

# **GEOPHYSICAL SURVEYING**

and

**DIAMOND DRILLING** 

# **ON THE**

# **ROX 1 MINERAL CLAIM**

# **OMINECA MINING DIVISION**

NTS 093E/15W 53°46' N 126°53' W

for

Mr. GARY THOMPSON owner and operator

GEOLOGICAL SURVEY BRANCH



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#### 3.0 SUMMARY

The ROX1 mineral claim is situated in the Central Interior of the Province of British Columbia, approximately 90 kilometres south of the town of Houston, BC. The claim lies in the Omineca Mining Division on NTS map sheet 093E/15W.

At the request of Mr. Gary Thompson of Houston, British Columbia, Peter Ogryzlo M. Sc., P. Geo. (the author) has reviewed diamond drill programs undertaken by Mr. Thompson on the ROX1 Mineral Claim. In particular, the author has examined and logged drill core obtained by Mr. Thompson during diamond drill programs executed during the 2001 and 2002 field seasons. The author visited the claim on October 22, 2001 and examined the legal corner post and the location of the diamond drill holes. The author also visited the claim during the period June 11 to 13 2002 to supervise an electromagnetic survey, and again on August 23, 2002 to verify some of the survey results, and to examine proposed drill locations.

Limited diamond drilling on the ROX1 minerals claim during the 2001 field season indicated the presence of precious and base metal mineralization. In order to ascertain the extent and grade of this mineralization, the diamond drill program was continued in the 2002 field season guided by the previous work and by limited surveying using electromagnetic techniques.

As additional mineralization was encountered, further testing of the claims is once again warranted.

#### 3.1 Summary – ROXI Mineral Claim.

Mr. Thompson (the owner) holds the ROX1 mineral claim through mineral tenure No. 372796. The claim is located in the Mosquito Hills to the north of Tahtsa Reach in central British Columbia. Mr. Thompson has been actively exploring the claim since acquisition of the property by staking in September 1997. His field work led to the discovery of subcroppings of bedrock containing silicified zones, stringers, and brecciated zones with open spaces filled with sphalerite, galena and pyrite. These discoveries further led to the excavation of 2 diamond drill holes on the property in the fall of 2001. The holes were drilled using and AQTK (thin kerf) diamond bit, which produced a 30.5 mm core from a hole 48mm in diameter. In total, 15.53 metres of drilling was completed. Both holes stopped short of the planned depth due to ground control problems. In particular, diamond drill hole R0103 was stopped in a sulphide seam containing measurable concentrations of precious metals. It was recommended that Mr. Thompson resume drilling in order to more adequately test this occurrence.

Accordingly, approximately 7 line kilometres of grid were laid out and were surveyed using the VLEM "tilt angle" electromagnetic technique. Using this information and the results of earlier testing, 2 diamond drill holes were completed for a total of 106 metres of AQTK diamond coring.

From the surface exposures and sampling completed, the mineralization encountered indicates the presence of an epithermal precious metal system filling veins or cavities in the country rock. The level of information is not sufficient to estimate the grade or width of the occurrence. Electromagnetic surveying has proven to be of use in generating drill targets. Additional surveys are warranted using more sophisticated techniques.

More drilling is warranted to ascertain the horizontal and vertical extent of the mineralization.

#### 4.0 INTRODUCTION & TERMS OF REFERENCE

At the request of Mr. Gary Thompson, registered owner of the ROX1 Mineral Claim, Peter Ogryzlo P. Geo. has examined the ROX1 claim and the diamond drill locations on the claim.

The objective of the examination of the claim and the diamond drill core was to produce a Technical Report suitable for submission to the Mineral Titles Branch, Energy and Mines Division, Ministry of Energy and Mines, Province of British Columbia as required by the Mineral Tenure Act and the Regulations. The format of this report is intended to satisfy the requirements of the Mineral Act Regulations of the Province of British Columbia and is also derived from the requirements of National Policy 43-101 for the public release of geological data.

Analysis of the drill core obtained by Mr. Thompson has indicated measurable quantities of zinc, silver and gold on the property.

The data used in the preparation of this report and contained in this report has been derived from the activities of the author in sampling the drill core. The sampling of drill cuttings was undertaken by Mr. Thompson, the owner of the property.

The effective date of the exploration data is October 15, 2002.

#### 5.0 DISCLAIMER

- The author has relied upon the description of the ROX1 mineral Claim as provided by Mr. Gary Thompson, and has no reason to doubt the property description.
- The author has not verified title to the ROXI Mineral Claim held by Mr. Gary Thompson, and hereby disclaims all responsibility for such matters.
- The author is unaware of any other technical data other than that presented by Mr. Thompson.

#### 6.0 PROPERTY DESCRIPTION & LOCATION

The ROX 1 mineral claim was located on October 27, 1999. The claim consists of 20 claim units covering a surface area of 500 hectares. The legal corner post is located at UTM Zone 9 5958969N and 0640178E using the NAD27 datum. The legal corner post was examined on October 22, 2001 by the author, and was found to be correctly located according to a Global Position System determination.

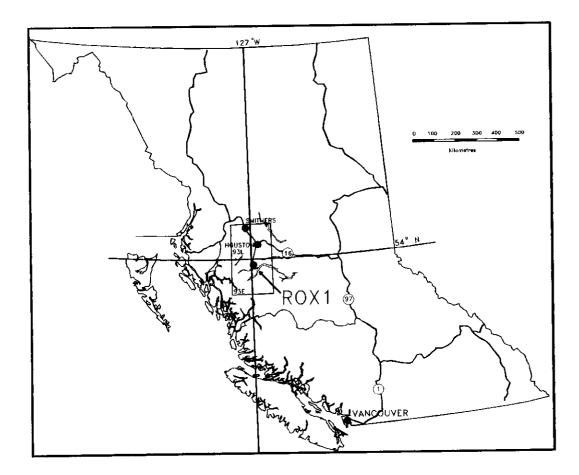


Figure 1. Location of ROX1 Mineral Claim.

# 7.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE & PHYSIOGRAPHY

# 7.1 Accessibility and Infrastructure

The property is located approximately 90 kilometres south of the town of Houston in the Central Interior of British Columbia.

Houston is a major supply and industrial centre and is serviced by the CNR transcontinental railway as well as by Highway 16, a major thoroughfare. Daily air service to Vancouver is available from Smithers, BC, approximately 70 kilometres by road to the west of Houston.

From Houston, access to the property is by road using a two wheel drive vehicle in fair weather, and a four wheel drive vehicle in poor weather. Road access is achieved by first travelling west from Houston on Highway 16 to the intersection with the Morice Forest Service Road; thence south 56.5 km on the Morice FSR and the Morice Owen FSR to the intersection with the Morice Nadina Forest Service Road. Travel is then south and west along the Morice Nadina FSR a further 33 kilometres to the Morice Reach Forest Service Road. The Morice Reach FSR is taken to the south for a further 3.5 km to a branch with and unmarked logging road. The branch road is taken 4.8 km to the south and east, then another branch is taken again to the south and east for a further 5 km to the claim block.

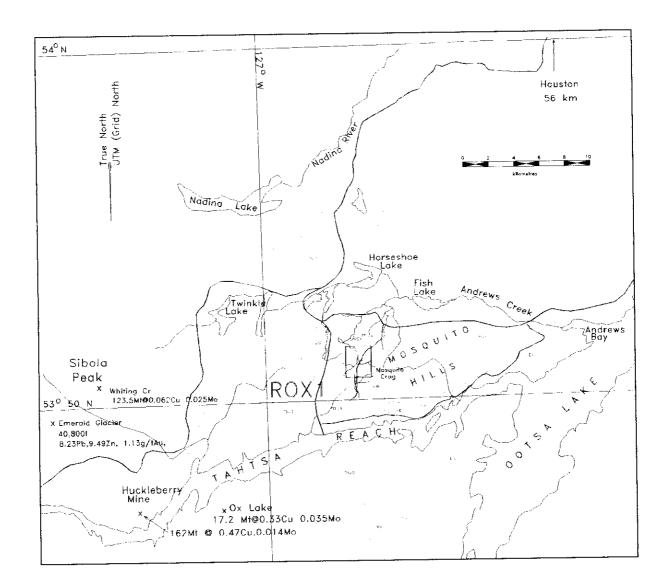
#### 7.2 Climate and Physiography

The property lies in the Mosquito Hills district on the northern shore of Tahtsa Reach. The district is located in the Nechako Plateau physiographic region of central British Columbia. Relief is moderate on the property with a maximum difference in elevation of approximately 400 metres. The highest point on the property is the summit of Mosquito Crag, a prominent landmark, at approximately 1441 metres.

The Mosquito Hills drain to the south into Tahtsa Reach, and thence into the Fraser River system. Drainage from the Mosquito Hills to the north first enters a chain of small lakes which then drain to the east via Andrews Creek into Andrews Bay on Ootsa Lake.

Climate is typical of the Central Interior, with short cool summers, and long relatively mild winters. Annual temperature variation in the region is approximately –25 to +25 degrees Celsius. Snowpack in the winter ranges from approximately 1 to 2 metres.

The property is covered around 20% by a submature stand of balsam fir. Most of the property has been logged by clearcut logging practices, and is covered by juvenile conifers, grasses and shrubs.



**Figure 2.** Location of ROX1 Mineral Claim with surrounding deposits. Resource figures from Energy and Mines MINFILE database. Geology after Foye and Owsiaki (1995). Note mJs Middle Jurassic Smithers Formation, Eo Eocene Ootsa Lake Group, EMv Endako Group.

#### 7.3 Local Resources

Houston British Columbia is a supply and service centre for the mining and logging industries located in the area. Modern transportation, supply and telecommunication services are available. There is a municipal airstrip for non-scheduled services, and helicopters may be hired locally. The town of Smithers, located approximately 65 km to the west is a service centre for the mineral exploration industry, with diamond drilling contractors, air services, and professional exploration personnel.

The 128 KVA power line and the access road servicing the Huckleberry Mine runs approximately 10 km west of the ROX1 mineral claim.

#### 8.0 GEOLOGICAL SETTING

#### 8.1 Regional Geology

The Whitesail map area (NTS 93E) straddles the boundary between the Coast tectonic belt and the Intermontane tectonic belt (MacIntyre et al., 1994). The Kitimat Ranges of the Coast Mountains lie to the west, with the Tahtsa Ranges lying between the Interior Plateau and the Coast Mountains.

Much of the map area is underlain by the Lower to Middle Jurassic Hazelton Group. The Hazelton group is comprised of folded and weakly metamorphosed to undeformed intermediate and basic volcanic rocks as well as derived sedimentary rocks attributed to ancient island arc complexes of the Stikine Terrane.

Mesozoic compressional tectonics resulting from the joining of the Stikine Terrane to continental North America were succeed by Late Cretaceous and Tertiary extension and rifting. Continental volcanic rocks of Upper Cretaceous to Eocene age occur in the Ootsa Lake Region as the Upper Cretaceous Kasalka and the Oligocene to Eocene Ootsa Lake groups. The Eocene to Miocene Endako Lake Group is largely comprised of mafic volcanic rocks, and occur as plateau basalts to the east of the map area, as well as occupying the downdrop basin of the Ootsa Lake valley.

The Intermontane Belt has been the site of episodic plutonic activity from Late Triassic time onwards. The plutons are grouped according to age, and have varying associated metal concentrations.

The topography of the area has been extensively modified by Quaternary ice sheets of Wisonsonian age. Ice movements in the area were complex, with an apparent reversal in the direction of ice flow (Ferbey and Levson, 2001). At the Huckleberry mine, two dominant ice flow directions have been reported, namely 40-91 degrees and 236-265 degrees. Along the shores of Tahtsa Reach and Ootsa Lake ice flow was topographically controlled and appears to have flowed parallel to the valleys. At lower elevation, Ferby and Levson (2001b) report that it is common to find WSW and ENE ice flow indicators at opposite ends of the same outcrop. At the onset of glaciation, ice flowed east from the Coast Mountains directed by the valleys of Tahtsa and Ootsa Lakes. As glaciation advanced, and ice dome or ice divide formed in central British Columbia during the glacial maximum. Ice flowed west to southwest back through the Ootsa Lake valley and over the adjoining mountain peaks. As glaciation waned, the ice divide shifted to the west, and ice flow once again was to the ENE along the major valleys. These ice flow reversals will have an affect on any surface drift exploration in the region.

The region is exceptionally well mineralized, with a number of producers, past producers and partially developed deposits with drill indicated resources. The area has been and continues to be an important supplier of base and precious metals in the Province of British Columbia. The most important of these operations are the past producing Emerald Glacier Mine, and the Huckleberry Mine of Imperial Metals which is in production at the time of preparation of this report.

The Emerald Glacier Mine (MINFILE 093E001 is located in the Whiting Creek drainage approximately 25 km WSW of the ROX1 mineral claim. The mine produced lead, zinc, silver and gold intermittently between 1951 and 1968. Reported production was 2.6 million grams of Ag, 1,524 grams of gold, 1.7 tonnes Cd, 9 tonnes of Cu, 766 tonnes of lead and 892 tonnes of Zn extracted from 8,293 tonnes of ore. The ore was produced from a series of en echelon polymetallic quartz veins cutting feldspathic sandstone and lesser siltstone and tuffaceous shale near the contact with overlying andesitic volcanic rocks and breccia. The Emerald Glacier deposit still has a reported unclassified resource of 40,800 tonnes containing 8.23% Pb, 9.49% Zn, and 1.13 g/t gold.

The Huckleberry Mine (MINFILE 093E 037) is located on the north side of Tahtsa Reach approximately 21 km WSW of the ROX1 claim. Porphyry Cu-Mo mineralization at Huckleberry is associated with an elliptical stock of the Cretaceous Bulkley Intrusions. Production began in 1997, and the mine was operating at a rate of 21.000 tonnes per day at the time of preparation of this report. Combined geological resources at the opening of the mine were 162 million tonnes containing 0.47% Cu and 0.014 % Mo. The deposit has also produced 8,576 kilograms of silver and 253,460 grams of gold up to 2001.

Exploration in the area has also resulted in the development of a number of deposits with drill indicated resources. The Ox Lake porphyry Cu-Mo deposit (MINFILE 093E 004) lies on the south side of Tahtsa Reach approximately 16 km SW of the ROX1 claim. Resources at Ox Lake are reported at 17.2 million tonnes containing 0.33% Cu and 0.035% Mo. The Whiting Creek porphyry Cu-Mo deposit (MINFILE 093E 112) is located north of the Emerald Glacier Mine, and has a reported geological resource of 123.4 million tonnes grading 0.062% Cu and 0.023% Mo. The Berg porphyry Cu-Mo-Ag deposit (MINFILE 093E 046) lies 36 km west of the ROX1 claim and has reported resources of 238 million tonnes at 0.39% Cu, 0.031% Mo and 2.84 g/t Ag.

#### 8.2 Regional Geochemical Survey

A Regional Geochemical Survey (RGS16) was conducted by the Ministry of Energy Mines and Petroleum Resources on the NTS 93E (Whitesail Lake) topographic sheet in 1986. Data were released in 1987. The survey comprised a total of 951 stream sediment and 933 water samples collected from 898 sample site.

The survey covered the Mosquito hills district with samples collected at a density of approximately 1 sample per 10 square kilometres. Two drainages with headwaters in the ROX1 mineral claim were anomalous. The first stream running north from the centre of the claim toward Fish Lake yielded 145 ppm Zn and 63 ppb Au, both anomalous at the >95% confidence level. A second stream draining to the north from the western claim boundary yielded 221 ppm Zn, and was also anomalous at the >95% confidence level.

#### 9.0 LOCAL GEOLOGY - ROX1 MINERAL CLAIM

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Rocks ranging in age from Mesozoic to Tertiary underlie the ROX1 Mineral Claim.

The ROX1 mineral claim is primarily underlain by fossiliferous rocks of the Middle Jurassic (Bajocian) Smithers formation (mJs, Foye and Owsiaki, 1995). These rocks occupy much of the lowlands between Tahtsa Reach and Nadina Lake. Exposures of mJs are poor on the ROX1 claim, as the rocks of the Smithers formation appear to weather recessively. Overburden depth is locally shallow, however, as the discovery showing subcrops in a stream cut at the edge of the logging haul road which traverses the claim. In drill core, rocks attributed to the Smithers formation were represented by greywacke, mudstone, immature quartz sandstone and minor bioclastic limestone.

Rocks of the Eocence Ootsa Lake Group (Eo) have not been mapped on the property, but have been observed in a downdrop block extending along Whitesail Lake and along the Ootsa Lake valley, as well as in a fault bounded downdrop block located 3 km west of the claim. The Ootsa Lake group is commonly characterized by felsic volcanic rocks, namely rhyolite and rhyodacite. The rhyolite encountered in the drill core is tentatively attributed to the Ootsa Lake Group, and may be associated with a circular domal feature located in the centre of the claim and which may be observed on an aerial photograph.

The Mosquito Hills, which begin in the southeastern corner of the property and extend to the east are underlain by basalt and andesite of the Eocene Endako Group (EMv). These rocks were examined on the cliff face of Mosquito Crag, where they appear to be of a rhyodacitic composition. Mosquito Crag is a prominent glacial feature which forms a landmark in the area.

An outcrop of the Cretaceous Bulkley Intrusions (LKb) has been mapped on the shores of Tahtsa Reach, approximately 5.5 km southeast of the claim.

The surface geology of the property has not been examined in detail. A few observations have been mad in road and stream cuts to verify the geology as described on Ministry maps.

#### **10.0 SURFACE EXPLORATION**

#### 10.1 Previous Exploration

Prior to the diamond drilling undertaken by Mr. Thompson, no previous exploration has been reported from the area enclosed by the ROX1 mineral claim. The discovery showing appears to be an original discovery made by Mr. Thompson during the course of prospecting the ground.

Noranda Exploration Company Ltd (No Personal Liability) reported on the occurrence of shear zones containing arsenopyrite along the shores of Tahtsa reach (MacArthur and Maxwell, 1988). The mineralization appears to be associated with a stock of the Cretaceous Bulkley Intrusions. The area of mineralization is located approximately 5.5 km southeast of the ROX1 claim and is described in assessment report 17443.

#### 11.0 GEOPHYSICAL SURVEYING

#### 11.1 Purpose of the survey

In order to determine the location of a drill target, a limited program of geophysical testing was undertaken. The method chosen was VLEM (Vertical Loop Electromagnetic), which is an inductive technique used to target subsurface conductive zones. The equipment used was a Sharpe SE 200 VLEM with an operating frequency of 1250 cps transmitting an intermittent signal at 2-3 cps.

The system uses two coils approximately 46 cm in diameter as transmitting and receiving coils respectively. Two transmitter (Tx) and receiver (Rx) orientations were used: the broadside array and the inline array. In the broadside configuration, the Tx loop is held vertically and points directly at the Rx loop. The receiver is held in a horizontal position, and is rotated out of the horizontal plane around an axis connecting the transmitter and receiver. The amount of tilt in

degrees and the direction of the plane of tilt are recorded. By convention, clockwise tilt is recorded as positive, and anti-clockwise tilt is recorded as negative. An intermittent audio frequency signal is transmitted which is received at the Rx coil, and is amplified. In the absence of a conductive body, the electromagnetic fields will be unpolarized, and will remain orthogonal. In this case, the signal will be at a minimum or null at a 0 degree tilt at the receiving coil. However, if a conductive body is present, an eddy current will be induced in the conductor, and the resultant field at the Rx coil will be polarized. The minimum signal or null position at the Rx coil is realized when the plane of the coil is parallel to the long axis of the polarization ellipse. The width of the null position may indicate the size of the conductive body, and is also recorded. The transmitter and receiver are located on parallel survey lines, and are displaced along the lines in a "broadside" manner. For the survey on the ROX1 mineral claims, Tx-Rx separations were 20 metres and 40 metres. Depth of penetration of the signal is commonly accepted as being approximately one-half the coil separation. Data is plotted as positive or negative tilt angles along the survey line. Due to the orientation of the resultant EM field, the receiver will tilt away from a buried conductor in the broadside configuration. As the apex of the conductor is crossed, the tilt angle will pass through zero, and will then have the opposite sign as the survey progresses along the line and the Rx coil once again tilts away from the conductor at the null position. The line connecting well defined crossover points is taken as the axis of the conductive body.

In the in-line configuration, the Tx and Rx coils are located on the same survey line. In this case, the Tx coil is held vertically, but at right angles to the Rx coil, with the axis of the Tx coil pointing at the receiver. The Rx coil is now rotated about an axis at right angles to the direction of travel along the survey line. In this configuration, the orientation of the resultant field is such that the tilt of the receiving coil is towards a buried conductor. Tilt angles and width of the null position are recorded in a similar fashion to the broadside technique, and crossover points are plotted.

A more adequate description of the theory and practice of electromagnetic surveying using the VLEM technique is available in Beck (1981).

A grid was laid out as control for the geophysical survey. The collar of Diamond Drill Hole R0101 located at UTM 63919E, 5960288N NAD27 was used as the 0N 0W origin of the grid. The baseline was oriented at 105 degrees azimuth, with section lines running 015/195 degrees azimuth. The orientation of the baseline was chosen to parallel a sulphide bearing shear zoned exposed in a ravine 10 metres south of R0101, which allowed the section lines to cross the shear zone. Section lines were laid out on 20 metre spacings. Lines were measured using a hip chain, and survey stations were marked every 20 meters. Directional control was provided using a Brunton pocket transit. Correction to the grid was provided by a Garmin etrex GPS. The grid was then extended south to DDH R0103, and three section lines were laid out to cover this location. A further extension was also laid out southwest of DDH R0103, with section lines running 105 degrees azimuth. A total of 660 metres of baseline and 7100 metres of section line were laid out for a total of 7760 metres of line.

| ARRAY                                 | Tx-Rx   | LINE | LENGTH   | CROSSOVER                              |
|---------------------------------------|---------|------|----------|----------------------------------------|
|                                       | Spacing |      | (metres) |                                        |
| Broadside                             | 40m     | 80E  | 360      | 10N (weak)                             |
|                                       |         | 100E | 360      | 5N(fair)                               |
|                                       | •       | 120E | 360      |                                        |
|                                       |         | 140E | 360      |                                        |
|                                       | ;,      | 20W  | 180      | 20S (fair)                             |
| Broadside                             | 20m     | 80W  | 200      |                                        |
|                                       |         | 60W  | 200      |                                        |
|                                       |         | 40W  | 200      |                                        |
| ·                                     |         | 20W  | 220      | ······································ |
|                                       |         | 0W   | 220      |                                        |
|                                       |         | 20E  | 220      | 15S (fair)                             |
| · · · · · · · · · · · · · · · · · · · |         | 40E  | 220      |                                        |
|                                       |         | 60E  | 220      |                                        |
|                                       | [       | 80E  | 220      |                                        |

#### 11.2 Work performed

|           |           | 100E | 220  | 5S (fair)   |
|-----------|-----------|------|------|-------------|
|           |           | 120E | 220  |             |
|           |           | 160E | 220  |             |
| Broadside | 40m       | 120W | 220  |             |
|           | · · · · · | 160W | 220  | 300S(fair)  |
|           |           | 200W | 220  | 350S (fair) |
| In-line   | 40m       | 400S | 400  | 490W(fair)  |
|           |           |      |      | 350W(fair)  |
|           |           | 420S | 400  | 490W(fair)  |
|           |           |      | 5    | 350W(fair)  |
|           |           | 440S | 420  | 390W(good)  |
|           |           |      | 1    | 260W(fair)  |
|           |           | 460S | 400  | Redo        |
|           | ļ         | 480S | 400  | Redo        |
|           | <u> </u>  | 500S | 400  | 400w(good)  |
| TOTAL     | 1         |      | 6880 |             |

#### 11.3 Interpretation of Results

In general, EM response was weak using the broadside configuration. Known outcrops of sulphide bearing shear zones were identified with the broadside technique, but response was in the +- 2 degree range. The 40m Tx-Rx separation while giving a weaker audio signal due to attenuation, provided somewhat better contrast in the readings.

For the area of the grid around DDH R0101, weak anomalies were identified at 20E 15S and 100E 5S using the broadside technique with a 20 metre Tx-Rx spacing. Somewhat stronger anomalies were identified at 20W 20S (over the sulphide showing) and at 80E 10N and 100E 5N using a 40 metre Tx-Rx separation. Diamond Drill Hole R0101 was completed in 2001, and was oriented to test the sulphide showing near 20W 20S and 20E 15S, but stopped short of the target.

For the area around DDH R0103, a distinct crossover was identified at 160W 300S, with a weaker crossover at 200W 350S using the broadside configuration with a 40 metre Tx-Rx configuration. Since a line joining these two crossovers appears to parallel a nearby topographic lineament, this area was chosen as the first priority for drill testing. A grab sample taken previously from this area reportedly returned 2.25 g/t Au and 8.4 g/t Ag, and an analysis of the cuttings from DDH R01013 returned 0.30 g/t Au and 31.8 g/t Ag. Another weaker crossover was noted at 160W 390S.

While surveying the area around DDH R0103, reconnaissance readings were taken using the inline configuration. These readings indicated the presence of a conductive body to the west and south of R0103. Accordingly, the grid was extended to the west and south, and an area 400 metres by 100 metres was survey on E-W lines using the in-line configuration with a Tx-Rx separation of 40 metres. Response was considerably greater, but was also "noisy": that is, readings were difficult to repeat. Several lines were re-surveyed on August 23, with more stable readings. Strong (high amplitude) crossovers were indicated at 500S 400W and 440S 390W. Weaker crossovers were indicated at 400S 490W, 400S 390W, 420S 490W, 420S 350W AND 440S 260W. Some of these crossovers appear to lie on an extension of the conductive zone identified near DDH R0103.

Readings on lines 480S and 460S were inconclusive, and these lines should be resurveyed.

In general, response was better (that is, easier to read) using the in-line technique.

Examination of the drill core revealed that sulphide contents are low. The highest concentration noted was approximately 5% sulphide, with most contents falling in the range of trace to 2% total sulphides. These concentrations would be at the lowere limit of detection by VLEM survey techniques. Nevertheless, DDH R0203A intersected precious metal bearing veinlets in the target zone indicated by the VLEM survey. While the VLEM response may have been due to the sulphides associated with the mineralization, it is also possible that the response was due to water saturated clay filled shear zones, which coincidentally hosted the observed mineralization.

The VLEM profiles have been plotted and are included in a pocket which accompanies this report.

### 12.0 DIAMOND DRILLING

#### 12.1 Purpose of the drilling program

Drilling during the 2001 field season had targeted the projected subsurface extensions of surface showings of precious metal mineralization. Both holes drilled during the 2001 filed season, however, had stopped short of their planned depth. Although DDH R0101 did not return any appreciable precious metal values, R0103 stopped in a sulphide bearing shear zone. No core was recovered in the shear zone, but the drill cuttings contained 2.25 g/t Au and 8.4 g/t Ag. As the occurrence had not been adequately tested by the two holes, additional drilling guided by electromagnetic surveying was recommended.

The purpose of the 2002 drill program was to test for the presence of precious metal mineralization below DDHR0103 and to test the VLEM anomaly whose axis lies 8 metres NW of DDH R0103.

#### 12.2 Work performed.

During the period August 26 to September 26 2002 two diamond drill holes were excavated on the property. Both holes were cored using an AQTK thin kerf bit, which produced a 30.50mm diameter core from a 48 mm diameter hole.

| Hole Number | Date completed     | Depth (m) | Comments                                                                                                                                         |
|-------------|--------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| R0203A      | September 16, 2002 | 34.85     | Hole encountered<br>numerous precious<br>metal bearing<br>sulphide veinlets, but<br>stopped short of<br>planned depth in hard<br>black rhyolite. |
| R0203B      | September 26, 2002 | 71.02     | Hole oriented to test<br>below the end of<br>R0203A, and<br>encountered several<br>precious metal<br>bearing sulphide<br>veinlets.               |
| Total       |                    | 105.87    |                                                                                                                                                  |

The core was logged on October 16-17, 2002 by Peter Ogryzlo, M.Sc., P. Geo. Notations were made of lithology and mineralization encountered. Geotechnical characteristics were also logged, with observations and measurements made of rock hardness (on a scale of 1 to 5), recovery, and Rock Quality Designation (RQD) according to Deere's formula for the calculation of RQD.

#### 12.3 Results

Diamond drill hole R0203A was located at UTM 5960016N and 639116E (NAD27) approximately 31.5 metres northwest of DDH R0103. It was designed to test below DDH R01013 and to traverse the VLEM anomaly to the north and west of DDH R0103.

Diamond drill hole RO203A traversed an alternating sequence of clastic sedimentary and tuffaceous rocks. The sedimentary rocks have been tentatively assigned to the Middle Jurassic Smithers Formation. Lithologies observed were calcite cemented immature sandstone with sections of greenish glauconite imparting a greyish green hue to the matrix intercalated with hard grey felsic to intermediate tuff. Lapilli sized fragments were observed in the tuffaceous rocks. Sulphide mineralization was present as pyrite and sphalerite filling fractures 1 to 5 mm in width. Calcite was usually present as a fracture filling with the sulphides. Sulphide content was low, ranging for trace to 2 per cent total sulphides.

Precious metal mineralization in DDH R0203A is associated with the carbonate - sulphide fracture fillings.

| From  | То    | Width<br>(metres) | Au g/t | Ag g/t |
|-------|-------|-------------------|--------|--------|
| 18.55 | 18.90 | 0.45              | 1.40   | 16.5   |
| 20.83 | 21.13 | 0.30              | 0.67   | 1.7    |
| 21.44 | 21.74 | 0.30              | 2.80   | 9.3    |
| 22.35 | 22.78 | 0.43              | 0.77   | 1.8    |
| 28.65 | 34.85 | 6.20<br>sludge    | 0.10   | 38.1   |
| 14.53 | 34.85 | 20.32             | 0.12   | 1.33   |

#### **DDH R0203A Highlights**

The precious metal mineralization was accompanied by lead, zinc, arsenic and antimony. Maximum values were 0.73% Pb, 1.01% Zn, 0.93% As and 0.046% Sb over an interval of 0.35 metres. Over the entire 20.32 metre section analyzed, the weighted mean values were 0.03% Pb, 0.07% Zn, 0.07% As and 0.005% Sb.

Diamond drill hole R0203A was stopped when a hard black lapilli tuff was encountered at a depth of 34.85 metres. The drill was unable to penetrate this formation and could not proceed any further. At this point, the VLEM anomaly had been reached but had not been traversed. The target below and to the southeast of DDH R0103 remains untested.

In order to proceed, the drill was relocated to UTM 5960015N 639171E(NAD27) approximately 34.3 metres northeast of DDH R0103. Diamond drill hole R0203B was collared at this location, and was designed to test below DDH R0203A.

Diamond drill hole R0203B traversed a predominantly sedimentary sequence of sandstone, welded tuff, greywacke and argillite. There was considerable evidence of faulting and shearing in the core expressed a zones of clay fill gouge. Precious metal mineralization was associated with carbonate and pyrite fracture fillings, clay-sulphide seams and carbonate-pyrite fractures fillings accompanied by a soft white granular mineral tentatively identified as anyhdrite.

| From  | То    | Width    | Au g/t | Ag g/t |
|-------|-------|----------|--------|--------|
|       |       | (metres) |        |        |
| 24.38 | 24.69 | 0.31     | 2.89   | 1.7    |
| 57.56 | 57.91 | 0.35     | 4.25   | 7.3    |
| 65.23 | 65.84 | 0.61     | 0.25   | 2.5    |

**DDH R0203B Highlights** 

Weighted averages for base metals from DDH R0203B were 106ppm Pb, 280ppm Zn, 138 ppm As and 4.8 ppm Sb. Maximum values were 0.12% Pb, 0.87% Zn, 0.34% As and 19.3ppm Sb over a width of 0.61 metres.

#### 13.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

This section describes the analytical procedures used and provides an evaluation of results.

After taking the core from the core barrel, the diamond drill core was boxed and transported to a locked and gated core storage area located in the industrial area in Houston BC. From there it was transported to the office of Peter Ogryzlo at Topley Landing BC for logging and splitting.

After geological and geophysical logging, the core was then split using a standard Longyear core splitter. Half of the core was bagged with an identifying sample tag, and the other half was returned to the core tray for future reference. The bags were closed, and the bagged samples were shipped to Acme Analytical Laboratories of Vancouver BC for analysis.

The core will remain in storage in Mr. Thompson's storage compound in the industrial area in Houston British Columbia.

Upon receipt at Acme Laboratories, the samples were dried, crushed and pulverized. The pulverized samples were split down to 0.50 gram. The 0.5 gram aliquots were attacked by an aqua regia (HCl – HNO3 – H20) digestion. An initial scan was then performed using Inductively Coupled Plasma Mass Spectrophotometry (ICP-MS) for a suite of 38 elements including gold and silver. Samples returning significant quantities of gold, silver, lead, zinc or arsenic were then re-analyzed. A one assay tonne split was also taken from the pulverized reject for samples 68005, 68513, 68534, 69543, 68546 and 68548. The one assay tonne split was analyzed for gold using standard fire assay procedures with a gravimetric finish. For samples with lesser concentrations of gold, but reporting appreciable base metals, a 30g split was taken from the pulverized reject. The 30 g splits were assayed using fire assay procedures with an ICP finish. Samples 68003, 68007, 68011 cuttings, 68514, 68516, 68517, 68524, 68525, 68528, 68529, 68531, 68535, 68536, 68537 cuttings, 68538, 68539, 68541, 68545, 68549 and 68550 wer accordingly re-analyzed.

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| Sample No. | ICP-MS 0.5g split<br>Au ppb | Fire assay 30 g split<br>gravimetric finish<br>Au g/t |
|------------|-----------------------------|-------------------------------------------------------|
| 68005      | 131.9                       | 0.17                                                  |
| 68513      | 3161.9                      | 2.89                                                  |
| 68534      | 3486.9                      | 4.25                                                  |
| 68543      | 1115.9                      | 1.40                                                  |
| 68546      | 376                         | 0.67                                                  |
| 68548      | 2338.3                      | 2.80                                                  |
| Average    | 1768                        | 2.03                                                  |

Comparison ICP-MS 0.5 g split with Au fire assay gravimetric

This comparison indicates a 13% increase in the gold grade by using fire assay techniques with gravimetric finish. This may be partially due to the use of a larger (30g) sample split.

A similar comparison was performed for samples exhibiting a lesser concentration of gold, but this time using an ICP finish on the standard 30.0 g split for fire assay.

| Sample No.     | ICP-MS 0.5g split<br>Au ppb | Fire assay – 30 g<br>split - ICP finish |
|----------------|-----------------------------|-----------------------------------------|
|                | ·                           | Au ppb                                  |
| 68003          | 33.5                        | 52                                      |
| 68007          | 10.4                        | 25                                      |
| 68011 cuttings | 50.7                        | 130                                     |
| 68514          | 13                          | 59                                      |
| 68516          | 33.5                        | 88                                      |
| 68517          | 6                           | 29                                      |
| 68524          | 12.5                        | 21                                      |
| 68525          | 36.6                        | 75                                      |
| 68528          | 22.1                        | 54                                      |
| 68529          | 30.2                        | 91                                      |
| 68531          | 41                          | 105                                     |
| 68535          | 102                         | 248                                     |
| 68536          | 35.6                        | 63                                      |
| 68537 cuttings | 97.1                        | 95                                      |

| 58.2  | 114                                                                    |
|-------|------------------------------------------------------------------------|
| 11.7  | 19                                                                     |
| 11.7  | 21                                                                     |
| 30.5  | 36                                                                     |
| 22.7  | 24                                                                     |
| 701.2 | 773                                                                    |
| 37.2  | 31                                                                     |
| 67    | 103                                                                    |
|       | 11.7         11.7         30.5         22.7         701.2         37.2 |

This comparison indicates a 35% increase in gold grade using standard fire assay procedures on a 30g split using an ICP finish for gold concentrations in the 10ppb to 700 ppb range in comparison to the ICP-MS scan. Once again, the increase is attributed to the use of the larger sample split.

#### 13.1 Data verification

As the number of samples was limited, only a limited number of data verification and quality control analyses were performed.

For the purpose of verifying instrumental base accuracy, a blank sample consisting of clean quartz sand was inserted by the lab into the sample stream as the initial sample in each analytical run. The blank performed adequately, and did not return any measurable base metal or precious metal values. A second blank consisting of beach sand was also inserted into the sample stream as sample numbers 68002 and 68537. This blank performed adequately, and reported low to negligible values for precious metals, although minor base metals were reported.

For the purposes of checking assay accuracy, the standard SU-1A was also inserted into the sample stream as sample number 68001. This standard is normally used for Ni-Cu ores, but has well documented values for silver, and suggested values for gold. The standard did not report adequate results from the ICP-MS scan, as the results reported were low for both gold and silver. The standard DS4 was also inserted by the lab into the sample stream, and appears to have performed adequately. New standards AU-R and AU-1 and were therefore chosen for the fire assay reruns.

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Duplicate samples were prepared to check analytical reproducability and precision. The first two were RE 68520 and RE68542, which represent a second analysis of the original sample digestion to ascertain instrumental precision and variance at the analytical stage. The second two were RRE68520 and RRE68542, which was a second split prepared from the original reject which was prepared to ascertain variance at the sample preparation stage. Variance for all elements was within the limits of instrumental accuracy, although gold exhibited some variance at or near the detection limit.

#### 14.0 INTERPRETATIONS AND CONCLUSIONS

Diamond drilling on the ROX1 mineral claim has confirmed the presence of precious metals below and adjacent to DDH R0103. The precious metals are present in concentrations that indicate economic potential. However, the information gathered up to the end of 2002 is not sufficient to make an estimate of the extent and the grade of the zone.

The mineralization observed in the discovery showing, and the mineralization observed in the diamond drill core are considered to represent three possibilities:

- The mineralization is possibly associated with porphyry Cu –Au style deposit of unknown size and unknown location, and represents a zone of mineralization on the periphery or alteration halo around such a deposit. There have been no surface indications observed to date which would suggest the existence of such a deposit. The precious metal values encountered in the drilling are generally higher than would be expected in a porphyry copper environment.
- 2. The mineralization is possibly associated with an polymetallic Ag-Pb-Zn vein system. Although gold is frequently reported from this deposit type, the gold grades encountered on the ROX1 claim are somewhat higher than would be expected, and sulphide contents are lower than would be expected.
- 3. The mineralization is possibly associated with an epithermal precious metal vein system. The relatively high concentrations of precious metals accompanied by low to modest sulphide concentrations indicates the potential for a low-sulphidation epithermal style

deposit. The structures and textures observed are consistent with this interpretation. The carbonate gangue observed in the sulphide veinlets is a common accessory to the low-sulphidation style deposit. This latter deposit model appears to be the most likely mode of occurrence.

- 4. Electromagnetic surveying on the property has proven to be effective in targeting precious metal mineralization at depth. However, the equipment and technique chosen (VLEM using the Sharpe SE 200) may not be appropriate to the mineral assemblages observed in the drill core. The low quantities of sulphides (commonly trace to 2%) is generally below the limits of detection for this technique. The response of the buried conductors was weak using the broadside transmitter-receiver configuration and was noisy using the inline configuration. The interpreted conductors may also be due to conductive zones in clay and sulphide filled shears.
- Diamond drill hole R0203A intersected a number of structures hosting precious metals, but did not traverse the axis of the proposed buried conductor. The area south of DDH R0203A and below R0103 remains untested.
- 6. The gold concentration appears to increase using a larger sample size and fire assay techniques.

#### **15.0 RECOMMENDATIONS**

The author has reviewed the work done on the property with Mr. Thompson, the owner/operator with the view of making some specific recommendations.

 Additional diamond drilling is warranted to test the extent and grade of the precious metal mineralization. The zone southeast of the end of R0203A and below R0103 has indicated the presence of a possible buried conductor and remains untested. The first objective of the next phase of exploration should be to test this zone by diamond drilling.

- Diamond drill hole R0101 should be redrilled from the same location, and should be extended until the target zone indiciated but the weak VLEM conductor at 20W 20S has been crossed.
- 3. Electromagnetic surveying has proved to be effective in targeting diamond drill holes. However, the method and equipment chosen may not be appropriate for the style of mineralization observed. Another geophysical technique should be considered. Induced Polarization would be adequate to detect the low concentrations of sulphide observed; however, a significant portion of the sulphides observed are sphalerite and galena, which respond poorly to induced polarization. A more sophisticated electromagnetic technique such as MAX MIN (horizontal loop electromagnetic or HLEM) or Pulse EM should be considered. The survey are should be expanded to encompass the western half of the ROX1 mineral claim
- If this program confirms the VLEM anomalies and/or generates new targets, further testing by diamond drilling is warranted.
- 5. A larger sample size for analysis is warranted. The AQTK (30.5mm) drill core used is adequate for reconnaissance sampling, but using larger diameter core (N or P) will provide a larger sample, and may result in an increase in the precious metal values.
- 6. The Regional Geochemical Survey samples were collected from drainages which find their headwaters on the ROX1 Mineral Claim. However, between the headwaters and the sample site, there a series of small lakes, ponds and boggy areas. These low areas may have served as traps for base and precious metals eroded from the property. In addition, the anomalies in the RGS data may have had their source rocks in the area downstream of the small lakes. The owner should conduct reconnaissance scale stream sediment sampling with sample collection at a density of approximately one sample for every 500 metres of stream length, and sampling each branch drainage on the ROX1 mineral claim and those areas upstream of the RGS sample sites. The purpose of this program would be to ascertain if the anomalies had their source in the showings discovered on the mineral claim, or if there is the potential for another source.

# 16.0 STATEMENT OF COSTS

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| ITEM                                                 | AMOUNT             |
|------------------------------------------------------|--------------------|
|                                                      |                    |
| Diamond Drilling: AQTK coring 347 feet @\$28.00 / ft | \$9716.00          |
| Camp costs: 40 person days @\$50/day                 | \$2000.00          |
| Equipment rental: Hiab 20 days @\$200/day            | \$4000.00          |
| Travel: 20% of site costs \$9716x .20                | \$1943 <b>.2</b> 0 |
| Professional fees:                                   |                    |
| Geophysical survey 5 days @\$500.00                  | \$2500.00          |
| Logging and splitting core 2 days @\$500.00          | \$1000.00          |
| Drafting: 1 day @\$500.00                            | \$500.00           |
| Report preparation 3 days @ \$500.00                 | \$1500.00          |
| Geophysical Survey helper 6 days @\$200/day          | \$1200.00          |
| Camp cost 10 person days @\$50/cay                   | \$500.00           |
| Travel cost: 20% of site costs \$3700.00x0.2         | \$740.00           |
| Subtotal                                             | \$25599.20         |
| Assaying                                             | \$860.07           |
| TOTAL                                                | \$26459.27         |

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#### 17.0 REFERENCES

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#### STATEMENT OF QUALIFICATIONS

I, Peter L. Ogryzlo, with business address at Suite 1407-1651 Harwood Street, Vancouver, British Columbia, V6G 1Y2, do hereby certify that:

- 1. I hold the degree of Bachelor of Science from McGill University and the degree of Master of Science in Geology from the University of Regina.
- 2. I am a registered Professional Geoscientist in the Province of British Columbia.
- 3. I am a Consulting Geologist with over 30 years professional experience in mineral exploration and mine production.
- 4. I am a "Qualified Person" for the purpose of National Instrument 43-101.
- 5. This Exploration Report is based on a review of relevant oral and written and electronic technical data in Smithers, Vancouver, and Houston British Columbia as provided by Mr. Gary Thompson, and as obtained from Ministry of Mines and Petroleum Resources files in Smithers and on the Ministry websites. I am responsible for all of this report.
- 6. I examined the ROX1 Mineral Claim on October 22, 2001, June 11 to 13, 2002, August 13, 2002 and August 23, 2002.
- I have not received, nor do I expect to receive any interest, directly or indirectly, in the ROX1 Mineral Claim, or in any properties held by the registered owner, Mr. Gary Thompson.
- 8. I am not aware of any material fact or material change with respect to this report, which is not reflected in the report.
- 9. I have read the Mineral Act Regulations of the Mineral Tenure Act of the Province of British Columbia as updated to July 9, 1999 and this report has been prepared in compliance with the regulations.
- 10. I hereby give my permission to use this exploration report in its entirety to satisfy the requirements of the Mineral Act in the Province of British Columbia, and to be submitted to the Ministry.

DATED at Vancouver, British Columbia, this 12th day of January 2003.

1 the cycle

## **APPENDIX A**

## **DIAMOND DRILL LOGS**

LOG: DDH R0103

| Coordin<br>N: | 596001G      |                                                                                                                                                            | · ·         | 34.85 m<br>160                                                                     | Elevatio<br>Hole Siz<br>Drill:                                                                          |                                    | 1140<br>АQТК                                       |                         | Start:<br>Stop:<br>Logged        |              | Aug 26, 2<br>Sep 16, 2<br>PLO  |                                     |                                                |                                        |                                      |               |      |                                 |                                        |                                    |                          |                                    |          |
|---------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------------------|-------------------------|----------------------------------|--------------|--------------------------------|-------------------------------------|------------------------------------------------|----------------------------------------|--------------------------------------|---------------|------|---------------------------------|----------------------------------------|------------------------------------|--------------------------|------------------------------------|----------|
| :             | 639116       |                                                                                                                                                            | Inclination | -60<br>Mineralization                                                              | Comments                                                                                                | Structure                          | Hydracore                                          |                         | rodãee                           | by.          |                                |                                     | 1                                              |                                        | icpms                                | fa            | fa   |                                 |                                        | DEPT                               | H (m) RG                 | юн                                 | Ta       |
| from          | th (m)<br>to | Geology                                                                                                                                                    | (%) Sulph   |                                                                                    | Contanierites                                                                                           | autocula                           | SAMPLE                                             | From                    | To                               | Width        | Pbppm                          | Znppm                               | Asppm                                          | Stoppm                                 |                                      |               |      |                                 | Ag g/t                                 | From                               | To                       |                                    | 10       |
| 0.00          | 1.14<br>2.13 | Casing. No core<br>Rubble. Fragments of sandstone,<br>gray, hard. Oxidized on fractures.<br>mudstone, all well rounded.<br>2.44 coarser grained sandstone. | 0           |                                                                                    |                                                                                                         |                                    |                                                    |                         |                                  |              |                                |                                     |                                                |                                        |                                      |               |      |                                 |                                        | 0.0<br>1.1<br>2.0                  | 1,1 (<br>2,0 (<br>3,4 (  | 3                                  |          |
| 2.13          | 4.88         | Sandstone, coarsening downhole,<br>Light grey, 0.2 to 0.5 mm grains<br>in grey matrix.                                                                     |             |                                                                                    |                                                                                                         | 6.32 caved g                       | round                                              |                         |                                  |              |                                |                                     |                                                |                                        |                                      |               |      |                                 |                                        | 3.4<br>4.4<br>4.7                  | 4.4<br>4.7<br>6.2        |                                    | 1 6      |
| 4.88          | 8.38         | Tuff, possibly flow banded rhyolite.<br>Finely laminated with sandy l<br>interiaminations.<br>7.65, 7,70 sandy lenses.                                     |             | 6.43 calcite fracture filling.                                                     | 8.38 sharp contact                                                                                      |                                    |                                                    |                         |                                  |              |                                |                                     |                                                |                                        |                                      |               |      |                                 |                                        | 8.2<br>6.3                         |                          | 3 3<br>10 4                        |          |
| 8.38          | 8.69         | Sandstone, tr glauconite.                                                                                                                                  |             |                                                                                    | ss/tuff at 45.                                                                                          |                                    |                                                    |                         |                                  |              |                                |                                     |                                                |                                        |                                      |               |      |                                 |                                        | 7.7                                | 9.3 3                    | 10 4                               | 6        |
| 8.69          | 13.72        | Tuff. Banded, hard, grey.<br>8.69, 9.27 some lapili.                                                                                                       |             |                                                                                    | 9.45-9.53.<br>Angular breccia<br>healed with calcite,<br>9.63 fault. Stuck rod<br>12.29 fault. Broken o |                                    | 68539                                              | 9.45                    | 9.65                             | 0.20         | 66.0                           | 115                                 | 72.8                                           | 6.3                                    | 11.7                                 |               |      | 12                              | 0.8                                    | 9.3<br>9.6<br>11.1<br>12.3<br>12.7 | 11.1 4<br>12.3 2<br>12.7 | 10 4<br>10 4<br>20 4<br>0 4<br>0 0 |          |
| 13.72         | 21.82        | Sandstone, medum grey, massive.<br>Black lithic fragments, roun ded.<br>Greenish grey matrix.                                                              | 1           | 15.86, 16.15,py fracture<br>filings, tr disseminated.<br>18.76 tr glauconite       | 14.63 Ca∨ity. Fault,                                                                                    | rubble                             | 68540<br>68541<br>68542<br>re68542<br>rere68542    | 14.53<br>16.13<br>16.54 | 16.54<br>17.75                   | 0.41<br>1.21 | 1993.8<br>40.3<br>38.9<br>42.5 | 93<br>2447<br>97<br>95<br>92        | 67.3<br>510.4<br>30.0<br>30.4<br>29.7          | 3.2<br>6.8<br>2.4<br>2.3<br>2.3        | 13.5<br>30.5<br>8.8<br>8.1<br>6.2    | 36.0          |      | 14<br>36<br>7                   | 0.7<br>4.5<br>0.3<br>0.4<br>0.4<br>0.4 | 13.0<br>14.5<br>15.2<br>17.3       | 15.2<br>17.3             | 0 4.0<br>0 0.0<br>10 4.0<br>15 4.0 | 0        |
|               |              |                                                                                                                                                            | 2           | 18.64 5 mm fracture filled<br>with py, sp<br>18.75,18.89 "                         |                                                                                                         |                                    | 68012<br>68543<br>68544                            | 17.75<br>18.55<br>18.90 | 18.90                            | 0.35         |                                | 69<br>10136<br>90                   | 26.2<br>9193.6<br>52.5                         | 3.0<br>48.9<br>2.0                     | 1115.9                               | 9.0           | 1.40 | 1400<br>10                      | 16.5                                   | 18.8                               | 20.3                     | 10 4.0                             | 0        |
|               |              | 19.51- 5 cm iapili tuff,2-5mm fragments                                                                                                                    |             | 20.42 2mm fracture filled<br>with calcite,py,sp.<br>20.57 py diss and on fractures |                                                                                                         |                                    | 68545                                              | 19.66                   | 20.83                            | 1.17         | 52.1<br>369.2                  | 308<br>697                          | 234.8<br>3291.8                                | 2.0                                    | 22.7<br>376.0                        | 24.0          | 0.67 | 24<br>670                       | 0.3                                    | 20.3                               | 21.8                     | 10 4                               | 0        |
|               |              |                                                                                                                                                            |             | 21.64 5mm fracture filled<br>with calcite,py,sp.                                   | 21.64 contact<br>Iapilli tuff/sandstone                                                                 |                                    | 68546<br>68547<br>68548                            | 20.83<br>21.13<br>21.44 | 21.44                            | 0.31         | 13.8                           | 62<br>12199                         | 56.4<br>12691.4                                | 2.2<br>41.6                            | 8.8<br>2338.3                        | f             | 2.80 | 9<br>2800                       | 0.2<br>9.3                             | 20.0                               |                          |                                    |          |
| 21.82         | 24.87        | Tuff and sandstone. Lapilii sized fragments<br>and glauconite in fg matrix altermating<br>with sandstone ienses.                                           | 1           | 22.38-22.78 fractures filled with<br>py,sp, calcite                                |                                                                                                         |                                    | 68013<br>68549                                     |                         |                                  |              | 23.9<br>545.6                  | 68<br>1313                          | 28.8<br>6335.6                                 | 3.3<br>9.3                             | 701.2                                | 25.0<br>773.0 |      | 25<br>773                       | 0.9<br>1.8                             | 21.8                               | 23,3                     | 5 4.                               | 0        |
|               |              | Will Sandslutie Ierises.                                                                                                                                   | tr.1        | 22.78-24.51 py tr-1<br>23.47-23.62 py sp on fractures<br>in lapilli tuff           |                                                                                                         |                                    | 68550<br>68001<br>68002                            |                         |                                  |              |                                | 364                                 | 169.1                                          | 3.0                                    | 37.2                                 | 31.0<br>52.0  |      | 31<br>52                        | 0.9                                    | 22.2                               | 24.9                     | 10 4                               |          |
| 24.87         | 34.85        | Lapilli tuff. Black, hard.                                                                                                                                 | tr-2        | 24.51-24.99 py on fractures                                                        |                                                                                                         |                                    | 68003                                              | 24.99                   | 26.52                            | 1.53         | 53.6                           | 878<br>200                          | 416.5<br>78.0                                  | 3.3<br>2.9                             | 14.0                                 |               |      | 14                              | 0.6                                    |                                    |                          | 10 4.                              |          |
|               |              | Fg matrix with sparse 1-10 mm lapilii forming 2-10% of rock.                                                                                               |             | 27.03-27.46 Fractures filled with<br>py, sp, calcite                               | 28.75-34.85                                                                                             | Fault zone<br>broken core<br>gouge | 68014<br>68005<br>68006<br>68007<br>68008<br>68008 | 27.46<br>28.75<br>30.53 | 27.46<br>28.75<br>30.53<br>32.39 | 0.41         | 1376.6<br>37.3<br>35.1         | 68<br>1497<br>77<br>958<br>71<br>81 | 22.3<br>1125.8<br>33.6<br>30.6<br>30.6<br>25.3 | 2.8<br>4.2<br>1.8<br>3.4<br>4.0<br>3.9 | 131.9<br>13.8<br>10.4<br>11.2<br>7.6 | 7.0<br>25.0   | 0.17 | 7<br>170<br>14<br>25<br>11<br>8 | 0.7<br>2.6<br>0.6<br>1.0<br>1.3<br>1.0 | 30.5                               | 28.8<br>30.5             | 0 4.                               | 0.<br>0. |
| 34.85         |              | EOH. Hole stopped in black lapilii tuff.<br>Extremely hard, could not proceed.                                                                             |             |                                                                                    |                                                                                                         |                                    | 68010<br>68537                                     | 33.83<br>28.65          |                                  |              |                                | 44<br>940                           | 20.1<br>676.1                                  | 3.5<br>6.2                             | 3.7<br>97.1                          |               |      | 4<br>97                         | 0.9<br>38.1                            | 33.6                               | 34.9                     | 0 4.                               | .0       |

| oordina     |              |                                                                                                                                               | Depth:                   | 71.02m                                                                                                                    | Elevation                                    |           | 1164                                               | m                       | Start:                                             |                                              | Sept 17,                          |                                      |                                  |                                       |                 |                           |       |                                  |                                        |              |              |          |                          |
|-------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-----------|----------------------------------------------------|-------------------------|----------------------------------------------------|----------------------------------------------|-----------------------------------|--------------------------------------|----------------------------------|---------------------------------------|-----------------|---------------------------|-------|----------------------------------|----------------------------------------|--------------|--------------|----------|--------------------------|
|             | 5960015      | NAD27                                                                                                                                         | Bearing:<br>Inclination: | 255                                                                                                                       | Hole Size<br>Drill:                          | 2:        | AQTK                                               |                         | Stop:                                              |                                              | Sept 26, 2                        | 2002                                 |                                  |                                       |                 |                           |       |                                  |                                        |              |              |          |                          |
|             | 639171       | UTM Zone 9                                                                                                                                    | Inclination:             | المستحدين والأكفاف ستجرز كمجهز والفاقية والمتعاد                                                                          | Comments                                     | Structure | Hydracore                                          |                         | Logged                                             | by:                                          | PLO                               |                                      | 2, k                             |                                       | lcpms           | fa                        | fa    | plotted                          |                                        | OFPT         | H (m) I      |          | <del>a T</del>           |
| Dep<br>from | th (m)<br>to | Geology                                                                                                                                       | (%) Sulph                | Mineralization<br>description                                                                                             | Comments                                     | Structure | SAMPLE                                             | From                    | To                                                 | Width                                        | Pb ppm                            | Znppm                                | Asppm                            | Sboob                                 |                 |                           | Aug/t |                                  | Agppm                                  |              |              |          |                          |
| 0.00        |              | Casing. No core                                                                                                                               | (70) Compil              |                                                                                                                           |                                              |           |                                                    |                         |                                                    |                                              |                                   |                                      |                                  |                                       |                 |                           |       |                                  |                                        | 0.0          | 1.5          |          | 0                        |
| 1.52        |              | Sandstone, med gray, 0.5-1mm grains<br>of qz and fspar with grains of black<br>mudstone, all well rounded.<br>2.44 coarser grained sandstone. | ni                       | carbonate stringers                                                                                                       |                                              |           |                                                    |                         |                                                    |                                              |                                   |                                      |                                  |                                       |                 |                           |       |                                  |                                        | 1.5<br>2.8   |              |          | 4                        |
| 3.86        | 4.27         | Sandstone and felsic tuff. White to buff<br>Rinely laminated. Bedding core angle<br>~15 degres to core axis.                                  |                          |                                                                                                                           | Bedding planes<br>offset along<br>fractures  |           |                                                    |                         |                                                    |                                              |                                   |                                      |                                  |                                       |                 |                           |       |                                  |                                        | 3.9          | 4.5          | 0        | 4                        |
| 4.27        |              | Greywacke. 0.5mm grains of sand and rock fragments in dark grey matrix.                                                                       |                          |                                                                                                                           |                                              |           |                                                    |                         |                                                    |                                              |                                   |                                      |                                  |                                       |                 |                           |       |                                  |                                        |              |              |          |                          |
| 4.88        |              | Welded tuff. Mottled "wormy" appearance                                                                                                       |                          | carbonate in crenulated<br>stringers                                                                                      |                                              |           |                                                    |                         |                                                    |                                              |                                   |                                      |                                  |                                       |                 |                           |       |                                  |                                        | 4.5          | 6.3          | 0        | 4                        |
| 5.49        | 7.82         | Greywacke. Massive, dark grey.<br>0.2-0.5 mm grains in grey matrix.                                                                           |                          |                                                                                                                           |                                              |           |                                                    |                         |                                                    |                                              |                                   |                                      |                                  |                                       |                 |                           |       |                                  |                                        | 6,3          |              |          | 4.0                      |
| 7.82        | 8.09         | Conglomerate. 10-30mm pebbles of buff<br>sandstone and grywcke in grey matrix.                                                                |                          |                                                                                                                           |                                              |           |                                                    |                         |                                                    |                                              |                                   |                                      |                                  |                                       |                 |                           |       |                                  |                                        | 6.9          | 8.4          | 20 4     | 4.0                      |
| 8.09        | 9.45         | Greywacke                                                                                                                                     |                          |                                                                                                                           |                                              |           |                                                    |                         |                                                    |                                              |                                   |                                      |                                  |                                       |                 |                           |       | ļ                                |                                        | 8.4          | 10.0         | 30       | 4.0                      |
| 9.45        | 12.12        | Sandstone, buff to grey.<br>Bedding at 75° to core axis<br>11.89 Mudstone lamintions<br>12.09 Shell bed. 5-10 mm pelecypods?                  |                          |                                                                                                                           |                                              |           |                                                    |                         |                                                    |                                              |                                   |                                      |                                  |                                       |                 |                           |       |                                  |                                        | 10.0         | 11.5         | 60       | 4.0                      |
| 2.12        | 18,19        | in sandstone matrix.<br>Massive greywacke. Dull, dark, grey.                                                                                  |                          | 12.19 carbonate increasing                                                                                                |                                              |           | 68021                                              | 12.09                   | 12.85                                              | 0,76                                         | 13                                | 91                                   | 19                               | 4.8                                   |                 | 3                         |       | 3                                | 0.4                                    | 11.5         | 13.0         | 50 :     | 3.0                      |
|             |              | 15.09 10mm sandstone bed                                                                                                                      |                          |                                                                                                                           | 13.00-14.53 broken g<br>14.53-14.63 broken c |           | 68022<br>68023                                     | 13.61<br>14.53          | 14.53<br>15.16                                     | 0.92<br>0.63                                 | 17                                | 111<br>98                            | 22<br>28                         | 4.3                                   |                 | 3                         |       | 3                                | 0.3<br>0.4                             | 13.0<br>14.5 |              |          | 3.0<br>4.0               |
| 8.19        | 19.13        | Sandstone. Buff sandstone interbedded<br>with greywacke. Bedding planes<br>fractured.                                                         |                          |                                                                                                                           | 14.33-14.63 DFORMET C                        | Je        | 68015                                              | 18.82                   | 19,74                                              | 0.92                                         | 15                                | 49                                   | 20                               | 4.1                                   |                 | 13                        |       | 13                               | 0.8                                    | 16.1<br>17.0 | 17.0         | 70       | 4.0<br>4.0               |
| 19.13       | 24.38        | Greywacke. Massive, dark, dull.                                                                                                               | tr                       | fractures filled with<br>carbonate, tr py.                                                                                |                                              |           | 68016<br>68017<br>68512<br>68018<br>68019<br>68020 |                         | 20.04<br>20.57<br>20.88<br>22.17<br>23.70<br>24.38 | 0.30<br>0.53<br>0.31<br>1.29<br>1.53<br>0.68 | 426<br>30<br>52<br>12<br>18<br>36 | 171<br>105<br>301<br>53<br>61<br>124 | 93<br>17<br>34<br>12<br>18<br>69 | 10.8<br>3.5<br>3.5<br>4<br>5.2<br>6.3 | 8.5             | 61<br>11<br>4<br>12<br>95 |       | 61<br>11<br>8.5<br>4<br>12<br>95 | 2.1<br>0.5<br>0.5<br>0.4<br>0.9<br>1.2 | 20.7<br>22.2 | 22.2         | 20<br>30 | 3.0<br>4.0<br>4.0<br>4.0 |
| 24.38       | 24.69        | Coarse sandstone, tuff. Angular<br>fspar 1-2mm, black subround lithic<br>grains.                                                              | 2                        | 24.55-25.45 carbonate<br>veinlet // to core axis.<br>py disseminated in tuff<br>and in carbonate vnit.<br>25.2,26.8 tr py |                                              |           | 68513                                              | 24.38                   | 24.69                                              | 0.31                                         | 55                                | 100                                  | 164                              | 3.7                                   | 3161.9          |                           | 2.89  | 2890                             | 1.7                                    |              |              |          |                          |
| 4.69        | 28.04        | Greywacke, probably tuffaceous                                                                                                                | nii<br>1<br>tr-2         | 26.62-27.8 fracture filled<br>with anhydrite, py.<br>27.94-28.14 fracture<br>filled with calcite, py.                     |                                              | •         | 68514<br>68515<br>68516                            | 24.69<br>24.69<br>26.62 | 25.76<br>26.62<br>27.28                            | 1.07<br>1.93<br>0.66                         | 43<br>22<br>91                    | 89<br>60<br>123                      | 116<br>31<br>586                 | 7<br>4.9<br>5.5                       | 13<br>3<br>33.5 | 59<br>88                  |       | 59<br>3<br>88                    | 1.4<br>1.2<br>1.3                      | 25.2<br>26.8 | 26.8<br>28.3 | 40       | 4.0                      |
| 8.04        | 28.35        | Tuff. Flattened fragments 1mmx2mm.                                                                                                            | 1<br>nil                 | inter mer ogene, py.                                                                                                      |                                              |           | 68517<br>68518                                     | 27.28<br>28.27          | 28.27<br>29.79                                     | 0.99<br>1.52                                 | 161<br>14                         | 501<br>78                            | 33<br>16                         | 3.2<br>3                              | 6<br>8.7        | 29                        |       | 29<br>9                          | 0.9<br>0.5                             | 28.3         | 29.8         | 80       | 4.0                      |
| 8.35        | 38.71        | Sandy tuff, greywacke, massive                                                                                                                | tr                       | 29.87-38.71 fractures                                                                                                     |                                              |           | 68519                                              | 29.79                   | 31.32                                              | 1.53                                         | 14                                | 83                                   | 21                               | 3.3                                   | 2.9             | 1                         |       | 2.9                              | 0.5                                    | 29.8         | 31.3         | 75       | 4.0                      |

LOG: DDH R00203B

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|       |        | ·····                                                                    |              |                                                 |                      |                         |                |                |                |              | -           | ,           |                 |              |               |             | r           |               |              |               |              |               | _          |          |
|-------|--------|--------------------------------------------------------------------------|--------------|-------------------------------------------------|----------------------|-------------------------|----------------|----------------|----------------|--------------|-------------|-------------|-----------------|--------------|---------------|-------------|-------------|---------------|--------------|---------------|--------------|---------------|------------|----------|
|       | th (m) | Geology                                                                  | 1941 Cudmb   | Mineralization                                  | Comments             | Structure               | SAMPLE         | Fram           |                | Made         | Dh com      | 70000       | Aanom           | Phone        | icpms         | fa<br>Auppb | fa<br>Aug/t | piotted<br>Au | Agoom        | DEPT          | <u>H (m)</u> | RQD           |            |          |
| from  | to     | · · · · · · · · · · · · · · · · · · ·                                    | (%) Sulph    | description                                     | · · · · · ·          |                         | Tre68520       | From           | To             | width        | 16          | Znppm<br>73 | Asppm<br>21     | Sbppb<br>3.4 | Auppb<br>< .5 | Auppo       | AUGA        | 0             | Agppm<br>0.4 | From          | 10           | $\rightarrow$ | +          | (%)      |
|       |        |                                                                          | ni           |                                                 |                      |                         | 68521<br>68522 | 32.84<br>34.37 | 34.37<br>35.89 | 1.53<br>1.52 | 21<br>65    | 72<br>124   | 27<br>33        | 3.7<br>3.1   | 1.5<br>5.4    |             |             | 1.5<br>5.4    | 0.5<br>0.4   | 32.3<br>34.4  | 34.4<br>35.9 |               |            | 98<br>98 |
|       |        |                                                                          |              |                                                 |                      |                         | 68523          | 38.18          | 38.91          | 0.73         | 19          | 77          | 22              | 4.1          | 2.6           |             |             | 2.6           | 0.9          | 35.9          | 37.4         | 65            | 4.0        | 98       |
| 38.71 | 40.08  | Gouge. Fragments of greywacke, tuff<br>cemented with clay and sulphides. | 1<br>tr-2    | 38.91-39.55 gouge.<br>Bleached with py, calcite |                      |                         | 68524<br>68525 | 38.91<br>39.55 | 39.55<br>40.08 | 0.64         | 1273<br>763 | 1548<br>935 | 135<br>105      | 4<br>5.5     | 12.5<br>36.6  | 21<br>75    |             | 21<br>75      | 2.4<br>2.2   | 37.4<br>38.,9 |              |               |            | 98<br>95 |
| 10.00 | 40.07  |                                                                          | 1            | 40.08-40.16 sil-py alt                          | -                    |                         | 68526          | 40.08          | 41.33          |              | 79          | 110         | 27              | 4.3          | 7.8           |             |             | 8             | 0.8          | 40.1          |              |               |            | 70       |
| 40.08 | 42.37  | Argillite, tuff.                                                         | tr-2<br>tr-1 | 41.76-41.99 cemented<br>gouge, clay, py.        | broken ground        |                         | 68527          | 41.33          | 41.96          | 1.25<br>0.63 | 56          | 197         | 36              | 2.9          | 10.2          |             |             | 10            | 0.6          | 40.1          | 42.0         | "             | 2.0        |          |
| 42.37 | 43.28  | Gouge. Ground core                                                       | 5            | 43.1-43.21 Clay<br>subhide seam.                |                      |                         | 68528<br>68529 | 42.72<br>43.13 | 43.13<br>43.28 | 0.41<br>0.15 | 399<br>735  | 795<br>914  | 63<br>97        | 5.3<br>5.3   | 22.1<br>30.2  | 54<br>91    |             | 54<br>91      | 1.6<br>5.7   | 42.0          | 43,1         | 0             | 1.0        | 60       |
| 43.28 | 48.62  | Agillite, tuff. Massive.                                                 | ni           | 44,20-44,42                                     | broken ground        |                         | 68530          | 43.28          | 44.93          | 1.65         | 25          | 79          | 15              | 3.5          | 3.5           |             |             | 4             | 0.6          | 43.1          | 45.0         | 20            | 0.0        | 90       |
| 40.20 | 40.02  | · grito, car, mussivo.                                                   |              | 1 cm caldite vein                               |                      |                         |                |                |                |              | 688         |             | 195             | 9.1          | 41            | 105         |             | 105           | 2.5          | 45.0          |              |               |            | 90       |
|       |        |                                                                          | 1            | 46.64 1.5 cm calcite/py vein                    |                      | İ                       | 68531<br>68532 | 46,81<br>biank | 46.99          | 0.18         |             | 122         |                 |              |               | 105         | l           |               | 1            |               | 46.6         |               |            |          |
|       |        |                                                                          | nil          | 48.08-51.36 sil, tr py                          |                      |                         | 68533          | 48.08          | 48.87          | 0.79         | 43          | 263         | 26              | 4.5          | 11            |             |             | 11            | 0.5          | 46.6          | 48.1         | 10            | 3.0        | 95       |
| 48.62 | 51.36  | Gouge. Blocky ground.                                                    | 1            |                                                 |                      |                         | 68024          | 49.30          | 49.83          | 0.53         | 52          | 98          | 16              | 3            |               | 11          |             | 11            | 0.4          | 48.1          | 49.6         | 20            | 2.0        | 96       |
| 40.02 | 51.56  | Gouge, diotky ground,                                                    | ť            |                                                 |                      |                         | 68025          | 49.83          | 51.36          | 1.53         | 42          | 132         | 34              | 5.2          |               | 12          |             | 12            | 0.8          | 49.6          |              |               |            | 95       |
|       |        |                                                                          |              |                                                 |                      |                         |                |                |                | 0.00<br>0.00 |             |             |                 |              |               |             |             |               |              |               |              |               |            |          |
| 51.36 | 60.05  | Tuff and greywacke                                                       | t            |                                                 |                      | 1                       | 68026<br>68027 | 51.36<br>52.38 | 52.38<br>54.41 | 1.02<br>2.03 | 14<br>13    | 100<br>102  | 28<br>23        | 3.9<br>4.1   |               | 6           |             | 6<br>4        | 0.4          | 51.1<br>52.6  | 52.6<br>54.2 |               | 2.0<br>2.5 | 90<br>95 |
|       |        |                                                                          |              |                                                 |                      |                         | 68028          | 54.41          | 55.02          | 0.61         | 15          | 86          | 22              | 4.5          |               | 7           |             | 7             | 0.5          | 54.2          | 55.7         | 0             | 3.0        | 96       |
|       |        | 1                                                                        |              |                                                 | 55.32                | day seam                | 68029<br>68030 | 55.02<br>55.70 | 55.70<br>56.72 | 0.68         | 8           | 76<br>56    | 15<br>16        | 2<br>3.3     |               | 79          |             | 7<br>9        | 0.3          | 55.7<br>57.2  | 57.2<br>57.6 |               | 3.0        | 95<br>50 |
|       |        | 1                                                                        |              |                                                 | 67.60                |                         | 68031          | 56.72          | 57.56<br>57.91 | 0.84         | 13<br>1223  | 86<br>8672  | 17<br>3398      | 6<br>19.3    | 3486.9        | 10          | 4.25        | 10<br>4250    | 0.7<br>7.3   |               |              |               |            |          |
|       |        |                                                                          | 2            |                                                 | 57.56                | caved ground<br>peobles | 68534<br>68032 | 57.56<br>57.91 | 58.57          | 0.66         | 9           | 45          | 15              | 3.9          | 3400.5        | 14          | 4.25        | 14            | 0.5          | 57.6          |              |               | 3.0        | 80       |
|       |        |                                                                          |              |                                                 |                      |                         | 68033<br>68034 | 58.57<br>58.93 | 58.93<br>60.05 | 0.36<br>1.12 | 14<br>284   | 69<br>1356  | 20<br>44        | 3.3<br>13.7  |               | 18<br>27    |             | 18<br>27      | 0.4          | 58.9          | 60.7         | 0             | 3.0        | 80       |
| 60.05 | 61.26  | Gouge                                                                    |              |                                                 |                      |                         | 68035          | 60.05          | 60.96          | 0.91         | 25          | 41          | 41              | 6.5          | 1             | 26          |             | 26            | 1.4          | 60.7          | 61.2         | 0             | 2.0        | 95       |
| 00.00 | 01.20  |                                                                          |              |                                                 |                      |                         | 68036          | 60.96          | 62.48          | 1.52         | 24          | 121         | 28              | 3.8          |               | 20          |             | 20            | 0.8          | 61.2          |              |               | 2.0        | 95       |
| 61.26 | 62.48  | Tuff. Grey to buff.                                                      |              |                                                 |                      |                         | 68037          | 62.48          | 62.64          | 0.16         | 16          | 57          | 61              | 5.1          |               | 33          |             | 33            | 1            |               |              |               |            |          |
| 62.48 | 67.06  | Gouge.                                                                   |              |                                                 |                      |                         | 68011          | 62.48          | sludge         |              | 600         | 1183        | 17 <del>9</del> | 5            | 50.7          | 130         |             | 130           | 8.7          |               |              |               |            |          |
|       |        |                                                                          |              |                                                 | 63.4                 | Caved ground            | 68038<br>68039 | 62.64<br>63.86 | 63.86<br>64.82 | 1.22<br>0.96 | 18<br>18    | 108<br>71   | 34<br>27        | 3.6<br>3.3   |               | 21          |             | 21<br>16      | 0.8          | 63.4          | 64.9         | 60            | 2.0        | 95       |
|       |        | Rock dasts cemented with day and                                         |              |                                                 | 65.23-65.84          | Fault zone              | 68040          | 64.82          | 65.23          | 0.41         | 13<br>924   | 149<br>1118 | 33<br>2480      | 4.5<br>12    | 102           | 10<br>248   |             | 10<br>248     | 0.6<br>2.5   | 64,9          | 66.5         |               | 2.0        | 50       |
|       |        | suphide.                                                                 |              | 65.84-66.29                                     | poorty consolidated. |                         | 68535<br>68536 | 65.23<br>65.84 | 65.84<br>66.37 | 0.61<br>0.53 | 924<br>88   | 2039        | 2480            | 5            | 35.6          | 63          |             | 63            | 1.3          |               |              |               |            |          |
|       |        | Anhydrite, day on fractures.                                             |              | Carbonate seam // to core a                     | axis.                |                         |                |                |                |              |             |             |                 |              |               |             |             |               |              |               |              |               |            |          |
| 67.06 | 69.49  | Silicified tuff. Very hard.                                              |              |                                                 |                      |                         | 68538          | 67.06          | 68.58          | 1.52         | 393         | 267         | 1154            | 6.8          | 58.2          | 114         |             | 114           | 1.6          |               |              |               |            |          |
|       |        | Dark grey to black.                                                      |              | 69.67-69.72<br>Carbonate vein with sulphid      | l<br>es              |                         |                |                |                |              |             |             |                 |              |               |             |             |               |              |               |              |               |            |          |
| 69.49 | 69.72  | Sandy tuff.                                                              |              |                                                 |                      | [                       |                |                |                |              |             |             |                 |              |               |             |             |               |              |               |              |               |            |          |
| 69.72 | 70.10  | Clay filled gouge.                                                       |              |                                                 |                      |                         |                |                |                |              |             |             |                 |              |               |             |             | l             |              |               |              |               |            |          |
| 70.10 | 71.02  | Fragments of very hard black rhyolite.                                   |              |                                                 |                      |                         |                |                |                |              |             |             |                 |              |               |             |             | 1             |              |               |              |               |            |          |
| 71.02 |        | ЕОН                                                                      |              |                                                 |                      |                         |                |                |                |              |             |             |                 |              |               |             |             |               |              |               |              |               |            |          |
|       |        | 1                                                                        |              |                                                 |                      | 1                       |                |                |                |              | 1           |             |                 |              |               |             |             |               |              |               |              |               |            |          |

## **APPENDIX B**

## **ASSAY CERTIFICATES**

| ACME ANA<br>(ISO                                 |                    |                                      | LABO<br>cred                            |                          |                   |                      | ).                               | 8                     | n.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | . HAS                                   | 30110.00          |                      | r bilan           |                      | 1.5                    |                       |                      |                      |                      |              |                                     | PH                 | ONE             | (604                 | 1)25             | 53-3                    | 315               | 8 F                  | AX (                | 60                                             | -53                     | -17                  | 16              |
|--------------------------------------------------|--------------------|--------------------------------------|-----------------------------------------|--------------------------|-------------------|----------------------|----------------------------------|-----------------------|----------------------------------------|-----------------------------------------|-------------------|----------------------|-------------------|----------------------|------------------------|-----------------------|----------------------|----------------------|----------------------|--------------|-------------------------------------|--------------------|-----------------|----------------------|------------------|-------------------------|-------------------|----------------------|---------------------|------------------------------------------------|-------------------------|----------------------|-----------------|
|                                                  |                    |                                      |                                         |                          |                   |                      | 1407                             | <u>Ogr</u><br>- 165   | vzl                                    | D, P<br>wood St                         | ete               | r                    | Fi                | le                   | # 2                    | A20                   | 50                   | 19                   | Р                    | aqe          | ∋ 1<br>er Ogr                       | yzlo               |                 |                      |                  |                         |                   |                      |                     |                                                |                         | 4                    | Ê               |
| SAMPLE#                                          | Mo<br>ppm          | Cu<br>ppm                            |                                         | Zn<br>I ppr              | -                 | וא<br>ppm            |                                  | Mn<br>ppm             | Fe<br>گ                                |                                         | U<br>ppm          |                      |                   |                      | Cd S<br>ppm pp         |                       |                      | Ca<br>%              |                      |              | Cr<br>ppm                           |                    |                 |                      |                  |                         |                   |                      |                     | Hg S<br>opm pp                                 |                         |                      | Ga<br>ppm       |
| SI<br>68001 PULP<br>68002 SAND<br>68003<br>68004 | 2.3<br>1.0         | 3290.1<br>23.2<br>19.4               | 53.6                                    | 58<br>878                | 3.1<br><.1<br>1.6 | >9999<br>12.7<br>2.4 | 10.8<br>3.8                      | 345<br>592<br>766     | 2.86<br>1.52                           | 20.3                                    | 2.2<br>.5<br>.2   | 1.8<br>33.5          | 3.8<br>1.6<br>1.1 | 21 3<br>45<br>82 9   | 1.52<br>.1<br>5.93     | .73.<br>.5.           | 1 51<br>1 60<br>1 5  | .53<br>.56<br>1.36   | .042<br>.070<br>.026 | 13<br>8<br>7 | 121.6<br>22.9<br>8.1                | 1.00<br>.71<br>.37 | 76<br>150<br>35 | .083<br>.073<br>.001 | 41.<br>51.<br>5. | .35 .<br>.22 .<br>.37 . | 063<br>070<br>046 | .49<br>.13<br>.21    | .8<<br>2.4<br>3.4   | .03 4.<br>.01 .                                | 1 .3<br>6 .1<br>9 .1    | 6.09<br><.05<br>.85  | 5<br>5<br>1     |
| 68005<br>68006<br>68007<br>68008<br>68009        | 1.1<br>1.2<br>1.0  | 9.1<br>10.6<br>10.5                  |                                         | 77<br>958<br>71          | .6<br>1.0<br>1.3  | 2.9<br>2.8<br>3.9    | 7.4                              | 927<br>2082<br>1815   | 1.57<br>2.45<br>2.68                   | 1125.8<br>33.6<br>30.6<br>30.6<br>25.3  | .2<br>.1<br>.1    | 13.6<br>10.4<br>11.2 | 1.6<br>.8<br>.5   | 98<br>169 8<br>141   | .41<br>8.53<br>.34     | .8 .<br>.4 .<br>.0 .  | 1876<br>6111         | 1.30<br>3.29<br>2.41 | .032<br>.039<br>.059 | 11<br>6<br>6 | 6.5<br>5.0<br>4.1                   | .50<br>.79<br>.79  | 53<br>75<br>43  | .001<br>.001<br>.001 | 3<br>3<br>4      | .39 .<br>.48 .<br>.50 . | 023<br>012<br>016 | . 25<br>. 28<br>. 28 | 2.5<br>1.6<br>1.0   | .01 1.<br>.02 2.<br>.01 3.                     | 1 .1<br>2 .2<br>0 .1    | .39<br>1.46<br>.97   | 1<br>1<br>1     |
|                                                  | 13.0<br>1.3<br>1.3 | 19.8<br>11.2                         | 599.5<br>51.6                           | 1183<br>301<br>100       | 8.7<br>.5<br>1.7  | 8.1<br>4.4<br>1.2    | 7.2<br>5.4<br>4.5                | 2665<br>1890<br>>9999 | 4.26<br>2.35<br>2.85                   | 20.1<br>179.0<br>33.5<br>163.9<br>115.8 | .1<br>.1<br><.1 3 | 8.5<br>3161.9        | .6<br>.4<br>.2    | 195  <br>93  <br>154 | 5.55<br>1.43<br>.43    | .0 .<br>.5 .<br>.7 <. | 5 13<br>4 15<br>1 4  | 3.38<br>1.94<br>4.04 | .070<br>.035<br>.046 | 8<br>6<br>6  | 9.2<br>5.9                          | 1.04<br>.72<br>.99 | 79<br>30<br>20< | .001<br>.001<br>.001 | 3<br>4<br>2      | .58 .<br>.37 .<br>.36 . | 012<br>044<br>006 | .31<br>.22<br>.24    | 9.8<br>3.3<br>2.8   | .02 2.<br>.06 4.<br>.01 2.<br>.01 1.<br>.01 1. | 2 .2<br>4 .1<br>6 .2    | 1.74<br>.65<br>1.84  | 1<br>1<br>1     |
| 68515<br>68516<br>68517<br>68518<br>68519        | 1.4<br>1.0<br>1.2  | 16.6<br>9.5                          | 90.7<br>160.7                           | 123<br>501<br>78         | 1.3<br>.9         | 5.3<br>3.0<br>2.1    | 15.4<br>8.3<br>5.3<br>5.5<br>7.9 | 2365<br>1648<br>1260  | 3.53<br>2.68<br>2.32                   | 586.2<br>32.9<br>16.3                   | .1<br>.1<br>.1    | 6.0                  | .4<br>.3<br>.4    | 169<br>108 :<br>106  | .4 5<br>2.3 3<br>.2 3  | .5 .<br>.2 .<br>.0 .  | 1 16<br>1 14<br>1 16 | 3.24<br>2.50<br>2.28 | .058<br>.072<br>.057 | 6<br>6<br>6  | 8.6<br>6.3<br>5.9<br>8.7<br>12.8    | 1.02<br>.71<br>.64 | 88<br>54<br>49  | .001<br>.001<br>.001 | 4<br>2<br>2      | .53 .<br>.53 .          | 021<br>021<br>034 | . 25<br>. 29<br>. 24 | 1.7<br>1.2<br>1.9   | .01 5.<br>.01 2.<br>.01 2.<br>.01 2.<br>.01 3. | .8 .1<br>.7 .1<br>.7 .1 | 1.64<br>.77<br>.46   | 1<br>2<br>2     |
| 68520<br>RE 68520<br>RRE 68520<br>68521<br>68522 | 1.2<br>1.2<br>2.5  | 18.8<br>18.6<br>18.8<br>16.4<br>17.9 | 15.7<br>15.9                            | 76<br>73<br>72           | 5.4<br>5.4<br>2.5 | 5.2<br>5.8<br>5.9    | 8.4<br>8.4<br>8.0<br>8.0         | 1170<br>1173<br>1583  | 2.86<br>2.77<br>3.05                   | 20.0<br>20.8<br>26.8                    | .1<br>.1<br>.1    | 1.2<br><.5<br>1.5    | .4<br>.4<br>.5    | 98<br>102<br>108     | .23<br>.33<br>.13      | .3 .<br>.4 .<br>.7 .  | 1 37<br>1 36<br>1 32 | 3.34<br>3.48<br>2.80 | .062                 | 6<br>6<br>6  | 14.0<br>14.7<br>13.6<br>12.1<br>9.9 | .83<br>.85<br>.95  | 91<br>97<br>47  | .002<br>.002<br>.001 | 21<br>31<br>1    | .19 .<br>.16 .<br>.99 . | 041<br>046<br>032 | .21<br>.23<br>.21    | 1.5<<br>1.4<<br>1.4 | .01 3.<br>.01 3.<br>.01 4.<br>.01 3.<br>.01 3. | 9 .1<br>1 .1<br>8 .1    | . 68<br>. 67<br>. 80 | 5<br>5<br>4     |
| 68523<br>68524<br>68525<br>68526<br>68527        | .9<br>2.1<br>1.1   | 32.6<br>24.6<br>15.1                 | 19.1<br>1273.2<br>763.2<br>78.7<br>55.7 | 2 1548<br>2 935<br>7 110 | 2.4               | 2.4<br>2.9<br>3.4    | 6.6                              | 2351<br>1975<br>1654  | 2.94<br>2.86<br>2.38                   |                                         | .1<br>.1<br>.1    | 12.5<br>36.6<br>7.8  | .4<br>.5<br>.4    | 162<br>160<br>112    | 8.1 4<br>4.5 5<br>.4 4 | .0 <.<br>.5 .<br>.3 . | 1 31<br>1 11<br>1 20 | 3.34<br>2.36<br>2.86 | .065<br>.056<br>.063 | 6<br>6<br>7  | 8.0<br>12.7<br>7.2<br>9.3<br>4.6    | .91<br>.59<br>.68  | 32<br>32<br>64  | .001<br>.001<br>.001 | 2<br>1<br>2      | .47.<br>.52.<br>.49.    | 042<br>017<br>028 | .20<br>.23<br>.25    | 1.8<br>2.2<br>1.9   | .01 2.                                         | .6 .1<br>.0 .2<br>.8 .1 | .76<br>1.73<br>.68   | 2<br>1<br>1     |
| 68528<br>68529<br>68530<br>68531<br>68532 SAND   | 1.5<br>.8<br>1.2   | 34.2<br>12.2                         | 688.3                                   | 914<br>79<br>122         | 5.7               | 3.0<br>3.6<br>2.6    | 6.9<br>4.2                       | 2746<br>1540<br>>9999 | 3.37<br>2.65<br>5.74                   | 62.6<br>97.0<br>14.7<br>195.2<br>9.3    | .1<br>.1<br>.1    | 3.5<br>41.0          | .8<br>.4<br>.2    | 166<br>126<br>291    | 4.35<br>.33<br>.69     | .3.<br>.5.            | 4 7<br>1 20<br>4 6   | 2.13<br>3.89<br>7.24 | .058<br>.054<br>.035 | 6<br>6<br>7  | 4.8<br>9.0<br>5.4                   | .69<br>.79<br>1.63 | 50<br>49<br>43  | .001<br>.001<br>.001 | 1<br>2<br>1      | .56 .<br>.56 .<br>.34   | 008<br>025<br>009 | .35 ]<br>.24<br>.21  | 2.5<br>1.6<br>2.1   | .03 2.<br>.02 2.<br>.06 2.                     | .6 .2<br>.9 .1<br>.2 .4 | 1.99<br>.45<br>4.10  | 1<br>5 2<br>1 1 |
| STANDARD DS4                                     | 6.4                | 121.0                                | 30.4                                    | 154                      | .3                | 33.2                 | 11.8                             | 807                   | 3.09                                   | 22.6                                    | 6.1               | 27.7                 | 3.7               | 27                   | 5.4 4                  | .75.                  | 0 73                 | .49                  | .081                 | 16           | 160.2                               | . 57               | 138             | . 080                | 21               | .66 .                   | 030               | .16                  | 3.5                 | .27 3                                          | .7 1.1                  | < .05                | 6               |
|                                                  | ι                  | JPPER                                | LIMITS                                  | 5 - A                    | G, AU             |                      | W = 10                           | O PPM                 | ; MO,                                  | L 2-2-2<br>CO, CD<br>ginning            | ), SB             | , BI,                | TH,               | U &                  | B =                    | 2,00                  | 0 PP                 | M; CU                | , PB,                | , ZN,        | NI,                                 |                    |                 |                      |                  |                         |                   |                      |                     |                                                |                         |                      |                 |
| DATE RECE                                        | IVE                | D:                                   | NOV 13                                  | 200                      | 2 D               | ATE I                | REPOI                            | RT M                  | AILE                                   | D: N                                    | ov                | -20                  | /2                | 002                  | 2 <u>510</u>           | gnei                  | ) BY                 | l,                   | W                    | -f.          | D                                   | . TOY              | (E, C           | LEO                  | NG, J            | I. WA                   | NG;               | CERT                 | TIFIE               |                                                |                         | /                    | ٤S              |
| All results                                      | аге с              | onsid                                | ered t                                  | he c                     | onfid             | ential               | prope                            | rty o                 | f the                                  | client                                  | . Ac              | me ass               | sume              | s th                 | e lia                  | abili                 | ties                 | for                  | actua                | i co         | st of                               | the                | ana             | lysis                | onl              | у.                      |                   |                      |                     | Da                                             | ita_ <b>/</b>           | <u>FA</u>            |                 |



**Ogryzlo, Peter** FILE # A205019

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Data\_\_\_\_\_FA

| ACME ANALYTI                                              | CAL                            |                                    |                                           |                                    |                                 |                                 |                   |                                      |                      |                                            |                              |                                         |                                 |                              |                                 |                                   |                              |              |                                      |                      |                           |                                  |                                  |                   |                                      |                        |                      |                                      |                                 |                                 |                                     |                                 | AUTE AN                    | ALTITUAL                            |                       |
|-----------------------------------------------------------|--------------------------------|------------------------------------|-------------------------------------------|------------------------------------|---------------------------------|---------------------------------|-------------------|--------------------------------------|----------------------|--------------------------------------------|------------------------------|-----------------------------------------|---------------------------------|------------------------------|---------------------------------|-----------------------------------|------------------------------|--------------|--------------------------------------|----------------------|---------------------------|----------------------------------|----------------------------------|-------------------|--------------------------------------|------------------------|----------------------|--------------------------------------|---------------------------------|---------------------------------|-------------------------------------|---------------------------------|----------------------------|-------------------------------------|-----------------------|
| SAMPLE#                                                   | Мо<br>ррт                      | Cu<br>ppm                          | Pb<br>ppm                                 | Zn<br>ppm                          | Ag<br>ppm                       | Ni<br>ppm                       | Co<br>ppm         | Mn<br>ppm                            | Fe<br>%              | As<br>ppm                                  | U<br>ppm                     | Au<br>ppb                               | Th<br>ppm                       | Sr<br>ppm                    | Сd<br>ppm                       | Sb<br>ppm                         | Bi<br>ppm                    | V<br>ppm     | Ca<br>%                              | P<br>%               | La<br>ppm                 | Cr<br>ppm                        | Mg<br>%                          | Ba<br>ppm         | ⊺i<br>%a                             | B<br>ppm               | A1<br>%              | Na<br>%                              | K<br>X                          | W<br>ppm                        | Hg<br>ppm                           | Sc<br>ppm                       | T1<br>ppm                  | S<br>X                              | Ga<br>ppm             |
| 68533<br>68534<br>68535<br>68536<br>68536<br>68537 SAND   | 1.0<br>1.1                     | 25.6                               | 43.3<br>1222.5<br>924.3<br>87.5<br>361.0  | 263<br>8672<br>1118<br>2039<br>940 | .5<br>7.3<br>2.5<br>1.3<br>38.1 | 2.6<br>3.4<br>3.9<br>2.9<br>8.1 | 5.1<br>6.6<br>4.7 | 1118<br>2166<br>1556<br>1832<br>2265 | 5.32<br>3.30<br>2.47 | 25.6<br>3397.8<br>2480.4<br>209.0<br>676.1 | .1<br>.1 :<br>.1<br>.1<br>.1 | 11.0<br>3486.9<br>102.0<br>35.6<br>97.1 | .4<br>.6<br>.5<br>.8            | 185                          |                                 | 4.5<br>19.3<br>12.0<br>5.0<br>6.2 | .1<br>4.2<br>.4<br>1.4<br>.5 | 5<br>14<br>4 | 2.37<br>2.32<br>2.50<br>2.01<br>2.58 | .061<br>.048         | 4<br>5<br>6<br>5<br>6     | 5.6<br>4.1<br>3.8<br>4.5<br>37.6 | .32<br>.69<br>.71<br>.59<br>.71  | 49<br>96          | .001<br>.001<br>.001<br>.001<br>.001 | 1<br>3<br>2<br>1<br>2  | .63<br>.72           | .017                                 | .34<br>.26<br>.34               | 2.1<br>1.7<br>.8<br>1.7<br>18.6 | . 13<br>. 07<br>. 06                | 2.7<br>2.0<br>3.9<br>2.0<br>3.0 | .3<br>.2                   | .88<br>4.05<br>1.71<br>1.90<br>1.30 | 1<br>2<br>2<br>1<br>1 |
| 68538<br>68539<br>68540<br>68541<br>68542                 | + · +                          | 16.7<br>12.9<br>7.0<br>37.7<br>8.6 | 393.0<br>66.0<br>50.7<br>1993.8<br>40.3   | 267<br>115<br>93<br>2447<br>97     | 1.6<br>.8<br>.7<br>4.5<br>.3    | 6.9<br>2.3                      | 3.2<br>3.8<br>3.8 | 2963<br>1778<br>1134<br>1124<br>927  | 1.30<br>1.35<br>1.37 | 1153.8<br>72.8<br>67.3<br>510.4<br>30.0    | .1<br>.3<br>.2<br>.2<br>.3   | 58.2<br>11.7<br>13.5<br>30.5<br>8.8     | .5<br>1.4<br>1.3<br>1.4<br>1.8  | 208<br>113<br>79<br>68<br>77 | 1.3<br>.5<br>.5<br>11.9<br>.5   | 6.8<br>6.3<br>3.2<br>6.8<br>2.4   | .1<br>.1<br>.2<br>.1         | 2<br>3<br>2  | 3.43<br>2.12<br>1.34<br>1.45<br>1.41 | .025<br>.026<br>.024 | 9<br>10<br>8<br>8<br>13   | 6.1<br>4.9<br>10.9<br>7.1<br>6.2 | 1.02<br>.28<br>.39<br>.42<br>.43 | 42<br>31<br>43<   | .001<br>.001<br>.001<br>.001<br>.001 | 1<br>2<br><1<br>2<br>3 | . 45<br>. 39<br>. 35 | .029<br>.013<br>.059<br>.028<br>.030 | .26<br>.25<br>.19<br>.23<br>.26 | 1.6<br>2.1<br>3.5<br>3.5<br>2.6 | .02<br>.01<br>.02<br>.03<br>.01     | 2.7<br>1.0<br>.9<br>.7<br>.9    | .2<br>.2<br>.1<br>.1<br>.1 | 1.05<br>.74<br>.55<br>.82<br>.32    | 2<br>1<br>1<br>1<br>1 |
| RE 68542<br>RRE 68542<br>68543<br>68544<br>68544<br>68545 | 1.0<br>1.1<br>1.1<br>.9<br>1.0 | 8.0<br>8.3<br>195.1<br>9.3<br>10.0 | 38.9<br>42.5<br>7288.4<br>38.2<br>52.1    | 95<br>92<br>10136<br>90<br>308     | 16.5<br>.3                      | 3.0                             | 4.0<br>3.1<br>4.3 | 933<br>1534<br>884                   | 1.48<br>4.38<br>1.44 | 30.4<br>29.7<br>9193.6<br>52.5<br>234.8    | .3<br>.3<br>.2<br>.3<br>.3   | 8.1<br>6.2<br>1115.9<br>10.3<br>22.7    | 1.8<br>1.8<br>1.0<br>1.6<br>1.3 | 80<br>79<br>53<br>72<br>75   | .5<br>.4<br>54.6<br>.4<br>1.8   | 2.3<br>2.3<br>46.9<br>2.0<br>2.0  | .1<br>.1<br>.1<br>.1<br>.1   | 4<br>1<br>5  | 1.36<br>1.43<br>1.03<br>1.42<br>1.66 | .028                 | 13<br>12<br>4<br>10<br>10 | 6.7<br>7.6<br>7.9<br>6.8<br>8.6  | .43<br>.41<br>.29<br>.38<br>.35  | 66<<br>30<<br>59< | .001<br>.001<br>.001<br>.001<br>.001 | 1<br>2<br>1<br>2       | .40<br>.38<br>.41    | .030<br>.027<br>.006<br>.031<br>.041 | .26<br>.22<br>.23<br>.22<br>.22 | 3.8<br>2.5                      | .02<br>< .01<br>.03<br>.01<br>< .01 | 1.0<br>.9<br>.5<br>1.1<br>1.0   | .1<br>.1<br>.1<br>.1<br>.1 | .32<br>.29<br>4.47<br>.26<br>.22    | 1<br>1<br>1<br>1      |
| 68546<br>68547<br>68548<br>68549<br>68550                 | .9<br>.8                       | 714.6<br>15.0                      | 369.2<br>13.8<br>1661.7<br>545.6<br>176.9 | 697<br>62<br>12199<br>1313<br>364  | 1.7<br>.2<br>9.3<br>1.8<br>.9   |                                 | 4.0<br>4.1<br>4.1 | 1574<br>957                          | 1.29<br>3.01<br>1.72 | 3291.8<br>56.4<br>>9999<br>6335.6<br>169.1 |                              | 8.8                                     | 1.5                             | 64<br>54<br>67<br>67<br>72   | 4.3<br>.2<br>73.1<br>8.3<br>2.1 | 7.4<br>2.2<br>41.6<br>9.3<br>3.0  | .1<br>.1<br>.1<br>.1         | 10<br>5<br>3 | 1.07<br>1.34<br>1.67<br>1.29<br>1.27 | .033<br>.026<br>.027 | 9<br>9<br>4<br>8          | 8.9<br>10.5<br>6.4<br>5.3<br>5.2 | .32<br>.27<br>.41<br>.42<br>.48  | 62<br>36<<br>76<  | .001<br>.001<br>.001<br>.001<br>.001 | 4<br>2<br>4<br>4<br>2  |                      | .044<br>.042<br>.021<br>.014<br>.029 | .21<br>.22<br>.18<br>.28<br>.22 | 4.8<br>2.6<br>3.2<br>2.5<br>2.4 | .02<br>.02<br>.13<br>.01<br>.01     | .7<br>1.1<br>.7<br>.7<br>.9     | .1                         | .56<br>.11<br>2.09<br>.80<br>.47    | 1<br>1<br>1<br>1      |
| STANDARD DS4                                              | 6.3                            | 122.0                              | 30.5                                      | 153                                | .3                              | 31.8                            | 11.4              | 791                                  | 2.99                 | 21.1                                       | 5.7                          | 26.1                                    | 3.6                             | 26                           | 5.2                             | 4.7                               | 4.9                          | 72           | .50                                  | .081                 | 14                        | 160.3                            | . 54                             | 137               | .081                                 | 2                      | 1.63                 | . 028                                | .14                             | 4.0                             | . 27                                | 3.5                             | 1.1                        | . 05                                | 6                     |

Sample type: CORE R150 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.

|                         | SAMPLE#                                        | Au**<br>ppb                                                                                             |       |
|-------------------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------|-------|
|                         | 68003<br>68007<br>68011 SAND<br>68514<br>68516 | 52<br>25<br>130<br>59<br>88                                                                             |       |
|                         | 68517<br>68524<br>68525<br>68528<br>68528      | 29<br>21<br>75<br>54<br>91                                                                              |       |
|                         | 68531<br>68535<br>68536<br>68537 SAND<br>68538 | 105<br>248<br>63<br>95<br>114                                                                           |       |
|                         | 68539<br>RE 68539<br>68541<br>68545<br>68545   | 19<br>21<br>36<br>24<br>773                                                                             |       |
|                         | 68550<br>STANDARD AU-                          | R 480                                                                                                   |       |
| - SAMPLE TYPE: CORE PUL | P <u>Samples beginning 'RE' are Reruns ar</u>  | IN AQUA - REGIA, ICP ANALYSIS. UPPER LIMITS = 10 PPM.<br><u>ad 'RRE' are Reject Reruns.</u><br>LGNED BY | SAYER |
|                         |                                                |                                                                                                         |       |
|                         |                                                |                                                                                                         |       |

| ACME ANI TICAL LABORATORIES LTD. 852 E. HASTINGS ST. Y 'COUV<br>(IS) 02 Accredited Co.)<br>ASSAY CERTIFI                                                                         | TER BC V6A 1R6 PHONE (604) 253-3158 FAX (60 ) 53-1716<br>CATE |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| <u>Ogryzlo, Peter</u> File<br>1407 - 1651 Harwood St., Vancouver BC V6G 1Y2                                                                                                      | # A205019R<br>Submitted by: Peter Ogryzlo                     |
| SAMPLE#                                                                                                                                                                          | Au**<br>gm/mt                                                 |
| 68005<br>68513<br>68534<br>68543<br>68543<br>68546                                                                                                                               | .17<br>2.89<br>4.25<br>1.40<br>.67                            |
| 68548<br>STANDARD AU-1                                                                                                                                                           | 2.80<br>3.34                                                  |
| GROUP 6 - PRECIOUS METALS BY FIRE ASSAY FROM 1<br>- SAMPLE TYPE: CORE PULP<br>DATE RECEIVED: NOV 22 2002 DATE REPORT MAILED: $\sqrt{\partial \vee \partial g} / \partial 2$ SIGN | A.T. SAMPLE, ANALYSIS BY ICP-ES.<br>NED BY                    |

## TICAL LABORATORIES LTD. 852 E. HASTINGS ST. VCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 2002 Accredited Co.)

253-1716

Data FA

GEOCHEMICAL ANALYSIS CERTIFICATE

ACME AV

(TS

Gary Thompson Contracting File # A205270 P.O. Box 704, Houston BC VOJ 120

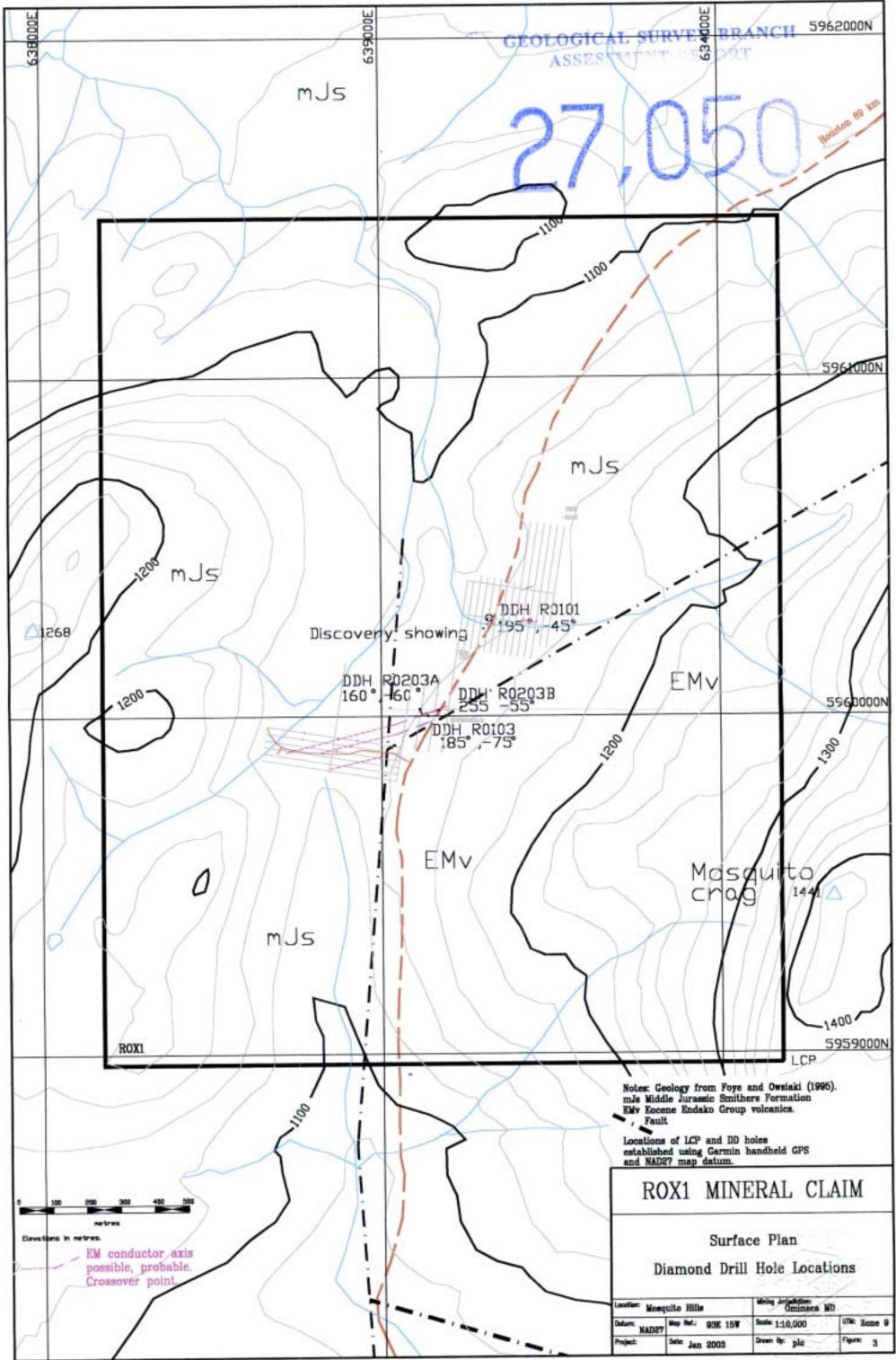
| SAMPLE#                                                     | Pb<br>ppm                                                         | Zn<br>ppm                       | Ag<br>ppm                       | As<br>ppm                            | Sb<br>ppm                                                                                 | Au**<br>ppb                |  |
|-------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------|---------------------------------|--------------------------------------|-------------------------------------------------------------------------------------------|----------------------------|--|
| SI<br>1-68012<br>1-68013<br>1-68014<br>1-68015              | $2.1 \\ 13.2 \\ 23.9 \\ 36.2 \\ 14.6$                             | 1<br>69<br>68<br>68<br>49       | <.1<br>.4<br>.9<br>.7<br>.8     | <.5<br>26.2<br>28.8<br>22.3<br>20.3  | <.1<br>3.0<br>3.3<br>2.8<br>4.1                                                           | <2<br>9<br>25<br>7<br>13   |  |
| 1-68016<br>1-68017<br>1-68018<br>1-68019<br>1-68020         | 425.5<br>29.5<br>11.8<br>17.5<br>35.7                             | $171 \\ 105 \\ 53 \\ 61 \\ 124$ | 2.1<br>.5<br>.4<br>.9<br>1.2    | 92.5<br>16.9<br>11.5<br>17.7<br>69.1 | $   \begin{array}{c}     10.8 \\     3.5 \\     4.0 \\     5.2 \\     6.3   \end{array} $ | 61<br>11<br>4<br>12<br>95  |  |
| 1-68021<br>1-68022<br>1-68023<br>1-68024<br>1-68025         | $ \begin{array}{c} 12.9\\ 16.5\\ 17.9\\ 52.4\\ 42.2 \end{array} $ | 91<br>111<br>98<br>98<br>132    | .4<br>.3<br>.4<br>.8            | 19.1<br>22.0<br>27.5<br>15.8<br>34.3 | 4.8<br>4.3<br>4.0<br>3.0<br>5.2                                                           | 3<br>3<br>3<br>11<br>12    |  |
| 1-68026<br>1-68027<br>1-68028<br>1-68029<br>1-68030         | 13.5<br>13.3<br>14.6<br>8.3<br>10.5                               | 100<br>102<br>86<br>76<br>56    | .43<br>.53<br>.4                | 28.2<br>22.5<br>22.2<br>15.3<br>16.3 | 3.9<br>4.1<br>4.5<br>2.0<br>3.3                                                           | 6<br>4<br>7<br>7<br>9      |  |
| RE 1-68030<br>RRE 1-68030<br>1-68031<br>1-68032<br>1-68033  | 10.6<br>10.5<br>12.8<br>9.3<br>13.9                               | 51<br>56<br>86<br>45<br>69      | .4<br>.4<br>.7<br>.5<br>.4      | 16.9<br>16.7<br>17.4<br>15.3<br>20.0 | 3.3<br>3.2<br>6.0<br>3.9<br>3.3                                                           | 10<br>10<br>10<br>14<br>18 |  |
| 1-68034<br>1-68035<br>1-68036<br>1-68037<br>1-68038         | 284.0<br>25.1<br>23.6<br>16.4<br>18.4                             | 1356<br>41<br>121<br>57<br>108  | $2.2 \\ 1.4 \\ .8 \\ 1.0 \\ .8$ | 43.7<br>41.1<br>28.0<br>61.1<br>34.2 | 13.7<br>6.5<br>3.8<br>5.1<br>3.6                                                          | 27<br>26<br>20<br>33<br>21 |  |
| 1-68039<br>1-68040<br>.STD Rocklab S-4<br>STANDARD DS4/AU-R | 17.7<br>13.4<br>506.5<br>29.1                                     | 71<br>149<br>349<br>155         | .6<br>.6<br>14.5<br>.3          | 26.9<br>33.0<br>329.9<br>21.3        | 3.3<br>4.5                                                                                | 16<br>10<br>2288<br>472    |  |

UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.

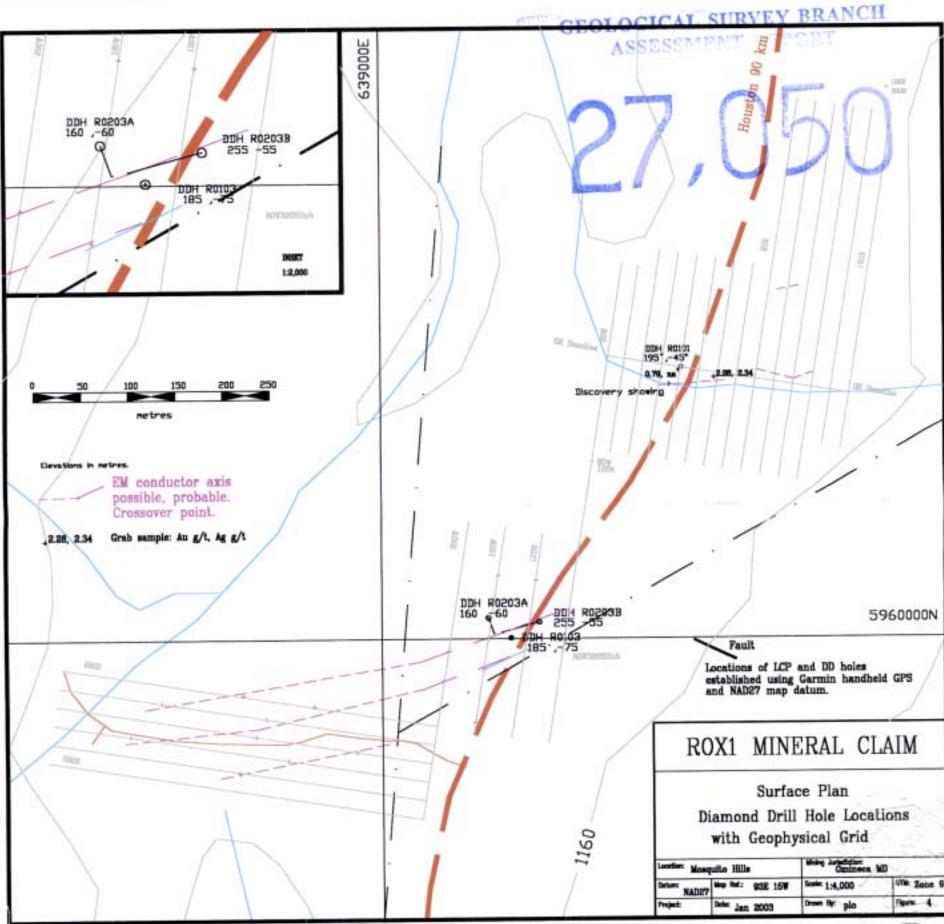
- SAMPLE TYPE: CORE R150 GOC AU\*\* GROUP 3B - 30.00 GM SAMPLE ANALYSIS BY FA/ICP.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

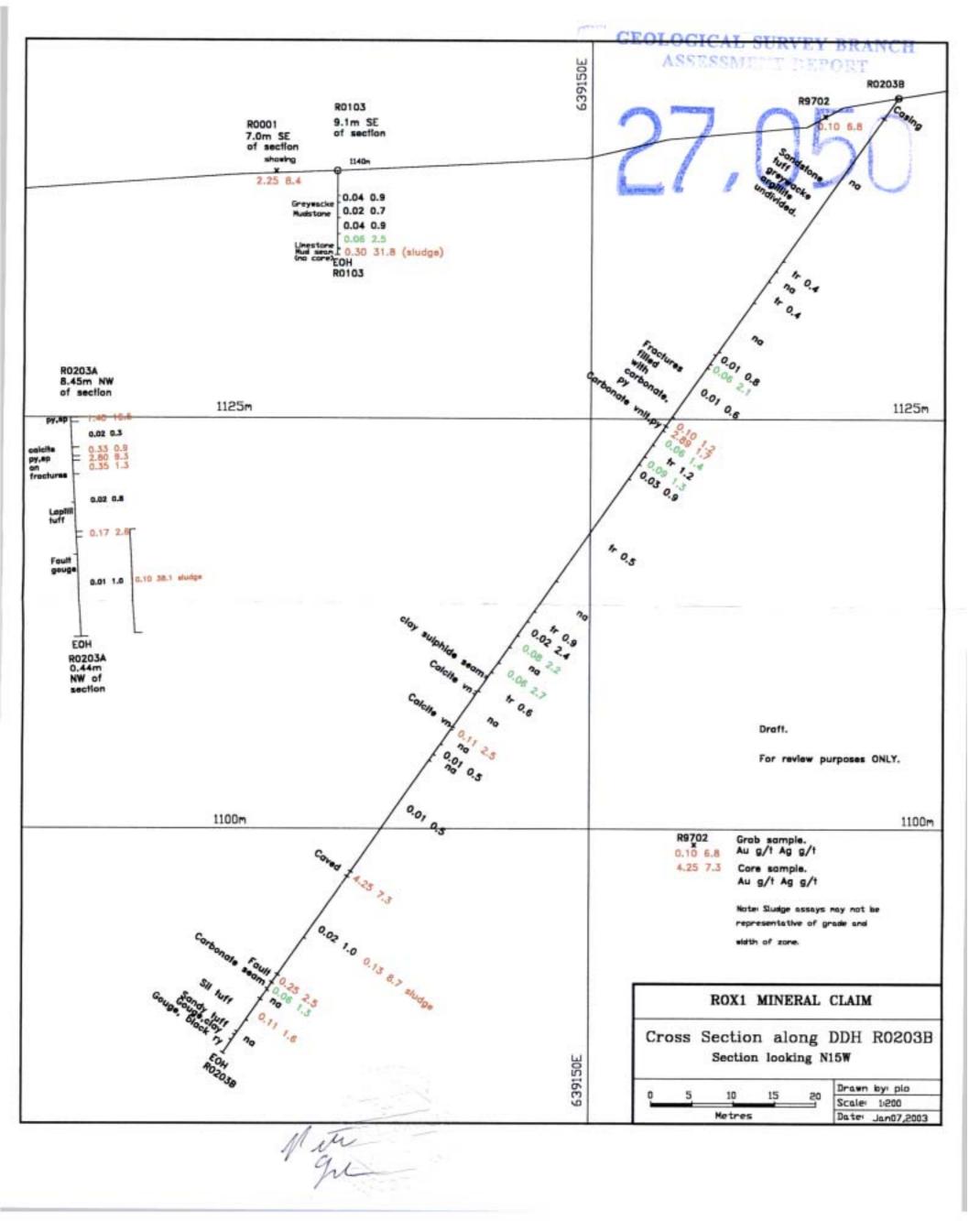
ec 11 DATE RECEIVED: DEC 2 2002 DATE REPORT MAILED:

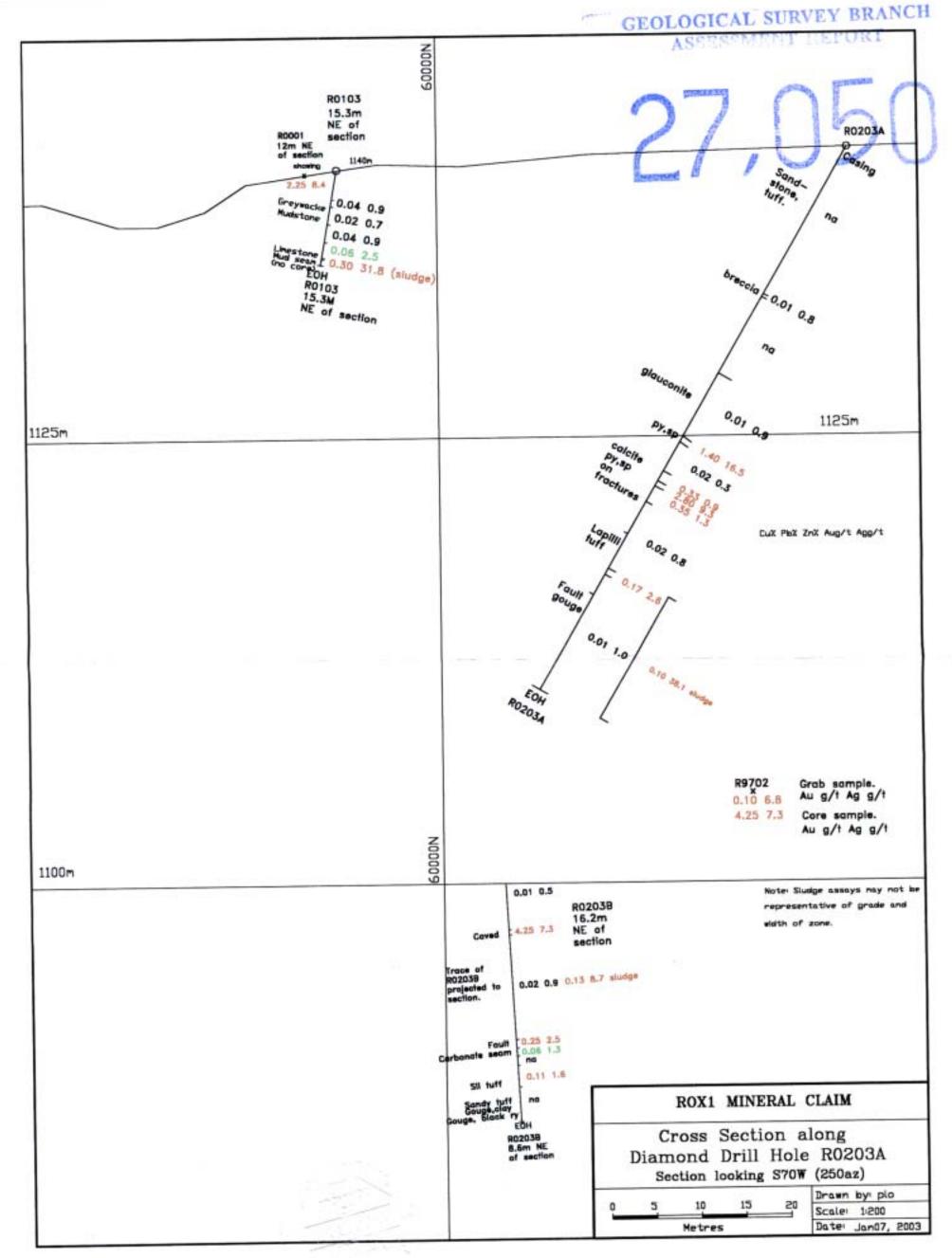


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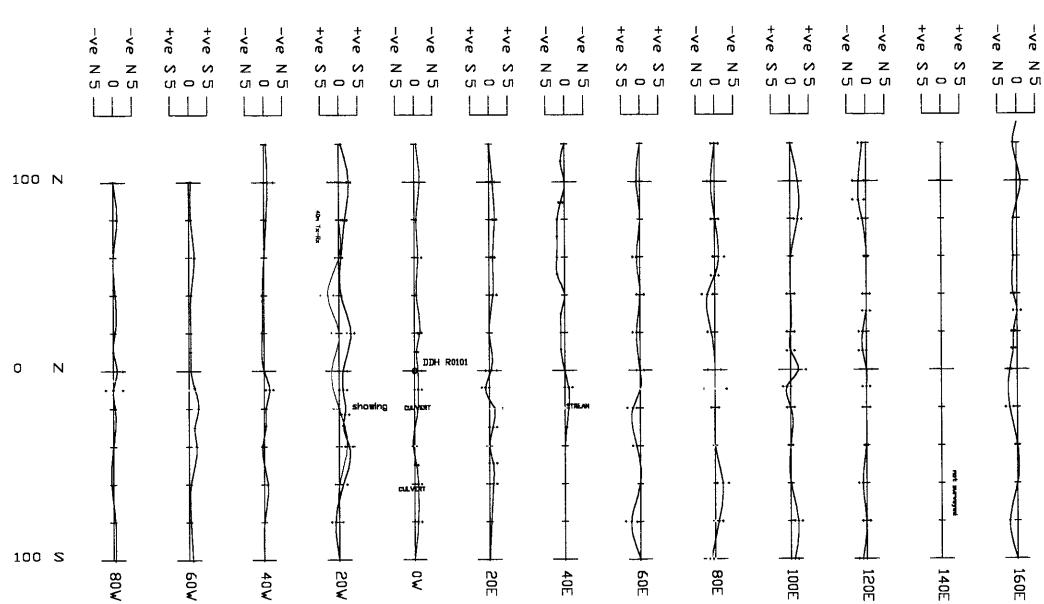


Equ





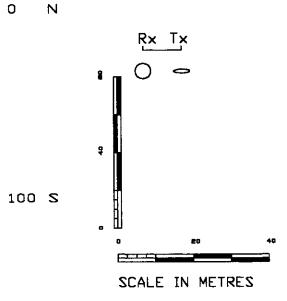
Mit gule



Tilt angle (degrees)

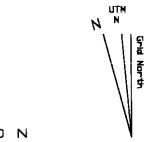
Marga

## ROX 1 Mineral Claim SE 200 VLEM Survey



INSTRUMENTATION Sharpe SE 200 VLEM Operating frequencey 1250 Hz Tx-Rx separation 20m Broadside array.

100 N

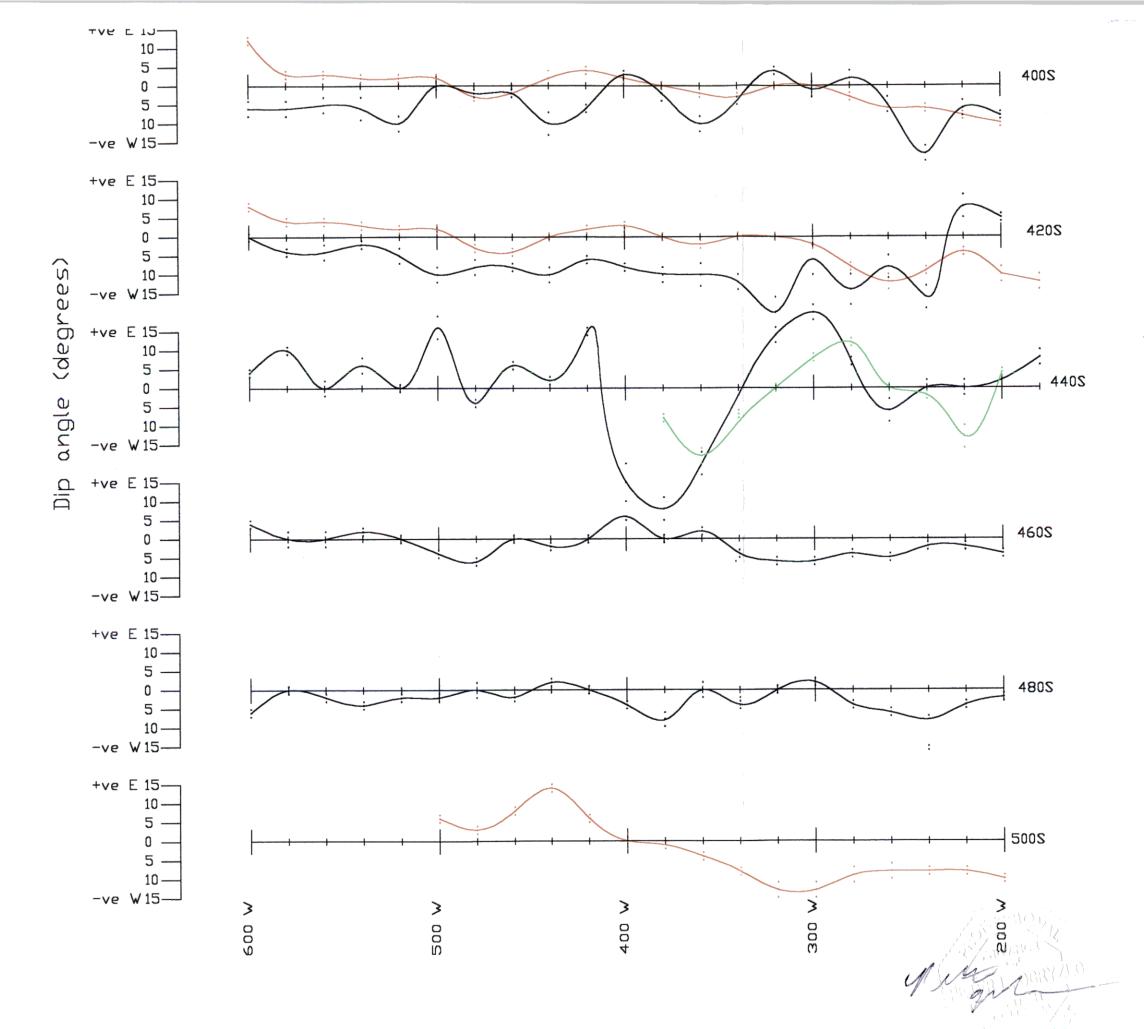


-Ve Z

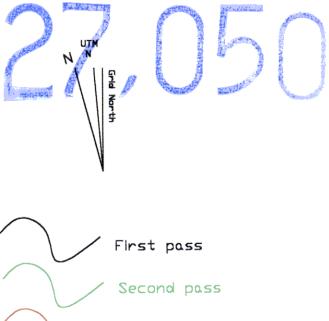




GEOLOGICAL SURVEY BRANCH 1.84

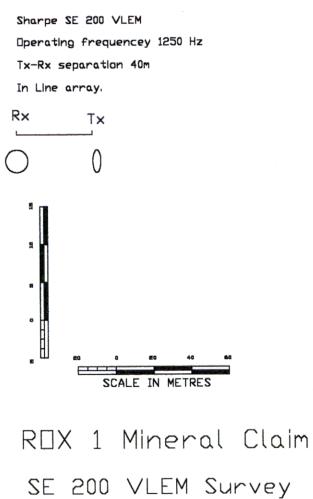


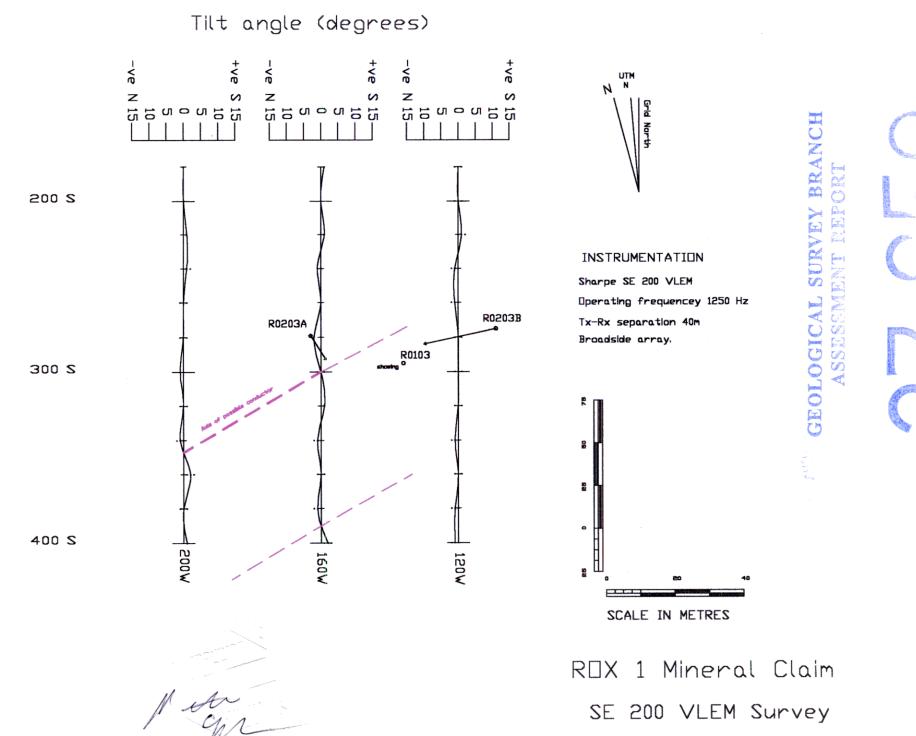
## GEOLOGICAL SURVEY BRANCH ASSEGRMENT REPORT

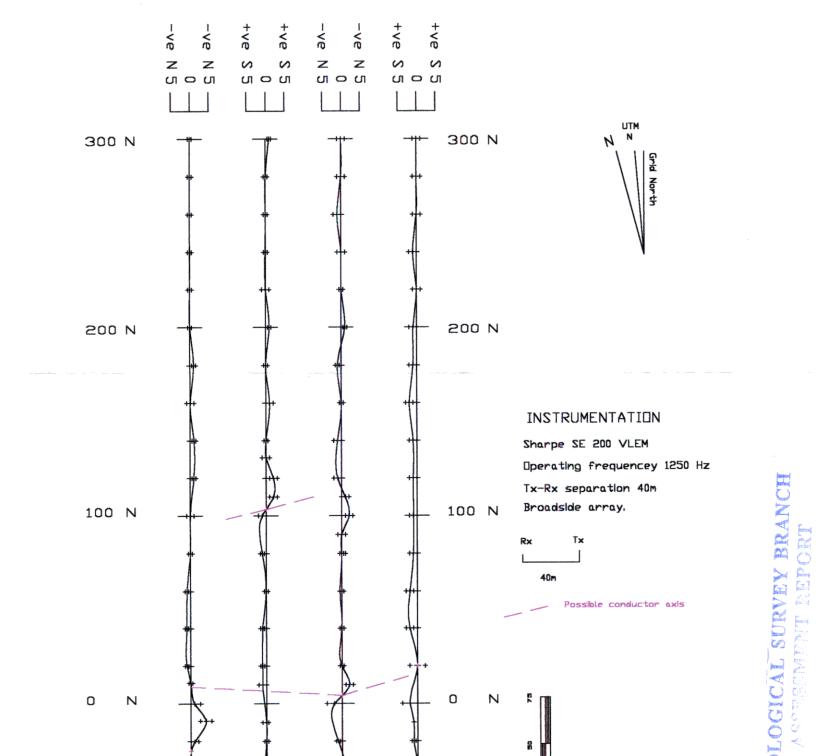


Third pass

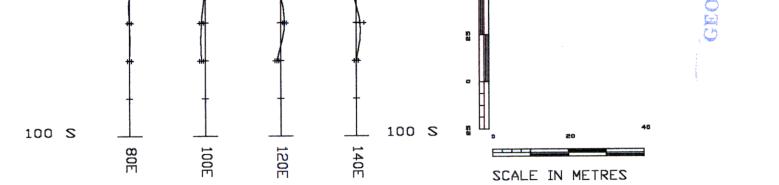
INSTRUMENTATION







Tilt angle (degrees)



1 sta

## ROX 1 Mineral Claim

SE 200 VLEM Survey