521033

LEADER - MARYSVILLE, B.C.

A. BEST
BOX 738
CHEMAINUS, B.C. VOR IKO.

TEL: 246-4805

82F9E
8084

MINERAL ACT - PROVINCE OF BRITISH COLUMBIA

Record of 2 - Post Claim

OFFICE USE

MAP NO. 82F/9E RECORD NO. 644

MINING RECEIPT NO. 133233E RECORDED AT Cranbrook B.C. 6 DAY OF June 19 79

DO NOT WRITE IN SHADED AREAS

GOLD COMMISSIONER Fort Steele MINING DIVISION

APPLICATION TO RECORD A 2-POST CLAIM LOCATED BY WITNESS POST(S)

I, Alfred Best (NAME) Box 738 Chemainus VOR 1 K0 246-4805

HOLDER OF VALID SUBSISTING F.M.C. NO. 178435 STATE THAT:

1 ON THE 5 DAY OF June 19 79 I LOCATED Leader #2 2-POST CLAIM

2 SITUATE Adjacent to Leader #4 N/E Direction 45°

(HERE DESCRIBE THE POSITION OF THE LOCATION LINE IN TERMS OF KNOWN TOPOGRAPHICAL OR SURVEYED FEATURES ON THE MAP)

Latitude 49°-36' N Longitude 116° 7' West.

3 I HAVE PLACED THE NO. 1 POST (ON THE LOCATION-LINE) (AS NEAR AS POSSIBLE TO THE LOCATION LINE) †

USE ONLY WHEN NO. 1 POST IS WITNESSED

I HAVE WRITTEN ON THE WITNESS-POST FOR THE NO.1 POST

DISTANCE TO TRUE POSITION OF NO.1 POST IS METRES, COMPASS BEARING 437602 M

4 I HAVE SECURELY FASTENED TO THE (WITNESS-POST FOR THE NO.1 POST) (NO. 1 POST), † METAL TAG NO.

EMBOSSED "INITIAL POST (NO.1)", UPON WHICH THE FOLLOWING HAS BEEN IMPRESSED -

5 NAME OF CLAIM Leader #2 DATE OF LOCATION June 5/79

LOCATOR Alfred Best BEARING TO TRUE POSITION OF NO.2 POST 45° 457.20 MTRS

DISTANCE TO NO.2 POST (FROM TRUE POSITION OF NO.1 POST) 457.20 MTRS NUMBER OF METRES TO RIGHT TO LEFT OF LOCATION LINE

6 I'VE PLACED A NO. 2 POST (ON THE LOCATION-LINE) (AS NEAR AS POSSIBLE TO THE LOCATION LINE) †

USE ONLY WHEN NO. 2 POST IS WITNESSED

I HAVE WRITTEN ON THE WITNESS POST FOR THE NO.2 POST

DISTANCE TO THE TRUE POSITION OF NO. 2 POST IS METRES, COMPASS BEARING

7 I HAVE SECURELY FASTENED TO THE (WITNESS-POST FOR THE NO.2 POST) (NO.2 POST), † METAL TAG NO.

EMBOSSED "FINAL POST (NO.2)", UPON WHICH THE FOLLOWING HAS BEEN IMPRESSED -

NAME OF CLAIM DATE OF LOCATION

LOCATOR

RECEIVED

JUN - 6 1979

GOLD COMMISSIONER
FORT STEELE MINING DIVISION
CRANBROOK, B.C.
RECORDER'S STAMP

† DELETE WORDS NOT APPLICABLE

Alfred Best
SIGNATURE

OFFICE USE

WORK NO.'S OR C/L	DATE RECORDED	MINING RECEIPT	DATE OF EXPIRY	TRANSFERS (BILLS OF SALE, ASSIGNMENTS, CONVEYANCES)

MINERAL ACT PROVINCE OF BRITISH COLUMBIA

Record of 2-Post Claim

MAP NO. 82F/9E RECORD NO. 645

MINING RECEIPT NO. 133233E RECORDED AT Cranbrook B.C. 6 DAY OF June 19 79

DO NOT WRITE IN SHADED AREAS

GOLD COMMISSIONER Fort Steele MINING DIVISION

APPLICATION TO RECORD A 2 POST CLAIM LOCATED BY WITNESS POST(S)

I, Alfred Best (INSERT) Box 733 Elemanus BC 246-4805 (ADDRESS) V0R1K0

HOLDER OF VALID SUBSISTING F.M.C. NO. 178435 STATE THAT

ON THE 5 DAY OF June 19 79 I LOCATED THE Leader #3 2 POST CLAIM

SITUATE ajacent to Leader #5 NE Direction

(HERE DESCRIBE THE WATER COURSE OR OTHER LOCALITY, SUFFICIENTLY FOR PURPOSES OF RECORD, OR SUBSTANTIALLY AS SHOWN ON THE MAP)

Located mineral Reference Victoria BC

I HAVE PLACED THE NO. 1 POST (FIRST LOCATION POST) AT A POINT ON THE LOCATION LINE Lt. 49° 36' N Lt 116° 7' W

USE ONLY WHEN NO. 2 POST IS WITNESSED

I HAVE WRITTEN ON THE WITNESS POST FOR THE NO. 1 POST

DISTANCE TO TRUE POSITION OF NO. 1 POST IS METRES COMPASS BEARING

I HAVE SECURELY FASTENED TO THE WITNESS POST FOR THE NO. 1 POST (NO. 1 POST), † METAL TAG NO. 437603 M

EMBOSSED "INITIAL POST (NO. 1)", UPON WHICH THE FOLLOWING HAS BEEN IMPRESSED:

NAME OF CLAIM Leader #3 DATE OF LOCATION June 5/79

LOCATOR Alfred Best BEARING TO TRUE POSITION OF NO. 2 POST 225°

DISTANCE TO NO. 2 POST (FROM TRUE POSITION) 457.20 MTRS NUMBER OF DEGREES TO RIGHT TO LEFT OF LOCATION LINE 457.20 MTRS

I HAVE PLACED A NO. 2 POST (ON THE LOCATION LINE) AS NEAR AS POSSIBLE TO THE LOCATION LINE. †

USE ONLY WHEN NO. 2 POST IS WITNESSED

I HAVE WRITTEN ON THE WITNESS POST FOR THE NO. 2 POST

DISTANCE TO THE TRUE POSITION OF NO. 2 POST IS METRES COMPASS BEARING

I HAVE SECURELY FASTENED TO THE WITNESS POST FOR THE NO. 2 POST (NO. 2 POST), † METAL TAG NO.

EMBOSSED "FINAL POST (NO. 2)", UPON WHICH THE FOLLOWING HAS BEEN IMPRESSED:

NAME OF CLAIM DATE OF LOCATION

LOCATOR

RECEIVED

JUN - 6 1979

GOLD COMMISSIONER
FORT STEELE MINING DIVISION
CRANBROOK, B.C.

RECORDER'S STAMP

† DELETE WORDS NOT APPLICABLE

Alfred Best
SIGNATURE

WORK NO'S OR C/L	DATE RECORDED	MINING RECEIPT	DATE OF EXPIRY	TRANSFERS (BILLS OF SALE, ASSIGNMENTS, CONVEYANCES)

MINERAL ACT - PROVINCE OF BRITISH COLUMBIA

Record of 2 - Post Claim

MAP NO. 82F/9E

RECORD NO. 646

MINING RECEIPT NO. 135233E REGISTERED Cranbrook BY 6 DAY OF June 19 79

DO NOT WRITE IN SHADED AREAS

GOLD COMMISSIONER Fort Steele MINING DIVISION

APPLICATION TO RECORD A POST CLAIM LOCATED BY WITNESS POST(S)

I, Alfred Best (NAME) Box 738 Cheemaine BC VOR1K6 246-4805 (ADDRESS)

HOLDER OF VALID SUBSISTING F.M.C. NO. 178435 STATE THAT:

ON THE 5 DAY OF June 19 79 I LOCATED THE Leader #4 POST CLAIM

SITUATE adjacent to Claim Leader #6 N/E Direction following vein

(HERE DESCRIBE THE POSITION OF THE POST BY REFERENCE TO KNOWN TOPOGRAPHICAL FEATURES OR PLACE ON MAP) (Lat 49° 36' N Long. 116° 7' west)

I HAVE PLACED THE NO. 1 POST (ON THE LOCATION-LINE) AS NEAR AS POSSIBLE TO THE LOCATION LINE

USE ONLY WHEN NO. 1 POST IS WITNESSED

I HAVE WRITTEN ON THE WITNESS-POST FOR THE NO. 1 POST

DISTANCE TO TRUE POSITION OF NO.1 POST IS _____ METRES. COMPASS BEARING _____

I HAVE SECURELY FASTENED TO THE (WITNESS-POST FOR THE NO.1 POST) (NO. 1 POST), † METAL TAG NO. 437604 M EMBOSSED "INITIAL POST (NO.1)", UPON WHICH THE FOLLOWING HAS BEEN IMPRESSED:-

NAME OF CLAIM Leader #4 DATE OF LOCATION June 5/79

LOCATOR Alfred Best BEARING TO TRUE POSITION OF NO.2 POST 225°

DISTANCE TO NO.2 POST (FROM TRUE POSITION OF NO.1 POST) 457.20 MTRS NUMBER OF METRES TO RIGHT 457.20 MTRS TO LEFT OF LOCATION LINE _____

I HAVE PLACED A NO. 2 POST (ON THE LOCATION-LINE) AS NEAR AS POSSIBLE TO THE LOCATION LINE

USE ONLY WHEN NO. 2 POST IS WITNESSED

I HAVE WRITTEN ON THE WITNESS-POST FOR THE NO.2 POST

DISTANCE TO THE TRUE POSITION OF NO. 2 POST IS _____ METRES. COMPASS BEARING _____

I HAVE SECURELY FASTENED TO THE (WITNESS-POST FOR THE NO.2 POST) (NO.2 POST), † METAL TAG NO. _____ EMBOSSED "FINAL POST (NO.2)", UPON WHICH THE FOLLOWING HAS BEEN IMPRESSED:-

NAME OF CLAIM _____ DATE OF LOCATION _____

LOCATOR _____

RECEIVED

JUN - 6 1979

GOLD COMMISSIONER
FORT STEELE MINING DIVISION
CRANBROOK, B.C.
RECORDER'S STAMP

† DELETE WORDS NOT APPLICABLE

Alfred Best
SIGNATURE

WORK NO.S OR C/L	DATE RECORDED	MINING RECEIPT	DATE OF EXPIRY	TRANSFERS (BILLS OF SALE, ASSIGNMENTS, CONVEYANCES)

MINERAL [illegible] OF [illegible] COLUMBIA

Record [illegible] - Post Claim

MAP NO. 82F/9E

RECORD NO. 647

MINING RECEIPT NO. 133253E RECORDED AT Cranbrook 6 DAY OF June 19 79

DO NOT WRITE IN SHADED AREAS

Fort Steele

MINING DIVISION

APPLICATION TO RECORD A 2 POST CLAIM LOCATED BY WITNESS POSTS

Alfred Best (NAME) Box 438 Chemainus B.C. V0R.1K0 (ADDRESS) 246 4805

HOLDER OF VALID SUBSISTING F.M.C. NO. 178435 STATE THAT

1 ON THE 5 DAY OF June 19 79 I LOCATED Leader #5 2 POST CLAIM

2 SITUATE Angus Creek at end of Road on Mineral map

(HERE DESCRIBE THE POSITION OF THE CLAIM RELATIVE TO KNOWN GEOGRAPHICAL SURVEYED OR RELIEF ON THE MAP)

at sed crossing of Angus Creek 9KM from start of Angus Creek Rd

3 I HAVE PLACED THE NO. 1 POST (ON THE LOCATION LINE) (AS NEAR AS POSSIBLE TO THE LOCATION LINE) †

Lat 49° 36'N Long 116° 7' West.

USE ONLY WHEN NO. 1 POST IS WITNESSED

4 I HAVE WRITTEN ON THE WITNESS POST FOR THE NO. 1 POST

DISTANCE TO TRUE POSITION OF NO. 1 POST IS METRES COMPASS BEARING

5 I HAVE SECURELY FASTENED TO THE WITNESS POST FOR THE NO. 1 POST (NO. 1 POST), † METAL TAG NO. 437605 M1 EMBOSSED "INITIAL POST (NO. 1)", UPON WHICH THE FOLLOWING HAS BEEN IMPRESSED:—

NAME OF CLAIM Leader #5 DATE OF LOCATION June 5/79

LOCATOR Alfred Best BEARING TO TRUE POSITION OF NO. 2 POST 225° S/W

DISTANCE TO NO. 2 POST (FROM TRUE POSITION OF NO. 1 POST) 457.20 MTRS NUMBER OF METRES TO RIGHT TO LEFT OF LOCATION LINE 457.20 M

6 I HAVE PLACED A NO. 2 POST (ON THE LOCATION LINE) (AS NEAR AS POSSIBLE TO THE LOCATION LINE) †

USE ONLY WHEN NO. 2 POST IS WITNESSED

I HAVE WRITTEN ON THE WITNESS POST FOR THE NO. 2 POST

DISTANCE TO THE TRUE POSITION OF NO. 2 POST IS METRES COMPASS BEARING

I HAVE SECURELY FASTENED TO THE WITNESS POST FOR THE NO. 2 POST (NO. 2 POST), † METAL TAG NO. EMBOSSED "FINAL POST (NO. 2)", UPON WHICH THE FOLLOWING HAS BEEN IMPRESSED:—

NAME OF CLAIM DATE OF LOCATION

LOCATOR

RECEIVED

JUN - 6 1979

GOLD COMMISSIONER
FORT STEELE MINING DIVISION
CRANBROOK, B.C.
RECORDER'S STAMP

† DELETE WORDS NOT APPLICABLE

Alfred Best
SIGNATURE

OFFICE USE ONLY

WORK NO.'S OR C/L	DATE RECORDED	MINING RECEIPT	DATE OF EXPIRY	TRANSFERS (BILLS OF SALE, ASSIGNMENTS, CONVEYANCES)

MINERAL ACT - PROVINCE OF BRITISH COLUMBIA

Record of 2 Post Claim

82F/9E

MAP NO. 92F/9E

RECORD NO. 648

MINING RECEIPT NO. 133235E RECORDED AT Cranbrook DAY 6 MONTH June YEAR 1979

DO NOT WRITE IN SHADED AREAS

GOLD COMMISSIONER

Fort Steele MINING DIVISION

APPLICATION TO RECORD A 2 POST CLAIM (LOCATED BY WITNESSES)

I, Alfred Best (NAME) Box 738 Chemainus BC (ADDRESS) 246-4805 V0R1K0

HOLDER OF VALID SUBSISTING F.M.C. NO. 178435 STATE THAT

ON THE 5 DAY OF June 1979 I LOCATED THE Leader #6 2-POST CLAIM

SITUATE Angus Creek at end of Road on mineral map at the second crossing of Angus Creek at 9KM Road Post.
(HERE DESCRIBE THE PROMINENCE OF THE CLAIM AS TO KNOWN TOPOGRAPHICAL OR SURVEYED FEATURES ON THE MAP)

I HAVE PLACED THE NO. 1 POST (ON THE LOCATION LINE) (AS NEAR AS POSSIBLE TO THE LOCATION LINE)

(USE ONLY WHEN NO.1 POST IS WITNESSED) Lat 49° 36' N Long. 116 4' West.

I HAVE WRITTEN ON THE WITNESS POST FOR THE NO.1 POST

DISTANCE TO TRUE POSITION OF NO.1 POST IS METRES COMPASS BEARING 457 606

I HAVE SECURELY FASTENED TO THE (WITNESS POST FOR THE NO.1 POST) (NO.1 POST) METAL TAG NO. 457606 M EMBOSSED "INITIAL POST (NO.1)", UPON WHICH THE FOLLOWING HAS BEEN IMPRESSED:-

NAME OF CLAIM Leader #6 DATE OF LOCATION June 5 1979

LOCATOR Alfred Best BEARING TO TRUE POSITION OF NO.2 POST 225° S/W

DISTANCE TO NO.2 POST (FROM TRUE POSITION OF NO.1 POST) 457.20 MTRS NUMBER OF METRES TO RIGHT 457.20 MTRS TO LEFT OF LOCATION LINE

I HAVE PLACED A NO.2 POST (ON THE LOCATION LINE) (AS NEAR AS POSSIBLE TO THE LOCATION LINE) †

(USE ONLY WHEN NO.2 POST IS WITNESSED)

I HAVE WRITTEN ON THE WITNESS POST FOR THE NO.2 POST

DISTANCE TO THE TRUE POSITION OF NO. 2 POST IS METRES COMPASS BEARING

I HAVE SECURELY FASTENED TO THE (WITNESS POST FOR THE NO.2 POST) (NO.2 POST) † METAL TAG NO. EMBOSSED "FINAL POST (NO.2)", UPON WHICH THE FOLLOWING HAS BEEN IMPRESSED:-

NAME OF CLAIM DATE OF LOCATION

LOCATOR

RECEIVED

JUN - 6 1979

GOLD COMMISSIONER
FORT STEELE MINING DIVISION
CRANBROOK, B.C.
RECORDER'S STAMP

† DELETE WORDS NOT APPLICABLE

Alfred Best
SIGNATURE

OFFICE USE ONLY

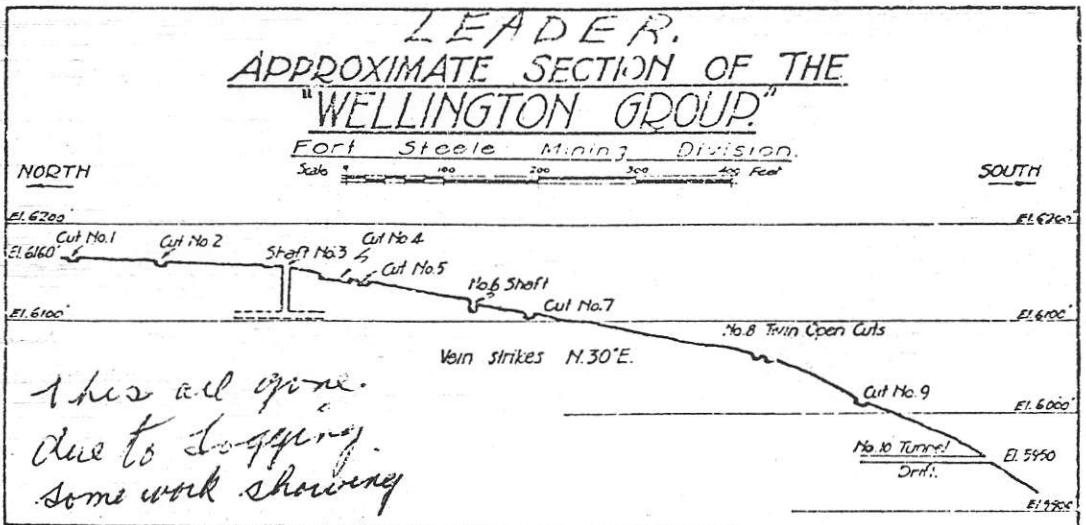
WORK NOS OR C/L	DATE RECORDED	MINING RECEIPT	DATE OF EXPIRY	TRANSFERS (BILLS OF SALE, ASSIGNMENTS, CONVEYANCES)

Minister of Mines A. Report 1932

A M Richmond Engineer Nelson

of the sulphides, but in general the deposits are not affected to any appreciable extent by oxidation.

Values are apparently entirely confined to the quartz pay-streak which favours the hanging-wall side of the vein. On the foot-wall side of this pay-streak there is usually present a width of several feet of rusty, schisted, and crushed material. This was sampled at several points with negative results. The superficial workings shown on the accompanying illustration cover a length of about 1,000 feet of outcrop ranging from 5,950 to 6,160 feet in elevation (aneroid readings). Southerly from the tunnel, and beyond the section reproduced, three open-cuts and a large surface excavation trace the continuity of the vein for an additional length of about 500 feet over a vertical range approximating 200 feet.



ASSAYS

LOCATION	Width-in	Gold-oz	Silver-oz	Lead-%	Copper %	REMARKS.
No. 2 Working	10	0.08	0.5	1.5	No Assay	South side of Cut
No. 2 "	15	0.02	0.6	4.2	" "	North " " "
No. 3 "	15	0.40	2.5	9.0	" "	
No. 4 "	15	0.42	4.0	15.0	" "	
No. 7 "	24	0.24	2.2	12.0	" "	
No. 8 "	22	0.24	1.2	2.5	" "	
No 9 "	18	0.30	0.3	8.0	" "	
No. 10 "	40	0.06	0.6	3.0	" "	Includes barren vein filling
No 10 "	Grab	0.20	2.6	14.0	" "	From ore pile at Tunnel
450' S. of Tunnel	Selected	0.20	57.5	33.0	0.8	Beyond limits of sketch.

With report by D.T.O'Grady, 1932. Resident Mining Engineer, Nelson, B.C.

D.C. Bureau of Mines. A.M.R.

Work done by the owner since the 1915 Annual Report by J. D. Galloway includes the drift-tunnel, 127 feet long, and additional surface excavations. The samples taken by the writer and those quoted in the 1915 Annual Report make it evident that the vein is well mineralized in the 700-foot stretch between the shaft and the drift. The sample taken by the writer in the face of the last-mentioned working included some waste which reduced the assay, but the 22-inch pay-streak at this point looks much the same as at other points to the north, where samples show fair values. The shaft-workings were not accessible at the time of the writer's visit. Other concentrations of mineralization no doubt occur on the claims.

Summarizing conditions, the vein is very persistent in lateral extent and general conditions are favourable for mining. Systematic prospecting of the deposits, laterally and in depth, might well disclose larger widths of similar mineralization on the property. The ore-minerals could

Leader Geology.

Legend

MESOZOIC OR (?) CENOZOIC

9 Granite, granodiorite

PALAEOZOIC

Cambrian

Lower Cambrian

8 Eager formation: dark argillite, grey argillite; brown weathering limy sandstone and sandy limestone.

7 Cranbrook formation: siliceous quartzite, grit, and conglomerate.

PROTEROZOIC

Purcell group

Upper Purcell

6 Dutch Creek formation: laminated black argillite, green argillite; quartzite.

Lower Purcell

5 Kitchener-Siyeh formation: varicolored dolomitic argillites, buff weathering dolomite.

4 Creston formation: green and grey weathering, green, gray, and purplish, argillaceous quartzite, quartzite, and argillite.

3 Aldridge formation

Upper Division: rusty weathering, massive, grey, laminated quartzite, and argillaceous quartzite.

2 Middle Division: Grey weathering, massive, grey quartzite and argillaceous quartzite with argillite partings; brown weathering, argillaceous quartzite and argillite.

1 Lower Division: rusty weathering, grey quartzite, argillaceous quartzite, and argillite; grey weathering massive quartzite; mica schist.

Leader

Geological Report
PROSPECT
Marysville District
British Columbia, Canada

by

Virgil R. Chamberlain September, 1963.

Introduction

. Prospect lies on the western slope of the rugged Purcell Mountains in southeastern British Columbia. It is located on the east side of Angus Creek which flows northerly into the St. Mary's River a few miles below St. Mary Lake. The Prospect is about 15 miles southeast of Kimberley, 24 miles slightly north of west from Cranbrook, and about 12 miles slightly north of west of Marysville. It was formerly known as the Leader or Wellington group of claims.

Numerous prospects occur in this general area, but the only producing mine of any consequence in the area is Consolidated Smelting and Refining Company's Sullivan mine, northeast of Kimberley. The principle ore from this mine is argentiferous galena. ? The closest smelter is C.S. & R's smelter at Trail, and there are currently no custom mills now active in this district.

The writer first examined this prospect in the Fall of 1962 in the course of examining other prospects here and in the Kootenai Lake district to the west. At this time the adit was examined and mapped and a general reconnaissance made of the various pits and workings. Tungsten fluorescence was noted along part of the back of the adit as well as in the face. Lead and copper minerals were also seen to occur in and along broken quartz veins. Values obtained from chip sampling the mineralized veins (and included gangue) at the face of this adit showed the vein to carry moderate tungsten and copper values, but to be surprisingly high in gold. The 6" footwall part of the vein carried slightly more than an ounce of gold per ton, the center 0.4 ft of silicified gangue carried only a trace and the 0.5 ft. of the hanging wall carried only 0.04 of an ounce of gold per ton. The weighted average of these samples would indicate a vein 1.4 ft. wide carrying 0.40 ounces of gold per ton or $14.00 ore. As reconnaissance had shown this vein to be continuous for a distance of at least 2,000 feet, additional work was warranted on this prospect.

During the summer of 1963 trails into the prospect were improved and the writer and Mr. Frank Brown of Royal Canadian Ventures made another trip to this prospect to map and sample additional pits and trenches on the various claims. This report is a summation of this and previous work done in the area with recommendations for future operations.

Tungsten is wolframite or a Lead Tungstate - "Stolzite"

Method

This prospect lies along the ~~west~~ east side of Angus Creek. A moderately good forest road leads up Angus Creek. This is a former logging road which is now partially closed by fallen timber. It originally extended up to the claim cabin site on Angus Creek but is now passable for a distance of only 8 miles from St. Mary Lake. A good pack trail can then be followed to the adit or to the upper cabin above the workings. The trail shown on the surface geology map leads to the upper cabin (See Figure 2). The main road is not shown on this map, but follows up the east side of Angus Creek, and crosses to the west side above the mine.
(good road onto Claims now)

A tape and Brunton compass survey was made of the Adit and trenches above the adit. The vein was chip sampled where possible over the entire width of mineralized area. Where applicable a channel cut was made across the mineralized zone. These samples included apparent waste as well as possible ore. The workings mapped and examined cover approximately 980 feet horizontally or well over 1000 feet along the vein exposure. The surface exposure of the vein and vein material is often obscured by surface soil and mantle. However, there have been numerous small pits and trenches dug along its outcrop to expose it for visual examination. Numerous small pits exposing the vein from the adit down to the lower cabin have been dug, but were not mapped at this time. The surface mantle and soil are heavier in this area and the vein is not as well exposed. For this report it was thought best to examine the workings that might prove ore above the present adit level.

Geology

Stratigraphy

Strata cropping out in this area belongs to the Proterozoic Purcell group. The complete group is not present in our area of interest but is exposed in the general St. Mary Lake region. The surface geology is given in the Geological Survey of Canada's Preliminary Map 52-15A covering St. Mary Lake. Figure 2 is a blown up portion of this map on the scale of 1/20,000 (1 inch on the map equals 20,000 inches on the ground). The strata of the Purcell group are primarily varicolored dolomitic argillites, buff weathering dolomite, green and grey weathering argillaceous quartzite, quartzite, and rusty weathering grey quartzite plus grey weathering massive quartzite and mica schist.

Proterozoic dioritic dikes and sills cut this strata in the northern part of Figure 2. Mesozoic or Cenozoic granites and granodiorites have invaded this area and partially domed and altered the attitude of the invaded strata.

Permissable to drive onto claims by standard auto now good Forestry Road. See map.

Structure

Regionally the St. Mary Lake area is on the crest and western flank of a regional anticline that strikes and plunges to the north. Our area of interest lies south of the St. Mary fault. Here the region is underlain by strata that dip to the west and are either synclinal or are partially repeated by steep northerly striking faults.

Two faults are shown on the Surface Geology map (Figure 2). The Sawmill fault with a north northeast strike lies to the northwest and north of the mine workings. A possible extension of the east-west St. Mary fault lies farther to the north. A small stock of granodiorite crops out immediately north of the Unus adit. This outcrop lies approximately 100 feet to the north with the initial corner post of the Unus "A" and the final corner post Unus "D" on or near the contact between the granodiorite and the Kitchener-Slyeh formation. At this point the latter formation appears to be predominantly a greenish gray, dolomitic argillite.

Surface dips of the vein in the trenches as well as underground appears to be to the east. The vein in the shaft dips to the east at the surface, changes to vertical near the bottom of the 50 foot shaft and at the bottom may even dip steeply to the west. A slight arcuate trend is noted to the strike of the vein and to its trace at surface. It is possible that this trend parallels the granodiorite-argillite contact. It also could be possible that the vein bends into the Sawmill fault and the change in strike is due to drag along the fault plane

Mineralization

Mineralization in the St. Mary Lake area falls into three categories:

I. Quartz-calcite veins and lenses in Proterozoic diorite sills.
   Associated minerals — Chalcopyrite, pyrite, pyrrhotite, and less abundantly, galena and sphalerite.
   Valuable minerals - copper

II Fillings and replacements along faults and shear zones and not confined to one rock type or formation
   Associated Minerals — Galena, sphalerite, pyrite, pyrrhotite, chalcopyrite, arsenopyrite, and hematite.
   Valuable minerals - Lead, zinc, silver and gold with some tungsten. ← Leader group

III Lenticular replacement deposits
   Associated minerals — Pyrite, galena, tetrahedrite, and minor chalcopyrite
   Valuable minerals - copper

granodiorite greenish grey.
dolomitic argillite.

The most promising mineral deposits of the St. Mary Lake area belong in Group II. The Stella claims belong in this group. Here shearing associated with the Sawmill Fault contains quartz mineralized by galena, pyrite, chalcopyrite, with some good gold and silver values. Sphalerite, scheelite, hematite, and wolfrite (lead tungstate) have also been reported.

The vein in the mapped cuts, pits, and adit is primarily mineralized quartz 6" to 30" wide. Quartz veins often occur along both a well defined foot as well as hanging wall. Silicified and often chloritized gangue separate the foot and hanging wall veins. This gangue is often laced with fine quartz veins imparting a somewhat brecciated appearance to the overall vein structure.

No petrographic study was made of any ore specimen, but it appears from visual study that there are two ages of quartz mineralization. It would further appear the order of recognizable mineralization was quartz, pyrite, chalcopyrite, scheelite (?), galena, and quartz. No free gold was noted and it is possible that it is combined with the pyrite. The silver values are probably contained with the galena.

No tests have been run to determine the milling properties of this type of ore. From its general appearance it would appear to be readily adaptable to a flotation process. A preliminary concentration could be made by grinding and jigging.

Ore Reserves

While more sampling and more work will be needed to accurately forecast reserve figures preliminary work indicates that some ore has already been developed. A plan view of the geology of the mapped cuts as well as the adit is given on the map in the back of the report. All of the geology of the workings together with the assay values of the ore sampled are given on the map titled Geology of the Workings. A longitudinal section in the plane of the vein was made by direct projection and then rotated this section to make this view more readable. Both the vertical and horizontal scales of all maps are 40 feet to the inch.

The second map in the back of the report again shows a plan view of the workings under which are shown profile sections through the vein and a plan for proposed diamond drill holes.

Samples used in calculations of the ore grades were limited, but should be fairly representative. The shaft on the property is open but the ladders are old and unsafe to use without a safety rope. all filled from logging —

Leader = 1000 oz gold
5000 oz silver
+ Lead zinc copper
Stolzite. Today worth
approx $150000

It had been reported that "rock" running a half-ounce per ton had been mined in this shaft. A grab sample of the ore dump ran 0.42 ounces per ton. All values used in computing grades are weighted averages. Similar methods were used in calculating tonnages. From this data the following ore reserve was computed.

Type Reserve	Tons	Oz Au	Oz Ag	%Pb	Dollar Value / Ton
Proven ore	0				
Probable ore	730	0.41	2.51	2.85	$22.446 /Ton
Possible ore	1720	0.41	2.62	4.09	$24.997 /Ton

1963

This would give the probable ore a gross value of $16,400.15 and the possible ore a gross value of $42,994.84.

The geology of the workings indicate the veins appear to hold their width and possibly widen slightly with depth. Assays appear to indicate an increase in gold values with depth. As the gold values appear to be unassociated with the silver values it is believed that the gold content is also independent of the lead content. The lead-silver ratio also is not constant indicating there is probably some argentiferous galena as well as non-argentiferous galena present in the mineralized zone.

While this reserve is considerable for a prospect of this type more exploration work is needed before this prospect could be considered a workable mine.

EXPLORATION PROGRAM

Leader

The ~~Stolz~~ vein is exposed for some thousand feet along the strike above the adit workings. The longitudinal section shows the position of potential ore blocks in respect to the adit level. Block 1 is roughly 650 feet ahead and 200 feet above the face of the adit level. All potential ore blocks with the exception of Blocks 4C and 4D are above adit level. If this adit were extended or driven ahead in the vein it would be developing ore all the way. Such ore could then be mined from the adit and this adit converted to a haulage level. Raises could be driven from the adit level to the surface to block out the ore and establish good ventilation.

Before going to the expense of moving in mining equipment into this prospect a diamond drilling program should be instituted to prove the presence and grade of ore ahead of the proposed adit drift and to establish the presence of mineral values with depth. It is proposed that a minimum of six initial holes be drilled prior to the beginning of any mining program.

"Values seem to increase with depth"

60

The position, strike, and angle of inclination of the proposed diamond drill holes are shown on the program map in the back of this report. This program involves about 1100 feet of diamond drilling with the longest hole contemplated being 220 feet. A similar program could be used in exploring the vein between Angus Creek and the adit. This would prove an additional 1000 feet of vein length and approximately another 250 feet of "looks" or vein depth. If ore could be proved in this future block a second adit could be driven from near Angus Creek in vein material northeastward to develop this Angus Creek block and the lower levels of Blocks 1 through 4.

There appears to be enough water for drilling coming from a small spring near the upper cabin approximately 1500 feet northeast of the surface workings of Block 1. This spring appears to run all year. In the Spring and early Summer nearly all small gulches carry water, and of course, Angus Creek flows a large supply of water the year around. There is a suitable timber supply for all mining purposes on all claims.

Conclusions

Leader

The ~~three~~ Prospect at this stage of development contains 730 tons of probable ore with a gross value of $16,400 and 1720 tons of possible ore with a gross value of $42,995. Only minor development has been done on this group of claims. The upper 1000 feet of vein exposure has received the most attention. The vein can be followed from Angus Creek to the adit, but only minor exploration has been done in this area. As far as has been determined there has been little or no attempt made to follow this vein to the southwest although the Sawmill fault can again be mapped after an approximate half mile gap. Timber and surface mantle in this gap area makes prospecting difficult, but it is possible that a vein extension could be found in this direction.

1962

Additional ore could be developed by diamond drilling. Drilling should first be done to explore vein extensions ahead of the present adit. This could result in considerable ore being developed above the adit and above a potential haulage level. The second stage of exploration would be to develop ore by drilling between the vein trace near Angus Creek and the adit portal.

Once ore bodies are established ahead of the present adit face, drifting should be started to prove up additional ore reserves. Raises could also be driven both to block out ore, and to establish good ventilation for the workings.

2370 tons

$1565000

1100 ft of drilling would prove up 20 times this value.

6 holes @ 200 ft.

could go $50M

plus copper lead zinc Tungsten

Should ore be found by drilling the Angus Creek Adit block, another adit drift should be commenced to further explore the vein and block out additional ore.

It would be advisable to prospect for the southwestern extension to this vein during the next Spring and Summer. It is probable that any vein occurring in this area will be covered by thick surface mantle and soils.

The ~~Lime~~ prospect is promising, but will require additional exploration work to make it a workable mine. It is not often that one finds a vein that can be traced for 2,000 feet and contain relatively good gold assays. More sampling and more assaying should be done, but from the data gathered to date it would appear that this prospect has a good chance of becoming a workable mine. The present lack of transportation and mills can be overcome if sufficient ore reserves can be developed.

Respectfully submitted,

Virgil R. Chamberlain

Virgil R. Chamberlain
P. Eng. and P. Geol.

71

A paved road now to St Mary's Lake
A fair road exists out past Meekum to
Kootenay Bay Jerry to Nelson. Thus cutting
mileage to Trail if needed. There are
custom mills operating also in the Slocan.
Power is available also at St Marys Lake.
Crest Brook are logging up Angus Creek so
The Road to the Claims is in Top condition *
(see Air photo)

NORTHWEST GEO-RESEARCH & ENGINEERING, LTD.
Great Falls Montana
+
Calgary Alta

Wellington Group (1, pages 135-136; 5, page 113). The Wellington group of four claims is owned by James Angus of Marysville. The property is located on the eastern slopes of the valley of Angus (East Fork of Hellroaring) Creek several hundred feet above the creek. The cabin, near the workings, is accessible by trail 6¼ miles long (paced) from the end of a road about a mile from St. Mary Lake and stands at an elevation of about 2,575 feet (barometric) above the lake or 5,700 feet above sea-level. G.S.C. CAIRNES 1932 REPORT

Cairnes Report G.L.C.

The workings consist of a dozen or more open-cuts, a shaft 55 feet deep with short drifts from the bottom, and an adit 127 feet long. The latter is driven northerly at about the elevation of the cabin and is located 850 feet south of, and 135 feet below, the most northerly and highest workings and 650 feet south of the shaft.

The workings investigate the continuity of a mineralized quartz vein, or veins, which follow a strong fault-fissure. The fissure has a curving strike varying from nearly north and south at the more northerly workings to about north 30 or 35 degrees east at the adit. Its dip varies in the same direction and in the same distance from about 65 to 80 degrees east. South of the adit the hill-side drops away more steeply and the fissure and contained vein are less well exposed and less certainly continuous to the most southerly and lowest workings several hundred feet away. North of the adit, however, the fissure is, apparently, occupied by a continuous quartz vein varying from about 1 foot to 2 feet wide and averaging about 1½ feet. WELLINGTON — LEADER

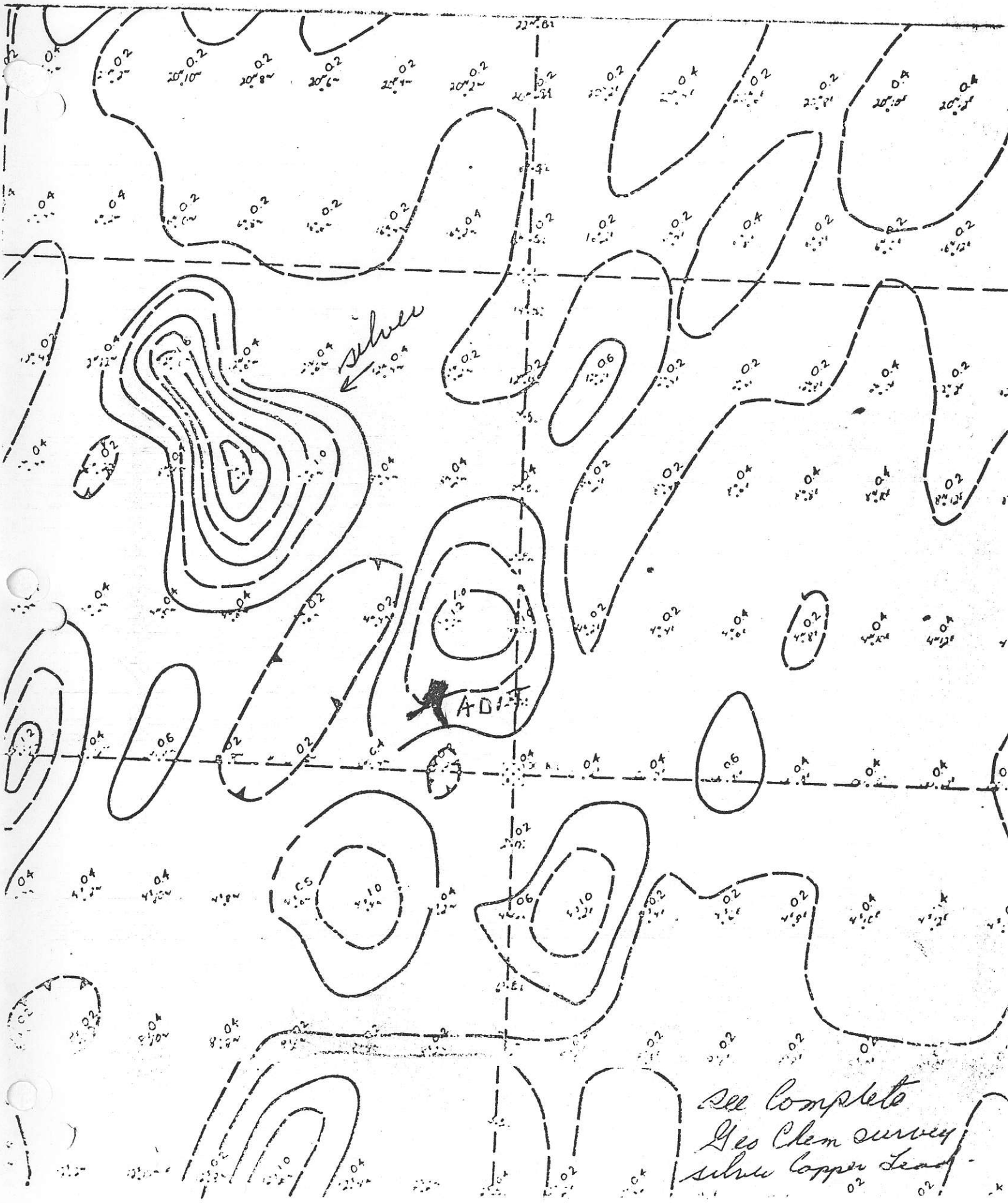
O. Grady has one also Leech and Rees G.L.C.

This vein is, as exposed, composed of white, banded quartz conspicuously mineralized with cube galena, pyrite, and, more locally, chalcopyrite. At the surface these minerals are partly oxidized to iron oxides and copper and lead carbonates. Some manganese stains were also observed. Numerous samples of this vein matter (1, page 136; 5, page 113; and 12) have indicated values in gold ranging from 0·02 ounce to 4·80 ounces a ton; silver, from 0·30 ounce to 57·5 ounces; lead, from 1·5 to 69·6 per cent; and copper, from 0·8 to 10 per cent. Average values probably do not exceed $8 in gold and would be about 5 per cent lead. At the time visited the shaft was inaccessible, but Schofield reports that at the bottom the vein "is somewhat broken, but still in evidence". At the face of the adit the vein is about 22 inches wide. Gold values are stated to improve with increase in chalcopyrite. SCHOFIELD G.S.C 1915

The hanging-wall of the vein is marked in places by as much as a foot of gouge and above this is a width of several feet of a sheared, brownish-weathering, quartz-carbonate rock, probably a sediment. O'Grady reports (12) that this rock, as sampled, carries no values. The foot-wall rocks are, on the whole, more massive, grey to greenish grey, quartzitic sediments. In places they are banded and this banding is about parallel with the strike of the vein-fissure. Both dip and strike of the latter are, however, principally controlled by the schistosity developed in the enclosing rocks. In general these rocks are so altered by deformation, thermal metamorphism, and weathering processes that their identity is not easily established. Their metamorphism is attributed to a stock-shaped body of granite outcropping 200 feet or more below the vein exposures. Probably, also, their deformation, resulting in the development of the fault-fissure now occupied by vein-matter, is connected with the period of granitic intrusion. Presumably, too, the vein mineralization may be a related phenomenon, though this is by no means certain.

The encouraging average values and proved, lateral persistence of the vein matter on the Wellington property are offset, to some extent, by the narrowness of the deposit. On the other hand, the strength of the fissuring along which the vein deposits have formed supports the view that the vein matter should persist at depth. Whether it will widen out appreciably in this direction or contain better average values cannot be foretold from developments to date, but at least the chances are equally as good that it may as that it may not. In view of such possibilities and in view of the character of its mineralization the property would appear to be well worthy of further exploration.

Good values experience south presence


silver
ADIT
See Complete
Geo Chem survey
silver copper Lead

Marysville District, B.C.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 661 MAP 1

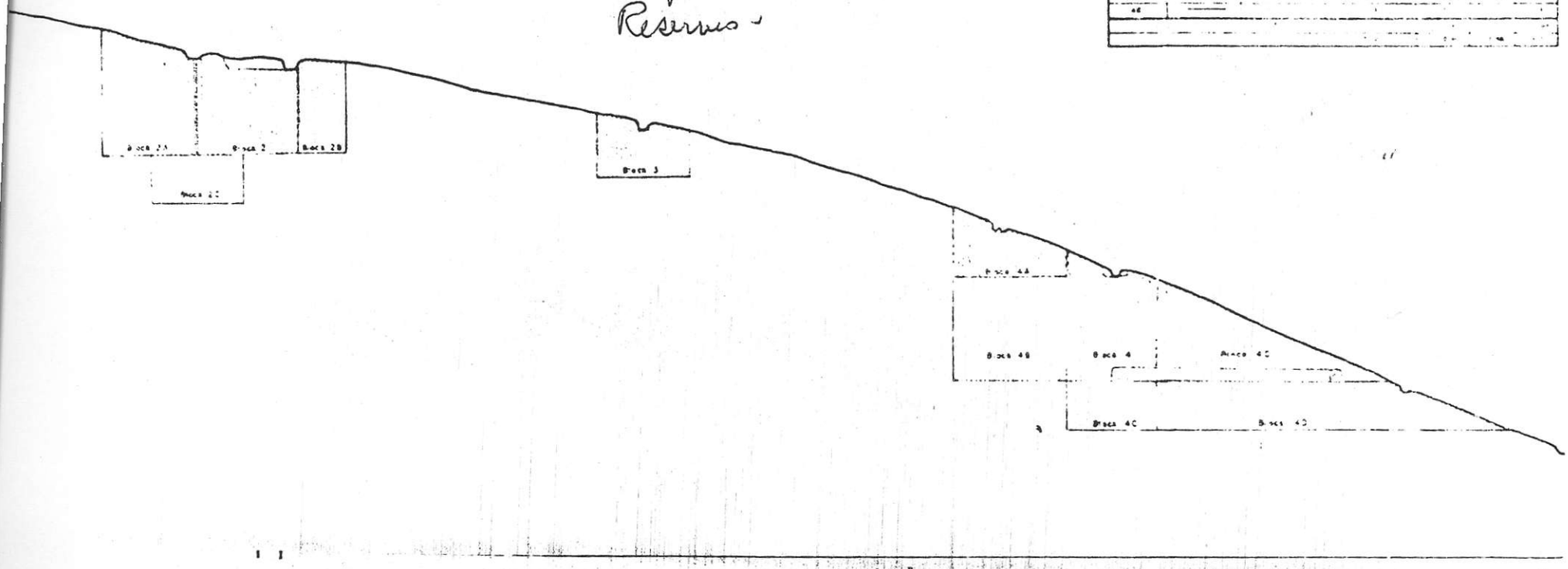
LONGITUDINAL SECTION

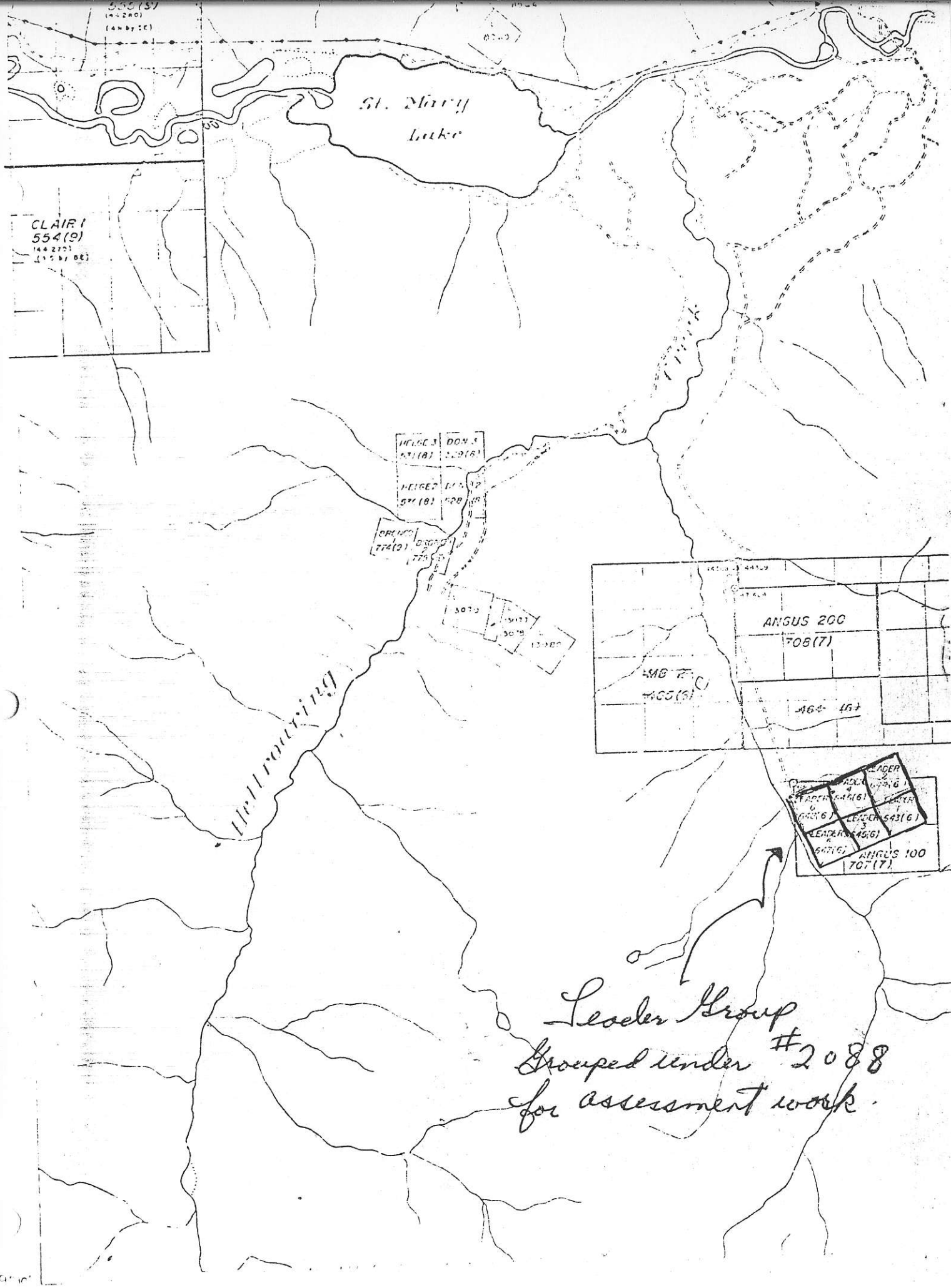
Plane of Vein

Scale 1" = 40'

Leader / Marpwell - B.C.
Possible - probable ore
Reserves -

BLOCK NO	PROPERTY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2B	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4B	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4C	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4D	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4E	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]




St. Mary
Lake
CLAIR 1
554(9)
ANGUS 200
708(7)
ANGUS 100
707(7)
Leader Group
Grouped under #2088
for assessment work.

MARK CREEK TIE RESERVE

BLOCK F

KIMBERLEY

PYRAMID MTN.

NORTH STAR HILL

MATTHEW CREEK TIE RESERVE

BK F

BOOTLEG 8558' MTN.

To Kimberley 6 miles

To Cranbrook 17 miles

Meachen

St. Mary Lake

MT. EVANS

Hellroaring

Pudding

"LEADER VEIN"

49°30'

116°00'

15'

REFERENCE

Roads: Hard Surface
Loose Surface, Main
Loose Surface, Secondary
Rough (may be private, closed or unusable)
Trail
Highway Route Number
Railway
Power Line (Main)
Lighthouse
Survey Control Station (Main)
Elevation in feet above mean sea-level
Contours (Interval 200 feet)
Swamp or Marsh
Intermittent Lake or Seasonal Inundation

Divided | More than 2 Lanes | 2 Lanes

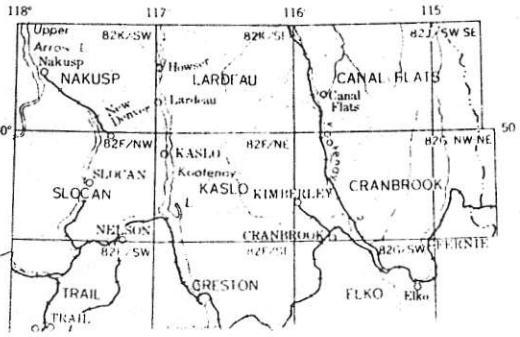
Station | Flag Stop

With Lighthouse

8315'

Depression

"Road to Leader Group." "FORT STEELE" M.D.B.C



LEAD

BRITISH COLUMBIA MINING RECEIPT

Mining Division FORT STEELE

Issued at CRANBROOK № [illegible] E

Date April 28, 1980

RECEIVED from ALFRED BEST

the sum of FIVE Dollars,

in payment of GROUP NOTICE ON THE LEADER 1-6 M.C.

Signature

$ 5.00 Office GOLD COMMISSIONER

RECEIVED
MR # 133600
APR 29 1980 5.00
GOLD COMMISSIONER
FORT STEELE MINING DIVISION
CRANBROOK, B.C.

Lat. 49° 38'
Long. 116° 7'
Map No. 82F/9E
According to the provisions of

OWNER*	Free Miner Certificate No.
Best	19293
Best	19293

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES BRANCH-TITLES DIVISION

RECEIVED
mr # 133600
APR 29 1980
GOLD COMMISSIONER
FORT STEELE MINING DIVISION
CRANBROOK, B.C.

MINERAL ACT

FORM I

NOTICE TO GROUP

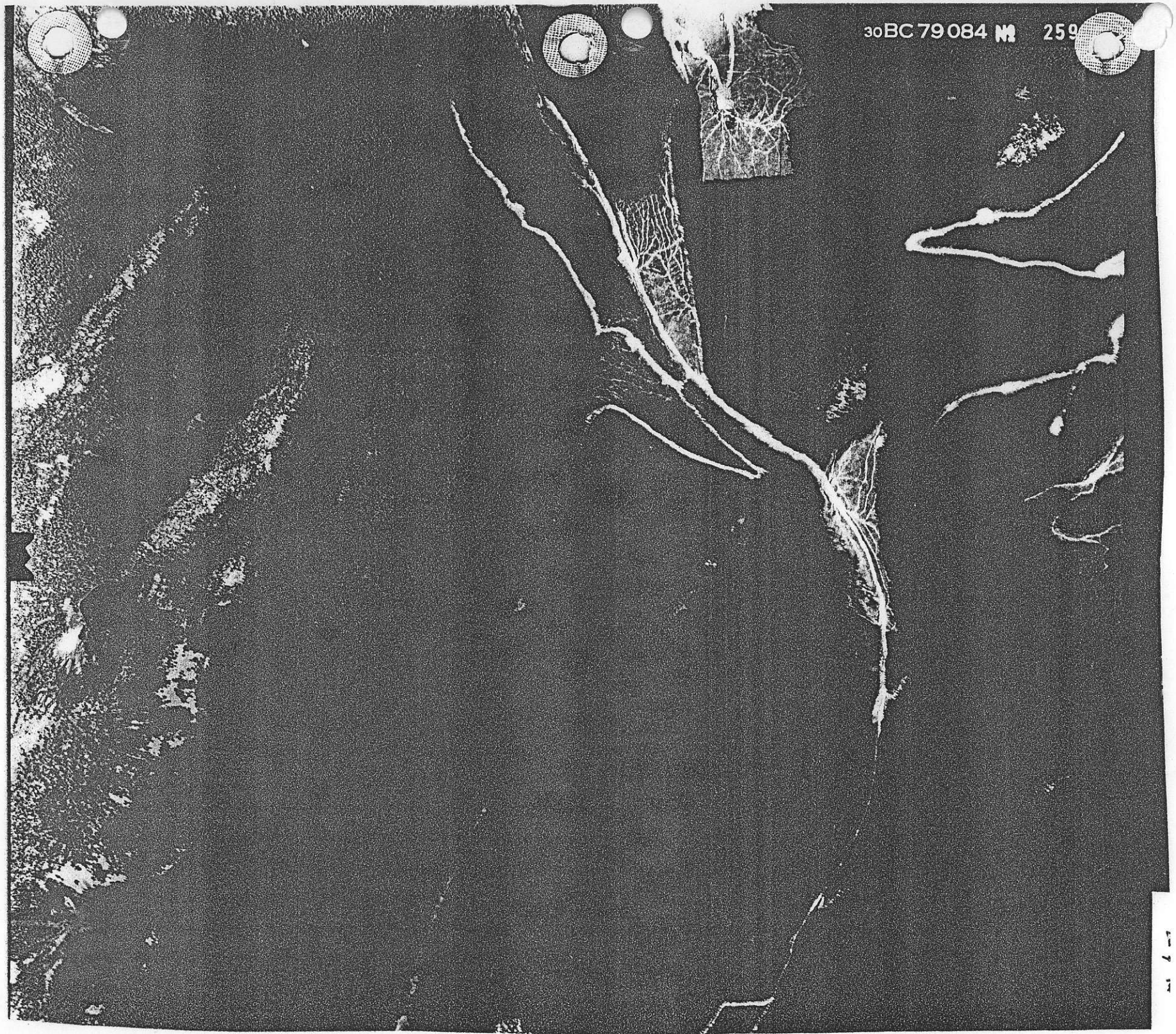
Mining Division Fort Steele Location Morgan Creek Lat. 49° 38 Long. 116° 7
Name of group LEADER Map No. 82F/9E

We, the undersigned owners* of the following adjoining claims, desire to group them according to the provisions of the *Mineral Act*:–

NAME OF CLAIM	No. of Units	Record No. or Lot No.	Month of Record	SIGNATURE OF OWNER*	Free Miner Certificate No.
Leader #1		643	June	Alfred Best	192931
Leader #2		644	June	Alfred Best	192931
Leader #3		645	June	Alfred Best	192931
Leader #4		646	June	Alfred Best	192931
Leader #5		647	June	Alfred Best	192931
Leader #6		648	June	Alfred Best	192931

* May be signed by agent on behalf of owner.

N/G # 2088


30BC 79 084 № 259

"LEADER PROSPECT"

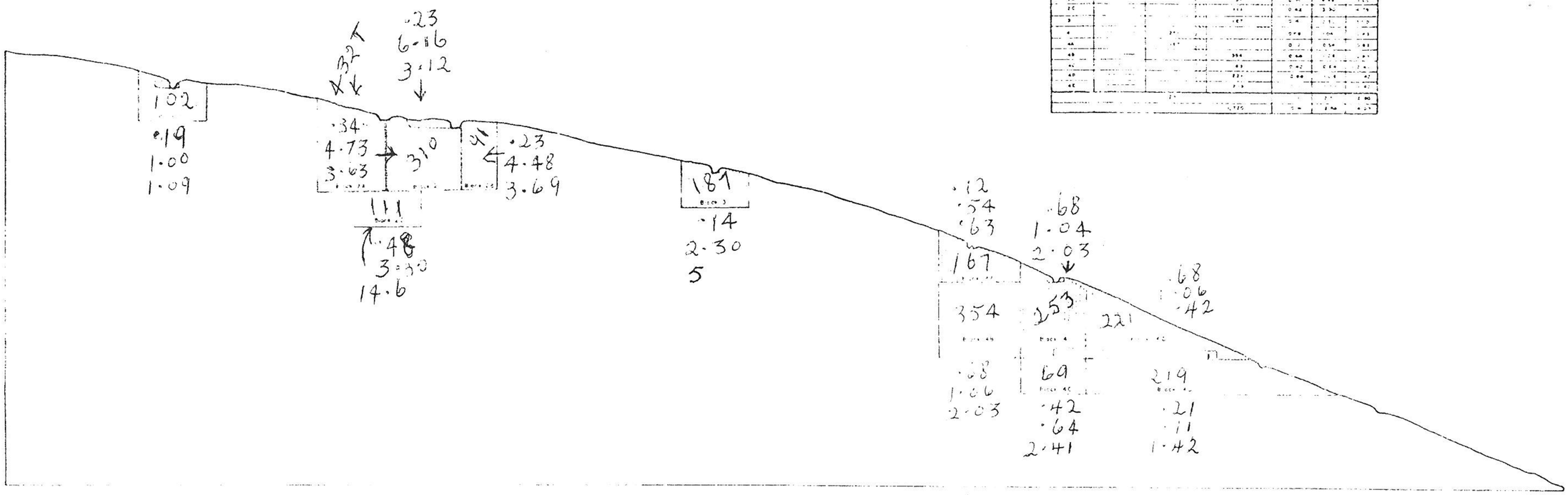
Marysville District, B.C., Canada

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO 661 MAP 1

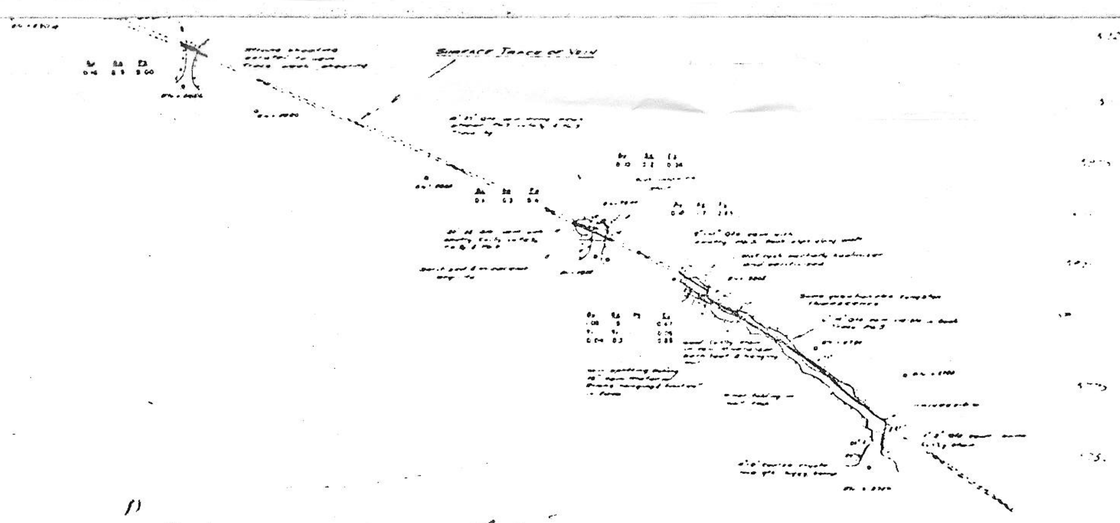
LONGITUDINAL SECTION

Plane of Vein

Scale 1" = 40'



Quartz vein at face of drift
assays 1.06 au



"Enlargement of this in Back Pouch"

GEOLOGY OF WORKINGS

Plan View

Scale 1" = 40' Contour Interval = 25'

inches 0 1 2
0 1 2 3 4 5 centimetres

BRITISH COLUMBIA GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

VIRGIL R. CHAMBERLAIN
Geologist & Engineer
GREAT FALLS, MONT.-CAMPBELL, ALTA

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