



ABMINCO N.L.
CLEVELAND MINE

CATEGORY

P/A

HOLE No. : C 1483

GENERAL DATA

Objective : TEST B₂C 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 : 94.0 m

Drilling Commenced : 18.1.80 Completed : 29.1.80 Logged by : _____

DRILLING DATA

Drilled by : PHILPOTT Non Coring : _____

Drilling Rig : M 30 Coring : AQ, AXT

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

Core Recovery : _____

HOLE SURVEYS

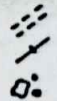
HOLE No. : C 1483

DIAMOND DRILL HOLE DATA

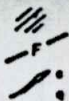
PROGRAM DATA				SURVEY DATA				INTERPOLATED DATA		
			(+) (-)	Instrument Type	Depth	Dip	Azimuth	Depth	Dip	Azimuth
1	Attitude	-		SURVEY	0	-32 ³ / ₄	130 ⁴	12 ¹ / ₂	33	130 ⁴
				CAMERA	9	-33 ¹ / ₄	130 (135)	37 ¹ / ₂	29 ¹ / ₂	131 ²
2	Hole No.	1483			32	-30	131 (136)	62 ¹ / ₂	28 ¹ / ₂	132
					64	-28 ³ / ₄	132 (137)	87 ¹ / ₂	27 ¹ / ₂	130 ¹ / ₂
3	Down Hole Interval	25			94	-27 ¹ / ₄	130 (135)	94		
4	Collar	15453.189	N							
5	Co-ords.	10973.517	E							
6	Collar R.L.	86-269								
7	Halls Sect.	15549.204	N							
8	Intersect Point	10867.808	E							
9	Battery Sect.	15409.213	N							
10	Intersect. Point	10838.117	E							
11	Start Plot (Depth)	0	0 = Collar							

Feature

Bedding
Foliation
Fragment
size & shape



Shearing
Fault
Vein



carbonate
quartz

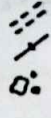
Mineralization

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

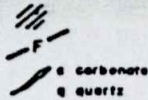
CORE RECD	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
	0								
295	2	BASALT fine grained rock initially dark green massive. Shows brownish speckled alteration towards base. where it is interbedded with thin shale bands.							
320	3	band of massive black shale based on shale band.						x	Ca veinlets
457	4	Bleached zone 7-7-4-3 ? fault zone. Contact is irregular, bright green.							
650	6	SHALE Black, very fine grained, massive, local chert chert breccia band - white.						x-0	veinlet: siderite galena minor in interstitial po.
725	7								
800	8								
950	10	band of sandstone, pale grey, fine-coarse grained.						x-4	vein: Qtz chl cpy 10cm thick Δ 50
1050	12								
1550	16	SANDSTONE pale - mid grey fine-medium grained poorly sorted lithic arenite. Minor veins - Qtz ca chl with rare sulphides - cpy ba.						x-7	vein as below. 2 veins each 5cm thick, as below.
1850	18							x-5-8	vein: Qtz: disseminated chl/ba porphyrophytic, 30cm thick
1950	20	shale band, black, massive, narrow							
2150	22	shale band, black, massive, narrow						x	Qtz vein
2450	24								
2750	26	SANDSTONE as above.							
3050	30	band of altered brownish greenish black - pale grey - white very hard, & fine grained rock, generally laminated.							minor quartz veins.
3150	32	SANDSTONE greenish grey, locally brownish, medium grained poorly sorted lithic arenite. - 77.6 shalesided joint							occasional Qtz-ca veins (small).
3350	34								
3500	36								
3800	38	SHALE black-dark grey, very fine grained, locally fine grained, generally massive. Minor bands of sandstone as below or minor chert white chert.							
3950	40	SANDSTONE fine-medium grained mid grey poorly sorted generally massive lithic arenite. Rare veinlets - Qtz-carbonate.							
4200	42								
4550	46								
4850	48	some disrupted bedding.							
	50								Qtz vein, minor calcite, formalin

Feature

Bedding
Foliation
Fragment
size & shape



Shearing
Fault
Vein



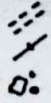
Mineralization

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

CORE RECD	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
	50	SANDSTONE (cont) as before, minor shale bands							
51.50	52								
	54								
54.50	56	band of very coarse grained unsorted arenite, merges into shale SHALE dark grey							
57.50	58								
	60	SANDSTONE as before LOOSE - TUFF dark green banded chloritic SANDSTONE - TUFF fine coarse grained, laminated massive							
60.50	62	SHALE Black-dark grey, very fine grained massive, but thoroughly jointed to locally badly broken at 63.0, 66.7							
62.00	64	chert band - ? silicified shale - greenish grey							1.25 vert line thick, 1/2, 1/4, 1/8
63.50	66								
65.00	67	CHERT pale pinkish grey, locally green, very fine grained, hard, faintly laminated rock. Core badly broken thru out							
66.50	68								
	69	TUFF dark green fine grained, banded (brecciated white chert), minor sulphides - veins and blobs. Copper staining on outside of core, off rods							1.5 Copper contamination in outside of core → 0.10% cp, 2%
69.50	70	Loose Banded green tuff, fine grained, with local chert breccia (white) or quartz veins. Sulphides disseminated to blobby, rarely as veins. Brown carbonate? alteration between 70.8-73.5 (siderite)							quartz vein, minor pb blobs Overall: pyrrhotite 20% sphalerite 5% chalcopyrite 5% gangue varies: quartz 30-60% (siderite) carbonate 60-30% tourmaline 2-5% chlorite 5-10%
70.50	71								
	72	butt band, rare sulphides							
71.40	73								
	74								
74.0	75								
	76								
	77	CHERT pale pinkish grey, very fine grained, hard, massive (locally faintly banded)							
77.50	78								
77.90	79	SHALE - locally chert - dark grey, locally green or brown, very fine grained, generally massive, chaotic locally. 79.3-1.5 green, chloritic, chaotic. then brown.							
78.30	80								
78.70	81	green chloritic banded? (stiff) than pale grey shale.							
79.00	82								
	83	greenish-grey, chaotic shale-in-shale							

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	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
	83	SHALE (cont) as before.							
	2.62	Fault at 82.23: 20cm of pale brown bleached shale, slickensides on joint faces. $\Delta 60^\circ$							
84.10	0.41	Calcite mineralization along fault. Greenish chaotic shale becomes brown massive below 84.1, then gray below 84.50.							
84.60	1.00								
85.60	0.38	become purplish gray, massive.							
86.10	0.80								
86.80	0.26								
87.10	0.35	green chloritic & tuffaceous bed. minor sulphides							veinlets: qtz siderite po chlorite. Minor dissem. po.
87.60	1.07	dark gray, massive, locally green							
x88.80	1.18								
89.95	1.04								
91.00		local fine grained sandstone zones, very pale gray							quartz vein, $\frac{1}{2}$ cm thick
	2.94								quartz vein, calcite
	92								
	93								
94.00		massive dark gray shale.							
	2.94								
	95								
	96								
	97	END OF HOLE 97.00 m.							

SAMPLE NUMBER	D.D.H. NUMBER	FACE/STOPE			Σ	FROM	TO	LENGTH	ROCK TYPE	%SnT	%SnS	%Cu	%WO ₃	%Mo	%Bi	%Zn
		LENS	LEVEL	DATE												
300988	1483					58.65	59.20	0.55	CH L	0.22	<0.01	0.26				
300989						68.70	69.45	0.75	CH	0.15	<0.01	0.07				
90						69.45	70.35	0.90	CH	0.18	<0.01	0.13				
91						70.35	70.64	0.29	WVN	0.07	<0.01	0.11				
x 92						70.64	71.50	0.86	L	0.30	<0.01	0.11				
93						71.50	72.40	0.90	L	2.27	0.01	0.37				
94						72.40	73.46	1.06	CH L	1.04	<0.01	0.28				
300995						73.96	74.10	0.14	L	0.12	0.01	0.07				
96						74.10	74.60	0.50	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 W	0.16	<0.01	0.08				
x 99						75.95	76.74	0.79	CH L	0.15	<0.01	0.14				
		Halls B			✓	^{70.64} 68.9	76.74	^{6.1} 8.04		0.59 0.73	0	0.16 ^{0.18}				
301000						87.82	88.19	0.37	CH L	0.53	<0.01	0.06				
										13 SAMPLES						