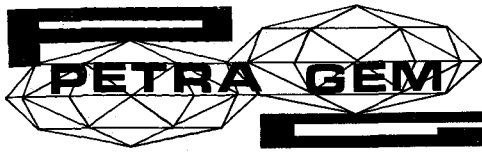


77-#387-#6495



EXPLORATION of CANADA LTD.

3540 West 41st. Ave., Vancouver, B.C. V6N 3E6

BUS 263-2678

RES 733-6902

GEOLOGICAL REPORT - BAR 1 CLAIM

TOPLEY, B.C., OMINECA M.D.

54 30 N.LAT, 126 25 W.LONG.

6495

for

SUMMIT PETROLEUM CORP,
1130 - 700 W. GEORGIA ST.
VANCOUVER, B.C.

by:

BJ. PRICE, M.Sc., F.G.A.C.
PETRA GEM EXPLORATION LTD.,
200 - 3540 W.41 Ave.,
VANCOUVER, B.C.

November 6 , 1977.

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

NO. _____

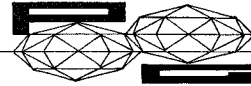
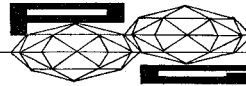


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LIST OF ILLUSTRATIONS

location map	FIG 1
Claims	FIG 2
Regional Geology	FIG 3
Map of Trenches	FIG 4
Compilation Map geology + Geochem	FIG 5 (pocket)



LOCATION AND ACCESS:

The claim is due south of the settlement of Perow, B.C., on highway 16, 12 miles northeast of the town of Houston, B.C. Access is by bush road, (four wheel drive), from Topley, which is 6 miles due east of Perow. The road passes Sunset and Gilmore lakes. The claim block lies within one mile of the main C.N. Railway line between Edmonton and Prince Rupert. Numerous old logging roads afford access to the southern part of the property.

Location is illustrated in figure 1. on the following page.

CLAIMS:

The Bar 1 claim (record no. 400 (8) containing 12 units was staked by W.D. Yorke-Hardy on August 2, 1976 and recorded August 18. The legal corner-post is located on the old logging road near the trenches. The claim is shown on the accompanying map, figure 2.

HISTORY:

Showings of copper-silver mineralization were staked originally by the late Eric Strimbold of Topley, and were explored by hand methods sporadically over the last 20 years. In 1966 the claims were optioned to Normont Copper Ltd., who trenched the showings and sampled the trenches under the supervision of M.J.Beley and W.Sharp, geologists. Results of their sampling are shown in figure 5. In 1967 the area was soil sampled and mapped. Since 1969, several people have held small claim blocks on the occurrence, but no further work was done. Recently, Mr Yorke-Hardy located a barite occurrence on the Bar 1 claim which has been purchased by Summit Petroleum Corp. In March 1977 the writer prepared an exploration proposal for the prospect, and Petra Gem Exploration Ltd. carried out limited exploration work in July and August.

1977 WORK PROGRAM:

The writer spent 6 days on the property; July 26, assisted by P.Howard, prospector, and August 11 - 15 inclusive, assisted by P.J.Huber, prospector, and M.Linden, drilling assistant. Work done during this time included geological mapping and sampling, prospecting, and a limited amount of pack-sack diamond drilling (4½ feet.) Because of the extremely hard cherty nature of the volcanic rocks, this drilling was not considered satisfactory for evaluation of the deposit. Previous geochemical data was analyzed statistically and reinterpreted with respect to known mineralization. Results are shown in figure 5. Assays were done by Vangeochem Lab Ltd. by atomic absorption spectrophotometry, and are shown in the appendix.

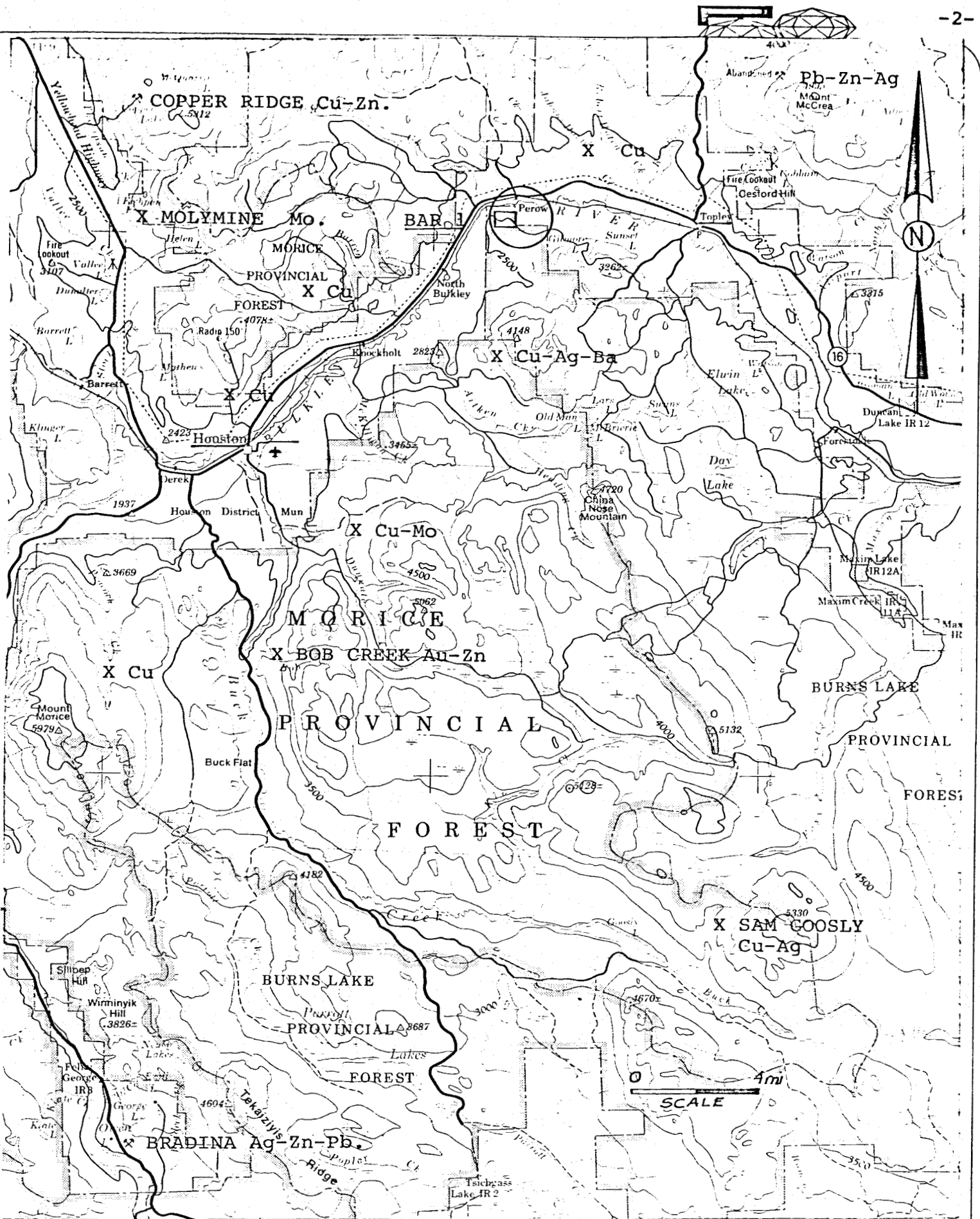
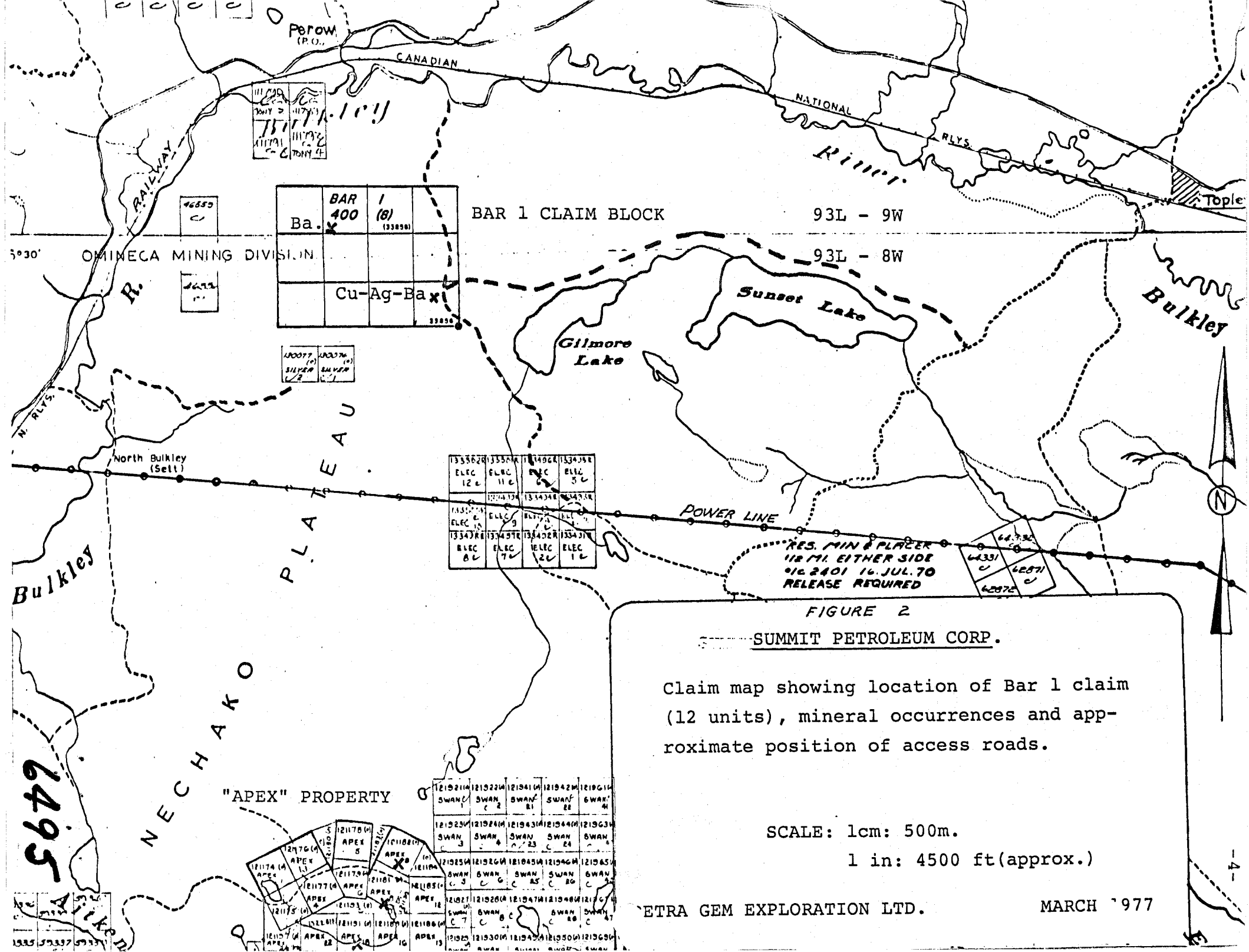


FIG.1. Location Map, Houston - Topley area showing Bar 1 claim with respect to adjacent mineral deposits.

6495



Ba.	BAR 400	1 (8)	(33850)
	Cu-Ag-Ba x		33850

BAR 1 CLAIM BLOCK

93L - 9W

93L - 8W

133562	133563	134064	134065
ELEC 12	ELEC 11	ELEC 6	ELEC 5
133566	133567	134068	134069
ELEC 10	ELEC 9	ELEC 4	ELEC 3
133478	134479	134080	134081
ELEC 8	ELEC 7	ELEC 2	ELEC 1

POWER LINE

RES. MIN & PLAZER
112 MI. EITHER SIDE
916 2401 16 JUL. 70
RELEASE REQUIRED

64331	64371
64372	

FIGURE 2
SUMMIT PETROLEUM CORP.

Claim map showing location of Bar 1 claim (12 units), mineral occurrences and approximate position of access roads.

SCALE: 1cm: 500m.
1 in: 4500 ft (approx.)

"APEX" PROPERTY

121921	121922	121941	121942	121961
SWAN 1	SWAN 2	SWAN 8	SWAN 28	SWAN 41
121923	121944	121943	121944	121963
SWAN 3	SWAN 6	SWAN 23	SWAN 24	SWAN 42
121925	121926	121945	121946	121965
SWAN 5	SWAN 7	SWAN 25	SWAN 26	SWAN 43
121927	121928	121947	121948	121967
SWAN 9	SWAN 10	SWAN 27	SWAN 28	SWAN 44
121929	121930	121949	121950	121969
SWAN 11	SWAN 12	SWAN 29	SWAN 30	SWAN 45

ETRA GEM EXPLORATION LTD.

MARCH 1977

6495

NECHAKO PLATEAU

5°30' OMEGA MINING DIVISION

RAILWAY

North Bulkley (Sett)

Bulkley

Bulkley

N

-4-



REGIONAL GEOLOGY:

An excellent study of the regional geology of the area is provided by B.N. Church, B.C. Dept. of Mines, (G.E.M. 1970, 1973.) and his map (figure 3,) illustrates the predominantly volcanic terrain of the western margin of the Nechaco Plateau. In the portion of the plateau between Bulkley River and Francois Lake, early Mesozoic rocks varying from clastics to pyroclastics and volcanics of acid to intermediate composition are exposed in erosional windows. These rocks are folded and faulted and covered with late Mesozoic and Tertiary volcanic rocks ranging from basaltic through trachyandesitic and rhyolitic composition. An idealized stratigraphic section is shown on the geological map.

Igneous intrusions in the area are of several types with direct compositional equivalents in adjacent volcanics; for example, granite intrusions have been dated at 76+/- m.y. These are probable equivalents to rhyolite dykes, sills and flows of the same age. The syenomonzonite stock at Sam Goosly Lake is identical in age (48 m.y.) and composition with the Goosly Lake lavas and pyroclastics.

Several significant mineral deposits occur within the same map area. The Sam Goosly modified massive sulfide deposit is situated 20 miles southeast of Bar 1. Bradina Mines' Silver Queen mine containing reserves of silver-zinc-lead ore with values in gold and copper, is situated 30 miles southwest. At Bob Creek, volcanics contain low, but significant values of gold and zinc. Several porphyry copper-moly prospects have been investigated nearby.

GEOLOGY OF THE CLAIM:

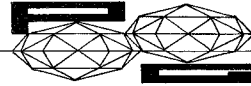
Bar 1 claim is underlain by Hazelton Group volcanics and pyroclastics which strike uniformly northwesterly and dip steeply (80°) to the northeast. Exploration in 1966 by Normont Copper Ltd consisted of trenching and sampling. Two of four trenches exposed mineralization of chalcopyrite, bornite and tetrahedrite mainly as fragment rims and disseminations in matrix of a very strongly silicified andesitic or rhyolitic pyroclastic rock. According to Sharp 1966, minor galena and sphalerite also occur. Trenches and assays are shown on the accompanying map, figure 4, traced from Sharps report. A 60 foot width assays 0.38 % Cu. and 0.73 oz./Ton Ag. The best mineralization over a width of 20 feet averages 0.56% cu. and 1.6 oz./Ton Ag. 1966 assays are shown in Table 1.

Several additional pits near trenches 1 and 2 were noted and sampled by the writer. Assay results are as follows:

	Cu	Ag
1. High grade selected sample - South pit	0.47%	0.68 oz./T
2. Chip - 3m. South pit.	0.29%	0.53 oz./T
3. Grab - pits between Tr 1 and 2	0.10%	0.19 oz./T

These results agree well with averages for the best mineralization in the trenches. At present, the mapped area of known mineralization in and near these two trenches approximates 300 feet X 60 feet. The rock is extremely hard and is strongly fractured. Silicification is the only alteration noted, but is very intense. Scattered outcrops to the south and east are unmineralized. Outcrop is sparse to the west, with deep overburden. A small trench west of the road contains silicified crystal-lithic tuff with abundant pyrite.

Five hundred feet north of the trenches, near the end of the road, scattered specks of chalcopyrite occur in a strongly silicified buff colored rhyolite, resembling chert. Considering the strike of the rock units in the area, the mineralized horizon may be the same as that exposed in the trenches, and the mineralization may be in part stratigraphically controlled. The rhyolite is overlain by water-lain tuffs of intermediate composition and a thick band of



red to purple, strongly hematitic coarse tuff or agglomerate. A cat trench crosses this sequence and exposes both units extremely well. Twenty feet above the trench a small pit exposes narrow zones of strongly oxidized copper mineralization in fractures in the hematitic tuff. This pit is the source of the 1966 assay 16365 containing 1.43% cu. and 1.9 oz./Ton Ag. The fractures are weak and cannot be traced into the surrounding wallrock for any distance.

Strata exposed on the hill to the west are similar in composition and textures and may represent the same sequence folded or faulted. No outcrop is present in the intervening valley.

PROSPECTING:

Prospecting by the writer and P.J.Huber in areas of outcrop on the same hill as the trenches and the hill to the west failed to disclose any additional mineralization, except for one occurrence of "flow-top" bornite and chalcocite noted in one piece of float. Abundant float of pyritic "quartz-eye" porphyry occurs on the road leading to the Bulkley River from the northeastern side of the property. Source of this float was not seen.

GEOCHEMISTRY:

Four soil samples were taken by the writer and analyzed. These were taken from the area in between trenches 1 and 2. Statistical analysis by the writer of 1966 soil sample results gave mean of 8.6 ppm., standard deviation of 13.8 ppm, and mean + 2S.D. of 36 ppm. Anomalous samples are considered to be 36 ppm. Very few samples on the grid are anomalous, and no recognizable pattern is present to those scattered anomalies.

BARITE OCCURRENCE:

Minor amounts of vein barite is present at the trench showings as coarsely bladed material. Additional occurrences of barite were noted by Sharp; "Other mineralization noted consists of significant exposures of barite on Bornite 14 M.C." This exposure has been seen by Mr Yorke-Hardy, but the writer, on several traverses, failed to encounter the exposures. Barite at this locality is reported by Mr. Yorke-Hardy to be wider and of greater purity than at the copper-silver trenches.

RECOMMENDATIONS:

Geochemical results from 1966, particularly when reviewed with statistical procedures outlined in this report do not provide encouragement for widespread mineralization of bornite-tetrahedrite - chalcopyrite. However, the width and tenor of mineralization exposed in trench 2 are significant and if further work is contemplated on the property, this mineralization could best be traced by a series of shallow percussion holes. Some effort should be expended to locate the barite exposures mentioned by Sharp. These must occur on the west side of the western hill on the property, in heavy timber, and 3 to 4 man days of concentrated effort may be necessary to find the showings.

Barry Price .

Barry Price, M.Sc., F.G.A.C.
November 6, 1977

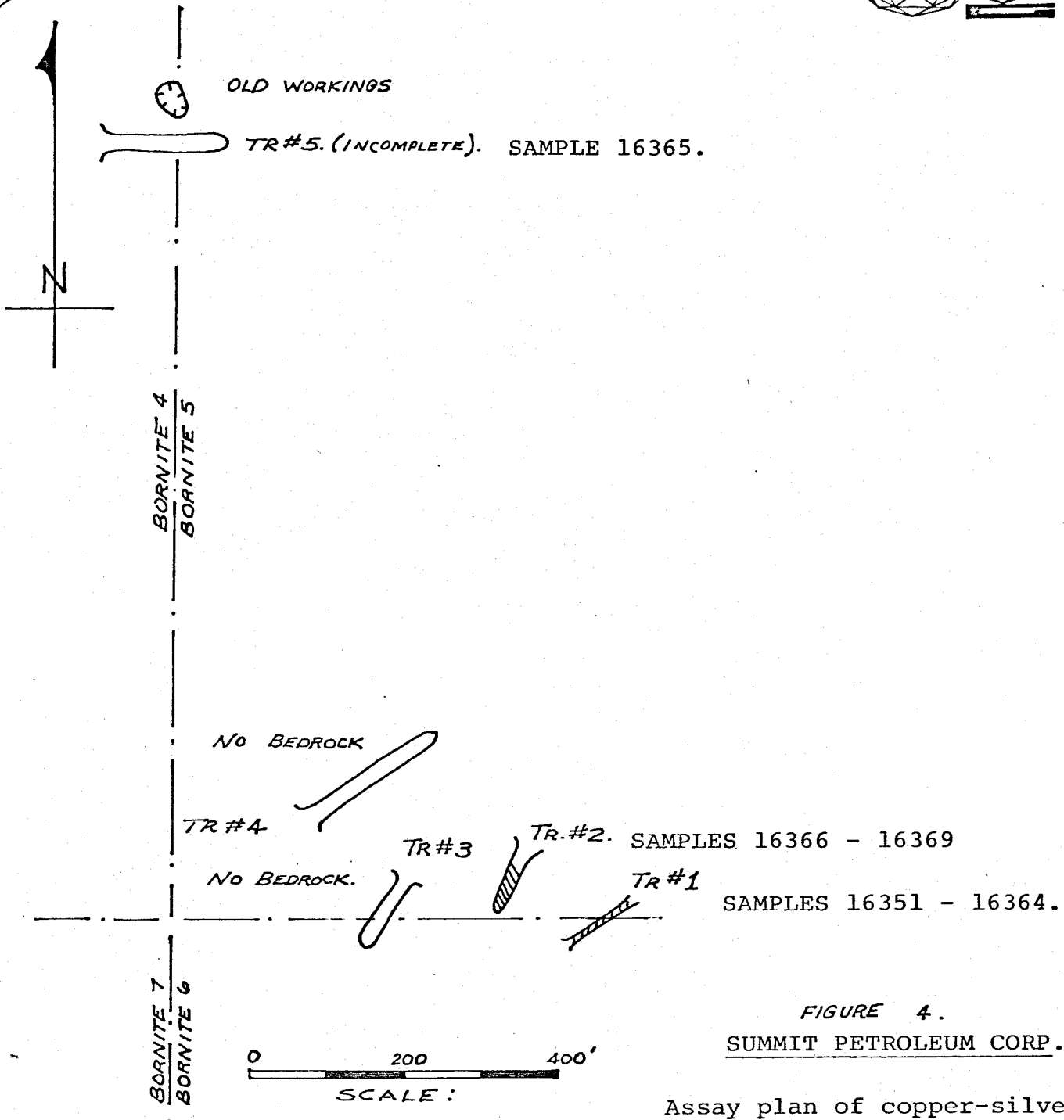


FIGURE 4.
SUMMIT PETROLEUM CORP.

Assay plan of copper-silver min
 with barite on Barl claim.
 Trenching and sampling done by
 W.M.Sharp,P.Eng., M.J.Beley,B.Sc.
 In 1966. Traced from map by W.M.
 Sharp in report dated Dec. 1966.



PETRA GEM EXPLORATION of CANADA LTD.

3540 West 41st. Ave., Vancouver, B.C. V6N 3E6
BUS 263-2678 RES 733-6902

BAR 1 PROSPECT - STATEMENT OF COSTS - 1977 WORK

WAGES: P.Howard - Prospector- July 26, 1 day @ \$75.00\$ 75.00
P.J.Huber " " " Aug 11 " " " " 75.00
M.Linden - assistant Aug 11-15 4days@ \$40.00 160.00

CONSULTING FEES:

B.J.Price, M.Sc. Geologist and supervisor \$150.00/day
July 26, Aug 11 - 15; 6 days @ \$150.00900.00

RENTALS:

P.J.Huber 4 W.D. Truck 1 day @ \$35/day 35.00
Petra Gem Expl. GMC van 6 days@ \$40.00/day240.00
" " " camp 5 days @ \$50.00/day 50.00
" " " drills (2) 2 days @ \$25.00/day 50.00

EXPENDITURES:

Motel (Smithers) 4 days @ \$12.50 50.00
Meals 8 man days @ \$10.00/day 80.00
Food for camp 54.91
Fuel for drills 6.10
Assays 8 @ \$2.50 20.00
Freight 10.00

** All figures will be supported by receipts if requested

TOTAL \$1806.01

Barry Price.

Barry Price, M.Sc.
November 6, 1977



BIBLIOGRAPHY

Sharp, W. M. (1967) - Summary Geological Report
Houston-Topley-Tsalet Mtn.
Exploration Projects
Company report for Normont Copper Ltd.
(N.P.L.) January 1967.

Annual Report (1927)- B.C. Minister of Mines
p. c 149

L.B. Warren - personal communication



DECLARATION

I, Barry James Price, with business address 200-3540 W. 41st. Ave., Vancouver, B.C., do hereby declare that:

- 1) I am a consulting geologist, having graduated from the University of British Columbia in 1965, (B.Sc.-honors geology), and in 1972 (M.Sc. geology).
- 2) I have practiced my profession since 1965
- 3) I am a fellow of the Geological Association of Canada.
- 4) I am personally familiar with geology and mineral deposits in the area of the exploration proposal, and have examined all available geological data from company and governmental geological reports.
- 5) I have no direct or indirect interest in Summit Petroleum Corp. or any associated companies, nor do I expect to acquire any such interest, and will accept only normal consulting fees for the preparation of this report.

Respectfully Submitted
Barry Price.
Barry Price, M.Sc., F.G.A.C.
Vancouver, B.C.
March 23, 1977

QUALIFICATIONS

NAME: Barry James Price.

BORN: Smithers, B.C., August 19, 1944.

EDUCATION:

- A) High school: Smithers, B.C. Graduated 1961.
- B) University: B.Sc. Honors Geology 1965, Thesis topic:
(U.B.C.) "Tertiary Sediments at Driftwood
Creek, Smithers Map Area, B.C."
M.Sc., Geology, 1972, Thesis topic:
"Minor Elements in Pyrite and
Exploration Applications of
Minor Element Studies."

EMPLOYMENT RECORD:

- 1964, (summer): GEOLOGICAL SURVEY OF CANADA., junior assistant, mapping party in Rocky Mts., supervised by Dr. G.B.Leech.
- 1965 - 1968 CHEVRON STANDARD LTD., Alberta. Senior assistant, regional mapping party in Mackenzie and Richardson Mts. Subsurface geological studies, carbonate reef research, wellsite supervision and production department studies.
- 1968 (summer) MANEX MINING LTD. Smithers, B.C. Geological mapping and diamond-drill supervision.
- 1969 (summer) MANEX MINING LTD. Smithers, B.C. Property mapping and evaluation, geophysical and geochemical studies, supervision of diamond drilling, geological mapping for Jade Queen Mines Ltd.
- 1970 (summer) ARCHER, CATHRO AND ASSOC., Party chief, regional study of sedimentary copper potential of Mackenzie Mts. Reconnaissance mapping and geochemical interpretation.
- 1971 (summer) J.R.WOODCOCK CONSULTANTS LTD., Project geologist in charge of exploration of massive sulphide prospect, including geological mapping, geochemistry, geophysics, and diamond drilling. Con- currently supervised regional exploration program.

1972 - 1974

MANEX MINING LTD., Vancouver, Geologist in charge of field projects. Consulting geological work for New World Jade Ltd., and Delphi Resources Ltd.

1974 - 1976


Manex Mining Ltd., Geologist in charge of field projects. Consulting geologist for Delphi Resources Ltd., Territorial Gold Placers Ltd., Nephro-Jade Canada Ltd.

1976

Petra Gem Exploration Ltd. Geological Consulting.

1975

Elected Fellow, Geological Society of Canada.



APPENDIX NO 1 - ASSAY SHEETS.



1966 ASSAYS - "BORNITE" GP. (BAR 1 CLAIM)

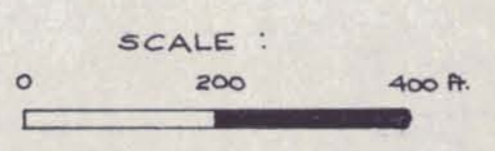
	<u>SAMPLE NO.</u>	<u>WIDTH</u>	<u>Copper (%)</u>	<u>Silver (oz./Ton)</u>
	16351	5'	0.46	2.1
	16352	5'	0.38	1.2
	16353	5'	0.94	2.8
	16354	5'	0.47	0.40
	16355	5'	0.30	0.30
TR#1	16356	5'	0.29	0.30
	16357	5'	0.32	0.30
	16358	5'	0.20	0.20
	16359	5'	0.47	0.60
	16360	5'	0.24	0.10
	16361	5'	0.33	0.30
	16362	5'	0.11	0.10
	16363	5'	0.06	Tr
	16364	5'	0.02	Tr.
	16366	GRAB	0.02	Tr.
TR#2	16367	" "	0.05	0.30
	16368	" "	0.04	Tr.
	16369	" "	0.05	0.20
OLD. WK.	16365	GRAB.	1.43	1.9

* All assays done by Atlas Testing Laboratories Ltd.
 Assay sheets included in appendix.



Statistical Data:
 Mean. = 8.6 ppm Cu.
 S.D. = 13.8 ppm
 $\bar{x} + 2s.d. = 36ppm$
 ○ $\bar{x} + (s.d.)$ ($> 22ppm$)
 ⊙ $\bar{x} + 2(s.d.)$ ($> 36ppm$)

1977 Assays:	Cu	Ag
1 High grade - south pit	0.47%	0.68 oz/T
2 Chip 3m. south pit	0.29%	0.53 oz/T
3 Grab - 2 pits between Tr. 1, 2.	0.10%	0.19 oz/T

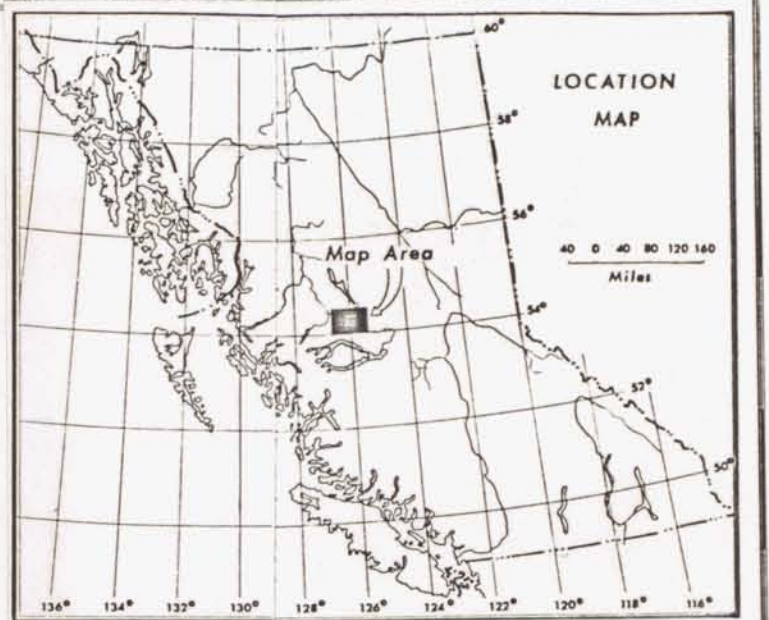
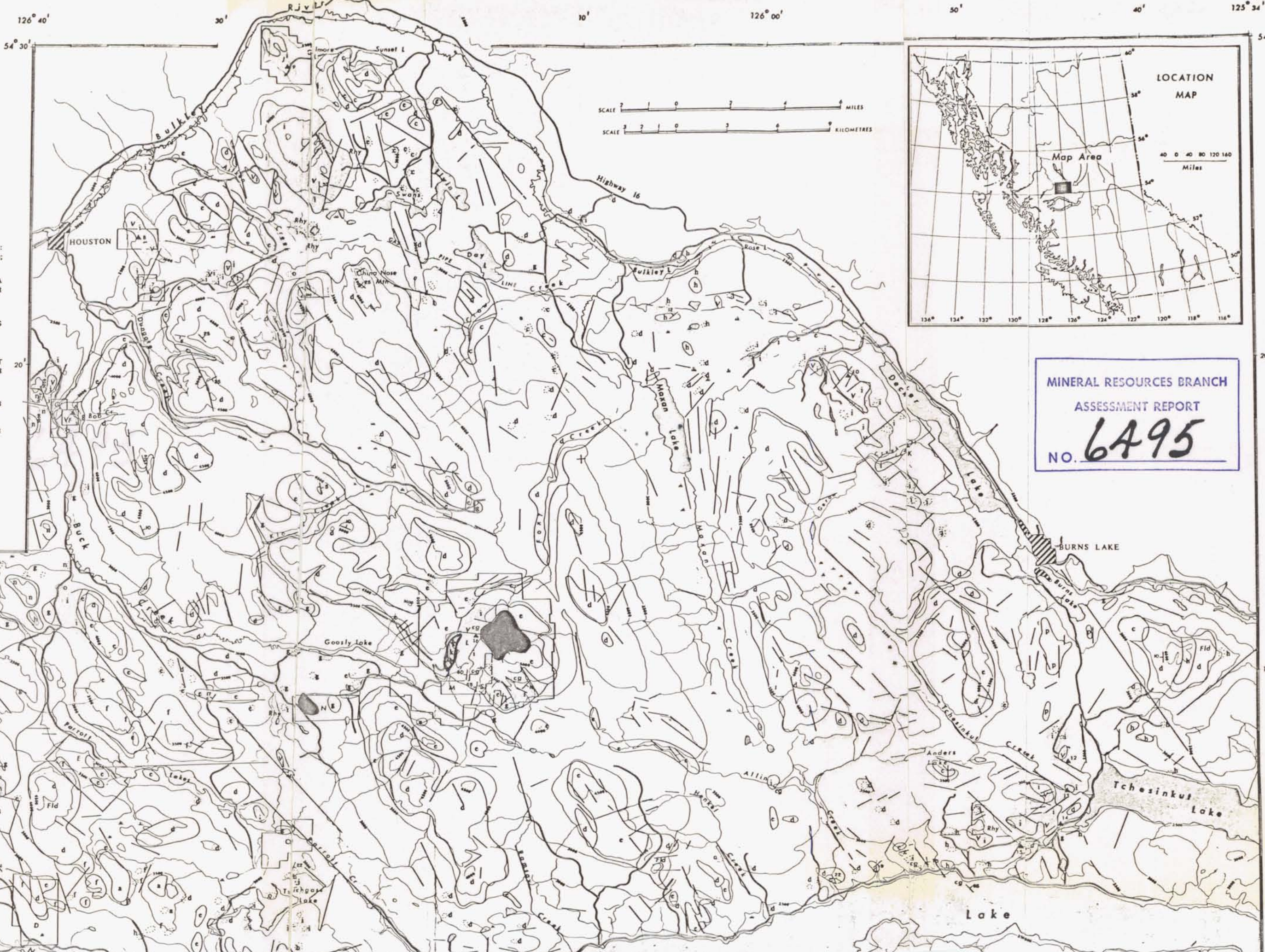


MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
 NO. 6495

FIG 5
 To accompany assessment report dated Sept 30, 1977
 Report for BAR 1 claim. Nov. 6, 1977.
SUMMIT PETROLEUM CORP
 BAR 1 PROJECT - TOPLEY, B.C.
 GEOLOGY AND GEOCHEMISTRY. (Cu.)
 N.B. Geochem traced from Fig 1, Assessment Report
 by M.J. Beley, B.Sc., Jan 4 1968 for Normont
 Copper Ltd. - Reinterpreted for Summit
 Petroleum Corp., Aug and Sept. 1977.
Barry Price.
 PETRA GEM EXPLORATION LTD. B.J. PRICE, M.Sc.

GEOLOGY OF THE BUCK CREEK AREA
OMINECA MINING DIVISION

MAY, 1973



BEDDED ROCKS

MIocene
a POPULAR BUTTES VOLCANIC ROCKS, COLUMNAR OLIVINE BASALT (21.0±1.1 m.y.)

EOCENE
 BUCK CREEK VOLCANIC ROCKS
b PARROTT MOUNTAIN PHASE, MAINLY ANDESITE BRECCIA
c SWANS LAKE PHASE, MAINLY BASALTIC LAVA
d HOUSTON PHASE, APHANITIC ANDESITE AND DACITE LAVAS AND VOLCANIC BRECCIA, MINOR BASALT (47.3±1.6 m.y.)

e GOOSLY LAKE VOLCANIC ROCKS, MAINLY BIOTITE - PYROXENE - PLAGIOCLASE TRACHY-ANDESITE LAVAS AND THICK SILLS OR LAVA FLOWS AND SMALL STOCKS OF SIMILAR ROCK (48.0±1.8 m.y.) / LOCAL FELDSPATHIC ANDESITIC LAVAS AND BRECCIAS

UPPER CRETACEOUS
f TIP TOP HILL VOLCANIC ROCKS, MAINLY BIOTITE - HORNBLende ANDESITE AND ANDESITIC DACITE LAVAS AND PYROCLASTIC ROCKS (75.8±2.7 m.y.)
g ACID VOLCANIC ROCKS, MAINLY RHODACITE LAVA IN THE TCHESINKUT LAKE AND BURNERS LAKE AREAS AND RELATED QUARTZ PORPHYRY INTRUSIONS ON OKUSYELDA HILL (76.5±1.0 m.y.)

EARLY AND MIDDLE MESOZOIC
i ACID AND INTERMEDIATE LAVAS AND PYROCLASTIC ROCKS, SOME ARGILLITE, SANDSTONE, AND CONGLOMERATE

IGNEOUS INTRUSIONS
j SYENOMONZONITE ALKALIC GABBRO STOCKS: PARROTT LAKE INTRUSION (49.4±1.5 m.y.); GOOSLY LAKE INTRUSION (48.3±3.0 m.y.)
k BIOTITE GRANITIC STOCK, GOOSLY AREA (56.2±3.0 m.y.) AND QUARTZ FELDSPAR PORPHYRY AT DUNGATE CREEK
m MINE HILL MICRODIORITE SILLS AND DYKES (74.0±1.0 m.y.)
n BIOTITE - PLAGIOCLASE PORPHYRY STOCK AT DUCK LAKE AND RELATED QUARTZ FELDSPAR PORPHYRY INTRUSIONS (76.0±2.0 m.y.)
o BASIC AND INTERMEDIATE STOCKS AT BOB CREEK AND ISICHGASS LAKE
p TOPLEY INTRUSIONS AND GRANITE NEAR BURNS LAKE

MINERAL PROPERTIES

- A SILVER QUEEN - BRADINA JOINT VENTURE
- B DIAMOND BELLE - FRONTIER EXPLORATION LIMITED
- C WINN - MAHARAJA, MINERALS, LIMITED
- D SPOOK - LOBELL MINES LIMITED
- E PAR - CANADIAN SUPERIOR EXPLORATION LIMITED
- F ROD, DOT - E. KOBLASNI
- G LUKY - AMERICAN SMELTING AND REFINING COMPANY
- H HOT - CHINOOK RESOURCES LTD.
- I DEER - RIO TINTO CANADIAN EXPLORATION LIMITED
- J BORNITE - E. G. STRIMBOLD
- K GRE, DE, MO - DECKER LAKE MINES LIMITED
- L SAM GOOSLY - KENNCO EXPLORATIONS, (WESTERN) LIMITED
- M GAUL - MAVERICK MOUNTAIN RESOURCES LIMITED
- N WIL - LEWES RIVER MINES LTD.
- O SEAN - KENNCO EXPLORATIONS, (WESTERN) LIMITED

MINERAL SHOWINGS

- 1 - WRINCH VEIN SYSTEM (Au, Ag, Cu, Pb, Zn)
- 2 - COLE VEIN SYSTEM (Au, Ag, Cu, Pb, Zn)
- 3 - CHISHOLM VEIN SYSTEM (Ag, Pb, Zn)
- 4 - WINNIVIK HILL VEINS (Pb, Zn)
- 5 - NEW DISCOVERY VEINLETS (Zn)
- 6 - BOB CREEK DISSEMINATIONS (Au)
- 7 - DUNGATE CREEK DISSEMINATIONS (Cu)
- 8 - MUD LAKE DISSEMINATIONS IN SHEARS (Au)
- 9 - GILMORE LAKE MINERALIZED SHEARS
- 10 - BOO MOUNTAIN VEIN (Cu)
- 11 - GEROW CREEK DISSEMINATIONS (Cu)
- 12 - BALD HILL QUARTZ VEINS (Au)
- 13 - MONA VEINS (Ag, Cu, Pb, Zn)
- 14 - OAKLA VEINLETS (Au)
- 15 - FRANCOIS LAKE VEINLETS (As, Sb, Bi, Sn)
- 16 - GOOSLY REPLACEMENTS (Ag, Cu)

SYMBOLS

- BEDDING ATTITUDE - HORIZONTAL, INCLINED
- TOPOGRAPHIC LINEAMENT
- TOPOGRAPHIC CONTOUR (500 feet)
- PROPERTY BOUNDARY
- MINERAL SHOWING
- ROAD
- RAILWAY
- OUTCROP BOUNDARY
- LAKE
- STREAM
- SWAMP
- SHALE, SANDSTONE
- VOLCANIC ROCKS

MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
 NO. **6495**