Category: S/E

CLEVELAND TIN MINE

REF No 18569 Hole No: C1510

Objective: 80m BELOW SURFACE Location: WASHINGTON HWY RA6

Bearing of Hole: 112° 39' 44" (108) 112.7 Angle of Hole: -46° 00' 34" (45) -46.0 Final Depth: 382.70 Core Size: HQ, NQ

Logged By: Drilled By: LONGYEAR, A.BLOORE, C.NEWMAN, MOLE Rig Type: EHS 38

Drilling Commenced: 27-3-80 Drilling Completed: 10-4-80

NWPS 3477

	Program Data		Survey Data				Interpolated Data			Depth	Plan			X-Sect.		Long. Proj.	
			Surv. By Inst.	Depth	Az.	Dip	Depth	Az.	Dip		N	E	RL	M.From HRP	M.From BRP	M.From	M.From
1	Attitude + -	—	CAM.	Ø	112½	-46	12½	112 HO½	47	Ø	14558.56	9994.31	354.31	20.05	-496.15	-673.57	-230.95
			DC	28	110 (115)	-47.5	37½	112 HO	47½	25	14552.59	10010.31	336.03	35.88	-479.10	-667.25	-231.01
2	Hole No.	1510	DC	46	110 (115)	-47.5	62½	112 HO	47½	50	14546.81	10026.19	317.59	51.51	-462.21	-660.84	-230.92
			NE	75	109½ (114)	-48	87½	109½	48	75	14541.04	10042.06	299.16	67.14	-445.33	-654.44	-230.83
3	Down Hole Interval	25	NE	110	110½ (115)	-48	112½	112 HO½	48	100	14535.45	10057.83	280.58	82.57	-428.60	-647.97	-230.59
			DC	45	110 (115)	-48	137½	112 HO	48½	125	14529.59	10073.49	262.00	98.10	-411.87	-641.76	-230.65
4	Collar	14558.56N	DC	190	110 (115)	-48	162½	112 HO	48½	150	14523.93	10089.06	243.28	113.43	-395.31	-635.48	-230.56
			DC	217	110 (115)	-47	187½	112 HO	46½	175	14518.26	10104.63	224.56	128.76	-378.74	-629.20	-230.48
5	Co-ords	9994.344E	NE	234	111 (116)	-46.5	212½	112 HO	47	200	14512.60	10120.19	205.83	144.09	-362.17	-622.93	-230.39
			DC	277	112 (117)	-45	237½	113 H1	46	225	14506.76	10136.22	187.55	159.87	-345.13	-616.46	-230.30
6	Collar RL	354.309	NE	290	111 (116)	-45	262½	113 H1½	45½	250	14500.54	10152.43	169.57	176.05	-327.76	-610.16	-230.51
			NE	320	112 (117)	-44	287½	113 H1	45	275	14494.12	10168.73	151.73	192.43	-310.24	-603.95	-230.87
7	Hall's Sect. Intersect Point G3	15070.45N	NE	356	113 (118)	-42	312½	113 H1	44½	300	14487.78	10185.24	134.06	208.91	-292.56	-597.53	-231.09
			NE	382	113 (118)	-40.5	337½	114 H1½	43	325	14481.39	10201.88	116.53	225.52	-274.73	-591.06	-231.30
8		10432.60E					362½	115 H3	41½	350	14474.40	10218.77	99.48	242.73	-256.46	-584.89	-232.00
							382.7 387½	115 H3	40	375	14467.08	10236.01	82.92	260.40	-237.76	-578.70	-232.89
9	Batt. Sect. Intersect Point A3	14602.99N								400	14459.60	10253.64	66.85	278.48	-218.63	-572.38	-233.79
10		10539.81E															
11	Start Plot (Depth)	Ø															

Hole No. C1510

HOLE No.: C1510

SAMPLE DATA

SHEET No.: 1

LENS	SAMPLE No.	ROCK TYPE	Σ	INTERVAL From	INTERVAL To	Length (L)	Assays (A) % Snt	Assays (A) % Sns	Assays (A) % Cu	Assays (A) % Zn	Product (A x L) % P. Sntpb	Product (A x L) P.F. Sns Ag	Product (A x L) P.F. Cu Cd
	248149	SHALE/SILTSTONE		258·72	259.26	0·54	<0.01		0.01	0.01	<0.10	<5	<10
	248150	MINERALIZED		259.26	260·34	1·08	0.07		0.03	2.70	2.10	70	190
	248151	CHERT/CARBONATE		260·34	261·18	0·84	0.02	NO	0.01	0.75	0.45	20	60
	248152	CHERT		261·18	262·88	1·70	<0.01	SNS	<0.01	0.03	<0.10	5	<10
								ASSAYS					
	248153	SHALE		277·48	278·07	0·59	<0.01		0.01	0.03	<0.10	<5	<10
	248154	SANDSTONE		278·07	278·95	0·88	<0.01		<0.01	0.12	<0.10	<5	10
	248155	MINERALIZED		278·95	279·71	0.76	0.03		0.01	1.10	0.25	10	70
	248156	CLAY		279·71	280·10	0·39	0.01		<0.01	0.24	0.12	5	20
	248157	SANDSTONE		280·10	280·73	0·63	<0.01		<0.01	0.04	<0.10	<5	<10
	248158	SHALE		280·73	281·43	0·70	<0.01		0.01	0.04	<0.10	<5	<10
	248159	SANDSTONE		281·43	282·36	0·93	0.05		<0.01	0.22	0.95	30	20
	248160	MINERALIZED		282·36	283·00	0.64	0.07		0.01	1.50	5.50	180	110
	248161	SHALE		283.00	283·55	0·55	0.01		0.01	0.10	<0.10	5	10
	248162	SHALE		283·55	284·90	1·35	0.02		0.01	0.10	<0.10	5	10
	248163	SHALE/SANDSTONE		286·46	288·03	1·57	0.04		0.01	0.52	<0.10	5	30

N.W.P.S.

ABERFOYLE DIAMOND DRILL LOG HOLE NO C1510 Page NO 1

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
Tri-coned - No Core	0	Weathered [redacted] basic - brown orange, broken - distorted. - harder and more greenish towards base - from 12.7m.							
	15.00	Ultrabasic - dark green. - few dark minerals - top very broken - rest hard - distorted with flow structures - silicified in parts	Very Broken						minor cvb veining all angles main veins at 25°
NQ	16.90								
	18.50								
	20.00								
	22.70								
NQ	25.70								
	28.70		Brk						
	31.70								
	34.70		Brk						
	37.70		Brk Brk						
	40.70								
	43.70		15°/45° FI Brk Brk						
	46.70								
	49.70		70° V3						qtz, cvb.

220 030

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%

CORE RECD	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
52.70	50	[redacted]. Ultrabasic cont.							
	51								
	52								
	53							V2 70	cvb.
	54							V4 20	cvb.
	55 55.20							50°	cvb centre with ga, sph - then green zones [redacted] gb, sph, Tm minor ga, As
55.20	56	Ultrabasic - dark green Ultrabasic - distorted flow structure - silicified pockets						V1 20	gb, cvb, ga, Tm
	57 57.53	VEINS - cvb rich in brecciated basalt						35°	[redacted]
58.70	58	Shale - very fine for top 0.9m then coarse/fine alternations Pillows for 0.6m then fine							cvb, gb, Ga, sph, py, cpy
	59	20cm breccia band at 60.07							
	60	& 64.8	Bac 15°FI						
	61	Coarse at 63.07 - 63.64							
64.70	62	Clast or gb vein at 63.84 - 64.26	Brec.						
	63	Flow breccia to 66.76 from 64.26							
	64	also 68.09 - 71.35							
64.70	65	Silicified breccia 71.35 - 72.78	25° Flow banded breccia						
	66	also silicified & cvb rich at 72.02 - 74.94							
	67	Pink band at 74.57m.							
67.70	68	- flow sheathed breccia at	45° Flow breccia						
	69	77.12 - 77.50							
	70	- cvb veins at 77.82 - 78.07							
70.70	71	Coarse breccia at base.							
	72		54.18						gb rich - cemented
73.70	73								
	74								
	75								
	76		shear						cvb veins
76.70	77							V4 50	cvb with [redacted] gb, sph, py & minor Ga.
	78								
	79		Brec					V1 ?	cvb.
79.70	80								
	81 81.44	sharp lower contact.							
	81.44 82	Purple [redacted] - silicified hard - chert like							
82.70	83	[redacted] - silicified fine grained Shale some purple tuff bands band.							
	84 84.17								
	85	Purple [redacted] Shale - silicified - fine grained							
85.70	86	- some fine grained silicified green tuff breccia at 86.15 - 86.45						V2 25	cvb, Tm.
	87								
	88								
88.70	89	gradational contacts.							
	90 90.07	[redacted] - fine grained green Shale - hard silicified						V3 CO-70	cvb
	91	Silicified Brecciated Shale - very little movement [redacted] pieces but broken & rewelded by							cvb veins common - fine
91.70	92	[redacted] mineralization							cvb veining
	93 92.92								
	93.55	Breccia & cvb rich - [redacted] tuff.							
	94	Silicified Brecciated Shale - bleached - very little movement - rewelded with black mineral.							
94.70	95 94.79	[redacted] - bleached in top 1.35m							
	96	Shale - very fine grained							
	97	- distorted and rewelded down to 99.37							
97.70	98	then massive & fine grained.							
	99	at 99.37 in 1cm of cvb vein						V1 80	cvb.
	100								

ABERFOYLE

DIAMOND DRILL LOG

HOLE Nº C1510 Page Nº 3

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%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
100.70	100	porphiric and green tuff interbands and gradations from 100.15 - 102.16 m.							
	102.16	Slab - coarse flow banded and fine massive green tuff interbands sharp contacts						VI 70	cvb.
103.70	105.57	Pl, 10° Brk							
		Bkgd - Ultra basic? No dark minerals overall green color talcy feel. many fine veins of $CaCO_3$ all angles							Many cvb VI^5 at 80°.
106.70								VI 60	cvb, green min.
109.70									
112.70								VI 80	cvb 10cm thick
115.70								VI 80	[redacted] cvb, gtz, sph minor Ga, py + green min
118.70		Brk.							
121.70									
124.70									
127.70									
130.70								VI^5 60	cvb
								VI^5 80	cvb
133.70								VI 60	cvb
136.70									
139.70									
142.70									
145.70									
148.70									

ABERFOYLE

DIAMOND DRILL LOG

HOLE Nº C1510 Page Nº 22

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%

CORE RECD	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
	150								
	151	Ultramafic continued						V4 55° crb.	
151.70	152								
	153								
	154								
154.70	155								
	156								
	157								
157.70	158								
158.90	159							V2' 60° crb.	
	160							V1' 85° crb	
160.70	161								
	162							V3' 50° crb.	
	162.52								
	163	Sandstone							
	164	- mid grey							
	165	- fine grained	F' 25° Bdk						
	166	- composed of shale particles						V1' common 80°, 30, 10° crb	
166.70	167	- disturbed in upper 1.5m then massive							
	168	- many distorted shale bands							
	169	very broken at 182.88 to 183.31 m							
169.70	170	shale from 187.10 to 188.07 m							
	171	very coarse 191.35 to 191.72 m							
	172	crb cement throughout						V4 45° crb with minor pyrite, Tr Ga	
172.70	173	minor thin shale bands							
	174	minor tourmalinized zones	shear						
	175								
175.70	176							V3 35° crb, q/3, [illegible] Ga in one zone, Sph in another	
	177								
	178								
178.70	179								
	180								
	181								
181.70	182								
	183		Brk [illegible]					V2 30° crb, q/3, [illegible] sph, [illegible] minor Ga	
	184								
184.70	185								
	186								
	187		Shale						
187.70	188								
	189							V3 50° crb, q/3, sph. minor Ga, py, As	
	190								
190.70	191								
	192							V1° all angles crb	
	193								
193.70	194								
	195								
	196								
196.70	197								
	198								
	199								
199.70	200								

630 22

ABERFOYLE

DIAMOND DRILL LOG

HOLE Nº C1510 Page Nº 5

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%

CORE RECD	DEPTH m 200	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
202.70	201	Sandstone continued some chaotic distorted zones							
	202								
	203								
	204								
	205								
205.70	206								Vn S all angles - calc mod
	207								
	208								
208.70	209								
	210								
	211								
211.70	212								
	213								
	214								
214.70	215								
	216								
	217								
217.70	218								
	219								
	220								
220.70	221								
	222								
	223								
223.70	224								
	225								
	226								
226.70	227								
	228								
	229								
10	230								
	231								
	232		50mm - 35° Sl cav						
232.20	233								Vn 35° 55mm calc, [illegible] qtz, Sph - minor py, As, Cu.
	234								
	235								
235.70	236								
	237								
	238								
238.70	239								
	240								
	241								
241.70	242								
	243								
	243.80								
	244	Chaotic Sandstone : dominantly ss with a silty fraction and tourmalinized mah. a.							Many calcite veins Vn 35-40° mainly others at 70°
244.70	245								
	246								
	246.83								
	247	Sandstone fine grained becoming coarser downwards - still some salt sized fractions in parts							
247.70	248							F/ 45°	
	249								
3.01	250								

22 040

ABERFOYLE **DIAMOND DRILL LOG** **HOLE N° C/510** PAGE 6

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%

CORE RECD	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
250.70	250	**Sandstone** (cont'd) Mid grey - many dark minerals (lime) many thin bands of black (Tm) calcite grains throughout - lime to medium grained - generally massive						F1 35°	Calcite veins 20-30° to core Rw at 70° to core
3.14	251								
	252								
	253								
253.70	253.76								
	254	**Siltstone / Sandstone** Chaotic - dark grey to black tourmalinized - some pyrite							Calcite veins, mainly 60-70° some 20-30°
2.98	255								
	256	256.07							
256.70	257	**Chaotic Siltstone / Shale** Dark grey tourmalinized siltstone with some light brown grey shale - shales are slumped							Calcite veins (thin) dominantly 60-70°
	257.60								
2.44	258	**Sandstone** - very disturbed fine grained - med to dark grey tourmalinized							Calcite veins
	258.72								
	259	Shale / Siltstone - dark grey fine grained	x						
	259.26								
259.70	260	Mineralized Carbonate Calcite rich carbonate with py, sp, PY - very chaotic zone with shales & sandstones	x						crb (50%) sp (20%) qtz (15%) PY (5%) qz (80%) spy (trace)
	260.34								
	261	Shale / Siltstone / Chert/Carbonate - very contorted. Tourmalinized fine grained - some shale pyrite veins	x						crb, qtz, PY
3.25	261.18								
	262	Chert - hard - light to med grey. silicified shale. some pyrite.	x						
262.70	262.98								
	263	**Chaotic Shale** - Light brownish cream - greenish tinge in places. - includes pieces of grey, brown, cream shale. - stress direction at 45°							rr w qtz, cpy, PY, crb
3.03	264								
	265								
265.70	265.37								
	266	**Chaotic Shale / Sandstone** mid grey - shale dominant at top with sandstone dominant at base - generally calcite rich							Thin calcite veins common
2.96	267								
	268								
268.70	269								
	270								
3.04	271							v3 40°	crb, qtz, Tm minor sph
271.70	272							v4 30	crb, qtz, Tm. minor sph
	272.71								
3.07	273	**Sandstone** - fine to medium grained, light to mid grey - calcite rich - shale at 275.50 - 275.60							qtz veins v1 5 35°
	274								
274.70	275								

ABERFOYLE **DIAMOND DRILL LOG** HOLE No [illegible] Post No

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%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
	275	Sandstone cont.							
3.00	276								
	276.49	Shale/Sandstone - chaotic and distorted. - mid to dark grey.						VI 80	cvb, qfs
	277							VI 60	cvb, sph, ga, py
	277.48	fault or shear contact with py.						VI 20	cvb, qfs, py
277.70		Shale - contorted shale - py common. pyrite in veins - light and mid grey	x					VS 10-50	py, cvb
	278 278.97	Chaotic Sandstone - mid to dark grey - becomes also veins of py. cvb.	x					VI S 40	cvb, qfs, py, [illegible], sph minor Ga
2.50	279 279.95								
		Mineralization - cvb veins & minor ss.	x						cvb with sph, py, ga qfs
	279.71								
	280 280.18	Clay - grey - fault zone - unanalysed	x						
280.20		Chaotic Sandstone - mid to dark grey some py.	x						
	280.73								
	281	Shales - beige light grey, base mid grey - minor pyrite	x					VS 50	qfs, cvb, py
281.50	281.62								
		Sandstone - fine grained - light grey	dot					VI S 80	cvb, qfs, sph.
	282		x						
	282.76								
		Mineralized breccia - brecciated shale with qfs, cvb in fill with ga, sph	x						qfs (20%) · ga (20%) cpy (trace) cvb (60%) sph (20%) py (")
	283 283.09								
		Chaotic Shales - light brown grey - contorted.	x						
283.70	283.55								
	284	Chaotic Shales - black, grey, brown grey shales with some py chert bits	x					VI S 30	70° cvb, qfs, py, [illegible], sph, cpy Ga.
	284.96								
	285	Shales - light brown grey							
	285.86								
286.70	287	Shale/Sandstone - mid to light grey py rich in parts (dark)	x						
	287.02								
		Sandstone - mid grey - fine grained - qfs and shale bags - massive - minor shale bands						V2 35°	cvb, qfs py, AS, sph [illegible] minor Ga
289.70	289								
	290								
	291								
292.70	292								
	293								
	294							VI S dominantly 35° - cvb	
295.70	295								
	296								
	297								
298.70	298								
	299								
	300								
301.70	301								
	302								
	303								
304.70	304								
	305								
	306								
	307								
307.70	308								
	309								
310.70	310								
	311								
	312								
	313								
313.70	314								
	315								

22 042

ABERFOYLE

DIAMOND DRILL LOG

HOLE Nº C1510 Page No 8

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%

CORE REC'D	DEPTH m 315 m	GEOLOGY	VISUAL LOG (TRACE / COMMON / ABUNDANT / MASSIVE)	DEPTH m	MINERALIZATION
316.70	316	Sandstone continued			
	317	ss/shale bands from 320.93 to 322.10m		VI 5°	cvb, g/3, cpy, py, no minor sph
	318	also shale bands at 329.0m			
319.70	319				
	320	Shale bands at 334.2 (20cm)			
	321	mainly light green grey fine: 335.25 (25cm); 336.05 (10cm); 331.45 (50cm)	ss/sh bands		
322.70	322				
	323	mid grey shale at 358.1 (40cm)			
	324				
326.70	325				
	326				
	327				
70	328				
	329		sh band		
	330				
	331		shear	VI 15°	cvb, g/3
331.70	332				
	333				
	334			VI 15°	g/3, cvb
334.70	335				
	336				
337.70	337				
	338				
	339				
	340				
340.70	341			VI 15	g/3, sph, cvb
	342				
	343				
343.70	344				
	345				
	346				
346.70	347				
	348			VIS 10-30°	g/3, cvb.
	349				
349.70	350				
	351				
	352				
352.70	353				
	354				
	355		70° Fl		
355.70	356				
	357			VIS all angles 70°, 15°, 30°, 50° g/3, cvb.	
	358		70° Fl		
358.70	359				
	360				
	361				
361.70	362				
	363				
	364				
364.70	365				

22 0043

ABERFOYLE

DIAMOND DRILL LOG

HOLE Nº C1510

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%

CORE REC'D	DEPTH m	GEOLOGY	VISUAL LOG	TRACE	COMMON	ABUNDANT	MASSIVE	DEPTH m	MINERALIZATION
	365								
	366	Sandstone continued							
	367								
367.70	367.93							VI 45	carb, py
	369	Shale - mid grey - silty - bedded.						VI 70	carb, gls, py, minor Ga, sph
	370								
	371								
	372	372.09						V2 30	gls, carb, py, sph, As
	373	Sandstone - mid grey, fine grained, very fine at top - massive - carb cement - minor shale bands at 376.3 and 376.0							
	374								
	375								
	376								
	377								
	378								
	379								
	380	380.03							
	381	Siltstone / Shale - mid grey, fine grained, chaotic						VI 20	gls, carb.
	382	382.97							
382.70		Sandstone - mid grey, fine grained massive							
		END OF HOLE C1510 at 382.70m.							

22 014