

MOD LEAD-ZINC-SILVER PROSPECT

Patience 1-4 claims (YE85697-YE85700)

Patience 5-8 (YD10896-YD10899)

105B-3

REPORT OF FIELDWORK 2015:

Excavation, mapping, channel sampling,

ground magnetic survey

and mineragraphy

Fieldwork from 20th. August to 3rd. September 2015

T. Liverton

W.D. Mann

December 2015

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LOCATION

The Mod (Bom) property is located at the southwestern headwaters of the Swift River. Claim map sheet 105B-3 shows the Patience 1-4 claims that cover the original Mod 1-4 claims and peripheral claims Patience 5-8 . The centre of the block is at 60°08'N, 131°13W. Access is possible using a four wheel drive road from the Alaska Highway via the Pine Lake airstrip.

CLAIMS

Eight quartz claims cover the prospect as follows:

Patience 1, YE85697, held by Hardy Hibbing; Patience 2, YE85698, held by Hardy Hibbing;

Patience 3, YE85700, held by Hardy Hibbing; Patience 4, YE85699, held by Hardy Hibbing;

Patience 5, YD10896, held by Hardy Hibbing; Patience 6, YD10897, held by Timothy Liverton;

Patience 7, YE10898, held by Hardy Hibbing; Patience 8, YD10899, held by Hardy Hibbing.

Legend

Outboard

- CG Chugach
- YA Yakutat

Insular

- WR Wrangellia
- AX Alexander
- KS Kluane schist

Arctic

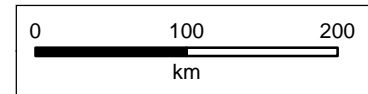
- AA Arctic Alaska

Intermontane

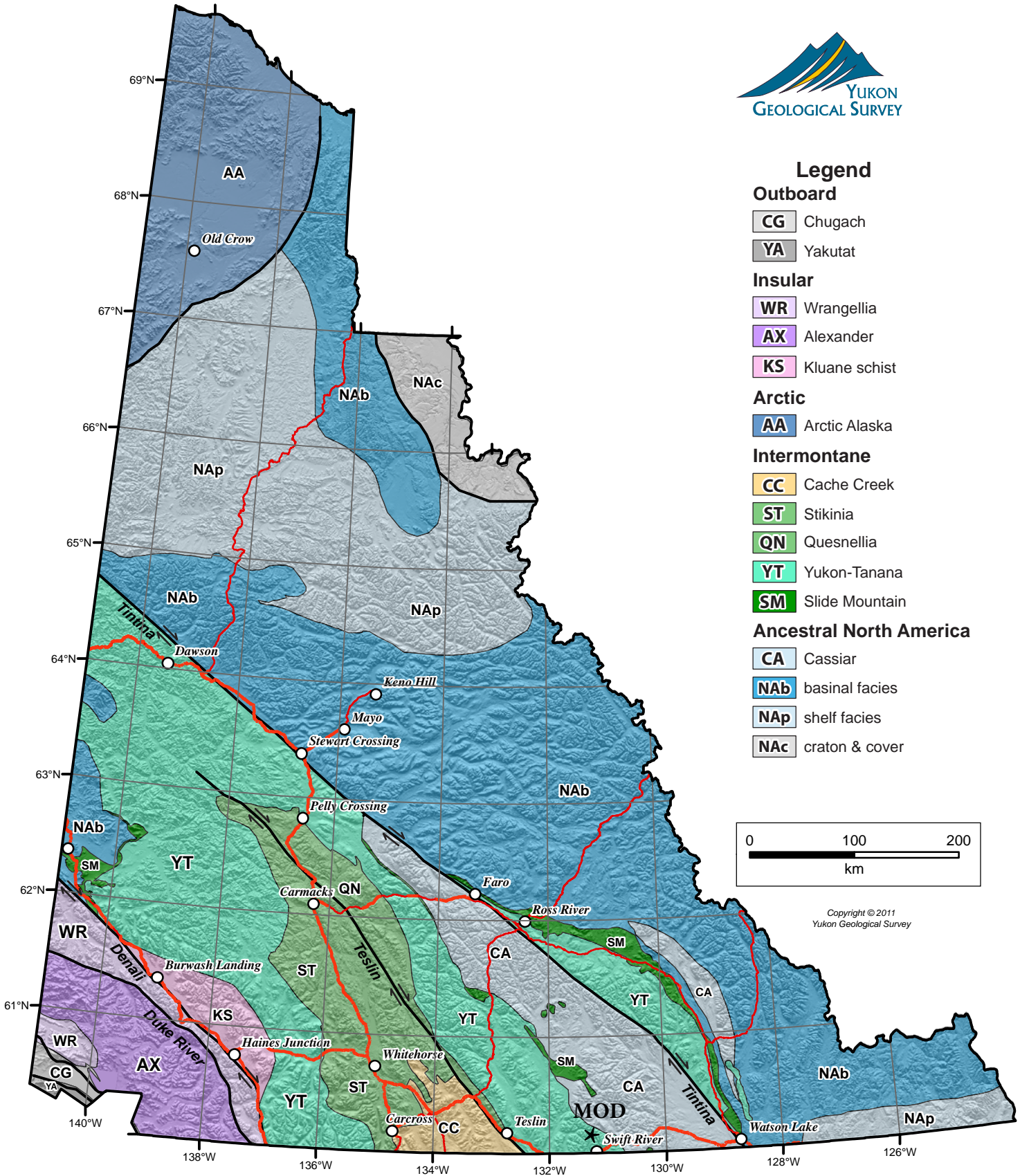
- CC Cache Creek
- ST Stikinia
- QN Quesnellia
- YT Yukon-Tanana
- SM Slide Mountain

Ancestral North America

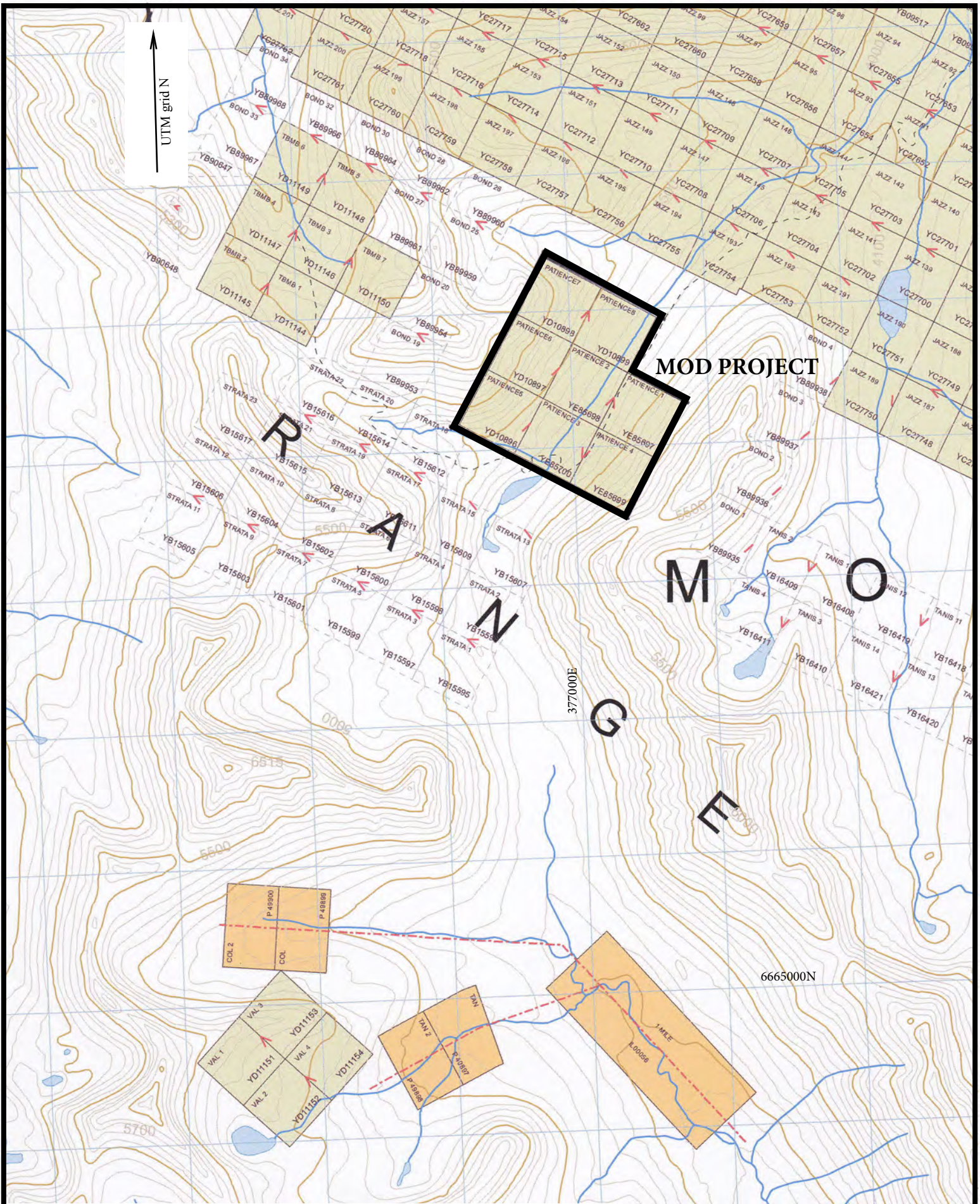
- CA Cassiar
- NAb basinal facies
- NAP shelf facies
- NAc craton & cover



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LOCATION AND BEDROCK TERRANES - MOD PROJECT
Hibbing, Liverton & Mann



Patience 1-8 claims: H. Hibbing & T. Liverton

Sheet 105B-3

INTRODUCTION

The Mod property (Minfile 105B-028), originally called the Bom prospect, was discovered in 1946 by prospectors working for Hudson Bay Mining and Smelting Co. Ltd. They drilled 18 diamond drill holes in the region in 1947, as well as trenching three localities. A map and some cross sections remain (Assessment report A092107), but no detailed logs are available. Drill core is no longer preserved. Boswell River Mines also drilled on the property, but documentation of this work is sketchy and no identifiable core remains. None of the drill sites are now recognizable. In more recent times the obvious showings were covered by four ('Mod') claims held by Henry Regehr until 2013. The prospect is now covered by the Patience claims held by Hardy Hibbing and Timothy Liverton.

During the time that Henry Regehr held the property the only work done was bulldozer stripping. This obliterated the original Hudson Bay trenching and actually obscured much of the mineralization since the cuts were never cleaned down to the irregularly shaped rock surface. Less than one metre of sulphide was visible at either locality in 2014.

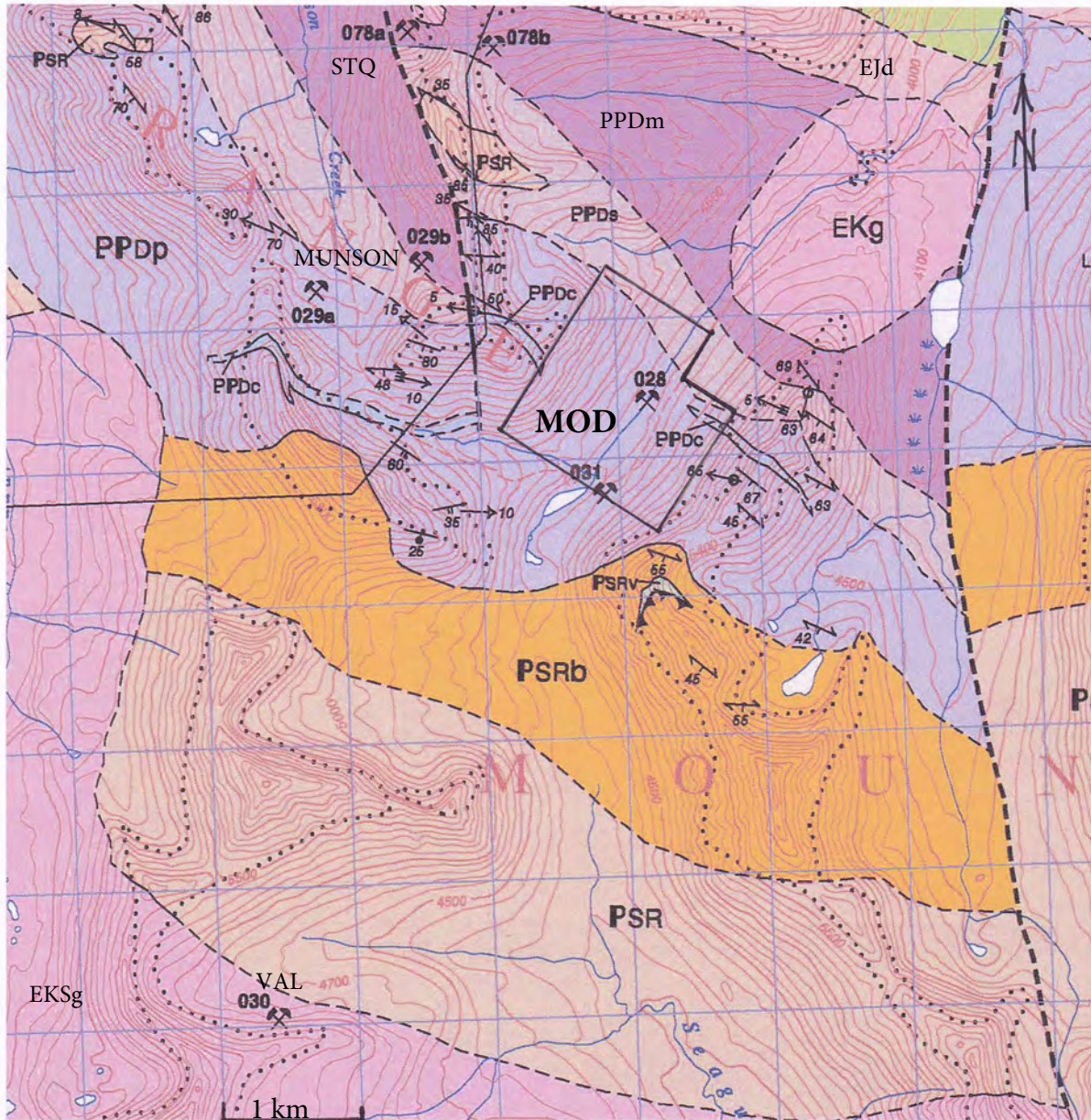
It was planned to uncover outcropping sulphide mineralization in existing bulldozer trenches at the Mod property.

This present work consisted of using a Candig backhoe and much pick-and-shovel effort to clean a small part of two of the original dozer cuts. The topographically lower showing was then channel sampled using a jackhammer. The thickness of mineralization uncovered by this present work is consistent with that shown in the trenches drawn on the Hudson Bay 1947 map.

In addition the immediate region of the prospect was covered by a ground magnetic survey to investigate response of the mineralization and control points were established with a theodolite/EDM survey for mapping. Detailed maps of the mineralization were prepared.

EKSg - early Cretaceous Seagull Batholith
 EKg - early Cretaceous granite
 EJd - early Jurassic diorite

GEOLOGY after Roots, Nelson & Stevens, 2004



1:50,000 MOD PROJECT - PATIENCE CLAIMS 105B/3

YUKON TANANA TERRANE

- PSR - Swift River Group grit, argillite
- PSRb - chert & phyllite
- Dorsey Complex - PPDp - Upper Dorsey phyllite
- PPDc - marble & limestone
- PPDs - biotite schist

GEOLOGY

The prospect occurs within the Yukon Tanana terrane in a sequence of siliciclastic sediments, volcanics and marble that are assigned to the Dorsey assemblage of Devonian age. The Mod mineralization is peripheral to a marble horizon that crops out intermittently along the local ESE strike of the metasediments. The metasediments have been polydeformed and metamorphosed to greenschist facies. The style of folding is indicated in Silva (2000) and it would result in major folds with perhaps 200m wavelength. To the north and northeast of the prospect a granite stock that is an apophysis of the Cretaceous Seagull batholith is exposed in the deep canyon below the prospect and on the ridge to the northeast. The proximity of the stock has resulted in contact metamorphism of the greenschist grade metasediment forming abundant pyroxene around the prospect. Whether the original mineralization was of stratiform (VMS), high-temperature replacement of carbonate, or skarn origin is currently debated. If the mineralized horizon is of regional extent, then repetition by folding is likely. Mineralogy at the Mod consists predominantly of pyrrhotite-sphalerite-tetrahedrite-galena in a pyroxene gangue. A kilometre to the east the on-strike mineralization consists of sphalerite with magnetite.

2015 WORK

The 2015 work was aimed primarily at cleaning up two the sulphide showings that had been partially exposed in the old bulldozer trenches. Two locations were chosen: the lowest being 20 metres above the creek and the upper showing immediately below the common corner of the Patience 1, 2, 3 and 4 claims. At the lower showing a 2.2m thickness of mineralization was exposed. The outcrop was drilled with spacing every 10cm or less using a cobra drill to define the channel and the rock between holes removed with the breaker tool to yield a small channel sample of 80.2 kg total. These samples were passed through a jaw crusher to reduce particle size to a final $\leq 6\text{mm}$ and split three times with a riffle splitter. The final split was submitted to ALS for assay of base metals, silver and gold. The upper showing of 6.8 m exposed thickness remains to be sampled. Nine specimens of the mineralization and three from surrounding country rock were collected and sent to Vancouver Petrographics for thin and polished thin section preparation.

A ground magnetic survey was performed by Bill Mann, using base station and roving instrument with GPS location. Reduction and compilation of the data was carried out by Aurora Geophysics.

A preliminary topographic survey using theodolite and laser EDM equipment was performed to provide control for detailed mapping.

RESULTS

2015 Magnetometer Survey

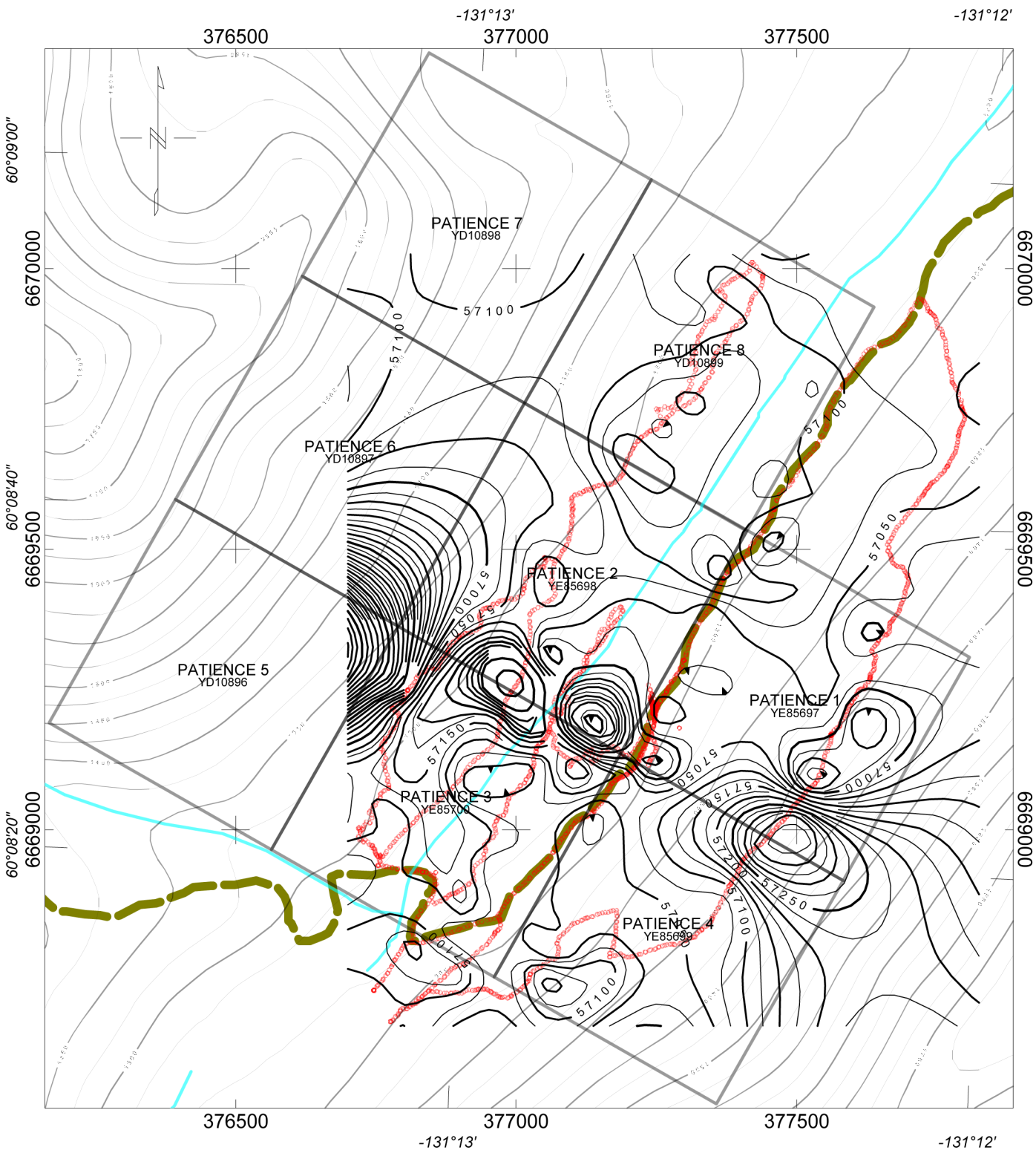
A ground magnetometer survey was conducted between August 19 to 22 at the property by W.D. Mann. The survey was partly conducted along the roads and trails that cross the property for ease of travel. Much of the lower part of the claims is covered by very dense vegetation. Some traverses were also conducted roughly midway between trails in order to improve survey density. One upper level traverse was conducted on rocky terrain near treeline on the south side of the property.

The survey used a Gem Systems GSM-19 Overhauser unit as a base station and a GSM-19T Proton unit as a mobile unit. The equipment was rented from Aurora Geosciences Ltd., with instruction provided by Dave Hildes. The magnetometer system was time-synched with a Garmin handheld GPS, and the GPS track (with 10 second readings) used for mag station positioning. GPS location during the survey was generally accurate to within 3 meters. Magnetometer readings were collected at roughly 5m intervals. The magnetometer data was downloaded into Gemlink V5.3 software, and the results processed, reviewed and plotted by Aurora Geosciences Ltd.

The valley bottom on the claims is covered with thick buckbrush and thickets of balsam fir. There is little outcrop present in the valley, though the ridges on each side have abundant outcrop. The valley vegetation overlies glacial material that is sometimes boggy, but mostly very sandy soil with large, rounded boulders. Soil geochemistry is not likely to be very useful in this

type of surficial material, which led to the decision to try geophysics. The main mineralized zone contains variable quantities of both magnetite and pyrrhotite, so a strong magnetic response was expected. It was hoped that additional magnetic anomalies would be present under the valley cover, indicating repetition of the mineralized horizon.

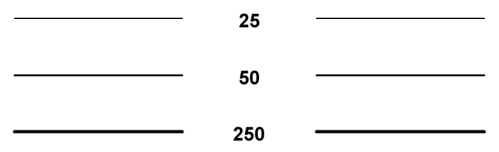
The results of the Total Field Magnetometer survey are presented in three maps. The first shows the magnetic field strength in contours, the second shows the results in colour coded grid, and the third shows the Calculated First Vertical Derivative of TMI in colour coded grid. The survey locations are shown as dark circles, and the main road is a dashed gold colour. The main mineral zone is located near the boundary between the Patience 1 and 4 claims and the 2 and 3 claims. The strongest, most continuous anomaly follows the zone. In addition to this anomaly several other anomalies are evident on the claims. Additional work to follow up on these anomalies is recommended.



LEGEND

TOTAL FIELD MAGNETICS

CONTOUR INTERVALS (nT)



REFERENCE FIELD : 57,113 nT

INSTRUMENT : GEM GSM-19T

GRIDDING ALGORITHM : MINIMUM CURVATURE

GRID CELL SIZE : 25 m

FILTER : HANNING FILTER

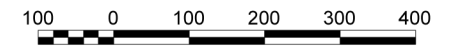
FILTER SPECS : 1 PASSES

DATA FILE : Patience_Mag.GDB

STATION SEPARATION : ~10 m

LINE-KM SURVEYED THIS SHEET : ~10 km

Scale 1:10000



(meters)

NAD83 / UTM zone 9N

HIBBING LIVERTON & MANN

TOTAL FIELD MAGNETICS SURVEY
PATIENCE CLAIMS
WMN_15530_YT

Date Surveyed: August 20-21, 2015

NTS Mapsheet: 105 B/03

Map Name: Patience_Mag_Contour.MAP

Drawn By: DE, MC, DH - 2015-12-02

Aurora Gesociences Ltd.

LEGEND

TOTAL FIELD MAGNETICS

REFERENCE FIELD : 57,113 nT

INSTRUMENT : GEM SYSTEMS GSM-19

GRIDDING ALGORITHM :
GEOSOFT MINIMUM CURVATURE

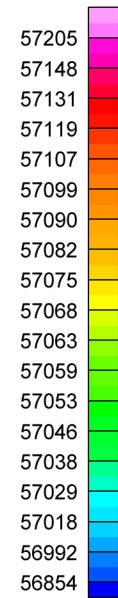
GRID CELL SIZE : 25 m

DATA FILE : Patience_Mag.GDB

OPERATORS : BM

STATION INTERVAL : ~10m

LINE-KM SURVEYED THIS SHEET : ~10 Km



Magnetic Field Strength
(nT)

Scale 1:10000



(meters)

NAD83 / UTM zone 9N

HIBBING LIVERTON & MANN

**TOTAL FIELD MAGNETICS SURVEY
PATIENCE CLAIMS
WMN_15530_YT**

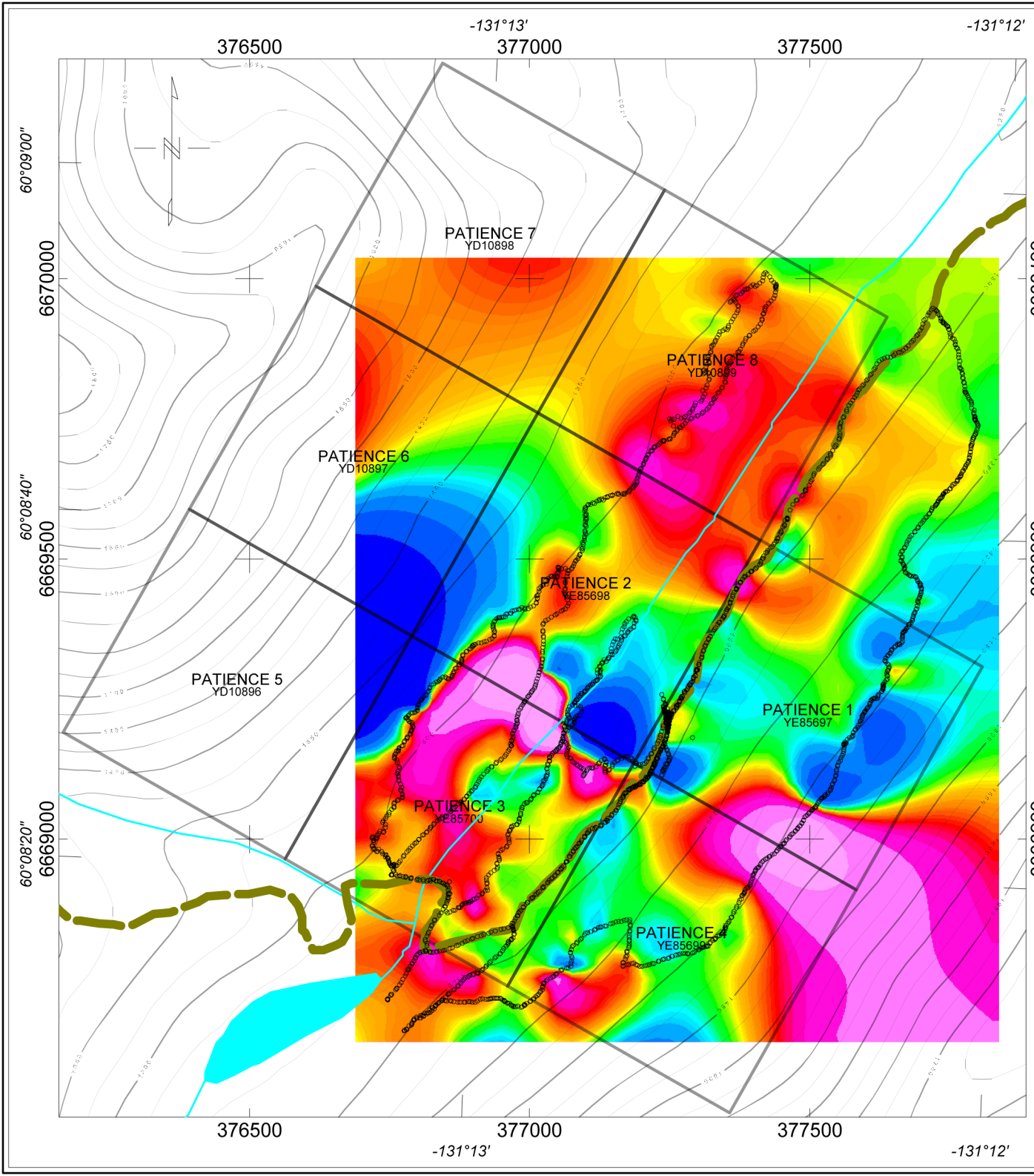
Date Surveyed: August 20-21, 2015

NTS Mapsheet: 105 B/03

Map Name: Patience_Mag_Grid.MAP

Drawn By: DE, MC, DH - 2015-12-02

Aurora Gesociences Ltd.



LEGEND

TOTAL FIELD MAGNETICS

REFERENCE FIELD : 57,113 nT

INSTRUMENT : GEM SYSTEMS GSM-19

GRIDDING ALGORITHM :
GEOSOFT MINIMUM CURVATURE

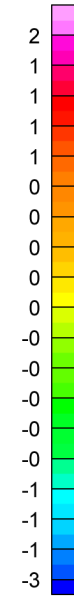
GRID CELL SIZE : 25 m

DATA FILE : Patience_Mag.GDB

OPERATORS : BM

STATION INTERVAL : ~10m

LINE-KM SURVEYED THIS SHEET : ~10 Km



Calculated First Vertical
Derivative of TMI
(nT/m)

Scale 1:10000



(meters)

NAD83 / UTM zone 9N

HIBBING LIVERTON & MANN

TOTAL FIELD MAGNETICS SURVEY
PATIENCE CLAIMS
WMN_15530_YT

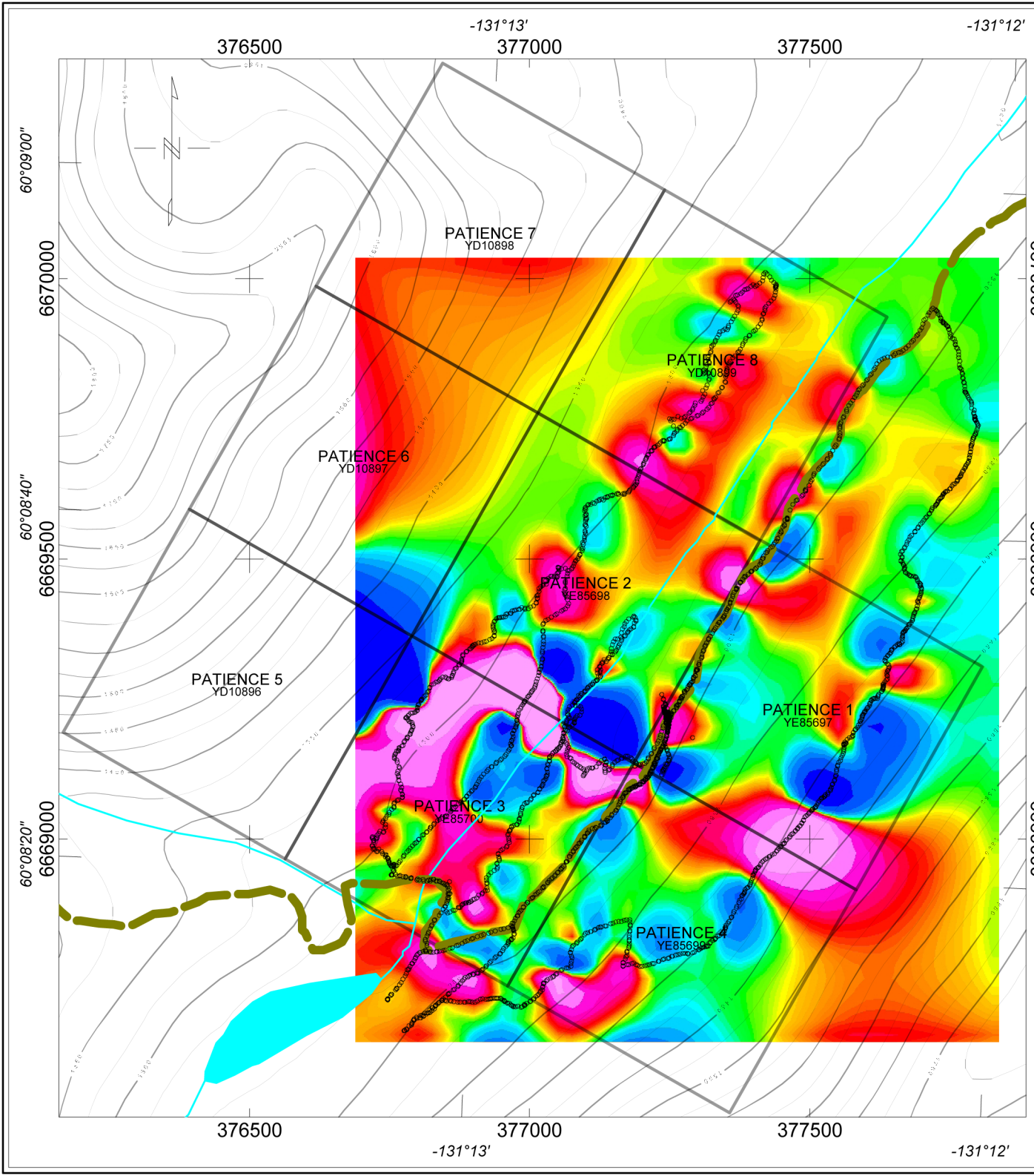
Date Surveyed: August 20-21, 2015

NTS Mapsheet: 105 B/03

Map Name: Patience_Mag_Grid.MAP

Drawn By: DE, MC, DH - 2015-12-02

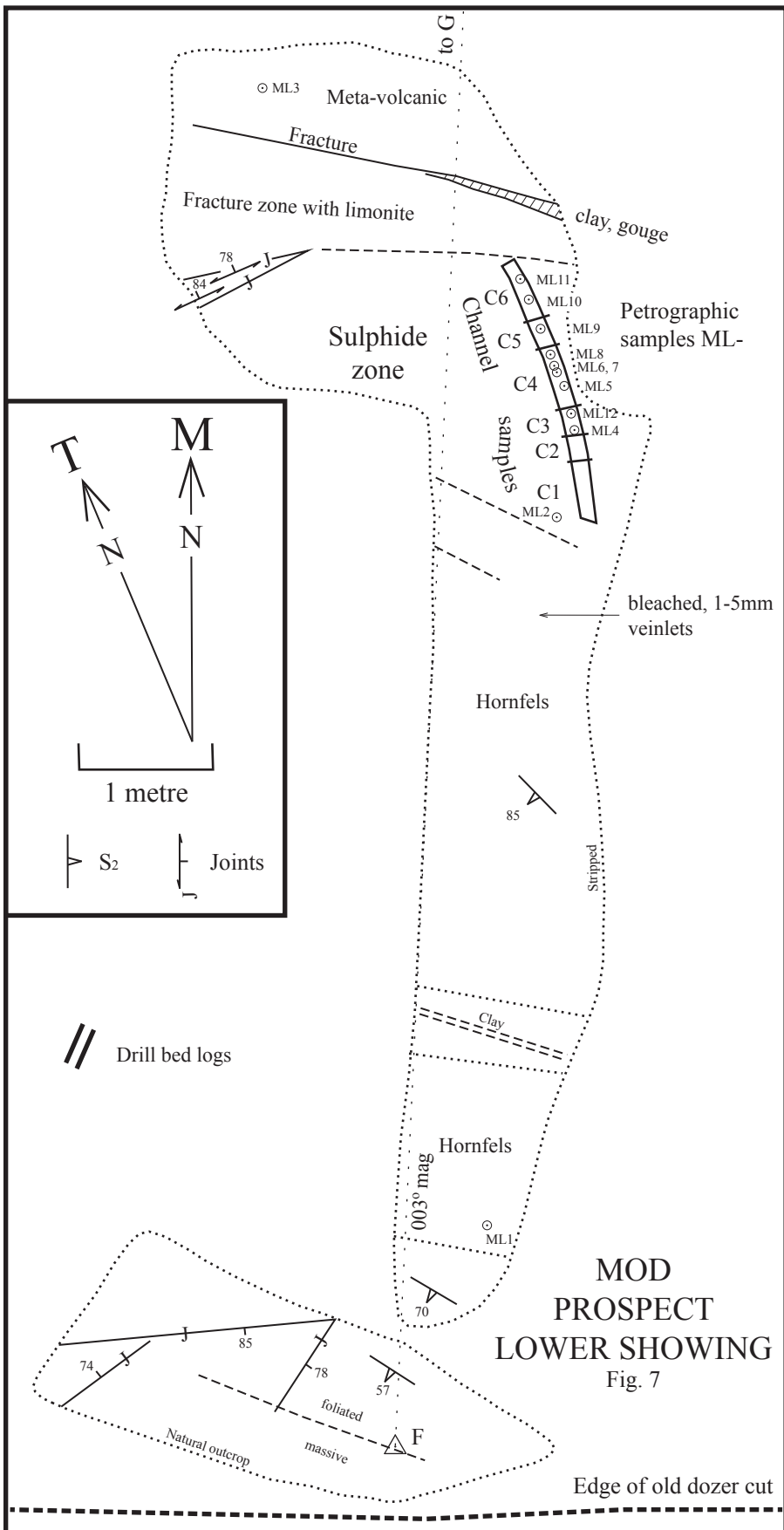
Aurora Gesociences Ltd.

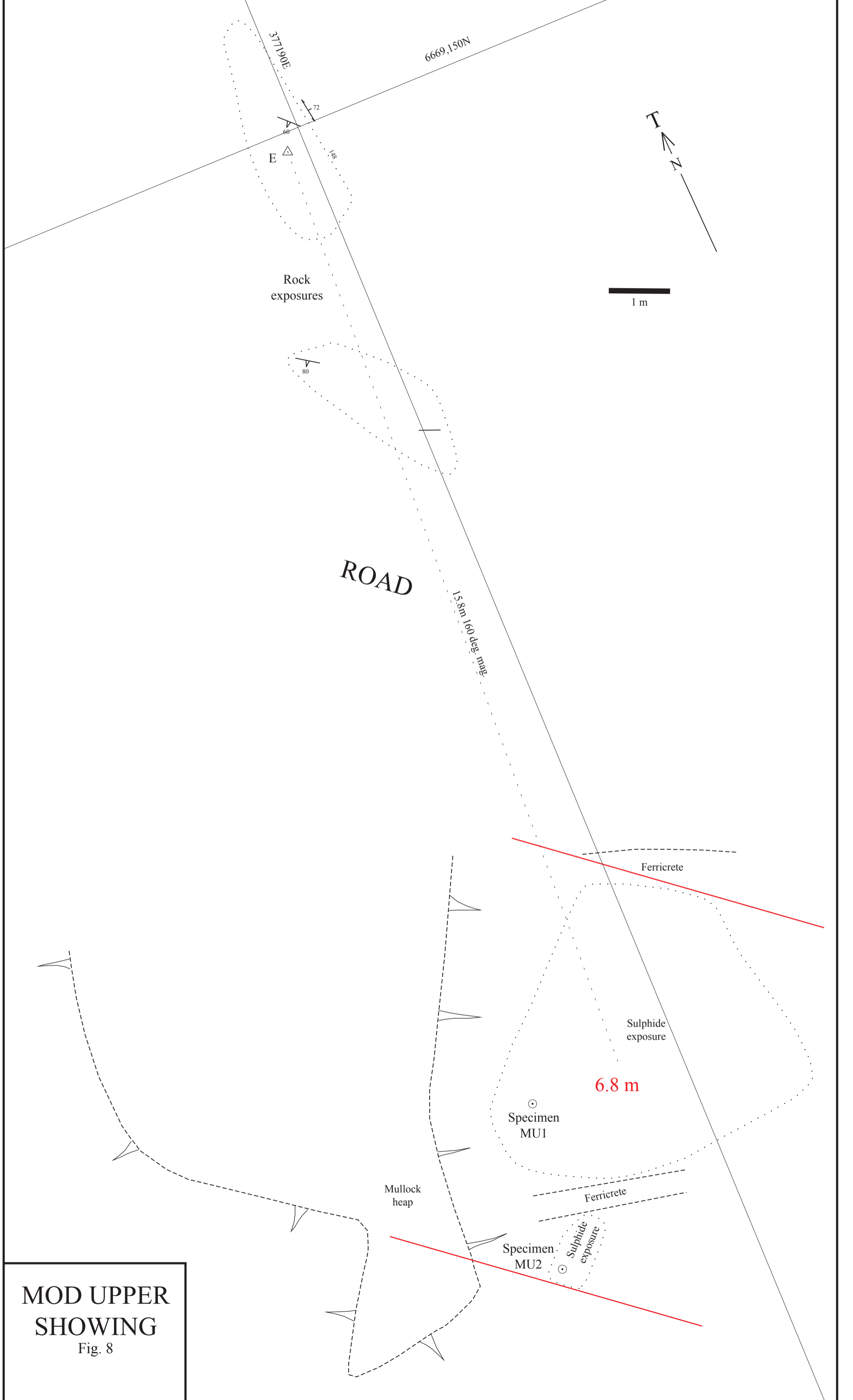


Surveying and Mapping

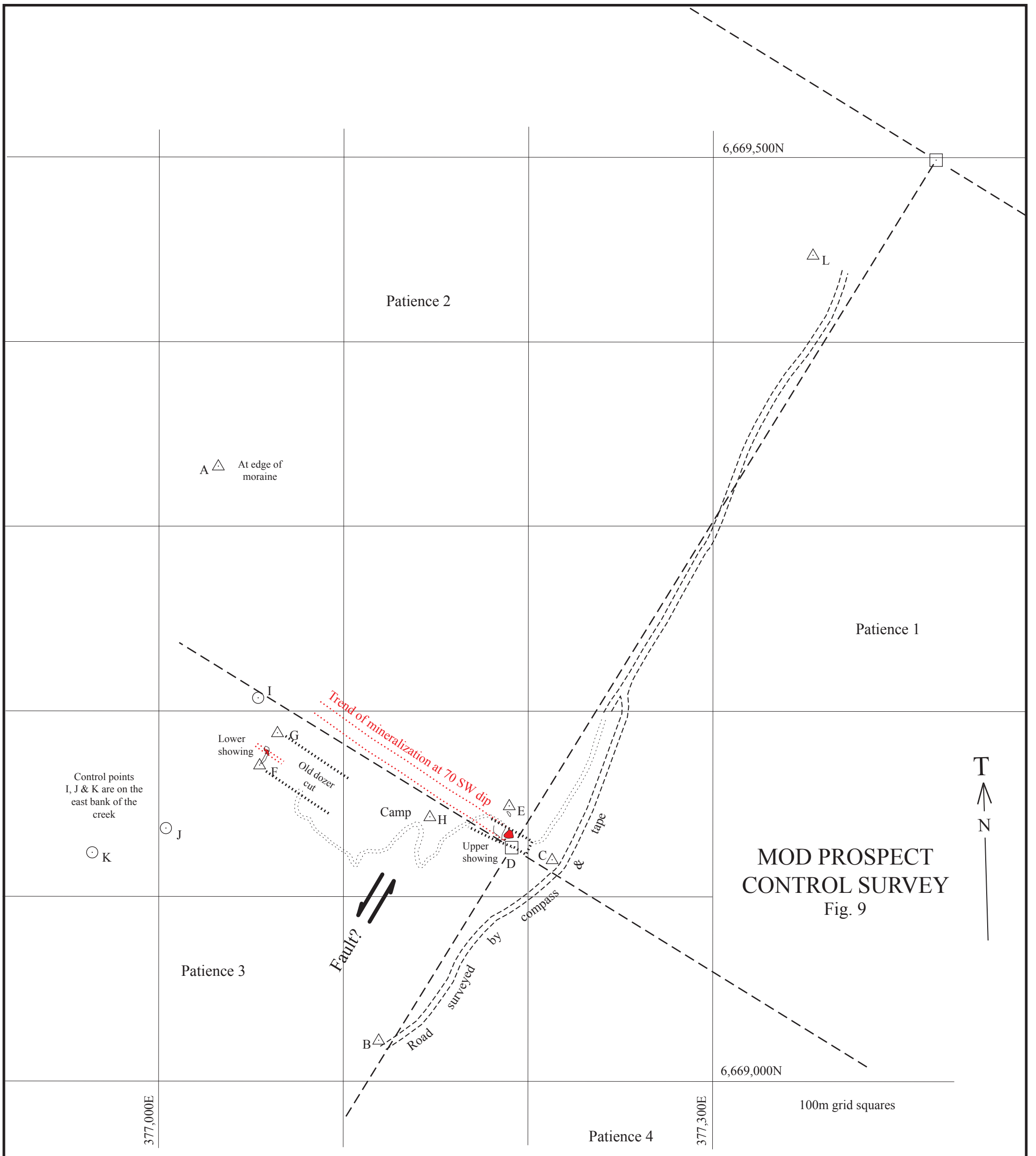
The lower and upper showings are shown in sketches (Figs. 5 & 6) which were prepared using tape and offset measurements. The control survey is presented as Fig. 7. The surveying was performed using a Kern K1-S theodolite and DM502 laser distance meter. For this equipment precision in turning angles is ≤ 0.2 minutes and distance is typically $\{\pm 1\text{cm} \pm 2\text{ppm}\}$. This is of course far more precise than is needed for the present work, but use of this instrument allowed rapid measurement from a single set-up at station 'A' and if vertical control is needed in the future, this will be accurate. Orientation was obtained from a measurement with a tripod-mounted surveyor's compass (± 15 minutes angle). A peak to the west of station A was found to bear 204° magnetic. UTM coordinates were calculated for station A as origin using a long-averaged reading with a hand held GPS instrument. Magnetic variation and convergence were calculated using the NRCan interactive program. GPS readings with the hand-held instrument at several of the other stations were compared to the calculated coordinates. All agreed to within 5 metres. Detailed geological sketches were prepared using tape and offset measurements from survey stations E, F and G.

At the lower showing the southernmost rock exposure was mapped as a hornfels. The petrographic examination (specimen ML1) indicates that it has a quartz-muscovite-chlorite-biotite mineralogy and it is considered to be a meta-tuff. The prominent foliation in the surrounding metasediments and tuffs is designated S_1 and it dips steeply WSW at the lower showing and to the SW at the upper excavation. Country rock immediately adjacent to the mineralization is pyroxene-rich and possibly is a replacement of original carbonates.





**MOD UPPER
SHOWING**
Fig. 8





PEAK USED AS A REFERENCE POINT FOR GRID ORIENTATION: 204 DEGREES MAGNETIC

Assay

The sample from the lower showing was taken in six portions (lengths are shown on Fig 2 and on Table 1). The six portions of the channel were passed through a jaw crusher then split three times with a Jones riffle. The reduced specimens were submitted to ALS for assay of base metals, silver and gold. Certificates giving methods and results are appended. Table 1 gives results and calculation of an average grade.

A weighted average of 8.42 oz/ton Ag, 5.12% Pb and 7.49% Zn results for the whole 2.2 m interval. Gold values were ≤ 0.09 g/t.

The upper showing was not sampled this season due to difficulty in breaking the rock with a jackhammer and chisel. It will be necessary to drill and blast out a channel sample next year to obtain representative results.

Table 1: assay results for channel sample, lower showing

SAMPLE	Ag g/t	Pb %	Zn %	S %	width metres	Ag width x grade	Pb	Zn
1	72	1.47	5.00	12.0	0.50	36.00	0.74	2.50
2	92	1.70	7.00	21.9	0.15	13.80	0.26	1.05
3	141	2.73	6.63	21.0	0.35	49.35	0.96	2.32
4	493	9.38	9.99	27.8	0.48	236.64	4.50	4.80
5	244	3.27	6.53	24.3	0.22	53.68	0.72	1.44
6	492	8.20	8.74	27.3	0.50	246.00	4.10	4.37
				Total	2.20	635.47	11.27	16.47
				Average	grade	288.85	5.12	7.49
					oz/ton	8.42		

Petrography / Mineragraphy

Twelve specimens were prepared: three were country rock; two were polished blocks from the upper showing and the remaining seven were from the channel sample at the lower showing (Fig. 2). Sulphide mineralogy consists of pyrrhotite-sphalerite-tetrahedrite/tennantite-galena±arsenopyrite in a diopside-hedenbergite gangue. A coarse layering (dm –scale) across the lower showing was evident from the channel sampling and proportions of tetrahedrite/tennantite and galena vary considerably. The sulphosalt has a distinct brownish tinge in polished section, so it is likely close to the tetrahedrite end member. Whether this mineral is the principal source of the silver content is not confirmed at present but possible. Of the various channel samples, sample C4 from which petrographic specimens ML5 to 8 were collected does show the highest Ag content and notable tetrahedrite in two of the polished sections; sample C6, from which specimens ML 10 and 11 were also high in tetrahedrite, showed the next highest grade in Ag. In some of the mineragraphic specimens a mm-scale layering is evident, most often as elongated galena grains. This would represent S₂ foliation. Notes and photomicrographs are appended.

CONCLUSIONS AND RECOMMENDATIONS

The historical bulldozer workings at the Mod property when cleaned down to outcrop demonstrated sulphide mineralization of 2.2m thickness at the lower and 6.8m at the upper showing, which is a considerable improvement on the original exposure of ≤ 1m. Average grade over the lower showing was 8.4 oz/ton Ag, 5.1% Pb and 7.5% Zn, which is potentially economic. Examination of hand specimens from the upper showing indicates that Pb grades should be higher there. The highest content of tetrahedrite is found at the lower showing. If the Ag content is primarily in the sulphosalt, then mineralogy variation along strike should be investigated.

The magnetic survey showed an obvious anomaly over the known showings and also a smaller response close to the northern boundary of claims 1 and 2. This could represent the same mineralized horizon on a northern limb of a fold.

Work that should be attempted in the 2016 season is:

- a) drilling and blasting at the upper showing to obtain a channel sample of, say, between 1 and 2 tonnes weight. This should be crushed and split to provide a manageable representative assay sample. Sampling for mineragraphy should be carried out according to observed mineralogy.
- b) In the ancient bulldozer cut at the lower showing there is room to clean up the eastern end and allow a further channel sample to be taken.
- c) Mapping of the hillside to the west of the showings is needed to locate the marble unit as a stratigraphic marker. Detailed mapping westward to the TBMB prospect is needed to investigate whether the marble unit at the TBMB is within a different structural unit to that of the Mod.
- d) Another limb on a major fold may exist to the north of the known mineralization. Some sulphide float has been reported (H. Hibbing, pers. comm.) close to the No. 2 post of the Patience 1 and 2 claims. There is a historical bulldozer trench in that locality, but outcrop is not visible. This excavation could be cleaned up with a backhoe.
- e) If finances allow, further geophysical surveys are desirable. The coverage of ground magnetics could be extended westward and detailed I.P. work would be desirable to attempt to locate fold repetition of the obvious mineralization.

REFERENCES

Hudsons Bay Mining and Smelting Co. Ltd. Maps and sections from 1947 drill programme. Assessment report 092107.

D'el-Rey Silva, L.J.H., Liverton, T., Roots, C. and Paradis, S. 2001. A structural analysis of the upper Swift River area (105B/3), Yukon, Part II: the TBMB claims and implications for the regional geology. *In: Yukon Exploration and Geology 2000*, D.S. Emond and L.H. Weston (eds.), Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 301-310.

J.W. McLeod and P.H. Sevensma: Boswell River Mines Ltd., Dan Group. Watson lake M.D. 105B-3. 60°10' North, 131° 6' West. Summary of 1968 Work Program. July 7th. 1969

COST STATEMENT

W. Mann, consulting	\$ 2100.00
Aurora Geophysics	\$ 1987.13
ALS Minerals, assay	\$ 364.37
Vancouver Petrographics, sample preparation	\$ 455.70
Vehicle use (Landrover, Toyota), 1280km @ \$0.62	\$ 1587.20
Candig, 3 days @ \$100-	\$ 300.00
Camp costs, \$100 per man-day	\$ 1600.00
<u>TOTAL</u>	<u>\$ 8394.40</u>

QUALIFICATIONS

Timothy Liverton: Geologist

Qualifications: BSc in Geology & Geophysics, University of Sydney, conferred 1965
BSc (Hons) in Economic Geology, University of Adelaide, conferred 1968
PhD in petrology, structural geology & metallogeny, Royal Holloway, University of London 1992.

Chartered Geologist, Fellow of the Geological Society, Fellow of the Geological Association of Canada, Member of the Geological Society of America, Member of the Society of Economic Geologists

Experience: 49 years' experience in engineering geology, mine geology and mineral exploration for tin, tungsten, uranium, manganese, base metals, silver, gold and industrial minerals in Australia, Canada, U.S.A., Brasil, Guyana, Norway, Portugal and Egypt.

Watson Lake, Yukon

December 2015

Timothy Liverton

APPENDIX 1: PETROGRAPHY

The location of specimens is shown in Figure 2.

MU1 (polished block)

Consists of galena (60%) with mostly 0.25-1mm grains of pyrrhotite. There is little sphalerite (10%) in often 1mm grainsize and quite anhedral. It has occasional inclusions of euhedral arsenopyrite (<0.3mm size and <0.5% content) included in galena. Subhedral to euhedral tetrahedrite, 0.2-0.25mm is also present. [MU1-20ppin] shows arsenopyrite, sphalerite and pyrrhotite in galena with gangue; [MU1-10ppin] shows galena, sphalerite and pyrrhotite with a tetrahedrite crystal in the centre. [MU1-20ppin2] shows sphalerite with euhedral tetrahedrite with a little arsenopyrite and pyrrhotite in galena.

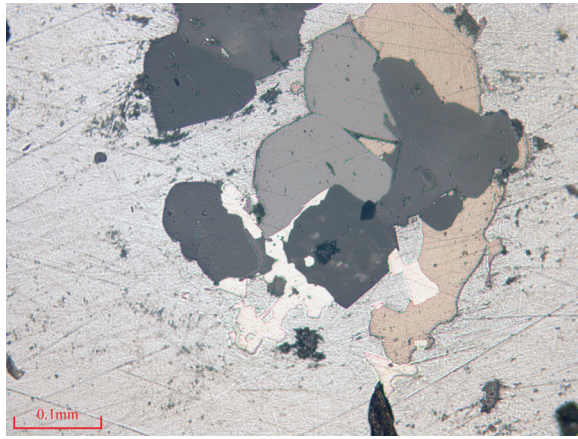
MU2 (polished block)

There is little gangue in this rock. Contains roughly equal proportions of sphalerite, galena and pyrrhotite. Sphalerite masses (layers) are up to 20 x 6mm. Galena is in layers 10mm thick that cross the whole section. The pyrrhotite forms some large fields, but is mostly in 0.5-1mm rounded grains that are included in the galena and sphalerite. Tetrahedrite occurs as ≤ 0.3 mm rounded grains that are included in galena and sphalerite (total $\leq 5\%$). There are no small oriented inclusions in either tetrahedrite or sphalerite such as are seen at the lower showing. A network of brittle fractures crosses the section. Where these cross the galena they step around cleavages. Fracture filling is probably carbonate. A few arsenopyrite crystals to 0.12mm are included in the galena. [MU2-10ppin] shows sphalerite, galena and pyrrhotite with small inclusions of subhedral tetrahedrite. Note: a trace of chalcopyrite is present as inclusions in sphalerite to 0.07mm long and also along sphalerite margins associate with pyrrhotite. One 0.03mm grain of (?) ruby silver, associated with chalcopyrite at the margin of sphalerite against galena was noted.

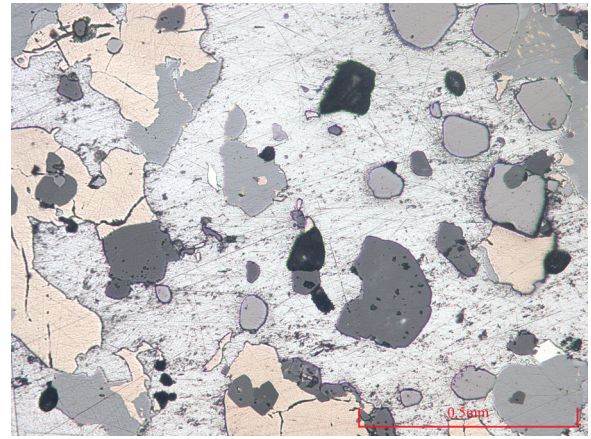
ML1 (covered thin section)

(Somewhat weathered).

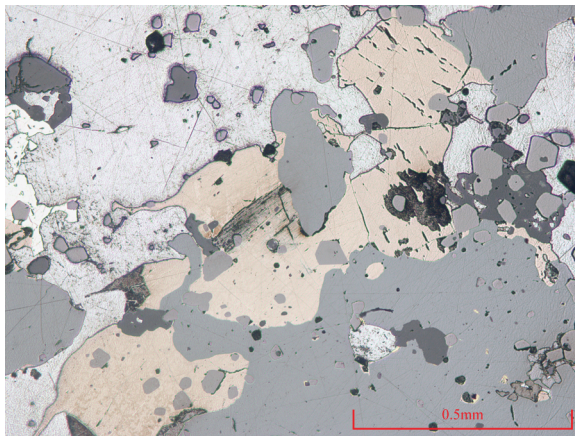
This is a fine-grained, highly foliated rock composed of quartz, muscovite and chlorite with some biotite layers [ML1-20pp]. In [ML1-20pp2] the slightly greenish layers are chlorite. No undulose extinction is seen in quartz and no plagioclase was noted in the thin section. 1-2mm wide quartz veins cut the rock at 80° to foliation.



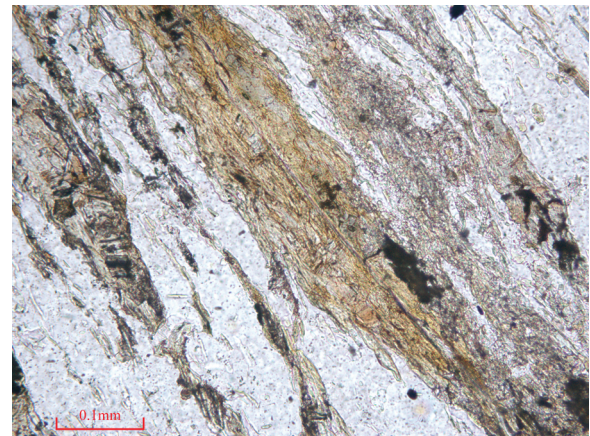
MU1-20ppin
Sphalerite, pyrrhotite, arsenopyrite
& gangue in galena



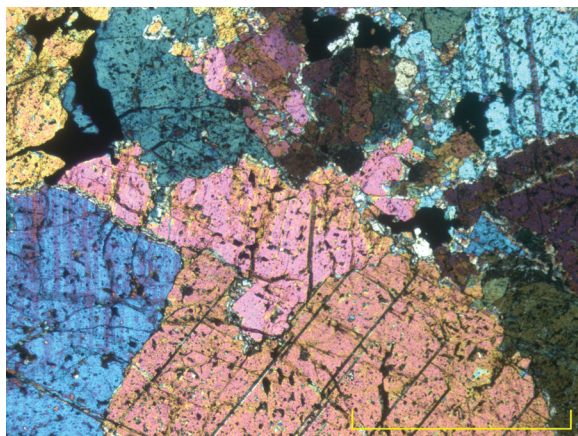
MU1-10ppin2
Pyrrhotite, sphalerite &
tetrahedrite in galena



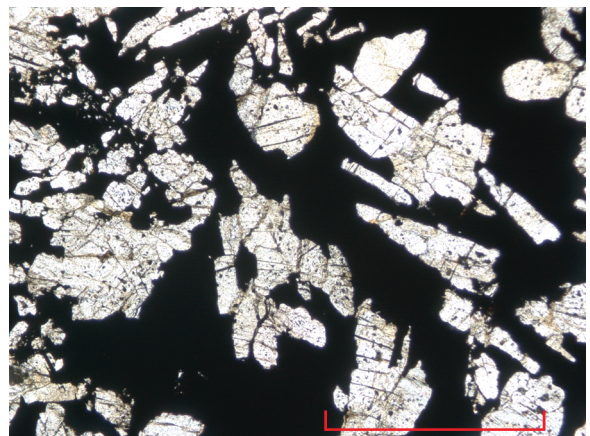
MU2-10ppin
Galena, sphalerite & pyrrhotite



ML1-20pp
Biotite in muscovite-chlorite
'schist': meta-tuff



ML2-5,0xp
Diopside-hedenbergite



ML2-5,0pp
Pyroxene in sulphide

ML2 (covered thin section)

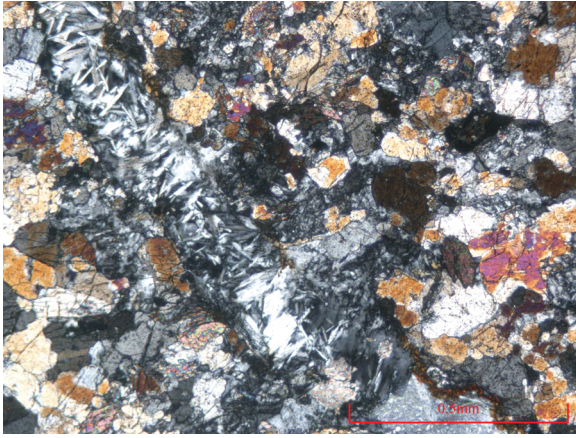
This is diopside-hedenbergite with some sulphides. Coarse pyroxene is granular and anhedral [ML2-5,0xp], but where individual crystals are totally included in sulphide they are subhedral [ML2-5,0pp].

ML3 (covered thin section)

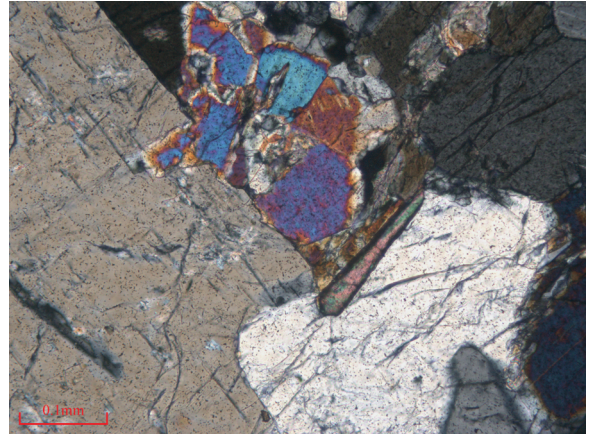
The rock is composed of pyroxene with some masses of anorthite and a few anhedral to euhedral sphene crystals. Fields of anorthite are up to 6mm across and include a few 0.04-0.2mm diopside crystals. The main pyroxene mass is of anhedral crystals to 1mm grainsize. Sphene occupies $\approx 0.5\%$ of the rock. One 0.1mm wide chlorite-filled fracture cuts the rock. [ML3-10xp] shows pyroxene with small sphene grains in the SW and NE quadrants, plus the vein. [ML3-20xp] shows euhedral sphene. A little remnant carbonate is present, mostly within anorthite.

ML5 (polished block)

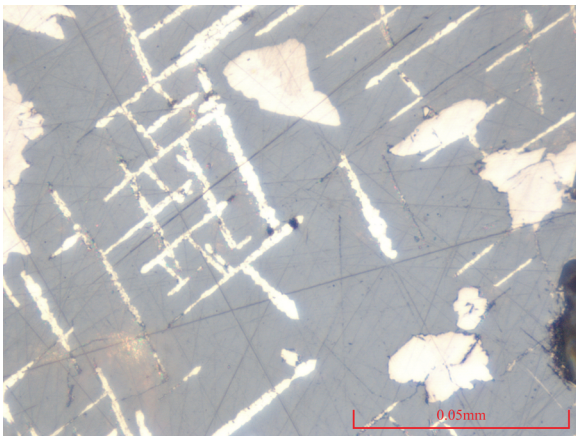
This has about 60% pyrrhotite, approximately 5% galena (but locally to 30%): the remainder is sphalerite and tetrahedrite (almost half tetrahedrite). Gangue (pyroxene) amounts to 15%. The grain boundaries of the sphalerite are marked by thin (0.005-0.25mm) fields of pyrite and rare chalcopyrite. Oriented inclusions occur within the sphalerite. Acicular inclusions are of pyrite (ML5-100ppin oil) and coarser short, anhedral inclusions are pyrrhotite. This differs from the upper showing in that the tetrahedrite forms irregular-shaped masses intergrown with the sphalerite, often constituting 15% of any field. The tetrahedrite occasionally has planar oriented inclusions of pyrrhotite as well as coarser anhedral inclusions to 0.015mm long. The smaller masses of tetrahedrite are found along sphalerite grain boundaries. Apart from internal grain boundaries within sphalerite masses the grains are mostly subrounded. Galena forms irregular elongate masses to 2 x 8 mm [ML5-10ppin]. About ten 0.6mm euhedral to anhedral arsenopyrite crystals were noted. [ML5-10ppin] shows pyrrhotite, galena, tetrahedrite and sphalerite. [ML5-10ppin2] shows arsenopyrite in pyrrhotite, sphalerite and tetrahedrite. The pyrrhotite grains define a weak foliation. [ML5-20ppin4] shows pyrrhotite, galena and sphalerite (with pyrrhotite inclusions) intergrown with tetrahedrite, plus little gangue.



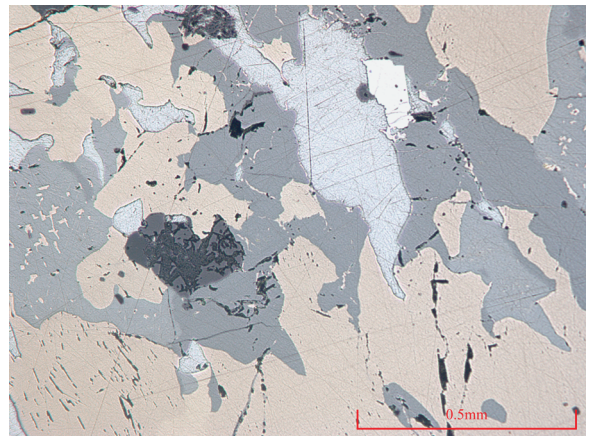
ML3-10xp
Chlorite vein



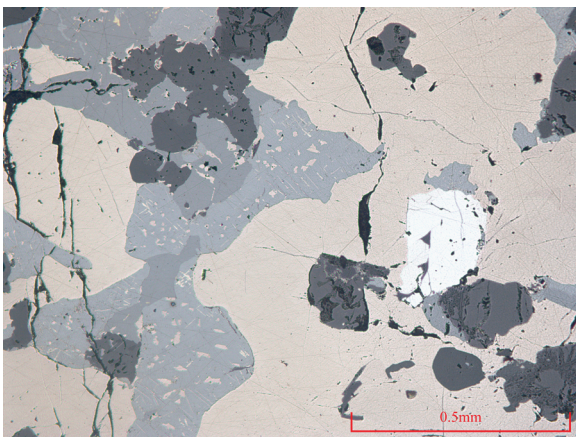
ML3-20xp
Pyroxene & sphene



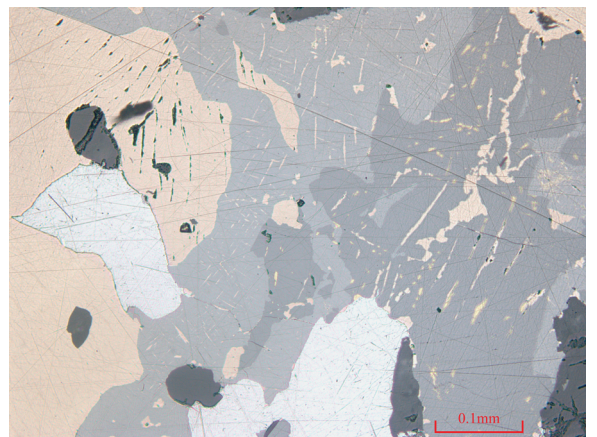
ML5-100ppin oil
Sphalerite containing pyrrhotite
and pyrite inclusions



ML5-10ppin
Pyrrhotite, sphalerite, tetrahedrite,
galena & arsenopyrite



ML5-10ppin2
Tetrahedrite included in sphalerite,
pyrrhotite and arsenopyrite



ML5-20ppin4
Tetrahedrite with pyrrhotite inclusions
in sphalerite, with pyrrhotite and arsenopyrite

ML6 (polished thin section)

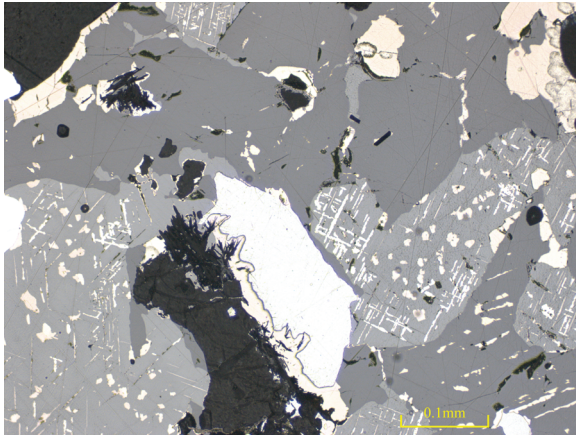
Contains sphalerite, tetrahedrite, pyrrhotite, galena and arsenopyrite. One end of the section has a field predominantly of sphalerite which contains oriented, elongate pyrrhotite inclusions and is intergrown with $\approx 20\%$ tetrahedrite. Pyrrhotite also is found as thin masses along sphalerite grain boundaries. The remainder of the section is of coarse ($\leq 7\text{mm}$) masses of galena and pyrrhotite with lesser amounts of sphalerite. Some coarse anhedral arsenopyrite (3mm) with sphalerite inclusions is also found in this coarser grained section. Tetrahedrite is not prominent in the coarser material. [ML6-20ppin oil] shows sphalerite (mid grey) containing oriented pyrrhotite inclusions, tetrahedrite (upper part), galena in the centre with a pyrrhotite rim. The acicular black material is a weathering product. [ML6-20ppin oil2] shows galena with curved cleavages, pyrrhotite and sphalerite; [ML6-5,0ppin] shows a large arsenopyrite field with pyrrhotite inclusions with galena and pyrrhotite masses; [ML6-10ppin] shows detail of arsenopyrite with galena, pyrrhotite and sphalerite. The gangue is of subhedral diopside mostly in 0.5mm crystals. Much is included in the sulphide as individual grains. Total gangue is $\approx 30\%$.

ML8 (polished thin section)

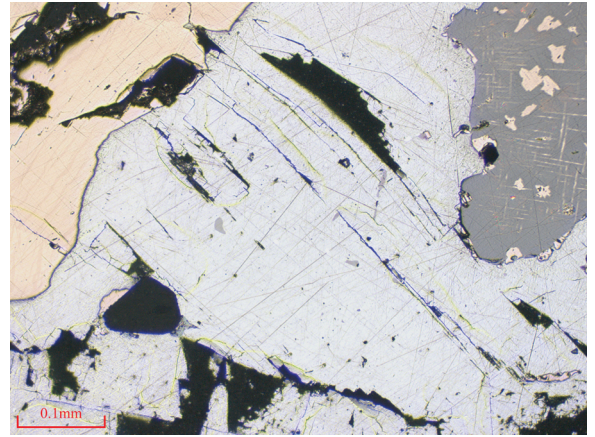
Coarse-grained. Consists of a field of sphalerite containing minor tetrahedrite ($\leq 10\%$) and pyrrhotite along grain boundaries. Masses of coarse pyrrhotite (2mm) are also included in the sphalerite as well as elongate irregular shaped galena (layers to 15mm long). Two anhedral grains of arsenopyrite to 3mm long are included in sphalerite. [ML8-5,0ppin] gives a general view. The gangue is entirely pyroxene, $\approx 30\%$.

ML9 (polished thin section)

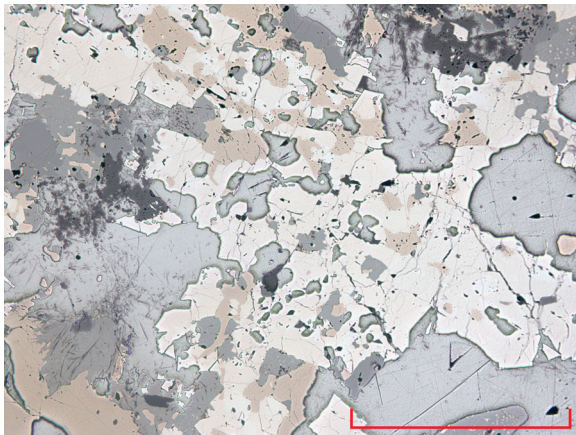
The gangue is up to 50% volume (average 40%). [ML9-5,0xp] shows this. Subhedral to rare euhedral pyroxenes are from 0.1-1.0 mm, with a little carbonate (1mm). Sphalerite and pyrrhotite are overall in equal proportion, but vary considerable as to individual fields. Only a little tetrahedrite ($\approx 10\%$ overall) is included in the sphalerite. Grain boundaries of sphalerite are invaded by pyrrhotite. Oriented, acicular inclusions of pyrrhotite are seen in the tetrahedrite. Coarser, elongate, pyrrhotite and occasional chalcopyrite inclusions are in the sphalerite. Only a few 1-2mm grains of galena are present. Anastomosing fractures (two sets at $70-80^\circ$ apart) cut both sulphides and pyroxene [ML9-10-ppin].



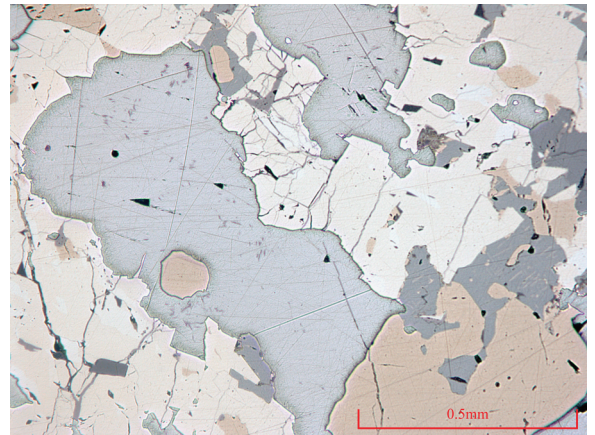
ML6-20ppin oil
Sphalerite containing oriented
pyrrhotite inclusions, tetrahedrite,
galena in the centre with a pyrrhotite rim



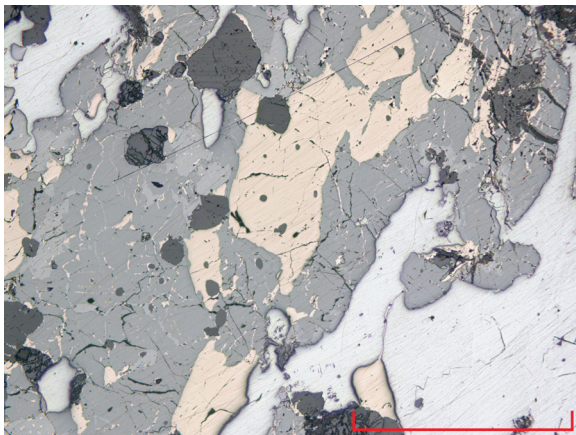
ML6-20ppin oil2
Galena showing deformed
cleavages



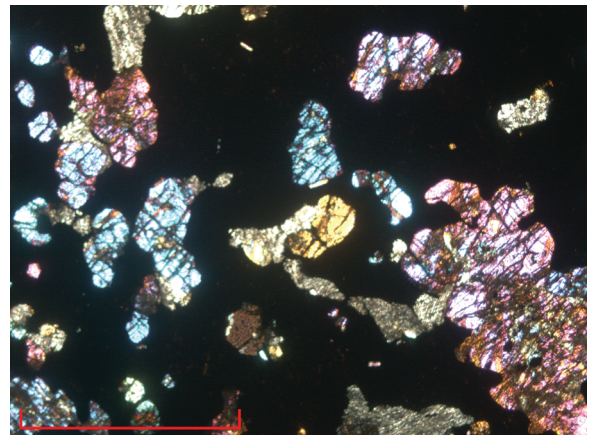
ML6-5,0ppin
Arsenopyrite with pyrrhotite inclusions
with galena & a little tetrahedrite



ML6-10ppin
Arsenopyrite with galena, pyrrhotite
and sphalerite



ML8-5,0ppin
Sphalerite with tetrahedrite,
galena & pyrrhotite



ML9-5,0xp
Pyroxene in sulphide

ML10 (polished thin section)

Similar to ML9. Sphalerite with tetrahedrite and pyrrhotite form large masses. Only a little galena (six grains of 1-2mm) is seen and one subhedral crystal of arsenopyrite. [ML10-5,0ppin] gives a general view showing a little galena. Gangue amounts to $\approx 45\%$.

ML11 (polished thin section)

[ML11-20ppin] shows detail of tetrahedrite in sphalerite with pyrrhotite. Acicular crystals along cleavages are pyrrhotite. Contains about 35% pyroxene with some carbonate gangue. Diopside is anhedral to subhedral and 0.2-2mm grainsize. In the coarser pyroxene grains the boundaries are embayed [ML11-10xp]. Shows tetrahedrite rimmed with pyrrhotite and sphalerite with pyrrhotite inclusions. The section contains about 30% pyrrhotite as fine (0.05mm) to coarse (2mm long) masses. The remainder of the sulphides are tetrahedrite and sphalerite in subequal proportions. Galena forms only rare 0.1mm grains. A 2mm wide distinctly foliated layer of fine grained pyrrhotite is enclosed in the tetrahedrite and sphalerite. Fine fractures cross at 60-90° to this layering [ML11-5,0ppin]. One end of the specimen only shows a 2mm wide galena-rich layer [ML11-5,0ppin2]. Some fracturing follows this layer (but this may have been induced by breaking the rock).

ML12 (polished thin section)

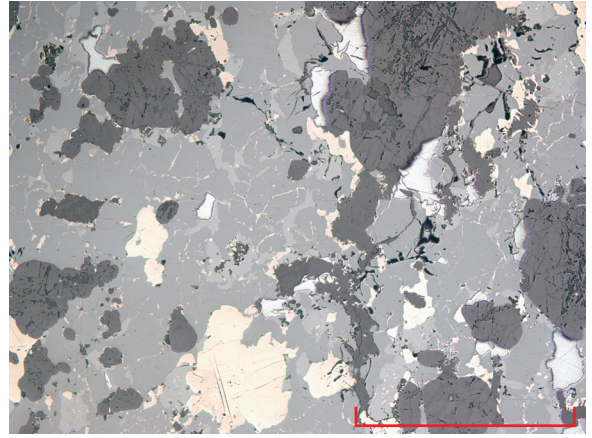
This specimen is predominantly of sphalerite-pyrrhotite, with only rare tetrahedrite and no galena [ML12-5,0ppin]. Pyrrhotite forms oriented inclusions in sphalerite [ML12-20ppin]. Gangue (pyroxene) comprises up to 70% of the volume in anhedral rounded and embayed forms. Sphalerite is often rimmed by pyrrhotite and contains frequent oriented inclusions. Pyrrhotite forms some discrete masses to 2mm size. Galena is seen as only rare 0.2mm grains. Gangue is $\approx 50\%$.

ML12 (polished thin section: second slide)

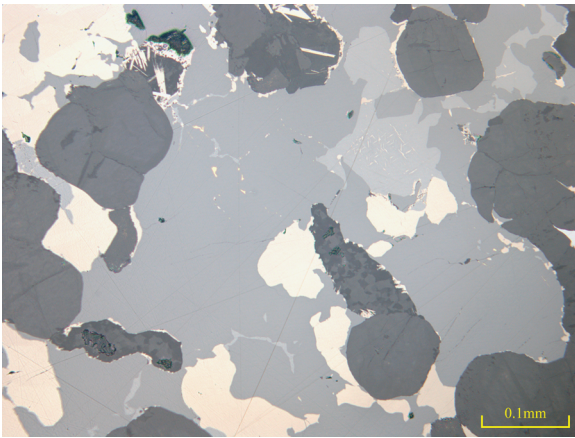
Similar to the above, but galena is seen as few elongate anhedral grains to 1mm long (still <1% total, however). No fabric is evident. [ML12b-5,0ppin]. Gangue is $\approx 50\%$.



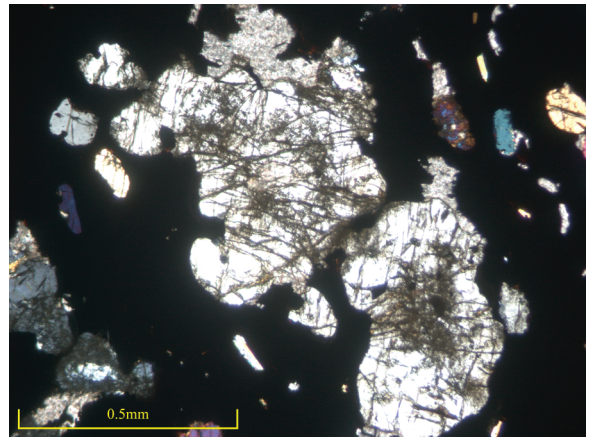
ML9-10ppin
Fractures



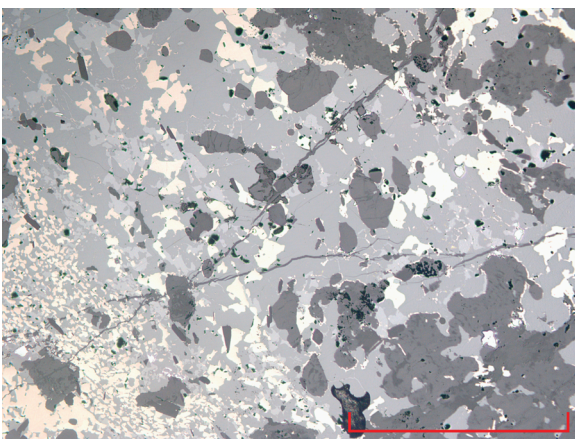
ML10-5,0ppin
Tetrahedrite along grain boundaries in
sphalerite (with pyrrhotite, galena & gangue)



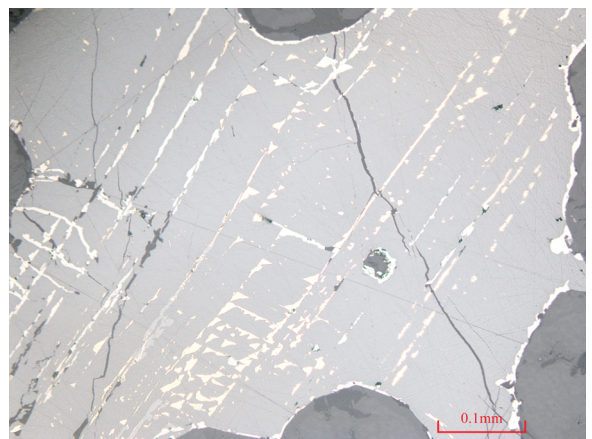
ML11-20ppin
Spahlerite, tetrahedrite & pyrrhotite



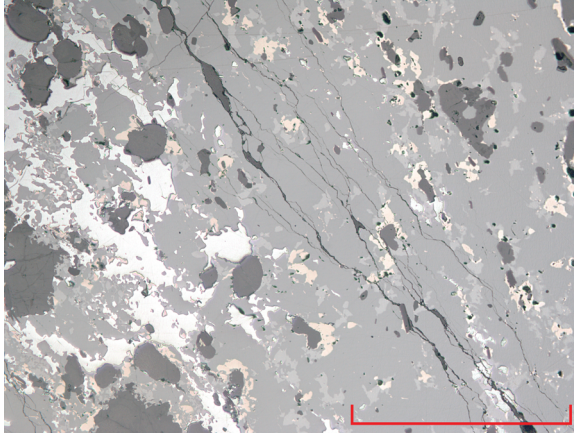
ML11-10xp
Rounded & embayed pyroxene
in sulphides



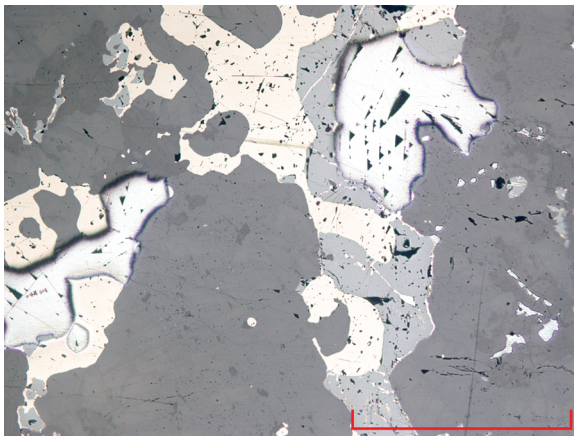
ML11-5,0ppin
Weak foliation and fractures



ML12-20ppin
Pyrrhotite inclusions in sphalerite



ML11-5,0ppin2
Foliation parallel fractures



ML12-5,0ppin
Sphalerite, tetrahedrite, pyrrhotite
& galena

APPENDIX 2: ASSAY CERTIFICATES

Copies of the ALS Minerals certificates follow



ALS Canada Ltd.
 2103 Dollarton Hwy
 North Vancouver BC V7H 0A7
 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
 www.alsglobal.com

An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

To: **LIVERTON, TIMOTHY**
PO BOX 393
WATSON LAKE YT Y0A 1C0

Page: 1
 Total # Pages: 2 (A - B)
 Plus Appendix Pages
 Finalized Date: 12-OCT-2015
 Account: TLIVER

CERTIFICATE WH15140802

Project: MOD

This report is for 6 Rock samples submitted to our lab in Whitehorse, YT, Canada on 16-SEP-2015.

The following have access to data associated with this certificate:

HARDY HIBBING

TIMOTHY LIVERTON

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
CRU-31	Fine crushing - 70% <2mm
LOG-21	Sample logging - ClientBarCode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICPORE	Oxidizing Digestion w/ ICP-AES Finish	ICP-AES
Au-AA25	Ore Grade Au 30g FA AA finish	AAS

To: **LIVERTON, TIMOTHY**
PO BOX 393
WATSON LAKE YT Y0A 1C0

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.

***** See Appendix Page for comments regarding this certificate *****

Signature: 
 Andrey Tairov, Technical Manager, Ireland



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Project: MOD

CERTIFICATE OF ANALYSIS WH15140802

Sample Description	Method Analyte Units LOR	ME-ICPORE	ME-ICPORE	ME-ICPORE	ME-ICPORE	ME-ICPORE	ME-ICPORE	ME-ICPORE	ME-ICPORE	ME-ICPORE	ME-ICPORE	ME-ICPORE	ME-ICPORE	ME-ICPORE	ME-ICPORE	ME-ICPORE
		Ag ppm	As %	Bi %	Ca %	Cd %	Co %	Cu %	Fe %	Hg ppm	Mg %	Mn %	Mo %	Ni %	P %	Pb %
		1	0.005	0.005	0.01	0.001	0.001	0.005	0.01	8	0.01	0.005	0.001	0.001	0.01	0.01
S055001		72	<0.005	0.022	2.97	0.030	<0.001	0.086	18.15	<8	0.54	4.68	<0.001	0.001	0.03	1.47
S055002		92	<0.005	<0.005	0.36	0.030	<0.001	0.160	28.1	<8	1.66	13.50	<0.001	0.001	0.01	1.70
S055003		141	<0.005	<0.005	0.30	0.025	<0.001	0.151	28.9	<8	1.85	14.40	<0.001	0.002	0.01	2.73
S055004		493	0.181	<0.005	0.72	0.040	<0.001	0.113	22.8	9	1.71	15.80	<0.001	0.001	0.04	9.38
S055005		244	0.085	<0.005	0.63	0.025	<0.001	0.106	25.9	<8	1.81	18.10	<0.001	0.001	0.02	3.27
S055006		492	0.310	<0.005	0.63	0.034	<0.001	0.094	23.3	<8	1.73	17.20	<0.001	0.001	0.02	8.20

***** See Appendix Page for comments regarding this certificate *****



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Project: MOD

CERTIFICATE OF ANALYSIS WH15140802

Sample Description	Method Analyte Units LOR	ME-ICPORE S %	ME-ICPORE Sb %	ME-ICPORE Tl %	ME-ICPORE Zn %	Au-AA25 Au ppm	WEI-21 Recvd Wt. kg
		0.05	0.005	0.005	0.01	0.01	0.02
S055001		12.00	<0.005	<0.005	5.00	0.09	1.31
S055002		21.9	<0.005	<0.005	7.76	<0.01	1.62
S055003		21.0	0.014	<0.005	6.63	<0.01	1.70
S055004		27.8	0.037	<0.005	9.99	<0.01	2.27
S055005		24.3	0.010	<0.005	6.53	<0.01	2.03
S055006		27.3	0.027	<0.005	8.74	<0.01	1.10

***** See Appendix Page for comments regarding this certificate *****



ALS Canada Ltd.
 2103 Dollarton Hwy
 North Vancouver BC V7H 0A7
 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218 www.alsglobal.com

To: **LIVERTON, TIMOTHY**
PO BOX 393
WATSON LAKE YT Y0A 1C0

INVOICE NUMBER 3430962

BILLING INFORMATION	
Certificate:	WH15140802
Sample Type:	Rock
Account:	TLIVER
Date:	12-OCT-2015
Project:	MOD
P.O. No.:	
Quote:	
Terms:	Due on Receipt
Comments:	C1

QUANTITY	CODE	ANALYSED FOR DESCRIPTION	UNIT PRICE	TOTAL
1	BAT-01	Administration Fee	30.00	30.00
6	PUL-31	Pulverize split to 85% <75 um	4.30	25.80
6	LOG-21	Sample logging - ClientBarCode	0.60	3.60
6	ME-ICPORE	Oxidizing Digestion w/ ICP-AES Finish	25.10	150.60
6	Au-AA25	Ore Grade Au 30g FA AA finish	16.70	100.20
10.03	SPL-21	Weight Charge (kg) - Split sample - riffle splitter	0.38	3.81
6	SPL-21	Split sample - riffle splitter	1.90	11.40
10.03	CRU-31	Weight Charge (kg) - Fine crushing - 70% <2mm	0.48	4.81
6	CRU-31	Fine crushing - 70% <2mm	2.80	16.80

SUBTOTAL (CAD) \$ 347.02

R100938885 GST \$ 17.35

TOTAL PAYABLE (CAD) \$ 364.37

To: **LIVERTON, TIMOTHY**
 PO BOX 393
 WATSON LAKE YT Y0A 1C0

Payment may be made by: Cheque or Bank Transfer

Beneficiary Name: ALS Canada Ltd.
 Bank: Royal Bank of Canada
 SWIFT: ROYCCAT2
 Address: Vancouver, BC, CAN
 Account: 003-00010-1001098
 Please send payment info to accounting.canusa@alsglobal.com

Please Remit Payments To :
ALS Canada Ltd.
 2103 Dollarton Hwy
 North Vancouver BC V7H 0A7



ALS Canada Ltd.
 2103 Dollarton Hwy
 North Vancouver BC V7H 0A7
 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
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Page: Appendix 1
 Total # Appendix Pages: 1
 Finalized Date: 12-OCT-2015
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An INAB accredited testing laboratory Reg. No. 173T. Accredited methods are listed in the Scope of Accreditation available on request.

Project: MOD

CERTIFICATE OF ANALYSIS WH15140802

CERTIFICATE COMMENTS

ACCREDITATION COMMENTS

Applies to Method: ISO 17025:2005 Accredited. INAB Registration No: 173T
 Au-AA25 ME-ICPORE



LABORATORY ADDRESSES

Applies to Method: Processed at ALS Loughrea located at Dublin Road, Loughrea, Co. Galway, Ireland.
 ME-ICPORE

Applies to Method: Processed at ALS Whitehorse located at 78 Mt. Sima Rd, Whitehorse, YT, Canada.
 CRU-31 CRU-QC LOG-21 PUL-31
 PUL-QC SPL-21 WEI-21

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
 Au-AA25

William D. Mann, P.Geo.

GEOLOGICAL CONSULTANT

INVOICE

#15-154

19 Hayes Cres.
Whitehorse, Y.T., Y1A 0E1
Phone: 867-667-7409
email: wdmgeology@gmail.com

DATE:
2015-09-02

Bill To:
Timothy Liverton

For:
Geological Consulting: Yukon

DATE	WORK	Project	RATE	UNITS	AMOUNT
2015-08-19	work on PATIENCE claims		500	1	\$500.00
2015-08-20	work on PATIENCE claims		500	1	\$500.00
2015-08-21	work on PATIENCE claims		500	1	\$500.00
2015-08-22	work on PATIENCE claims		500	1	\$500.00
			SUBTOTAL		\$2,000.00
			GST (5%)		\$100.00
TOTAL					\$ 2,100.00

Note: rate for office work \$400 per day, field work \$500 per day, QP \$750 per day

Make all cheques payable to **William Mann**

A.P.E.G.B.C. License # 31907
GST # 118617992

THANK YOU!



Aurora Geosciences Ltd.
3506 McDonald Drive
Yellowknife, NT X1A 2H1

Invoice

Date: 24/09/2015
 Invoice #: 12741

Tel: 867-920-2729 Fax: 867-920-2739


Invoice To

E-mail: accounting@aurorageosciences.com

William Mann
 19 Hayes Crescent
 Whitehorse, YT Y1A 0E1

Terms	P.O. No.	Project
		WMN-15530-YT Mag Rental & Data Processing

Description	Qty	Unit	Rate	Amount	Tax
MAG RENTAL & DATA PROCESSING					
Property Location: YT					
Service Invoice August 13 - September 4, 2015					
Job Prep & equipment checks, Dave Hildes	3.5	Hours	75.00	262.50T	G
Project management, data, map & report review, Dave Hildes	3.25	Hours	100.00	325.00T	G
Mag data processing, map production & database clean-up: technical time	7	Hours	75.00	525.00T	G
Magnetometer rental:2 units, Aug 19 - 22	4	Days	180.00	720.00T	G
1 kW generator rental, Aug 19 - 22	4	Days	15.00	60.00T	G
GST on Sales			5.00%	94.63	

Approved by		Subtotal	\$1,892.50
GST/HST No.	886365816	GST/HST	\$94.63
Bank Info: Bank ID #003, Transit #09879, Account #1013606, RBC Royal Bank.		Total	\$1,987.13
Please quote invoice # and amount paid when making payments by emailing accounting@aurorageosciences.com			

Vancouver Petrographics Ltd.

8080 Glover Road
Langley BC
V1M 3S3
604-888-1323

Invoice

Date	Invoice #
10/18/2015	150703

Invoice To
Tim Liverton P.O. Box 393 Watson Lake, Yukon Y0A 1C0

Ship To
Tim Liverton

P.O. No.	Terms	Due Date	Ship Date	Ship Via	Project
	Net 30	11/17/2015	10/18/2015	Mail	

Description	Qty	Rate	Amount
Thin Sections	2	25.00	50.00
Polished Thin Sections	7	50.00	350.00
Display Polishing		9.00	9.00
Shipping		25.00	25.00
GST On Sales		5.00%	21.70
Total			CAD 455.70
Payments/Credits			CAD 0.00
Balance Due			CAD 455.70

E-mail
vanpetro@vanpetro.com

GST/HST No. 105484687

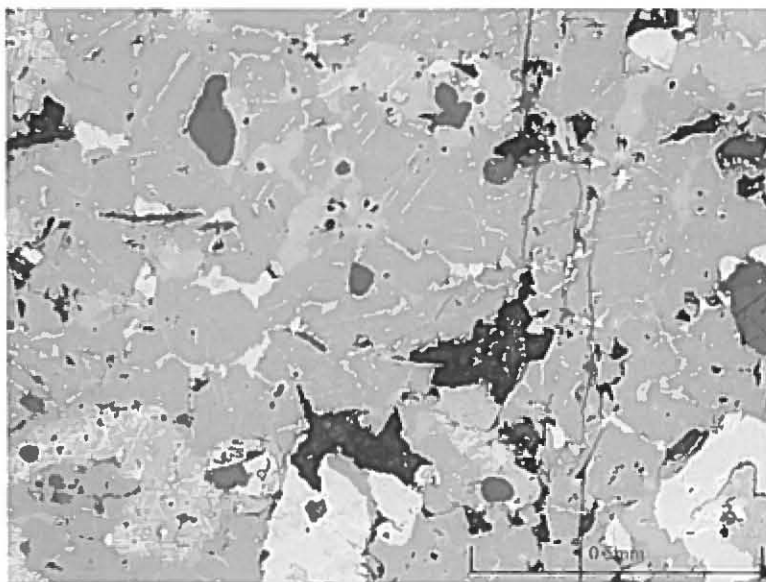
ERRATUM

For the assessment report entitled: "REPORT OF FIELDWORK 2015:

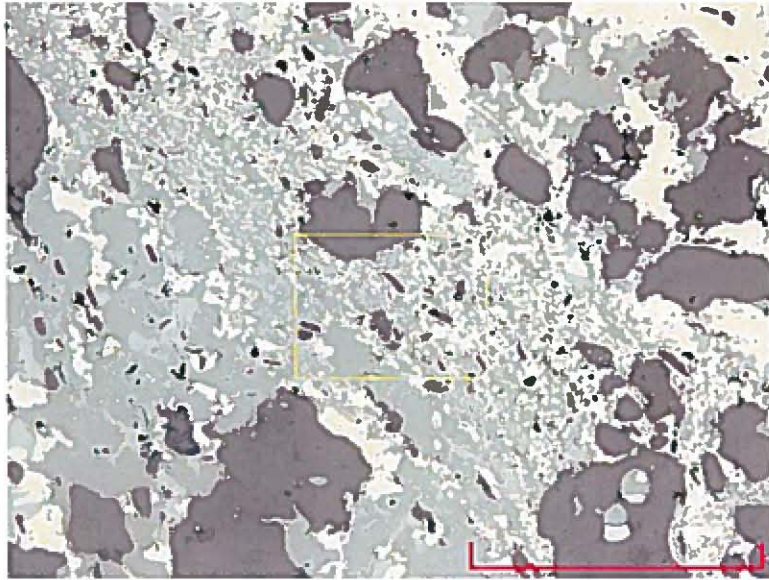
Excavation, mapping, channel sampling, ground magnetic survey and mineragraphy. Fieldwork from 20th. August to 3rd. September 2015"

Relevant to : Patience 1-4 claims (YE85697-YE85700) and Patience 5-8 (YD10896-YD10899)

Further examination of hand specimens and mineragraphy on polished or polished thin sections has shown that the mineral identified as tetrahedrite is in fact magnetite. The texture of this mineral and surrounding sulphides lead to the identification error. The faint brownish tint to the grey of the magnetite mirrors the colour of the antimonial end member of the tetrahedrite-tennantite series. Pyrrhotite inclusions within the magnetite crystals further complicated the issue. Examination of the assays, particularly for specimens C4 and C6 confirm this identification by the low values for Cu and Sb. Presence of some Cu and Sb may well indicate a trace of tetrahedrite-tennantite in the rock.



Magnetite (mid grey) containing oriented pyrrhotite inclusions. Sphalerite is alighter grey and it also contains inclusions of pyrrhotite. Galena and silicate gangue are also present. PP reflected light. Specimen ML6.



Specimen ML11. Banded sulphide/magnetite 'ore'. PP reflected light, scale bar 1mm. The yellow box indicates detail below.



Detail of magnetite (Mid grey), sphalerite (lighter), pyrrhotite and gangue. PP reflected light, scale bar 0.1mm.

Timothy Liverton

T. Liverton, January 2017