



Geological Survey Branch
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[ARIS11A]

ARIS Summary Report

Regional Geologist, Vancouver

Date Approved: 1998.08.12

Off Confidential: 1999.05.21

ASSESSMENT REPORT: 25446

Mining Division(s): Nanaimo

Property Name: Copper Road

Location:	NAD 27	Latitude: 50 12 00	Longitude: 125 18 00	UTM: 10	5563181	335853
	NAD 83	Latitude: 50 11 59	Longitude: 125 18 05	UTM: 10	5563372	335758
	NTS:	092K03W				

Camp:

Claim(s): Copper Road 1-2

Operator(s): 543445 BC Ltd.
Author(s): Wahl, H.J., Reyes, Felix

Report Year: 1998

No. of Pages: 74 Pages

Commodities Searched For: Copper

General Work Categories: GEOC

Work Done: Geochemical

- META Metallurgic (2 sample(s);)
- Elements Analyzed For : Multielement
- ROCK Rock (8 sample(s);) No. of maps : 1 ; Scale(s) : 1:5000
- Elements Analyzed For : Multielement
- SAMP Sampling/assaying (2 sample(s);BULK)
- Elements Analyzed For : Multielement

Keywords: Andesites, Basalts, Bornite, Chalcopyrite, Karmutsen Formation, Limestones, Quatsino Formation, Shear zones, Triassic-Jurassic

Statement Nos.: 3118940

MINFILE Nos.: 092K 060

Related Reports:

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REPORT

on the

COPPER ROAD 1 & 2 PROPERTY

ASILE WEST RESOURCE INC

**Quadra Island, British Columbia
NTS 92 K/3
50° - 12' N. Lat.; 125° 18' W. Long.**

May 15, 1998

**GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT
Vancouver, B.C.**

Felix Reyes, A.Sc.T.

Mine Technologist

25 446

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BRITISH COLUMBIA

MINISTRY OF EMPLOYMENT AND INVESTMENT

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MINERAL TITLES BRANCH

MINERAL TITLES REFERENCE

MAP 092K03W

U.T.M. ZONE 10

LAST MAP UPDATE: 1997 JULY

ORIGINAL PRODUCED AT



ADMINISTRATIVE AFFILIATION

MINING DIVISIONS: NANAIMO

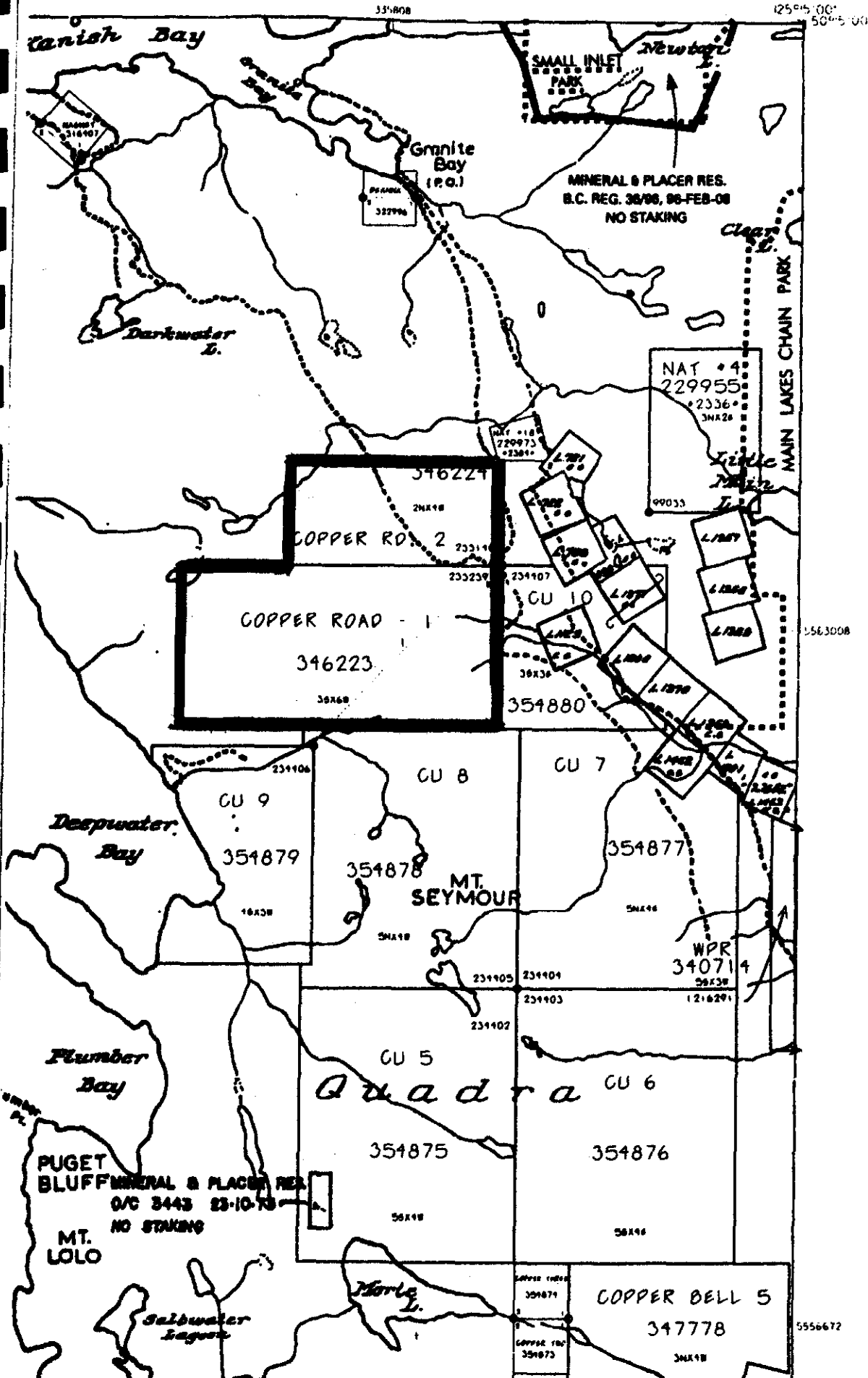
LAND DISTRICTS:

ALIENATIONS

NO STAKING AREAS -

NO STAKING RESERVES

PARKS



COPPER ROAD No.1
MINE WORKINGS



COPPER ROAD MINE WORKINGS
HERB WAHL, P.ENG - SAMPLING ORE.



COPPER ROAD ORE STOCKPILE.
106 Kg. ORE REMOVED FOR TESTS (METALURGY)

Introduction

The Copper Road 1 & 2 claims were staked by Mervin Boe on May 30, 1996. The claims were staked to cover several known copper zones that were first discovered in 1919. A search of old records indicates that extensive exploration and development had indicated inferred copper reserves that had potential for a moderate tonnage bio-leaching operation. The purpose of the prospecting program was to determine the following:

- 1) Verify the existence of mineralized zones on the claims Acid Leach Process/E.W.
- 2) Determine if topography was suitable for construction of advance exploration and development. (Drilling & Feasibility Study).
- 3) Determine if the location was in a possible environmentally sensitive area.
- 4) Determine if small existing 3000 tons Broken Ore would effect forest growth in the immediate area.
- 5) Re-claim the area as to condition of road access and site conditions.

Location and Access

The claims may be accessed by taking the ferry from Campbell River to Quathiaski Cove on Quadra Island. From there take the Heriot Bay Road to North Island Road. Follow the North Island Road until you reach Gowland B./Road. Go west on the Gowland Bay Road to the head of the bay. From there several roads access the claims to the north, northwest and west. The property is mostly accessible by 4 x 4.

History

The Copper Road Deposit is situated on the west side of Quadra Island, British Columbia within the Triassic Karmutsen formation.

Previous production from the East Zone aggregated 5,064 DST grading 3.66% Cu, 0.51 oz/T Ag, and 0.018 oz/T Au. The property was formerly explored by Anaconda and Western Mines. Some 36 angle core holes have defined a 4,500 foot long by \pm 20 foot wide chloritized shear zone striking roughly east-west with a near vertical dip. Exploration to date has defined two bornite-chalcopyrite shoots totalling some 120,000 tons grading 2.6% Cu and 0.47 oz/T Ag. While the drilling has been performed by responsible operators, there is a degree of uncertainty attached to the reserve estimates, as no drill cores, drill logs, or cross-sections are available to confirm the true thicknesses of mineralized intercepts.

The East Shoot is the most significant of the two zones having a possible high grade core of $\pm 14,000$ tons grading 6% Cu. (Feeder Zone?) This zone is open at depth and might ultimately contain some 60,000 tons of material in a grade range of 2% Cu or better.

The Copper Road deposit could develop into a small, stand-alone high-grade copper operation (± 100 Tpd) or supply feed to a larger milling operation based upon Network's Gowlland Bay properties, located 10 km south of Copper Road.

A two-stage program is recommended totalling \$800,000. Stage One (\$120,000) consists of check drilling (3 NQ angle holes for $\pm 1,800$ feet) to verify zone thickness, grade and test downward continuity. Success here (at least 5 feet true thickness of + 2% Cu), would then warrant a \$680,000 underground exploration and development program to gain entry to the high grade East Shoot, test mining characteristics and costs, and provide bulk samples for mill tests. The deposit has many favourable geological and locational aspects suggestive of relatively low cost mining for this type of deposit.

As a regional exploration option, the company is advised to consider an INPUT/GRADIOMETER airborne survey over their land holdings to search for large, sub-surface strata bound disseminated/massive, basalt-hosted chalcocite deposits, within the flat-lying Karamutsen stratigraphy.

GEOLOGICAL SETTING

Regional Geology

Quadra Island is underlain by three rock units distributed in a manner shown on Figure 3. They are from the oldest to the youngest: the Karmutsen Formation, the Quatsino Formation and granitic rocks of the Island Intrusions. The Karmutsen and Quatsino Formations belong to the Vancouver Group, which is of Upper Triassic age; the intrusive unit is Lower Jurassic. The composition of the intrusive rocks is predominantly granodiorite. The Karmutsen Formation is comprised mainly of oceanic volcanic rocks containing minor thinly-bedded sedimentary member. The Quatsino Formation is composed mainly of limestone.

The Quatsino Formation on Quadra Island is a northwest-trending belt that ranges in width from one-half to one and one-half kilometres. From tidewater on the southeast it extends north-westward for approximately 13 kilometres before pinching out. It is host to numerous mineral occurrences, mainly copper. The Formation is in intrusive contact with a large granodiorite body along its northeast flank and in apparent fault contact along its southwest side.

The Karmutsen Formation occupies the southwestern half of Quadra Island, whereas the granodiorite intrusive for the most part underlies the northeastern half. The Karmutsen is bisected along the Morte Lake valley by a fault (Carlisle D., 1965), manifested topographically as a prominent air photo lineament (Ford G.M., 1992). Mapping by Carlisle indicates the volcanic strata within the Karmutsen succession dip persistently at 15 to 20 degrees, to the north northeast on the northern part of the island and to the southeast on the south half.

Structure & Mineralization

The Copper Road property is a shear zone in basic volcanics which has been traced for some 4,500 feet along a topographical depression. The structure strikes 280° and dips vertically or nearly so. The zone of shearing is generally about 20 feet wide and characterized by intense chloritization of the sheared basalts. The north or hanging wall of the zone is a clean slip surface, while the foot wall is more "hackly" with random quartz sulphide stringers.

This zone of shearing has been impregnated with chalcopyrite and bornite bearing quartz veins, wherein locally rich shoots of massive chalcopyrite and bornite are developed. Copper sulphids are apparently dominant as there is little recorded data on the presence of accompanying pyrite or pyrrhotite.


Discussion of Possible Environmental Concerns

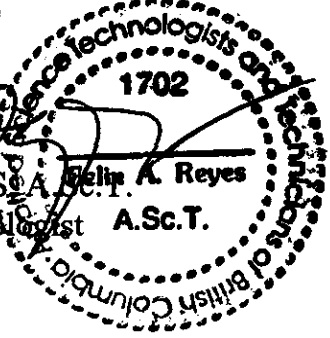
The majority of the property has had large scale surface disturbance from previous exploration and mining operations. Poor topsoil conditions because of the lava flow nature has discouraged old tree growth and evidence of windfalls are everywhere. Small scale open cut or pit mining methods with proper reclamation would probably have minimal effect on the local area. The southern part of the Copper Road 1&2 claims has been clear cut and logged.

Conclusions

The results of bulk samples taken two separate metallurgical tests one 56 kg and the other 50 kg. The result are commercially viable. The extent of exposed mineralization indicates a viable underground small scale mining operation that could be economical at the current metal prices. I recommend that application for B.C. Mines permit should be done to remove a 9,990 tonnes bulk sample test production. The contract cost for mining at 175 m. tons/day is \$2,500.

Prepared by:


FELIX REYES, A. Sc. T.
Mining Technologist



This report is based upon incomplete technical data as drill cores and/or logs are not available. With this in mind, the following proposals are recommended.

RECOMMENDATIONS

A two-stage program is recommended.

1. **Reserve Confirmation:** Confirm and extend the presently indicated reserves by drilling 3 NQ core holes, with dip tests every 100 ft. Success at this stage (at least 5 feet of +2% Cu True thickness) would then justify proceeding with the underground exploration and development program.
2. **Underground Development:** Whether by adit or ramp, access the mineralized zone (East Shoot) at the 700-foot level.
The objective of this work is to gain entry to reserves and establish a transportation corridor, to test-mine several hundreds of tons, check the mined grade, and provide bulk samples for mill testing. Upon completion of this phase, a detailed inquiry should be prepared investigating the feasibility of a small-scale copper mining operation and/or the provision of mill feed for an expanded operation including the Gowland properties.

BUDGET/COST ESTIMATE - COPPER ROAD ZONE

Check Drilling: To test for extension of East Shoot high grade zone at 600 feet below surface, confirm grade at 350 feet below surface, and test area between holes 15 and 19.

\$ 3,000	Preparation of detailed topo map at scale 1:2500 with 10 m contour interval
54,000	Core drilling - 1,800 feet NQ @ \$30/foot inclusive contract charges
1,000	Assays
50,000	Road and site preparation, 2 km @ \$25,000/km to current code standards
<u>5,000</u>	Engineering and supervision
\$ 113,000	
<u>7,000</u>	Contingency
<u>\$ 120,000</u>	TOTAL

Underground Development: Allowance for 1600 feet entry plus preliminary U/G work and sampling \$680,000 1600 feet of development @ \$425/ft. inclusive.

Recapitulation:

\$ 120,000	Phase I
<u>680,000</u>	Phase II
<u>800,000</u>	Grand Total

Optional: Regional INPUT/GRADIOMETER survey estimated 260 line kilometres @ \$30/km.....\$78,000.

Prepared by



Herb Wahl, P.Eng. B.C.

Statement of Wages and Expenses

Mine Technologist / Prospectors:

Felix Reyes, A.Sc.T. - Mine Technologist
 Magnum Explorations Ltd., Michael McDonald - Prospectors
 Barry Smith, Jeremy Smith
 Ed Skoda & Herb Wahl, P. Eng

Days Worked:

July 16 to December 20, 1997 (10 days) at \$200/day --(2 men)	\$4,000
Engineering Evaluation on Copper Road 1 & 2 Report	
-- Herb Wahl, P. Eng., Geological Evaluation Report.	3,000
2 Days Site Evaluation/Transportation, Jerry White, Mine Contractor	
August 25 - 26 (2 days - 2 men) \$500/day	1,000
Helicopter (Long Beach) Campbell River - Quadra Island (Copper Rd.)	500
Accommodation/Ferries & Meals	500
Process Research Association Ltd.	
9145 Shanghnessy St.	
Vancouver, B.C.	
Metallurgical Test of 56Kg Sample Copper Road Ore	
(July 25 - Sept. 10, 1997)	2,500
Acme Assay Lab	200
Transport of Ore Sample (50 kg)	300
Ortech Research & Assoc.	
Missassauga, Ontario Metallurgical Tests (50 kg Ore)	<u>3,000</u>
TOTAL	<u>\$ 15,000</u>



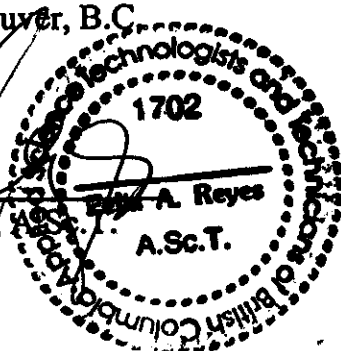
CERTIFICATION

I, Felix Reyes, of the City of Surrey, Province of British Columbia, do certify that:

1. I am a Consulting Mining Technologist with my place of business #123, 8655 King George Hwy., Surrey, B.C. V3W 5C4.
2. I am a registered member in good standing of the Applied Science Technologist and Technicians in British Columbia. Registration Number 1702, as Applied Science Technologist.
3. I am a Graduate of Adamson University, Manila, Philippines, with a Bachelor of Science in Mining Engineering, October, 1963.
4. I have been a practising Applied Science Technologist, Mining with 25 years experience in mineral exploration, mineral development to commercial production for industrial minerals, strategic minerals and base and precious metals.
5. I assisted Herb Wahl, P. Eng. on the site inspection and supervised a removal of 50 kg Ore Sample @ the Mine Stockpile @ Copper Road No. 1, and exploration program. I have accompanied Mr. Greg. Carriere, P. Eng. Inspector of Mines and Ted Hall, Regional Director of Mines, Nanaimo, B.C. July 16, 1997 and August 25 - 26, 1997.
6. The information contained in this report are as a result of my visit to the respective mining project from July 16, 1997 to April 20, 1998.
7. THAT, I obtained information from the B.C. Ministry of Mines & Energy Reports between 1907 - 1996. Mine files from Geological Survey Branch, B.C. Evaluation Reports and Prospectuses from previous work of several geological engineers for the past 20 years whether private or published.
8. I consent to the use of this report, or as a summary thereof in a prospectus for financing and for Mine Reviewable Development Certificate Application to the B.C. Government.

Dated at Vancouver, B.C.
May 15, 1998

Felix A. Reyes, A.Sc.T.



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CONFIDENTIAL

**Bench Scale Jig-Column Test
on Network 1 Copper Ore**

A Report to:

555 West Hasting Street
Suite 700
Vancouver B.C.
V6B 4N5

Attention:

Mr. Felix Reyes

Submitted by:

Robert de Laat
Technologist, Separation Processes
Recycling Technologies

Report No.:

97-1-20-01-03-11008-003
18 pages

Date:

December 4, 1997

ORTECH



ORTECH Corporation, 2395 Speakman Dr., Mississauga, Ontario, Canada L5K 1B3 Phone: (905) 822-4111 Fax: (905) 823-1446

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1. INTRODUCTION

A copper ore sample was obtained from Network 1 Copper of Vancouver, British Columbia for copper extraction in the Mackie Vat Leach bench scale jig-column test apparatus. Two boxes of 4" ore weighing 20 kg and 25 kg respectively were crushed to 100% passing 0.263 inches using the laboratory scale jaws and rolls crusher. Subsequently, 2 lab extraction tests and 2 full jig-column tests were undertaken at ORTECH during the period from July 30 - September 20, 1997. A total recovered crushed ore weight of 65.65 kg was riffled down to 10.0 kg, 10.15 kg, 12.60 kg and 32.20 kg batches. The smaller 12.60 kg riffled batch was further riffled down to ~250 kg for size characterization and copper head analysis.

2. OBJECTIVES

The principal objective of testwork undertaken on the Network 1 copper ore was to determine copper leach rate and total copper extraction attainable in the Mackie Vat Leaching Jig (MVLJ) by simulation leaching in the jig-column apparatus.

3. DESCRIPTION OF THE TEST APPARATUS

A sketch of the jig-column test apparatus is shown in Figure 1. Measuring $6\frac{3}{8}$ " inside diameter by 6 feet high, the column is constructed of pliable clear acrylic. During test operation, solution from the 1.5L head tank pulses downward to the bottom of the column through a $\frac{3}{4}$ " diameter PVC pipe. As the supernatant solution percolates up through the ore bed, the ore bed fully fluidizes. Feed solution to the head tank is pumped from the clearer supernatant residing above the ore bed.

Solution pulsed upwards through the ore bed is controlled by a float-operated switch in the head tank. When the head tank nears full, the switch opens a solenoid valve, releasing leachant downward to the column bottom. Conversely, an empty head tank is allowed to fill with leach solution since the float switch closed the solenoid valve.

Leachant circulated from the supernatant above the ore bed is pumped with a $\frac{1}{2}$ " Masterflex pump, which operates continually feeding the head tank. The Mackie Vat Leaching Jig (MVLJ) operates set-up in this co-current solution flow configuration.

4. SAMPLE PREPARATION

Two boxes of approximately 66 kg of 4" rock was received and logged into the ORTECH sample inventory (Sample ID #97-T13-A0039). Single stage jaw crushing followed by 5 stage rolls crushing reduced the entire sample to 100% minus 0.263". Four large homogenous splits of 65.65 kg of ore was achieved through riffing. Column acid-leaching would be undertaken on 10.0 kg or 10.15 kg splits with 12.60 kg and 32.20 kg held in reserve. Additionally, a riffed head sample was split out for copper and iron assaying. A second riffed head sample was size characterized on 3, 4, 6, 8, 10, 16, 20, 28, 35, 48, 65, 100, 150 and 200 Tyler mesh screens.

Following column acid-leaching, the recovered tailing material was displaced washed in the Buchner funnel with 10 gpL H₂SO₄ followed by a displacement distilled water wash. The sample was then oven dried. A representative tailing sample was obtained through riffing and submitted for iron and copper assaying.

5. OBSERVATIONS AND RESULTS

5.1 Bench Scale Test #1

Prior to acid leaching a minus 0.263" feed sample, a screen analysis was performed on a riffle split of 238.2 g. Table 1 shows the size characterization of the crushed Network 1 ore.

A representative split of the crushed ore weighing 211.80g was added to a 1L leach kettle with 550 ml of distilled water. Low speed agitation was undertaken with the addition of concentrated H₂SO₄ to control the pH of the leachant at 1.5-2.0. Sampling twice daily for in-situ copper continued for 9 days. Refer to Table 2 for data collected during Test #1. After 215.5 hours leaching of the minus 0.263" sample, the residue was acid washed and water washed and oven dried. The combined primary, acid and water filtrate was assayed for copper to determine an accurate copper extraction value. Test #1 was resumed with the addition of fresh pH = 1.5-2.0 leachant and resumed for an additional 164.5 hours. Copper analysis was continued at regular intervals.

Solution-based copper extraction results are shown in Table 3.

Testwork on a similar copper ore done for Network 1 Copper showed a maximum copper extraction of 38%. This work was conducted on minus 65 mesh material using conventional agitation leaching. In Test #1, minus 1/4" copper ore is leachable in 217.5 hours. An additional 8% copper is extracted in 7 extra days.

6. CONCLUSIONS

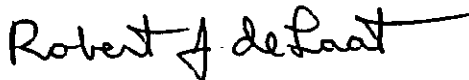
- stir-tank test results indicate
 - minus ¼" material leaches copper to its extractable limit (~38%) in 217.5 hours
 - minus 10 mesh material leaches copper to the extractable limit (~38%) in 100.5 hours
- acid column leach tests indicate
 - 50% of extractable copper is leached in 48 hours on minus 10 mesh material
 - 65% of extractable copper is leached in 48 hours on minus 65 mesh material

7. RECOMMENDATIONS

- For the Network 1 copper ore provided, the acid digestable copper (CuO, Cu₂O) should be accurately determined. Additionally, x-ray diffraction should be used to establish copper sulphide concentrations in the ore.
- Based upon the size characterization of the minus ¼" crushed ore, very fine sample was limited (4% -100M). Extraction results were also poor for the minus 10 mesh jig-column leach (12% -100M feed size). In column Test #4, 45% -200M material leached faster but was limited to 25% copper extraction. Finer material has been successfully operated in the jig-column apparatus. Therefore, additional testwork should examine:
 - liberation of the copper ore to minus 200 mesh prior to 48 hour acid dissolution in the jig-column
 - operation of the jig-column at elevated temperatures, ie., 40°C to improve leaching kinetics and overall copper extraction


- Additionally, testwork could be conducted as follows:
 - multi-element chemical analysis of leach pregnant solution to determine additional elements acid soluble during leaching. This could be extended to x-ray diffraction testing of leach feed and tailings to determine minerals present before and after acid digestion.
 - varying acid addition during the leach to maximize copper dissolution and limit iron, gangue and other minerals from solubilization.
 - use of a surfactant to enhance both copper leach rates and overall copper extraction.

- To maximize copper sulphide mineral recovery, Network 1 copper ore should be ground to minus 200 mesh. Then, bench scale flotation testwork would be undertaken for sulphide mineral collection. Flotation tailings would then be acid leached in the Mackie Jig-column apparatus.



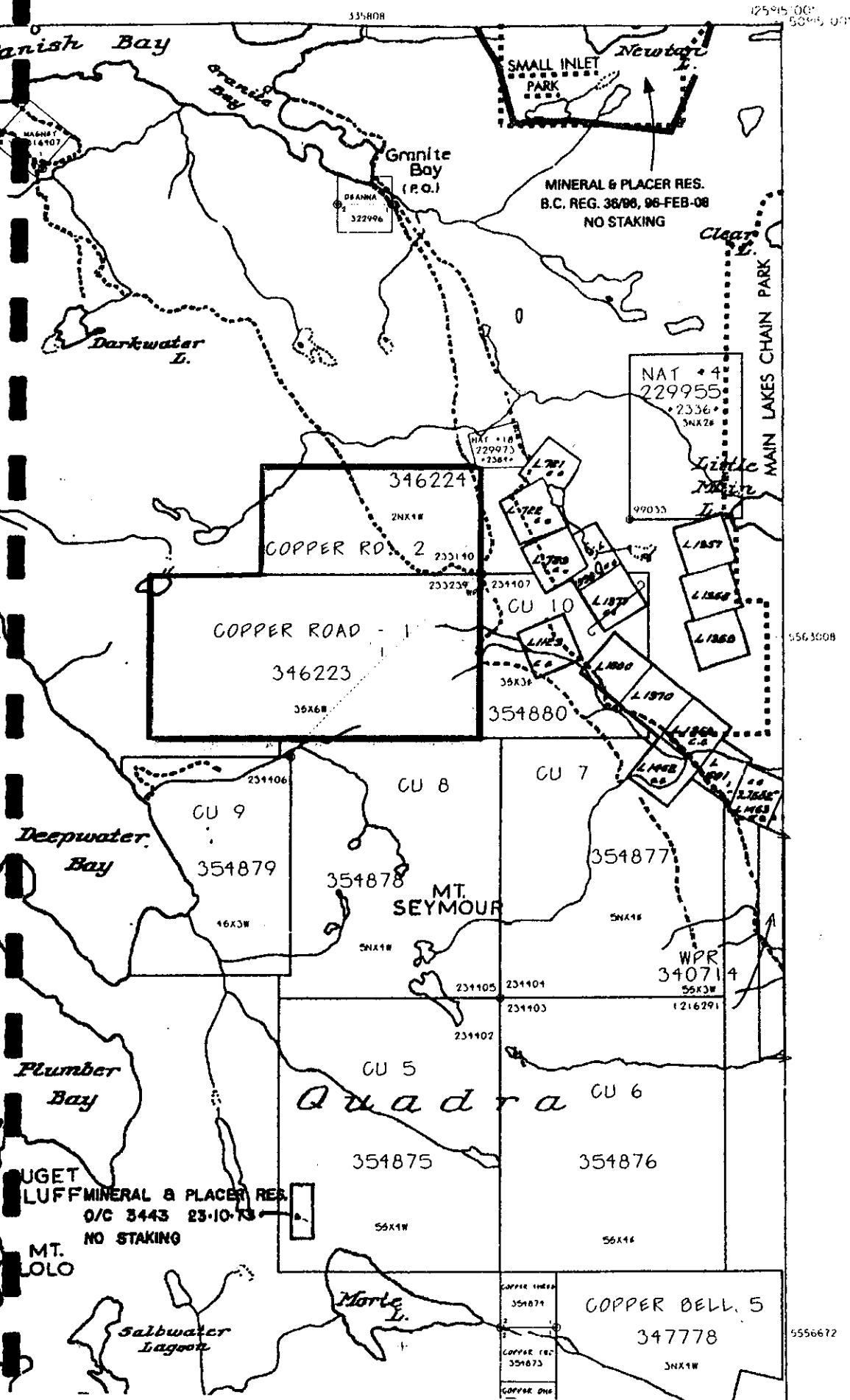
Robert de Laat
Technologist, Separation Processes
Recycling Technologies

Approved by:



Marc Rishia
Manager, Separation Processes
Recycling Technologies

RJD:or



BRITISH COLUMBIA

MINISTRY OF EMPLOYMENT AND INVESTMENT

ENERGY AND MINERALS DIVISION

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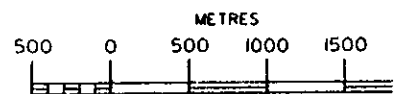
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Company: Asile West Resources Inc.
Attention: Mr. Felix Reyes
FAX Number: 893-7001
From: Qi Liu

Date: May 20, 1998
Fax:
Project No.: 97-068
No. of pages (including this page): 8

Dear Felix:

Re: Cu Recovery from a sulphide/oxide sample

Enclosed are the results of a copper recovery test on a composite sub-sample. The sub-sample was ground to 80% passing 99 μm and leached with sulphuric acid at pH 1.8 for 48 hours. The leach residue was then floated to recover the remaining copper minerals (presumably the non-soluble copper sulphides).

After the 48 hour sulphuric acid leach, 38.4% of the copper was extracted in the solution. Flotation on the leach residue recovered 52.9% of the copper. The total copper recovery was 91.3%. Total reagent consumption was as follows:

Sulphuric acid:	33.63 kg/t
Aero 412	90 g/t
Aero 5100	15 g/t
MIBC	13 g/t

The high sulphuric acid consumption was probably caused by the carbonate minerals present in the sample. An inorganic carbon assay may need to be performed on the head sample.

The flotation was carried out at the natural pH of the leach residue (after wash). The pH was 3.5. No specific effort was made to adjust the pulp pH.

The good copper recovery by flotation suggests that an all-flotation procedure may be a viable process for copper recovery. This procedure is particularly attractive in view of the high sulphuric acid consumption during acid leach. In the flotation process, copper sulphide can be floated first, followed by sulphidization and flotation of the copper oxide minerals.

I will call you and discuss the possibility of conducting the proposed all-flotation test.

Regards,



Qi Liu

ACID LEACH TEST DATA

Test: L1

Date: August 13, 1997
Project: 97-068

Test Conditions:

Sample: Composite
Weight: 2000 g
Solids: 40 %
Leach Period: 48 hr

H₂SO₄ Strength: 6 N
Maintained pH: 1.8
Sampling Period: 2, 4, 8, 24 hr

Time (hr)	pH		6N H ₂ SO ₄ addition (mL)	PLS		Cu Assay		Extraction	
	Start	Final		Volume (L)	Weight (g)	(g/L)	(%)	Cu (%)	
0.0	7.6	1.5	140.0						
0.5		1.5	5.0						
1.0		1.8	20.0						
2.0		1.5	5.0	3.19		7.50		25.87	
4.0		1.8	23.0	3.18		7.50		25.76	
6.0		1.8	7.0						
8.0		1.8	46.0	3.21		7.70		26.70	
24.0		1.7	4.0	3.13		8.60		29.05	
27.0		1.9	0.0						
29.0		1.9	20.0						
31.0		1.8	55.0						
48.0		1.8		3.23		10.00		34.92	
			Wash Residue	3.86	1834	0.84	3.11	3.50 61.58	

Total acid added (mL): 325.0

Residual acid concentration in PLS (g/L): 8.75

Total acid consumption (kg/t): 33.63

SIZE ANALYSIS REPORT

Test: L1
 Sample: Composite

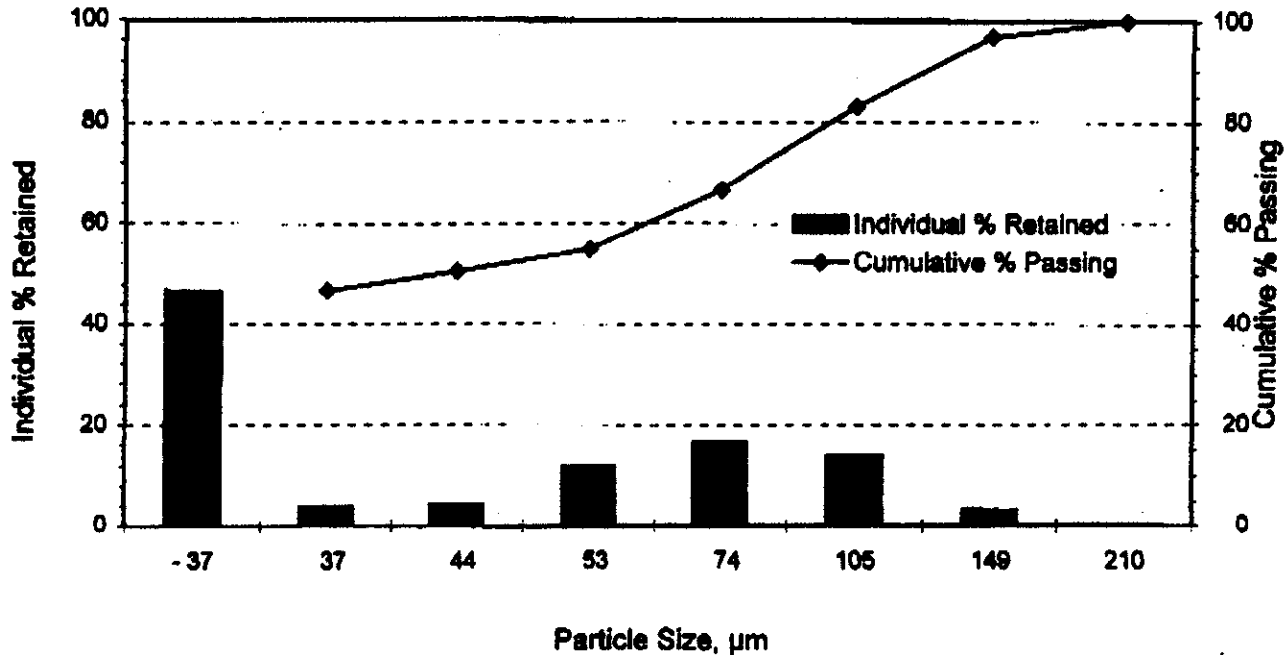
Date: August 13, 1997
 Project: 97-068

Grind: 2 kg for 38 minutes at 65% solids in a stainless steel rod mill.

Sieve Size		Individual % Retained	Cumulative % Passing
Tyler Mesh	Micrometers		
65	210	0.0	100.0
100	149	3.1	96.8
150	105	13.8	83.1
200	74	16.4	66.7
270	53	11.7	55.0
325	44	4.3	50.6
400	37	4.0	46.7
Undersize	- 37	46.7	-
TOTAL:		100.0	

80 % Passing Size (μm) = 99.0

Size Distribution



FLOTATION TEST PROCEDURE

Test: L1-F1

Sample: L1 leach residue

Date: August 15, 1997

Project: 97-068

Objective: To float copper following an acid leach

STAGE	TIME (min)	pH	ADDITION		COMMENTS
			Reagent	g/tonne	
Condition	3	3.5	A412	30	
			A5100	15	
Rougher float 1	5	3.5	MIBC	13	
Rougher float 2	5	3.5	A412	30	
Scavenger float	2	3.5	A412	30	

FLOTATION TEST METALLURGICAL BALANCE

Test: L1-F1
Sample: L-1 leach residue

Date: August 15, 1997
Project: 97-058

Objective: To float copper following an acid leach

Products	Weight		Assay (%)	Distribution (%)
	(g)	(%)	Cu	Cu
Rougher concentrate 1	111.2	6.1	39.2	76.4
Rougher concentrate 2	52.9	2.9	8.68	8.1
Rougher concentrate 1+2	164.1	8.9	29.4	84.5
Scavenger concentrate	17.2	0.9	4.35	1.3
* Total concentrate	181.2	9.9	27.0	85.8
Final Rougher Tails	1652.8	90.1	0.490	14.2
Total Measured	1834.0	100.0	3.11	100.0

OVERALL METALLURGICAL BALANCE

Test: L1
Sample: Composite

Date: August 20, 1997
Project: 97-068

Objective: To recover copper by acid leach and flotation

Product	Weight or Volume		Cu		
	(g)	(Litre)	(g/L) or (%)	(g)	% Distribution
Acid leach PLS		3.23	10.0	32.30	34.9
Acid leach wash		3.66	0.840	3.24	3.5
Flotation concentrate	181.2		27.0	48.92	52.9
Total Cu recovered				84.47	91.3
Flotation tail	1652.8		0.490	8.10	8.7
Total				92.57	100.0
Calculated head			4.63		

FLOTATION TEST METALLURGICAL BALANCE

Test: L1-F1
Sample: L-1 leach residue

Date: August 15, 1997
Project: 97-068

Objective: To float copper following an acid leach

Products	Weight		Assay (g/t)		Assay (%)		Distribution (%)		
	(g)	(%)	Au	Ag	Cu		Au	Ag	Cu
Rougher concentrate 1	111.2	8.1	0.46	231.	39.2		66.7	60.5	76.4
Rougher concentrate 2	52.9	2.9	0.14	94.4	8.68		9.9	11.8	8.1
Rougher concentrate 1+2	164.1	8.9	0.35	187.	29.4		76.6	72.3	84.5
Scavenger concentrate	17.2	0.9	0.06	50.5	4.38		1.4	2.0	1.3
Total concentrate	181.2	9.9	0.32	174	27.0		78.0	74.3	85.8
Final Rougher Tails	1652.8	90.1	0.01	6.60	0.490		22.0	25.7	14.2
Total Measured	1834.0	100.0	0.04	23.2	3.11		100.0	100.0	100.0

①

FACSIMILE

PROCESS RESEARCH ASSOCIATES LTD.

9145 Shaughnessy Street
Vancouver, B.C.
Canada, V6P 6R9

Tel.: (604) 322-0118
Fax: (604) 322-0181
E-mail: Liu@PRAprocess.com

Company:	Network One Holdings Corp.	Date:	July 25, 1997
Attention:	Mr. Felix Reyes	Fax:	
FAX Number:	893-7001	Project No.:	97-068
From:	Qi Liu	No. of pages (including this page):	4

Re: Head Assay

Enclosed are the sample receiving log sheet and the head assay on the composite sample. The sample contains 4.9% Cu and about half of it is in oxide form.

The ICP scan, performed after a complete digestion of the sample, indicated 641 ppm Vanadium.

I suggest that scoping flotation and acid leach test be conducted on the sample to characterize the response of the sample and to find out the deportment of Vanadium.

I will call you next week to discuss the test work.

Have a nice weekend!


Qi Liu

Felix Reyes, A. Sc.T.
MINERAL PROPERTY DEV.

555 West Hastings St.
Suite 700
Vancouver, B.C. V6B 4N5

②

HEAD ASSAY

Project: 97-068

Date: 18-Jul-97

Sample	Au (g/t)	Ag (g/t)	Cu (%)		S (%)	
			Total	Oxide	Total	SO ₄ ⁼
Composite	0.02	20.6	4.93	2.28	1.09	0.07

Multi-element ICP Analysis Results

Project: 97-068

Sample: Composite

The following ICP results were obtained by a complete digestion of the sample

Element	Symbol	Unit	Reported	Detection limit	
				low	high
Aluminum	Al	ppm	5.80%	100.	50,000
Antimony	Sb	ppm	< 5	5.	1,000
Arsenic	As	ppm	16	5.	10,000
Barium	Ba	ppm	9	2.	10,000
Bismuth	Bi	ppm	< 2	2.	10,000
Cadmium	Cd	ppm	24.8	0.1	100.0
Calcium	Ca	ppm	43923	100.	100,000.
Chromium	Cr	ppm	410	1.	10,000.
Cobalt	Co	ppm	51	1.	10,000.
Copper	Cu	ppm	3.60%	1.	20,000.
Iron	Fe	ppm	5.80%	100.	50,000.
Lanthanum	La	ppm	6	2.	10,000.
Lead	Pb	ppm	32	2.	20,000.
Magnesium	Mg	ppm	29667	100.	100,000.
Manganese	Mn	ppm	1144	1.	10,000.
Mercury	Hg	ppm	< 3	3.	10,000.
Molybdenum	Mo	ppm	35	1.	1,000.
Nickel	Ni	ppm	215	1.	10,000.
Phosphorus	P	ppm	1193	100.	50,000.
Potassium	K	ppm	548	100.	100,000.
Scandium	Sc	ppm	27	1.	10,000.
Silver	Ag	ppm	18.3	0.1	100.0
Sodium	Na	ppm	9177	100.	50,000.
Strontium	Sr	ppm	47	1.	10,000.
Thallium	Tl	ppm	< 10	10.	1,000.
Titanium	Ti	ppm	7432	100.	10,000.
Tungsten	W	ppm	10	5.	1,000.
Vanadium	V	ppm	641	2.	10,000.
Zinc	Zn	ppm	147	1.	20,000.
Zirconium	Zr	ppm	76	1.	10,000.

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RESOURCES
CONTRACTORS INC.
OFFICE: (604) 546-8893**

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DATE: JULY 31, 1997**

PLEASE DELIVER THE FOLLOWING DOCUMENTS TO:

**NAME: MR. FELIX REYES, A. Sc.T
OFFICE/FIRM: NETWORK 1
CITY: VANCOUVER, BC
FAX: (604) 893-7001**

**FROM: JERRY WHITE, SANCOLD RESOURCES CONTRACTORS INC.
RE: REVISED COSTS LETTER**

Message:

Letter attached

Sancold Resources**Contractors Inc.**

P.H. #3 C-8 - 4257 MacDonald Road, Armstrong, B.C. V0E 1B0

Tel. (604) 546-8893 Fax. (604) 546-8503

Res: (604) 546-8589 Autotel. (604) 549-7670

July 31, 1997

Mr. Felix Reyes, A. Sc.T.
Mining Consultant
Network 1
555 West Hastings Street
Suite 700
Vancouver, B.C. V6B 4N5

Dear Felix:

The following prices will give you some approximate costs for the project.

1. To use a scooptram of 1.6 metre (5' 1") wide and allowing 1 metre on each side of this equipment the dimensions of the tunnel would have to be a minimum of 3.4 metres wide (11') by 2.4 metres high (8').
2. It is hard to estimate the cost per metre at this time as costs of the camp and barge are unknown and there are also other unknown factors - you could use the approximate cost of \$300.00 per foot (\$984.00) a metre.
3. Since the vein is 80° and the raises longer in height than 50' (15 metres) they will have to be timbered, two compartment raises, or alternatively raise bored out.

Raises - 2.74 metre (9') wide
- 1.68 metre (5.5) high
- estimated cost - \$325.00 per foot (\$1,066.00) metre

When the ground is stable (walls) bullhorn raises can be driven with the chute side open. Only the manway side will be timbered and this will save on the cost of timber.

4. Mining Costs - we would require the estimate of tonnage mined per day and how many stopes we have, and costs of - crew size, camp, transportation, powder, timber, barge and the cost to bring diesel to the minesite

For Example:

175 tons per day

Cost per day - \$6,000.00/175 tons = \$34.28 per ton

Cost per day - \$5,000.00/175 tons = \$28.57 per ton

Cost per day - \$4,000.00/175 tons = \$22.86 per ton

Cost per day - \$2,500.00/175 tons = \$20.00 per ton

\$31.50 / ton

\$25.00 / ton

- 2 -


For 200 tons per day
Cost per day - \$7,000.00/200 tons = \$35.00 per ton
Cost per day - \$6,000.00/200 tons = \$30.00 per ton
* Cost per day - \$5,000.00/200 tons = \$25.00 per ton
Cost per day - \$4,000.00/2(X) tons = \$20.00 per ton

\$32.08/tonne
\$27.56/tonne

When you are at the final planning stages we can travel to the site and take a good look at everything to ascertain the costs as accurately as possible.

I hope these figures will help you with the costing of your project. I know that I can provide you with competitive prices and excellent work. I'm easy to get along with, flexible, and have some good miners who always work for me.

Yours very truly,



Jerry White