84-1441-13376



# Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

# ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)	TOTAL COST
DIAMOND DRILLING	\$38,945.50
H. S. Aikins, C. E. T.	ATURE(S) A Sumuly
CUB Group	
COMMODITIES PRESENT Zn., Pb., Ag.	
B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN No. 90 (1	Partial coverage)
MINING DIVISION Liard	NTS 104 U/IDE, 10W
ATITUDE 59° 56' N LONG	1200 211 14
NAMES and NUMBERS of all mineral tenures in good standing (when work	was done) that form the property [Examples: TAX 1-4, FIRE
12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified No.	Aining Lease ML 12 (claims involved)):  Name Record No.
·Cub·············440················	
Rox 572	
Blue 573 DS #1 932	Red 3038 Reo 1 3039
OWNER(S)	Reo 2 3040
Doug Schellenberg (2)	SOVEREIGN METALS CORPORATION
MAILING ADDRESS	
R.R.#1, Greenbay Road, Westbank, B. C.	305-535 Thurlow Street
	Vancouver, B. C. V6E 3L2
PERATOR(S) (that is, Company paying for the work)	
COLUMN NATION C. CONDON MITON	
1) SOVEREIGN METALS CORPORATION (2)	
MAILING ADDRESS 305-535 Thurlow Street	
	and the first of the control of the
Vancouver, B. C. V6E 3L2	
UMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, Galena and sphalerite occur as crudely banded	
contact with the Cassiar batholith.	
어떻게 되는 것 같아요. 이 사람이 많아 살아 되어 하는 것이 없는 것이다.	
EFERENCES TO PREVIOUS WORK See . "Exploration in	British Columbia - 1979" page 314
FLEHENCES TO BESTIONS MOUNT . See . Tribiotation in	· bi i fi bii coliminia - i i i i . · bade ' i i . ·

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)			ON WHICH CLAIMS		COST APPORTIONED
GEOLOGICAL (scale, area)						
Ground						
Photo						
GEOPHYSICAL (line-kilometres)						
Ground						
Magnetic			• • • • • • • • • • • • • • • • • • • •			
Electromagnetic						
Induced Polarization						
Radiometric						
Seismic	••••••••••					
Other			• • • • • • • • • • • • • • • • • • • •			
Airborne			• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		
GEOCHEMICAL (number of samp	les analysed for)					
Soil						
Silt			• • • • • • • • • •			
Rock	, a digita dia 4 manara ana ara-dahari dia 4 miliara	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		
Other			• • • • • • • • • • • • • • • • • • • •			
DRILLING (total metres; number of	of holes, size) 54 m., (b) 7 holes - 285m.	(a) DOV (c)	1 207 FO	(L) D C 1 (C)4	EEO 001	220 045 50
COLC	54 m., (b) / notes - 205m.	·   /a/ 'ươy / bi	4.36/.301.	(b) D.S.1 (\$24.	228.00)	\$38,945.50
Non-core			• • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	
RELATED TECHNICAL						
Sampling/assaying		.	• • • • • • • • • •	• • • • • • • • • • • • • •		
Petrographic			• • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		
Mineralogic			• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • •		• • • • • • • • • • •
Metallurgic			• • • • • • • • • • • •	· • · • · • · • · · · · · · · · · · · ·		• • • • • • • • • • • • • • • • • • • •
PROSPECTING (scale, area)						
PREPARATORY/PHYSICAL						
Legal surveys (scale, area)						
Topographic (scale, area)			• • • • • • • • • • • • •			
Photogrammetric (scale, area)			• • • • • • • • • •			
Line/grid (kilometres)						
Road, local access (kilometres)						
Trench (metres)	ing. Kabupatèn kelanggan keranggan kelanggan kelanggan kelanggan kelanggan kelanggan kelanggan kelanggan kelanggan		· · · · · · · · · · · ·			
Underground (metres)						
						420 045 50
		<u> </u>			TOTAL COST	\$38,945.50
FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	NT DEBIT	CREDIT	REMARKS:		
Value work done (from report)						
Value of work approved						
				1		
				1		
Accepted Date .	Rept. No			Information Class		

+

84-1441-

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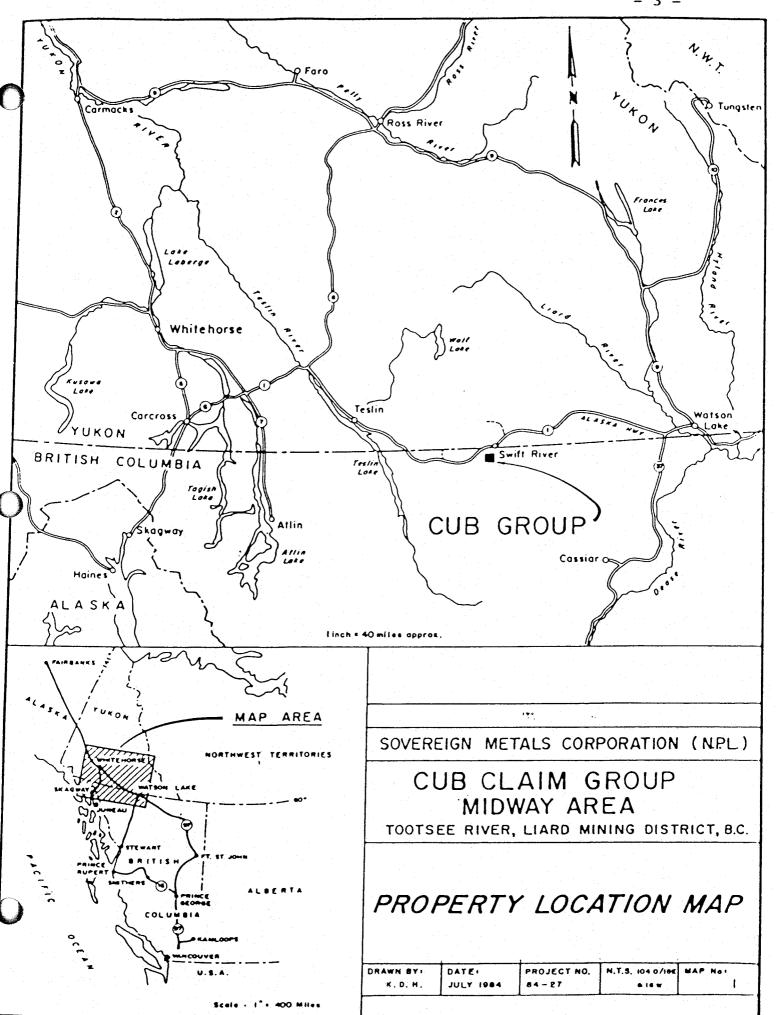
1.	Title Page & Summary
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5.	Introduction
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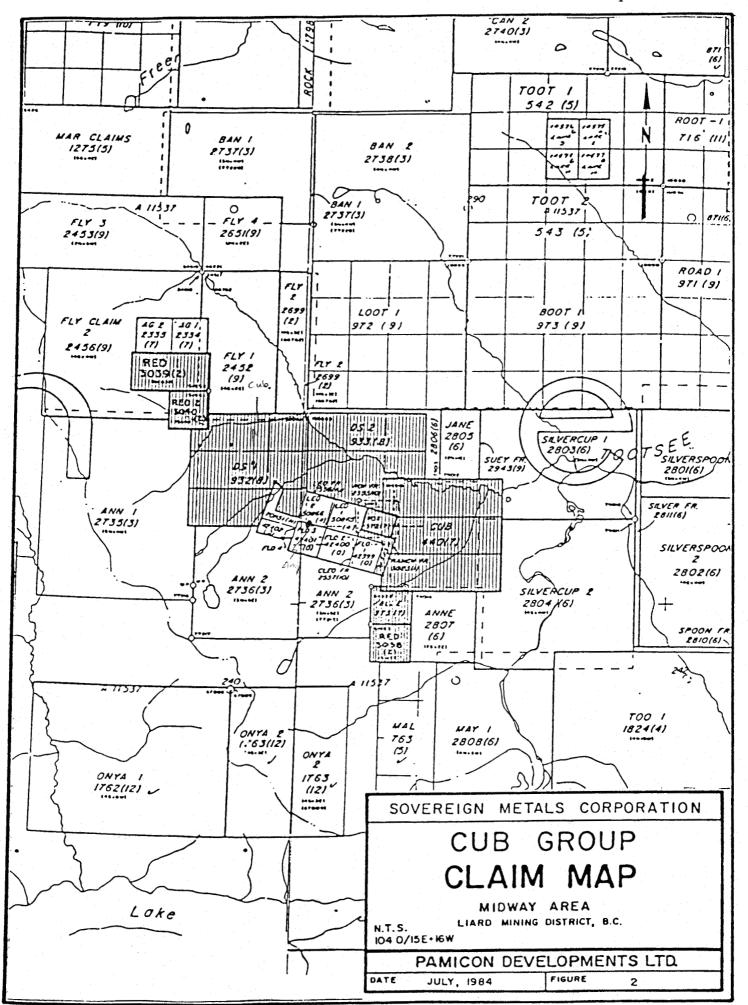
## **APPENDICES**

Diamond Drill Logs: Holes 84-1 to 84-8 incl.

## LIST OF MAPS

FIGURE	1,	1984 Diamond Drilling (Scale 1:12,500)
FIGURE	2	WEST ZONE 1984 Diamond Drill Plan (Scale 1:500)
FIGURE	3	EAST ZONE 1984 Drilling & Survey Data (Scale 1:2,000)





#### 5. INTRODUCTION

The Cub Property comprises a total of nine mineral claims consisting of 34 contiguous mineral claim units. The property is owned by D. Schellenberg of Watson Lake, Yukon and is presently under option to Sovereign Metals Corporation (n.p.l.) of Vancouver, B. C.

Between June 4th and 25th, 1984, Sovereign Metals Corporation as operator, engaged Pamicon Developments Limited to supervise the preparation of a survey grid and to conduct geological and geochemical surveys. Geotronics Surveys Ltd. of Vancouver, B. C. conducted a Maxmin Electromagentic Survey over the 10.9 km. grid using 100 metre coil separation and recording frequencies of 222, 444, 888, 1777 and 3555 Hz. Results of this work were described in a report by David G. Mark, Geophysicist dated July 25th, 1984 and in a progress report by D. A. Caulfield, Geologist and Charles K. Ikona, P. Eng. dated August 2nd, 1984.

Between August 22nd, 1984 and September 20th, 1984 439 metres of NQ wireline diamond drilling in 8 holes was completed under the supervision of R. Darney, Geologist. Results of this work are detailed herein.

#### 6. LOCATION, ACCESS & TOPOGRAPHY

The claims are located some 5 kilometers north of the east end of Tootsee Lake and about 8 kilometers south of the British Columbia/Yukon border. Coordinates for the center of the claim group are 59° 56' North, 130° 30' West. The map sheets covering the area are 104 0/16 W and 104 0/15 E. (National Topographic System).

Access to the property is gained from Mile 701 on the Alaska Highway, where a bushroad leads south, partly along the Tootsee River, to the Midway Prospect of Regional Resources Ltd. at a distance of about 30 kilometers. This part of the road is reported to be suitable for normal vehicle traffic. A branch road forking off in southwesterly direction some 5 kilometers north of the Regional Camp leads to the Cub Property. This branch road, with a length of about 8 kilometers, is passable in the dry season only. Alternative access is by helicopter, of which several are usually available in the general area during the summer.

The nearest town, at 130 kilometers east of the property, is Watson Lake, Yukon, where most of the necessary services are available.

The claims are located in the Cassiar Mountains at elevations from 1,200 to 1,600 meters. Peaks in the general area rise to about 2,000 meters. The general topography can be described as rugged but accessible. At higher elevations, the country is open and allows good travel, although some slopes are steep. In the valleys, small timber and heavy undergrowth make travel difficult.

### 7. PROPERTY: CLAIM STATUS

The property consists of the following located mineral claims:

<u>Name</u>	Record No.	<u>Units</u>	Record Date	Expiry Date
Cub Rox Blue DS #1 DS #2 Ranch Fr Red Reo 1	440 572 573 932 933	9 1 1 9 9 1 1	July 27/77 July 6/78 July 6/78 August 21/79 August 21/79 January 27/84 February 23/84 February 23/84	1987 1989 1987 1985 1985 1985 1985
Reo 2	3040	ī	February 23/84	1985

Claims are recorded in the Liard Mining Division and located within the area covered by the Mineral Reference Maps  $104\ 0/16\ W$  and  $104\ 0/15\ E$ .

On December 31, 1984 a Notice to Group was recorded forming two separate but contiguous claim groups. The diamond drilling work which is the subject of this Report was allocated on the basis of work performed and costs incurred as set out in the Itemized Cost Statements which are enclosed.

#### 8. HISTORY

High grade silver-lead-zinc mineralization was discovered in the Camp Creek area on what is now Flo #3 mineral claim in 1948.

In 1949 the Hudson Bay Mining and Smelting Company drilled eight small diameter holes along a strike length of 775 ft. (236 m.). Four holes intersected mineralization while the remaining holes failed to intersect potentially economic values. The property was allowed to lapse.

In 1962 the property was acquired by the Rancheria Mining Company Ltd., controlled by W. S. Kennedy of Toronto, Ontario.

During 1963, 1964 and 1965 the Rancheria Mining Company conducted a significant amount of exploration work including 24 diamond drill holes and an underground adit 835 ft. in length on what was then known as the Amy Group. During 1966 and 1967 a limited amount of work on the Amy Group was conducted by Chapman, Wood & Griswold personnel. In 1968 a short percussion drilling program was attempted by Irwin Engineering of Edmonton, Alberta. The claims were allowed to lapse. key mineral claims (Flo and Leo) were subsequently staked by J. Foster Irwin of Edmonton, to cover the mine workings. Forty additional claims were acquired to cover adjoining ground including the area now covered by the Cub Group. The property was assigned to Fosco Mining Ltd. and additional work was conducted from 1971 to 1973. During this period a lower level of underground work was completed with 1,400 ft. of cross-cut and 200 ft. of drifting to explore the mineralized zone on the 4,200 ft. level (1,280 m.). In March of 1974 results of all work to date were summarized in a report by Chapman, Wood & Griswold.

In July of 1977, Mr. D. Schellenberg, geologist, examined ground adjoining the Flo and Leo claims and located the Cub claim (9 units). Schellenberg subsequently extended his holding to include the present group. Dupont of Canada Exploration Ltd. acquired an option on the property and conducted geological and geochemical surveys during 1979.

A primary objective in work conducted by Dupont was the evaluation of skarn zones with values in tungsten and molybdenum. Results were not considered economic and the option terminated in 1980. During 1981 and 1982 Marbaco Mines Ltd., a successor to Fosco Mining Ltd., optioned the Cub property and conducted geochemical surveys and limited bulldozer work. The property reverted to Mr. Schellenberg and an option was acquired by Sovereign Metals Corporation in May of 1983. H. Veerman, P. Eng., based on prior examinations and a detailed review of existing data, recommended that additional work be conducted to explore potential extensions to the known mineralized zone on the adjacent Flo and Leo claims and to locate the source or high grade float encountered in the course of his examination.

#### 9. GEOLOGY

The area is covered by the Jennings River Map Sheet (G.S.C. Paper 68-55, H. Gabrielse). The property is bounded on the south by the Cassiar batholith of Mid-Cretaceous age and the known mineral occurrences of potential value occur within altered sediments ranging from Cambrian to Devonian in age. (J. F. Irwin, 1973). Limestone (Cambrian-Ordovician) is regarded as a favourable host for economic sulphide deposits.

Paper 1983-1, Ministry of Energy, Mines & Petroleum Resources, B. C., pages 149 - 169, D. G. MacIntyre, discusses the geologic setting of the Midway deposits immediately to the east of the Cub Group. The Midway deposits are described as stratabound carbonate-hosted massive sulphide occurrences. The location of hydrothermal vents is regarded as the most critical factor in determining where deposits of this type are formed.

#### 10. DIAMOND DRILL RESULTS

Eight diamond drill holes were completed for a total of 439 metres. Drill targets were selected on the basis of Electromagnetic survey results, surface or trenched exposures of mineralization and/or co-incident geochemical anomalies and float occurrences.

Significant results are summarized as follows:

Hole 84-1: No intersection (Maxmin anomaly).

Hole 84-2: 9.75 to 11.28, 1.53 m. @ 41.8 grams/Tonne

Ag., minor Pb., Zn.

18.36 to 18.97, 0.61 m. @ 5.4% Zn., minor

Ag., Pb.

Hole 84-3: 21.5 to 22.7, minor Ag., Pb., Zn. 26.3 to 27.9, minor Ag., Pb., Zn.

Hole 84-4: No intersection. Hole 84-5: No intersection.

Hole 84-6: 0 to 1.52, 1.52 m. @ 32.6 grams/Tonne

Ag., 2.64% Pb., 4.94 % Zn.

Hole 84-7: No intersection Hole 84-8: No intersection

Detailed lithologic logs together with the analytic results of all core samples submitted for analysis are enclosed.

## 11. CORE STORAGE

Drill core has been stored in standard plywood trays, transported to Watson Lake, Yukon and placed in the care of Mr. D. Schellengerg, property owner. On-site storage was deemed insecure as road access has resulted in serious vandalism of previously existing facilities.

#### 12. CONCLUSIONS

Hole 84-1 was located to test one of the seven possible conductive features delineated by the electromagnetic survey. As results were negative, drilling was employed to test the down dip extention of a sulphide zone located in the course of prospecting and exposed by trenching. Holes 84-2 and 84-6 located on this exposure confirmed the presence and continuity of the mineralized limestone as a potential host for an oregrade silver-lead-zinc deposit. Information gained from the 1984 program has provided a basis for reinterpretation of previous survey results which warrant further evaluation.

Respectfully submitted,

H. S. Aikins, C. E. T.

R. J. Darney, Project Geologist

#### ITEMIZED COST STATEMENT

I, HAROLD S. AIKINS, President of SOVEREIGN METALS CORPORATION (n.p.l.), certify that the following costs were incurred in diamond drilling operations on the ROX mineral claim during August, 1984. Drilling commenced on August 22nd, 1984 and was completed on September 2nd, 1984.

-	G. D. Diamond Drilling Co. Ltd. 18124 - 59A Avenue Surrey, B. C. V3S 4V5		
	- Hole 84-1: 505 ft. (154 m) @ \$15.50/ft. Two NQ bits @ \$530/ea.	\$	7,827.50 1,060.00
-	Joe Corcoran Construction P. O. Box 35		
	Watson Lake, Yukon YOA 1C0 - Drill mobilization and site preparation with Komatsu bulldozer, 20 hrs. @ \$75/hr.		1,500.00
_	R. J. Darney, Geologist Pamicon Developments Limited 215 - 543 Granville Street Vancouver, B. C. V6C 1X8		
	- Professional Services, 12 days @ \$250/day		3,000.00
-	Camp and Cookery - 40 man days @ \$25/day	-	1,000.00
	TOTAL cost of NQ Hole 84-1	\$	14,387.50

H. S. Aikins, President SOVEREIGN METALS CORPORATION

December 27th, 1984

#### ITEMIZED COST STATEMENT

I, HAROLD S. AIKINS, President of SOVEREIGN METALS CORPORATION (n.p.l.), certify that the following costs were incurred in diamond drilling operations on the D. S. 1 mineral claim during September, 1984. Drilling commenced on September 3rd, 1984 and was completed on September 20th, 1984.

- G. D. Diamond Drilling Co. Ltd. 18124 - 59A Avenue Surrey, B. C. V3S 4V5 - Holes 84-2 to 8, 936 feet (285 m) @ \$15.50/ft.

\$ 14,508.00

- Joe Corcoran Construction P. O. Box 35 Watson Lake, Yukon YOA 1C0

- Drill mobilization and site preparation with Komatsu bulldozer, 50 hrs. @ \$75/hr. 3,750.00

- R. J. Darney, Geologist Pamicon Develpments Limited 215 - 543 Granville Street Vancouver, B. C. V6C 1X8 - Professional Services, 18 days @ \$250/day 4,500.00

- Camp and Cookery - 72 man days @ \$25/day

1,800.00

TOTAL cost of NQ Holes 84-2 to 8 incl.

\$24,558.00

H. S. Aikins, President SOVEREIGN METALS CORPORATION

December 27th, 1984

### STATEMENT OF QUALIFICATIONS

I, HAROLD S. AIKINS, of 204 - 4001 Mt. Seymour Parkway, in the District of North Vancouver, Province of British Columbia, DO HEREBY CERTIFY that:

- I am a Senior Engineering Technician registered with the Society of Engineering Technologists of the Province of British Columbia;
- I have been employed in Technical, Administrative and Managerial duties in mining and mineral exploration since 1950;
- I have full knowledge of the work conducted and the costs incurred on the Cub group of mineral claims and as set forth in this Report.

DATED at Vancouver, British Columbia this  $13^{\text{M}}$  day of Mach , 1985.

H. S. Aikins, C. E. T.

#### STATEMENT OF QUALIFICATIONS

I, ROBERT J. DARNEY, of R. R. #1, Sechelt in the Province of British Columbia, DO HEREBY CERTIFY that:

- I am a Geologist in the employment of Pamicon Developments Limited with offices at 215 - 543 Granville Street, Vancouver, British Columbia;
- I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geology;
- 3. My primary employment since 1966 has been in the field of mineral exploration;
- 4. My experience has encompassed a wide range of geological environments and has allowed considerable familiarization of exploration techniques for both lode and placer deposits;
- 5. This Report is based on field data generated during a 1984 diamond drilling program supervised by myself on the Cub property.

DATED at Vancouver, British Columbia this /3 day

of March, 1985.

Robert J. Darney Geologist

See Geotron CORE RECOVERY:  FOOTAGE FROM TO 0.0 33: 35.0 3 38.5 4 48.5 5 55.0 17 170.0 19 196.0 19 199.0 22	gust Augus st Ma onics Y: E	DESCRIPTION  Overburden - tri-cone bit  Greenstone, dense fg. dyke Rx Sharp contact 60°, recovery 90 Phyllite; dk. brown to green f (irreg.) Core angle 70°-75°, r Phyllite; wavy foliation - c.a Chlorite & Sericite alt'n., re Phyllite; becomes increasingly section with a number of narro characterized by pale yellow f white mica and mottled qtz fracturing with oxidization delical crenulations suggest tig	(no control of the co	85% 75° 85% ous downtic zone with mg	CORRECT TO THE PROPERTY OF THE	SAMPLE NO.	METR FROM 0.0 10.67 11.73		CLAIM N SECTION LOGGED DATE LO	0: RO : Li BY: R GGED:	OVEREIC CUB Gro X - Re 4+50E Darne Aug. 2 G. D. D No assa	oup" ecord 22 - So iamono ying	No fri	2, 198	erf_
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FROM TO 3: 35.0 3: 35.0 3: 38.5 4 48.5 5: 55.0 17 17 17 19 19 19 19 19 19 19 19 19 19 19 19 19	35.0 38.5 48.5 55.0	Overburden - tri-cone bit Greenstone, dense fg. dyke Rx Sharp contact 60°, recovery 90 Phyllite; dk. brown to green f (irreg.) Core angle 70°-75°, n Phyllite; wavy foliation - c.a Chlorite & Sericite alt'n., re Phyllite; becomes increasingly section with a number of narro characterized by pale yellow f white mica and mottled qtz fracturing with oxidization de	(no control of the co	85% 75° 85% ous dow tic zone with mg	es J.	1	0.0 10.67 11.73	10.67 11.73 14.78	LENGTH			AS	SAYS		
0.0 3: 35.0 3 38.5 4 48.5 5 55.0 17 170.0 19 196.0 19 199.0 22	35.0 38.5 48.5 55.0	Greenstone, dense fg. dyke Rx Sharp contact 60°, recovery 90 Phyllite; dk. brown to green f (irreg.) Core angle 70°-75°, n Phyllite; wavy foliation - c.a Chlorite & Sericite alt'n., re Phyllite; becomes increasingly section with a number of narrocharacterized by pale yellow f white mica and mottled qtz fracturing with oxidization de	foliated recovery a. 65° - ecovery y silice ow pegma reldspar moderate	85% 75° 85% ous dow tic zone with mg	es J.	NO.	0.0 10.67 11.73	10.67 11.73 14.78							
35.0 3 38.5 4 48.5 5 55.0 17 170.0 19 196.0 19 199.0 22	38.5 48.5 55.0	Greenstone, dense fg. dyke Rx Sharp contact 60°, recovery 90 Phyllite; dk. brown to green f (irreg.) Core angle 70°-75°, n Phyllite; wavy foliation - c.a Chlorite & Sericite alt'n., re Phyllite; becomes increasingly section with a number of narrocharacterized by pale yellow f white mica and mottled qtz fracturing with oxidization de	foliated recovery a. 65° - ecovery y silice ow pegma reldspar moderate	85% 75° 85% ous dow tic zone with mg	es J.		10.67 11.73	11.73 14.78							
38.5 4 48.5 5 55.0 17 170.0 19 196.0 19 199.0 22	48.5	Sharp contact 60°, recovery 90° Phyllite; dk. brown to green f (irreg.) Core angle 70°-75°, n Phyllite; wavy foliation - c.a Chlorite & Sericite alt'n., re Phyllite; becomes increasingly section with a number of narrocharacterized by pale yellow f white mica and mottled qtz fracturing with oxidization de	foliated recovery a. 65° - ecovery y silice ow pegma reldspar moderate	85% 75° 85% ous dow tic zone with mg	es J.		11.73	14.78							
48.5 5 55.0 17 170.0 19 196.0 19 199.0 22	55.0	Phyllite; dk. brown to green f (irreg.) Core angle 70°-75°, n Phyllite; wavy foliation - c.a Chlorite & Sericite alt'n., re Phyllite; becomes increasingly section with a number of narro characterized by pale yellow f white mica and mottled qtz fracturing with oxidization de	foliated recovery a. 65° - ecovery y silice ow pegma feldspar moderate	85% 75° 85% ous dow tic zone with mg	es J.		14.78	16.76							
48.5 5 55.0 17 170.0 19 196.0 19 199.0 22	55.0	(irreg.) Core angle 70°-75°, r Phyllite; wavy foliation - c.a Chlorite & Sericite alt'n., re Phyllite; becomes increasingly section with a number of narro characterized by pale yellow f white mica and mottled qtz fracturing with oxidization de	recovery a. 65° - ecovery y silice ow pegma reldspar moderate	85% 75° 85% ous dow tic zone with mg	es J.										
55.0 17 170.0 19 196.0 19 199.0 22		Phyllite; wavy foliation - c.a Chlorite & Sericite alt'n., re Phyllite; becomes increasingly section with a number of narro characterized by pale yellow f white mica and mottled qtz fracturing with oxidization de	a. 65° - ecovery y silice ow pegma teldspar moderate	75° 85% ous dow tic zone with mg	es J.										
55.0 17 170.0 19 196.0 19 199.0 22		Chlorite & Sericite alt'n., re Phyllite; becomes increasingly section with a number of narro characterized by pale yellow f white mica and mottled qtz fracturing with oxidization de	ecovery y silice ow pegma teldspar moderate	85% ous dow tic zone with mg	es J.					-					
170.0 19 196.0 19 199.0 22	170.0	Phyllite; becomes increasingly section with a number of narro characterized by pale yellow function white mica and mottled qtz fracturing with oxidization de	y silice ow pegma feldspar moderate	ous dow tic zone with mg	es J.		16.76	51.82							
196.0 19 199.0 22		characterized by pale yellow f white mica and mottled qtz fracturing with oxidization de	moderate	with mg	1.										
196.0 19 199.0 22		white mica and mottled qtz fracturing with oxidization de	moderate									1			+
196.0 19 199.0 22		fracturing with oxidization de	creasing	c. i.u 51.I	ona						<del> </del>				
196.0 19 199.0 22		Togal crenulations suggest tig		g to dep	oth.								1		
196.0 19 199.0 22		112 71 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	ht fold	s but no	,			·							
196.0 19 199.0 22		major faulting evident. Minor	pyrrho	tite											7
196.0 19 199.0 22		147'-157'; occasional chlorite // to foliations.	knots												
196.0 19 199.0 22	196.0	Phyllite; alternating tan and		h hands			51.82	59.74			<del> </del>				<del></del>
199.0 22		locally siliceous with tan much					31.02	33.14			<del> </del>	<b></b>	<del> </del> -	+	+
	199.0	Greenstone Dyke. Contacts at 6			222013		59.74	60.66					<del> </del>	<del></del>	+
	226.0	Phyllite; predominately light		d mudsto	ne		60.66				<del> </del>		<del> </del>	+	1
226.0 22		with minor disseminated pyrite	and occ	casional	ly			30.00				7.75	<del>                                     </del>	<del> </del>	1
226.0 22		fracture filling.				<del></del>					1		<u> </u>	1	+
	229.0	Greenstone; sharp MW & FW cont	acts. Co	ore angl	e		68.88	69.80			1		<del> </del>	+	1
		65° - minor diss. Py. througho	out.		-					<del></del>		100		1	-
	234.0	Phyllite; as 199 to 226.	<del></del>		V.,.		69.80	71.32		100		,	1		1
	236.0	Phyllite; soft tan mudstone.					71.32	71.93						1	1
236.0 23	236.5	Phyllite; hard-qtz. flooded.				The state of the s	71.93	72.08			1				1
236.5 24		Phyllite; dark laminated and						74.37		•				1	3.74
	244.0	and soft bands. Pegmatites @ 1	50 150										1		

Grid Lo	cation:	4+50E; 2+25N (metres)		D	RILL H	IOLE L	OG					84-	E No. ·1		PAGE NO.
AZIM: C	040°	MAN ELEV:							PROPE	RTY: SOV	EREIGN	METALS	CORPORA	TION	
DIP:	-45. °	LENGTH: 505' (154 m)			DIP	TEST				"CI	JB Group				
		CORE SIZE: NO	FOOTAGE	READING	CORRECT	FOOTAG	EREADING	CORRECT	CLAIM		x - Reco		1/2/	· · · · · · · · · · · · · · · · · · ·	
STARTED:	August 2	22, 1984					1		SECTIO	N: L 4	+50E		17		<del></del>
COMPLETE	0: August	31, 1984				<b> </b>			LOGGE	DBY: R.	Darney	7/1	Din	sel	
PURPOSE:	Test Max	. Min. anomaly "B"				1		1	DATEL	OGGED: A	ug. 22	- Sept.			
See Geo	tronics S	Surveys Ltd. report							DRILL	NG CO: C	. D. Di	amond D	rilling		
CORE RECO							1		ASSAY	ED BY:	o assay	ing req	uired		
F00	TAGE	D500010710			S	AMPLE	METR	E S				AS	SAYS		
FROM	то	DESCRIPTION				NO.	FROM	то	LENGTH			· ·	T	T	
244.0	249.5	Quartzite; pale grey with occa	sional r	nicaceou	us		74.37	76.05	_				1		
		parting, fg. to vfg. hard									<b>T</b>	t		1	1
249.5	251.0		dized 29	50-250.5	5,		76.05	76.50					1	1	
1 1 1		pegmatite 205.5-251.	<del></del>	<del>,</del>			······································	1		t <del></del>	<b> </b>	-	1	1	
251.0	255.0	Greenstone; carbonate frs. wit	h abunda	ant			76.50	77.72						1	
		pyrite from 252-252.5.					, , , , , ,	''-'-					1		1
255.0	266.5	Phyllite; pred. dark with ligh	it interb	panding.			77.72	81.23			1		1	1	
266.5	272.0	Greenstone; slightly magnetic	with up	to 1%			81 23	82.90			1				
		diss. pyrite.				<u>V</u>	02.70					1			
272.0	290.0	Phyllite; alternating lt. & d	. bandir	ng. Cor	e		82,90	88.39			1				
		angles vary from 50° to 75° du	e to cre	nulatio	ns.						1				
		Average near 65°.												1	
290.0	311.5	Quartzite; sharp contact at 45	° fg. ha	ird, whi	te		88.39	94.95							
		and slightly micaceous for fir	st few f	eet.											
		Fractured with limonite from 2	93.5 - 2	95.											
311.5	312.5	Phyllite; badly broken.					94.95	95.25							
312.5	338.5	Quartzite; white with local mo		eenish											
		zones due to chlorite and seri					95.25	103.17							
338.5	342.0	7												1	
342.0	352.0	Quartzite; lt. grey to pale gr	een.				103.17	104.24							
352.0	355.0	Phyllite; as above, c.a. 55°					104.24	108.20							
355.0	358.5	Quartzite;as 342-352					108.20								
358.5	366.5	Phyllite; dk green, c.a. 75°-8	0°				109.27	111.71							
366.5	368.5	Quartzite; as 342-352					111.71								
368.5	423.5	Phyllite; alternating dk. chlo	ritic an	d ligh	ter		112.32	129.08							
		siliceous sericitic phyllite.									L				
		pyrite ± 1% throughout. Pegma	tic zone	s 378.5	-										
		379.5 and 389.0-391.5.											ļ		
	1							1					1	14	· L

4 ..

Grid Lo	cation:	4+50E; 2+25N (metres)		D	RILLI	HOLEL	0 G						E No. 84-1		PAGE N	
AZIM: U4		ELEV:							PROPE	RTY: SOV	EREIGN I	METALS (	CORPORA'	TION		
DIP: -45	5 °	LENGTH: 505' (154 m)			DIF	TEST					B Group					
		CORE SIZE: NQ	FOOTAGE	READING	CORRECT	FOOTAGE	READING	CORREC	CLAIM	NO: ROX	- Reco	rd No.5	72			
	August								SECTIO	ON: L 4	+50E	//				
COMPLETED	. August	31, 1984			1				LOGGE	D BY:R.	Darney _		pin	4	A	
PURPOSE:	Test Ma	x. Min. anomaly "B"				1			DATE LOGGED: Aug. 22 - Sept. 2, 1984							
See Geot	tronics S	urveys Ltd. report							DRILL	ING CO: G	. D. Dia	amond D	rilling			
CORE RECO	VERY:							1	ASSAY	ED BY: N	o assay:	ing req	uired			
FOOT	AGE	DECORURTION			·	AMPLE	METR	ES	Υ	T T			SAYS	<del>-ii</del>		
FROM	то	DESCRIPTION	V .			NO.	FROM	то	LENGTH				i i	T	T	
423.5	444.0	Phyllite; (phyllitic mudstone	) pale or	ev fa	soft		129 08	135.33	†	<del>                                     </del>	<del> </del>		l		1	
		with narrow siliceous bands.	c.a. 65°.	minor		-	127.00	222.23	<u> </u>	<del>                                     </del>	<del>                                     </del>		<b> </b>	1	1	
1		pyrite // to foliation.	<u>-</u>					<b>-</b>	<del> </del>	<b>†</b>	<del>                                     </del>		1	1	1	
444.0	454.5	Quarzite; extremely hard, liq	ht colour	ed near			135 22	138.53	<b>†</b>		† · · · · · ·		1	1	1	
		massive with weak laminae @ 5	5°.	ca nan		<del></del>	ررورد	130.33				<u> </u>		1		
454.5	461.0	Quartzite; minor mudstone and		x.			138.53	140.51	<b> </b>		<u> </u>					
461.0	461.5	Quartzite; pyrite stringers					140 51	140.66			1				1	
461.5	462.0	Phyllite; mudstone		· · · · · · · · · · · · · · · · · · ·				140.81	<del> </del>	1	<b>†</b>					
462.0	463.0	Gouge zone						141.12	<del> </del>	<del> </del>	<del> </del>			1	+	
463.0	464.0	Phyllite; brecciated mudstone	minor Pv					141.43	<u> </u>		†				1	
464.0	465.25	Quartzite?; siliceous,pyritic	seds.					141.80	-	<u> </u>	<u> </u>			1	+	
465.25	473.00						141.80		<u> </u>	<b> </b>	-					
473.0	480.0	Phyllite; sericite to quartz,	c.a. 65°	** - ;***				146.30		1	<del> </del>		<b></b>		1	
480.0	486.0	Quartzite; hard, minor laminae	<del></del>					148.13						1	1	
486.0	490.0	Phyllite; siliceous lt. and da	ark bande	đ				149.35	<del></del>	<del> </del>	<u> </u>		1	<del>                                     </del>	1	
490.0	497.0	Quartzite; laminated micaceous	Ouartzi	te	<del></del>		149.35			<u> </u>	<b></b>				1	
497.0	498.0	Pegmatite					151.49		<u> </u>				<b>†</b>	1	1	
498.0	505.0	Phyllite; lt. and dk. banding.	Silice	ous wit	h		151.79		<b> </b>	1				1	1	
		pegmatite @ 503.5-504.0.								<del> </del>	1			1	1	
505.0		End of Hole.		· · · · · · · · · · · · · · · · · · ·			154.0							1	1	
				<del>-</del>				<del></del>	<b> </b>	<del> </del>				1	1	
				*********				<del></del>		<u> </u>		-		1	1	
									Note:	Hole fa	iled to	encour	ter a	zone		
	<del></del>	<del>- Angelon - Ang</del>									d to ex				-	
			<del></del>	<del></del>	<del> </del>					encoun	ered or	Line 4	4+50E.			
			<del></del>								<del>                                     </del>				1	
													<del> </del>	1	1	
	<del></del>			-					L.———	<del> </del>				1	1	
			· · · · · · · · · · · · · · · · · · ·	<del></del>							<del> </del>		<del>                                     </del>	1	1	
			· · · · · · · · · · · · · · · · · · ·								<del> </del>		<del> </del>	+	1	

Zinc zo	one, above	trench		n n	RILL	HOLELO	) <b>G</b>					84	-2	P	1			
AZIM:	043°	ELEV:					-		PROPE	TY SON	PEDETCN I	ALC:	CODDODAY.	DTONI				
DIP:	-60	LENGTH: 136' (41.45 m)			DIP	TEST			PROPERTY: SOVEREIGN METALS CORPORATION "CUB Group"									
H.C.=20	.7 m V.C.	=35.9 m CORE SIZE: NO	FOOTAGE	READING	CORRECT	FOOTAGE	READING	CORRECT	CLAIM	LAIM NO: DS 1, Record No. 937 Liard								
	Sept. 3		-			TOUTAGE			SECTIO	N. 13	+ 02.5	N /	7	,u	<del></del>			
COMPLETE	o:Sept. 4	. 1984			<u> </u>	<del> </del>	<del></del>	ļ			Darney		1 1	new	7			
PURPOSE:	Test sur	face exposure at depth.			<del> </del>	+					Sept. 6		$i \omega$	-7-5-7	1			
	<del></del>				<del> </del>	+					D. Dia		illing (	20 /1+4				
CORE RECO	OVERY:				<del> </del>	<del> </del>		<b></b>	ASSAVI	o ev. Cr	nemex La	os Ltd.	Cert. /	A841614	5			
FOO	TAGE		1	L	·	1	METR	<u> </u>			O.P.T		AYS					
FROM	то	DESCRIPTION	J		,	AMPLE NO.	FROM	TO	LENGTH		<del>,                                    </del>		% 2n.		Τ .			
0.0	12.0	No core; Tri-cone bit in over	hurden	<del></del>					••••	Au.	Ng.	T PD.	* Zn.	<b>% Cu.</b>	-			
12.0	12.5	Float: 3" intrusive fragment,		1242 - 7			0.0	3.66 3.81							-			
12.5	14.0	Greenstone breccia; Qtzcarb		MO++1	rag.		3.66 3.81	4.27							-			
		pale green - 'y" sub-angular f	rags	PULLI	<del></del>		3.01	4.27		. ,					<del> </del>			
14.0	24.0	Phyllite; finely laminated gr	eenish a	rey Rx			4.27	7.32							<del>                                     </del>			
		fractured and oxidized surface	2. C a . (		ation				•••••						-			
		45°-50° (frs. @ 90° to foliat	ion).	IOII	201014					-	<del>  </del>				_			
24.0	31.0			finely			7.32	9,45			<del>  </del>			<del></del>	-			
		Phyllite; grey to purplish bar laminated with oxidized fr. s	urfaces.	Minor			1.32	9.45		<del></del>	-				-			
		pyrite, c.a. 50°.									<del>                                     </del>				-			
31.0	53.75		.a. 43°	-65°			9.45	16.38			<del>                                     </del>				<del> </del>			
		Up to 5% sulphide locally.					- 2.43	10.30			-				<del>                                     </del>			
		32 - 37. 38 ps/ 1/8" galona (	lori			2690	9.75	11.28	1.53		1.22	0.19	0.23		<del>                                     </del>			
		32 - 37: 3% py. 1/8" galena-s 37 - 42: c.a. 40° to foliation	1.  pv < 2.	.08	iger -	2691		12.80	1.53			0.02	0.02					
		42 - 44: dk. coloured, local b	recciati	Lon		2692	12.80	13.41	0.61	<del></del>	0.06	0.01	0.02	<del></del>	<del>                                     </del>			
		44 - 51: py. 1 to 5%, poss. sp	halerite	·		2693	13.41	15 54	2.13		0.08	0.01	0.03		<del>                                     </del>			
		51 - 53.75: med. grey phyllite	less r	v. evid	lent.	2033	15.54		-4.11	<del> </del>	0.00	<u> </u>						
53.75	59.75	Limestone; wavy banded, c.a.	0-55°.	4: 5:20			16.38		<del> </del>	<del></del>								
59.75	62.5	SULPHIDE MINERALIZATION	<del></del>	<del></del>			18.21											
		59.75 - 60.25: oxidized Is wit	h high %	qtz.		2694	18.21	18.36	0.15		0.12	0.08	0.63		<del>                                     </del>			
		60.25 - 62.25: broken zone, 30				2695		18.97	0.61		0.22	0.18	5.40					
		Siliceous Ls with diss. Py & S												1.	_			
		62.25 - 62.5: Qtz Carb., mi	nor diss	. sulph	ide :	2696	18.97	19.05	0.08		0.10	0.03	0.09					
62.5	72.0	Phyllite: foliated, good micac					19.05											
72.0	86.5	Greenstone: massive dk green f	g. to ma	•			21.95											
		Minor diss. py. & pyrr., weakl	y magnet	ic														
86.5	136.0	Phyllite: schistose app. alt'n	. biotit	e, seri	cite		26.36	41.45										
		Phyllite: schistose app.,alt'n chlorite, c.a. 50-55°, diss. p	y. commo	n, poss	. cpy.													
	136.0	End of Hole.						41.45										

Zinc z	one, same	e set-up a	+ 89.5 S as 84-2 .	_		IRILI	L HOLE L	.0G					HOLI	<del>-</del>	ļ:	AGEN			
AZIM:	<del>-</del>		ELEV:	<del>-,</del>						PROPE	RTY: SO	VEREIGN	METALS	CORPORA?	LION				
DIP:	-90°		LENGTH: 158' (48.16 m)	<del>-</del>			DIP TEST			-		UB Group		/					
			CORE SIZE: NO	FOOTAGE	READING	CORR	ECT FOOTAG	E READIN	CORRECT	CLAIM	CLAIM NO: DS 1, Record No. 930, Liard								
STARTED	: Sept.	4, 1984								SECTIO		ALC: N		17		$\overline{\overline{}}$			
	εο: Sept.									LOGGE	oey: R	. Darney	$\sqrt{\chi}$	Lan	ney	1			
PURPOSE:	Test 2	one as in	n Hole 84-2									Sept. 7,							
										DRILLI	ING CO: G	. D. Dia	mond Dr	illing (	io/Ltd	•			
CORE REC	OVERY:							]-		ASSAY	ED BY: A	ome Anal	ytical	Labs Lto	1. #84-	2731			
FOC	TAGE		DESCRIPTION	\AI			SAMPLE	METR	ES	LENGTH	O.P.T	O.P.T.	ASS	AYS					
FROM	TO		DESCRIPTIO	/14			NO.	FROM	TO	LENGIA	Au.	Aq.	% Pb.	% Zn.	8 Cu				
0.0	7.0	Overbur	den ; Tri-cone (no cor	e)				0.0	2.13										
7.0	31.6	Phyllit	e; drk. brown to green	ish, high	n bio.			2.13	9.63										
		foliate	d with chlorite & seri	cite alt	n.														
		c.a. 45	o° @ 8', 25° @ 17' to 2	8', mino	diss.							1				1			
		pyrite	throughout.					:		·		T							
31.6	35.0	Greenst	one Breccia; mottled p	ale green	, minor			9.63	10.67	•		1							
		pyrr. i	n fragments & matrix.																
35.0	45.0	Phyllit	e; dk. green with med.	green ba	ands -			10.67	13.72	-									
			tone?) banding//to fol		38°. Wea	ak													
		to mode	rately magnetic diss.	pyrr.															
45.0	49.0	Phyllit	e; dk. green tobrownis	h (biotit	:e)			13.72	14.94										
		minor p	y. & pyrr., foliated c	.a. 38°															
49.0	70.5	Phyllit	e; alternating dk gree	n to lt c	reenish-	- 1		14.94	21.49										
			otite-sericite-quartz																
70.5	74.5		E MINERALIZATION - H.W					21.49	22.71										
		70.5-71	.5: banded phyllite &		liss. su	lph.	2697	21.49	21.79	0.30	.001	0.03	0.01	0.23					
			silicified from 71	.0															
		71.5-73	.0: vuggy qtz. & tan fe	eldspar?			2698	21.79	22.25	0.46	.001	0.03	0.01	0.04					
			minor diss. galena	& sphale	rite <18	pyri	te .												
			.5: increase in galena				2699	22.25	22.71	0.46	.001	0.11	0.21	0.85					
74.5	86.25		e; pale greenish grey,					22.71	26.29										
		minor p	y, broken zone with gt:	z. 84-85.															
86.25	91.50	SULPHID	E MINERALIZATION - H.W	. @ 37°				26.29	27.89										
		wavy bar	nded Ls., partially si	licified	& brecci	ated.													
		86.25-8	7.75: diss. amber sph	pyrite	to 1%		2700	26.29	26.75	0.46	.001	0.13	0.05	0.44					
			9.75: siliceous, minor		-		2601	26.75	27.36	0.61	.001	0.16	0.02	0.04					
			1.5: similar to above,				2602	27.36	27.89	0.53	.001	0.52	0.06	0.09					
3.	108.0		e; pale green-grey,fol:					27.89	32.92										
0.80	158.0	Phyllite	e;dk to pale green,brok	en @ 121	' & 151			32.92	48.16										
. 1	158.0	End o	.a. 30°-40° near end						48.16										

Zinc z		ve trench, same set-up as 84.2 ειεν:		DI	RILLI	IOLEL	0 <b>G</b>		PROPE	17 SOUT	PRETCN N		-4 ORPORATIO		GE NO.			
DIP: -	-50°	LENGTH: 116' (35.36 m)			DIP	TEST				17/4 11	Czausi	·						
H.C.=22	.7 m V.0	C.=27.lm cone size: NQ	FOOTAGE R	EADING	CORRECT	FOOTAGE	READING	CORRECT	CLAIM	NO: DS	I Recor	d No.	32, Liard	1				
	Sept.								SECTION:									
	o: Sept.		<del> </del>	+	<del> </del>		<del> </del>		LOGGE	OGGED BY:R. Darney - August								
PURPOSE:	Test S	E extension of zone	1				1			DATE LOGGED:								
									DAILLI	NG CO: G	D. Dia	amond Dr	illing Co	5. Ltd.				
CORE REC	OVERY:		-			1	<b> </b>		ASSAY	DBY: A	me Ana	ytical	Labs Ltd.	. #84-2	2731			
FOO	TAGE		- <del> </del>		5	AMPLE	METR	E S		O.P.T.	O.P.T.	ASS	AYS		******			
FROM	TO	DESCRIPTION	1			NO.	FROM	то	m.	Au.	Aq.	% Pb.	% Zn.					
0.0	15.0	Overburden; Tri-cone bit (no co	ore)	· · · · · · · ·			0.0	4.57		-	1							
15.0	24.0	Phyllite; dk green chloritic R		0			4.57	7.32										
24.0	77.6	Phyllite; dk green to pale grey					7.32	23.65			1							
	<del>                                     </del>	partings, qtz. carb. fracture																
77.6	78.6	Shear zone; 50% pyrite, ca.a.	40°		2	612	23.65	23.96	0.31	.001	0.09	0.09	0.18					
78.6	85.0	Phyllite; pale green-grey, stro		looding			23.96	25.91										
85.0	89.0	Phyllite; as above, less qtz.,	minor pyr	ite			25.91	27.13		-								
89.0	104.0	Phyllite? (hornfels?);dense sil					27.13	31.70		-	İ							
			ome foliation but more massive & hard.															
104.0	116.0	Greenstone; dk green fg. Rx. ma	assive wit	h hairl	ine		31.70	35.36										
		fractures & calcite filling, I																
		114 - 116 qtz. flooding. Minor								······································				-				
	116.0	End	<del>- '</del>					35.36										
		1						-22.2		-	· · · · · · · · · · · · · · · · · · ·							
		Mineralized zone(s) not encount	tered.															
	···			<del></del>		<u>_</u> -												
					.													
		<del></del>																
		<u></u>																

LOCATION: 12 + 27.5 W, 1 + 01 S  Zinc Zone		27.55 117 2	n	RILL HO	HEL	0 G		<b>Y</b>			HOLE No. 84-5			PAGE N		
AZIM: 043° ELEV:			PRILL HOLL LOG						RTY: SON	EREIGN	METALS CORPORATION					
DIP;	-50°	LENGTH: 185* (56.39 m)		DIP T	EST			1	"CUB Group"							
-			AGE READING	CORRECT	POOTAGE	READING	CORRECT	CLAIM	NO: DS	1. Rec	ord No.	932. Ili	ard			
STARTED:	Sept.						-	SECTIO				7		7		
COMPLET	ED: Sept.	11, 1984	<del>-  </del>			<del></del>	<del></del>	LOGGE	DBY: R.	Darney	1	ar	red	<del>/</del>		
		one 75 m southeast of 84-2				<del>                                     </del>			LOGGED:		~~	-		<del></del>		
H.C.=36.25 m, V.C.=43.2 m.					<del></del>	1	1	DRILL	ING CO: G.	D. Di	amondDri	lling C	o/Ltd			
ORE REC					:	1.	1	ASSAY	ED BY: ACT	ne Anal	ytical I	abs Ltd	., #84-	-2731		
FOC	TAGE		<del></del>	SAN	MPLE	METR	E.S.		O.P.T.	O.P.T	ASSAYS					
FROM	TO	DESCRIPTION			10.	FROM	то	M.	Au.	Aq.	% Pb.	% Zn.				
0.0	23.0	Overburden; Tri-cone bit (no core)			<del></del>	0.0	7.01				1			T-		
23.0	63.0	Phyllite; appearance of biotite sch	ist. Brown	nish		7.01	19.20				1					
11.11		to mauve colour due to biotite. Pa	le green		$\neg \uparrow$											
		translucent mineral gives yellow t		?				T		:-						
		c.a. 40-60°. Minor py. on fracture				-			1							
		seminated.	<del>- 1, 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -</del>													
63.0	92.0	Hornfels? ; Greyish to pale green f	g. Rx.			19.20	28.04									
		63.0 - 68.5: Massive greenish grey						100								
		68.5 - 73.5: Highly broken with qtz		260	)3	20.89	22.40	1.52	.001	0.04	- 0.02	0.03				
	1	gouge from 68.5-69.5, muscovite & g														
		73.5-76.0; as above, less broken, p		ite 260	)4	22.40	23.16	0.76	.001	0.06	0.01	0.01				
		76.0-83.0; massive, locally pyrite	1-2%			23.16	25.30									
		83.0-88.0; highly broken, some gouge	to 3% py.	260	)5.	25.30	26.82	1.52	.001	0.06	0.01	0.02				
		88.0-92.0; massive to weakly foliat														
92.0	104.0	Phyllite; banded/foliated with chlo				28.04	31.70									
		biotite & sericite, c.a. 70°, high	CaO											↓		
104.0	134.6	Phyllite; foliated, biotite rich wi	th crenulat	.ea		31.70	41.03							↓		
1 1 1 7		appearance, c.a.≈70°												<u> </u>		
		Ls bands at 130 & 132												1		
134.6	143.0	Hornfels?; pale green to white with				41.03	43.59					<u> </u>		1		
		136 to 138. Reacts to Hcl. c.a. 70°		]							1			<del> </del>		
143.0	158.5	Phyllite; frequent 1" Ls bands, minor pyrr.				43.59	48.31			:	<u> </u>			<del> </del>		
158.5	169.0	Dense Mg. Rx; crude foliation @ 60°				48.31	51.51				1			-		
169.0	185.0	Phyllite; biotite type, with occasi	onal carbon	ate		51.51	56.39				ļ			<del> </del>		
		band, weakly magnetic, c.a. 65°									ļ			+		
	185.0	End.					56.39				ļ			+		
					_									-		
		Mineralized zone not encountered.		1												

Zinc zone, in trench .		_	D	RILLH	OLFI	O G					HOL	E No. 84-6		PAGE NO		
DIP: -	90	ÉLEV:	PROPERTY: CONTENT OF A PROPERTY OF A PROPERT													
		LENGTH: 25' (7.62 m.)				TEST				HIT: SC	NEREIG	N METALS	CORPOR	NOIPA		
V.C. =	7.62 [	n	FOOTAGE	READING	CORRECT	FOOTAGE	READIN	COBBEC	T) CLAIR	I NO: DS	I Per	ord No.	027 /1:	-/-	<u> </u>	
OMPLETS	Sep	t. 12, 1984 t. 12, 1984						-	SECT		A NECC	Jiu No.	3,82,7 1.1.	aro	<del></del>	
URPOSE:	Sam	12, 1984						<del> </del>			Darney	_/	1/2	1411	/	
	llared	ole zone near surface.					<del> </del>		DATE	LOGGED:	Sept.	3, 1984	1 922	1	•	
ORE REC		or n.w. or zone										Diamond		/_		
								<del>                                     </del>	ASSAV	ED BY: A	CTDE Ana	lytical	Jabo 14	9 60.	Ltd.	
FROM	TAGE	DESCRIPTION			54	MPLE	METO	<u> </u>	1 .33.	lo p m	0.P.1	Tycical		ca. #8	4-2731	
	TO		•			NO. FROM TO				Au.	Aq.					
0.0	5.0	SULPHIDE MINERALIZATION							m.	<del> </del>	- Ag.	%Pb.	%2n.	8Cu.		
	<u> </u>	Galena-sphalerite mineralizat	ion as di	screte				<del> </del>		<del> </del>	ļ					
		fg cg. (up to 1/8") dissem	nations	and						<del> </del>	<del> </del>	<del>                                     </del>				
		discontinuous laminae paralle	to cox	6						<del> </del>						
		rollation at 38-45° to core as	us. Mos	E						<del> </del>	<del> </del>	ļ		ļ		
		common c.a. is 42-43°.									<del> </del>		ļ			
		Zone highly siliceous with loc	al respo	nse to F	icl.						<del> </del>	<u> </u>				
	<u> </u>	(Silicilled limestone with mir	or calci	te in					•							
		fractures) weak to moderate li	monite s	taining.												
		- 2" - massive amber sphale	- 2" - massive amber sphalerite									ļ				
		2" - 13" - siliceous zone, 15%	Sph. ne.	ar too	<del>- il</del>					<u> </u>						
		decreasing to 1-2%,	minor a	alena	1 26	10	0.0	0.76	0.76							
		throughout	1 20		0.0	0.76	0.76	.001	1.29	4.09	6.91	.,,				
		13" - 30" - foliated, 1-3% comb	ined gale	ena /	<del>-  </del>											
		sphalerite	3020	-1144/	<del>- ( </del>								<u> </u>			
				<del></del>										<u> </u>		
		30" - 36" - foliated, fg. black	sulph?.	ga/sph	- 1											
		as above			1									<u> </u>		
		36" - 50" - siliceous zone, up t	0 5% snh	alerite	) 26	<del>,,   -</del>	0.76	1 52								
		50" - 60" - siliceous zone, shat	tered an	d 	1 20		0.76	1.52	0.76	.001	0.60	1.20	2.98			
		oxidized, minor sulp	h.													
					-1	<del> </del>	<del></del>									
	25.0	Phyllite; mottled and crudely fo	liated 1	ŧ			1.52	7.62								
		grey to buff to greenish, serici	tized.		<del>- </del>			1.02								
	]				+										ļ	
	25.0	End.												<u> </u>	ļ	
	1							7.62								
		Assay Average (0 to 5 feet).	<del></del>		<del></del>		.0	7 52	1 53	-001	0.05				<b> </b>	
				<del></del>	<del></del>	— <del>                                     </del>		1.52	1.52	.001	0.95	2.64	4.94	e per en in		

LOCATIO	Zinc Zone AZIM: 043° ELEV:			DRILL HOLE LOG								HOL   84-	E No.		PAGE NO			
AZIM:	043°							PROPERT	y: SO	VEREIGN			ATTON					
DIP:				DIP TEST							PROPERTY: SOVEREIGN METALS CORPORATION							
	H.C. = 29.8, V.C.=35.5 CORE SIZE: NQ			FOOTAGE READING CORRECT FOOTAGE READING CORRECT CLAIM NO: DS 1, Record No.														
	: Sept. I				1	+			SECTION:		I, Nec	ora wo.	7982, 1	nard				
COMPLETE	ED: Sept.	14, 1984		<del> </del>		1						/-	1 -		/			
PURPOSE:	To te	st the western extension of the		<del> </del>	-	<del>                                     </del>			DATE LOC	GED:	Darney	1	Mar	xiif,				
zinc zo	zinc zone showing.					1					. D. Di	amond D	rilling	d- 1	<u> </u>			
CORE REC	OVERY:				<del> </del>	1			ASSAVED	av. N	o assav	s requi	red	<i>,</i> ω. 1	ш.			
FOO	TAGE	1	1 2002 2 1 102 2 2 2						ASSAYED BY: No assays required.  ASSAYS									
FROM	TO	DESCRIPTION	· .			NO.	FROM	TO	LENGTH -		т	AS	SAYS	T	<del></del>			
0.0	12.0	Overburden: Tri-cone bit (no c	ore).				0.0	3.66	ш.		<del> </del>	ļ		+				
12.0	31.0	Phyllite; biotite type, c.a.	000				3.66	9.45			<del> </del>	<del> </del>						
31.0	44.0	Greenstone; dense dk. green wi	th hair	line car	ъ.		9.45	13.41					-	+				
		filled frs.											<u> </u>					
44.0	48.0	Phyllite; biotite type, crenul	ated for	liation	at		13.41	14.63					<del>                                     </del>	<del> </del>				
1.7.7	T	all angles to core axis.							<del></del>			<b> </b>	<del> </del>		<del></del>			
48.0	50.5	Greenstone, as 31 to 44 above.		<del></del>			14.63	15.39			<del> </del>							
		Slow reaction to Hcl.					14.03	13.39					<b> </b>	1				
50.5	63.0	Phyllite; biotite type, abunda	nt chlor	rite alo	na 📙		15.39	19.20			ļ							
		frs. and foliation, calcite in					13.35	19.20					<del> </del>	<del> </del>				
		@ 55°, fractures @ 30-40°.											<del> </del>	<del> </del>				
63.0	66.6	Broken zone; mixed phyllite &	greensto	nne.			19.20	20.30					<b> </b>	<del> </del>				
66.6	85.5	Greenstone; pale to dk green f	Call		20.30	26.06						<del> </del>						
		brecciated. py, variable up to			20.30	20.00					<b> </b>	<del> </del>						
85.5	94.0	Phyllite, biotite type, gradat			26.06	28.65					ļ							
		with greenstone over 6" brecci				20.03						<del> </del>						
	1	qtz. flooding and muscovite pro								<del></del>		<del> </del>	-					
		subhederal hornblende.										<del> </del>						
94.0	99.0	Greenstone: massive dk green w	reenstone; massive dk green with calcite filled									<del></del>		<del> </del>				
		fractures.		<u> </u>	28.65	30.18				<del></del>	<u> </u>	<del> </del>	+					
99.0	118.5	Phyllite; biotite type interbed	ded wit	h thin			30.18	36.12			<del></del>	<del></del>		<del> </del>	1 22			
		quartzite bands. c.a. 55-60°.					20.10	50.14						<del> </del>				
18.5	126.5	Greenstone; minor pyrrhotite &	3		36.12	38.56					<u> </u>	ļ	-					
		minor diss. sphalerite, limey	oands (	120' & .	125													
26.5	152.0	Phyllite; biotite type, with in	en-	-	38.56	46.33					<del></del>	<del> </del>	+					
		stones @ 132-133.5, 139-140, 14	12.5-144	, and l				<del></del>						<del> </del>	+			
		-152. Sphalerite in calcite @	35' ave	rage									<del></del>	<del> </del>	+			
		foliation @ 55°.	· · · · · · · · · · · · · · · · · · ·											<del> </del>	+			
	152.0	End of hole						46.33						<del>                                     </del>	+			
		Zone not intersected.												l	+			

	No. 2	Zone .					8	4-8		1							
AZIM:	050°	ELEV:	<del>-</del>	PROPERTY: SOVEREIGN METALS CORPORATION													
DIP:	-50°	LENGTH: 165' (50.29 m)		DIP	TEST				"Ct	JB Group	**	7	1000				
H.C.=3	2.3 m.V.		FOOTAGE READING CORRECT FOOTAGE READING CORRECT CLAIM NO. D.S.1, Record No.								32. Liard						
STARTED		36 300	SECTION:											-			
COMPLET		20, 1984				1		LOGGE	Day: R.	Darney 4	XV	bu	cey,				
PURPOSE:	Test	#2 Shoot			1			DATE LOGGED: Sept. 18-21, 1984  DRILLING CO: G. D. Diamond Drilling Co. Ltd.									
					1												
CORE REC	OVERY:							ASSAYE	DBY: AC	me Analy	tical l	labs Kto	1.,#84-	2731			
FOO	TAGE		<del></del>	' s	AMPLE	METR	E S		O.P.T.	O.P.T.	ASS	AYS	-				
FROM	TO	DESCRIPTION			NO.	FROM	то	LENGTH	Au.	Aq.	% Pb.	% Zn.					
0.0	22.0	Overburden; Tri-cone bit (no core)				0.0	6.71			1							
22.0	41.0	Phyllite; broken, weathered Rx with	limonite		<del></del>		12.50										
		coating on all surfaces.															
41.0	53.0	Phyllite; chlorite-biotite & occas.			12.50	16.15											
			1-43.5: Qtz. flooding & veining with up to 3% Py.														
<del></del>		minor greenstone?, pyrrhotite in frs	. c.a. 50°														
53.0	58.0	Silicified limestone?; probable equiv	, of		615	16.15	17.68	1.53	.001	0.02	0.01	0.06					
		upper mineralized zone at surface fg.															
		53.5-53.75: chalky white Ls.															
		55.75-56.0: grey-buff banded Ls.															
		56.0-57.0: crackle breccia															
		57.0-58.0: grey-buff Ls.?, limonitic															
		No sulphides except minor py. recover															
58.0	112.0	Phyllite; foliated, colour banded wit			17.68	34.14							L				
		micaceous partings. Similar to hole 8															
		Chlorite-sericite type, c.a. 55° @ 72	9 106														
12.0	117.0	Pegmatite; lt., cg. qtz., feldspar, m			34.14	35.66							<del> </del>				
		with minor euhedral hornblende. H.W.	contact 0	40°										<u> </u>			
17.0	130.0	Phyllite; foliated lt.green grey to d			35.66	39.62		l					ļ				
		123-124: Broken zone, limonite staini															
		128-129: Broken zone, poor recovery (	+ 50%)														
30.0	137.0	Quartzite?; mg. hard black Rx.		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			41.76		1					<del> </del>			
37.0	148.0	Greenstone; fg. dense grey/green Rx.			. [	41.76	45.11										
		Weak foliation @ 40° with chlorite, se							Specime	n of Co	. redis	n miner	al from	146			
	160.5	Phyllite; hard & massive but with mic	a of part	ngs			48.92							<del> </del>			
60.5	165.0	Greenstone; dk green massive Rx.											<u> </u>	<del> </del>			
		pyrite/Pyrrhotite 1% to 2% @ 164.5												1-			
	165.0	End					50.29						<b></b>	+			
							I							1			

