



ASSESSMENT REPORT

on the

SAMPLING and GEOLOGICAL EXAMINATION

of the

EUPHRATES GOLD DEPOSIT

Tram #1 to #8 claims

Situated

Immediately East of

Highway #6,

13 kilometres South of

the City of Nelson,

NELSON MINING DIVISION

British Columbia.

FIELD WORK: OCTOBER 27 and 28, 1976.

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO.

REPORT BY:

D. R. Cochrane, P. Eng.,

December 17, 1976,

DELTA, B. C.



ENGINEERING Cochrane Consultants Ltd. EXPLORATION

INTRODUCTION:

In October, 1976 Messrs. Graham, Urquhart and the author inspected portions of the Tram mineral claims which cover the old Euphrates Mine, a former gold producer in the Ymir Gold Camp. Work included "mucking out" the partly caved main (El Tee) portal, underground sampling of the El Tee vein, and sampling of mine dumps on the property. The project was conducted on behalf of Barker Resources Ltd. of Vancouver, B.C. the owner of the claim group.

This report describes procedures and discusses the results obtained. It is written for assessment work submission and Appendix I contains the assessment work details. Metric units have been used exclusively in this report.

LOCATION AND ACCESS:

The eight Tram claims are situated thirteen road km south of the city of Nelson in the southern Interior of British Columbia. Access from Nelson is via the Salmo Valley which includes paved Highway No. 6, the Salmo River, the West Kootenay Power Line and the Burlington Northern Railway Line. These services pass just northwest of the north boundaryof the Tram claims. The Euphrates adit is visible from the highway and lies about 300 meters above it, and some 1100 meters southeast and upslope from the highway.

The national topographic system code for the area is 82F/6.

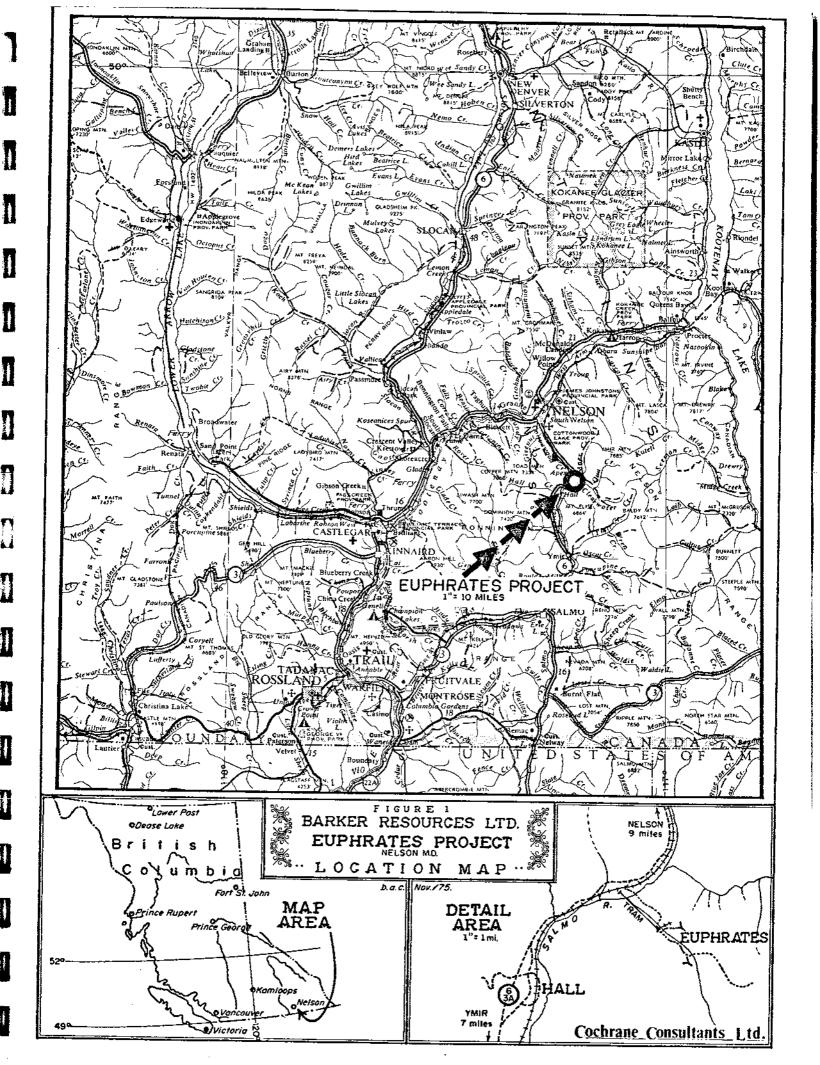
The latitude is 49 22 N, and the longitude is 117 10 W. (See Figure 1, location map).

CLAIMS INFORMATION:

The Tram claims were staked by John Lepinski on October 31, 1974 and recorded in Nelson on November 27, 1974. They were transferred to Mr. W. L. McCullough of Aldergrove, B.C. on November 18, 1975, and all interest was further transferred to Barker Resources Ltd. on April 7, 1976.

Tram No. 1 to No. 8 have record numbers 15687 to 15694 inclusive.

The initial post for Trams No. 3 and No. 4 is located immediately above the main El Tee portal.



GENERAL SETTING:

The Euphrates Mine is located on a northwestern facing slope of a spur of Mt. Elise, which is part of the Nelson Range of the Selkirk Mountains. Elevations in the general vicinity vary from just below 750 meters (at Nelson), to peaks just in excess of 2000 meters.

The Euphrates side hill is moderately steep slope (average of 20°) and is well forrested with tamarack, spruce, balsam, and pine. Alder and willow grow in the creek valleys and any areas disturbed by man including old trails, mine dumps, abandoned camp sites, etc.

The Ymir - Nelson area is underlain by a complex rock assemblage including Paleozoic metasediments of the Ymir group; the lower Jurassic Rossland Formation (mainly greenstone) and the Upper Jurassic Hall Formation (mainly argillite). These rocks are intruded by dikes and stocks collectively grouped as Nelson Intrusives. The Euphrates lies just north of the north end of an elongate prophyry plug known locally as the Ymir porphyry and in rocks assigned to the Rossland Formation (or Elise Formation of Little, 1964). The Rossland Formation is predominantly andesite, basalt, augite porphyry, and volcanic agglomerate, breccia and tuff.

The Euphrates Mine has been previously described as a "narrow vein type" deposit, steeply dipping and southeasterly striking. The vein material is predominantly quartz with galena, sphalerite, pyrite, arsenopyrite and with traces of chalcopyrite, native gold and silver. (Cochrane, 1975)

HISTORY:

The Euphrates Mine was discovered and staked in 1926 after a forest fire had burned timber and underbrush off the Euphrates sidehill opposite the Golden Age Railway Siding. It was staked by members of the Terzian and Pashgian families, and work on these new showings was conducted in six areas; from just above the Salmo River to a point about 300 meters higher in elevation.

Development work was conducted rapidly and in 1928, 11 tons of ore were shipped to Trail; in 1929, 1 ton; in 1931, 47 tons; and in 1934, 59 tons. The El Tee drift was extended to 500 meters in from the portal in 1934 and 380 meters of drifting and 230 meters of crosscutting was completed in 1936. A 2 bucket riblet aerial tram, 1000 meters in length was installed in 1930 to facilitate shipping. (Minister of Mines Reports) There is no mention of the Euphrates in the B. C. Minister of Mines Reports after 1936, however shipments were made as late as 1941. (Table of Recorded Mineral Production in B.C.)

The Exphrates was acquired by Roberts Mines Ltd. of Vancouver in 1969 and in 1970 and 1971 the author supervised magnetometer and geochemical soil sampling on the Euphrates and on behalf of Roberts Mines Ltd. Bulldozer trenching of a few of the anomalies was completed in 1972.

The claims came open in the fall of 1974, and were staked by John Lepinski and ultimately transferred to Barker Resources in April of 1976. In the fall of 1975 the author completed a stadia transit survey of portions of the claims. (see Assessment Report dated November 20, 1975)

WORK DONE:

On October 26, 1976 the author, Mr. Graham and Mr. Urquhart (both the latter from Merritt, B.C.) mobilized to Nelson, and on October 27 commenced work on the Euphrates. The main El Tee portal was partially blocked, and muck was removed by hand and water allowed to drain. On the same day, the El Tee adit was chained and marked at 10 meter intervals from the portal southeasterly to 250 meters. At this point a lack of oxygen in the tunnel forced a retreat. The vein was inspected and sampled periodically, and on October 28 sampling was completed including a large sample from the main El Tee portal dump, and a sample from the mill bin at the river.

The samples were tagged and sent to Min En Labs of Vancouver where they were assayed for gold and silver by an atomic adsorption method. Assay results were completed on December 15, 1976.

DISCUSSION OF RESULTS:

The Minto portal, situated some 200 odd meters northeast of the El Tee portal, and at the same elevation (1160 meters A.M.S.L.) is presently caved, and drilling and blasting of large caved rock slabs would be necessary to re-open the adit. The upper Minto portal is partially caved but requires timber in order to gain safe access. The El Tee portal is in good shape, as is most of the tunnel, except for the odd small cave principally at stoped areas. The air is bad at 250 meters in from the portal. (see accompanying map)

The main El Tee vein lies in a shear zone which varies in width but averages about one meter wide. The shear zone is steeply dipping and the quartz vein, (occassionally two veins) lies within this shear and varies in width from 0 to 17 centimeters wide, and in strike from 108 to 180 degrees, but is normally about 135° (true azimuth).

The following table lists pertinent data on the El Tee vein to 250 meters southeast of the portal.

TABLE A

DISTANCE	CE VEIN			ASSA		
from Portal	Dip	Strike	Width	Au	Ag	Remarks
(meters)	deg.	azimuth true	cm.	(oz/ton)	(oz/ton)	
0	90	120				portal
20	87SW	140	0-10			shear 1 m.wide
30	85NE	131	m5	0.094	0.17	vein pinches
40	-	-	12			•
50	-	-	5-10			host augite porph.
60	86NE	129				vein pinches
70	-	-	-			stoped out
80	-	-	-			stoped out
90				0.325	4.06	-
100	90	138				No vein (pinched)
110	84NE	142	12			strong vein
120				0.085	2.08	•
130	77SW	108	4			vein rolls
140	-	-	5			
150			5	0.033	3.01	
160	90	180	1			sharp turn
170			3-4			two veins
						1 cm. apart
180	87NE	132	8			vein strong
190			8			-
200	90	133	8-10	0.096	6.62	•
220	76NE	136	14			vein braided
230						small stope
240	90	149	5			-
250			17	0.031	18.30	stope

A large (approx. 5 k.grm) sample of vein material was collected from the El Tee dump, and also a similar sample from the mill bin at the river, with the following results.

Dump	Au (oz/ton)	Ag (oz/ton)
El Tee	0.205	16.50
Mill Bin	0.355	3.55

Most of the material in the El Tee dump is greenstone, however there is a modest portion which is a whitishgrey, massive, fine grained felsite (?) consisting predominantly of quartz and feldspar laths that is well mineralized with arsenopyrite and traces of pyrite and pyrrhotite. A sample of this rock, which must have been some of the last host rock mined, assayed 0.087 ounces of gold per ton and 0.48 ounces of silver.

Near survey station A-10, and some 100 meters uphill along the road from the mill site, is a small trench exposing rusty altered rock similar to the felsite described above. A few colours of gold were panned from the soil near this zone, however a chip sample across the outcrop assayed only 0.010 ounces of gold per short ton and 0.13 ounces of silver.

CONCLUSIONS:

The Euphrates Gold Mine was one of the twentythree (23) former producers that made up the Ymir Gold Camp
of southeastern British Columbia. Total recorded production
from the Euphrates, between 1928 and 1941, was 326 tons
averaging 1.40 ounces of gold and 7.3 ounces of silver per
ton (B.C. Dept. of Mines Records) Production was presumably
from "ore shoots" within a steeply dipping and narrow (up to
17 cm wide) quartz vein lying within a strong shear zone.

The recent work was hampered by bad air beyond the 250 meter point however assay values are sufficiently encouraging to warrant "blowing air" to allow a complete inspection and re-evaluation of the old workings. Additional work should also be directed towards locating the felsite (?) intrusive both on surface and underground since it may have dimensions much larger than the main El Tee quartz vein.

Respectfully submitted,

D. R. Cochrane, P.Eng., December 17, 1976.

APPENDIX I

Assessment Work Details

PROJECT: Euphrates Gold Mine

CLAIMS: Tram No. 1 to No. 8 inclusive

SPONSOR: Barker Resources Ltd., Vancouver, B.C.

LOCATION: 13 km south of Nelson and immediately southeast of

Highway No. 6

MINING DIVISION: Nelson

N.T.S. 82F/6E

WORK DONE: Muck out El Tee Portal, mark adit and sample

vein. Samples assayed for Au and Ag by Min En

Labs.

WORK DATES & PERSONNEL:

D. R. Cochrane, C. F. Graham and I. Urquhart

October 26, mobilize to Nelson

October 27, 28, sampling October 29, demobilization

COSTS:

1. D. R. Cochrane, P.Eng.

Oct. 26 - Mobilize - ½ day

Oct. 27, 28 - Field Work (2 days)

Oct. 29, - Demobilize - ½ day

Dec. 17 - Report Preparation (1 day)

Total - 4 days @ \$200.00/day

\$ 800.00

2. Graham and Urquhart

3 days each @ \$50.00/day (6 man days)

300.00

Total

\$ 1,100.00

D. R. Cochrane, P.Eng.

APPENDIX II

Bibliography

- B. C. Minister of Mines Reports 1926, 282; 1927, 319; 1928, 324; 325; 1929, 285, 346; 1930, 267; 1931, 138; 1933, 223; 1934, E4; 1935, A27, E27; 1936, E44.
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- LITTLE, H.W. (1960) G.S.C. Memoir 308, Nelson Map Area, B.C.
- MILLIGAN, J.A. (1970), Report on the Golden Age- Euphrates
 Property in Robert's Mines Prospectus,
 July 2, 1970.
- COCHRANE, D.R. (1971) (a) Geophysical, Geochemical and Geological Report on the Golden Age Project. (Private Report to Robert's Mines).
 - (b) Geophysical and Geochemical Report on the Euphrates Project; (Nov. 12, 1971); Assessment Report # 3719
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