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THE SPOKANE PROSPECT

A REVIEW

OF THE

826451

HISTORY, GEOLOGY

AND

ECONOMIC POTENTIAL

OF A

GOLD-SILVER-COPPER PROSPECT

ON AMAZON CREEK,

TASEKO LAKE AREA, B.C.

N.T.S. 92 O/3W

LATITUDE 51°07'N, LONGITUDE 123°24'W

Antonio M. de Quadros, Ph. D.
Geologist

North Vancouver, B.C.
18th January 1981.

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SUMMARY

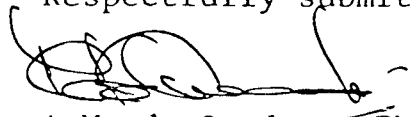
The Spokane Prospect is one of the several porphyry-type mineral occurrences southeast of Taseko Lake, B.C. First staked in 1922, it has been worked sporadically by several major and junior mining companies.

An area of about 160 metres by 130 metres of granodiorite is extensively fractured and pyritised, and mineralization has been encountered to a depth of about 60 metres, the depth of the longest drill-hole. The area has been extensively oxidised and is now a prominent rust-coloured zone.

The prospect is very different from the other properties in the area in having unusually high values in gold, silver, copper and tungsten. Present data indicate that the gold values occur not with chalcopyrite as typical of other Taseko Lake properties, but rather with the dissemminated pyrite mineralization, and that gold values often increase with decreasing copper values.

The writer beleives the property to be of great merit; presently the property is judged to have the potential of several million tons of gold-silver-copper-tungsten ore. A programme, estimated to cost $200,000, is recommended for geological, geophysical, trenching, diamond-drilling and assaying work to be carried out during the summer of 1982.

Respectfully submitted,



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18th January 1982
North Vancouver, B.C.

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INTRODUCTION

The following report has been prepared at the request of Mr. Felix Reyes of Golden Arrow Exploration and Services Corp. of Vancouver, B.C. It reviews and summarizes the work done on the Spokane and Limonite prospects since 1922 and focuses on the possiblity of developing a copper-gold-silver mine at the prospect, supported by several unusually high gold and silver assays from rocks in outcrops, blast trenches and diamond-drill core.

The writer has been fortunate in being able to discuss the property with several geologists familiar with the area, especially Mr. Cliff Rennie, who worked on the property for Canex-Placer in 1956, and Mr. Myron Osatenko of Cominco. Mr. Rennie and Mr. Osatenko made available copies of maps, assays and drill logs from company records and Mr Alan Willcox of the B.C. Department of Mines, Victoria, helped with the research.

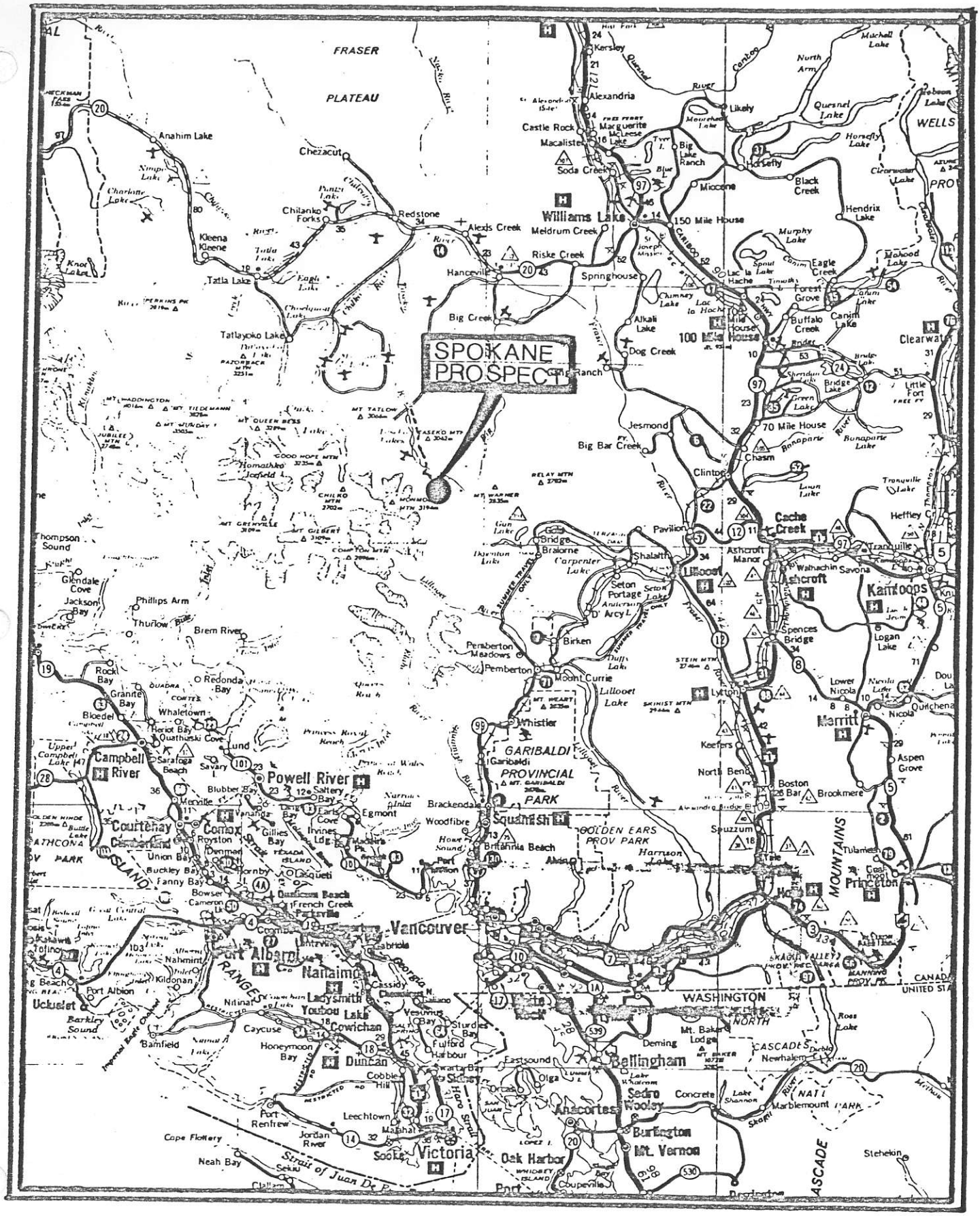


FIG 1: LOCATION MAP

THE PROPERTY

The property, which is owned by Genoveva Resources Corp. of Vancouver, B.C., is located on Amazon Creek, a tributary of Taseko River. It lies about 10 kilometres southeast of the south end of Taseko Lake. (Fig. 1)

The claims may be reached by a four-wheel-drive, summer only road from Williams Lake and Hanceville on the Bella Coola Road. The property may also be reached by helicopter from Pemberton, B.C.; the flight time is about 30 minutes.

The property consists of several crown grants and metric grid claims. The details are presented on Table 1, and are shown on Figure 2.

TABLE 1

LIST OF CLAIMS

A. Reverted Crown Grants

Limonite 2	Lot No. 3133	Record No. 284(1)
Limonite 1	3132	283(1)
Limonite 3	3134	285(1)
Vulcan	3135	1082(7)
Bog Iron	3136	1079(7)
Chilcotin No. 3	3137	1081(7)
Chilcotin No. 1	3140	1080(7)

B. Metric Grid Claims

Tay 1	Record No. 1084(7)	16 units
Rose-1	572(1)	12 units
N. Rose-2	879(9)	9 units
Rose-3	574(1)	18 units
N. Rose-4	880(9)	18 units
Spokane	129(10)	4 units

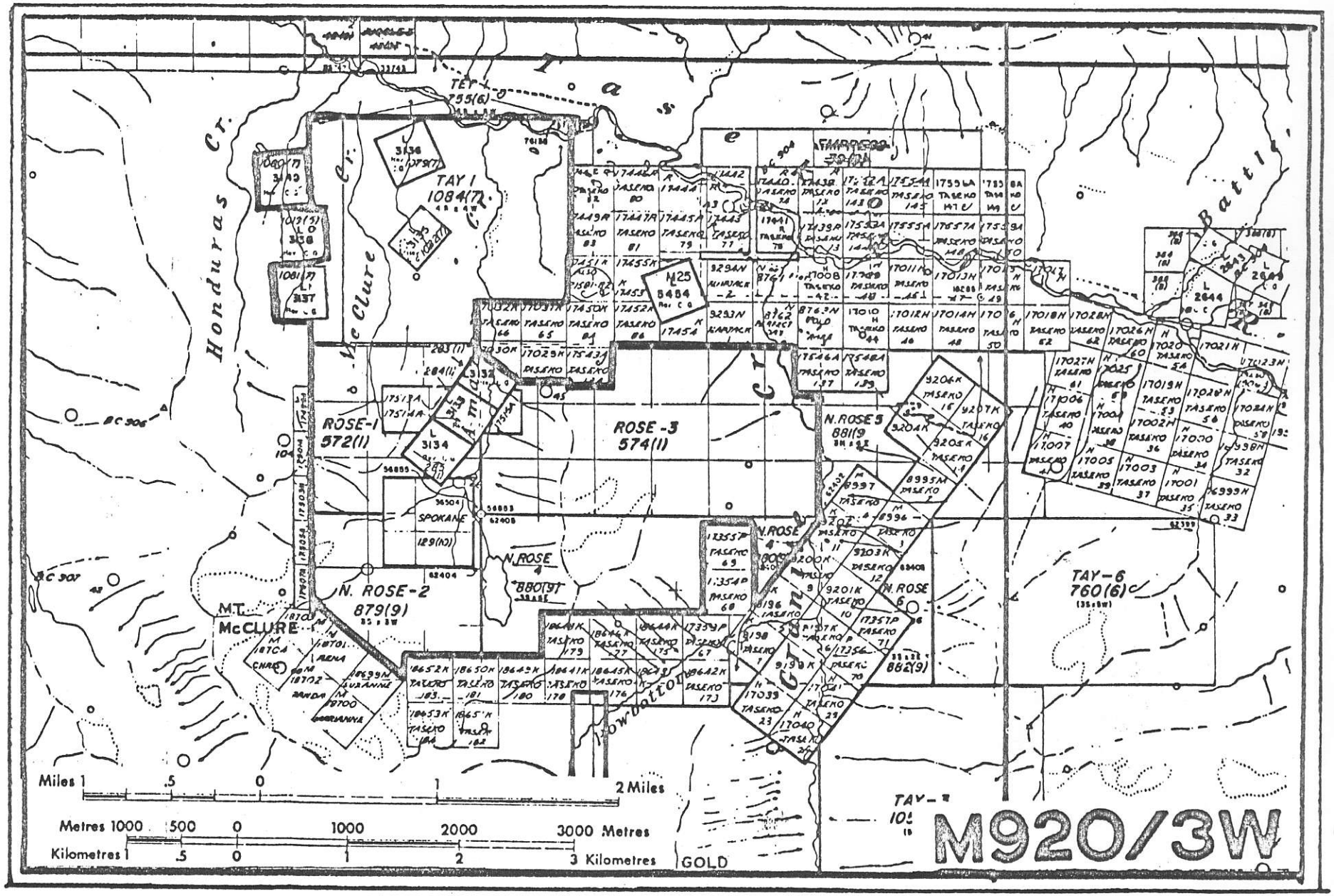


FIG.2: CLAIM MAP

PROPERTY HISTORY

The earliest prospectors, who worked the Taseko Lake Area between about 1909 and 1920, were attracted by the many large limonite bog-iron deposits; this phase of exploration was summarized by MacKenzie (1920). Mackenzie estimated that the LIMONITE PROSPECT contained about 384,000 tons of about 50% Fe (pages 67A-68A). The limonite beds were obviously derived by the erosion and oxidation of the vast amount of pyrite present in the altered siliceous tuffs of the Taseko Formation.

The SPOKANE PROSPECT was first staked in 1922. The Consolidated Mining and Smelting Company (Cominco) explored the Spokane as part of a larger Taseko Lake programme during 1926 - 1928. The work consisted of prospecting and trenching. Fifty-two rock chip-samples (5 foot width) were taken from the trenches and assayed.
The values ranged as follows (Table 2, Fig. 3):

Au trace to-0.43 oz/ton;
with 9 samples better than 0.05 oz/ton.
Ag trace to-2.67 oz/ton
with 16 samples better than 0.5 oz/ton.
Cu trace - 5.32%
with 23 samples better than 1%.

Selected samples gave higher values with Au up to 0.67 oz/ton, Ag up to 3 oz/ton and Cu up to 11.4%. In his report dated December 17th, 1928, Mr. H.M. Powell of Cominco commented that the rocks were highly fractured and sheared and that gold values were good only where heavy iron pyrite occurred.

Dolmage (1928) examined the various prospects in the Taseko Lake area and described the Spokane. He states that (page 91A):

> "The values in the deposit are conceeded to be higher on average than those from any of the other deposits. A large number of trenches and open cuts exposed mineralized material, some of which may be classed as ore but the work was not successful either proving a workable body of ore, or in throwing much light on the shape, attitude or future possibilities of the deposit".

During this period, the following assays were published by the B.C. Minister of Mines:

1922:	1. oxidised material	Au trace; Ag 0.4 oz/ton
	2. " "	Au 0.22 oz/ton; Ag 0.4 oz/ton
1927:	1. trench sample (10 ft.)	Au 0.06 oz/ton; Ag 2.0 oz/ton; Cu 5.8%
	2. " "	Au 0.04 oz/ton; Ag 0.46-2.52 oz/ton; Cu 0.78 - 1.77%
1928:	random sample	Au 0.01 oz/ton; Ag 1.2 oz/ton, Cu 3%.

Work was carried out desultorily during the 1930's. In 1935, the showings are described by the B.C. Minister of Mines as being 500 feet long and 200 to 300 feet wide, trending northeast and dipping sharply to the southeast. The sulphide mineralization is most intense where local fracturing was pronounced. It was noted that the gold was not associated with chalcopyrite, unlike other Taseko Lake Cu-Au prospects. The following assays for samples from open cut were presented (pages F25-26):

1. selected chalcopyrite with quartz: Au 0.02 oz/ton; Ag 0.8 oz/ton; Cu 13.5%.

2. Pyritic material: Au nil; Ag 6.0 oz/ton; Cu 9%.

3. " ": Au trace; Ag 2.09 oz/ton; Cu 8%.

4. Rusty copper stained granite: (Outcrop 30 feet by 10 feet): Au 0.76 oz/ton; Ag 0.8 oz/ton; Cu 2%.

In 1956, Canex-Placer optioned the property from the Gadara Copper Syndicate and carried out a programme of sampling and diamond drilling (228 feet in 3 holes, EX), looking for a porphyry Cu-Mo deposit. The results of the sampling are presented on Table 3. and Figure 4. Four samples gave values of 0.1 oz/ton Au or better, the highest being 0.64 oz/ton. Minor silver value were obtained, highest being 0.8 oz/ton. The two most interesting samples are ore taken to the north that ran 0.10 oz/ton Au for four chip samples 7 feet wide over a trench 35 feet long, and another sample that ran 0.3 oz/ton Au for 2 chip samples taken 7 feet wide over an outcrop 17 feet long.

Three short holes were drilled in October 1956; the assays are presented on Table 4. The best intersection is in drill hole S3 where the samples from 12-26 feet averaged 2.53% Cu. 0.213 oz/ton Au and 0.53 oz/ton Ag (Table 4).

In 1963, the property was optioned by Phelps-Dodge. Only the locations and drill logs are available to the writer. Eight holes, apparently EX with a Prospector Drill, were drilled, totalling 1616 feet. Only rare samples were assayed for precious metals. The best intersections were (Table 4)

PDS-1	-45°	18 - 148 feet	Cu 1.69% average/160 feet
PDS-2	-90°	2 - 40 feet	Cu 1.13% average/38 feet
		105 - 200 feet	Cu 0.75% average/95 feet

A few rich but minor zones were intersected in the other holes.

The period 1968 to 1975 saw the involvement of several junior and major mining companies, including Canoo Mines, Valnicla Copper Mines, Scurry-Rainbow Oil, Quintana Minerals and Sumitomo Metal Mining. The work included legal surveying, geophysics, percussion and diamond-drilling. The Spokane was worked as a part of larger properties, including the Buzzer, Rowbottom, Empress, Syndicate and Granite prospects. The various programmes were geared towards

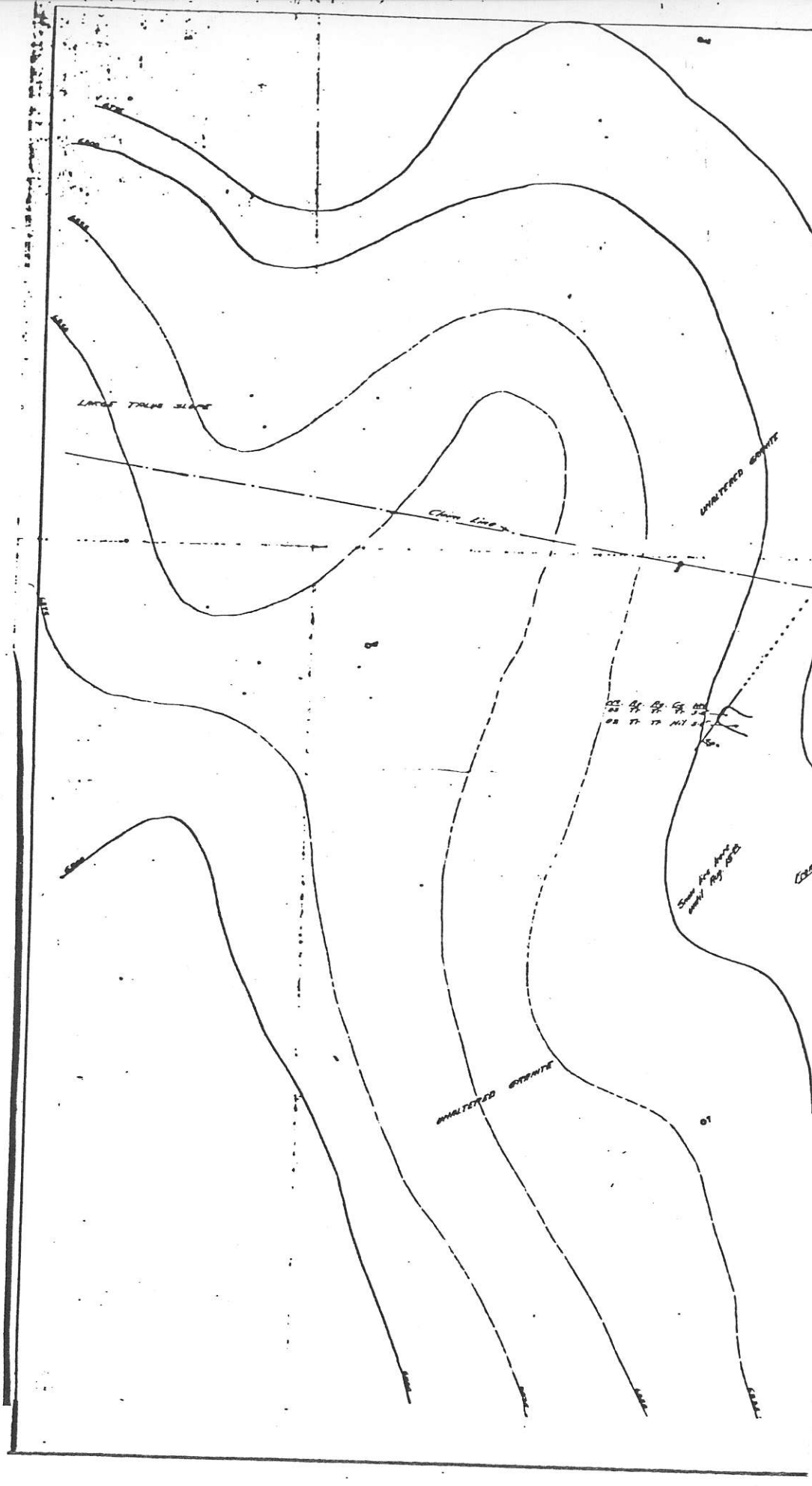
TABLE 2
SPOKANE ASSAYS COMINCO 1928

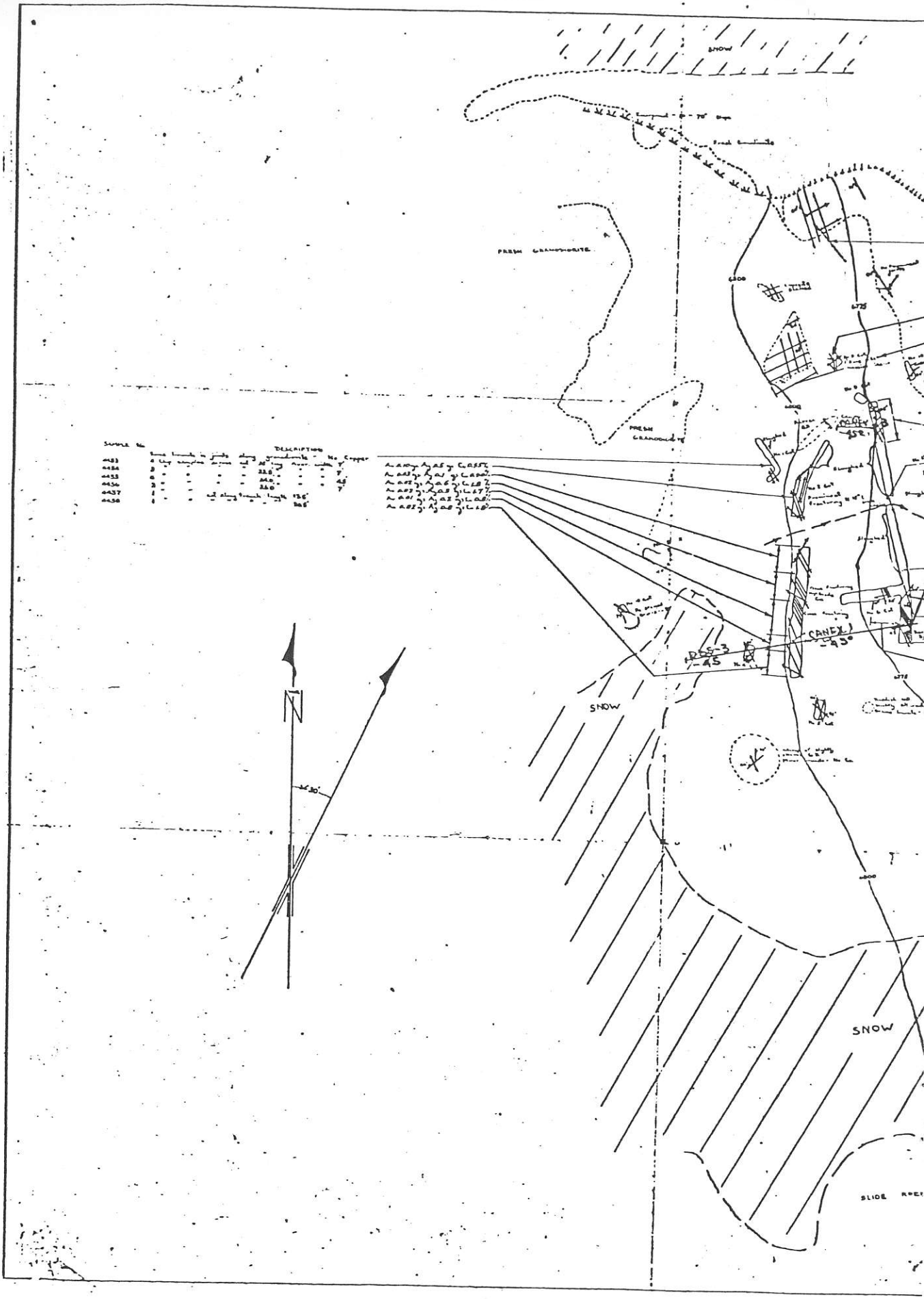
No.	Au	Ag	Cu	Width	Description
92	Tr.	Tr.	nil	3.0'	Somewhat sheared reddish granodiorite. Apparently the N-W limit of shear zone.
93	Tr.	Tr.	Tr.	3.0'	As above.
94	Tr.	Tr.	.30	4.0'	Mineralization and oxidation granite showing disseminated chalcopyrite.
95	Tr.	.16	1.34	5.0'	Somewhat altered oxidized granite showing disseminated chalcopyrite.
96	Tr.	.22	.49	5.0'	As No. 95. Less mineralization.
97	.04	1.46	5.26	5.0'	White completely altered rock 5% sulphides.
98	.05	1.98	5.32	5.0'	As No. 97.
99	.04	1.34	2.32	5.0'	Reddish-Less sulphides
100	Tr.	.44	.90	5.0'	As No. 99.
101	.04	.74	1.46	5.0'	White completely altered rock. 3% sulphides.
102	.04	.78	3.01	5.0'	As above apparently best ore in this cut.
103	.03	.85	2.64	5.0'	As No. 101.
104	Tr.	Tr.	1.02	5.0'	Reddish some Cu stain. Less sulphides
105	Tr.	.42	1.68	5.0'	As above.
106	.04	.36	2.18	5.0'	Reddish. 5% sulphides
107	.04	1.50	2.40	5.0'	As above. heavily oxidized.
108	.05	1.57	3.89	5.0'	White completely altered rock some oxidation
109	.03	.57	.94	5.0'	Little apparent Cu mineral.
110	Tr.	.44	.94	5.0'	As above reddish.
111	Tr.	.40	.64	5.0'	As above
112	.03	Tr.	.44	5.0-	As above some Cu stain.
113	.17	.27	1.55	5.0'	Reddish 3% sulphides (note - I doubt this gold assay)
114	.05	.29	1.28	5.0'	As above
115	.04	.18	1.22	6.0'	As no. 113
116	.02	.42	.86	5.0'	White completely altered dissem. chalcopyrite.
117	Tr.	.18	.90	5.0'	As above from bottom of 8 ft. pit.
118	.08	.68	1.50	5.0'	As No. 116
119	.12	2.67	10.88	Select.	Representing selected ore from pit
120	Tr.	.64	1.22	5.0'	Reddish 3% sulphides
121	.03	1.23	4.97	5.0'	Reddish 5% sulphides adjoining dyke on south.
122	.03	.25	.56	5.0'	White completely altered little mineralization N. of dyke.
123	.03	1.73	1.40	5.0'	As above

124	Tr.	.68	1.50	5.0'	Reddish 3% sulphides
125	.02	.74	1.20	5.0'	As above.
126	.03	.31	.80	5.0'	As above
127	Tr.	.46	.73	7.0'	As above. Less sulphides.
128	.03	Tr.	.50	4.0'	considerable oxidation in small creek bottom.
129	.02	.16	.72	6.0'	Reddish less alteration few sulphides.
130	.6	.60	2.0	2.0'	From practically unaltered granite yet well mineralized.
131	.04	Tr.	nil	1.0'	oxidized seam material. H. side.
132	.34	Tr.	nil	2.0'	Pink sheared granite below dyke rock.
133	Tr.	Tr.	.62	0.5'	Seam material oxidized and Cu stained.
134	.03	Tr.	1.26	1.5'	Seam material as above.
135	.25	.41	.69	2.5'	Seam material well altered granite.
136	.08	.68	10.98	Select.	Chalcopyrite in patches of quartz in pink granite.
137	.43	.45	.28	2.5'	Heavily oxidized honey-combed material.
138	.40	2.14	6.08	Select.	Heavy iron oxidized 20% sulphides.
147	.09	3.00	11.40	Select	Representing best apparent ore showing some disseminated bornite and chalcopyrite 60% sulphides.
148	.67	2.30	1.80	Select.	Representing heaviest iron mineralization noted 60% sulphides.

TABLE 3:SURFACE AND TRENCH SAMPLES
(Canex-Placer, 1956)

Sample No.	Type	Width ft.	Length ft.	Au oz/ton	Ag oz/ton	Cu%
West Cuts						
4453	4 chipsamples	7	35	0.10	0.5	0.55
4454	3 chipsamples	7	22 1/2	0.03	0.1	0.99
4455	4 chipsamples	4 1/2	24	0.02	0.6	1.80
4456	3 chipsamples	7	25	0.02	0.3	1.70
4457	1 chip sample cut along length	13		0.01	0.2	0.80
4458	1 chip sample cut along length	20 1/2		0.02	0.8	1.90
North Cuts outcrops						
4466	1 chip sample - outcrop		40	0.06	tr.	0.40
4476	2 " - trench	4 1/2	-	0.64	0.5	0.80
4477	1 " - outcrop	-	37 1/2	tr.	tr.	tr.
4465	1 " - trench	3 1/2	-	0.02	tr.	tr.
4467	1 " - trench	7	-	0.03	tr.	0.30
4480	2 " - outcrop	7 1/2	17	0.30	tr.	0.30
4472	1 " - trench	19	-	0.01	tr.	0.90
4479	1 " - outcrop	-	10	0.01	0.10	0.40
4468	1 " - outcrop	-	28	tr.	tr.	0.25
4469	1 " - outcrop	22	-	0.01	tr.	0.20
4464	1 " - trench	8	36	tr.	tr.	0.15
4463	1 " - trench	6 1/2	-	0.08	tr.	0.20
4470	1 " - outcrop	-	36	tr.	tr.	0.05
South and Centre						
4471	1 chip sample cut along trench	11	18	0.04	tr.	1.10
4478	1 chip sample cut across trench	8	-	0.10	0.10	0.25
4473	1 chip sample cut across trench	9	-	tr.	tr.	1.30
4474	1 chip sample cut across trench	6	-	tr.	tr.	0.60
4475	1 chip sample cut along trench	7	29	tr.	tr.	0.20
4461	1 chip sample cut along trench	7	19 1/2	0.03	0.30	2.00
4460	1 chip sample cut along trench	10	22	0.03	0.50	1.6
4459	1 chip sample cut along trench	10	22	0.02	1.1	1.1
4462	1 chip sample cut along trench	27	-	0.01	tr.	0.30


LATOSE TALUS SLOPE
Claim Line
UNALTERED GRANITE
ANALTERED GRANITE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FRESH GRANODIORITE
FRESH GRANODIORITE
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SNOW
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SLIDE

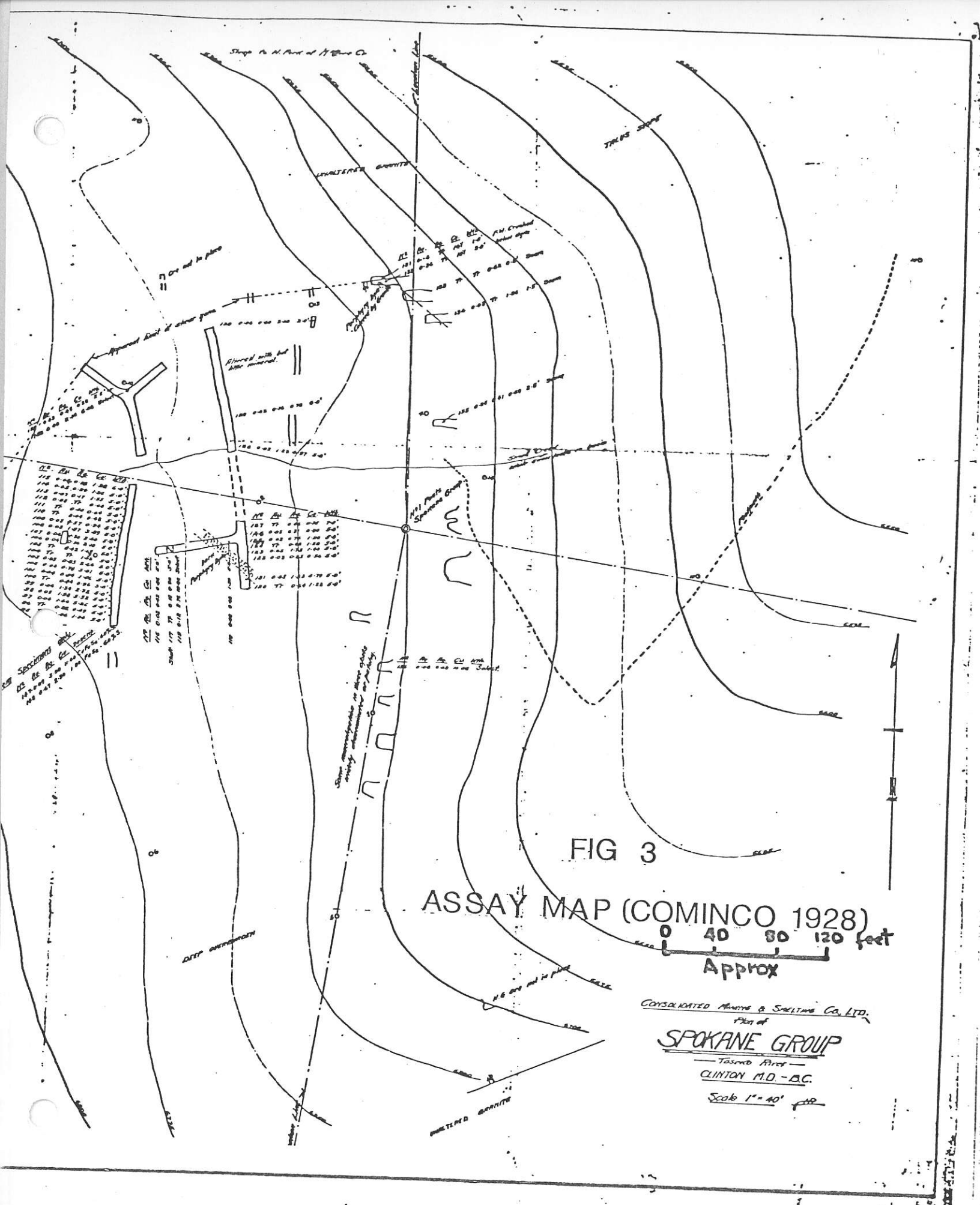

FIG 3

ASSAY MAP (COMINCO 1928)

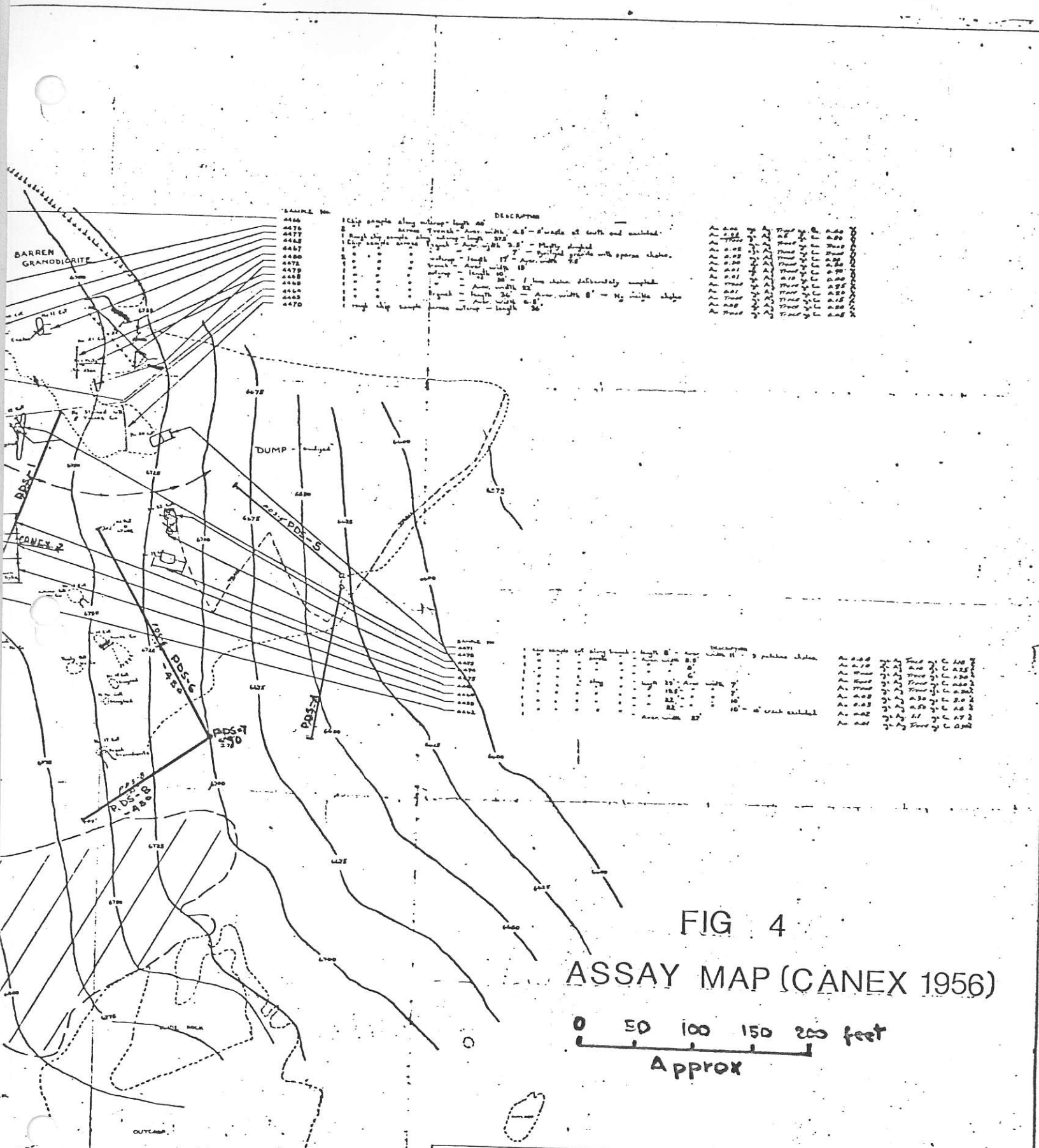

FIG 4

ASSAY MAP (CANEX 1956)

0 50 100 150 200 feet

Approx

DRAWN O. Jones	SCALE 1" = 50'	CANADIAN EXPLORATION LIMITED	SPOKANE- GEOLOGY & ASSAYS
TRACED	DATE AUGUST	TASEKO RIVER VENTURE	FILE NO. 92-0-3
APPROVED			

TABLE 4: DIAMOND DRILL ASSAYS

NOTE: Gold and Silver Assays done for high copper sections only.

1. CANEX - October 1956

Hole No.	Footage	Cu %	Au oz/ton	Ag oz/ton
SI (122ft.) -45°	0 - 5	4.5	0.02	1.2
	5 - 10	1.7	0.02	0.6
	10 - 40 (average)	0.61	n.a.	n.a.
	40 - 96	tr.	n.a.	n.a.
	96 - 100	3.7	0.02	0.05
	100 - 105	3.4	0.10	0.4
	105 - 110	1.3	0.10	0.4
	110 - 115	1.4	n.a.	n.a.
S2 (75 feet) -45°	0 - 75 (average)	1.39	0.02-trace	0.35
S3 (31 feet) -45°	2 - 3.5	1.6	0.10	0.1
	4 - 12	0.1	tr.	tr.
	12 - 17	2.1	0.32	0.4
	17 - 22	2.0	0.20	0.4
	22 - 26	3.5	0.12	0.8
	26 - 31	0.35	0.02	tr.

2. PHELPS DODGE - July - August 1963

PDS-1 (212 feet) -45°	18 - 178 feet	Cu 1.69% average/160 feet
PDS-2 (222 feet) -90°	2 - 48 feet	Cu 1.13% average/38 feet
	105 - 200 feet	Cu 0.75% average/95 feet

Notes:
1. n.a. - not assayed
2. Phelps Dodge assayed only PDS-1 103'-128' for Au, Ag
3. Minor Copper zones in PDS-6, PDS-7

the location of large Cu-Mo porphyry systems. Though the Spokane is mentioned on the title pages of many reports, very little work was actually done on the Spokane, attention being directed largely to the Empress, Buzzer and Rowbottom. Doal (1969) reported that E.M. work carried out over the Spokane showed only minor conducitvity, most of which could be attributed to conductive overburden. The magnetometer indicated a weak negative anomaly trending East-West with dimension of 400 feet in width and 500 feet long. This area coincided with the know zone of chalcopyrite and pyrite. Yokoyama (1970) states that measurements for an induced potential survey could not be done on the Spokane, due to steep topography and a rock slide.

In 1981, Mr. Felix Reyes resampled the Spokane trenches and obtained confirmation of the old work by Cominco and Canex (Table 5, Fig. 6). Select samples ranged from 0.16 to 10.2% Cu, 0.021 to 0.850 oz/ton Au and 0.18 to 2.11 oz/ton Ag. The highest gold values were obtained from samples with lowest copper values, confirming the separate modes of occurrences of Au and Cu.

TABLE 5
ASSAYS BY B.C. DEPT. OF MINES (1935)
and FELIX REYES (1981)

Date	Cu	Au	Ag
1935	13.5%	0.02 oz per ton	0.8 oz per ton
1935	9.0	tr.	6.0
1935	8.0	tr.	2.0
1981	8.25	0.065	2.15
1981	4.06	0.131	1.11
1981	0.68	0.545	0.18 leached
1981	0.16	0.850	1.13 leached
1981	1.20	0.294	-
1981	10.2	0.021	2.11
1981	3.95	0.190	1.03 leached

Situated on a bluff 23 metres east of the eastern vein, still within the Spokane zone, a prominent area of copper stained, well fractured granitic rock had been opened by blasting a large cut. Selected samples of this material assayed as follows:

1935	2.0%	0.76 oz Au/ton	0.8 oz Ag/ton
1981	0.21	0.644	0.12

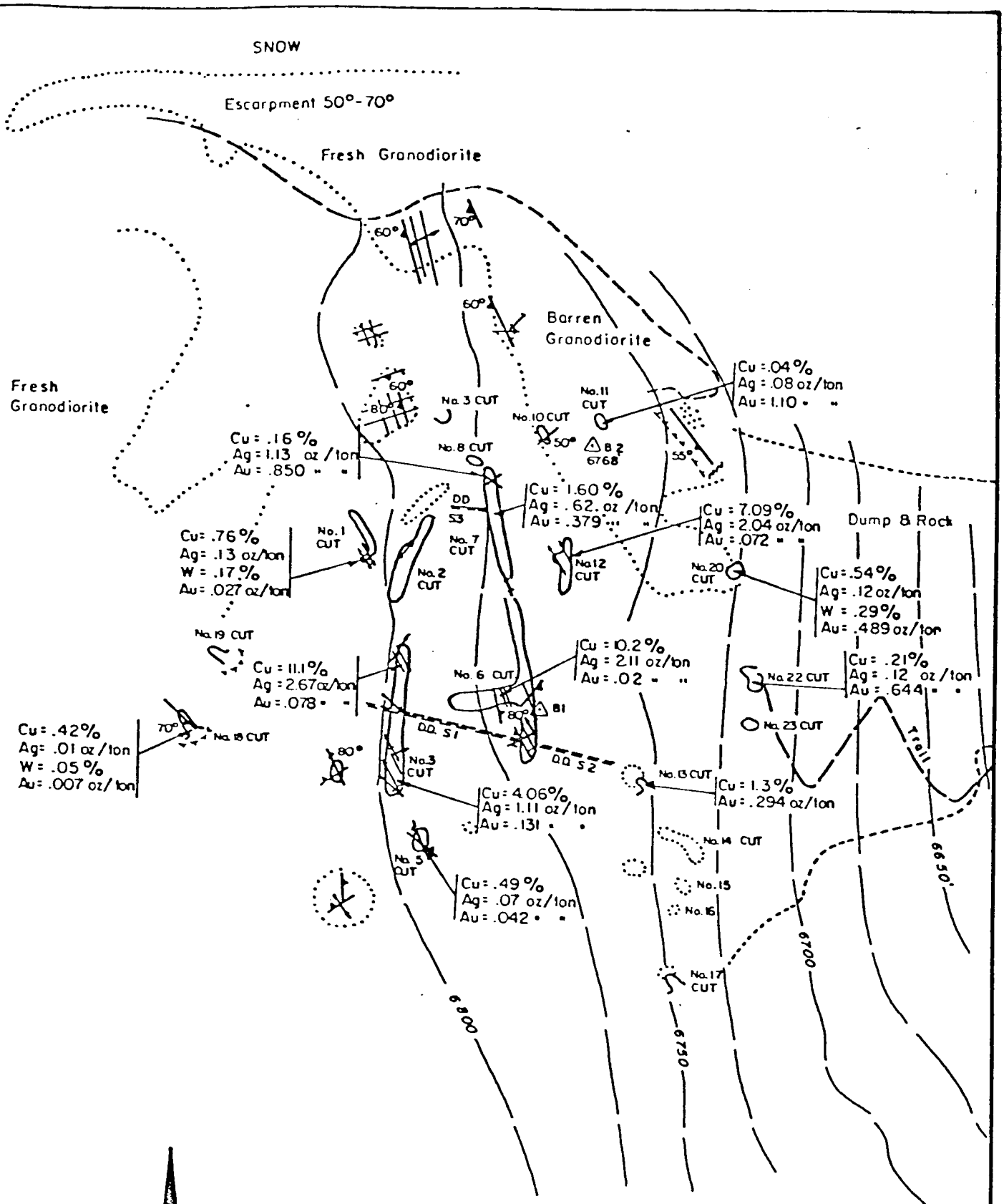

FIG 5

SPOKANE GROUP

GENOVEVA RESOURCES CORP.

ELEVATIONS BASED ON CANEX DATUM

SCALE 1"=100'

DEC. 1981

GENERAL GEOLOGY

Tipper (1963) and McMillan (1976a, 1976b), describe the rocks of the Taseko River area as varicoloured andesitic pyroclastic rocks with intercalated grey, grey-green and purplish massive to porphyritic flows with minor shales and conglomerates. Plant fossils indicate an early late Cretaceous age. These rocks are intruded by granodiorites of mid-late Cretaceous age.

The lowest member of Amazon Creek is seen to be several hundred feet of green andesite. This andesite is overlain by mixed basic flows and volcanoclastic rocks, now altered to some degree, and grading upward into 500 feet of thin to thickly-bedded fine to coarse-grained fragmental volcanoclastic rocks. This unit is overlain by 600 feet of porphyritic andesite and then by a volcanoclastic andesite (1500 feet thick) and finally by the upper porphyritic andesite. Much of this sequence has been altered by variable silicification, sericitisation, bleaching, and by introduction of pyrite. Weathering of the hydrothermally altered zones produces the varicoloured gossans and rust-zones characteristic of the area.

The granitic rocks which intrude the area range from quartz-diorite to quartz-monozonite. These are often porphyritic and usually hydrothermally altered. In the area of the working, the granodiorites are cut numerous pre-mineral aplitic and alaskitic dykes.

Alteration zones in volcanogenic rocks are generally pyritiferous and form large rusty zones and gossans. On close examination the rocks are seen to be invariably bleached to pale grey with secondary minerals being clays, quartz, specular haematite, sodic plagioclase, some tourmaline, rare andalusite and alunite. Other secondary minerals are biotite, tourmaline, magnetite and chalcopyrite (McMillan, 1976b).

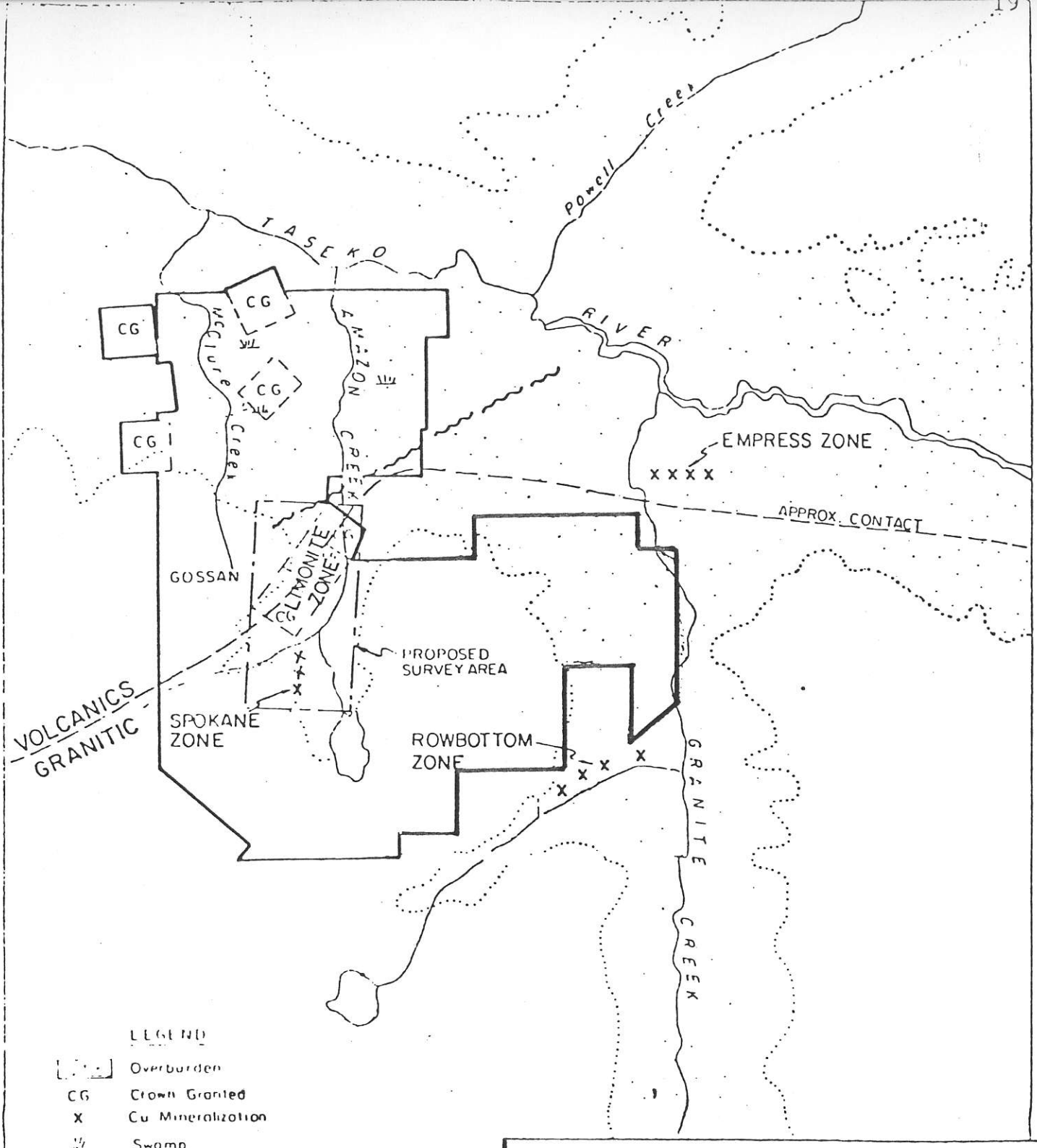

FIG 6

REGIONAL GEOLOGY

PROPERTY GEOLOGY

The Spokane showings occur in a biotite-hornblende-granodiorite of the Coast Range batholith (MacMillan, 1976a, 1976b); about a thousand metres to the east, the granodiorite is overlain by Cretaceous volcanic rocks. Extensive rusty zones and gossans are common. In the area of the Spokane working, the country rock is cut by pre-mineral aplite and alaskitic dykes, which are often heavily altered and locally pyritised, and by post-mineral basaltic dykes. Mineralization, mainly pyrite with chalcopyrite, occures in veins, fractures, shear zones but also disemminated in altered country rock. This main mineralized zone is exposed for an area approximately 125 by 160 metres. Here, the granodiorite is heavily fractured by two sets trending NE-SW and NW-SE and dipping steeply.

Sulphides accur as dissemination in altered granitic rocks and as clots in open-space-filling in pre-mineral dykes and veins. The main mineral is pyrite but chalcopyrite is co-equal in the veins. The granodiorite adjacent to the veins is altered to a pink colour due to haematisation of plaqioclase and chloritisation of the mafics. The veins show quartz-sericite alteration and are often drusy, with quartz, scheelite, rare topaz and sulphides. Minor arsenopyrite is reported. The best mineralized veins strike northeast or northwest and are steeply inclined, with dips to the south. In weathered exposures, the rocks are stained with malachite and chrysocolla and often display boxwork structures. Pyrite-rich zones, often in the strongly bleached granodiorite, carry the best gold values.

GOLD appears to occur in a different mode from copper and would appear to be associated with pyrite and rusty vuggy rocks derived from very pyritic rocks. Sufficient sampling has been undertaken to show its presence throughout the showings and down to about 200 feet in drill holes. However, its unusual mode of occurrence has meant that the pyritic rocks which would be gold-bearing have not been systematically sampled. The assays obtained show the presence of unusually high values of gold; the large number of values around 0.05 oz/ton show the presence of a fairly good base level at the deposit.

SILVER values are fairly high, with a probable mode of around 0.4 - 0.5 oz/ton. The distribution of silver appears to follow that of Cu.

COPPER values are high, with many assays better than 0.5%. In particular, the three Canex drill holes and the two Phelps-Dodge holes PDS-1 and PDS-2 showed significant copper mineralization (Table 4).

TUNGSTEN values have been noted; scheelite has been identified on the property. The three W assays carried out gave 0.29%, 0.17% and 0.05% W. McMillan (1976b) reports that tan to green-coloured scheelite was an accessory in one vein.

DISCUSSION

The Spokane Prospect presents a very unusual porphyry-type mineralization which is exposed for a small area of about 160 metres by 130 metres and characterized by unusually high values in copper, gold, silver, and tungsten. Cominco, in 1928, briefly considered it as a possible gold mine but decided that diamond drilling would be too difficult and that exploration by underground development would be too expensive due to the very fractured nature of mineralized zone.

Later exploration was geared to the development of Cu-Mo deposits and the Spokane, with its high assays and limited areal extent was largely ignored due to limited tonnage potential. On the basis of an area of 160 metres by 125 metres and known depth of about 60 metres in the deepest diamond drill hole, the potential tonnage would be about 3,500,000 tonnes assuming a tabular body. The later exploration programs after the Canex work in 1956 totally ignored the precious metal content of the Spokane mineralized zone.

On the basis of the present sampling and access to the records of Cominco and Placer, it appears that at present prices of gold and silver, the Spokane should be considered to be a gold-silver prospect with values in copper and tungsten, making the small several-million-ton potential a viable mining proposition.

A further exploration target may also be of interest. The fracture-controlled alteration and mineralization, the extensive veining with open-space mineralization, the strong pyritic halo, and the tungsten values suggest that the Spokane may be the very top of a porphyry-molybdenum system. During any exploration of the gold-silver-copper mineralization some attention should be paid to this possibility.

The Limonite Claims have not been prospected since 1920, when some assays were presented by MacKenzie (1920); the work done was restricted to the possiblity of developing an iron-ore mine. Poor

outcrop has always been a problem here and the trenches in this area probably do not reach bedrock. In view of the close association of gold with pyrite, it would be worthwhile to sample the limonite beds and any outcrop for gold and silver assays.

RECOMMENDATIONS

The Spokane Prospect is obviously the main area of interest in the Amazon Creek Property and most of the exploration in the summer of 1982 should be directed to a systematic study of the distribution of gold, silver, copper and tungsten in this area. The work, consisting of geology, geophysics, trenching and diamond-drilling is estimated to cost $200,000.00

Mapping of the property is essential as no detailed geological maps are available. Induced potential survey would be useful, with grid spacing and electrode separation to be determined in the field, contrary to Yokoyama (1970) much of the main Spokane Prospect may be amenable to I.P. work. The trenches have been sloughed in and need cleaning out and more trenching is recommended in areas of poor outcrop. Diamond drilling to 500 feet depth with larger core diameter for better recovery will be used to confirm the results of Canex and Phelps Dodge work. A grid with 11ine and station separation of 20 metres will be established

The programme is estimated to cost as follows:

a.	Grid 1.5 kilometres with permanent pickets and 20 metre spacing	10,000.00
b.	I.P. Survey 7.5 kilometres	10,000.00
c.	Geological Mapping, core logging including petrology and mineralogy	12,000.00
d.	Rock and Soil Geochemistry Analyses for Au, Ag, Cu, W, Mo including chip and channel sampling	10,000.00
e.	Road Work and Trenching, Site Preparation; D6 bulldozer	15,000.00
f.	Camp Costs, including food, fuel, and supplies	8,000.00
g.	Diamond Drillig (BQ) including mobilization and assay cost 5 holes X 500 feet X $50.00	125,000.00
	Subtotal	180,000.00
	Contingencies	20,000.00
	TOTAL	$ 200,000.00

Respectfully Submitted,

A.M. de Quadros, Ph.D.
Geologist
18th January, 1982.

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STATEMENT OF QUALIFICATIONS

I, Antonio M. de Quadros, certify that:

A. I hold the following degrees in Geology

1964: B.Sc. Hons. University of London

1968: M.S. U.C.L.A.

1972: Ph.D. University of Nairobi

B. I have worked on geological projects since 1962, including

1964-1965: Geologist, Tanzania Geological Survey
1968-1972: Lecturer in Geology, University of Nairobi
1973 : Geologist, Agilis Exploration Services, Vancouver
1974 : Geologist, Union Carbide Exploration, Vancouver
1974-1975: Geologist, Dolmage Campbell & Associates, Vancouver
1975-1976: Geologist, Kerr Addison Mines, Vancouver
1976-1977: Geologist, Dolmage Campbell & Associates, Vancouver
1977-1978: Project Geologist, Chinook Construction and Engineering Ltd., Vancouver
1978-1979: Consulting Geologist
1980-1981: Project Geologist, Extotal Resources Ltd., Vancouver
1982 : Consulting Geologist.

C. I am an

a. Engineer-in-training of the Association of Professional Engineers of B.C.

b. Fellow of the Geological Association of Canada.

A.M. de Quadros, Ph.D.
Geologist
North Vancouver, B.C.
18th January, 1982.

SPOKANE

if increase to → 0.16 oz/t

1,424,000 Tons Reserve, 1% Cu, ~~0.06~~ 0.16 oz/t Au, 0.4 oz/t Ag.

Throughput 500 TPD @ 500 x 350 days/yr or 175,000 TPY.

Recovery : Cu @ 90% : 90% x 1% = 0.9% Cu

Au @ 90% : 90% x ~~.06~~ .16 oz/t = ~~0.054~~ 0.144 oz/t Au

Ag @ 90% : 90% x .4 oz/t Ag = 0.36 oz/t Ag.

Recovered Value : Cu – 0.9% x 20 x £5/ton = £15.30 per ton

Au – ~~0.054~~ 0.144 oz/t x £400/oz = ~~£21.60~~ £57.6 " "

Ag – 0.36 oz/t x £1/oz. = £2.16

T. = ~~£39.18~~ £75.78 " " , say ~~£40~~ £76

Capital Cost – £30,000 Per ton Capacity x 500 TPD = £15,000,000 / Loan @ 15% P.A..

Operating Costs — £15 per ton milled. (not incl. interest expense)

Operating Profit – ~~£25~~ £60 per ton

Op. Yr.		Op. Profit £MM.	Less Int. Pay £MM.	Payback Principle	Annual P.V. £MM	Accumulative P.V.
1	175,000 x ~~25~~ 60 =	4.375	10.5 2.25	8.25	~~2.625~~	(12.875) (6.75)
2	"	4.375	~~1.43~~ 1.01		2.475	(4.43) 2.74
3	"	4.375	~~1.56~~		2.81	(7.62) 13.24
4	"	4.375	~~1.14~~		3.23	(4.39) 23.74
5	"	4.375	~~0.66~~		3.72	(0.67) 34.24
6	"	4.375	~~0.10~~		.67	3.61 44.74
7	"	4.375	–		–	7.99 55.24
8	"	4.375				12.36 65.74

T = 1,400,000 Tons

Write-offs	Bal. of Write-offs	Taxable Income	Taxes	Yearly Net After Taxes £MM.	Net Accum.
	15.00				
2.74	12.26	—	—	2.74	2.74
3.68	8.58	6.82	3.41	7.09	9.83
2.57	6.01	7.92	3.96	6.54	16.37
1.80	4.21	8.7	4.35	6.15	22.52
1.26	2.95	9.24	4.62	5.88	28.4
0.88	2.07	9.62	4.81	5.69	34.09
0.62	1.45	9.88	494	5.56	39.65

Present Value Before Taxes of

2.74 is 2.74 x 0.65752 (3rd yr) = 1.80 → 1.802

~~3.61 is 3.61 x 0.43233 = 1.56~~ 10.5 x 0.57175 (4th yr) → 6.003

~~4.375 is 4.375 x 0.37594 = 1.64~~ 10.5 x 0.49718 → 5.220

~~4.375 is 4.375 x 0.32690 = 1.43~~ 10.5 x 0.43233 → 4.539

" " " the ~~12.36 MM~~ is 10.5 x 0.37594 → 3.432

~~£4.63 MM~~ £20.996 MM

10.5 x 0.32690 → 2.985

10.5 x 0.28426 → $23.981

Present Value Of Net Profits (After Taxes)

Op. Yr. 2	2.74	x 0.65752 (3rd yr) = 1.80		1.80
3	7.09	0.57175	4.05	5.85
4	6.54	0.49718	3.25	9.10
5	6.15	— 0.43233	2.66	11.76
6	5.85	— 0.37594	2.21	13.97
7	5.69	— 0.32690	1.86	15.83
8	5.56	– 0.28426	1.58	17.41

If the gold content increase to 0.16 oz/t, then the operation would be viable.

April/82

if increase to → 0.10

1,424,000 Tons Reserve, 1% Cu, ~~0.08~~ 0.09 Au, 0.4 Ag.

Mining Rate 500 TPD @ 500 x 350 days/yr or 175,000 TPY.

Recovery: Cu @ 90% : 90% x 1% = 0.9% Cu

Au @ 90% : 90% x 0.10 = 0.09 Au

Ag @ 90% : 90% x .4 Ag = 0.36 Ag.

Recovered Value: Cu – 0.9% x 20 x $55/t. = $15.30 per ton

Au – 0.09 x $400/oz. = 36.00 " "

Ag – 0.36 x $8/oz. = 2.88

T. = $54.18 " " , say $54

Capital Cost – $30,000 Per ton Capacity or 500 TPD = $15,000,000 / Loan @ 15% P.A..

Operating Costs — $5 per ton milled. (not incl. interest expenses)

Operating Profit – $ 25 per ton

Yr.			Op. Profit $/ton	Less Int. Pay $/ton	Payback Period	Accomulative Income P.A. $/ton
1	175,000	x 39	6.825	2.25	4.575	(10.425)
2	"			1.564	5.261	(5.163)
3	"			0.775	5.163	0.887
4	"					7.712
5	"					14.537
6	"					21.362
7	"					28.187
8	-					

T = 1,400,000 Tons

Present Value of	$0.887/ton	x	0.57175 (3+1/4 yr) (4th yr)	0.507
" " "	6.825		.49718	3.393
" " "	6.825		.43233	2.951
" " "	6.825		.37594	2.566
" " "	6.825		.32690	2.231
" " "	6.825		.28426	1.940
				13.588

SPOKANE

1,424,000 Tons Reserve, 1% Cu, 0.06 oz Au, 0.4 oz Ag.

Milling Rate 500 TPD or 500 x 350 days/yr or 175,000 TPY.

Recovery: Cu @ 90% : 90% x 1% = 0.9% Cu

Au @ 90% : 90% x .06 oz = 0.054 oz Au

Ag @ 90% : 90% x .4 oz Ag = 0.36 oz Ag.

Recovered Value: Cu - 0.9% x 20 x $85/lb. = $15.30 per ton

Au - 0.054 oz x $400/oz = 21.60 " "

Ag - 0.36 oz x $8/oz. = 2.88

T. = $39.78 " " , say $40

Capital Cost - $30,000 Per ton Capacity x 500 TPD = $15,000,000 / Loan @ 15% P.A..

Operating Costs — $15 per ton milled. (not incl. interest expenses)

Operating Profit - $25 per ton

Op. Yr.		Op. Profit $ MM.	Less Int. Pay $ MM.	Payback Principle	Principal Accum. Bal. $ MM
1	175,000 x 25 =	4.375	2.25	2.125	(12.875)
2	"	4.375	1.93	2.445	(10.43)
3	"	4.375	1.56	2.81	(7.62)
4	"	4.375	1.14	3.23	(4.39)
5	"	4.375	0.66	3.72	(0.67)
6	"	4.375	0.10	.67	3.61
7	"	4.375	/	/	7.99
8	"	4.375			12.36

T = 1,400,000 Tons

Present Value of 3.61 is 3.61 x 0.43233 (6th yr) = 1.56

4.375 is 4.375 x 0.37590 (7th yr) = 1.64

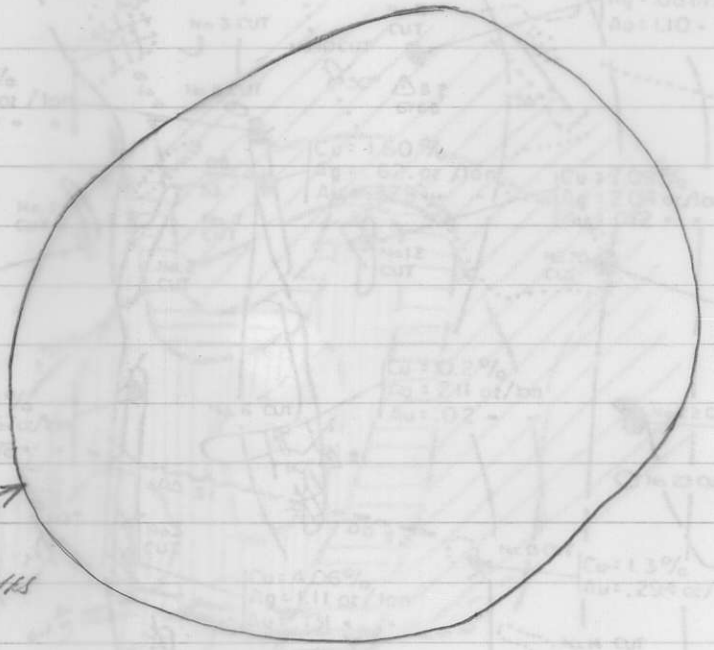
4.375 is 4.375 x 0.32690 (8th yr) = 1.43

" " - the $12.36 MM is $4.63 MM

SPOKANE GROUP
AG. April 2/82

1956 Canex surface sampling, roughly 1% Cu, 0.3 oz/T Ag, 0.02 oz/T Au
" " diamond drilling roughly 1% Cu, 0.4 oz/T Ag, 0.06 oz/T Au.
1963 Phelps Dodge drilling ——— 1.3% Cu.

FROM DIAMOND DRILLING, THE EST. GROSS VALUE IS: 1%/T x 20 x $25/T = $17.00 for Cu
0.06 oz/T Au x 400 = 24.00 for Au.
0.4 oz/T Ag x $8 = 3.20
$44.20/TON



SELECTED SAMPLING BY FELIX REYES

Circled area contains mineral reserve ≥ $30/T (0.5% Cu + 0.05 oz/T Au)

Arithmetic Average:

Cu	Ag	Au
.76	.13	.027
.16	1.13	.850
1.60	.62	.379
.04	.08	1.100
7.09	2.04	.072
.54	.12	.489
.21	.12	.644
1.30	—	.294
0.02	2.11	.02
4.06	1.11	.131
11.10	2.67	.078
T 26.88	10.13	4.066
Arith Av. 2.44	0.92	0.37

① TONS/VERT. FT. IS

$\frac{\pi \times 165^2 \times 1}{12} = 7128$ TNF.

② PROBABLE TONNAGE TO 200 FT DEPTH IS

7120 x 200 = 1,424,000 T

③ ESTIMATED GROSS VALUE/TON IS (Felix Reyes' sampling)

Cu – 2.44% x 20 x $5/lb. = $41.48
Ag – 0.92 oz/T x $8.6/oz = 7.91
Au – 0.37 oz/T x $400/oz = 148.00
} Total = $197.39/Ton (Note Selected Sampling)

FIG 5
SPOKANE GROUP
GENOVEVA RESOURCES CORP.
ELEVATIONS BASED ON CANEX DATUM
SCALE 1" = 100'
DEC. 1981

SPOKANE GROUP 11

1956 Canex surface sampling, roughly 1% Cu, 0.3 oz Ag, 0.02 oz Au

" " diamond drilling roughly 1% Cu, 0.4 Ag, 0.06 Au

1963 Phelps Dodge drilling 1.3 % Cu.

Escarpment 50°-70°

Au Contour w/ Cu (0.5%) and Ag (1 oz/T) contours

- < 0.05
- 0.05 - 0.10
- 0.10 - 0.20
- > 0.20 oz/ton

FROM DIAMOND DRILLING THE EST. GROSS VALUE IS:

19 a x 20 x 85 ¢ = $17.00 for Cu.

0.06 oz Au x 400 = $24.00 for Au.

0.4 oz Ag x $8 = 3.20

$44.20/ton

Fresh Granodiorite

Barren Granodiorite

Fresh Granodiorite

Cu = .04 %
Ag = .08 oz/ton
Au = 1.10 "

Cu = .16 %
Ag = 1.13 oz/ton
Au = .850 "

Cu = 1.60 %
Ag = .62 oz/ton
Au = .379 "

Cu = 7.09 %
Ag = 2.04 oz/ton
Au = .072 "

Dump & Rock

Cu = .76 %
Ag = .13 oz/ton
W = .17 %
Au = .027 oz/ton

Cu = .54 %
Ag = .12 oz/ton
W = .29 %
Au = .489 oz/ton

Cu = 10.2 %
Ag = 2.11 oz/ton
Au = .02 "

Cu = 11.1 %
Ag = 2.67 oz/ton
Au = .078 "

Cu = .21 %
Ag = .12 oz/ton
Au = .644 "

Cu = .42 %
Ag = .01 oz/ton
W = .05 %
Au = .007 oz/ton

Cu = 1.3 %
Au = .294 oz/ton

Cu = 4.06 %
Ag = 1.11 oz/ton
Au = .131 "

Cu = .49 %
Ag = .07 oz/ton
Au = .042 "

No. 1 CUT
No. 2 CUT
No. 3 CUT
No. 5 CUT
No. 6 CUT
No. 7 CUT
No. 8 CUT
No. 10 CUT
No. 11 CUT
No. 12 CUT
No. 13 CUT
No. 14 CUT
No. 15
No. 16
No. 17 CUT
No. 18 CUT
No. 19 CUT
No. 20 CUT
No. 22 CUT
No. 23 CUT
DD S1
DD S2
DD S3
B1
B2 6768

Trail

6650'
6700'
6750'
6800'

SELECTED SAMPLING By FELIX REYES

Circled area contains mineral reserve ≥ $30/T (0.5 % Cu + 0.05 oz Au/T)

Arithmetic Average:

Cu	Ag	Au
.76	.13	.027
.16	1.13	.850
1.60	.62	.379
.04	.08	1.100
7.09	2.04	.072
.54	.12	.489
.21	.12	.644
1.30	—	.294
0.02	2.11	.02
4.06	1.11	.131
11.10	2.67	.078
T 26.88	10.13	4.066
Arith Av. 2.44	0.92	0.37

① TONS/VERT. FT. IS

$\frac{\pi \times 165^2 \times 1}{12}$ = 7128 T/VF

② PROBABLE TONNAGE TO 200 FT DEPTH IS

7120 x 200 = 1,424,000 T

③ ESTIMATED GROSS VALUE/TON IS (Felix Reyes' sampling)

Cu — 2.44% x 20 x 85¢/lb. = $41.48
Ag — 0.92 oz x $8.6/oz = 7.91
Au — 0.37 oz x $400/oz = 148.00

} Total = 197.39/Ton (Note Selected Sampling)

1981 Year Felix Reyes Sampling

* Selected samples

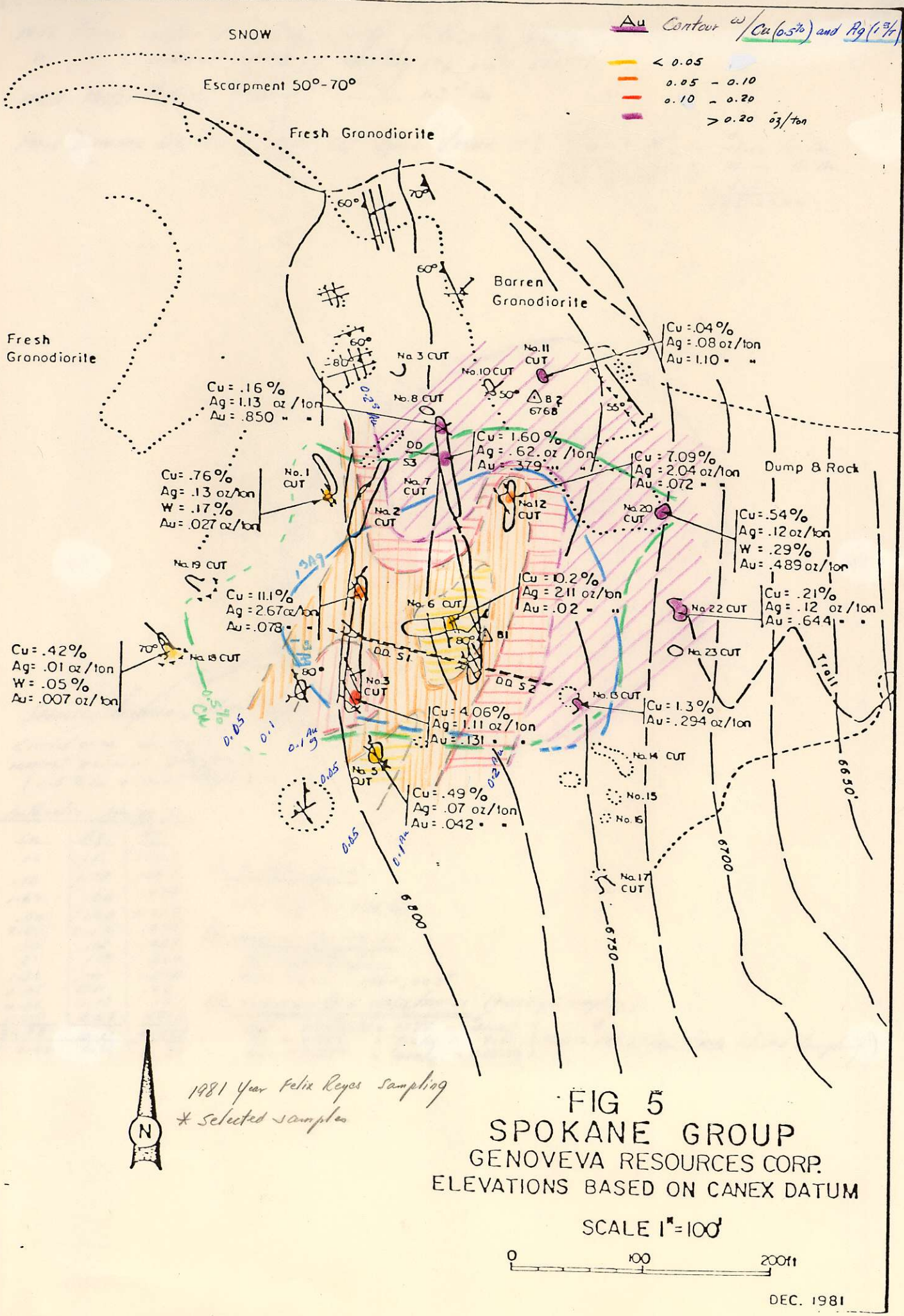
N

FIG 5
SPOKANE GROUP
GENOVEVA RESOURCES CORP.
ELEVATIONS BASED ON CANEX DATUM

SCALE 1" = 100'

0 100 200 ft

DEC. 1981



1981 Year Felix Reyes Sampling
* Selected samples

FIG 5
SPOKANE GROUP
GENOVEVA RESOURCES CORP.
ELEVATIONS BASED ON CANEX DATUM

SCALE 1" = 100'

0 100 200ft

DEC. 1981

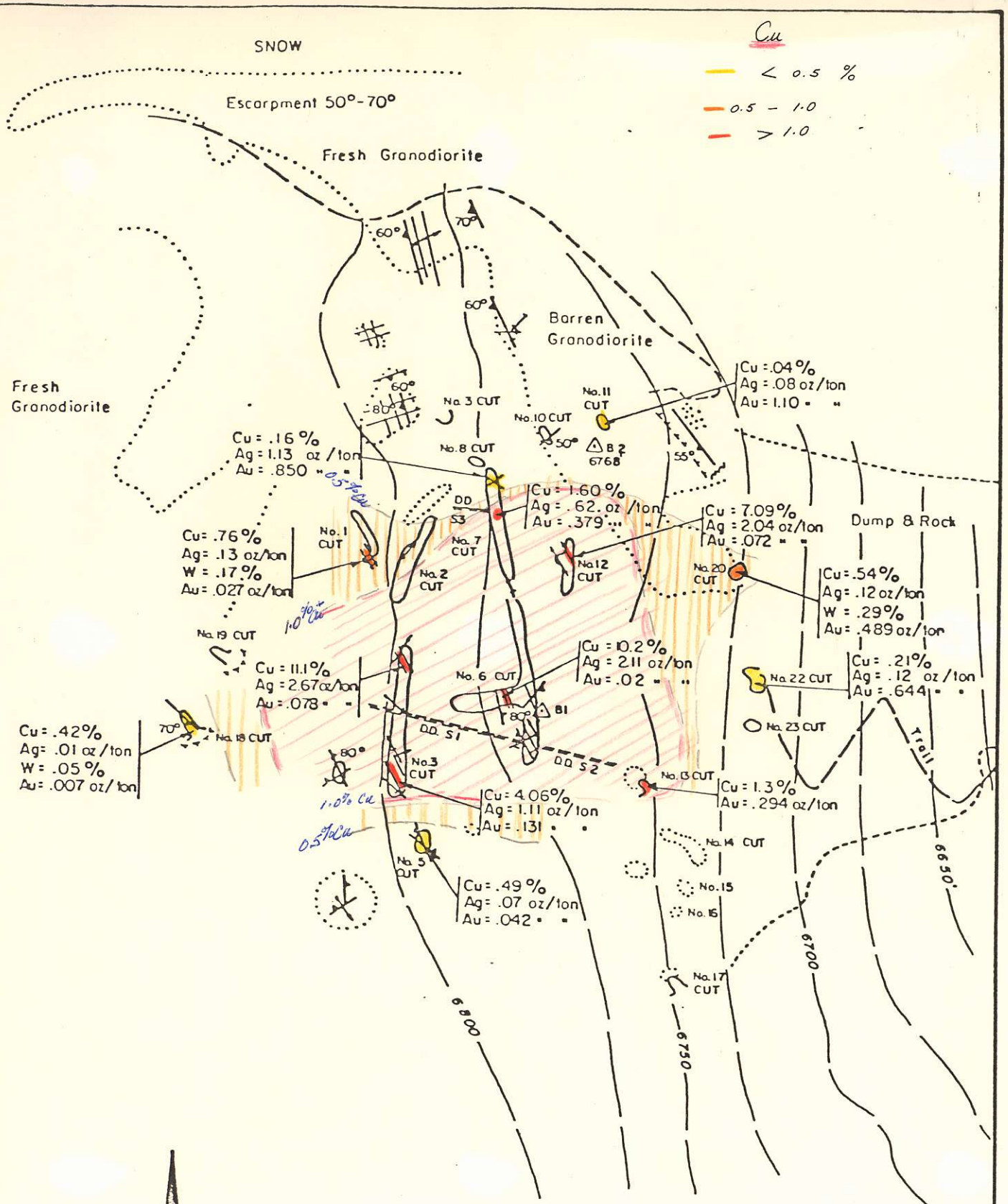


FIG 5
SPOKANE GROUP
GENOVEVA RESOURCES CORP.
ELEVATIONS BASED ON CANEX DATUM

SCALE 1"=100'

0 100 200ft

DEC. 1981

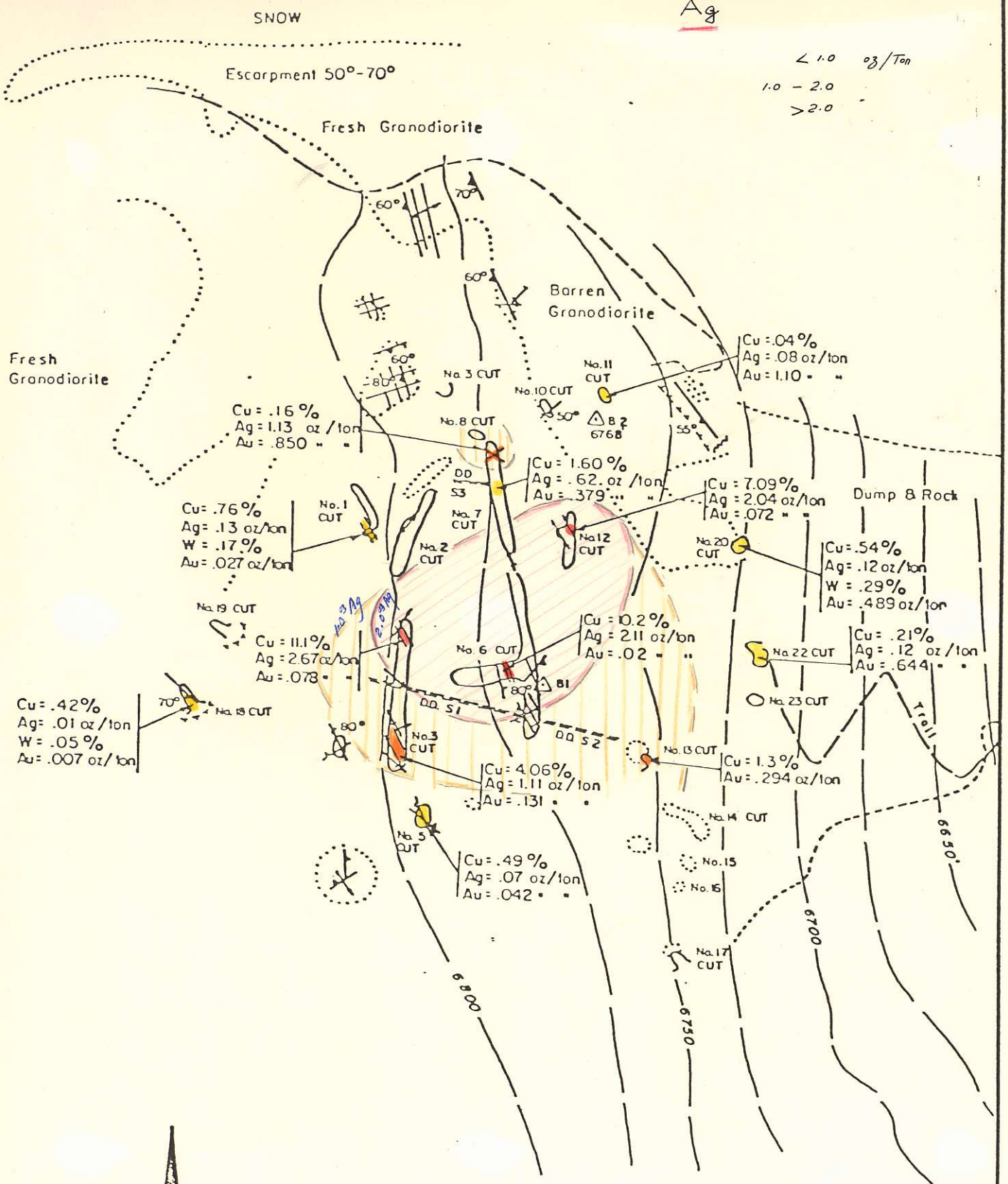


FIG 5
SPOKANE GROUP
GENOVEVA RESOURCES CORP.
ELEVATIONS BASED ON CANEX DATUM

SCALE 1" = 100'

0 100 200ft

DEC. 1981

TABLE 4: DIAMOND DRILL ASSAYS

NOTE: Gold and Silver Assays done for high copper sections only.

1. CANEX - October 1956

Hole No.	Footage	Cu %	Au oz/ton	Ag oz/ton
SI (122ft.) -45°	0 - 5	4.5	0.02	1.2
	5 - 10	1.7	0.02	0.6
	10 - 40 (average)	0.61	n.a.	n.a.
	40 - 96	tr.	n.a.	n.a.
	96 - 100	3.7	0.02	0.05
	100 - 105	3.4	0.10	0.4
	105 - 110	1.3	0.10	0.4
	110 - 115	1.4	n.a.	n.a.
S2 (75 feet) -45°	0 - 75 (average)	1.39	0.02-trace	0.35
S3 (31 feet) -45°	2 - 3.5	1.6	0.10	0.1
	4 - 12	0.1	tr.	tr.
	12 - 17	2.1	0.32	0.4
	17 - 22	2.0	0.20	0.4
	22 - 26	3.5	0.12	0.8
	26 - 31	0.35	0.02	tr.

2. PHELPS DODGE - July - August 1963

PDS-1 (212 feet) -45°	18 - 178 feet	Cu 1.69% average/160 feet
PDS-2 (222 feet) -90°	2 - 40 feet	Cu 1.13% average/38 feet
	105 - 200 feet	Cu 0.75% average/95 feet

Notes:

1. n.a. - not assayed
2. Phelps Dodge assayed only PDS-1 103'-128' for Au, Ag
3. Minor Copper zones in PDS-6, PDS-7