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ASSESSMENT REPORT

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PAYNE AND DONNELLY GROUPS

("MERCURY PROPERTIES")

(Mercury and Redress Fraction Crown-granted mineral claims, Donnelly, Big Timber, Reciprocity, Ocean, Lillian No. 4 and the #1 & 2 Argentite two post and International and Main fractional mineral claims)

SLOCAN MINING DIVISION

BRITISH COLUMBIA

Latitude: 50° 00'N Longitude: 117° 14'W

N.T.S. 82 F/14E, K/3E

Owner:	MRS. M. McCRORY, P.O. BOX 33		
	NEW DENVER, B.C.		A G S E
Operator:	YUKON MINERALS CORPORATIO 510 ELLIOT ST. WHITEHORSE, YUKON Y1A 2A5.		OLOGIC SESSME
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	Peter G. Dasler M.Sc.	n	で で で で
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	F. Marshall Smith, P.Eng.	\bigcirc	R T

October 28, 1986

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1.0 SUMMARY

The Mercury properties are located in an area that historically has seen intense exploration and mining activity. Both of the properties are crossed by a number of fracture systems or "lodes" which intermittently host quartz/siderite veins carrying silverlead-zinc mineralization. Individually these lodes have been offset by shallowly dipping faults and shear zones with accompanying extension fractures.

The "Payne lode" traverses the northern property and has been successfully mined in the past at two locations; the Payne mine (3,741,971oz Ag), and the Mercury mine (31,459ozs Ag). The continuity of the lode system was established between these two mines (over 600 meters) in the present work programme by a series of bulldozer cuts and roadways across the strike of the lode.

The southern claim group is situated around the old "Daniel" crown grant workings, which trace a silver lead zinc mineralized lode displayed in three adits. Production figures are not available for the old mine, however assays show values to 8loz silver within the shear. The present programme confirmed the geology within the upper adit and identified the correct location of silver in soil anomalies in the Donnelly claim. Trenching was not attempted on these properties because of time and cost limitations.

In addition to these main targets the trenching programme identified another major zone of shearing and hydrothermal alteration to the west of the Payne Lode system. This area, the Brothers zone, has been prepared for exploratory drilling in the coming season.

The claim groups are recommended for further expenditure of \$120,000 in a two stage programme of trenching, then drilling.

2.0 INTRODUCTION

At the request of Mr Terry McCrory of Yukon Minerals Corporation the writer supervised a programme of trenching, mapping and sampling on the Payne and Donnelly claim groups, Slocan Mining Division, between September 15 and October 15 1986.

The programme was primarily aimed at testing the continuity of mineralization along the strike of the Payne Lode system, down to, and beyond, the Mercury mine adit. In addition detailed mapping to check for the existence of parallel mineralized zones was carried out.

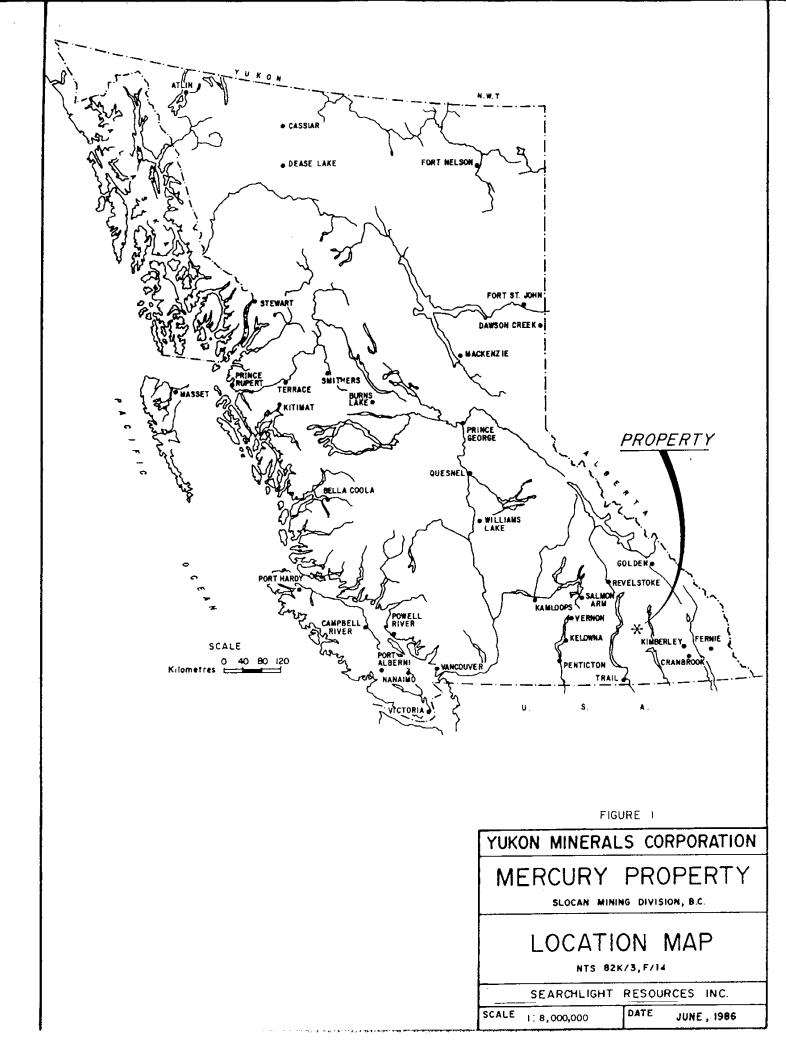
The writer was assisted by a small group of prospectors retained by Yukon minerals, and with their help a series of old adits were reopened and timbered and a number of anomalies associated with a soil geochemical survey performed for Hallmac mines were correctly located (see Donnelly claim anomalies).

3.0 LOCATION AND ACCESS

The Mercury Property is situated in the Slocan Mining Division on N.T.S. sheets 82F/14E and K/3E, centered roughly on 50° 00' north latitude and 117° 14' west longitude, about 10 kilometers due east of the town of New Denver, B.C. (Figure 1).

The property is accessible via the old Payne Mine Road north of the mining town of Sandon, B.C. Most of the road is in good condition and can be negotiated with two-wheel drive vehicles when free of snow. The Donnelly group is bisected by the road, with the upper adit (of the old Daniel C.G.) is on the roadway approximately 450 meters uphill from the old K&S right of way. The Mercury No 1 adit is below the roadway, and the Mercury No 3 is on the Redress property just above the roadway approximately two kilometers further on from the Daniel No 1.

New Denver, located on Slocan Lake approximately 20 minutes by road from the property, provides excellent facilities for both supplies and lodging.



4.0 PHYSIOGRAPHY AND VEGETATION

The property lies within the Omineca physiographic division of the Canadian Cordillera. The property and surrounding terrain is typified by U-shaped valleys with moderate to steep slopes and distinct ridges. Elevations on the property range from 3,300 feet (1,006m) on Carpenter Creek to almost 5,900 feet (1,798m) within the Big Timber claim. The higher parts of the property are generally under snow until late March or early April. As a thick (approximately 3 meter) mantle of overburden masks much of the valley, only limited exposures of bedrock can be seen on ridge tops and at old workings.

Vegetation, consisting of secondary stands of cedar, fir and spruce, is uniformly distributed over the claims, except where recent mining activity has occurred. In these areas alder and willow predominate.

5.0 CLAIM INFORMATION

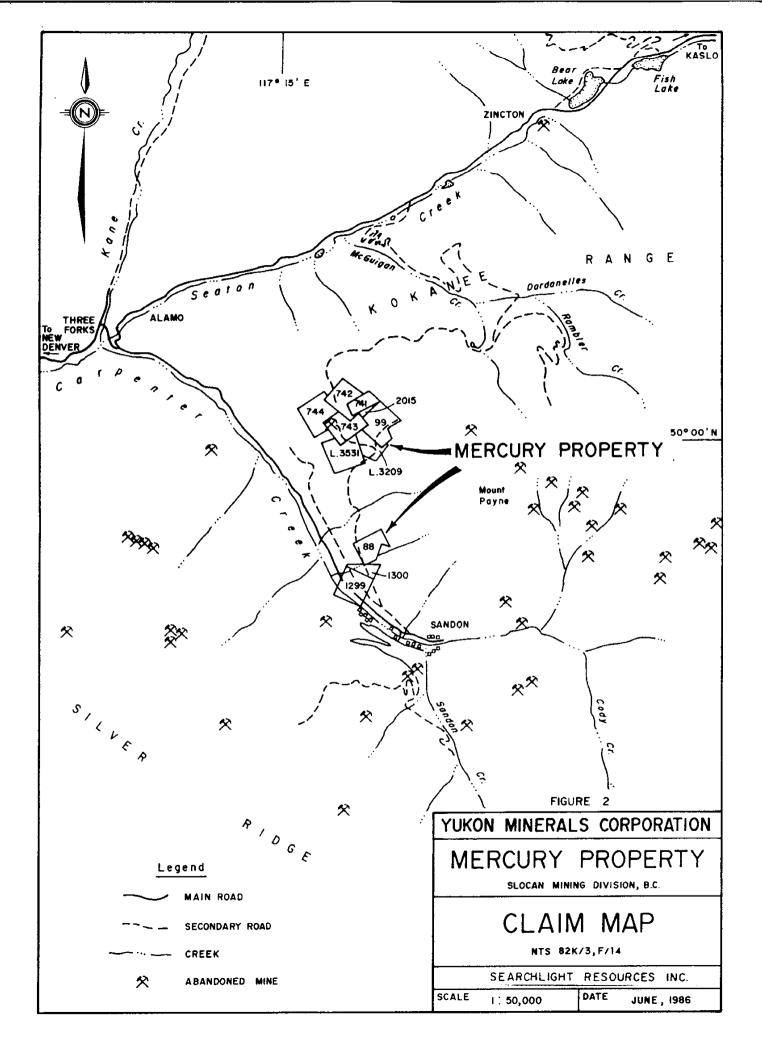
The Mercury property consists of two spatially separated groups of claims located in the Slocan Mining Division (Figure 2). Title to these claims is currently held by Mrs. M. McCrory of New Denver, B.C. The property consists of the following Crown-granted and two post mineral claims.

CLAIM	RECORD	LOT	DATE OF
NAME	NUMBER	NUMBER	EXPIRY
PAYNE GROUP			
Mercury	M21P	3531	November 17, 1987*
Redress Fraction	M21P	3209	November 17, 1987*
Big Timber	99	3191	November 20, 1987
Reciprocity	741	1722	July 13, 1987
Ocean	742	1723	July 13, 1987
Lillian No. 4	743	1724	July 13, 1987
International Fraction	744	2834	July 13, 1987
Main Fraction	2015	2015	June 30, 1987
DONNELLY GROUP			
Donnelly	88	5195	November 20, 1991
#1 Argentite	1299	1299	June 29, 1987
#2 Argentite	1300	1300	June 29, 1987

* Lease M21P is held until Nov. 17 1991 by yearly payments.

The present work has been applied as assessment to all other claims until 1996.

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6.0 **PROPERTY HISTORY**

The history of the Slocan River Camp dates back to September 9, 1891, when prospectors made the district's first significant location at what was to become the Payne Mine. Before the end the year, some 80 subsequent locations were recorded in the area. By 1892 the camp opened rapidly and 16 properties were in active production. In the next few years, the towns of Sandon, Three Forks, New Denver, Silverton and Slocan City grew rapidly, and in the years 1894-1895 the railway was built into the Sandon area.

In the early days of the Slocan history, only the high grade silver-lead ores were shipped, as their treatment was done in Montana and only ores of sufficient grade would stand the heavy freight charges to smelters. Initially, sphalerite contained in this ore was considered of little value and often wasted, as zinc was penalized at the smelters. With the successful development of the metallurgy of lead-zinc ores in the early 1920's however, it was possible to re-open many of those properties closed by low metal prices and equip them with milling plants capable of extracting both lead and zinc from the ores. While this resulted in a small boom between 1925-1929, production in the Slocan district never again reached the peak experienced in 1918.

With rapidly falling metal prices, the camp closed down in 1930¹. During the period from 1930 until the late 1940's only minor exploration work was carried out in the Sandon area. In 1948, Violamac Mines (B.C.) Ltd. acquired the Victor and Lone Batchelor properties and became a steady producer into the mid 1960's. Currently, Dickenson Mines Ltd., Silvana Division, holds the majority of the claims in the area and is operating a mill in the old Sandon townsite with ore coming from the Ruth-Hope mine, 3 kilometers to the south of the Mercury property.

During the period between its original discovery and the late 1930's, the Payne Mine, located just east of the present Mercury property, shipped ore worth approximately \$5,000,000. Other heavy shippers of silver-lead ore within a few kilometers of the property include the Standard (336,000 tons worth over \$10,000,000), the Ruth Hope (54,000 tons worth \$1,955,000), and the Silversmith (189,000 tons worth over \$8,000,000). Many other properties in the area shipped from \$100,000 to \$1,000,000 worth of high grade silver-lead ore from comparatively small tonnage operations. Work on the Mercury Crown grant is first mentioned in the 1902 Minister of Mines Annual Report, and subsequent references indicate that two short adits were driven on a shear-vein lode striking 035⁰ and dipping 55⁰ to the southeast. The 1905 report indicated the miners thought the Mercury to be a continuation of the Payne lead. The ore was reported to consist of grey copper, gneissic and cubic galena, blende, pyrite and chalcopyrite in a gangue of siderite and quartz. This lode varied in thickness up to four feet and was paralleled by a porphyry dyke near which a paystreak had developed. The ore was reportedly high-grade silver-lead above the No. 1 adit, but became zinc-rich very rapidly at depth. Production commenced in 1902 when 21 tons of ore averaging 229 oz/t silver and 46% lead were mined. In 1904, an additional 14 tons of very rich silver-lead ore was extracted. By the end of 1915, however, records indicate a total production of only 193 tons averaging 163 oz/t silver and 38 % lead (production grades given in the MinFile appear to be substantially lower). Records also indicate a total production of eight tons of ore grading 237 oz/t silver and 60% lead from the Redress Crown-granted mineral claim between 1920 and 1921.

In 1929, a small syndicate of locals expended considerable money in completing 262 feet of drifting, 10 feet of cross cutting and 14 feet of sinking, but curtailed work early in the season before recording any production. Additional development is recorded in the Annual Report of 1937 when five tons of ore yielded 628 ounces silver, 3,396 pounds lead and 841 pounds zinc.

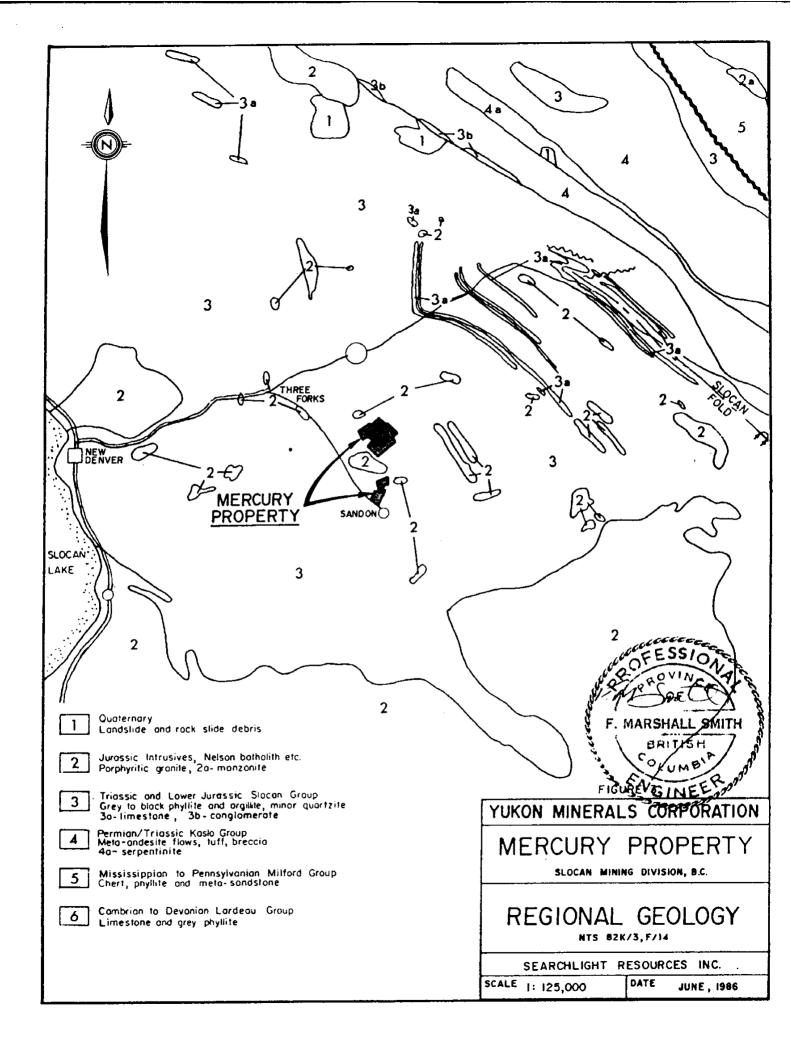
The property appears to have lain idle until the late sixties when Pat McCrory opened and re-timbered the Mercury adit. In 1968 several short diamond-drill holes were drilled in an effort to locate extensions of the Mercury vein, but with little success.

7.0 GEOLOGY

7.1 Regional Geology

Lithology-

The property lies within the Lower Jurassic (?) and Triassic Slocan Group which underlies a large area extending from Kaslo River and Keen Creek westward to Slocan Lake. The Slocan Group is composed of a thick assemblage of mainly pelitic rocks, but limestone and fine-grained quartzite are fairly abundant, and some tuffaceous beds and conglomerate are also present⁵. South of the property the Slocan Group has been intruded by the Nelson batholith, a large body of porphyritic granite. A number of related small porphyritic intrusive bodies and dykes are to be found within the Slocan Group rocks north of this contact (fig. 3).



The following description of the Slocan Group is from Little $(1960)^6$.

"The basal part of the group has been described by Hedley (1945)⁷ who refers to it as the "slate belt" because of the predominance of fissile, argillaceous rocks. A number of bands of limestone occur in them, and some quartzitic strata are also present. The slates and phyllites are grey to black, and locally greenish. Evidence of lateral gradation of these beds toward the northwest into more arenaceous and less calcareous phases has been presented by Cairnes and confirmed by Hedley."

"Several thousand feet of strata overlying the basal belt have not been examined anywhere in detail. In general they resemble the basal beds as far west as Zincton, beyond which they are mainly grey argillaceous rocks that contrast sharply with the lower strata."

"Higher in the sequence, the beds exposed between Mount Payne and Idaho Peak are more arenaceous, the dominant type being a dark, well-bedded, quartzitic argillite in which the alternating strata of various degrees of purity range in thickness from a fraction of an inch to two or three feet. These rocks are fine grained and silty. Less abundant are impure limestones and quartzites."

"Rocks highest in the section outcrop between Idaho Peak and Slocan Lake. They are similar to those east of Idaho Peak but contain beds of tuffaceous origin. It is probable that these tuffs heralded the outpourings of lava of the "Rossland Group" which, according to McConnell and Brock (1904)⁸, overlays the Slocan Group northwest of Slocan Lake."

"West of Slocan Lake, slates and impure quartzites of the Slocan Group have been largely altered to paragneiss. The gneiss is similar in appearance and composition to that exposed farther south in the core of the Nelson batholith."

Structural Geology-

On a line through Silverton and Idaho Peak and extending north to Whitewater, strata of the Slocan Group outcrop for 20 kilometers across their strike. Nearly all these strata face southwest; in general those in the valley bottoms dip southwest, those of median elevation dip vertically, and those on the peaks dip northeast and are overturned. Thus they form a great recumbent syncline facing southwest with horizontal cleavage and axial plane. This has been termed the "Slocan fold". Within it, particularly around Idaho Peak, are Z-folds of large dimension formed by crumpling within the trough. Faults of small displacement relative to the fold are common. In the cross-section described, the axis of the Slocan fold is horizontal, but to the northwest it plunges gently northwest.

To the southeast it plunges successively southeast, south, and southwest and the axial plane dips more and more steeply eastward until, near the contact with the Nelson batholith, the dip is reversed to steeply west⁵.

7.2 Property Geology

The Mercury property is predominantly underlain by thinly bedded, soft, black argillites characterized by slaty cleavage and graphitic partings interbedded with more massive, pyritic argillites with banded argillaceous and quartzitic strata². The rocks are right side up and strike between 000 and 100^{0} with moderately steep north and westerly dips.

Hedley (1952)⁹ reported that in the area of the Mercury property:

"...the rocks are cut by steeply dipping or vertical joints normal in strike to the bedding. Several faults dip at various angles to the southwest, and there are many fractures of random orientation. Most of the faults follow the bedding or cut it at small angles, and because of local crumpling of the beds it is not always certain whether a fault is parallel to the general bedded attitude, follows a crumpled zone, or is deflected from some other course by local crumples. The amount of movement in these faults is not known."

This general picture of the local structures seems to hold true for the the property as a whole.

In addition to the argillites described above, a number of quartz porphyry and granite dykes and sills occur on the property. They are apparently related to the Nelson Batholith some 7 kilometers to the south.

Both the argillites and intrusives are cut by mineralized shear systems, "lodes," which are usually at high angles to the bedding. These crosscutting shears are tear faults with a component of underthrusting. Most of the lodes are complex, inasmuch as they represent zones of rupture with more than one locus of movement and they are are considerably influenced, both in strike and in dip, by the competency of the structures they cross. These complex zones contain components of both fracture and shear, with the ore bodies, as a rule being deposited in the areas of fracture rather than shearing⁹.

The present work exposed a number of open space breccias and zones of brecciation in the felsic dykes ("pebble dykes") which crosscut the stratigraphy. Several of these zones were found along the predicted strike outcrop of the main Payne Lode, and also to the west at the "Brothers zone". This latter zone (figure 6) is thought to be part of a second Lode System parallel to the Payne, and was found after following a series of old pits and trenches which showed polylithologic fine grained breccia dykes crosscutting the graphitic shales.

The excavations along the line of the Payne lode, were predominantly in fine bedded graphitic argillite, locally intensely sheared. Sub-horizontal shears were encountered which showed displacement of pre-existing felsic dykes up to 40meters along the shear plane, with classic boudinage of pods of dyke and country rock within the shear.

Pyritic weathering, and zones of gypsum surface coatings were observed in the shales, and near the Mercury, in the blocky argillites. These sulphide and sulphate weathering products are common halos above epithermal veins of the type which host the silver mineralization of this and other districts. The zones of particular interest on the Payne group are noted on the property geology map (figure 4). These were targeted for further trenching in the October programme, but were curtailed because of budget considerations. Of particular interest is the zone to the west of the the Mercury workings, in the rusty blocky argillite. It is possible that there are two parallel shoots at the Mercury workings, but only the small shoot in the hanging wall was worked. Trenching in this area encountered up to five meters of overburden down slope of the main Mercury adit, and additional work is required.

The Brothers zone excavations uncovered an apparent major NE-SW shear system with a well developed conjugate vein filled joint system between the two major shears, (figure 7). One of the veins fill was of particularly strange character, apparently composed entirely of botryoidal and open space fill of limonite, and a petrological report was ordered of a sample (appendix 1). This vein now outcrops over a large portion of the hillside, as it dips at an angle only slightly less steep than the slope, and during trenching with the dozer it became a limit to the excavation. The vein fill appears to be a replacement deposit and may develop sulphide mineralization at depth. No other veins of this type were seen in this area, although there are several polylithologic breccia veins, and breccia dykes in the immediate area. This shear controlling the replacement vein intersects a porphyry dyke which becomes extremely sheared and brecciated, with considerable cream and black clay development on the shear surfaces. Silver values are slightly elevated in these clays.

On the Donnelly group there had previously been a comprehensive soil geochemical survey, and at the time of investigation Yukon minerals was in possession of a plan showing the 5ppm and higher Ag. in soil anomalies. The author completed hipchain surveys of the access tracks and locations of the trenching completed on these anomalies by the previous operator, and discovered that trenching had been completed at location 2+00S, 2+50W, and not the plotted location of the soil anomaly, 2+50S, 2+00W. There is obvious epithermal alteration within the intrusive (norite?) at the plotted location of the soil anomaly, with the development of quartz veins, manganese staining, and possibly some fine galena in some of the weathered quartz veined material. Some time was spent locating the old soil sample lines, and identifying sites for trenching, and in doing so a small adit (collapsed) was found above the track in a zone of manganese staining. This area is targeted for intense inspection in the recommended work programme.

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8.0 MINERALIZATION

The productive orebodies in the Sandon area are generally found in fracture zones within the Slocan Group of pelites. These sediments have been intruded by younger granites of the Nelson batholith which appear to have acted as the heat source for the mineralization, as the numerous porphyritic intrusions which have been mapped in the area tend to be spatially related to the areas of higher silver and gold values¹⁰. The fracturing of the sediments also resulting from this period of intrusion appears to have provided openings for the deposition of lead, zinc, silver and gold.

The largest ore zones in the area have been found along composite veins (a fractured zone occupied by two or more roughly parallel fissures that merge or are connected by a network of mineralized fractures), the vein filling generally being brecciated, with mineralization having occurred in more than one period and the veins being recemented by a later period of mineralization.

According to Hedley (1952)⁹, the control for ore deposition is mainly structural with temperature and load pressure only of minor importance. The most important factor in deposition is thus seen as the "local confining pressure in a structurally complex environment."

The following is a description by Cairnes $(1935)^2$ of the lode followed on the Mercury Crown-granted claim, the southernmost of the two claim blocks:

The workings develop a shear-vein lode striking north 35 degrees east and dipping 55 degrees southeast. The lode varies in thickness from a fraction of a foot to 4 feet. The foot-wall is along or close to a porphyry dyke and a paystreak of ore has formed near this dyke. An ore shoot 40 feet long was encountered in the upper level and has been stoped out between the surface and a point 20 feet or so below that level. Another but smaller shoot was intersected towards the face of the lower adit and has been mostly stoped out. The main shoot had a maximum width of 22 inches.

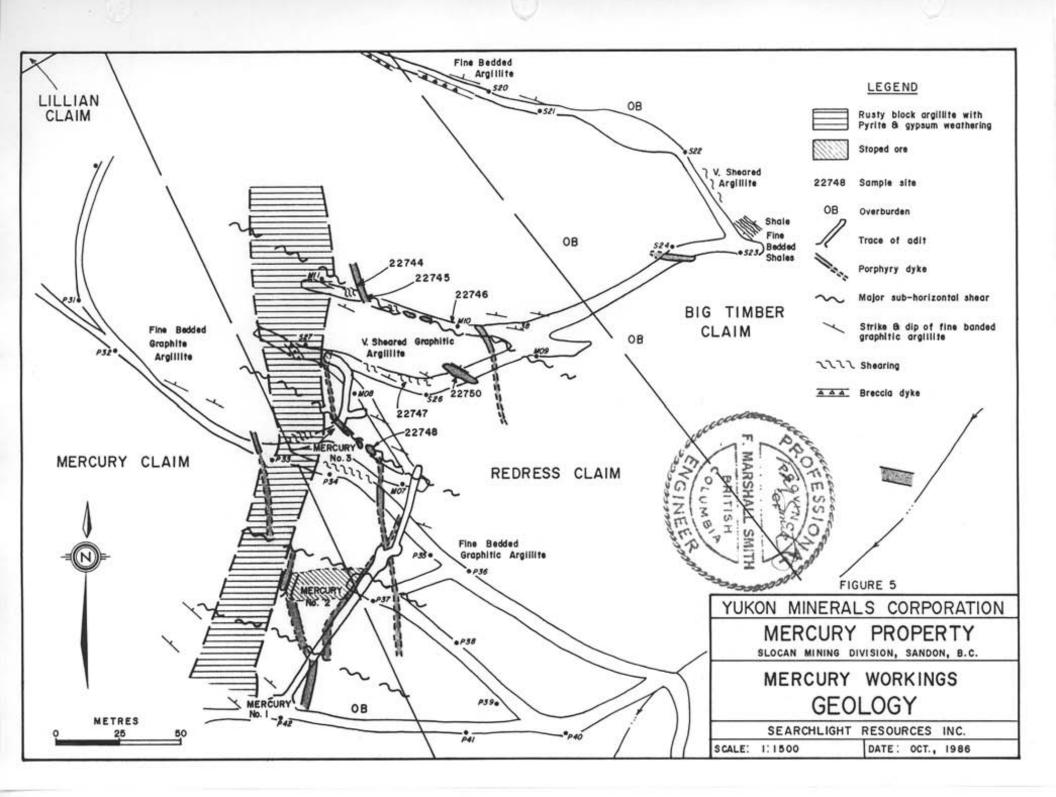
The ore consisted of grey copper, gneissic and cube galena, blende, pyrite, and chalcopyrite in a gangue of siderite and quartz. Lean or barren parts of the lode consisted of a breccia of slate with siderite and vuggy quartz. The ore was high-grade silver-lead above No 1 adit but became zincy very rapidly with depth. A plan and section of the lower Mercury adit drawn by H. Forman (1967) was obtained from the present owner, and is reproduced for this report in figure 6, with the sample assays and corrections noted by the author. The geology and mineralization checked against the original map, apart from a reversal of dip on the first major cross shear, and the addition of a small stoped area just before the second small crosscut The original map is used particularly to show the predicted outcrop of the vein in section A-A. The dyke was in fact found in this area in the present programme, accompanied with some barren quartz veining. There was however a major sub-horizontal shear which was found to displace the dyke some 15 meters to the west, to lie along the west side of the upper adit. In this adit an attempt had been made to intersect further mineralization by drifting in three directions (see figure 5 & 6). They were apparently successful on a small scale as a small stope at the end of the west adit apparently is the source of 8 tons which were mined returning 227 oz Ag. (total or oz/ton??). On the surface, west of the furthest point of this adit, more work is recommended as the weathering of pyrite and gypsum from the rocks indicate hydrothermal activity along a second shear zone

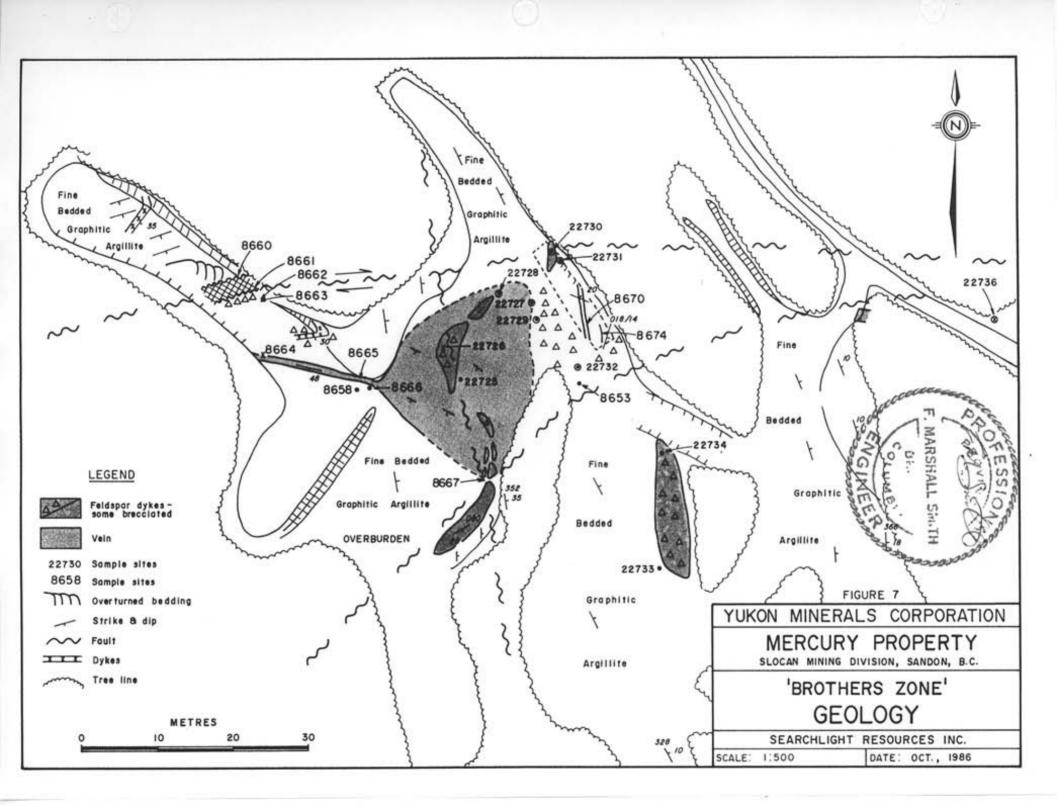
Similarly weathering products west of the No2 and No1 mercury adits, and downhill of the Mercury No1, indicate a continuation of this shear and its hydrothermal activity.

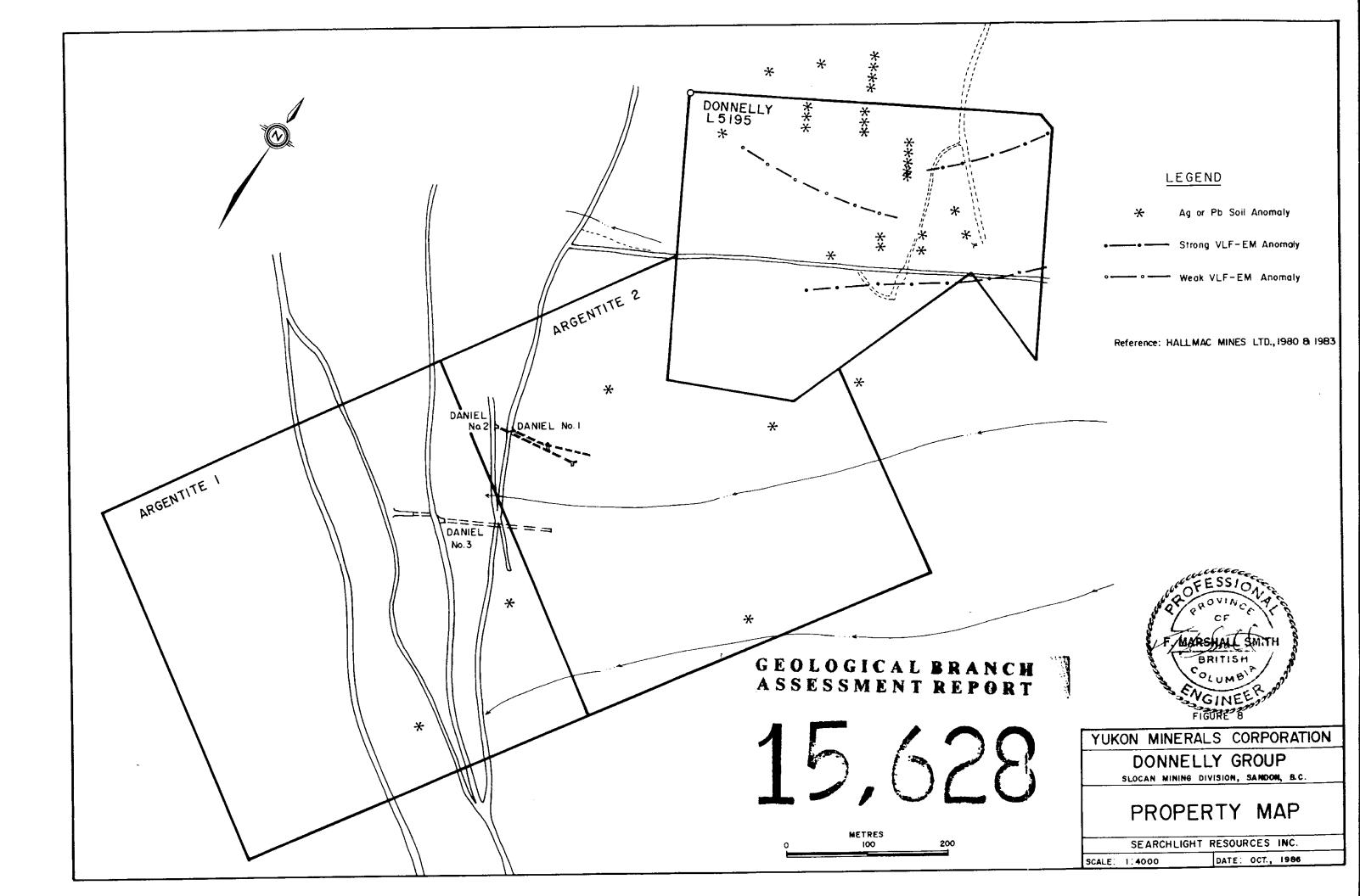
The Brothers zone showed intense limonite development along one shear plane, but showed no sulphide mineralization. Assays taken from samples in this area generally were less than .05oz/ton Ag., but reached 5-10 times that amount in the clayey shear zones. The open breccias in the main shears at this location generally show thick (treacle like) botryoidal coatings of limonite indicating intense supergene weathering, probably following low temperature hydrothermal activity along the zone. The author considers that the depth extension of this zone should be drilled to determine if sulphide deposition occurred at a deeper level.

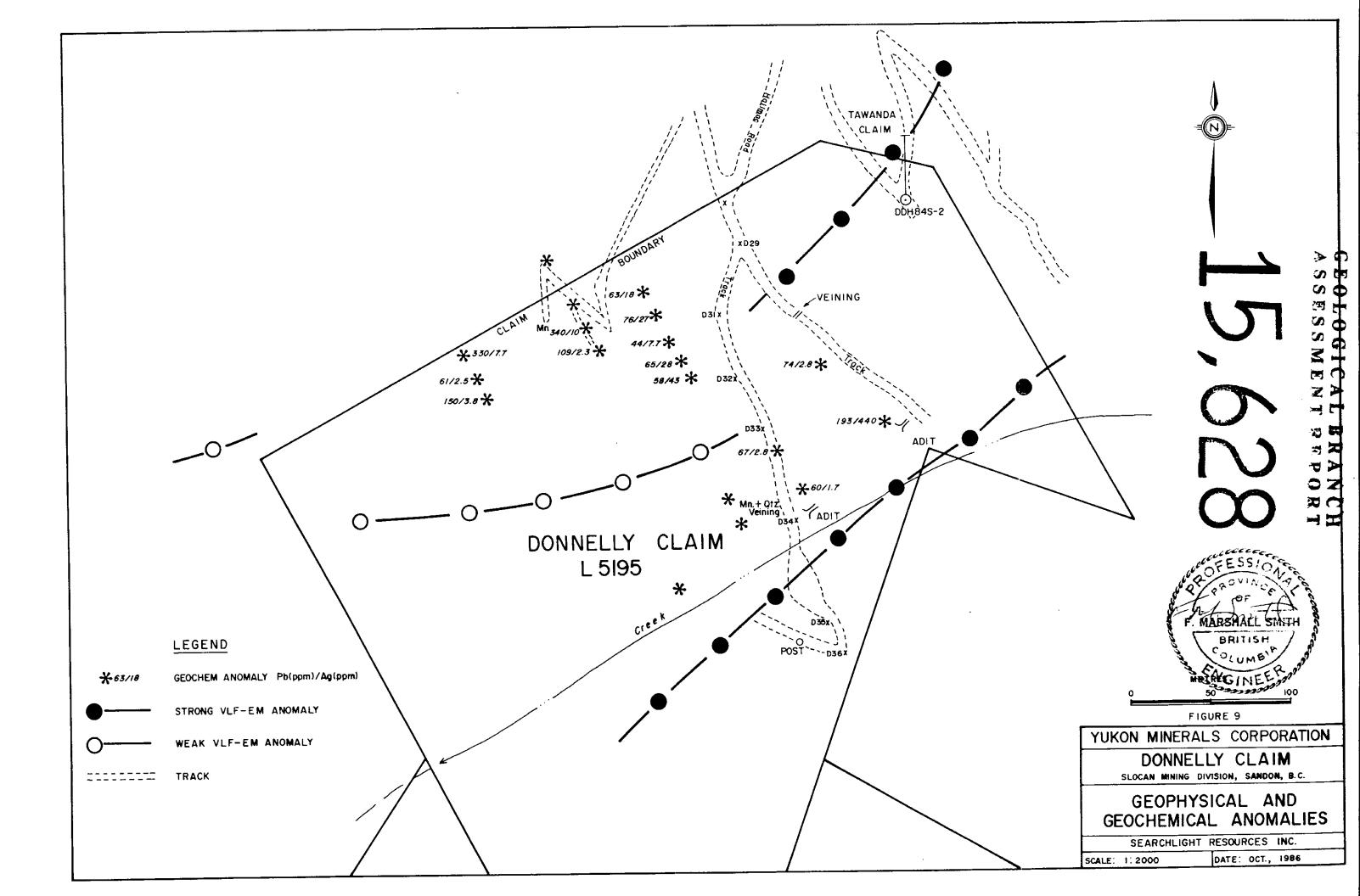
Limited work was done on the Donnelly claim, however results provided from Hallmac's programme of soil sampling and trenching indicate significant Pb. and Ag. anomalies on lines 1, 2, & 3+00s. (figure 10). The field inspection showed locally strong Mn. staining within the intrusive, accompanied by small open fill quartz veins, one sample showing a small galena fragment. The rock exposure in this area is insufficient to determine the source of the anomalies without trenching. The termination of the strong VLF-EM anomaly within the large soil anomaly at 1+50s, 1+00w, requires intensive trenching, as the VLF-EM response may have died in the alteration zone of a major epithermal event.

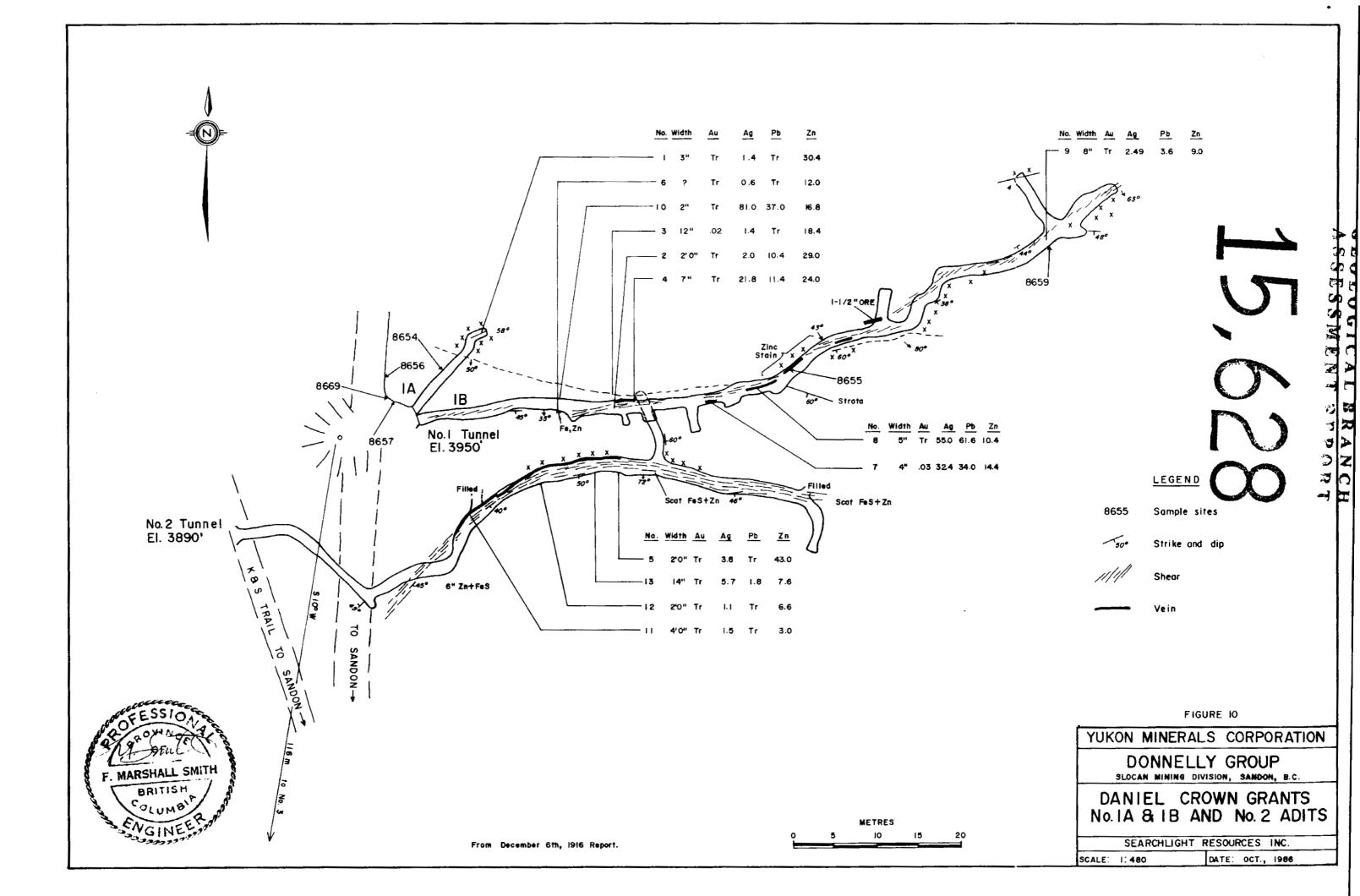
On the Argentite 1&2 claims there is evidence of extensive old prospecting activity. These claims cover what was the Daniel workings. The author checked the geology of the Nol adit against the old plan reproduced in figure 10 and collected samples within the adit and near the entrance. The shear system traced by the workings appears to maintain continuity over 500meters, and according to Mr Pat McCrory it extends across Carpenter creek to the opposite hillside in the vicinity of Dickenson Mines tailings pond.











9.0 CONCLUSIONS

The economic mineralization in the area of the Mercury property consists of galena, sphalerite and various silver minerals in brecciated quartz/siderite veins. These veins have formed along fracture zones or lodes. The mineralization tends to be concentrated in high grade "pods" which have developed when the mineralizing solutions reached the appropriate confining pressure to deposit them, probably at dilatant zones within the lode.

These mineralized pods are discrete high grade targets, best discovered and developed by careful interpretation of the trend of mineralization and by observation of zones of recessive weathering or sulphide or sulphate replacement along strike.

The fieldwork indicates numerous alteration zones, shears, and breccias which individually could host mineralization similar to the previously mined ore bodies on and adjacent to the property. The present trenching programme did not open all targeted zones, because of budget limitations, but it did allow the identification of new targets in the worked target areas.

An examination of the textual, geochemical and geophysical information available indicates that there is good potential for finding either new lodes on the property or faulted off extensions of the previously located lodes.

10.0 RECOMMENDATIONS

10.1. Continue the exposure of the fracture systems identified by sulphide and sulphate weathering in the present trenches located between the Payne mine and the Mercury mine workings.

10.2. Deepen the trenches below the Mercury Nol adit to expose bedrock, and continue tracing the rusty blocky argillite downslope.

10.3. Trench and sample the soil and VLF-EM anomalies on the Donnelly claim, especially at 1+50s, 1+00w.

10.4. Trench and sample outcrop of the mineralized shear zone shown in the adits on the Argentite 1&2 claims, and follow this mineralization across to the reported mineralization adjacent to Dickenson Mines tailings pond area.

10.5. Drill test the depth extension of the Brothers zone for geological control. Recommend BQ, 3 holes, total 150 meters (in conjunction with phase 2).

10.6. Prepare all galena bearing outcrops for drill testing (to be the subject of phase 2 budget expenditure).

11.0 BUDGET

The following is a budget for the project to carry out the programmes described in this report.

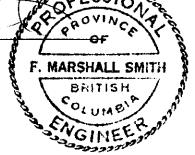
Phase I	
Preliminary Mapping	\$7,500
Dozer hire 80 hrs @ \$65	\$5,200
Assays	\$1,500
Support, Room and Board,	
Travel Costs	\$2,000
Supervision, Engineering,	
Administration	\$2,000
Contingencies	<u>\$1,800</u>
Total Phase I	\$20,000

The following is the expected Phase II budget which will be carried out if the results of the first phase as detailed above results in the definition of significant mineralization.

Backhoe or Cat Trenching	\$5,000
Drilling 2500ft, BQ & NQ ave \$25ft	\$62,500
Drill support, equip. hire	\$5,000
Geologist 1mth	\$7,500
Assistants	\$5,000
Assays	\$2,500
Support, Room and Board, Travel	\$3,000
Supervision, Engineering,	
Administration	\$7,000
Contingencies	<u>\$2,500</u>
Total Phase II	\$100,000
Total Phase I & H	\$120.000
Total Phase I & II	<u>\$120,000</u>

F. Marshall Smith, P.Eng.

F. Marshall Smith, P.Eng October 18, 1986.



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COST STATEMENT

The following summaries are prepared from statements collated by Yukon Minerals Corporation's Accountants. Then costs accredited to the Donnelly group were derived from totals of direct expenditure (loader hire, man days etc.) as well as the addition of a pro-rata allowance for mobilization and general expenses.

COMBINED EXPENDITURES. PAYNE GROUP AND DONNELLY GROUP.

EXCAVATOR HIRE

	Dozer 110 Hours @ \$65.00	\$7150.00	
	Loader 5.5 Hours @ \$60.00	\$330.00	
	Compressor, etc.	\$200.00	\$7,680.00
ASSAYS			
	47 Au & Ag assays @ \$21.25	\$998.75	. •
	19 Ag only, assays @ \$18.25	\$194.25	
	3 Au only assays @ 10.25	\$30.75	
	1 Ag geochem. assay @ \$8.75	\$8.75	
	1 Pb, Cu, Zn. @ \$20.25	\$20.25	
	2 ICP multi-element @ \$8.75	\$17.50	
	Freight, sample bags, etc.	\$27.77	\$1,298.02
BOARDING EXPE	NSES		
	Accomodation and board, 52 man	days	\$3,030.60
EQUIPMENT REN	TAL		·
	Field supplies		\$70.00
TRANSPORTATIO	N AND TRAVEL EXPENSE		
	4X4 Vehicle Hire	\$2,840.00	
	Mileage	\$1,940.28	
	Fuel and oil	\$2,025.89	
	Air Tickets	\$1,826.02	
	Honda ATV.	\$300.00	
			\$8,932.19

(604)684-2361 Searchlight Resources Inc. (604)271-6556 218-744 West Hastings Street, Vancouver, B.C., Canada, V6C 1A5 ١

SALARIES AND WAGES

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 B. Buchanan, prospector 43 days @ \$250.00 S. Pownall, assistant 23 days @ \$90.00 T. McCrory, prospector 28 days @ \$250.00 M. Neilson, prospector 2 days @ \$250.00 W. Preston, prospector 2 days @ \$250.00 R. Wymer, blaster, rehab. 10 days @ \$150.00 H. Pankratz, Shift boss 5 days @ \$150.00 P. Dasler, Geologist 27.75 days @ \$240.00 	\$10,750.00 \$2,070.00 \$7,000.00 \$500.00 \$500.00 \$1,500.00 \$750.00 \$6,660.00
	\$29,750.30
SUPPLIES Explosives Hardware, timber etc. MANAGEMENT AND CONSULTANT FEES F. M. Smith 4 days @ \$400	\$514.20 \$1,953.67 \$2,467.88 \$1,600.00
DRAFTING	·
Printing, maps, drafting	\$1,570.62
ASSESSMENT REPORT COMPILATION P. Dasler 9.05 days @ \$225 Office Expenses, computer, etc. Telephone,	\$2,036.25 \$257.60. \$757.50 \$3,016.43
TOTAL EXPENDITURE ON PROJECT:	\$59,416.04

EXPENDITURE, DONNELLY CLAIM, (DIRECT COSTS AND PRO-RATA ASSESSMENT) Assessed as % of Labour costs on claims, (\$1,950 of total \$29,730.00)

EXCAVATOR HIRE

ASSAYS	Loader 5.5 Hours @ \$60.00		\$330.00
	7 Au & Ag assays @ \$21.25	\$148.25	
	Freight, sample bags, etc.	\$18.00	\$166.75
BOARDING EXPENS	ES		
	Accomodation and board,	3/24 man days	\$378.82
EQUIPMENT RENTA	L		
	Field supplies		\$8.00
TRANSPORTATION	AND TRAVEL EXPENSE		,
	Vehicle Hire Mileage Fuel and oil Air Tickets Honda ATV	\$186.27 \$127.26 \$132.87 \$119.77 \$19.68	\$1,077.02
SALARIES AND WAC	Ges		
S. Pownall, assistant T. McCrory, prospect M. Neilson, prospecto B. Preston, prospecto R. Wymer, labour	tor 1.0 days @ \$250.00 or .5 days @ \$250.00 r .5 days @ \$250.00 1.0 days @ \$150.00 oss 1.0 days @ \$150.00	\$250.00 \$180.00 \$250.00 \$125.00 \$125.00 \$150.00 \$150.00 \$720.00	\$1,950.00

SUPPLIES Hardware, timber etc.	\$124.18
MANAGEMENT AND CONSULTANT FEES F. M. Smith 2 days @ \$400	\$800.00
DRAFTING	\$350.00
ASSESSMENT REPORT COMPILATION P. Dasler 2.5 days @ \$225 Office Expenses, computer, etc. Telephone,	\$562.50 \$75.00 \$50.00
TOTAL EXPENDITURE ON DONNELLY GROUP CLAIMS :	\$5,872.27

(604)684-2361 Searchlight Resources Inc. (604)271-6556 218-744 West Hastings Street, Vancouver, B.C., Canada, V6C 1A5 11.0 **BIBLIOGRAPHY**

1 Richmond, A.M. (1946): Report on the Silverite Group of Mining Claims; unpublished report for Mr. L.N. Smith, 8 pp.

2 Cairnes, C.E. (1935): Descriptions of Properties, Slocan Mining Camp, British Columbia; Geol. Surv., Canada, Memoir 184.

3 Cairnes, C.E. (1926): Preliminary Report on Slocan Mining Area; B.C.; Geol. Surv., Canada, Summary Report 1925, Part A., pp. 182-221.

4 Pedley, S.J. (1962): Summary Report on the Slocan Base Metals Prospect, New Denver, B.C., unpublished report for Violamac Mines Ltd., 3 pp.

5 Little, H.W. (1985): Geological Notes, Nelson West Half (82F, W1/2) Map Area; Geol. Surv., Canada, Open File 1195.

6 Little, H.W. (1960): Nelson Map-Area, West Half, British Columbia; Geol.Surv., Canada, Memoir 308.

7 Hedley, M.S. (1945): Geology of the Whitewater and Lucky Jim Mine Areas, Slocan District, British Columbia; B.C. Dept. Mines, Bull. 22.

8 McConnell, R.G. and Brock, R.W. (1904): West Kootenay Sheet, British Columbia, Geol. Surv., Canada, Map 792.

9 Hedley, M.S. (1952): Geology and Ore Deposits of the Sandon Area, Slocan Mining Camp, British Columbia; B.C. Dept. Mines, Bull. 29.

10 Black, J.C., former manager of Violamac Mines Ltd., Slocan Division (1986): personal communication with S. Coombes.

11 Read, P.B. (1976): Geology, Lardeau West-Half, Geol. Surv., Canada, Open File 432.

12 Hallmac Mines Ltd. from reports of exploration 1982,1983, courtesy Mr. L. Goldsmith.

CERTIFICATE OF QUALIFICATIONS

I, Peter G. Dasler, do hereby certify that:

1. I am a geologist for Searchlight Resources Inc. with offices at 218-744 West Hastings Street, Vancouver, British Columbia.

2. I am a graduate at the University of Canterbury, Christchurch, New Zealand with a degree of M.Sc., Geology.

3. I am an Associate Member in good standing of the Australasian Institute of Mining and Metallurgy, and a Member of the Geological Society of New Zealand.

4. I have practiced my profession continuously since 1975.

5. This report is based on information received from field surveys by myself and F.M.Smith during September and October 1986 and reports by Professional Engineers and others working for the previous owners and operators of the property.

6. I have no interest in the property or shares of Yukon Minerals Corporation, nor in any of the companies with contiguous property to the Mercury Project claims.

Peter G/Dasler, M.Sc. October 18, 1986.

CERTIFICATE

I, F. Marshall Smith, do hereby certify that:

1. I am a consulting geologist and geochemist with offices at 218-744 West Hastings Street, Vancouver, British Columbia.

2. I am a graduate at the University of Toronto with a degree of B.Sc., Honors Geology.

3. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.

4. I have practiced my profession continuously since 1967.

5. This report is based on reports by Professional Engineers and others working for the previous owners and operators of the property and examination of the claims in June and October of 1986.

6. I have no interest in the property or shares of Yukon Minerals Corporation or in any of the companies with contiguous property to the Mercury group of claims.

7. In the writers opinion, the property is of merit and deserves the exploration program recommended in this report, but the writer does not accept responsibility for the actions of any regulatory authorities.

. MARSHALL SMIT F. Marshall-Smith, P.Eng. October 18, 1986.

APPENDIX 1

ASSAY RESULTS AND METHODS

(604)684-2361 Searchlight Resources Inc. (604)271-6556 218-744 West Hastings Street, Vancouver, B.C., Canada, V6C 1A5

YUKON MINE	RALS-MERCURY	SUMMARY OF SAMPLE AND ASSAY DATA				0 23.0c				
SAMPLE No.	DRILL HOLE No.	INTERVAL SAMPLED (m)	LENGTH (m)		lab: An (° ² /···)	A0 (01/2)	P6%	Znole	Cu [®] lo	
22705	45M NE P.55	WAD NR. ADIT .				•03				
22706	45 NE P.55	BRECCIA NR ADIT .				1.000m				
22707	ADIT ON SILVER REEF	-FACE OF ADIT				.12				
22708	AD IT ON SILVER REF					·04				
22709	MERCURY NOT (NOI)	SMALL RAISE -CARBONATE		1		+67				
22710	MORCURY ADIT (NOI)	1-3" QIZ VEN AR DYKE				·88				
22711	MOLCULY NOT (NOI)	1-3" QHE VEIN (AS About)				1-78			· · · · · · · · · · · · · · · · · · ·	
22712		2" QTE VEN A ISM.				•68				
31723	MERCURY ADIT (NOI)					•03				
22714	MCLCULY AD T (NOI)	Polzn From stope.			·004	37.00	36.20	730	·06	
22717		Otz vein-13" at enhance			4003	e09				
22718	1	Ofzikin 1-3" at entrace.			<-003	• 16				
22719	MERCURY ADIT (NOI)	Otztshearat 2271			41003	-04				
22720	MERCURY ADT. (NOI)	DIKE AT 22M.			~5 ppb	· Sistem				
22721	MGREURY ADIT (NOI)	DIKE AT ENTRANKE			5ppb	1.6ppm				
22722	MERCURY NOT (NOI)	FOOTWALL OF DYKE			A+003	•10				
22 רבל	MORCURY ADIT (NOI)	Qtz-Carlo Shear			8001	:50				
22724	15ME 5.13	QEZVEIN + BRECCIA			5.003	401				
22725	15ME of 513	OFZVEN + BREGGIA			450pb	0.3pm.				
22726	BROTHERS ZONE	BREICIA DYKE			.002	05				
22727	BROTHERS ZONE	RUST-L BREEIATEDSEDS	·		4.002	.03	,			
22728	BROTHERS ZONE	RUSTY BRECER HW. DYKE			4.002	.01				
22729	BROTHERS ZONXE	RUSTY BRECE A			4.002	·02				

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Yukon Mine	ums - Mercury	SUMMARY OF SAMPLE AND ASSAY DATA					<u>_2</u> _0 230			
SAMPLE No.	DRILL HOLE NO.	INTERVAL SAMPLED (m)	LENGTH (m)		lab: An(° ² /)	Aq (02/0-)	I			
. 22730	BROTHERS ZONE	BRECCIATED DYKE			4.002	• 01				
22731	BROTHERS ZONE	HW OF 22730			×1002	•29				
22732	BROTHERS ZONE	RUSTY BRECCIA			< • œ2	· 20				
22733	BROTHERS ZONE	STH. END OF YOLL BLUCA			<·002	•04				
22734	SKOTHERS ZONE	HA END OF YOLL BREECH			4.002	•01		_		
22735	10mE of S.30.	SED. BRECC'IA			4.002	· 03				
22736	15m SE OF Pib	Ydc. Breacin (Porpland)			<.∞2	.03				
22737	30m N OF P.62	BROWN DYKE W. PYRITE .			4.002	-06				
22738	60m No= P.62	BRECCIA DYKE (POLYLITH)			4.002	•03				
22739	5m EOF Piby	DK. DYKE W. Dtz.			Sppb	1. Open				
22740	5m E of Piby	LIGHT DIKG W. OTZ			#002	-16				
22741	20ME OF P67	OF LENS			4.002	·05		-		
22742	SMEDF P.68	BRECCIA (SEAMONTS)	·6m chip		<.∞2	,05				
22743	5ME OF P.68	DYKE (DK)			<u> ۲.002</u>	•04	·2ppm			ICP ANHY.
22744	40MNEOF M.10	DK DYKE IN SEDS			4.002	·05				
22745	28MNE OF M.D	PORP. DYKE W. PYRITE			25 ppb	O.4pm				
22746	AT M.O.	MN+ PY. BREELA			<5pp/0	0.5ppm		- <u></u>		
22747		MN + N. BREE A BRECIATED DK. DYKE W. PYRITE.				LOST				
22748	25m SWN OF # 3AVRCH	2" OHZ VEN ON RAD			<.002	·01				
22749.	OPP. 5.26	GLEEN+YELLON CLAY	ļ ļ		4.002	.07		<u> </u>		_
22750	IOM NOF S.26	Q12+ GRAP. PARTINES			4.002	•02			ļ	<u></u>
\$651	15MN or P.66	Monthe SMEAR			4.002	•07				ļ
8652	8 MNE OF P.66	MN+FE MONG DYKE	-		4.002	·07				

		SUMMARY OF SAMPLE AND ASSAY DATA					PAGE <u>3_OF 3</u> DATE <u>23 pc x 86</u>			
SAMPLE No.	LOCATION OR DRILL HOLE No.	INTERVAL SAMPLED (m)	LENGTH (m)		laδ: Au(⁰² /)	Aq (°1/2-)				
. 8653	BROTHER ZONE	MIN. SHEARED SEDS			4.002	-19				
8654	DONNELLY + 1A	QTZ+ QYRITE (SHORTADIT)			4.002	.06				
8655	DONNELLY #18	MAINSHEAR AT TOM .			.024	3.32				
8656	DONNELLY "I PORTAL	GALENA IN DYKE 10' FRAME			·014	1.5c				
8657	DONNELLY "IPORTAL	BRECCIA			4002	•51				
8658	BROTHER ZONE	ADJ'TO FE DYKE FILL				.04				
8659	DONNIEUY #18 FACE	SMALL OTZ VEIN			· œ2	40.02				
8660	BROTHER ZONE	MNIFE COMENT.				-04				
8661	BROTHER ZONE.	MNIFE CONGNT . BRECCIA . MNIFE CONTED				02				
8662	BROTHER ZONE	BREC. DYKE WQTZ			4.002	-02				
8663	BROTHER ZONE	HW DYKE AT 8662				·05				
866A	BROTHER ZONE	MN+FE BLVEIN	30cm CHIP			40.02				
8665	BROTHER ZONE	CENTRE OF MULTEROTIN				·۲۵				
8666	BROTHER ZONE	HW OF 8665				·03				
8667	BROTHER ZONE	SHEAR W. GRAPHITE				-05				
8668	DONNELLY PORTAL	PHIN DKSHALE.			2.002	• 70	· · · -			
8670	BROTHER ZONE TROKE	CREYGOUGE	40cm.		.002	•57				
8672	15MN P.62	WEATHERED PY. DYKE	·		×·002	.04			L	
8673	100MN P.64	1" OF 2 IN RUSTY ZONE				•03				
8674		RUSTY SHALE BRECCIA				•04			ļ	
8675		RUSTY CAKB. BREECHA				•03				
						·				
·										

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CHEMEX LABS LTD. - ANALYTICAL PROCEEDURES

01 Cu % : Detection limit: Cu - 0.01 %

A 2 gram sub-sample is digested in a hot perchloric-nitric acid mixture for two hours, cooled, then transferred into a 250 ml volumetric flask. Aluminum Chloride is added as an ionization suppressant for Molybdenum. The solutions are then analyzed on an atomic absorption instrument.

96 Au oz/T FA

71 Au oz/T FA RUSH

83 Ag oz/T FA

70 Ag oz/T FA RUSH Detection limits: Au - 0.003 oz/T Ag - 0.01 oz/T

Silver and gold analyses are done by standard fire assay techniques. In the sample preparation stage the screens are checked for metallics which, if present, are assayed separately and calculated into the results obtained from the pulp assay. 0.5 assay ton sub samples are fused in litharge, carbonate and silicious fluxes. The lead button containing the precious metals is cupelled in a muffle furnace. The combined Ag and Au is weighed on a microbalance, parted, annealed and again weighed as Au. The difference in the two weights is Ag.

6 Ag ppm (Aqua Regia) Detection limit: Ag - 0.1 ppm

A 1.0 gram sample is digested in concentrated perchloric-nitric acid (HClO4 - HNO3) for approximately 2 hours. The digested sample is cooled and made up to 25 mls with distilled water. The solution is mixed and solids are allowed to settle. Silver is determined by atomic absorption technique using background correction on analysis.

100 Au FA+AA ppb (Combo Gold) Detection limit: Au - 5 ppb

For low grade samples and geochemical materials, 10 gram samples are fused in litharge, carbonate and siliceous flux with the addition of 10 mg of Au-free Ag metal and cupelled. The silver bead is parted with dilute HNO3 and then treated with aqua regia. The salts are dissolved in dilute HCl and analyzed for Au on an atomic absorption spectrophotometer.

CHEMEX LABS LTD. - SAMPLE PREPARATION CODES

203 Preparation method for SOIL or SEDIMENT samples:

The sample is dried, then sieved through a -35 mesh screen and ring pulverized to approximately -100 mesh.

217 Preparation method for SOIL or SEDIMENT samples:

The sample is dried and ring pulverized to approximately -100 mesh.

207 Preparation method for ROCK or CORE samples:

(Standard precious metal prep) The sample is dried, then the entire sample is crushed in two stages using jaw and cone crushers. Then it is subsampled and pulverized using a rotary grinder. The sample is screened to -140 mesh and the screen is examined for metallics. If metallics are present, they are analyzed separately, otherwise the +140 mesh fraction is hand pulverized and homogenized with the original sample.

205 Preparation method for ROCK or CORE samples:

(Standard geochem prep) The sample is dried, crushed, subsampled and ring pulverized to approximately -140 mesh.

214 PULP samples: Require no additional preparation for geochemical analysis.

231: A one assay ton surcharge.

Analytical Chemists •

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Geochemists • Registered Assayers

212 Brooksbank Ave. North Vancouver, B.C. Canada V7J 2C1 Phone:

(604) 984-0221 Telex: 043-52597

Chemex Labs Ltd.

			CER	TIFICATE OF	ASSAY			
TO :	YUKON MINERA 510 ELLIOTT WHITEHORSE, Y1A 2A5	ST.	RATION			CERT• # INVOICE DATE P•O• # MERCURY	: A8619 # : I8619 : 23-00 : NONE	
	ATTN: T. Mo	CRORY		G. DASLER				
	Sample	Ргер	Ag FA	AU FA				
	description	code	oz/T	oz/T				,
	2726	207	0.05	0.002	* -			
	2727	207	0.03	<0.002			<u> </u>	
	2728	207	0.01	<0.002				
	2729	207	0.02	<0.002				
	2730	207	0.01	<0.002			÷	
2	2731	207	0+29	<0.002				
2	2732	207	0.20	<0.002				
2	2733	207	0.04	<0.002				
2	2734	207	0.01	<0.002				
2	2735	207	0.03	<0.002				'
2	2736	207	0.03	<0.002				
2	2737	207	0.06	<0.002				
ŗ	2738	207	0.03	<0.002				
2	2740	207	0.16	0.002				
2	2741	207	0.05	<0.002				
. 2	2742	207	0.05	<0.002				
2 Z	2743	207	0.04	<0.002				
2	2744	207	0.05	<0.002				
2	2746	207	0.07	<0.002				
2	2748	207	0.01	<0.002				
2	2749	207	0.07	<0.002	~ -			
2	2750	207	0.02	<0.002				
P	G-1	207	0.04	<0.002				
P	G-2	207	0.02	<0.002				
	G-3	207	0.03	<0.002				
	G-4	207	0.01	<0.002				- -
	651 D	207	0.07	<0.002				
	652 D	207	0.07	<0.002				
	653 D	207	0.19	<0.002				
								1

Chem	ex	Labs	Ltd.
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212 Brooksbank Ave. North Vancouver, B.C.

		JIICII	IEN La			North V Canada	ancouver, B.C. V7J 2C1
	Analyt	ical Chemists	Geochemists	Registered	Assayers	Phone: Telex:	(604) 984-0221 043-52597
		CERTIF	ICATE OF A	NALYSIS			
O : YUKON MINERA	ALS CORPO	RATION			CERT. # Invoice #		9369-001-A
510 ELLIGTT WHITEHORSE+		SEA	2CHUGHT	UBSTRY.S	DATE P.O. #	: 23-0 : NONE	CT-86
Y1A 2A5		≪ (8 V	ANCOUVER,	BL.	MERCURY		
ATTN: T. Mc	CRORY	CC: P.G	DASLER				
Sample	Prep	Ag ppm	Au ppb			-	
description	code	Aqua R	FA+AA				
22739	205	1.0	5				
.22745	205	0.4	<5				
22746	205	0.5	<5				
							,

VOI rev. 4/85

Certified by Hart Bichler

Chemex Labs Ltd.

212 Brooksbank Ave. North Vancouver, B.C. Canada V7J 2C1 Phone: (604) 984-0221 Telex: 043-52597

: A8618755-001-A

7-0CT-86

: I8618755

: NONE

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Analytical Chemists

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CERT. #

DATE

P.C. #

INVOICE #

CERTIFICATE OF ANALYSIS

TO : YUKON MINERALS CORPORATION 510 ELLIOTT ST. WHITEHORSE, Y.T.

Y1A 2A5

SEARCHLIGHT RES. 215-744 W. Hastings st. Vancouver, BC

		• •• •		4			
ATTN: T. P	1cCR OR Y	QC. P.G.	DASLER				
Sample	Prep	Ag ppm	Au ppb				
description	code	Aqua R	FA+AA				
22720 F	205	0.8	<5				÷
22721 F	205	1.6	5		+-	* *	
22725 F	205	0.3	<5				** -=

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Hart Brokler Certified by .

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Registered Assayer. Province of British Columbia

CERTIFICATE OF ASSAY

TO : YUKON MINERALS CORPORATION

510 ELLIOTT ST. WHITEHORSE, Y.T. Y1A 2A5

SEARCHLIGHT RESCUELES 218-744 W. HASTINGS VAN COUVER, BC

Phone:	(604) 984-02
Telex:	043-525

CERT. #		:	A8618756-001-A
INVOICE	#	:	18618756
DATE		:	14-0CT-86
P•O• #		:	NONE

: NONE

			<u> </u>		
ATTN:	т	MCCRORY		D.C.	DASLER

Sample	Prep	Cu	Pb	Zn	5102 %	Ag FA	AU FA
description	code	2	z	z	fusion	oz/T	oz/T
22717 F	207					0.09	<0.003
22718 F	207					0.16	<0.003
22719 F	207				- -	0.04	<0.003
22722 F	207					0.10	<0.003
22723 F	207					0.50	0.008
22724 F	207					<0.01	<0.003
22786 BARRY	207	<0.01	3.71	18.90	- -	0.37	0.010
22787 BARRY	207	<0.01	58.90	4.11		39.39	0.004
22788 BARRY	207	0.01	0.66	6.30		0.85	<0.003
22789 BARRY	207	0.08	10.00	14.40		21.90	<0+003
22790 BARRY	207	0.02	0.88	21.70		1.23	0.006
22791 BARRY	207	0.04	13.10	11.10		6.05	0.012
22792 BARRY	207	0.15	32.30	0.55	56.90	20.98	0.004
22793 BARRY	207	<0.01	4.34	16.30		0.46	<0.003

YC:	C	heme	ex L	abs Lto	d.	N		oksbank Av ancouver, B. V7J 2	C.
	Analyti	al Chemists •	Geochemi	sts • Registered	Assayers		hone: elex:	(604) 984-02 043-525	
		CERTIFI	CATE OF	ANALYSIS					
TO : YUKON MINERALS	CORPO	RATION		**	CERT. # INVOICE			8389-001 8389	L-A
510 ELLIGTT ST. WHITEHCRSE, Y.T YIA 2A5					CATE P.C. # Mercury	-	29-5 None	SEP-86	
ATTN: T. McCRC Sample P	RY rec	CC: P.G. Ag ppr	DASLER						
	ode	Aqua R							

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22706

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Zn

MERCURY

Ag FA

CERTIFICATE OF ASSAY

TO : YUKON MINERALS CORPORATION

T. MCCRORY

Prep

510 ELLIOTT ST. WHITEHORSE, Y.T. Y1A 2A5

SEARCHLIGHT RESURCES 218-744 W. HASTINGS VANC. BC P.G. DASLER

	Τŧ	elex: 043-525
. #	 :	A8618390-001

CERT . 1-A INVOICE # : 18618390 DATE 6-0CT-86 : P.O. # : NONE

Au FA

ATTN:

Sample

Сu Pb

√cc:

description	code	z	2	%	oz/T	oz/T	
22705	207				0.03		
22707	207			÷ -	0.12		
22708	207				0.04		
22709	207			- -	0.67		
22710	207				0.88		
22711	207				1.78		
22712	207				0.68		
22713	207				0.03		
22714	207	0.06	36.20	7.30	37.00	0.004	
22715	207				17.20		·
22716	207				11.60	0.154	

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Registered Assayer, Province of British Columbia

C	Chemex Labs I	Ltd.	212 Brooksbank Ave. North Vancouver, B.C. Canada V7J 2C1	SEARCHLIGHT RES 218-744 W. HASTINGS ST VANCOUVER, BC
E	•Analytical Chemists •Geochemists •Reg	istered Assayers	Telephone:(604) 984-0221 Telex: 043-52597	Semi quantitative multi element ICP analysi: Nitric-Aqua-Regia digestion of 0.5 gm of
TO : YUKON MINE 510 Elliot Whitehorse Y1A 2A5			: A8619368-001-A : I3619363 : 27-0CI-S6 : NONE	material followed by ICP analysis. Since thi digestion is incomplete for many minerals. values reported for Al, Sb, Ba, Be, Ca, Cr. Ga, La. Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative. COMMENTS : ATTN: T. McCRORY CC: P.G. DASLER
ATTACK AND AND	Ag As Ba Be Bi Ca Cd Co Cr Cu ppa ppz ppa ppa ppa I ppa ppa ppa ppa 0.2 140 220 c0.5	n Z ppn Z 5 3.03 (10 0.10	ppa 1 ppn ppn 1	
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	Chemex Labs I	Ltd.	212 Brooksbank Ave. North Vancouver, B.C.	SEARCHLIGHT KESOURCES 218-774 W. HASTINGS 57.
	Analytical Chemists -Geochemists -Reg	istered Assayers	Canada V7J 2C1 Phone: (604) 984-0221	VANCOUVER, B.C. Semi quantitative multi element ICP analysis
E	-Analytical Chemists -Geochemists -Reg		Canada V7J 2C1	
	ERALS CORPORATION	** CERT. *	Canada V7J 2C1 Phone: (604) 984-0221	Semi quantitative multi element ICP analysis Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since the digestion is incomplete for many minerals.
TO : YUKON MINI 510 ELLIO WHITEHORSI	ERALS CORPORATION	** CERT. * INVOICE DATE P.O. * MERCURY	Canada V7J2C1 Phone: (604) 984-0221 Telex: 043-52597 : A8618391-001-A : I8618391 : 30-SEP-86 : NONE La Mg Mn Mo Na	Semi quantitative multi element ICP analysis Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since the digestion is incomplete for many minerals, values reported for Al, Sb. Ba. Be. Ca. Cr. Ga. La. Mg. K. Na. Sr. Tl. Ti. W and V can only be considered as semi-quantitative. COMMENTS :
TD : YUKON MINI 510 ELLIO: WHITEHORSI YIA 2A5 Sample Al description 2	CERTIFICATE OF ANALYS ERALS CORPORATION IT ST. S. Y.T. Ag As Ba Be Bi Ca Cd Co Cr Cd ppm	** CERT. * INVOICE DATE P.O. * MERCURY	Canada V7J2C1 Phone: (604) 984-0221 Telex: 043-52597 : A8618391-001-A : I8618391 : 30-SEP-86 : NONE La Mg Mn Mo Na ppa 2 ppa ppa 2	Semi quantitative multi element ICP analysis Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since the digestion is incomplete for many minerals, values reported for Al, Sb. Ba. Be, Ca. Cr. Ga. La, Mg. K. Na, Sr. Tl. Ti, W and V can only be considered as semi-quantitative. COMMENIS : ATTN: T. MCCRORY CC: P.G. DASLER / Ni P Pb Sb Sr Ti TI U V W Zn

Bondar-Clegg & Company Ltd. 130 Pemberton Ave. North Vancouver, B.C. Canada V7P 2R5 Phone: (604) 985-0681 Telex: 04-352667



Oct. 27 1986

Mr. P. G. Dasler Searchlight Resources Inc. 218-744 West Hastings Vancouver B.C. V6C 1A5

RE: Assay Procedures used on Yukon Minerals samples.

Dear Sir:

Contained in this letter is the assay procedure used on your samples. I will describe the full procedure from receiving the samples to reporting the results.

Sample Preparation:

- (a) When the samples are recieved they are given a report number.
- (b) The method of shipping is noted.
- (c) The samples are then sorted numerically or according to client shipment form if provided.
- (d) The whole sample is then put through a 6" jaw crusher.
- (e) The whole sample is then put through a 10" cone crusher. Which crushes down to 10 mesh.
- (f) Sample is then split down to approximately 250 grams and the excess material is placed back into original bag and the "250" gram split is placed into a paper bag.
- (g) The 250 gram split is pulverized to 90% -150 mesh.

Analyses: Fire Assay

The pulverized sample was then fire assayed for Au and Ag. The fire assay procedure was as follows;

- (a) The sample is weighed into a crucible with prepared flux. The flux, was appropriate weights of litharge, soda, silica, borax glass, and flour. liquid silver was added to all of the samples in a Au run.
- (b) Three samples out of every 24 are run again on another fusion at the end of a report. All samples over 0.20 OPT Au are run again as a check and weighed on the gold balance, as well as any sample whose results look suspect. (ie a high one amongst a series of low ones and vise versa)
- (c) The samples are fused at 1950 degrees F for about 40 minutes.
- (d) The slag is removed from the resulting lead button, which contains the Precious metals and weighs between 30 and 40 grams.
- (e) The lead button is then cupelled to get rid of the lead and the resulting bead is digested in a test tube and analysed on an A.A. unit.

I hope the description of the procedures is adequate for your needs.

cerelv

Chief Assayer

 'ar-Clegg & Company Ltd.

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 Phone! (604) 985-0681

 Telex: 04-352667
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Certificate of Analysis

	REPORT: 426-5544			PROJECT: MERCURY PAGE 1
	SAMPLE ELENE NUMBER UNI		Ag OPT	
	R2 8654		0.06	
	R2 8655	0.024	3.32	
	R2 8656	0.014	1.50	
	R2 8657	<0.002	0.51	
	R2 8658		0.04	······································
	R2 8659	0.002	<0.02	
	R2 8660		0.04	
	R2 8661	10 000	0.02	
	R2 8662 R2 8663	<0.002	<0.02 0.05	
	A4 000		V • VJ	and the second
	R2 8664		<0.02	
	R2 8665 R2 8666		0.02	
	R2 8666 R2 8667		0.03	
	R2 8668	<0.002	0.70	•
	R2 8669	0.005	37.23	
	R2 8670	0.002	0.57	
	R2 8671 R2 8672	<0.002 <0.002	A A4	
	R2 8673	10.002	0.04 0.03	
		· · · · · · · · · · · · · · · · · · ·		
	R2 8674 R2 8675		0.04 0.03	
	R2 8676	<0.002		
	R2 8677	<0.002		
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Registered Assayer, Frevince of British Columbia

APPENDIX 2

PETROLOGICAL REPORT.

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Vancouver Petrographics Ltd.

JAMES VINNELL Manager JOHN G. PAYNE, Ph. D. Geologist P.O. BOX 39 8887 NASH STREET FORT LANGLEY, B.C. VOX 1JO

PHONE (604) 888-1323

Invoice 6092

Report for: Peter Dasler, Searchlight Resources Inc., 213 - 744 West Hastings Street, Vancouver, B.C., V6C 1A5.

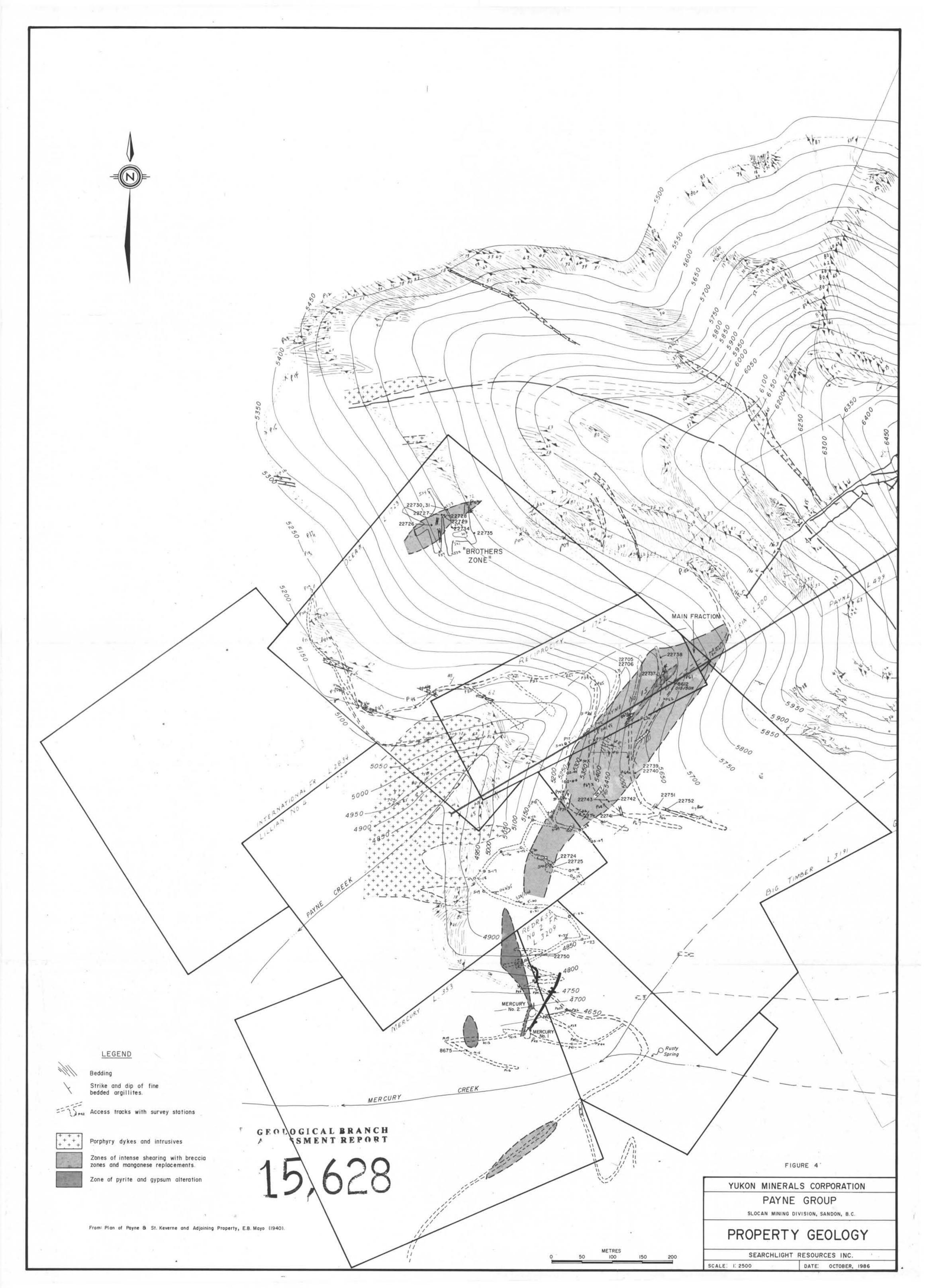
October 23, 1986

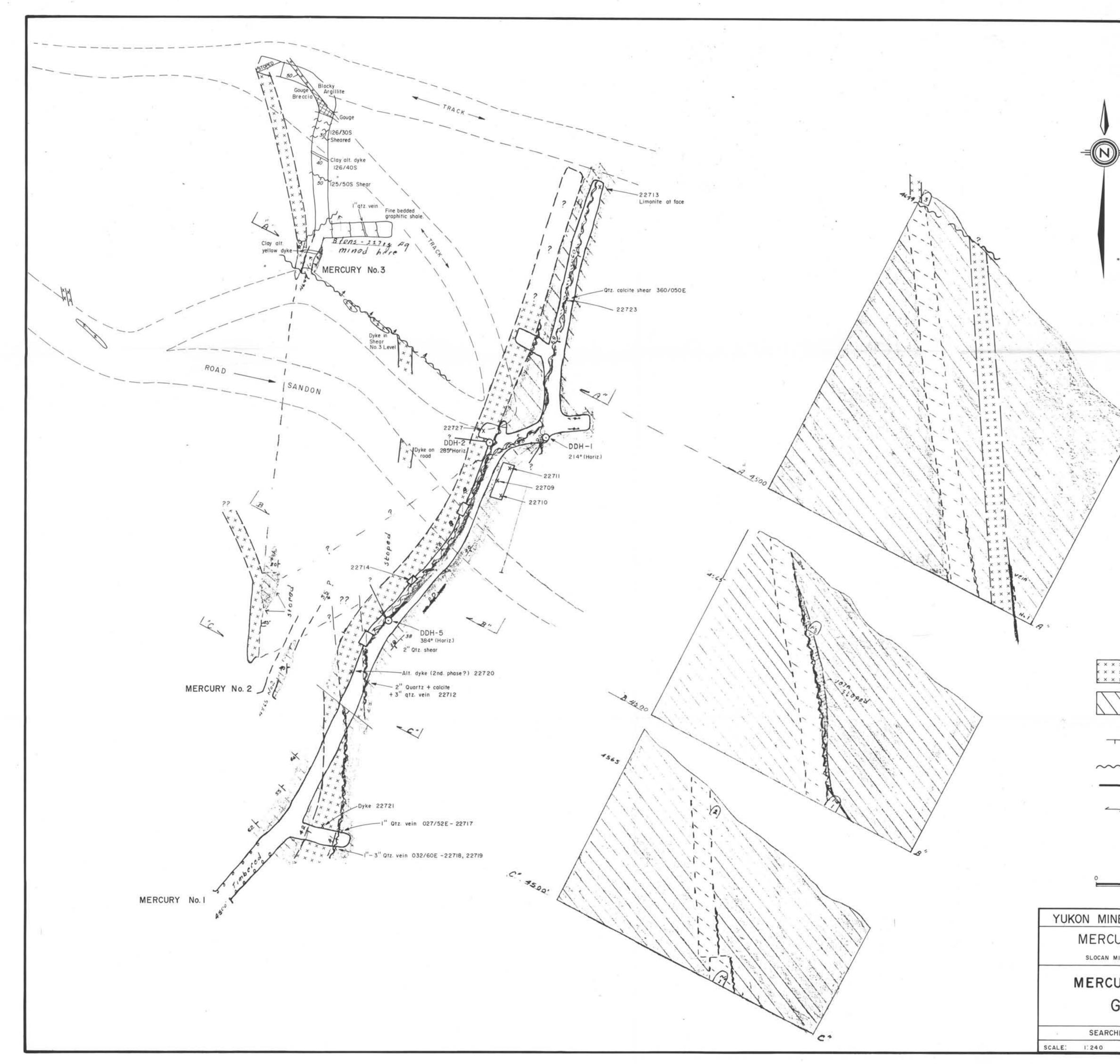
Sample: One unlabelled rock.

The sample is a nard, black, highly vesicular rock which consists of an intimate intergrowth of manganese and iron oxides. The main manganese mineral appears to be braunite (3nn203.MnSi03) but others such as pyrolusite (1n02) may be present; precise identification of species is best made by X-ray diffraction. The main iron mineral is goethite (FeO(OH)). These occur as extremely fine mixtures in various proportions, showing a fine colloform growth. The goethite tends to be the last to form in a sequence of rings so that the vesicles are lined with a thin zone of it; the braunite tends to occur in the core of a sequence of rings. Individual rings are mostly less than U.2mm in width.

Within the Mn-Fe oxide mixture there is a small (2mm) piece of country rock. It is a fine phyllite, consisting of subrounded quartz grains about 0.05mm in size with thin sericite flakes between them. Contacts are sharp and the rock piece is not being replaced, although fine whisps occur along the foliation. Evidence of replacement, such as "ghosts" of country rock within the mass of fin-Fe oxides is absent and this material probabaly formed by supergene deposition in open spaces.

A. L. Little john, M.Sc.





LEGEND PORPHYRY ARGILLITE FOLIATION SHEAR VEIN CLEAVAGE METRES J 10 15 FIGURE 6 RALS CORPORATION RY PROPERTY ING DIVISION, SANDON, BC. RY WORKINGS		6228	
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ARGILLITE FOLIATION SHEAR VEIN CLEAVAGE METRES 5 10 15 FIGURE 6 RALS CORPORATION RY PROPERTY NG DIVISION, SANDON, B.C. RY WORKINGS			
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SHEAR VEIN CLEAVAGE METRES 5 10 15 FIGURE 6 RALS CORPORATION RY PROPERTY NG DIVISION, SANDON, B.C. RY WORKINGS		ARGILLITE	
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METRES 5 10 15 FIGURE 6 RALS CORPORATION RY PROPERTY ING DIVISION, SANDON, B.C. RY WORKINGS	_		
FIGURE 6 RALS CORPORATION RY PROPERTY ING DIVISION, SANDON, B.C. RY WORKINGS		CLEAVAGE	
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