Ì	RECEIVED	
	" JUN 🛱 1992	
	A a manissioner's Officas	SES

LOG NO:	190F Q \ 1935	RD.
ACTION:		
•		
FILE NO:		

SMENT REPORT Gold Commissioner's Office ON VANCOUVER, B.C. GEOCHEMICAL WORK

ON THE FOLLOWING CLAIMS

RR 1 #9230

located

1 KM DUE EAST OF STEWART, BRITISH COLUMBIA SKEENA MINING DIVISION

55 degrees 56 minutes latitude 129 degrees 56 minutes longitude

N.T.S. 103/P13W

PROJECT PERIOD: SEPT. 29 - OCT. 11, 1991

ON BEHALF OF TEUTON RESOURCES CORP.

509-675 WEST HASTINGS ST. VANCOUVER, B.C. V6B 1N2

REPORT BY

D. M. Cremonese, P.Eng. 509-675 West Hastings St. Vancouver, B.C. V6B 1N2

June GEOLOGICAL BRANCH Date: ASSESSMENT REPORT

TABLE OF CONTENTS

	Page
1. INTRODUCTION	1
A. Property, Location, Access and Physiography B. Status of Property C. History D. References E. Summary of Work Done	1 1 1 2 3
2. TECHNICAL DATA AND INTERPRETATION	3
A. Geology B. Rock Geochemistry a. Introduction b. Treatment of Data c. Sample Descriptions d. Discussion C. GeochemistrySoils a. Introduction b. Treatment of Data c. Discussion D. Field Technique & Laboratory Analysis E. Conclusions	3 3 4 4 5 6 6 6 7
APPENDICES	•
I Work Cost Statement II Certificate III Assay Certificates	
ILLUSTRATIONS	
Fig. 2 Claims Map	Report body Report body Report body Map Pocket

1. INTRODUCTION

A. Property, Location, Access and Physiography

The property is situated on the western flank of Mount Rainey, due east of the Town of Stewart. Elevations vary from approximately 120m in the northwest corner of the RR 1 claim near the Bear River to approximately 1,000m in the southeast corner. Most of the claim area is characterized by rugged topography covered by a thick mantle of spruce and balsam.

Climate features moderate to intense precipitation throughout the year with heavy snowfalls in winter.

Transportation of personnel and supplies to Stewart is effected either directly from Vancouver via the B.C. highways network or indirectly from the nearest jet airports at Terrace and/or Smithers. Ocean-going vessels occasionally service Stewart by means of the Portland Canal, a long narrow fiord.

Current access to higher levels of the property is either by foot along the old Silverado Trail or by helicopter from the nearby base (Vancouver Island Helicopters) at the Stewart airport.

B. Status of Property

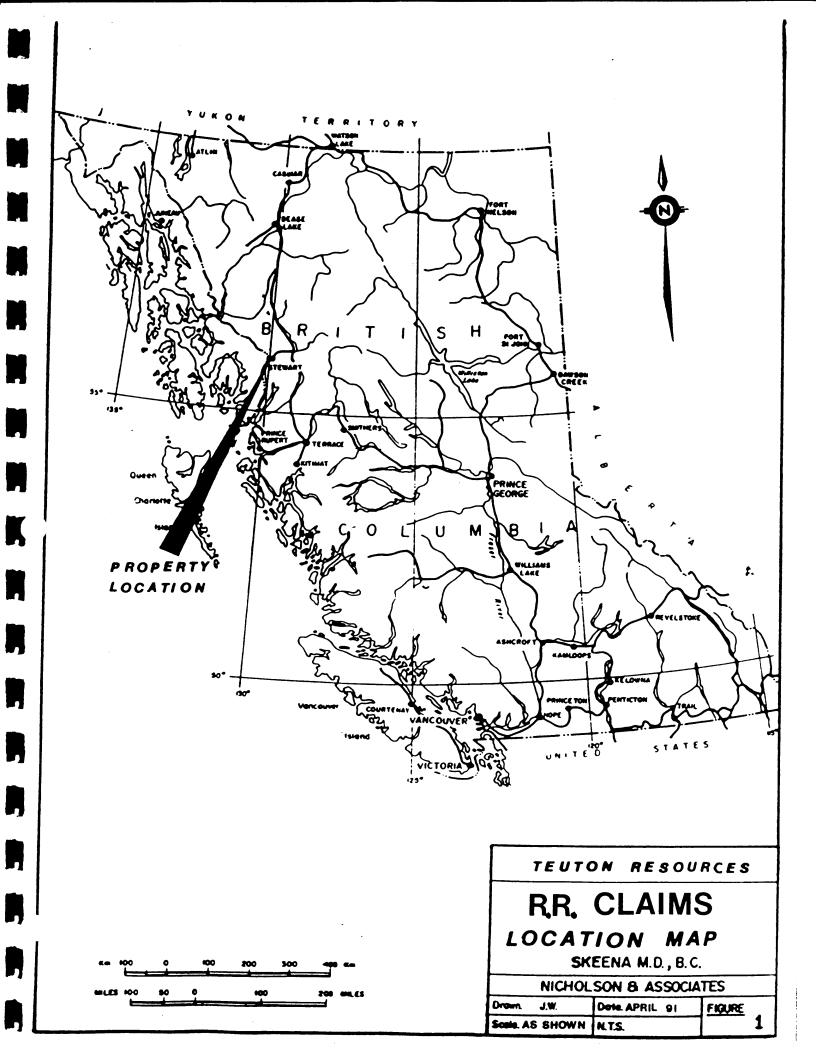
Relevant claim information is as follows: RR 1 M.C. -- Record No. 9230, 4 units, registered owner Teuton Resources Corp.

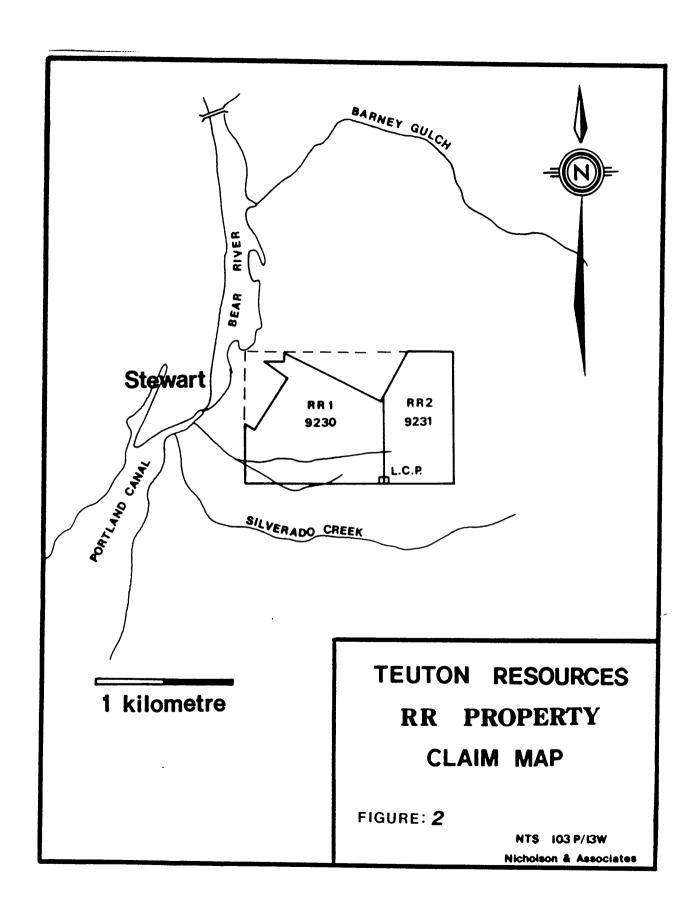
Claim disposition is shown on Fig. 2.

C. History

Earliest recorded work on what is now the RR 1 claim was directed at silicified zones occurring in Hazelton volcanic rocks near their contact with the Hyder quartz monzonite/hornblende diorite intrusive (these zones occur at low elevations near the Bear River). Ongoing investigation by trenching and drifting has proceeded at irregular intervals up to the present date. Gold values associated with copper mineralization were reported in accounts of work carried out in the 1930's. Silver-lead-zinc mineralization was also reported to occur in small quartz-sulphide veins at higher elevations on the property.

In 1984, Apex Airborne Surveys carried out a helicopter borne, high-resolution electromagentic and magnetometer survey over a portion of the RR 1 claim. The survey was useful in defining contacts between rock types but otherwise did not assist in identification of mineralized zones of economic interest. [The





system did not react to the known mineralization at the bordering Silverado Mine].

In September, 1986, Teuton Resources personnel carried out reconnaissance geological and geochemical investigations in the most westerly portions of the claim area, a few hundred meters above the Bear River. Soil samples, rock character samples and heavy mineral stream sediment samples were taken. A number of copper and gold anomalies were noted during this program.

In 1990, a small program by Teuton personnel concentrated on the strike extension into the RR 1 claim of the "Oral M" quartz vein/shear located on Crown Grant Lot 4498 (jutting into the western boundary of the property). According to a report by geologist Gordon Wilson, a 1.5 m chip sample from an outcrop of a brecciated quartz-sulfide vein along this extension returned 1.334 oz/ton gold, 2.63 oz/ton silver and 9.27% copper. The 1991 work program was designed to follow up this anomalous result.

D. References

- 1. ALLDRICK, D.J. (1984); "Geoogical Setting of the Precious Metal Deposits in the Stewart Area", Paper 84-1, Geological Fieldwork 1983, BCMEMPR.
- 2. ALLDRICK, D.J. and KENYON, J.M. (1984); "The Prosperity/ Porter Idaho Silver Deposits", Paper 84-1, Geological Fieldwork 1983, BCMEMPR.
- 3. ANNUAL REPORTS OF THE MINISTER OF MINES (B.C.); 1947, ppA74 -- A78.
- 4. CREMONESE, D., P.ENG., AND SHELDRAKE, R.F. (1985); "Assessment Report on Geophysical Work on the Red Reef, Sky, and Reef 1 claims" (on file with BCEMPR).
- 5. CREMONESE, D., P.ENG. (1986); "Assessment Report on Geological and Geophysical Work on the Sky Annex, Red Reef, Red Reef No. 4 and Red Reef No. 1 Claims" (on file with the BCEMPR).
- 6. CREMONESE, D., P.ENG. (1986); "Assessment Report on Geological and Geochemical Work on the Sky Annex, Red Reef, Red Reef No. 4 and Red Reef No. 1 Claims" (on file with the BCEMPR).
- 7. CREMONESE, D., P.ENG. (1987); "Assessment Report on Geochemical Work on the Red Reef Claims" (on file with the BCEMPR).
- 8. WILSON, GORDON, P. GEOL. (1991); "Geochemical and Prospecting

Report on the R.R. Claims"--Private Report for Teuton Resources Corp.

E. Summary of Work Done

The 1991 rock and soil geochemical survey conducted over the claim area was undertaken by geologist Brian Hall accompanied by prospector Dave Javorsky.

On October 8, 1991, the crew was flown in and out of the property by helicopter from the heliport located just across the Bear River. Fieldwork consisted of collection of 14 reconnaissance rock geochem samples and 10 soil geochem samples (the latter from a contour line). All of the geochemical samples were analysed for gold by standard AA techniques, as well as for 30 elements by I.C.P. (Inductively Coupled Argon Plasma) at the Acme Analytical Laboratories facility in Vancouver.

2. TECHNICAL DATA AND INTERPRETATION

A. Geology

The property is underlain by Lower Jurassic volcanics and sediments of the Unuk River Formation. To the east these rocks are overlain, at times unconformably, by Middle Jurassic sediments of the Salmon River Formation. To the north, south and west, the Unuk River Formation is bounded by Cenozoic quartz diorite intrusives. Jurassic aged southeast-northwest trending zones of schists, semi-schists, gneiss, cataclastites and mylonites also occur within the claim area.

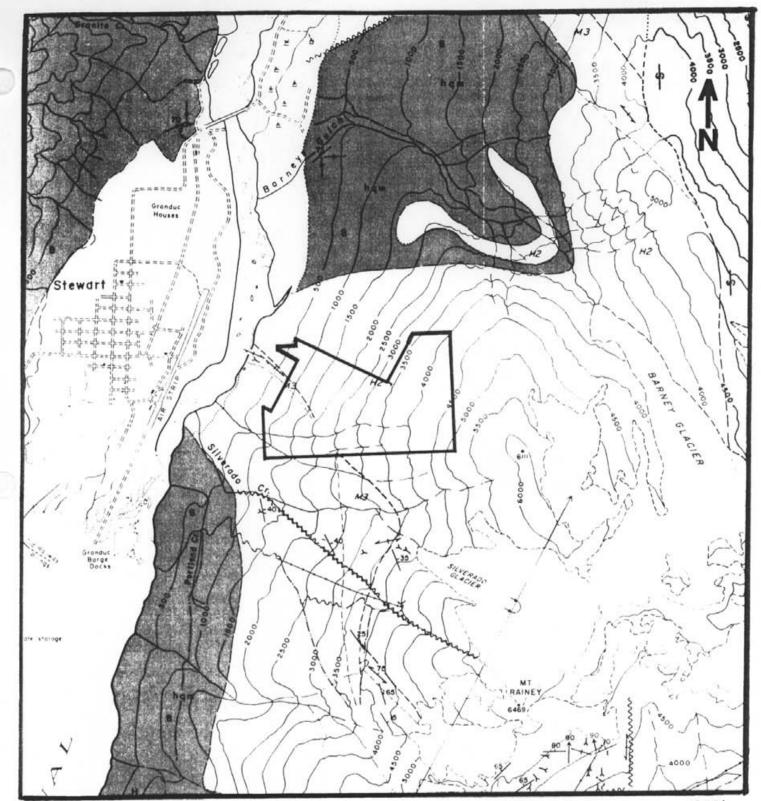
A large fault trends up Silverado Creek and terminates near the axis of a north-northwesterly trending overturned syncline. Structural features include a series of high angle fracture sets and shears trending 125 degrees and dipping 75 degrees south. The most prominent set hosts the "Oral M" gold bearing quartz veins, developed by an adit on Crown Grant Lot 4498 (jutting into the western boundary of the RR 1 claim). Sulfide mineralization is typically erratic, consisting of disseminated to semi-massive pyrite, galena and chalcopyrite. Malachite and hydrozincite staining also occur.

Refer to Fig. 3 for Regional Geology.

B. Rock Geochemistry

a. Introduction

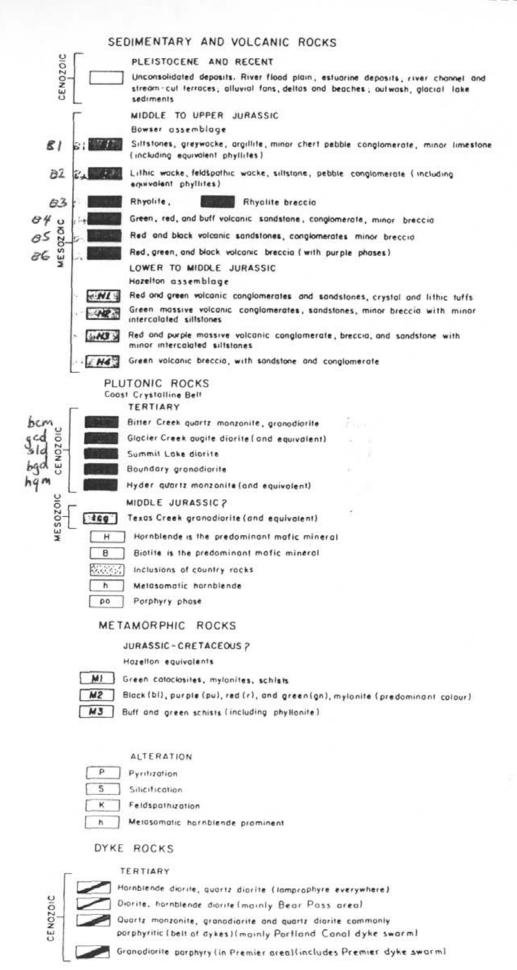
Fourteen rock geochem samples were collected by the crew



lafter Grove 1970

TEUTON RESOURCES FIG.3: R.R. PROPERTY Regional Geology

NTS 103 P/13 W



RI

IS

during reconnaissance surveys over the property. Sample locations and values for gold, silver and copper are shown on Fig. 4 (scale of 1:5000: inset map, scale of 1:500). Sample sites were plotted in the field on a base map prepared from a government topographic map. Sample locations were fixed according to field altimeter readings and by reference to air photos.

b. Treatment of Data

The rock geochem samples collected during the 1991 work program comprise too small a set to utilize standard statistical methods for determining threshold and anomalous levels. In lieu of such treatment, the author has chosen a simple "rule of thumb" method based on reference to several rock geochem programs of similar character carried out in the Stewart area over the last ten years. For the purposes of this discussion, anomalous levels have thus been set as follows:

<u>Element</u>	<u>Anomalous Above</u>
Gold	100 ppb
Silver	3.6 ppm
Copper	200 ppm

c. Sample Descriptions

Following are rock sample descriptions. Those samples containing anomalous levels of any of the elements listed above have ICP/assay values appended to the descriptions (with anomalous values underlined).

- 91 BR-581 Grab sample of mafic volcanic dark-green to maroon biotitic, silicified and/or bleached, F1 foliation faintly developed (115/72S), trace disseminated pyrite.
- 91 BR-582 Grab sample of float, silicified mafic volcanic quartz veining occupying 50% of rock; 1% disseminated chalcopyrite.

Gold - $\underline{148 \text{ ppb}}$ Copper - $\underline{598 \text{ ppm}}$ Silver - $\underline{3.6 \text{ ppm}}$

- 91 BR-583A Grab sample of float, quartz vein material, ribboned, 1% pyrite veins crosscutting the ribbons.
- 91 BR-583B Grab sample of quartz vein material found in float, 2 3% pyrite veins.

Gold - 42 ppb Copper - <u>252 ppm</u> Silver - 1.9 ppm

- 91 BR-584A Chip sample 1.0 m, heavily fractured quartz veins up to 10 cm wide, minor chalcopyrite, cleavage 140/77S)
- 91 BR-584B Chip sample 1.0 m wide orientated north-south adjacent to 91 BR-584A, large quartz vein parallel to the cleavage 30 cm wide; 1% pyrite, 3% pyrrhotite.

Gold - 35 ppb Copper - <u>273 ppm</u> Silver - 2.6 ppm

- 91 BR-584C Chip sample 1.0 m wide, located immediately to the south of 91 BR-584B, 75% quartz, 1% clotty pyrrhotite, remainder fractured mafic volcanic.
- 91 BR-584D Chip sample 1.0 m wide, located immediately to the south of 91 BR-584C, 75% quartz, minor fractured mafic volcanic, trace to 1% chalcopyrite, 1% disseminated and clotty pyrite.
- 91 BR-584E Chip sample 1.0 m wide, located immediately to the south of 91 BR-584D, 5% quartz veining, trace chalcopyrite and pyrite, with 1% pyrrhotite, host rock is a mafic volcanic, pyrrhotite is parallel to the F1 foliation.
- 91 BR-584F Chip sample 1.0 m wide, located immediately to the south of 91 BR-584E, dark-green mafic volcanic, minor iron staining, 1% pyrite and pyrrhotite, 10 cm wide pod of quartz.
- 91 BR-585A Chip sample 50 cm wide orientated north-south and located south of 91 BR-584A, milky quartz, no sulphides.
- 91 BR-585B Chip sample 50 cm wide orientated north-south located immediately to the north of 91 BR-585A, milky quartz, no sulphides.
- 91 SR-102 Grab sample of local float, mafic volcanic, silicified, minor disseminated pyrite.
- 91 SR-103 Grab sample from outcrop, silicified mafic volcanic, 1% disseminated pyrite, cleavage F1 110/90.

d. Discussion

Only three of the 14 rock samples taken during the 1991 sampling program returned anomalous values. Sample BR-582, from a float specimen, registered slightly anomalous values in gold and

silver accompanied by a significant copper value of 598 ppm. The two other anomalous samples returned modestly elevated values in copper, accompanied by background levels of gold and silver.

These results are not encouraging and throw little light on the highly anomalous gold values obtained in the previous year's sampling (cf. History section, infra).

C. Geochemistry--Soils

a. Introduction

Prospector Dave Javorsky collected 10 soil samples roughly every 5m along a contour line near the western boundary of the RR 1 claim (see Fig. 4, Inset Map). The object was to pick up the postulated eastern extension of the Oral M mineralization located on the adjacent Crown Grant.

b. Treatment of Data

Soil samples collected during the 1991 program were tested for gold content by atomic absorption methods; an additional 29 elements were analysed for using ICP (Inductively Coupled Plasma). Results for gold, silver and copper have been tabulated on Fig. 4 immediately above the Inset Map showing sample locations.

c. Discussion

For the purpose of this discussion, anomalous levels for the soil samples have been empirically set at 50 ppb for gold, 1.8 ppm for silver and 100 ppm for copper. On this basis, none of the ten samples returned anomalous values in gold, surprising considering previous geochemical sampling in the area.

Only the northernmost of the soil samples, #1, registered an anomalous value in copper (270 ppm), the other nine varying between 17 and 88 ppm. Several of the soil samples showed silver values in excess of 1.8 ppm to a maximum of 3.4 ppm.

D. Field Technique and Laboratory Analysis

Soil samples were taken from 20 to 30 cm below surface by digging with a mattock to the "C" horizon. Care was taken to ensure that all of the samples were taken from the same horizon/material to allow a proper statistical comparison. After sampling, soils were placed into a standard kraft bag, labelled, and allowed to dry before being shipped to the laboratory.

Reconnaissance rock geochem samples were collected with a standard prospector's pick and placed into marked plastic sample

bags. Care was taken to obtain as fresh a surface as possible. Samples were allowed to dry and then shipped.

Gold analyses were carried out by Acme Analytical Laboratories in Vancouver. In each case, 10 gm sub-samples were subjected to standard fire assay preconcentration techniques to produce silver beads which were then dissolved in reagent prior to determination of gold content by AA.

All samples were also tested using the 30-element Inductively Coupled Argon Plasma analysis. Preparation consisted of digesting representative 0.5 gm sub-samples with 3 ml of 3-1-2 HCl-HNO3-H2O at 95 deg. C. for one hour, followed by dilution to 10 ml with water.

E. Conclusions

Sample results from the 1991 geochemical program were for the most part disappointing. No highly anomalous values were obtained in either gold or copper to correlate with sampling carried out in 1990. Since the highest soil and rock geochem values obtained in the 1991 program were both from the northern part of the area examined, it is possible that the 1991 work was concentrated too far to the south.

A small work program is recommended to tie in 1990 and 1991 results, for which it may be necessary to have the 1990 geologist, Gordon Wilson, return to the property with one of the 1991 crew. Positive results could lead to an expanded program.

Respectfully submitted,

D. Cremonese, P.Eng.

June 22, 1992

2 Lemmes

APPENDIX I -- WORK COST STATEMENT

Field PersonnelPeriod Sept. 29 to Oct. 11, 1991: B. Hall, Geologist 1 days @ \$321/day D. Javorsky, Assistant 1 days @ \$150/day	\$321 150
Helicopter VIH/Stewart Base Crew drop-offs/pick-up 0.2 hrs @ \$751/hr.	152
Food 2 man-days @ \$25/man-day	50
Personnel: mob/demob (home base to Stewart, return) (prorated with other projects where applicable)	75
AssaysAcme Analytical Labs, Vancouver, B.C. Geochem Au, I.C.P. and soil sample preparation 10 @ \$11.00 sample Geochem Au, I.C.P. and rock sample preparation 14 @ \$12.75 sample	110 179
Report Costs Report and map preparation, compilation and research D. Cremonese, P.Eng., 1.0 days @ \$350/day Draughting RPM Computer Word Processor - 3 hrs. @ \$25/hr. Copies, report, jackets, maps, etc.	350 100 75 40
TOTAL\$	1,602

Amount Claimed Per Statement of Exploration: \$950*

*Please apply excess to PAC account of Teuton Resources Corp.

APPENDIX II - CERTIFICATE

- I, Dino M. Cremonese, do hereby certify that:
- 1. I am a mineral property consultant with an office at Suite 509-675 W. Hastings, Vancouver, B.C.
- 2. I am a graduate of the University of British Columbia (B.A.Sc. in metallurgical engineering, 1972, and L.L.B., 1979).
- 3. I am a Professional Engineer registered with the Association of Professional Engineers of the Province of British Columbia as a resident member, #13876.
- 4. I have practiced my profession since 1979.
- 5. This report is based upon work carried out on the RR 1 claim, Skeena Mining Division in October of 1991. Reference to field notes and maps made by geologist Brian Hall is acknowledged. I have full confidence in the abilities of all samplers used in the 1991 geochemical program and am satisfied that all samples were taken properly and with care.
- 6. I am a principal of Teuton Resources Corp., owner of the RR 1 claim: this report was prepared solely for satisfying assessment work requirements in accordance with government regulations.

Dated at Vancouver, B.C. this 22nd day of June, 1992.

D. Cremonese, P. Eng.

2. Lemmen

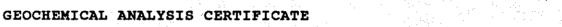
Appendix III

Assay Certificates

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C.

PHONE (604) 253-3158 FAX (604) 253-1716



Teuton Resources PROJECT RED REEF File # 91-5133 Page 1 602 - 675 W. Hastings St., Vancouver BC V6B 1N2 Submitted by: BRIAN HALL

<u> </u>	-																			· ·										•				<u> </u>		
SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb	Bi ppm	ppm V	Ca %	P %	La ppm	Cr ppm	Mg %	Ва ррп	Ti %	B Al	Na %	K %		Au* ppb						
91BR 581 - RE-91BR 5848	4	96 273	12	35 30	1.2		28	393 758		11	5	ND	1	177	.4	3	2	101	4.67 1.35		3	11	.34 1.01	34	.17	2 6.03 5 1.99	.07	. 23	3	23						
91BR 582	8	598	42	69	3.6	13	23	530	4.65	2	6	ND	1	19	1.2	2	4	25	2.17	.043	2	11	.03	2	.07	5 1.30	.01	.01	1	148						
91BR 583A 91BR 583B	4	69 252	13	10	.9 1.9	4	11	236 265		12 7	5	ND ND	1	21 75	.2	2	2 6	13 25	.72 .80		2	5 6	.10 .13	10 4	.03	6 .59 7 .81	.01 .01	.03 .02	1	28 42						
918R 584A ~ 918R 584B ~	8 12	169 273	4	29 30	1.0	6	11 16	752 759		-10 8	5 5	ND ND	1	35 41	.2	2	2	84 53	2.04		2	11 5	.80 1.03	37 46	.18	7 2.78 6 2.00	.02	.15	2	29 35						
91BR 584C - 91BR 584D -	4	100 41	18 11	33 34	1.0	6 9	8	889 426	2.09	. 7 5	8	ND ND	1	281 187	.7	2	2		6.41	.216	2	13 16	.40	47 60	.12	7 2.45 3 1.74	.02	. 15	2	14						
91BR 584E -	1	140	9	70	1.0	6	14	1109	6.27	6	5	ND	2	158	.6	2	2	166	2.82		2		1.85	163	.33	7 5.83	.02	.64	1	14						
91BR 584F / 91BR 585A /	1 2	70 7	14	75 6	.5 .2	10		1129 1881	3.42	8 7	5 5	ND ND	1	125 394	.5 .8	2 5	2 2		2.71 12.49		2	18 8	.71 .07	98 6	.22	2 4.21 3 .07	.05	.59 .01	2	15 3						
91BR 585B~ 91SR 102	1 1	16 103	7 6	7 45	.3	10	3 18	234 433		3	5 5	ND ND	1	15 259	.2	2 2	2	7 138	.28 4.81	160	2	3 14	.10	16 101	.01	2 .19 6 7 .79	.01 .14	.03	1	6						
91SR 103	6	140	9	39	1.1	12	23	362		8	5	ND	1	148	.6	5	2	262	3.30		3	12	.73	47	.19	4 4.82	.03	.53	4	26						
STANDARD C/AU-R	19	61-	44-	131	6.9	70	32	1052	3.93	41	18-	7	39	5 2-	18.5	15	18-	57	47	-090	~ 39	- 58	- 8 9	- 178	09	36 1.87	-06	15	··· 11	450						

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY 1CP IS 3 PPM. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB - SAMPLE TYPE: P1 ROCK P2 SOIL AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

Samples beginning 'RE' are duplicate samples.

- AA ACKE AMALYTICAL		4	<u> </u>		T	Teuton Resources PROJECT RED REEF FILE # 91-5133 Page 2															2 AAA									
SAMPLE#	Mo ppm	Cu ppn	Pb ppm	Zn ppm	Ag	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	D D D D	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm		V	Ca %	P *	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B AL	Na %	K %	bbu bb	
1	3	270	28	81	3.4	7	10	1493	6.12	88	5	ND	1	18	.2	2	2	94	.20	.173	6	9	.55	62	.06	2 2.50	.01	.18	1 26.	—— 9
2	2	76	23	127	2.1	9	14	2489		73	5	ND	1	99	2.1	2	2			.106	8	5	.61	242	.07	3 2.36			1 18.	9
; 3	3	43	12	67	3.4	2	4	234		35	5	ND	1	34	2	4	2	42		.115	3	6	.23	97	. 05	3 .78		. 15	111.	
RE 8	3	34 	10	69 76	1.6	1 2	45.	239 1375		75	5	ND		34 		2	2	45		.079	4	. 12	.23	133	.06	3 .55 2 5.48		.10	1 8.	
	-			,,,		"	1,	1379-		****				رے		6					- 6	12	.47	102	• • • •	2'3.40	.02		1:32.	
5	4	63	18	63	1.4	12	9	1045	5.43	61	5	ND	1	14	.2	2	2	112	.21	.106	4	8	.26	55	.11	2 2.09	.01	.13	1 23.	3
6	4	59	22	67	1.4	10	7	439	4.02	80	5	ND	1	19	_2	2	2	77		.119	5	6	.32	49	.07	2 1.81		.09	1 13.	_
7	3	73	24	85	2.6	6	10	594	4.43	77	5	ND	1	20	.2	2	2	84	.19	. 145	6	8	.57	82	.09	2 3.63		. 12	1 24.	
8	2	88	21	79		6		1382		58	5	ND	1	23	2	2	2	103	.25	.134	6	10	.51	101	.11	2 5.48	.02	. 14	1 31.	5
9	1	63	15	47	3.4	10	5	211	6.29	38	5	NĐ	1	13	2	2	2	138	.18	.102	4	36	.26	46	.17	2 3.88	.01	. 10	1 10.	1
10	١.		_			۱ ـ	_				_					_	_	_			_	_			1.748				14	
10	11	17		89	\$4 1 PT T. 1	1 7	3			A 1 A 1 A 1	<u>5</u>	ND	1	53		2	2	_7		.083	. 2	3	.10	148	.01	2 .33		.04	ા 2.	
STANDARD C/AU-S	19	60	1 41	130	7.2	- 70 -	54-	1069	3.68	~ 42	17	6	- 41	52	18.5		17-	57	47	.090	40	58	.86	172 -	~09	34 1.88	06	14	11 47.	2

Sample type: SOIL. Samples beginning 'RE' are duplicate samples.

