LOG NO: march 5/9	/ RD.
ACTION:	
	·
FILE NO:	

ASSESSMENT REPORT

ON GEOCHEMICAL WORK ON THE FOLLOWING CLAIMS

FRANCES 1 6770(7) FRANCES 2 6771(7) FRANCES 4 6773(7)



FRANCES GROUP

located

46 KM NORTH-NORTHWEST OF STEWART, BRITISH COLUMBIA SKEENA MINING DIVISION

56 degrees 25 minutes latitude 130 degrees 04 minutes longitude

N.T.S. 104B/8E

PROJECT PERIOD: July 18-July 23, 1990

ON BEHALF OF JOHN E. WYDER CALGARY, ALBERTA

REPORT BY

D. Cremonese, P. Eng. 602-675 W. Hastings Vancouver, B.C.

Date: October 22, 1990 GEOLOGICAL BRANCH ASSESSMENT REPORT

TABLE OF CONTENTS

1.	INTR	ODUCTION	1
	А. В. С. D. Е.	Property, Location, Access and Physiography Status of Property History References Summary of Work Done	1 1 2 2
2.	TECH	NICAL DATA AND INTERPRETATION	3
	А.	Regional Geology	3
	в.	Property Geology	3
	c.	Geochemistry Rock Samples	5
		a. Introduction	5
		b. Treatment of Data	6
		c. Sample Descriptions	6
		d. Discussion	8
	D.	Geochemistry Stream Sediment Samples	9
		a. Introduction	9
		b. Treatment of Data	9
		c. Discussion	9
	Е.	Field Procedure and Laboratory Technique	10
	F.	Conclusions	10

APPENDICES

.

- 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	Sample Location Map	Map Pocket
Fig.	5	Gold Values (Plus Elevated Values	
-		of Ag, Pb, Zn, Cu, As & Sb)	Map Pocket

.

1. INTRODUCTION

A. Property, Location, Access and Physiography

The property is located about 46 km north-northwest of Stewart, British Columbia. Nearest permanent road is at Tide Lake Flats (terminus of Granduc mining road), about 12 km southsoutheast. The recently completed access road into the Brucejack Lake gold-silver property (Newhawk/Granduc joint venture) crosses the northeast corner of the Frances 1 claim, along the middle of the Knipple Glacier.

The Legal Corner Post for the Frances claims is located atop a thin, east-west nunatak on the height on the height-of-land between the Knipple Glacier to the north and the smaller, Canoe Glacier to the south. Property elevations vary from approximately 1450 m to 1900 m. Vegetation in the area is sparse because of the general high altitude and limited rock exposure; where present it consists mainly of little shrubs, mountain grasses and heathers. Slopes range from moderate to steep to precipitous; most of the property is covered by glacier or ice and snow fields.

Climate is severe, particularly at the higher elevations. Heavy snowfalls in winter and rain in the short summer working season are typical of the Stewart area.

B. Status of Property

Relevant claim information is summarized below:

Name	Record No.	No. of Units	Record Date
Frances 1	6770(7)	16	July 25, 1990
Frances 2	6771(7)	16	July 25, 1990
Frances 4	6773(7)	20	July 25, 1990

Claim locations are shown on Fig. 2 after government N.T.S. map 104B/8E. The claims are registered in the name of Jack Wyder of Calgary but are operated by Teuton Resources Corp. of Vancouver, British Columbia.

C. History

There are no references to any early exploration work on the Frances claims area in conventional references such as the Annual Minister of Mines Reports, Geological Bulletins, or Assessment Reports (Index and Maps), etc.

In the modern era, interest in the general area was aroused after discovery of high grade gold-silver mineralization near Brucejack Lake. In 1988, prospecting, silt sediment surveys and rock geochemical sampling was carried our over portions of the Frances property by E. R. Kruchkowski Consulting Ltd. for Wydmar Development Corporation (as part of a larger program including surrounding claims).

Very recent regional discoveries such as the rich Eskay Creek deposits have intensified exploration efforts throughout the Stewart area. In particular, this renewed search has concentrated on particular felsic volcanic suites which are thought to be favourable hosts for exhalative-type mineralization. The presence of such rock units on the Frances claims, as mapped by government geologists, was the impetus for the 1990 field program.

D. References

- 1. GROVE, E.W. (1971): Bulletin 58, Geology and Mineral Deposits of the Stewart Area. B.C.M.E.M.P.R.
- GROVE, E.W. (1982): Unuk River, Salmon River, Anyox Map Areas. Ministry of Energy, Mines and Petroleum Resources, B.C.
- 3. GROVE, E.W. (1987): Geology and Mineral Deposits of the Unuk River-Salmon River-Anyox Area, Bulletin 63, BCMEMPR
- ALLDRICK, D.J.(1984); Geological Setting of the Precious Metals Deposits in the Stewart Area, Paper 84-1, Geological Fieldwork 1983", B.C.M.E.M.P.R.
- ALLDRICK, D.J. (1985); "Stratigraphy and Petrology of the Stewart Mining Camp (104B/1E)", p. 316, Paper 85-1, Geological Fieldwork 1984, B.C.M.E.M.P.R.
- 6. BRITTON, J.M. AND ALLDRICK, D.J. (1988); "Sulphurets Map Area", p. 199, Paper 1988-1, Geological Fieldwork 1987, B.C.M.E.M.P.R.
- 7. KRUCHKOWSKI, E.R. (1989); "Report on the Tippy Lake Property, Stewart, B.C., Skeena Mining Division, now on file with the B.C.M.E.M.P.R.

E. Summary of Work Done.

The silt and rock geochemical survey conducted over the claims area was undertaken by geological contractor, International Kodiak Resources Inc., of Vancouver, B.C., as part of a larger project in the immediate area spanning the period from July 18 to July 23, 1990. Object of the 1990 program was to carry out reconnaissance geochemical sampling over accessible rock outcrops with particular attention to gossanous zones and favourable geological structures.





Fieldwork was carried out on July 18, 19, and 20 consisting of rock geochemical/character sampling (30 samples) and stream sediment sampling (12 samples). The crew was made up of three men: geologist Len Gal and two assistants. On each day the crew was flown in and out of the property by helicopter originating from International Kodiak's main camp north of the Iskut River.

The westernmost portions of the property were not examined due to precipitous terrain and ice cover. The major focus of the project was a large gossanous zone near the contact of the sedimentary and volcanic rock packages on the Frances 1 claim. A smaller rusty-weathering zone in the southeast corner of the property was also examined.

All of the 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 facility in Vancouver..

2. TECHNICAL DATA AND INTERPRETATION

A. Regional Geology

The property lies within a broad, north-northwest trending belt of Triassic and Jurassic volcanic and sedimentary rocks termed by Grove (1971) as the "Stewart Complex". This belt is bounded to the west by the Coast Crystalline Belt (mainly granodiorites) and to the east by a thick series of sedimentary rocks known as the Bowser Assemblage (Middle Jurassic to Upper Jurassic age).

Property location relative to regional geology is shown on Fig. 3.

B. Property Geology

The rocks of the Frances Claims were divided into two groups: a volcanic package (northwest portion) and an overlying sedimentary package (southeast portion). The volcanic rocks are correlative with the Mt. Dillworth Formation and part of the Betty Creek Formation and the sedimentary rocks belong to the Salmon River Formation. Both packages are part of the Mesozoic Hazelton Group.

The rocks examined lie on the northeast limb of a northwest trending anticline that runs through the property (Alldrick et al., BCDM Open File 88-4). As well, smaller east and northeast trending folds affect the strata of the sedimentary package, but the relative age relationships between the folds are unknown. Bedding planes dip east and northeast at moderate to steep angles, forming dip slopes on much of the ridges in the Frances 1 and 2 blocks. A fairly strong foliation is developed in most lithologies, usually at a high angle to bedding. The foliation is likely related to one



or both generations of folds.

The thick sequence of sedimentary rocks can be correlated with the Salmon River Formation of the Hazelton Group. These rocks structurally overlie the volcanic series, and comprise argillites, siltstone, wackes and conglomerate. The argillites and siltstones are recessive and often rusty weathering, dark grey to black and thinly laminated. Siltstone laminae often display grain size grading and ripples, indicating that the sedimentary package is right way up. The wackes and litharenites are fine to medium grain, rusty and tan weathering, with a flaggy appearance. Beds of resistant chert and quartzite pebble conglomerates are comparatively rare.

The sedimentary units are folded into east and northeast trending, moderately plunging folds. The folds are open and appear concentric, with wavelengths on the order of 30m. Foliation is well developed, particularly in the argillites.

The underlying volcanic sequence consists of felsic to mafic volcaniclastics and flows, correlative with the Mt. Dilworth Formation and at least part of the underlying Betty Creek Formation.

Near the top of the package is a distinctive felsic agglomerate, consisting of poorly sorted block to lapilli sized ash, pumice, flow banded rhyolite, tuffs and minor chert in a buff to light green ash matrix. This rock is characteristically lightweathering, and blue grey chalcedony veinlets are common. Some felsic crystal ash tuff is interbedded. Bedding planes are moderately to well-developed, as is foliation. A dominant joint set trends north-south. This unit is likely part of the Mt. Dilworth Formation.

The remainder of the volcanic package consists of a variety of flows and tuffs that could not be separated at the scale of mapping. The lithologies observed included a light green and rusty weathering intermediate lapilli tuff, felsic crystal ash tuffs, calcitic (?) lapilli tuffs, grey-green andesite flows, plagioclase porphyry dacite and plagioclase-hornblende porphyry andesite. These dark grey porphyries feature euhedral phenocrysts up to 1 cm long. Present in the lower part of the exposed sequence are distinctive maroon basalts. A volcanic conglomerate, with intermediate and mafic pebbles to cobbles in a fine grained matrix, is present in the large gossanous zone at the volcanic sedimentary contact above the Knipple Glacier.

The volcanics are layered on a scale of 30cm to several metres, but layering is often obscured by strong jointing and fracturing. Foliation is variably developed, but tends to be more pronounced in the ash tuffs.

A major gossanous zone comprising red, orange, maroon and yellow weathering volcanic rocks, occurs below the icefield on the southwest slope above the Knipple Glacier (Frances 1 Claim Block). This zone is approximately 300m by 200m, adjacent to the sedimentary contact. It is characterized by abundant stringers and fracture fillings of pyrite and quartz, with accessory pyrrhotite and arsenopyrite. These fractures and veinlets are generally less than one centimetre wide, but quite closely spaced. They tend to trend northwest and northeast, but generally their orientations are not consistent, and their overall aspect suggests a stockwork. The fractures are likely associated with larger faults, some of which The trend of the faults is apparently on had a northeast trend. strike with a major fault zone on the north side of the Knipple Glacier, on the Lilli claims. In any case, the abundant pyrite stringers and veinlets suggest an epithermal type mineralization. Quartz, quartz-hematite and quartz-carbonate stringers were also noted in the area.

A second rusty orange weathering zone, in the southwest corner of the Frances 2 block was examined. This gossan was about 10m by 30m, and 100m from the sedimentary contact. This zone seemed to be related to an east trending fault, and the style of mineralization is similar to the large gossan.

Several thick (10-50cm) quartz (+/- carbonate, sulphides) veins were observed in the volcanic rocks. Mineralization associated with these veins, which show evidence of shearing, is variable. The veins trend approximately 060 and 120 degrees, forming a conjugate set.

Within the sedimentary package, mineralization is sparse. The gossans near the contact apparently do not extend into the sedimentary rocks. Sulphide mineralization is limited to stratabound horizons in the argillite-siltstone sequence that are rich in pyrite. The pyrite is likely diagenetic rather than epigenentic. The coarser clastics also host minor disseminated pyrite cubes.

C. Geochemistry - Rock Samples

a. Introduction

Thirty rock geochem samples were collected by the field crew during three days of traversing over the Frances claims. Sample sites were plotted on a base map prepared from a government topographic map (cf. Sample Location Map--Fig. 4). Sample locations were fixed according to field altimeter readings and by reference to air photos. Gold values in ppb, as well as any elevated values in silver, copper, lead, zinc, arsenic and antimony are presented in this report in Fig. 5, which is drawn at a scale of 1:5000.

b. Treatment of Data

The 30 rock geochem samples collected during the 1990 work program comprise too small a set for efficient use of standard statistical methods for determining threshold and anomalous levels. In lieu of such treatment, the author has simply chosen anomalous levels by reference to several rock geochemical programs conducted over other properties in the Stewart region over the past ten years. On this basis, anomalous values for gold, as well as a suite of accessory metals useful as pathfinders for gold mineralization, are indicated below:

<u>Element</u>	<u>Anomalous Above</u>
Gold	100 ppb
Silver	3.6 ppm
Copper	200 ppm
Lead	160 ppm
Zinc	600 ppm
Arsenic	120 ppm
Antimony	30 ppm

Because gold was the main object of the 1990 exploration program, values for this metal have been plotted on Fig. 5 at each sample location; by contrast, values for Ag, Cu, Pb, Zn, As and Sb have been plotted only where they exceed the levels indicated in the list immediately above.

c. Sample Descriptions

Following are rock sample descriptions from field notes. Those elements containing anomalous levels of any of the elements listed in the preceding section have those values appended to the descriptions. Unless otherwise indicated, all samples are grabs.

- CC-R-120 Volcanic agglomerate/breccia, clasts 1-10cm, chalcedonic veining, trace pyrite.
- CC-R-121 Float--black argillite, contains bands of coarse-grained sulfides, (2cm); predominant sulfide is pyrite (5%).

[As-170 ppm]

- CC-R-122 Volcanic agglomerate, black argillite clasts, some quartz flooding. Disseminated pyrite and along fractures. Pyrite 2-3%.
- CC-R-123 Grab over 1m; same as above.
- CC-R-124 Float; semi-massive pyrite in silicieous dark green/blue

felsite volcanic, limonite on surfaces.

[Zn-962 ppm; As-425 ppm; Sb-86 ppm]

- CD-R-035 Grab from gossanous outcrop. Sample contains occasional disseminated sulfides. Taken 50 m from edge of icefalls.
- CD-R-036 Grab from gossanous outcrop. Conglomerate with some sulfide mineralization.
- CD-R-037 From velvety, gossanous outcrop. Occasional sulfides.
- CD-R-038 From velvety gossan; veins of fine sulphides.
- CD-R-039 Taken from large rounded gossanous area; rock is streaked with iron staining. Samples contain accumulations of fine-grained sulfides.
- CD-R-041 Taken from western half of large, rounded gossanous zone; some massive sulphides, dark iron-staining.
- CD-R-045 From float boulder; contains disseminated sulfides.
- CD-R-046 Grab from large dark outcrop with iron staining.
- CD-R-047 Float sample taken 15 m from creek.
- CD-R-048 Sample taken from bright orange outcrop, 25 m from creek.
- CD-R-049 Iron-stained (massively); outcrop of massive sulfides, 50 m from creek.

[Ag-33.8 ppm; As-628 ppm; Sb-56 ppm]

CD-R-051 20 m from last sample; gossan containing massive sulfides (fine-grained); located under ice falls. North of dark outcrop, other side of small cascading creeks.

[As-1092 ppm; Sb-310 ppm]

CD-R-052 50 m from last sample; massive sulfides.

[As-326 ppm; Sb-42 ppm]

- LG-R-125 Rubble (float) felsic tuff with stringers and disseminations of pyrite.
- LG-R-126 Silicified felsic tuff (?); pyrite in stringers, blebs and replacement of lapilli.
- LG-R-127 Float (frost heave) or glacial rubble? Substantial pyrite veining in felsic tuff.

[Pb-260 ppm]

- LG-R-128 Chalky white quartz vein with mesh of pyrite. 10cm wide.
- LG-R-129 Quartz vein sample within brecciated country rock, and pyrite cementing breccia.
- LG-R-130 Sheared and brecciated andesite with disseminated pyrite and in fracture fillings.
- LG-T-132 5m chip sampling along 40 cm quartz vein, brecciated and pinching/swelling.

[Ag-5.8 ppm]

- LG-R-133 Pyritic shear margin, 4cm wide and continuous along strike for 7m. Light grey-blue with abundant pyrite euhedra.
- LG-R-134 Brecciated felsic volcanic with pyrite fracture fills.

[As-751 ppm; Sb-44 ppm]

LG-R-135 Felsic lapilli tuff, slightly welded, with moderate pyrite stockwork development.

[As-409 ppm; Sb-225 ppm]

- LG-R-136 Sandy phase of volcanic conglomerate with pyrite matrix and fracture fillings.
- LG-R-137 Same as GSC sample site AH-24. Fracture filling pyrite in silicified tuff or felsic flow?

[Ag-6.0 ppm; Sb-168 ppm]

d. Discussion

A suite of rock geochem samples taken from the Frances 1 claim, in volcanic rocks on the ridge overlooking the south side of the Knipple Glacier, shows consistently anomalous values in arsenic and antimony, accompanied occasionally by elevated to anomalous values in silver. Samples #49, 51 and 52 of the CD-R series are from massive pyrite mineralization containing arsenic values ranging from 326 to 1092 ppm and antimony values from 42 to 310 ppm. These elevated values appear over a fair sized area as indicated by samples #'s 134, 135 and 137 of the LG-R series which also contain similar arsenic and antimony highs. Sample CC-R-124, in addition to anomalous values in As and Sb, also shows a zinc high of 962 ppm.

Rock geochem samples taken from other portions of the property were not as interesting: there were a couple of spot highs, one of lead (LG-R-127) and one of silver (LG-T-132) but otherwise values were lower than in the locality discussed above.

D. Geochemistry - Stream Sediment Samples

a. Introduction

Twelve stream sediment samples were taken from courses draining the property. Sample locations are marked as circles on Figure 4, drawn at a scale of 1:5000 (Map Pocket). Geochemical sample sites were plotted on a base map prepared on a scale of 1:5000. Locations were fixed according to field altimeter readings and reference to airphotos.

b. Treatment of data

Based on reference to a number of silt geochemical sampling programs conducted in the region over the past ten years, values in excess of 50 ppb can be safely considered anomalous for gold. On the same basis, values considered anomalous for Ag, Cu, Pb, Zn, As and Sb are listed below.

<u>Element</u>	<u>Anomalous Above</u>
Gold	50 ррЪ
Silver	1.2 ppm
Copper	100 ppm
Lead	80 ppm
Zinc	300 ppm
Arsenic	80 ppm
Antimony	5.0 ppm

Silt geochem gold values have been plotted on Fig. 5; only anomalous values in the remaining elements listed above have been plotted.

c. Discussion

None of the twelve stream sediment samples taken returned anomalous values in gold. However three of the samples returned anomalous values in silver, ranging from 1.4 to 2.3 ppm (samples CC-M-125, CC-M/S-130 & CD-S-040). These samples were also anomalous in lead (150 to 317 ppm) and antimony (8 to 15 ppm).

Although many of the rock geochem samples taken during the reconnaissance program contained moderate to highly anomalous levels of arsenic, only one stream sediment sample, CD-S-050, registered a distinctly anomalous value in that element--178 ppm.

This was accompanied by the highest Sb value of the program, 27 ppm.

Sample LG-M-131 from the southeast corner of the property returned an anomalous lead value of 104 ppm.

E. Field Procedure and Laboratory Technique

Silt samples were taken in the field by sieving fine stream sediments through a -40mesh nylon screen until approximately 300 to 500 grams of material was collected. This was rinsed from a plastic collecting basin into a standard Kraft Bag. The bags were then marked, allowed to dry, and shipped by bus to Vancouver for analysis at the Acme Analytical Laboratories facility on 852 East Hastings Street.

After standard sample preparation, a .500 gram subsample was digested with 3ml of 3-1-2 HCl-HNO3-H20 at 95 degrees Centigrade for one hour, then diluted to 10 ml with water. The resulting solution was tested by Inductively Coupled Argon Plasma to yield quantatitive results for 30 elements. Gold was analysed by standard atomic absorption methods from a 10 gram subsample.

Rock geochem and character samples were analysed in the same manner as described above.

F. Conclusions

The 1990 exploration program over the Frances claims consisted of helicopter-supported rock and silt geochemical sampling. The program was of a reconnaissance nature, designed to isolate areas worthy of follow-up.

Most of the interesting results from the geochemical sampling programs, both rock and stream sediment, came from a sizeable gossan straddling the contact between volcanic and sedimentary rocks on the Frances 1 claim. Many of the samples taken from this area returned moderate to highly anomalous values in arsenic and antimony, with occasional elevated to anomalous values in silver. Rock geochem samples reported highs of 1119 ppm arsenic, 310 ppm antimony and 33.8 ppm silver. Silt samples returned lead highs to 317 ppm, silver highs to 2.3 ppm, arsenic highs to 178 ppm and antimony highs to 27 ppm.

Considering the style of mineralization in this area, stockworks of sulphide veinlets (pyrite, pyrrhotite, arsenopyrite), the geochemical results support the field geologist's hypothesis that the zone may represent an epithermal system. Although no elevated gold values were obtained during the survey, it is possible that further work may disclose an increase in precious metal mineralization within deeper sections of the zone. Follow-up prospecting, sampling, and geological mapping, supported by petrographic studies and trace metal analysis, is warranted to establish whether the gossans mark the upper levels of a gold-silver bearing system. Unprospected portions of the property should also be carefully examined during this program.

Respectfully submitted:

D. Lemmen

D. Cremonese, P.Eng. Oct. 22, 1990

APPENDIX I -- WORK COST STATEMENT

Field Personnel: Contractor International Kodiak Period July 18-23, 1990	
Len Gal, Geologist 3.5 days @ \$275/day	\$ 962
Cal Church, Assistant 3.5 days @ \$240/day	840
2.0 days @ \$225/day	450
Helicopter Vancouver Island Hel. (Stewart Base)	
$\frac{1}{10} \frac{1}{12} \frac$	1.084
J_{11} J_{12} J	1 011
T_{1} T_{1	772
5419 20. 1.0 MIS @ \$722.50	122
Contractor la comp (boond (food cost)	
Contractor's camp/board/100d cost*:	1 1 2 5
9 man-days @ \$125/man-day	1,120
Janesse Jane Jackies]	
Assays Acme Analytical	
Geochem Au, I.C.P. and rock sample preparation	410
30 @ \$13.75 per sample	412
Geochem Au, I.C.P. and silt sample preparation	
12 @ \$11.60 per sample	139
Project supervision/Report and map preparation	
D. Cremonese, P.Eng., 2 days @ \$400/day	800
Draughting RPM Computer	200
Word Processor - 4 hrs. 0 \$25/hr.	100
Copies, blow-ups, jackets, maps, etc.	 30
TOTAL	\$ 7,875
Amount Claimed Per Statement of Exploration: \$7,200	

*Includes prorated portion of mob-demob.

- I, Dino M. Cremonese, do hereby certify that:
- 1. I am a mineral property consultant with an office at Suite 602-675 W. Hastings, Vancouver, B.C.
- 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 Frances mineral claims, Skeena Mining Division in July of 1990. Reference to field reports, notes and maps made by geologist Len Gal and his assistants is acknowledged. I have full confidence in the abilities of all samplers used in the 1990 geochemical program and am satisfied that all samples were taken properly and with care.
- 6. I am a principal of Teuton Resources Corp., operator of the Frances claims: this report was prepared solely for satisfying assessment work requirements in accordance with government regulations.

Dated at Vancouver, B.C. this 22 day of October, 1990.

2 Limonue

D. Cremonese, P.Eng.

APPENDIX III

ASSAY CERTIFICATES

GEOCHEMICAL ANALYSIS CERTIFICATE

Teuton Resources PROJECT KNIPPLE File # 90-3124 Page 1 602 - 675 W. Hastings St., Vancouver BC V68 1N2 Submitted by: GEORGE WICHOLSON

S	MPLE#	Но	Cu DOM	Pb	Zn	Ag	N 1 ppm	Со	Mn ppm	Fe X	As ppa	U ppon	Au ppm	Th ppm	Sr ppm	Cd	Sb ppm	Bi ppm	V ppm	Ca X	P X	La ppra	Cr ppm	Hg X	Ba Ti ppm X	B / ppm	AL X	Na X	K V A X ppa
80 80 80 80 80 80 80 80 80 80 80	C-R-044 C-R-045 C-R-046 C-R-046 C-R-047 C-R-048	23432	35 6 51 54 53	9 2 11 13 19	81 18 123 68 116	.1 .1 .6 .5 .3	140 40 56 60 102	11 4 8 10 11	270 772 953 764 370	3.95 1.06 4.44 4.42 4.53	47 93 33 33 22	5 5 5 5 5 5	ND ND ND ND	1 1 1 3	9 74 15 4 44	.2 .2 .2 .4 .8	2 2 2 2 2 2	2 2 5 2 2	38 5 40 56 32	.06 .64 .21 .05 .45	037 010 043 042 091	8 2 4 4	96 43 70 64 71	1.31 .21 1.05 1.31- 1.44	94 .01 42 .01 53 .02 49 .01 105 .01	7 2. 3 5 1. 7 2. 2 2.	14 - 32 - 78 - 03 - 39 -	.01 .01 .02 .02 .01	.10 1 .02 1 .07 1 .07 1 .10 1
BI BI BI BI BI BI	C-R-049 C-R-051 C-R-053 C-R-054 C-R-055	4 3 1 1	118 28 31 9 2	28 18 15 9 14	58 65 77 109 121	54.0 .4 .3 .3	10 76 11 3 4	18 3 14 13 3	1522 144 956 2985 1397	3.40 3.81 4.37 11.45 4.24	40 19 12 29 -33	5 5 5 5 5	ND ND ND ND ND ND	1 -2 -2 -1 1	74 16 75 28 34	5.5 P. 6.	25 2 2 2 4 2	2 3 2 2 2	6 33 11 68 8	3.42 .12 .07 1.51	012 061 005 289 <u>161</u>	2 7 21 17 31	3 79 9 16 2	.25 1.24 .55 .74 .32	51 .01 83 .01 145 .01 31 .17 75 .05	5 . 3 2. 4 1. 2 3. 2 1.	23 01 87 13 59	.01 .01 .01 .03 .05	.13 1 .10 1 .17 1 .02 2 .10 1
S B B B B	C-R-056 C-R-057 C-R-058 IC-R-059 IC-R-059	1 6 3 1	2 1 	14 10 56 2 24	136 94 152 1 42		8 2 4 8 5	2 2 5 1 3	1839 1116 895 236 516	1.93 3.47 3.08 .29 .99	12 22 154 3 7	5 5 8 6	nd ND ND ND	1 1 1 7	18 27 12 5 23	.2 1.1 1.9 .2 .2	2 2 2 2 2 2	2 3 2 2 2 2	4 6 1 2	.32 .85 .37 .01 .22	063 169 133 001 010	41 30 37 2 33	3 2 2 6 2	.21 .30 .24 .01 .08	71 .01 100 -13 57 .01 20 .01 228 .01	2 - 3 1. 4 - 2 - 4 -	88 06 86 02 41	.03 .04 .05 .01	.16 1 .12 1 .07 1 .01 2 .17 2
	C-R-120 C-R-121 C-R-122 C-R-122 C-R-123 C-R-124	1 22 1 2 12	28 7 20 22 46	16 30 20 217 3 13	133 70 84 96	5 .2) 1.6 1 3 .4 2 .5	9 4 6 11 6	13 4 10 22 12	740 74 1990 909 4189	7.55 4.54 8.12 7.89 19.88	10 170 15 37 425	5 6 5 5 5	ND ND ND ND ND	1 1 2 1 1	13 4 12 11 121	.2 .8 .2 .8 13.1	2 2 2 86	2 2 2 5	47 1 71 57 4	.45 .04 .30 .29 4.12	.054 .030 .148 .121 .015	9 11 14 10 2	20 1 19 15 5	.94 .01 .67 .57 .10	87 .13 22 .01 55 .01 44 .01 8 .01	3 Z. 4 2 Z. 2 1. 3	.75 .20 .50 .97 .22	.04 .02 .04 .04 .01	.04 1 .11 1 .04 1 .05 1 .03 1
	CD-T-035 CD-R-036 CD-R-037 CD-R-038 CD-R-038 CD-R-039	21112	48	3 15 5 19 5 17 7 24 3 37	109 114 117 117 90 117	7 .4 4 .1 7 .2 6 .3 1 .3	11 8 9 10	26 15 20 21 37	971 1183 1561 1434 453	7.17 6.57 6.99 7.26 8.58	27 14 22 8 20	5 5 5 5 5	ND ND ND ND	1 1 1 1	52 19 29 18	.4 .4 .3 .2 .9	322	2 2 2 2 2 2	62 65 60 41 41	.80 .48 .79 .51 .21	.112 .090 .116 .195 .096	10 9 11 14 8	16 14 16 13 20	.65 .79 .68 .43 .97	29 .01 39 .01 46 .01 34 .01 42 .01	2 1. 2 2. 2 2. 5 1 4 2	.80 .10 .20 .61 .24	.04 .03 .03 .04 .03	.04 1 .03 1 .04 1 .07 1 .06 1
	CD-R-041 CD-R-045 CD-R-046 CD-R-046 CD-R-047 CD-R-048		2: 1 6: 1 6: 1 7:	5 18 9 1 8 1 0 1 3 1	5 9 2 6 3 4 5 9 2 5	1 .1 9 .2 4 .1 6 .1 1 .3	13 65 63 86	i 34 23 i 21 i 34 i 23	392 1852 334 240 1870	8.63 4.71 5.87 8.76 5.80	20 6 2 108 43	5 5 5 5 5	ND ND ND ND		1 11 327 64 1 16 1 231	1.2 7 .8 7 .7 5 .3	4 3 2 17 4	2 2 2 2 2 2	34 72 77 95 25	.15 7.55 .97 .18 7.26	.080 .146 .101 .970 .101	11 6 5 2 4	18 51 74 56 26	1.24 .90 .73 .30 1.73	29 .01 188 .03 129 .11 22 .01 137 .01	2 Z 4 2 5 2 2 1 2	,49 .04 .28 .10 .71	.02 .01 .01 .01 .01	.09 1 .30 1 .50 1 .12 1 .18 1
	CD-R-049 CD-R-051 CD-R-052 LG-R-125 LG-R-126	19	9 7 2 8 1 6 2 2 5 1	4 8 6 7 5 6 3	8 25 7 4 6 11 4 18 7 2	0 33.8 0 .2 0 .8	5 112 5 40 5 60 9 1	2 27 0 16 4 32 9 19 0 10	244 142 1987 426 2353	16.01 13.89 8.01 7.90 3.19	628 1092 322 17	5 5 5 5 5 5 5 5 5 5	i nd 5 nd 5 nd 5 nd 5 nd		1 21 1 21 1 297 1 11 1 27	1 1.2 9 .2 2 .9 0 .4 8 .4	56 310 42 2	2 2 2 2 2 2	23 15 9 40 14	.15 .35 4.06 .32 1.30	.082 .127 .073 .119 .102	2 5 2 10 10	32 19 9 14	.30 .04 .06 .54	5 .01 9 .01 17 .01 47 .10 5 44 .04	3 4 22 3 3	.72 .42 .21 .21 .45	.01 .01 .01 .03 .04	.22 1 .26 11 .18 1 .06 1 .02 1
	LG-R-127 Standard C/AU-R		7486	2 26	05 313	i9 1.1 11 7.	8 1 1 7	0 30 1 3 ⁻) 242 1 1051	6.83 3.97	10 4	5 5 2 19	5 MC 5 () B 3	1 6 5	8 2 18.0	2	20	s a) 56	1.04 5.50	.007	10 37) é 758	.44	6 22 .01 5 179 .01	3 1 34 1	.54 1.89	.02 .06	.10 1 .13 11

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 ICP IS 3 PPM. - SAMPLE TYPE: P1-P3 Rock P4 SILL AU** ANALYSIS BY FA\ICP FROM 10 GM SAMPLE.

DATE RECEIVED: AUG 2 1990 DATE REPORT MAILED: HM 9/90. BIGNED BY. D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Teuton Resources PROJECT KNIPPLE FILE # 90-3124

-

\mathbf{P}	а	q	\mathbf{e}	2
		_		

S	AMPLE#	Mo ppm	Cu pp#	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co	Min ppm	Fe X	As ppn	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppst	sb ppm	Bi ppm	V ppm	Ca X	P X	La ppm	Cr ppm	Mg X	Ba Ti ppm X	B prpm	AL X	No X	K W Au* X ppw pp
	G-R-128 G-R-129 G-R-130 G-T-132	5 6 7 5	8 5 8 35	67 41 21 32	2 14 5 153	.8 .5 .1 5.8	8 6 9 8	4 11 3 2	24 121 39 721	1.17 2.23 1.58 1.37	23 36 15 2	5555		3322	4 3 4 3	.2 .2 .2 2.3	2 4 2 12	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 2 1	.01 .01 .01 .01	.004 .004 .003 .002	22 20 20 12	7 5 8 6	.01 .03 .01 .01	78 .01 54 .01 71 .01 84 .01	4 2 3 4	. 15 .27 .20 .11	.04 .03 .04 .01	.12 Z .11 1 .13 1 .12 1 .12 1
	G-R-133 G-R-134 G-R-135 .G-R-136	28 2 6 12	17 62 21 4	24 3 4 21	252 11 31 26	1	5 64 42 5 74	8 34 18 2	433 14 318 14 17	4.41 20.32 5.22	151 751 409 78	> 5 5 5 5 5	ND ND ND ND	, 1 1 1	29 30 5 3	.2 .2 .2 .2	44 225 17 168	2 2 2 2 2 2 2	19 29 2	.08 .26 .25 .02	.137 .117 .007	4 4 6 2	16 27 4 11	.03 .35 .01 .01	30 .01 8 .01 16 .01 4 .01	8 4 2 2	.51 1.16 .19 .22	.01 .01 .03 .01	.36 Z .17 2 .14 1 .22 2 1
	N-R-113 N-R-114 M-R-115 M-R-116 M-R-116	3 6 2 3 1	50 28 65 27 31	12 13 13 17 14	80 31 120 64 69	.2		8 1 10 5 4	672 371 1387 945 1198	4.20 3.02 5.64 4.53 4.27	18 19 18 19 21	5 5 5 5 5 5	ND ND ND ND ND	1 1 2 1 1	12 6 19 7 5	.2 .2 .2 .2 .2	3 2 3 2 4	2 2 2 2 2 2	47 45 70 54 54	.12 .01 .21 .07 .04	.048 .024 .124 .051 .040	5 5 8 4 5	60 66 84 71 66	1.31 .92 1.75 1.52 1.47	64 .01 63 .01 55 .01 65 .01 66 .01	5	2.05 1.60 2.82 2.35 2.20	.02 .01 .01 .01 .02	.09 1 -11 1 .08 1 .10 1 .09 1
	WH-R-118 WH-R-119 WH-R-120 WH-R-121 WH-R-122	1 2 6 5	24 12 7 5 18	14 9 2 14 9	71 32 26 35 46	.4 .1 .5 .1	50 73 18 5 12	5	861 827 4953 142 240	4.08 2.49 .91 2.45 3.60	12 10 2 12 19	5 5 5 5 5	ND ND ND ND ND	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7 6 1192 7 7	.2 .2 .2 .2 .2	2 2 2 2 2 2	2 2 2 2 2 2	39 41 5 15 26	.07 .04 8.15 .09	.061 .028 .014 .070 .052	9 12 2 6 2	80 117 8 10 16	1.15 .73 .22 .76 1.19	69 -01 25 .01 18 .01 99 .01 52 .01	2 2 9 2	1.85 1.13 .31 1.24 1.65	.01 .04 .01 .02 .01	.03 .01 .01 .1 .09 .1 .04 .1
64.7143	₩-R-123 ₩-R-126 ₩-R-125 ₩-R-126 ₩-R-127	1 1 1 1 2 4	6 1 17 29 14	15 3 15 9 35	251 35 88 194 173	28.2	10 3 8 14 4 c	13 3 11 17 7	566 2498 723 1460 65 247	5.45 2.19 8.41 6.78 12.45 11 52	-11 4 14 19	5 5 5 5 5 5	ND ND ND ND ND ND	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	40 594 18 55 5 0		2 23 2 4 5	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	10 33 36 14 15	20.71 .20 1.20 .01 .03	.082 .051 .047 .046 .055 .039	25 15 17 13 5 5	14 2 11 11 5 6	.95 .38 1.18 1.19 .07 .14	52 .01 70 .01 137 .01 72 .01 81 .05	23	.69 2.79 3.05 .62 .87	.03 .01 .02 .01 .02 .03	.04 1 .11 1 .12 1 .09 1 .07 1
- 4/44/	MM-R-129 MM-R-130 MM-R-131 MM-R-132 MM-R-133	3 23 14 5	7 1 3 20	7 12 12 12 12 12 12 12 12	2 25 2 11 2 25 2 37 3 77		53		172 66 135 187 1608	2.74 4.04 3.13 6.85 .96	-18 7 15 13 4	5 5 5 5 5	ND ND ND ND	1 1 1 1	16 17 9 5 42	.2 .2 .2 .2 .2	2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	10 7 8 26 1	.23 .45 .12 .01 .97	.064 .054 .056 .015 .013	8 6 7 54	8 6 9 9	.46 .15 .60 .42 .10	78 .05 78 .05 71 .12 89 .01 182 .01	i 4 i 2 2 3 1 2	.88 .46 1.04 2.02 .56	.04 .05 .04 .02 .03	.08 1 .07 1 .09 1 .09 1 .09 1 .18 1
	NM-R-134 NM-R-135 NM-R-136 NM-R-138		2		90 90 5 6 5 114 5 70			10 25 17 27 22	1742 738 564 2481 1841	6.28 4.48 1.14 7.18 4.79	9 12 2 12 6	5 5 5 5	ND ND ND ND	1 1 1 1	65 123 83 1300 52	42.27	2 2 2 3	2 2 2 2 2 2	38 75 2 127 52	2.04 1.21 .24 6.01 2.63	.329 .208 .006 .134 .132	27 15 21 12 7	1 1 3 1 55	.14 1.31 .14 2.88 2.08	687 .11 166 .24 118 .04 873 .03 148 .3	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	.73 1.56 .63 1.01 2.41	.03 .05 .03 .02	.27 1 .12 1 .14 1 .10 1 .16 1
┢╎	UN-R-139 STANDARD C/AU-R		5	 5 8 7 40	5 134 D 131	5 88 1 272	1 1 1 7	1 3 0 32	714	1.61	5 42	5 22	i ND 2 7	1	19 7 52	· .2	2 15	2 19	2 7 57	.58 .51	- 105 - 091	16 39	2 58	1.06	157 .2 182 .0	1 2 9 33	1.24	.02	.17 .14 .11 .4

Teuton Resources PROJECT KNIPPLE FILE # 90-3124

.

															_																	
	SAMPLE#	Ho	Cu DOM	Pb	Zn	Ag	N (DOM	Co	Mn DOM	Fe		U Domi	Au	Th	Sr DOR	Cd	Sb	Bi DDM	V	Ca X	P	La	Ċr DDM	Mg X	8a DOM	Ti.	8 DOM	AL X	Na X	K X	V. V.	Au** ppb
、		PP			FF	S CERTS						FF		FF	· · ·	3.44.64	F F	F F	F.L		26 - 26 - 2 26 - 26 - 2		FI				FF				<u></u>	
ş	BC-S-050	+	78	17	-232		155	36	4382	5.51	28		<u> </u>	2	64	7.	2	2	40		-101	7	- 61-	1.13	148	.01	- 3 -	2.14	.01	.04		8
÷	80-3-052	<u> </u>	- 76	18	231		155	- 36	4392	5.47	29	5	ND	2	63	<u></u>	2	2	40	.26	.098		02	1.17	155	.01	2 7	2.13	01	,03		2
	CC-M-125	6		150	196	1.4	17	18	966	5.17	40	5	ND	3	19	1.45	8	2	22	.26	.087:	- 26	8	.37	- 147	.03	- 4	1.07	.02	.12	1	8
	СС-М-126	1	- 30	12	- 81	- Si i 1	8	- 11	983	3.23	5.5	5	ND	2	69	2 . 2	2	2	57	.78	.093	15	13	1.08	123	. 21	2	1.48	.0Z	.08	3. g t)	- 4
	CC-H-127	1	30	14	87	: Se D	10	14	1556	3.75	6	5	ND	1	55	28.12	2	2	51	.75	.117	15	11	1.31	419	્ર. 16	5	1.72	.03	. 10	~ 1	8
											\$3030.0					60.000																
	CC-\$-128	1	24	12	92		8	12	1424	4.34	2	5	ND	1	40		2	2	27	.63	.132	18	5	. 69	314	. 16	2	1.28	.03	. 12	88 1 0	. 1
	CC-S-129	2	37	45	117	े िंदू <mark>उ</mark>	38	19	1177	5.62	27	5	ND	1	24	· 7	2	2	50	.46	.137	18	42	1.86	163	.04	3	2.07	.01	.05	33 t	5
^	CC-M/S-130	6	61	317	212	1.5	14	20	1481	5.34	50	5	ND	1	22	ીં ડેટે	9	2	23	.34	.134	30	7	.32	188	.03	2	1.05	.02	.11	1.1	. é
6	co-s-040	6	76	277	247	Z.3	18	24	1441	7.37	60	5	ND	3	22	1.0	15	2	27	.29	170	26	9	.30	178	.03	2	1.16	.02	.16	684	7
Ľ.	CD-S-042	6	28	78	273	7	20	18	937	6.25	32	6	ND	2	17	2.7	5	ž	28	.24	069	18	ģ	.52	116	.01	ž	1.58	.01	.09	8.84	
Ę.		-										_		_			_	_					_				_					
Υ.	CD-S-043	5	33	77	290	7	22	18	947	6.40	39	5	ND	· 1	20	2.9	3	2	28	.25	.069	16	11	.52	116	.01	3	1.55	.01	.07	Sec. 11	15
`	00-5-044	1 5	37	64	241	Q	23	19	1015	6.20	<u>.</u>	5	ND	2	19	23	5	2	29	.26	.078	18	10	.51	117	.02	4	1.51	.01	.09	1	4
	CD-S-050	5	58	25	177		62	43	1076	6.56	178	ŝ	ND	1	31	11 A	27	2	40	.28	.109	10	27	.30	99	02	Ĺ.	1.29	.01	.21	2	
	16-8-131	1 12	56	104	244	- 288 /	19	15	1382	3.94	37	5	ND	Í	26		5	2	27	.76	.066	40	Ö,	.30	185	05	3	1.13	.03	.21	33. .	. 4
	RH-S-211	2	69	18	181	<u>.</u> .5	153	34	1899	5.61	23	5	ND	3	51	.4	2	2	40	.24	.091	6	72	1.20	137	.01	2	2.33	.02	.05		42
	·	+		_																							_	_				
	RW-S-218	2	67	15	172		149	30	1668	5.45	24	5	ND	2	52		2	2	39	.25	.087	5	_75	4.22	123	.01	2	2.32	.01	.04	1. T t e	: 5
_	RW-S-221	2	81	15	188	.z	159	28	-1390	5.96	26	5	ND	2	77	.4	2	- 2	-44	27	.101	6	77	1.33	125	.01	5	2.62	.01	.10	ं 🕇	. 5
Ĵ.	RW-S-238	2	83	13	268	4	163	42	3099	5.43	30		-NO-	2			2	2	43	.32	.107	12	61	1.29	114	.01	3	2.12	.01	.06	1	11
y.	RU-S-242	2	79	15	248	័្យត្	155	37	2670	5.16-	- 25		MD	2	44			2	40	.32	.101	11	60	1.24	109	01	3	2.01	.01	.07	1	
Ň	RW-5-243	l ž	76	10	212		- 137	- 29	2209	5.23	25	5	ND	1	- 41	5	. 2	2	42		- 098.	9	61	1.34	83	.01:	3	2.09	.01	.04	1	
		\downarrow		_																					_							
	RW-S-246	2	68	16	176	-4	- 149	32	1785	5.46	20	5	ND	- 3	57	5	2	2	39	.27	.091	6	71	1.22	121	.01	- 2-	2.26	01_	_,04	1	. 6
	STANDARD C/AU-S	l 16	58	. 39	131	6.7	. 70	31	1044	3.94	6.42	19	7	38	53	19.0	15	18	56	.51	.089	37	57	. 90	180	09	- 33	1.89	.06	. 13	-13	-46

Page 4



