REPORT ON THE 2001
GEOLOGICAL AND GEOCHEMICAL
ASSESSMENT WORK ON THE
MTA 1-6 Claims

Whitehorse Mining District, Yukon
July 1-3, 2001

Claims: MTA 1-6 (YB57957-YB57962)

Location: 1. 55 km south of Whitehorse, Yukon
2. NTS Map Area 105 D/3
3. Latitude: 60° 15'N
   Longitude: 135° 12'W

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Whitehorse, Yukon
Y1A 1G1

January 15, 2002
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INTRODUCTION

This report summarizes the results of exploration work conducted on and around the MTA 1-6 claims during the period July 1-3, 2001. The claims are registered in the name of R. Allan Doherty and were staked in 1996 when ground held by Total Energold lapsed. The exploration target on the property is for gold-silver associated with galena veins.

LOCATION AND ACCESS

The MTA claims are located on the west shoulder of Mt. Anderson in the Wheaton River Valley at 60° 12’ N latitude and 135° 09 W longitude and are shown on claim map 105D /3. The claims are accessible by road from the Wheaton River road, up Partridge pass to a road that runs up the eastern side of Mt. Anderson. There is an old 1920’s mining trail that leads from Becker Creek up the western slopes of Mt. Anderson to three old adits driven on the vein. The road up Becker Creek is currently only useable for the first kilometer or so and has been washed out and is not passable from that point.

PHYSIOGRAPHY, CLIMATE AND VEGETATION

The claims are located on the eastern side of the Coast Mountains physiographic region. The area is part of an uplifted and dissected peneplain and the old rolling upland plateau is still visible from higher ground. Valley walls are steep and the effects of recent glaciation are common. The climate is variable with warm summers and cold winters. Annual precipitation in this part of southwest Yukon is in the order of 30 cm. The claims are above treeline and vegetation consists of stunted willows and grasses.
PROPERTY

At the time the work was completed, the property consisted of 6 contiguous unsurveyed two-post quartz claims covering approximately 120 hectares (Figure 2), staked in accordance with the Yukon Quartz Mining Act. All the claims are in the Whitehorse Mining District. Current claim status is shown on Yukon Quartz Sheet 105 D-3. Claim data are as follows:

<table>
<thead>
<tr>
<th>Claim Name</th>
<th>Grant Numbers</th>
<th>No. of Claims</th>
<th>Mining District</th>
<th>Expiry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTA 1-6</td>
<td>YB57957-YB57962</td>
<td>6</td>
<td>Whitehorse</td>
<td>2004/07/12</td>
</tr>
</tbody>
</table>

* subject to approval of 2001 assessment work.
HISTORY

The original discovery on Mt. Anderson dates to turn of century staked as RIP and WOLF claims. By 1915, a total of 152 metres of drifting was complete. The property has changed owners since, with

The first claims on Mt. Anderson were staked in Aug/06 as Rip, Mtn Sheep & Whirlwind (9519) by McGraw, Becker & Cochran. Two short adits (27 m and 12 m long) were driven by 1909 on the Whirlwind (or lower) Vein. By 1915, the lower (No. 1) adit had advanced 98 m (46 m drifted on vein), the upper (No. 2) adit was in about 107 m (all on vein) and elsewhere on the property, a 10.7 m x-cut and 22.9 m of drift had been completed on a different vein and a fourth adit had failed to intersect a vein. Ore was being sacked in 1912 and a small mill was built shortly after but no production is recorded. The claims were taken to lease in 1918. E. Butterfield recorded some rock trenching in 1926 on the Flora and Mountain Sheep Extension claims, and H. Beatty did similar work in 1934-35 on the Gold Coin group (19085).

The property was restaked as Mountain Sheep, in May/44 by J. Johns and W. McAlister, who did more rock trenching. The RHSM cl (57335) staked in Aug/47 by T.C. Richards, W. McAlister and G. Simmons, were examined by Keno Hill Mg CL later that year. The owners made a test shipment to the Trail Smelter in 1947 and did extensive bulldozer trenching in 1948.

Restaked as Mt Sheep cl in Apr/51 by J. Johns; as Star, etc cl (73145) in Aug/57 by L. Laroche; as Skinner, etc cl (73186) in Oct/57; as Jax, etc cl (74871) in Jun/60 by L. Russell; as Eagle, etc cl (92035) in Oct/62 by G. Caldwell; as DL cl (91543) in Dec/64 by Yukon Antimony Corp L, which did minor bulldozer trenching in 1965, and as HL cl (Y12963) in Apr/67 by W. Hyde. Hyde optioned the property to Silgold ML from June to Nov/67, and to Adanac Mg & EL in Jun/68. Adanac conducted more bulldozer trenching in 1968 and dropped its option in Jan/70. In May-Jun/73, Adonis ML optioned the property briefly and carried out a short bulldozing and sampling program.

The Wheaton River area saw a major exploration revival in the early 1980’s when companies targeted the area for epithermal gold mineralization, that culminated in the discovery of the Mount Skukum deposit 13 km west of the MTA claims.

W. Kuhn, staking the TAM and MAT claims in 1978. These claims were then transferred to Sanfred Resources Ltd in 1983. Noranda, in 1984, optioned the claims to identify vein extensions. The program, in the summer of 1985, consisted of grid soil sampling, rock chip sampling, petrographic studies, induced polarization, VLF-EM and magnetometer surveys, bulldozer and blast trenching and diamond drilling.

In 1988, the Whirlwind vein, was sampled by Total Erickson Resources Ltd. Underground sampling of a 15 m mineralized shoot assayed 7.5 g/t Au, 83.0 g/t Ag, 3.3% Pb & 0.025% Zn over 1.28 m. The vein extension was tested from a single diamond drill set-up, 152.4 m and 165.5 m respectively (Bremner, 1986). Drilling results confirmed the existence of the similar geological structure as encountered by previous workers at different elevations. This geological target consists of a granodiorite intruded by later andesite dykes, with veins and sulphides found footwall to andesite dykes. No significant mineralization was encountered other than trace values (Rawsthorn, 1988)
GEOLOGY

Regional Geology

The MTA claims are situated on the eastern flank of the Coast Plutonic Complex. Regional geology (Figure 3) has been described by Cairnes (1912), Wheeler (1961), Doherty et al. (1988), and Hart et al. (1990). The Coast Plutonic complex is composed of foliated and non-foliated granodiorite of Jurassic to Tertiary age. Flanking the Coast Plutonic Complex on the east are rocks of the Whitehorse Trough comprising Triassic Lewes River Group limestones and arkoses and Jurassic Laberge Group conglomerates and Tantulus Formation chert pebble conglomerate.

Subaerial rhyolite to andesite flows, dykes and sills are ubiquitous in the area. Two well developed Tertiary Calderas Complexes the Skukum and Bennett Lake complexes are located to the west and south of Mount Anderson. Structural trends in the area are dominated by a northwest trending brittle and ductile Tally-Ho Shear Zone shear zones and by later east and northeast structures.

Property Geology

The MTA claims are underlain by Cretaceous hornblende granodiorite cut by numerous narrow mafic dykes with an east-west trend. Just to the northeast of the claim block a large klippe of Nisling Group quartzite and gneiss outcrops on the ridge to the north of the claims. A quartz vein structure hosting galena and traces of antimony is exposed on the west side of the claims.

Andesitic rocks (map unit Ea) have been mapped as dikes over most of the property, although many are too small to be shown at 1:25,000 scale. They are typically porphyritic with variable propylitic alteration. These dykes may be older than the Tertiary rhyolites.

Dikes, faults, and air photo lineaments mapped to date on the MTA Claims follow a predominant northeast trend, discordant with regional structures, which dominantly trend north-east.
Mineralization on the property consists of ribbon quartz veins containing up to 70% galena. The veins are commonly found parallel with and cross-cut by a mafic dyke. The vein strikes between 1010° and 120° with a steep 80° NE dip. Vein widths vary from 0.5 to 2.0 m width. Three short adits have been driven on the vein. All but the lowermost adit has caved. The lowest adit is collared in granodiorite and is still in reasonable shape. A series of trenches have been excavated on the upper slopes to expose the vein and it has a strike length of approximately 1000 m.

EXPLORATION RESULTS

The property, claim posts, roads, trenches and adits were located using a hand held Garmin GPS 12. Accuracy is believed to be +/- 5 m. The vein was samples and structural data collected at all exposed outcrops, mainly in old trenches, adits and road cuts.

Roil Geochemistry

A total of 7 rock chip samples were collected from vein material at the adits and in trenches above the adits. Analytical results and sample descriptions are found in Appendices A & B. Sample R17006 returned 25.84% Pb, 1,095 gm/mt Ag, and 0.24 gm/mt Au, this sample is also slightly elevated at 0.09% Cu, and 0.15% Bi, all other elements assay below 0.01%. For the seven samples collected, copper and zinc values average 0.027% Cu and 012% Zn. No other elements show any significant values.

CONCLUSIONS AND RECOMMENDATIONS

Although the geochemical results are not outstanding, there are sufficient anomalous values to warrant further work. The primary purpose of the sampling program was to locate high grade samples of quartz vein with galena and determine if there was any significant gold grades associated with the sulphide. The average gold assay for seven samples is 0.34 gm/mt Au. Prior sampling has returned assay values of 7.5 g/t Au, 83.0 g/t Ag, 3.3% Pb & 0.025% Zn over a 1.28 m. chip sample of a 15 m mineralized shoot. A sample of vein float from just north of the claims returned 6.27 oz/ton Au and 15.2 oz/ton Ag (Keyser, 1987).

Respectfully submitted;

R. Allan Doherty, P.Geo.
January 15, 2002
MTA 1-6
Claims

ROCK SAMPLE LOCATIONS

Scale ~ 1:8,000 Figure 4
REFERENCES


Bremner, T., 1989, D.I.A.N.D. Assessment Report Summary, #091846;#091811 by Mary Webster


Rawsthorn, D.R., 1988, Assessment Report #092623, TAM 1-8;MAT 1-16, Mt. Anderson, Whitehorse M.D.

STATEMENT OF QUALIFICATIONS (RAD)

I, R. Allan Doherty, hereby certify that:

1. I am a geologist with AURUM GEOLOGICAL CONSULTANTS INC., 3151 3\textsuperscript{rd} Avenue, Whitehorse, Yukon, Y1A 1G1.

2. I am a graduate of the University of New Brunswick, with a degree in geology (Hons. B.Sc., 1977) and that I attended graduate school at Memorial University of Newfoundland, 1978-80. I have been involved in geological mapping and mineral exploration continuously since then.

3. I am a member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia, Registration No. 20564.

4. I am author of this report on the MTA claims and the owner of the claims. The work was completed on the property during the period July 1-4th, 2001. The report is based on information collected during property work and on referenced sources.

5. This report is for assessment purposes only.

January 15, 2002
Allan Doherty, P.Geo.
STATEMENT OF COSTS

2001 Assessment Work Valuation; MTA Claims (105 D/3)

1. Geological and Geochemical

A. Fieldwork

   i. R.A. Doherty, P.Geo., of Whitehorse, Yukon
      1. July 1, 4, 2002; 2 days @ $350.00/day: $700.00
   ii. Joe Clarke, CeT., of Whitehorse, Yukon
        1. July 1, 4, 2002; 2 days @ $250.00/day: $500.00

B. Geochemical Analysis

   i. 7 rock assays @ $30.29 ea: $212.03
   ii. shipping samples: $45.00
   iii. Gasoline, food, miscellaneous $100.00

C. Report Preparation $300.00

Sub-Total $1,857.03

GST: (7% of $2,057.03) $129.99

Total Valuation of 2001 Assessment Work: $1,987.02
Appendix A

Analytical Methods and Reports
Acme Analytical Laboratories Ltd.
File #A102317
# ASSAY CERTIFICATE

**Aurum Geological Consultants Inc.**
**PROJECT MTA**
**File # A102317**

| SAMPLE#  | Mo  | Cu  | Pb  | Zn  | Ag** | Ni | Co  | Mn  | Fe  | As  | Sr  | Cd  | Sb  | Bi  | Ca  | P   | Cr  | Mg  | Al  | Na  | K   | W   | Hg  | Te  | Au** | %   | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | %  | gm/mt |
|----------|-----|-----|-----|-----|------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| R17001   | .001| .002| .02 | .01 | 49.2| .01| .01 | .01 | .01 | .01 | .01 | .04 | .01 | .08 | .001| .03 | .03 | .03 | .03 | .02 | .07 | .001| .001| .02 |
| R17002   | .005| .026| 14.75| .83 | 272.1| .01| .01 | .01 | .01 | .01 | .01 | .03 | .01 | .04 | .001| .09 | .02 | .02 | .03 | .01 | .01 | .01 | .01 | .03 | .42 |
| R17003   | .001| .003| 2.54 | .01 | 371.6| .01| .01 | .01 | .01 | .01 | .01 | .04 | .01 | .07 | .011| .01 | .02 | .03 | .01 | .01 | .01 | .01 | .01 | .01 | .89 |
| R17004   | .001| .046| .16 | .01 | 44.8| .01| .01 | .01 | .01 | .01 | .01 | .06 | .01 | .01 | .06 | .01 | .04 | .08 | .01 | .01 | .01 | .09 | .01 | .01 | .07 |
| R17005   | .001| .042| 20.68| .01 | 455.5| .02| .01 | .01 | .01 | .01 | .01 | .04 | .01 | .03 | .012| .01 | .04 | .08 | .01 | .01 | .01 | .01 | .02 | .03 | .14 |
| R17006   | .001| .090| 25.84| .03 | 1095.3| .01| .01 | .01 | .01 | .01 | .01 | .04 | .02 | .20 | .01 | .01 | .01 | .01 | .01 | .01 | .01 | .01 | .01 | .01 | .24 |
| R17007   | .002| .006| 1.98 | .02 | 108.3| .01| .01 | .01 | .01 | .01 | .01 | .07 | .01 | .01 | .01 | .01 | .01 | .01 | .01 | .01 | .01 | .01 | .01 | .01 | .49 |
| RE R17007| .002| .004| 1.93 | .02 | 105.8| .01| .01 | .01 | .01 | .01 | .01 | .01 | .01 | .13 | .01 | .08 | .13 | .01 | .01 | .01 | .01 | .02 | .01 | .41 |
| STANDARD GC-2/AU-1 | .017| .934| 9.05| 16.85| 1069.3| .003| .01 | .21 | .11 | .21 | .17 | .012 | .104 | .838| .01 | 5.99 | .278 | .004 | 2.66 | .50 | .07 | 14.004 | .006 | .001 | 3.44 |

**GROUP 7AR - 1.000 GM SAMPLE, AQUA REGIA (HCl-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.**
**AG** & **Au** BY FIRE ASSAY FROM 1 A.T. SAMPLE.

- **SAMPLE TYPE:** ROCK R150
  - Samples beginning 'RE' are Reruns and 'REF' are Reject Reruns.

**DATE RECEIVED:** JUL 23 2001  **DATE REPORT MAILED:** Aug 7/01  **SIGNED BY:** C. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.
Appendix B
Rock Sample Descriptions
<table>
<thead>
<tr>
<th>Sample ID</th>
<th>UTM Coordinates</th>
<th>Sample Type</th>
<th>Sample Width (m)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>R17001</td>
<td>491603 6674073</td>
<td>Grab</td>
<td></td>
<td>Rusty vein quarts from old trench (west &amp; south end). Red ochre drusy filling in cavities Free growth terminations of quarts, minor sulphides</td>
</tr>
<tr>
<td>R17002</td>
<td>491538 6674118</td>
<td>Grab</td>
<td></td>
<td>Rusty quartz vein with galena blebs to 1-5%. Rusty surface. Traces of pyrite, red ochre rust stain</td>
</tr>
<tr>
<td>R17003</td>
<td>491499 6674160</td>
<td>Grab</td>
<td></td>
<td>Drusy quartz veins with galena, pyrite. Rusty weathing, Vein is in fractured chloritized granodite. Vein strike 305° 60° N. Sample is from west end of trench.</td>
</tr>
<tr>
<td>R17004</td>
<td>490890 6674218</td>
<td>Grab</td>
<td></td>
<td>Sample of quartz vein with galena and pyrite, right below upper and northern most adit. Adit is caved</td>
</tr>
<tr>
<td>R17005</td>
<td>490864 6674136</td>
<td>Chip</td>
<td>1.8</td>
<td>In place quartz vein sampled from roof of adit. Ribboned quartz with galena. Galena up to 10-15%</td>
</tr>
<tr>
<td>R17006</td>
<td>490864 6674136</td>
<td>Grab</td>
<td></td>
<td>Grab off of dump below chip R17005. Massive galena in quartz vein.</td>
</tr>
<tr>
<td>R17007</td>
<td>491112 6674069</td>
<td>Grab</td>
<td></td>
<td>Grab sample of quartz vein Vein just above road, strike 290° 70° N</td>
</tr>
</tbody>
</table>