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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 2 and June 12, 1984 For: B.C. Gold Syndicate By: J.C. Stephen Explorations Ltd. 674020

TENDERLOIN (A) + WHITEBER 1984 JUNE / 8.

GEOLOGICAL AND GEOCHEMICAL REPORT

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TABLE OF CONTENTS

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	Page
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 1		SAMPLE DATA SHEETS
APPENDIX II	[STATEMENT OF QUALIFICATIONS

LIST OF ILLUSTRATIONS

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

Map	Title	
Ι	Tenderloin (A) and Whitebear Claims	In Pocket
	Geology 1:5000	
II	Tenderloin (A) and Whitebear Claims Geochemistry 1:1000	Of Report

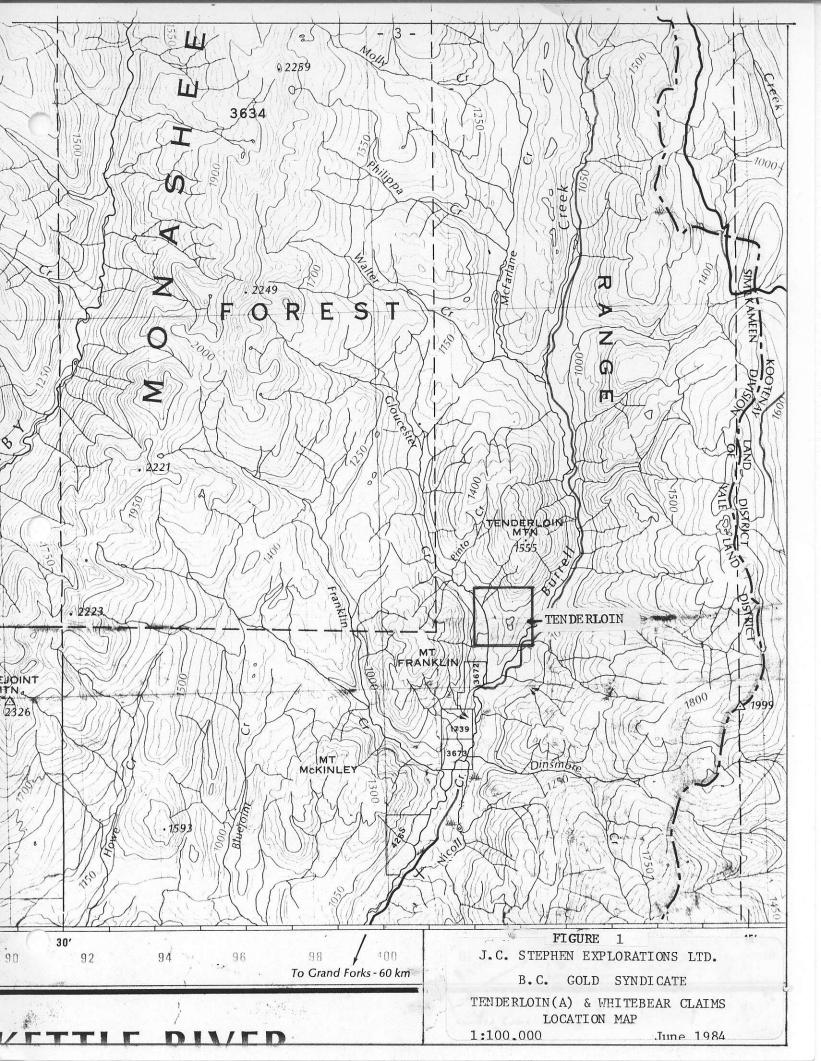
SUMMARY AND RECOMMENDATIONS

- The WHITE BEAR CROWN GRANT and TERNDERLOIN (A) claims (9 units) are located in the Franklin Camp approximately 70 km north of Grand Forks, B.C.
- 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.



PROPERTY

1

LIST OF CLAIMS WHITE BEAR GROUP

TABLE I

Claim Name	No.of Units	Record Number	Date of Location	Date of <u>Recording</u>	Metal Tag <u>Number</u>	Acreage and Lot Number
White Bear	٦	1709(8)	•	Aug.8/79	-	L10105,51.65 acres
Tenderloin(A)#1	4	4060	June 3/84	June 12784	29124	approx.100 hectares
Tenderloin(A)#2	2	4061	June 3/84	June 12/84	29125	approx. 50 hectares
Tenderloin(A)#3	2	406Z	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

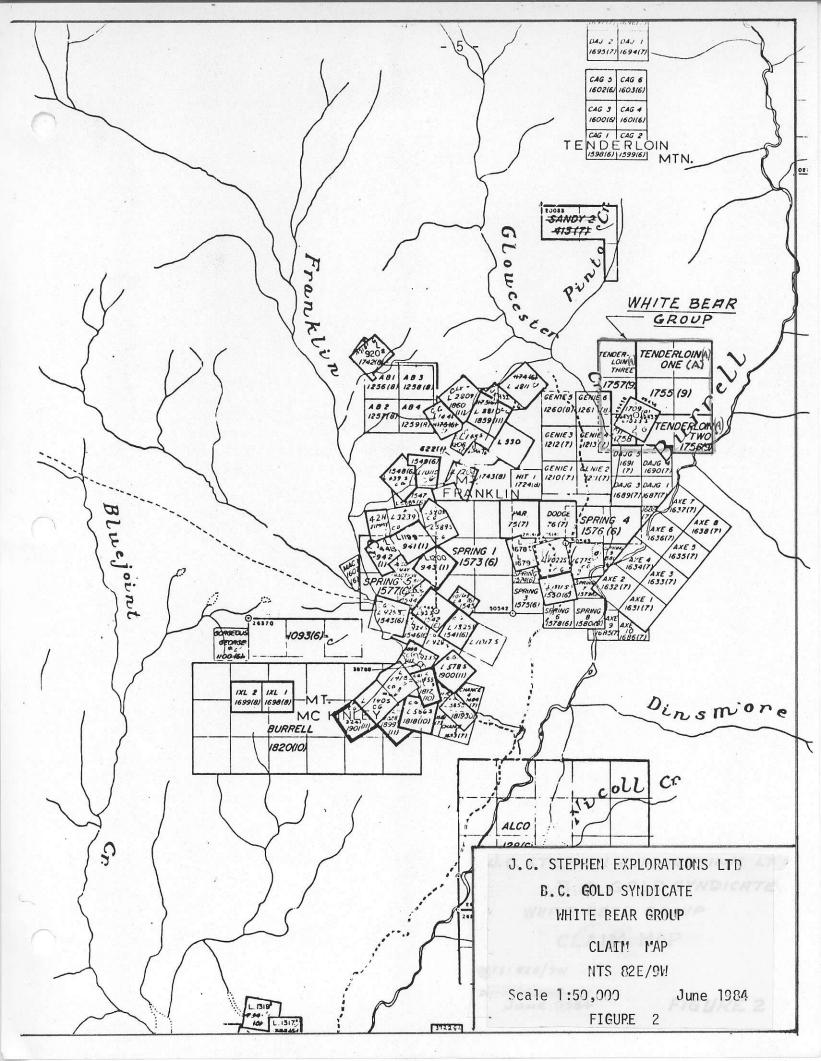
F.M.C. Number 267623 (Date of issue June 1, 1984; Vancouver, B.C.)

<u>Claim Name</u>	Date and Time of Commencement of Location	Date and Time of Completion of Location
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.

- 4 -



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 water lain 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 contemporanous is intercalated with and may alternate with grit. Tuffaceous texture ranges from fine granular to dense.

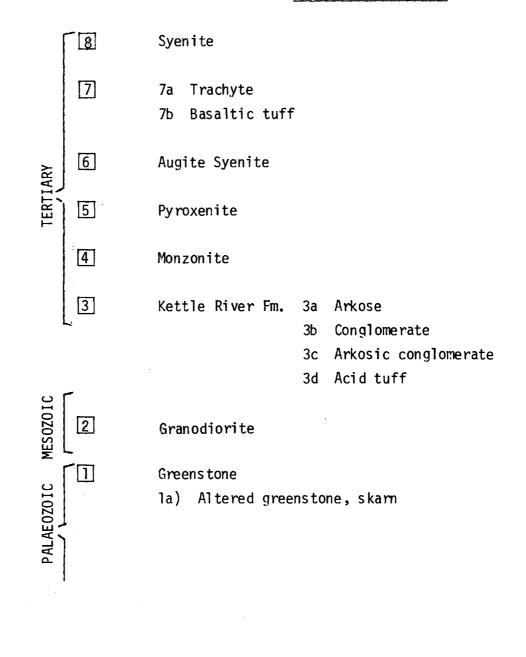
The metamorphic rocks of the area consist of dark green often pyritic massive greenstone. Origin has been obscured by metamorphism and in outcrop shows a largely chloritized groundmass.

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

- 8 -

TABLE OF FORMATIONS



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 contemporanous 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 1½ 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.

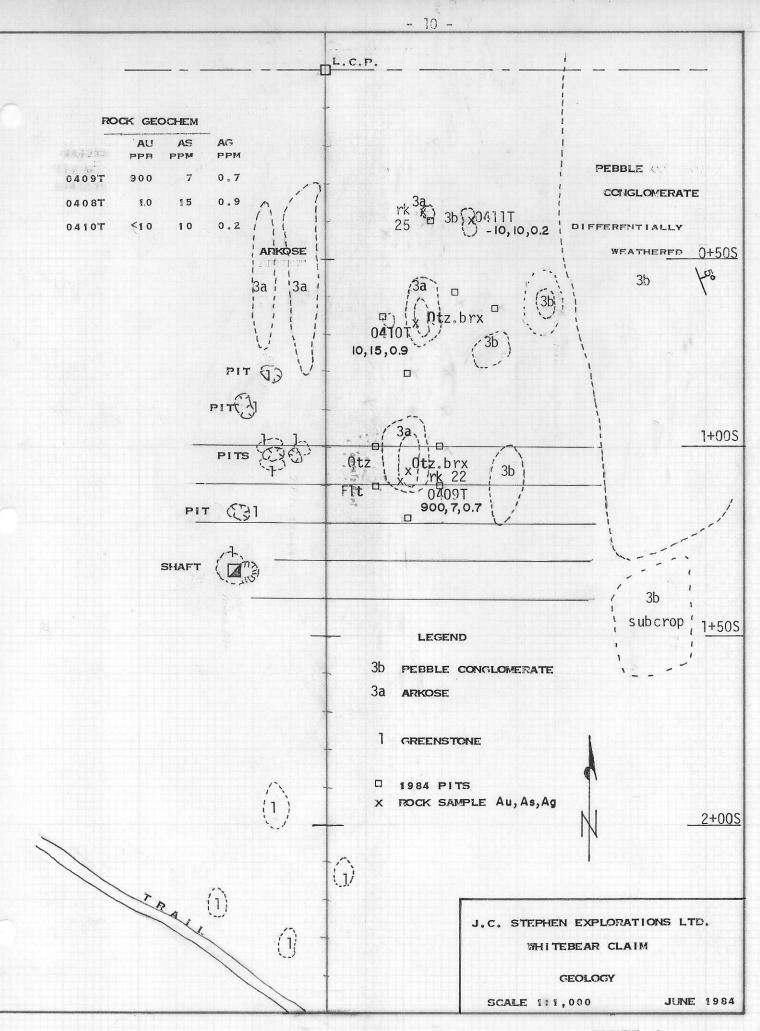


FIGURE 3

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. Uncomformably overlying the Franklin Group are the coarse clastics and acid tuff of the Eocene Kettle River Formation.

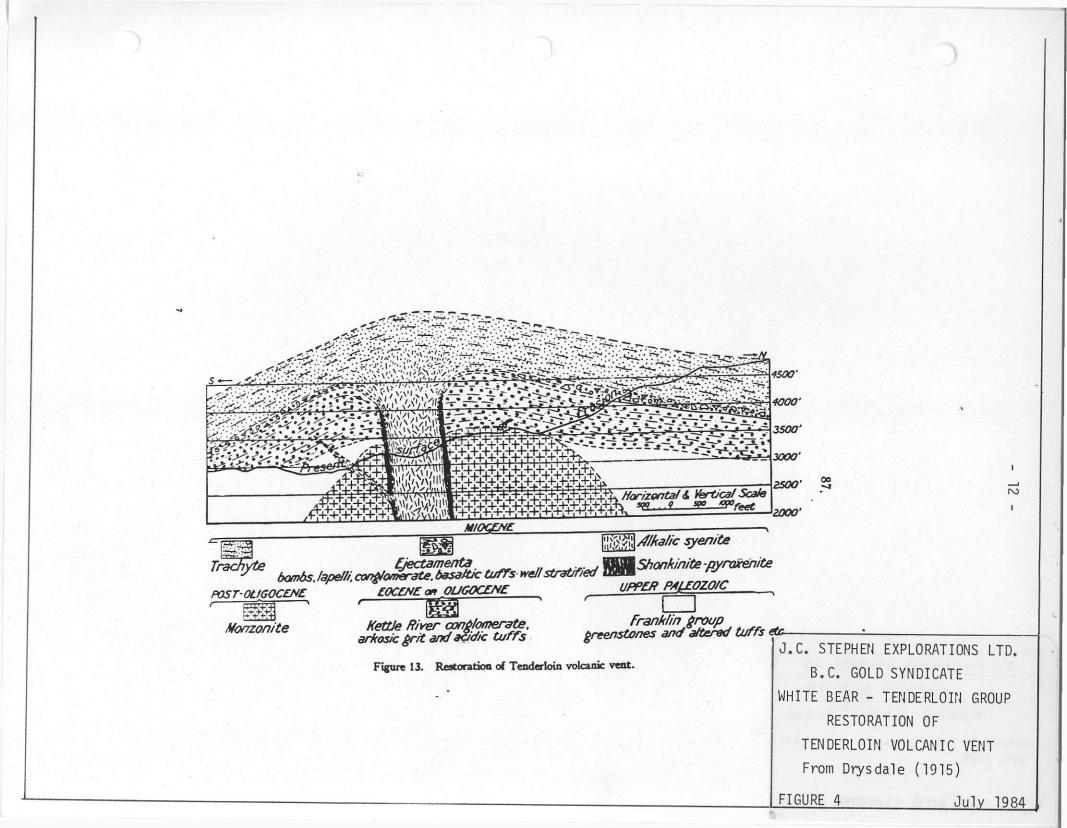
Late Tertiary plutonic rocks consisting of monzonite and augite syenite are exposed on the eastern flank of Tenderloin Mountain within the Kettle River Formation and on the southernmost flank within the Franklin Group.

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

Drysdale (1915) explained this sequence in his hypothermal 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.



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-existant). 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 flourite bearing) that showed an anomalous gold value in the 1979 survey of the area. Detailed soils was done to try and deliniate 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 consistant 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 J.C. Stephen Explorations Ltd.

fin Walls

J.R. Walls, Geologist

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REFERENCES

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

TABLE OF EXPENDITURES

RE: Restaking TENDERLOIN CLAIMS Mapping and Geochemical Sur		AND TENDERLOIN	CLAIMS
PERSONNEL			
J.D. Walls Geologist May	31-June 13 14	days @ \$150.= \$	2100.
H. Wahab Technician May	31-June 13 14	days @ 100.= _	
			\$3,500.00
CAMP SUPPLIES, MEALS, MAPS ETC.			
Maps, Prints	\$50 . 75		
Food and Camp Supplies	212.21		
			\$262.96
TRUCK RENTAL			
11 days @ \$35.	\$385.00		
Gas, etc.	95.16		
			\$480.16
GEOCHEMICAL ANALYSIS			
Chemex Invoice 8412481	\$ 57.37		
8412482	826.87		
			\$884.24
COMPILATION, PRINTING ETC.			
Report and Drafting			\$300.00
RECORDING FEES TENDERLOIN (A) 1	- 4 \$ 45.00		
ASSESSMENT WORK 3 years	165.00		
			\$210.00
		TOTAL	\$5,637.36

- 17 -

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APPENDIXI

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SAMPLE DATA SHEETS

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J.C. STELLEN EXPLORATIONS LTD.

GEOCHEMICAL DATA ȘHEET - ROCK GEOCHEM SAMPLING

B.C. GOLD SYNDICATE

92E/9W NTS

SAMPLER J. R. WAlls

PROJECT White Bear

LINE

DATE	J	un	e	19	94

	SAMPLE	LOCATION	ROCK	ALTERATION	MINERALIZATION	STRIKE	ADDITIONAL	APPARE WIDTH	NT	AS	SAYS		
	NUMBER	Looning	ТҮРЕ			DIP	REMARKS		WIDTH	Au,	As.	ŚЬ.	Rg
(1)	0408T WB-A-RK-13	Upgite Brown Shi	set Greenston	e typith,	Pyrite					<10	41		5.2
(2)	0409T 84-WB-A-RK-21	Q-2 BROWIN	Brech	inon stain		~				900	.7-		0.7
(3)	0410T 84WB.A.RK.23	Or Breccia	BREECOM	inon storin		-				10	15		0.9
(4)	84-WB-A-RK24	Oz BRECCIA	BREWIA	FROM Stain		-				<10	10		0.2
(5)	0412T 84-WA-A-RK26	Union Mine	Greenston	-	Punite					10	85		1:2
(6,)													
(7)													
(8)													
(9)													
(10)											· · · ·		
(11)													
(12)								4					
(13)													
(14)							-						
(15)													
(16)													
(17)													
(18,)													
(19)													
(20)													

J.C. STEPHEN EXPLORATIONS LTD.

GEOCHEMICAL DATA SheET - SOIL SAMPLING

NTS 82E/9W

m

	SAMPLER	Hugh W	ah	ab			ROJECT	(- ,	Jhite.	Bear	LINE			
	DATE 1	June /19	784.	14	48.8N						S finished June 11. AIR PHOTO NO.			1
	SAMPLE	LOCATION	Depth	Horiz		DESCRIPT	ION		SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	ASSAYS		
	NO.	from LC.P.	cm		Colour	Part Size	% ORG.	Ph				Au	As	Ag
	1	1+205	45	С	Gry-Br	60% coarse	0		15°5W	shrubs coniferous	steep hill to the NE (40°)	<10	14	0.1
		00+00				20% med sand				decidous	•			
						sand								
	2	H205	15	B	Rd-Br	10% angular 60 sand 30 sitt	5		15°5W	shr.	steep hill to the NE (40°)	<10	14	0.4
·		0100				10 clay				dec.		10		
	. 3	1+205	11	A ?	Gry-Whit.	10 schol 70 silt	10		15°5W	shr	steep hill NE (40°). suspect this may be an ash layer from the 1914 (approx) forest fire.		.0	
)	0+00		500.	h	20 clay				dec	may be an ash lover from	<10	.9	0.1
		2					······································				the 1914 (approx) forest fire.		9	
1	A	H205	4	A	Gry Br	60 30	20		15°5W	shr.	A(sub?) makes up portion		- F	
	4	0+00				10-peto-	60			dec	between Band A. Steep hill,	<u>×10</u>	12	01
	5	1+205	0	Humas	B1k.	Humus	100		15°5W	shr	between Band A. steep hill top 4 cm of soil.	$\ $		
		0+00	-	HH		MANAG	100		10 0	shr con dec.	TOP 7 CM ST SOTI.	<10	•9	0.1
-	C		12	0	0	60	5		30°W	shr				
	6	HLOS	10	15	Rol·Br	35	5		50 W	con dec.		<10	.11	0.1
		0+10E	-	0	010	60			0.2.1	- de C				
	.7	H205	/	B	Rd.Br	60 35	10		30°W	shr con dec		410	11	0.1
		Ot20E				5 peb								
	8	H20S		B	Rd.Br	30	10		30°W	shr		<10	16	0.1
		Q+30E				5 peb								
	9	17205	20	B	Rd. Br	25	5		35°W	shr	small out crop 10m NE (peb cong)	-10	M	0.1
1		9+40E				10 peb					(approx. 10-15mp.)			

J.C. S'A_PHEN EXPLORATIONS LTD.

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GEOCHEMICAL DATA SHLET - SOIL SAMPLING

NTS 82E W

SAMPLER Hugh Wahab DATE June 1984

White Bear PROJECT

LINE

SAMPLE LOCATI			Horiz		DESCRIPT	ION		SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS	1	SAYS	
NO.	LOCATION	Depth	Horiz	Colour	Part Size	% ORG.	Ph		VEG.	ADDITIONAL OBJETT ATTONS ON THE MAILES		As	Ag
10	H205	4	AB	Br. (Dirt)	50	15		35°W	shr	no distinct B Horiz. was found before	10	12	0.1
	0+50 E				lopeb.				dec	hitting rock. This may be the B Hor, with a poorly developed A. (10 m NW out crop)			
11	HOUS												
//	1+395	11	B	Rd. Br	60 30	5		S°SW	shr	steeper slope to the NE	410	12	0.1
1	9400				10				dec		10		
12	1+305	7	B	Rd. Nr		5		5°56	shr		×10	11	0.1
	OTOSW		33	RJ-br	5	6		5.269				-	
13	1+305	7	B	Rd. Br	60 30	5		5°5W	con shr	shaft located 20m NW	<10	12	0.2
	OHISW	7			10								~
14	1+305	6	B	Br	60 30	5		10° W	dec	small out crop 5 m W.	420	12	0.1
	0+05E				10				shr				
15	H305	8	B	Rd · Br	50 30	10		30°W	shr		410	10	0.1
	Q+ISE	-			20 peb				dec				
16	1+30 S	6	B	Br	60 30	5		35°W	shr		10	12	0.1
	0+25E				10				dec				
17	4305	3	AB	Br	50	10		35°W	shr	under developed A Hor.	10	10	0.1
	0+35E				50 30 peb				dec			•	
18	1+305	2	AB	Br	50 30	5		35°W	shr		4/0	11	0.1
	0HASE		1		20 peb				dec				

J.C. S'1_PHEN EXPLORATIONS LTD.

GEOCHEMICAL DATA SHEET - SOIL SAMPLING

82E/9W NTS

SAMPLER Hugh Wahab. DATE June 1984

PROJECT White Bear

LINE

SAMPLE	LOCATION	Depth	Horiz		DESCRIPT	TION		SLOPE	VEG.	ADDITIONAL OBSERVATIONS OF REMARKS	ASSAYS				
NO.		Ceptii		Colour	Part Size	% ORG.	Ph				Au	As	Ast		
19	1+305	4	AB	Br.	50 30 20 peb	10		403W	Con dec		10	9	0.1		
	O+5SE				20 peb				shr.						
20	HAOS	12	B	Rd Bc	60	5		10°5W	shr	small out crop 10 m south.	410	14	0.1		
	0400				10	.96	24		dec						
21	1+405	6	ß	Rd Br	60 30	5		15°5W	shr		<10	10	0.1		
	0+10W				10										
22	14405	15	B	Rd·Br	60 30	10		15°5W	shr	shaft located 20m NW	<10	12	0.1		
	0+20 W				10										
23	1+405	7	B	Rd.Br	60 30	5		30° W	Con!		10	12	0.1		
	QtIO E				10				dec						
24	H405	12	B	Rd.BC	60 30	5		35 5 6	shr.		-10	11	0.1		
	0+20E				10 peb			1							
25	1+40 5	7	в	Rd-Br	60 39	5		40°W	shr		10	11	0.1		
	Ot39E				19				dec						
26	14405	6	ß	RdiBr	6020	5		40°W	on she		410	12	0,2		
	0+40E				10 5 peb				IS IC.						
27	2+001	9	B	RdiBr	70 39	5		5°5W	shr	out crop IOM NE	410	10	0.5		
	740.0E								dec						
28	2+00N	5	B	Rd.Br	65 30	5		SSE	shr	a lot of rock in the B Hor.	410	11	0.3		
	6+90 E				s peb				dec						

J.C. S'1_PHEN EXPLORATIONS LTD.

GEOCHEMICAL DATA SHEET - SOIL SAMPLING

9W NTS

White Bear PROJECT

LINE

AIR PHOTO NO.

DATE June 1984

AIR PHOT

SAMPLE	LOCATION	Depth	Unein		DESCRIPT	ION		SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS		ASS	AYS	
NO.	LOCATION	Depth	HUITZ	Colour	Part Size	% ORG.	Ph				Au	As	Ag	Γ
29	2+001	10	B	Rd.Br	65 30	5		10° 5E	Shr		<10	11	0.4	
	6+80 E				5 peb				dec					
30	2+0011	15	ß	RdiBr	70 39	10		15°5E	shr dec	slope to the NW 15 30°	410	9	03	
	6+70E									(increased)				
31	2+001	10	B	RdeBr	70.	5		15°5E	shr	slope to the NW increases to	×10	.7	1.0	
	6+60 E								Jec	32°				Γ
32	2+00 N	12	B	RdiBr	70	5		5° 5E	shr	large rock 5m N.	410	10	0.2	
•	7+10E													
33	2+0011	8	B	Rd. Br	70 30	5		5° 5 W	shr		10	14	0.4	
	7+20 E								dec					
34	2+00 M	4	B	Rd. Br		19		(5°5W	shr	Very underdeveloped A Hor.	<10	14	0.3	
	7+30E			*	10 peb				dec	out crop 5m E				
35	11-8011	15	B	Rd. Br	60	15		0°	shr	Swamp area 5m W	<10	12	0,2	
	7+90E								dec					
36	1480N	12	B	Rd.Br	60 39	15		0°	shr	swamp.	<10	12	0.3	
	7+10 €				10				dec					
37	H80 N	26	B	Rd-Br	60 30	20		Q°	shr con	small boulder (paccong)	10	.11	0.2	
	7+20E				10				dec	SWAMP! wet sample.				
38	H80N	3	B	Rd Br	59 39	5		5900	Shr.	Very pour sample, B Hor. 2 cm	410	11	0.2	
	7+30E				29 pelo					thick ontop of out crop.				

J.C. S'A_PHEN EXPLORATIONS LTD.

GEOCHEMICAL DATA SHLET - SOIL SAMPLING

NTS

SAMPLER Hugh Wahab June 1984

DATE

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PROJECT White Bear

LINE

39					DESCRIPT	TION				ADDITIONAL OBSERVATIONS OR REMARKS		ASS	SAYS
	LOCATION	Depth	Horiz	Colour	Part Size	% ORG.	Ph	5°NE St	VEG.	ADDITIONAL OBSERVATIONS OF REMARKS	Au	As	Ag.
39	H80 N	12	B	Rok Br	30	5		5°NE	shr		<10	9	0.1
	6+90 E								dec				
40	H80 N	5	B	Rd. Br	50	10		5°NE		swampy area.	10	9	0.1
	6+80E				10 peb				dec			1	
+ (1+80 N	12	B	Rd. Br	60 39	10		10° SE	shr.	Swampy.	410	15	0.3
	6+70E				10 peb				Aec				
12	1+8014	8	B	Rd.Br	79 39	5		10°56	shr		<10	7	0.2
	6+69E								dec				
+3	2+20N	16	B	Rd.Br	60	5		10°5E	shr con dec	large racks in B Warizon.	<10	16	0.3
	7too E								dec	J			
-4	2×2014	22	B	BSGBC	60	5		10*5	she	a lot of large rock in	210	15	0.1
	7+10E				10				dee	B Hor.			
15	2+2011	9	B	Rd.Bc	70	15		5°5W	shr		<10	15	0.3
	7t20E								dec				
46.	2+20 N	6	B	bd. Bc	60 49	10		5°5	shr	Wet sample, Swampy.	-10	22	0.5
	7+30E								0,00			*	
47	2+20N	5	AB	Bc.	69 40	20		153W		out crop at 20cm depth.	-10	14	0,2
	7440E								dec				
8	2+20N	26	B	Rd.Br	60	10		19 5W	shr con dec	Thick humus layer	<10	22	orl
	6+90E				lobep				aco	(24 cm)			

J.C. S'LEPHEN EXPLORATIONS LTD.

GEOCHEMICAL DATA ShEET - SOIL SAMPLING

NTS 82 a

SAMPLER Hugh Wahab DATE June 1982

PROJECT White Bear

LINE

SAMPLE NO.	LOCATION	Dopth	oth Horiz				SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS		ASS	AYS	
NO.	LOCATION	Deptil		Colour	Part Size	% ORG.	Ph		VEG.		Au	As	Aq,
19	2+20N	18	B	RdiBr	70	10		10° 5	Shr	Thick humas layer	410	15	0.1
	6480 E								dec				
50	2+20 N	8	D	Br	50	5		2505	shr	increased slope to the	410	12	0.4
	6470E				10 sandi 10 peb			25%	dec	north by 30°			
51	2+2012	14	ß	RABr	50 30	5		30°SW	shr .	a tot of large recks in the	10	14	0.4
	6+60E				10-sand 10-peb				Acc	area, along the slope.			
52	2+40 N	19	B	Adibr	59	5		35°5W	Shr	large rocks in B Hor.	-10	10	0.4
I astr	7+00E				10 peb				dec				
53	2+40N	9	B	Rd-Br	60	5		35°S	shr	rocks in B Har.	-10	12	0.4
	6+90E				10 peb				dec				
54	2+401	6	B	RdiBr	70	10		40°5	shr	poor A Her.	-10	10	0.4
	6+80E								dec				
Sav	ple n	NW	50	5 55	wo	5 W	nlss	icd 1	py c	accident-	41.		
56	2+40N	16	B	RdiBr	50 30	(Q		40°5	shs	a lot of rocks and	10	19	0.4
	6+80E				20 peb				dec	a poor B boundry.			
57	2+40N	6	B	Rd Br	60 40	5		40°5	shr	rocks in B.	<10	12	0.4
	6+69 E								dec				
38	2+40 N	28	B	Rdibr	70	5		5°5U		a lot of rocks in B Hor.	10	17	0.6
	7+10E												

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GEOCHEMICAL DATA SHEET - SOIL SAMPLING

NTS 82E/ 9W

SAMPLER Hugh Wahab. DATE JUNE 1984

PROJECT White Bear

LINE

NU.	LOCATION	Depth			DESCRIPT	ION		SLOPE	VEG.	ADDITIONAL OBSERVATIONS OF REMARKS		ASS	AYS	
NO.	LOCATION	Depth	Horiz	Colour	Part Size	% ORG.	Ph				Au	As	Aa	
59	2+40 N	28	B	Rd.Br.	78 30	5		5°SW		-Humus layer very thick. (12 cm)	-10	29	0.9	
	7420 E								dec	-rocks in B Horizon.				
60	2+40N	13	в	Rd.Br	60 40	10		25°5W			<0	38	0.3	
	7+30E								dec					
61	2+40 N	8	B	Rd. Br	60 40	5		30°5W	shr	- out crop 10 m E.	0</td <td>16</td> <td>0.2</td> <td>-</td>	16	0.2	-
	7+40 E								dec					
62	2+60 N	35	B	Rd.Br	60 30 10 coarse sund,	5		35° SW		- poor sampte, B Hor. is				
	7+20E				sand,				dec	under slide rock.				
63	2+60 N	3	B	Rd.Br	60 40	10		10° SE	shr	very thin thumus layer				
	7+30 E								dec					
64	2+60 N	15	B	Rd.Br	60 40	Б		15°5E						
	7+40 E								dec					
65	2+60N	18	B	RdiBr	60 49	5		25°5	shr	-slide rocks have covered the				
	7+10E								dec	· B Harizon, small sample.				
66	2+60 N	22	B	Br	40 30	10		35°5	con	-thick humus and slide				
	6+90€				30 coarse sand				dec	rock over				
67	2+60N	15	B	Br	500	5		30°5W	shr					
	6+80E				10 peb				dec					
68	2+60N	10	B	RdiBr	60 40	5		35°5W	shr	slope increases to the north				
	6+70 E								des	and ends at a cliff approx. 45m.				

J.C. S'A _PHEN EXPLORATIONS LTD.

GEOCHEMICAL DATA SHEET - SOIL SAMPLING

NTS 82E/9W

SAMPLER Hugh Wahab DATE June 1984

PROJECT White Bear

LINE

SAMPLE	LOCATION	Depth			DESCRIPT	ION		SLOPE	VEG.	ADDITIONAL OBSERVATIONS OR REMARKS		ASS	SAYS	
NO.	LOCATION	Depth	HOFIZ	Colour	Part Size	% ORG.	Ph				Au	As	Ag	
69	1+50 N	10	B	Rd-Br	60 40	10		Q°	shr	out crop to the south (5m)				
	7+00E								dec					
70	OTSON	15	B	Br	60 30	10		40°5	shr can dec	rocks in B Hor. sample				
	7+00E				10 peb					taken 30 m south of peb-cong O.C.				
71	0+00	5	B	Rd-Br	69 39	5		30° 5	shr	rocks in B Horizon.	<10	16	0.2	v
	TTODE		-		10 peb				dec					
72	0+00	5	AB	Br.	40 20 20 peb 20 cearse sand.	10		40°5	shr cen	out crop Im North	410	15	0.5	
	6+50 E				20 peb 20 course				dec	Humus very thick.				•
73	0+00	2	B	Rd.Br	35	10		50° S	shr	peb cong out crop Im E	40	11	0.2	
	6+00 E				5 peb				dec					
74	0+00	2	в	Rd.Br	60 40	10		35°5E	100.	peb cong. out crop 4 m N.	<10	9	0.4	
	5+80E								dec	1 0				
75	0100	20	ß	Rd.Br	60 40	5		25°5W	shr con	surrounded by peb cong	=10	11	0.8	
	5+60E						-		dec			-		
76	0100	30	ß	Rd.Br	60 40	15		35° siv	shr	(west) outer edge of peb-cong out crop.	410	10	0.2	
	5+30E								dec					
77	0+00	53	ß	Rd.Br	30	5		30° 5	shr con		410	.11	0.4	
	5+00E								dec					
78	9+00	20	B	Rd.Br	60 40	10		25°5E	shr		10	12	0.2	
	4+50E								dec					

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GEOCHEMICAL DATA SHEET - SOIL SAMPLING

NTS 82E/9W

SAMPLER Hugh Wahab DATE June 1984

PROJECT White Bear

LINE

SAMPLE	LOCATION	Depth			DESCRIPT	ION		SLOPE		ADDITIONAL OBSERVATIONS OR REMARKS		ASS	SAYS
NO.	LOCATION	Depth	HOFIZ	Colour	Part Size	% ORG.	Ph	SLOPE	VEG.	ADDITIONAL OBSCITVATIONS ON HEMAIKS	Au	As	Ag
79	0+00	10	B	Rd.Br	60 40	10		5°5E	shr con	outcrop 20m north	×10	11	O.Z
	4+00E								dec				
80	0+00	15	B	Rd·Br	70 39	10		5°5	shr con		410	11	0.4
	3+50E								dec				
81	0400	3	B	Rd. Br	60 40	10		30°5	shr		- 10	//	0.2
	3+00E								dec				
82	0+00	5	B	Rd · Br	60 40	15		15°5	shr	boulder or outcrop 5 m, N	-10	11	0.3
	2+50E								dec				
83	0+00	25	B	Rd.Br	70 30	5		15°5E	shr	outcrop 5 m N	<10	15	0.2
	2+00E								dec				
84	9+00	10	B	Rd.Br	60 30	5		15° W	shr		410	11	0.5
	1+50E				10 coarse sanol.				dec				
35	0+00	4	B	Rd. Br	70	5		25°W	shr		410	15	0.2
	1+00 E								dec				
86	0+00	10	B	Rd.Br	50 20	5		35° W	shr				
	OHSOE				20 co. sand 10 peb				dec			-	
87	0+00	13	B	Rd. Br	60 35	5		25° SW	shr	Legal corner post.			
	0+00				5				dec				
88	4505	10	B	Rd·Br	70 30	5		15° W	shr				
	0+05E	-				•			dec				

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GEOCHEMICAL DATA SHEET - SOIL SAMPLING

9W 82E. NTS

SAMPLER Hugh Wahab

DATE

June 1984

PROJECT White Bear

LINE

SAMPLE NO.	LOCATION	Denth	Unite		DESCRIPT	TION				ADDITIONAL OBSERVATIONS OF REMARKS		ASS	AYS	
NO.	LUCATION	Depth	FIORIZ	Cotour	Part Size	% ORG.	Ph	25°W Sh	VEG.		Au	As	Ag	
89	1750 5	9	ß	RdiBr	60	5		25°W	shr	small rocks in B Horizon			0	
	OTISE				10 peb				dec					
90	1+505	6	B	Rd .Br	60 40	10		26°W	shr					
	0+25E								dec					
91	1+505	5	B	RdiBr	60 40	10		25°W	shr con					
	0+35E								dec					
92	14505	8	ß	Rd: Br	60	10		5° W	shr	boulder Am SE				
	Otos W								dee					•
93	1+50 5	4	B	RdiBr	70 39	5		5°SW	shr	shaft 25 m NW				
	0+15W								dec					
94	1+505	12	B	Rd.Br	60 40	10		5°W	shr	shaft 20 m N.				
	0+25 W								dec					
95	1+505	5	В	Rd.Br	60 40	10		5°W	shr con	shaft 20 m N				***: **
4	0+35 W								dec					
96	1+20 5	4	B	Rd.Br	70 30	5		10°SW	shr con	shaft 25mW, 2 small shafts				
	9+10W								dec	15 m N				
97	1+20 S	4	B	Rd.Br	70 39	10		10°W	shr	large shaft 10 m W				
•	0+20 W								dec grass					
98	1+105	15	13	Rolibr	60 40	5		10°5W	shr Con	2 small shafts to the North.				
	0+05W								dec					

J.C. S'L_PHEN EXPLORATIONS LTD.

GEOCHEMICAL DATA ShEET - SOIL SAMPLING

NTS

SAMPLER Hugh Wahab DATE June 1984

PROJECT White Bear

LINE

0+15 00 1+10 0+05 01 1+10 0+15 02 1+10 0+15 0+2 0+2 0+2 0+2 0+2 0+2 0+2 0+2 0+2 0+2					DESCRIPT	ION				ADDITIONAL OBSERVATIONS OF REMARKS	×	ASS	SAYS	
	LOCATION	Depth	Horiz	Colour	Part Size	% ORG.	Ph	SLOPE	VEG.	ADDITIONAL OBSERVATIONS OF REMARKS	Au	As	Ag	Γ
99	1+105	6	B	Rd Br	60 30	10		15° W	shr	increased slope to the east			0	
	0+15 W				10 peb				dec	(20°)				
100	1+105	6	B	Rdibr	60	10		5°S	shr	2 small shafts 5 m NE.				
	0+05 E								dec grass					
101	1+105	7	B	Rd.Br	70 39	5		30° W	shr con					
	0+15E								dec	1				
102	14105	6	B	Rd.Br	69 40	5		30° W	shr	quartz breccia out crop		. i		
	0+25E								dec	5 m East.				
103	1+105	30	B	Rd.Br	50 20	15		30°W	shr	poorly developed B Hor,				
	0+35E				30 peb			-	dec	poor sample size. rocks in B Hor.				
104	1+005	12	B	Rd · Br	70 30	5		10° 5W	shr	2 small shafts 10 m W				
	0+00				-				dec					
105	1+995	25	ß	Rd Br	60	5		15°W	shr					
	OTIOE				lopeb				dec					
106	1+00 S	3	AB	Br	60 30	10		35° W	shr	poorly developed A Hor.				
	0+20E				10 co. sand.				dee					
107	1+005	6	B	Br	69 30	10		35° W	shr	quartz out crop 5 m N				
	0+30E				10 peb				dec					
108	0+90 5	5	AB	Br	50 30	10		35°W	shr	10 m W of quartz out crop.				
	0+25E				20 peb				dec					

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GEOCHEMICAL DATA SHLET - SOIL SAMPLING

W NTS

SAMPLER Hugh Wahab DATE June 1984

PROJECT White Bear

LINE

	-		Calaur	DESCRIPTION			SLOPE	VEG.	ADDITIONAL ORGERVATIONS OF REMARKS	1	ASS	AYS	
LOCATION	Depth	Horiz	Colour	Part Size	% ORG.	Ph			ADDITIONAL OBSERVATIONS OF REMARKS	Au	As	Ag	
0+905	4	B	Rd·Br	60 40	10		25°5W	shr				0	
OHISE								dec					
0+905	6	B	Rd. Br	70 30	10		20°5W	shr	2 small shafts 20 m SW.				
0+05E								dec					
								<u>.</u>					
		<u> </u>											
										-			
								4					
	0+905 0+15E 0+905	0+905 4 0+15E 0+905 6	0+905 4 B 0+15E 0+905 6 B	0+905 4 B Rd·Br 0+15E 0+905 6 B Rd·Br 0+05E 	Colour Part Size 0+905 4 B Rd·Br 60 +0 0+15 E - - - - 0+905 6 B Rd·Br 39 0+05 E - - - - 10 - - - - 11 - - - - 11 - - - - 11 - - - - 11 - - - - 11 - - - - 11 - - - - 11 - - -	Colour Part Size % ORG. 0+905 4 B Rd·Br 60 10 0+15 E 5 B Rd·Br 73 10 0+905 6 B Rd·Br 39 10 0+05 E - - - - - 0 - - - - - - 0 - - - - - - 10 - - - - - - - - - - -	Colour Part Size % ORG. Ph 0+905 4 B Rd·Br 60 10	Colour Part Size % ORG. Ph 0+905 4 B Rd·Br 10 25°5W 0+15 E - - - - - - 0+905 6 B Rd·Br 7% 10 25°5W - 0+905 6 B Rd·Br 7% 10 20°5W 0+05 E - - - - - - - - 0+05 E - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	ColourPart Size% ORG.Ph $0+905$ 4B $Rd \cdot Br$ $60 \\ 10$ 10 $25^{\circ}SW$ $5h^{\circ}$ $0+15 E$ dec $0+905$ 6B $Rd \cdot Br$ 30° 10 $20^{\circ}SW$ $5h^{\circ}$ $0+05 E$ decdec0+05 E	ColourPer Size% ORG.PhColour $0+905$ 4BRd·Br 60 1025°SW $5h^{\circ}$ $0+15 E$ 20°SW $5h^{\circ}$ dec $0+905$ 6BRd·Br 39 1020°SW $5h^{\circ}$ $0+05 E$ dec $0+05 E$ dec a dec a dec a	column Part Size $ 0$ ORG, Ph Column $ 0$ Org Ph $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ $ 0$ </td <td>org corou Part Size % 0RG Ph org <!--</td--><td>order Colour Part Size % ORG. Ph order Au Au</td></td>	org corou Part Size % 0RG Ph org org </td <td>order Colour Part Size % ORG. Ph order Au Au</td>	order Colour Part Size % ORG. Ph order Au Au

A P P E N D I X II

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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