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GEOLOGICAL REPORT
On the
TATLER GROUP
Farnum Creek Area
Golden Mining Division, B.C.
Of
JUMBO MINES LTD. (N.P.L.)

By
E. P. Sheppard, P.Eng.
Consulting Geologist

November 19, 1971

82KSE00.4-07
PROPERTY FILE

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APPENDIX: Geochemical Sample Results
Field Report, Electro-Magnetic
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MAPS:

Location Map		
Claim Map		Scale: 1"= 600'
Geology & Geochemical Survey	"	1"= 200'
Electro-Magnetic	"	1"= 400'
Electro-Magnetic Profiles	"	1"= 400'
D.D. Section, Holes 1, 2, 5	"	1"= 100'
" " Hole 2	"	1"= 100'
" " Hole 3	"	1"= 100'
" " Hole 4	"	1"= 100'

* * *

TATLER GROUP
Golden Mining Division, B. C.

SUMMARY

Early work on the Tatler group of claims, consisting of trenching, drifting and shaft sinking, indicated the presence of mineralized vein material containing appreciable amounts of silver, copper, lead and zinc.

A mineralized zone some 700 feet long and up to 30 feet in width was also outlined.

The occurrences indicate the presence of a fairly widespread mineralized zone or zones. The preliminary geochemical sampling and geological mapping substantiated this premise.

Five diamond drill holes put down on surface showings and the geochemical anomalies in the Worlds Fair claim cut strong breccia zones mineralized by massive pyrite. Early snows terminated the drilling program. Drilling on the Copper King claim, on a high-grade bedded silver-copper showing, was also stopped because of early snows.

An Electro-magnetic survey was carried out in July 1969, during which 35,641 line feet were surveyed and 441 readings taken. In Area 1, two well-defined zones with a N-S trend were outlined. They extend from 0+00 to 16+00S, and they may form a continuous zone of pyrite mineralization. Three zones were outlined in Area 2: Zone 1, corresponds to a sharp ridge of black shaly mud and the cross-overs are ascribed to this formation. Zone 2, shows cross-overs on several lines, and Line 22S runs across an old trench containing azuite, malachite and a little barite. Zone 3, outlined an area of minor trends with no conclusive results.

Tatler Group

CONCLUSIONS

The diamond drill program showed brecciated zones mineralized by pyrite under the geochemical anomaly.

The diamond drill intersections of the zones gave minor amounts of gold, silver and copper.

It was felt that there was not sufficient information on the mode of occurrence of the mineralization to continue drilling and the work was suspended until a geophysical survey could be carried out.

As a result of the Electro-magnetic survey conducted in July 1969, it appears that more work on the property is justified, particularly in the upper part.

RECOMMENDATIONS

It is recommended that a two-phase exploration program be carried out as outlined in this report.

It is recommended that Jumbo Mines Ltd. (N.P.L.) allocate the sum of \$40,000 to carry out the 1st Phase. Contingent on the success of this work, a further \$40,000 should be allocated to implement the 2nd Phase, for a total of \$80,000.

E. P. Sheppard

E. Percy Sheppard, P.Eng.
Consulting Geologist



November 19, 1971

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GEOLOGICAL REPORT

TATLER GROUP

INTRODUCTION

The Tatler group of claims was visited by the writer during the periods June 16, 17, and September 30 to October 3, 1968. An examination was made of significant parts of the property which had been mapped geologically, and over which a geochemical survey had been conducted by Mr. T. R. Tough, Geologist, during the period September 16 to 21, 1967. A review of the Electro-magnetic Survey carried out by Geotronics Surveys in July 1969 is included in the following report.

LOCATION

The Tatler group of mineral claims is located at 116° 20'W Longitude and 50° 30'N Latitude, in the Purcell Mountain Range, Golden Mining Division, southeastern British Columbia. It is approximately 22 miles southwesterly from Invermere, which is situated on Highway 95.

ACCESS

Access is by an all-weather gravelled logging road, with no adverse grades, which extends westward from Invermere for approximately 30 miles to the confluence of Farnam Creek and Horsethief Creek. This road is maintained by the Department of Public Works and the Forest Service. Jumbo Mines Ltd has constructed a good gravelled road from the end of the logging road to the property.

Helicopter service is available from either Golden or Invermere.

TOPOGRAPHY

The topography is precipitous with peaks of over 10,000 feet and aproned with snowfields and receding alpine

glaciers. The valley of Farnam Creek has an altitude of 6000 feet and the campsite is at 6900 feet. Much glacial debris covers the valley floor. Spruce, fir, balsam and pine grow to the 7500 ft. elevation with larch predominating over 6500 feet. Above the timberline large angular rock fragments occur caused by frost action.

CLIMATE

The annual snowfall is considerable, with relatively mild but long winters. Summer rainfall is scant and temperatures range from 60° to 80°.

Sufficient water for all phases of operation is obtainable from Farnam Creek and its tributaries. Diesel power will be required.

HISTORY

A reference to the Tatler Group was made in the 1920 Annual Report of the Minister of Mines for British Columbia. The report was written by A. C. Langley, Resident Engineer. Mr. R. S. Gallop of Wilmer, B. C., intermittently worked on the property from the late 1890's to 1924. He dug several trenches, drove three drifts varying from 15 feet to over 500 feet in length, and sunk a 50-foot shaft.

Mr. L. Hemmelgarn obtained the Mineral Lease and staked the surrounding ground in 1966. Trenching and some sampling of the old workings was carried out by Mr. Hemmelgarn. Mr. R. E. Renshaw, Consulting Geologist, reported on the property in August 1966.

Tatler Group

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PROPERTY

The Jumbo Mines Ltd. Tatler group of claims consists of 11 Crown Grants under Mineral Lease M-15 (expiry date - August 21, 1972), as follows:

<u>Name</u>	<u>Lot Number</u>
Worlds Fair	5356
Wilderness	5357
Great Northern	5358
Iron Mask	9991
Broken Hill	9992
Imperial	9993
North Light	9994
White Bear	9987
Copper King	9988
Butler	9989
Master	9990

72 Mineral claims held by location are included in the group:

<u>Name</u>	<u>Expiry Date</u>
D - 1 & 2 <small>1297-75 May</small>	May 26, 1972 <small>82K/8W</small>
J - 1 & 2	Oct. 11, 1972
K - 1,3,4,5,7; 17-30 incl. <small>1970</small>	July 22, 1972
M - 1,3,5; 7-22 incl. <small>1975</small>	July 22, 1972
23-28 incl.	May 26, 1972
29-32 incl.	May 29, 1973
P - 1,2; 4-8; 13-21;23,25,27,29	July 22, 1972

The claims have been staked over the Crown Grants to avoid fractions. They have not been surveyed.

All claims have been properly staked and are in good standing. They were held by Jumbo Mines Ltd. (N.P.L.) on a long-term Option Agreement, until subsequently purchased outright in the latter part of 1968.

GENERAL GEOLOGY

The regional geology as compiled by J. E. Reesor is shown on Map No. 12, 1957, Geological Survey of Canada.

The area to the northwest of the Columbia River is one of unmetamorphosed, folded and faulted Paleozoic sediments which truncate along the eastern flank of the Purcell Mountains.

The eastern and central portions of the Purcells are

characterized by the weakly metamorphosed sediments of the Purcell and Windermere Systems. The strata are generally folded into a broad north-plunging geanticline with minor folds superimposed on the major structure. Normal faulting is common and some thrust faults are present on the eastern flank of the Purcells. The major fault is the Purcell Fault which strikes northwesterly and dips approximately 40° West. Many short faults trend east-west in an en echelon pattern.

Along the western portion of the Purcell Range lie the highly deformed and metamorphosed rocks of the Horse-thief Creek, Hamil and Lardeau Series. To the south lie the older rocks of the Purcell System: the Aldridge, Creston, Kitchener-Siyeh, Dutch Creek and Mt. Nelson formations.

There are a few minor, concordant, syntectonic quartz diorite bodies. The East Kootenay Batholith, the Bugaboo and Starbird Ridge stocks are the three major intrusives in the area.

GEOLOGY - DETAILED

The rock types of the Farnam Creek are those of the Toby and Mt. Nelson formations of the Lower Windermere and Upper Purcell Ages, respectively. The Toby Formation is comprised of polymictic pebble, cobble and boulder conglomerate with a matrix of quartzite, argillite and limestone. Deformation of the beds has produced an elongation of the pebbles. Sericitization is a common alteration in the unit. The conglomerate overlies, with a slight angular unconformity, the Mt. Nelson Formation on the southern portion of the property. The Mt. Nelson Formation consists of buff weathering, grey, dolomitic limestone; purple, grey, and black argillite and slate, and green and white quartzite. A dolomitic matrix forms up to 90% of the rock. Green and white quartzite occurs interbedded with the dolomitic limestone and varies in thickness from less than one inch to several feet.

To the west, a 50 to 100-foot thick bed of black argillaceous limestone occurs within interbedded quartzite and dolomite. Few of the limestone beds contain fragments of dolomite and quartzite near contact zones. A black argillaceous slate with much syngenetic pyrite lies a couple of hundred feet further west. The unit is highly contorted within a tight anticlinal fold and is heavily stained with iron oxide.

STRUCTURE

The main structure is anticlinal and covers the eastern and central portions of the property. On the western flank the strata are intensely contorted into a series of chevron and recumbent folds which strike north-westerly. Several near vertical fissures formed by the folding and associated faulting are present but, although mineralized, they are relatively narrow. Sparsely mineralized joints trending N 60°E are filled with quartz-barite gangue. The veins are short, lentic, and very irregular. Faulting is prominent, with two relatively close normal faults which are traceable southward to the Mineral King Mine four miles distant. The faults are the main source of mineralization in the Mineral King deposit. Replacement bodies tend to form wherever the mineralized veins intersect favourable horizons within the Mt. Nelson dolomite.

MINERAL DEPOSITS

Two tunnels were driven on a well-mineralized 15-inch vein in the northwest corner of the Copper King Crown Grant; 10 feet and 20 feet long, respectively. The vein strikes N 30°W and is nearly vertical.

The 1920 report of the Minister of Mines gave assays of the vein on surface as, a trace of gold and silver, and 2.3% copper across 15 inches. A sample taken across the vein in the southern tunnel, by R. E. Renshaw in 1966,

Tatler Group

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assayed 7.2 oz. silver, 3.00% copper, 0.50% Pb and 1.26% zinc over 18 inches. The workings are at the 8000 ft. elevation.

At the 7500 ft. elevation, a tunnel 350-400 feet long has been driven with the intention of crosscutting the vein at depth. Work was stopped prior to reaching the vein. The portal has caved and it was impossible to examine the workings. The above-mentioned Minister of Mines report gave assays of a sample taken across a zone in the tunnel as, a trace of gold, 13.8 oz. silver, and 3.6% copper. The adit is located on the Butler-Master C. G. boundary.

A 3 to 4-ft. wide quartz-barite vein containing some tetrahedrite and azurite occurs in the middle of the Imperial C. G. The vein strikes northwesterly, dips about 75-80°W, and has been exposed for over 100 feet in length. In the central portion of the eastern half of Imperial C.G., at about the 8000 ft. elevation, four nearly vertical fissure veins were discovered over a width of approximately 300 feet. The veins strike N 25°W. They were traced over a strike length of 50 to 75 feet, and appear to be lenses. Sulphide mineralization is sparse and azurite predominates.

In the vicinity of the northwest corner of the Broken Hill C. G., recent trenching has revealed several narrow, irregular, short veins. Vertical joint fillings trending N 60°E are sparsely mineralized with tetrahedrite and azurite. No mineralization was noted in the dolomitic limestone.

There are two trenches about 200 feet apart near the summit of the mountain on the Copper King C. G. The southernmost trench is 30 feet long and 3 feet wide, exposing a vein which dips 20°E. Azurite and fine tetrahedrite fill fractures in the quartzite. Samples across three feet of the zone assayed 2.2 oz. silver, 1.22% copper, 0.25% lead, 1.08%

zinc, 3.65 oz. silver, 2.17% copper. The northern trench is 20 feet long and 8 feet deep. Azurite, frieborgite, malachite and some galena occur in quartzite in near-vertical fractures. The quartzite beds have been exposed for approximately 6 feet, and dip 20°E and strike northwesterly. The actual thickness of the zone has yet to be determined. The mineralization appears to be caused by a bedding vein but actual evidence of this is elusive due to the adjacent surfaces being covered by loose rock fragments.

Three chip samples were cut across the beds at 5-ft. intervals over a length of 15 feet. The results were as follows:

<u>Location</u>	<u>Width</u>	<u>Ag oz/ton</u>	<u>Cu%</u>	<u>Pb%</u>	<u>Zn%</u>
East end	3'	2.80	0.85	0.63	Tr
Centre	5'	8.90	5.15	Tr	Tr
West end	6'	8.00	4.05	0.40	0.12

A grab sample from the ore dump, taken by A. G. Langley, ran 10.2 oz. silver and 4.50% copper.

Insufficient work has been done in this area to determine the continuity of the mineral occurrences.

On the Great Northern C. G., to the north, several trenches and a shaft 50 feet deep comprise workings on a mineralized zone some 700 feet long. The zone lies along the same fault which passes through the Mineral King deposit to the south. Vertical fissure veins up to one foot in width strike N 30°W, and are mineralized with frieborgite, galena, chalcopryrite, pyrite, azurite and malachite. The gangue minerals are quartz and barite. Low grade disseminated mineralization occurs in the silicified dolomitic limestone on both sides of the veins and has been traced over a width of 30 feet in the area of the 50-ft. shaft. The 4'x 4' shaft is located at 5+70' W on L 26 + 00N.

A grab sample from the ore dump assayed 57.60 oz. silver, 5.25% copper, 15.65% lead and 2.10% zinc. A chip sample across five feet adjacent to the shaft collar ran

1.70 oz. silver, 0.40% copper, 0.80% lead, and a trace of zinc. 30 feet north of the shaft, a chip sample across four feet assayed 10.45 oz. silver, 1.05% copper and 4.37% lead. A chip sample from 5+55' W on L 24 + 00N, across 3 feet, gave 8.40 oz. silver, 1.15% copper and 2.65% lead. A chip sample across 7 feet in a trench located at 5+80' W on L 23 + 50 N, ran 3.10 oz. silver, 0.90% copper, and 5.35% lead.

GEOCHEMICAL SURVEY & GEOLOGICAL MAPPING

In the course of examining the property, a grid system was established with a base line 5800 feet long trending N 35° W. Cross-lines were established at intervals of 400 feet. The grid covers portions of the Master, Butler, Wilderness, Great Northern and Worlds Fair claims, as well as some of the mineral claims to the west of M-15. The grid provided control for geochemical and geological mapping.

A total of 50 geochemical samples were taken at intervals of 400 feet along the grid lines and, where warranted, at 200 foot intervals.

GEOPHYSICAL SURVEY

During July 1969, an Electro-magnetic survey was carried out over the Tatler claims group by Geotronics Surveys of Vancouver. Robert H. Parker, B.Sc., conducted the survey under the direct supervision of T. R. Tough, Geologist, E. P. Sheppard & Associates, Ltd.

A total of 35,641 line feet were surveyed and 441 readings taken. Lines were run at 400 ft. intervals and closed in to 200' where crossovers were located on the wider spacing.

Area 1. Crossovers on 0+16 S, 0+04 S, 0+12 S, form a well defined N-S trend. These crossovers correspond roughly with a rock outcrop containing gossan zones. A

A similar trend was located on lines 0+00, 0+04S and 0+06S. It may continue southward to line 0+08S except that the curve makes a negative instead of a true crossover.

The two zones from 0+00 to 16+00S may be a continuous zone of pyrite mineralization. Permanent snow and overburden makes geologic work impossible in this area.

Area 2. (Treated as 3 zones.)

Zone 1. Lines 12S-24S, east side. Here the crossovers correspond to a sharp ridge of black shaly mud, as shown on 16S, 18S, 20S. The crossovers are ascribed to this formation.

Zone 2. Numerous small crossovers are located on lines 20S, 22S and 24S. Line 22S runs across a showing in an old trench containing azurite, malachite and a little barite.

Zone 3. Lines 0+00 to 0+08S and 0+00 to 0+20N is an area of minor trends, with no conclusive results. Some trenching has been done on the west side, with minor showings of copper mineralization in narrow quartz veins.

It is felt that the results of the EM survey justify doing more work on the property, particularly in the upper part. Geologic work is made difficult by the presence of large areas of snow and broken rock overburden.

Diamond drilling is indicated for the two zones mentioned; the zone including the old trench site, and on the east side of lines 12, 14 and 16 S of base line 1; 4S and 16S on base line 2.

DIAMOND DRILL PROGRAM

A diamond drill program was started on the Worlds Fair claim in September 1968. In spite of the lateness of the season, 5 holes were drilled for a total length of 1468 feet.

Hole No. 1. Located at L 26 + 00N, 4 + 20W; elevation 6400'. Dip -48° , bearing S 60° W. Drilled to investigate the geochemical anomaly and probe for possible extension of the vein in the shaft. The hole cut two zones of fine-grained, massive pyrite in breccia. Pyrite carried minor amounts of copper, silver and gold.

Hole No. 2. Same location as No. 1. Dip -65° , bearing S 60° W. Drilled for a length of 473 feet below No.1. Cut several bands of pyrite as in Hole 1, with similar minor copper, gold, silver content.

Hole No. 3. Located at L 24 + 00N, 4 + 20W; collar elevation 6400'. Drilled to investigate the large geochemical anomaly, and to cut possible extensions of a narrow high-grade vein exposed on surface in a shallow trench. Cut pyrite mineralization similar to that found in Holes 1 & 2. No significant amounts of copper, gold or silver were found.

Hole No. 4. Located at L 22 + 00N, 4 + 20W; collar elevation 6400'. Dip -45° , bearing S 60° W. Drilled to investigate geochemical anomaly and surface showings exposed in shallow trenches. Drilled for a length of 308 feet.

Hole No. 5. Located at L 25 + 70N, 5 + 80W; collar elevation 6400'. Dip -45° , bearing N 60° E. Drilled to intersect projected vein at bottom of shallow shaft. Cut pyritic breccia over 51 feet but failed to cut a vein and was stopped.

This constituted the program for the fall of 1968.

The five holes drilled in the above program showed

heavy pyrite mineralization only. This would indicate that the surface showings are minor occurrences and do not continue to depth. The original recommendation was based on the possibility of finding large tonnage, low-grade "Manto-type" deposits.

An attempt was made to drill the high-grade, bedded argentiferous tetrahedrite, azurite and chalcopyrite occurrence at the 8700 ft. elevation on the Copper King claim. Before the drilling got underway, adverse weather conditions forced an end to the work for the season.

EXPLORATION PROGRAM

The EM survey conducted over areas 1 and 2 depicted strong crossovers. These should constitute the initial drill targets.

It is recommended that a 2-phase program be undertaken, the 1st to drill the two most accentuated crossovers at BL 2, L 4S, and BL 2, L 16S. Detailed geological mapping is recommended on parts of the property not already mapped.

The 2nd phase, consisting of additional drilling, is to be contingent upon the results from the 1st phase.

ESTIMATED COSTS FOR EXPLORATION PROGRAM

PHASE I

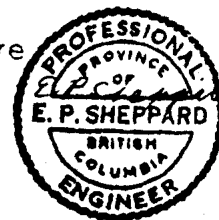
Diamond drilling, 1400' @ \$15/ft.	\$21,000
Sampling & Assaying	2,000
Geological mapping	2,500
Engineering & Supervision	3,500
Helicopter rental	3,500
Living expenses	2,500
Travel	3,000
Contingency Fund	2,000
	<hr/>
	\$40,000

PHASE 2

Diamond drilling, 2000' @ \$15/ft.	\$30,000
Sampling & Assaying	3,500
Helicopter rental	4,000
Living expenses	1,500
Travel	1,000
	<hr/>
	\$40,000

(Total: \$80,000)

It is estimated that the program outlined above should be completed within one year.



E. P. Sheppard
E. Percy Sheppard, P.Eng.
Consulting Geologist

November 19, 1971

C E R T I F I C A T E

I, E. PERCY SHEPPARD, of the City of Vancouver, in the Province of British Columbia, hereby certify THAT:

1. I am a Consulting Geologist with offices at 314-402 West Pender Street, Vancouver, B.C.;
2. I am a graduate of Dalhousie University, with a B.Sc. in Geology, and have been active in mining exploration and geophysics for over thirty years;
3. This report is based on my examination of the property on June 16 & 17, September 30 to October 3, 1968; a study of pertinent data; the geological mapping and geochemical survey conducted by Thomas R. Tough, B.Sc., Consulting Geologist, during the period September 16 to 21, 1967, under my supervision; and a study of the geophysical survey conducted by Geotronics Surveys in July 1969;
4. I have no direct or indirect interest in the property or securities of Jumbo Mines Ltd. and do not expect to receive any such interest as a result of writing this report;
5. I am a member of the Professional Engineers Association of British Columbia, the American Institute of Mining Engineers, the Society of Exploration Geophysicists, and a Fellow in the Geological Association of Canada.

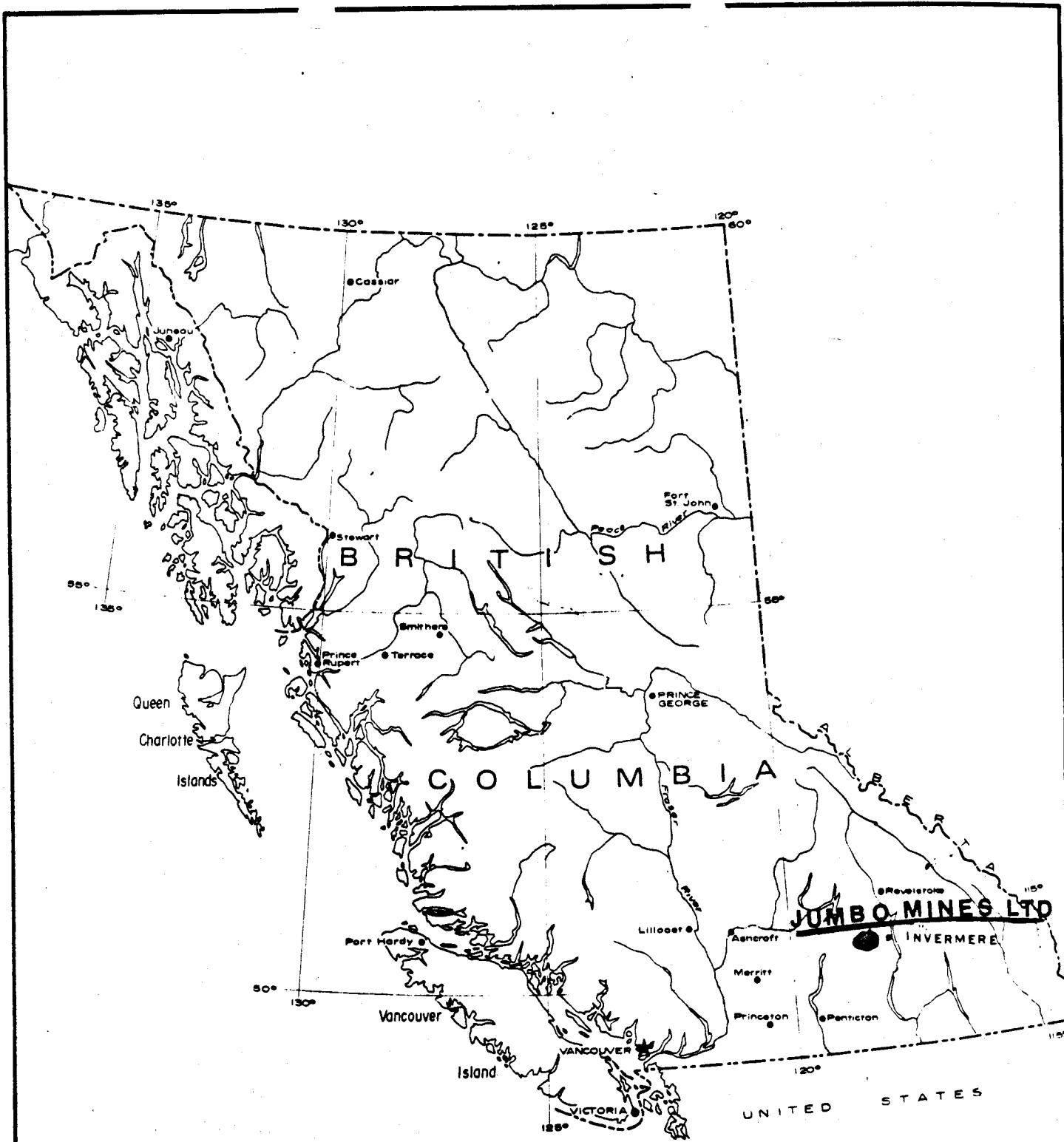
DATED AT VANCOUVER, B.C., this 19th day of November, 1971.

E. P. Sheppard
E. Percy Sheppard, P. Eng.



GEOCHEMICAL SAMPLE RESULTS

<u>SAMPLE #</u>		<u>LOCATION</u>	<u>RESULT Cu P.P.M.</u>
68551	1	BASELINE 0 + 00	50
52	2	" L4 + OON	25
53	3	" L8 + OON	15
54	4	" L12 + OON	55
55	5	" L16 + OON	150
56	6	" L20 + OON	20
57	7	" L24 + OON	20
58	8	" L28 + OON	30
59	9	" L32 + OON	55
68560	10	" L36 + OON	10
61	11	" L40 + OON	10
62	12	" L44 + OON	15
63	13	" L47 + OON	70
64	14	L30 + OON, 1 + OOE	75
65	15	L28 + OON, 4 + OOW	265
66	16	L28 + OON, 6 + OOW	70
67	17	L26 + OON, 6 + OOW	80
68	18	L24 + OON, 6 + OOW	15
69	19	L24 + OON, 4 + OOW	80
68570	20	L20 + OON, 4 + OOW	60
71	21	L20 + OON, 6 + OOW	15
72	22	L20 + OON, 8 + OOW	40
73	23	L20 + OON, 10 + OOW	45
74	24	L16 + OON, 8 + OOW	35
75	25	" 6 + OOW	10
76	26	" 4 + OOW	60
77	27	" 2 + OOW	35
80	28	L0 + 00 4 + OOW	40
81	29	" 6 + OOW	10
82	30	" 10 + OOW	35
78	31	L0 + 00 8 + OOW	50
79	32	" 12 + OOW	30
83	33	L4 + OON 10 + OOW	15
84	34	" 8 + OOW	30
85	35	" 5 + OOW	20
86	36	" 4 + OOW	40
87	37	" 2 + OOW	35
88	38	L0 + 00 2 + OOE	45
89	39	" 4 + OOE	40
68590	40	L2 + OON 4 + OOE	40
91	41	L4 + OON 4 + OOE	10
92	42	" 2 + OOE	40
93	43	L8 + OON 2 + OOE	30
94	44	" 4 + OOE	30
95	45	L12 + OON 4 + OOE	20
96	46	" 2 + OOE	45
97	47	" 4 + OOW	35
98	48	" 8 + OOW	20
99	49	L8 + OON 8 + OOW	10
68600	50	" 4 + OOW	45



JUMBO MINES LTD (NPL)
TATLER GROUP
GOLDEN MINING DIV. BC

scale 1 in = 136 mi

E. P. SHEPPARD & ASSOCIATES LTD.

CONSULTING GEOLOGISTS

314-402 WEST PENDER STREET,
VANCOUVER 3, B.C.

August 1, 1970

Mr. Tom Rolston, Pres.
Geotronics Surveys
517-602 West Hastings
Vancouver, B.C.

Dear Mr. Rolston:

At your request I have reviewed the reference noted below and examined the report prepared by your personnel, "Geophysical Report - Electromagnetic Survey" on the Tatler Claim Group, Golden M.D., submitted to Jumbo Mines Ltd. (N.P.L.)

The claims group is located at the head of Farnham Creek, a tributary of Horsethief Creek, about 40 miles west of Invermere, B.C. Access to the claims is by a road along the bank of Farnham Creek, passable by a 4-wheel drive vehicle. A direct means of reaching the property is by helicopter, available at Invermere or Golden.

Geology. The claims group is underlain by rock types of the Toby and Mt. Nelson formations of the Lower Windermere and Upper Purcell ages respectively. Toby is composed of pebble, cobble and boulder conglomerate with a matrix of quartzite, argillite and limestone. The conglomerate overlies the Mt. Nelson in the southern part of the property. This formation consists of buff weathering, grey dolomitic limestones, purple, grey and black argillite and slate, and green and white quartzite. The rocks are folded into anticlinal folds, with rocks on the western flank intensely contorted into a series of chevron and recumbent folds striking NW. Sparsely mineralized joints trending N 60°E are filled with quartz-barite gangue. The veins are short, lentic and irregular.

Two normal faults were traced southward to the Mineral King Mine 4 miles distant. The faults are the main sources of mineralization in the Mineral King deposit. Replacement bodies tend to form wherever mineralized veins intersect favourable horizons within the Mt. Nelson dolomite.

The Electro-magnetic survey was carried out over a grid pattern and 6 main areas of interest were outlined. They are designated by letters on Fig. 2 accompanying the report. The conductors exhibit a northerly trend.

Area A indicates a broad conductive zone part of which is aligned with the showing exposed in a trench. Diamond drill hole is recommended to explore this conductor.

Area B indicates lineal conductors of more than 1000 feet in length. The conductor coincides with a showing on L 10S-13E. Drill holes are recommended to explore this conductor.

Area C indicates several conductors over an area 400' x 800'. The eastern edge of this zone coincides with a ridge of black shaly mud which may well be conductive. The conductor on the western edge coincides with a steep bluff of rock showing gossan zones and copper mineralization. This zone warrants exploration by diamond drilling.

Area D shows a linear conductor 800 ft. long. There are showings nearby of barite and copper showings on 06S, 04W. A drill hole is recommended to explore this conductor.

Area E shows a conductor 600 ft. long beginning north of the adit. A series of drill holes is recommended for this conductor.

Area F contains two conductive areas. These appear to be part of the conductor running through Area D, and should be explored in conjunction with Area E.

The areas of immediate interest are A, B and C. It is known that the beds and veins dip NE, and it is felt that the conductors located here may represent downdip occurrences, which would make the whole area a target for diamond drilling.

The geophysical report and maps submitted by your Company show careful preparation and professional presentation.

E. P. Sheppard

E. Percy Sheppard, P. Eng.
Consulting Geologist

REFERENCE

FIELD REPORT, ELECTROMAGNETIC SURVEY,
Jumbo Mines Ltd, Tatler Group, July
1969, R. H. Parker.

