ABMINCO N.L.
CLEVELAND MINE

CATEGORY: P/A.

HOLE No.: C1392 REF No 18560

GENERAL DATA

Objective: Halls lenses below 18level

Area of Operation: 18 level Henry Location: Qa Section

Collar R.L.: 119-2 Co-ordinates: 15538.411 N, 11030.492 E.

Bearing of Hole: 131° 41' 56" (132). Angle of Hole: -13° 13' 46" (-14°) Final Depth: 86.41m

Drilling Commenced: 13/5/79 Completed: 24/5/79 Logged by:

DRILLING DATA

Drilled by: Philpott Non Coring:

Drilling Rig: E500 Coring: AXT

Driller(s): B. Howell.

Core Recovery:

HOLE SURVEYS

HOLE No.: 1392

NWPS 24164

ABMINCO N.L.
CLEVELAND MINE

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HOLE No.: C1392.

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Drilling Rig: E500

Driller(s): B. Lovell.

Non Coring:

Coring: AXT

Core Recovery:

HOLE SURVEYS

HOLE No.:

NWPS 24164

HOLE No.: 1392

SAMPLE DATA

SHEET No.: .....

LENS	SAMPLE No.	ROCK TYPE	Σ	INTERVAL From	INTERVAL To	Length (L)	Assays (A) % Snt	Assays (A) % Sns	Assays (A) % Cu	Product (A x L) P. Snt	Product (A x L) P. Sns	Product (A x L) P. Cu
	242173	CHLORITIC SHALE/LODE		0·00	0·80	0·80	·11		·08			
	242174	LODE		0·80	2·40	1·60	·66		1·06			
	242175	CHLORITIC SHALE		2·40	3·96	1·56	·17		·47			
	242176	LODE		3·96	5·21	1·25	·30		1·28			
	242177	LODE		26·70	26·97	0·27	1·62		2·74			
	242178	LODE		28·50	29·62	1·12	·13		·06			
HALL'S B			Σ	26·7	29·62	2·9	0·20	0·01	0·28			
	242179	LODE		33·98	34·93	0·95	·53		·80			
	242180	"		34·93	35·97	1·04	1·02		·81			
	242181	"		35·97	36·94	0·97	1·60		·73			
	242182	"		36·94	38·06	1·12	·93		·55			
	242183	LODE		46·86	47·93	0·97	·93		·38			
	242184	"		47·83	48·77	0·94	·72		·26			
	242185	"		48·77	49·65	0·58	·54		·17			

N.W.P.B.

HOLE No.: 1392

SAMPLE DATA

SHEET No.:

LENS	SAMPLE No.	ROCK TYPE	Σ	INTERVAL From	INTERVAL To	Length (L)	Assays (A) % Snt	Assays (A) % Sns	Assays (A) % Cu	Product (A x L) P. Snt	Product (A x L) P. Sns	Product (A x L) P. Cu
	24217 3	CHLORITIC SHALE/LODE		0.00	0.80	0.80	.11		.05			
	24217 4	LODE		0.80	2.40	1.20	.66		1.06			
	24217 5	CHLORITIC SHALE		2.40	3.96	1.50	.17		.47			
	24217 6	LODE		3.96	5.21	1.25	.30		1.25			
*	24217 7	LODE		26.70	26.97	0.27	1.62		2.74			
*	24217 8	LODE		28.50	29.62	1.12	.13		.06			
	24217 9	LODE		33.98	34.93	0.95	.53		.50			
	24217 0	"		34.93	35.97	1.04	1.02		.51			
	24217 1	"		35.97	36.94	0.97	1.66		.73			
*	24217 2	"		36.94	38.06	1.12	.93		.35			
*	24217 3	LODE		46.86	47.83	0.97	.33		.35			
	24217 4	"		47.83	48.77	0.94	.72		.26			
*	24217 5	"		48.77	49.65	0.58	.54		.17			
Hall's D			Σ	46.86	49.65	2.49	0.72	0.01	0.29			

ABMINCO N.L. - Cleveland Mine

Hole No. C1392

Sheet No.

DIAMOND DRILL HOLE DATA

PROGRAM DATA				SURVEY DATA				INTERPOLATED DATA		
				Instrument Type	Depth	Dip	Azimuth	Depth	Dip	Azimuth
1	Attitude	—	(+) (-)	~~Survey~~	0			12½	13E	130E
2	Hole No.	1392		Camera	30	-13¾	130 (134)	37½	13½	129
					60	-12¼	127 (131)	62½	12	127
					86	-12.2	132 (136)	87½	12	132
3	Down Hole Interval	25								
4	Collar Co-ords.	15538.411	N							
5		11030.492	E							
6	Collar R.L.	119.2								
7	Halls Sect. Qa Intersect Point	15623.938	N							
8		10935.748	E							
9	Battery Sect. FA Intersect. Point	15409.213	N							
10		10838.117	E							
11	Start Plot (Depth)	0	0 = Collar							

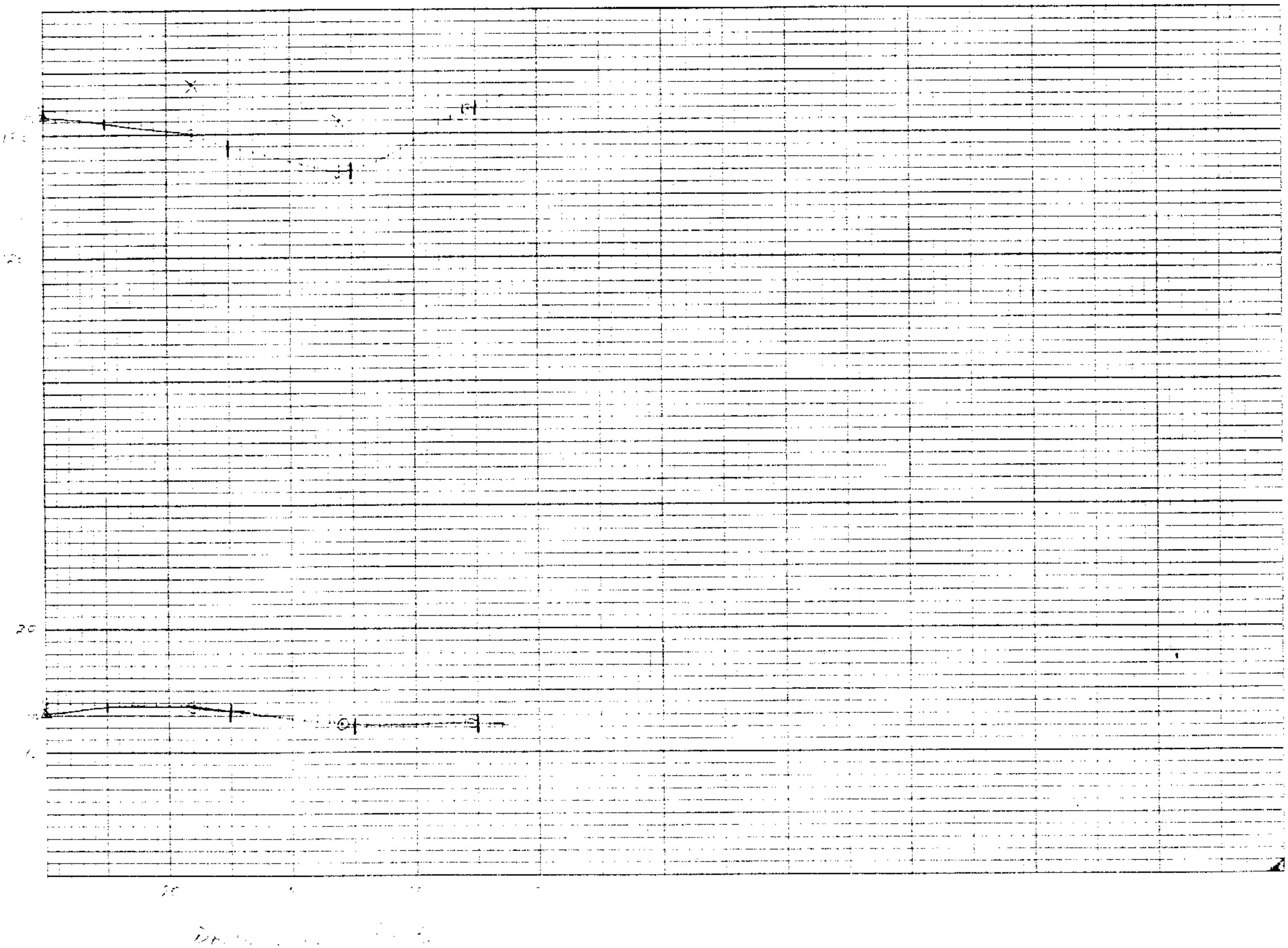
DOWN HOLE PLOT

Hole No: C1332

Sheet No: 1

	PLAN			CROSS SECTION		LONG SECTION					PLAN			CROSS SECTION		LONG SECTION			
DEPTH	N	E	RL	Dist.from H.R.P.	Dist.from B.R.P.	Dist. from Halls	Sect. Qa	Dist from Batt.	Sect. FA	Depth	N	E	RL	Dist.from H.R.P.	Dist. from B.R.P.	Dist from Halls	Sect.	Dist. from Batt	S
Ø	15538.411	11033.492	119.2	127.64	135.59	0.45		187.93											
25	15522.54	11048.91	113.36	151.94	158.57	1.09		179.43											
50	15507.24	11067.80	107.53	176.21	181.39	2.48		171.64											
75	15492.53	11087.33	102.33	200.56	204.82	4.73		164.62											
100	15476.17	11105.50	97.13	225.01	227.54	4.85		155.58		86.41m									

C1392



ABERFOYLE **DIAMOND DRILL LOG** **HOLE Nº** 1392 Page No 1

Feature Bedding, Foliation, Fragment (size & shape), Shearing, Fault, Vein (c carbonate, q quartz)

Mineralization 23 460 — Trace 1–5%, Common 5–15%, Abundant 15–60%, Massive > 60%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	DEPTH m	MINERALIZATION
0.70		**LOSS.** From 0.00 – 0.80 – The lode is sulphide deficient with upto 1% chpy, py. 0.80 – 2.40 – 20% sulphides – e.g. aggregates of chpy, vuggy & veiny py. altered foliated py. 2.40 – 2.75 – sulphide deficient lode, altered chloritic shale. no visible sulphides. 2.75 – 3.45 – 40% sulphides py, chpy. 3.45 – 3.76 – Altered sulphide deficient lode. 3.76 – 4.32 – 20% sulphides – spotty rounded py, aggregates of py/chpy – veiny chpy, py. 4.32 – 5.21 – Altered chloritic lode.	TRACE COMMON ABUNDANT MASSIVE		Overall 15% sulphides – py – 10%, py 4% chpy 1% carb 30%, chl 40, q/c 10% fluorite 5%
1.95					
0.86					
1.33	5.00				
	5.01	**SHALE** Fine grained massive partly bedded. Colour variation from dark brown to blackish brown – occasionally silted and fractured. Fine spotting common. Locally chaotic and foliated. Contact sharp. 55°.			
2.11					
0.81	9.33				
3.36	10	**LAPILLI TUFF / SHALE** – fine brown shale and interlayered pinky brown tuff & green basalt frags.			
	10.95	**BASALT** – Green f.g. massive – locally porphyritic			
	10.48	**SHALE** – f.g. dark brown massive shale.			
	10.79	**BASALT.** greenish grey – fine brn. rounded carbonate clots – irregular chlorite blebs.			
	11.89				
	12.97	**TUFF SHALE / LAPILLI TUFF** – fine grained dark brown shales interbedded with f.g. green massive shales and pinky brown lapilli tuff & vbs frags.			
3.00	13.27	**BASALT.** – f.g. dark green – carbonate filled vesicles			
	14.60	**SHALE** – f.g. massive weakly foliated dark brown, finely disseminated carbonate. Minor chloritic alteration. Contact 80°			
	15	**SST.** – m.g. grey, carbonate mica ss.			Rare blebby py.
	15.94	**SHALE** – f.g. massive dark brown. weak foliation – minor blebs of chloritized ss. Contact irregular – approximately 50°			
2.99	16.19	**SST** – chaotic mid grey ss. – blebby shale patches			
	17.60	**SHALE** – f.g. massive dark brown – fine scale carbonate spotting – irregular ss blebs.			
	17.79	**SST** – As above			
	19.02	**SHALE** – massive, locally weakly foliated. Dark brown to blackish brown in colour.			
3.07	20	**SST** – m.g. mid grey to grey brown in colour. – fine carbonate silicified. Minor shale interbeds.			
	20.30				
	20.70	**SHALE** – As above.			
	20.93	**SST** – As above.			
	21.33	**SHALE** – As above.			
	21.35	**SST** – As above			
3.10		**SHALE** Massive fine grained dark brown shale. Abundant fine scale carbonate spotting. Poorly foliated. Minor off white cherty blebs. Becomes more siliceous proximal block.			
3.05	25.00				

ABERFOYLE **DIAMOND DRILL LOG** **HOLE No** 1392 Page No 2

Feature Bedding, Foliation, Fragment size & shape, Shearing, Fault, Vein (c carbonate, q quartz)

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

23 461

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
	26.70								
	26.97	LODE - 80% sulphides. chpy, po, py.							carb, chl, amph.
	28.50	SHALE - f.g. dark brown massive - not bedded.							
2.98		LODE 1% sulphides in chlorite, qtz carbonate host. patchy dots of py, minor po, chpy.							chl 45% carb 35% qtz 10% py 1%. 4% fluorite.
	29.62								
	30	SHALE Fine grained massive dark brown to brownish black. Minor chloritic alteration. Fine scale carbonate spotting common. Finely disseminate carbonate. Local silicification - Last cm chaotic chloritic chert.							
3.07									
	33.98								
3.14		LODE ~25% sulphides - patchy veining and locally submassive f.g. po - veining clots and aggregates of chpy - (closely associated with po). Veins and patches of py. Irregular bands and blebs of pale yellow carbonate - cherty blebs are common - chlorite, fluorite, qtz, matrix							po 20% py 3% chpy - 2% chl 40%, carb 20%, fluorite 5% qtz 10%
	35								
	38.06	CHERT - f.g. chaotic and blebby pinky white to brown. Locally alteration to chlorite.							minor veiny po.
	38.90	SHALE Fine grained massive dark brown, fine carbonate spotting common.							
3.78									
	40	SST. - med grey. slightly altered. m.g. qtz mica						40.60	
2.74	40.27	SHALE As previously described - massive dark brown - irregular sandstone blebs proximal to ss above. Abundant fine carbonate blebs.							
3.01	44.4								
	44.38	SST. - m.g. mid grey. qtz, mica ss							
	45	SHALE As above. - becomes siliceous towards lode contact.							
1.00									
0.40	46.86								
2.85		LODE 10% sulphides, predominantly veining and patchy py, chpy in parts. altered po/py. Minor chpy. in a patchy mottled carbonate/chlorite matrix with lesser qtz, fluorite. Minor last cm veined chert band.							py 7% po 2% chpy 1% chl 40%, carb 35% qtz 10%, fluorite 5%.
0.65	49.65								
	50	SHALE							

Feature Bedding · Foliation · Fragment (size & shape) · Shearing · Fault · Vein (c carbonate, q quartz)

Mineralization 23 462 Trace 1–5% · Common 5–15% · Abundant 15–60% · Massive > 60%

	CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
53.26 5[illegible].37 5[illegible]	2.50 2.26 1.55	58.20	Fine grained massive dark brown to grey brown shale. Homogeneous in nature – fine disseminated carbonate – sections appear to be foliated. Contact sharp 45° to C.A.							
60.27	1.65	60.00 60.30	CALCAREOUS SHALE – f.g. carbonate rich pale greyish green – well bedded c̄ minor chloritic alt.							minor trace spotting po.
63.[illegible]	3.00	63.34	SHALE – f.g. dark brown massive.						67.00	Thin calcite vein 65° to C.A.
[illegible] 69.[illegible]	2.90 2.93	68.63	BASALT – m.g. to fine grained olive green chloritic alteration common as veinlets fracture fill and patchy segregations. Areas of calcite filled vesicles.							
72.46	3.02	70 72.60	TUFF SHALE – f.g. massive to well bedded greenish grey to pale green – bedding 45–60° to C.A. finely disseminated carbonate common						69.85	5cm qtz carb vein 50° to C.A.
75.[illegible] 78.48 81.53 84.58 84.83	2.70 3.08 2.76 3.07 0.2[illegible]	80 84.18	BASALT. Massive fine grained olive green – abundant chlorite clots and veinlets – predominantly calcite filled vesicles – fine scale spotting common. Minor carbonate veining						75.26	10cm qtz, carb vein c̄ chpy, po py. 15° to C.A.
86.41	1.04	86.41	SHALE f.g. well bedded 45°, pale grey green tuffs.							finely spotted.

End of hole

Logged A. Eadie 15/8/79

Feature Bedding · Foliation · Fragment (size & shape) · Shearing · Fault · Vein (c carbonate, q quartz)

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

23 463

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
		Quick Log							
		0 - 0.7 Shale.							
		0.7 - 4.5 Lode.							
		4.5 - 5.0 Sandstone/sh.							
	*	5.0 - 33.1 Shale							
		33.1 - 38.8 Lode with minor chert at 38.4-38.8							Vein at 26.8 (Py. -Py)
									F at 38.5 ?
		38.8 - 46.84 Shale							
		46.84 - 50.1 Lode							
		F @ 50.1 35 - 45° ^CA							
		50.1 - 64.4 Shale sh. [illegible] up to 58.							Faulted 56 - 56.5
		64.4 - 68.8 Vb. F @ 60°^CA.						*	5.0 - 9.35 sh.
		65.8 - 72.9 ~~Sh~~ Shale and minor tuff							9.35 - 10.2 Vt lithic
									10.2 - 13.6 Vt + Vb
									13.6 - 16.3 sh/ss.
									16.3 - 26.8 sh minor ss
									26.8 Fault
		72.9 - 84.2 - Vb.							26.8 - 26.9 L.C. Vein
		84.2 - 86.41 Shale. + Vt CA 50°							26.9 - 29 sh.
									29 - 29.6 min sh
									29.6 - 33.1 sh.
		Plotted NCG.							
		Check for Henry O Volcanics NCG							