-60%    | F            |       |           |       |                      |      |           |      |           |  |  |
|          |        |              | 87.70        | 88.50  | 0.80         | OGN       | WH LT-              |         | W          | W        | T         |           |       |           |      | DE             |                |                       |        | W         |              |       | T         |       |                      |      |           |      |           |  | Orthogneiss. Numerous empty vugs 5-15mm wide.  |

n = none, t= <1%, w = 1-3%, f = 3-5%, m = 5-7%, ms = 7-10%, s = 10-15%, l = 15-20%, (write % for >20%)

**GEOLOGY LOG**

| INTERVAL |        |              | SUB-INTERVAL |        |              | LITHOLOGY |             |         | ALTERATION |           |           |           |       | STRUCTURE |       |                |                | MINERALS              |        |           |              |           |      | Photo | DETAILED DESCRIPTION |           |  |  |  |  |  |  |  |  |  |   |  |
|----------|--------|--------------|--------------|--------|--------------|-----------|-------------|---------|------------|-----------|-----------|-----------|-------|-----------|-------|----------------|----------------|-----------------------|--------|-----------|--------------|-----------|------|-------|----------------------|-----------|--|--|--|--|--|--|--|--|--|---|--|
| From (m) | To (m) | Interval (m) | From (m)     | To (m) | Interval (m) | Unit      | Modifier    | Texture | Sericite   | Chlorite  | Carbonate | Oxidation | Other |           | Type  | Attitude (tca) | Attitude (tfa) | Density (frequency/m) | Pyrite | Magnetite | Chalcopyrite | Other     |      |       |                      | Other     |  |  |  |  |  |  |  |  |  |   |  |
|          |        |              |              |        |              |           |             |         | Type       | Intensity |           |           |       |           |       |                |                |                       | Type   | Intensity | Type         | Intensity | Type |       |                      | Intensity |  |  |  |  |  |  |  |  |  |   |  |
|          |        |              | 88.90        | 89.50  | 0.60         | OGN       | DI          |         |            |           |           |           |       |           |       |                |                |                       |        |           |              |           |      |       |                      |           |  |  |  |  |  |  |  |  |  |   |  |
|          |        |              |              |        |              |           | F.M.-G.     |         |            |           |           |           |       |           |       |                |                |                       |        |           |              |           |      |       |                      |           |  |  |  |  |  |  |  |  |  |   |  |
| 93.05    | 98.80  | 5.75         |              |        |              | OGN       | WH-GN       |         | W          | F         | T         |           |       |           |       |                |                |                       |        |           |              |           |      |       |                      |           |  |  |  |  |  |  |  |  |  | Orthogneiss with narrow bands of sub-MA Py. Sub-MA Py sections concentrate in vuggy chlorite altered zones. Cp occurs alongside Py interstitially or as whips. Py and Cp zones occur in the following intervals: 96.57-96.77m, 97.15-97.32m, 97.55-97.75m, 98.2-98.33m, 98.5-98.7m.   |  |
|          |        |              |              |        |              |           | F.M.-G.     |         |            |           |           |           |       |           |       |                |                |                       |        |           |              |           |      |       |                      |           |  |  |  |  |  |  |  |  |  |   |  |
| 98.80    | 105.70 | 6.90         |              |        |              | PCS       | WH-FY-FN    |         | T          | W         |           | T         |       |           | FO    | 80             |                |                       |        |           | W            |           |      |       |                      |           |  |  |  |  |  |  |  |  |  | Pyritic Chlorite Schist. Well developed FO, although some areas do indicate deformation. Few rusty surfaces along fractures.  |  |
|          |        |              |              |        |              |           | F.M.-G.     |         |            |           |           |           |       |           |       |                |                |                       |        |           |              |           |      |       |                      |           |  |  |  |  |  |  |  |  |  |   |  |
| 105.70   | 108.75 | 3.05         |              |        |              | AND       | LT-GY       |         |            | W         | T         | T         |       |           | FO    | 70             |                |                       |        |           |              |           |      |       |                      |           |  |  |  |  |  |  |  |  |  | Andesite. Sharp lower contact. Mt crystals are subhedral and 1mm in size. Lean Qz veins are sparse and 1-3cm wide.  |  |
|          |        |              |              |        |              |           | F.G.        |         |            |           |           |           |       |           |       |                |                |                       |        |           |              |           |      |       |                      |           |  |  |  |  |  |  |  |  |  |   |  |
|          |        |              |              |        |              |           | DI          |         |            |           |           |           |       |           |       |                |                |                       |        |           |              |           |      |       |                      |           |  |  |  |  |  |  |  |  |  |   |  |
| 108.75   | 130.25 | 21.50        |              |        |              | TMS       | LT-DK-GN-GY |         | T          | W         |           | T         |       |           | QZ-VN | 70             |                |                       |        |           |              |           |      |       |                      |           |  |  |  |  |  |  |  |  |  | Tuffaceous Meta Sediment. Py crystals are euhedral to anhedral and elongate (showing some evidence of strain). Silicification gradually increases towards the end of the unit. Lean Qz lenses increase in size from 1cm to 8cm. Narrow bands of OGN are sparse within the unit. From 124 to 129.9m deformation and alteration is evident with abundant fracturing and increasing number of stringers. |  |
|          |        |              |              |        |              |           | DI          |         |            |           |           |           |       |           |       |                |                |                       |        |           | W            |           |      |       |                      |           |  |  |  |  |  |  |  |  |  |   |  |
|          |        |              |              |        |              |           | F.M.-G.     |         |            |           |           |           |       |           |       |                |                |                       |        |           |              |           |      |       |                      |           |  |  |  |  |  |  |  |  |  |   |  |

**GEOLOGY LOG**

| INTERVAL |        |              | SUB-INTERVAL |        |              | LITHOLOGY |                  |         | ALTERATION |          |           |           |       | STRUCTURE |      |                |                | MINERALS              |        |           |              |       |           | Photo | DETAILED DESCRIPTION |       |           |  |   |
|----------|--------|--------------|--------------|--------|--------------|-----------|------------------|---------|------------|----------|-----------|-----------|-------|-----------|------|----------------|----------------|-----------------------|--------|-----------|--------------|-------|-----------|-------|----------------------|-------|-----------|--|---|
| From (m) | To (m) | Interval (m) | From (m)     | To (m) | Interval (m) | Unit      | Modifier         | Texture | Sericite   | Chlorite | Carbonate | Oxidation | Other |           | Type | Attitude (tca) | Attitude (tfa) | Density (frequency/m) | Pyrite | Magnetite | Chalcopyrite | Other |           |       |                      | Other |           |  |   |
|          |        |              |              |        |              |           |                  |         |            |          |           |           | Type  | Intensity |      |                |                |                       |        |           |              | Type  | Intensity |       |                      | Type  | Intensity |  |   |
| 130.25   | 159.75 | 29.50        |              |        |              | MRB       | Clou<br>dy<br>WH |         |            | W        |           |           |       |           |      | FO 30          |                |                       |        |           |              |       |           |       |                      |       |           |  | Marble (MRB) interbedded with chlorite-rich volcaniclastic layers. MRB varies in color from cloudy white ('clean') to yellowish white ('dirtier' in appearance) with blotchy irregular shaped & brecciated chlorite/mafic lenses. Scattered (& infrequent) Cl-rich VCL sections are 8 to 20cm wide, they host euhedral DI Py crystals (0.1-0.5mm). Note: Shallow FO measurements were taken in the top half of the unit, and FO of 70 deg was taken in the bottom half of the unit (which corresponds to the main FO seen in this hole and hole MOR-08-07). |
|          |        |              |              |        |              |           | F.G              |         |            |          |           |           |       |           |      | FO 40          |                |                       |        |           |              |       |           |       |                      |       |           |  |   |
|          |        |              |              |        |              |           | XL               |         |            |          |           |           |       |           |      | FO 70          |                |                       |        |           |              |       |           |       |                      |       |           |  |   |
|          |        |              |              |        |              |           |                  |         |            |          |           |           |       |           |      | FO 70          |                |                       |        |           |              |       |           |       |                      |       |           |  |   |
| 159.75   | 168.60 | 8.85         |              |        |              | VCL       | GY-<br>GN        |         | W          | M-S      | W         |           |       |           |      | FO 70          |                |                       |        |           |              | Ga    | T         |       |                      |       |           | Volcaniclastic with moderate Py mineralization. Cl crystals are subrounded, 1-25mm wide and resemble quartz-eyes. Py occurs as FG DI, whisps, and blebs (1-10mm) on fractured surfaces; occasionally with Cp as an accessory. Euhedral 1mm cubic with rusty borders, metallic, mineral Ga? occurs in trace amounts. Light pink, subrounded, moderately soft mineral, 1-3mm wide, and resembles a quartz-eye. |   |
|          |        |              |              |        |              |           | F.M-G.           |         |            |          |           |           |       |           |      | FO 60          |                |                       |        | M         |              |       |           |       |                      |       |           |  |   |
|          |        |              |              |        |              |           | DI               |         |            |          |           |           |       |           |      |                |                |                       |        |           |              |       |           |       |                      |       |           |  |   |
| EOH      |        |              |              |        |              |           |                  |         |            |          |           |           |       |           |      |                |                |                       |        |           |              |       |           |       |                      |       |           |  |   |

## SAMPLE LOG

HOLE: MOR-10-01

| From (m)          | To (m) | Interval (m) | Recovery (m) | Recovery (%) | Sample   | Batch | Au (g/t) | Ag (g/t) | Cu (ppm) | Pb (ppm) | Zn (ppm) | Comments                                |
|-------------------|--------|--------------|--------------|--------------|----------|-------|----------|----------|----------|----------|----------|---|
| 63.10             | 65.10  | 2.00         | 2.00         | 100          | G0557051 | 1     | 0.006    | 0.40     | 54       | 20       | 262      | Pyrite Chlorite Schist (PCS)            |
| 65.10             | 67.20  | 2.10         | 2.05         | 98           | G0557052 | 1     | 0.088    | 4.40     | 2890     | 108      | 1910     | PCS. 10cm sub-MA Py, minor Bo & Cp.     |
| 67.20             | 69.20  | 2.00         | 2.00         | 100          | G0557053 | 1     | 0.007    | 0.40     | 168      | 30       | 246      | PCS                                     |
| 69.20             | 71.20  | 2.00         | 2.00         | 100          | G0557054 | 1     | 0.108    | 6.00     | 131      | 300      | 1050     | PCS                                     |
| 71.20             | 72.80  | 1.60         | 1.60         | 100          | G0557055 | 1     | 0.013    | 1.30     | 74       | 17       | 395      | PCS                                     |
| Standard CND-ME-2 |        |              |              |              | G0557056 | 1     | 2.140    | 13.30    | 4950     | 234      | 13700    | Standard CND-ME-2                       |
| 72.80             | 73.75  | 0.95         | 0.95         | 100          | G0557057 | 1     | 0.290    | 16.10    | 214      | 1500     | 2100     | PCS                                     |
| 73.75             | 75.75  | 2.00         | 2.00         | 100          | G0557058 | 1     | 0.012    | 1.10     | 36       | 24       | 276      | Orthogneiss (OGN)                       |
| 75.75             | 77.75  | 2.00         | 2.00         | 100          | G0557059 | 1     | <0.005   | 0.30     | 15       | 21       | 89       | OGN                                     |
| 77.75             | 79.75  | 2.00         | 2.00         | 100          | G0557060 | 1     | <0.005   | 0.30     | 31       | 15       | 149      | OGN                                     |
| 79.75             | 81.75  | 2.00         | 2.00         | 100          | G0557061 | 1     | 0.007    | <0.2     | 14       | 9        | 141      | Tuffaceous Meta-Sediment (TMS)          |
| 81.75             | 83.20  | 1.45         | 1.45         | 100          | G0557062 | 1     | <0.005   | <0.2     | 59       | 23       | 263      | Contact between TMS & OGN               |
| 83.20             | 84.20  | 1.00         | 0.90         | 90           | G0557063 | 1     | 0.064    | 1.10     | 351      | 253      | 1880     | OGN                                     |
| 84.20             | 85.10  | 0.90         | 0.90         | 100          | G0557064 | 1     | 0.030    | 1.00     | 255      | 89       | 483      | OGN                                     |
| 85.10             | 85.75  | 0.65         | 0.65         | 100          | G0557065 | 1     | 0.425    | 22.50    | 3700     | 2270     | 14700    | Volcaniclastic (VCL). 5-15cm sub-MA Py. |
| 85.75             | 86.40  | 0.65         | 0.65         | 100          | G0557066 | 1     | 0.351    | 11.40    | 3820     | 994      | 7360     | VCL                                     |
| 86.40             | 87.05  | 0.65         | 0.65         | 100          | G0557067 | 1     | 0.321    | 28.50    | 4450     | 2520     | 18800    | VCL                                     |
| BLANK             |        |              |              |              | G0557068 | 1     | <0.005   | <0.2     | 40       | 11       | 73       | BLANK - Batch B                         |
| 87.05             | 87.70  | 0.65         | 0.65         | 100          | G0557069 | 1     | 0.448    | 15.00    | 10550    | 922      | 12500    | VCL                                     |
| 87.70             | 88.35  | 0.65         | 0.65         | 100          | G0557070 | 1     | 0.033    | 2.20     | 1075     | 157      | 1160     | OGN                                     |
| 88.35             | 89.00  | 0.65         | 0.65         | 100          | G0557071 | 1     | 0.744    | 28.60    | 20600    | 1100     | 4250     | VCL                                     |
| 89.00             | 89.65  | 0.65         | 0.65         | 100          | G0557072 | 1     | 0.079    | 6.00     | 1680     | 643      | 3300     | OGN                                     |
| Standard CND-ME-6 |        |              |              |              | G0557073 | 1     | 0.274    | 99.00    | 6290     | 9560     | 4940     | Standard CND-ME-6                       |
| 89.65             | 90.30  | 0.65         | 0.65         | 100          | G0557074 | 1     | 0.323    | 3.60     | 5610     | 246      | 1390     | VCL                                     |
| 90.30             | 90.95  | 0.65         | 0.65         | 100          | G0557075 | 1     | 0.200    | 8.40     | 5250     | 486      | 3310     | VCL                                     |
| 90.95             | 91.60  | 0.65         | 0.65         | 100          | G0557076 | 1     | 0.526    | 34.80    | 12650    | 2620     | 4860     | VCL                                     |
| 90.95             | 91.60  | 0.65         | 0.65         | 100          | G0557077 | 1     | 0.737    | 41.80    | 12550    | 3220     | 4270     | Duplicate of G0557076                   |
| 91.60             | 92.25  | 0.65         | 0.65         | 100          | G0557078 | 1     | 0.389    | 17.90    | 5240     | 1390     | 8820     | VCL                                     |
| 92.25             | 92.90  | 0.65         | 0.65         | 100          | G0557079 | 1     | 1.130    | 49.10    | 14250    | 3970     | 19750    | VCL                                     |
| 92.90             | 94.00  | 1.10         | 1.10         | 100          | G0557080 | 1     | 0.014    | 0.60     | 210      | 38       | 875      | Contact between VCL & OGN               |
| 94.00             | 95.30  | 1.30         | 1.30         | 100          | G0557081 | 1     | <0.005   | 0.30     | 50       | 31       | 290      | OGN                                     |
| 95.30             | 96.40  | 1.10         | 1.10         | 100          | G0557082 | 1     | <0.005   | <0.2     | 46       | 15       | 92       | OGN                                     |

## SAMPLE LOG

| From (m)  | To (m) | Interval (m) | Recovery (m) | Recovery (%) | Sample   | Batch | Au (g/t)    | Ag (g/t) | Cu (ppm) | Pb (ppm) | Zn (ppm) | Comments        |
|---|--------|--------------|--------------|--------------|----------|-------|-------------|----------|----------|----------|----------|-----------------|
| 96.40   | 97.10  | 0.70         | 0.70         | 100          | G0557083 | 1     | 0.024       | 1.70     | 5290     | 26       | 106      | OGN             |
| 97.10   | 97.90  | 0.80         | 0.80         | 100          | G0557084 | 1     | 0.027       | 1.60     | 4650     | 9        | 98       | OGN             |
| BLANK   |        |              |              |              | G0557085 | 1     | <0.005      | <0.2     | 24       | 5        | 15       | BLANK - Batch B |
| 97.90   | 98.70  | 0.80         | 0.80         | 100          | G0557086 | 1     | 0.019       | 1.20     | 2790     | 6        | 106      | OGN             |
| 98.70   | 99.70  | 1.00         | 0.95         | 95           | G0557087 | 2     | Not Assayed | <0.2     | 7        | 4        | 38       | PCS             |
| 99.70   | 101.20 | 1.50         | 1.45         | 97           | G0557088 | 2     |             | <0.2     | 6        | 3        | 43       | PCS             |
| 101.20  | 103.20 | 2.00         | 2.00         | 100          | G0557089 | 2     |             | <0.2     | 11       | 4        | 58       | PCS             |
| 103.20  | 105.20 | 2.00         | 2.00         | 100          | G0557090 | 2     |             | <0.2     | 20       | 4        | 73       | PCS             |
|   |        |              |              |              |          |       |             |          |          |          |          |                 |
| <p><b>Overview:</b> Main mineralization is hosted in the Volcaniclastic unit between 85.1m to 92.9m containing sub-massive pyrite zones (5-15cm). The volcaniclastic layer is commonly interbedded with small orthogneiss intervals which can host up to 0.5% copper, and contain 1.7 g/t silver.</p> |        |              |              |              |          |       |             |          |          |          |          |                 |

## GEOTECHNICAL LOG

HOLE: MOR-10-01

| From (m) | To (m) | Interval (m) | Recovery (m) | Recovery (%) | RQD (m) | RQD (%) | Hardness | Weathering |  | Comments |
|----------|--------|--------------|--------------|--------------|---------|---------|----------|------------|--|----------|
| 0.90     | 3.96   | 3.06         | 0.54         | 18           | 0       | 0       | S        | FR         |  |          |
| 3.96     | 7.01   | 3.05         | 0.65         | 21           | 0.42    | 14      | W        | FR         |  |          |
| 7.01     | 10.10  | 3.09         | 2.80         | 91           | 2.10    | 68      | MS       | SW         |  |          |
| 10.10    | 13.10  | 3.00         | 2.99         | 100          | 2.41    | 80      | MS       | MW         |  |          |
| 13.10    | 16.20  | 3.10         | 2.80         | 90           | 1.60    | 52      | MS       | SW         |  |          |
| 16.20    | 19.20  | 3.00         | 3.03         | 101          | 1.87    | 62      | S        | FR         |  |          |
| 19.20    | 22.30  | 3.10         | 3.02         | 97           | 2.01    | 65      | MS       | FR         |  |          |
| 22.30    | 25.30  | 3.00         | 2.80         | 93           | 1.22    | 41      | S        | MW         |  |          |
| 25.30    | 28.30  | 3.00         | 3.10         | 103          | 2.51    | 84      | MS       | FR         |  |          |
| 28.30    | 31.40  | 3.10         | 3.08         | 99           | 2.81    | 91      | S        | FR         |  |          |
| 31.40    | 34.40  | 3.00         | 2.88         | 96           | 1.33    | 44      | MS       | SW         |  |          |
| 34.40    | 37.50  | 3.10         | 3.25         | 105          | 1.21    | 39      | S        | MW         |  |          |
| 37.50    | 40.50  | 3.00         | 2.34         | 78           | 0.47    | 16      | S        | MW         |  |          |
| 40.50    | 43.60  | 3.10         | 2.57         | 83           | 0.29    | 9       | S        | MW         |  |          |
| 43.60    | 46.60  | 3.00         | 2.50         | 83           | 0.73    | 24      | S        | SW         |  |          |
| 46.60    | 49.70  | 3.10         | 3.09         | 100          | 1.63    | 53      | S        | FR         |  |          |
| 49.70    | 52.70  | 3.00         | 3.07         | 102          | 2.88    | 96      | MS       | FR         |  |          |
| 52.70    | 55.80  | 3.10         | 3.05         | 98           | 2.80    | 90      | MS       | SW         |  |          |
| 55.80    | 58.80  | 3.00         | 3.04         | 101          | 2.69    | 90      | MS       | SW         |  |          |
| 58.80    | 61.90  | 3.10         | 3.10         | 100          | 3.01    | 97      | MS       | FR         |  |          |
| 61.90    | 64.90  | 3.00         | 3.08         | 103          | 2.47    | 82      | MS       | FR         |  |          |
| 64.90    | 68.00  | 3.10         | 2.98         | 96           | 2.59    | 84      | MS       | FR         |  |          |
| 68.00    | 71.00  | 3.00         | 2.98         | 99           | 2.42    | 81      | MS       | SW         |  |          |
| 71.00    | 74.10  | 3.10         | 3.13         | 101          | 3.04    | 98      | MS       | FR         |  |          |
| 74.10    | 77.10  | 3.00         | 3.06         | 102          | 2.92    | 97      | VS       | FR         |  |          |
| 77.10    | 80.20  | 3.10         | 3.07         | 99           | 2.88    | 93      | S        | FR         |  |          |
| 80.20    | 83.20  | 3.00         | 2.99         | 100          | 2.82    | 94      | S        | SW         |  |          |
| 83.20    | 86.30  | 3.10         | 3.00         | 97           | 2.61    | 84      | MS       | SW         |  |          |
| 86.30    | 89.30  | 3.00         | 3.13         | 104          | 3.06    | 102     | MS       | SW         |  |          |
| 89.30    | 92.40  | 3.10         | 3.07         | 99           | 2.60    | 84      | MS       | SW         |  |          |
| 92.40    | 95.40  | 3.00         | 3.06         | 102          | 2.82    | 94      | MS       | FR         |  |          |
| 95.40    | 98.50  | 3.10         | 3.30         | 106          | 2.48    | 80      | MS       | FR         |  |          |
| 98.50    | 101.50 | 3.00         | 2.85         | 95           | 2.33    | 78      | S        | SW         |  |          |
| 101.50   | 104.50 | 3.00         | 3.04         | 101          | 2.43    | 81      | S        | SW         |  |          |
| 104.50   | 107.60 | 3.10         | 3.00         | 97           | 2.18    | 70      | MS       | FR         |  |          |
| 107.60   | 110.60 | 3.00         | 3.14         | 105          | 2.72    | 91      | S        | SW         |  |          |
| 110.60   | 113.70 | 3.10         | 2.93         | 95           | 2.19    | 71      | MS       | SW         |  |          |
| 113.70   | 116.70 | 3.00         | 3.01         | 100          | 2.73    | 91      | S        | FR         |  |          |
| 116.70   | 119.80 | 3.10         | 3.12         | 101          | 2.60    | 84      | MS       | SW         |  |          |
| 119.80   | 122.80 | 3.00         | 2.96         | 99           | 2.06    | 69      | MS       | FR         |  |          |
| 122.80   | 125.90 | 3.10         | 3.08         | 99           | 2.05    | 66      | MS       | SW         |  |          |
| 125.90   | 128.90 | 3.00         | 3.07         | 102          | 1.59    | 53      | W        | SW         |  |          |
| 128.90   | 132.00 | 3.10         | 3.09         | 100          | 2.13    | 69      | S        | SW         |  |          |
| 132.00   | 135.00 | 3.00         | 2.66         | 89           | 2.43    | 81      | S        | FR         |  |          |
| 135.00   | 138.10 | 3.10         | 3.02         | 97           | 1.88    | 61      | MS       | FR         |  |          |
| 138.10   | 140.85 | 2.75         | 2.78         | 101          | 2.26    | 82      | MS       | FR         |  |          |
| 140.85   | 141.10 | 0.25         | 0.33         | 132          | 0.33    | 132     | MS       | FR         |  |          |
| 141.10   | 144.20 | 3.10         | 2.97         | 96           | 2.97    | 96      | S        | FR         |  |          |
| 144.20   | 147.20 | 3.00         | 3.09         | 103          | 2.17    | 72      | MS       | FR         |  |          |
| 147.20   | 150.30 | 3.10         | 3.04         | 98           | 2.79    | 90      | S        | FR         |  |          |
| 150.30   | 153.30 | 3.00         | 3.03         | 101          | 2.33    | 78      | MS       | SW         |  |          |

## GEOTECHNICAL LOG

| From (m) | To (m) | Interval (m) | Recovery (m) | Recovery (%) | RQD (m) | RQD (%) | Hardness | Weathering |  | Comments |
|----------|--------|--------------|--------------|--------------|---------|---------|----------|------------|--|----------|
| 153.30   | 156.40 | 3.10         | 3.01         | 97           | 2.55    | 82      | MS       | FR         |  |          |
| 156.40   | 159.40 | 3.00         | 3.15         | 105          | 1.32    | 44      | MS       | SW         |  |          |
| 159.40   | 162.50 | 3.10         | 3.00         | 97           | 2.63    | 85      | S        | FR         |  |          |
| 162.50   | 165.50 | 3.00         | 3.06         | 102          | 2.46    | 82      | S        | FR         |  |          |
| 165.50   | 168.60 | 3.10         | 2.54         | 82           | 2.30    | 74      | MS       | FR         |  |          |
| EOH      |        |              |              |              |         |         |          |            |  |          |

## MAGNETIC SUSCEPTIBILITY LOG

**HOLE: MOR-10-01**

| Depth (m) | Unit | Modifier | Magnetic Susceptibility | Comments |
|-----------|------|----------|-------------------------|----------|
| 1.00      | TMS  |          | 0.30                    |          |
| 2.00      | TMS  |          | N/A                     |          |
| 3.00      | TMS  |          | N/A                     |          |
| 4.00      | TMS  |          | 3.75                    |          |
| 5.00      | TMS  |          | N/A                     |          |
| 6.00      | TMS  |          | N/A                     |          |
| 7.00      | TMS  |          | 4.42                    |          |
| 8.00      | TMS  |          | 5.76                    |          |
| 9.00      | TMS  |          | 3.77                    |          |
| 10.00     | TMS  |          | 3.32                    |          |
| 11.00     | TMS  |          | 1.66                    |          |
| 12.00     | TMS  |          | 5.18                    |          |
| 13.00     | TMS  |          | 1.20                    |          |
| 14.00     | TMS  |          | 5.26                    |          |
| 15.00     | TMS  |          | 0.38                    |          |
| 16.00     | TMS  |          | 0.04                    |          |
| 17.00     | TMS  |          | 0.16                    |          |
| 18.00     | OGN  |          | 0.32                    |          |
| 19.00     | OGN  |          | 10.40                   |          |
| 20.00     | OGN  |          | 8.46                    |          |
| 21.00     | OGN  |          | 10.30                   |          |
| 22.00     | OGN  |          | 0.41                    |          |
| 23.00     | OGN  |          | 0.30                    |          |
| 24.00     | TMS  |          | 0.84                    |          |
| 25.00     | TMS  |          | 4.57                    |          |
| 26.00     | TMS  |          | 42.90                   |          |
| 27.00     | TMS  |          | 0.86                    |          |
| 28.00     | TMS  |          | 0.20                    |          |
| 29.00     | TMS  |          | 0.55                    |          |
| 30.00     | TMS  |          | 0.53                    |          |
| 31.00     | TMS  |          | 0.71                    |          |
| 32.00     | TMS  |          | 1.72                    |          |
| 33.00     | TMS  |          | 0.67                    |          |
| 34.00     | TMS  |          | 6.51                    |          |
| 35.00     | TMS  |          | 0.51                    |          |
| 36.00     | OGN  |          | 11.30                   |          |
| 37.00     | OGN  |          | 14.60                   |          |
| 38.00     | OGN  |          | 2.50                    |          |
| 39.00     | OGN  |          | 1.14                    |          |
| 40.00     | OGN  |          | 0.53                    |          |
| 41.00     | OGN  |          | 0.30                    |          |
| 42.00     | OGN  |          | 3.95                    |          |
| 43.00     | OGN  |          | 0.28                    |          |
| 44.00     | OGN  |          | 0.49                    |          |
| 45.00     | OGN  |          | 0.36                    |          |

## MAGNETIC SUSCEPTIBILITY LOG

| Depth (m) | Unit | Modifier | Magnetic Susceptibility | Comments |
|-----------|------|----------|-------------------------|----------|
| 46.00     | OGN  |          | 0.47                    |          |
| 47.00     | AND  |          | 20.70                   |          |
| 48.00     | AND  |          | 21.60                   |          |
| 49.00     | AND  |          | 13.00                   |          |
| 50.00     | AND  |          | 25.10                   |          |
| 51.00     | AND  |          | 27.30                   |          |
| 52.00     | AND  |          | 28.60                   |          |
| 53.00     | AND  |          | 0.51                    |          |
| 54.00     | AND  |          | 24.10                   |          |
| 55.00     | AND  |          | 0.43                    |          |
| 56.00     | AND  |          | 0.16                    |          |
| 57.00     | AND  |          | 0.18                    |          |
| 58.00     | AND  |          | 0.18                    |          |
| 59.00     | AND  |          | 11.10                   |          |
| 60.00     | AND  |          | 17.70                   |          |
| 61.00     | AND  |          | 26.00                   |          |
| 62.00     | AND  |          | 0.65                    |          |
| 63.00     | AND  |          | 22.70                   |          |
| 64.00     | PCS  |          | 30.70                   |          |
| 65.00     | PCS  |          | 6.62                    |          |
| 66.00     | PCS  |          | 35.90                   |          |
| 67.00     | PCS  |          | 11.20                   |          |
| 68.00     | PCS  |          | 11.00                   |          |
| 69.00     | PCS  |          | 13.60                   |          |
| 70.00     | PCS  |          | 19.70                   |          |
| 71.00     | PCS  |          | 0.16                    |          |
| 72.00     | PCS  |          | 31.90                   |          |
| 73.00     | PCS  |          | 0.49                    |          |
| 74.00     | OGN  |          | 0.08                    |          |
| 75.00     | OGN  |          | 0.12                    |          |
| 76.00     | OGN  |          | 0.12                    |          |
| 77.00     | OGN  |          | 0.84                    |          |
| 78.00     | TMS  |          | 0.22                    |          |
| 79.00     | TMS  |          | 6.23                    |          |
| 80.00     | TMS  |          | 0.53                    |          |
| 81.00     | TMS  |          | 0.57                    |          |
| 82.00     | TMS  |          | 3.25                    |          |
| 83.00     | OGN  |          | 3.77                    |          |
| 84.00     | OGN  |          | 0.47                    |          |
| 85.00     | OGN  |          | 9.47                    |          |
| 86.00     | VCL  |          | 34.60                   |          |
| 87.00     | VCL  |          | 10.50                   |          |
| 88.00     | VCL  |          | 1.76                    |          |
| 89.00     | VCL  |          | 1.04                    |          |
| 90.00     | VCL  |          | 20.20                   |          |
| 91.00     | VCL  |          | 11.40                   |          |

## MAGNETIC SUSCEPTIBILITY LOG

| Depth (m) | Unit | Modifier | Magnetic Susceptibility | Comments |
|-----------|------|----------|-------------------------|----------|
| 92.00     | VCL  |          | 2.05                    |          |
| 93.00     | VCL  |          | 13.00                   |          |
| 94.00     | OGN  |          | 14.40                   |          |
| 95.00     | OGN  |          | 37.90                   |          |
| 96.00     | OGN  |          | 3.21                    |          |
| 97.00     | OGN  |          | 5.90                    |          |
| 98.00     | OGN  |          | 13.00                   |          |
| 99.00     | PCS  |          | 6.29                    |          |
| 100.00    | PCS  |          | 3.95                    |          |
| 101.00    | PCS  |          | 12.90                   |          |
| 102.00    | PCS  |          | 0.77                    |          |
| 103.00    | PCS  |          | 2.05                    |          |
| 104.00    | PCS  |          | 11.70                   |          |
| 105.00    | PCS  |          | 12.60                   |          |
| 106.00    | AND  |          | 15.50                   |          |
| 107.00    | AND  |          | 45.30                   |          |
| 108.00    | AND  |          | 34.10                   |          |
| 109.00    | TMS  |          | 1.98                    |          |
| 110.00    | TMS  |          | 9.43                    |          |
| 111.00    | TMS  |          | 0.96                    |          |
| 112.00    | TMS  |          | 0.20                    |          |
| 113.00    | TMS  |          | 0.63                    |          |
| 114.00    | TMS  |          | 0.38                    |          |
| 115.00    | TMS  |          | 2.17                    |          |
| 116.00    | TMS  |          | 0.61                    |          |
| 117.00    | TMS  |          | 0.16                    |          |
| 118.00    | TMS  |          | 0.12                    |          |
| 119.00    | TMS  |          | 0.26                    |          |
| 120.00    | TMS  |          | 3.19                    |          |
| 121.00    | TMS  |          | 1.29                    |          |
| 122.00    | TMS  |          | 0.02                    |          |
| 123.00    | TMS  |          | 0.32                    |          |
| 124.00    | TMS  |          | 1.20                    |          |
| 125.00    | TMS  |          | 0.02                    |          |
| 126.00    | TMS  |          | 0.04                    |          |
| 127.00    | TMS  |          | 0.47                    |          |
| 128.00    | TMS  |          | 0.59                    |          |
| 129.00    | TMS  |          | 0.67                    |          |
| 130.00    | TMS  |          | 2.62                    |          |
| 131.00    | MRB  |          | 0.04                    |          |
| 132.00    | MRB  |          | 0.01                    |          |
| 133.00    | MRB  |          | 39.80                   |          |
| 134.00    | MRB  |          | 16.80                   |          |
| 135.00    | MRB  |          | 0.59                    |          |
| 136.00    | MRB  |          | 0.48                    |          |
| 137.00    | MRB  |          | 0.59                    |          |

## MAGNETIC SUSCEPTIBILITY LOG

| Depth (m) | Unit | Modifier | Magnetic Susceptibility | Comments |
|-----------|------|----------|-------------------------|----------|
| 138.00    | MRB  |          | 0.02                    |          |
| 139.00    | MRB  |          | 0.02                    |          |
| 140.00    | MRB  |          | 0.08                    |          |
| 141.00    | MRB  |          | 0.04                    |          |
| 142.00    | MRB  |          | 0.16                    |          |
| 143.00    | MRB  |          | 0.06                    |          |
| 144.00    | MRB  |          | 0.04                    |          |
| 145.00    | MRB  |          | 0.04                    |          |
| 146.00    | MRB  |          | 0.12                    |          |
| 147.00    | MRB  |          | 0.06                    |          |
| 148.00    | MRB  |          | 0.02                    |          |
| 149.00    | MRB  |          | 0.02                    |          |
| 150.00    | MRB  |          | 0.08                    |          |
| 151.00    | MRB  |          | 0.06                    |          |
| 152.00    | MRB  |          | 0.00                    |          |
| 153.00    | MRB  |          | 0.08                    |          |
| 154.00    | MRB  |          | 0.18                    |          |
| 155.00    | MRB  |          | 0.28                    |          |
| 156.00    | MRB  |          | 0.02                    |          |
| 157.00    | MRB  |          | 0.12                    |          |
| 158.00    | MRB  |          | 0.00                    |          |
| 159.00    | MRB  |          | 0.02                    |          |
| 160.00    | VCL  |          | 0.43                    |          |
| 161.00    | VCL  |          | 0.24                    |          |
| 162.00    | VCL  |          | 1.61                    |          |
| 163.00    | VCL  |          | 2.70                    |          |
| 164.00    | VCL  |          | 0.57                    |          |
| 165.00    | VCL  |          | 0.36                    |          |
| 166.00    | VCL  |          | 0.24                    |          |
| 167.00    | VCL  |          | 0.41                    |          |
| 168.00    | VCL  |          | 1.25                    |          |
| EOH       |      |          |                         |          |

## BOX LOG

**HOLE:** MOR-10-01

| BOX | FROM (m) | TO (m) | BOX | FROM (m) | TO (m) |
|-----|----------|--------|-----|----------|--------|
| 1   | 0.50     | 10.84  |     |          |        |
| 2   | 10.84    | 16.43  |     |          |        |
| 3   | 16.43    | 22.04  |     |          |        |
| 4   | 22.04    | 27.71  |     |          |        |
| 5   | 27.71    | 33.24  |     |          |        |
| 6   | 33.24    | 38.26  |     |          |        |
| 7   | 38.26    | 44.47  |     |          |        |
| 8   | 44.47    | 50.96  |     |          |        |
| 9   | 50.96    | 56.66  |     |          |        |
| 10  | 56.66    | 62.23  |     |          |        |
| 11  | 62.23    | 68.00  |     |          |        |
| 12  | 68.00    | 73.50  |     |          |        |
| 13  | 73.50    | 79.20  |     |          |        |
| 14  | 79.20    | 84.90  |     |          |        |
| 15  | 84.90    | 90.52  |     |          |        |
| 16  | 90.52    | 95.84  |     |          |        |
| 17  | 95.84    | 101.50 |     |          |        |
| 18  | 101.50   | 107.32 |     |          |        |
| 19  | 107.32   | 112.76 |     |          |        |
| 20  | 112.76   | 118.35 |     |          |        |
| 21  | 118.35   | 124.09 |     |          |        |
| 22  | 124.09   | 129.70 |     |          |        |
| 23  | 129.70   | 135.23 |     |          |        |
| 24  | 135.23   | 140.85 |     |          |        |
| 25  | 140.85   | 140.85 |     |          |        |
| 26  | 140.85   | 146.35 |     |          |        |
| 27  | 146.35   | 151.85 |     |          |        |
| 28  | 151.85   | 157.33 |     |          |        |
| 29  | 157.33   | 162.90 |     |          |        |
| 30  | 162.90   | 168.22 |     |          |        |
| 30  | 168.22   | 168.80 |     |          |        |
| EOH |          |        |     |          |        |

## DENSITY LOG

HOLE: MOR-10-01

| Depth (m) | Unit | Modifier | MINERALS |      |       |   | Comments                      | Length (cm) | Diameter (cm) | Dry weight | Wet Weight | Density | Specific Gravity |
|-----------|------|----------|----------|------|-------|---|-------------------------------|-------------|---------------|------------|------------|---------|------------------|
|           |      |          | Py %     | As % | Other | % |                               |             |               |            |            |         |                  |
| 7.01      | TMS  |          | 2        |      |       |   |                               | 11.6        | 4.2           | 409.5      | 263.2      | 2.55    | 2.80             |
| 20.65     | OGN  |          | 2        |      |       |   |                               | 11.0        | 4.2           | 407.2      | 256.9      | 2.67    | 2.71             |
| 30.85     | TMS  |          | 3        |      |       |   |                               | 11.7        | 4.2           | 435.3      | 281.9      | 2.69    | 2.84             |
| 50.96     | AND  |          | 1        |      | Mt    | 5 |                               | 10.7        | 4.2           | 394.9      | 248.7      | 2.66    | 2.70             |
| 64.45     | PCS  |          | 6        |      |       |   |                               | 10.4        | 4.2           | 400.1      | 253.0      | 2.82    | 2.72             |
| 72.79     | PCS  |          | 6        |      |       |   |                               | 10.4        | 4.2           | 375.9      | 238.5      | 2.62    | 2.74             |
| 79.77     | TMS  |          | 1        |      |       |   |                               | 12.4        | 4.2           | 476.9      | 305.1      | 2.78    | 2.78             |
| 92.23     | VCL  |          | 40       |      |       |   | Sub-MSV PYR with 2cm OGN band | 9.3         | 4.2           | 478.3      | 358.0      | 3.71    | 3.98             |
| 94.42     | VCL  |          | 3        |      |       |   |                               | 13.9        | 4.2           | 534.4      | 340.0      | 2.78    | 2.75             |
| 107.68    | AND  |          | 1        |      | Mt    | 3 |                               | 14.1        | 4.2           | 526.2      | 330.4      | 2.69    | 2.69             |
| 124.40    | TMS  |          | 3        |      |       |   | Silicified TMS                | 11.1        | 4.2           | 408.4      | 257.0      | 2.67    | 2.70             |
|           |      |          |          |      |       |   |                               |             |               |            |            |         |                  |
|           |      |          |          |      |       |   |                               |             |               |            |            |         |                  |

## MOR PROPERTY

| Grid East | Grid North | Easting | Northing | Elev. (m) | Depth (m) |
|-----------|------------|---------|----------|-----------|-----------|
|           |            | 662293  | 6664173  | 1244      | 275.23    |

**ZONE:** UTM 8

**SECTION:** 3000 E

**HOLE:** MOR-10-02

**CLAIM:** MOR1 YB89971

Contractor: Top Rank Drilling

Drill: JKS 300

Core size: BTW

Casing depth: 3.05 (m) in / out

Drilling dates: June 11 - 18, 2010

Geology logged by: Oliver Fu

| SURVEY    |         |       |         |           |         |     |        |
|-----------|---------|-------|---------|-----------|---------|-----|--------|
| Depth (m) | Azimuth | Dip   | Method  | Depth (m) | Azimuth | Dip | Method |
| collar    | 335     | -50.0 | compass |           |         |     |        |
|           |         |       |         |           |         |     |        |
|           |         |       |         |           |         |     |        |
|           |         |       |         |           |         |     |        |

**TARGET:** Geophysical Target

| SUMMARY  |        |          |      |          |
|----------|--------|----------|------|----------|
| From (m) | To (m) | Interval | Unit | Comments |
| 0.00     | 3.57   | 3.57     | OVB  |          |
| 3.57     | 19.20  | 15.63    | VCL  |          |
| 19.20    | 23.20  | 4.00     | OGN  |          |
| 23.20    | 33.10  | 9.90     | VCL  |          |
| 33.10    | 52.85  | 19.75    | VCL  |          |
| 52.85    | 103.78 | 50.93    | MRB  |          |
| 103.78   | 114.30 | 10.52    | VCL  |          |
| 114.30   | 170.76 | 56.46    | MRB  |          |
| 170.76   | 195.68 | 24.92    | QTE  |          |
| 195.68   | 215.50 | 19.82    | VCL  |          |
| 215.50   | 219.60 | 4.10     | VCL  |          |
| 219.60   | 221.05 | 1.45     | QTE  |          |
| 221.05   | 226.05 | 5.00     | VCL  |          |
| 226.05   | 231.10 | 5.05     | QTE  |          |
| 231.10   | 275.23 | 44.13    | VCL  |          |
| EOH      |        |          |      |          |
|          |        |          |      |          |

| SAMPLES   |
|---|
| Numbers: G0557091 to G0557128                   |
|   |
| Total: 38                                       |
| Batch: 2 (Samples G0557091 - G0557122)          |
| Batch: 3 (Samples G0557123 - G0557128)          |
| Date Sent: B2: June 21, 2010. B3: June 28, 2010 |
| Certificate:                                    |
|   |

| COMMENTS   |
|--|
| The hole did not intersect all the lithologies expected. The volcanoclastic layer hosting sub-massive Py in hole MOR-10-01 was not intersected. Main mineralization was Py>Cp>Mt>Po>Bo and hosted in volcanoclastic layers. Few quartzite layers hosted Py. Mineralization occurs as disseminations and interstitially. Dominant foliation orientation is at 70°. The mineralization through the IP and gravity anomalies showed trace to moderate Py, and trace Po and Bo. Deformation and chlorite alteration increase with depth. |

**GEOLOGY LOG**

**HOLE: MOR-10-02**

| INTERVAL |        |              | SUB-INTERVAL |        |              | LITHOLOGY |               |         | ALTERATION |          |           |           |       | STRUCTURE |       |                |                | MINERALS              |        |           |              |       | Photo | DETAILED DESCRIPTION |           |      |  |
|----------|--------|--------------|--------------|--------|--------------|-----------|---------------|---------|------------|----------|-----------|-----------|-------|-----------|-------|----------------|----------------|-----------------------|--------|-----------|--------------|-------|-------|----------------------|-----------|------|--|
| From (m) | To (m) | Interval (m) | From (m)     | To (m) | Interval (m) | Unit      | Modifier      | Texture | Sericite   | Chlorite | Carbonate | Oxidation | Other |           | Type  | Attitude (tca) | Attitude (tfa) | Density (frequency/m) | Pyrite | Magnetite | Chalcopyrite | Other |       |                      | Other     |      |  |
|          |        |              |              |        |              |           |               |         |            |          |           |           | Type  | Intensity |       |                |                |                       |        |           |              | Type  |       |                      | Intensity | Type | Intensity  |
| 0.00     | 3.57   | 3.57         |              |        |              | OVB       |               |         |            |          |           |           |       |           |       |                |                |                       |        |           |              |       |       |                      |           |      | No recovery  |
| 3.57     | 19.20  | 15.63        |              |        |              | VCL       | Pale GN-WH    |         | T          | M        |           | M-S       | Ep    | F         | DE    |                |                |                       |        | F         |              |       |       |                      |           |      | Felsic Meta-Volcaniclastic (VCL) with abundant 1-2mm size Cl veins and FG DI Py. Highly fractured section with abundant rusty surfaces (fracturing increases with depth). Cl crystals become elongate and show evidence of compression.  |
|          |        |              |              |        |              |           | DI            |         |            |          |           |           |       |           |       |                |                |                       |        |           |              |       |       |                      |           |      |  |
|          |        |              |              |        |              |           | F-M           |         |            |          |           |           |       |           |       |                |                |                       |        |           |              |       |       |                      |           |      |  |
|          |        |              |              |        |              |           | G             |         |            |          |           |           |       |           |       |                |                |                       |        |           |              |       |       |                      |           |      |  |
| 19.20    | 23.20  | 4.00         |              |        |              | OGN       | Pale GY-GN-WH |         | W          | M        |           | T         | Ep    | M         | DE    |                |                |                       |        | W         |              |       |       |                      |           |      | Felsic Orthogneiss (OGN). Py is 1mm in size and DI throughout the section.   |
|          |        |              |              |        |              |           | DI            |         |            |          |           |           |       |           |       |                |                |                       |        |           |              |       |       |                      |           |      |  |
|          |        |              |              |        |              |           | F-M           |         |            |          |           |           |       |           |       |                |                |                       |        |           |              |       |       |                      |           |      |  |
|          |        |              |              |        |              |           | G             |         |            |          |           |           |       |           |       |                |                |                       |        |           |              |       |       |                      |           |      |  |
| 23.20    | 33.10  | 9.90         |              |        |              | VCL       | Pale GN-WH    |         | T          | M        |           | M-S       | Ep    | F         | DE    |                |                |                       |        | F         |              |       |       |                      |           |      | Felsic Meta-Volcaniclastic with abundant 1-2mm Cl veins and FG DI Py. Highly fractured section with abundant rusty surfaces (fracturing increases with depth). Cl crystals become elongate and show evidence of compression towards the end of the section. Dark brownish, soft, semi-metallic mineral, seen throughout the matrix, altered biotite?   |
|          |        |              |              |        |              |           | DI            |         |            |          |           |           |       |           |       |                |                |                       |        |           |              |       |       |                      |           |      |  |
|          |        |              |              |        |              |           | F.-M.         |         |            |          |           |           |       |           |       |                |                |                       |        |           |              |       |       |                      |           |      |  |
|          |        |              |              |        |              |           | G.            |         |            |          |           |           |       |           |       |                |                |                       |        |           |              |       |       |                      |           |      |  |
| 33.10    | 52.85  | 19.75        |              |        |              | VCL       | MD-DK GY-GN   |         | W          | M-S      | T         | T         |       |           | DE    |                |                |                       |        | F         |              | T     |       |                      |           |      | Volcaniclastic with DI and IN, EU to subhedral Py (1-10mm) . Section is highly fractured and deformed, both increasing with depth. Evident by abundant carbonate infilling of fractures and higher degree of fracturing and deformation. Sparse lean Qz lenses 1-4cm wide. FO at 70 when observed (otherwise FO is deformed). From 47-52.85m grain size increases from MG to CG. EU to subhedral Bi increases from MG to CG. |
|          |        |              |              |        |              |           | F-M           |         |            |          |           |           |       |           |       |                |                |                       |        |           |              |       |       |                      |           |      |  |
|          |        |              |              |        |              |           | G             |         |            |          |           |           |       |           | FO 70 |                |                |                       |        |           |              |       |       |                      |           |      |  |

**GEOLOGY LOG**

| INTERVAL |        |              | SUB-INTERVAL |        |              | LITHOLOGY |                            |         | ALTERATION |          |           |           |       | STRUCTURE |      |                |                | MINERALS              |        |           |              |       | Photo | DETAILED DESCRIPTION |           |      |  |  |
|----------|--------|--------------|--------------|--------|--------------|-----------|----------------------------|---------|------------|----------|-----------|-----------|-------|-----------|------|----------------|----------------|-----------------------|--------|-----------|--------------|-------|-------|----------------------|-----------|------|--|--|
| From (m) | To (m) | Interval (m) | From (m)     | To (m) | Interval (m) | Unit      | Modifier                   | Texture | Sericite   | Chlorite | Carbonate | Oxidation | Other |           | Type | Attitude (tca) | Attitude (tfa) | Density (frequency/m) | Pyrite | Magnetite | Chalcopyrite | Other |       |                      | Other     |      |  |  |
|          |        |              |              |        |              |           |                            |         |            |          |           |           | Type  | Intensity |      |                |                |                       |        |           |              | Type  |       |                      | Intensity | Type | Intensity  |  |
| 52.85    | 103.78 | 50.93        |              |        |              | MRB       |                            |         |            |          |           |           |       |           |      | Qz<br>VN       | 50             |                       |        |           |              |       |       |                      |           |      |  | Marble (MRB) interbedded with narrow (7 to 40cm) weakly mineralized Volcaniclastic units. MRB is cloudy white to yellowish-white and has a brecciated appearance (randomly throughout). Appears to have undergone minor hydrothermal alteration (giving it a 'dirty' MRB appearance), weak stockwork observed with 1-4 cm Qz veins. Weakly fractured. MRB also shows some evidence of recrystallization. |
|          |        |              | 58.11        | 58.41  | 0.30         | VCL       | DI-IN                      |         | W          | M        |           |           |       |           |      | FO             | 60             |                       |        | F         | W            |       |       |                      |           |      | Volcaniclastic sections within the MRB are weakly to fairly mineralized. Py occurs as whisps, DI and IN with sizes ranging from 1-25mm. Py and Cl crystals are MG to CG. Most appear elongate and show evidence of deformation. Cl crystals resemble quartz-eyes, and are 1-3mm in size. Units show varying amounts of chlorite; zones with increased Cl host more mineralization (Py). Cl surrounds some Py crystals. From 74.67 onwards, 1-2mm light pink, moderately hard, quartz eyes are observed (1-4%). |  |
|          |        |              | 59.20        | 59.65  | 0.45         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      | The breaks between MRB and VCL lithologies are Pyrite Chlorite Schist (PCS). Cl crystals are MG to CG, subrounded, and resemble quart-eyes.  |  |
|          |        |              | 60.70        | 60.75  | 0.05         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 60.82        | 60.92  | 0.10         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 65.03        | 65.35  | 0.32         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 65.47        | 65.56  | 0.09         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 66.50        | 66.71  | 0.21         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 67.23        | 67.53  | 0.30         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 67.60        | 67.70  | 0.10         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 73.42        | 73.68  | 0.26         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 74.67        | 75.15  | 0.48         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 76.45        | 78.67  | 2.22         | PCS       | DI-IN                      |         |            | M        |           |           |       |           |      | FO             | 60             |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 80.54        | 80.89  | 0.35         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | M-S       |              |       |       |                      |           |      |  |  |
|          |        |              | 84.07        | 85.30  | 1.23         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 86.75        | 87.00  | 0.25         | QTE       |                            |         | W          | M        |           |           |       |           |      |                |                |                       |        |           |              |       |       |                      |           |      | Quartzite (QTE) lens.  |  |
|          |        |              | 88.40        | 88.57  | 0.17         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | M         |              |       |       |                      |           |      |  |  |
|          |        |              | 90.75        | 91.40  | 0.65         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 93.40        | 94.75  | 1.35         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 95.06        | 95.27  | 0.21         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | W         |              |       |       |                      |           |      |  |  |
|          |        |              | 96.94        | 97.21  | 0.27         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 97.70        | 97.86  | 0.16         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 98.28        | 99.87  | 1.59         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 99.87        | 99.97  | 0.10         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 100.21       | 101.86 | 1.65         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 102.33       | 102.48 | 0.15         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
|          |        |              | 102.70       | 102.90 | 0.20         | VCL       | DI-IN                      |         |            | M        |           |           |       |           |      |                |                |                       |        | T-W       |              |       |       |                      |           |      |  |  |
| 103.78   | 114.30 | 10.52        |              |        |              | VCL       | GY to DK-GY<br>DI-IN<br>MG |         | T-W        | T-W      | F         | W         | sil   | M         |      |                |                |                       |        | W         | W            | Po    | T     |                      |           |      | Volcaniclastic. Cl crystals resemble quartz-eyes, subrounded, 1-3mm and elongate in some areas. Py is DI and occurs as whisps, 1-3mm.  |  |
| 114.30   | 170.76 | 56.46        |              |        |              | MRB       | Clou<br>dy<br>WH           |         |            |          |           |           |       |           |      |                |                |                       |        |           |              |       |       |                      |           |      | Marble with interbedded volcaniclastic layers. From 120.02m onwards chlorite alteration increases. Weakly sheared along contact boundaries with VCL.   |  |



## GEOLOGY LOG

| INTERVAL |        |              | SUB-INTERVAL |        |              | LITHOLOGY |                       |         | ALTERATION |          |           |           |       | STRUCTURE |      |                |                | MINERALS              |        |           |              |       | Photo | DETAILED DESCRIPTION |           |      |           |  |  |  |  |  |   |
|----------|--------|--------------|--------------|--------|--------------|-----------|-----------------------|---------|------------|----------|-----------|-----------|-------|-----------|------|----------------|----------------|-----------------------|--------|-----------|--------------|-------|-------|----------------------|-----------|------|-----------|--|--|--|--|--|---|
| From (m) | To (m) | Interval (m) | From (m)     | To (m) | Interval (m) | Unit      | Modifier              | Texture | Sericite   | Chlorite | Carbonate | Oxidation | Other |           | Type | Attitude (tca) | Attitude (tfa) | Density (frequency/m) | Pyrite | Magnetite | Chalcopyrite | Other |       |                      | Other     |      |           |  |  |  |  |  |   |
|          |        |              |              |        |              |           |                       |         |            |          |           |           | Type  | Intensity |      |                |                |                       |        |           |              | Type  |       |                      | Intensity | Type | Intensity |  |  |  |  |  |   |
| 195.68   | 215.50 | 19.82        |              |        |              | VCL       | DK<br>GN-<br>GY       |         |            |          | M-S       |           | T-W   |           |      | FO             | 70             |                       |        |           |              |       |       |                      |           |      |           |  |  |  | Mafic-rich Volcaniclastic with varying amounts Py. Py is DI and IN. Patchy bornite 'splotches' occur on rusty fractured surfaces. Lt pink altered porphyroblasts? Lean QZ lenses 1-2cm. Biotite crystals are MG. |  |   |
|          |        |              |              |        |              |           | DI-IN                 |         |            |          |           |           |       |           |      |                |                |                       |        | W-F       |              |       | Po    | T                    |           |      |           |  |  |  |  |  |   |
|          |        |              |              |        |              |           | F-M                   |         |            |          |           |           |       |           |      |                |                |                       |        |           |              |       | Bo    | T                    |           |      |           |  |  |  |  |  |   |
|          |        |              |              |        |              |           | G                     |         |            |          |           |           |       |           |      |                |                |                       |        |           |              |       |       |                      |           |      |           |  |  |  |  |  |   |
| 215.50   | 219.60 | 4.10         |              |        |              | VCL       | LT-<br>DK<br>GN       |         |            | S        | W         |           |       | Ep        | F-M  | FO             | 70             |                       |        |           |              |       | Po    | T                    |           |      |           |  |  |  | Volcaniclastic with chlorite porphyroblasts. Po is blotchy. Section is mafic-rich (giving the dark green colour). Biotite crystals are MG.   |  |   |
|          |        |              |              |        |              |           | MC G                  |         |            |          |           |           |       |           |      |                |                |                       |        |           |              |       |       |                      |           |      |           |  |  |  |  |  |   |
| 219.60   | 221.05 | 1.45         |              |        |              | QTE       | WH-<br>GY<br>FG       |         |            |          | T         |           |       |           |      | FO             | 70             |                       |        |           |              |       |       |                      |           |      |           |  |  |  |  | Quartzite with interbedded marble layers.  |   |
| 221.05   | 226.05 | 5.00         |              |        |              | VCL       | DK<br>GN-<br>GY       |         |            | S        | T         |           |       | Ep        | F    | FO             | 70             |                       |        |           |              |       |       |                      |           |      |           |  |  |  |  | Volcaniclastic. Py crystals are DI and IN (1-3mm). Mafic-rich. Well developed FO.  |   |
|          |        |              |              |        |              |           | DI-IN                 |         |            |          |           |           |       |           |      |                |                |                       |        | M         |              |       |       |                      |           |      |           |  |  |  |  |  |   |
| 226.05   | 231.10 | 5.05         |              |        |              | QTE       | WH<br>GY              |         |            |          |           |           |       |           |      |                |                |                       |        |           |              |       |       |                      |           |      |           |  |  |  |  | Quartzite interbedded with marble and volcaniclastic layers. Very fine grain to FG.  |   |
|          |        |              | 229.63       | 230.45 | 0.82         | VCL       | DK<br>GN              |         |            |          | M         |           |       | Ep        | W    |                |                |                       |        |           |              |       |       |                      |           |      |           |  |  |  |  | Volcaniclastic with chlorite porphyroblasts. Dark brownish, soft, semi-metallic mineral, seen throughout the matrix, altered biotite?  |   |
|          |        |              |              |        |              |           | DI-IN                 |         |            |          |           |           |       |           |      |                |                |                       |        |           |              |       |       |                      |           |      |           |  |  |  |  |  |   |
|          |        |              |              |        |              |           | F-M                   |         |            |          |           |           |       |           |      |                |                |                       |        |           |              |       |       |                      |           |      |           |  |  |  |  |  |   |
|          |        |              |              |        |              |           | G                     |         |            |          |           |           |       |           |      |                |                |                       |        |           |              |       |       |                      |           |      |           |  |  |  |  |  |   |
| 231.10   | 275.23 | 44.13        |              |        |              | VCL       | DK<br>GN              |         | W-M        | S-I      | W         |           |       | Ep        | F    | FO             | 65             |                       |        | T-W       | T            |       | Po    | W                    |           |      |           |  |  |  |  | Volcaniclastic with chlorite porphyroblasts, CG Bi and an altered brownish minerals (biotite?). Some areas show an accumulation of Cl crystals (appears they have settled and accumulated in a narrow zone). Few areas have well developed fabric while most crystal orientation appear 'disorganized. |   |
|          |        |              |              |        |              |           | DI-IN                 |         |            |          |           |           |       |           |      |                |                |                       |        |           |              |       |       |                      |           |      |           |  |  |  |  |  |   |
|          |        |              |              |        |              |           | M-C                   |         |            |          |           |           |       |           |      |                |                |                       |        |           |              |       |       |                      |           |      |           |  |  |  |  |  |   |
|          |        |              | 244.30       | 248.60 | 4.30         | MRB       | WH<br>LT-<br>GY<br>FG |         |            | W        |           |           |       |           |      |                |                |                       |        |           |              |       |       |                      |           |      |           |  |  |  |  |  | Marble with dark grey (0.1-1cm) mafic layers. |

## GEOLOGY LOG

| INTERVAL |        |              | SUB-INTERVAL |        |              | LITHOLOGY |                 |         | ALTERATION |          |           |           |       | STRUCTURE |      |                |                | MINERALS              |        |           |              |       | Photo | DETAILED DESCRIPTION |           |      |           |  |  |  |   |
|----------|--------|--------------|--------------|--------|--------------|-----------|-----------------|---------|------------|----------|-----------|-----------|-------|-----------|------|----------------|----------------|-----------------------|--------|-----------|--------------|-------|-------|----------------------|-----------|------|-----------|--|--|--|---|
| From (m) | To (m) | Interval (m) | From (m)     | To (m) | Interval (m) | Unit      | Modifier        | Texture | Sericite   | Chlorite | Carbonate | Oxidation | Other |           | Type | Attitude (tca) | Attitude (ffa) | Density (frequency/m) | Pyrite | Magnetite | Chalcopyrite | Other |       |                      | Other     |      |           |  |  |  |   |
|          |        |              |              |        |              |           |                 |         |            |          |           |           | Type  | Intensity |      |                |                |                       |        |           |              | Type  |       |                      | Intensity | Type | Intensity |  |  |  |   |
|          |        |              | 253.85       | 260.50 | 6.65         | MRB       | WH<br>LT-<br>GY |         | W          |          |           |           |       |           |      |                |                |                       |        |           |              |       |       |                      |           |      |           |  |  |  | Marble with dark grey (0.1-1cm) mafic layers. |
| EOH      |        |              |              |        |              |           |                 |         |            |          |           |           |       |           |      |                |                |                       |        |           |              |       |       |                      |           |      |           |  |  |  |   |

## SAMPLE LOG

HOLE: MOR-10-02

| From (m)            | To (m) | Interval (m) | Recovery (m) | Recovery (%) | Sample   | Batch | Au (g/t) | Ag (g/t) | Cu (ppm) | Pb (ppm) | Zn (ppm) | Comments                           |
|---------------------|--------|--------------|--------------|--------------|----------|-------|----------|----------|----------|----------|----------|------------------------------------|
| 30.36               | 32.36  | 2.00         | 2.00         | 100          | G0557091 | 2     |          | <0.2     | 19       | 3        | 67       |                                    |
| 32.36               | 34.36  | 2.00         | 2.00         | 100          | G0557092 | 2     |          | 0.30     | 115      | 12       | 114      |                                    |
| 34.36               | 36.36  | 2.00         | 2.00         | 100          | G0557093 | 2     |          | <0.2     | 83       | 7        | 109      |                                    |
| 36.36               | 38.36  | 2.00         | 1.80         | 90           | G0557094 | 2     |          | 0.30     | 64       | 7        | 100      |                                    |
| STANDARD - CDN-ME-6 |        |              |              |              | G0557095 | 2     |          | 95.20    | 6140     | 9870     | 4900     | Standard - CDN-ME-6                |
| 38.36               | 40.36  | 2.00         | 2.00         | 100          | G0557096 | 2     |          | 0.30     | 78       | 23       | 76       |                                    |
| 40.36               | 42.36  | 2.00         | 2.00         | 100          | G0557097 | 2     |          | <0.2     | 76       | 10       | 78       |                                    |
| 42.36               | 44.36  | 2.00         | 2.00         | 100          | G0557098 | 2     |          | 0.20     | 53       | 13       | 61       |                                    |
| 44.36               | 46.36  | 2.00         | 2.00         | 100          | G0557099 | 2     |          | 0.30     | 68       | 13       | 81       |                                    |
| 46.36               | 48.36  | 2.00         | 2.00         | 100          | G0557100 | 2     |          | <0.2     | 42       | 9        | 62       |                                    |
| 48.36               | 49.86  | 1.50         | 1.45         | 97           | G0557101 | 2     |          | <0.2     | 40       | 8        | 43       |                                    |
| BLANK               |        |              |              |              | G0557102 | 2     |          | <0.2     | 2        | 4        | 12       | Blank - Batch C                    |
| 49.86               | 51.36  | 1.50         | 1.50         | 100          | G0557103 | 2     |          | <0.2     | 21       | 3        | 20       |                                    |
| 51.36               | 52.86  | 1.50         | 1.50         | 100          | G0557104 | 2     |          | <0.2     | 60       | 7        | 67       |                                    |
| 52.86               | 54.86  | 2.00         | 2.00         | 100          | G0557105 | 2     |          | <0.2     | 3        | 6        | 32       |                                    |
| 103.79              | 105.89 | 2.10         | 2.10         | 100          | G0557106 | 2     |          | <0.2     | 59       | 5        | 67       |                                    |
| 105.89              | 107.99 | 2.10         | 2.10         | 100          | G0557107 | 2     |          | 0.30     | 66       | 7        | 66       |                                    |
| STANDARD - CDN-ME-2 |        |              |              |              | G0557108 | 2     |          | 14.20    | 5090     | 251      | 12900    | Standard - CDN-ME-2                |
| 107.99              | 110.09 | 2.10         | 2.10         | 100          | G0557109 | 2     |          | 0.40     | 85       | 7        | 86       |                                    |
| 110.09              | 112.19 | 2.10         | 2.10         | 100          | G0557110 | 2     |          | 0.50     | 72       | 7        | 43       |                                    |
| 112.19              | 114.30 | 2.11         | 2.11         | 100          | G0557111 | 2     |          | 0.20     | 48       | 5        | 61       |                                    |
| 196.95              | 198.95 | 2.00         | 2.00         | 100          | G0557112 | 2     |          | 0.30     | 94       | 4        | 45       |                                    |
| 198.95              | 200.95 | 2.00         | 2.00         | 100          | G0557113 | 2     |          | <0.2     | 77       | 5        | 40       |                                    |
| 200.95              | 202.95 | 2.00         | 2.00         | 100          | G0557114 | 2     |          | 0.20     | 102      | 2        | 42       |                                    |
| BLANK               |        |              |              |              | G0557115 | 2     |          | <0.2     | 2        | 2        | 13       | Blank - Batch C                    |
| 202.95              | 204.95 | 2.00         | 2.00         | 100          | G0557116 | 2     |          | 0.20     | 59       | 4        | 40       |                                    |
| 204.95              | 206.95 | 2.00         | 2.00         | 100          | G0557117 | 2     |          | <0.2     | 73       | 5        | 40       |                                    |
| 206.95              | 208.95 | 2.00         | 2.00         | 100          | G0557118 | 2     |          | <0.2     | 73       | 5        | 43       |                                    |
| 208.95              | 210.95 | 2.00         | 2.00         | 100          | G0557119 | 2     |          | 0.20     | 99       | 7        | 43       |                                    |
| 208.95              | 210.95 | 2.00         | 2.00         | 100          | G0557120 | 2     |          | 0.20     | 104      | 5        | 43       | Duplicate - 1/4 sample of G0557119 |
| 210.95              | 212.95 | 2.00         | 2.00         | 100          | G0557121 | 2     |          | 0.20     | 78       | 4        | 47       |                                    |
| 212.95              | 214.95 | 2.00         | 2.00         | 100          | G0557122 | 2     |          | <0.2     | 91       | 6        | 46       |                                    |

Not Assayed

### SAMPLE LOG

| From (m)            | To (m) | Interval (m) | Recovery (m) | Recovery (%) | Sample   | Batch | Au (g/t) | Ag (g/t) | Cu (ppm) | Pb (ppm) | Zn (ppm) | Comments            |
|---------------------|--------|--------------|--------------|--------------|----------|-------|----------|----------|----------|----------|----------|---------------------|
| 214.95              | 216.95 | 2.00         | 2.00         | 100          | G0557123 | 3     |          | <0.2     | 47       | <2       | 31       |                     |
| 216.95              | 219.58 | 2.63         | 2.63         | 100          | G0557124 | 3     |          | <0.2     | 54       | <2       | 43       |                     |
| 231.40              | 233.65 | 2.25         | 2.25         | 100          | G0557125 | 3     |          | <0.2     | 24       | <2       | 52       |                     |
| 233.65              | 235.90 | 2.25         | 2.25         | 100          | G0557126 | 3     |          | <0.2     | 27       | <2       | 42       |                     |
| 235.90              | 238.25 | 2.35         | 2.35         | 100          | G0557127 | 3     |          | <0.2     | 2        | <2       | 45       |                     |
| STANDARD - CDN-ME-6 |        |              |              |              | G0557128 | 3     |          | 98.00    | 6150     | 9630     | 4960     | Standard - CDN-ME-6 |
|                     |        |              |              |              |          |       |          |          |          |          |          |                     |

## GEOTECHNICAL LOG

HOLE: MOR-10-02

| From (m) | To (m) | Interval (m) | Recovery (m) | Recovery (%) | RQD (m) | RQD (%) | Hardness | Weathering |  | Comments |
|----------|--------|--------------|--------------|--------------|---------|---------|----------|------------|--|----------|
| 0.00     | 3.96   | 3.96         | 0.55         | 14           | 0       | 0       | W        | HW         |  |          |
| 3.96     | 7.01   | 3.05         | 3.04         | 100          | 0.96    | 31      | MS       | MW         |  |          |
| 7.01     | 10.10  | 3.09         | 1.62         | 52           | 1.42    | 46      | MS       | MW         |  |          |
| 10.10    | 13.10  | 3.00         | 3.06         | 102          | 2.25    | 75      | MS       | MW         |  |          |
| 13.10    | 16.20  | 3.10         | 2.85         | 92           | 1.80    | 58      | MS       | MW         |  |          |
| 16.20    | 19.30  | 3.10         | 1.68         | 54           | 1.06    | 34      | MS       | SW         |  |          |
| 19.30    | 22.30  | 3.00         | 3.01         | 100          | 2.92    | 97      | S        | FR         |  |          |
| 22.30    | 25.30  | 3.00         | 3.00         | 100          | 2.71    | 90      | S        | FR         |  |          |
| 25.30    | 28.30  | 3.00         | 2.98         | 99           | 1.67    | 56      | S        | FR         |  |          |
| 28.30    | 31.40  | 3.10         | 3.04         | 98           | 1.86    | 60      | MS       | MW         |  |          |
| 31.40    | 34.40  | 3.00         | 2.97         | 99           | 2.66    | 89      | MS       | FR         |  |          |
| 34.40    | 37.50  | 3.10         | 2.73         | 88           | 1.59    | 51      | S        | SW         |  |          |
| 37.50    | 40.50  | 3.00         | 2.94         | 98           | 2.82    | 94      | S        | FR         |  |          |
| 40.50    | 43.60  | 3.10         | 3.09         | 100          | 3.07    | 99      | S        | FR         |  |          |
| 43.60    | 46.60  | 3.00         | 2.98         | 99           | 2.98    | 99      | W        | FR         |  |          |
| 46.60    | 49.70  | 3.10         | 3.03         | 98           | 2.20    | 71      | MS       | MW         |  |          |
| 49.70    | 52.70  | 3.00         | 2.70         | 90           | 2.13    | 71      | S        | MW         |  |          |
| 52.70    | 55.78  | 3.08         | 3.08         | 100          | 2.98    | 97      | S        | FR         |  |          |
| 55.78    | 58.82  | 3.04         | 3.00         | 99           | 3.00    | 99      | MS       | FR         |  |          |
| 58.82    | 61.87  | 3.05         | 3.02         | 99           | 3.02    | 99      | MS       | FR         |  |          |
| 61.87    | 64.92  | 3.05         | 2.99         | 98           | 2.99    | 98      | MS       | FR         |  |          |
| 64.92    | 67.97  | 3.05         | 3.03         | 99           | 3.03    | 99      | MS       | FR         |  |          |
| 67.97    | 71.01  | 3.04         | 3.05         | 100          | 3.03    | 100     | S        | FR         |  |          |
| 71.01    | 74.06  | 3.05         | 3.04         | 100          | 3.00    | 98      | S        | FR         |  |          |
| 74.06    | 77.14  | 3.08         | 3.06         | 99           | 2.75    | 89      | S        | FR         |  |          |
| 77.14    | 80.16  | 3.02         | 3.05         | 101          | 3.00    | 99      | S        | FR         |  |          |
| 80.16    | 83.21  | 3.05         | 3.02         | 99           | 3.02    | 99      | S        | FR         |  |          |
| 83.21    | 86.25  | 3.04         | 3.00         | 99           | 2.60    | 86      | MS       | FR         |  |          |
| 86.25    | 89.30  | 3.05         | 3.02         | 99           | 2.60    | 85      | MS       | FR         |  |          |
| 89.30    | 92.35  | 3.05         | 3.04         | 100          | 2.58    | 85      | S        | FR         |  |          |
| 92.35    | 95.40  | 3.05         | 3.05         | 100          | 3.05    | 100     | S        | FR         |  |          |
| 95.40    | 98.45  | 3.05         | 3.02         | 99           | 2.92    | 96      | S        | FR         |  |          |
| 98.45    | 101.49 | 3.04         | 2.63         | 87           | 1.89    | 62      | S        | FR         |  |          |
| 101.49   | 104.54 | 3.05         | 3.06         | 100          | 3.00    | 98      | S        | FR         |  |          |
| 104.54   | 107.59 | 3.05         | 3.01         | 99           | 3.01    | 99      | S        | FR         |  |          |
| 107.59   | 110.59 | 3.00         | 3.02         | 101          | 2.82    | 94      | S        | FR         |  |          |
| 110.59   | 113.69 | 3.10         | 3.11         | 100          | 1.97    | 64      | MS       | MW         |  |          |
| 113.69   | 116.73 | 3.04         | 3.03         | 100          | 2.83    | 93      | MS       | MW         |  |          |
| 116.73   | 119.78 | 3.05         | 3.06         | 100          | 2.94    | 96      | MS       | FR         |  |          |
| 119.78   | 122.83 | 3.05         | 2.95         | 97           | 2.72    | 89      | S        | FR         |  |          |
| 122.83   | 125.88 | 3.05         | 2.97         | 97           | 2.90    | 95      | S        | FR         |  |          |
| 125.88   | 128.93 | 3.05         | 2.95         | 97           | 2.25    | 74      | MS       | FR         |  |          |
| 128.93   | 131.97 | 3.04         | 3.07         | 101          | 2.77    | 91      | MS       | FR         |  |          |
| 131.97   | 135.02 | 3.05         | 3.05         | 100          | 3.05    | 100     | S        | FR         |  |          |
| 135.02   | 138.07 | 3.05         | 3.05         | 100          | 3.05    | 100     | S        | FR         |  |          |
| 138.07   | 141.12 | 3.05         | 3.03         | 99           | 2.95    | 97      | S        | FR         |  |          |
| 141.12   | 144.17 | 3.05         | 3.04         | 100          | 2.90    | 95      | S        | FR         |  |          |
| 144.17   | 147.21 | 3.04         | 3.02         | 99           | 3.00    | 99      | S        | FR         |  |          |
| 147.21   | 150.26 | 3.05         | 3.05         | 100          | 2.97    | 97      | S        | FR         |  |          |
| 150.26   | 153.31 | 3.05         | 3.06         | 100          | 2.57    | 84      | S        | FR         |  |          |

## GEOTECHNICAL LOG

| From (m)   | To (m) | Interval (m) | Recovery (m) | Recovery (%) | RQD (m) | RQD (%) | Hardness | Weathering |  | Comments |
|------------|--------|--------------|--------------|--------------|---------|---------|----------|------------|--|----------|
| 153.31     | 156.36 | 3.05         | 3.01         | 99           | 2.96    | 97      | S        | FR         |  |          |
| 156.36     | 159.41 | 3.05         | 3.00         | 98           | 2.88    | 94      | S        | FR         |  |          |
| 159.41     | 162.45 | 3.04         | 3.03         | 100          | 3.03    | 100     | MS       | FR         |  |          |
| 162.45     | 165.50 | 3.05         | 3.05         | 100          | 2.93    | 96      | MS       | FR         |  |          |
| 165.50     | 168.55 | 3.05         | 3.06         | 100          | 2.98    | 98      | MS       | FR         |  |          |
| 168.55     | 171.60 | 3.05         | 3.04         | 100          | 2.82    | 92      | MS       | FR         |  |          |
| 171.60     | 174.70 | 3.10         | 3.02         | 97           | 2.92    | 94      | S        | MW         |  |          |
| 174.70     | 177.69 | 2.99         | 3.02         | 101          | 3.02    | 101     | S        | FR         |  |          |
| 177.69     | 180.74 | 3.05         | 3.07         | 101          | 3.07    | 101     | S        | FR         |  |          |
| 180.74     | 183.79 | 3.05         | 3.09         | 101          | 3.00    | 98      | MS       | FR         |  |          |
| 183.79     | 186.84 | 3.05         | 3.03         | 99           | 2.90    | 95      | MS       | FR         |  |          |
| 186.84     | 189.89 | 3.05         | 3.00         | 98           | 2.95    | 97      | MS       | FR         |  |          |
| 189.89     | 192.93 | 3.04         | 3.06         | 101          | 3.00    | 99      | S        | FR         |  |          |
| 192.93     | 195.98 | 3.05         | 3.00         | 98           | 2.92    | 96      | S        | MW         |  |          |
| 195.98     | 199.03 | 3.05         | 2.98         | 98           | 2.67    | 88      | S        | MW         |  |          |
| 199.03     | 202.08 | 3.05         | 2.93         | 96           | 2.25    | 74      | S        | MW         |  |          |
| 202.08     | 205.13 | 3.05         | 3.00         | 98           | 2.20    | 72      | S        | FR         |  |          |
| 205.13     | 208.37 | 3.24         | 3.06         | 94           | 1.90    | 59      | W        | FR         |  |          |
| 208.37     | 211.22 | 2.85         | 2.90         | 102          | 2.90    | 102     | W        | FR         |  |          |
| 211.22     | 214.27 | 3.05         | 3.05         | 100          | 2.85    | 93      | W        | FR         |  |          |
| 214.27     | 217.32 | 3.05         | 3.01         | 99           | 2.96    | 97      | MS       | FR         |  |          |
| 217.32     | 220.37 | 3.05         | 3.06         | 100          | 2.85    | 93      | MS       | FR         |  |          |
| 220.37     | 223.41 | 3.04         | 3.05         | 100          | 3.00    | 99      | S        | FR         |  |          |
| 223.41     | 226.46 | 3.05         | 3.07         | 101          | 2.85    | 93      | S        | FR         |  |          |
| 226.46     | 229.51 | 3.05         | 3.07         | 101          | 2.98    | 98      | S        | FR         |  |          |
| 229.51     | 232.56 | 3.05         | 3.06         | 100          | 3.06    | 100     | MS       | FR         |  |          |
| 232.56     | 235.61 | 3.05         | 3.02         | 99           | 2.92    | 96      | MS       | FR         |  |          |
| 235.61     | 238.65 | 3.04         | 3.07         | 101          | 3.00    | 99      | MS       | FR         |  |          |
| 238.65     | 241.70 | 3.05         | 3.04         | 100          | 2.96    | 97      | MS       | FR         |  |          |
| 241.70     | 244.75 | 3.05         | 3.02         | 99           | 2.97    | 97      | MS       | FR         |  |          |
| 244.75     | 247.80 | 3.05         | 3.03         | 99           | 2.96    | 97      | MS       | FR         |  |          |
| 247.80     | 250.85 | 3.05         | 3.04         | 100          | 3.04    | 100     | MS       | FR         |  |          |
| 250.85     | 253.89 | 3.04         | 3.07         | 101          | 3.00    | 99      | MS       | FR         |  |          |
| 253.89     | 256.94 | 3.05         | 2.94         | 96           | 2.63    | 86      | S        | FR         |  |          |
| 256.94     | 259.99 | 3.05         | 3.08         | 101          | 3.00    | 98      | S        | FR         |  |          |
| 259.99     | 263.04 | 3.05         | 2.98         | 98           | 2.90    | 95      | MS       | FR         |  |          |
| 263.04     | 266.09 | 3.05         | 3.04         | 100          | 2.92    | 96      | S        | FR         |  |          |
| 266.09     | 269.14 | 3.05         | 3.06         | 100          | 2.96    | 97      | MS       | FR         |  |          |
| 269.14     | 272.18 | 3.04         | 3.05         | 100          | 3.05    | 100     | MS       | FR         |  |          |
| 272.18     | 275.23 | 3.05         | 3.05         | 100          | 3.05    | 100     | S        | FR         |  |          |
| <b>EOH</b> |        |              |              |              |         |         |          |            |  |          |
|            |        |              |              |              |         |         |          |            |  |          |

## BOX LOG

HOLE: MOR-10-02

| BOX | FROM (m) | TO (m) | BOX        | FROM (m) | TO (m) |
|-----|----------|--------|------------|----------|--------|
| 1   | 3.57     | 9.80   | 36         | 198.30   | 203.50 |
| 2   | 9.80     | 15.13  | 37         | 203.50   | 209.13 |
| 3   | 15.13    | 21.83  | 38         | 209.13   | 214.80 |
| 4   | 21.83    | 26.89  | 39         | 214.80   | 220.37 |
| 5   | 26.89    | 32.36  | 40         | 220.37   | 226.03 |
| 6   | 32.36    | 37.50  | 41         | 226.03   | 231.40 |
| 7   | 37.50    | 43.19  | 42         | 231.40   | 237.17 |
| 8   | 43.19    | 48.76  | 43         | 237.17   | 242.63 |
| 9   | 48.76    | 54.42  | 44         | 242.63   | 248.43 |
| 10  | 54.42    | 60.05  | 45         | 248.43   | 253.95 |
| 11  | 60.05    | 65.66  | 46         | 253.95   | 259.11 |
| 12  | 65.66    | 71.01  | 47         | 259.11   | 264.84 |
| 13  | 71.01    | 76.60  | 48         | 264.84   | 270.62 |
| 14  | 76.60    | 82.20  | 49         | 270.62   | 275.23 |
| 15  | 82.20    | 88.00  | <b>EOH</b> |          |        |
| 16  | 88.00    | 93.63  |            |          |        |
| 17  | 93.63    | 99.08  |            |          |        |
| 18  | 99.08    | 104.90 |            |          |        |
| 19  | 104.90   | 110.53 |            |          |        |
| 20  | 110.53   | 115.53 |            |          |        |
| 21  | 115.53   | 121.05 |            |          |        |
| 22  | 121.05   | 126.76 |            |          |        |
| 23  | 126.76   | 131.97 |            |          |        |
| 24  | 131.97   | 137.76 |            |          |        |
| 25  | 137.76   | 143.01 |            |          |        |
| 26  | 143.01   | 148.50 |            |          |        |
| 27  | 148.50   | 154.06 |            |          |        |
| 28  | 154.06   | 159.50 |            |          |        |
| 29  | 159.50   | 165.15 |            |          |        |
| 30  | 165.15   | 170.76 |            |          |        |
| 31  | 170.76   | 176.20 |            |          |        |
| 32  | 176.20   | 181.67 |            |          |        |
| 33  | 181.67   | 187.10 |            |          |        |
| 34  | 187.10   | 192.80 |            |          |        |
| 35  | 192.80   | 198.30 |            |          |        |

## MAGNETIC SUSCEPTIBILITY LOG

**HOLE: MOR-10-02**

| Depth (m) | Unit | Modifier | Magnetic Susceptibility | Comments |
|-----------|------|----------|-------------------------|----------|
| 1.00      | VCL  |          | N/A                     |          |
| 2.00      | VCL  |          | N/A                     |          |
| 3.00      | VCL  |          | N/A                     |          |
| 4.00      | VCL  |          | 2.78                    |          |
| 5.00      | VCL  |          | 5.33                    |          |
| 6.00      | VCL  |          | 3.24                    |          |
| 7.00      | VCL  |          | 0.16                    |          |
| 8.00      | VCL  |          | 0.10                    |          |
| 9.00      | VCL  |          | 0.38                    |          |
| 10.00     | VCL  |          | 0.16                    |          |
| 11.00     | VCL  |          | 0.14                    |          |
| 12.00     | VCL  |          | 0.12                    |          |
| 13.00     | VCL  |          | 0.22                    |          |
| 14.00     | VCL  |          | 0.22                    |          |
| 15.00     | VCL  |          | 0.10                    |          |
| 16.00     | VCL  |          | 0.18                    |          |
| 17.00     | VCL  |          | 0.20                    |          |
| 18.00     | VCL  |          | 0.20                    |          |
| 19.00     | VCL  |          | 0.16                    |          |
| 20.00     | OGN  |          | 0.20                    |          |
| 21.00     | OGN  |          | 0.20                    |          |
| 22.00     | OGN  |          | 0.30                    |          |
| 23.00     | OGN  |          | 0.18                    |          |
| 24.00     | VCL  |          | 0.32                    |          |
| 25.00     | VCL  |          | 0.18                    |          |
| 26.00     | VCL  |          | 0.18                    |          |
| 27.00     | VCL  |          | 0.28                    |          |
| 28.00     | VCL  |          | 0.14                    |          |
| 29.00     | VCL  |          | 0.12                    |          |
| 30.00     | VCL  |          | 0.10                    |          |
| 31.00     | VCL  |          | 0.18                    |          |
| 32.00     | VCL  |          | 0.49                    |          |
| 33.00     | VCL  |          | 8.30                    |          |
| 34.00     | VCL  |          | 0.28                    |          |
| 35.00     | VCL  |          | 0.67                    |          |
| 36.00     | VCL  |          | 1.10                    |          |
| 37.00     | VCL  |          | 0.04                    |          |
| 38.00     | VCL  |          | 0.86                    |          |
| 39.00     | VCL  |          | 0.53                    |          |
| 40.00     | VCL  |          | 0.12                    |          |
| 41.00     | VCL  |          | 0.75                    |          |
| 42.00     | VCL  |          | 0.22                    |          |
| 43.00     | VCL  |          | 0.16                    |          |
| 44.00     | VCL  |          | 0.34                    |          |

## MAGNETIC SUSCEPTIBILITY LOG

| Depth (m) | Unit | Modifier | Magnetic Susceptibility | Comments |
|-----------|------|----------|-------------------------|----------|
| 45.00     | VCL  |          | 2.72                    |          |
| 46.00     | VCL  |          | 7.33                    |          |
| 47.00     | VCL  |          | 1.02                    |          |
| 48.00     | VCL  |          | 0.69                    |          |
| 49.00     | VCL  |          | 0.16                    |          |
| 50.00     | VCL  |          | 1.08                    |          |
| 51.00     | VCL  |          | 0.18                    |          |
| 52.00     | VCL  |          | 0.30                    |          |
| 53.00     | MRB  |          | 0.10                    |          |
| 54.00     | MRB  |          | 0.08                    |          |
| 55.00     | MRB  |          | 0.20                    |          |
| 56.00     | MRB  |          | 0.30                    |          |
| 57.00     | MRB  |          | 0.18                    |          |
| 58.00     | VCL  |          | 0.10                    |          |
| 59.00     | MRB  |          | 0.10                    |          |
| 60.00     | MRB  |          | 0.10                    |          |
| 61.00     | MRB  |          | 0.04                    |          |
| 62.00     | MRB  |          | 0.00                    |          |
| 63.00     | MRB  |          | 0.06                    |          |
| 64.00     | MRB  |          | 0.06                    |          |
| 65.00     | MRB  |          | 0.22                    |          |
| 66.00     | MRB  |          | 0.24                    |          |
| 67.00     | MRB  |          | 0.02                    |          |
| 68.00     | MRB  |          | 0.12                    |          |
| 69.00     | MRB  |          | 0.10                    |          |
| 70.00     | MRB  |          | 0.08                    |          |
| 71.00     | MRB  |          | 0.04                    |          |
| 72.00     | MRB  |          | 0.10                    |          |
| 73.00     | MRB  |          | 0.06                    |          |
| 74.00     | MRB  |          | 0.02                    |          |
| 75.00     | VCL  |          | 0.02                    |          |
| 76.00     | MRB  |          | 0.16                    |          |
| 77.00     | MRB  |          | 2.15                    |          |
| 78.00     | MRB  |          | 3.95                    |          |
| 79.00     | MRB  |          | 0.02                    |          |
| 80.00     | MRB  |          | 0.04                    |          |
| 81.00     | MRB  |          | 0.20                    |          |
| 82.00     | MRB  |          | 0.20                    |          |
| 83.00     | MRB  |          | 0.04                    |          |
| 84.00     | MRB  |          | 0.10                    |          |
| 85.00     | VCL  |          | 0.49                    |          |
| 86.00     | MRB  |          | 0.04                    |          |
| 87.00     | MRB  |          | 0.01                    |          |
| 88.00     | MRB  |          | 0.00                    |          |
| 89.00     | MRB  |          | 0.02                    |          |
| 90.00     | MRB  |          | 0.06                    |          |

## MAGNETIC SUSCEPTIBILITY LOG

| Depth (m) | Unit | Modifier | Magnetic Susceptibility | Comments |
|-----------|------|----------|-------------------------|----------|
| 91.00     | VCL  |          | 0.77                    |          |
| 92.00     | MRB  |          | 0.04                    |          |
| 93.00     | VCL  |          | 0.36                    |          |
| 94.00     | MRB  |          | 26.70                   |          |
| 95.00     | MRB  |          | 0.41                    |          |
| 96.00     | MRB  |          | 0.18                    |          |
| 97.00     | VCL  |          | 0.26                    |          |
| 98.00     | MRB  |          | 1.57                    |          |
| 99.00     | MRB  |          | 0.65                    |          |
| 100.00    | MRB  |          | 0.55                    |          |
| 101.00    | VCL  |          | 11.60                   |          |
| 102.00    | MRB  |          | 0.45                    |          |
| 103.00    | MRB  |          | 0.06                    |          |
| 104.00    | VCL  |          | 0.24                    |          |
| 105.00    | VCL  |          | 0.73                    |          |
| 106.00    | VCL  |          | 0.49                    |          |
| 107.00    | VCL  |          | 0.49                    |          |
| 108.00    | VCL  |          | 0.92                    |          |
| 109.00    | VCL  |          | 0.69                    |          |
| 110.00    | VCL  |          | 0.28                    |          |
| 111.00    | VCL  |          | 0.43                    |          |
| 112.00    | VCL  |          | 0.28                    |          |
| 113.00    | VCL  |          | 0.67                    |          |
| 114.00    | MRB  |          | 0.55                    |          |
| 115.00    | VCL  |          | 0.59                    |          |
| 116.00    | MRB  |          | 0.12                    |          |
| 117.00    | MRB  |          | 0.10                    |          |
| 118.00    | VCL  |          | 2.41                    |          |
| 119.00    | MRB  |          | 0.26                    |          |
| 120.00    | VCL  |          | 0.41                    |          |
| 121.00    | MRB  |          | 0.02                    |          |
| 122.00    | MRB  |          | 0.22                    |          |
| 123.00    | VCL  |          | 4.16                    |          |
| 124.00    | MRB  |          | 1.04                    |          |
| 125.00    | MRB  |          | 0.04                    |          |
| 126.00    | MRB  |          | 0.28                    |          |
| 127.00    | MRB  |          | 0.10                    |          |
| 128.00    | MRB  |          | 0.20                    |          |
| 129.00    | MRB  |          | 0.10                    |          |
| 130.00    | MRB  |          | 0.63                    |          |
| 131.00    | MRB  |          | 0.04                    |          |
| 132.00    | MRB  |          | 0.08                    |          |
| 133.00    | MRB  |          | 0.08                    |          |
| 134.00    | VCL  |          | 12.30                   |          |
| 135.00    | MRB  |          | 0.04                    |          |
| 136.00    | MRB  |          | 0.14                    |          |

## MAGNETIC SUSCEPTIBILITY LOG

| Depth (m) | Unit | Modifier | Magnetic Susceptibility | Comments |
|-----------|------|----------|-------------------------|----------|
| 137.00    | MRB  |          | 0.16                    |          |
| 138.00    | MRB  |          | 0.98                    |          |
| 139.00    | MRB  |          | 0.10                    |          |
| 140.00    | VCL  |          | 8.17                    |          |
| 141.00    | MRB  |          | 0.04                    |          |
| 142.00    | MRB  |          | 0.02                    |          |
| 143.00    | MRB  |          | 0.02                    |          |
| 144.00    | MRB  |          | 0.14                    |          |
| 145.00    | MRB  |          | 0.14                    |          |
| 146.00    | MRB  |          | 0.02                    |          |
| 147.00    | MRB  |          | 0.47                    |          |
| 148.00    | MRB  |          | 0.45                    |          |
| 149.00    | MRB  |          | 0.28                    |          |
| 150.00    | MRB  |          | 0.28                    |          |
| 151.00    | MRB  |          | 0.04                    |          |
| 152.00    | VCL  |          | 64.10                   |          |
| 153.00    | MRB  |          | 0.02                    |          |
| 154.00    | MRB  |          | 0.00                    |          |
| 155.00    | VCL  |          | 0.67                    |          |
| 156.00    | VCL  |          | 19.10                   |          |
| 157.00    | MRB  |          | 2.82                    |          |
| 158.00    | MRB  |          | 0.14                    |          |
| 159.00    | MRB  |          | 0.04                    |          |
| 160.00    | MRB  |          | 0.04                    |          |
| 161.00    | MRB  |          | 0.51                    |          |
| 162.00    | MRB  |          | 0.08                    |          |
| 163.00    | VCL  |          | 0.24                    |          |
| 164.00    | VCL  |          | 0.36                    |          |
| 165.00    | MRB  |          | 0.57                    |          |
| 166.00    | MRB  |          | 0.36                    |          |
| 167.00    | MRB  |          | 0.02                    |          |
| 168.00    | MRB  |          | 0.06                    |          |
| 169.00    | MRB  |          | 0.08                    |          |
| 170.00    | MRB  |          | 0.12                    |          |
| 171.00    | QTE  |          | 0.08                    |          |
| 172.00    | QTE  |          | 0.20                    |          |
| 173.00    | QTE  |          | 0.30                    |          |
| 174.00    | QTE  |          | 0.30                    |          |
| 175.00    | QTE  |          | 0.31                    |          |
| 176.00    | QTE  |          | 0.46                    |          |
| 177.00    | MRB  |          | 0.08                    |          |
| 178.00    | QTE  |          | 0.02                    |          |
| 179.00    | VCL  |          | 0.02                    |          |
| 180.00    | QTE  |          | 0.02                    |          |
| 181.00    | QTE  |          | 1.56                    |          |
| 182.00    | QTE  |          | 2.89                    |          |

## MAGNETIC SUSCEPTIBILITY LOG

| Depth (m) | Unit | Modifier | Magnetic Susceptibility | Comments |
|-----------|------|----------|-------------------------|----------|
| 183.00    | QTE  |          | 0.10                    |          |
| 184.00    | QTE  |          | 0.80                    |          |
| 185.00    | VCL  |          | 0.80                    |          |
| 186.00    | VCL  |          | 0.80                    |          |
| 187.00    | VCL  |          | 20.40                   |          |
| 188.00    | VCL  |          | 0.10                    |          |
| 189.00    | VCL  |          | 0.21                    |          |
| 190.00    | VCL  |          | 0.21                    |          |
| 191.00    | VCL  |          | 0.02                    |          |
| 192.00    | VCL  |          | 0.04                    |          |
| 193.00    | VCL  |          | 0.05                    |          |
| 194.00    | VCL  |          | 0.06                    |          |
| 195.00    | VCL  |          | 0.06                    |          |
| 196.00    | VCL  |          | 0.28                    |          |
| 197.00    | VCL  |          | 0.30                    |          |
| 198.00    | VCL  |          | 0.28                    |          |
| 199.00    | VCL  |          | 0.76                    |          |
| 200.00    | VCL  |          | 0.50                    |          |
| 201.00    | VCL  |          | 0.50                    |          |
| 202.00    | VCL  |          | 0.50                    |          |
| 203.00    | VCL  |          | 0.49                    |          |
| 204.00    | VCL  |          | 0.08                    |          |
| 205.00    | VCL  |          | 0.08                    |          |
| 206.00    | VCL  |          | 0.04                    |          |
| 207.00    | VCL  |          | 0.02                    |          |
| 208.00    | VCL  |          | 0.02                    |          |
| 209.00    | VCL  |          | 0.02                    |          |
| 210.00    | VCL  |          | 0.02                    |          |
| 211.00    | VCL  |          | 0.04                    |          |
| 212.00    | VCL  |          | 0.04                    |          |
| 213.00    | VCL  |          | 0.20                    |          |
| 214.00    | VCL  |          | 0.20                    |          |
| 215.00    | VCL  |          | 0.20                    |          |
| 216.00    | VCL  |          | 0.10                    |          |
| 217.00    | VCL  |          | 0.08                    |          |
| 218.00    | VCL  |          | 0.20                    |          |
| 219.00    | VCL  |          | 0.42                    |          |
| 220.00    | QTE  |          | 0.17                    |          |
| 221.00    | QTE  |          | 0.16                    |          |
| 222.00    | VCL  |          | 0.17                    |          |
| 223.00    | VCL  |          | 0.17                    |          |
| 224.00    | VCL  |          | 0.20                    |          |
| 225.00    | VCL  |          | 0.82                    |          |
| 226.00    | VCL  |          | 0.86                    |          |
| 227.00    | QTE  |          | 0.04                    |          |
| 228.00    | QTE  |          | 0.06                    |          |

## MAGNETIC SUSCEPTIBILITY LOG

| Depth (m) | Unit | Modifier | Magnetic Susceptibility | Comments |
|-----------|------|----------|-------------------------|----------|
| 229.00    | QTE  |          | 0.47                    |          |
| 230.00    | VCL  |          | 1.39                    |          |
| 231.00    | QTE  |          | 0.32                    |          |
| 232.00    | VCL  |          | 6.27                    |          |
| 233.00    | VCL  |          | 0.75                    |          |
| 234.00    | VCL  |          | 0.79                    |          |
| 235.00    | VCL  |          | 0.36                    |          |
| 236.00    | VCL  |          | 0.75                    |          |
| 237.00    | VCL  |          | 0.79                    |          |
| 238.00    | VCL  |          | 0.77                    |          |
| 239.00    | VCL  |          | 0.80                    |          |
| 240.00    | VCL  |          | 0.20                    |          |
| 241.00    | VCL  |          | 0.56                    |          |
| 242.00    | VCL  |          | 0.70                    |          |
| 243.00    | VCL  |          | 0.90                    |          |
| 244.00    | VCL  |          | 0.75                    |          |
| 245.00    | MRB  |          | 1.47                    |          |
| 246.00    | MRB  |          | 0.24                    |          |
| 247.00    | MRB  |          | 0.24                    |          |
| 248.00    | MRB  |          | 3.73                    |          |
| 249.00    | VCL  |          | 0.02                    |          |
| 250.00    | VCL  |          | 0.18                    |          |
| 251.00    | VCL  |          | 1.90                    |          |
| 252.00    | VCL  |          | 0.32                    |          |
| 253.00    | VCL  |          | 0.59                    |          |
| 254.00    | MRB  |          | 0.04                    |          |
| 255.00    | MRB  |          | 0.06                    |          |
| 256.00    | MRB  |          | 0.04                    |          |
| 257.00    | MRB  |          | 0.02                    |          |
| 258.00    | MRB  |          | 0.02                    |          |
| 259.00    | MRB  |          | 0.02                    |          |
| 260.00    | MRB  |          | 0.02                    |          |
| 261.00    | VCL  |          | 0.05                    |          |
| 262.00    | VCL  |          | 0.13                    |          |
| 263.00    | VCL  |          | 0.26                    |          |
| 264.00    | VCL  |          | 0.25                    |          |
| 265.00    | VCL  |          | 0.25                    |          |
| 266.00    | VCL  |          | 0.26                    |          |
| 267.00    | VCL  |          | 0.10                    |          |
| 268.00    | VCL  |          | 0.08                    |          |
| 269.00    | VCL  |          | 0.08                    |          |
| 270.00    | VCL  |          | 0.08                    |          |
| 271.00    | VCL  |          | 0.32                    |          |
| 272.00    | VCL  |          | 0.08                    |          |
| 273.00    | VCL  |          | 0.02                    |          |
| 274.00    | VCL  |          | 1.68                    |          |

## MAGNETIC SUSCEPTIBILITY LOG

| Depth (m)  | Unit | Modifier | Magnetic Susceptibility | Comments |
|------------|------|----------|-------------------------|----------|
| 275.00     | VCL  |          | 29.20                   |          |
| <b>EOH</b> |      |          |                         |          |
|            |      |          |                         |          |

**DENSITY LOG**

**HOLE: MOR-10-02**

| Depth (m) | Unit | Modifier | MINERALS |      |       |   | Comments | Length (cm) | Diameter (cm) | Dry weight | Wet Weight | Density | Specific Gravity |
|-----------|------|----------|----------|------|-------|---|----------|-------------|---------------|------------|------------|---------|------------------|
|           |      |          | Py %     | As % | Other | % |          |             |               |            |            |         |                  |
| 13.55     | VCL  |          | 4        |      |       |   |          | 9.9         | 4.2           | 347.5      | 216.1      | 2.53    | 2.64             |
| 20.96     | OGN  |          | 3        |      |       |   |          | 14.7        | 4.2           | 524.8      | 326.8      | 2.58    | 2.65             |
| 31.20     | VCL  |          | 3        |      |       |   |          | 11.9        | 4.2           | 427.1      | 266.5      | 2.59    | 2.66             |
| 34.94     | VCL  |          | 3        |      |       |   |          | 12.2        | 4.2           | 447.3      | 282.8      | 2.66    | 2.72             |
| 49.96     | VCL  |          | 3        |      |       |   |          | 10.3        | 4.2           | 370.6      | 233.3      | 2.60    | 2.70             |
| 80.54     | VCL  |          | 20       |      |       |   |          | 14.5        | 4.2           | 581.8      | 388.5      | 2.91    | 3.01             |
| 87.50     | VCL  |          | 10       |      |       |   |          | 13.2        | 4.2           | 488.8      | 320.5      | 2.68    | 2.90             |
| 129.52    | MRB  |          |          |      |       |   |          | 11.8        | 4.2           | 434.5      | 278.1      | 2.67    | 2.78             |
| 134.43    | MRB  |          | 3        |      |       |   |          | 12.7        | 4.2           | 501.2      | 327.8      | 2.86    | 2.89             |
| 186.84    | QTE  |          | 3        |      |       |   |          | 10.1        | 4.2           | 401.7      | 267.3      | 2.89    | 2.99             |
| 197.40    | VCL  |          | 5        |      | Po-Bo | T |          | 13.0        | 4.2           | 475.0      | 303.1      | 2.65    | 2.76             |
| 201.08    | VCL  |          | 5        |      | Po-Bo | T |          | 11.6        | 4.2           | 437.4      | 277.8      | 2.71    | 2.74             |
| 204.85    | VCL  |          | 5        |      | Po-Bo | T |          | 12.1        | 4.2           | 454.4      | 296.4      | 2.71    | 2.88             |
| 233.52    | VCL  |          | 3        |      | Mt    | T |          | 11.5        | 4.2           | 476.5      | 318.4      | 3.00    | 3.01             |
|           |      |          |          |      | Po    | W |          |             |               |            |            |         |                  |
|           |      |          |          |      |       |   |          |             |               |            |            |         |                  |
|           |      |          |          |      |       |   |          |             |               |            |            |         |                  |
|           |      |          |          |      |       |   |          |             |               |            |            |         |                  |
|           |      |          |          |      |       |   |          |             |               |            |            |         |                  |
|           |      |          |          |      |       |   |          |             |               |            |            |         |                  |
|           |      |          |          |      |       |   |          |             |               |            |            |         |                  |
|           |      |          |          |      |       |   |          |             |               |            |            |         |                  |
|           |      |          |          |      |       |   |          |             |               |            |            |         |                  |

**APPENDIX III**  
**CERTIFICATES OF ANALYSIS**



# ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

2103 Dollarton Hwy

North Vancouver BC V7H 0A7

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: ARCHER, CATHRO AND ASSOCIATES (1981)  
LIMITED  
1016-510 W HASTINGS ST  
VANCOUVER BC V6B 1L8

Page: 1  
Finalized Date: 9-JUL-2010  
Account: F

## CERTIFICATE WH10082497

Project: MOR

P.O. No.:

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 21-JUN-2010.

The following have access to data associated with this certificate:

JOAN MARIACHER

BILL WENGZYNOWSKI

## SAMPLE PREPARATION

| ALS CODE | DESCRIPTION                    |
|----------|--------------------------------|
| WEI-21   | Received Sample Weight         |
| BAG-01   | Bulk Master for Storage        |
| CRU-QC   | Crushing QC Test               |
| LOG-24   | Pulp Login - Rcd w/o Barcode   |
| LOG-22   | Sample login - Rcd w/o BarCode |
| CRU-31   | Fine crushing - 70% <2mm       |
| SPL-21   | Split sample - riffle splitter |
| PUL-31   | Pulverize split to 85% <75 um  |
| PUL-QC   | Pulverizing QC Test            |

## ANALYTICAL PROCEDURES

| ALS CODE | DESCRIPTION                    | INSTRUMENT |
|----------|--------------------------------|------------|
| ME-ICP41 | 35 Element Aqua Regia ICP-AES  | ICP-AES    |
| ME-OG46  | Ore Grade Elements - AquaRegia | ICP-AES    |
| Cu-OG46  | Ore Grade Cu - Aqua Regia      | VARIABLE   |
| Pb-OG46  | Ore Grade Pb - Aqua Regia      | VARIABLE   |
| Zn-OG46  | Ore Grade Zn - Aqua Regia      | VARIABLE   |
| Au-AA24  | Au 50g FA AA finish            | AAS        |

To: ARCHER, CATHRO AND ASSOCIATES (1981) LIMITED  
ATTN: JOAN MARIACHER  
1016-510 W HASTINGS ST  
VANCOUVER BC V6B 1L8

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



# ALS Chemex

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ALS Canada Ltd.

2103 Dollarton Hwy  
North Vancouver BC V7H 0A7

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To: ARCHER, CATHRO AND ASSOCIATES (1981)

LIMITED

1016-510 W HASTINGS ST

VANCOUVER BC V6B 1L8

Page: 2 - A

Total # Pages: 2 (A - C)

Finalized Date: 9-JUL-2010

Account: F

Project: MOR

## CERTIFICATE OF ANALYSIS WH10082497

| Sample Description | Method Analyte Units LOR | WEI-21          | Au-AA24   | ME-ICP41  | ME-ICP41 | ME-ICP41  | ME-ICP41 | ME-ICP41  | ME-ICP41  | ME-ICP41  | ME-ICP41 | ME-ICP41  | ME-ICP41  | ME-ICP41  | ME-ICP41  | ME-ICP41 |
|--------------------|--------------------------|-----------------|-----------|-----------|----------|-----------|----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|
|                    |                          | Recvd Wt.<br>kg | Au<br>ppm | Ag<br>ppm | Al<br>%  | As<br>ppm | B<br>ppm | Ba<br>ppm | Be<br>ppm | Bi<br>ppm | Ca<br>%  | Cd<br>ppm | Co<br>ppm | Cr<br>ppm | Cu<br>ppm | Fe<br>%  |
|                    |                          | 0.02            | 0.005     | 0.2       | 0.01     | 2         | 10       | 10        | 0.5       | 2         | 0.01     | 0.5       | 1         | 1         | 1         | 0.01     |
| G0557051           |                          | 3.40            | 0.006     | 0.4       | 2.95     | 4         | <10      | 150       | <0.5      | 3         | 1.34     | <0.5      | 15        | 12        | 54        | 5.04     |
| G0557052           |                          | 3.69            | 0.088     | 4.4       | 3.02     | 11        | <10      | 30        | <0.5      | 13        | 1.42     | 5.6       | 35        | 30        | 2890      | 8.49     |
| G0557053           |                          | 3.64            | 0.007     | 0.4       | 2.18     | 4         | <10      | 330       | <0.5      | <2        | 1.48     | <0.5      | 14        | 21        | 168       | 3.66     |
| G0557054           |                          | 3.50            | 0.108     | 6.0       | 1.46     | 5         | <10      | 250       | <0.5      | <2        | 1.01     | 5.5       | 8         | 9         | 131       | 2.30     |
| G0557055           |                          | 3.04            | 0.013     | 1.3       | 3.23     | 5         | <10      | 840       | <0.5      | <2        | 1.79     | <0.5      | 18        | 3         | 74        | 4.98     |
| G0557056           |                          | 0.16            | 2.14      | 13.3      | 0.95     | 24        | <10      | 30        | <0.5      | 6         | 0.28     | 53.8      | 10        | 42        | 4950      | 8.86     |
| G0557057           |                          | 1.74            | 0.290     | 16.1      | 1.23     | 12        | <10      | 180       | <0.5      | <2        | 0.60     | 15.7      | 7         | 4         | 214       | 1.86     |
| G0557058           |                          | 3.93            | 0.012     | 1.1       | 1.22     | 5         | <10      | 300       | <0.5      | <2        | 0.34     | 1.4       | 5         | 4         | 36        | 1.42     |
| G0557059           |                          | 3.62            | <0.005    | 0.3       | 1.53     | 7         | <10      | 190       | <0.5      | <2        | 0.99     | <0.5      | 6         | 7         | 15        | 2.06     |
| G0557060           |                          | 3.92            | <0.005    | 0.3       | 2.29     | 4         | <10      | 170       | <0.5      | <2        | 1.77     | <0.5      | 12        | 9         | 31        | 3.39     |
| G0557061           |                          | 3.96            | 0.007     | <0.2      | 3.87     | 4         | <10      | 330       | <0.5      | <2        | 2.53     | <0.5      | 24        | 38        | 14        | 4.78     |
| G0557062           |                          | 2.48            | <0.005    | <0.2      | 1.30     | 3         | <10      | 350       | <0.5      | <2        | 1.52     | 1.8       | 7         | 6         | 59        | 2.29     |
| G0557063           |                          | 1.99            | 0.064     | 1.1       | 1.68     | 7         | <10      | 120       | <0.5      | <2        | 0.77     | 26.4      | 9         | 4         | 351       | 3.23     |
| G0557064           |                          | 1.83            | 0.030     | 1.0       | 2.36     | 7         | <10      | 120       | <0.5      | <2        | 1.67     | 0.6       | 17        | 23        | 255       | 4.80     |
| G0557065           |                          | 1.42            | 0.425     | 22.5      | 2.43     | 30        | <10      | 30        | <0.5      | 64        | 1.27     | 38.7      | 66        | 22        | 3700      | 18.0     |
| G0557066           |                          | 1.35            | 0.351     | 11.4      | 3.04     | 26        | <10      | 30        | <0.5      | 31        | 0.68     | 18.3      | 36        | 28        | 3820      | 13.35    |
| G0557067           |                          | 1.64            | 0.321     | 28.5      | 2.24     | 46        | <10      | 20        | <0.5      | 74        | 0.79     | 50.7      | 78        | 19        | 4450      | 22.7     |
| G0557068           |                          | 2.57            | <0.005    | <0.2      | 0.05     | 4         | <10      | 20        | <0.5      | <2        | 19.1     | <0.5      | <1        | 1         | 40        | 0.50     |
| G0557069           |                          | 1.48            | 0.448     | 15.0      | 2.54     | 28        | <10      | 40        | <0.5      | 18        | 0.77     | 33.1      | 45        | 10        | >10000    | 17.0     |
| G0557070           |                          | 1.56            | 0.033     | 2.2       | 1.99     | 10        | <10      | 120       | <0.5      | 3         | 1.10     | 1.7       | 12        | 12        | 1075      | 3.73     |
| G0557071           |                          | 1.38            | 0.744     | 28.6      | 2.31     | 26        | <10      | 50        | <0.5      | 38        | 0.46     | 12.9      | 82        | 14        | >10000    | 13.6     |
| G0557072           |                          | 1.01            | 0.079     | 6.0       | 2.32     | 13        | <10      | 70        | <0.5      | 16        | 1.53     | 9.4       | 22        | 20        | 1680      | 6.53     |
| G0557073           |                          | 0.31            | 0.274     | 99.0      | 1.21     | 241       | <10      | 90        | <0.5      | 31        | 0.60     | 24.0      | 10        | 30        | 6290      | 5.16     |
| G0557074           |                          | 1.32            | 0.323     | 3.6       | 0.97     | 13        | <10      | 30        | <0.5      | 12        | 1.02     | 4.0       | 21        | 11        | 5610      | 5.93     |
| G0557075           |                          | 1.61            | 0.200     | 8.4       | 2.49     | 30        | <10      | 60        | <0.5      | 22        | 1.03     | 9.8       | 64        | 9         | 5250      | 12.60    |
| G0557076           |                          | 1.61            | 0.526     | 34.8      | 1.08     | 60        | <10      | 20        | <0.5      | 141       | 1.03     | 16.2      | 204       | 10        | >10000    | 24.3     |
| G0557077           |                          | 0.74            | 0.737     | 41.8      | 1.05     | 70        | <10      | 20        | <0.5      | 169       | 1.06     | 14.7      | 266       | 1         | >10000    | 28.5     |
| G0557078           |                          | 1.43            | 0.389     | 17.9      | 3.45     | 30        | <10      | 50        | <0.5      | 49        | 2.04     | 28.5      | 78        | 73        | 5240      | 16.1     |
| G0557079           |                          | 1.77            | 1.130     | 49.1      | 1.86     | 40        | <10      | 30        | <0.5      | 175       | 0.86     | 62.1      | 132       | 6         | >10000    | 24.3     |
| G0557080           |                          | 2.15            | 0.014     | 0.6       | 3.99     | 11        | <10      | 240       | <0.5      | <2        | 2.17     | 0.6       | 25        | 11        | 210       | 6.30     |
| G0557081           |                          | 2.38            | <0.005    | 0.3       | 3.82     | 6         | <10      | 220       | <0.5      | <2        | 2.38     | <0.5      | 21        | 27        | 50        | 5.20     |
| G0557082           |                          | 1.86            | <0.005    | <0.2      | 4.02     | 5         | <10      | 40        | <0.5      | <2        | 2.85     | <0.5      | 23        | 20        | 46        | 5.35     |
| G0557083           |                          | 1.66            | 0.024     | 1.7       | 5.00     | 16        | <10      | 80        | <0.5      | 4         | 1.94     | <0.5      | 47        | 56        | 5290      | 8.87     |
| G0557084           |                          | 1.56            | 0.027     | 1.6       | 3.53     | 10        | <10      | 80        | <0.5      | 5         | 1.04     | <0.5      | 38        | 18        | 4650      | 6.58     |
| G0557085           |                          | 2.22            | <0.005    | <0.2      | 0.05     | <2        | <10      | 10        | <0.5      | <2        | 19.4     | <0.5      | 2         | 1         | 24        | 0.42     |
| G0557086           |                          | 1.61            | 0.019     | 1.2       | 4.62     | 8         | <10      | 70        | <0.5      | 7         | 0.81     | <0.5      | 36        | 13        | 2790      | 8.67     |



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Finalized Date: 9-JUL-2010

Account: F

Project: MOR

## CERTIFICATE OF ANALYSIS WH10082497

| Sample Description | Method Analyte Units LOR | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 |     |
|--------------------|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----|
|                    |                          | Ga       | Hg       | K        | La       | Mg       | Mn       | Mo       | Na       | Ni       | P        | Pb       | S        | Sb       | Sc       | Sr  |
|                    |                          | ppm      | ppm      | %        | ppm      | %        | ppm      | ppm      | %        | ppm      | ppm      | ppm      | %        | ppm      | ppm      | ppm |
|                    |                          | 10       | 1        | 0.01     | 10       | 0.01     | 5        | 1        | 0.01     | 1        | 10       | 2        | 0.01     | 2        | 1        | 1   |
| G0557051           |                          | 10       | <1       | 0.21     | 10       | 2.80     | 1005     | <1       | 0.05     | 6        | 600      | 20       | 0.68     | <2       | 10       | 24  |
| G0557052           |                          | 10       | 2        | 0.18     | <10      | 2.90     | 954      | 1        | 0.05     | 12       | 470      | 108      | 5.03     | <2       | 10       | 25  |
| G0557053           |                          | 10       | <1       | 0.25     | 10       | 2.04     | 743      | <1       | 0.08     | 10       | 470      | 30       | 0.31     | <2       | 8        | 23  |
| G0557054           |                          | 10       | <1       | 0.58     | 10       | 1.08     | 539      | 2        | 0.04     | 5        | 360      | 300      | 1.00     | <2       | 3        | 21  |
| G0557055           |                          | 10       | <1       | 2.13     | <10      | 2.80     | 1400     | <1       | 0.04     | 6        | 550      | 17       | 0.31     | <2       | 12       | 47  |
| G0557056           |                          | <10      | 1        | 0.10     | <10      | 0.96     | 330      | 12       | 0.02     | 23       | 110      | 234      | >10.0    | <2       | 2        | 8   |
| G0557057           |                          | <10      | 2        | 0.71     | 10       | 0.76     | 413      | <1       | 0.03     | 4        | 240      | 1500     | 1.25     | 3        | 2        | 21  |
| G0557058           |                          | <10      | <1       | 0.49     | 10       | 0.90     | 288      | 1        | 0.08     | 3        | 460      | 24       | 0.69     | <2       | 2        | 12  |
| G0557059           |                          | <10      | <1       | 0.42     | 10       | 1.24     | 525      | <1       | 0.07     | 5        | 390      | 21       | 0.36     | <2       | 3        | 23  |
| G0557060           |                          | 10       | <1       | 0.49     | 10       | 2.03     | 834      | 2        | 0.06     | 7        | 450      | 15       | 0.36     | <2       | 7        | 35  |
| G0557061           |                          | 10       | 1        | 0.45     | 10       | 4.18     | 1185     | <1       | 0.05     | 19       | 330      | 9        | 0.07     | <2       | 19       | 56  |
| G0557062           |                          | <10      | <1       | 0.36     | 10       | 1.14     | 646      | <1       | 0.07     | 5        | 310      | 23       | 0.69     | <2       | 4        | 30  |
| G0557063           |                          | 10       | 1        | 0.36     | 10       | 1.32     | 463      | <1       | 0.08     | 3        | 430      | 253      | 1.70     | <2       | 4        | 17  |
| G0557064           |                          | 10       | 1        | 0.56     | <10      | 2.07     | 748      | <1       | 0.06     | 11       | 560      | 89       | 1.64     | <2       | 9        | 28  |
| G0557065           |                          | 10       | 7        | 0.29     | <10      | 2.18     | 745      | 9        | 0.04     | 14       | 410      | 2270     | >10.0    | <2       | 8        | 30  |
| G0557066           |                          | 10       | 4        | 0.15     | <10      | 2.88     | 712      | 10       | 0.05     | 11       | 390      | 994      | >10.0    | <2       | 7        | 13  |
| G0557067           |                          | 10       | 9        | 0.12     | <10      | 2.01     | 621      | 11       | 0.04     | 10       | 270      | 2520     | >10.0    | <2       | 4        | 23  |
| G0557068           |                          | <10      | <1       | 0.02     | 10       | 12.05    | 190      | <1       | 0.02     | 5        | 200      | 11       | <0.01    | <2       | <1       | 53  |
| G0557069           |                          | 10       | 6        | 0.22     | <10      | 2.30     | 656      | 10       | 0.04     | 6        | 250      | 922      | >10.0    | <2       | 4        | 15  |
| G0557070           |                          | 10       | 1        | 0.18     | 10       | 1.83     | 640      | <1       | 0.08     | 7        | 420      | 157      | 1.30     | <2       | 7        | 21  |
| G0557071           |                          | 10       | 4        | 0.28     | <10      | 1.99     | 526      | 2        | 0.05     | 9        | 330      | 1100     | >10.0    | <2       | 7        | 11  |
| G0557072           |                          | 10       | 2        | 0.41     | <10      | 2.14     | 769      | 1        | 0.06     | 9        | 400      | 643      | 4.85     | <2       | 9        | 20  |
| G0557073           |                          | <10      | 1        | 0.09     | <10      | 0.74     | 1600     | 20       | 0.05     | 25       | 440      | >10000   | 2.38     | 402      | 4        | 26  |
| G0557074           |                          | <10      | <1       | 0.09     | 10       | 0.79     | 458      | 1        | 0.11     | 3        | 390      | 246      | 4.36     | 3        | 6        | 22  |
| G0557075           |                          | 10       | 1        | 0.23     | <10      | 2.20     | 759      | 2        | 0.04     | 6        | 440      | 486      | >10.0    | <2       | 7        | 13  |
| G0557076           |                          | <10      | 3        | 0.15     | <10      | 0.85     | 436      | 2        | 0.04     | 4        | 200      | 2620     | >10.0    | <2       | 4        | 11  |
| G0557077           |                          | <10      | 1        | 0.10     | <10      | 0.85     | 442      | 2        | 0.04     | 3        | 180      | 3220     | >10.0    | <2       | 4        | 11  |
| G0557078           |                          | 10       | 4        | 0.17     | <10      | 3.50     | 1205     | 4        | 0.02     | 26       | 470      | 1390     | >10.0    | 4        | 13       | 28  |
| G0557079           |                          | <10      | 11       | 0.18     | <10      | 1.60     | 541      | 6        | 0.02     | 8        | 290      | 3970     | >10.0    | <2       | 6        | 18  |
| G0557080           |                          | 10       | <1       | 0.18     | <10      | 3.87     | 1305     | <1       | 0.04     | 4        | 820      | 38       | 0.49     | 2        | 17       | 33  |
| G0557081           |                          | 10       | <1       | 0.10     | <10      | 3.79     | 1240     | <1       | 0.05     | 12       | 600      | 31       | 0.06     | <2       | 18       | 42  |
| G0557082           |                          | 10       | <1       | 0.06     | <10      | 4.12     | 1285     | <1       | 0.04     | 13       | 570      | 15       | 0.03     | <2       | 22       | 49  |
| G0557083           |                          | 10       | <1       | 0.08     | <10      | 5.19     | 1405     | 1        | 0.02     | 19       | 580      | 26       | 3.29     | <2       | 16       | 32  |
| G0557084           |                          | 10       | <1       | 0.16     | <10      | 3.41     | 978      | 1        | 0.04     | 10       | 520      | 9        | 2.21     | <2       | 12       | 16  |
| G0557085           |                          | <10      | <1       | 0.02     | <10      | 12.50    | 197      | <1       | 0.01     | <1       | 260      | 5        | <0.01    | <2       | <1       | 45  |
| G0557086           |                          | 10       | <1       | 0.17     | <10      | 4.51     | 1180     | <1       | 0.02     | 4        | 730      | 6        | 3.18     | <2       | 9        | 10  |



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Account: F

Project: MOR

## CERTIFICATE OF ANALYSIS WH10082497

| Sample Description | Method<br>Analyte<br>Units<br>LOR | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | Cu-OG46 | Pb-OG46 | Zn-OG46 |       |
|--------------------|-----------------------------------|----------|----------|----------|----------|----------|----------|---------|---------|---------|-------|
|                    |                                   | Th       | Ti       | Ti       | U        | V        | W        | Zn      | Cu      | Pb      | Zn    |
|                    |                                   | ppm      | %        | ppm      | ppm      | ppm      | ppm      | ppm     | %       | %       | %     |
|                    |                                   | 20       | 0.01     | 10       | 10       | 1        | 10       | 2       | 0.001   | 0.001   | 0.001 |
| G0557051           |                                   | <20      | 0.05     | <10      | <10      | 81       | <10      | 262     |         |         |       |
| G0557052           |                                   | <20      | 0.03     | <10      | <10      | 83       | <10      | 1910    |         |         |       |
| G0557053           |                                   | <20      | 0.04     | <10      | <10      | 54       | <10      | 246     |         |         |       |
| G0557054           |                                   | <20      | 0.05     | <10      | <10      | 20       | <10      | 1050    |         |         |       |
| G0557055           |                                   | <20      | 0.25     | <10      | <10      | 111      | <10      | 395     |         |         |       |
| G0557056           |                                   | <20      | 0.02     | <10      | <10      | 15       | 10       | >10000  |         |         | 1.370 |
| G0557057           |                                   | <20      | 0.04     | <10      | <10      | 14       | <10      | 2100    |         |         |       |
| G0557058           |                                   | <20      | 0.02     | <10      | <10      | 11       | <10      | 276     |         |         |       |
| G0557059           |                                   | <20      | 0.03     | <10      | <10      | 15       | <10      | 89      |         |         |       |
| G0557060           |                                   | <20      | 0.04     | <10      | <10      | 47       | <10      | 149     |         |         |       |
| G0557061           |                                   | <20      | 0.05     | <10      | <10      | 120      | <10      | 141     |         |         |       |
| G0557062           |                                   | <20      | 0.02     | <10      | <10      | 19       | <10      | 263     |         |         |       |
| G0557063           |                                   | <20      | 0.02     | <10      | <10      | 29       | <10      | 1880    |         |         |       |
| G0557064           |                                   | <20      | 0.07     | <10      | <10      | 76       | <10      | 483     |         |         |       |
| G0557065           |                                   | <20      | 0.04     | <10      | <10      | 71       | <10      | >10000  |         |         | 1.470 |
| G0557066           |                                   | <20      | 0.04     | <10      | <10      | 62       | <10      | 7360    |         |         |       |
| G0557067           |                                   | <20      | 0.03     | <10      | <10      | 47       | 10       | >10000  |         |         | 1.880 |
| G0557068           |                                   | <20      | <0.01    | <10      | <10      | 3        | <10      | 73      |         |         |       |
| G0557069           |                                   | <20      | 0.04     | <10      | <10      | 47       | 10       | >10000  | 1.055   |         | 1.250 |
| G0557070           |                                   | <20      | 0.03     | <10      | <10      | 47       | <10      | 1160    |         |         |       |
| G0557071           |                                   | <20      | 0.03     | <10      | <10      | 44       | <10      | 4250    | 2.06    |         |       |
| G0557072           |                                   | <20      | 0.05     | <10      | <10      | 62       | <10      | 3300    |         |         |       |
| G0557073           |                                   | <20      | 0.08     | <10      | <10      | 40       | <10      | 4940    |         | 0.956   |       |
| G0557074           |                                   | <20      | 0.03     | <10      | <10      | 23       | <10      | 1390    |         |         |       |
| G0557075           |                                   | <20      | 0.03     | <10      | <10      | 69       | <10      | 3310    |         |         |       |
| G0557076           |                                   | <20      | 0.01     | <10      | <10      | 32       | <10      | 4860    | 1.265   |         |       |
| G0557077           |                                   | <20      | 0.01     | <10      | <10      | 31       | <10      | 4270    | 1.255   |         |       |
| G0557078           |                                   | <20      | 0.01     | <10      | <10      | 77       | <10      | 8820    |         |         |       |
| G0557079           |                                   | <20      | 0.01     | <10      | <10      | 41       | 10       | >10000  | 1.425   |         | 1.975 |
| G0557080           |                                   | <20      | 0.03     | <10      | <10      | 159      | <10      | 875     |         |         |       |
| G0557081           |                                   | <20      | 0.02     | <10      | <10      | 141      | <10      | 290     |         |         |       |
| G0557082           |                                   | <20      | 0.02     | <10      | <10      | 175      | <10      | 92      |         |         |       |
| G0557083           |                                   | <20      | 0.02     | <10      | <10      | 121      | <10      | 106     |         |         |       |
| G0557084           |                                   | <20      | 0.02     | <10      | <10      | 94       | <10      | 98      |         |         |       |
| G0557085           |                                   | <20      | <0.01    | <10      | <10      | 2        | <10      | 15      |         |         |       |
| G0557086           |                                   | <20      | 0.02     | <10      | <10      | 85       | <10      | 106     |         |         |       |



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## CERTIFICATE WH10082498

Project: MOR

P.O. No.:

This report is for 36 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 21-JUN-2010.

The following have access to data associated with this certificate:

JOAN MARIACHER

BILL WENGZYNOWSKI

## SAMPLE PREPARATION

| ALS CODE | DESCRIPTION                    |
|----------|--------------------------------|
| WEI-21   | Received Sample Weight         |
| BAG-01   | Bulk Master for Storage        |
| CRU-QC   | Crushing QC Test               |
| LOG-24   | Pulp Login - Rcd w/o Barcode   |
| LOG-22   | Sample login - Rcd w/o BarCode |
| CRU-31   | Fine crushing - 70% <2mm       |
| SPL-21   | Split sample - riffle splitter |
| PUL-31   | Pulverize split to 85% <75 um  |
| PUL-QC   | Pulverizing QC Test            |

## ANALYTICAL PROCEDURES

| ALS CODE | DESCRIPTION                    | INSTRUMENT |
|----------|--------------------------------|------------|
| Zn-OG46  | Ore Grade Zn - Aqua Regia      | VARIABLE   |
| ME-ICP41 | 35 Element Aqua Regia ICP-AES  | ICP-AES    |
| ME-OG46  | Ore Grade Elements - AquaRegia | ICP-AES    |

To: ARCHER, CATHRO AND ASSOCIATES (1981) LIMITED  
ATTN: JOAN MARIACHER  
1016-510 W HASTINGS ST  
VANCOUVER BC V6B 1L8

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



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## CERTIFICATE OF ANALYSIS WH10082498

| Sample Description | Method<br>Analyte<br>Units<br>LOR | WEI-21          | ME-ICP41  | ME-ICP41 | ME-ICP41  | ME-ICP41 | ME-ICP41  | ME-ICP41  | ME-ICP41  | ME-ICP41 | ME-ICP41  | ME-ICP41  | ME-ICP41  | ME-ICP41  | ME-ICP41 | ME-ICP41  |
|--------------------|-----------------------------------|-----------------|-----------|----------|-----------|----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|
|                    |                                   | Recvd Wt.<br>kg | Ag<br>ppm | Al<br>%  | As<br>ppm | B<br>ppm | Ba<br>ppm | Be<br>ppm | Bi<br>ppm | Ca<br>%  | Cd<br>ppm | Co<br>ppm | Cr<br>ppm | Cu<br>ppm | Fe<br>%  | Ga<br>ppm |
|                    |                                   | 0.02            | 0.2       | 0.01     | 2         | 10       | 10        | 0.5       | 2         | 0.01     | 0.5       | 1         | 1         | 1         | 0.01     | 10        |
| G0557087           |                                   | 2.14            | <0.2      | 1.53     | <2        | <10      | 40        | <0.5      | <2        | 0.39     | <0.5      | 3         | 4         | 7         | 2.61     | 10        |
| G0557088           |                                   | 2.42            | <0.2      | 1.52     | 2         | <10      | 30        | <0.5      | <2        | 0.34     | <0.5      | 3         | 3         | 6         | 2.91     | 10        |
| G0557089           |                                   | 3.75            | <0.2      | 1.38     | <2        | <10      | 30        | <0.5      | <2        | 0.88     | <0.5      | 4         | 4         | 11        | 2.83     | <10       |
| G0557090           |                                   | 3.89            | <0.2      | 1.34     | <2        | <10      | 50        | <0.5      | <2        | 1.10     | <0.5      | 6         | 3         | 20        | 2.72     | <10       |
| G0557091           |                                   | 3.48            | <0.2      | 0.92     | <2        | <10      | 40        | <0.5      | <2        | 0.30     | <0.5      | 1         | 5         | 19        | 1.63     | <10       |
| G0557092           |                                   | 4.02            | 0.3       | 2.49     | 4         | <10      | 280       | <0.5      | <2        | 1.84     | <0.5      | 15        | 62        | 115       | 3.89     | 10        |
| G0557093           |                                   | 3.35            | <0.2      | 1.32     | 12        | <10      | 260       | <0.5      | <2        | 0.91     | 0.5       | 10        | 40        | 83        | 2.61     | <10       |
| G0557094           |                                   | 3.36            | 0.3       | 1.41     | 14        | <10      | 260       | 0.6       | <2        | 2.56     | <0.5      | 15        | 42        | 64        | 3.16     | <10       |
| G0557095           |                                   | 0.31            | 95.2      | 1.44     | 244       | <10      | 110       | <0.5      | 25        | 0.66     | 23.6      | 11        | 32        | 6140      | 5.25     | <10       |
| G0557096           |                                   | 3.51            | 0.3       | 0.97     | 196       | <10      | 180       | <0.5      | <2        | 2.21     | <0.5      | 14        | 28        | 78        | 2.70     | <10       |
| G0557097           |                                   | 3.69            | <0.2      | 1.85     | 21        | <10      | 320       | 0.6       | 2         | 1.35     | <0.5      | 14        | 44        | 76        | 3.25     | <10       |
| G0557098           |                                   | 4.17            | 0.2       | 1.79     | 13        | <10      | 150       | 0.6       | <2        | 1.63     | <0.5      | 14        | 52        | 53        | 2.92     | <10       |
| G0557099           |                                   | 3.68            | 0.3       | 1.66     | 5         | <10      | 350       | 0.5       | <2        | 1.60     | <0.5      | 13        | 36        | 68        | 2.94     | <10       |
| G0557100           |                                   | 3.97            | <0.2      | 1.80     | 7         | <10      | 270       | 0.8       | <2        | 2.40     | <0.5      | 15        | 41        | 42        | 3.17     | 10        |
| G0557101           |                                   | 2.18            | <0.2      | 1.58     | 5         | <10      | 240       | 0.6       | <2        | 1.94     | <0.5      | 11        | 74        | 40        | 2.79     | 10        |
| G0557102           |                                   | 2.25            | <0.2      | 0.04     | 2         | <10      | 10        | <0.5      | <2        | 19.7     | <0.5      | 1         | 1         | 2         | 0.40     | <10       |
| G0557103           |                                   | 2.78            | <0.2      | 0.92     | 5         | <10      | 180       | 0.5       | <2        | 1.99     | <0.5      | 10        | 67        | 21        | 1.95     | <10       |
| G0557104           |                                   | 2.95            | <0.2      | 1.87     | 2         | <10      | 160       | <0.5      | <2        | 2.62     | <0.5      | 18        | 114       | 60        | 2.99     | <10       |
| G0557105           |                                   | 4.33            | <0.2      | 0.64     | <2        | <10      | 90        | <0.5      | <2        | 16.9     | 0.5       | 6         | 40        | 3         | 1.31     | <10       |
| G0557106           |                                   | 4.12            | <0.2      | 2.22     | 3         | <10      | 250       | 0.5       | 3         | 2.76     | <0.5      | 12        | 104       | 59        | 3.66     | 10        |
| G0557107           |                                   | 4.05            | 0.3       | 2.17     | 9         | <10      | 160       | <0.5      | <2        | 2.56     | <0.5      | 17        | 80        | 66        | 4.31     | 10        |
| G0557108           |                                   | 0.16            | 14.2      | 1.78     | 27        | <10      | 40        | <0.5      | 5         | 0.32     | 56.1      | 9         | 50        | 5090      | 9.30     | <10       |
| G0557109           |                                   | 4.00            | 0.4       | 0.46     | 118       | <10      | 150       | <0.5      | <2        | 2.55     | <0.5      | 18        | 28        | 85        | 4.35     | <10       |
| G0557110           |                                   | 3.73            | 0.5       | 0.56     | 256       | <10      | 80        | <0.5      | <2        | 2.72     | <0.5      | 15        | 16        | 72        | 3.39     | <10       |
| G0557111           |                                   | 4.62            | 0.2       | 1.71     | 34        | <10      | 80        | 0.5       | <2        | 2.44     | <0.5      | 13        | 20        | 48        | 3.56     | 10        |
| G0557112           |                                   | 3.98            | 0.3       | 1.96     | 126       | <10      | 40        | <0.5      | <2        | 2.03     | <0.5      | 13        | 40        | 94        | 3.68     | <10       |
| G0557113           |                                   | 4.07            | <0.2      | 1.33     | 20        | <10      | 80        | <0.5      | <2        | 0.30     | <0.5      | 10        | 35        | 77        | 2.89     | 10        |
| G0557114           |                                   | 3.62            | 0.2       | 1.75     | 2         | <10      | 70        | <0.5      | <2        | 0.74     | <0.5      | 12        | 36        | 102       | 3.34     | 10        |
| G0557115           |                                   | 1.96            | <0.2      | 0.04     | 2         | <10      | 10        | <0.5      | <2        | 19.3     | <0.5      | 1         | 1         | 2         | 0.37     | <10       |
| G0557116           |                                   | 3.86            | 0.2       | 1.68     | <2        | <10      | 60        | <0.5      | <2        | 0.65     | <0.5      | 11        | 38        | 59        | 2.96     | 10        |
| G0557117           |                                   | 3.41            | <0.2      | 1.52     | 7         | <10      | 60        | <0.5      | <2        | 0.34     | <0.5      | 9         | 56        | 73        | 2.94     | 10        |
| G0557118           |                                   | 4.02            | <0.2      | 1.64     | 6         | <10      | 80        | 0.5       | <2        | 0.57     | <0.5      | 10        | 66        | 73        | 2.98     | 10        |
| G0557119           |                                   | 3.84            | 0.2       | 1.61     | <2        | <10      | 120       | 0.5       | <2        | 0.99     | <0.5      | 13        | 37        | 99        | 3.23     | 10        |
| G0557120           |                                   | 1.98            | 0.2       | 1.57     | <2        | <10      | 120       | 0.5       | <2        | 0.96     | <0.5      | 13        | 38        | 104       | 3.24     | 10        |
| G0557121           |                                   | 3.87            | 0.2       | 1.59     | <2        | <10      | 90        | <0.5      | <2        | 1.03     | <0.5      | 10        | 35        | 78        | 3.40     | 10        |
| G0557122           |                                   | 3.88            | <0.2      | 2.08     | <2        | <10      | 100       | 0.7       | <2        | 1.46     | <0.5      | 19        | 133       | 91        | 3.60     | 10        |



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Page: 2 - B  
Total # Pages: 2 (A - C)  
Finalized Date: 7-JUL-2010  
Account: F

Project: MOR

## CERTIFICATE OF ANALYSIS WH10082498

| Sample Description | Method  | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 |
|--------------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|                    | Analyte | Hg       | K        | La       | Mg       | Mn       | Mo       | Na       | Ni       | P        | Pb       | S        | Sb       | Sc       | Sr       | Th       |
| Units              |         | ppm      | %        | ppm      | %        | ppm      | ppm      | %        | ppm      | ppm      | ppm      | %        | ppm      | ppm      | ppm      | ppm      |
| LOR                |         | 1        | 0.01     | 10       | 0.01     | 5        | 1        | 0.01     | 1        | 10       | 2        | 0.01     | 2        | 1        | 1        | 20       |
| G0557087           |         | <1       | 0.11     | <10      | 1.23     | 402      | <1       | 0.05     | 1        | 290      | 4        | 0.19     | <2       | 3        | 6        | <20      |
| G0557088           |         | <1       | 0.09     | <10      | 1.08     | 460      | <1       | 0.06     | <1       | 330      | 3        | 0.03     | <2       | 4        | 6        | <20      |
| G0557089           |         | <1       | 0.09     | <10      | 0.95     | 596      | 1        | 0.06     | <1       | 440      | 4        | 0.11     | <2       | 4        | 13       | <20      |
| G0557090           |         | <1       | 0.12     | <10      | 0.89     | 626      | 1        | 0.08     | <1       | 520      | 4        | 0.18     | <2       | 3        | 22       | <20      |
| G0557091           |         | <1       | 0.08     | <10      | 0.58     | 384      | <1       | 0.07     | <1       | 150      | 3        | 0.01     | <2       | 3        | 6        | <20      |
| G0557092           |         | <1       | 0.18     | 10       | 2.48     | 943      | 1        | 0.03     | 36       | 630      | 12       | 0.91     | 3        | 8        | 45       | <20      |
| G0557093           |         | <1       | 0.27     | 10       | 1.16     | 769      | 1        | 0.01     | 38       | 430      | 7        | 0.91     | 2        | 3        | 30       | <20      |
| G0557094           |         | <1       | 0.85     | 10       | 1.22     | 1040     | 2        | 0.02     | 30       | 800      | 7        | 0.93     | <2       | 5        | 137      | <20      |
| G0557095           |         | 2        | 0.16     | <10      | 0.85     | 1630     | 21       | 0.08     | 23       | 440      | 9870     | 2.39     | 389      | 4        | 31       | <20      |
| G0557096           |         | <1       | 0.45     | 10       | 0.86     | 1035     | 1        | 0.02     | 40       | 610      | 23       | 0.53     | 2        | 3        | 107      | <20      |
| G0557097           |         | <1       | 0.30     | 10       | 1.57     | 1155     | 1        | 0.01     | 43       | 620      | 10       | 0.63     | 2        | 3        | 55       | <20      |
| G0557098           |         | <1       | 0.53     | 10       | 1.58     | 1435     | 1        | 0.01     | 35       | 630      | 13       | 0.42     | 2        | 4        | 68       | <20      |
| G0557099           |         | <1       | 0.71     | 10       | 1.47     | 841      | <1       | 0.01     | 30       | 470      | 13       | 0.94     | <2       | 4        | 86       | <20      |
| G0557100           |         | <1       | 0.91     | 20       | 1.55     | 986      | <1       | 0.02     | 25       | 700      | 9        | 0.65     | <2       | 6        | 80       | <20      |
| G0557101           |         | <1       | 0.80     | 10       | 1.81     | 391      | <1       | 0.04     | 30       | 570      | 8        | 1.16     | <2       | 9        | 41       | <20      |
| G0557102           |         | <1       | 0.02     | <10      | 12.95    | 199      | <1       | 0.01     | 1        | 280      | 4        | <0.01    | <2       | <1       | 42       | <20      |
| G0557103           |         | <1       | 0.43     | 20       | 1.22     | 265      | <1       | 0.05     | 28       | 500      | 3        | 1.04     | <2       | 6        | 34       | <20      |
| G0557104           |         | <1       | 0.43     | 10       | 2.07     | 1200     | <1       | 0.01     | 74       | 980      | 7        | 0.68     | <2       | 6        | 57       | <20      |
| G0557105           |         | <1       | 0.09     | <10      | 9.92     | 1880     | <1       | 0.01     | 22       | 640      | 6        | <0.01    | <2       | 3        | 293      | <20      |
| G0557106           |         | <1       | 0.65     | 10       | 2.14     | 964      | 1        | 0.02     | 43       | 710      | 5        | 0.48     | <2       | 9        | 80       | <20      |
| G0557107           |         | <1       | 0.37     | 10       | 2.18     | 972      | 1        | 0.03     | 61       | 1120     | 7        | 0.48     | <2       | 9        | 84       | <20      |
| G0557108           |         | <1       | 0.37     | <10      | 1.40     | 438      | 15       | 0.04     | 27       | 120      | 251      | >10.0    | 5        | 4        | 8        | <20      |
| G0557109           |         | <1       | 0.28     | 10       | 2.03     | 1160     | 1        | 0.02     | 68       | 1060     | 7        | 0.47     | 2        | 5        | 102      | <20      |
| G0557110           |         | <1       | 0.25     | 10       | 1.08     | 1300     | 2        | 0.01     | 36       | 1000     | 7        | 1.15     | 5        | 4        | 127      | <20      |
| G0557111           |         | <1       | 0.30     | 10       | 1.18     | 750      | 1        | 0.02     | 28       | 760      | 5        | 0.34     | 2        | 5        | 54       | <20      |
| G0557112           |         | <1       | 0.19     | 10       | 1.70     | 605      | 1        | 0.01     | 37       | 740      | 4        | 0.36     | <2       | 4        | 43       | <20      |
| G0557113           |         | <1       | 0.18     | 10       | 0.86     | 405      | 1        | 0.01     | 37       | 450      | 5        | 0.11     | <2       | 3        | 9        | <20      |
| G0557114           |         | <1       | 0.29     | <10      | 1.20     | 400      | 1        | 0.03     | 38       | 710      | 2        | 0.32     | <2       | 2        | 17       | <20      |
| G0557115           |         | <1       | 0.02     | <10      | 12.40    | 182      | <1       | 0.01     | <1       | 250      | 2        | <0.01    | <2       | <1       | 44       | <20      |
| G0557116           |         | <1       | 0.26     | 10       | 1.24     | 382      | 1        | 0.02     | 35       | 490      | 4        | 0.20     | <2       | 2        | 15       | <20      |
| G0557117           |         | <1       | 0.18     | 10       | 1.11     | 487      | 1        | 0.01     | 39       | 390      | 5        | 0.08     | <2       | 3        | 10       | <20      |
| G0557118           |         | <1       | 0.31     | 10       | 1.27     | 535      | 1        | 0.01     | 42       | 370      | 5        | 0.28     | <2       | 3        | 13       | <20      |
| G0557119           |         | <1       | 0.46     | 10       | 1.04     | 554      | 1        | 0.04     | 37       | 550      | 7        | 0.43     | <2       | 3        | 23       | <20      |
| G0557120           |         | <1       | 0.47     | 10       | 1.01     | 570      | 1        | 0.03     | 38       | 550      | 5        | 0.45     | <2       | 3        | 29       | <20      |
| G0557121           |         | <1       | 0.26     | 10       | 0.99     | 510      | 2        | 0.04     | 29       | 960      | 4        | 0.36     | <2       | 3        | 27       | <20      |
| G0557122           |         | <1       | 0.45     | 10       | 1.70     | 1110     | 3        | 0.02     | 90       | 1090     | 6        | 0.54     | <2       | 5        | 35       | <20      |



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Project: MOR

## CERTIFICATE OF ANALYSIS WH10082498

| Sample Description | Method<br>Analyte<br>Units<br>LOR | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | Zn-OG46 |
|--------------------|-----------------------------------|----------|----------|----------|----------|----------|----------|---------|
|                    |                                   | Ti       | Ti       | U        | V        | W        | Zn       | Zn      |
|                    |                                   | %        | ppm      | ppm      | ppm      | ppm      | ppm      | %       |
|                    |                                   | 0.01     | 10       | 10       | 1        | 10       | 2        | 0.001   |
| G0557087           |                                   | 0.01     | <10      | <10      | 6        | <10      | 38       |         |
| G0557088           |                                   | 0.02     | <10      | <10      | 1        | <10      | 43       |         |
| G0557089           |                                   | 0.03     | <10      | <10      | 7        | <10      | 58       |         |
| G0557090           |                                   | 0.06     | <10      | <10      | 14       | <10      | 73       |         |
| G0557091           |                                   | 0.01     | <10      | <10      | 1        | <10      | 67       |         |
| G0557092           |                                   | 0.03     | <10      | <10      | 51       | <10      | 114      |         |
| G0557093           |                                   | 0.02     | <10      | <10      | 31       | <10      | 109      |         |
| G0557094           |                                   | 0.08     | <10      | <10      | 39       | <10      | 100      |         |
| G0557095           |                                   | 0.10     | <10      | <10      | 44       | <10      | 4900     |         |
| G0557096           |                                   | 0.02     | <10      | <10      | 23       | <10      | 76       |         |
| G0557097           |                                   | 0.01     | <10      | <10      | 31       | <10      | 78       |         |
| G0557098           |                                   | 0.05     | <10      | <10      | 33       | <10      | 61       |         |
| G0557099           |                                   | 0.06     | <10      | <10      | 31       | <10      | 81       |         |
| G0557100           |                                   | 0.10     | <10      | <10      | 42       | <10      | 62       |         |
| G0557101           |                                   | 0.13     | <10      | <10      | 70       | <10      | 43       |         |
| G0557102           |                                   | <0.01    | <10      | 10       | 1        | <10      | 12       |         |
| G0557103           |                                   | 0.11     | <10      | <10      | 44       | <10      | 20       |         |
| G0557104           |                                   | 0.08     | <10      | <10      | 65       | <10      | 67       |         |
| G0557105           |                                   | 0.01     | <10      | <10      | 21       | <10      | 32       |         |
| G0557106           |                                   | 0.10     | <10      | <10      | 78       | <10      | 67       |         |
| G0557107           |                                   | 0.07     | <10      | <10      | 92       | <10      | 66       |         |
| G0557108           |                                   | 0.03     | <10      | <10      | 27       | <10      | >10000   | 1.290   |
| G0557109           |                                   | <0.01    | <10      | <10      | 16       | <10      | 86       |         |
| G0557110           |                                   | <0.01    | <10      | <10      | 13       | <10      | 43       |         |
| G0557111           |                                   | 0.03     | <10      | <10      | 42       | <10      | 61       |         |
| G0557112           |                                   | 0.05     | <10      | <10      | 57       | <10      | 45       |         |
| G0557113           |                                   | 0.02     | <10      | <10      | 37       | <10      | 40       |         |
| G0557114           |                                   | 0.13     | <10      | <10      | 59       | <10      | 42       |         |
| G0557115           |                                   | <0.01    | <10      | 10       | 1        | <10      | 13       |         |
| G0557116           |                                   | 0.11     | <10      | <10      | 48       | <10      | 40       |         |
| G0557117           |                                   | 0.03     | <10      | <10      | 41       | <10      | 40       |         |
| G0557118           |                                   | 0.08     | <10      | <10      | 51       | <10      | 43       |         |
| G0557119           |                                   | 0.13     | <10      | <10      | 51       | <10      | 43       |         |
| G0557120           |                                   | 0.13     | <10      | <10      | 51       | <10      | 43       |         |
| G0557121           |                                   | 0.13     | <10      | <10      | 77       | <10      | 47       |         |
| G0557122           |                                   | 0.13     | <10      | <10      | 65       | <10      | 46       |         |



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Page: 1  
Finalized Date: 14-JUL-2010  
Account: F

## CERTIFICATE WH10089646

Project: MOR

P.O. No.:

This report is for 6 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 28-JUN-2010.

The following have access to data associated with this certificate:

JOAN MARIACHER

BILL WENGZYNOWSKI

## SAMPLE PREPARATION

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

## ANALYTICAL PROCEDURES

| ALS CODE | DESCRIPTION                    | INSTRUMENT |
|----------|--------------------------------|------------|
| ME-ICP41 | 35 Element Aqua Regia ICP-AES  | ICP-AES    |
| Ag-OG46  | Ore Grade Ag - Aqua Regia      | VARIABLE   |
| ME-OG46  | Ore Grade Elements - AquaRegia | ICP-AES    |

To: ARCHER, CATHRO AND ASSOCIATES (1981) LIMITED  
ATTN: JOAN MARIACHER  
1016-510 W HASTINGS ST  
VANCOUVER BC V6B 1L8

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

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



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## CERTIFICATE OF ANALYSIS WH10089646

| Sample Description | Method<br>Analyte<br>Units<br>LOR | WEI-21          | ME-ICP41  | ME-ICP41 | ME-ICP41  | ME-ICP41 | ME-ICP41  | ME-ICP41  | ME-ICP41  | ME-ICP41 | ME-ICP41  | ME-ICP41  | ME-ICP41  | ME-ICP41  | ME-ICP41 | ME-ICP41  |
|--------------------|-----------------------------------|-----------------|-----------|----------|-----------|----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|
|                    |                                   | Recvd Wt.<br>kg | Ag<br>ppm | Al<br>%  | As<br>ppm | B<br>ppm | Ba<br>ppm | Be<br>ppm | Bi<br>ppm | Ca<br>%  | Cd<br>ppm | Co<br>ppm | Cr<br>ppm | Cu<br>ppm | Fe<br>%  | Ga<br>ppm |
|                    |                                   | 0.02            | 0.2       | 0.01     | 2         | 10       | 10        | 0.5       | 2         | 0.01     | 0.5       | 1         | 1         | 1         | 0.01     | 10        |
| G0557123           |                                   | 5.63            | <0.2      | 2.03     | <2        | <10      | 30        | <0.5      | <2        | 3.57     | <0.5      | 18        | 181       | 47        | 2.68     | <10       |
| G0557124           |                                   | 4.77            | <0.2      | 2.08     | <2        | <10      | 30        | <0.5      | <2        | 2.25     | <0.5      | 20        | 94        | 54        | 3.79     | 10        |
| G0557125           |                                   | 5.33            | <0.2      | 2.52     | <2        | <10      | 100       | <0.5      | <2        | 1.39     | <0.5      | 25        | 135       | 24        | 4.54     | 10        |
| G0557126           |                                   | 4.50            | <0.2      | 2.40     | <2        | <10      | 50        | <0.5      | <2        | 4.05     | <0.5      | 21        | 97        | 27        | 3.40     | <10       |
| G0557127           |                                   | 5.40            | <0.2      | 2.78     | <2        | <10      | 40        | <0.5      | <2        | 2.41     | <0.5      | 25        | 179       | 2         | 3.68     | 10        |
| G0557128           |                                   | 0.31            | >100      | 1.22     | 247       | <10      | 70        | <0.5      | <2        | 0.59     | 23.4      | 11        | 29        | 6150      | 5.22     | <10       |



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|-------------------------|------------|
| CERTIFICATE OF ANALYSIS | WH10089646 |
|-------------------------|------------|

| Sample Description | Method | Analyte | Units | LOR | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 |     |     |     |
|--------------------|--------|---------|-------|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----|-----|-----|
|                    |        |         |       |     | Hg       | K        | La       | Mg       | Mn       | Mo       | Na       | Ni       | P        | Pb       | S        | Sb       | Sc  | Sr  | Th  |
|                    |        |         |       |     | ppm      | %        | ppm      | %        | ppm      | ppm      | %        | ppm      | ppm      | ppm      | %        | ppm      | ppm | ppm | ppm |
|                    |        |         |       |     | 1        | 0.01     | 10       | 0.01     | 5        | 1        | 0.01     | 1        | 10       | 2        | 0.01     | 2        | 1   | 1   | 20  |
| G0557123           |        |         |       |     | <1       | 0.25     | 10       | 2.03     | 633      | 1        | 0.05     | 92       | 1070     | <2       | 0.17     | <2       | 4   | 72  | <20 |
| G0557124           |        |         |       |     | <1       | 0.19     | <10      | 1.52     | 755      | 2        | 0.06     | 56       | 1500     | <2       | 0.37     | <2       | 3   | 52  | <20 |
| G0557125           |        |         |       |     | <1       | 0.67     | <10      | 1.69     | 337      | <1       | 0.13     | 112      | 1230     | <2       | 0.26     | <2       | 5   | 26  | <20 |
| G0557126           |        |         |       |     | <1       | 0.36     | <10      | 2.10     | 557      | 1        | 0.08     | 72       | 1070     | <2       | 0.16     | <2       | 3   | 56  | <20 |
| G0557127           |        |         |       |     | <1       | 0.31     | <10      | 2.72     | 455      | <1       | 0.08     | 114      | 810      | <2       | 0.01     | <2       | 3   | 27  | <20 |
| G0557128           |        |         |       |     | 1        | 0.09     | <10      | 0.74     | 1570     | 18       | 0.07     | 22       | 430      | 9630     | 2.27     | 393      | 3   | 26  | <20 |



# ALS Chemex

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Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

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Page: 2 - C

Total # Pages: 2 (A - C)

Finalized Date: 14-JUL-2010

Account: F

Project: MOR

## CERTIFICATE OF ANALYSIS WH10089646

| Sample Description | Method  | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | ME-ICP41 | Ag-OG46 |
|--------------------|---------|----------|----------|----------|----------|----------|----------|---------|
|                    | Analyte | Ti       | Tl       | U        | V        | W        | Zn       | Ag      |
|                    | Units   | %        | ppm      | ppm      | ppm      | ppm      | ppm      | ppm     |
|                    | LOR     | 0.01     | 10       | 10       | 1        | 10       | 2        | 1       |
| G0557123           |         | 0.18     | <10      | <10      | 59       | <10      | 31       |         |
| G0557124           |         | 0.20     | <10      | <10      | 79       | <10      | 43       |         |
| G0557125           |         | 0.27     | <10      | <10      | 73       | <10      | 52       |         |
| G0557126           |         | 0.21     | <10      | <10      | 61       | <10      | 42       |         |
| G0557127           |         | 0.25     | <10      | <10      | 61       | <10      | 45       |         |
| G0557128           |         | 0.08     | <10      | <10      | 39       | <10      | 4960     | 98      |



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Page: 1

Finalized Date: 18-JUL-2010

Account: F

## CERTIFICATE WH10094084

Project: MOR

P.O. No.:

This report is for 2 Drill Core samples submitted to our lab in Whitehorse, YT, Canada on 8-JUL-2010.

The following have access to data associated with this certificate:

JOAN MARIACHER

BILL WENGZYNOWSKI

## SAMPLE PREPARATION

| ALS CODE | DESCRIPTION                   |
|----------|-------------------------------|
| FND-02   | Find Sample for Addn Analysis |

## ANALYTICAL PROCEDURES

| ALS CODE | DESCRIPTION         | INSTRUMENT |
|----------|---------------------|------------|
| Au-AA24  | Au 50g FA AA finish | AAS        |

To: ARCHER, CATHRO AND ASSOCIATES (1981) LIMITED

ATTN: JOAN MARIACHER

1016-510 W HASTINGS ST

VANCOUVER BC V6B 1L8

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

Signature:

  
Colin Ramshaw, Vancouver Laboratory Manager



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Total # Pages: 2 (A)

Finalized Date: 18-JUL-2010

Account: F

Project: MOR

## CERTIFICATE OF ANALYSIS WH10094084

| Sample Description   | Method<br>Analyte<br>Units<br>LOR | Au-AA24<br>Au<br>ppm<br>0.005 |
|----------------------|-----------------------------------|-------------------------------|
| G0557095<br>G0557108 |                                   | 0.272<br>1.990                |

Q26590

095427

Statement of Expenditures  
Mor 1-290 Mineral Claims  
April 29, 2011

Labour

K. Larson (field assistant) June 2010 – 19 days @ \$480/day \$ 10,214.40

Expenses

|  |                 |
|--|-----------------|
| Field room and board – 80 mandays @ \$125/manday | 11,200.00       |
| Top Rank Diamond Drilling                        | 72,906.70       |
| Oceanview Helicopters                            | 35,487.48       |
| ALS Chemex                                       | <u>1,821.25</u> |
|  | 121,415.53      |

Total \$131,629.93

Drilled two holes on YB91628 (Mor 7)