GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORTS

ASSESSMENT REPORT

DATE RECEIVED MAY 2 8 1996

ON A

96 Sept 16 Annended

HEAVY MINERAL STREAM SEDIMENT PROGRAM

ON THE

AMY PROPERTY

AMI 1 - 8 MINERAL CLAIMS

TOOTSEE LAKE AREA

FILMED

LIARD MINING DIVISION, B.C.

OLOGIC I BRANCH SSESSMENT REPORT

NTS: LATITUDE: LONGITUDE: OWNER: OPERATOR: AUTHORS: DATE: 1040/15E,16W 59° 56'N 130° 30'W W.R. Gilmour Discovery Consultants T.H. Carpenter, P.Geo. February 8, 1996

24,424

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ADDENDUM

SUMMARY

The Amy property is a developed prospect comprising a galena and sphalerite "manto" body formed by replacement mineralization in folded Cambro-Ordovician Kechika Group metasediments. Sulphide zones averaging 1.8 metres wide occur primarily in marble units in a phyllite-calc-silicate, hornfels-quartzite package.

Mineralization, consisting of sphalerite, galena, pyrite, arsenopyrite and friebergite can be traced along strike for 170 metres. Indicated reserves of 72,000 tonnes grading 367 grams per tonne silver, 6.0% zinc and 2.8% lead were reported by Marbaco Resources Ltd. in 1973.

In 1995 a program of heavy mineral stream sediment sampling was carried out on the property to check for possible extensions of known mineralization.

LOCATION AND ACCESS

The AMY property is located approximately 130 km (80 miles) west-southwest of Watson Lake, Yukon Territory, in the Liard Mining Division of British Columbia. The property is accessible by four-wheel drive vehicle from Mile 701 on the Alaska Highway. From Mile 701 a road leads south, partly along the Tootsee River to the Midway Deposit at a distance of 30 kilometres. A branch road forking off the Midway road, some 5 kilometres north of the deposit, leads 8 kilometres southwesterly to the Amy property. This road is passable in the dry season only.

TOPOGRAPHY

The claims are located in the Cassiar Mountains at elevations ranging from 1,200 to 1,600 metres. Peaks in the general area rise to about 2,000 metres.

The general topography is moderately rugged and accessible. At higher elevations the country is open. In the valleys, small timber and heavy undergrowth make travel difficult.



DWG-629-004

PROPERTY

The Amy property comprises 8 two-post claims staked as the Ami 1 to 8 claims by J.R. Beggs on May 24, 1995 and recorded in Vernon on June 1, 1995 (Figure 2).

<u>Claim Name</u>	Record No.	<u>Owner of Record</u>	<u>Anniversary</u> <u>Date *</u>
Ami 1	336307	W.R. Gilmour	May 24, 2000
Ami 2	336308	W.R. Gilmour	May 24, 2000
Ami 3	336309	W.R. Gilmour	May 24, 2000
Ami 4	336310	W.R. Gilmour	May 24, 2000
Ami 5	336311	W.R. Gilmour	May 24, 2000
Ami 6	336312	W.R. Gilmour	May 24, 2000
Ami 7	336313	W.R. Gilmour	May 24, 2000
Ami 8	336314	W.R. Gilmour	May 24, 2000

The claims are owned by W.R. Gilmour in trust for the Phoenix Syndicate.

* Pending acceptance of this report.



DWG-629-005

HISTORY

High grade silver-lead-zinc mineralization was discovered in 1948 on Camp Creek in the present claim area. In 1949 the Hudson Bay Mining and Smelting Company drilled eight diamond drill holes along a strike length of 236 metres (775 ft). Four holes intersected mineralization.

In 1962 the property was acquired by the Rancheria Mining Company Ltd., which from 1963 to 1965 conducted a significant amount of exploration including 24 diamond drill holes and an adit 835 ft (254 m) in length.

In 1966 and 1967 a limited amount of work on the property was carried out.

Irwin Engineering attempted a short percussion drilling program on the property in 1968 and the claims were allowed to lapse.

Later staking included the Amy property and the adjacent Cub property. From 1971 to 1973 Fosco Mining Ltd. completed 200 ft (61 m) of drifting and 1400 ft (427 m) of cross-cutting to explore the mineralized zone on the 1280 m (4200 ft) level.

In 1977 the Cub claims adjoining the Amy deposit were located. Dupont of Canada conducted geological and geochemical surveys on the Cub property in 1979, primarily to evaluate skarn zones with values in tungsten and molybdenum.

In 1981 and 1982 Morbaco Mines Ltd., a successor to Fosco Mining Ltd., optioned the Cub property and conducted geochemical

surveys and limited bulldozer trenching.

Sovereign Metals Corporation in 1984 carried out exploration on the Cub property to test for potential extensions to the Amy deposit and to locate the source of high grade float. Eight diamond drill holes comprising 439 metres were completed.

In 1985 Reg Resources carried out an exploration program including an electromagnetic survey and diamond drilling (3 holes totalling 358 metres) on the Amy property.

GENERAL GEOLOGY

The claims are situated near the contact zone of the east flank of the Cassiar batholith, which extends over 300 km from the Wolfe Lake map sheet in the Yukon, southeast to the Kechika map area in British Columbia.

In this region the batholith intrudes a metamorphic package of Cambrian to Silurian metasediments. These include members of the Atan and Good Hope Groups (dolomites, limestones, skarns and quartzites) which are in turn overlain by calcareous phyllite and phyllitic limestone of the Kechika group. The upper part of the Kechika Group also includes black graptolitic shales and platy sandstones. The above sequence exhibits evidence of intense multiple deformations.

Overlying the above rocks and outcropping to the east is the McDame Group of Middle Devonian age comprising fetid fossiliferous dolomites and limestones.

The Lower Sylvester Group, which forms part of the Sylvester allocthonous slab is in low-angle fault contact with the McDame. The lower Sylvester comprises fine grained, black, locally graphitic slates and phyllites with grey to black bedded and ribbon cherts.

The Sylvester allocthon is characterized by a broad northwesterly trending synclinal feature referred to as the McDame Synclinoriun. This structure generally parallels the contact of the Cassiar batholith. Strong northwest to northeast

steep, normal faults affect the area.

The Amy deposit occurs as a replacement zone along a limestone-argillite contact within the Kechika Group. Measured and drill indicated reserves reported by Marbaco Resources include 72,000 tonnes of 367 g/t silver, 6.0% zinc and 2.8% lead with an additional 59,000 tons inferred with no assigned grade.

Eight kilometres east of the Amy deposit the Midway deposit of Regional Resources contains an estimated 1,180,000 tonnes of 16.6% combined Pb-Zn and 408 g/t Ag within the McDame dolomite, localized by the McDame-Sylvester contact.

Work in 1985 demonstrated mineralization in the Midway deposit to be Tertiary in age and possibly related to intrusions in the area. Exploration in the area need not therefore be restricted to a particular sedimentary horizon. Mineralization could be found in any place where there is a suitable stratigraphic trap.

WORK COMPLETED

Work carried out on the property in 1995 comprised heavy mineral stream sediment sampling.

1. Heavy Mineral Stream Sediment Sampling

a). <u>Program Parameters</u>

A total of 3 heavy mineral stream sediment samples was taken from the claim area. Sample locations are shown on Figure 3. Heavy mineral drainage sampling entails the sampling of gravels, sands and silts from creek beds. The material is sieved in the field until approximately 10 kg of -20 mesh material is obtained. The sample is then shipped to C.F. Minerals Ltd. of Kelowna for heavy mineral separation. Fractions are produced according to grain size, specific gravity and magnetic susceptibilities.

Generally the -150HN fraction (-150 mesh, >3.2 specific gravity, non-magnetic) includes native gold, pyrite and many base metal sulphides as well as accessory minerals such as zircon. Para-magnetic (P) minerals include garnets, hornblende and epidote. The magnetic (M) fraction is generally exclusively magnetite. The IP and HP fractions commonly contain secondary zinc minerals. All remaining fractions are stored for further analysis or microscopic examination. The fraction selected for analysis (-150IP) was sent to Activation Laboratories for nondestructive analysis by neutron activation, followed by ICP analysis upon 'cooling' (Appendix A).

b). <u>Program Results</u>

The heavy mineral samples were collected from a stream (Camp Creek) draining the Amy deposit and from drainages located east and west of the deposit to test for possible extensions of the zone. The Amy deposit extends in an easterly direction from Camp Creek.

The orientation sample (629-HM002) collected on Camp Creek returned values of 51 ppm Pb and 278 ppm Zn. Similar values would have been expected on the drainage to the east. However this sample (629-HM001) contained only 24 ppm Pb and 90 ppm Zn.

Sample 629-HM003 however, collected on a drainage to the west contains similar values to those found in sample 629-HM002 and may indicate potential mineralization in that direction.

CONCLUSIONS

The Amy property is host to a significant tonnage of Pb-Zn-Ag mineralization comprising 72,000 tonnes containing 637 g/t Ag, 6.0% zinc and 2.8% Pb.

Anomalous Pb and Zn mineralization has been detected by heavy mineral sampling in a drainage west of the Amy deposit. Previous exploration has been concentrated on mineralization defined to the east of Camp Creek.

Work in 1985 on the Midway deposit has shown that Pb-Zn mineralization in the area may be related to Tertiary age intrusions and may not be necessarily confined to specific geological horizons.

Potential therefore exists for the definition of additional mineralization on the Amy property.

RECOMMENDATIONS

Additional sampling is recommended on the Amy property. Previous drilling has not adequately defined the eastern extent of mineralization. A well designed drill program should be carried out to test the down dip and lateral extent of known mineralization.

Exploration should be carried out to the west of the deposit to search for the cause of anomalous mineralization in sample 629-HM003.

Additional heavy mineral sampling should be undertaken in the area of the Amy deposit to aid in the definition of other mineralization in the area.

Respectfully submitted, T.H. Garpenter, P.Geo.

February 8, 1996 Vernon, B.C.

REFERENCES

British Columbia Ministry of Energy, Mines and Petroleum Resources (MEMPR) Annual Reports

> 1949 - p. 70 1964 - p. 9 1965 - pp. 10-12

British Columbia Ministry of Energy, Mines and Petroleum Resources - Geology, Exploration and Mining in British Columbia

> 1972 - p. 560 1973 - p. 516 1974 - p. 352

British Columbia Ministry of Energy, Mines and Petroleum Resources - Exploration in British Columbia

> 1978 - p. E276 1979 - p. 314 1980 - p. 508

British Columbia Ministry of Energy, Mines and Petroleum Resources -Assessment Reports #44, 734, 3566, 6798, 7539, 10066, 11997, 13376, 14788

STATEMENT OF COSTS

1.	Professional Services T.H. Carpenter, P.Geo. Supervision, field work & report writing 2 days @ \$380.00/day \$7 2 days @ \$332.21/day	760.00 564.42	\$ 1424.42
2.	Field Personnel Heavy mineral sampling & travel May 24 to May 26, 1995 2 days @ \$214/day		428.00
3.	Transportation Truck 2 Helicopter8	100.00 300.00	1200.00
4.	Lodging & Meals		288.14
5.	Geochemical Analysis a) Heavy Mineral samples Sample preparation 3 samples Sample analysis 3 @ 7.75/sample	379.54 23.25	402.79
6.	Drafting		237.60
7.	Data compilation, secretarial		308.17
8.	Field supplies and equipment rental		147.54
9.	Printing, data processing, telephone, shipping		100.00

Total <u>\$ 4536.66</u>

STATEMENT OF QUALIFICATIONS

I, THOMAS H. CARPENTER of 3902 14th Street, Vernon, B.C., V1T 3V2, DO HEREBY CERTIFY that:

- 1. I am a consulting geologist in mineral exploration associated with Discovery Consultants, Vernon, B.C.
- 2. I have been practising my profession for 24 years.
- 3. I am a graduate of the Memorial University of Newfoundland with a Bachelor of Science degree in geology.
- 4. I am a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia.
- 5. This report is based upon knowledge of the AMY property gained from supervision.
- 6. I hold no interest either directly or indirectly in the AMY property.

P.Geo. T.H ter,

February 8, 1996 Vernon, B.C.

APPENDIX A

Heavy Mineral Stream Sediment Survey

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Date of Report : 95.08.18 Project 629

Amy Property

Heavy Mineral Stream Sediment Sampling Results Analysis of -150IP fraction

1995

Reference : BC95-00953.0 (CFM95-614)														
Sample ID	-20 mesh weight kg	-150IM wt g	-150IP wt 9	-150IN wt 9	-1501 total wt g	Ag ppm	Cu ppm	Pb ppm	Zn	Cd	Mo %	As	Sb	Bi
629-001 629-002 629-003	8.3 11.1 9.0	0.64 <0.01 0.08	4.23 1.24 0.44	0.11 0.37 1.61	4.98 1.61 2.13	<0.2 <0.2 0.6	38 27 53	24 51 62	90 278 234	⊲0.2 0.4 <0.2	5 4 14	6 <5 <5	ব্য ব্য ব্য	6 <5 12

Project 629

Heavy Mineral Stream Sediment Sampling Results (part 2)

Sample ID	Ni	Co .	Cr	Fe	Ba	Mn	v	Sr	Y	La	Te	Sn	w	AI
629-001	87	24	35	3.82	37	566	44	41	23	69	<10	<20	<20	1.22
629-002 629-003	14 40	9 27	17 30	2.64 6.58	58 80	743 820	49 91	62 36	123 25	150 183	<10 <10	<20 25	<20 <20	1.56 2.12

Project 629

Heavy Mineral Stream Sediment Sampling Results (part 3)

. 1

Sample ID	Mg	Ca	Na	K	Ga	Li	Ti	Ta	Sc	Nb	Zr
629-001	2.18	1.24	0.03	0.07	6	12	0.12	<10	<5	<1	3
629-002	0.9	4.56	0.06	0.17	7	42	0.06	<10	<5	<1	<1
629-003	1.69	0.92	0.06	0.21	12	62	0.24	<10	6	<1	4

APPENDIX B

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Analytical Procedures

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Geochemical Analysis

by Bondar-Clegg :

		LOWER		
ELEME	NT	DETECTION LIMIT	EXTRACTION	METHOD
Au	Gold	5 ppb	fire-assay	atomic absorption
Ag	Silver	0.2 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
AĪ*	Aluminum	0.01 %	HNO3-HCI hot extr	ind. coupled plasma
As	Arsenic	5 ppm	HNO3-HCI hot extr	ind. coupled plasma
Ba*	Barium	5 ppm	HNO3-HCI hot extr	ind. coupled plasma
Bi	Bismuth	5 ppm	HNO3-HCI hot extr	ind. coupled plasma
Ca*	Calcium	0.01 %	HNO3-HCI hot extr	ind. coupled plasma
Cd	Cadmium	1 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Co*	Cobalt	1 ppm	HNO3-HCI hot extr	ind. coupled plasma
Cr*	Chromium	1 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Cu	Copper	1 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Fe*	Iron	0.01 %	HNO ₃ -HCI hot extr	ind. coupled plasma
Ga	Gallium	2 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Hg	Mercury	10 ppb	HNO ₃ -HCI leach	cold vapour atomic absorption
К*	Potassium	0.01 %	HNO ₃ -HCI hot extr	ind. coupled plasma
La*	Lanthanum	1 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Li	Lithium	1 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Mg*	Magnesium	0.01 %	HNO ₃ -HCI hot extr	ind. coupled plasma
Mn*	Manganese	0.01 %	HNO ₃ -HCI hot extr	ind. coupled plasma
Mo*	Molybdenum	1 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Na*	Sodium	0.01 %	HNO ₃ -HCI hot extr	ind. coupled plasma
Nb	Niobium	1 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Ni*	Nickel	1 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Pb	Lead	2 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Sb*	Antimony	5 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Sc	Scandium	Б ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Sn*	Tin	20 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Sr*	Strontium	1 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Та	Tantalum	10 ppm	HNO3-HCI hot extr	ind. coupled plasma
Te*	Tellurium	10 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Ti	Titanium	0.01 %	HNO ₃ -HCI hot extr	ind. coupled plasma
V*	Vanadium	1 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
W*	Tungsten	20 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Y	Yttrium	1 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Zn	Zinc	1 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma
Zr	Zirconium	1 ppm	HNO ₃ -HCI hot extr	ind. coupled plasma

• Please note: certain mineral forms of those elements above marked with an asterisk will not be soluble in the HNO₃/HCl extraction. The ICP data will be low biased.

Please note: Hg will only be analysed upon request.

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ADDENDUM





July 17, 1996

File No. 24500-03-AME

Direct enquiries to G. McArthur (952-0384)

Discovery Consultants Box 933 Vemon BC V1T 6M8

Dear Sir/Madam:

Re: Assessment Report Number 24424 Mineral Claim(s) Worked On Ami 1-8 Statement Number(s) 3081067

We have received the above noted report(s); however, the report contravenes the Mineral Tenure Act Regulations and before it can be approved, we require the following amendments in duplicate:

Very little work performed and none of it is on the claims. Costs can only be applied to PAC account and not credited to title extension.

We are returning the report(s) for amendment within sixty days of the date of this letter. When you return the report(s), please attach one copy of this letter. No further extensions or reminders will be issued.

Yours truly

Arthan

Gilbert McArthur, M.Sc., P.Geo. Manager, Geoscience Information Section Geological Survey Branch for Chief Gold Commissioner

CC. Gilmour, William R. PO Box 933 Vemon BC V1T 6M8

Ministry of Employment and Investment

Mailing Address: 1810 Blanshard Street Victoria BC V8V 1X4 Location: 1810 Blanshard Street, Victoria, B.C.



201–2928 29th Street Vernon, B.C. V1T 5A6 Telephone: (604) 542-8960 Fax: (604) 542-4867

> Mail: P.O. Box 933 Vernon, B.C. V1T 6M8

Consultants

September 13, 1996

Sent by fax and courier (604) 952-0381

Mr. Gilbert McArthur Ministry of Employment and Investment 1810 Blanshard Street Victoria, BC V8V 1X4

> Re: Ami 1-8 claims File No. 24500-03-AME Assessment Report No 24424

Dear Mr. McArthur,

Thank you for your letter of July 17, 1996. I apologize for the delay in responding.

If we had suspected that there may be a problem with applying \$4000 worth of assessment work we would have used PAC, reducing the amount needed for 4 years to about \$3100.

Regarding the report, there are two drainages on the claims which are sampled, to some degree, by heavy mineral stream sediments (see enclosed photocopies of report map Figure 3). Approximately 1/3 of the claim area is evaluated by the geochemical sampling.

In certain types of geochemical surveys, such as stream sediments or till, the sample does not have to be on the claim to evaluate the claim. In fact, in some cases the sample needs to be collected off the claim to fully evaluate areas on the claim. The other sample was collected to help determine regional background values to aid interpretation. Also, the stream sediments were subjected to preparation procedures which produced a fraction with very specific size, specific gravity and magnetic susceptibility parameters. This fraction maximizes the ability to detect zinc mineralization.

Low density heavy mineral sampling has proven very effective locating mineralization in B.C. Figure 5a shows two samples anomalous in zinc in a specific heavy mineral fraction from stream sediments. Figure 5b shows the follow-up silt anomalies, which in spite of zinc's mobility did not reach as far downstream as the original sampling. Follow-up soil sampling located a significant soil anomaly in zinc.

Clearly our sampling on the Ami is a reasonable exploration technique which does fulfill the requirements of the assessment regulations.

ξ,

Please contact me if you require further information, if you still have problems with our report or if you question the value of assessment claimed.

Please find enclosed the 2 copies of our report. We have included your letter and this letter as an addendum in the reports as an explanatory note on the exploration program.

Yours truly,

DISCOVERY CONSULTANTS

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W.R. Gilmour

cor\ 629_0913.96















TREAM	SEDIMENT	SAMPLING
ZI	NC VALUES	(ppm)

E: May 16/1996	SCALE: 1:5000
JECT: 629	NTS: 1040/15,16
JRE: 6	Liard Mining Division