



**ABMINCO N.L.**  
**CLEVELAND MINE**

CATEGORY

HOLE No. : C 1483 REF No 18566

P/A

**GENERAL DATA**

Objective : TEST B&C LENS 19-20 LEVEL

Area of Operation : 20 HENRY'S Location : M SECTION

Collar R.L. : 86-269 Co-ordinates : 15453.189 N, 10973.517 E.

Bearing of Hole : 130° 15' 13" (132) Angle of Hole : -32° 46' 05" (-35) Final Depth : 911.5 m

Drilling Commenced : 18.1.80 Completed : 29.1.80 Logged by :

**DRILLING DATA**

Drilled by : PHILPOTT Non Coring :

Drilling Rig : M 30 Coring : AO, AXT

Drillers : K. DENBY, W. MOLLISON, P. SMITH.

Core Recovery :

**HOLE SURVEYS**

23 525

HOLE No. : C 1483



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**CLEVELAND MINE**

CATEGORY

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HOLE No. : C1483

**GENERAL DATA**

Objective : B&C LENS 19-20 LEVEL

Area of Operation : 20 HENRY'S Location : M SECTION

Collar R.L. : 86-269 Co-ordinates : 15453-189 N, 10973.517 E.

Bearing of Hole : 130° 15' 13" (132) Angle of Hole : -32° 46' 05" (-35) Final Depth : 94.5m

Drilling Commenced : 18.11.80 Completed : 29.1.80 Logged by :

**DRILLING DATA**

Drilled by : PHILDOTT Non Coring :

Drilling Rig : M 30 Coring : ~~PHIL~~ Bmc AQ, AXT

Driller(s) : K. DENBY, W. MOLLISON, P. SMITH

Core Recovery :

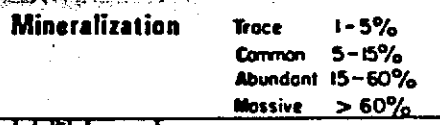
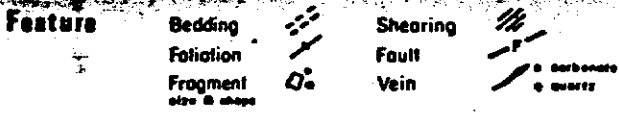
**HOLE SURVEYS**

23 526

HOLE No. : C1483







625 529

CORE RECD	DEPTH #	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH #	MINERALIZATION
	2	BASALT fine grained, very irregularly bedded, massive, shows brownish speckled alteration towards base where it is in bedded with thin shale bands							
120	123	band of massive black shale						x	Ca carbonate
457	132	bleached zone 7.7-4.3 ? fault zone. Contact is irregular, bright green.							
6.50	132	SHALE Black, very fine grained, massive, bedded chert breccia band - white.						x, x	veinlet, sub-st. calc. mineral in 15 ft. fault zone
7.25	132								
8.00	130								
9.50	12	band of sandstone, pale grey, fine-coarse grained.						x, x	vein: qtz chl cpy 100m thick 2.50
11.50	14								
13.50	16	SANDSTONE pale - mid grey fine medium grained poorly sorted lithic arenite							
15.50	18	minor veins - qtz ca chl with rare sulphides - cpy ka.							
17.50	20	shale band, black, massive, narrow							
19.50	22	shale band, black, massive, narrow							
21.50	24	- black, massive, wide.							
23.50	26	SANDSTONE coarse							
25.50	28	band of altered brown rock? w. 100- green left below							
27.50	30	CHERT-SHALE black - pb grey - white - con hard, fine grained rock, generally laminated.							
29.50	32	SANDSTONE greenish grey, locally brownish, medium grained poorly sorted lithic arenite.							
31.50	34	- 77.6 shales with flint							
33.50	36								
35.50	38	SHALE black - dark grey, very fine grained, locally fine grained, generally massive. Minor bands of sandstone as below of thin cherty white chert.							
37.50	40	SANDSTONE fine-medium grained mid grey poorly sorted generally massive lithic arenite. Rare veinlets - qtz-carbonate.							
39.50	42								
41.50	44								
43.50	46								
45.50	48	same described bedding							
47.50	50								

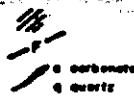
23 529

**Feature**

**Bedding**  
**Foliation**  
**Fragment**  
size & shape



**Shearing**  
**Fault**  
**Vein**



**Mineralization**

**Trace** 1-5%  
**Common** 5-15%  
**Abundant** 15-60%  
**Massive** > 60%

CORE RECD	DEPTH m	GEOLOGY	VISUAL LOG	TABLE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
51-50	52	SANDSTONE (cont) as before, minor shale bands							
302	54								
54-50	56	band of very coarse grained unsorted arenite, merges with shale (dark grey)							
296	58								
57-50	60	SANDSTONE as before LOOSE TUFF dark green, band of chlorite SANDSTONE - TUFF fine coarse grained, laminated massive							
301	62	SHALE Black-dark gray, very fine grained massive, but thoroughly jointed to locally badly broken at 63.0, 66.7							
60-50	64	chert hard - ? silicified shale - greenish grey						1.25	vein chert, quartz, chert
62-00	66	CHERT pale pinkish grey, locally green, very fine grained, chert faintly laminated rock. Core badly broken throughout							
63-50	68								
65-00	69	TUFF dark green fine grained, banded (brecciated with chert) - minor sulphides, veins and blebs. Upper staining on outside of core, 66-70m						1.5	copper concentration in shale of vein quartz veins, minor pyrite
66-50	70	TUFF Banded green tuff, fine grained, with local chert breccia (white) or quartz veins sulphides disseminated to blobby, rarely as veins. Brown darkening of alteration between 70.8 - 73.5 (identical)							quartz vein, minor pyrite overall pyrochalcite 20% sphalerite 5% chalcophyllite 5% gangue veins: quartz 30-40% (siderite) calcite 60-70% barroisite 20-30% chlorite 10-15%
67-50	71								
68-50	72								
69-50	73								
70-50	74								
71-50	75								
72-50	76								
73-50	77	CHERT pale pinkish grey, very fine grained, hard, massive (locally faintly banded)							
74-50	78								
75-50	79	SHALE - locally chert - dark grey, locally green or brown, very fine grained, generally massive, chert locally. 79.3-80.0 green, chloritic, chertic. Chert broken.							
76-50	80								
77-50	81	green chloritic banded stuff like pale grey shale.							
78-50	82								
79-50	83	greenish-grey, chertic shale in situ							

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Feature

Bedding

Foliation

Fragment size & shape

Shearing

Fault

Vein

Mineralization

carbonate  
quartz

Trace

Common

Abundant

Massive

1-5%

5-15%

15-60%

> 60%

CORE RECD	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
	83								
	2.62	SHALE (cont). as before.							
84-10	84	Fault at 82.23: 20cm of pale brown bleached shale, slickensides on joint faces. $\Delta 60^\circ$							
84-60	0.41	local mineralization along it. Greenish chaotic shale becomes brown massive below 84.1, then grey below 84.50.							
85-60	1.00								
86-10	0.38	become purplish grey, massive.							
86-80	0.80								
87-10	0.26								
87-60	0.35	from chloritic (tuffaceous) to dark minor sulphides.							
88-80	1.07	dark grey, massive, locally green.							veinlets, etc. subtle for chlorite. Some dissolution.
89-45	1.18								
91-00	1.04	local fine grained sandstone zone; very pale grey.							quite thin, $\frac{1}{2}$ inch
94-00	2.94	massive dark grey shale.							part 2 inch, white
97-00	2.94	END OF HOLE 97.00 m.							

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SAMPLE NUMBER	D.D.H. NUMBER	FACE/SLOPE			Σ	FROM	TO	LENGTH	ROCK TYPE	%SnT	%SnS	%Cu	%WO <sub>3</sub>	%Mo	%Bi	%Zn
		LENS	LEVEL	DATE												
300988	1283					55.15	59.40	0.55	CH L	0.27	<0.01	0.26				
300989						68.70	70.45	0.75	CH	0.15	<0.01	0.07				
90						69.65	70.35	0.90	CH	0.18	<0.01	0.13				
91						70.35	70.66	0.90	UNKN	0.07	<0.01	0.11				
x 92						70.66	71.50	0.86	L	0.30	<0.01	0.11				
93						71.50	72.66	0.90	L	2.27	0.01	0.37				
94						72.66	73.40	1.66	CH L	1.04	<0.01	0.22				
300995						73.90	74.10	0.60	L	0.12	0.01	0.07				
96						74.10	74.60	1.50	L	1.26	<0.01	0.16				
97						74.60	75.27	0.67	L	0.17	<0.01	0.13				
98						75.27	75.95	0.68	CH L	0.16	<0.01	0.08				
x 99						75.95	76.74	0.79	CH L	0.15	<0.01	0.14				
		Halls B		✓		<del>70.64</del> 68.9	76.74	<del>6.1</del> 8.04		<del>0.59</del> 0.73	0	0.16018				
300999						87.10	88.10	0.70	CH L	0.23	<0.01	0.06				