

file NTS True blue claim's

822586

NAME OF PROPERTY TRUE BLUE

MINING DIVISION NELSON, BRITISH COLUMBIA

LOCATION 2KM SW OF KASLO, BC

NTS 82F/15W (70KM N OF NELSON, BC)

GEOLOGY & TYPE OF DEPOSIT VOLCANOGENIC MASSIVE

SULPHIDES WITHIN UPPER PALEOZOIC MILFORD GROUP.

SUBMITTOR NOTIFIED YES

CO-ORDINATES _____

OWNER OTTO & OTAKAR JANOUT

ADDRESS 310-1509 MARTIN STREET

WHITE ROCK, BC V4B 3W8

PHONE (604) 536-1839

PARTNERS _____

Access, area, financial proposals, history & development, production, reserves, geology & mineralization, geophysics, previous submittals, references, remarks, recommendations.

DATE SUBMITTED _____

FILE NO. NTS 82F/15W DATE EXAMINED 27 JULY 1991

852-4152

APPRAISAL -  MR OTTO JANOUT -

APPRAISAL -  310-1509 MARTIN ST
WHITE ROCK BC CANADA
V4B 3W8 -

30-33123 NELSON AVE.
ABBOTSFORD B.C
V2S 2L6

ACCESS

Excellent. Property is located 2km SW of the town of Kaslo and is reached via old logging roads up to approximately 4000' level. 45 min. trail to main showing at ~4700'. Helicopter base located ~10km away. Two helicopter pads straddling main showing at 1) ~4500' and 2) ~5200'. Main showing is about 2/3 up True Blue mountain on steep, NE facing slope with variable bush and rock exposure.

CLAIMS

113 units and 2 reverted Crown grants. The vast majority not due until the year 2000, owned wholly by Otto Janout and his father, Otakar Janout.

HISTORY

- 1898 - a few hundred feet of underground work produced 92 tons of ore averaging: 8.9% Cu, 58.6 g/t Ag, 1.3 g/t Au, with Zn not recovered.
- 1902-1978 - Basically dormant
- 1979 - optioned by Esso Minerals
- 1981-1982 - optioned by SMD Mining Co.
- 1986 - optioned by Minequest Exploration
- N.B. 1902 through 1986 (as per dates listed above) - mainly regional soil and rock geochem with some geophysics. Esso confirmed main showing averaging Cu 6-7%, Zn 1-2% and similar Ag+Au to 1898 results.

1987-1990 - Optioned by QPX Minerals who spent a total of approximately \$400,000. Work included: 58km of grid cut; detailed geological mapping of grid at 1:2,500 scale; 58 line km of Mag; 58 line km of VLF-EM; 13 line km of I.P.; 2 line km of mise a la masse; and much detailed soil and rock geochem. Program culminated in one diamond drill hole approximately 450' deep which failed to intersect massive sulphides and subsequently the option was dropped.

REGIONAL GEOLOGY

The claims lie within the complex geology of the Kootenay Arc. The area is underlain by lower Paleozoic grit and schist of the Lardeau Group. Overlying these by an angular unconformity are the upper Paleozoic sediments and volcanics of the Milford Group. These are overlain by the late Paleozoic to early Mesozoic Kaslo Group porphyritic andesitic volcanics and volcanoclastics before greenschist facies. Some narrow ultramafic slices in the Kaslo mark the loci of thrust faulting. Overlying the Kaslo Group are the Mesozoic phyllites and limestone of the Slocan Group.

PROPERTY GEOLOGY AND MINERALIZATION

The True Blue showing appears to be a volcanogenic massive sulphide deposit type. Massive sulphides (cpy, po, py, sph) within an approximate 1.2m unit are banded, apparently syngenetic and occur within a siliceous, sericitic envelope in the upper Milford Group volcanics. The sulphides are confined to this quartz-sericite schist unit which is part of a westward dipping succession of Milford and Kaslo volcanics which are bounded to the west by a thrust fault. The overlying Upper Triassic Slocan sediments contain parts of the Kaslo Group which have been faulted into the upper plate. Intruding these are Cretaceous diorites which may truncate the sulphide unit on the west side.

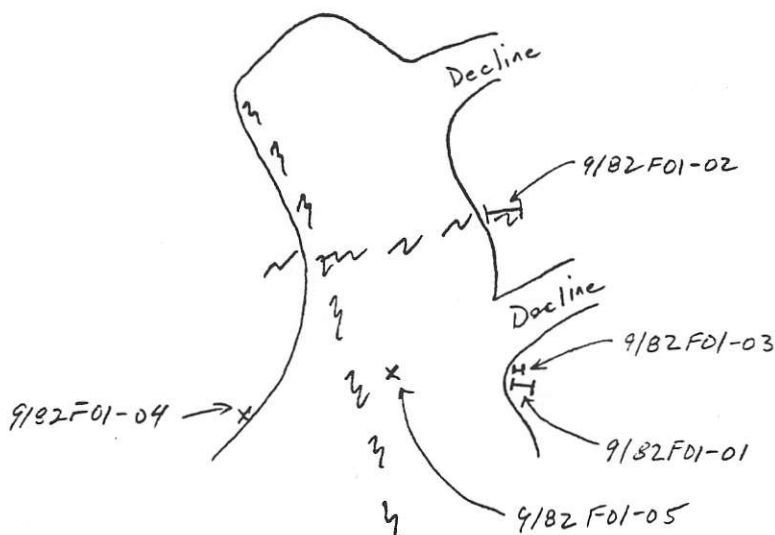
EXAMINATION REMARKS

The vast majority of information has been gathered by QPX between 1986-1991. The surficial mapping and sampling program was extensive in search of peripheral showings and produced a detailed map, however no other showings were found on surface. Other quartz-sericite schist outcrops were located but were essentially barren aside from minor pyritic laminations. Manganese is locally common and in one particular location (called the Manganese Showing) is prolific, occurring in rhodonite. QPX concluded that the sericitic units were the same and interpreted them as part of a large fold. Based on this, the drill hole was oriented down

the topographic dip slope at -67° aiming to intersect a pencil shaped ore body in the nose of the large fold. The massive sulphide unit was not intersected and downhole geophysical results were poor. However, according to property owner, Otto Janout, a recent visit by geologist Trygve Hoy to the property in 1990 led to the opinion of Mr. Hoy that the orientation of the massive sulphide unit is not controlled by that generation of folding which QPX believed.

The True Blue showing was visited by contracting [redacted] geologists, Shaun Pattenden, Alex Nikolajevick, and myself, report author, Ian Mitchell, on July 27, 1991. A total of 5 rock samples were taken at the True Blue showing Glory Hole Adit entrance as follows:

- #9182F01-01 - 1m chip across central qtz-ser schist containing 40cm sulph.
- #9182F01-02 - 1.6m chip across shear in qtz-ser schist with 20cm mass. sulph.
- #9182F01-03 - 40cm chip across massive sulphide zone (cpy, po, py, sph sample #1)
- #9182F01-04 - 1m chip across upper west unmineralized limb of qtz-ser schist.
- #9182F01-05 - high grade ore sample grab in Glory hole.



Sketch Map of Glory Hole Adit with Sample Locations.

Total sulphides are generally >90% in the massive zone. Faulting in the Glory hole adit appears to truncate the sulphide zone at surface on the SW side. Complex folding further complicates the picture and it is clear that a structural analysis with stereonet would enhance interpretation of post mineralization structural controls for the deposit; more detailed work in the Glory Hole vicinity is required. Unfortunately, sloughing in the adits has prevented mapping of the work done at the turn of the century. It is unknown what happens to the ore zone in these; whether it pinches out, is displaced by faulting or truncated at depth by the diorite, etc.

RECOMMENDATIONS

Sample results (still pending) are expected to be favourable; the massive sulphide zone is impressive looking but small in size. Lack of geophysical conductors with the exception of a questionable mis a la masse response, is discouraging. The complexity of folding and local faulting complicates exploration for a larger target but may explain the lack of success to date. However, the age of the host rocks (late Paleozoic) and alteration around the massive sulphide zone (a sericitic unit surrounded by propylitically altered volcanics and sediments) indicate the environment is favourable for VMS type deposits. The author believes that there is the room and potential for a larger size deposit on the property.

Ian Mitchell
BSc. Geol 1983

IM/tb

CERTIFICATE OF ANALYSIS

A9119158

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
9182 F01-01	205	294	7	0.01	22	700	122	5	4	10	0.02	< 10	< 10	76	< 50	2000
9182 F01-02	205	294	18	< 0.01	1	2100	420	< 5	6	11	0.04	< 10	< 10	102	600	2420
9182 F01-03	205	294	2	0.03	35	440	38	< 5	7	20	0.33	< 10	< 10	101	< 10	144
9182 F01-04	205	294	14	< 0.01	34	370	550	10	2	21	< 0.01	< 10	< 10	26	< 50	>10000
9182 F01-05	205	294	26	< 0.01	73	1000	386	10	3	1	< 0.01	< 10	< 10	25	200	>10000

CERTIFICATE OF ANALYSIS

A9119158

SAMPLE DESCRIPTION	PREP CODE	Au-AA ppb	Hg ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
9182 F01-01	205 294	180	3.6	2.03	80	130	< 0.5	38	0.42	< 0.5	59	170	>10000	11.15	< 10	< 1	0.13	< 10	1.89	1345
9182 F01-02	205 294	2300	37.6	1.30	165	70	< 0.5	< 2	0.06	< 0.5	22	136	>10000	>15.00	10	< 1	0.06	< 10	0.67	320
9182 F01-03	205 294	55	2.0	1.90	25	80	< 0.5	16	0.97	< 0.5	14	230	4260	5.34	< 10	< 1	0.04	< 10	1.45	1050
9182 F01-04	205 294	1300	13.0	0.19	1365	20	< 0.5	< 2	1.07	34.5	569	81	>10000	>15.00	< 10	< 1	0.02	< 10	0.16	785
9182 F01-05	205 294	385	28.6	0.13	615	20	< 0.5	< 2	0.19	48.0	112	35	>10000	>15.00	10	4	0.02	< 10	0.17	760

June 6, 1990

DRILLING TO COMMENCE ON TRUE BLUE POLYMETALLIC PROSPECT

Diamond drilling on the True Blue copper/gold/silver project will commence June 9, 1990.

The True Blue Property is located four kilometres southwest of Kaslo, B.C., in the Slocan Mining Division. The drill area and old workings are at an elevation of about 1500 metres, on the east side of True Blue Mountain.

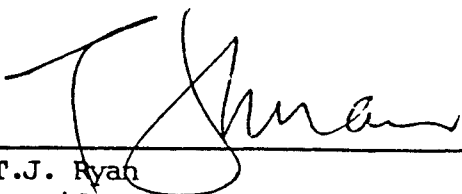
The property consists of eight mineral claims and two Reverted Crown Grants, held by QPX Minerals Inc. under the terms of a 1987 option agreement, and three mineral claims owned by QPX. QPX may purchase a 100% interest in the optioned claims for \$500,000 subject to a 2% NSR. These claims cover the True Blue Showing and approximately 12 kilometres of strike length of the host Milford Group.

Limited production from the True Blue Showing at the turn of the century reported 96 tonnes grading 8.9% Copper, 58.6 g/tonne Silver, and 1.3 g/tonne Gold.

The True Blue showing is an occurrence of massive sulphides hosted by Upper Paleozoic sediments and volcanics of the Milford Group. Mineralization is typical of volcanogenic massive sulphide deposits; banded massive pyrite-pyrrhotite-chalcopyrite with lesser amounts of galena and sphalerite within a sericitic schist unit. Sulphide thicknesses exposed range up to 1.2 metres. The mineralization is located at the nose of a fold that plunges to the northwest.

Work by QPX during 1987 and 1988 traced the sericitic unit 800 metres north of the showing and defined an anomaly with Induced Polarization and Mise a la Masse surveys that suggest that the sulphide body continues to the north.

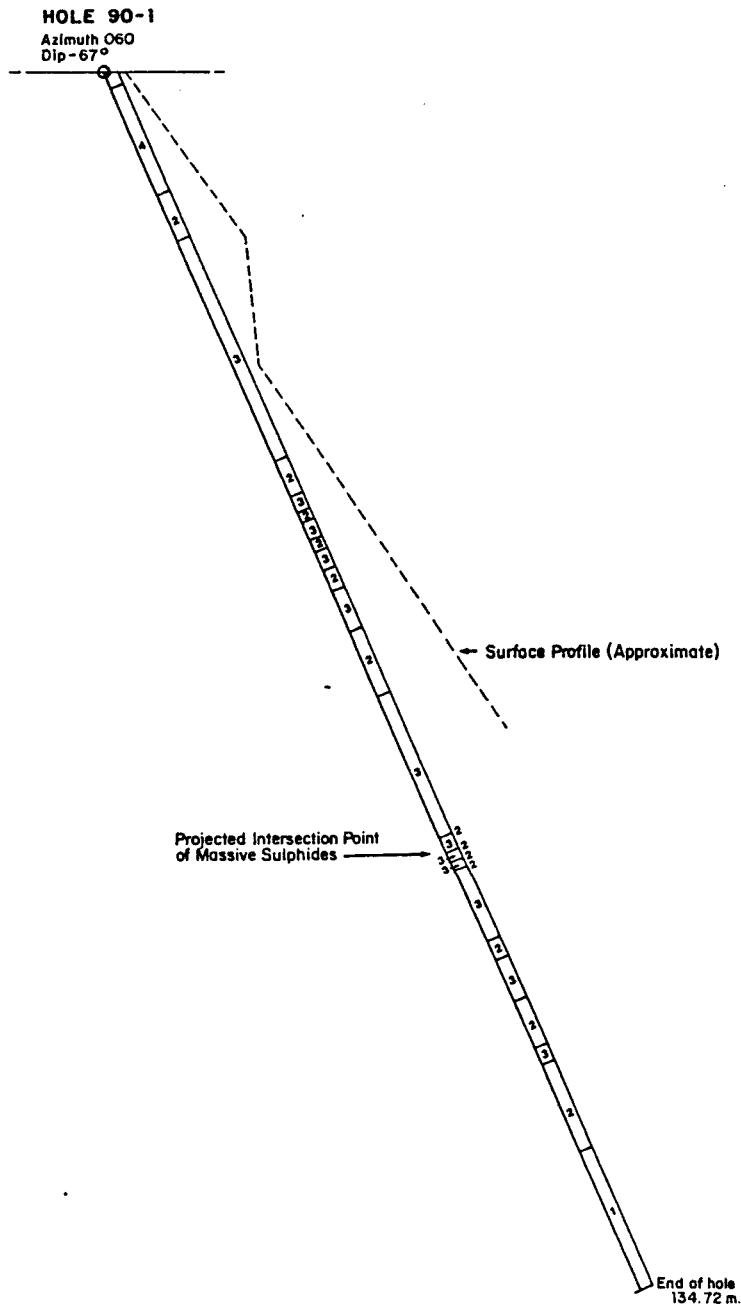
The current diamond drill program is designed to test for the down-plunge extension of the mineralization found at surface. Results are expected by late June.



T.J. Ryan
President

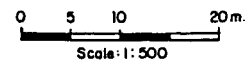
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LEGEND

- 4 Andesite flows ; massive, green, fine to medium grained
- 3 Andesite tuffs ; massive to finely bedded, green, fine grained
- 2 Sediments , finely bedded, grey, very fine to fine grained
- 1 Interbedded sediments and Andesite tuffs; finely banded, green to grey, fine grained



QPX MINERALS INC.			
TRUE BLUE PROPERTY			
DRILL SECTION HOLE 90-1			
PLAN NO.	DRAWN	DATE	FIGURE
	C.D.	June '90	5
Revised _____		N.T.S. 82 F/15W	
MINEQUEST EXPLORATION ASSOCIATES LTD.			

TABLE 5-2

Volcanogenic Massive Sulphide Deposits and Occurrences in British Columbia

Name	MINFILE No.	Type	Terrane	Host	Age
CAMBRIAN					
Goldstream area					
1 Goldstream	082M 141	Besshi	Kootenay	Lardeau	C
2 Montgomery	082M 085	Besshi	Kootenay	Lardeau	C
3 Standard	082M 090	Besshi	Kootenay	Lardeau	C
4 Brew	082M ?	Besshi	Kootenay	Lardeau	C
DEVONIAN					
Barriere area					
5 Twin Mtn.	082M 020	Kuroko(?)	Kootenay	Eagle Bay	D
6 Homestake	082M 025	Kuroko	Kootenay	Eagle Bay	D
7 Bay	082M 053	Kuroko	Kootenay	Eagle Bay	D
8 Joe	082M 054	Kuroko	Kootenay	Eagle Bay	D
9 Beca	082M 055	Kuroko	Kootenay	Eagle Bay	D
10 Birk Creek	082M 067, 60, 130, 131	Kuroko	Kootenay	Eagle Bay	D
11 May	082M 131	Kuroko	Kootenay	Eagle Bay	D
12 Rea	082M 191	Kuroko	Kootenay	Eagle Bay	D
13 Fortuna	092P 044	Kuroko	Kootenay	Eagle Bay	D
Vancouver Island					
14 Twin J		Kuroko	Wrangellia	Sicker	uD
Lenora	092B 001				
Tyee	092B 002				
Richard III	092B 003				
15 Lara		Kuroko	Wrangellia	Sicker	uD
Coronation Zone	092B 129				
Coronation Ext. Z.	092B 129				
Randy North Zone	092B 128				
Hangingwall Zone					
16 Anita	092B 037	Kuroko	Wrangellia	Sicker	uD
17 Sharon Copper	092B 040	Kuroko	Wrangellia	Sicker	uD
18 Water Power	092B 041	Kuroko	Wrangellia	Sicker	uD
19 Jane	092B 084	Kuroko	Wrangellia	Sicker	uD
20 Copper Canyon	092B 086.4	Kuroko	Wrangellia	Sicker	uD
21 Breen Lake	092B 090	Kuroko	Wrangellia	Sicker	uD
22 Regina	092F 078	Kuroko	Wrangellia	Sicker	uD
23 Debbie	092F 125	Kuroko	Wrangellia	Sicker	uD
24 Thistle	092F 083	Kuroko	Wrangellia	Sicker	uD
25 Westmin					
Lynx	092F 071	Kuroko	Wrangellia	Sicker	uD
Myra	092F 072	Kuroko	Wrangellia	Sicker	uD
Price	092F 073	Kuroko	Wrangellia	Sicker	uD
H-W	092F 330	Kuroko	Wrangellia	Sicker	uD
PERMIAN-MISSISSIPPIAN					
26 Chu Chua	092P 140	Cyprus	Slide Mtn.	Fennel	M-P
27 Lang Creek	104P 008	Cyprus	Slide Mtn.	Sylvester	uPl
28 True Blue	082F 002	Besshi	Slide Mtn.	Milford	M-Pm
29 Packsack	103H 013	Kuroko	Taku (Wrangellia)		Pl
30 Horsefly	103H 014	Kuroko	Taku (Wrangellia)		Pl
31 Cimadoro	103F 052	Besshi(?)	Wrangellia	Sicker(?)	Pl(?)
32 Ecstall	103H 011	Kuroko	Taku (Wrangellia)		Pl
33 Scotia	103I 007	Kuroko	Taku (Wrangellia)		Pl
34 Pit	103H 066	Kuroko	Taku (Wrangellia)		Pl
35 Foremore	104G ?	Kuroko(?)	Stikinia	Stikine	D-M
Tulsequah area					
36 Tulsequah Chief	104K 061	Kuroko	Stikinia	Stikine	Pm
37 Big Bull	104K 008	Kuroko	Stikinia	Stikine	Pm
38 Maple Leaf	104K ?	Kuroko	Stikinia	Stikine	Pm
39 Ericksen-Ashby	104K 011	Kuroko	Stikinia	Stikine	Pm
40 Mary Mac	092J ?	Cyprus	Bridge R.	Bridge R.	Pm-Tr
41 New Discovery	092J 121	Cyprus	Bridge R.	Bridge R.	Pm-Tr
TRIASSIC					
42 Kutcho Creek	104I 060	Kuroko	Stikinia	Kutcho	uTr(?)
43 Windy Craggy	114P 002	Besshi	Alexander	Tats	uTr
44 Rime	114P 061	Besshi	Alexander	Tats	uTr
45 Rock and Roll	103H ?	Kuroko	Stikinia	Stuhini	uTr
Anyox area					
46 Hidden Creek	103P 021	Cyprus	Stikinia	Karmutzen	uTr
47 Bonanza	103P 023	Cyprus	Stikinia	Karmutzen	uTr
48 Double Ed	103P 025	Cyprus	Stikinia	Karmutzen	uTr
49 Redwing	103P 024	Cyprus	Stikinia	Karmutzen	uTr
50 Eden	103P 026	Cyprus	Stikinia	Karmutzen	uTr
51 Granduc	104B 021	Besshi	Stikinia	Stuhini	uTr
52 Sylvester K	082E 052	Kuroko	Quesnellia	Brooklyn	uTr
JURASSIC					
53 Dolly Varden	103P 088	Kuroko(?)	Stikinia	Hazelton	IJ
54 Torbrit	103P 191	Kuroko(?)	Stikinia	Hazelton	IJ
55 North Star	103P 189	Kuroko(?)	Stikinia	Hazelton	IJ
56 Eskay Creek	104B 009	(Kuroko)	Stikinia	Hazelton	mJ
57 Seneca	092H 013	Kuroko	Harrison	Harr. L.	mJ
CRETACEOUS					
58 Britannia	092G 003	Kuroko	Harrison	Gambier	K
59 Maggie	092G 036	Kuroko	Harrison	Gambier	K
60 McVicar	092G 006	Kuroko	Harrison	Gambier	K
61 Roy	092G 001	Kuroko	Harrison	Gambier	K
62 Hopkins	092G ?	Kuroko	Harrison	Gambier	K
USA					
63 Lockwood	Washington	Kuroko			K
64 Greens Creek	Alaska	Besshi	Stikinia	Stuhini	uTr

TABLE 5-4
Volcanogenic Massive Sulphide Deposits — Production Data¹

No.	Name	Tonnes	Cu	Zn	Pb	Ag	Au
1	Goldstream	427 886	11 849	505	-	3 820	-
6	Homestake	4 296	9	203	141	8 751	11.3
14	Lenora ³	119 831 ²	3 595	1 926	165	10 722	386.1
	Tyee	152 668 ²	5 841	-	-	13 725	762.5
	Richard III	4 903 ²	114	-	-	523	22.8
24	Thistle	6 283 ²	309	-	-	66	85.9
25	Westmin ^{3,4}	10 392 097	176 423	558 384	56 795	636 409	16 418.0
36	Tulsequah ^{3,5}	933 609	12 341	56 559	15 214	105 774	2 931.7
46	Hidden Creek	21 725 524 ²	321 546	-	-	206 309	3 772.8
47	Bonanza	655 656	14 300	-	-	8 748	86.6
51	Granduc	15 173 140 ²	190 144	-	-	124 049	2 000.1
53	Dolly Varden	33 434	0.2	-	0.9	42 451	-
54	Torbrit	1 251 339	-	283	4 868	579 956	3.4
55	North Star	101 ²	-	-	-	88	-
57	Seneca	260 ²	3	18	-	30	0.5
58	Britannia ³	47 402 534	516 960	125 291	15 563	180 846	15 350.6

¹ Copper, zinc and lead data in 1000 kg; silver and gold in kg (to 1989 inclusive).

² Tonnes mined, not milled.

³ Deposit also produced cadmium.

⁴ Includes production from Lynx, Myra and H-W deposits.

⁵ Includes production from Big Bull, 1951-1956.

NOTE: Data from B.C. Geological Survey Branch MINFILE.

marginal basins, possibly back-arc basins, in relatively close proximity to the Eagle Bay assemblage of the pericratonic Kootenay Terrane (Schiarrizza and Preto, 1987).

Anyox (MINFILE 103P 021 to 25)

Deposits in the Anyox district north of Prince Rupert were major producers of copper between 1914 and 1936 (Nelson, 1935; 1948). Approximately 22 million tonnes of ore were mined from the largest of the deposits, the Hidden Creek orebody, producing 322 000 tonnes of copper, 206 tonnes of silver and 3.8 tonnes of gold (Table 5-4). The large reserve tonnage reported (Table 5-3) is primarily for a quartz-vein stockwork zone.

The massive sulphide deposits occur at or near a conformable contact of tholeiitic basalts and an overlying argillite succession, both of upper Triassic age (Figure 5-15). They are composed mainly of pyrite with lesser amounts of pyrrhotite, chalcopyrite and sphalerite (Sharp, 1980). Footwall rocks comprise a thick pillow basalt sequence, overlain by basaltic tuff interbedded with chert, and a crudely bedded chert unit that is associated with the largest sulphide masses. Both the tuff and chert units are thickest beneath the sulphide masses; the chert can be traced for several kilometres away from the Hidden Creek area.

The footwall rocks are variably altered with silica, sericite and chlorite and locally cut by well-defined quartz-sulphide stringer zones. The basaltic tuff unit beneath the Hidden Creek deposit contains a few small, massive pyrrhotite lenses and disseminated to

bedded pyrrhotite with minor pyrite and chalcopyrite. The chert lens also contains disseminated sulphides, small, massive sulphide lenses, and sericite, chlorite and minor magnetite. The stringer zones are in chloritized rocks with alteration increasing in intensity toward the base of the sulphide layers. Locally, footwall basalts are weakly albitized, indicative of sodium metasomatism.

The deposits at Anyox are within pillow basalts and tuffs, associated with exhalite chert, and overlain by argillites. These volcanic rocks are low-potassium tholeiites, similar in age and chemistry to upper Triassic volcanic rocks of the Karmutsen Formation in Wrangellia, and dissimilar to volcanic and sedimentary rocks of the Alexander and Stikine terranes (MacIntyre, 1986). The MORB characteristics of volcanic rocks hosting Anyox deposits, associated deep-water lithologies, and overlying fine-grained sedimentary successions indicates deposition in an oceanic environment at the end of a period of effusive volcanism.

CU-ZN: BESSHI-TYPE

Besshi-type copper-zinc deposits in British Columbia (Table 5-2, Figure 5-13) include the lower Paleozoic Goldstream deposit north of Revelstoke, the True Blue deposit on the west side of Kootenay Lake and the Granduc mine northwest of Stewart. Windy-Craggy, located in the St. Elias Mountains in northwestern British Columbia also has some similarities with this class of deposit. Both the Granduc and Windy-Craggy deposits are in Late Triassic rocks.

Property (Operator)	MINFILE Number	Mining Division	NTS	Commodity	Deposit Type	Work Done
Silvana Mine (Tremincio Res. Ltd.)	082FNW050	Slocan	82F/14	Ag, Pb, Zn, Cd	Vein	2 ddh, 1046 m; 6 u/g ddh, 1098 m
Silver Dawn (Rock Creek Res. Ltd.)	082ESE113	Greenwood	82E/2W	Pb, Zn, Ag	Replacement	30 ddh, 2030 m
Star (Barkhor Res. Inc.)	082FSE089	Nelson	82F/1E	Ag, Pb, Zn	Sedex/vein	9 ddh, 4082 m
Steeple (Bull River Mine) (R.H. Stanfield Group)	082GNW002	Fort Steele	82G/11W	Cu, Ag, Au	Vein	12 ddh, 5550 m; rtd, 1200 m
Strawberry Flats (Cameco)		Trail Creek	82F/4W	Au	Skarn	5 ddh, 430 m; 8 trenches; geochem
Sullivan Two (White Knight Res.)	082FSE077	Nelson	82F/2E	Pb, Zn, Ag	Sedex	9 ddh, 1500 m
Surelock (Mountain Minerals Co. Ltd.)		Golden	82K/9W	Ba	Fault breccia	bulk sample; exploration adit; mapping; geochem
Taylor Pit (Fording Coal Ltd.)	082JSE009	Fort Steele	82J/2W	Coal		9 rdh, 1808 m
True Blue (Minequest Expln. Assoc. Ltd.)	082FNE002	Slocan	82F/15W	Cu, Ag, Zn, Au	Stratabound massive sulphide	1 ddh
Vine (Kokanee Expln. Ltd.)	082GSW035	Fort Steele	82G/5W	Pb, Zn, Cu	Vein	39 ddh, 8000 m
Whitewater (Teck Corp.)	082FSW222	Nelson	82F/6W	Au	Breccia	5 ddh, 650 m; geochem; geophys
Wilds Creek (Kokanee Expln. Ltd.)	082FSE005	Nelson	82F/2E	Zn	Stratabound	5 ddh, 1464 m

Southwestern District

Bruno (Doromin Res. Ltd.)	092L 229	Nanaimo	92L/1E	Cu, Ag, Au	Veins	11 ddh, 1400 m
Chemainus/Holyoak (Falconbridge Ltd.)	092B 037	Victoria	92B/13W, 92C16E	Au, Ag, Zn, Cu, Pb	VMS	24 ddh, 7202 m; geophys
Cimaduro (Doromin Res. Ltd.)	103F 052	Skeena	103F/1E, W	Zn, Pb, Cu, Au, Ag	Sedex?	9 ddh
Debbie (Westmin Res. Ltd.)	092F 078	Alberni	92F/2E, 7E	Au, Ag	Shears, Qtz-vein stockwork	4 ddh, 240 m; trenching; geophys
Expo(Hushamu) (Moraga Res. Ltd.)	092L 185	Nanaimo	92L/12W	Cu, Mo, Au	Porphyry	19 ddh, 4267 m; geophys; geochem; mapping
Harrison Gold(Abo) (Bema Gold Corp.)	092HSW092	New West.	92H/5E, W	Au	Vein stockwork	7 ddh, 2106 m
Lara (Minnova Inc.)	092B 110	Victoria	92B/13W	Au, Ag, Zn, Pb, Ag	VMS	49 ddh, 11 167 m; geophys; geochem
Merry Widow (Noranda Expln. Co. Ltd.)	092L 044	Nanaimo	92L/6E, W	Au, Ag, Cu	Skarn, manto	geophys; geochem; mapping; drilling
Mount Sicker (Minnova Inc.)	092B 001	Victoria	92B/13E, 13W	Cu, Au, Ag, Pb, Zn	VMS	14 ddh, 2400 m
Mount Washington (Better Res. Ltd.)	092F 116	Nanaimo	92F/11E, W, 14W	Au, Ag, Cu	Epithermal veins, Breccias	6 ddh, 284.4 m
Quet (Noranda Expln. Co. Ltd.)	092GNE027	New West.	92G/9W, 16W	Au, Ag, Zn, Pb, Cu	Veins, replacement	7 ddh, 1251.9 m; geophys; geochem; mapping
Red Dog (Moraga Res. Ltd.)	092L 200	Nanaimo	92L/12W	Cu, Au, Mo	Porphyry	10 ddh, 1890 m
Seneca (Minnova Inc.)	092HSW013	New West.	92H/5W	Cu, Zn, Pb, Au, Ag	VMS	geochem; mapping; drilling
Southeast (Clear Creek Res. Ltd.)	103G 004	Skeena	103F/8E, 103G/5	Au, Ag	Epithermal Veins, Breccias	18 ddh, 940 m; trenching
Spud Valley (McAdam Res. Inc.)	092L 211	Alberni	92L/2W	Au, Ag	Veins	u/g drifting; bulk sampling; pilot mill
Tsable River (Western Canadian Mining Corp.)	092F 333	Nanaimo	92F/7W, 10W	Coal	Sedimentary	drilling
Wann (Moraga Res. Ltd.)	092L 087	Nanaimo	92L/12E, W	Cu, Mo, Au	Porphyry	17 rcdh, 1867 m

pcdh = percussion drill hole
rcdh = reverse circulation drill hole
rdh = rotary drill hole
ddh = diamond drill hole
VMS = Volcanogenic massive sulphide
grd = ground
u/g = underground
sfc = surface

grade, large-tonnage porphyry deposit. The property is underlain by hornblende diorite, Elise Formation tuffs, agglomerate and feldspar porphyry. Alteration is variably propylitic, pyritic, silicic and potassic. The mineralogy consists of pyrite, chalcopyrite and magnetite but magnetite is not coincident with sulphides. Chalcopyrite occurs in stringers and disseminations, often with calcite or quartz. Further drilling is expected to test the extent of low-grade mineralization.

VEIN

At the southern border of Kokanee Glacier Park Cove Resources Corporation drilled the eastern extension of the Alpine vein and a subparallel vein, the Gold Crown, to the south. Immediately west of Nelson, Winchester Developments drilled the Nevada vein.

Quartz veins related to shears were also drilled on the Clearwater and Joe properties. One hole on the Clearwater returned 13.4 grams per tonne gold over 2.3 metres.

On the Clubine Comstock property on the east side of the Hall syncline, north of Salmo, Yellowjack Resources Ltd. exposed a 0.3-metre vein in trenches; the best assay ran 55 per cent lead and 2185 grams per tonne silver. This high-grade vein, hosted by the Hall Formation, will be drilled in 1991. Earlier drilling had followed a quartz vein.

On the Rely property, between Nelson and Castlegar, gold occurs with pyrite and pyrrhotite in erratic vein-like zones within a section of hornfelsed Archibald Formation siltstones and interbedded felsic to intermediate volcanics. Pegasus Gold Inc. drilled an induced polarization anomaly but with less encouraging results than in 1989 when up to 8.74 grams per tonne gold was intercepted over 6.1 metres.

On the Whitewater property, Teck Corporation drilled a breccia in Rossland Group rocks, near the contact with Nelson intrusive rocks, with inconclusive results.

In the Rossland camp Antelope Resources renewed drilling on the Rossland claims late in the year, focusing on the Bluebird and New North areas in the south belt. A large (62-metre) interval of lead-zinc mineralization was intersected in one hole and a narrow high-grade gold-silver zone in another (0.37 metres of 376 grams per tonne silver, 14.5 per cent lead, 7.5 per cent zinc and 10.3 grams per tonne gold). Traditional mineralization on this claim block consists of massive pyrrhotite-chalcopyrite shoots in altered monzonite and Elise Formation vol-

canics. Interestingly, gold occurs with arsenopyrite but not necessarily with the massive sulphide content.

Southwest of Rossland, at the Midnight mine, underground development continued on quartz veins and about 1500 tonnes of ore was hauled to a mill in Northport, Washington.

SKARN

North of Nancy Greene Park, in an area underlain by Mount Roberts Formation CAMECO drill-tested two areas in which trenching had exposed massive pyrite-pyrrhotite mineralization with elevated gold values in skarn.

OTHER

In the Salmo camp, Yellowjack Resources Ltd. pursued gold in Lower Paleozoic limestones and phyllites on the Ore Hill-Summit property. Sulphides, including sphalerite, galena, and chalcopyrite (minor), and free gold are present in crackle zones confined to the more carbonate-rich facies. Results of drilling in three holes returned values of 6.24 to 12.48 grams per tonne gold in intervals of 2 to 3 metres. Old mine workings nearby exploited a rich polymetallic quartz-siderite vein.

SLOCAN AREA (KASLO-NEW DENVER-SLOCAN)

At the Silvana silver-lead-zinc mine, drilling from surface and underground pursued the faulted western extension of the lode structure and tested the ground between the Silvana mine and Carnation workings without much success.

Avril Explorations Ltd. opened up, mapped and sampled levels 2, 3, 5 and 5A on the Grey Copper vein (a high-grade zinc vein) located near the former mining town of Cody.

Kokanee Explorations Ltd. drilled the Hope prospect which consists of a skarned pendant of the Slocan Group within the Nelson plutonic suite. Potential for extension of modest reserves is limited.

The Millie Mack property, site of an extensive program in 1989 by Dragoon Resources Ltd., underwent limited drilling without much success.

→ The True Blue massive sulphide prospect, hosted by the Upper Paleozoic Milford Group, was tested by a single hole by QPX Minerals Inc. This prospect of banded massive pyrite-pyrrhotite-chalcopyrite up to 1.2 metres thick warrants further work. |

MEMORANDUM

TO: [REDACTED]

FROM: Jim Oliver (Teck)

DATE: May 8, 1992
JUNE

RE: True Blue Property: Slocan Mining Division, N.T.S. 82F/15W, Lt. 49 53'
Long 116 58'

SUMMARY: Copper rich massive sulphides develop at the transition between late Paleozoic Milford and Kaslo group rocks at or near a volcanic-sediment transition. All rocks have been strongly penetratively deformed by two deformational events. A series of exhalitive horizons cross the flank of True Blue Mountain at approximately the 1500 m elevation datum. The horizons may be zoned from base metal poor, Mn rich to the north, to base and precious metals enhanced near the True Blue showing. Two massive sulphide lenses combine to form thicknesses of up to 1.2 m's and have produced 90 tons of ore grading 8.9% Cu, 58.6 g/T Ag, and 1.3 g/T Au.

RECOMMENDATION: The property owner should be approached and the conditions and terms of a potential option agreement investigated. The property should be acquired with the intention of immediately testing the D1 down plunge extension of the True Blue massive sulphide lense with 3 to 4 boreholes.

LAND POSITION: The True Blue property consists of eleven mineral claims, one fractional mineral claim, and two reverted Crown Grants, Figure 1.

OWNERSHIP: The claims are held by Otto and Otakar Janout of ^{413307SF0-13}Whiterock.

LOCATION AND ACCESS: The True Blue property is located on the east slope of True Blue mountain, five kilometres southwest of Kaslo, B.C. Elevation ranges from 625 metres in the True Blue valley to 2135 metres on the peak of True Blue Mountain. The property is road accesssible to within one kilometre of the main showing.

TARGET TYPE: The property is an example of a volcanogenic massive sulphide potentially of a Besshi type affinity.

GEOLOGICAL SETTING: The property is underlain by the Mississippian age Milford and older Kaslo groups. The Milford may be correlative with Fennel and Slide Mountain rocks. A gradational contact exists between the dominantly sedimentary Milford rocks and the more volcanic Kaslo group. This contact occurs at approximately the 1600 metre elevation datum on True Blue Mountain. Within the Milford group are a series of agillites and interbedded pyritic to manganiferous cherts and exhalites which increase in frequency toward the upper volcanic (Kaslo) contact. Volcanic rocks include massive foliated mafic flows, chlorite schists and potentially subvolcanic intrusions. Felsic tuffaceous sequences are also identified. Geological relations in the area of the True Blue adits are shown on Figure 2.

Beds are west to southwest dipping at moderate angles, 30 to 40 degrees. Beds are isoclinally folded by two major fold events. The earliest of these (D1) generates tight fold structures which are south-southwest plunging at moderate angles, 20 -----> 200. D1 minor folds are shown on Plate 1. Smaller scale D2 structures rotate the earlier linear fabrics into moderate east or west directed plunges. D2 folds are shown on Plate 2. Sterographic data, Figure 3 clearly shows that earlier south plunging rock fabrics are rotated by later smaller scale folds. It is critical to note that the overall plunge direction remains to the south-southwest at moderate angles.

MINERALIZATION AND ALTERATION: Two massive sulphide lenses are identified at the True Blue occurrence. Where they are exposed they range in thickness from 25 to 35 cm's. Mining records suggests thicknesses of up to 1.2 m's were encountered. These lenses are very copper rich and sometimes demonstrate well defined zinc rich layers. Material which was mined had an average grade of 8.9% Cu, 1 - 2% Zn, < 0.5% Pb, 58.6 g/T Ag and 1.3 g/T Au. A distinctive zonation exists across all mineralized horizons on this property with Mn and Ba contents in exhalitive horizons increasing distally to away from main showing.

Massive sulphides exposed in the west rib of the upper adit are shown in Plate 3 and a more distal manganiferous chert horizon in Plate 4.

The main massive sulphide lens is overlain by 1.0 to 2.0 m's of strongly sericitized and weakly pyritic volcanic tuffs possibly of felsic origin. Although the sulphide lenses decrease in the more distant portions of the True Blue underground workings the hangingwall alteration does not diminish. Alteration levels are similar at the collar of the adit, Plate 5, and 40 m's into the mine workings, Plate 6.

The underground workings at True Blue are cut by a large number of faults. Well defined thrust and extensional faults mapped in the lower adit (Figure 4) were also noted in the upper adit. Some of these structures may be partially responsible for the termination of ore at the True Blue.

PREVIOUS WORK: The True Blue has been the recipient of detailed geochemical, ground and airbourne geophysical, and geological mapping. The occurrence has produced 90 tons of high grade ore. One 135 m drill hole has been drilled on this property.

RECOMMENDATION RATIONALE:

There are several points to consider in the evaluation of this property:

A. Negative Parameters

1. The known massive sulphide lenses are small and have modest alteration development.
2. Geophysical and geochemical data are not definitive in defining a discrete geophysical or geochemical target.
3. The occurrence is hosted by a belt of rocks not typically associated with other VMS occurrences.
4. The single borehole drilled on this property, and tested with a down hole geophysical system has met with negative results.

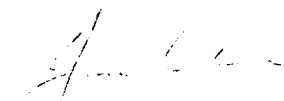
B. Postive Parameters

1. Although the known lenses are small, significant rock alteration persists throughout the known workings of the mine and exists in the absence of known sulphide development. Manganiferous horizons, sometimes with anomalous barite, are laterally persistent.
2. The sulphide lenses develop very close to a volcanic sediment contact. This conductive contact may tend to mask an EM signature related to massive sulphides.

3. Although the Kaslo - Milford Groups do not have past production from known VMS deposits two other copper rich massive sulphides are known in the Kaslo area and are hosted by a similar rock package.
4. The single borehole drilled on this property has been drilled at an azimuth of 060 degrees in an attempt to intersect the down plunge extension of the True Blue mineralized zone. This azimuth is directed toward D2 fold plunges. The primary control on the distribution of sulphides at True Blue is from D1 plunges. These structures plunge 20 degrees towards 200 degrees. In essence, every foot that this borehole penetrates takes it farther away from its presumed target.
5. The True Blue zone is outlined by a large cylindrical Mise a la Masse anomaly of approximately 300 m's in strike length. I do not believe that the thin sedimentary beds intersected in the borehole drilled are the cause of this conductor. Virtually none of the core in this borehole has been split. No trace element indicators have been intersected in this borehole to suggest that the main True Blue zone has been penetrated.

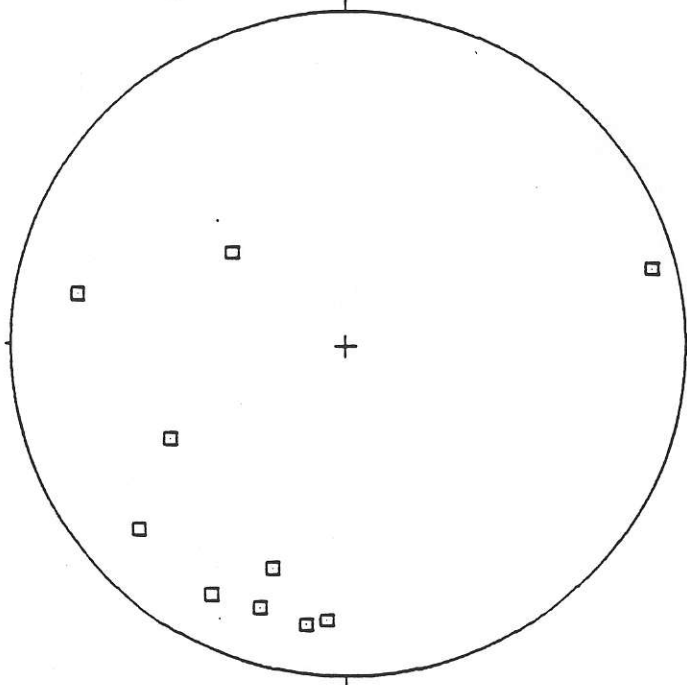
The True Blue is an untested massive sulphide occurrence. It warrants drill testing. A single drill collar positioned at approximately L 99+25 E and L 104+25 N could be used to initiate 3 drill holes drilled at azimuths of 015, 045, and 075 degrees. Approximately 450 metres of thin wall BQ drilling would be required.

I would estimate that this program would stand about a 10% percent chance of intersecting massive sulphides as good as, or better than, those currently known at the True Blue.



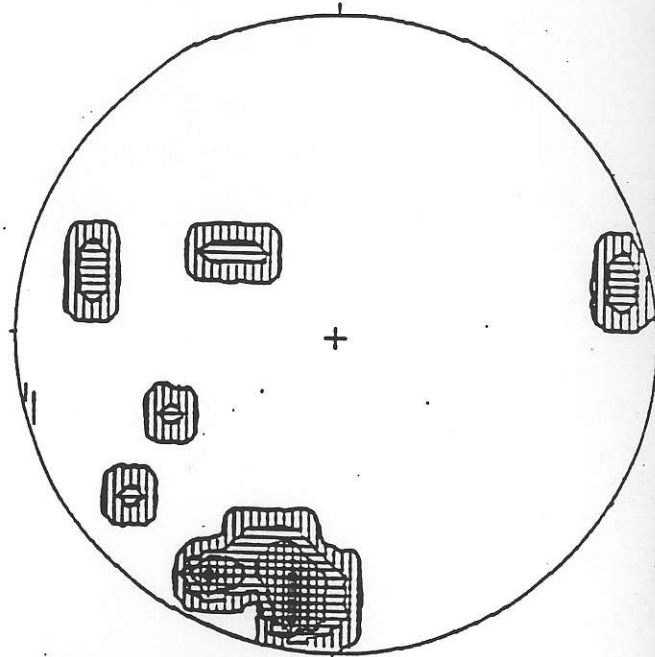
Jim Oliver

II Linear Fabric Iron Ore Property
North



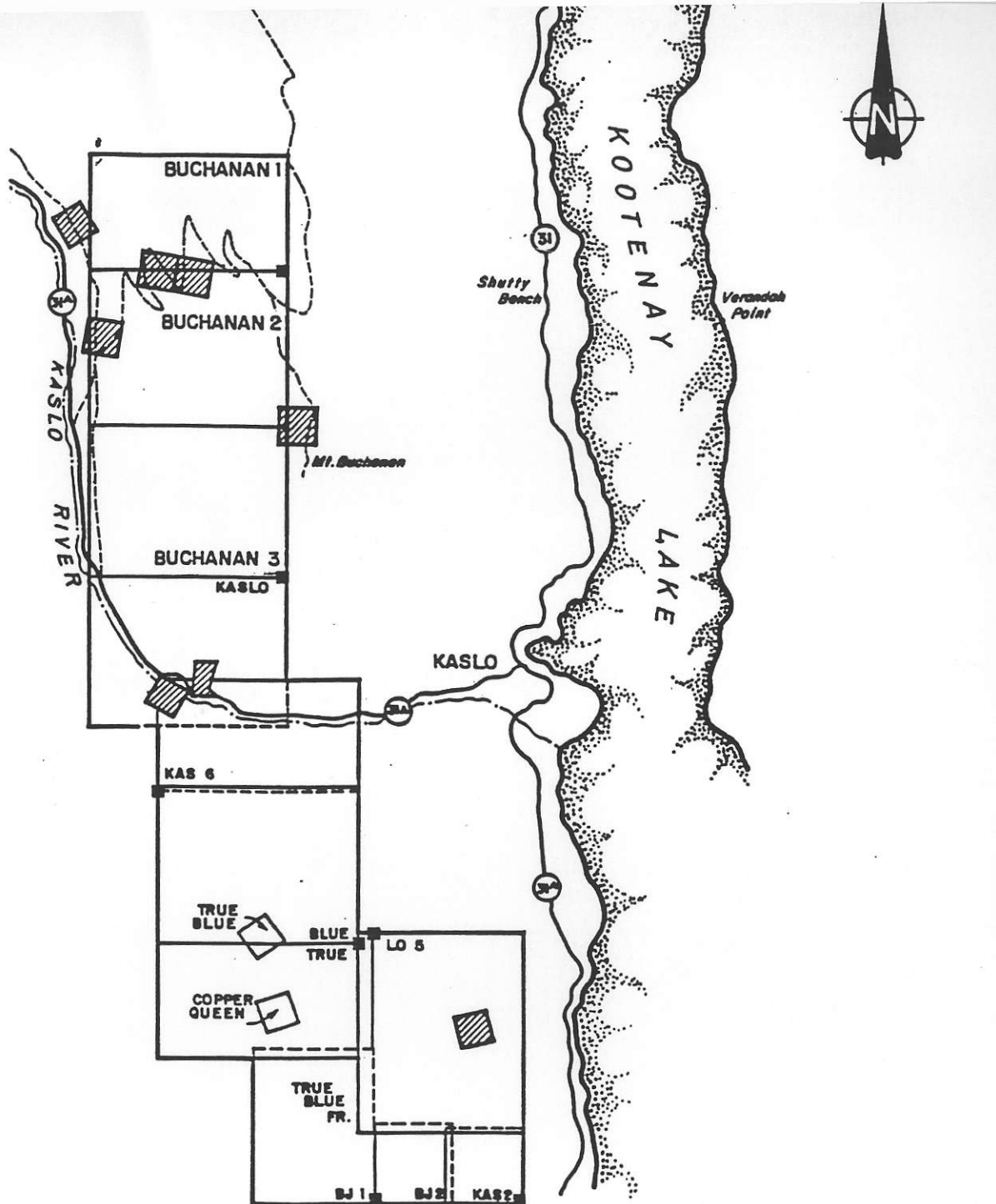
II Linear Fabric Iron Ore Property
II Points
II Points Total

II Linear Fabric Iron Ore Property
South



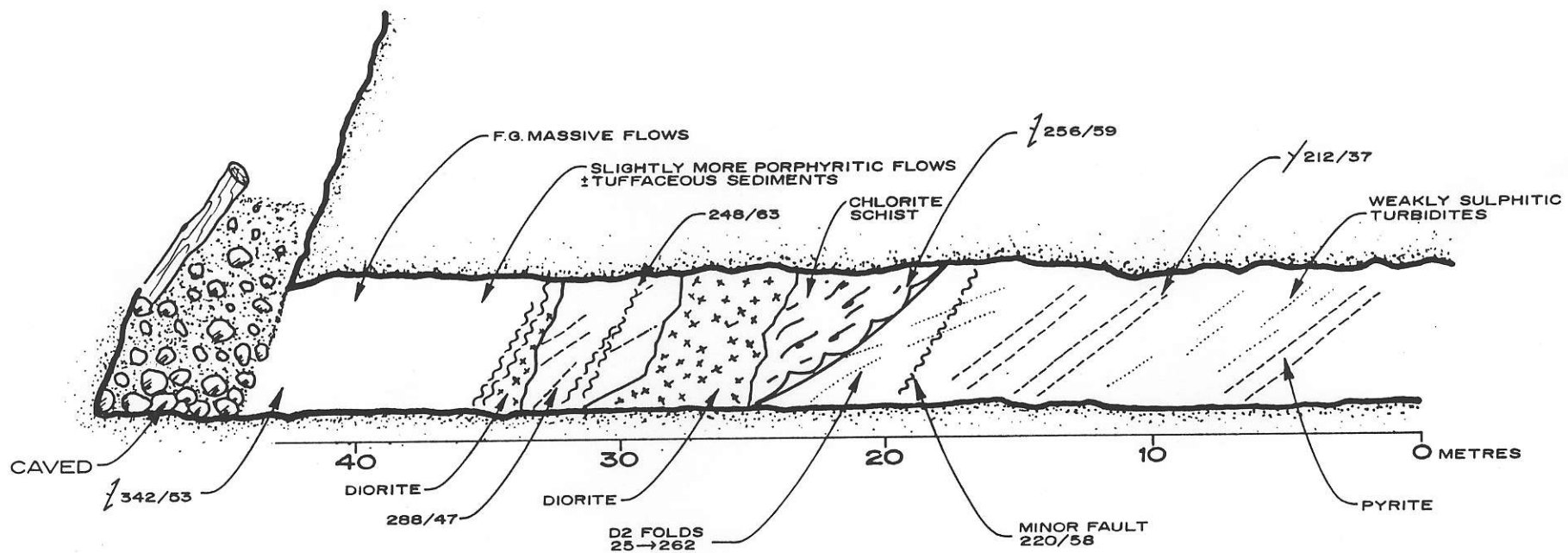
II Points
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FIG. 3.



Note:
 Shaded areas are ground
 not owned by QPX.

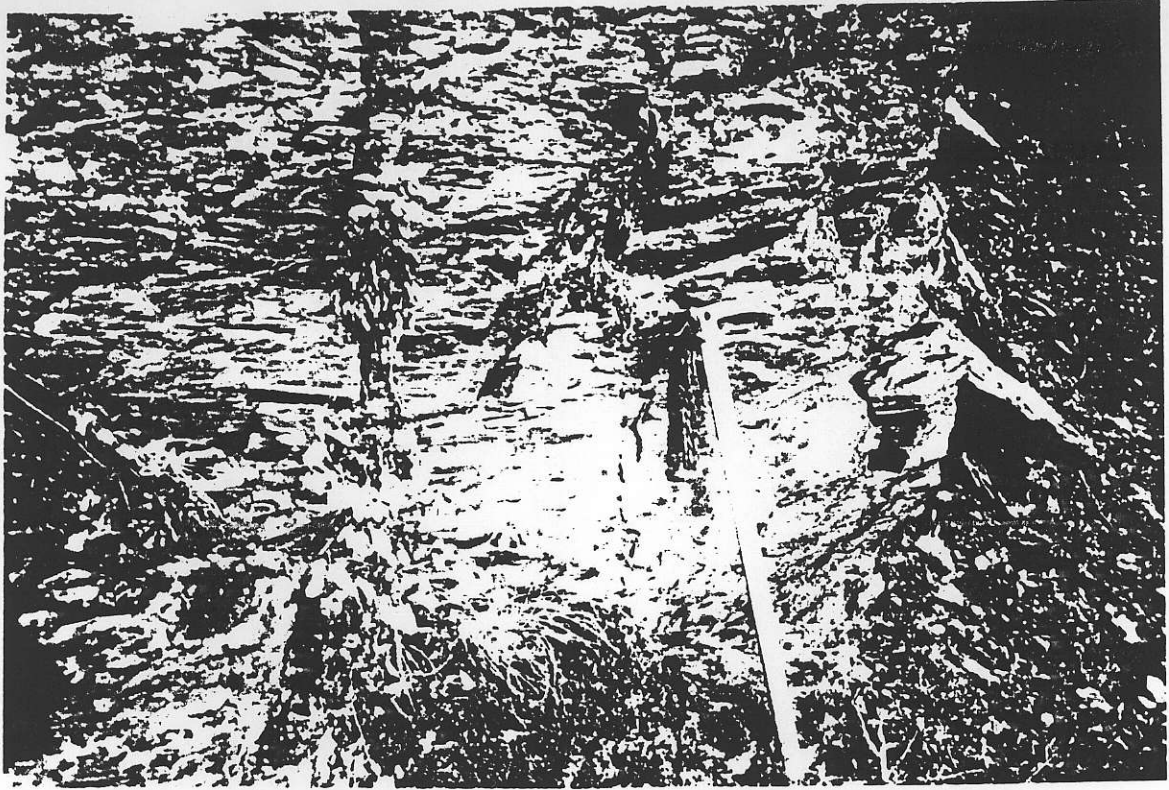
QPX MINERALS INC.			
TRUE BLUE PROJECT, SLOCAN M.D., B.C.			
CLAIM MAP			
Originator L.J.L.	Drawn c.d.	Plan No.	FIG. 1
Revised	Date Sept.'88	NTS 82F/15	
MINEQUEST EXPLORATION ASSOCIATES LTD.			



-PLANAR DATA PLOTTED
AS DIP DIRECTION

WEST RIB
 LOWER TRUE BLUE ADIT

1:250



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P
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PLATE 3

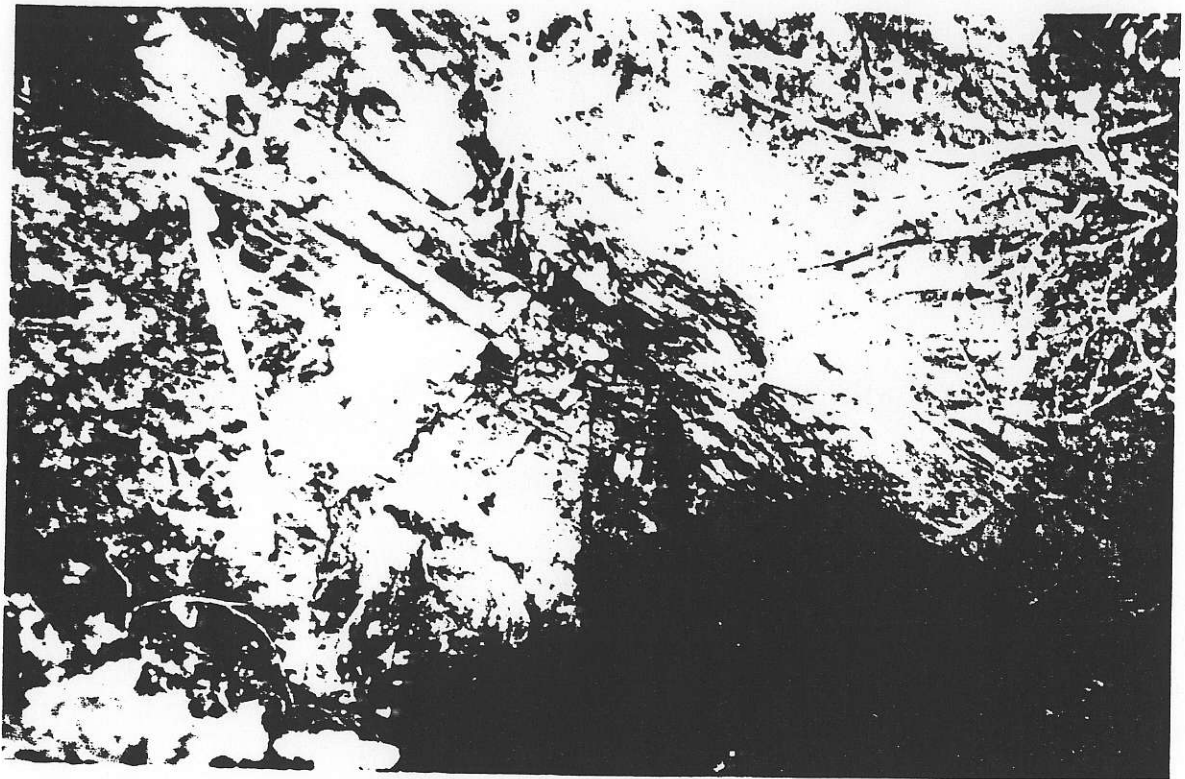
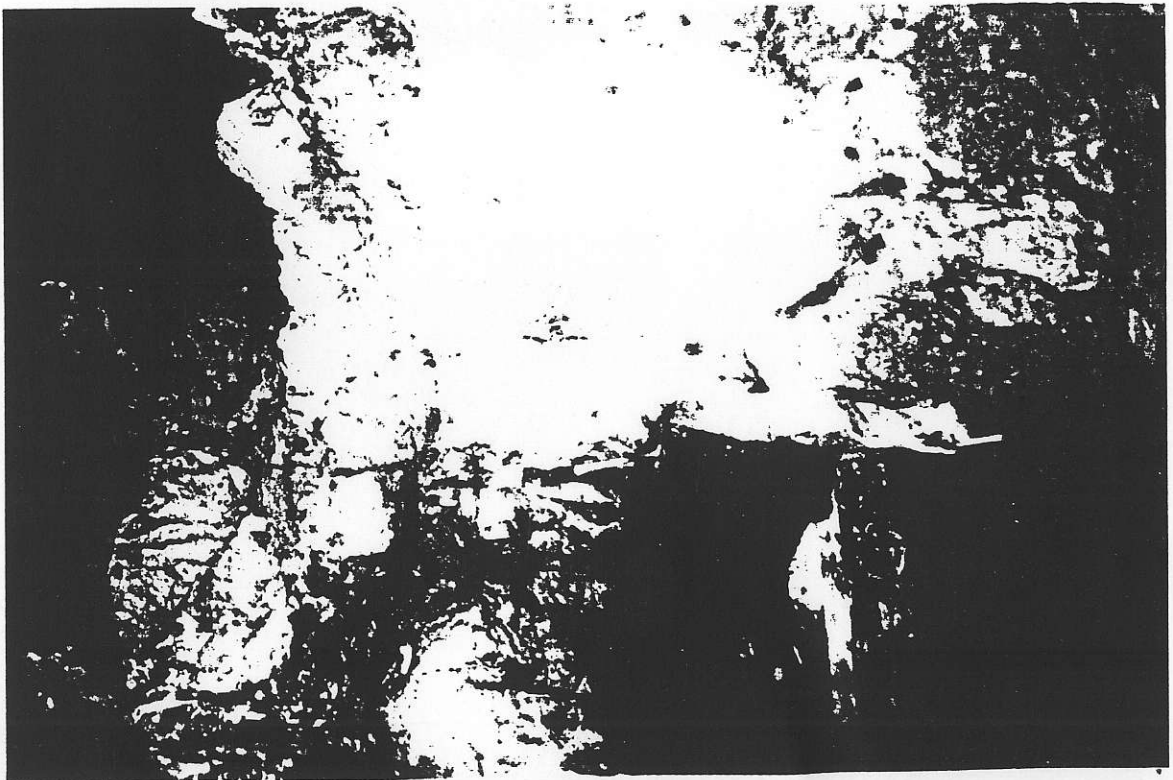


PLATE 4



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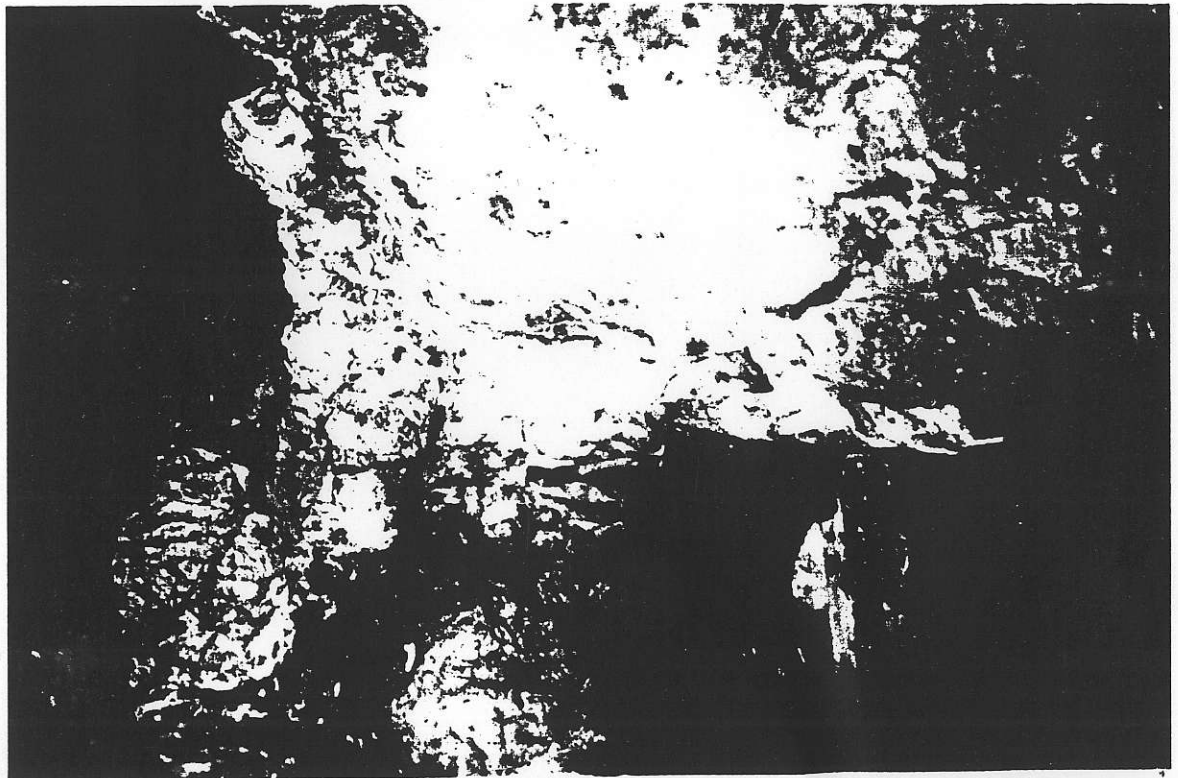
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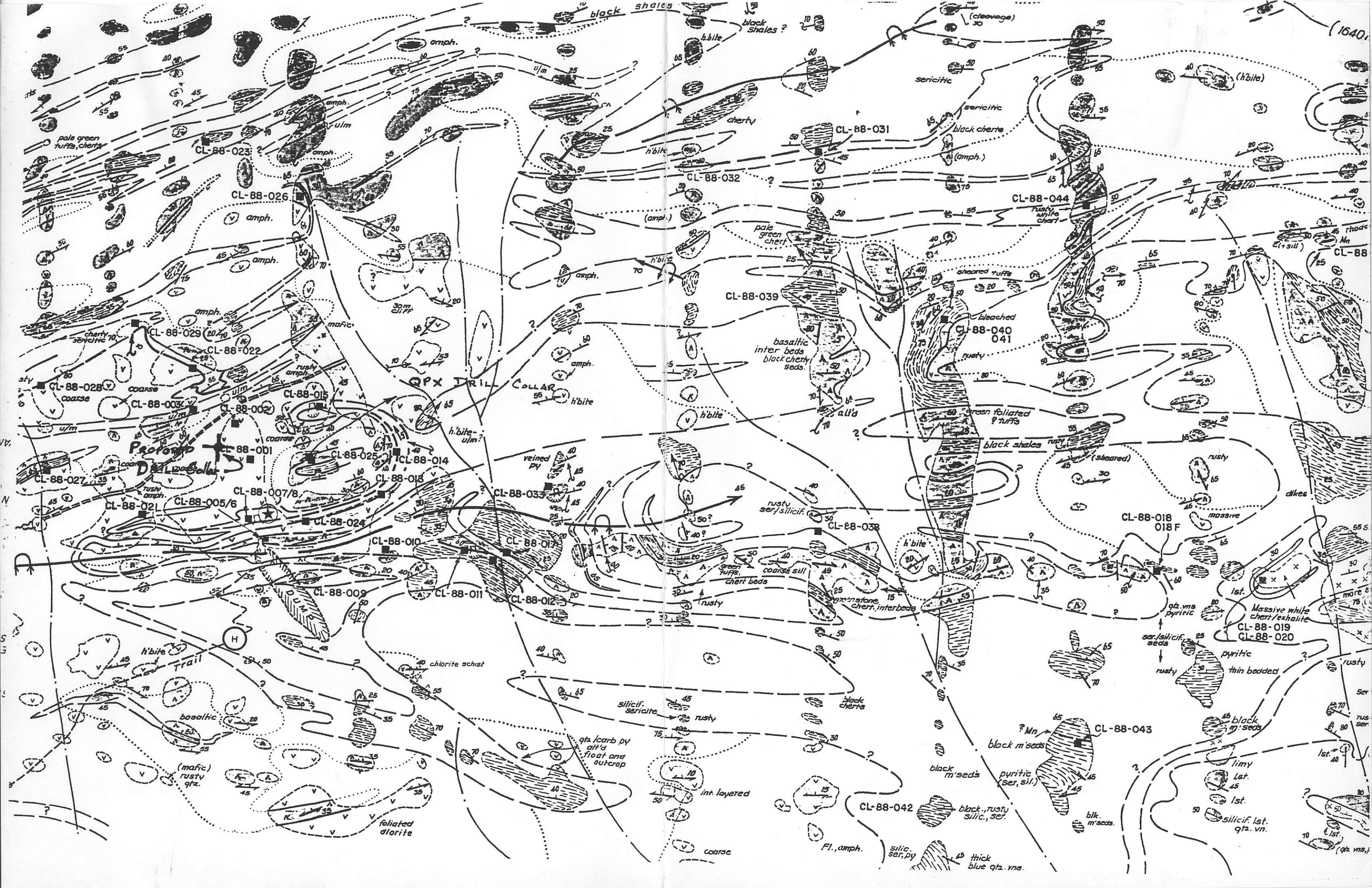
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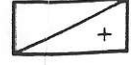
SCALE 1:2500
 Geology by Leach C.L. 1988

FIGURE 3




LEGEND


NELSON-KASLO INTRUSIVES


 Granitic rocks, pre-deformation

SLOCAN GROUP

 Black phyllites


KASLO GROUP (Upper Plate)


 Dark green to black finely porphyritic augite (?) basalts; green, vaguely porphyritic basaltic (?) andesites.


 Deep green to black, highly magnetic, serpentinized ultramafics.

 Whitewater Thrust Fault

KASLO GROUP (Lower Plate)

 Dioritic intrusives: medium to coarse grained dykes, sills and stocks, often highly folded, sheared and foliated. May be in part extrusive, c/f following unit. Includes thin rusty amphibolite units.

 Green andesitic to black basaltic (?) flows and volcanoclastics, may be in part intrusive, c/f preceding unit.

 Dark green ultramafics c/f those in Upper Plate rocks; may be feeders.

 Black cherty sediments - see below

 Cherts or exhalites - see below

NOTE: *The bottom of the Lower Plate Kaslo assemblage is defined as the point at which volcanic rocks become predominant. The contact with the underlying Milford Group is gradational, and may be in part a lateral facies change.*

MILFORD GROUP (MCHARDY ASSEMBLAGE)

TRUE BLUE
 P2F15W
 KASLO

SIC
 ER
 SIC

ANIAN