June 83

A S U B M I S S I O N

862420

REQUESTING PERMISSION TO MINE

WITHIN TWEEDSMUIR PARK (CLASS B)

SITUATED IN THE

OMINECA, M.D., WHITESAIL LAKE AREA, B. C.

by

The Telluride Prospecting Syndicate
170 Bloor St. W., Ste. 418, Toronto, Ontario
M5S 1T9

(A syndicate registered with the Ontario Securities Commission)

CONTENTS

PREFACE

A gold-silver deposit was identified and mineral claims staked in 1944 within the Tweedsmuir Park area of British Columbia.

The prospect received intermittent development from 1944 to about 1954. Because of the small tonnage developed and the then low gold and silver prices, the deposit was viewed as uneconomic and the lease claims were allowed to expire.

Metal economics have much improved since the earlier appraisals and it is believed that this small deposit can now be exploited profitably.

The nature and size of the deposit, the location above tree line and the condition of existing workings and roads make possible the re-activation of mining activity with minimal environmental impact and with positive economic and social benefits to the region.

The mine-site is just within the border of Tweedsmuir Park, a Class B park, but is not within the Eutsuk Nature Conservancy Area of that park, and therefore would appear qualified for oonsideration as a multi-purpose use area. Government policy, not legislation, has restricted development on the subject property to the present.

The applicant for permission to develop is The Telluride Prospecting Syndicate a small group that includes Dr. Franc R. Joubin (P.Eng.), the original discoverer of the gold-silver bearing area in 1944 and also responsible for the direction of most of the development work performed on the deposit to date. Among his colleagues in the Syndicate are one other geologist and environment specialist, Dr. R. D. Johnson (P.Geol.) and a Mining Engineer, Dennis Fairbairn (P.Eng.); all three are earlier residents of British Columbia and graduates of the University of British Columbia who have contributed importantly to successful mine development in British Columbia and elsewhere. They form the management committee of the Syndicate.

DEPOSIT, LOCATION AND ACCESS

The subject area is located in west-central British Columbia (53^{o} 21' N Lat., 127^{o} 16' W Long.) just within and at the northwesterly tip of Tweedsmuir Park and on the edge of the hydro reserve area serving Alcan for Kitimat power development. Please refer to maps 1, 2 and 3.

The deposit lies on the upper north side of Lindquist Lake. The country is rugged, rising from Lindquist Lake at an elevation of 2900 feet to high peaks exceeding 7000 feet. The area of interest lies on the southeast side of the Lindquist Peak slope. The gold-silver deposit occurs between 4200' and 5000' elevations and is above timberline. The gold-silver vein crops out intermittently in the talus-covered slope that extends to the "height of land." It was the 1943 discovery of tungsten "float" in this talus that attracted first attention to the area, leading to the later discovery of the gold-bearing area. The slopes below the mineral deposits are timbered with small spruce, hemlock and alpine fir. (See Photo #2)

Geologically, the deposit is summarized in G.S.C. Memoir 299 by S. Duffel (p.93):

> . . . . The property lies on the southeastern slope of Lindquist Peak, astride the contact between the main mass of Coast Intrusions and the metamorphosed Hazelton group rocks. A wide quartz vein outcrops in the batholithic rocks near the contact and dips gently northward towards the sedimentary and volcanic rocks of the Hazelton group. This quartz vein, though displaced by north-trending faults, may be followed westward across the property for about 2600 feet. Metallic minerals in the vein are mainly pyrite, galena, sphalerite, chalcopyrite, and telluride minerals, hessite and altaite. Gold is rarely present in the free state and only as a residual mineral in cavities and veinlets; it is most commonly intimately associated with hessite and may be present as rare disseminations in other minerals such as pyrite (Warren, 1947).

The area was at one time covered by leased mineral claims, later allowed to lapse.

Burns Lake on the Canadian National Railway is the chief rail centre and provides all normal facilities of communication and commerce, including chartered air service. Good all-weather roads lead south from Burns Lake, a distance of 45 miles, to Ootsa Lake. From Ootsa Lake it is approximately 65 miles by Alcan-flooded waterway to the southwest end of Whitesail Lake and then about 5 miles by existing tractor-jeep road to the mine-site. The water route is outside the Park area but the final 5 miles of road access is within existing Park boundaries. Please refer to maps 1, 2 and 3.

Lindquist Lake will accommodate float planes. Alcan's maximum allowable flooding (o/c 396, 16-2-60, sheet M93E/6W) would connect Lindquist Lake to the Whitesail Lake water-route, and reduce the terminal roadway from mine-site to the water route to about 2 miles (Map 3).

The geography and topography are well shown in the attached maps 2 and 3. Photographs 1 and 2 show vegetation, talus, snow areas, etc. and clearly picture the existing road access and shallow trenching of talus done during the most recent work in the area. Very little of the workings seen on Photograph 2 are related to the underground gold-silver "telluride" deposit (located in the area of the red dot). The surface trenching of talus material seen high up the slope was done by other interests while evaluating the importance of the unrelated tungsten-bearing slide rock situated at higher elevations above the gold-silver bearing vein.

Flooding by Alcan

Recurrent press reports are to the effect that further flooding of the area is under consideration. An increase in the water level of Ootsa/Whitesail Lake to the allowable 3000-foot contour would join Whitesail (2800') to Lindquist Lake (2900').

The present Park boundary is along the south side of the Ootsa/Whitesail complex. Flooding would almost totally isolate the area discussed in this submittal from the main body of Tweedsmuir Park. Map 2 shows the potentially flooded area in relationship to the mine-site. (See also Map 3)

HISTORY OF PROSPECT

The gold-silver telluride deposit was identified in 1944 by Franc R. Joubin, P.Eng., then a field geologist of Pioneer Gold Mines, while he was investigating a prospector's report, by the Harrison brothers of Burns Lake, of a tungsten occurrence in the area. After receipt of high gold and silver assays, Joubin advised the prospectors to stake additional claims to protect the gold vein deposit, which he then optioned for his employer, the Pioneer Company.

Two distinct periods of mine development ensued, both directed by Joubin with W. L. Fairbairn, P.Eng., also of the Pioneer staff serving as on-site engineer for the first program. During 1945-47 limited trenching and diamond drilling indicated reserves too small and of too low grade (gold @ $35/oz and silver at less than $1.00/oz) to encourage exploitation. The claims were returned by Pioneer to the Harrison brothers.

In the mid 1950's, Dr. Franc R. Joubin with finances provided by the Deerhorn Mines Company of Toronto, Ontario, re-optioned the property from the Harrison's and undertook the first and only underground development of the gold-silver vein to date. The work included a substantial 7000 feet of diamond-drilling, and 2000 feet of underground adit cross-cutting and drifting. The result was the development of 100,000 tons of reserves which were estimated by geologist D. H. James, P.Eng., to average 0.28 ounces of gold and 9.5 ounces of silver per ton. This tonnage was considered uneconomic in the 1950's, but it is the same ore block that is now regarded as commercial and is the object of this submittal.

Subsequently, the mineral claim leases expired, title reverted to the Crown and the Legal surveys were cancelled. All activity ceased, save for the talus-slide sampling by others (in the mid 1970's) to determine the possible importance of the tungsten present.

Dr. Joubin, Interim Manager of The Telluride Prospecting Syndicate, retains the technical records of all drilling and underground development performed under his direction on the gold-silver deposit. (Please see Appendix I for biographical sketch.)

RECENT EVENTS

The improved prices of gold and silver prompted Joubin to re-assess the prospect's merits in 1979 when he, with a few associates determined to re-evaluate the property. To that end, he had Fairbairn assemble all available data; revisit the property to examine the underground workings; collect samples of the ore to confirm grade of gold and silver and provide material for treatment-testing without the use of toxic reagents if possible. Fairbairn also had a preliminary environmental study made by an environmental specialist (See Appendix II, Letter Report by Dr. G. Poling). All these studies provided encouragement to proceed further. A study of the applicable Act and Amendments indicated a monitored mining activity could be possible in a "Class B" park by discretion of the appropriate Ministers (Environment and Mining).

Accordingly on January 23, 1980, approval was sought in writing to proceed to a land application from the Hon. R. D. McClelland (Mines) and the Hon. James R. Chabot (Parks). This first application was prepared by Dennis Fairbairn, P.Eng., then serving as the Syndicate Manager. The approval of the Ministers was not then granted.

More recent public statements by provincial officials in the past year in regard to B Class Park development, have suggested that they may now be more amenable to entertain certain such requests. On February 3, 1983, Dr. Franc Joubin and Dr. Ronald D. Johnson, for The Telluride Prospecting Syndicate, approached the British Columbia Chief Gold Commissioner (Mr. Rutherford) and the Assistant Deputy Minister (Mr. Lorne Sivertson) to re-open discussion on this subject. Joubin and Johnson were informed that policy remained unchanged but continued under review by the Government. We now consider it timely to indicate our continued interest, hence this present submittal.

FOR REGULATORY CONSIDERATION

The project contemplated requires the granting of property rights and the permission of extraction and sale of the gold-silver content from within a semi-proven deposit of approximately 100,000 tons, situated within a multi-use Park B area. Possible regulatory options include:

1) Separate and exclude the known relatively small mineralized area from within the Park limits. The rationale for this suggestion is the fact that the mineralized area forms a Park border protuberance that will, in effect, experience near-total severance from the main Park area if the allowable additional flooding of the Alcan Lake reservoir for power generation should proceed. Please see Maps 2 and 3) Flooding could come within half a mile of the Park boundary.

2) This modest mining operation if approved under the existing multi-use option allowed in such a B Class Park would, uniquely, be faced with minimal risks for the following reasons: all mine workings would be underground with consequent minimal surface disturbance; little or no new road construction is necessary, the present being almost adequate; no toxic chemicals are required for the recovery of the gold and silver from this ore; even the mining rock waste disposed of on surface would be almost indistinguishable from the talus slides above timberline where the mine portal is sited.

PROPOSAL FOR DEVELOPMENT AND OPERATION

The following "Telluride Prospecting Syndicate" proposal, first submitted January 23, 1980, suggests possible guidelines to undertakings needed from and to both the Government and Developer for the economic extraction of the deposit.

Government Undertaking

1. (a) To grant a surface and mineral lease, or other instruments, to permit mining operations; within an area of less than 500 acres; for up to a 15-year period; subject to performance qualifications.

   (b) To permit minimal road access and use of water and air access corridors to the "outside."

2. The right to remove for sale all minerals from the "lease area" viewed by us as economic.

3. The right to conduct limited additional exploration and development, related to the known showings, within the "lease area."

Developer's Undertaking

1. The Telluride Prospecting Syndicate or its operative successor, privately financed, would become registered in British Columbia should this project proceed

2. To develop and place into production, in an orderly way, the "telluride" gold-silver deposit.

3. Operations would probably be on an annual seasonal basis (June to October, both inclusive).

4. The project would provide "start-up" employment for probably 50 persons during the first year, with probably 30 "on site" during the seasonal months.

5. The annual ongoing seasonal operation would provide work for probably 20 persons under normal working conditions. A profit-sharing formula for employees is contemplated in order to retain a good work force despite the seasonal nature of the project.

6. All supplies and services would be purchased locally as available.

7. In addition to payment of all normal metal-mining taxes, an allocation of a percentage of net profits, after capital recovery, would be made towards a Tweedsmuir Park Conservation Fund.

8. We would accept, if requested, a Provincial investment corporation (B.C. Development Corp.?) as a joint venture associate for up to 25% working interest, provided this election was made at the time of land granting.

9. We would cooperate, at the mine-site and at cost only, with Regional Provincial and/or Federal agencies in regard to serving as a radio outpost or observation contact, recording meteorological data, wildlife observations, etc. during the normal work season.

10. We would secure all relevant and prudent insurance and provide financial security bonds.

It is suggested that the above outline may serve as a guide to develop a formal agreement between the Government and The Telluride Prospecting Syndicate.

CONCLUDING STATEMENT

We believe that the positive impact on the British Columbia economy of this small yet probably lucrative project in terms of employment, goods and services purchased in the district and Province, and direct and indirect tax revenues to the Provincial Government would be significant, real and socially progressive.

IN FAVOUR OF THE TELLURIDE PROSPECTING SYNDICATE

It is respectfully suggested that if production from this mineral deposit is permitted, then it would be fitting that The Telluride Prospecting Syndicate be considered as the agency for the purpose and for the following reasons:

1. The Telluride Prospecting Syndicate was organized in 1979 solely to address the particular problem of the further development of this specific property;

2. The Telluride Prospecting Syndicate includes among its members prominent and highly successful geologists, engineers and mine-makers; one a professional specialist in regard to environmental affairs.

3. The Telluride Prospecting Syndicate includes those geologists and engineers who first identified the gold-silver deposit and directed all past work in its development. These men had continuing faith and belief in the deposit as a potential mine over adverse physical, economic and social factors for four decades.

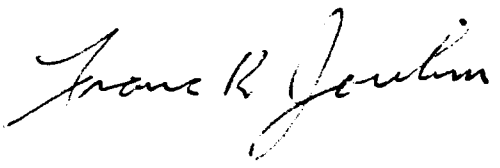
4. The Telluride Prospecting Syndicate has, at its cost (approximately $20,000) and time, responsibly concerned itself with preliminary engineering, economic and environmental aspects before approaching the Government to reconsider its policy on this specific matter.

5. The Telluride Prospecting Syndicate approach to Government has been direct and sustained since January, 1980. The approach has been professional and open in seeking a method by which the deposit could be mined either under the multi-user concept or by removal of the area from the Park.

6. The Telluride Prospecting Syndicate is prepared to exhibit professional and financial responsibility and accountability.

For these reasons, we believe that if Government permission is to be given in the foreseeable future, for production from this deposit, The Telluride Prospecting Syndicate is deserving of the opportunity to negotiate a mutually satisfactory agreement with the Government of the Province of British Columbia to that end.

Respectfully submitted,



on behalf of The Telluride Prospecting Syndicate.

APPENDIX I

BIOGRAPHICAL SKETCH

DR. FRANC R. JOUBIN, P.ENG.
Interim Manager

THE TELLURIDE PROSPECTING SYNDICATE

ALSO:

Dennis Fairbairn, P.Eng. Letter with biographical comments.
Ronald D. Johnson, P.Geol. Professional resumé.

BIOGRAPHICAL DATA

FRANCIS RENAULT JOUBIN, M.A., D.Sc., L.L.D.
(FRANC. R. JOUBIN)

Francis (Franc) Renault Joubin was born in San Francisco, California, of French parents in 1911 and came to Canada in 1913. He became a naturalized Canadian in 1929.

He received his early education in Victoria, British Columbia and despite the handicaps of being orphaned at an early age and the economic depression then existing, he put himself through the University of British Columbia where he obtained his B.A., majoring in chemistry (1936) and his M.A., majoring in geology (1943). He is a D.Sc. (Honoris Causa, U.B.C., 1958); and L.L.D. (Honoris Causa, St. Fancis Xavier, 1972); and an L.L.D. (Honoris Causa, York University, 1979). He is bilingual.

Joubin has worked in the field of geological exploration throughout Canada and in about sixty overseas countries on five continents. He has written and lectured widely on mineral exploration methods for technical journals and societies in Canada and abroad. A list of some of his papers and addresses is attached.

Joubin was mine geologist and later exploration geologist for Pioneer Gold Mines Company from 1938 to 1948 during the course of which employment he travelled extensively over western, eastern and northern Canada.

In 1948 he turned his attention to the exploration of uranium deposits. In this field, he has been eminently successful. He directed a small group of geologists, engineers and metallurgists that discovered, developed and readied for production ten uranium mines across Canada, in the Beaverlodge District of

Saskatchewan, in British Columbia, and in the Algoma District of Ontario. Joubin's group directed the discovery and development of the entire Algoma field which, with its initial twelve large mines, fulfilled production contracts totalling one billion dollars within the first six years of operation and established Canada as the then world leader in the production of uranium. Joubin directed, at the same time, the discovery and development of two successful copper mines, one in Saskatchewan and one in Ontario, as well as the discovery and development of a large iron ore deposit in Labrador, Quebec.

In 1955 Joubin terminated his consulting firm association and from 1956 to 1957 he served as an individual consultant to several clients engaged in mineral exploration on a global scale, including The Rio Tinto Company of London, England.

In 1962 Joubin withdrew from professional consulting activities for private and institutional clients and joined the United Nations to serve, in much the same capacity, the Bureau of Technical Assistance, the Expanded Programme, the Special Fund Programme and the International Atomic Energy Agency, in various foreign posts.

In 1966 he resigned from full-time service to the United Nations and since then to 1980 he has served as a Senior Consultant to the Administrator, United Nations Development Programme. He has served similarly in a part-time advisory capacity to the Canadian International Development Agency and to other foreign government agencies.

His work with the United Nations has contributed to several very successful programmes, principally the first discoveries of porphyry copper deposits of economic importance in Central America (Panama) and in northern Mexico; the identification of a large new offshore hydrocarbon basin in the Caribbean (the North Trinidad Basin); the development of important potash

deposits near the Baltic coast of Poland; and the recognition of the first economically important carbonatite structure in Central India, as well as the development of important urani-ferrous laterite deposits in Somalia, N. E. Africa.

Joubin's major current professional activity in Canada is his continuing direction of the Sogepet Company (Societe Generale des Petroles) which is the pioneer group founded by him in 1962 to commence offshore oil exploration in Canada's eastern Arctic, principally in the Hudson Bay region, N.W.T.

Joubin was awarded the Leonard gold medal by the Engineering Institute of Canada in 1955 and the Blaylock gold medal by The Canadian Institute of Mining and Metallurgy in 1957, both for "Outstanding Achievement in the Mining Industry in Canada." He was awarded an Honorary Doctorate of Science by his Alma Mater, The University of British Columbia in 1958; an Honorary Doctorate of Laws by St. Francis Xavier University, Nova Scotia in 1972, in recognition of his dedicated service to the United Nations; and an Honorary Doctorate of Laws by the School of Fine Arts, York University in 1979. In 1974 the Government of Ontario gave his name to a provincial Township in the Elliot Lake region, in recognition of his contribution to that area's development. In 1982 he was awarded the Distinguished Service Award of the Prospectors and Mine Developers Association of Canada.

Joubin has acted, as an officer or member, in many service groups, professional societies and community organizations. A partial list of such membership follows.

Dr. Joubin resides in Toronto, was married in 1938 to Mary Torvinen (deceased 1977), and has one daughter, Marion, born in 1940.

Professional Memberships

The Canadian Institute of Mining and Metallurgy
(Member since 1942; Vice-President in 1957)

National Research Council for Geological Sciences (past member)

American Institute of Mining and Metallurgical and Petroleum Engineers (Member since 1941)

Geological Association of Canada (Charter Member 1949)

Geological Society of America (Member since 1958)

Mining and Metallurgical Society of America (Member since 1955)

The Geochemical Society of America

The Engineering Institute of Canada

Society of Economic Geologists (since 1961)

Association of Professional Engineers of British Columbia
(Member since 1947)

Association of Professional Engineers of Ontario
(Member sinoe 1948; Life Member since 1982)

Mineralogical Association of Canada

Prospectors and Developers Association (past Honorary Chairman)

Community Activities

Past Chairman, Board of Trustees, Elliot Lake Improvement District
(involving the planning, building and administration of a modern community of 25,000 population developed to service the Algoma District)

Past Chairman of the Elliot Lake School Trustees

Governor and Past Chairman, Elliot Lake Centre for Continuing Education

Director, Canadian Institute for Radiation Safety

Past Governor, Ryerson Polytechnical Institute

Past Director, Canadian Mental Health Association

Past Director, Canadian Peace Research Institute

Societies and Associations

Art Gallery of Ontario (Life Member)
The Royal Canadian Institute
Overseas Institute (Past National Director)
United Nations Association
Academy of Political Science
Y. M. C. A.
Ontario Potters Association (Hon. Director)
Dr. Aaro E. Aho Foundation (Honorary Governor)
Antigonish Human Resources Foundation (Governor)
Elliot Lake Centre for Continuing Education (Charter Governor)
Ontario Crafts Council: John Mather Award for Support of Craftsmen, 1982

Clubs

The Engineers Club of Toronto (Member since 1948)
University Club of Toronto (since 1963)
Toronto Geological Discussion Club (Charter Member 1946)
The Arts and Letters Club, Toronto (since 1975)

Some Past Business Directorships

Guaranty Trust Company of Canada (Director)
Algom Uranium Mines Limited (President)
Rio Algom Mines (Director)
Bralorne Pioneer Mines Limited (President)
Scintrex Limited (Director)
Sogepet Limited (President)

DENNIS FAIRBAIRN P.Eng.

5070 Tyneside Road,
Mount Hope, Ontario.
LOR 1WO
June 21st., 1983

Dr. R. Johnson,
Calgary, Alberta.

Re: Whitesail, (Lindquist), Lake
Gold-Silver Deposit,
Omineca Mining Division.

Dear Sir:

You are probably not aware that I was born in Victoria, B.C., and was educated at Sir James Douglas public school, Victoria High School, Victoria College, and, finally, at the University of B.C., (where I received my B.A.Sc. degree in Mining Engineering). During and subsequent to that educational period, I spent almost two decades working at British Columbian mining properties, where my specialty was seeing mineral deposits, primarily gold, from the raw prospect stage through to production. Included in those gold properties were: Bralorne Gold Mines; Twin Lakes Gold Mines; Island Mountain Gold Mines; Mount Zeballos Gold Mines; Salmon Gold Mines, (Morris Summit, and, now, the Scottie Mine); Highland Silver Mines: and, Pioneer Gold Mines.

Franc Joubin was Chief Geologist at Pioneer Gold Mines, and I was Chief Engineer. It was Joubin who initially discovered gold in the Tellurides at "Whitesail Lake"; it was Joubin who turned the gold-silver deposit over to the Harrison Brothers for staking, and it was Pioneer Gold Mines who then optioned the property from the Harrisons and it was Pioneer that spent what at the time was a large sum of money on the initial, on-site, "Whitesail Lake" development; this, under the direction of Joubin.

Additionally, I played a not inconsiderable part in bringing into production the Pinchi Lake Mercury deposit, the Emerald, (Salmo, B.C.), Tungsten deposit: the Reeves McDonald lead-zinc deposit, as well as the Flakland Gypsum deposit and the Texada Island, (Blubber Bay), Limestone deposit. Finally, I worked in Australia at the Sulphide Gold and Junction Reefs Mines in N.S.W., Boulder Perseverence Gold Mine in Kalgoorlie, W.A., and the Golden Queen Gold Mine in Coolgardie, W.A..

I am therefor a British Columbian with a long-standing record of successful experience in developing British Columbian mineral deposits, who is, generally technically competent in his field,and, specifically, technically knowledgeable of this particular "Whitesail Lake" deposit.

Should your efforts be successful in obtaining title or the rights to this property, I wish you to know that I am available, capable, and very willing to consult or to assist in whatever way you may wish, to bring this specific deposit through to commercial production.

DF/df

Dennis Fairbairn

R. D. JOHNSON & ASSOCIATES LTD.

200, 409 - 8TH AVENUE S.W.
CALGARY, ALBERTA T2P 1E3

RONALD D. JOHNSON
PH.D., P.GEOL.

PHONE: 262-2860
AREA CODE 403

June, 1983

PERSONAL HISTORY: Age, 54; Married; 4 children

Public School, Calgary

B.A. Honours (Geology)'52 - University of British Columbia
(California Standard Research Fellowship, 1952-53)

M.Sc. Geology '56 - University of British Columbia

Thesis: "The Pre-Jurassic Stratigraphy, Sedimentation and Tectonism of Southern Alberta and Adjacent Areas of British Columbia and Montana."

Ph.D. Geology/Oceanography '74 - Univ. of British Columbia

Thesis: "Dispersal of Recent Sediments and Mine Tailing in a Shallow-Silled Fjord, Rupert Inlet, British Columbia."

PETROLEUM EXPERIENCE:

July'48 - Sept.'49	IMPERIAL OIL LIMITED	Geological Assistant, Roughneck	
Summers: 1950	CROW'S NEST PASS COAL CO.	Structural and stratigraphic field mapping, Fernie Basin, B. C.	
1951	" " " "	Structural and stratigraphic field mapping, Flathead Basin, B. C.	
1952	CANADIAN GULF OIL	Core Drill Supervision	
May '53 - Dec. '54	THE CALIFORNIA STANDARD CO.	Wellsite supervision and subsurface studies in Central Alberta	
Jan '55 - Apr. '56	A.W. McCOY ASSOCIATES (Consultants) Subsurface (lithofacies) studies mainly in Manitoba and Southeast Saskatchewan		
May '56 - Nov. '56	MILLER-McCULLOCH (Consultants) Surface stratigraphic and structural studies for Pan American Corp. in Jamaica, B.W.I.		

Nov. '56 - May '58	FOREST OIL CORPORATION Subsurface and general exploration studies in Central and Northern Alberta
May '58 - June '61	HUNTING SURVEY CORPORATION LTD. (Consultants) Manager Western Division: Photogeologic, surface and subsurface projects throughout Western Canada and the Arctic
June '61 - Present	R. D. JOHNSON & ASSOCIATES LTD. (Consultants) Petroleum exploration projects and management in Canada and the Caribbean Exploration Management of Vaughn Petroleum, Inc. in Western Canada Exploration Management of Sogepet Limited in Hudson Bay
Nov. '75 - Jan. '83	SEACONSULT MARINE RESEARCH LTD. (President) Interdisciplinary marine consultants in engineering and environmental projects, particularly to the petroleum industry

PUBLICATIONS:

Nelson, S.J. and R.D. Johnson, 1966. Geology of Hudson Bay Basin. Bull. Canadian Petroleum Geology, v.14, 4, pp.520-578

Nelson, S.J. and R.D. Johnson, 1968. Kaskattama No. 1 Well, Central Hudson Bay Lowland, Manitoba, Canada. Bull. Canadian Petroleum Geology, v.16, 4, pp. 431-443

Johnson, R.D. and S.J. Nelson, 1968. Sogepet-Aquitaine-Kaskattama Province No. 1 Well, Hudson Bay Lowland, Manitoba. Geological Survey Canada, Paper 68-53 (Earth Science Symposium on Hudson Bay) pp. 215-226

Johnson, R.D. and S.J. Nelson, 1969. Subsurface and Outcrop, Hudson Bay Basin. Bull. Canadian Petroleum Geology, v.17, 4, pp. 370-375

Editor: Marine Geoscience in Canada--Status Report, Geoscience Council of Canada, Geol. Surv. of Can. Rept. (in press)

* * * Authorship and/or responsibility for a wide range of private, professional reports over 25 years

MEMBERSHIPS:

Association of Professional Engineers, Geologists & Geophysicists of Alberta
Geological Association of Canada
Canadian Society of Petroleum Geologists
Canadian Research Management Association

Social:

Calgary Petroleum Club
The Glencoe Club

SPECIAL NOTE *not usually included in my resumé: I was the founder of the Mosquito Creek load gold deposit (Barkerville area) and together with A. H. Jukes became the original promoter of MOSQUITO CREEK GOLD MINING CO. LTD.*

A P P E N D I X I I

LETTER REPORT REGARDING

ENVIRONMENTAL CONSIDERATIONS

by

Dr. George W. Poling, P.Eng.

Vancouver, B.C.
January 18, 1980

Mr. Dennis Fairbairn, P.Eng.,
General Manager,
The Telluride Prospecting Syndicate,
131 Bloor Street West,
Suite 416,
Toronto, Ontario.

Dear Mr. Fairbairn: Re: Whitesail Lake, B.C. Gold-Silver Property

I havo reviewed the several maps, geological reports and general reconnaissance reports that you supplied me with on Jan. 14, 1980 concerning the subject property. This particular property is located near the western extremity of Whitesail Lake, B.C.at 53 degrees 21 minutes N. Lat. and 127 degrees 16 minutes W. Long. Since this property is located just inside the western boundary of Tweedsmuir Park, I understand that your Syndicate will have to obtain special governmental permission to develop and essentially rejuvenate a small underground mine at that site. As a result of my preliminary review, I offer my support to you in your seeking this permission. My reasons for supporting your proposal are outlined briefly below.

(1.) EXISTING ENVIRONMENTAL CONDITIONS SHOULD NOT BE DAMAGED BY THE MINE

Your proposal is to establish a small mine of 50-200 tons per day capacity. This will almost amount to a rejuvenation of the old Deer Horn Mine which closed down in 1955. Many of the old buildings and surface facilities from this previous mining operation still remain on this particular site.

This potential mine site lies at an elevation of approximately 4000-5800 feet elevation on the eastern slope of a mountain belonging to the Coast Mountain chain. This places the mine activity all above the timberline. In addition most of the mountainside is presently covered by talus. These factors would all serve to minimize the potential land disturbance at the mine site.

Reports from the several years of previous mining activity at that site indicate wild game was very scarce. Only an occasional moose, bear and wolverine were seen near the old camp. Fish were reported to be abundant in parts of Whitesail Lake. Preventing significant contamination or pollution of the streams and lakes in the immediate vicinity will probably be the main concern of the governmental agencies involved in environmental protection. Sound engineering design and responsible management of the entire proposed mining operation can ensure that pollution of the lakes and streams will not occur.

(2.) PROJECT DESCRIPTION

Your proposal to mine approximately 100,000 tons of ore should be possible with a minimum of disturbance to the existing surface environment. Locating almost all of the operations and service facilities underground is one proposal worth serious consideration. The mine itself will be an underground operation using selective techniques. This would ensure that a minimum of waste rock would need to be disposed of near the portal of an adit used for access to the mine workings. Camp and service facilities could also be accommodated underground. This would not only minimize surface disturbances but also conserve heating energy and eliminate concerns of high winter snow loads on

conventional outdoor buildings.

The mill to concentrate the gold-silver containing minerals in the ore would be a simple one-product flotation plant. This mill could either be located underground at the mine-site or outside of the Park entirely.

Your report on mineral process testwork conducted on a sample of the ore (frum Lakefield Research of Canada Ltd., dated Oct. 19, 1979) indicates that a medium grind fineness (approx. 60% -200 mesh) will liberate the valuable minerals in the ore. This will be followed by froth flotation to concentrate the valuable minerals in the ore. The froth concentrate will include almost all of the sulphide minerals contained in the ore. The gold-silver-sulphide concentrate will be transported out of the Whitesail Lake area for additional processing to recover the gold and silver values.

The mill tailing which will remain should consist primarily ef the quartz host rock. With essentially all of the sulphides removed there should be no problem of potential acid mine water generation. The coarse fraction of this mill tailing (approx. 50% of the total tailing) might be placed back in the mined-out areas as "fill" for ground support. The tailing fines would have to be stored in a tailing pond which could be located outside of Tweedsmuir Park. A detailed contour map of the area indicates that several cross-valley impoundment sites immediately west of the mine site, warrant study as potential tailing impoundment areas.

Tailing impoundments can be constructed so that no seepage nor contaminated supernatant need enter the surrounding lake system. Satisfactory disposal of the tailing outsida of Tweedsmuir Park should therefore be possible.

(3.) FEATURES OF NATIONAL INTEREST

The gold and silver that can ba produced from this small mining operation can add significantly to Canada's reserves and improve our foreign exchange position.

I understand that one of the members of your Syndicate is Mr. Franc Joubin, who originally discovered the subject gold-silver bearing quartz vein in 1944. It would seem just that if anyone is to obtain permission to mine these resources, your Syndicate should.

In conclusion, I support your attempt to secure permission to develop this Whitesail Lake property into a mine. This mining operation should be possible with a minimum of impact on the existing environment. In fact, since your Syndicate will have to commit to perform land reclamation work following closure of your proposed mine, this site might well be returned to a more natural state than presently exists.

Sincerely,

George W. Poling, P. Eng.

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