ARIS SUMMARY SHEET

District Geologist, Victoria Off Confidential: 89.02.12

ASSESSMENT REPORT 17368 MINING DIVISION: Nanaimo

PROPERTY: East 88
LOCATION: LAT 50 35 53 LONG 127 24 45
UTM 09 5606112 612354
NTS 092L11W
CLAIM(S): Rupert 6 Fr.,Rupert 15,Rupert 18,Snafu,Expo 51
OPERATOR(S): BHP-Utah Mines
AUTHOR(S): Fleming, J.A.;Brabec, D.
REPORT YEAR: 1988, 28 Pages
GEOLOGICAL
SUMMARY: The Upper Triassic and Lower Jurassic volcanic and sedimentary succession of the Vancouver and Bonanza Groups underlie the area. Porphyry dykes believed to be linked to the Rupert stock extend east from Rupert Inlet. From south to north the underlying succession dipping gently southward, from top to bottom, is the Bonanza Group pyroclastic volcanics, Parsons Bay Formation calcareous siltstones, shales and limestone with shaly interbeds, Quatsino Formation limestone and Karmutsen Formation amygdaloidal basalt.

WORK
DONE: Geochemical,Physical
PITS 21 pit(s)
SOIL 160 sample(s) ;ME
Map(s) - 9; Scale(s) - 1:12 000,1:2400

RELATED
REPORTS: 05102,06056,11460,16510

SOIL GEOCHEM SURVEY

EAST 88 GROUP

LONG 127 ° 24' W. LAT. 50° 35' N.

NANAIMO, M.D.
FOR ASSESSMENT CREDIT

[redacted]

BHP-UTAH MINES LIMITED MARCH, 1988

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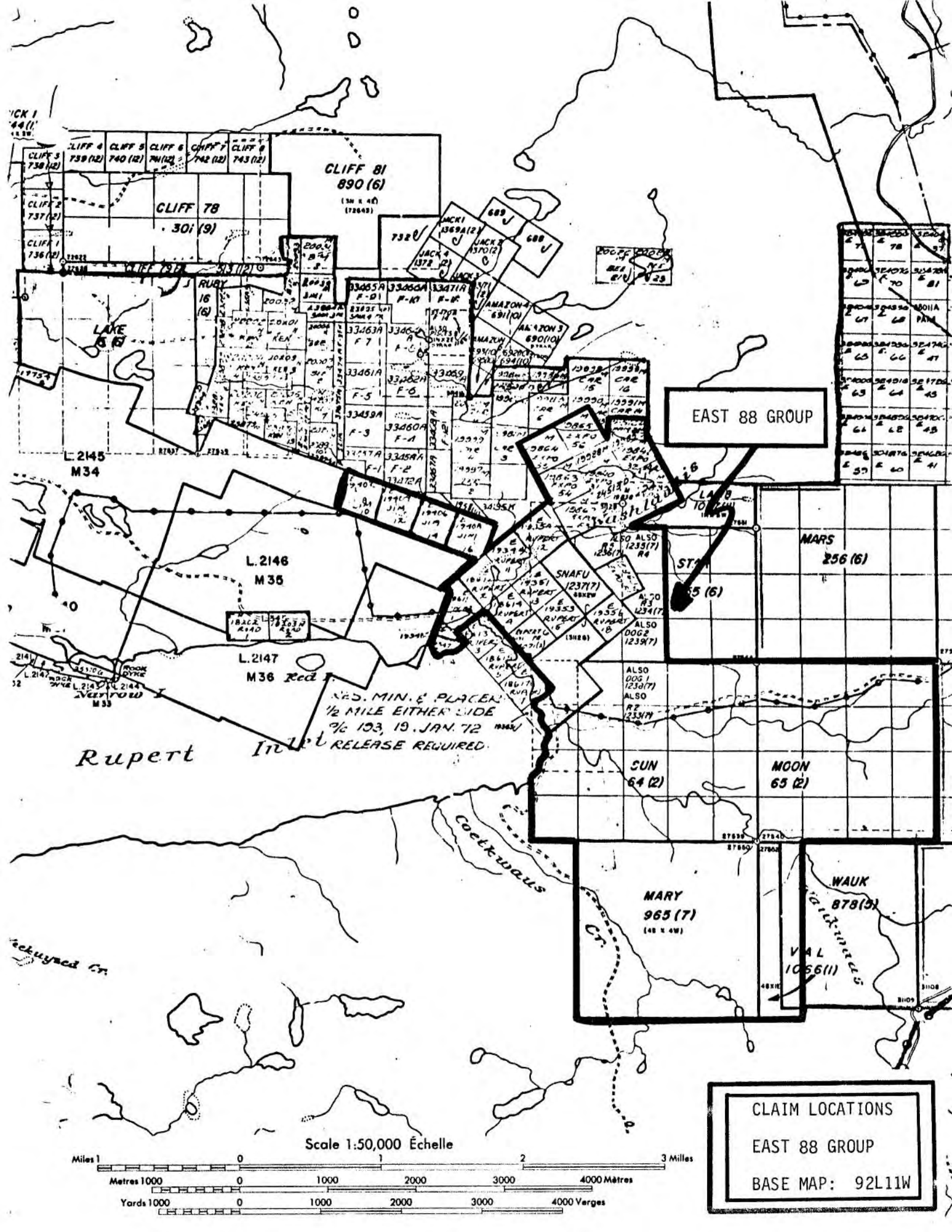

EAST 88 GROUP
CLIFF 81
890 (6)
CLIFF 78
30i (9)
RUBY
16
(6)
LAKE
6 (6)
L. 2145
M34
L. 2146
M35
L. 2147
M36
Red
Narrow
M33
Rupert Inlet
N.D. MIN. & PLACER
½ MILE EITHER SIDE
O/C 193, 19 JAN. 72
RELEASE REQUIRED
MARS
256 (6)
SNAFU
1237(7)
SUN
64 (2)
MOON
65 (2)
MARY
965 (7)
WAUK
878(5)
VAL
1066(1)
Cockyard Cr.
Scale 1:50,000 Échelle
Miles 1 0 1 2 3 Milles
Metres 1000 0 1000 2000 3000 4000 Mètres
Yards 1000 0 1000 2000 3000 4000 Verges
CLAIM LOCATIONS
EAST 88 GROUP
BASE MAP: 92L11W

1.0 INTRODUCTION

A previous soil survey on the claim group identified a number of sites anomalous in one or more of the indicator elements (Zn, Cu, Mo, As and Au). Clustering of these anomalies on the western part of the grid outlined a near-continuous NW-SE elongated zone anomalous in Zn, Ag, Mo and As +Cu +Au.

The results from a diamond drill hole (R-17) located near the centre of this anomaly were low and suggested that the latter may be caused by a bedrock source located at some distance from the drill site, possible within the SE tail of the anomalous zone, that is roughly up-ice and upslope from its centre.

A concentration of weak Au anomalies, with sporadic Zn highs was found on the east side of the grid, particularly along the line 17W.

The work covered by this report was essentially of the follow up nature and consisted of the following:

1. Sampling of overburden and/or bedrock from a number of shallow pits excavated on selected parts of the grid, and

2. Soil sampling along additional lines or extensions of the existing grid lines. (Assessment Report No. 87-680-16510).

The objective of the surveys was to outline the source area of the anomalies, particularly regarding the possibility of glacial transport of overburden, as well as to improve the overall coverage of the claim group.

The pits were located and sampled under the direction of Dr. D. Brabec, Consultant Geochemist, on January 11-15, 1988. Grid lines were flagged and soil samples collected along the lines by a contractor, David C. Bazett, Land Surveyor, on January 25 - 29, 1988.

The above paragraph, Sections 2.0 to 5.0, Section 10 and the maps (back pockets) were prepared by J.A. Fleming, Chief Geologist, BHP-Utah Mines Ltd., Island Copper Mine. Sections 1.0 and 7.0 to 9.0 were written by Dr. Brabec.

2.0 LOCATION AND ACCESS

The survey area is located in the Nanaimo Mining Division with co-ordinates 50 35'N and 127 24'W. It is located on the NTS map sheet 92L/11W and borders on claims contiguous with the Utah Mines Ltd. mineral leases some 8 km south of Port Hardy. Access is provided part way by paved highway from Port Hardy and the remainder by logging roads suitable for two wheel drive vehicles.

3.0 CLIMATE

Precipitation at the Port Hardy airport is normally about 160 cm per year including 42 cm of snow. Minimum and maximum temperatures are usually in the range of -12 and 27 C.

4.0 GEOLOGY

The Upper Triassic and Lower Jurassic sedimentary and volcanic succession of the Vancouver and Bonanza Groups respectively, and the Jurassic "Rupert" Stock underlie the area east of Rupert Inlet. The succession strikes approximately west-northwest and dips gently southward becoming younger to the south. From south to north the formations are: (1) Bonanza Volcanics andesitic tuffs and flows underlain by (2) Parson Bay calcareous siltstone with interbedded shales and andesitic and cherty tuffs, and limestone with shaley interbeds underlain by (3) Quatsino limestone and (4) Karmutsen amygdaloidal basalt flows. The Rupert Stock underlies the northwest corner of Rupert Inlet and the uplands cutting the Bonanza Volcanics. It is a porphyritic granodiorite.

5.0 PHYSIOGRAPHY AND VEGETATION

5.1 Topography and Landscape

The area is in the coastal lowland of the Suquash Basin forming part of the Nahwitti Lowlands of the Central Trough physiographic subdivision. The area is characterized by rounded, gently rolling hills with a maximum relief of about 125 meters. Washlawlis Hill, to the northeast of the survey area, has an elevation of 173 meters.

5.2 Drainage

a) Stream Drainage

No major streams cross the survey area. Washlawlis Creek and tributaries drain west to the north of the survey area with a low gradient, into Rupert Inlet.

b) Lakes

No lakes occur in the area. Rupert Inlet lies immediately to the west of the area.

c) Bogs

Little marshy ground occurs in the survey area, as indicated on the field notes.

5.3 Overburden, Soils and Vegetation

a) Overburden

The area has a variable cover of glacial till, peat and moss. Outcrop exposure in the area is sparse. Overburden thickness over the survey area is variable. Drill holes R-17 and hole C - 314 have 6.1 meters and 0.3 meters of overburden respectively.

b) Soil Development

The B horizon is well developed on the North Island, but it is not always possible to observe because of the accumulation of organic waste which varies from forest litter to well fermented material.

c) Vegetation

The vegetation consists mainly of coniferous, virgin forest.

6.0 SAMPLE COLLECTION AND PREPARATION

6.1 Overburden and Rock Samples From Pits

A total of 48 samples were taken from 21 shovel excavated pits of variable depth (30-150 cm, largely depending on the proximity of bedrock to the surface). This group of samples included the following types of material:

a) Bf horizon, channel-sampled at 20 cm or 30 cm intervals in all deeper pits, and
b) A spot composite of the rocky bottom material, in most cases representing bedrock or C horizon.

No attempt was made to sample the organic topsoil which shows extreme variation in texture and the composition of which may be difficult to interpret considering that all previous soil surveys in the area relied on the B horizon geochemistry.

After drying, the overburden samples were disaggregated and sieved to minus 80 mesh. The samples consisting entirely or predominantly of rock fragments were crushed and pulverized.

6.2 Line Soils

These samples, 72 in total, were collected at 30 m intervals along the flagged and cut lines using a trenching shovel. The reddish-brown Bf horizon underlying the organic cover was the preferred sampling material. If it was found to be absent or beyond reach, a sample of the available material was taken and its nature recorded.

The samples from this group were prepared for analysis in the same way as the overburden samples from the pits.

6.3 Analytical Techniques

Both the rock pulps and the overburden fines were analyzed for 30 elements and ppb-level Au by ICP and AA techniques, respectively, following a hot oxidizing acid digestion (for details see the assay sheets provided in Appendix A). All sample preparation and analysis were done by Acme Laboratories in Vancouver, B.C.

7.0 RESULTS

7.1 Data Classification

The data for Bf horizon soils were classified taking into account the anomaly thresholds calculated in the previous surveys (Assessment Report No. 87-680-16510), but also considering the nature of distribution for some of the indicator elements. It seems that in some of these polymodal, highly skewed distributions, a threshold set at a fixed percentile (95 or 98 cum. %) tends to be overestimated. For this reason, the local thresholds for some elements listed in Table 1 were revised downward relative to the values calculated in the earlier work.

TABLE 1: ANOMALY THRESHOLDS FOR SELECTED ELEMENTS

Element	Threshold (ppm)
Cu	90
Mo	10
Pb	30
Zn	100
Ag	0.5
Au	30 (ppb)
As	20
Mn	1000

The above classification is adopted for all materials sampled in this survey because of the relatively small number of both the deeper overburden and the rock samples which precludes their treatment as separate statistical groups. It is possible, however, that lower thresholds for Zn and As in bedrock should be considered in view of the considerably lower contents in this type of material relative to the minus 80 mesh overburden.

7.2 Pit Samples

The pit locations are shown in Fig. 1, and a list of results for selected elements, together with sample type reference, are give in Table 2. The selected elements show the best definition of anomalies, and therefore are likely to be the most important geochemical indicators in the area (a full data listing is given in Appendix A).

The data in Table 2 show a considerable inter-correlation of all the elements listed. Thus, the anomaly pattern on the map can probably be shown by fewer elements. This was done in Fig. 2 using Mo, Cu, Zn and As in the deepest part of the Bf horizon sampled. The same elements in bedrock are shown in Fig. 3.

At most sites where bedrock was reached, it tends to be lower in most indicator elements than the overlying soil. Such differences are the sharpest for Mo and As. Depth variations within overburden are moderate at most sites and do not show any readily detectable pattern.

The data for deeper Bf horizon (Fig. 2) and bedrock (Fig. 3) show a similar areal distribution of Zn and Cu values, but those for the overburden are generally higher. At several anomalous sites, these two types of material show sharp differences in their Mo and As contents. It is possible that these elements get concentrated in the Fe oxide-rich fracture material, which, as softer, makes a large portion of the minus 80 mesh soil, whereas, in the whole rock analysis, the silica-high matrix could act as a dilutant.

7.3 Line Samples

Most anomalous readings recorded in this group are for Zn and As. In some samples these elements correlate well with one or more of Mo, Cu and Ag. At a few sites on the eastern part of the grid (lines 19W and 9W) there is high Pb associated with Zn + Ag.

Continuous or near-continuous strings of anomalous sites occur along the portions of lines 31W (27N-34N), 35W (27N-33N) and 39W (33N-40N).

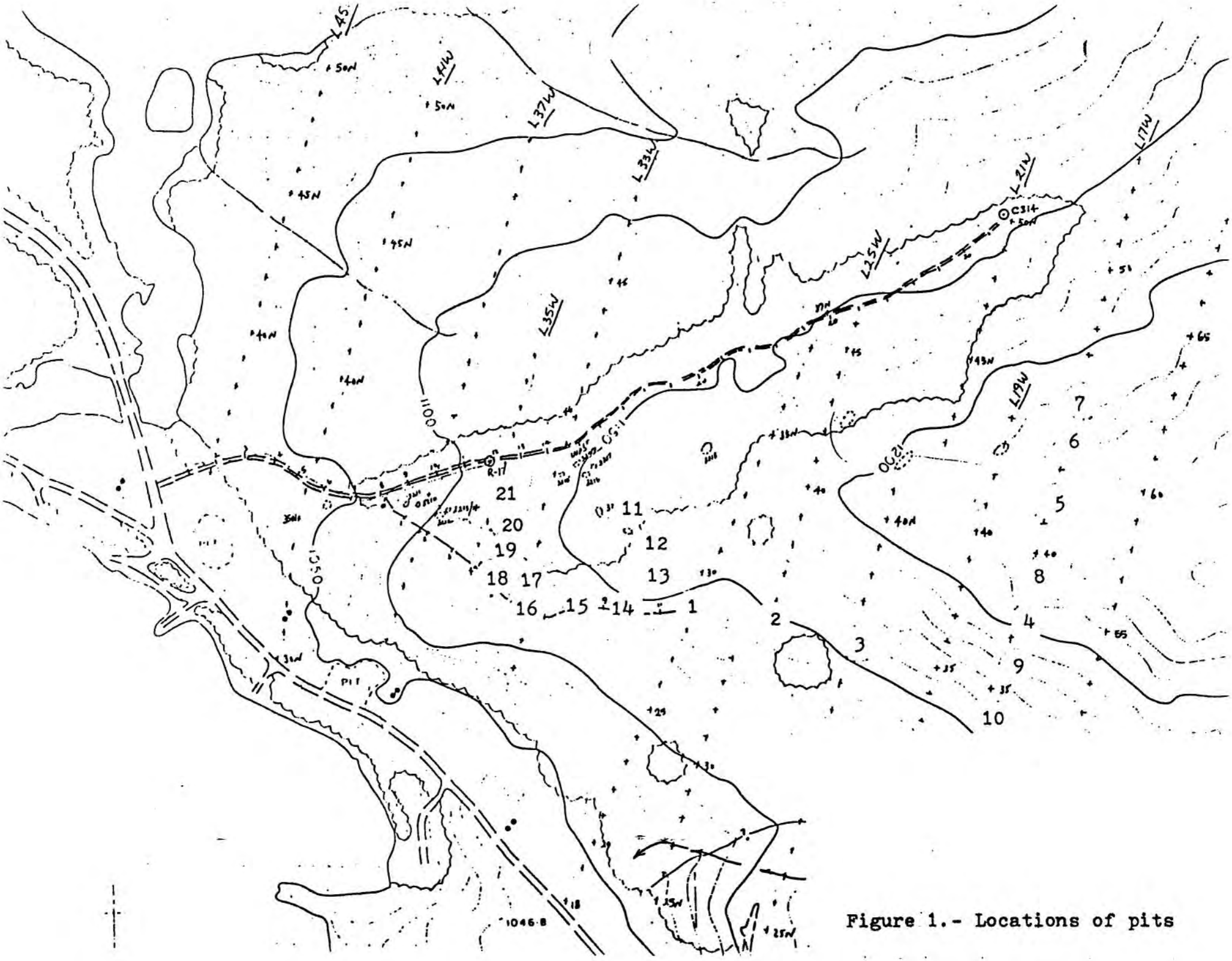


Figure 1.- Locations of pits

Table 2. Data for selected elements in the pit samples

Pit No.	Sample No.	Sample Type	Depth(cm)	Mo	Cu	Zn	Ag	Mn	As
1	s-10	C	50	12	101	229	0.6	627	33
	s-11	Bf	25-50	14	92	258	0.9	613	37
	s-12	Bf	5-25	18	89	361	1.3	841	39
2	s-13	Bf	70	1	38	41	0.2	155	7
	s-14	ABf	40-70	1	11	27	0.1	74	2
3	R-21	C	120	6	78	44	0.3	331	2
4	R-15	Bdk	30	1	64	38	0.3	398	3
5	s-20	C	90	1	48	34	0.1	182	4
6	R-18	Bdk	150	2	117	59	0.4	533	2
	s-19	Bf(C)	120-150	1	35	41	0.1	148	3
7	R-16	Bdk	80	1	102	41	0.4	419	2
	s-17	Bf	50-80	1	48	35	0.1	178	7
8	R-22	Bdk	110	4	71	45	0.3	401	2
	s-23	Bf(C)	80-110	1	45	48	0.2	245	3
	s-24	Bf	50-80	1	30	44	0.1	188	3
	s-25	Bf	30-50	1	40	34	0.1	157	6
9	s-26	Bf	120	1	45	36	0.1	313	2
	s-27	Bf	90-120	1	46	38	0.1	331	6
	s-28	Bf	60-90	1	49	37	0.2	276	7
	s-29	Bf	30-60	1	48	37	0.1	221	5
10	s-30	Bf	90	1	47	32	0.1	226	7
	s-31	Bf	70-90	1	43	36	0.1	127	7
11	R-32	Bdk	90	3	39	121	0.5	1389	24
	s-33	ABf	60-90	1	8	42	0.1	53	2
	s-34	ABf	30-60	1	7	49	0.4	45	2
12	R-35	Bdk	35	2	49	126	0.6	909	6
13	R-36	Bdk	40	2	41	152	0.3	1198	3
14	R-37	Bdk	80	1	46	45	0.3	470	2
	s-38	Bf	50-80	2	45	88	0.5	489	15
15	R-39	Bdk	70	3	119	187	0.1	932	6
	s-39	Bf	40-70	33	134	748	1.1	1566	139
16	R-41	Bdk	80	1	43	151	0.2	1124	2
	s-42	Bf	50-80	46	51	305	0.8	556	126
	s-43	Bf	20-50	57	62	434	0.5	1360	130
17	R-45	Bdk	90	3	68	68	0.3	748	16
	s-46	Bf	60-90	2	55	58	0.4	1051	35
	s-47	Bf	30-60	3	46	72	0.6	1266	34
18	R-47	Bdk	100	3	70	124	0.2	1216	29
	s-48	Bf	70-100	7	84	177	0.6	1342	99
	s-49	Bf	40-70	4	47	94	0.6	950	42
19	R-50	Bdk	50	4	62	124	0.2	1440	8
	s-51	Bf	20-50	2	44	82	0.2	1205	17
20	R-52	Bdk	70	2	73	66	0.4	866	6
	s-53	Bf	40-70	1	25	45	0.2	539	4
	s-54	Bf	20-40	2	24	50	0.1	1053	7
21	R-55	Bdk	80	4	46	156	0.3	769	16
	s-56	Bf	50-80	3	55	137	0.8	1246	10
	s-57	Bf	20-50	2	44	81	0.5	1281	6

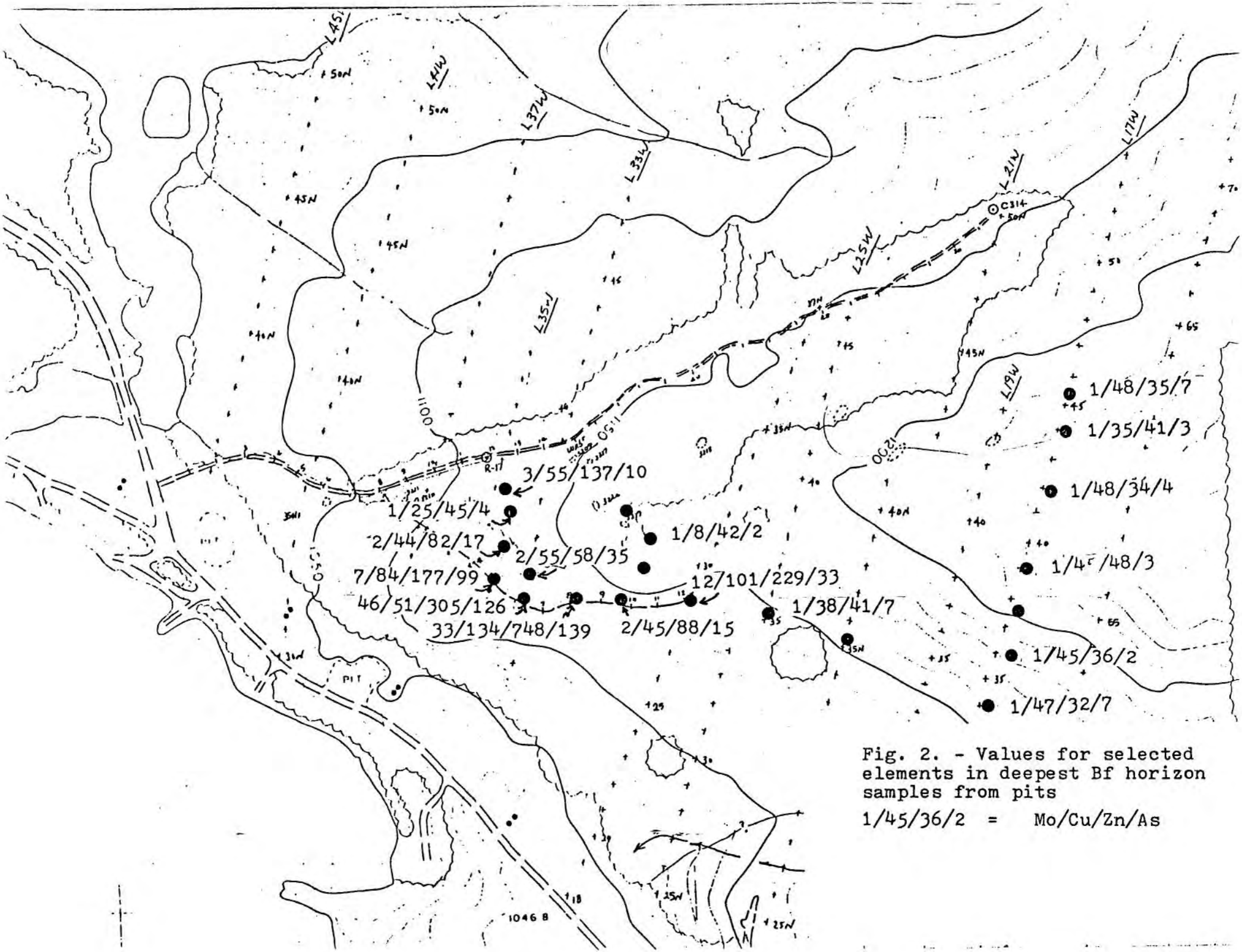


Fig. 2. - Values for selected elements in deepest Bf horizon samples from pits

1/45/36/2 = Mo/Cu/Zn/As

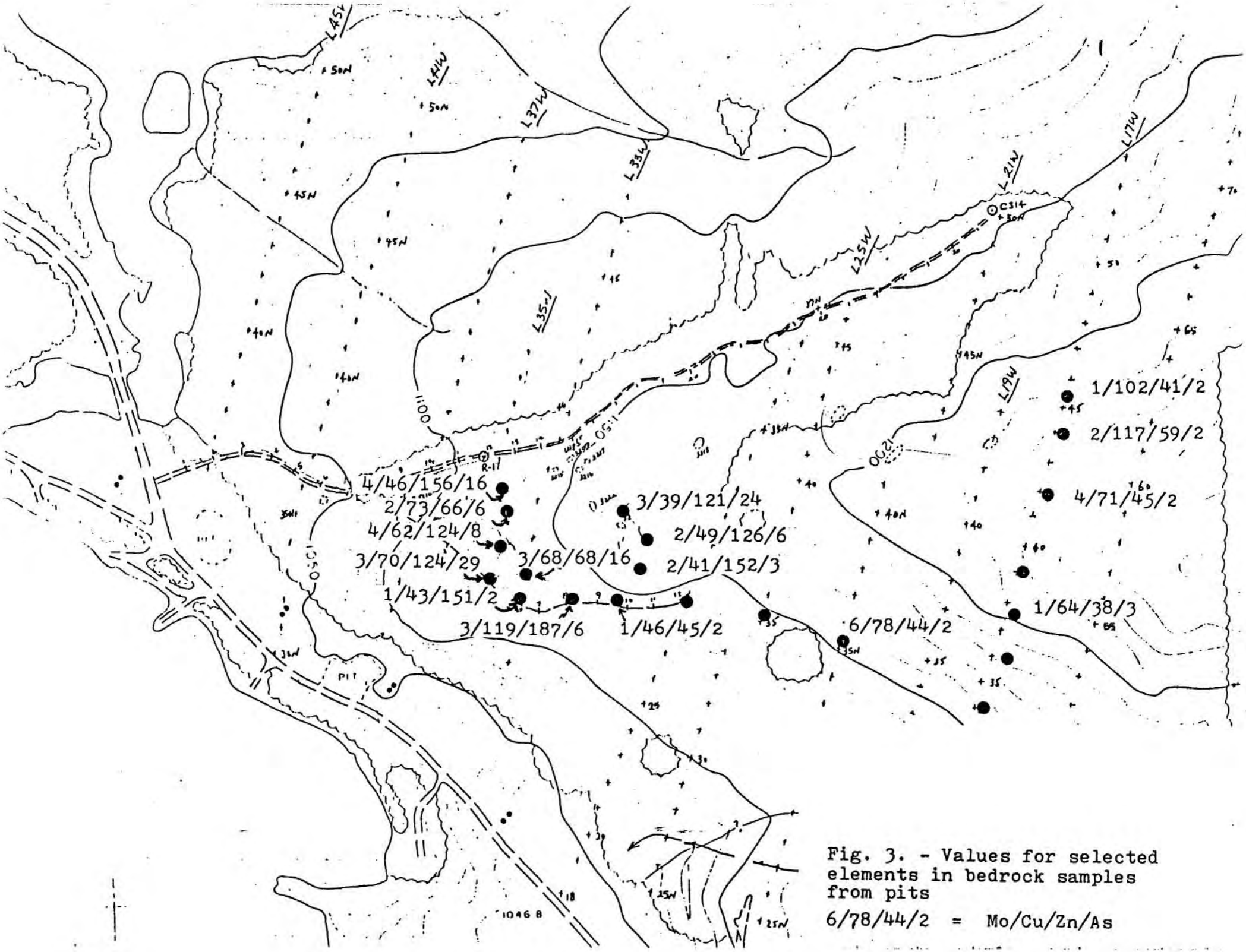


Fig. 3. - Values for selected elements in bedrock samples from pits

6/78/44/2 = Mo/Cu/Zn/As

The general level of all indicator elements, particularly As, drops considerably along the line 9W, 19W and 21W. An exception is the Zn (+Pb, Ag, As) anomaly on the line 9W (13N-18N).

The results for the line samples are plotted in Figs. 1, 2 and 3 and on the anomaly maps (back pockets).

8.0 DISCUSSION

The present results confirm the level and continuity of the anomalies found on the western part of the claim group. Most of the pits in this zone encountered shallow residual overburden developed from a highly silicified and fractured bedrock. The soil fines, probably enriched in fracture-derived Fe oxides are locally quite anomalous in Zn, As and Mo. This may well represent leakage from a blind mineralized source.

Gold anomalies, reported earlier over the eastern part of the area, were not repeated in any of the pit samples. No bedrock was reached in some of these pits (No. 9 and 10).

9.0 RECOMMENDATIONS

As the pits at the most anomalous sites are quite shallow (less than 1 m), trenching is desirable to investigate variations in the geochemical indicators down to the depth of a few meters. The preferred sites for this work are the pits no. 15 and 16 in which the highest values were registered. This may also be a favourable location the the drill hole previously planned for the area south of the DDH R-17 as a test of the possible mineralization in the Rupert Stock (Assessment Report No. 87-680-16510).

Further sampling on the eastern portion of the area may be required to test the extent of the Zn + Pb, Ag, As anomaly detected on the line 9W.

10.0 COST STATEMENT

CONSULTANT (Dr. D. Brabec)	
Field work: 4 days @ $500.00	$ 2,000.00
Data Evaluation & Report 1 day	$ 500.00
Expenses: travel, hotel, meals	$ 589.86
COLLECTION	
Pit Samples: 7.5 man-days (BHP crew)	$ 860.93
Line Samples: Contractor (Dave C. Bazett, Land Surveyor)	$ 1,467.50
SUPERVISION	$ 200.00
DATA PROCESSING / REPORT PREPARATION	$ 500.00
OVERHEAD	$ 253.23
ASSAYS (Acme Analytical Laboratories Ltd.) 30 element ICP & ppb Au 160 soil & 50 rock samples	$ 1,804.65
SUPPLIES Flags, tags & bags	$ 41.83
TOTAL	$ 8,200.00

UNIT COST = $39.05/SAMPLE

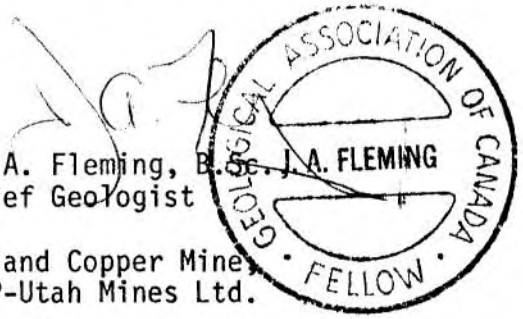
STATEMENT OF QUALIFICATIONS

I submit that I am qualified to prepare and present this report for assessment credit. My qualifications are as follows:

1) I have a B.Sc., (Major Geology) 1971 from McGill University.

2) I have been employed as a geologist continuously since June, 1968, and am presently Chief Geologist, Island Copper Mine, Utah Mines Ltd.

3) I have been a fellow of the Geological Association of Canada since 1974.



J. A. Fleming, B.Sc.
Chief Geologist

Island Copper Mine
BHP-Utah Mines Ltd.

STATEMENT OF QUALIFICATIONS

I submit that I am qualified to prepare and present this geochemical report for assessment credit. My qualifications are as follows:

1. I have a Ph.D. in geology (geochemical project) from the University of British Columbia, Vancouver (1971).

2. I have a Diploma of Membership of Imperial College of Science and Technology (London, U.K.) in applied geochemistry (1964).

3. I have B.Sc. and M.Sc. equivalents in the areas of mineralogy, petrology and geochemistry from the University of Belgrade, Yugoslavia (1959 and 1966, respectively).

4. I have been employed as a geochemist since 1974, and I am presently a consulting geochemist in Vancouver, B.C.

5. I have been a member of the Association of Exploration Geochemists since 1971.

Dragan Brabec, Ph.D.,
Consulting Geochemist.

4011 W. 37th Avenue
Vancouver, B.C.
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ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

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 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 ROCK P2 SOIL AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: JAN 22 1988 DATE REPORT MAILED: Jan 27/88 ASSAYER. C. Leong .D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

BHP UTAH MINES LTD. File # 88-0184 Page 1

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
DB88-1	2	60	9	132	.4	8	20	1254	4.21	14	5	ND	3	97	1	2	2	143	5.17	.103	6	4	.85	81	.29	7	2.89	.04	.03	1	1
DB88-1A	3	54	7	71	.4	9	28	987	5.70	27	5	ND	3	43	1	2	2	160	2.69	.111	6	3	1.43	63	.34	6	2.96	.05	.02	1	5
DB88-R-15	1	64	5	38	.3	30	11	398	3.63	3	5	ND	2	32	1	2	2	111	1.29	.023	4	36	1.00	20	.38	3	2.57	.08	.04	1	3
DB88-R-16	1	102	4	41	.4	30	12	419	3.68	2	5	ND	2	50	1	2	2	113	2.50	.039	4	27	1.03	22	.39	7	3.27	.25	.05	1	4
DB88-R-18	2	117	5	59	.4	23	15	533	4.20	2	5	ND	2	45	1	2	2	132	2.30	.057	5	23	1.25	20	.33	10	3.33	.13	.06	1	6
DB88-R-21	6	78	6	44	.3	29	11	331	3.41	2	5	ND	2	37	1	2	2	121	1.39	.026	4	40	.92	18	.39	6	3.30	.10	.03	2	1
DB88-R-22	4	71	10	45	.3	30	11	401	3.62	2	5	ND	2	35	1	2	2	114	1.21	.025	5	41	.80	25	.37	13	2.98	.09	.02	1	3
DB88-R-32	3	39	15	121	.5	9	20	1389	7.66	24	5	ND	3	241	1	2	2	212	2.85	.122	8	4	1.38	120	.38	12	6.00	.37	.06	1	1
DB88-R-35	2	49	8	126	.6	10	19	909	5.98	6	5	ND	3	72	1	2	2	183	2.27	.104	7	7	1.96	96	.35	5	3.90	.12	.03	1	1
DB88-R-36	2	41	6	152	.3	11	20	1198	6.08	3	5	ND	3	48	2	2	2	184	1.96	.116	7	5	2.17	145	.32	3	3.35	.09	.02	1	2
DB88-R-37	1	46	7	45	.3	27	11	470	3.46	2	5	ND	3	44	1	2	2	108	1.30	.030	7	31	1.04	39	.35	3	2.39	.09	.03	2	1
DB88-R-39	3	119	8	187	.1	32	28	932	8.24	6	5	ND	2	145	5	2	2	297	1.82	.093	9	86	3.15	158	.02	4	4.85	.16	.06	1	1
DB88-R-41	1	43	13	151	.2	15	19	1124	5.83	2	5	ND	2	55	1	2	2	165	1.02	.092	14	17	1.91	100	.07	3	3.08	.06	.03	1	1
DB88-R-45	3	68	6	68	.3	22	16	748	4.88	16	5	ND	2	70	1	2	2	144	1.32	.057	7	27	1.50	72	.29	4	3.56	.11	.05	1	2
DB88-R-47	3	70	17	124	.2	19	21	1216	6.85	29	5	ND	2	35	1	2	2	155	.47	.052	14	20	1.38	99	.05	10	4.56	.06	.05	1	1
DB88-R-50	4	62	23	124	.2	14	23	1440	6.51	8	5	ND	2	52	1	2	2	173	.77	.094	8	13	1.50	93	.21	6	4.09	.06	.03	1	3
DB88-R-52	2	73	6	66	.4	22	16	866	4.86	6	5	ND	2	85	1	2	2	156	1.49	.061	7	27	1.64	96	.26	6	4.02	.13	.05	1	1
DB88-R-55	4	46	10	156	.3	30	12	769	3.65	16	5	ND	1	21	2	2	2	115	.68	.042	5	36	.70	37	.27	4	2.62	.05	.02	1	1
STD C/AU-R	19	58	39	132	7.0	69	29	1136	4.06	42	19	7	39	50	18	16	20	59	.48	.084	40	59	.98	179	.07	33	1.93	.07	.14	11	495

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
DB88-S10	12	101	8	229	.6	26	19	627	7.29	33	5	ND	2	18	2	2	2	216	.09	.242	8	86	.49	75	.01	5	6.14	.02	.02	1	1
DB88-S11	14	92	10	258	.9	29	20	613	7.17	37	5	ND	2	18	2	2	2	225	.10	.151	13	80	.54	93	.01	4	5.88	.02	.03	1	1
DB88-S12	18	89	13	361	1.3	33	22	841	6.84	39	5	ND	2	16	3	2	2	217	.15	.112	22	78	.66	139	.01	3	6.08	.02	.04	1	1
DB88-S13	1	38	10	41	.2	18	7	155	4.86	7	5	ND	1	13	1	2	2	148	.27	.025	5	67	.21	20	.38	2	5.15	.03	.01	1	1
DB88-S14	1	11	4	27	.1	9	3	74	2.40	2	5	ND	1	25	1	2	2	143	.51	.023	2	26	.12	29	.29	3	.76	.03	.01	1	1
DB88-S17	1	48	7	35	.1	17	7	178	3.77	7	5	ND	1	14	1	2	2	133	.42	.036	7	72	.34	15	.41	3	6.13	.04	.01	1	1
DB88-S19	1	35	9	41	.1	11	5	148	4.89	3	5	ND	2	14	1	2	2	131	.34	.024	4	66	.24	15	.39	2	5.06	.03	.01	1	1
DB88-S20	1	48	11	34	.1	18	6	182	3.23	4	5	ND	1	16	1	2	2	92	.54	.034	7	50	.42	18	.29	3	6.20	.04	.01	1	3
DB88-S23	1	45	11	48	.2	19	8	245	4.90	3	5	ND	2	16	1	2	2	146	.40	.034	8	72	.29	20	.41	2	5.26	.04	.02	1	4
DB88-S24	1	30	8	44	.1	14	6	188	6.23	3	5	ND	1	14	1	2	2	239	.25	.016	6	71	.12	15	.55	2	3.15	.03	.01	1	1
DB88-S25	1	40	11	34	.1	14	5	157	5.31	6	5	ND	2	15	1	2	2	170	.32	.019	5	80	.22	14	.44	3	5.69	.03	.01	1	1
DB88-S26	1	45	9	36	.1	20	12	313	4.17	2	5	ND	2	18	1	2	2	139	.41	.025	6	71	.38	19	.37	2	4.31	.03	.01	1	1
DB88-S27	1	46	9	38	.1	22	13	331	4.47	6	5	ND	2	20	1	2	2	150	.45	.024	6	73	.40	21	.39	5	4.34	.04	.01	1	1
DB88-S28	1	49	7	37	.2	23	12	276	4.32	7	5	ND	2	19	1	2	2	144	.45	.022	7	73	.43	22	.39	3	4.74	.04	.01	1	1
DB88-S29	1	48	9	37	.1	23	10	221	4.66	5	5	ND	1	17	1	2	2	148	.40	.019	7	80	.37	19	.39	3	4.95	.03	.01	1	1
DB88-S30	1	47	6	32	.1	19	9	226	3.81	7	5	ND	1	16	1	2	2	111	.57	.029	6	52	.34	16	.32	3	4.91	.04	.01	1	1
DB88-S31	1	43	10	36	.1	13	5	127	4.92	7	5	ND	1	12	1	2	2	127	.28	.033	5	76	.17	15	.35	5	6.78	.03	.01	1	2
DB88-S33	1	8	4	42	.1	1	1	53	.15	2	5	ND	1	51	1	2	2	3	.58	.022	2	2	.07	75	.01	2	.18	.02	.01	1	1
DB88-S34	1	7	2	49	.1	2	1	45	.06	2	5	ND	1	26	1	2	2	1	.50	.022	2	1	.08	47	.01	6	.11	.02	.01	1	1
DB88-S38	2	45	9	88	.5	20	19	489	5.04	15	5	ND	2	16	2	2	2	131	.33	.072	8	63	.34	34	.32	5	6.56	.03	.01	1	1
DB88-S39	33	134	13	748	1.1	60	39	1566	9.00	139	6	ND	1	14	6	2	2	255	.20	.077	36	66	1.09	165	.01	2	5.68	.02	.05	1	1
DB88-S42	46	51	15	305	.8	27	9	556	7.18	126	5	ND	1	7	1	2	2	252	.08	.188	4	28	.13	63	.01	10	3.42	.02	.03	1	1
DB88-S43	57	62	14	434	.5	42	15	1360	7.49	130	5	ND	1	6	2	2	2	230	.06	.112	19	32	.16	61	.01	3	4.22	.01	.03	1	1
DB88-S46	2	55	13	58	.4	18	17	1051	4.48	35	6	ND	3	56	1	2	2	140	.53	.124	13	32	.65	68	.27	4	5.97	.04	.03	1	2
DB88-S47	3	46	11	72	.6	12	21	1266	5.59	34	5	ND	2	40	2	2	2	154	.32	.153	15	38	.36	57	.28	5	8.81	.03	.02	1	1
DB88-S48	7	84	30	177	.6	32	20	1342	6.72	99	5	ND	3	24	1	2	2	152	.35	.068	9	42	.57	78	.11	11	4.88	.03	.04	1	1
DB88-S49	4	47	9	94	.6	15	15	950	6.57	42	5	ND	1	23	1	2	2	168	.34	.097	7	53	.29	51	.19	4	6.41	.03	.02	1	1
DB88-S51	2	44	34	82	.2	10	16	1205	6.11	17	5	ND	2	38	1	2	2	150	.36	.125	9	26	.34	69	.20	3	5.65	.03	.01	1	1
DB88-S53	1	25	17	45	.2	11	8	539	5.18	4	5	ND	1	27	1	2	2	154	.40	.063	5	46	.21	45	.32	4	2.84	.03	.02	1	1
DB88-S54	2	24	13	50	.1	11	12	1053	5.81	7	5	ND	1	42	1	2	2	156	.34	.122	5	59	.19	78	.31	3	4.25	.03	.01	1	5
DB88-S56	3	55	23	137	.8	18	14	1248	5.97	10	5	ND	2	16	3	2	2	180	.34	.092	7	68	.23	46	.43	2	5.05	.03	.02	1	14
DB88-S57	2	44	9	81	.5	15	10	1281	5.36	6	5	ND	1	17	2	2	2	177	.35	.077	6	61	.21	45	.38	3	3.92	.03	.01	1	2
STD C/AU-S	19	58	42	132	7.3	70	29	1145	4.04	45	21	7	39	50	19	16	21	60	.48	.084	40	60	.98	179	.07	33	1.92	.07	.13	11	48

ACME AI 'TICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANC 'ER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253

GEOCHEMICAL ANALYSIS CERTIFICATE

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 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 AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: FEB 05 1988 DATE REPORT MAILED: Feb 11/88 ASSAYER: C. Leong ...D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

BHP UTAH MINES LTD. PROJECT-ISLAND COPPER MINE File # 88-0335 Page 1

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
39W 40N	15	69	15	213	1.1	32	10	748	6.48	136	5	ND	1	15	2	7	2	176	.27	.242	6	50	.17	65	.08	3	3.80	.01	.03	1	2
39W 39N	7	68	8	164	.3	30	16	1003	5.71	39	5	ND	1	17	2	2	2	153	.53	.114	9	60	.36	46	.22	8	5.21	.02	.02	1	3
39W 38N	9	80	11	167	.7	27	19	1122	8.70	60	5	ND	1	11	2	3	2	232	.22	.078	9	88	.16	45	.21	4	5.04	.01	.02	1	2
39W 37N	6	87	17	168	.2	38	24	714	8.36	52	5	ND	1	34	2	2	4	213	.66	.062	7	147	.47	215	.12	6	6.30	.02	.03	1	1
39W 36N	17	48	3	272	.3	19	21	1197	7.08	104	5	ND	1	17	13	6	2	111	.41	.113	3	34	.11	181	.01	6	2.70	.01	.07	1	1
39W 35N	11	113	19	284	.3	32	22	1469	6.42	63	5	ND	1	25	2	3	2	153	.81	.097	10	32	.63	119	.12	6	2.96	.02	.03	1	3
39W 34N	2	84	21	89	.2	13	30	1511	9.37	230	5	ND	2	24	1	2	3	306	.32	.145	9	81	.62	80	.38	2	5.00	.02	.01	2	1
39W 33N	1	75	16	115	.2	30	20	1318	6.22	16	5	ND	2	24	1	2	3	144	.41	.069	9	63	.71	90	.19	10	6.12	.02	.05	1	2
39W 32N	2	42	14	53	.1	22	13	359	4.84	5	5	ND	2	24	1	2	3	130	.50	.046	7	61	.48	30	.33	5	5.09	.02	.02	2	6
39W 31N	1	66	8	79	.1	33	14	481	4.83	2	5	ND	2	29	1	2	2	123	.55	.047	9	65	.81	62	.31	5	5.36	.02	.03	1	3
39W 30N	5	82	18	121	.1	28	18	735	6.38	48	5	ND	2	32	1	2	2	154	.49	.066	11	59	.55	67	.23	5	5.33	.02	.03	1	2
35W 34N	4	71	25	94	.2	10	21	1372	8.36	26	5	ND	2	15	2	2	2	195	.16	.133	8	64	.20	53	.26	10	8.15	.01	.02	1	1
35W 33N	2	68	13	106	.2	31	17	679	6.48	19	5	ND	2	23	1	2	2	165	.39	.077	7	70	.56	53	.31	4	6.07	.02	.03	2	3
35W 32N	7	73	17	148	.1	29	15	538	6.42	40	5	ND	2	31	1	2	2	144	.44	.127	8	44	.59	49	.21	5	5.78	.02	.02	1	3
35W 31N	5	35	15	161	.3	6	17	1121	8.68	37	5	ND	2	35	1	2	2	150	.23	.148	8	11	.39	68	.09	6	3.30	.02	.03	1	1
35W 30N	2	60	15	113	.2	18	17	728	7.48	20	5	ND	2	19	1	2	2	199	.30	.087	9	58	.24	72	.30	2	5.50	.02	.02	1	2
35W 29N	1	58	9	119	.4	27	16	445	7.12	10	5	ND	1	18	1	2	2	150	.32	.051	10	62	.23	51	.28	2	5.61	.01	.02	1	1
35W 28N	2	76	8	84	.2	52	23	1592	5.87	10	5	ND	1	68	1	2	2	128	.96	.025	8	86	1.18	153	.27	6	5.00	.03	.04	1	10
35W 27N	3	98	24	109	.2	40	20	1013	5.49	17	5	ND	2	57	1	2	2	120	2.03	.103	11	50	1.48	102	.28	7	3.84	.07	.08	2	4
31W 42N	1	110	11	89	.2	13	24	498	10.09	27	5	ND	3	12	1	3	2	212	.08	.058	6	50	.88	111	.01	2	7.32	.01	.06	2	1
31W 41N	1	35	8	50	.3	11	9	271	7.44	4	5	ND	2	16	1	2	2	232	.30	.033	5	63	.15	49	.46	4	4.04	.01	.02	3	1
31W 40N	2	41	10	72	.1	16	16	543	6.94	7	5	ND	2	14	1	3	2	199	.33	.078	7	67	.23	30	.43	6	5.11	.02	.02	2	2
31W 39N	4	32	5	85	.1	14	12	696	5.10	18	5	ND	1	18	1	2	2	156	.33	.098	6	43	.19	42	.25	4	3.82	.02	.02	1	1
31W 38N	2	30	6	48	.4	8	11	1336	5.58	9	5	ND	1	82	1	2	2	125	.28	.113	5	21	.16	118	.19	5	2.81	.02	.03	2	1
31W 37N	1	34	10	66	.1	9	18	1013	4.49	22	5	ND	1	17	1	3	2	89	.37	.176	5	25	.20	34	.15	15	7.72	.02	.01	1	2
31W 36N	3	32	12	71	.1	9	21	8621	4.55	16	5	ND	1	378	1	2	2	104	.83	.196	4	5	.35	224	.13	6	3.07	.07	.06	1	1
31W 35N	3	26	15	74	.1	12	8	249	5.61	12	5	ND	1	28	1	2	2	169	.41	.043	7	43	.22	43	.33	4	4.16	.02	.01	1	2
31W 34N	2	44	2	105	.1	15	12	463	4.78	3	5	ND	1	17	2	2	2	127	.33	.078	5	56	.25	30	.27	3	4.96	.02	.02	1	1
31W 33N	25	108	14	471	.6	47	26	803	11.08	90	5	ND	2	6	2	2	3	321	.04	.102	9	92	.58	100	.01	4	7.06	.01	.04	1	1
31W 32N	2	42	10	144	.1	21	13	501	5.71	9	5	ND	1	21	2	2	2	171	.49	.066	6	70	.23	30	.37	4	5.80	.02	.01	1	1
31W 31N	2	30	54	161	.4	10	12	1160	8.56	11	5	ND	2	31	1	2	2	173	.21	.131	13	33	.26	77	.10	3	6.68	.02	.03	1	1
31W 30N	1	37	42	99	.1	7	12	1584	7.57	15	5	ND	2	45	1	2	3	165	.27	.289	7	19	.29	87	.18	3	4.08	.03	.04	2	1
31W 29N	1	37	13	81	.2	15	11	474	6.20	4	5	ND	2	21	1	2	2	158	.34	.046	11	50	.22	46	.32	3	4.80	.02	.02	1	1
31W 28N	1	71	22	114	.4	17	18	1131	6.82	8	5	ND	1	24	1	2	2	170	.37	.094	14	61	.27	59	.37	4	6.23	.02	.02	1	2
31W 27N	5	42	9	129	.2	22	14	1031	2.95	5	5	ND	1	52	1	4	2	101	1.00	.037	7	38	.57	86	.24	4	3.09	.03	.03	1	2
31W 26N	1	65	5	83	.1	35	14	333	5.17	2	5	ND	1	17	1	2	2	122	.40	.025	5	74	.63	55	.27	2	5.89	.02	.03	1	7
STD C/AU-S	19	58	41	132	7.5	67	29	1121	4.19	43	17	7	37	48	18	18	21	56	.47	.087	39	57	.89	180	.07	35	2.00	.08	.13	11	47

BHP UTAH MINES LTD. PROJECT-ISLAND COPPER MINE FILE # 88-0335

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
31W 25N	1	60	12	96	.1	40	20	456	6.11	3	5	ND	1	21	1	2	3	135	.43	.033	5	67	.81	55	.28	2	4.91	.02	.03	1	1
31W 24N	2	88	20	84	.1	27	15	928	4.58	9	5	ND	1	47	1	2	4	109	1.57	.071	8	36	1.00	68	.25	5	3.23	.05	.05	1	1
21AW 48N	1	42	12	29	.1	11	6	182	5.52	2	5	ND	1	12	1	2	2	147	.35	.021	5	67	.22	15	.38	2	4.65	.02	.01	1	1
21AW 47N	1	51	16	59	.1	16	13	398	6.07	2	5	ND	1	14	1	2	3	149	.33	.046	6	70	.27	30	.36	2	6.11	.02	.01	1	3
21AW 46N	1	27	8	39	.3	11	9	405	5.28	3	5	ND	1	13	1	2	2	129	.28	.041	4	56	.17	19	.32	6	4.19	.01	.01	1	1
21AW 45N	1	26	13	37	.1	10	6	261	5.40	2	5	ND	1	14	1	2	2	152	.30	.032	4	55	.14	20	.33	2	4.10	.01	.01	1	1
21AW 44N	1	45	15	67	.3	17	14	664	6.01	15	5	ND	1	14	1	2	2	156	.32	.050	10	59	.20	37	.30	4	4.77	.02	.01	1	1
21AW 43N	1	39	6	51	.1	13	11	742	5.02	2	5	ND	1	13	1	2	2	140	.30	.059	6	55	.21	27	.32	2	5.19	.02	.01	1	1
21AW 42N	1	45	21	47	.2	16	12	574	6.14	10	5	ND	1	17	1	2	2	162	.32	.049	7	66	.24	39	.32	2	5.38	.02	.01	2	1
21AW 41N	1	51	7	82	.3	11	12	465	6.51	14	5	ND	1	12	1	2	3	116	.14	.078	8	28	.18	51	.11	2	5.31	.01	.02	1	1
19W 51N	3	46	13	52	.1	30	12	296	3.52	2	5	ND	1	19	1	2	4	169	.43	.027	5	70	.62	47	.38	3	4.68	.02	.02	2	1
19W 50N	1	41	13	23	.2	5	3	151	4.77	2	5	ND	1	11	1	2	2	206	.23	.018	5	61	.13	20	.50	2	3.29	.01	.01	1	1
19W 49N	1	43	15	40	.1	11	6	172	5.59	5	5	ND	1	9	1	2	2	151	.25	.017	7	82	.16	12	.37	6	6.95	.02	.01	1	5
19W 48N	1	41	9	39	.2	13	7	196	6.11	2	5	ND	1	15	1	2	5	188	.33	.018	4	74	.20	20	.45	9	4.20	.02	.01	1	1
19W 47N	1	38	15	45	.1	10	7	157	8.21	2	5	ND	1	10	1	2	3	186	.22	.022	4	75	.11	14	.45	2	5.04	.01	.01	2	4
19W 46N	1	17	6	56	.1	4	1	87	.20	2	5	ND	1	9	1	2	3	4	.49	.029	2	3	.06	9	.01	5	.14	.02	.06	1	1
19W 45N	1	33	9	56	.2	20	5	267	2.68	3	5	ND	1	18	1	2	2	75	.45	.040	2	33	.28	21	.20	5	1.85	.02	.03	1	1
19W 44N	1	56	5	62	.1	23	19	459	4.13	2	5	ND	1	22	1	2	4	90	.53	.041	7	55	.34	29	.29	7	5.16	.02	.02	1	1
19W 43N	1	55	10	70	.2	20	16	487	6.17	6	5	ND	1	16	1	2	2	184	.35	.040	7	66	.32	43	.35	2	5.05	.02	.02	1	1
19W 42N	1	31	10	51	.2	9	5	167	5.63	7	5	ND	1	13	1	2	2	141	.28	.029	3	47	.15	19	.32	4	3.50	.02	.01	2	1
19W 41N	2	53	5	54	.5	11	8	578	3.97	3	5	ND	1	24	1	2	2	147	.40	.032	8	53	.27	50	.35	2	4.82	.02	.02	1	1
19W 40N	1	28	6	35	.2	8	3	141	1.34	2	5	ND	1	30	1	2	2	69	.46	.044	4	29	.21	45	.20	4	1.94	.02	.01	2	1
19W 39N	1	62	10	67	.3	17	12	529	5.29	9	5	ND	1	22	1	2	3	140	.41	.045	8	49	.31	66	.31	4	4.30	.02	.01	1	1
19W 38N	1	32	15	58	.2	11	10	339	5.79	2	5	ND	1	27	1	2	2	155	.29	.055	5	49	.17	62	.32	2	4.85	.02	.01	1	1
19W 37N	2	35	17	66	.2	7	18	826	5.96	7	5	ND	1	66	1	2	2	135	.29	.101	6	33	.14	104	.31	2	5.29	.02	.02	1	1
19W 36N	2	30	278	230	.3	11	11	492	4.15	12	5	ND	1	120	1	2	4	114	.78	.039	4	23	.26	107	.19	5	3.22	.02	.03	1	1
19W 35N	1	48	16	65	.4	19	12	338	5.37	3	5	ND	2	20	1	4	2	149	.35	.035	5	77	.30	30	.37	3	5.09	.02	.02	1	1
19W 34N	1	43	8	59	.1	15	11	333	5.49	3	5	ND	1	16	1	2	2	134	.44	.032	5	67	.28	20	.40	4	5.40	.02	.01	1	1
19W 33N	1	39	9	62	.2	18	26	795	6.00	4	5	ND	1	19	1	2	2	130	.51	.025	5	70	.33	28	.41	2	4.63	.02	.02	1	1
19W 32N	1	40	11	46	.1	16	6	172	2.81	2	5	ND	1	16	1	2	2	105	.58	.031	5	51	.30	16	.33	6	4.69	.02	.01	1	4
19W 31N	1	48	16	36	.3	13	9	177	5.94	2	5	ND	1	17	1	2	2	184	.34	.017	5	68	.16	47	.46	2	4.28	.02	.02	1	1
19W 30N	1	34	11	36	.3	12	7	159	6.45	2	5	ND	1	13	1	2	2	200	.30	.023	5	69	.13	13	.50	2	4.46	.02	.01	1	1
19W 29N	1	34	9	32	.1	15	7	148	5.18	5	5	ND	1	13	1	2	2	133	.35	.024	4	74	.17	13	.38	2	5.95	.02	.01	1	2
19W 28N	2	53	19	40	.2	17	10	196	6.24	2	5	ND	1	13	1	2	2	193	.33	.026	4	72	.20	21	.47	7	5.32	.02	.02	2	1
19W 27N	1	42	7	44	.2	13	8	212	5.62	2	5	ND	1	13	1	2	2	179	.41	.028	5	73	.20	12	.46	7	5.01	.02	.01	2	1
19W 26N	1	76	9	49	.2	20	19	466	6.42	2	5	ND	1	12	1	2	5	176	.35	.041	6	77	.27	24	.56	3	5.54	.02	.02	1	1
STD C/AU-S	19	57	37	132	7.4	67	29	1072	4.15	43	19	7	36	48	18	18	21	56	.47	.089	38	57	.88	179	.07	34	1.91	.08	.13	11	48

BHP UTAH MINES LTD. PROJECT-ISLAND COPPER MINE FILE # 88-0335

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
19W 25N	1	55	5	42	.2	14	8	214	6.40	4	5	ND	1	14	1	2	2	186	.40	.026	6	82	.20	19	.49	2	5.49	.02	.02	2	1
19W 24N	1	60	2	58	.1	30	15	332	5.94	6	5	ND	1	15	1	2	2	171	.50	.026	5	79	.53	26	.44	2	5.48	.02	.02	1	1
19W 23N	1	65	6	58	.1	26	15	349	7.57	2	5	ND	1	14	1	2	2	212	.40	.028	6	84	.39	29	.55	8	5.86	.02	.02	1	1
19W 22N	1	60	9	57	.1	19	11	290	6.85	5	5	ND	1	14	1	2	2	191	.43	.036	6	83	.32	20	.51	6	5.93	.02	.02	1	1
19W 21N	1	43	6	53	.1	13	10	282	7.30	4	5	ND	1	10	1	2	2	206	.29	.033	5	83	.16	15	.50	6	5.96	.02	.01	1	1
19W 20N	1	47	5	62	.1	14	16	574	7.96	3	5	ND	1	11	1	2	2	207	.32	.048	9	82	.16	19	.51	6	6.36	.02	.02	1	1
19W 19N	1	55	9	54	.1	18	13	341	5.11	6	5	ND	1	17	1	2	2	158	.56	.039	5	69	.31	18	.43	6	5.51	.02	.01	1	3
19W 18N	1	40	5	79	.1	15	11	586	6.06	2	5	ND	1	19	1	2	2	200	.52	.045	5	66	.21	26	.49	4	3.94	.02	.03	1	1
19W 17N	1	41	7	49	.1	14	11	614	6.15	5	5	ND	1	16	1	2	2	179	.43	.048	6	67	.17	23	.46	6	3.93	.02	.02	2	1
19W 16N	1	48	8	64	.1	18	13	483	6.63	7	5	ND	1	10	1	3	2	168	.28	.068	5	71	.22	24	.42	3	6.73	.03	.03	1	1
19W 15N	1	110	5	80	.3	31	22	695	6.10	8	5	ND	1	13	1	2	2	136	.34	.070	8	75	.50	43	.36	3	8.18	.02	.02	1	1
9W 55N	1	20	4	38	.1	7	5	145	6.45	2	5	ND	1	10	1	2	2	250	.19	.011	3	58	.08	19	.60	2	2.55	.01	.02	1	1
9W 54N	2	31	2	37	.1	7	6	135	5.77	3	5	ND	1	12	1	2	2	167	.30	.020	4	70	.17	16	.50	8	4.14	.02	.02	1	1
9W 53N	1	31	2	56	.1	13	7	208	7.71	4	5	ND	1	11	1	5	2	165	.32	.028	4	92	.18	12	.45	4	6.36	.02	.02	1	1
9W 52N	1	37	2	40	.1	14	9	229	6.42	2	5	ND	2	14	1	2	2	196	.38	.026	5	77	.19	17	.51	4	4.81	.02	.02	1	1
9W 51N	1	42	2	59	.1	17	9	361	6.23	2	5	ND	1	14	1	4	2	192	.36	.030	5	80	.21	17	.47	4	5.25	.02	.02	1	1
9W 50N	1	13	7	52	.1	5	2	209	2.23	2	5	ND	1	16	1	2	2	93	.39	.034	2	23	.08	12	.20	4	.75	.02	.03	1	1
9W 49N	1	43	7	38	.1	18	9	191	6.83	2	5	ND	2	15	1	2	2	225	.37	.017	6	97	.25	14	.51	3	5.59	.02	.02	2	4
9W 48N	1	18	6	92	.1	5	1	269	.45	2	5	ND	1	29	1	2	2	9	.52	.065	2	5	.07	38	.01	4	.42	.04	.03	1	1
9W 47N	1	8	2	74	.1	1	1	642	.08	6	5	ND	1	14	1	2	5	2	.65	.043	2	1	.07	34	.01	2	.07	.02	.05	1	3
9W 46N	1	7	2	44	.1	3	1	435	.11	2	5	ND	1	33	1	3	5	1	.60	.037	2	1	.06	72	.01	3	.09	.02	.03	2	1
9W 45N	1	16	7	26	.2	6	1	125	1.24	2	5	ND	1	25	1	3	2	59	.58	.040	2	20	.09	45	.17	5	.54	.02	.04	1	1
9W 44N	1	13	6	98	.1	3	1	282	.15	2	5	ND	1	12	1	2	3	3	.44	.035	2	2	.07	14	.01	2	.12	.03	.05	1	1
9W 43N	1	42	5	45	.1	16	7	191	5.73	6	5	ND	2	14	1	2	2	165	.36	.018	6	93	.23	12	.42	2	6.46	.02	.02	1	2
9W 42N	1	25	4	30	.1	8	2	111	1.11	2	5	ND	1	20	1	3	2	77	.31	.016	4	33	.12	31	.36	2	1.35	.02	.01	1	1
9W 41N	1	8	6	69	.2	10	1	186	.22	2	5	ND	1	25	1	2	3	5	.47	.039	2	6	.07	15	.01	5	.19	.02	.02	1	1
9W 40N	1	39	5	40	.1	17	14	321	6.49	7	5	ND	1	14	1	2	2	193	.34	.026	6	78	.20	17	.49	2	5.52	.02	.02	1	1
9W 39N	1	59	2	36	.1	17	15	373	5.42	2	5	ND	1	16	1	2	2	172	.41	.034	6	72	.27	21	.46	2	4.90	.02	.02	2	1
9W 38N	1	53	4	62	.1	19	11	307	6.75	6	5	ND	2	13	1	2	2	179	.36	.038	5	84	.21	22	.46	2	7.05	.02	.02	1	3
9W 37N	1	33	4	39	.1	10	6	174	6.51	2	5	ND	1	13	1	2	2	232	.27	.023	6	68	.15	16	.54	2	3.71	.02	.01	1	6
9W 36N	1	20	9	34	.1	11	3	125	1.73	5	5	ND	1	19	1	2	2	84	.55	.029	3	45	.21	20	.34	3	1.98	.02	.01	1	1
9W 35N	1	41	5	45	.1	15	10	231	7.43	2	5	ND	1	13	1	2	2	236	.34	.022	6	90	.18	20	.56	2	5.40	.02	.02	1	1
9W 34N	2	36	6	50	.1	13	15	432	1.89	2	5	ND	1	39	1	3	2	68	.75	.055	8	42	.21	49	.16	4	2.13	.02	.02	2	2
9W 33N	1	37	6	82	.1	16	18	953	1.92	2	5	ND	1	22	1	2	2	82	.62	.046	5	47	.30	37	.21	3	2.23	.02	.02	1	1
9W 32N	2	43	5	53	.1	16	8	214	2.46	4	5	ND	1	21	1	2	2	99	.56	.038	5	53	.29	31	.27	4	2.74	.02	.02	1	2
STD C/AU-S	19	59	39	132	7.4	68	29	1127	4.17	44	18	8	37	47	18	18	25	56	.47	.089	38	57	.89	181	.07	34	1.92	.08	.14	10	50

BHP UTAH MINES LTD. PROJECT-ISLAND COPPER MINE FILE # 88-0335

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
9W 31N	1	50	4	57	.2	18	15	585	5.64	2	5	ND	1	18	1	2	2	174	.54	.028	6	71	.30	23	.46	2	4.94	.02	.02	1	8
9W 30N	1	30	5	35	.1	8	6	209	6.52	2	5	ND	1	13	1	2	2	183	.33	.024	3	65	.17	14	.48	2	3.17	.01	.01	1	3
9W 29N	1	40	7	45	.1	13	9	361	4.94	2	5	ND	1	14	1	2	2	139	.36	.037	5	64	.22	20	.39	2	5.00	.01	.01	1	5
9W 28N	1	49	4	60	.1	22	16	483	5.14	2	5	ND	1	17	1	2	2	152	.46	.047	7	69	.35	30	.42	2	6.15	.02	.01	1	2
9W 27N	1	21	3	33	.1	8	6	194	6.47	2	5	ND	1	15	1	2	2	218	.26	.019	3	57	.15	21	.52	3	2.65	.02	.01	1	19
9W 26N	1	43	2	45	.1	18	12	312	5.77	2	5	ND	1	17	1	2	2	163	.49	.022	6	75	.37	23	.45	2	5.83	.02	.01	1	1
9W 25N	1	46	8	55	.1	17	23	416	6.02	2	5	ND	1	15	1	2	2	211	.28	.041	4	86	.32	40	.54	3	7.05	.02	.02	1	7
9W 24N	1	75	7	47	.1	14	13	303	6.24	5	5	ND	1	13	1	3	2	175	.30	.057	8	77	.27	19	.45	2	7.86	.02	.02	1	1
9W 23N	1	73	5	53	.1	18	14	369	6.24	2	5	ND	1	20	1	2	2	177	.45	.047	8	69	.27	38	.44	2	6.57	.02	.01	1	3
9W 22N	1	64	4	60	.2	18	13	412	5.77	3	5	ND	1	17	1	2	2	154	.37	.052	7	65	.26	31	.39	2	6.11	.02	.02	1	2
9W 21N	1	47	10	46	.2	18	12	340	6.84	2	5	ND	1	16	1	2	2	184	.31	.032	13	63	.24	40	.46	3	5.19	.02	.01	1	1
9W 20N	1	64	13	68	.2	20	15	434	5.86	4	5	ND	1	27	1	2	2	134	.41	.067	7	58	.48	44	.33	2	6.96	.02	.02	1	1
9W 19N	1	48	20	74	.5	11	15	680	5.93	4	5	ND	1	31	1	2	2	124	.38	.099	7	43	.44	47	.29	4	6.87	.02	.03	1	1
9W 18N	1	65	28	144	.3	14	34	4366	7.63	4	5	ND	1	25	1	2	2	172	.28	.067	12	47	.34	84	.39	2	5.99	.01	.02	1	2
9W 17N	1	49	21	112	.6	11	16	842	7.13	7	5	ND	1	30	2	2	2	171	.41	.066	8	44	.31	60	.36	3	5.71	.02	.01	1	12
9W 16N	1	45	30	146	.8	16	11	340	5.54	4	5	ND	1	22	2	2	2	124	.30	.052	5	40	.32	59	.28	4	4.57	.01	.02	1	8
9W 15N	1	50	98	250	.6	9	13	438	7.24	9	5	ND	1	26	2	2	2	129	.34	.044	7	28	.32	77	.25	3	8.07	.02	.02	1	1
9W 14N	2	97	174	202	1.0	9	10	625	6.64	15	5	ND	1	107	2	2	2	91	1.20	.055	4	17	.86	127	.21	2	4.96	.04	.04	1	1
9W 13N	1	68	172	222	1.2	9	11	624	7.03	10	5	ND	1	69	2	2	4	110	.56	.059	6	27	.66	107	.22	2	6.02	.02	.04	1	6
9W 12N	1	19	3	46	.3	3	1	112	.19	2	5	ND	1	33	1	2	2	3	.49	.045	2	3	.09	13	.01	12	.12	.02	.04	2	2
9W 11N	1	23	7	80	.1	28	3	956	.82	2	5	ND	1	58	1	2	2	17	1.13	.055	2	9	.24	89	.04	7	.43	.02	.03	1	6
STD C/AU-S	18	58	38	132	7.4	68	28	1069	4.08	42	18	8	37	47	18	17	22	55	.45	.086	38	55	.96	177	.07	35	1.97	.09	.13	11	52

DR/PS — L 21 A — 29 JAN 88

A3 = 18 7½

STAT	HOR	DEP	TOPO	COL	ORG	CLAY	REM
48N	AB	20"	N	Br/o	H	H	30' South Old Rd
47N	B	10"	N	Br/o	M	H	
46N	B	16"	N	B1/o	M	H	
45N	A/B	24"	L	B1/o	M	H	
44N	B	14"	N	B/o	M	L	Edge of Timb.
43N	B	12"	L	B/o	L	M	
42N	B	20"	L	O/Br	L	M	Crk 20' S Old root
41N	B	14"	S/N	O/Br	M	L	Crest of hill

Note: Blazed tree mkd "734m" 20' W

L 31 W

DR/PS — A3 = 17½ — 26 JAN 88

STAT	HOR	DEP	TOPO	COL	ORG	CLAY	REMARKS
34N	AB	12"	L	R/Br	H	L	30'N of CAT road
35N	B	16	W	O	L	M	
36N	A&C	0-6	W	B	H	H	Nr. Peak of hill No B. Some rock frags in Bag
37N	B	~10"	L	Br/o	M	L	Old root
38N	AB	10"	L	B1/Br	M	L	Outcrop @ 38.3N
39N	B	6"	N	Br	M	L	
40N	B	~12"	W	R/o	L	L	Old root
41N	B	6"	N	R/Br	M	L	
42N	B	6"	L	O	M	L	

L 31 W

33N	B	10"	S	O/Br	M	M	Nr. toe of Slope
32N	B	16"	L	O/Br	L	L	Old root
31N	B	20"	SE	Br	M	L	" "
30N	A/B	16"	S	Br	H	L	
29N	B	10"	S	R/Br	L	L	
28N	B	16"	S	Br	M	L	Old root
27N	B	10"	L	B1/Br	L	M	Creek flowing S.W.
26N	N/B	16"	L	O/Br	H	L	HYDRO R/W Old root
25N	B	6"	L	Br	M	L	Excav. Hydro R/W
24N	?	10"	L	Gr	H	L	10' N of road gravelly may be road material

NEVILLE CROSBY INC

L 35W

DR/PS — 26 JAN 88

A3 = 17½

STAT	HOR	DEP	TOPO	COL	ORG	CLAY	Remarks
27N	B	8"	L	Br	M	M	
28N	AB	6"	L	Br	H	H	Excavd. Hydro R/W
29N	AB	6"	L	R/O	M	M	NEdge of Hydro R/W
30N	B	10"	S	O	M	M	
31N	B/C	6"	S	O/Br	L	L	Steep grade Bedrock just below surface
32N	B	-	S	O	M	L	Under old log
33N	B	8"	N	Br/O	M	L	40'S old CAT road.
34N	B	10"	W	Br/O	M	L	

LINE 39W

DR/PS — 26 JAN 88

A3 = 17½°

STAT	HOR.	DEP.	TOPO.	COL.	Org	CLAY	Remarks
28N							
29N							Pit face @ 29.5
30N	B	8"	L	Br	M	L	Nr. Hydro R/W Excav.
31N	B	10"	L	Br	M	L	Drainage 30'E
32N	AB	10"	L	Y/O	M	L	Drainage 10'W
33N	B	6"	W	Br.	L	L	Drainage 50'W
34N	B	6"	W	Br	M	L	Drainage 80'W
35N	B	12"	S	Br.	M	L	S. side of road
36N	AB	16"	L	Or/Br	H	M	Under root
37N	B	20"	W	R/B	L	H	" "
38N	B	10"	W	O/B	L	M	
39N	B	24"	NW	B	L	M	tree root
40N	AB	30"	N	B/O	H	L	Old tree root

Note Posib. old claim post @ L39W, 35.5N (Tag ripped off)

Claim post Rupert — Feb 13, 1985 Tag ripped L39W, 30.3N

From L39W, 31N Compass 400' @ 107½° to L35W, 31N

E 2 PS | L 9W | 28 JAN 88

L 3 17½°

STAT	HOR	Dep.	Topo	Col	Org	Clay	Remarks
11N	A	16"	L	Bl	H	L	30 W 3/4"E rm 1 No 3 @ 9'
12N	A	16"	L	Bl	H	L	Swamp
13N	B	6"	L	Br	M	L	Hydro 2W
14N	B	4"	S	O	H	L	" "
15N	B	16"	S	R/O	M	M	Edge of Timber
16N	B	12"	S	R/Br	M	L	Old root
17N	B	24"	S	Br/O	M	L	" "
18N	B	16"	L	Br/O	M	L	" "
19N	B	24"	S	Br/O	M	M	" "
20N	B	36"	S	Br/O	L	M	" "
21N	B	30"	S	O/Br	L	M	" "
22N	B	6"	S	O/Br	M	L	
23N	B	10"	L	O/Br	L	M	
24N	B	30"	L	O	L	L	Pink-Yel Flg. Evaz E-W
25N	B	20"	L	Y/Br	H	L	Crk 100'
26N	B	16"	L	R/O	M	L	
27N	B	8"	L	R/B	H	L	Old root
28N	B	30"	L	R/O	L	L	" "
29N	B	24"	L	B/O	M	M	" "
30N	B	24"	L	Y/O	L	M	" "

L 9W

STAT							
S1N	B	12"	L	O	M	L	
S2N	B	16"	L	O	M	M	Edge of Timber
S3N	B	12"	L	O	H	M	Old root
S4N	B	30"	L	R/O	H	L	" "
S5N	B	10"	L	O	M	L	" "

DR/PS — L 9W — 28 JAN 88

Az = 174°

STAT	HOR	DEP	TOPO	COL	ORG	CLAY	REM
31N	B	30"	E	O/Br	M	M	Old root
32N	A/B	12"	E	Bl/Br	L	M	315 Blazed tree tag "315302 59E 2.60m"
33N	A	12"	L	Bl	M	L	Swampy Crk
34N	A	20"	L	Bl	M	L	"
35N	A	36"	L	O	L	M	Old root
36N	A	36"	L	Br/Bl	L	L	Swampy Crk Old root
37N	B	10"	S	R/O	M	L	
38N	B	12"	SE	R/O	M	L	Old root
39N	B	24"	L	R/O	L	M	Blaze "Hub 5" 40 E
40N	B	4"	L	R/O	M	M	Edge of timber
41N	A	36"	L	Bl	H	L	No B @ ½ shov. hole
42N	A	18"	L	Bl/Br	H	L	
43N	B	36"	L	O	M	M	Old root
44N	A	24"	L	Bl	H	L	Swampy
45N	A	20"	L	Bl	H	L	"
46N	A	24"	L	Bl	H	L	"
47N	A	20"	L	Bl	H	L	Very Swampy
48N	A	16"	L	Bl	H	L	" "
49N	B	10"	S	O	M	L	"
50N	A	20"	L	Bl	H	L	

L 9W

STAT							
S1N	B	12"	L	O	M	L	
S2N	B	16"	L	O	M	M	Edge of Timber
S3N	B	12"	L	O	H	M	Old root
S4N	B	30"	L	R/O	H	L	" "
S5N	B	10"	L	O	M	L	" "

DR/PS — L 9W — 28 JAN 88

Az = 174°

STAT	HOR	DEP	TOPO	COL	ORG	CLAY	REM
31N	B	30"	E	O/Br	M	M	Old root
32N	A/B	12"	E	Bl/Br	L	M	315 Blazed tree tag "315302 59E 2.60m"
33N	A	12"	L	Bl	M	L	Swampy Crk
34N	A	20"	L	Bl	M	L	"
35N	A	36"	L	O	L	M	Old root
36N	A	36"	L	Br/Bl	L	L	Swampy Crk Old root
37N	B	10"	S	R/O	M	L	
38N	B	12"	SE	R/O	M	L	Old root
39N	B	24"	L	R/O	L	M	Blaze "Hub 5" 40 E
40N	B	4"	L	R/O	M	M	Edge of timber
41N	A	36"	L	Bl	H	L	No B @ ½ shov. hole
42N	A	18"	L	Bl/Br	H	L	
43N	B	36"	L	O	M	M	Old root
44N	A	24"	L	Bl	H	L	Swampy
45N	A	20"	L	Bl	H	L	"
46N	A	24"	L	Bl	H	L	"
47N	A	20"	L	Bl	H	L	Very Swampy
48N	A	16"	L	Bl	H	L	" "
49N	B	10"	S	O	M	L	"
50N	A	20"	L	Bl	H	L	

DR/PS L 19W 29 JAN 88

A3 197½

	HOR	DEP	TOPO	COL	ORG	CLAY	EEM.
17N	B	12"	W	O	M	L	40's Rd.
16N	B	10"	L	O	H	L	Old root
15N	B	10"	L	O	M	M	S side road!?
14N							
13N							

Note L19W was started @ the wrong spur seems to be ~200' West & 400' N

L 19 W CONT

DR/PS — Az = 17½° — 27 JAN 88

STAT	HOR	DEP	TOPO	COL	ORG	CLAY	REMARKS
39N	B	10"	N	Br/y	L	M	
40N	A	16"	L	Bk	H	L	Edge of slash Swampy
41N	A/B	16"	L	Bk/Br	H	M	
42N	B	20"	W	Br/o	L	M	
43N	B	6"	W	Br/o	M	M	Tag mkd L21W, 48N 30'E
44N	B	12"	L	Br	M	H	Tag mkd L21W, 49N 5'W
45N	A	12"	L	Bl	H	L	No B @ 24"
46N	A	20"	L	Bl	H	L	Red flg. @ 234° Swampy
47N	B	40"	L	R/o	M	L	Edge of Timber
48N	B	12"	N	R/Br	L	M	
49N	B	12"	N	R/Br	M	M	
50N	B	30"	L	Gr/Br	H	L	
51N	A/B	20"	L	Gr/Br	H	L	Old root

Red/Blue flagging @ 92° @ 51N

Blazed tree ≈ 70' E mk'd "HUB 8"

L 19W

DR/PS — Az = 17½° — 27 JAN 88

STAT	HOR	DEP	TOPO	COL.	ORG.	CLAY	REMARKS
* 18N	B	6"	L	Bl/Br	M	L	60' N of L Spur
19N	B	16"	L	O/Br	M	M	Old root
20N	B	12"	L	O/Br	M	L	" "
21N	B	6"	L	O/Br	M	L	
22N	B	6"	L	O/Br	M	L	
23N	B	6"	L	O/Br	M	L	Edge of timber Crk @ 23.6N Blazed tree mkd
* 24N	B	16"	L	O/Br	L	L	FC #12
25N	B	20"	L	O/Br	M	M	Old root
26N	B	36"	L	O/Br	L	M	Lg. old root
27N	B	20"	L	O/Br	M	M	Old root
28N	B	10"	L	R/Br	L	L	Crk @ 27.8N time of red
29N	B	20"	L	O/Br	L	L	flagging E-W
30N	B	6"	L	R/Br	L	M	
31N	B	20"	L	O/Br	M	L	Old root
32N	B	36"	L	Gr/Br	M	H	Old test hole
33N	B	30"	L	Y/Br	H	L	Old root
34N	B	24"	L	R/o	L	L	" "
35N	B	10"	L	R/Br	M	L	" "
36N	B	10"	S	Y/Br	H	M	
37N	B	12"	L	O/Br	M	L	Red E-W Flagging Blaze 30'E "649M"
38N	B	40"	L	Br/o	L	L	Old root

39000 40000 41000 42000

7000 6000 5000 4000 3000

N
W E
S

Feet
0 200 400 600
Meters
0 48 96 144 192
200

Value Ft > -9999 > 10 > 15

Tags: 92=□ 83=□ 84=□ 85=□ 86=□ 87=□ 88=○
Default symbol: □
Points plotted: 383

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,368

[redacted]

BHP-UTAH MINES LIMITED

ISLAND COPPER MINE
EAST-88 GROUP GEOCHEM SURVEY
R-17 AREA - ALL SAMPLES
MOLYBDENUM ASSAYS - PPM
CIRCLE = 1988 DATA / SQUARE = PRE 1988

Scale:	200
Date:	03/16/88
Project:	ILC1
Drawn by:	JAF
Checked:	
Approved:	
Drawing No.	
	R17MO.LCN

39000 40000 41000 42000

7000 6000 5000 4000 3000

N
W E
S

Feet
0 200 400 600

Meters
0 48 96 144 192

200

Value #1 > -9999.0 > 0.5 > 1.0

Tags: 82= 83= 84= 85= 86= 87= 88=
Default symbol:
Points plotted: 383

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,368

[redacted]

BHP-UTAH MINES LIMITED

ISLAND COPPER MINE
EAST-88 GROUP GEOCHEM SURVEY
R-17 AREA - ALL SAMPLES
SILVER ASSAYS - PPM
CIRCLE = 1988 DATA / SQUARE = PRE 1988

Scale:	200
Date:	03/16/88
Project:	ILC1
Drawn by:	JAF
Checked:	
Approved:	
Drawing No.	
	R17AG.LCN

39000 40000 41000 42000

7000 6000 5000 4000 3000

N
W E
S

Feet
0 200 400 600

Meters
0 48 96 144 192

200

Value #1 > -9999 > 30 > 40

Tags: 82=□ 83=□ 84=□ 85=□ 86=□ 87=□ 88=□
Default symbol: □
Points plotted: 145

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,368

[redacted]

BHP-UTAH MINES LIMITED

ISLAND COPPER MINE
EAST-88 GROUP GEOCHEM SURVEY
R-17 AREA - ALL SAMPLES
GOLD ASSAYS - PPB
CIRCLE = 1988 DATA / SQUARE = PRE 1988

Scale:	200
Date:	03/16/88
Project:	ILC1
Drawn by:	JAF
Checked:	
Approved:	
Drawing No.	
	R17AU.LCN

BIM 4 20033 SEPT. 25 | BIM 2 20031 SEPT. 25

BIM 3 20032 SEPT. 25 | BIM 1 20030 SEPT. 25

SPAM 2 FR. 23883 MAR. 7 | SPAM 3 FR. 23884 MAR. 7 | SPAM 4 FR 23885 MAR 7.

KEN 2 20202 OCT. 2 | KEN 1 20201 OCT. 2 | BEE 1 20006 SEPT. 21 | F-3 FR 33474 JAN 8 | F-9 33465 JAN 8 | F-10 33466 JAN 8 | F-15 33471 JAN 8

KEN 4 20204 OCT 2 | KEN 3 20203 OCT 2 | BEE 2 20007 SEPT. 21 | F-7 33463 JAN 8 | F-8 33464 JAN 8 | F-14 33470 JAN 8

KEN 6 20206 OCT 2 | KEN 5 20205 OCT 2 | KEN 7 20207 OCT 2 | F-5 33461 JAN 8 | F-6 33462 JAN 8 | TAR 6 20001 SEPT 25

KEN 14 23879 MAR 7 | KEN 13 23878 MAR 7 | KEN 8 20208 OCT 2 | F-3 33459 JAN 8 | F-4 33460 JAN. 8 | TAR 4 19999 SEPT 25

SPAM 12 FR 23893 MAR 7 | F-1 33457 JAN 8 | F-2 33458 JAN. 8 | TAR 2 (1997) SEPT 25

JIM 10 19402 L. 2148 MAY 23 | JIM 12 19404 L. 2149 MAY 23 | JIM 14 19406 L. 2150 MAY 23 | JIM 16 19408 L. 2151 MAY 23

F-1 FR 33472 JAN 8 | F-2 FR 1958 Nov 9

CAR 7 19984 SEPT 21 | CAR 8 19985 SEPT. 21 | CAR 15 19992 SEPT. 21 | CAR 16 19993 SEPT. 21

SPAM 24 FR 24508 APR. 17

CAR 5 19982 SEPT. 21 | CAR 6 19983 SEPT. 21 | CAR 13 19990 SEPT 21 | CAR 14 19991 SEPT 21

CAR 3 19981 SEPT. 21

SPAM 28 FR 24512 APR. 17

CAR 12 19988 SEPT. 21

EXPO 56 19865 SEPT. 25 | EXPO 32 19841 SEPT 21

EXPO 55 19864 SEPT. 25 | EXPO 31 19840 SEPT 21 | APR. 17

24513

EXPO 54 19863 SEPT 25 | EXPO 30 19839 SEPT 21

EXPO 19838 29 SEPT 21

KEY FR 34195 AUG. 30

RUPERT 12 19350 MAY 1 | EXPO 53 19862 SEPT. 25

R-5 #1236 (1982) JUL 20

RUPERT 11 19349 MAY 1

#1235 (1982) JUL 20

EXPO 51 19860 SEPT 25

RUPERT 2 18618 MAY 1

RUPERT 10 19351 MAY 1

SNAFU (12 UNITS) #1237 (1982) JUL 20 6S x 2W

RUPERT 1 18611 L 2152

RUPERT 4 18614 MAY 17

RUPERT 1 19355 MAY 1

RUPERT 18 19356 MAY 1

R-3 #1234 (1982) JUL 20

RUPERT 10 FR 19348 L 2153 MAY 1

RUPERT 3 18613 MAY 17

RUPERT 6 FR 20171 MAY 18

DOG # 2 #1239 (1982) JUL 20

SNAFU

RUPERT 9 19347 L 2154 MAY 1

RUPERT 5 18615 MAY 17

DOG # 1 #1238 (1982) JUL 20

RUPERT 7 18617 MAY 17

R-2 #1233 (1982) JUL 20

SNAFU

EAST 88 GROUP BOUNDARY

MAP AREA 1:2400

ROAD 2

LAMB (3 UNITS) # 1047 (1981) NOV. 23 3W x 1N

STAR (15 UNITS) #255 (1978) JUNE 29 3N x 5E

MARS (16 UNITS) #256 (1978) JUNE 29 4N x 4E

VENUS (16 UNITS) #257 (1978) JUNE 29 4N x 4E

SUN (20 UNITS) #64 (1976) FEB 12 4N x 5W

MOON (16 UNITS) #65 (1976) FEB 12 4N x 4E

PLUTO (16 UNITS) #258 (1978) JUNE 29 4S x 4E

MARY (16 UNITS) #965 (1981) JUL 22 4S x 4W

VAL #1066 (1982) JAN 14 4S x 1E

WAUK (12 UNITS) #878 (1981) MAY 20 4N x 3W

WAAS (16 UNITS) #836 1981 MAR 24 4N x 4E

R-18

E-71 32498 JUNE 4	E-72 32499 JUNE 4	E-37 32464 (1970) JUNE 4			
E-69 32496 JUNE 4	E-70 32497 JUNE 4	E-51 32478 JUNE 4	E-52 32479 JUNE 4		
E-67 32494 JUNE 4	E-68 32495 JUNE 4	PAM 38011 JAN 10	E-50 32477 JUNE 4	E-31 32458 JUNE 4 (1970)	
E-65 32492 JUNE 4	E-66 32493 JUNE 4	E-47 32474 JUNE 4	E-48 32475 JUNE 4	E-29 32456 JUNE 4 (1970)	E-30 32457 JUNE 4 (1970)
E-63 32490 JUNE 4	E-64 32491 JUNE 4	E-45 32472 JUNE 4	E-46 32473 JUNE 4	E-27 32454 JUNE 4 (1970)	E-28 32455 JUNE 4 (1970)
E-61 32488 JUNE 4	E-62 32489 JUNE 4	E-43 32470 JUNE 4 (1970)	E-44 32471 JUNE 4 (1970)	E-25 32452 JUNE 4 (1970)	E-26 32453 JUNE 4 (1970)
E-59 32486 JUNE 4	E-60 32487 JUNE 4	E-41 32468 JUNE 4 (1970)	E-42 32469 JUNE 4 (1970)	E-23 32450 JUNE 4 (1970)	E-24 32451 JUNE 4 (1970)

Scale

1000 0 500 1000 1500 2000 2500

Feet

300 0 300 600

Metres

TN

CLAIM LOCATION MAP EAST 88 GROUP

SCALE - 1:12000

GEOLOGICAL BRANCH ASSESSMENT REPORT

17,368

[redacted]

Utah Mines Ltd.

ISLAND COPPER MINE

Port Hardy, B.C.

Drawn by AR	CLAIM LOCATION MAP TO ACCOMPANY REPORT ON EAST-88 GROUP	Date MAY/88
Traced by		Scale 1:12000
Approved by JFleming		Revision
Bench Elev.		Drg. No.

39000 40000 41000 42000

7000 6000 5000 4000 3000

N
W E
S

Feet
0 200 400 600
Meters
0 48 96 144 192
200

Value #1 > -9999 > 90 > 130

Tags: 82= 83= 84= 85= 86= 87= 88=
Default symbol:
Points plotted: 385

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,368

[redacted]

BHP-UTAH MINES LIMITED	
ISLAND COPPER MINE EAST-88 GROUP GEOCHEM SURVEY R-17 AREA - ALL SAMPLES COPPER ASSAYS - PPM CIRCLE = 1988 DATA / SQUARE = PRE 1988	Scale: 200 Date: 03/16/88 Project: ILC1 Drawn by: JAF Checked: Approved: Drawing No. R17CU.LCN

39000 40000 41000 42000

7000 6000 5000 4000 3000

N
W E
S

Feet
0 200 400 600
Meters
0 48 96 144 192
200

Value #1 > -9999 > 20 > 40

Tags: 82=□ 83=□ 84=□ 85=□ 86=□ 87=□ 88=□
Default symbol: □
Points plotted: 383

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,368

[redacted]

BHP-UTAH MINES LIMITED

ISLAND COPPER MINE
EAST-88 GROUP GEOCHEM SURVEY
R-17 AREA - ALL SAMPLES
ARSENIC ASSAYS - PPM
CIRCLE = 1988 DATA / SQUARE = PRE 1988

Scale:	200
Date:	03/16/88
Project:	ILC1
Drawn by:	JAF
Checked:	
Approved:	
Drawing No.	
	R17AS.LCN

39000 40000 41000 42000

7000 6000 5000 4000 3000

N
W E
S

Feet
0 200 400 600
Meters
0 48 96 144 192
200

Value #1 > -9999 > 100 > 200

Tags: 82=□ 83=□ 84=□ 85=□ 86=□ 87=□ 88=○
Default symbol: □
Points plotted: 385

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,368

[redacted]

BHP-UTAH MINES LIMITED

ISLAND COPPER MINE
EAST-88 GROUP GEOCHEM SURVEY
R-17 AREA - ALL SAMPLES
ZINC ASSAYS - PPM
CIRCLE = 1988 DATA / SQUARE = PRE 1988

Scale:	200
Date:	03/16/88
Project:	ILC1
Drawn by:	JAF
Checked:	
Approved:	
Drawing No.	
	R17ZN.LCN

39000 40000 41000 42000

7000 6000 5000 4000 3000

N
W E
S

Feet
0 100 400 800

Meters
0 48 96 144 192

200

Value #1 > -9999 > 30 > 50

Tags: 82=□ 83=□ 84=□ 85=□ 86=□ 87=□ 88=○
Default symbol: □
Points plotted: 385

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,368

[redacted]

BHP-UTAH MINES LIMITED

ISLAND COPPER MINE
EAST-88 GROUP GEOCHEM SURVEY
R-17 AREA - ALL SAMPLES
LEAD ASSAYS - PPM
CIRCLE = 1988 DATA / SQUARE = PRE 1988

Scale:	200
Date:	03/16/88
Project:	ILC1
Drawn by:	JAF
Checked:	
Approved:	
Drawing No.	
	R17PB.LCN

39000 40000 41000 42000

7000 6000 5000 4000 3000

N
W E
S

Feet
0 200 400 600
Meters
0 48 98 144 192
200

Tags: 82=□ 83=○ 84=△ 85=+ 86=X 87=◇
Default symbol: ○
Points plotted: 145

PIT 21 PIT 20 PIT 19 PIT 18 PIT 17 PIT 16 PIT 15 PIT 14 PIT 13 PIT 12 PIT 11 PIT 1 PIT 2 PIT 3 PIT 4 PIT 5 PIT 6 PIT 7 PIT 8 PIT 9 PIT 10

BS57 BS54 BS51 BS49 BS47 BS45 BS43 BS41 BS39 BS38 BS33 BS12 BS13 BS17 BS19 BS20 BS23 BS29 BS31

BHP-UTAH MINES LIMITED

ISLAND COPPER MINE
EAST-88 GROUP GEOCHEM SURVEY
R-17 AREA
STATION POSTINGS - SOIL SAMPLES

Scale:	200
Date:	03/16/88
Project:	ILC1
Drawn by:	JAF
Checked:	
Approved:	
Drawing No.	R17STA.LCN