

84-#540-12508

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,508

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

WHITE BEAR CROWN GRANT

AND

TENDERLOIN (A) CLAIMS

GREENWOOD MINING DIVISION

82E/9W; 49°36' 118°20'

by

J.R. WALLS

Work Done: June 5 - 13, 1984
For: B.C. Gold Syndicate & J.R. Walls
By: J.R. Walls

Operators: Newmont Expl.
Cantung

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY AND RECOMMENDATIONS	1
LOCATION AND ACCESS	2
PROPERTY - LIST OF CLAIMS	4
FIELD PROCEDURES	6
GEOLOGY	7
ROCK TYPES	7
LOCAL GEOLOGY	9
STRUCTURE	11
GEOCHEMISTRY	13
SOIL GEOCHEMISTRY	13
SOIL SAMPLE RESULTS	14
ROCK SAMPLE RESULTS	14
CONCLUSIONS AND RECOMMENDATIONS	15
REFERENCES	16
TABLE OF EXPENDITURE	17
APPENDIX I	SAMPLE DATA SHEETS
APPENDIX II	STATEMENT OF QUALIFICATIONS

LIST OF ILLUSTRATIONS

<u>Figure</u>	<u>Title</u>	<u>Page</u>
1	LOCATION MAP 1:100,000	3
2	CLAIM MAP 1: 50,000	5
3	WHITEBEAR CLAIM GEOLOGY 1:1000	10
4	RESTORATION OF TENDERLOIN VOLCANIC VENT From Drysdale (1915)	12

<u>Map</u>	<u>Title</u>	
I	Tenderloin (A) and Whitebear Claims Geology 1:5000	In Pocket
II	Tenderloin (A) and Whitebear Claims Geochemistry 1:1000	Of Report

SUMMARY AND RECOMMENDATIONS

- 1) The WHITE BEAR CROWN GRANT and TENDERLOIN (A) claims (9 units) are located in the Franklin Camp approximately 70 km north of Grand Forks, B.C.
- 2) Geochemical sampling totalling 110 samples were taken at two locations that showed anomalous gold values in previous surveying in August of 1979.
- 3) Geological mapping was carried out to further define and detail areas that showed anomalous gold values. The main area of concentration was a quartz breccia zone hosted by the Kettle River Formation pebble conglomerate and coarse arkose which was found to show anomalous gold values.
- 4) Geochemical results for Au, Ag and As on the current samples are not encouraging enough to indicate further immediate work. If the exploration program now being conducted at the Union Mine is successful further analyses of samples for trace elements such as mercury may be warranted in an effort to outline a geochemical halo. Exploration should be concentrated on the quartz breccia zone and on the pyritized volcanics which bear similarities to some of the rock at the Union Mine. Relatively high arsenic values occur in these volcanics.

LOCATION AND ACCESS

The WHITE BEAR GROUP consisting of the TENDERLOIN (A) Claims and the WHITE BEAR CROWN GRANT is located approximately 70 km north of Grand Forks, B.C., along the "north fork" road. The road crosses to the west side of Burrell Creek at Bunch Grass Hill and enters the Granby Forest District. A turn off to the Union Mine can be made just before the 25 km sign on this road. Following the Union Mine Road past the Union Mine and branching onto the Gloucester Creek Trail the south-west corner of the White Bear Group can be reached. Old roads on the WHITE BEAR are all over grown past Gloucester Creek.

The topography tends to be quite steep and sharply cut by mountain streams. The forest is fairly open consisting mainly of tamarack, spruce and pine.

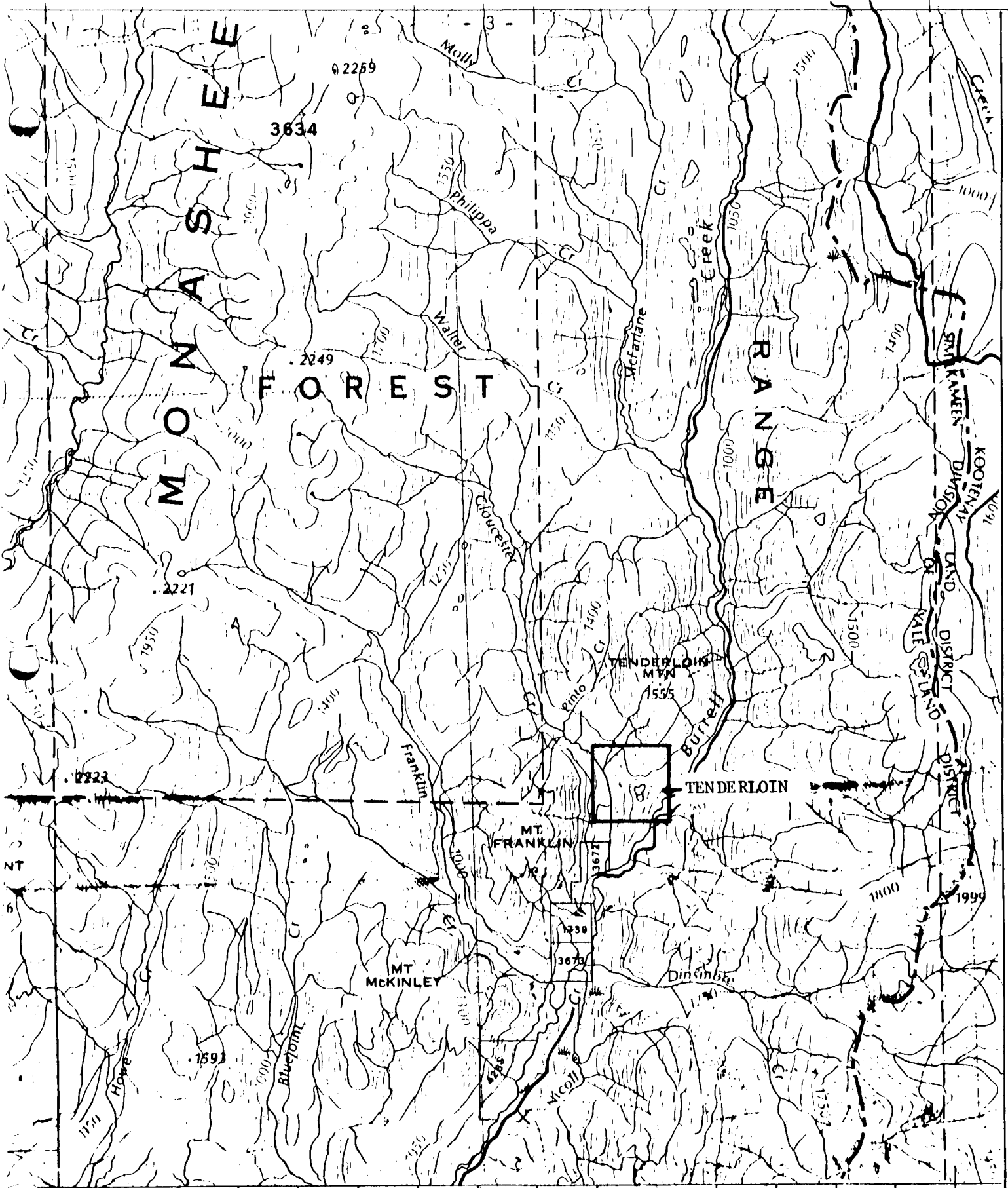


FIGURE 1

TENDERLOIN(A) & WHITEBEAR CLAIMS
LOCATION MAP

1:100,000

June 1984

PROPERTY

LIST OF CLAIMS WHITE BEAR GROUP

TABLE I

<u>Claim Name</u>	<u>No. of Units</u>	<u>Record Number</u>	<u>Date of Location</u>	<u>Date of Recording</u>	<u>Metal Tag Number</u>	<u>Acreage and Lot Number</u>
White Bear	1	1709(8)		Aug. 8/79	-	L10105, 51.65 acres
Tenderloin(A)#1	4	4060	June 3/84	June 12/84	29124	approx. 100 hectares
Tenderloin(A)#2	2	4061	June 3/84	June 12/84	29125	approx. 50 hectares
Tenderloin(A)#3	2	4062	June 3/84	June 12/84	29122	approx. 50 hectares
Tenderloin(A)#4	1	4063	June 3/84	June 12/84	29123	approx. 25 hectares

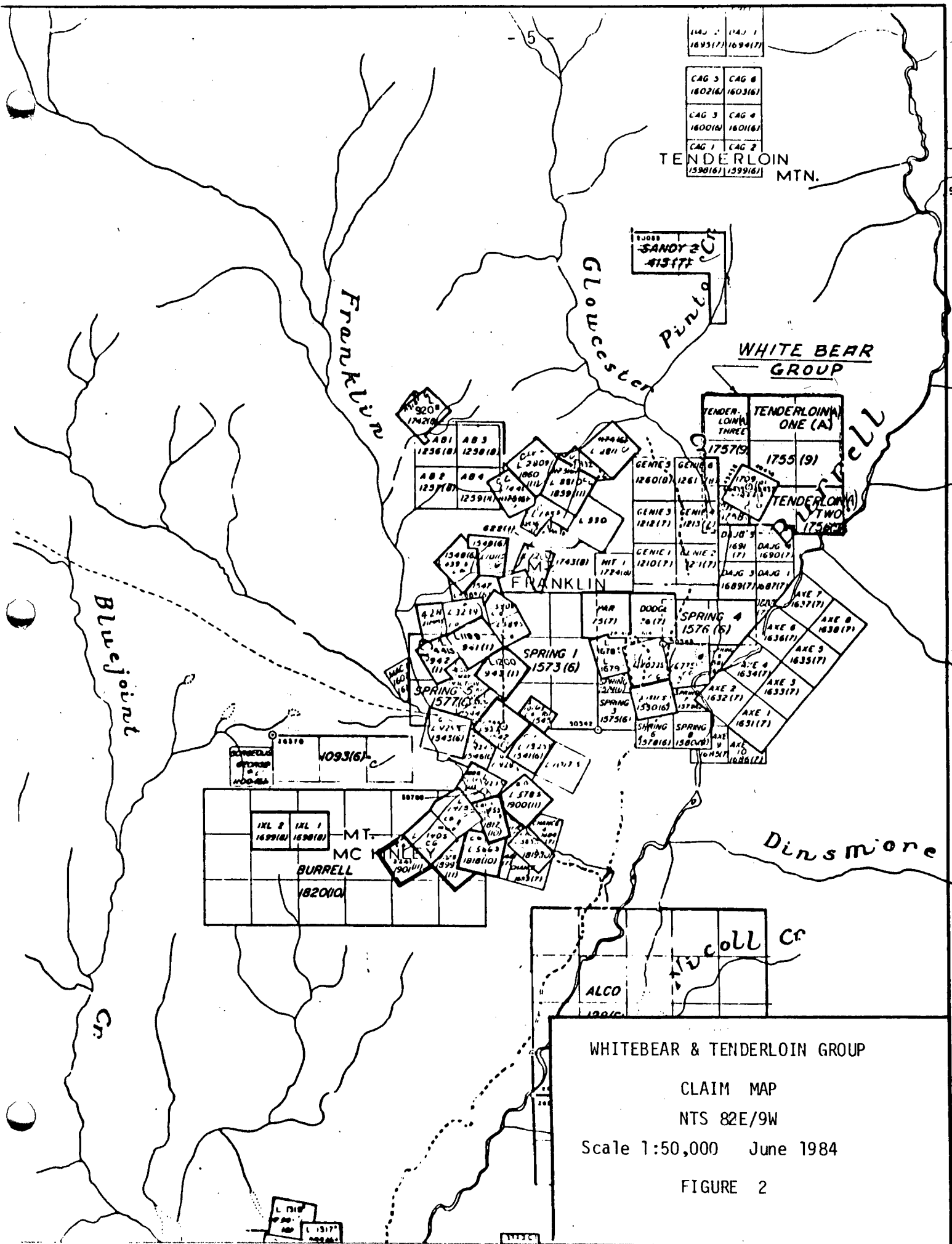
Locator - J.R. Walls

F.M.C. Number 267623 (Date of issue June 1, 1984; Vancouver, B.C.)

<u>Claim Name</u>	<u>Date and Time of Commencement of Location</u>	<u>Date and Time of Completion of Location</u>
White Bear	- .	-
Tenderloin(A)#1	4:30 p.m. June 3, 1984	7:30 p.m. June 3, 1984
Tenderloin(A)#2	8:30 a.m. June 3, 1984	11.50 a.m. June 3, 1984
Tenderloin(A)#3	1:44 p.m. June 3, 1984	4:05 p.m. June 3, 1984
Tenderloin(A)#4	12:05 p.m. June 3, 1984	1:00 p.m. June 3, 1984

All TENDERLOIN (A) Claims staked June 3, 1984 have the same claim post locations as the TENDERLOIN claims staked by J.T. Shearer in August, 1979.

All the claim lines were walked and remarked.



WHITEBEAR & TENDERLOIN GROUP
 CLAIM MAP
 NTS 82E/9W
 Scale 1:50,000 June 1984
 FIGURE 2

FIELD PROCEDURES

The claim lines were run along the OLD TENDERLOIN claim boundaries put in in 1979. Lines were all walked and re flagged.

Using the legal claim post as 0+00 N and 0+00 E datum, lines were run using silva compass, pacing and topolite belt chain. (Corrections were made for variations in slope)

Soil sampling lines were concentrated in two main areas with one cross property reconnaissance line established. A grub hoe was used to sample the B horizon which averaged 15 to 20 cm deep. Standard soil data forms were completed indicating sample number location, depth, horizon, colour, particle size, organics slope, vegetation and additional remarks. Samples were put into kraft bags and sent to Chemex Labs Ltd., North Vancouver, B.C.

Geological mapping and prospecting was carried out, plotting outcrop positions by pace and compass in reference to grid based on legal claim post datum. Most of the geological work was based around the geochemical grids.

GEOLOGY

ROCK TYPES

The sedimentary rocks of the Tenderloin Mountain area consist of continental deposits of conglomerate, arkoses and waterlain tuffs. They make up the Kettle River Formation.

The conglomerate consists of sub-angular to well rounded boulders of Sedimentary, Metamorphic and Igneous origin. They are cemented by a firm compact cement composed of sand and clay probably hardened and compacted chiefly as a result of pressure and to some degree by siliceous and calcareous binding materials.

The conglomerate contains resistant rocks such as pure and impure quartzites, cherts, sandstones, greenstones and feldspar porphyries which stand out in bold relief on weathered surfaces.

The arkosic grit consists of coarse feldspathic sandstone whose grains are dominantly sharp and angular. Limpid quartz and occasional stray fragments of other rocks can be found throughout. The arkose is cemented by a silica cement consisting of secondary quartz.

The acidic tuff thought to be contemporaneous is intercalated with and may alternate with grit. Tuffaceous texture ranges from fine granular to dense.

The metamorphic rocks of the area consist of dark green often pyritic massive greenstone. Origin has been obscured by metamorphism and in outcrop shows a largely chloritized groundmass.

The Igneous rock outcropping on the southern border of TENDERLOIN #2 is a medium to coarse grained monzonite evidencing a mottled appearance due to the large content of ferro-magnesian constituents.

GEOLOGY

TABLE OF FORMATIONS

TERTIARY	8	Syenite
	7	7a Trachyte
		7b Basaltic tuff
	6	Augite Syenite
	5	Pyroxenite
	4	Monzonite
PALAEOZOIC MESOZOIC	3	Kettle River Fm. 3a Arkose
		3b Conglomerate
		3c Arkosic conglomerate
		3d Acid tuff
	2	Granodiorite
	1	Greenstone
		1a) Altered greenstone, skarn

Local Geology

Geological mapping and prospecting was concentrated in two main areas. These areas were points of interest developed from the 1979 prospecting and geochemical survey. The internal stratigraphy of the Kettle River Formation was further defined. The thick differentially weathered coarse polymictic conglomerate tended to stand out forming the cliffs and ridges of the southern flank of Tenderloin Mountain. The conglomerate grades into and out of arkosic conglomerate and a simple arkose. The coarse fraction of the conglomerate seems to be contemporaneous with both the arkosic fraction and acid tuffs.

The quartz breccia zone was examined closely. It appears to be some 40 meters long in exposed and thinly covered outcrop. The host rock is mainly the arkose and arkosic conglomerate of the Kettle River Formation. A number of samples were taken across the entire zone including one composite chip sample of the entire zone. Hand trenching failed to extend the zone in any direction more than a few meters. Overburden rapidly exceeds $1\frac{1}{2}$ metres (depth of trenches dug by hand) and outcrop can't be reached. Sub-crop tends to be plentiful just below the B horizon because the vuggy breccia nature of the rock allows a blocky type of weathering. Iron stain was very prevalent. Mechanical trenching is recommended if assays warrant further study of this zone.

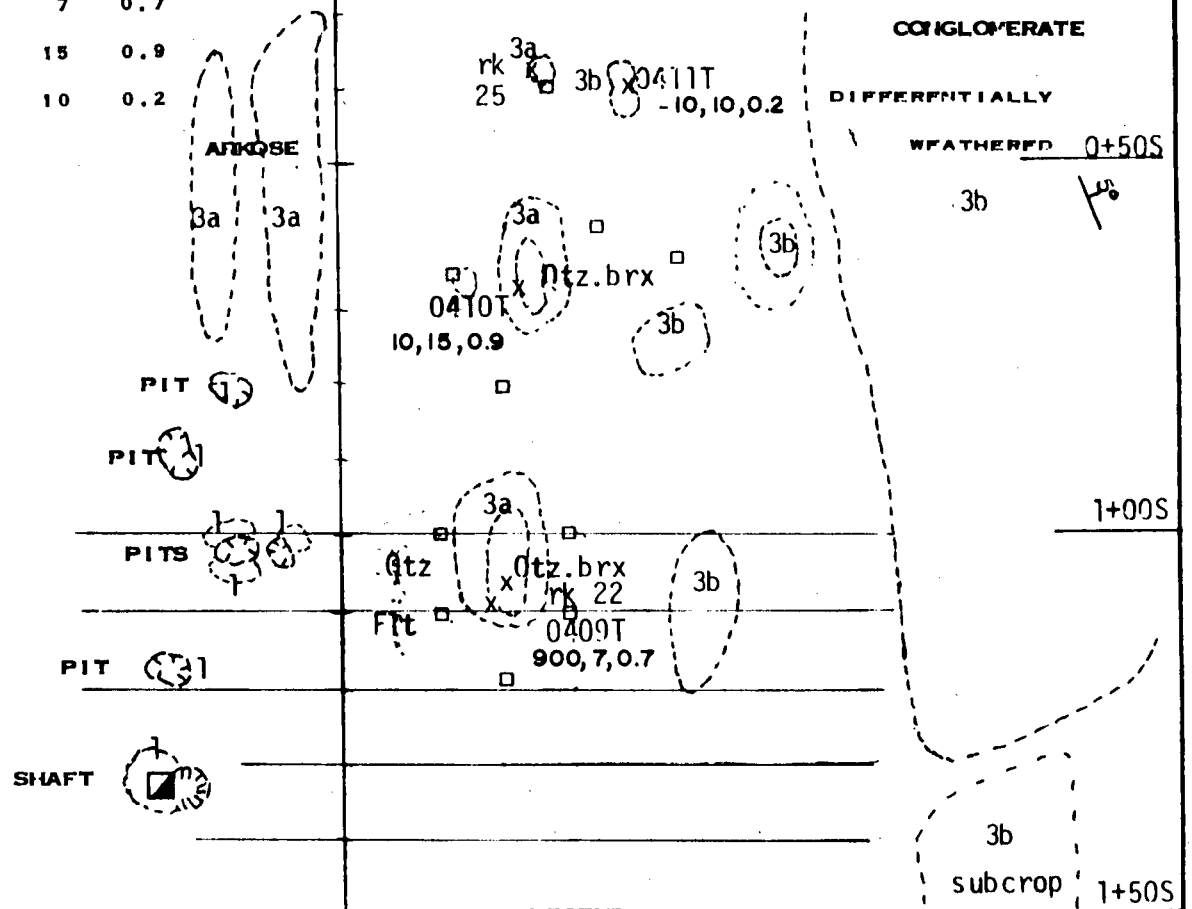
Elsewhere on the property mapping further filled in and defined the 1979 survey work. No other such quartz breccia was encountered.

ROCK GEOCHEM

	AU PPR	AS PPM	AG PPM
0409T	900	7	0.7
0408T	10	15	0.9
0410T	<10	10	0.2

L.C.P.

PEBBLE CONGLOMERATE
DIFFERENTIALLY WEATHERED



LEGEND

- 3b PEBBLE CONGLOMERATE
- 3a ARKOSE
- 1 GREENSTONE
- 1984 PITS
- x ROCK SAMPLE Au, As, Ag



WHITEBEAR CLAIM
GEOLOGY
SCALE 1:1,000
JUNE 1984

FIGURE 3

STRUCTURE

The entire Tenderloin Mountain area is underlain by Paleozoic Franklin Group Greenstones which has been intruded on all sides by the granodiorite of the Jurassic Nelson Intrusions. Unconformably overlying the Franklin Group are the coarse clastics and acid tuff of the Eocene Kettle River Formation.

Late Tertiary plutonic rocks consisting of monzonite and augite syenite are exposed on the eastern flank of Tenderloin Mountain within the Kettle River Formation and on the southernmost flank within the Franklin Group.

The entire sequence is capped by trachytic flows which are exposed on the top of Tenderloin Mountain.

Drysdale (1915) explained this sequence in his hypothetical restoration of Tenderloin volcanic vent. (Figure 4)

This model compares very favourably with the outcrop and geological sequence mapped. (Map I)

The quartz breccia zone is probably a late stage fluid migration and silicification. The zone of contact between the pebble conglomerate and the arkose appears to have been the easiest path of migration.

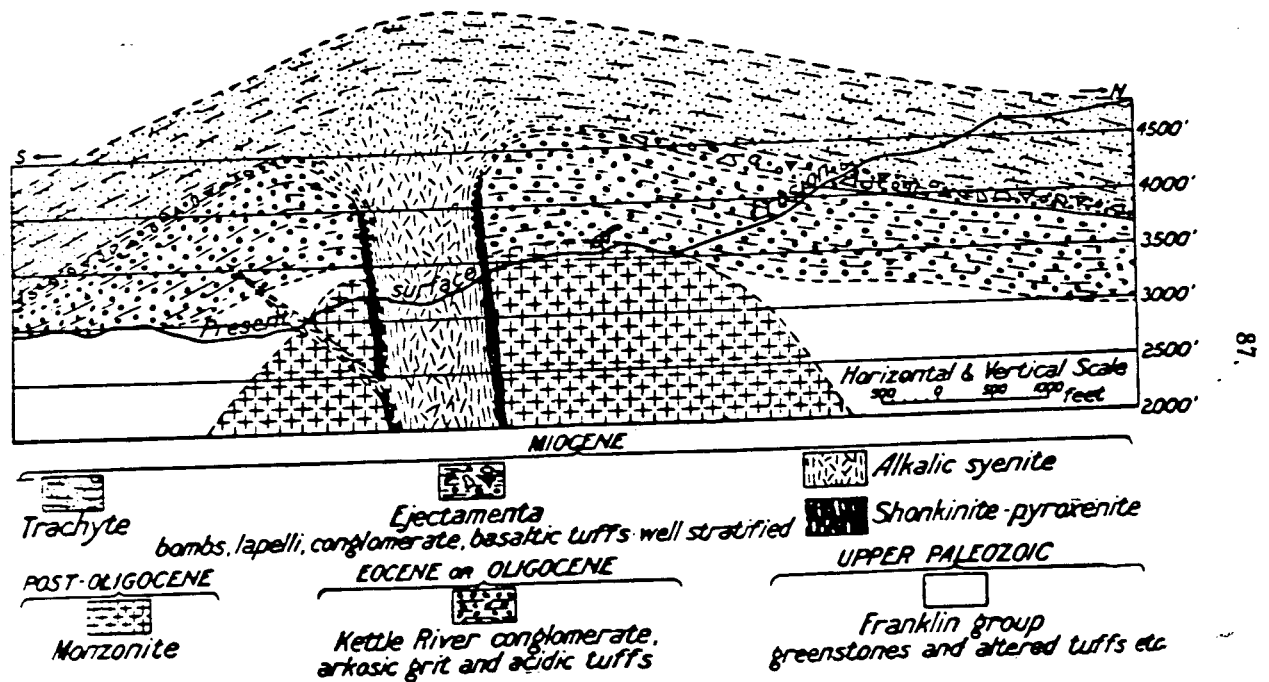


Figure 13. Restoration of Tenderloin volcanic vent.

WHITE BEAR - TENDERLOIN GROUP
 RESTORATION OF
 TENDERLOIN VOLCANIC VENT
 From Drysdale (1915)
 FIGURE 4 July 1984

GEOCHEMISTRY

Soil Geochemistry

One hundred and nine soil samples were taken in series 84-WB-A-1 to 84-WB-A-110 (Sample 84-WB-A-55 being non-existent). Soil sampling was concentrated in two main areas determined by anomalous values discovered by surveying in 1979. Some samples have not been analysed.

Detailed soil sampling was concentrated down slope from quartz breccia zone in the 100 S area of the grid. Some overlap was allowed to cover parts of the pyritic greenstone of the old White Bear workings. Reasoning behind soil grid position was to try and pick up gold anomalies derived from the quartz breccia zone which is largely covered by over 2 metres of overburden.

The second area of concentrated soil sampling was at 700 E/200N an area of tuff (identified as being fluorite bearing) that showed an anomalous gold value in the 1979 survey of the area. Detailed soils was done to try and delineate an anomalous zone.

Reconnaissance sampling was also done along the claim line from the legal claim post east to 750 meters. This was designed to catch downslope movement of elements from Tenderloin Mountain and try to detect upslope anomalies.

A soil profile was examined in detail at 120S/0+00. Each layer sampled as being typical of the entire area.

Soil sample locations were along lines established by compass and hip-chain (Compensation was made for hill slope.)

Soil Sample Results

As indicated on Map II not all samples were analysed. However the samples which were analysed show remarkably consistent results. Those in the vicinity of the White Bear shaft contained 0.1 ppm Ag and 9 to 16 ppm As. One gold value of 420 ppb was returned. The remainder of the samples ran less than 10 ppb Au.

The reconnaissance samples along the claim line show 0.1 to 0.8 ppm Ag, 9 to 16 ppm As and less than 10 ppb Au.

The detail soil samples on the 7E 2N grid returned 0.1 to 1.0 ppm Ag, 7 to 38 ppm As and <10ppb Au.

Rock Sample Results

Only five of the collected rock samples were analysed. Three of these were from the quartz breccia zone near the White Bear shaft. One of these returned 900 ppb Au, the others 10 and <10 ppb Au. A sample of the pyritized greenstone from the White Bear shaft gave <10 ppb Au, 41 ppm As and 5.2 ppm Ag. Results are shown on Figure 3 "Whitebear Claim". A sample of pyritized altered volcanics from the Union Mine dump returned 10 ppb Au, 85 ppm As and 1.2 ppm Ag.

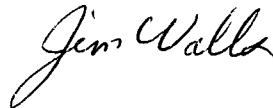
CONCLUSIONS AND RECOMMENDATIONS

The Tenderloin group of nine units surrounding the Whitebear crown grant were restaked because of renewed development at the Union Mine to the south. Further mapping and geochemical sampling on the property failed to locate economic mineralization. Rare, low, gold values were obtained from the quartz breccia zone near the White Bear shaft.

The quartz breccia zone is a favourable structure for precious metals. The brecciation, silicification and quartz filling appear to be relatively young and although precious metals values obtained thus far are low and erratic it would be desirable to analyse selected samples for mercury or other trace elements to test for a possible geochemical halo.

No other exploration is recommended at this time pending results at the Union Mine.

Respectfully submitted

A handwritten signature in cursive script that reads "Jim Walls".

J.R. Walls, Geologist

REFERENCES

Drysdale, C.W. 1915 Geology of the Franklin Mining Camp, B.C.
Geological Survey of Canada, Memoir 56, 246 pp

TABLE OF EXPENDITURES

WAGES & BENEFITS

J. Walls Geologist June 5 - 13 9 days @ \$150.= 1350.
H. Wahab Technician June 5 - 13 9 days @ \$100.= 900.

\$2,250.00

CAMP SUPPLIES, MEALS, MAPS ETC.

Maps, Prints 50.75
Food and Camp Supplies 212.21

\$262.96

TRUCK RENTAL

11 days @ \$35. 385.
Gas, etc. 95.17

\$480.17

GEOCHEMICAL ANALYSIS

Chemex Invoice 84 12481 57.37
Chemex Invoice 84 12482 826.87

\$884.24

COMPILATION, PRINTING ETC.

Report and Drafting 300. \$300.00
\$4,177.37

A P P E N D I X I

SAMPLE DATA SHEETS

NTS 82E/9W

SAMPLER Hugh Wahab

PROJECT White Bear

LINE _____

DATE June/1984.

Started sampling June 8 finished June 11.

AIR PHOTO NO. _____

SAMPLE NO.	LOCATION from LCP.	Depth cm.	Horiz.	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS		
				Colour	Part Size%	% ORG.	Ph				Au	As	Hg
1	H20S 0+00	45	C	Gry-Br	60% coarse sand 20% med sand 10% fine sand 10% org-br pe	0		15° SW	shrubs coniferous deciduous	steep hill to the NE (40°)	<10	14	0.1
2	H20S 0+00	15	B	Rd-Br	60 sand 30 silt 10 clay	5		15° SW	shr. con. dec.	steep hill to the NE (40°)	<10	14	0.4
3	H20S 0+00	11	A sub?	Gry-Wht.	10 sand 70 silt 20 clay	10		15° SW	shr. con. dec.	steep hill NE (40°). suspect this may be an ash layer from the 1914 (approx) forest fire.	<10	9	0.1
4	H20S 0+00	4	A	Gry-Br	60 30 10 peb. (pebbles)	20		15° SW	shr. con. dec.	A (sub?) makes up portion between Band A. steep hill NE (40°)	<10	12	0.1
5	H20S 0+00	0	Humus RH	Blk.	Humus	100		15° SW	shr. con. dec.	top 4 cm of soil.	<10	9	0.1
6	H20S 0+10E	12	B	Rd-Br	60 35 5	5		30° W	shr. con. dec.		<10	11	0.1
7	H20S 0+20E	7	B	Rd-Br	60 35 5 5 peb	10		30° W	shr. con. dec.		<10	11	0.1
8	H20S 0+30E	15	B	Rd-Br	60 30 5 5 peb	10		30° W	shr. con.		<10	16	0.1
9	H20S 0+40E	20	B	Rd-Br	60 25 5 10 peb	5		35° W	shr. con.	small outcrop 10m NE (peb cong) (approx. 10-15m Ø)	<10	H	0.1

11/11/84

NTS 82E/9W

SAMPLER Hugh Wahab

PROJECT White Bear

LINE

DATE June 1984

AIR PHOTO NO.

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS		
				Colour	Part Size	% ORG.	Ph				Au	As	Ag
10	H20S 0+50E	4	AB	Br. (Dirt)	50 40 10 peb.	5		35°W	shr con dec	no distinct B Horiz. was found before hitting rock. This may be the B Hor., with a poorly developed A. (10m NW out crop)	<10	12	0.1
11	H30S 0+00	11	B	Rd. Br	60 30 10	5		5°SW	shr con dec	steeper slope to the NE	<10	12	0.1
12	H30S 0+05W	7	B	Rd. Br	60 35 5	5		5°SW	shr con		<10	11	0.1
13	H30S 0+15W	7	B	Rd. Br	60 30 10	5		5°SW	con shr	shaft located 20m NW -	<10	12	0.2
14	H30S 0+05E	6	B	Br	60 30 10	5		10°W	con dec shr	small out crop 5m W.	420	12	0.1
15	H30S 0+15E	8	B	Rd. Br	50 30 20 peb	10		30°W	shr con dec		<10	10	0.1
16	H30S 0+25E	6	B	Br	60 30 10	5		35°W	shr con dec		<10	12	0.1
17	H30S 0+35E	3	AB	Br	50 30 20 peb	10		35°W	shr con dec	under developed A Hor.	<10	10	0.1
18	H30S 0+45E	2	AB	Br	50 30 20 peb	5		35°W	shr con dec		<10	11	0.1

NTS 82E/9W

SAMPLER Hugh Wahab

PROJECT White Bear

LINE _____

DATE June 1984

AIR PHOTO NO. _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS		
				Colour	Part Size	% ORG.	Ph				Au	As	Ag
19	1-30S 0+5SE	4	AB	Rc	50 30 20 peb	10		40°SW	con dec shr.		<10	9	0.1
20	1+40S 0+00	12	B	Rd Br	60 30 10	5		10°SW	shr con dec	small out crop 10 m south.	<10	14	0.1
21	1+40S 0+10W	6	B	Rd Br	60 30 10	5		15°SW	shr con		<10	10	0.1
22	1+40S 0+20W	15	B	Rd Br	60 30 10	10		15°SW	shr con	soffit located 20m NW	<10	12	0.1
23	1+40S 0+10E	7	B	Rd Br	60 30 10	5		30°W	shr con dec		<10	12	0.1
24	1+40S 0+20E	12	B	Rd Br	60 30 15 peb	5		35°SW	shr con dec		<10	11	0.1
25	1+40S 0+30E	7	B	Rd Br	60 30 10	5		40°W	shr con dec		10	11	0.1
26	1+40S 0+40E	6	B	Rd Br	60 30 10 5 peb	5		40°W	shr con dec		<10	12	0.2
27	2+00N 7+00E	9	B	Rd Br	70 30	5		5°SW	shr con dec	out crop 10m NE	<10	10	0.5
28	2+00N 6+90E	5	B	Rd Br	65 30 5 peb	5		5°SE	shr con dec	a lot of rock in the B Hor.	<10	11	0.3

NTS 82 E / 9 W

SAMPLER M. J. W. W. W.

PROJECT White Bear

LINE _____

DATE June 1984

AIR PHOTO NO. _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS		
				Colour	Part Size	% ORG.	Ph				Au	As	Ag
29	2+00N 6+50 E	10	B	Rd. Br	65 30 5 peb	5		10° SE	shr con dec		<10	11	0.4
30	2+00N 6+70 E	15	B	Rd. Br	70 30	10		15° SE	shr dec	slope to the NW is 30° (increased)	<10	9	0.3
31	2+00N 6+60 E	10	B	Rd. Br	70 30	5		15° SE	shr con dec	slope to the NW increases to 30°	<10	7	1.0
32	2+00N 7+10 E	12	B	Rd. Br	70 30	5		5° SE	shr con	large rock 5m N.	<10	10	0.2
33	2+00N 7+20 E	2	B	Rd. Br	70 30	5		5° SW	shr con dec		<10	14	0.4
34	2+00N 7+30 E	4	B	Rd. Br	60 30 10 peb	10		15° SW	shr con dec	Very underdeveloped A hor out crop 5m E	<10	14	0.3
35	1+80N 7+90 E	25	B	Rd. Br	60 40	5		0°	shr con dec	Swamp area 5m W	<10	12	0.2
36	1+80N 7+10 E	12	B	Rd. Br	60 30 10	15		0°	shr con dec	Swamp	<10	12	0.3
37	1+80N 7+20 E	26	B	Rd. Br	60 30 10	20		0°	shr con dec	small boulder (pcc cony) SWAMP! wet sample.	<10	11	0.2
38	1+80N 7+30 E	3	B	Rd. Br	50 30 20 peb	5		5° NW	shr	Very poor sample, B Hor. 2cm thick outcrop of out crop.	<10	11	0.2

NTS 82-19W

SAMPLER Hugh Worah

PROJECT White Bear

LINE _____

DATE June 1984

AIR PHOTO NO. _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS		
				Colour	Part Size	% ORG.	Ph				Au	As	Ag
39	480 N 640 E	2	B	Rd Br	70 30	5		5° NE	shr con dec		<10	9	0.1
40	480 N 6480 E	5	B	Rd Br	60 30 10 pch	10		5° NE	shr con dec	swampy area.	<10	9	0.1
41	480 N 6470 E	12	B	Rd Br	60 30 10 pch	10		10° SE	shr con dec	swampy	<10	15	0.3
42	480 N 6460 E	5	B	Rd Br	70 30	5		10° SE	shr con dec		<10	7	0.2
43	2+20 N 750 E	6	B	Rd Br	60 40	5		0° E	shr con dec	large rocks in B horizon.	<10	16	0.3
44	2+20 N 740 E	22	B	Rd Br	60 30 10	5		10° S	shr con dec	a lot of large rock in B hor.	<10	15	0.1
45	2+20 N 7420 E	9	B	Rd Br	70 30	15		5° SW	shr con dec		<10	15	0.3
46	2+20 N 7430 E	6	B	Rd Br	60 40	10		5° S	shr con dec	wet sample. swampy.	<10	22	0.5
47	2+20 N 7440 E	5	AB	Br.	60 40	20		15° SW	shr con dec	out crop at 20cm depth	<10	14	0.2
48	2+20 N 6490 E	26	B	Rd Br	60 30 10 pch	10		10° SW	shr con dec	Thick humus layer (24 cm)	<10	22	0.1

NTS 82E/9W

SAMPLER Hugh Wahab

PROJECT White Bear

LINE _____

DATE June 1982

AIR PHOTO NO. _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS		
				Colour	Part Size	% ORG.	Ph				Au	As	Ag
49	2+20N 6+50E	15	B	Rd.Br	70 30	10		10° S	shr con dec	Thick humus layer	<10	15	0.1
50	2+20N 6+70E	8	B	Br	50 30 10 coarse sand 10 peb	5		25° S	shr con dec	increased slope to the north by 30°	<10	12	0.4
51	2+20N 6+60E	14	B	Rd.Br	50 30 10 co. sand 10 peb	5		30° SW	shr con dec	a lot of large rocks in the area, along the slope.	<10	14	0.4
52	2+40N 7+00E	14	B	Rd.Br	50 30 10 por	5		35° SW	shr con dec	large rocks in B Hor.	<10	10	0.4
53	2+40N 6+90E	9	B	Rd.Br	50 30 10 peb	5		35° S	shr con dec	rocks in B Hor.	<10	12	0.4
54	2+40N 6+50E	6	B	Rd.Br	70 30	10		40° S	shr con dec	poor A Hor.	<10	10	0.4
Sample number 55 was missed by accident -											<11		
56	2+40N 6+80E	16	B	Rd.Br	50 30 20 peb	10		40° S	shr con dec	a lot of rocks and a poor B boundary.	<10	19	0.4
57	2+40N 6+60E	6	B	Rd.Br	60 40	5		40° S	shr con dec	rocks in B	<10	12	0.4
55	2+40N 7+10E	28	B	Rd.Br	70 30	5		5° SW		a lot of rocks in B Hor.	<10	17	0.6

NTS 82E/9W

SAMPLER Hugh Wahab

PROJECT White Bear

LINE _____

DATE June 1984

AIR PHOTO NO. _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS		
				Colour	Part Size	% ORG.	Ph				Au	As	Ag
59	2+40 N 7+20 E	28	B	Rd. Br	70 30	5		5° SW	shr con dec	-Humus layer very thick (12 cm) -rocks in B Horizon.	<10	29	0.9
60	2+40 N 7+30 E	13	B	Rd. Br	60 40	10		25° SW	shr con dec		<10	38	0.3
61	2+40 N 7+40 E	8	B	Rd. Br	60 40	5		30° SW	shr con dec	out crop 10 m E.	<10	16	0.2
62	2+60 N 7+20 E	35	B	Rd. Br	60 30 10 coarse sand	5		35° SW	shr con dec	poor sample, B Hor. is under slide rock.			
63	2+60 N 7+30 E	3	B	Rd. Br	60 40	10		10° SE	shr con dec	very thin humus layer			
64	2+60 N 7+40 E	15	B	Rd. Br	60 40	5		15° SE	shr con dec				
65	2+60 N 7+10 E	18	B	Rd. Br	60 49	5		25° S	shr con dec	-slide rocks have covered the B horizon, small sample.			
66	2+60 N 6+90 E	22	B	Br	40 30 coarse sand	10		35° S	shr con dec	-thick humus and slide rock cover			
67	2+60 N 6+80 E	15	B	Br	50 40 10 peb	5		30° SW	shr con dec				
68	2+60 N 6+70 E	10	B	Rd. Br	60 40	5		35° SW	shr con dec	slope increases to the north and ends at a cliff approx. 45m away			

NTS 82E/9W

SAMPLER Hugh Wahab
DATE June 1984

PROJECT White Bear

LINE _____

AIR PHOTO NO. _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS			
				Colour	Part Size	% ORG.	Ph				Au	As	Ag	
69	1+50N 7+00E	10	B	Rd-Br	60 40	10		0°	shr con dec	out crop to the south (5 m)				
70	0+50N 7+00E	15	B	Br	50 30 10 peb	10		40° S	shr con dec	rocks in B Hor. sample taken 30 m south of peb-cong. O.C.				
71	0+00 7+00E	5	B	Rd-Br	60 39 10 peb	5		30° S	shr con dec	rocks in B Horizon.	<10	16	0.2	✓
72	0+00 6+50E	5	AB	Br	40 20 20 peb 20 coarse sand.	10		40° S	shr con dec	out crop 1m North Humus very thick.	<10	15	0.5	
73	0+00 6+00E	2	B	Rd-Br	60 35 5 peb	10		50° S	shr con dec	peb cong out crop 1m E	<10	11	0.2	
74	0+00 5+80E	2	B	Rd-Br	60 40	10		35° SE	shr con dec	peb cong. out crop 4 m N.	<10	9	0.4	
75	0+00 5+60E	20	B	Rd-Br	60 40	5		25° SW	shr con dec	surrounded by peb cong	<10	11	0.8	
76	0+00 5+30E	30	B	Rd-Br	60 40	15		35° SW	shr con dec	(west) outer edge of peb-cong outcrop.	<10	10	0.2	
77	0+00 5+00E	53	B	Rd-Br	70 30	5		30° S	shr con dec		<10	11	0.4	
78	0+00 4+50E	20	B	Rd-Br	60 40	10		25° SE	shr con dec		<10	12	0.2	

NTS 82E/9W

SAMPLER Hugh Wahab

PROJECT White Bear

LINE _____

DATE June 1984

AIR PHOTO NO. _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS		
				Colour	Part Size	% ORG.	Ph				Au	As	Ag
79	0+00 4+00E	10	B	Rd. Br	60 40	10		5° SE	shr con dec	outcrop 20m north	<10	11	0.2
80	0+00 3+50E	15	B	Rd. Br	70 30	10		5° S	shr con dec		<10	11	0.7
81	0+00 3+00E	3	B	Rd. Br	60 40	10		30° S	shr con dec		<10	11	0.2
82	0+00 2+50E	5	B	Rd. Br	60 40	15		15° S	shr con dec	boulder or outcrop 5m, N	<10	11	0.3
83	0+00 2+00E	25	B	Rd. Br	70 30	5		15° SE	shr con dec	outcrop 5m N	<10	15	0.2
84	0+00 1+50E	10	B	Rd. Br	60 30 10 coarse sand	5		15° W	shr con dec		<10	11	0.5
85	0+00 1+00E	4	B	Rd. Br	70 30	5		25° W	shr con dec		<10	15	0.2
86	0+00 0+50E	10	B	Rd. Br	50 20 20 co. sand 10 pebb	5		35° W	shr con dec				
87	0+00 0+00	13	B	Rd. Br	60 35 5	5		25° SW	shr con dec	Legal corner post.			
88	H50 S 0+05E	10	B	Rd. Br	70 30	5		15° W	shr con dec				

SAMPLER Hugh Wahab

PROJECT White Bear

LINE _____

DATE June 1984

AIR PHOTO NO. _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS		
				Colour	Part Size	% ORG.	Ph				Au	As	Ag
89	1+50 S 0+15 E	9	B	Rd. Br	60 30 10 peb	5		25° W	shr con dec	small rocks in B Horizon			
90	1+50 S 0+25 E	6	B	Rd. Br	60 40	10		26° W	shr con dec				
91	1+50 S 0+35 E	5	B	Rd. Br	60 40	10		25° W	shr con dec				
92	1+50 S 0+05 W	8	B	Rd. Br	60 40	10		5° W	shr con dec	boulder 4m SE			
93	1+50 S 0+15 W	4	B	Rd. Br	70 30	5		5° SW	shr con dec	shaft 25m NW			
94	1+50 S 0+25 W	12	B	Rd. Br	60 40	10		5° W	shr con dec	shaft 20m N			
95	1+50 S 0+35 W	5	B	Rd. Br	60 40	10		5° W	shr con dec	shaft 20m N			
96	1+20 S 0+10 W	4	B	Rd. Br	70 30	5		10° SW	shr con dec	shaft 25m W, 2 small shafts 15m N			
97	1+20 S 0+20 W	4	B	Rd. Br	70 30	10		10° W	shr con dec grass	large shaft 10m W			
98	1+10 S 0+05 W	15	B	Rd. Br	60 40	5		10° SW	shr con dec	2 small shafts to the North			

NTS 82E/9W

SAMPLER Hugh Wahab

PROJECT White Bear

LINE _____

DATE June 1984

AIR PHOTO NO. _____

SAMPLE NO.	LOCATION	Depth	Horiz	DESCRIPTION				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS		
				Colour	Part Size	% ORG.	Ph				Au	As	Ag
99	1+10S 0+15W	6	B	Rd.Br	60 30 10 pcb	10		15° W	shr con dec	increased slope to the east (20°)			
100	1+10S 0+05E	6	B	Rd.Br	60 40	10		5° S	shr con dec grass	2 small shafts 5 m NE.			
101	1+10S 0+15E	7	B	Rd.Br	70 30	5		30° W	shr con dec				
102	1+10S 0+25E	6	B	Rd.Br	60 40	5		30° W	shr con dec	quartz breccia out crop 5 m East.			
103	1+10S 0+35E	30	B	Rd.Br	50 20 30 pcb	15		30° W	shr con dec	poorly developed B Hor., poor sample size. rocks in B Hor			
104	1+00S 0+00	12	B	Rd.Br	70 30	5		0° SW	shr con dec	2 small shafts 10 m W			
105	1+00S 0+10E	25	B	Rd.Br	60 30 10 pcb	5		15° W	shr con dec				
106	1+00S 0+20E	3	AB	Br	60 30 10 co. Sand	10		35° W	shr con dec	poorly developed A Hor.			
107	1+00S 0+30E	6	B	Br	60 30 10 pcb	10		35° W	shr con dec	quartz out crop 5 m N			
108	0+90S 0+25E	5	AB	Br	50 30 20 pcb	10		35° W	shr con dec	10 m W of quartz out crop.			

A P P E N D I X I I

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

JAMES R. WALLS

ACADEMIC

1983 Graduated from University of Toronto, Toronto, Ontario.
 H.B.Sc. in Geology

EXPERIENCE

1981 Geological Assistant in northern Saskatchewan. Geophysical
 surveys, line cutting, geological mapping, prospecting, rock
 sampling, plotted data and drew up maps.
 Denison Mines.

1982 Geological Assistant in the Kenora area of Ontario.
 Denison Mines

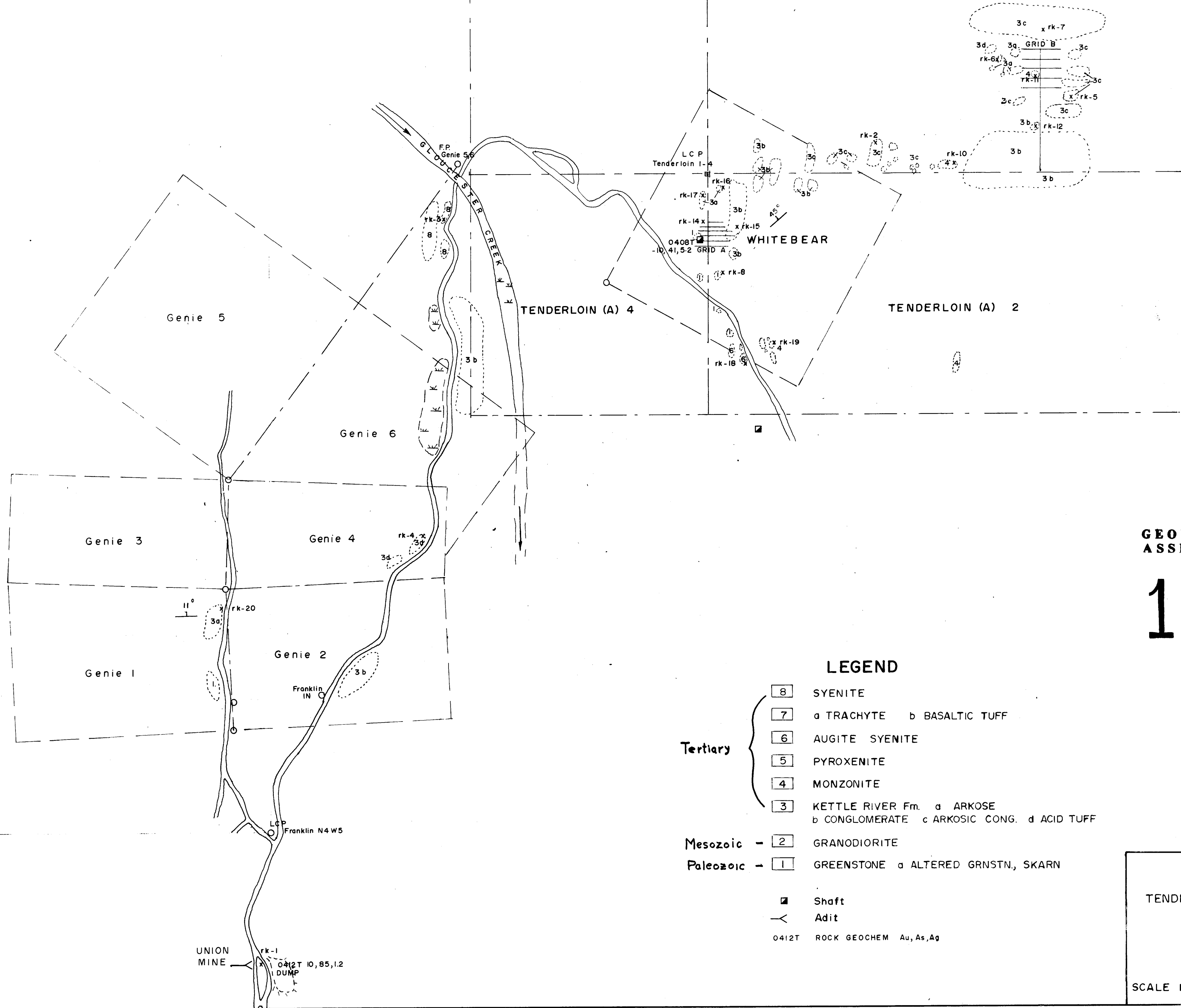
1983 Geologist on several gold exploration projects in the Abitibi
 Belt of north-western Quebec. Geological mapping, prospecting,
 geophysical and geochemical surveys.
 Kerr Addison Mines Ltd.

1984 May to present. Geologist
 J.C. Stephen Explorations Ltd.

J.R. Walls

TENDERLOIN (A) 3

TENDERLOIN (A) 1



GEOLOGICAL BRANCH ASSESSMENT REPORT

12,508

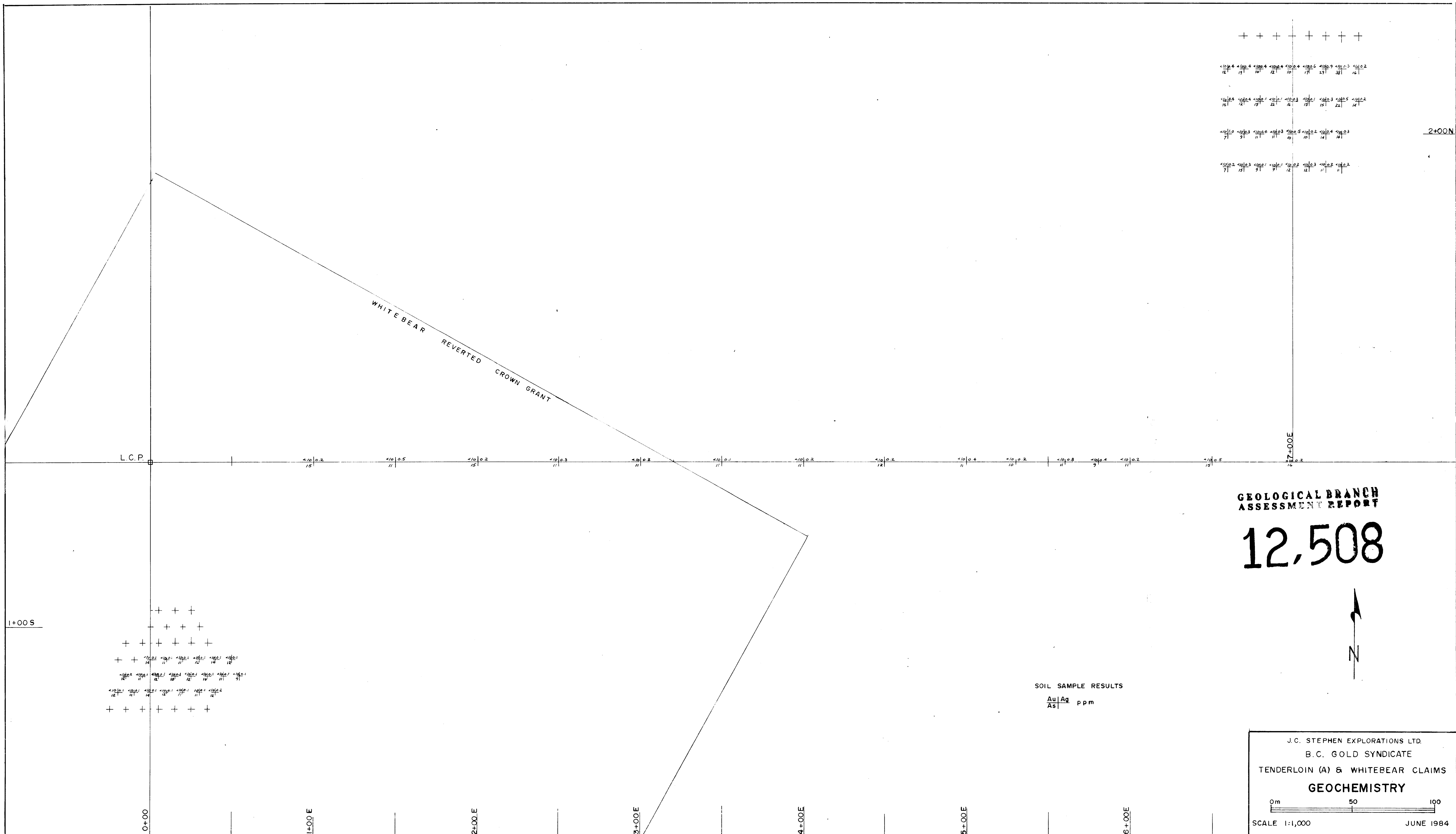
LEGEND

- Tertiary**
 - 8 SYENITE
 - 7 a TRACHYTE b BASALTIC TUFF
 - 6 AUGITE SYENITE
 - 5 PYROXENITE
 - 4 MONZONITE
 - 3 KETTLE RIVER Fm. a ARKOSE b CONGLOMERATE c ARKOSIC CONG. d ACID TUFF
- Mesozoic** - 2 GRANODIORITE
- Paleozoic** - 1 GREENSTONE a ALTERED GRNSTN, SKARN
- Shaft
- < Adit
- 0412T ROCK GEOCHEM Au, As, Ag



J.C. STEPHEN EXPLORATIONS LTD.
 B.C. GOLD SYNDICATE
 TENDERLOIN (A) & WHITEBEAR CLAIMS
 82E/9W
GEOLOGY

0 100 200 300m
 SCALE 1:5,000 JUNE 1984



1024	1024	1024	1024	1024	1024	1024	1024	1024	1024
11	11	10	12	10	17	27	31	14	
1024	1024	1024	1024	1024	1024	1024	1024	1024	1024
14	12	15	21	14	15	15	22	14	
1010	1010	1010	1010	1010	1010	1010	1010	1010	1010
7	9	11	11	20	10	14	14		
1022	1023	1023	1023	1023	1023	1023	1023	1023	1023
7	15	7	9	12	12	11	11		

2+00N

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,508



SOIL SAMPLE RESULTS
Au/Ag
As ppm

J.C. STEPHEN EXPLORATIONS LTD.
B.C. GOLD SYNDICATE
TENDERLOIN (A) & WHITEBEAR CLAIMS
GEOCHEMISTRY

0m 50 100
SCALE 1:1,000 JUNE 1984