Report on the

Percussion Drilling Program

on the

STERRITT CREEK PROSPECT

More Claims, Hazelton Area.

Omineca Mining Division, B. C.

93 M/12E

Latitude 55° 32.6' Longitude 127° 37.9'

ASARCO EXPLORATION COMPANY OF CANADA LIMITED

(Owner and Operator)

by

D. H. Olson

February, 1980

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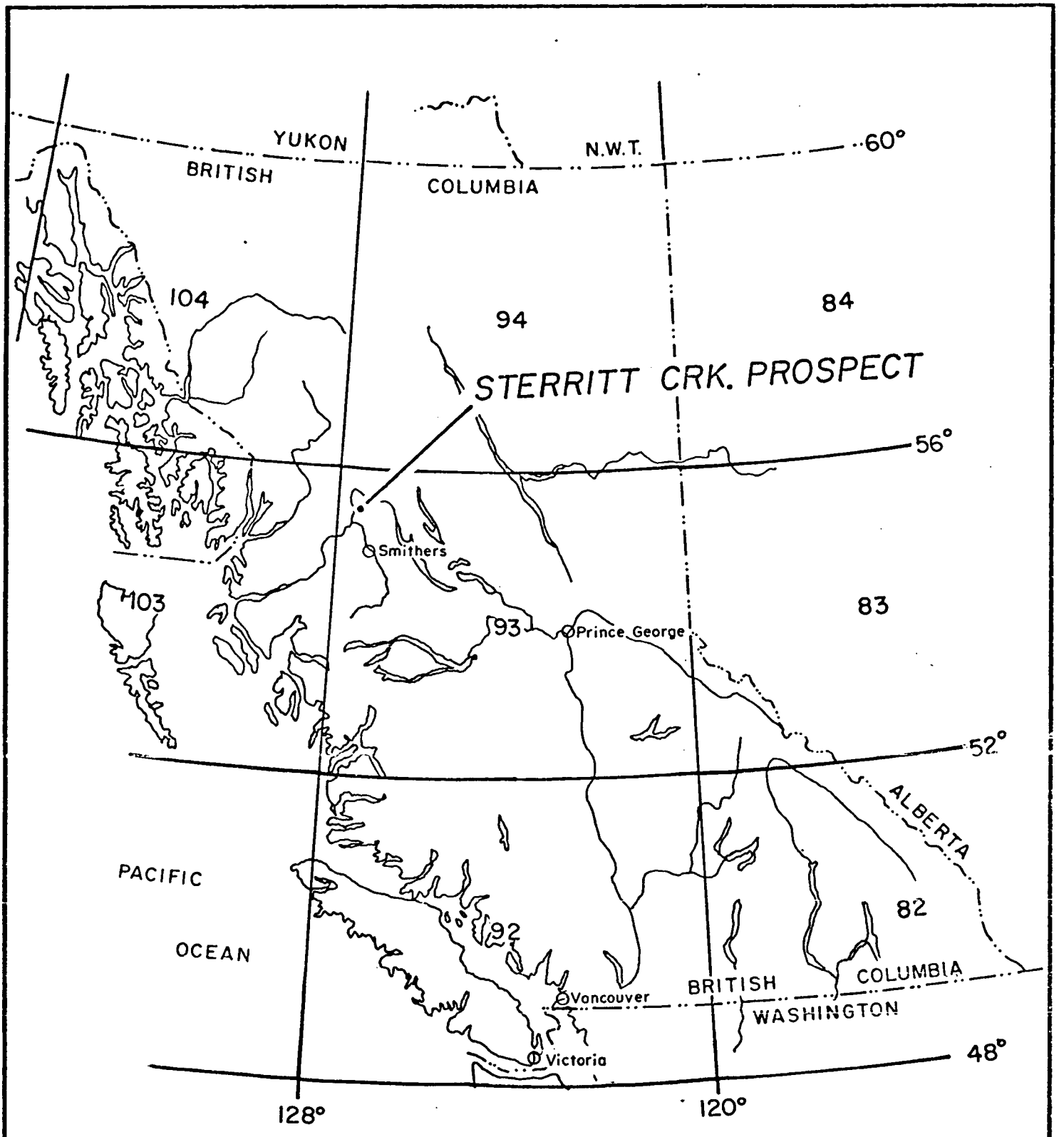
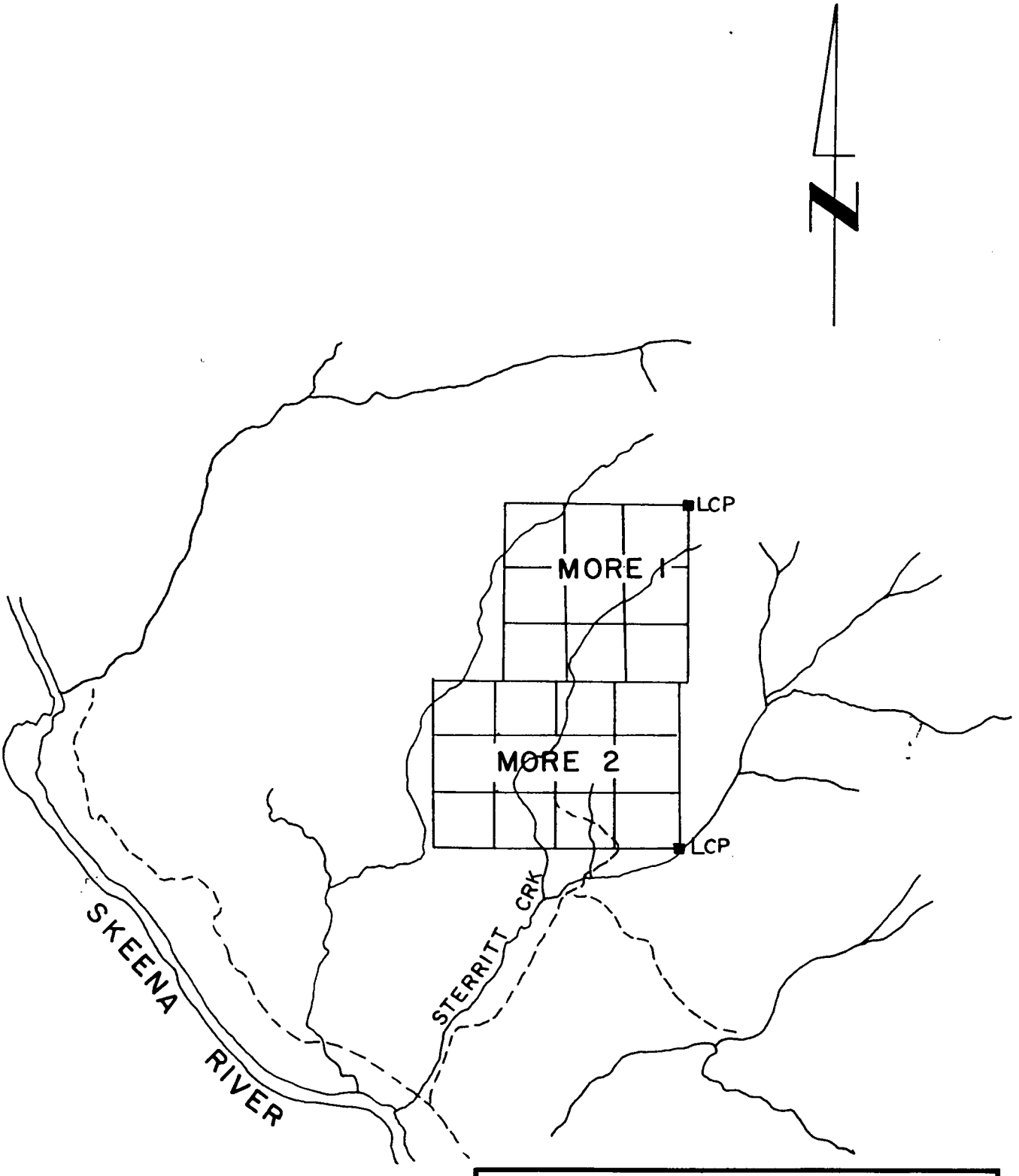


ASARCO Vancouver

STERRITT CRK. PROSPECT
LOCATION MAP

Drawn by	Date	N.T.S.		Figure
D.G.M.	9 Nov. 78	93M/12E		1

VanCal



1 0 1 2 KM

ASARCO Vancouver

STERRITT CRK PROSPECT
MORE CLAIMS — OMINECA M.D.

Drawn by	Date	N.T.S.		
D.G.M.	2 Nov. 78	93M/12E		Fig. 2

VanCal

INTRODUCTION

A percussion drilling program was carried out on the More #2 claim on August 23, 1979 and from September 3-11,1979 by Asarco Exploration Company of Canada, Limited. The purpose of the drilling program was to investigate coincedent induced polarization and geochemical Cu-Mo soil anomalies within the More # 2 claim.

The percussion drilling was carried out by Lorne Spence Enterprises of Smithers, B.C. A Nodwell mounted Atlas Copco drill was used to drill holes approximately 22.5 Cm. in diameter. M. F. Lancaster of ASARCO supervised the program.

LOCATION & ACCESS (Figure 1)

The property is located 40 km north of Hazelton, B.C., in the Omineca Mining Division. The center of the property is approximately 55^{o} 32.6' north latitude and 127^{o} 37.9' west longitude.

Access to the property is via a gravel logging road along the east bank of the Skeena River to Sterritt Creek.

CLAIMS (Figure 2)

Claim	Units	Record No.	Claim Group
More #1	9	880	More Group
More #2	12	1267	" "

WORK DONE

Eight percussion drill holes designated 79 - 1 to 79 - 8 inclusive and totaling 202 meters were drilled. The deepest hole 79-4 reached maxiumum depth of 46 meters. A total of 54 samples of drill cuttings taken at 3 meter intervals were assayed geochemically for Cu & Mo, and 6 of the above samples were also assayed for Pb., Zn and Ag. See Appendix B for assays.

Approximately 580 meters of tractor trail suitable for drill access was constructed by Sweder Logging Co. of Prince George.

GEOLOGY

Regionally, Bowser Group sedimentary and volcanic rocks of Jurassic-Cretaceous age are intruded by Cretaceous and later stocks of granodiorite and quartz monzonite composition.

Locally in the northeast corners of More #1 claim an irregular, subcircular intrusive complex approximately 800 meters in diameter intrudes Bowser Group rocks. This stock known as the Laura Stock is comprised of two petrographically distinct phases. The earliest or bordering phase is a medium to fine-grained, dark grey, biotite-hornblende granodiorite. The later phase making up the core of the stock is a medium to coarse grained leucocratic, crowded porphyritic biotite - hornblende granodiorite. Bowser Group sedimentary rocks peripheral to the Laura stock are pervasively hornfelsed.

Widespread molybdenum, copper and tungsten mineralization occurs throughout the Laura stock and the peripheral hornels. The better grade mineralization is associated with a quartz veinlet stockwork which is best developed toward the periphery of the stock.

Down slope on More #2 claim approximately 1 mile southwest of the Laura stock a large Mo-Cu geochem soil anomaly was defined by Laura Mines in 1967. In July 1979 Phoenix Geophysics Limited carried out an Induced Polarization and Resistivity survey on the More # 2 claim. The survey established a strong generally shallow I.P. anomaly within an area of low resistivity which in turn is superimposed upon the above Mo-Cu geochem anomaly. The reader is referred to the above geophysical survey report on the More Claims by Phoenix Geophysics Ltd. July 31, 1979,

and, a report on the Geology and Rock Geochemistry of the Sterritt Creek Prospect dated 20 October, 1978, by D. G. MacIntyre of Asarco.

The sparse nature of rock outcroppings on the More #2 claim suggests that the geochem and geophysical anomalies are underlain by Bowser Group phyllitic argillites and quartzites which have been intruded by granodiorite dykes and are related to the Laura stock.

PERCUSSION DRILLING RESULTS

Eight shallow percusssion holes totaling 202 meters were drilled during the period September 7 to September 9, 1979 to explore geochem Cu-Mo Soil anomalies and induced polarization resistivity anomalies on More # 2 claim. In percussion holes 79 - 1, 2, 3, 5 & 6 the drill failed to reach bedrock, however, overburden samples collected show anomalous Mo values ranging from 13 to 36 ppm Mo in holes 79 - 2, 3, 5 & 6 and anomalous Cu values ranging from 104 to 470 ppm Cu in holes 79 - 1, 2, 3, 5 and 6. In Hole 79 - 4 the drill entered bedrock at 27.4 meters and penetrated barren dark gray sedimentary rock, probably phyllitic argillite to 45.7 meters, the end of the hole. In Hole 79 - 7 the drill entered bedrock at 10.6 meters and penetrated dark grey argillite or siltstone to the bottom of the hole at 12.2 meters. Hole 79 - 8 was stopped at 30.5 meters after penetrating weakly pyritized dark grey clastic rock from mark 6.1 meters.

CONCLUSIONS

Within the percussion holes which bottomed in bedrock, Mo-Cu geochem values were found to be higher in overburden samples than they were in the samples taken of bedrock.

The percussion drilling by virtue of the shallow hole depths did not provide an explanation for the strong I.P. resistivity and soil geochem anomalies.

The great thickness of overburden encountered in the drilling program plus the physical appearance of the topography in the vicinity of the Mo-Cu geochem anomalies and the relative abundance of Mo-Cu values in the overburden compared with the Mo-Cu values in bedrock suggests a transported geochem anomaly by virtue of a landslide from mineralized areas upslope on More # 1 claim.

Further exploration is warranted to seek an explanation for the strong induced potential anomaly in an area of low resistivity on the More # 2 claim.

D. H. Olson

REFERENCES

Mullan, A.W.: July 1979; Assessment report on the Induced Polarization and Resistivity Survey on the More Claims, Hazelton Area, Omineca Mining Division, B.C.

MacIntyre, D.G. October 1978: Assessment report on the Geology and Rock Geochemistry of the Sterritt Creek Prospect, More #1 Claim (9 units), Hazelton Area, Omineca Mining Division, B.C.

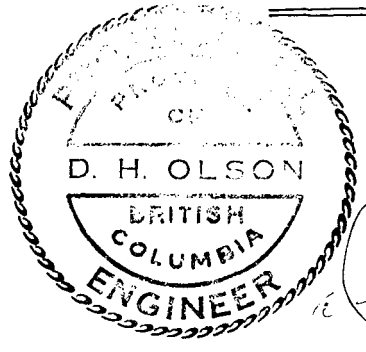
Appendix "A"

1979 Statement of Expenditures

Sterritt Creek Prospect - Omineca Mining Division

MORE # 2 Claim

Labour			
M. Lancaster - Aug. 23, Sept. 3-11 (10 Days)	$	729.00	
R. Wood - September 3 - 11/79 (9Days)		405.00	
M.Thicke - Aug. 23-27/79 (4 Days)		177.42	
Totals (23 Days)	$		$1,311.42
Supplies			
(Sample pans, pails, propane, fittings nails, rope, etc.)			185.43
Assaying			
Acme Analytical Laboratories, Vancouver, B.C. - 54 percussion samples for Cu-Mo			95.60
Vehicle Rental			
Bow Mac - Smithers, B.C.			295.72
Meals, Accomodation & Travel			790.82
Drill Road Construction - 580 meters X 3 meters			
Sweder Logging, Prince George, B.C.			490.00
Drilling			
Lorne Spence Enterprises, Smithers, B.C.			
Mobilization and demobilization	$	610.00	
Water Lines		300.00	
202.7 Meters (665') percussion Drilling @ $4/foot		2,620.00	
Total			3,530.00
Drafting and Report Preparation			250.00
Total Expenditures			$6,948.99



ACME ANALYTICAL LABORATORIES LTD.
saying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

To: American Smelting & Refining Co.
504 - 535 Thurlow St.,
Vancouver, B.C.
V6E 3L2

DATE RECEIVED
OCT 31 1979

File No. 0616

Type of Samples o/b P. Cuttings

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

ASAECO V.O

SAMPLE No.	-80 mesh Mo	-80 mesh Cu	+80 mesh Mo	+80 mesh Cu
79-1 15-20	6	126	2	38
20-25	6	220	7	225
25-30	9	260	2	80
30-35	9	275	8	270
35-40	10	270	9	265
40-45	11	205	3	80
79-2 10-15	18	160	5	68
15-20	23	195	15	128
79-3 25-30	34	140	7	54
40-50	35	255	33	225
79-5 10-20	26	122	10	68
20-30	23	130	16	82
30-40A	33	470	23	450
30-40B	20	108	13	80
40-50	17	80	15	74
50-60	18	88	16	82
60-70	13	104	14	84
70-80	16	92	28	182
79-6 20-30	8	64	5	50
30-40	3	47	2	41
40-50	25	130	15	82
50-60	36	250	13	122
60-70	32	250	22	174
70-80	31	245	25	200
80-90	32	220	21	154
79-7 10-20	5	60	3	46
20-30	8	78	4	50
30-40	5	54	2	37
79-8 15-20	10	60	4	40
20-30	3	28	1	30
30-40	8	44	2	23
40-50	8	55	1	30
50-60	5	54	1	34
60-70	4	60	1	36

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Oct. 22, 1979
DATE REPORTS MAILED Oct. 30, 1979

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

To: American Smelting & Refining Co.,

ACME ANALYTICAL LABORATORIES LTD.
Assaying & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone: 253 - 3158

File No. 0616

Type of Samples P. Cuttings

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

2 SAMPLE No.	-80 mesh Mo	-80 mesh Cu	+80 mesh Mo	+80 mesh Cu
79-8 70-80	3	64	2	39
80-90	3	60	2	38
90-100	2	52	2	42
79-8 70- 80A	7	114	7	116
80- 90A	7	94	6	94
90-100A	4	68	4	64

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:

DETERMINATION:

DATE SAMPLES RECEIVED Oct. 22, 1979

DATE REPORTS MAILED Oct. 30, 1979

ASSAYER

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

To: American Smel ,g & Refining Co.,
504 - 535 Thurlow Street,
Vancouver, B. C. V6E 3L2

ACME ANALYTICAL LABORATORIES LTD.
ɜying & Trace Analysis
852 E. Hastings St., Vancouver, B. C. V6A 1R6
phone:253 - 3158

File No. 0490 R
Type of Samples P. Cuttings
Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Property: Sterritt Creek -80 mesh +80 mesh

SAMPLE No.		Cu	Mo	Cu	Mo
79-4	10'- 20'	76	7	52	11
	20'- 30'	84	8	64	7
	30'- 40'	70	7	62	7
	40'- 50'	62	6	53	6
	50'- 60'	104	12	88	12
	60'- 70'	78	7	74	7
	70'- 80'	102	8	54	6
79-4	80'- 90'	84	6	55	6

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Sept. 13, 1979

DATE REPORTS MAILED Sept. 20, 1979

ASSAYER Dean Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

To: American Smelti. & Refining Co.

ACME ANALYTICAL LABORATORIES LTD.
ing & Trace Analysis
852 E. Hastings St., Vancouver, B.C. V6A 1R6
phone:253 - 3158

File No. 0490 B

Type of Samples Rocks

Disposition

GEOCHEMICAL ASSAY CERTIFICATE

Property: Sterritt Creek

SAMPLE No.	Cu	Mo	Pb	Zn	Ag
79-4 90'-100'	62	5	17	116	2.1
100'-110'	46	3	15	114	.7
110'-120'	49	4	16	98	.6
120'-130'	42	3	14	88	.6
130'-140'	45	4	14	116	.5
79-4 140'-150'	53	4	16	126	.6

All reports are the confidencial property of clients
All results are in PPM.

DIGESTION:.....

DETERMINATION:.....

DATE SAMPLES RECEIVED Sept. 13, 1979

DATE REPORTS MAILED Sept. 20, 1979

ASSAYER Dean Toye

DEAN TOYE, B.Sc.
CHIEF CHEMIST
CERTIFIED B.C. ASSAYER

APPENDIX "C"

Sterritt Creek Percussion Drilling

79 - 1 (-90^{o}) September 7, 1979
0 - 15.2 m. Overburden

79 - 2 (-90^{o}) September 7, 1979
0 - 30.5 m. Overburden

79 - 3 (-90^{o}) September 7, 1979
0 - 18.3 m. Overburden

79 - 4 (-90^{o}) September 7, 1979
0 - 27.4 m. Overburden
27.4 - 39.6 m. Dark Grey Argillite
39.6 - 45.7 m. Graphitic Argillite

79 - 5 (-90^{o}) September 8, 1979
0 - 23 m. Overburden

79 - 6 (-90^{o}) September 8, 1979
0 - 27.5 m. Overburden

79 - 7 (-90^{o}) September 9, 1979
0 - 10.6 m. Overburden
10.6 - 12.2 m. Light to dark grey argillite and silstone

79 - 8 (-90^{o}) September 9, 1979
0 - 6.1 m. Overburden
6.1 - 30.5 m. Grey to dark grey siltstone and greywacke.
Trace pyrite.

LCP
MORE 1

26°01'

BASE LINE

2+70W
1+50W
0+00
1+50E
2+55E
3+00N
1+50N
3+00E
4+50E
5+40E
0+00
60S
3+00S
3+50S
6+00S

BASE LINE

10+50S
10+50S
11+10S
15+50S
11+10S
11+40S
11+40S
11+90S
11+70S
11+70S
11+70S
13+20S
14+70S
17+70S
19+50S
19+50S

CANYON CREEK

LORRAINE CREEK

1+50W
0+00
1+50E
18+30S
18+30S
18+60S
18+60S
3+00E
4+50E
6+00E
18+90S
18+90S
7+50E
19+20S
9+00E
10+50E
12+00E
13+50E

79-1
79-2
79-3
79-4
79-5
79-6
79-7
79-8

1
2

STERRITT CREEK

CLAIM BOUNDARY

MORE 2
LCP

LEGEND

I P SURVEY - SURFACE PROJECTION OF ANOMALOUS ZONES
- DEFINITE
- PROBABLE
- POSSIBLE

PRONOUNCED RESITIVITY CHANGE

MOLYBDENUM IN SOILS > 10ppm

COPPER IN SOILS > 100ppm

ROAD BUILT BY ASARCO

1 ARGILLITE

2 GRANODIORITE

400 0 400 800 1200 1600 FEET

150 0 100 200 300 400 500 METERS

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
7894

ASARCO VANCOUVER

STERRITT CRK. PROSPECT

MORE CLAIMS — OMINECA M.D.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. H. OLSON

Drawn by	Date	N.T.S.	
MFL	FEB '80	93M/12E	