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Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

(over)

TYPE OF REPORT/SURVEY(S)	TOTAL COST
DIAMOND DRILLING	\$24,654.00
AUTHOR(S) J.A. FLEMING sig	INATURE(S)
DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILE	ED . January. 10., 1985 YEAR OF WORK .1984
PROPERTY NAME(S) Far. East. Group	
COMMODITIES PRESENT No.t. Known	
B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN	
	NTS 92L/11W
ATITUDE 50.0. 35½'. N LOI	•
NAMES and NUMBERS of all mineral tenures in good standing (when wo 12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified	ork was done) that form the property [Examples: TAX 1-4, FIRE 2
23/31; E-37; E-41/48; E-50/52; E-59/72; Pa	-
Wauk. (12. units.); Waas. (16. units.)	
OWNER(S)	
1) Utah Mines Ltd. (2)	·
MAILING ADDRESS	
. Box. 370	
PERATOR(S) (that is, Company paying for the work)	
1) Utah Mines Ltd (2)	
MAILING ADDRESS	
Box 370	
. Port Hardy, B.C.	
VON. 2PO	
SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization	
.The Upper Triassic and Lower Jurassic volca	
. Vancouver, and. Bonanza. Groups, underlie, the, a	
Rupert Stock extend east to the area Fro	
dipping gently southward, from top to botton	n is the Bonanza Group pyroclastic volcanio
Parson Bay calcareous siltstones, shales ar Quatsino limestone and Karmutsen amygdaloic been detected in the immediate area.	dal basalt. Copper mineralization has not
Report on Diamond Drilling on the Rupp, Ex. May, 1977, by J. Lamb. 6270, 8178	

TYPE OF WORK IN THIS REPORT		TENT OF WORK METRIC UNITS)			c	ON WHICH CLAIMS		COST APPORTIONED
GEOLOGICAL (scale, area)								
Ground						· · · · · · · · · · · · · · · · · · ·		1
Photo			1	·				
GEOPHYSICAL (line-kilometres)								
Ground						et		
Magnetic								1
Electromagnetic			1					
Induced Polarization			1			· · · · · · · · · · · · · · · · · · ·		
Radiometric			1		<i>.</i>			
Seismic			1					1
Other			1					
Airborne			1					1
GEOCHEMICAL (number of same	oles analysed for)						
Soil			1					1
Silt			1				• • • • • • • • • • • • • • • • • • • •	1
Rock			1				• • • • • • • • • • • • • • • • • • • •	
Other						• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	
DRILLING (total metres; number	of holes size)		1			• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	
	182 9m	1 hole; NQ size		Pluto. (#2	5Ω \	i		404 074 5
Core		.1. 110,10,3 110, 3,12,6		F.14.CO. \ #£	567		• • • • • • • • • • • • • • • • • • • •	\$24.074.0
Non-core	• • • • • • • • • •			• • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	
RELATED TECHNICAL	Cono Same	ala Assays		D1. + - / #0	F0\	4		4 FOO 6
Sampling/assaying	core .sam	ale As.s.a.y.s		P.lu.to. (#2	58.)			• • · . · ɔ́ọoʻ• • • •
Petrographic	••••	• • • • • • • • • • • • • • • • • • • •				· · · · · · · · · · · · · · · · · · ·		
Mineralogic							'	
Metallurgic		• • • • • • • • • • • • • • • • • • • •						
PROSPECTING (scale, area)								1
PREPARATORY/PHYSICAL			l					1
Legal surveys (scale, area)					•			
Topographic (scale, area)		• • • • • • • • • • • • • • • • • • • •				· · · · · · · · · · · · · · · · · · ·		
Photogrammetric (scale, area)		• • • • • • • • • • • • • • • • • • • •		• • • • • • • • •			• • • • • • • • • • • • • • • • • • • •	
Line/grid (kilometres)		• • • • • • • • • • • • • • • • • • • •						
Road, local access (kilometres)		• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • •			• • • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · · · ·
Trench (metres)		· · · · · · · · · · · · · · · · · · ·	1				• • • • • • • • • • • • • • • • • • • •	
Underground (metres)		• • • • • • • • • • • • • • • • • • • •						
							TOTAL COST	\$24,654.00
FOR MINISTRY USE ONLY		NAME OF PAC ACCOUN	T	DEBIT	CREDIT	REMARKS:		
Value work done (from report) .								
Value of work approved								
Value claimed (from statement) .		i e						•
Value credited to PAC account .								
Value debited to PAC account								
Accepted Date						1		
	<i>.</i>							

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INTRODUCTION

1) Geographic and Physioigraphic Position:

Hole R-16 was drilled on the Pluto (#258) mineral claim. The hole lies 5.79 km east Rupert Arm and 10.16 km east-southeast of the Island Copper open pit. The area east of Rupert Inlet is in the coastal lowland of the Suquash Basin forming part of the Nahwitti Lowland of the Central Trough physiographic subdivision. The area is characterized by rounded hills with a maximum relief of about 150 m. The high point in the immediate area is the Washlawlis hill to the north of Rupert Mainline.

2) Access to the Claims:

The hole site can be reached by following the Rupert Mainline logging road from its intersection with the Island Highway at the Port Alice turnoff for $1.75~\rm km$ to line $155~\rm E$. The hole is located at station 41 N on line $155~\rm E$ or $1.2~\rm km$ south of the Rupert Mainline.

3) Property Definition:

The mineral claims and the two-post claims comprising the Far East group are owned by Utah Mines Ltd. Utah has now drilled a total of four holes on the claims. Other work included line-cutting, IP, mag and VLF surveys on the lines in 1981 and 1982, and soil geochem survey over part of the group in 1983.

The claims are bounded on the south by the postulated Dawson Fault. They are underlain by the Upper Triassic and Lower Jurassic volcanic and sedimentary succession consisting from south to north of the Bonanza Volcanics andesitic tuffs and flows, the Parson Bay Formation calcareous siltstones, shales and limestone with shaley interbeds, the Quatsino limestone, and the Karmutsen porphyritic and amygdaloidal basalts. sequence dips gently south with the Bonanza volcanics on top. The granodioritic stock at the end of Rupert Inlet has been inferred by geophysical interpretations and substantiated by diamond drilling to have It was to test IP and mag anomalies and the continuity to the east. possibility of porphyry copper mineralization associated with an inferred dyke on the claims that hole R-16 was drilled. No copper mineralization The nearest known drill holes are was previously found on the claims. R-7 and R-8 on the Rupert Mainline drilled by Utah in 1977 and submitted for assessment.

4) Work Performed:

One hole was diamond drilled to NQ size between August 8 and August 12th, 1984.

INTRODUCTION / contd...

5) Collar Information:

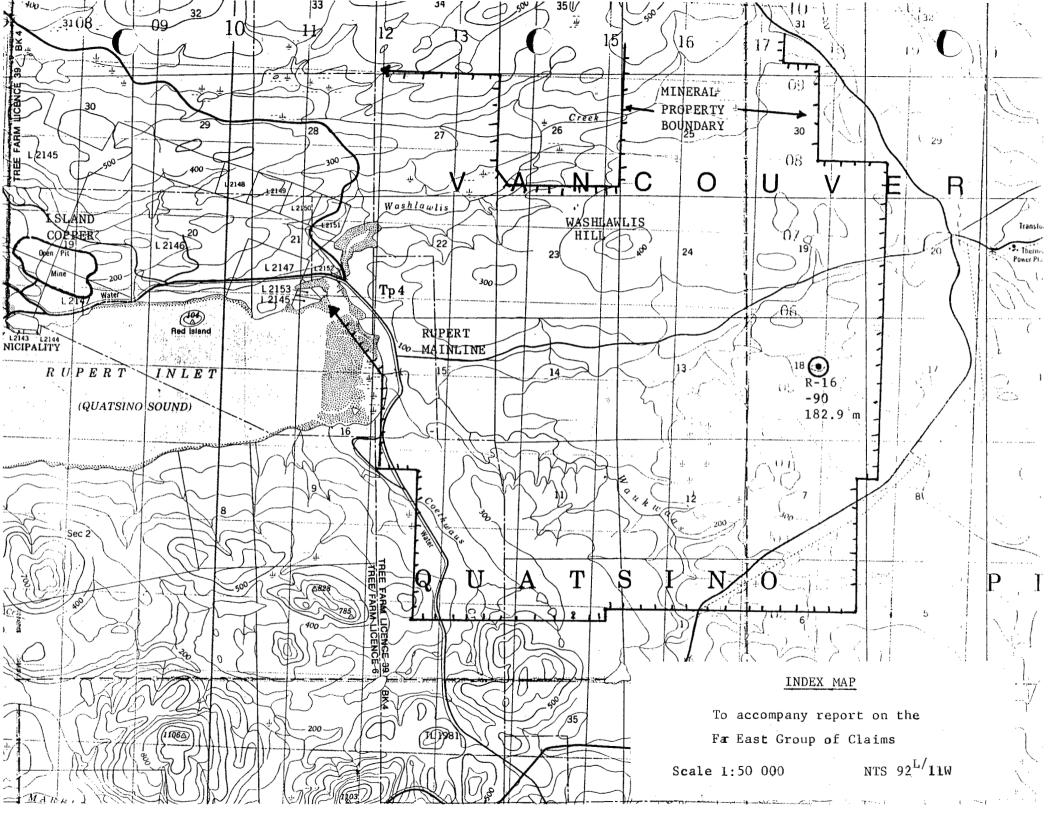
<u>Hole</u>	Inclin.	Length	Collar Elev.	Collar	Co-ords.
R-16	-90	182.9m	61 m above sea level	1630 N,	58270E
Co-ord	linates ar	e based on	the mine arid system.		

6) Core Logging:

All core logging was done by G.L. Holland, B.Sc., University of British Columbia, who is on Utah exploration staff in Vancouver.

7) Core Storage:

All core is stored at the Island Copper mine site.



RESULTS:

The hole intersected only 6.1 meters (20 feet) of overburden. This was much less than expected from reports of attempts by others to penetrate in excess of 100 meters of overburden to the south of the drill site.

From 6.1 to 150.6 meters (20 to 494 feet) the hole intersected grass green to dark green, quartz, chlorite, epidote altered andesite tuff. The tuff is massive with generally distinct ash sized particles. Alterations are moderate with sections of strong pervasive silicification associated with moderate magnetite alteration in the dark green sections. The fracture intensity is moderate with a high degree of infilling with silica and calcite. The sulphide content is generally less than one percent with pyrite distribution fracture controlled. Shears and faults with up to 3 cm of gouge and mud are scattered through the section generally at 40 to 60 degrees to the core axis.

From 108.5 to 110.9 meters (356 to 354 feet) a strong fault zone with considerable gouge occurs at 20 degrees to the core axis. Below the fault zone there is a slight increase in pyrite content, a decrease in silica and magnetite alterations and an increase in chlorite alteration.

From 150.6 meters (494 feet) to the end of the hole a pink medium-grained, quartz, chlorite, sericite altered quartz-feldspar porphyry occurs. Silica alteration of the matrix is strong with generally weak chlorite and sericite alteration of the mafic and feldspar phenocrysts, respectively. Magnetite alteration in this unit is very weak. Fracture intensity is weak to moderate with pyrite, quartz and calcite as fracture fillings. Pyrite content at 2 to 3 percent is slightly higher than the above section.

CONCLUSIONS:

The hole confirmed that a porphyry dyke system exists well east of the Rupert Stock. However, there is no copper mineralization associated with the altered andesite and porphyry at this site.

STATEMENT OF COSTS

DIAMOND DRILLING	G CONTRACTOR			
<u>Overburden</u>	20 feet @ \$16.75		\$ 335.00	
Rock	480 feet @ \$16.75 100 feet @ \$17.50	\$ 8,040.00 1,750.00	9,790.00	
Field Costs	(Moving, Setting up, Reaming, etc.) 2.5 Hours @ \$60.00 31.5 hours @ \$50.00 65.00 hours @ \$25.00		3,350.00	
Other Costs				
4	Mob and Demob Casing and Shoes Core Boxes Supplies, Freight	1,250.00 58.84 121.44 685.02	<u>2,115.30</u>	\$15,590.30
OTHER CONTRACTOR	RS			
D-6 Cat and	Operator			
	3 hours @ \$60.00 days @ \$120	180.00 360.00	540.00	
Highboy and	Tractor			
Move Drill 15.61 hours			1,007.50	
Helicopter				
Move Drill 7.9 hours @			4,171.20	
Line Cutter	<u>s</u>			
Prepare Dri	ll Pad		600.00	
				\$ 6,318.70
TOTAL CONTR	ACTORS' COSTS:			\$21,909.00

STATEMENT OF COSTS

COMPANY COSTS

Core House Labour	\$450.00	
Supervision and Core Logging	850.00	
Company Overhead @ 25% of Labour and Supervision	325.00	
Core Storage - 580 feet @ 40¢	290.00	
Report Preparation	250.00	
Sample Preparation and Assays 58 samples @ \$10.	580.00	\$ 2,745.00

TOTAL COST:

\$24,654.00

Cost per Meter = \$134.81

Cost per Foot = \$ 41.09

Total Depth = 182.9 meters 600 feet

STATEMENT OF QUALIFICATIONS

G.L. Holland -

Geologist, graduated with a BSc from the University of British Columbia in 1978. Employed as a field assistant from 1973 to 1975 by Noranda Mines Ltd.,; as a field assistant from 1976 to 1977 by Utah Mines Ltd; employed as a geologist from 1978 to present by Utah Mines Ltd., Vancouver Exploration office.

J.A. Fleming -

Geologist, graduated with a BSc from McGill University, in 1971. Employed as a geologist with Eldorado Nuclear Ltd. from 1968 to 1974; as geologist with Utah Mines Ltd. at Island Copper Mine, Port Hardy, B.C., from 1974 to present. Presently Chief Geologist, Island Copper Mine.

