# BRITISH COLUMBIA PROSPECTORS ASSISTANCE PROGRAM MINISTRY OF ENERGY AND MINES GEOLOGICAL SURVEY BRANCH

PROGRAM YEAR:2001/2002REPORT #:PAP 01-11NAME:GARY THOMPSON

Final Report.

Soogabb Project 9208/9285

2001-2002-P14 Gory R. Thompson

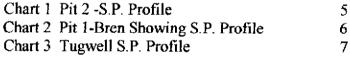
## **Final Report** Soogabb Cu-PGM Prospecting Project Reference # 2001/2002 P14

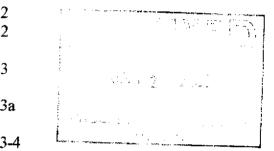
FMC 126766 Gary R. Thompson

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#### Contents

Final Report Part A	
Summary	2
Significant Results	2
Final Report Part B	
Cost Statement	3
Final Report Part C	
Daily Reports	3a
Final Report Part D	
Geochemical	3-4
Table 1 Significant Results	2
Table 2 Sample Descriptions/Location/Au-Cu-Pt-Pd-Rh	4
Geophysical	5
	7-8
Discussion/Conclusions	/-0
Proposed Work	7-0 8
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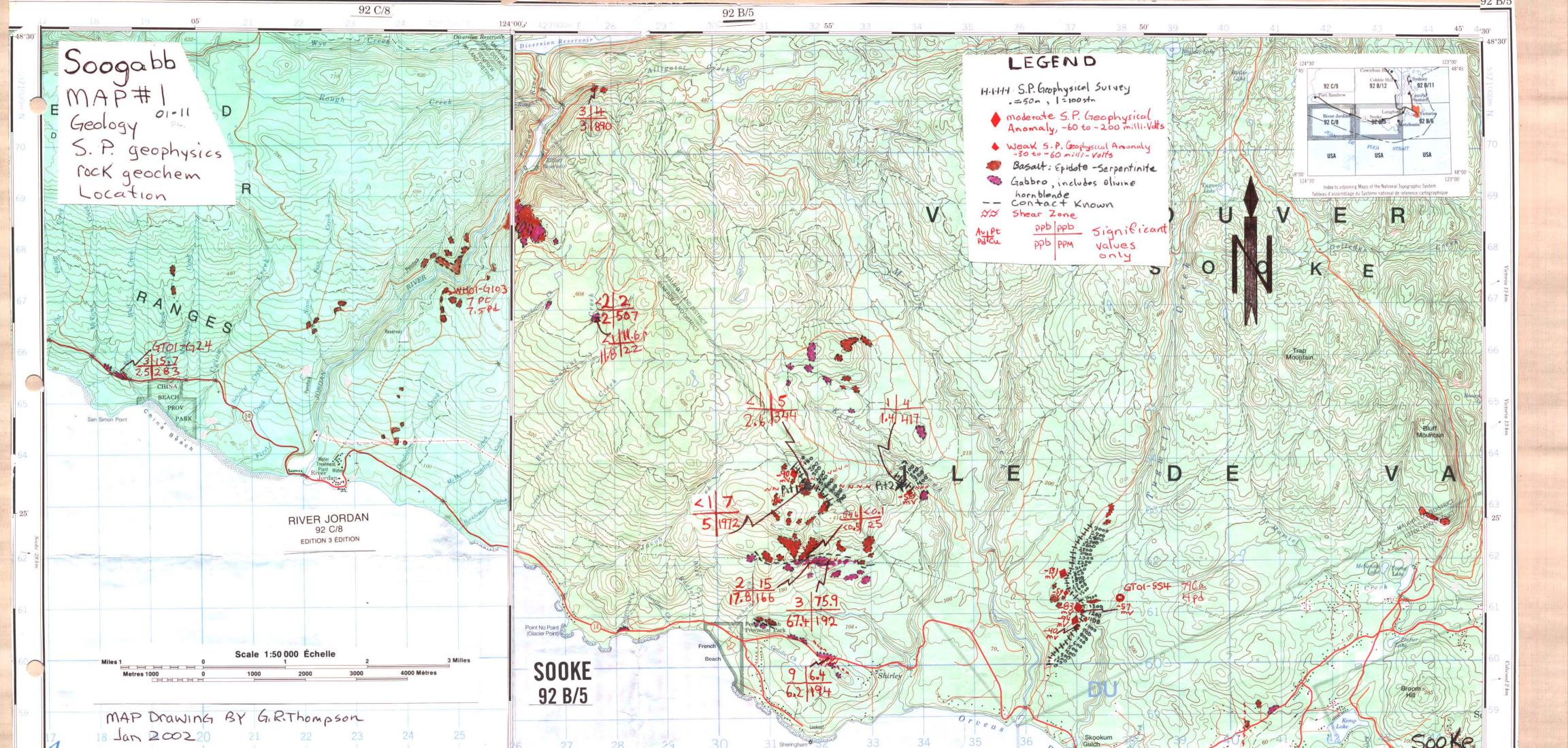




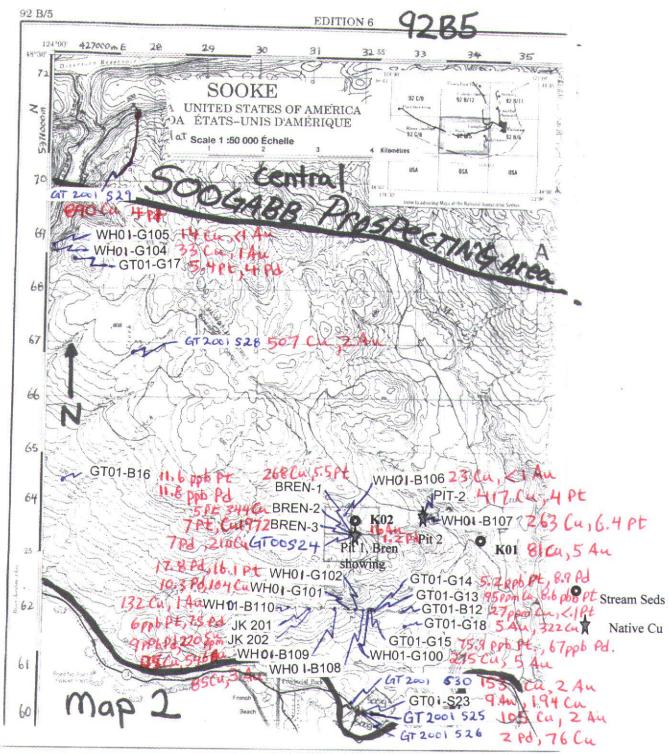
Map 1 Geology-S.P.-Rock Geochem-sample location Map 2 Sample Location Map Map 3 Mineral Titles - Soog 1-2 Claims Map 4 Mineral Titles - Brenda 1-4 Claims

Appendix 1 Assay Certificates Appendix 2 S.P. Raw Data Appendix 3 Receipts

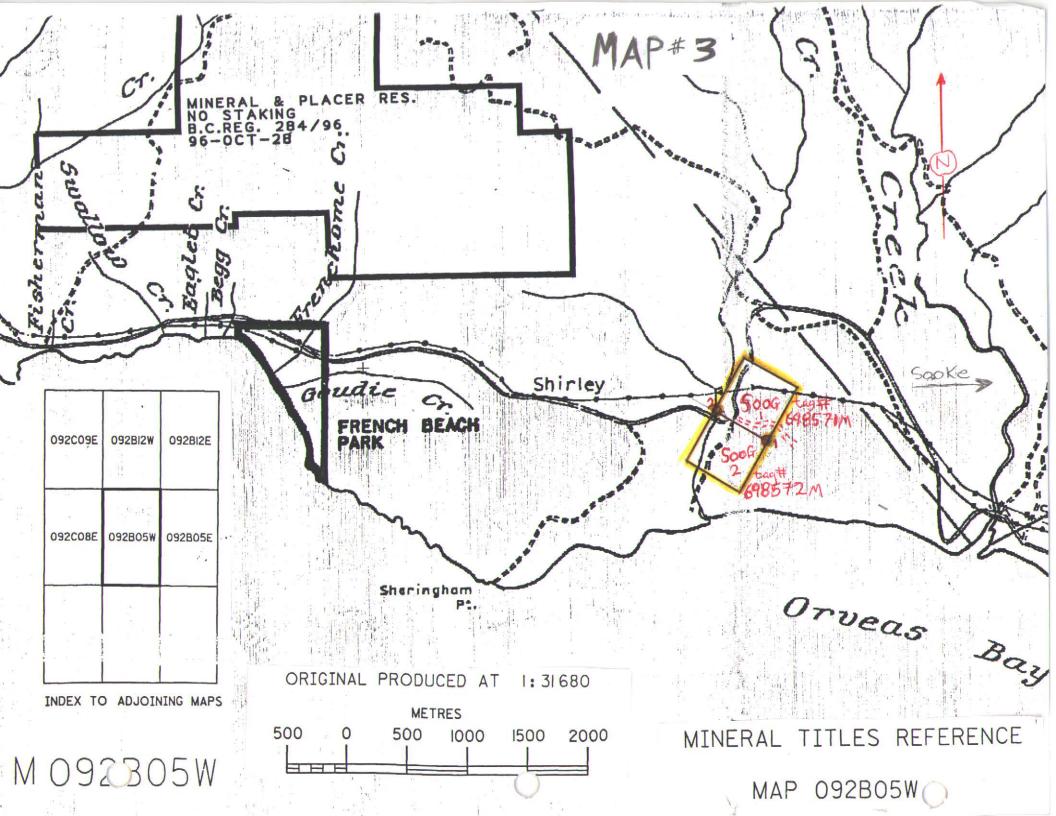
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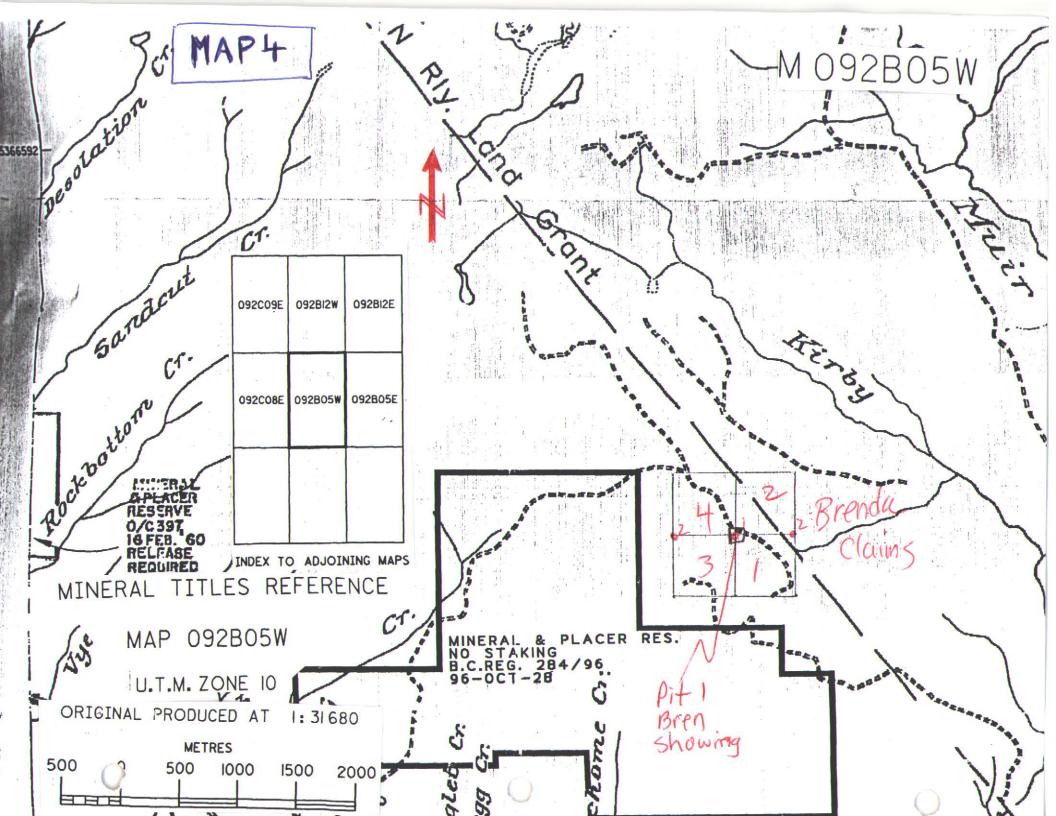


# SAMPLE LOCATION MAP 2



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### Final Report Part A SUMMARY

Prospecting days on the Soogabb project located on the southwest coast of Vancouver Island were limited to Twenty-four man-days. Nine of these twenty-four man-days were conducted by the grantee. Three geologists were involved in this program, which was executed in two phases. Phase one prospecting was during July 17-20, while phase two prospecting was done during December 8-12, 2001.

A total of 32 rock samples and 3 stream sediment samples were collected within the project area and submitted to Acme Analytical Laboratories Ltd., in Vancouver for analysis. A total of 4.2 km of road S.P. geophysical surveys were completed in three areas: i) Tugwell road 3.2 km, ii) Pit one road 0.8 km, iii) Pit two road 0.4 km.

No new claims were staked during this program, however, a considerable amount of work was related to the Brenda 1-4 claims (pit one) area. Native copper was discovered by the grantee in April 2001, which resulted in the staking of the Brenda claims prior to this grant (map 3). No options or agreements are pending on these claims.

None of the previously known minfile showings were located or reproduced.

#### SIGNIFICANT RESULTS

Native copper was discovered in two new gravel-rock pits, which were developed by Timber West in the spring of 2001. Native copper ranges up to 1% visibly hosted in a sheared basalt however, ICP analysis returned **1972 ppm Copper** from the Bren-3 sample. Sample # GT01-G15 returned **75.9 ppm Platinum**, **67.4 Palladium** and **1.2 ppb Rhodium**, hosted in a gabbro containing disseminated pyrrhotite and chalcopyrite. Sample # WH01-B109 returned **546 ppb Au** hosted in altered basalt. Twenty samples are anomalous for Cu, which range from 1972 ppm to 100ppm. Thirteen were greater than 200 ppm Cu while only three were greater than 500 ppm Cu.

Table 1	Most Si	gnificant l	Results		Soogabb Project 200							
	Coordi											
<u>Sample #</u>	<u>Northing</u>	Easting	<u>Cu ppm</u>	<u>Au ppb</u>	<u>Pt ppb</u>	<u>Pd ppb</u>	<u>Rh ppb</u>					
GT01-G15	5362056	432110	192	3	75.9	67.4	1.2					
Bren 3	5363556	4317 <del>9</del> 7	1972	<1	7	5	<0.05					
WH01-B109	5362117	431279	25	546	<0.1	<0.5	<0.05					

The S.P. survey along the Tugwell road returned three moderately anomalous spikes which ranged from -131 to -83 milli-volts and three weakly anomalous values, which ranged from -57 to -40 milli-volts. The most significant are -57 milli-volts to -83 millivolts over a 100m distance at (1200-1300m stn) and the -131 milli-volt reading at 1950m stn. The Pit 1 road survey returned a single -90 milli-volts at 100m stn, which is located 250m northwest of the Pit 1

### Final Report Part **O** GEOCHEMICAL

A total of 32 rock samples were taken as grab samples from within the Soogabb project area. Three Stream sediment samples were screened to -20 mesh in the field. Samples were submitted to Acme Analytical Laboratories Ltd's Vancouver lab for analysis. The samples were dried, crushed and screened to -80 mesh. Samples were analyzed by multielement ICP-ES and fire assay for Au, Pt, Pd and Rh. Standards were used for each batch of samples. Background values were determined from previous work. Values greater than 100 ppm, 30 ppb, 10 ppb, 10 ppb and 5 ppb for Cu, Au, Pt, Pd and Rh respectively are considered anomalous. Some sample notation was in error (as seen on certificates). Samples WH should read as WH01, which precedes the sample number. The B and G in the sample numbers represent basalt and gabbro respectively. Also the GT00 samples should read GT01.

From the 32 rock samples and the 3 stream sediments samples 20 are considered anomalous for Cu, one is anomalous for Au, three are anomalous for Pt and three are anomalous for Pd. Twenty samples are anomalous for Cu, which range from 1972 ppm to 100ppm. Thirteen were greater than 200 ppm Cu while only three were greater than 500 ppm Cu. Assay certificates are seen in appendix 2.

PROJECT S	OOGAB	B	ACME	ANAL	YTICAL	LABORA	TORIES	S LTD.
ELEMENT	Cu	Au	Pt	Pd	Rh	UTM 10U	NAD83	
SAMPLES	ppm	ppb	ppb	ppb	ppb	Northing	Easting	Description
GT01-B12	27	<1	<.1	< .5	< .05	5362049	432690	basalt, w/qtz/epidote alt, high mag, 1% py-po,
GT01-G13	95	6	8.6	2.8	0.13	5362090	432197	gabbro hmbld rich , epidote alt. diss py-po, mang stn
GT01-G14	82	2	5.2	8.9	< .05	5362071	432142	gabbro,hmbind, epidote alt , diss py-po <3%, E-W trend shear
GT01-G15	192	3	75.9	67	1.2	5362056	432110	gabbro,olivn-hmbld, diss po, chalc, <1%, E-W shear, 2 phase gal
GT01-B16	22	<1	11.6	12	0.11	5364407	426440	basait, gry-grn, epidote alt, <5% diss py
GT01-G17	3	<1	5.4	4	< .05	5368511	426422	gabbro-basalt mixing, epidote alt 1% diss py
GT01-G18	322	5	<.1	< .5	< .05	5361750	432735	gabbro, hmbkl rich, gossan
GT00-S23	194	9	6.4	6.2	0.1	5359968	432197	gabbro, serpentinite-hmblnd, diss po/chalco <1%
GT01s25	105	2	2	2	5	5359968	432197	gabbro gossan float,hmbld. <1% diss po, mod mag
GT01 s24	211	3	5	7	<5	5363540	431845	pit 1, sheared basalt, native copper as foil on tractured surfaces
GT01- G24	283	3	15.7	2.5	0.31	5365649	418463	alt gabbro-mafic volc, weak diss py , tr Native Cu
GT01s26	76	<2	2	<2	<5	5359968	432197	gabbro, olivine rich, shear 95 deg, diss py, po, mag, chalc
GT01s28	507	2	<2	<2	<5	5369028	426529	basalt, rusty E-W shear, high mag, up to 10% py,po,chaic, chl-ait
GT01s29	890	3	4	3	<5	5371475	427687	basalt, 2-3 m shear 40 deg dip 70 deg N, po- py <5%, chi-alt
GT01s30	153	2	2	4	<5	5560150	432040	gabbro-basalt,soog claims, att basatt-gabbro,high mag, 1-2% py-
WH01-G100	275	5	4.5	3.1	<.05	5362076	432313	gabbro, mod mag, trace py, chaico
WH01-G101	104	< 2	4.5	3.1	< .05	5362078	432158	gabbro, weak alt, hombid, <1% po
WH01-G102	165	<2	15,1	18	0.21	5362080	431921	gabbro, weak alt, 1% diss py, po
WH01-G103	346	< 2	16.1	18	0.2	5367280	424939	basalt, weak alt, tr py and chalco
WH01-G104	33	< 2	7.1	7.5	< .05	5368773	426066	gabbro, v. rusty gossan, 2-5 % suiphides, py, po
WH01-G105	14	< 2	0.1	< .5	< .05	5368773	426066	gabbro, v. rusty gossan, 2-5 % sulphides, py, po
WH01-B106	23	<1	<.1	<.5	<.05	5363934	431637	basalt, epidote alt, rusty, tr bornite,
WH01-B107	263	1	6.4	3.2	<.05	5363934	433178	basalt, epidote alt, float in Pit 2, native Cu along fractures
WH01-B108	85	<2	<.1	< .5	< .05	5362073	431504	basalt, rusty, epidote alt, <2% py
WH01-B109	25	< 2	<.1	2.7	< .05	5362117	431279	basalt, w/1% diss py and minor chalcopyrite
WH01-B110	132	< 2	<.1	< .5	< .05	5362101	430680	basalt-plag-prophyry, gabbro/basalt contact, fleck native Cu
JK 201	87	< 2	0.4	< .5	< .05	5362098	432144	basalt, weak-mod alt, <1% py, po
JK 202	220	< 2	6	7.5	< .05	5362098	432144	basalt, weak-mod alt, <1% py, po
Bren 1	268	<1	5.5	2.6	<0.05	5363556	431797	pit 1 showing, sheared basalt, native copper thin foil on fractures
Bren 2	344	<1	5	2.3	<0.05	5363556	431797	pit 1 showing, sheared basalt, native copper thin foil on fractures
Bren 3	1972	<1	7	5	<0.05	5363556	431797	pit 1, N/E serpentized shear-basalt, native copper <1%
Pit 2	417	1	4	1.4	<0.05	5363934	433178	pit 2, serpentinized sheared basalt, native Cu flakes
<01	81	5	2.7	2.5	<0.5	5363229	434276	SS-Kirby creek, low-high energy, trickle, minor fines, boulders
(02	29	16	0.9	1.2	<0.5	5363853	431815	SS-up from bridge, low energy, minor fines, boulders
GT01-SS4	79	2	3.6	4	0.9	5361330	437824	SS-Tugwell creek, low-med energy, boulders to limited fines

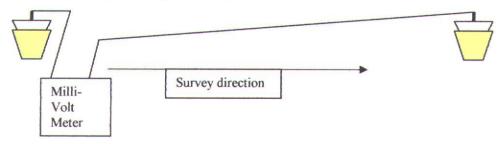
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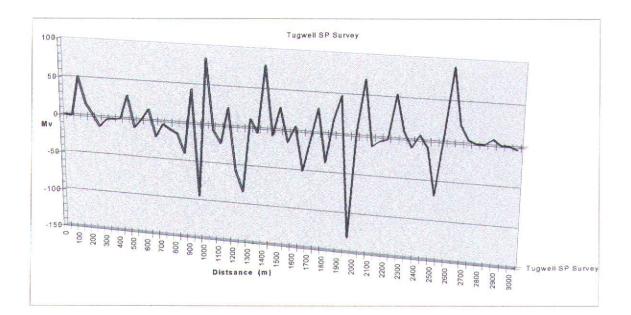
### Part Ø GEOPHYSICAL

The 4.2 km S.P. survey was conducted using two porous clay pots filled with a saturated copper sulphate solution. The pots were plugged with a rubber stopper and copper metal electrode. Measurements were taken by a milli-volt meter at 50 m stations with 18 gauge copper wire connecting electrodes. Both pots were moved forward and readings were taken at the rear pot (see plot below).



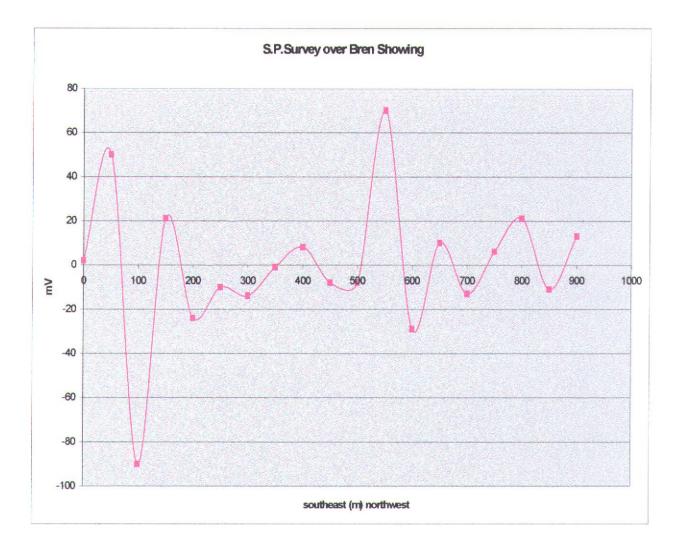
The S.P. readings that returned values from 0 to -30 mV are considered very low (background), values of -30 to -60 mV are considered low (weakly anomalous), values of -60 to -200 mV are considered moderately anomalous and values of -200 to -400 mV are highly anomalous. No highly anomalous values were obtained.

The Tugwell road SP survey was started at the gravel pit on Tugwell road 1.1 km from highway 14 and continued for 3 km at 50 m stations. (chart 1 and map 1). The Tugwell road survey produced three moderately anomalous S.P. spikes. The moderate kicks returned -131mV, -83mV and -94mV, which were located at 1950m, 1250m and 950m respectively. The Tugwell S.P. survey returned three weakly anomalous values. The low spikes are -50mV, -57mV and -40mV, which are located at 1650m, 1200, and 850m respectively. Raw data see appendix 1.

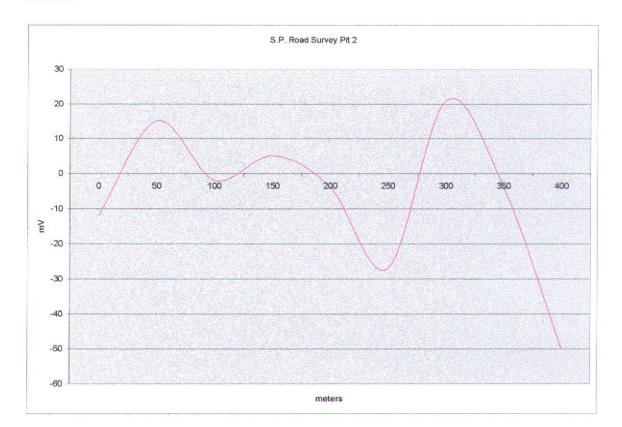


The Bren Showing (Pit1) road S.P. survey start point (0m) was 350 m to the northwest of the pit 1 and ran along the road towards the southeast to 900 m. readings were taken at 50 m stations. Only one spike of -90 mV occurred which is at the 100m stn. This kick puts it 250m to the northwest of the Pit 1 copper showing. (Bren chart 2, map 1 and appendix 1)





The (Pit 2) S.P. road survey was ran at 50 m stations for 200 m each way along the road from the pit. Only one low spike (-50mV) occurred at the 400 stn, which was located 200 to the southeast of the pit 2. (chart 3 and map1) **Chart 3** 



#### DICUSSIONS/CONCLUSIONS

Although the results of the Soogabb prospecting program did not produce a major discovery, significant potential may still exist. The contacts between the basalt-gabbro and east-west shear zones appear as the most prospective targets to mineralization. The basalts in the area are weakly to intensively altered. It was difficult to distinguish between a greenstone grade metamorphic event and hydrothermal alteration. The northeast Jordan River area reveals zones of mixing between the gabbro and basalt which was very interesting, however, this area failed to return any significant geochem values. Samples, which contained a greater percentage of pyrite-pyrrhottite did not return the higher grades. The disseminated sulphide in the gabbro and the native copper in sheared basalts returned the only significant results. The mineralization in Pit 1 and Pit 2 occur in a near east-west strike shear zone of approximately 5 m wide. The two pits are 1.5 km apart, which suggests a link between the two. The native copper's occurrence suggests a possible copper source at depth which has been re-localized or it may be just leaching from the country rocks. Although no layered series were detected notable gabbro phase changes do exist and is related to the 75.9 ppb Pt and 67 ppb Pd geochem anomaly. Potential exist in the Soogabb project area for a medium sized disseminated deposit and/or several small high grade small deposits.

#### **D. TECHNICAL REPORT**

- One technical report to be completed for each project area.
- Refer to Program Regulations 15 to 17, pages 6 and 7.

#### SUMMARY OF RESULTS

• This summary section must be filled out by all grantees, one for each project area

Information on this form is confidential subject to the provisions of the *Freedom of Information Act.* 

Name Soogabb Project - Gury R. Thompson Reference Number 2001/2002 A
LOCATION/COMMODITIES
Project Area (as listed in Part A) Scoke - Jordan River Area MINFILE No. if applicable
Location of Project Area NTS $92C8 - 9285$ Lat $4830'-25'$ Long $9'/24'$
Description of Location and Access <u>Highway #14 west From Socke to the Jordon</u> River Area, Logging access road North of Highway 14
Prospecting Assistants(s) - give name(s) and qualifications of assistant(s) (see Program Regulation 13, page 6) Cale Moodie, Dave Hildes, Wes Holden, Jukan Karus
Main Commodities Searched For Cu, Pt, Pd, Au, Rh
Known Mineral Occurrences in Project Area Sunro Past Producer
WORK PERFORMED
1. Conventional Prospecting (area) 500gabb - 500ke-Lordan River
2. Geological Mapping (hectares/scale) 1:50,000
3. Geochemical (type and no. of samples) <u>NCK 32</u> , Stream Sed 3
4. Geophysical (type and line km) <u>S. P. Geophys</u> . 4.2 Km
5. Physical Work (type and amount)
6. Drilling (no. holes, size, depth in m, total m)
7. Other (specify)
Best Discovery Project/Claim Name Sorgabb-Brondul-4 Location (show on map) Lat 5363556 N JTM 104 431797E Elevation 620 M Best assay/sample type 1972 ppm Cu, Pit (1), for Hosted in sheared Basalf.
Description of mineralization, host rocks, anomalies 5 m wide E-W frending shear Zine Cuts alt. Basalt. disseminated to foil on fractured surfaces.
Power line zone disseminated po-chalc, in olivine Gabbro near
phase change Fire - med grain. 75.9 ppb Pt, 67 ppb Pd.
FEEDBACK comments and suggestions for Prospector Assistance Program to be able to add the assistants to the prospector and.

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#### **D. TECHNICAL REPORT** (continued)

#### **REPORT ON RESULTS**

- Those submitting a copy of an Assessment Report or a report of similar quality that covers all the key elements listed below are not required to fill out this section.
- Refer to Program Regulation 17D on page 6 for details before filling this section out (use extra pages if necessary)
- Supporting data must be submitted with the following TECHNICAL REPORT or any report accepted in lieu of.

Information on this form is confidential for one year from the date of receipt subject to the provisions of the Freedom of Information Act.

500ga 65 Progect. Reference Number 2001-2002 P14 Name (1/1/4

1. LOCATION OF PROJECT AREA [Outline clearly on accompanying maps of appropriate scale.]

hospecting trea is hocates between Sooke and Jordan Rive

2. PROGRAM OBJECTIVE [Include original exploration target.]

Contact style - Shear hosted Cu, PGM Minera

**3. PROSPECTING RESULTS** [Describe areas prospected and significant outcrops/float encountered. Mineralization must be described in terms of specific minerals and how they occur. These details must be shown on accompanying map(s) of appropriate scale; prospecting traverses should be clearly marked.]

Traverses are shown where geology is plotted and 10 cations See geochem + discussion section

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#### D. TECHNICAL REPORT (continued)

#### **REPORT ON RESULTS (continued)**

**4. GEOCHEMICAL RESULTS** [Describe all survey types done (rock, soil, silt) and their objective. Show clearly on accompanying map(s) of appropriate scale all sample sites along with all significant values. Any anomalous areas should be indicated on maps by the use of contouring, variable symbol sizes, or some other suitable technique. Include a discussion/interpretation of results. A copy of analysis/assay certificates **must** be included with sample numbers from map. Details of individual rock samples taken are encouraged. Significant geochemical values obtained must be stated.]

	Report	Geochemical	Section.
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#### **D. TECHNICAL REPORT** (continued)

#### **REPORT ON RESULTS** (continued)

**5. GEOPHYSICAL RESULTS** [Specify the objective of the survey, the method used and the work done. Discuss the results and show the data on an accompanying map of appropriate scale. Any anomalous areas must be indicated on maps by the use of contouring, or some other suitable technique.]

Report Geephysial Section. Re \_\_\_\_\_ -----\_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ 5. OTHER RESULTS [Drilling - describe objective, type and amount of drilling done. Discuss results, including any

5. Other Resoluts [Drifting - describe objective, type and amount of drifting done. Discuss results, including any significant intersections obtained. Indicate on a map of appropriate scale the drift-hole collar location, the angle of inclination and azimuth. Drill logs correlated with assay results must be included. **Physical Work** - describe the type and amount of physical work done and the reasons for doing it (where not self-evident). This includes lines/grids, trails, trenches, opencuts, undergound work, reclamation, staking of claims, etc. Discuss results where pertinent.]

Signature of Grantee Date Jan 24 2002

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The S.P. road geophysics did reveal some interesting moderate anomalies however, correlations and trends were not made due to non-parallel surveys.

It was determined in the field that conventional soil and stream sediment surveys may not be the appropriate survey for this area due to the hard pan till and recent sediment cover which are abundant in the project area. During phase one, most creeks were dry and devoid of fines while during phase two high water volumes made them devoid of fines.

#### **Proposed Future Work**

Certainly the area offers a long working season and good road access, however the terrain is not so forgiving. The thick vegetation and steep slopes make traverses slow and hazardous.

The most effective way to survey this area may be with airborne geophysics. A survey like BHP's proprietary airborne gravity survey (Falcon) could pluck the concentrated sulphide deposits out if they exist. Continued S.P. road surveys to establish trends with reproducible results should be conducted. A moss mat sampling program may be an effective geochem method to consider instead of the stream sediment. A biogeochemical survey rather than a soil survey should be considered, although an orientation survey would have to precede a biogeochem sampling program. Continued prospecting would also be required to further evaluate the Soogabb area.

ROAD	S.P.	Brenda cla	ims SP	road survey
mV	comments	distance		
	START 1.1KM	(m)	mV	comments
0	gravel pit start	0	2	
	point			
-1		50	50	
51		100	-90	moderate
16		150	21	
2		200	-24	
-13	road junction	250	-10	
-3		300	-14	
-2		350	-1	Pit 1, Bren showing
-1		400	8	
30		450	-8	
-11		500	-8	
0		550	70	
14		600	-29	
-21		650	10	
-4		700	-13	
-10		750	6	
-15		800	21	
-40	Low	850	-11	
	0 -1 51 -13 -3 -13 -1 -11 0 14 -21 -10 -15	ROAD       S.P.         mV       comments         START 1.1KM       0         gravel pit start       point         -1       -1         51       -1         16       -2         -13       road junction         -3       -2         -1       -1         30       -11         0       14         -21       -4         -10       -15	mV         comments START 1.1KM         distance (m)           0         gravel pit start point         0           -1         50           51         100           16         150           2         200           -13         road junction         250           -3         300           -2         350           -1         400           30         450           -11         500           0         550           14         600           -21         650           -4         700           -10         750           -15         800	ROAD         S.P.         Brenda claims SP           mV         comments         distance           START 1.1KM         (m)         mV           0         gravel pit start         0         2           -1         50         50           51         100         -90           16         150         21           2         200         -24           -13         road junction         250         -10           -3         300         -14         -1           -1         400         8         300         -1           -1         400         8         30         -1           -1         500         -8         -1         -1           -1         400         8         30         -2           -1         500         -8         -0         -8           -11         500         -8         -0         -29           -21         650         10         -29           -21         650         10         -4           -10         750         6         -15

### APPENDIX 1

900	44			900	13	
950	-94	moderate				
1000	84				Pit 2 area S	-
1050	-7				(m)	mV
1100	-23				0	-12
1150	23				50	15
1200	-57	Low			100	-2
1250	-83	moderate			150	5
1300	11				200	-4
1350	-6				250	-27
1400	80				300	21
1450	-8	small o/c bas	alt		350	-4
1500	28				400	-50
1550	-15					
1600	6					
1650	-50	power line	Low			
1700	-10					
1750	30					
1800	-37					
1850	17	junction				
1900	48					
1950	-131	moderate				
2000	4					
2050	70					
2100	-12					
2150	-5					
2200	-2					
2250	54					
2300	9					
2350	-10					
2400	6					
2450	-9	junction				
2500	-67					
2550	8					
2600	91					
2650	22					
2700	4					
2750	0					
2800	0					
2850	7					
2900	0					
2950	0					
3000	-4	end of Tugwe	ell road s	urvey		

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Appendix 2

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Geochemical Lab Certificates t

						<u>GR</u> ]	<u>C G</u>	eol	ogic	:al	PRC	CAL OJEC	CT S	soo	GABI	B	Fil	e #	<b>k</b> A1	L043	397									
SAMPLE#	Mo ppm		Pb ppm			Ni ppm p		Mn	5601 D Fe % F	As	<u></u> U		Th	Sr	Cd	Sb	Bi	٧	Ca	 P		Çr		Ba ppm	Ti %	B	Al X	Na %	K %	W Ppm
SI BREN-1 BREN-2 BREN-3 PIT-2	1 1 1	1 268 344 1972 417	<3 3	100 99 113	<.3 .4 .3 .3 <.3	<1 31 26	<1 36 34 58 1	12 651 7 614 6 1006 6 587 3	.03 7.13 6.99 5.44	<2 3 3 3 2	<8 <8 <8 <8 <8 <8	<2	<2 <2 <2 <2 <2 <2 <2 <2		<.2 .6 .9 .9 .9	ব ব ব ব ব ব ব ব ব	<3 <3 4 5	<1 268 273 165	.16 1.18 1.02 1.36	.001 .113	<1 9 9 3	3 39	.02 1.73 1.61 2.30	4 14 15 11	<.01 .33 .32 .16	<3 4 2 4 1 8 3	.01 .11 .83 .62	.54 .14 .11 .04	.01 .15 .12 .37	<2 <2 <2 2 2 2 2
GT01-G24 WH07-B106 WH08-B107 STANDARD DS3		283 23 263 121	<3 5	134 96	.3	11 3 48 36	26 34	212 850 8 791 4 786 3	B.34 4.99	3 <2 3 33	<8 <8 <8 8	<2 <2 <2 <2 <2	<2 <2 <2 4	31	.6 .5 .6 5.9	≪3 ≪3 ≪3 5	5	111 157	1.16 1.39	.031 .333 .075 .092	12 6	8 74	.50 1.35 2.46 .58	17 8		<32 32	.27	.21 .06 .17 .04	.17 .03	<2 <2 <2 5
DATE RECEI	- Si	SAY REC SAMPLE DEC	TYDE -	<ul> <li>DOCK</li> </ul>	K R15	0 60C 'E RE	POR	T MA	AILED	):: J	}an	. 4/	/02	- 1	SIGN	TED ]	вч	?:[	Р У	<del></del>	D. TO	YE, C	. LEONG	ì, J.	WANG;	CERTI	FIED	B.C.	ASS/	IYERS
DATE RECEI	- Si	CAMDIE	TYDE -	<ul> <li>DOCK</li> </ul>	DAI	0 60C	}POR	T M3	LED	):: ( /	)an	4	/02	- ;	SIGN	17ED ]	ву	ייייי היייי	Р <del>У</del>	<del></del> ].	D. TO	YE, C	. LEONG	ì, J.	WANG;	CERTI	I F I E D	B.C.	. ASSI	<b>YERS</b>
DATE RECE]	- Si	CAMDIE	TYDE -	<ul> <li>DOCK</li> </ul>	DAI	0 60C	3POR	T MJ	LED	):: () ()	)an	4	102	- 1	SIGN	ned )	вч.	?.!!	Р <del>У</del>	 	D. TO	YE, C	.LEON(	à, J.	WANG;	CERTI	l F I ED	) B.C.	. ASSI	NYERS
DATE RECE]	- Si	CAMDIE	TYDE -	<ul> <li>DOCK</li> </ul>	DA]	0 60C	3POR	T MJ	LED	):: 0	)an	4	/02	- :	SIGN	<b>1ED</b> ]	вч	?.!	ρ ν	<del></del>	р. то	YE, C	. LEON(	ì, J.	WANG;	CERTI	[FIED	B.C.	. ASSI	AYERS
DATE RECE)	- Si	CAMDIE	TYDE -	<ul> <li>DOCK</li> </ul>	DA]	0 60C	3POR	T MJ	.ILED	): ( /	)an	4	/ o z	- :	SIGN	17BD )	вч	?.!	ρ Υ	<del></del>	р. то	YE, C	. LEON(	ì, J.	WANG;	CERTI	¦ <b>f</b> I ED	B.C.	. ASSI	<b>YERS</b>
DATE RECE	- Si	CAMDIE	TYDE -	<ul> <li>DOCK</li> </ul>	DA]	0 60C	3POR	ЧТ <b>М</b>	LEC		)an	4/	/ o z	- :	SIGN	NED ;	вч	?.!	ρ Υ	<del></del>	D. TC	YE, C	. LEON(	à, J.	WANG;	CERTI	I F I E D	) B.C.	. ASS	AYERS

	GRT Geological PROJECT	<u>SOOGABB</u> File # A104397 y AB Submitted by: Gary R. Thompson	
	SAMPLE#	Au Pt Pd Rh ppb ppb ppb ppb	
	SI BREN-1 BREN-2 BREN-3 PIT-2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
	GT01-G24 WH07-B106 WH08-B107 STANDARD FA-100S	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
GROUP - Sam	3B-MS - FIRE GEOCHEM AU PT PD RH - 30 GM SAN PLE TYPE: ROCK R150 60C	PLE FUSION, DORE DISSOLVED IN ACID, ANALYZED BY ICP-MS.	
		SIGNED BYD. TOYE, C.LEONG, J. WANG; CERTIFI	IED B.C. ASSAYERS

						GR	T G 40	<u>eol</u> 180 -	<u>oqi</u> 5601	<u>cal</u> Dalto	PR n Pri	OJE ve. c	CT algar	SOO		<u>B</u> bmitt				043 Thom										
WPLE#	No	Cu	Pb	Zn	Ag	Nī	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bî	۷	Ca	P	La	Cr	Mg	Ba	Ti	В	AL	Na	ĸ	
	ppm	ppm	ppm	ppm	bbw	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	*	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm
t	1	2	<3	2	<.3	<1	<1	6	.03	2	<8	<2	<2	4	<.2	<3	<3	<1	. 17	.002	<1	1	.01	6	<.01	5	.02	.63	.01	<2
00-s23	1	194	3	38	.3	27	26	267	5.02	<2	<8	<2	<2	8	.3	<3	<3	196	.75	.094	3	40	.69	59	.15	4	.74	.12	. 19	2
01-B12	1	27	<3	150	<.3	2	23	1262	8.10	2	<8	<2	<2	31	1.1	<3	<3	58	1.30	. 189	12	12	1.21	24	.29	<3 2	.06	.05	.02	<2
r01-G13	1	95	<3	36	<.3	33	19	329		<2	<8	<2	<2	45	.5	<3	<3	88	1.82	.015	1	36	1.12	15	. 12		.93	.44	.03	<2
(01-G14	1	82	<3	24	<.3	28	22	286	1.53	6	<8	<2	<2	53	.4	<3	4	108	2.12	.018	1	26		13	.25		.78	.44	.03	2
r01-g15	1	192	<3	47	<.3	55	18	288	2.21	<2	<8	<2	<2	101	1.0	<3	<3	62	3.57	.026	1	30	1.36	14	.09	35	.87	.61	.04	5
I01-B16	1	22	12	95	<.3	36	62	715	6.79	7	<8	<2	<2	12	.7	3	<3	167	1.08	.052	ź		1.43	7	.44		.57	.08	.01	<2
r01-G17	1	3	<3	10	<.3	13	11	149	3.85	2	<8	<2	<2	21	.2	<3	<3	62	.99	086	4	113	.25	ż	.19		.60	.09	.01	<2
r01-G18	<1	322	<3	45	<.3	71	32	420	7.72	2	<8	<2	<2	38	.9	<3	<3	707	1.64	.002	<1		1.00	10	.21		54	.30	.05	<2
101-6100	1	275	3	44	<.3	46	27	462	3.62	4	<8	<2	<2	49	.8	<3	<3	207	1.83	.009	1	40	1.27	14	.16	<3 3		.51	.04	<2
102-G101	1	104	<3	43	<.3	41	21	485	2.29	2	<8	<2	<2	42	.7	3	<3	105	1.61	.010	1	80	1.38	17	.13	4 2	. 86	.42	.04	<2
103-6102	<1	166	<3	47	<.3	40	31	309	2.62	<2	<8	<2	<2	80	1.0	<3	<3	79	2.95	.038	ź	25	.98	15	.12		5.11	.61	.05	<2
E WH03-G102	<1	165	<3	47	<.3	39	31	315	2.59	<2	<8	<2	<2	79	1.0	-3	4			.037	2	25	.97	16	.12	<3 5		.60	.04	<2
104-G103	1	346	<3	38	<.3	19	10	336	1.91	2	<8	<2	<2	19	.4	<3	<3			.060	2	48	.72		.16		.30	.23	04	<2
105-G104	1	33	3	7	<.3	6	11	137	3.39	3	<8	<2	<2	39	.4	<3	4	29	1.18	.035	1	19	.17	3	.14		.00	.06	.03	<2
106-G105	1	14	<3	7	<.3	3	11	87	2.23	<2	<8	<2	<2	37	.3	<3	<3	18	.94	.015	1	13	.08	3	. 14	<3	. 85	-08	.02	<2
109-B108	1	85	3	223	<.3	14	12	505	3.55	8	<8	<2	<2	23	1.5	<3	<3	183	1.24	.108	2	14	.56	7	.25	<3 1		.21	.04	<2
(10-B10 <b>9</b>	1	25	<3	110	<.3	1	17	1143	7.89	3	<8	<2	<2	8	1.4	<3	<3	36	1.30	.332	13		1.02	7	.21		2.16	.07	.05	<2
(11-B110	<1	132	<3	64	<.3	67	30	511	5.04	2	<8	<2	<2	37	1.4	-3	<3		1.97		2	41	1.71	10	.31		5.59	.41	.04	<2
C 201	1	87	4	74	<.3	36	21	522	5.96	4	<8	<2	<2	46	1.1	<3	4	281	1.86	050	2	187	1.16	13	.21	5 5	. 95	.45	.04	<2

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES. UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB - SAMPLE TYPE: ROCK R150 60C <u>Samples beginning 'RE' are Reruns and 'RRE' are Reject Regruns.</u>

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DATE RECEIVED: DEC 17 2001 DATE REPORT MAILED: JAN 10/02 SIGNED BY. C. : D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

#### ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716 (ISO 9002 Accredited Co.)

ULTRATRACE PRECIOUS METALS ANALYSIS

GRT Geological PROJECT SOOGABE File # A104388 408C - 5601 Dalton Drive, Calgary AB Submitted by: Gary R. Thompson

SAMPLE#	Au Pt Pd Rh ppb ppb ppb
SI GT00-S23 GT01-B12 GT01-G13 GT01-G14	<pre>&lt;1 &lt;.1 &lt;.5 &lt;.05 9 6.4 6.2 .10 &lt;1 &lt;.1 &lt;.5 &lt;.05 6 <math>8.6</math> 2.8 .13 2 5.2 <math>8.9</math> &lt;.05</pre>
GT01-G15 GT01-B16 GT01-G17 GT01-G18 WH01-G100	3 75.9 67.4 1.20 <1 11.6 11.8 .11 <1 5.4 4.0 <.05 2 <.1 <.5 <.05 5 4.5 3.1 <.05
WH02-G101 WH03-G102 RE WH03-G102 WH04-G103 WH05-G104	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
WH06-G105 WH09-B108 WH10-B109 WH11-B110 JK 201	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
JK 202 STANDARD FA-100	4 7.9 9.1 <.05 48 48.7 47.8 8.00

GROUP 38-MS - FIRE GEOCHEM AU PT PD RH - 30 GM SAMPLE FUSION, DORE DISSOLVED IN ACID, ANALYZED BY ICP-MS. - SAMPLE TYPE: ROCK R150 60C <u>Samples beginning</u> 'RE' are Reruns and 'RRE/ are Reject Reruns.

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#### ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1716 (ISO 9002 Accredited Co.) ULTRATRACE PRECIOUS METALS ANALYSIS

GRT Geological PROJECT SOOGABB File # A104388

408C - 5601 Dalton Drive, C	Calgary AB Submitted by: Gary R. Thompson	
 SAMPLE#	Au Pt Pd Rh Au ppb ppb ppb ppb	<u></u>
SI GT00-S23 GT01-B12 GT01-G13 GT01-G14	<1 <.1 <.5 <.05 - 9 6.4 6.2 .10 - <1 <.1 <.5 <.05 - 6 8.6 2.8 .13 - 2 5.2 8.9 <.05 -	
GT01-G15 GT01-B16 GT01-G17 GT01-G18 WH01-G100	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	
WH02-G101 WH03-G102 RE WH03-G102 WH04-G103 WH05-G104	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
WH06-G105 WH09-B108 WH10-B109	<1 <.1 <.5 <.05 - 3 <.1 2.7 <.05 - 546 <.1 <.5 <.05 <1	

GROUP 3B-MS - FIRE GEOCHEM AU PT PD RH - 30 GM SAMPLE FUSION, DORE DISSOLVED IN ACID, ANALYZED BY ICP-MS. Samples\_beginning 'RE' are Reruns and 'RRE' are Reject Reruns. - SAMPLE TYPE: ROCK R150 60C

1 1

WH11-B110

STANDARD FA~100

JK 201

JK 202

.4

4 7.9 9.1 <.05 48 48.7 47.8 8.00

6.0

<.5 <.05 <.5 <.05 7.5 <.05

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	e de la composición d		11 I.						GEC	CH	EMI	CAL	AN	ALY	SIS	CE	RTI	FIC	ATE											
			· · · · · ·			GR		eolc								B	Fil	e #	<b>A</b> 1	043	87			inenet ordet t					1	
							40	18C - 5	601 C	alto	n Dri	ve, (	Calgar	'Y AB	SL	ubom í t t	ed by	': Gar	y R	Thomp	son									
SAMPLE#	Мо	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	ኘከ	Sr	Cd	Sb	Bi	٧	Ca	Р	La	Cr	Mg	Ba	Ti	В	AL	Na	ĸ	¥
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	*	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm
	2	2	<3	38	<.3	6	3	556 1	.74	<2	<8	<2	4	59	<.2	<3	<3	34	.48	.095	7	12	48	209	11	<3	75	.06	-40	_ ح
G-1			E	58	.4	40	25	678 4	.69	7	<8	<2	2	19	4	4	3	181	.85	.035	Ĺ.	68	1.22	28	.29	<3	2.18	_05	.04	5
G-1 GTD1-\$\$4	2	79									-	-	=				7	137								-				-
	2	79 81	7	104	<.3	46	26	787 4	.46	<2	<8	<2	<2	30		<3	- 4	157	. 27	.045	2	85	1.01	53	.14	- 4	2.01	.04	.07	<2
GTD1-\$\$4	2		7		<.3 <.3	46 24	26 11	787 4 449 2	• • •	<2 2	<8 <8	<2 <2	<2 <2	- 30 20	.2	୍ ସ	<3	89	.39		2	83 40	1.01	5.5	.14 16	4 <3	2.01	.04	.07 .04	<2 <2

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HN03-H20 AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES. UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. - SAMPLE TYPE: STREAM SED.

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	408C - 5601 Dalton Drive, C SAMPLE#	Au Pt Pd Rh
	G-1 GT01-SS4 K01 K02 STANDARD FA-10	ppb         ppb         ppb           <1         <.1         <.5         <.05           2         3.6         4.0         .09           5         2.7         2.5         <.05           16         .9         1.2         <.05           008         48         48.7         47.8         8.00
- SAMPI	LE TYPE: STREAM SED.	GM SAMPLE FUSION, DORE DISSOLVED IN ACID, ANALYZED BY ICP-MS.
DATE RECEIVED: DEC 17 2001	DATE REPORT MAILED: Jan 4	4/02 SIGNED BYD. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

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				de la	and d	11					GR	SU C	н	Ş. M	77	AЦ	- <b>A</b>	NA	LY	543	<b>5</b> (	-65	CT T	. <b>Р</b> . Ц. Х	- 4 1	Щ.					1995. 1995		n del	2025			ul ul lu General		
							<u>G1</u> 147	<u>RT</u> - 6									JE	CT	S( c v6	200	<u> </u>	Fi	le miti	# ted b	A1	00 iary	R.	Tho	mps	n									
 SAMPLE#	Mo	Сu	РЪ	/n	Ag	Ni	Co I	 Mia	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	v (	a P	La	Ĉr	Mg	Ва	T1 A	) Na	. K	W	Zr	Ce	Sn	Y	ND 1	Ta	Be 1	 5c	L1	5	Rþ	Hf
 	ppm	ppm	ppn r	ppm p	on p	kom t	pp mqc	<b>PM</b>	× 1	pon p	opm p	p <b>m</b> j	pp <b>n</b> p	ppm j	ppm	ppm f	opm p	rpill	8 8	ppm	ppn	% (	ррл	8	x x	X	ppa	p <b>µm</b>	ppm	ppm p	ala nu b	pm pj	pm p	pan pp	on∎ p	р <b>п</b> 	× r	pm p	itan
GT 2001 S25	<.5	105	7	96	.2	23	62-18:	31 14	52	<2	<]	<4	<1 3	345	.3	1	<1 6	66 6.E	7 .051	3	22	4.17 2	248 1.4	430 7.6	8 1.775	.32	<2	20.5	6	1.5 2	2.7 5	.2 <	.5	1,	44	4.	26	8	<1
GT 2003 S26	14	76	6	135 <	2	7	39 22	99 12	.54	3	<1	-4	1 1	118	2	1	<1 3	27 6.1	2.137	13	13	2.50	91 1.3	381 7. <b>1</b>	4 2.188	.22	<2	109.3	28	1.7 4	3.4 14	.9 <	.5	1 :	37	4.	10	2	2
GT 2001 S28	1.1	507	13	136	.2	21	60 194	55 13	.93	<2	<1	<4	2 1	127	.2	<1	1 3	47 6.1	6.147	16	36	2.83	38 1.1	114 6.8	8 3 110	03	<2	65.6	36	3.4 4	3.6 16	.9	.5	1 :	35	2 1.1	B4	<1	1
CT 2001 SZ9	<.5	890	5 (	163 1	6	65	68 32	54 16	.23	21	<1	<4	1 1	119	10	1	<1 10	37 7.6	il .012	2	7 -	1.60	21 2.2	260 7.0	5.624	.05	~2	22.4	2	1.0 1:	3.7 6	.8 <	.5	1 !	56	5.	82	I.	<1
GT 2001 30	.5	153	5	127 <	. Z	28	47 17	41 12	.09	3	1	-4	2	102	<.2	<)	<   4	22 4.9	10.101	8	50 1	3.18	67 1 2	244 6.6	6 3.003	. 04	<2	129.3	18	1.9 3	5.1 10	.2 <	.5	1 4	42	9.	17	1	2
RF GT 2001 30	6	152	5	125 <	<.Z	28	48 17-	48 12	.01	<2	1	-4	2	106 -	<.2	<1	<] 4	175 4.9	90 10 <i>2</i>	8	47	3.19	89 1.2	247 6.7	0 3.024	.04	<2	129.6	21	2.3 3	5.4 10	.1 <	.5	1	42	9.	18	1	2
STANDARD CT3	28.3	66	41	181 5	7	37	13 104		69	60	0E	<1	27	249-2		22	22 1	.44 1.6	50 .097	27	271	.98 10		001 7 0	6 1.906	0.00	20	40.0		22 1 1			-	5 3		-			

GROUP 1EX - 0.25 GM SAMPLE DIGESTED WITH HCL04-HN03-HCL-HF TO 10 ML. UPPER LIMITS - AG, AU, W = 200 PPM; MO, CO, CD, SB, BI, TH & U = 4,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. DIGESTION IS PARTIAL FOR SOME MINERALS & MAY VOLATIZE SOME ELEMENTS, ANALYSIS BY 1CP-ES. - SAMPLE TYPE: ROCK R150 60C <u>Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.</u>

DATE REPORT MAILED: AM 17/2001 SIGNED BY. A. D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS DATE RECEIVED: APR 5 2001

(ISO 9002 Accredited Co.)	852 K. HASTINGS ST. GEOCHEM PRECIO eological PROJEC	dus me	TALS	ANALY		PHONE (604) 253-3158 PAX (604) 253-3715 41 Thompson
	SAMPLE#			Pd** ppb	Rh** ppb	
	GT 2001 S25 GT 2001 S26 GT 2001 S28 GT 2001 S29 GT 2001 S29 GT 2001 30	2 <2 2 3 2	<2 <2 <2 4 <2	<2 <2 <2 <2 2 3 2	55 55 55 55 55 55 55 55 55	
	RE GT 2001 30 STANDARD F10R	<2 469	2 460	4 470	<5 18	

GROUP 3B - FIRE GEOCHEM AU, PT, PD & RH - 30 GM SAMPLE FUSION, DORE DISSOLVED IN AQUA - REGIA, ICP ANALYSIS. UPPER LIMITS = 10 PPM. - SAMPLE TYPE: ROCK R150 60C <u>Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.</u>

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A A						e C	IEO	CHI	emi	CA	L A	NA	LYS	IIS	CER	TIP	'TC	ATE												NЛ
															<u>}</u> Sub															
SAMPLE#	Mo Cu opm ppm	-	·		e As ppm								Ca %		La Cr pripri		Ba ppm	Ti %	A] \$	Na %		2r Sn xn ppm								
GTOO S-3 RE GTOO	 <2 211 <2 231																						~~~	9 9 10	-	42 44	3	5	7	<5 -

GROUP 1E - 0.25 GM SAMPLE DIGESTED WITH HCLO4-HNO3-HCL-HF TO 10 ML. UPPER LIMITS - AG, AU, W = 200 PPM; MO, CO, CD, SB, BI, TH & U = 4,00 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. DIGESTION IS PARTIAL FOR SOME MINERALS & MAY VOLATIZE SOME ELEMENTS. - SAMPLE TYPE: ROCK R150 60C AU\*\* PT\*\* PD\*\* RH\*\* GROUP 3B BY FIRE ASSAY & ANALYSIS BY ICP-ES. (30 gm) <u>Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.</u>

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