JUN 301994

Geological Survey Branch MEMPR

ASSESSMENT REPORT ON GEOCHEMICAL WORK ON THE FOLLOWING CLAIMS

÷

FILMED

RR 1 ..... 254435 RR 2 ..... 254436

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: MARCH 23-24, 1994

	ON BEHALF OF
SUB-RECORDER	TEUTON RESOURCES CORP.
RECEIVED 5	99-675 WEST HASTINGS ST.
	VANCOUVER, B.C.
JUN 23 1994	V6B 1N2
M.R. # \$	
VANCOUVER, B.C.	REPORT BY
50	D. M. Cremonese, P.Eng. 09-675 West Hastings St. Yancouver, B.C. V6B 1N2

Date: June 22, 1994 GEOLOGICAL BRANCH ASSESSMENT REPORT

50

# 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 2 2
2. TECHNICAL DATA AND INTERPRETATION	3
<ul> <li>A. Geology</li> <li>B. Rock Geochemistry <ul> <li>a. Introduction</li> <li>b. Treatment of Data</li> <li>c. Sample Descriptions</li> <li>d. Discussion</li> </ul> </li> <li>C. Field Procedure and Laboratory Technique</li> <li>D. Conclusions</li> </ul>	3
APPENDICES	
T Usub Cost Chatamant	

I	Work Cost Statement
II	Certificate
III	Assay Certificates

# ILLUSTRATIONS

Fig.	1	Location Map	Report	body
Fig.	2	Claims Map	Report	body
Fig.	3	Regional Geology	Report	body
Fig.	4	1994 Rock Geochemical Sampling	Map Po	ocket

### 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 120 m in the northwest corner of the RR 1 claim near the Bear River to approximately 1,450 m in the southeast corner of the RR 2 claim. Most of the claim area is characterized by rugged topography, with a thick forest of spruce and balsam blanketing the lower portions.

Climate features moderate to heavy 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 directly 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 follows:

Claim Name	Tenure No.	Expiry Date*
RR 1	254435	Mar. 25, 1996
RR 2	254436	Mar. 25, 1995

\*After application of assessment credits

The claims are owned by Teuton Resources Corp. of Vancouver. Claim disposition is shown on Fig. 2.

#### C. History

Earliest recorded work on ground now covered by the RR claims 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.

In 1984, Apex Airborne Surveys carried out a helicopter borne, high-resolution electromagnetic and magnetometer survey over a portion of the Red Reef 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.

During the period 1987 to 1993, sporadic small geochemical sampling programs were carried out near the western boundary of the RR 1 claim to test the strike extension of the Oral M copper-gold zone. This zone apparently originates on the adjacent Molly B reverted crown grant, although an old description of the elevation of the main adit into the Oral M structure places it within the RR 1 claim boundary. Results of the sampling for the most part confirmed gold-copper values obtained in work carried out during the 1930's.

## D. References

- ALLDRICK, D.J. (1984); "Geological Setting of the Precious Metal Deposits in the Stewart Area", Paper 84-1, Geological Fieldwork 1983, BCMEMPR.
- 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. WILSON, GORDON (1991); "Geochemical and Prospecting Report on the RR claims". Private report prepared for Teuton Resources Corp.

## E. Summary of Work Done

A one day reconnaissance geochemical sampling program was carried out by geologist Jim Donaldson on March 24, 1994. Mr. Donaldson was flown in and out of the heavily snow-covered property by helicopter from the VIH base on the west side of the Bear River.

Altogether 11 samples were taken. Samples were analyzed at Pioneer Laboratories in New Westminster for 29 elements by ICP and for gold to ppb tolerance by conventional atomic absorption methods.

Information presented in this report has been derived from field notes and maps prepared by J. Donaldson.

### II TECHNICAL DATA AND INTERPRETATION

# A. Geology

The RR property is underlain by andesitic lapilli tuff and lithic tuff and thinly interbedded argillite of the Upper Unuk River Formation. The rocks are well bedded and range from maroon to light grey in colour and are very siliceous and pyritic. Cataclasites have been observed locally in isolated outcrops.

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 which were developed by an exploration adit along the 480 foot level. Exact location of the Oral M veins is problematical, but at the very least part of the structure strikes within the western boundary of the RR 1 claim from the adjacent Molly B reverted crown Detailed examination of the underground workings and grant. surface stripping indicates the main structure consists of a series of silicified fractures and quartz lenses hosted in a highly oxidized shear zone. Sulphide mineralization is erratic, consisting of disseminated to semi-massive pyrite, galena and chalcopyrite. Malachite and hydrozincite staining also occur. Previous sampling (1937) yielded gold values ranging from 0.026 to 0.27 oz/ton gold from underground workings and 0.05 to 0.36 oz/ton gold from surface trenches. Although gold values are sporadic, previous work has demonstrated sufficient strike and dip continuity of the main gold-bearing structure to allow for crude tonnage and grade estimations. These are reportedly 11,365 tons averaging



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

NTS 103 P/13 W

1 mile 1.62 km

<u> 1</u>

LEGEND

	SEC	DIMENTARY AND VOLCANIC ROCKS
Γ		PLEISTOCENE AND RECENT
		Unconsolidated deposits River flood plain, estuarine deposits, river channel and stream-cut terraces, alluvial fans, deltas and beaches, outwash, glacial lake sediments
Г		MIDDLE TO UPPER JURASSIC
		Bowser assemblage
	. 81	Siltstones, greywacke, argilite, minor chert pebble conglomerate, minor limestone (including equivalent phyllites)
	82	Lithic wocke, feld\$pathic wocke, siltstone, pebble conglomerate (including equivalent phyllites)
		Rhyolite , Rhyolite breccia
	8 <b>4</b> 5 4	Green, red, and buff volcanic sandstone, conglomerate, minor breccia
	85	Red and black volcanic sandstones, conglomerates minor breccia
	. 86	Red, green, and black volcanic breccia ( with purple phases )
		LOWER TO MIDDLE JURASSIC
		Hazellon assemblage
	HI	Red and green volcanic conglomerates and sandstones, crystal and lithic tuffs
	HR	Green massive volcanic conglomerates, sandstones, minor breccia with minor intercoloted siltstones
Į	[H3]	Red and purple massive volcanic conglamerate, breccia, and sandstone with

CENOZOIC

ME SOZOIC

CE NOZOIC

MESOZOIC

H4 Green volcanic breccia, with sandstone and conglomerate PLUTONIC ROCKS Coast Crystalline Belt TERTIARY Bitter Creek guartz monzonite, granodiorite Glacier Creek augite diorite (and equivalent) Summit Loke diorite Boundary granodiarite

minor intercolated siltstones

Hyder quartz monzonite (and equivalent)

MIDDLE JURASSIC?

tcg Texas Creek granodiorite (and equivalent) H Hornblende is the predominant matic mineral

B Biotite is the predominant matic mineral

- Inclusions of country rocks
- h Metasomatic hornblende
- po Porphyry phase

METAMORPHIC ROCKS

JURASSIC - CRETACEOUS 2

Hazellon equivalents

MI Green coloclosites, mylonites, schists

M2 Black (bl), purple (pu), red (r), and green(gn), mylomite (predominant colour)

M3 Buff and green schists (including phyllonite)

ALTERATION

P Pyritization

S Silicification

K Feldspathization

h Melasomatic hornblende prominent

DYKE ROCKS

TERTIARY



Harnblende diorite, quartz diorite (tamprophyre everywhere) Diorite, hornblende diorite(mainly Bear Pass area) Quartz monzonite, granodiorite and quartz diorite commonly

porphyritic (belt of dykes) (mainly Portland Canal dyke swarm)

Granodiorite porphyry (in Premier area) (includes Premier dyke swarm)

0.196 oz/ton gold and 0.62 oz/ton silver. No visible gold has yet been observed on the property, and the gold values correlate well with the richest copper-bearing sections. Silver values are likely associated with tetrahedrite intergrown with galena. The result is correspondence of galena and chalcopyrite rich sections to high precious metal values.

Regional geology is shown on Fig. 3.

# B. Rock Geochemistry

# a. Introduction

Altogether 11 reconnaissance rock geochemical samples (3 float and 8 grab) were taken from the property during the 1994 program. Because of heavy snow cover at the time, sampling was confined to windswept outcrops.

Sample locations were fixed by altimeter and correlated to a base map prepared from a government NTS topographic map. Location for sample JD 1 was also determined using a GPS unit.

### b. Treatment of Data

Geochemical reconnaissance sampling results are presented in this report on Fig. 4 drawn at a scale of 1:5,000. Values for gold and arsenic in ppb and ppm, respectively, are presented alongside the sample numbers. Although the ICP detected values for 28 other metals (see Appendix III), only the most anomalous of these have been recorded on Fig. 4.

Rather than employ statistical methods on such a small sample set, anomalous levels have been defined on a rule-of-thumb basis according to results from regional rock geochemical programs. In general, gold values in excess of 100 ppb and arsenic values in excess of 120 ppm may be considered anomalous.

### c. Sample Descriptions

NOTE: Element values considered anomalous have been appended to sample descriptions in bold print.

- JD 1 Grab. Dark green medium-grained blocky andesite, trace chlorite alteration.
- JD 2 Grab. Dark green/blue medium grained blocky andesite with minor diorite dyking, qtz-carb veins with hematite, trace diss. pyrite.

- JD 3 Grab. Medium green, medium grained andesite, rusty weathering; trace to 2% disseminated pyrite plus or minus aspy; manganese staining.
- JD 4 Grab. Same as JD 1.
- JD 5 Float. Dark blue, fine-grained to medium grained andesite; calcite veinlets and alteration; trace diss. pyrite.
- JD 6 Grab. Med. grained maroon andesite with calcite chlorite epidote alteration.
- JD 7 Grab. Same as JD 6
- JD 8 Grab. Same as JD 1
- JD 9 Float. Quartz-pyrite-galena plus tetrahedrite vein. 2.5 cm wide.

Gold	-	118,000 ppb
Arsenic	-	>99,999 ppm
Silver	-	291.6 ppm
Lead	-	5,084 ppm
Cobalt	-	360 ppm
Antimony	-	1,586 ppm
Bismuth	-	6,957 ppm
Tungsten	-	<b>191 ppm</b>

JD 10 Float. Same as JD 2.

Arsenic - 181 ppm

JD 11 Grab. Same as JD 3

Golđ	-	180	ppb
Arsenic	-	161	ppm

# d. Discussion

Reconnaissance sampling in the northwest corner of the RR 1 claim resulted in the location of a float sample, JD 9, containing highly anomalous values in gold, arsenic, silver, lead, cobalt, antimony, bismuth and tungsten (see sample descriptions above). This appears to be quite a different type of mineralogy from previous samples taken on the property. The bismuth and tungsten values, in particular, suggest close proximity to an intrusive.

The remaining samples, with the exception of JD 10 and 11, returned uninteresting values. Samples JD 10 and 11 showed slightly anomalous arsenic values accompanied by sub to modestly anomalous gold values.

# C. Field Procedure and Laboratory Technique

Rock samples were taken in the field with a prospector's pick and collected in a standard plastic sample bag. Grab samples were taken to ascertain character of mineralization at any specific locality. These samples consisted generally of three to ten representative pieces with total sample weight ranging between 0.5 to 2.0 kg.

All samples were analyzed at the Pioneer Labs facility in New Westminster, B.C. Rock samples were first crushed to minus 10 mesh using jaw and cone crushers. Then 250 grams of the minus 10 mesh material was pulverized to minus 140 mesh using a ring pulverizer. For the gold analysis a 10.0 gram portion of the minus 140 mesh material was used. After concentrating the gold through standard fire assay methods, the resulting bead was then dissolved in agua regia for 2 hrs at 95 deg. C. The resulting solution was then analyzed by atomic absorption. The analytical results were then compared to prepared standards for the determination of the absolute amounts. For the determination of the remaining trace and major elements Inductively Coupled Argon Plasma (ICP) was used. In this procedure a 1.00 gram portion of the minus 140 mesh material is digested with agua regia for 2 hours at 95 deg. C and made up to a volume of 20 mls prior to the actual analysis in the plasma. Again the absolute amounts were determined by comparing the analytical results to those of prepared standards.

### D. Conclusions

The 1994 work program on the property disclosed a potentially significant new area of interest in the northwest corner of the RR 1 claim. A very high gold value of 118,000 ppb was obtained from a float sample carrying stringer quartz-sulphide mineralization. This area should be rechecked during the summer whereupon diligent efforts should be made to locate the source of the float. In the interim, rejects from this sample should be subjected to mineralogical analysis.

Favourable results from this work would lead to an expanded program of trenching and geological mapping.

Respectfully submitted,

D. Cremonese, P.Eng. June 22, 1994

# APPENDIX I --- WORK COST STATEMENT

Field Personnel: J. Donaldson, Geologist - March 24, 1994 1 day @ \$250/day	\$	250
Helicopter - Drop-off and pick-up - VIH: March 24 0.4 hrs @ \$771.15/hr.		308
Food/accommodation/equip/supplies & misc.		104
Truck rentals: 1 truck X 1 days @ \$65/day		65
Mob/demob Van-Stwt-Van (prorated share)		157
Analyses Pioneer Labs. (New Westminster) 11 Au Geochem/ICP/Rock Sample Prep. @ \$14.25		157
Report Costs: Preparation & compilation data, maps, report - D. Cremonese, P. Eng 1 day @ \$300/day Draughting Word processor, 2 hrs @ \$25/hr Copies, etc. TOTAL	\$1	300 60 50 15 <b>,466</b>

Amount Claimed Per Statement of Exploration ...... \$1,080 Please credit excess to P.A.C. account

- 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 practised my profession since 1979.
- 5. This report is based upon work carried out on the RR 1 and RR 2 mineral claims, Skeena Mining Division, in March of 1994. Reliance on field maps and reports prepared by geologist J. Donaldson is acknowledged.
- 6. I am a principal of Teuton Resources Corp., owner of the RR property: this report was prepared solely for satisfying assessment work requirements in accordance with government regulations.

Dated at Vancouver, B.C. this 22 day of June, 1994.

D. Cremonese, P.Eng.

# APPENDIX III -- ASSAY CERTIFICATES

				·																		
IONEER LAB	ORATORI	es I	æc.		·····	5-730	BAT	icht ti	AY	HEW	WEST	MINSTE	R, BC	CANAD	<b>N V</b> 3	N 6J9	<u>-</u>	 TE	LEPHON	KOB (6	04)5:	22-3830
SUTON RESOURCES CORP. oject: uple Type: Rocks						CC S alti-elo				-		LYS Isaaple		CER ed with 3		ICA Haregia			yst <u>R</u>			·····
oject:					di Ba *A	9, Ti, I	B, N ysis-	and Li 10 gra	insitedi ans samp	for ( ple is	Na, K digest	and AL.	Detection	Mn, Fe, I on Limit a, KIBK es	for Au i	is 3 ppe	L.		rt No. 9 : June 2			

UNPLE	ppa j	p <b>pm</b>	ppm	ppa	ppm	ppa	ppin	ppa	X	ppin	ppa	n bbil	(ppa	ppa	ppm	ppm	pp	n bbu x	x	ppm	pp <b>a</b>	x	<b>pps</b>	2	ppa	<b>%</b>	X	X []	ape -	ppb (
> 1	2 :	59	3	101	-4	8	19	1077	6.25	2	5	KD	2	66	.2	6	2	211 .87	.088	4	23	2.00	412	.34	11	2.55	.10	2.37	I	3
> 2	4 7	24	2	63	.2	5	7	500	4.33	10	5	HD	3	125	.2	2	2	103 3.45	.054	Ζ	56	1.10	349	.23	2	6.77	.26	1.75	l -	1
> 3	25	76	5	90	.3	11	5	836	7.07	19	5	ND	2	57	.5	3	4	198.76	.158	5	25	3.14	60	.22	2	2.82	.03	.13	I	8
04	2 7	21	7	92	.3	8	6	556	5.10	6	5	ND	3	72	1.3	3	2	97 2.08	.060	7	30	1.18	285	.ద	2	5.77	.22	2.54	I	4
5 5	3 1	19	8	64	.1	9	15	768	3.84	5	5	ND	2	70	.2	3	3	114 1.81	.047	2	65	1.48	584	.14	3	2.32	.13	<b>.89</b> 1	<b>i</b>	·
36	2	18	18	177	.5	5	5	572	4.94	114	5	ND	4	214	.2	2	2	151 3.41	.096	3	11	2.29	567	.22	8	6.62	.18	1.69		41
o 7	2 1	10	8	276	.4	2	2	640	5.45	118	5	ND	3	628	.2	2	2	161 4.41	.099	3	11	3.02	818	-21	4	8.88	.18	2.38 1	I	20
98 -	1 7	7	12	140	.3	9	8	709	5.22	112	5	ND	3	209	.2	2	4	130 3.59	.128	6	15	1.85	342	.24	2	6.03	.17	2.10 1		59
a 9	10	145	5084	9	291.0	5 49	360	118	15.41	999999	5	144	2	11	3.5	158	6 69	5715 .19	.039	3	85	.23	14	.01	11	.34	.01	<b>-11</b> , 1	191	_
0 10	2 3	31	16	79	1.3	4	10	573	5.48	181	5	ND	3	204	.2	2	4	110 3.55	.097	3	13	2.04	161	.ಜ	5	7.59	.36	2.69	2	85
0 11	2	30	19	562	1.8	1	7	736	6.87	161	5	ND	3	221	.2	Z	10	168 3.01	.160	3	12	4.54	291	. 16	6	7.78	.04	2.69 1	<b>]</b> .	180

Sample No. JD 1009

118000 ppb

