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ASSESSMENT REPORT
GEOCHEMICAL REPORT ON
THE RED BLUFF CLAIM GROUP
DAK RIVER, ALICE ARM AREA, B.C.
SKEENA M.D.
103 P 11 W

CO-ORDINATES

55° 32' 30"

129° 26' 00"

OWNER OF CLAIMS

MICHAEL BOYLE
619 - 602 West Hastings Street
Vancouver, B.C.
V6B 1P2

OPERATOR

MICHAEL BOYLE

CONSULTANT

HAROLD M. JONES, P.Eng.
HAROLD M. JONES & ASSOCIATES INC.

AUTHOR

HAROLD M. JONES, P.Eng.

November 13, 1991

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SUMMARY

The Red Bluff Group is located in coastal British Columbia at the head of Alice Arm, approximately 40 kilometres southeast of Stewart. The claims lie immediately north of the head of the inlet.

The claims are underlain by a package of Hazelton Group sediments and volcanics which encompass a large feldspar porphyry body. This intrusive/extrusive body is bleached, sericitized, carbonatized, and locally silicified and well mineralized with pyrite and pyrrhotite on fractures. It also hosts numerous quartz veinlets accompanied by minor pyrite, molybdenite, pyrrhotite and chalcopyrite.

No detailed exploration has been conducted on the property. Reconnaissance sampling by Amax (1980) and Noranda (1990) returned a number of silt, soil and rock samples anomalous in gold and copper. The 1991 soil sampling program returned anomalous assays in gold, arsenic, copper, molybdenum, zinc and lesser in silver, confirming that gold along with copper is present on the property. It was concluded that because of the above mineralization associated with an intrusive(?) in the Hazelton Group rocks that detailed exploration on the claims is both warranted and recommended.

INTRODUCTION

During the period August 12 - August 25, 1991, reconnaissance soil sampling was conducted on the Red Bluff Group which is located in the Alice Arm area, B.C. This work was part of a larger program recommended for the property by the writer, but which had to be curtailed due to limited finances. The purpose of this work was to examine an area which, from previous work by others (see History), identified a large area from which rock and soil samples returned anomalous values in gold and copper.

Field work was conducted by one prospector and one helper, operating out of a fly camp on Dak River. The writer did not visit the property but has conducted field work on the adjoining MB claims and prepared an assessment report on it (Jones, 1990).

Location and Access

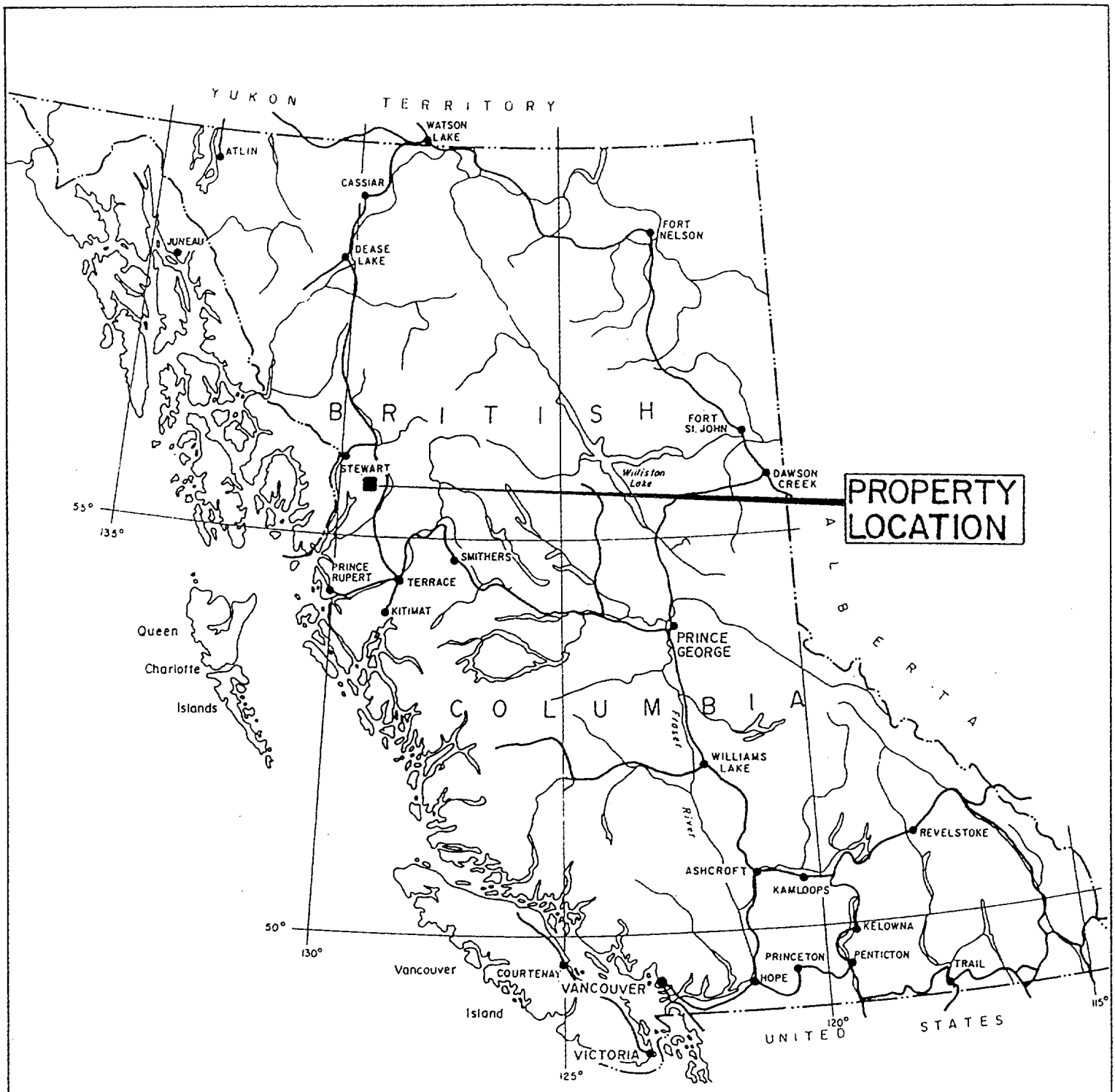
55° 32' 30"	)	to approximate centre
129° 26' 00"	)	of claims

The Red Bluff Group is located in coastal British Columbia at the head of Alice Arm, an inlet branching off the north end of Observation Inlet (Figure 1). It is approximately 40 kilometres southeast of Stewart and 90 kilometres northwest of Terrace.

Locally, the claims straddle the Dak River, lying on the southern slopes of Mt. McGuire and the northwestern slopes of Wilaux Mountain.

Direct access is by helicopter from Stewart or Terrace. By prior arrangement, one can drive a vehicle to Kitsault, located seven kilometres south of the property, then take a helicopter from here to the property. The recently completed program was mobilized from Kitsault.

A Cat road, constructed by Newmont Mining Corp. in the mid-1960's to service their Ajax molybdenum property, traverses the property following the Dak River. Its numerous bridges are now washed out, consequently it is not serviceable.



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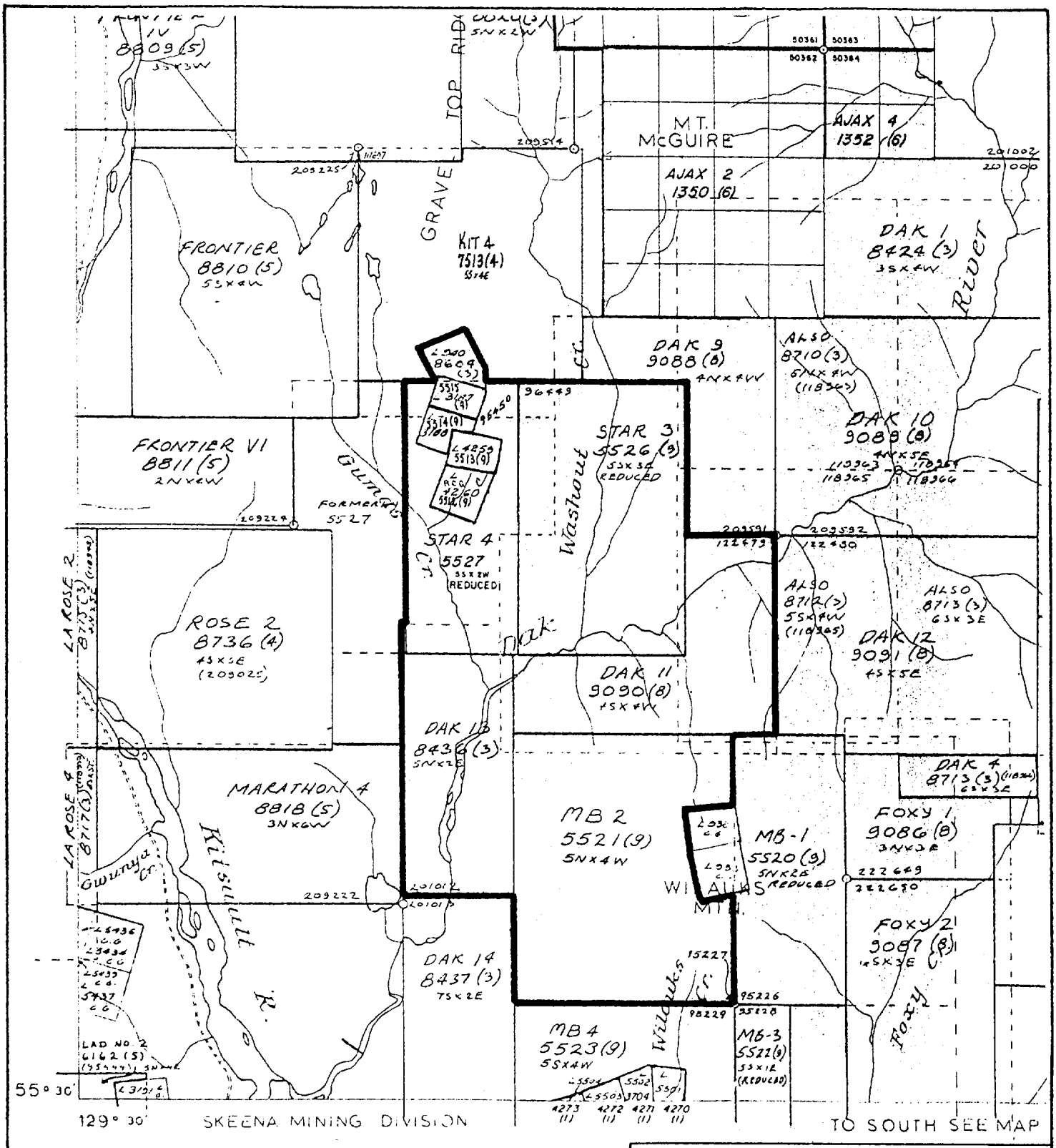
0 100 200 300 MILES
0 100 200 300 400 500KM.

M. BOYLE	
H. M. JONES & ASSOCIATES INC.	VANCOUVER, B.C.
RED BLUFF GROUP LOCATION MAP DAK RIVER, ALICE ARM AREA N.T.S. 103P-11W SKEENA M.D., B.C.	
SCALE : AS SHOWN H.M. JONES	NOV. 1991 FIG. 1



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RED BLUFF GROUP
CLAIM MAP

DAK RIVER, ALICE ARM AREA

NTS 103P-11W SKEENA M.D., B.C.

0 1 2 3 KM.

SCALE : AS SHOWN	NOV. 1991	FIG. 2
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CHONG

Topography and Vegetation

The property is characterized by very steep mountain slopes which are covered by mature conifers and thick undergrowth. Above approximately 1,050 metres elevation open grassy alpine terrain is common. Foot travel on the property is difficult and slow.

The Dak River flows through the property. Due to the heavy rainfall in this area, the level of the river fluctuates greatly, making safe crossing of the river dangerous to impossible.

Property and Title

The Red Bluff Group consists of five claims and five reverted Crown grants totalling 80 units. They are:

Claim Name	No. of Units	Record No.	New Record No.	Expiry Date*
Devil's Club	1	5512	251507	September 19, 1997
Red Bluff	1	5513	251508	September 19, 1997
Albion	1	5514	251509	September 19, 1997
Sunbeam	1	5515	251510	September 19, 1997
Sub-Collector	1	8604	253809	March 22, 1998
Star 3	15	5526	251519	September 26, 1992
Star 4	10	5527	251520	September 26, 1992
Dak 11	20	9090	254295	August 22, 1992
Dak 13	10	8436	253641	March 1, 1993
MB 2	20	5521	251516	September 26, 1992

* Pending acceptance of assessment work filed on September 18, 1991

This claims are owned by Michael Boyle, 619 - 602 West Hastings Street, Vancouver, B.C. V6B 1P2.

History

The property is located within an area having a long mining history. The old copper mining and smelting town of Anyox is located on Observatory Inlet approximately 27 kilometres to the southwest; the Dolly Varden and Torbrit silver mines are located approximately 17 kilometres to the north-northwest; and Amax's open pit molybdenum mine is located 3 kilometres to the southeast of the property.

Numerous mineral occurrences are known within the general Red Bluff Group area but most were not explored in detail. Newmont's Ajax property, located 6 kilometres to the north, is an exception. Detailed exploration on this property indicated a large mineral inventory. Published reserves for it are 190 million tons grading 0.12% Mo.

Kennco Exploration and Amax explored the northern part of the Red Bluff Group in respectively 1968 and 1980. This area included the Red Bluff, a very large alteration zone which was explored for its porphyry copper potential (included within the reverted Crown grants). The southern end of Amax's geochemical grid covered what is now the northwest corner of MB 2 claim. In this area, they obtained two rock chip samples assaying respectively 140 and 220 ppb gold. Slightly west of these samples, one soil sample assayed 1700 ppb gold. To the north of Dak River they obtained similar anomalous assays from scattered locations.

Numerous old mineral occurrences are located on or in close proximity MB 2 claim. Their locations are shown on Figure 3 and their map location number follows their name, e.g. (83). The mining properties are: San Diego (83), Devlin Zone (84), Mac (Sunrise, Silver Band) (92), Standard (93), Kent and Maple Leaf (94), Highland (96), Billie Mac (97), Alamoza and Lone Star (101), Copper Creek (107), Silver Bell (108), Casy and Brown Bear (109), and Thru Mile (110). All have showings mineralized with sphalerite and lesser galena and silver.

Since acquiring the property, M. Boyle conducted several prospecting programs on the MB claims. These included locating a number of the old showings and opening them up by hand trenching, drilling and blasting. Some trenches, especially on the

old Standard Crown grant (L. 4270), exposed interesting sphalerite and galena mineralization

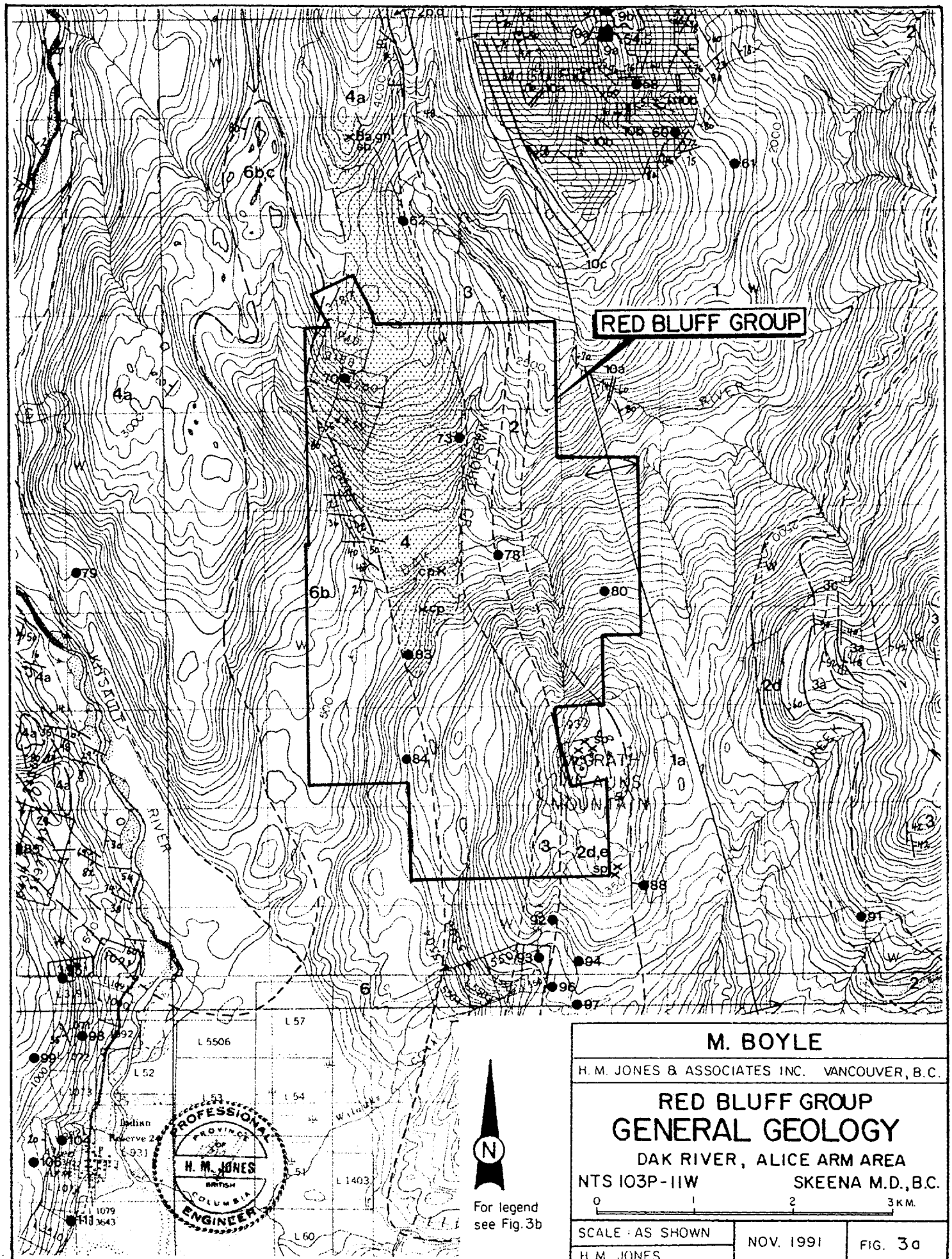
In 1990 Noranda Exploration Ltd. examined the northern end of the Red Bluff property, in the vicinity of the gossanous bluff of the same name. They ran several reconnaissance soil lines. Results from these returned some samples anomalous in gold and copper. They were sufficiently interested in the claims to make a tentative offer to option the property.

GEOLOGY

General Geology

The claims are underlain by north to northwest striking Lower to Middle Jurassic sediments and volcanics and include an intrusive complex and a large intrusive(?)/extrusive body. The eastern edge of the property is underlain primarily by black siltstone, argillite and shale. These sediments are in contact to the west with black argillaceous rocks intruded by a dyke swarm which is at least 300 metres wide. The dykes, primarily augite porphyry, also strike north to north-northwest. This unit is bounded to the west by an intrusive(?)/extrusive feldspar porphyry, which is up to 1,500 metres wide. Middle to Upper Jurassic sediments lie to the west of the porphyry and underly the western claim boundary (Black, 1949).

The feldspar porphyry trends approximately through the centre of the property. In the northwestern part of the claim group it is strongly silicified, sericitized and pyritized over a large area. This alteration zone was the area of interest for both Kennco's and Amax's past exploration and for the current prospecting and reconnaissance soil sampling.



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RED BLUFF GROUP
GENERAL GEOLOGY

DAK RIVER, ALICE ARM AREA

NTS 103P-11W SKEENA M.D., B.C.

0 1 2 3 KM.

SCALE : AS SHOWN	NOV. 1991	FIG. 3a
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PROVINCE OF BRITISH COLUMBIA
MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

OPEN FILE MAP 1986/2

GEOLOGY OF THE KITSAULT RIVER AREA
NTS 103P

Geology by D. J. Alldrick, G. L. Dawson, J. A. Bosher, and I.C.L. Webster

Compilation and drafting by G. L. Dawson

LEGEND

INTRUSIVE ROCKS

TERTIARY
EOCENE AND YOUNGER

10 (a, b, c) DYKES: diorite, microdiorite (a); lamprophyre (b); diorite, sill phase (c)

EARLY TO MIDDLE EOCENE

9 (a, b, c) ALICE ARM INTRUSIONS: quartz monzonite (a); biotite quartz monzonite porphyry (b); sericite quartz monzonite porphyry (c)

8 (a, b) COAST RANGE BATHOLITH: quartz monzonite (a); granodiorite (b)

VOLCANIC AND SEDIMENTARY ROCKS

QUATERNARY
PLEISTOCENE

7 MAFIC VOLCANICS: olivine basalt flows

JURASSIC
MIDDLE TO UPPER JURASSIC

6 (a, b, c, d) UPPER SEDIMENTARY UNIT: basal fossiliferous wacke (a); siltstone, shale, and minor sandstone (b); intraformational conglomerate (c); limestone (d)

LOWER TO MIDDLE JURASSIC

5 (a, b, c) EPICLASTIC AND FELSIC VOLCANIC UNIT: maroon and green volcanic conglomerate, breccia, and minor sandstone (a); black siltstone, argillite, wacke, and limestone (b); greenish grey dacitic pyroclastic rocks and feldspar porphyritic flows (c)

4 (a, b, c, d, e, f) INTERMEDIATE VOLCANIC UNIT: green and minor maroon andesite pyroclastic rocks (a); feldspar ± hornblende andesite porphyry (b), black siltstone (c); maroon siltstone, sandstone, and conglomerate (d); limestone and fossiliferous limestone (e); chert (f)

3 (a, b, c, d) MIDDLE SEDIMENTARY UNIT: black siltstone (a); limestone and fossiliferous limestone (b); green and purple volcanic breccia with minor siltstone, sandstone, and conglomerate (c); interbedded siltstone, sandstone, wacke, and polymictic pebble conglomerate (d)

2 (a, b, c, d, e) MAFIC VOLCANIC UNIT: olivine porphyry basalt flows (a); augite porphyry basalt flows and pillowed flows (b); basaltic pyroclastic rocks (c); basaltic conglomerate (d), black siltstone, sandstone, wacke, and limestone (e)

1 (a, b) LOWER SEDIMENTARY UNIT: black siltstone, argillite, shale (a); black wacke, sandstone, limestone (b)

ALTERATION

BIOTITE HORNFELS

SILICIFICATION-SERICITIZATION-PYRITIZATION

SYMBOLS

Adit
Anticline (normal, overturned)
Bedding, tops unknown (horizontal, inclined, vertical)
Bedding, tops known (inclined, overturned)
Contours (interval 500 feet) — 1500
Fault, arrows indicate sense of movement (defined, approximate)
Fossil locality
Geological contact (defined, approximate, assumed)
Height in feet above mean sea level — 5340'
Limit of alteration
Mineral occurrence, trench, or pit
Minfile location: accurate within 500 metres; accurate within 1 kilometre
Schistosity (horizontal, inclined, vertical)
Syncline (normal, overturned)
K-Ar Date (Ma) — 52.5

MAP NO.	NAME	COMMODITIES	MINFILE NO.
83	SAN DIEGO	Cu	155
84	DEYLIN ZONE	Ag,Zn	-
85	PAY MASTER, ALICE	Ag	130
86	BEAVER EXTENSION	Au	137
87	IRON	Au,Ag	136
88	MAC, SUNRISE, SILVER BAND	Zn	147
89	ANNA MACK	Ag	129
90	GOLDEN CREST	Cu	138
91	HORSESHOE	Cu	146
92	SILVER STAR	Ag,Pb	169
93	STANDARD	Zn	148
94	KENT, MAPLE LEAF	Zn	151
95	LONE MAID	Zn	128
96	HIGHLAND	Zn	150
97	BILLY MAC	Zn	149
98	ESPERANZA	Ag,Cu,Pb,Zn	126
99	ACADIA	Ag,Zn	127
100	BILLY BARTON	Ag,Pb,Zn	123
101	LONE STAR, ALAMOZA	Zn	153
102	UTOPIA, LYON	Ag,Pb,Zn	122
103	INGRAHAM'S	Ag,Pb	134
104	WOLF	Ag	125
105	SILVER LEAF	Ag	135
106	INDEPENDENT	Ag,Pb,Zn	131
107	COPPER CREEK	Pb	251
108	SILVER BELL	Pb,Zn	154
109	CASEY, BROWN BEAR	Pb	132
110	THREE MILE	Ag,Pb,Zn,Au	133

Abbreviations

Barite	Ba	Lead	Pb
Chalcopyrite	cp	Molybdenum	Mo
Chlorite	chl	Nickel	Ni
Cobalt	Co	Pyrite	py
Copper	Cu	Pyrrhotite	po
Epidote	ep	Silica	Si
Galena	gn	Silver	Ag
Gold	Au	Sphalerite	sp
Iron	Fe	Zinc	Zn
Jasper	ja		

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RED BLUFF GROUP
LEGEND FOR FIG. 3a

DAK RIVER, ALICE ARM AREA

N.T.S. 103P-11W SKEENA M.D., B.C.

SCALE : AS SHOWN	NOV. 1991	FIG. 3b
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Local Geology

The Red Bluff Group encompasses a prominent gossan located on the ridge between Gumas and Washout Creeks. This area is covered by Star 3 and 4 claims and four reverted Crown grants - L.940, L.3187, L.3188, L.4259, and L.4260 (see Figure 2).

The Red Bluff area is underlain by an elongate feldspar porphyry body 4 kilometres long by 0.75 - 1.5 kilometres wide trending northwesterly. It is intrusive and/or extrusive in origin and is surrounded by a sedimentary unit consisting of argillite, siltstone, greywacke and minor conglomerate. The porphyry is bleached, sericitized, carbonatized, and locally silicified. It is well mineralized with pyrite and pyrrhotite on fractures as well as with numerous quartz veinlets accompanied by minor pyrite, molybdenite, pyrrhotite and chalcopyrite.

FIELD PROGRAM

Conducting field work on the Red Bluff Group was slow, difficult and time consuming. Access was the first problem - not only was time lost due to unflyable weather - helicopter mobilization from Kitsault - but helicopter lending sites were very limited. Due to steep terrain and heavy forest cover, landing sites were only available on gravel bars on the Dak River, elevation 150 metres, or above timber line in the alpine terrain elevation 915 metres. A camp site could not be located on the slope north of the Dak River, which would be the best location, so it was established on a gravel bar on the river, slightly downstream from the confluence of Gumas Creek. Because of this camp location, work was concentrated on the lower slopes both north and south of the river rather than entirely on the northern slopes.

Ground travel was slow due to the thick bush. A trail was cut from the camp for approximately 450 metres south along the west side of Dak River to a broader part of the river. At this point a crossing was made by falling several large trees across the river (river too fast and deep to be crossed on foot), then clearing the branches to form a crude bridge. This provided access to the east side of the river and

permitted soil sampling in the area. Prior to establishing this route, other crossing sites were examined north of the camp but were not suitable.

A second trail was cut for approximately 400 metres up-stream, also on the western side of the river. This provided access to the area to be sampled between Gumas and Washout Creeks.

On the east side of the river a trail-control line was brushed out for 700 metres to give access to and locate the site of two sample lines. The first sample line was run northeasterly on the approximate location of the 600 foot (183 metre) topographic contour line - Line 600S. It was flagged and soil sampled at 50 metre intervals for 1,450 metres, terminating near a major creek canyon. The second line - Line 1400S - was run in the same direction on the approximate location of the 1,500 foot (457 metre) topographic contour line for 600 metres, terminating in a deep gulley. It was also flagged and sampled at 50 metre intervals (Figure 4).

Survey control was maintained using Silva compass, pocket altimeter and a clinometer. Due to pressure changes during the day, elevations along the sample lines would vary. Line 1400S started near the 1,500 foot level, but appeared to terminate near 1,600 - 1,650 foot level.

The area between Gumas and Washout Creek was sampled in a similar manner to that described above. A trail-baseline was brushed out from the end of the access trail due north for approximately 1,200 metres. Using the altimeter, the approximate location of the 1,600, 1,400, and 1,200 foot (488, 427, and 366 metre) topographic contours were located on this baseline. Sample lines were then run along the contours, marking them with flagging and collecting a sample at each 50 metre station. Line 1200N (1,600 feet elevation) was sampled from 600W to 300E, line 1000W (1,400 feet elevation) from 600W to 250E, and line 800N (1,400 feet elevation) from 500W to 300E (Figure 4).

All samples were taken from the B horizon, using a mattock, and placed in a kraft paper envelope upon which was marked the coordinates of the sample site. Upon completion of the project, all samples were sent to Acme Analytical Laboratories, 852 East Hastings Street, Vancouver, B.C. for 30 element ICP analyses plus gold by acid leach - atomic absorption finish. Teck Exploration Ltd., on behalf of the property owner, paid approximately 80% of the assay costs. This was done to earn the first rights of refusal on the property.

A total of 98 soil samples were collected. Elements considered of interest were Au, Ag, As, Cu, Mo and Zn. The assay results for these elements are shown on Figures 5 to 7. The laboratory procedure is summarized on the assay certificates which accompany this report as Appendix I

RESULTS

Frequency distribution curves were drawn for each of the above elements (Appendix II). Curves for all elements except arsenic are skewed, and those for gold, copper and molybdenum are irregular, suggesting possible several sample populations. Since the two areas sampled are at least 700 metres apart and approximately half of the samples came from each area, there are not sufficient assays from each area to calculate a meaningful value for the various orders of anomalies. For this reason the following values were arbitrarily taken from the above plots.

Element	Background	Anomalous
Gold	0 - 80 ppb	> 80 ppb
Silver	0 - 2.5 ppm	> 2.5 ppm
Arsenic	0 - 60 ppm	> 60 ppm
Copper	0 - 250 ppm	> 250 ppm
Molybdenum	0 - 18 ppm	> 18 ppm
Zinc	0 - 325 ppm	> 325 ppm

The assays are plotted on Figures 5 to 7. These figures illustrate that a number of sample sites are anomalous in one or more of the elements assayed. Some of the more significant areas of interest are:

CHONG

L.4260

STAR 4

STAR 3

2000

1500

L 1200 N

6+00W

3+00W

3+50E

0+00

L 1000N

6+00W

3+00W

2+50E

5+00W

3+00W

3+00E

L 800 N

1000

WASHOUT CREEK

GUMAS CREEK

BRUSHED OUT B.L.

14+50E

L 600S

DAK 13

12+00E

9+00E

CAMP 8

CUT TRAIL

6+00E

DAK 11

MB 2

L 1400S

6+00E

DAK RIVER

BRUSHED OUT B.L.

3+00E

3+00E

500

500

1000

1500

0+00

2000

2500

3000

LEGEND

• SOIL SAMPLE LOCATION

Base map after Amax, 1980
Contour in feet

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RED BLUFF GROUP
SAMPLE LOCATIONS

DAK RIVER, ALICE ARM AREA

NTS 103P-11W SKEENA M.D., B.C.

0 200 400 600METRES

SCALE : AS SHOWN	NOV. 1991	FIG. 4
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CHONG

L.4260

STAR 4

STAR 3

L1200N

L1000N

L800N

L600S

L1400S

2000

1500

1000

500

2500

3000

WASHOUT CREEK

GUMAS CREEK

DAK RIVER

BRUSHED OUT B.L.

BRUSHED OUT B.L.

CAMP

CUT TRAIL

DAK 13

DAK 11

MB 2

6+00W • 39,12 • 47,.6 • 14,.1 • 36,.7 • 42,.6 • 39,.6 • 83,1.1 • 25,.9 • 36,.3 • 22,1.6 • 58,.4 • 66,.6 • 52,.9 0+00 • 71,1.8 • 82,.3 • 61,1.0 • 41,.6 • 15,1.4 • 57,1.1 • 82,.9 3+50E

6+00W • 34,.3 • 13,.5 • 45,.5 • 360,1.0 • 29,.8 • 80,7.1 • 44,.8 • 23,.2 • 16,.1 • 18,.8 • 41,.5 • 12,.7 • 58,2.3 • 41,.8 • 47,.4 • 37,.3 • 54,.5 • 10,.0 2+50E

5+00W • 26,2.5 • 94,.8 • 24,1.4 • 23,1.0 • 37,.7 • 21,1.0 • 29,.7 • 115,.6 • 49,1.0 • 19,1.2 • 40,.8 • 40,.7 • 55,1.1 • 66,.6 • 88,1.2 • 10,.9 3+00E • 49,1.4

14+50E • 19,.8 • 23,.5 • 7,1.5 • 25,.4 • 140,1.6 • 260,.7 • 115,.1 • 1030,.6 • 130,.3 • 3,.8 • 62,1.0 • 135,1.6 • 21,1.0 • 6,1.3 • 24,1.7 • 88,.6 • 13,1.1 • 6,.6 • 22,.6 • 10,.4 • 6,.8 • 10,.4 • 66,.5 • 12,.2 • 10,1.1 • 6,.5 • 10,.9 • 6,.3 • 9,1.3 • 8,.3

6+00E • 26,.6 • 64,.6 • 111,.4 • 168,.8 • 267,.4 • 78,.5 • 97,.2 • 30,1.1 • 28,.5 • 9,.9 • 4,.3 • 3,.6 • 1,.3 0+00

Base map after Amax, 1980
Contour in ft.

LEGEND

9 , 1.3 Au ppb , Ag ppm

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RED BLUFF GROUP
SOIL GEOCHEMISTRY - Au, Ag

DAK RIVER, ALICE ARM AREA

NTS 103P-11W SKEENA M.D., B.C.

0 200 400 600METRES

SCALE : AS SHOWN	NOV. 1991	FIG. 5
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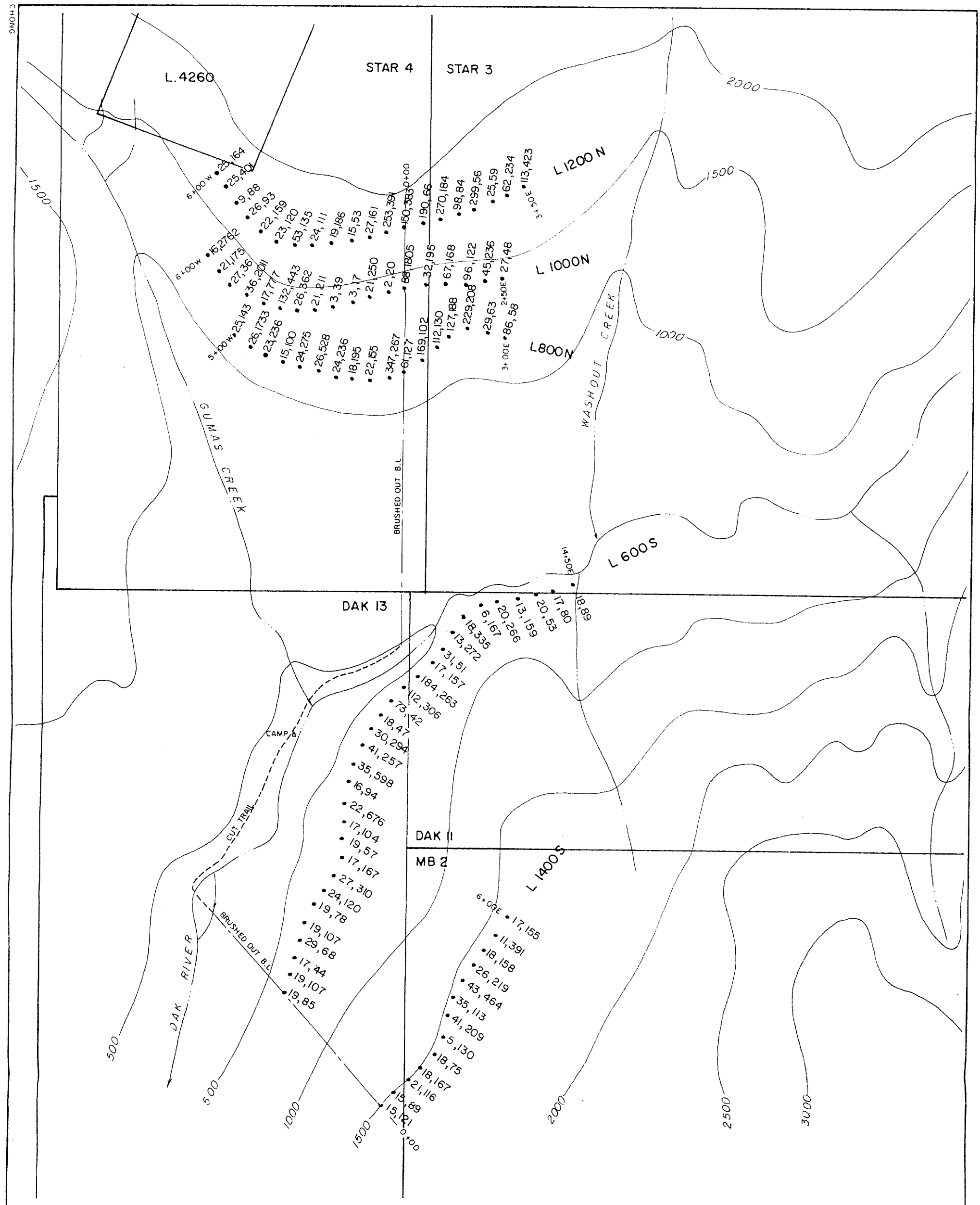

Base map after Amax, 1980
Contour in ft.

LEGEND

15, 121 As ppm, Cu ppm

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RED BLUFF GROUP
SOIL GEOCHEMISTRY- As, Cu
DAK RIVER, ALICE ARM AREA

NTS 103P-11W SKEENA M.D., B.C.

0 200 400 600 METRES

SCALE : AS SHOWN	NOV. 1991	FIG. 6
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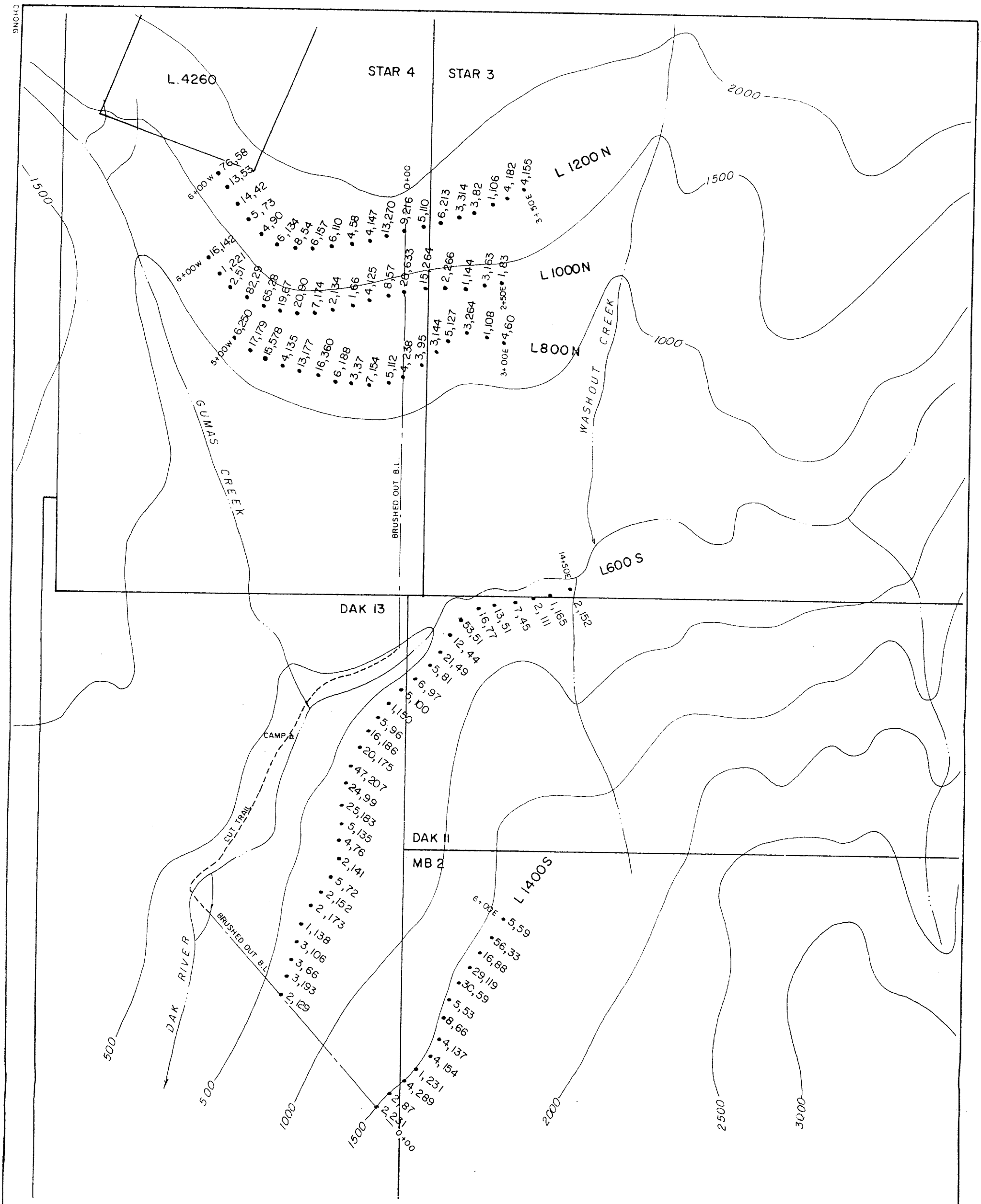

Base map after Amax, 1980
Contour in ft.

LEGEND

2,231 Mo ppm , Zn ppm

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RED BLUFF GROUP
SOIL GEOCHEMISTRY - Mo, Zn
DAK RIVER, ALICE ARM AREA

NTS 103P-11W SKEENA M.D., B.C.

0 200 400 600METRES

SCALE : AS SHOWN	NOV. 1991	FIG. 7
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Area East of Dak River

1) **Line 600S:**

- From 1050E to 1300E - four assays range from 115 to 260 ppb Au and one sample assayed 1030 ppb Au. Three of the samples are anomalous in copper - assays from 266-335 ppm Cu - and one anomalous in molybdenum 21 ppm Mo.
- From 850E to 950E three samples were anomalous in arsenic - assayed from 73 - 184 ppm As and included two also anomalous in copper - 263 and 306 ppm Cu.
- From 550E to 750E - four of five samples were anomalous in copper, assaying from 257 to 676 ppm Cu. Four samples were also anomalous in molybdenum, assaying from 20-47 ppm Mo and one was anomalous in gold - 88 ppb Au.

This line is at the base of a steep westerly facing slope. The above significant assays suggest that the area on and above this line warrant further investigation.

2) **Line 1400S:**

- From 300E to 500E four samples assayed 97 - 267 ppb Au and one 78 ppb Au. Two were anomalous in molybdenum - 29 & 30 ppm Mo, and all were elevated in copper with one being anomalous - 464 ppm Cu. This line is on the same steep slope but approximately 400 - 500 metres east of and 275 m (900 feet) higher in elevation than line 600S. The results indicate that this area also requires additional exploration.

Area Between Gumas and Washout Creeks

1) **Lines 800N, 1000N, and 1200N:**

- A broad zone extending from approximately 50W to the east end of each line - 250E-350E - contains many samples sites anomalous arsenic - 18 out

of 24 samples assayed between 61 - 347 ppm As. Within this zone are scattering of samples anomalous in gold - 82 - 88 ppb Au; in copper - 383 - 1805 ppm Cu; and one each in molybdenum and zinc - 20 ppm Mo and 633 ppm Zn, respectively.

2) **Lines 800N and 1000N:**

- A broad area extending from approximately 300W - 450W on line 1000N to 250W - 450W on line 800N contains a number of samples anomalous in one or more of the elements assayed. These include gold - 80 to 360 ppb Au; one silver - 7.1 ppm Ag; copper - 275 - 2011 ppm Cu; molybdenum - 19 to 92 ppm Mo; two zinc - 360 and 578 ppm Zn and one arsenic - 132 ppm As.

Lines 800N to 1200N are in terrain which slopes moderately to steeply southward, consequently there would be considerable migration, especially downslope, of the metallic ions in the soil. Additional sampling is required to define the limits of the anomalous areas.

DISCUSSION

The field work was planned to confirm and possibly expand on areas found by Amax Exploration Ltd. (1980) and Noranda Exploration Ltd. (1990) to be anomalous in gold, copper and molybdenum. The work described above confirms that significant geochemical values are present for gold, arsenic, copper, molybdenum, zinc and to a lesser degree silver. The 1991 program was a reconnaissance rather detailed program but it clearly indicates that significant mineralization may be present in the area and that additional exploration is warranted.

A literature research of the Red Bluff area indicated that no systematic, detailed exploration had been conducted on the property in the past. Since it offers the potential for hosting copper-gold mineralization related to an intrusive(?) body within Hazelton Group rocks, a detailed exploration program is warranted on the property.

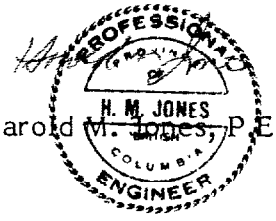
CONCLUSION

It is concluded the results from the reconnaissance-type geochemical soil sampling program confirm the presence of possibly significant precious and base metal mineralization on the property related to a feldspar porphyry intrusive(?) in Hazelton Group rocks.

RECOMMENDATIONS

It is recommended that a detailed geological-geochemical program be conducted on the property followed by geophysical and drilling programs if warranted. Since access within the property is difficult, it is recommended that an experienced crew prepare several heliports throughout the claims so that camp sites may be established in the desired locations. This would enable field personnel to avoid long steep hikes to the working areas and the difficult and dangerous crossings on the Dak River.

Respectfully submitted,



Harold M. Jones, P. Eng.

REFERENCES

Black, Jim (1949): Zinc Deposits on McGrath Mountain, in Minister of Mines Annual Report 1949, pp. A76-79.

Hanson, G (1935): Portland Canal Area, British Columbia, Geol. Surv. Canada Memoir, 175.

MMAR: 1916, p. 65; 1918, pp. 68-69; 1922, p. 62; 1923, p.61; 1925, p. 73; 1926, p. 78; 1927, p. 72; 1928, p. 89; 1929, p. 89; 1931, p. 39; 1949, p. 76-79; 1967, p. 43.

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Grove, E.W. (1986): Geology of the Mineral Deposits of the Unuk-Salmon River - Anyox Area, Ministry of Mines, Energy & Petroleum Resources, Bulletin 63.

Jones, H.M. (1990): Diamond Drilling Report on MB Claim Group, Wilaux Mountain, Alice Arm Area, Skeena Mining Division, 103P11W, Assessment Report.

Noranda Exploration Ltd. (1990): Reconnaissance Geochemical Survey Map, Red Bluff Area, private document.

Assessment Report 9295 - Amax Exploration Ltd. - 1980.

CERTIFICATE

I, Harold M. Jones, of the City of Vancouver, British Columbia, do hereby certify that:

1. I am a Consulting Geological Engineer with offices at 605 - 602 West Hastings Street, Vancouver, British Columbia.

2. I am a graduate of the University of British Columbia in Geological Engineering, 1956.

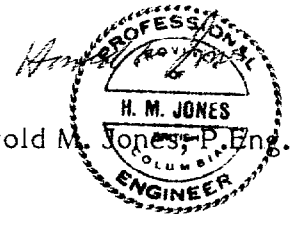
3. I have practised my profession as a Geological Engineer for over 30 years.

4. I am a member of the Association of Professional Engineers of British Columbia, Registration No. 4681.

5. I examined the MB claims, a part of which is included in the Red Bluff Group, on October 4, 1986, September 4, 1987 and September 19, 1988, and prepared an assessment report on them dated October 19, 1990. I reviewed the data on the recently completed geochemical program as well as reviewed the data listed under "References" in this report.

6. I have no interest in, nor do I expect to receive any, in the Red Bluff Group or any business ventures of the owner.

Dated at Vancouver, B.C. this 15th day of November, 1991.



Harold M. Jones, P.Eng.

APPENDIX I

STATEMENT OF COSTS

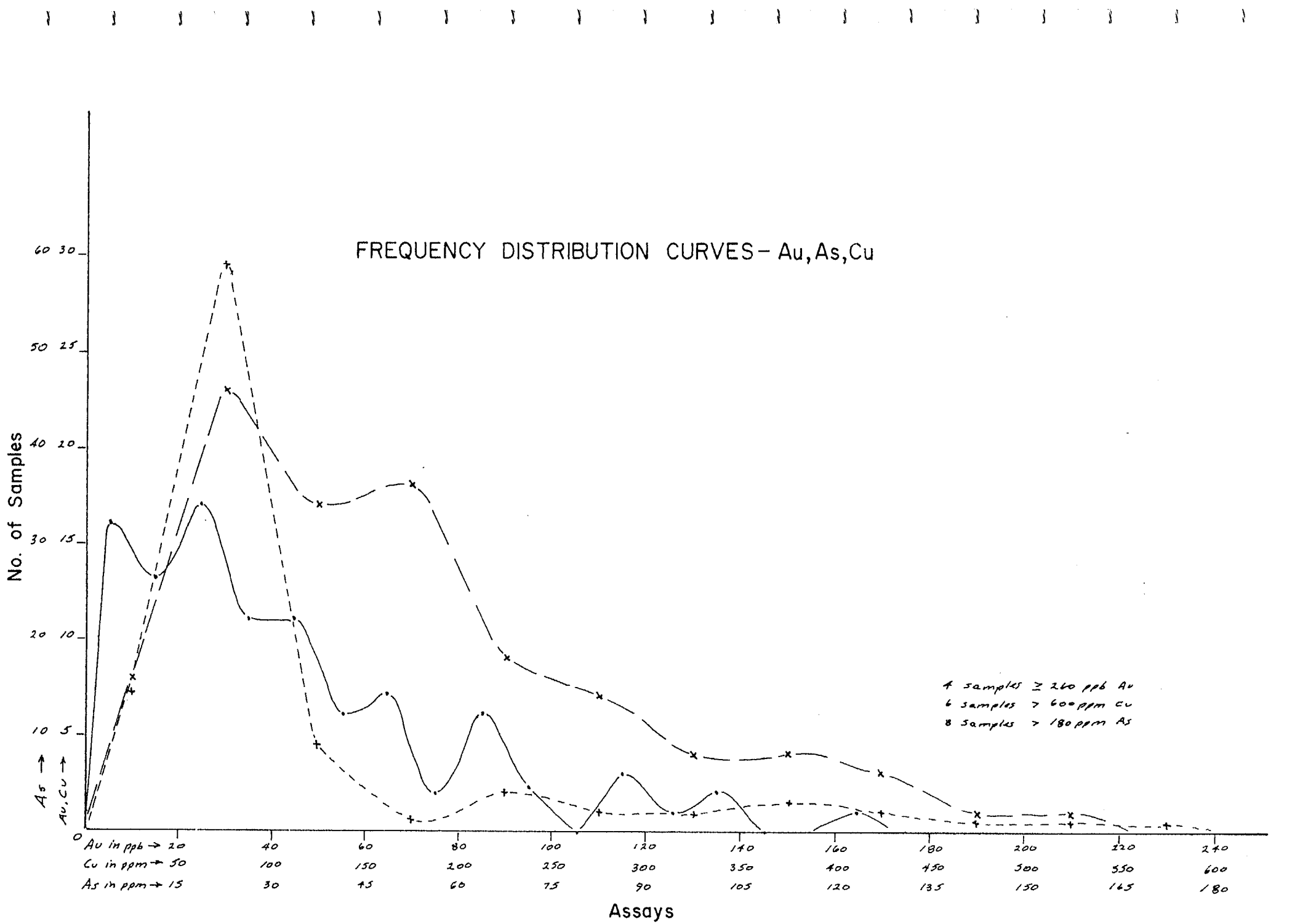
APPENDIX I

STATEMENT OF COSTS

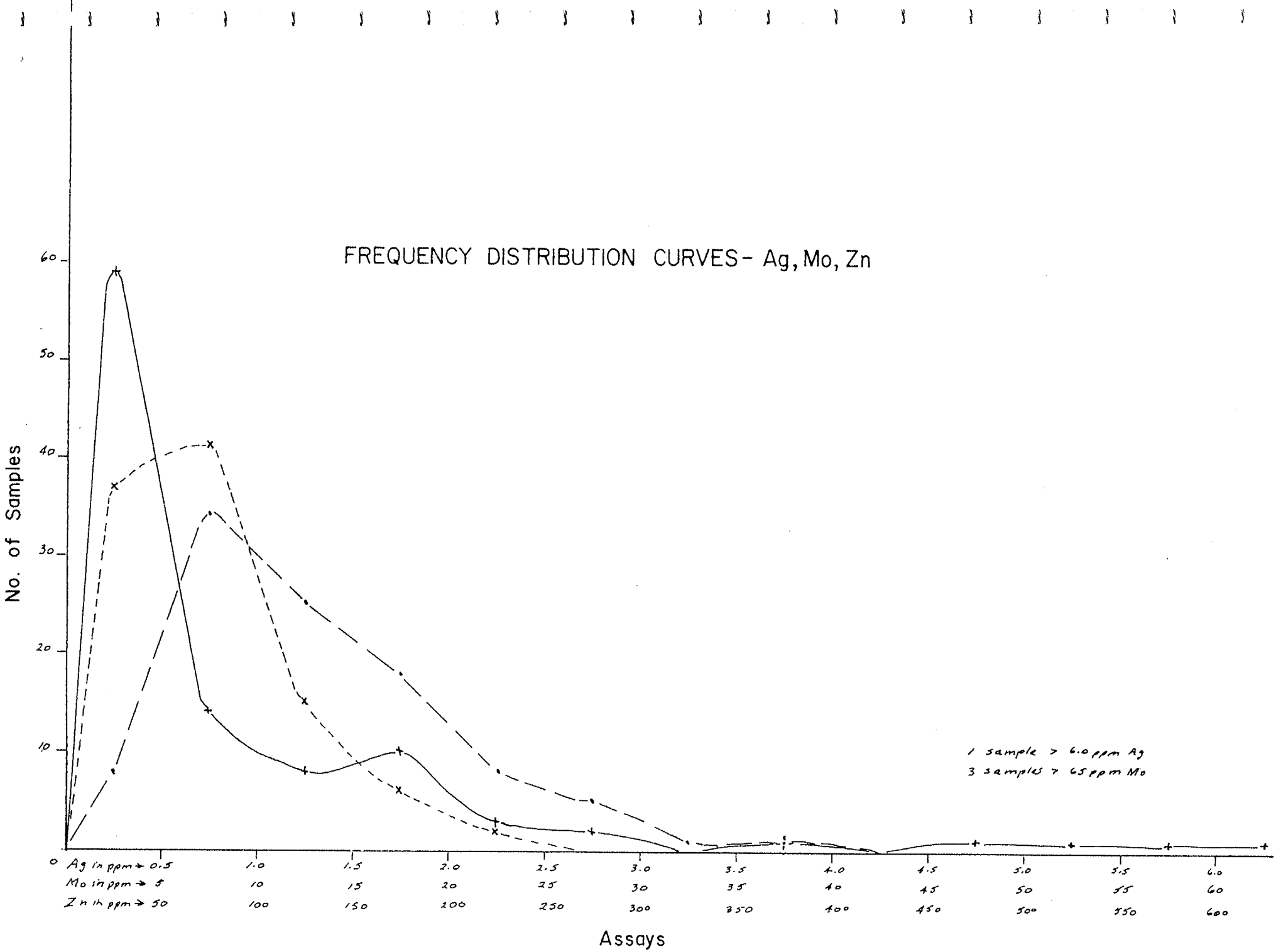
Wages		
A. Pedersen, Prospector-Soil Sampler		
Travel time - by vehicle:		
Vancouver-Stewart-Kitsault return		
Aug 9-11, 26-28 - 6 days at $100/day	$ 600	
Field work - trail cutting, grid layout, soil sampling		
Aug 12-25, 1991 - 14 days at $175/day	2,450	
R. Thomas, Soil Sampler-Field Assistant		
Travel time - by vehicle:		
Vancouver-Stewart-Kitsault return		
Aug 9-11, 26-28 - 6 days at $100/day	600	
Field work - trail cutting, grid layout, soil sampling		
August 12-25 - 14 days at $175/day	2,450	$ 6,100
Room and Board		
Traveling - Vancouver - Kitsault and return by truck, 2 men at $161/day, 6 days	966	
Field grocery costs - 14 days at $22.50/man/day	630	1,596
Truck Rental		
4x4 pick-up at $50/day + insurance + fuel		1,450
Assays		
98 soil samples at $10.50/sample ICP + Au		1,029
Helicopter		
Vancouver Island Helicopters - mob & demob		2,536
Report and Maps		
H.M. Jones, P.Eng. - report and maps		686
Total		$ 13,397

APPENDIX II

ASSAY CERTIFICATES AND FREQUENCY DISTRIBUTION GRAPHS


FREQUENCY DISTRIBUTION CURVES – Au, As, Cu
No. of Samples
As →
Au, Cu →
60 30
50 25
40 20
30 15
20 10
10 5
0
4 samples ≥ 260 ppb Au
6 samples > 600 ppm Cu
8 samples > 180 ppm As
Au in ppb → 20 40 60 80 100 120 140 160 180 200 220 240
Cu in ppm → 50 100 150 200 250 300 350 400 450 500 550 600
As in ppm → 15 30 45 60 75 90 105 120 135 150 165 180
Assays

FREQUENCY DISTRIBUTION CURVES - Ag, Mo, Zn



ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Teck Exploration Ltd. File # 91-4626 Page 1

1100 - 1199 W. Hastings S, Vancouver BC V6E 2K5

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
BL 1200N 600W	36	164	10	58	1.2	5	10	245	10.70	25	5	ND	1	9	.2	2	2	161	.07	.100	5	22	.50	81	.06	2	3.82	.02	.06	1	39.3
BL 1200N 550W	13	401	15	53	.6	3	11	265	6.88	25	5	ND	1	5	.2	2	2	77	.04	.092	8	9	.62	91	.01	2	3.24	.02	.14	1	46.5
BL 1200N 500W	14	88	5	42	.1	3	14	226	7.03	9	5	ND	1	6	.2	2	2	17	.02	.128	5	8	.49	148	.01	6	1.67	.04	.25	1	14.4
BL 1200N 450W	5	93	16	73	.7	3	9	265	9.00	26	5	ND	1	9	.2	2	2	180	.03	.086	6	14	.16	99	.02	2	3.63	.01	.05	1	36.4
BL 1200N 400W	4	159	29	90	.6	5	13	503	10.45	22	5	ND	1	17	.2	3	2	131	.16	.669	5	21	.31	101	.03	2	5.92	.01	.34	1	42.4
BL 1200N 350W	6	120	24	134	.6	16	11	444	8.98	23	5	ND	1	6	.2	2	2	113	.05	.070	7	34	.38	110	.02	2	5.23	.01	.06	1	39.4
BL 1200N 300W	8	135	13	54	1.1	2	16	972	13.94	53	5	ND	1	21	.2	5	2	198	.08	.690	5	13	.21	46	.07	2	6.45	.01	.04	1	83.0
BL 1200N 250W	6	111	18	157	.9	16	15	372	7.98	24	5	ND	1	9	.6	2	2	113	.09	.046	11	28	.34	172	.02	3	4.28	.01	.05	1	24.7
BL 1200N 200W	6	186	13	110	.3	6	11	487	5.95	19	5	ND	1	15	.2	3	2	104	.17	.059	5	12	.96	175	.01	3	3.48	.02	.09	1	35.7
BL 1200N 150W	4	53	13	58	1.6	5	6	142	3.59	15	5	ND	1	7	.2	2	2	114	.05	.060	6	9	.11	92	.02	2	1.98	.01	.04	1	22.0
BL 1200N 100W	4	161	19	147	.4	13	20	694	9.63	27	5	ND	1	4	.2	5	2	101	.04	.271	8	26	.37	161	.02	2	8.01	.02	.04	1	58.0
BL 1200N 50W	13	391	22	270	.6	25	27	440	7.48	253	5	ND	1	54	.8	4	2	128	.85	.053	20	27	.29	247	.06	2	3.62	.02	.05	1	66.3
BL 1200N 0	9	383	23	216	.9	31	25	1902	7.22	150	5	ND	1	23	1.6	7	2	92	.48	.100	23	31	.33	333	.01	2	3.89	.01	.09	1	51.7
BL 1200N 200E	3	56	19	82	.6	11	9	418	8.27	299	5	ND	1	4	.2	11	2	149	.06	.138	11	28	.16	72	.02	3	2.57	.01	.08	1	40.9
BL 1200N 250E	1	59	23	106	1.4	3	11	375	10.56	25	5	ND	1	3	.2	7	2	112	.02	.115	9	11	.11	219	.01	3	5.30	.01	.08	1	15.0
BL 1200N 300E	4	234	28	182	1.1	23	16	484	8.82	62	5	ND	1	5	.4	7	2	71	.06	.110	11	36	.43	107	.02	2	6.87	.01	.05	1	57.1
BL 1200N 350E	4	423	80	155	.9	46	42	1578	8.05	113	5	ND	1	9	.9	6	2	70	.12	.090	21	26	.92	289	.02	3	2.81	.02	.11	1	82.3
BL 1000N 600W	16	2762	14	142	.3	14	16	671	5.59	16	5	ND	1	88	.8	2	6	70	2.14	.132	10	9	.51	395	.02	4	2.02	.02	.07	1	33.7
RE BL 1200N 200E	3	51	19	79	.7	11	9	389	8.33	297	5	ND	1	4	.2	9	2	149	.05	.136	11	28	.16	69	.02	2	2.57	.01	.08	1	33.2
BL 1000N 550W	1	175	10	221	.5	19	36	2851	8.30	21	5	ND	1	26	.2	8	2	75	.60	.350	15	15	.81	309	.01	3	6.22	.02	.15	1	12.9
BL 1000N 500W	2	36	7	51	.5	7	10	274	1.97	27	5	ND	1	7	.2	2	2	67	.09	.051	6	10	.15	58	.01	4	1.27	.03	.07	1	45.0
BL 1000N 450W	82	2011	6	29	1.0	8	35	551	13.12	36	5	ND	2	5	.4	2	4	47	.05	.116	18	7	.31	171	.01	4	2.27	.01	.12	1	360.0
BL 1000N 400W	65	777	9	28	.8	3	11	245	10.05	17	5	ND	1	7	.3	2	2	141	.11	.376	7	12	.72	93	.02	2	1.98	.01	.33	1	28.7
BL 1000N 350W	19	443	29	67	7.1	7	13	277	8.04	132	5	ND	1	4	.2	2	2	86	.02	.150	7	13	.52	274	.01	2	3.64	.01	.14	1	79.6
BL 1000N 300W	20	362	19	90	.8	10	11	231	8.58	26	5	ND	1	4	.2	2	2	117	.03	.033	8	22	.32	105	.02	2	3.45	.01	.04	1	43.7
BL 1000N 250W	7	211	20	174	.2	23	16	355	7.68	21	5	ND	1	14	.2	5	2	87	.14	.058	11	25	.51	198	.01	2	4.66	.01	.07	2	22.8
BL 1000N 200W	2	39	3	134	.1	1	1	65	.47	3	5	ND	1	14	.3	2	2	7	.21	.037	2	1	.05	39	.01	2	.31	.01	.04	1	16.4
BL 1000N 150W	1	17	4	66	.8	2	2	253	.53	3	5	ND	1	11	.2	2	2	12	.22	.040	3	4	.07	21	.01	10	.19	.02	.29	1	17.6
BL 1000N 100W	4	250	13	125	.5	18	19	1371	4.92	21	5	ND	1	35	.5	2	2	86	.48	.098	9	17	1.33	506	.02	5	2.40	.04	.16	1	41.2
BL 1000N 50W	8	20	2	57	.7	2	1	43	.12	2	5	ND	1	145	1.0	2	2	3	2.73	.024	2	1	.05	116	.01	5	.09	.01	.04	1	11.8
BL 1000N 0	20	1805	21	633	2.3	229	20	2605	4.59	88	5	ND	1	62	4.7	7	6	41	1.20	.165	45	22	.54	224	.08	5	3.20	.04	.10	3	58.1
BL 1000N 50E	15	195	18	264	1.8	27	17	5749	6.27	32	5	ND	1	35	1.3	6	3	76	.57	.129	14	25	.44	306	.08	2	3.47	.01	.07	1	41.4
BL 1000N 100E	2	168	13	266	.4	26	24	1030	5.73	67	5	ND	1	16	.4	3	2	76	.19	.054	7	24	1.19	214	.03	3	2.54	.03	.14	2	47.0
BL 1000N 150E	1	122	29	144	.3	27	22	1092	5.59	96	5	ND	1	14	.2	3	2	77	.25	.096	12	31	1.25	143	.02	5	2.39	.03	.13	1	36.9
BL 1000N 200E	3	236	15	163	.5	26	29	582	7.96	45	5	ND	1	6	.2	3	2	78	.05	.085	9	28	.83	174	.03	3	3.84	.01	.06	1	54.1
BL 1000N 250E	1	48	16	83	1.0	12	10	423	9.97	27	5	ND	1	17	.2	2	2	221	.17	.140	8	32	.50	124	.08	2	2.72	.02	.06	1	10.1
STANDARD C/AU-S	18	58	37	132	6.6	70	31	1035	3.91	41	17	7	36	51	18.5	15	18	54	.48	.089	36	58	.88	176	.09	34	1.87	.06	.15	11	45.2

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: SOIL AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: SEP 20 1991 **DATE REPORT MAILED:** Sept 26/91. **SIGNED BY:** .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
BL 800N 500W	6	143	20	250	2.5	30	28	3147	6.23	25	5	ND	1	46	1.5	2	2	60	.97	.105	23	33	.69	264	.05	3	3.29	.02	.07	1	26.0
BL 800N 450W	17	1733	15	179	.8	24	23	1794	7.68	26	5	ND	1	27	1.5	2	2	86	.46	.094	14	27	.54	357	.01	2	4.17	.01	.09	1	93.7
BL 800N 400W	15	236	21	578	1.4	29	25	1293	6.99	23	5	ND	1	44	2.2	2	2	70	.56	.088	20	38	.59	299	.03	2	3.82	.02	.09	1	24.1
BL 800N 350W	4	100	4	135	1.0	7	14	965	7.88	15	5	ND	1	8	.7	2	2	121	.09	.125	8	25	.22	107	.01	2	4.31	.01	.06	1	23.4
BL 800N 300W	13	275	13	177	.7	19	14	423	7.44	24	7	ND	2	10	.6	2	2	102	.07	.055	9	31	.28	189	.02	2	4.35	.02	.07	1	37.0
BL 800N 250W	16	528	18	360	1.0	23	19	948	9.29	26	5	ND	1	54	1.5	2	2	105	.66	.080	14	48	.51	369	.09	3	4.27	.02	.08	1	20.7
BL 800N 200W	6	236	13	188	.7	28	14	634	6.65	24	5	ND	1	12	.6	2	2	91	.14	.061	9	32	.74	204	.02	3	3.71	.02	.11	1	28.5
BL 800N 150W	3	195	7	37	.6	3	9	140	5.50	18	5	ND	2	4	.2	2	2	87	.06	.105	2	4	.25	65	.02	4	1.87	.01	.11	1	115.1
BL 800N 100W	7	155	5	154	1.0	9	15	218	9.56	22	5	ND	2	5	.4	2	2	113	.06	.135	6	36	.13	107	.03	2	10.64	.01	.04	1	48.9
BL 800N 50W	5	267	6	112	1.2	82	21	916	7.80	347	11	ND	3	26	.5	12	2	97	.35	.165	10	73	1.79	120	.10	4	3.86	.06	.24	1	18.7
BL 800N 0	4	127	14	238	.8	28	16	568	9.83	61	5	ND	1	7	.5	3	2	125	.06	.067	10	52	.37	194	.06	2	5.52	.02	.07	1	39.9
BL 800N 50E	3	102	18	95	.7	26	12	275	11.86	169	6	ND	4	5	.8	2	2	80	.04	.117	7	70	.23	95	.02	2	10.24	.01	.05	1	40.4
BL 800N 100E	3	130	14	144	1.1	54	23	2609	9.80	112	5	ND	1	6	.7	5	2	101	.15	.269	10	69	.29	171	.01	2	5.42	.01	.13	1	54.8
BL 800N 150E	5	188	7	127	.6	11	20	896	11.47	127	5	ND	1	5	1.0	3	2	151	.06	.123	8	29	.22	171	.03	2	6.36	.01	.06	2	65.5
BL 800N 200E	3	208	37	264	1.2	23	46	2259	8.33	229	5	ND	1	30	1.5	2	2	87	.36	.128	22	19	.93	921	.01	2	3.58	.02	.08	1	87.7
BL 800N 250E	1	63	9	108	.9	19	12	723	5.63	29	5	ND	1	13	.4	2	2	97	.24	.064	7	31	1.10	122	.05	3	2.47	.04	.08	1	10.4
BL 800N 300E	4	58	27	60	1.4	6	7	410	8.28	86	5	ND	1	4	.5	2	2	144	.03	.117	7	17	.19	112	.01	2	2.93	.01	.10	1	48.5
BL 600S 0	2	85	10	129	.3	28	11	541	5.90	19	5	ND	1	10	.6	2	2	113	.11	.122	9	37	.80	148	.04	2	3.11	.02	.12	1	7.8
BL 600S 50E	3	107	9	193	1.3	42	15	3027	4.22	19	5	ND	1	45	2.8	2	2	66	.69	.111	20	37	.98	243	.03	4	2.91	.03	.13	1	8.8
BL 600S 100E	3	44	8	66	.3	11	5	365	4.74	17	5	ND	1	8	.2	2	2	129	.08	.043	10	24	.33	65	.04	3	2.12	.02	.06	1	6.4
BL 600S 150E	3	68	10	106	.9	23	8	370	5.84	29	5	ND	1	6	.5	2	2	99	.05	.046	8	40	.64	102	.02	2	3.74	.02	.07	1	10.3
BL 600S 200E	1	107	7	138	.5	30	14	936	5.57	19	5	ND	1	17	.9	2	2	81	.20	.096	8	40	1.10	187	.04	4	3.98	.03	.13	1	6.1
BL 600S 250E	2	78	8	173	1.1	33	13	984	5.72	19	5	ND	1	10	.7	2	2	81	.13	.087	10	44	1.20	102	.05	3	4.14	.02	.10	1	9.5
BL 600S 350E	5	310	5	72	.5	8	13	728	5.02	27	5	ND	1	33	.8	2	2	78	.42	.096	7	8	1.36	192	.04	4	2.00	.04	.14	1	65.8
BL 600S 400E	2	167	9	141	.4	36	13	718	4.71	17	5	ND	1	19	.7	2	2	75	.25	.086	10	41	1.32	190	.06	3	3.15	.03	.13	1	9.6
BL 600S 450E	4	57	12	76	.8	8	5	346	7.02	19	5	ND	1	6	.2	2	2	141	.04	.081	7	32	.19	84	.02	2	3.11	.01	.05	1	5.6
BL 600S 500E	5	104	10	135	.4	36	16	826	5.30	17	5	ND	1	14	.7	2	2	81	.17	.065	11	38	1.26	138	.04	4	3.38	.03	.14	1	9.9
RE BL 600S 350E	5	303	6	78	.5	11	14	762	5.18	27	5	ND	1	34	.8	2	2	83	.43	.101	7	11	1.43	216	.04	4	2.15	.05	.17	1	88.0
BL 600S 550E	25	676	12	183	.6	51	28	1262	5.15	22	5	ND	1	20	1.0	2	2	80	.33	.073	9	48	.76	203	.03	3	4.51	.02	.09	1	21.6
BL 600S 600E	24	94	10	99	.6	21	11	359	4.95	16	5	ND	1	21	.7	2	2	96	.21	.061	11	30	.51	149	.03	2	2.78	.02	.13	1	5.8
BL 600S 650E	47	598	18	207	1.1	23	23	2381	7.38	35	5	ND	1	29	1.5	2	2	107	.63	.108	13	41	.53	218	.07	4	3.28	.02	.13	1	12.7
BL 600S 700E	20	257	16	175	.6	34	25	1063	6.84	41	5	ND	1	10	1.0	2	2	95	.15	.086	14	55	.71	151	.06	2	5.03	.02	.11	1	87.7
BL 600S 750E	16	294	14	186	1.7	49	24	1958	5.61	30	5	ND	1	38	1.3	2	2	92	.37	.088	15	42	1.04	385	.04	3	3.40	.04	.12	1	24.4
BL 600S 800E	5	47	10	96	1.3	17	8	441	4.90	18	5	ND	2	9	1.0	3	2	102	.09	.046	10	28	.38	89	.05	4	2.25	.02	.08	1	5.9
BL 600S 850E	1	42	11	150	1.0	6	83	21884	10.97	73	5	ND	1	10	1.6	2	2	121	.37	.448	9	9	.80	112	.06	3	3.62	.02	.07	3	21.2
BL 600S 900E	5	306	18	100	1.6	8	11	1480	11.10	112	5	ND	1	8	1.2	6	2	99	.13	.165	7	21	1.01	93	.01	3	3.84	.02	.11	21	135.0
BL 600S 950E	6	263	18	97	1.0	8	27	1112	13.64	184	5	ND	2	4	.4	15	2	75	.07	.084	10	12	.90	72	.01	3	3.48	.02	.13	1	62.0
STANDARD C/AU-S	18	62	37	131	7.2	71	32	1047	4.02	42	19	7	38	52	18.3	14	21	54	.50	.090	39	59	.88	178	.09	34	1.90	.06	.15	11	48.7

Samples beginning 'RE' are duplicate samples.

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
See page 4 → BL 600S 1050E	21	51	10	49	.3	13	34	766	14.68	31	5	ND	1	10	.2	2	2	113	.08	.297	4	57	.95	40	.05	3	1.52	.02	.05	1	130.0
BL 600S 1100E	12	272	16	44	.6	10	30	592	7.73	13	5	ND	1	7	.2	2	2	102	.07	.127	7	21	1.09	99	.01	3	3.12	.03	.11	1	1030.0
BL 600S 1250E	13	266	4	51	1.6	7	14	238	8.28	20	5	ND	1	5	.2	2	4	127	.03	.195	6	13	.26	210	.01	2	3.36	.01	.04	2	260.0
BL 600S 1300E	7	159	7	45	.4	7	12	381	6.21	13	5	ND	1	5	.2	2	2	99	.07	.102	6	15	1.15	72	.04	3	2.81	.02	.07	1	140.0
BL 600S 1350E	2	53	13	111	1.5	22	9	383	5.21	20	5	ND	1	8	.2	2	2	104	.08	.032	7	37	.50	113	.03	2	3.25	.02	.11	1	24.7
BL 600S 1400E	1	80	17	165	.5	47	19	650	4.11	17	5	ND	1	6	.4	2	2	68	.04	.029	7	44	.87	130	.05	3	2.90	.01	.08	1	7.1
RE BL 600S 1350E	2	54	11	113	1.4	22	9	374	5.20	19	5	ND	1	7	.2	2	2	104	.08	.031	7	35	.50	112	.03	2	3.26	.02	.11	1	23.3
BL 600S 1450E	2	89	21	152	.8	45	24	1455	4.96	18	5	ND	1	27	.8	2	2	68	.36	.117	13	39	.99	193	.04	4	2.61	.03	.11	1	18.5
STANDARD C/AU-S	18	55	39	132	6.8	71	32	1043	3.98	40	17	6	35	54	18.7	16	18	57	.48	.090	38	58	.88	179	.09	34	1.88	.07	.15	11	49.5

Samples beginning 'RE' are duplicate samples.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

GEOCHEMICAL ANALYSIS CERTIFICATE

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619 - 602 W. Hastings St., Vancouver BC V6B 1P2

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
BL 1200N 50E	5	66	22	110	1.8	4	8	254	8.71	190	5	ND	1	3	.2	5	3	130	.02	.065	8	10	.22	179	.01	2	3.67	.01	.07	1	71.0
BL 1200N 100E	6	184	67	213	.3	26	21	573	10.53	270	5	ND	1	8	.5	7	4	82	.06	.062	8	31	.54	171	.01	2	5.11	.01	.07	1	81.7
BL 1200N 150E	3	84	46	314	1.0	31	17	602	10.42	98	5	ND	1	8	.4	8	2	116	.07	.051	8	69	.33	214	.01	2	7.23	.01	.05	1	60.7
BL 600S 300E	2	120	14	152	.2	51	20	1306	4.84	24	5	ND	1	39	.7	4	3	63	.56	.121	12	39	1.20	181	.05	3	1.95	.02	.12	1	11.9
BL 600S 1000E	5	157	14	81	.8	17	11	570	7.64	17	5	ND	1	17	.2	3	2	89	.08	.426	7	50	.38	103	.01	2	5.27	.01	.14	1	3.0
BL 600S 1150E	53	335	12	51	.1	6	11	225	9.17	18	5	ND	1	6	.2	5	4	133	.03	.328	6	15	.24	123	.01	2	3.72	.01	.06	1	114.8
BL 600S 1200E	16	167	6	77	.7	4	4	179	3.68	6	5	ND	1	32	.2	2	2	66	.15	.561	3	7	.11	49	.03	4	1.71	.01	.04	1	30.2
BL 1400S 0	2	121	18	231	.1	47	31	869	7.89	15	5	ND	1	9	.3	5	2	119	.09	.191	16	49	.86	128	.02	2	4.92	.01	.06	1	2.7
BL 1400S 50E	2	89	11	87	.1	39	8	316	5.86	15	5	ND	1	6	.2	3	2	115	.03	.084	4	57	.43	70	.03	3	3.05	.01	.04	1	6.1
BL 1400S 100E	4	116	21	289	.1	78	26	842	7.76	21	5	ND	1	5	.2	2	4	108	.03	.110	7	84	.90	149	.10	2	5.12	.01	.05	1	3.5
BL 1400S 150E	1	167	30	231	.1	58	42	2262	7.65	18	5	ND	1	9	.9	7	2	105	.14	.172	33	70	2.00	39	.01	2	3.24	.01	.06	1	8.7
BL 1400S 200E	4	75	17	154	.4	61	16	959	6.95	18	5	ND	1	34	.2	2	3	114	.11	.260	8	104	.86	123	.18	2	5.01	.01	.09	1	27.5
BL 1400S 250E	4	130	11	137	.3	42	35	831	8.50	5	5	ND	1	211	.2	4	2	139	1.39	.172	16	39	1.85	150	.20	2	4.15	.25	.05	1	29.7
BL 1400S 300E	8	209	17	66	.4	18	8	370	8.58	41	6	ND	1	15	.2	6	5	94	.10	.583	5	26	.60	110	.06	5	4.72	.01	.06	1	96.8
BL 1400S 350E	5	113	40	53	.2	11	6	232	14.33	35	5	ND	1	7	.2	3	4	103	.03	.329	4	26	.28	95	.04	2	3.97	.02	.06	1	78.3
BL 1400S 400E	30	464	33	59	.2	4	17	1027	16.72	43	5	ND	1	4	.2	2	7	50	.02	.560	5	9	.67	78	.18	2	2.96	.01	.04	7	266.6
RE BL 1400S 250E	5	131	10	135	.3	41	35	812	8.46	3	5	ND	1	203	.3	2	3	137	1.35	.170	15	38	1.84	144	.19	2	4.05	.24	.05	1	39.9
BL 1400S 450E	29	219	15	119	.6	30	35	777	11.39	26	5	ND	1	34	.7	4	3	62	.64	.111	9	27	.78	171	.03	2	3.37	.02	.06	1	167.8
BL 1400S 500E	16	158	16	88	.1	15	11	311	8.91	18	5	ND	1	11	.2	2	2	118	.07	.168	4	35	.36	111	.03	2	4.91	.01	.04	1	111.1
BL 1400S 550E	56	391	12	33	.2	4	5	173	14.47	11	5	ND	1	12	.2	2	5	203	.12	.271	2	27	.46	80	.11	2	2.84	.01	.04	1	64.3
BL 1400S 600E	5	155	16	59	1.0	13	5	169	8.31	17	6	ND	1	7	.2	4	2	132	.03	.064	5	52	.21	69	.03	3	5.26	.01	.05	1	26.1
STANDARD C/AU-S	18	57	36	133	6.9	71	33	1044	3.96	39	17	7	36	54	18.9	16	17	57	.48	.092	37	59	.89	176	.09	34	1.90	.06	.15	13	46.5

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.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: P1 SOIL P2 ROCK P1 GEO/P2 ASSAY AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.
Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: SEP 4 1991 DATE REPORT MAILED: Sept 12/91. SIGNED BY. C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS