ABMINCO N.L.
CLEVELAND MINE

CATEGORY: D1/E

HOLE No.: C1485 REF No 18567

GENERAL DATA

Objective: Mo - Bi - W VEINING

Area of Operation: 17 B SOUTH Location: Cad SECTION

Collar R.L.: 128·097 Co-ordinates: 15333·606 N, 10811·306 E.

Bearing of Hole: 311° 14' 35" Angle of Hole: -74° 49' 25" Final Depth: 398 m

Drilling Commenced: 24·1·80 Completed: 29-2-80 Logged by:

DRILLING DATA

Drilled by: LONGYEAR. Non Coring:

Drilling Rig: EMS 38 Coring: NQ to 272m : BQ to 860m : NQ to

Driller(s): P. BELL, P. LEFTERUK, G. COOMBE

K. STEPHESON, P. KAY, A. BLOORE, C. NEWMAN Core Recovery:

HOLE SURVEYS

HOLE No.: C1485

NWPS 24164

22 001

ABMINCO N.L.
CLEVELAND MINE

CATEGORY: m/E

HOLE No.: C14 85

GENERAL DATA

Objective: 11/c - Zi - W VEINING

Area of Operation: 17 B SOUTH

Location: C.d SECTION

Collar R.L.: 128.097

Co-ordinates: 15333.606 N, 10811.306 E.

Bearing of Hole: 311° 14' 35"

Angle of Hole: -74° 49' 25"

Final Depth:

Drilling Commenced: 24.1.80

Completed: 29-2-80

Logged by:

DRILLING DATA

Drilled by: LONGYEAR.

Non Coring:

Drilling Rig: E115 38

Coring: N8 to 272.m ; 28 to 86.0m ; N8 to

Driller(s): P. EELL, P. LEFTERUK, G. COONLE

K. STEPHENSON, P. KAY, G. NEWMAN

Core Recovery:

HOLE SURVEYS

HOLE No.: C 14 85

NWPS 24164

22 002

ABMINCO N.L. - Cleveland Mine

Hole No. C1485

Sheet No.

DIAMOND DRILL HOLE DATA

PROGRAM DATA				SURVEY DATA				INTERPOLATED DATA		
				Instrument Type	Depth	Dip	Azimuth	Depth	Dip	Azimuth
1	Attitude	—	(+) (-)	SURVEY	∅	-75	(311)	12½	-74	305
				CAMERA	30	-73·5	308½ (308·5)	37½	-73·5	299
2	Hole No.	1485			60	-73	308 (308)	62½	-73·5	300
					85	-74	308 (310)	87½	-74·5	301·5
3	Down Hole Interval	25			115	-73	296 (304)	112½	-73	296·5
					145	-73·5	292 (300)	137½	-73	293
4	Collar	15333·606	N		175	-74·5	287 (295)	162½	-74	289
	Co-ords.				205	-75	281 (289)	187½	-74·5	284
5		10811·306	E		235	-75	280 (288)	212½	-75	280
					265	-75	282 (290)	237½	-75	280
6	Collar R.L.	128·097			289	-73·5	284½ (292·5)	262½	-75·5	281·5
					340	-72	289 (287)	287½	-73·5	284·5
7	Halls Sect.	15392·230	N		378	-73	280 (288)	312½	-73	286·5
					397	-73·5	296 (284)	357½	-72	287
8	Intersect Point Cid	10725·105	E					362½	-72·5	288·5
								387½	-73	286·5
9	Battery Sect.	15310·738	N							
10	Intersect. Point	10801·681	E							
11	Start Plot (Depth)	∅	∅ = Collar							

22 003

DOWN HOLE PLOT

Hole No: CK8
Sheet No:

DEPTH	PLAN N	PLAN E	PLAN RL	CROSS SECTION Dist.from H.R.P.	CROSS SECTION Dist.from B.R.P.	LONG SECTION Dist. from Hulls	LONG SECTION Sect. Grid	LONG SECTION Dist from Batt.	LONG SECTION Sect. C	Depth	PLAN N	PLAN E	PLAN RL	CROSS SECTION Dist.from M.R.P.	CROSS SECTION Dist. from B.R.P.	LONG SECTIC Dist from Hulls	LONG SECTIC Sect.	LONG SECTIC Dis fro Bat
0	15333.61	10811.31	128.10	103.22	1.09	16.61		24.79										
25	15337.56	10805.66	104.07	96.38	-5.57	13.73		26.54										
50	15341.00	10799.45	80.09	89.47	-12.59	12.10		27.61										
75	15344.55	10793.30	56.12	82.53	-19.59	10.59		28.80										
100	15348.04	10787.61	32.03	75.97	-26.15	9.35		30.10										
125	15350.90	10780.88	8.13	69.07	-33.15	6.93		30.45										
150	15353.75	10774.15	-15.78	62.17	-40.75	4.52		30.79										
175	15355.99	10767.63	-39.81	55.84	-47.63	1.80		30.63										
200	15357.61	10761.15	-63.90	49.96	-54.28	-1.37		29.90										
225	15358.73	10754.78	-88.05	44.49	-60.64	-4.82		28.74										
250	15359.86	10748.41	-112.20	39.02	-67.01	-8.28		27.58										
275	15361.10	10742.27	-136.40	33.64	-73.19	-11.48		26.62										
300	15362.88	10735.40	-160.37	27.56	-80.26	-14.79		25.90										
325	15364.96	10728.39	-184.28	20.78	-87.55	-17.97		25.92										
350	15367.22	10721.00	-208.06	13.79	-95.26	-21.27		24.97										
375	15369.54	10713.85	-231.90	6.94	-102.77	-24.36		24.67										
400	15371.62	10706.85	-255.8	0.36	-110.07	-27.54		24.19			3980							

22 004

AUGUST 80 PRICES

WOLFRAMITE $15000 / tonne ($24,700 / tonne W)

~~MOLYBDENITE~~ MOLYBDENUM $22700 / tonne.

W + Mo $47400 / tonne

assume $45 / tonne mining cost

assume 60% recovery.

breakeven = 0.16 % (Mo+W)

1 tonne 0.2 % (W+Mo)

$95

$57 after 60% recovery.

breakeven

$x \times .6 \times 47400 = 45$

$x = \frac{45}{.6 \times 47400}$

$= 0.0016$

	% (W+Mo)	Profit / tonne
@	0.20	12
	0.25	26
	0.30	40
	0.35	55
	0.40	69

C1485

	% Mo	% WO_3	% Bi	% SnT	% Cu	CM Mo+WO_3+Bi+SnT	WO_3 % / CM %
0-10	<.005	.016	.017	.02	.01	.05	32
10-20	<.005	.191	.014	.04	.02	.25	76
20-30	.010	.022	.006	.01	.01	.05	44
30-40	<.005	.018	.015	.02	.01	.05	36
40-50	.027	.072	.034	.03	.02	.16	45
50-60	.006	.050	.007	.03	.06	.09	56
60-70	<.005	.032	.012	.02	.01	.07	46
70-80	.016	.123	.019	.02	.01	.18	68
80-90	.010	.095	.020	.02	.01	.15	63
90-100	.006	.064	.028	.01	.01	.11	58
100-110	.032	.122	.027	.04	.03	.22	55
110-120	.013	.061	.011	.01	.01	.10	61
120-130	.073	.214	.026	.01	.01	.32	[redacted]
130-140	.019	.134	.022	.02	.02	.20	67
140-150	.015	.093	.012	.02	.02	.14	66
150-160	.011	.062	.009	.02	.02	.10	62
160-170	.010	.147	.014	.02	.02	.19	77
170-180	.009	.298	.021	.02	.03	.35	85
180-190	.013	.329	.019	.02	.02	.38	87
190-200	.059	.196	.016	.05	.04	.32	61
200-210	.018	.255	.018	.11	.07	.40	64
210-220	.019	.263	.014	.11	.03	.41	64
220-230	.013	.300	.010	.06	.06	.38	[redacted]
230-240	.013	.233	.011	.10	.04	.36	[redacted]
240-250	.009	.336	.008	.10	.04	.45	75
250-260	.007	.368	.006	.08	.04	.46	80
260-270	.007	.405	.011	.09	.04	.51	79
270-280	.005	.335	.011	.05	.03	.40	84
280-290	.011	.421	.012	.07	.04	.51	83
290-300	.007	.271	.008	.03	.03	.32	85
300-310	.011	.451	.015	.02	.03	.50	90
310-320	.039	.240	.025	.01	.02	.31	77
320-330	.051	.198	.026	.01	.02	.29	68
330-340	.016	.184	.035	.01	.02	.25	74
340-350	.012	.085	.020	.02	.02	.14	61
350-360	.006	.148	.031	.01	.01	.20	74
360-370	.017	.046	.016	.02	.03	.10	46

* TO CONVERT %W to $\%WO_3$ FACTOR IS 1.261
$\%Mo$ to $\%MoS_2$ FACTOR IS 1.667
%W to $\%(Fe,Mn)WO_4$ FACTOR IS 1.649

HOLE No.: C1485

SAMPLE DATA

SHEET No.: 1

LENS	SAMPLE No.	ROCK TYPE	Σ	INTERVAL From	INTERVAL To	Length (L)	Assays (A) % Snt	% Sns	% Cu	%Zn	% Mo	% WO_3	% Bi	Mo + WO_3 + Bi
Mo-W	248277			0	2.5	2.5	.02	< .01	.01		< .005	.006	.003	.009
VEINING	248278			2.5	5.0		.01		.01		< .005	.009	.002	.011
	248279			5.0	7.5		.02		.01		< .005	.044	.058	.102
	248280			7.5	10.0		.02		.01		< .005	.005	.004	.009
	248281			10.0	12.5		.01		.01		< .005	.008	.005	.013
	248282			12.5	15.0		.02		.01		< .005	.007	.005	.012
	248283			15.0	17.5		.11		.02		< .005	.697	.040	.737
	248284			17.5	20.0		.02		.02		.005	.053	.007	.065
	248285			20.0	22.5		.01		.01		< .005	.011	.005	.016
	248286			22.5	25.0	2.5	.01		.01		< .005	.047	.005	.052
	248287			25.0	27.2	2.2	.01		.01		.038	.019	.008	.065
	248288			27.2	30.0	2.8	.01		.01		< .005	.011	.005	.016
	248289			30.0	32.5	2.5	.02		.02		< .005	.021	.007	.028
	248290			32.5	35.0	2.5	.02		.01		< .005	.025	.013	.038
	248291			35.0	37.5	2.5	.01		.01		< .005	.010	.006	.016
	248292			37.5	40.0	2.5	.01		.01		.010	.016	.034	.060
	248293			40 -	42.5	2.5	.02		.02		.010	.116	.061	.187
	248251			42.5	45 -	2.5	.02		.01		.090	.065	.054	.209
	248252			45 -	47.5	2.5	.03	< .01	.02		.005	.053	.017	.075

N.W.P.S.

HOLE No.: C 1485

SAMPLE DATA

SHEET No.: 2

LENS	SAMPLE No.	ROCK TYPE	Σ	INTERVAL From	INTERVAL To	Length (L)	Assays (A) % Snt	% Sns	% Cu	%Zn	[redacted] %Mo	%WO3	%Bi	Mo + WO3 + Bi
	248253			47.5	50.0	2.5	0.03	<.01	.02		<.005	.052	.002	.054
	248254			50.0	52.5	2.5	.02		.02		<.005	.061	.014	.075
	248255			52.5	55.0	2.5	.07		.21		<.005	.008	.007	.015
	248256			55.0	57.5	2.5	.01		.01		.018	.028	.007	.053
	248257			57.5	60.0	2.5	.01		.01		<.005	.101	<.002	.101
	248258			60.0	62.5	2.5	.02		.01		<.005	.038	.007	.045
	248259			62.5	65.0	2.5	.05		.02		.005	.043	.027	.075
	248260			65.0	[redacted]	2.5	.01		.01		.005	.019	.008	.032
	248261			67.5	70.0	2.5	.01		.01		<.005	.027	.006	.033
	248262			70.0	72.5	2.5	.04		.01		.008	.083	.007	.098
	248263			72.5	75.0	2.5	.01		.01		.008	.040	.010	.058
	248264			75.0	77.5	2.5	.01		.01		.005	.051	.010	.073
	248265			77.5	80.0	2.5	.02		.01		.043	.317	.048	.408
	248266			80.0	82.5	2.5	.03		.01		.005	.131	.014	.150
	248267	85.0 - 87.5m		82.5	85.0	2.5	.01		.01		<.005	.034	.009	.043
	248268	<.005 %Mo		85.0	86.0	1.0	.02		.01		.005	.039	.017	.061
	248269	.064% WO3 .010% Bi		86.0	87.5	1.5	.01		.01		<.005	.081	.005	.086
	248270			87.5	90.0	2.5	.03		.01		.030	.149	.045	.224
	248271			90.0	92.5	2.5	.01	<.01	.01		<.005	.055	.003	.058

N.W.P.S.

HOLE No.: C 1085

SAMPLE DATA

SHEET No.: 3

LENS	SAMPLE No.	ROCK TYPE	Σ	INTERVAL From	INTERVAL To	Length (L)	Assays (A) % Snt	% Sns	% Cu	% Zn	% Mo	% WO3	% Bi	Mo+WO3+Bi
—	248272			92.5	95.0	2.5	.01	<.01	.01		<.005	.021	.010	.031
/	248273			95.0	97.5	2.5	.02		.01		.018	.167	.092	.277
—	248274			97.5	100.0	2.5	.01		.01		<.005	.014	.008	.022
—	248351			100.0	102.5	2.5	.01		.01		.043	.122	.046	.211
×	248352			102.5	105.0	2.5	.04		.02		.020	.070	.017	.107
—	248353			105.0	107.5	2.5	.01		.02		<.005	.033	.016	.049
—	248354			107.5	110.0	2.5	.09		.07		.063	.262	.030	.355
—	248355			110.0	112.5	2.5	.01		.01		.008	.034	.012	.054
—	248356			112.5	115.0	2.5	.01		.02		.018	.038	.008	.064
—	248357			115.0	117.5	2.5	.01		.01		<.005	.025	.012	.037
—	248358			117.5	120.0	2.5	.01		.01		.023	.146	.010	.179
×	248359			120.0	122.5	2.5	.01		.01		.015	.131	.012	.158
—	248360			122.5	125.0	2.5	.01		.02		.103	.100	.024	.227
/	248361			125.0	127.5	2.5	.01		.01		.070	.418	.020	.508
—	248362			127.5	130.0	2.5	.02		.01		.105	.207	.048	.360
—	248363			130.0	132.5	2.5	.02		.02		.048	.260	.022	.330
—	248364			132.5	135.0	2.5	.02		.01		.005	.037	.010	.052
—	248365			135.0	137.5	2.5	.04		.02		.008	.149	.040	.197
—	248366			137.5	140.0	2.5	.01	<.01	.02		.015	.088	.016	.119

N.W.P.S.

0-187.5. ~~0.015% Mo~~ ~~0.112% W~~ ~~0.019% Bi~~ 0.134% MoS_2 + WO_3 + Bi

HOLE No.: 21485

SAMPLE DATA

SHEET No.: 4

LENS	SAMPLE No.	ROCK TYPE	Σ	INTERVAL From	INTERVAL To	Length (L)	Assays (A) % Snt	% Sns	% Cu	% Zn	Product (A x L) P. Snt (% MoS_2)	P. Sns (% WO_3)	P. Cu (% Bi)	Mo + WO + Bi
Mo-Bi-W	248367			140	142.5	2.5	.03		.01		.016	.150	.022	.188
	68			142.5	145	"	.02		.02		.020	.087	.002	.109
	69			145	147.5	"	.01		.01		.013	.106	.011	.130
	70			147.5	150	"	.01		.02		.009	.027	.011	.047
	71			150	152.5	"	.01		.02		.009	.049	.013	.071
	72			152.5	155	"	.02		.02		.014	.061	.008	.083
	73			155	157.5	"	.01		.01		.004	.026	.003	.033
	74			157.5	160	"	.03		.02		.018	.110	.013	.141
	75			160	162.5	"	.03		.02		.013	.336	.031	.380
	76			162.5	165	"	.01		.02		.005	.141	.005	.151
	77			165	167.5	"	.03		.02		.018	.067	.013	.098
	78			167.5	170	"	.01		.02		.004	.044	.007	.055
	79			170	172.5	"	.01		.03		.014	.162	.045	.221
	80			172.5	175	"	.04		.01		.009	.484	.019	.512
	81			175	177.5	"	.01		.01		.009	.231	.017	.257
	82			177.5	180	"	.03		.05		.005	.315	.004	.324
	83			180	182.5	"	.01		.02		.009	.439	.009	.457
	84			182.5	185	"	.01		.01		.007	.228	.009	.244
	85			185	187.5	"	.02		.01		.022	.456	.038	.516

N.W.P.S.

HOLE No.: C1485

SAMPLE DATA

SHEET No.: 5

LENS	SAMPLE No.	ROCK TYPE	Σ	INTERVAL From	INTERVAL To	Length (L)	Assays (A) % Snt	% Sns	% Cu	%Zn	%Mo	%WO_3	%Bi	Mo + WO_3 + Bi
W-Mo-Bi	248386	S'STONE		187.5	190.0	2.5	.02	0.01	.02	0.010	.014	.194	.018	.226
	87	"		190.0	192.5		.04	0.01	.10	0.027	.103	.207	.008	.318
	88	"		192.5	195.0		.03	0.01	.02	0.022	.088	.262	.028	.378
	89	S'stone/qtz porph.		195.0	197.5		.07	<0.01	.03	0.042	.016	.196	.011	.223
	90	QTZ. PORPHYRY		197.5	200.0		.06	<0.01	.02	0.014	.028	.120	.015	.163
	91	"		200.0	202.5		.05	0.01	.03	0.021	.016	.198	.024	.238
	92	"		202.5	205.0		.16	0.01	.13	0.032	.012	.204	.011	.227
	93	"		205.0	207.5		.11	0.01	.08	0.038	.031	.366	.020	.417
	94	"		207.5	210.0		.10	0.01	.04	0.022	.014	.252	.017	.283
	95	"		210.0	212.5		.05	<0.01	.03	0.017	.020	.341	.011	.372
	96	"		212.5	215.0		.05	0.01	.02	0.020	.014	.283	.011	.308
	97	"		215.0	217.5		.27	0.01	.04	0.026	.018	.186	.007	.211
	98	"		217.5	220.0		.08	0.02	.03	0.02	0.022	.240	0.027	.289
	99	QTZ. PORPH.		220.0	222.5		.06	0.01	.03	0.06	0.008	.530	0.007	.545
	400	QTZ. PORPH./SHALE		222.5	225.0		.06	0.02	.07	0.02	0.014	.170	0.012	.196
	01	"		225.0	227.5		.07	0.01	.09	0.03	0.014	.195	0.010	.219
	02	QTZ PORPHYRY		227.5	230.0		.04	0.01	.06	0.03	0.016	.305	0.009	.330
	03	"		230.0	232.5		.14	0.01	.04	0.03	0.014	.155	0.006	.175
	248404	"		232.5	235.0		.09	0.01	.04	0.03	0.010	.255	0.012	.277

N.W.P.B.

22 011

HOLE No.: C1485

SAMPLE DATA

SHEET No.: 6

LENS	SAMPLE No.	ROCK TYPE	Σ	INTERVAL From	INTERVAL To	Length (L)	Assays (A) % Snt	% Sns	% Cu	%2w	Product (A x L) %Mo ~~f. Snt~~	%WO_3 ~~f. Sns~~	%Bi ~~f. Cu~~	Mo+WO+Bi
W-Mo-Bi	248405	QTZ. PORPHYRY		235.0	237.5	2.5	.09	0.01	.03	0.03	0.009	.210	0.010	.229
	06	"		237.5	240.0		.06	0.01	.05	0.06	0.018	.310	0.014	.342
	07	"		240.0	242.5		.05	0.01	.03	0.12	0.016	.425	0.011	.452
	08	"		242.5	245.0		.12	0.02	.04	0.06	0.004	.205	0.006	.215
	09	"		245.0	247.5		.05	0.01	.03	0.13	0.010	.375	0.008	.393
	10	"		247.5	250.0		.19	0.02	.07	0.06	0.005	.340	0.007	.352
	11	"		250.0	252.5		.09	0.01	.03	0.05	0.005	.345	0.007	.357
	12	"		252.5	255.0		.05	0.01	.04	0.12	0.014	.430	0.007	.451
	13	"		255.0	257.5		.08	0.02	.06	0.13	0.006	.395	0.007	.408
	14	"		257.5	260.0		.09	0.02	.04	0.16	0.003	.300	0.002	.305
	15	"		260.0	262.5		.08	0.01	.05	0.16	0.010	.385	0.012	.407
	16	"		262.5	265.0		.15	0.02	.04	0.05	0.003	.430	0.004	.437
	17	"		265.0	267.5		.05	0.01	.03	0.05	0.008	.240	0.016	.264
	18	"		267.5	270.0		.07	0.01	.04	0.07	0.008	.565	0.012	.585
	19	"		270.0	272.5		.04	0.01	.03	0.13	0.008	.430	0.015	.453
	20	"		272.5	275.0		.08	0.01	.04	0.02	0.004	.260	0.004	.268
	21	"		275.0	277.5		.04	0.01	.03	0.23	0.004	.315	0.010	.329
	22	"		277.5	280.0		.04	0.01	.03	0.17	0.003	.335	0.014	.352
[illegible]	[illegible]	[illegible]		280.0	282.5		.07	0.01	.03	0.07	0.014	.555	0.024	.593

HOLE No.: C1485

SAMPLE DATA

SHEET No.: 7

LENS	SAMPLE No.	ROCK TYPE	Σ	INTERVAL From	INTERVAL To	Length (L)	Assays (A) % Snt	% Sns	% Cu	% Zn	Product (A x L) ~~P Snt~~ % Mo	~~P Sns~~ % WO_3	~~P Cu~~ % Bi	Mo + WO_3 + Bi
W-Mo-Bi	248424	Qtz Porphyry		282.5	285	2.5	.07	0.01	.04	0.06	0.018	.440	0.012	.470
	25	"		285	287.5	"	.06	"	.06	0.02	0.005	.420	0.006	.431
	26	"		287.5	290	"	.06	"	.03	0.04	0.005	.270	0.006	.281
	27	"		290	292.5	"	.04	"	.04	0.04	0.003	.220	0.012	.235
	28	"		292.5	295	"	.03	"	.05	0.12	0.003	.175	0.004	.182
	29	PORPHYRY / S'STONE		295	297.5	"	.04	"	.02	0.03	0.016	.230	0.006	.252
	30	S'STONE		297.5	300	"	.02	"	.02	0.02	0.006	.460	0.008	.474
	31	"		300	302.5	"	.01	"	.02	0.04	0.005	.135	0.008	.148
	32	"		302.5	305	"	.03	"	.03	0.02	0.014	1.110	0.018	1.142
	33	"		305	307.5	"	.02	"	.06	0.01	0.005	.335	0.020	.360
	34	"		307.5	310	"	.01	"	.02	0.01	0.020	.225	0.014	.259
	35	"		310	312.5	"	.01	"	.02	0.01	0.018	.090	0.014	.122
	36	"		312.5	315	"	.01	"	.02	0.01	0.038	.205	0.014	.257
	37	"		315	317.5	"	.01	"	.02	0.01	0.030	.180	0.040	.250
	38	"		317.5	320	"	.01	"	.02	0.01	0.068	.485	0.032	.585
	39	"		320	322.5	"	.01	"	.01	0.02	0.034	.090	0.020	.144
	40	"		322.5	325	"	.01	"	.01	0.01	0.012	.065	0.009	.08
	41	"		325	327.5	"	.02	0.02	.02	0.01	0.046	.190	0.020	.256
	42	"		327.5	330	"	.01	0.01	.02	0.01	0.110	.445	0.055	.610

HOLE No.: C1485

SAMPLE DATA

SHEET No.: 8

LENS	SAMPLE No.	ROCK TYPE	Σ	INTERVAL From	INTERVAL To	Length (L)	Assays (A) % Snt	% Sns	% Cu	% Zn	Product (A x L) ~~P. Snt~~ % Mo	~~P. Sns~~ % WO_3	~~P. Cu~~ % Bi	Mo + WO_3 + Bi
W-Mo-Bi	248443	SANDSTONE		330	332·5	2·5	0·01		0·02	0·01	0·026	0·185	0·020	·231
	44			332·5	335		0·01		0·03	"	0·016	·130	0·040	·186
	45			335	337·5		0·01		0·02	"	0·018	·365	0·065	·448
	46			337·5	340		0·01		0·02	"	0·003	·055	0·014	·072
	47			340	342·5		0·01		0·02	"	0·010	·095	0·024	·129
	48			342·5	345		0·02		0·02	"	0·005	·090	0·010	·105
	49			345	347·5		0·02		0·02	"	0·010	·050	0·016	·076
	50			347·5	350		0·02		0·03	"	0·024	·105	0·030	·159
	51			350	352·5		0·01		0·01	"	0·010	·205	0·030	·245
	52			352·5	355		0·01		0·01	"	0·003	·055	0·016	·074
	53			355	357·5		0·01		0·01	"	0·008	·100	0·032	·140
	54			357·5	360		0·01		0·01	"	0·004	·230	0·044	·278
	55			360	362·5		0·02		0·03	"	0·040	·025	0·028	·093
	56			362·5	365		0·01		0·05	"	0·018	·075	0·022	·115
	57			365	367·5		0·01		0·01	"	0·004	·045	0·007	·056
	58	ULTRAMAFICS		367·5	370		0·02		0·02	0·02	0·006	·040	0·008	·054
	59	"		370	372·5		0·01		0·02	0·02	0·001	·045	0·014	·060
	60	"		372·5	375		·02		·02	·01	·003	·485	·140	
	61	"		375	377·5		·04		·01	·06	·001	·015	·095	

22 014

HOLE No.: C1485

SAMPLE DATA

SHEET No.: 9

LENS	SAMPLE No.	ROCK TYPE	Σ	INTERVAL From	INTERVAL To	Length (L)	Assays (A) % Snt	% Sns	% Cu	% Zn	Product (A x L) % Mo	% WO_3	% Bi	Mo+WO_3+Bi
W-Mo-Bi	248462	Ultramafics		377·5	380	2·5	·02		·01	·03	·001	·050	·007	
	63	"		380	382·5		·02		·02	·02	·001	·100	·120	
	64	"		382·5	385		·01		·02	·02	·001	·035	·008	
	65	"		385	387·5		·02		·01	·02	·002	·055	·030	
	66	"		387·5	390		·02		·02	·02	·002	·100	·018	
	67	"		390	392·5		·01		·01	·02	·001	·155	·014	
	68	"		392·5	395	2·5	·03		·02	·02	·004	·380	·210	
	69	"		395	398	3·0	·03		·02	·02	·001	·045	·014	

HOLE No. : C 1485

SAMPLE DATA

SHEET No. :

LENS	SAMPLE No.	ROCK TYPE	Σ	INTERVAL		Length (L)	Assays (A)				Product (A x L)			
				From	To		% Snt	% Sns	% Cu		P. Snt	P. Sns	P. Cu	
		Qtz-/carb rock		369.92	370.12	0.20								
		Qtz/carb, rock		371.80	373.10	1.30								
		Carb/talc rock		373.10	374.00	0.90								
		"		374.00	375.00	1.00								

N.W.P.S.

22 016

HOLE No. : .....

SAMPLE DATA

SHEET No. : .....

LENS	SAMPLE No.	ROCK TYPE	Σ	INTERVAL		Length (L)	Assays (A)				Product (A x L)			
				From	To		% Snt	% Sns	% Cu		P. Snt	P. Sns	P. Cu	

N.W.P.S.

22 017

C1485

PORPHYRY

197.5 – 295

97.5m × 0.312% WO_3

SGF Lab.
recommended by KGP

AT 0.2% WO_3 CUTOFF

15.0 – 17.5m	2.5m ×	0.697%
77.5 – 80.0m	2.5m ×	0.317%
107.5 – 110.0m	2.5m ×	0.262%
125.0 – 132.5m	7.5m ×	0.295%
160.0 – 162.5m	2.5m ×	0.336%
172.5 – 187.5m	15.0m ×	0.359%
190.0 – 195.0m	5.0m ×	0.235%
202.5 – 215.0m	12.5m ×	0.289%
217.5 – 222.5m	5.0m ×	0.385%
227.5 – 230.0m	2.5m ×	0.305%
232.5 – 292.5m	60.0m ×	0.352%
295.0 – 300.0m	5.0m ×	0.345%
302.5 – 310.0m	7.5m ×	0.557%
312.5 – 315.0m	2.5m ×	0.205%
317.5 – 320.0m	2.5m ×	0.485%

$\sum$ 135.0m × 0.354%

AT 0.10% WO_3 CUTOFF

15.0 – 17.5m	2.5m × 0.697%
40.0 – 42.5m	2.5m × 0.116%
57.5 – 60.0m	2.5m × 0.101%
77.5 – 82.5m	5.0m × 0.224%
87.5 – 90.0m	2.5m × 0.149%
95.0 – 97.5m	2.5m × 0.167%
100.0 – 102.5m	2.5m × 0.122%
107.5 – 110.0m	2.5m × 0.262%
117.5 – 132.5m	15.0m × 0.210%
135.0 – 137.5m	2.5m × 0.149%
140.0 – 142.5m	2.5m × 0.150%
145.0 – 147.5m	2.5m × 0.106%
157.5 – 165.0m	7.5m × 0.196%
170.0m – 310.0m	140.0m × 0.319%
312.5m – 320.0m	7.5m × 0.290%

Σ 200.0m × 0.288%

at 0.15% WO_3 CUTOFF

15 – 17.5m	2.5m × 0.697%
77.5 – 80.0m	2.5m × 0.317%
95.0 – 97.5m	2.5m × 0.167%
107.5 – 110.0m	2.5m × 0.262%
125.0 – 132.5m	7.5m × 0.295%
160.0 – 162.5m	2.5m × 0.336%
170.0 – 197.5m	27.5m × 0.289%
200.0 – 300.0	100.0m × 0.319%
302.5 – 310.0	7.5m × 0.557%
312.5 – 320.0	7.5m × 0.290%

Σ 162.5m × 0.325%

ABERFOYLE   **DIAMOND DRILL LOG**   **HOLE Nº** d485   **Page N**

Feature: Bedding, Foliation, Fragment (size & shape), Shearing, Fault, Vein (carbonate / quartz)

Note: for WO_4 read $FeWO_4$

Mineralization: Trace 1–5%; Common 5–15%; Abundant 15–60%; Massive > 60%

Interval	CORE REC'D	DEPTH m	GEOLOGY	DEPTH m	MINERALIZATION
	3.00		**Shale.** Predominantly massive, fine grained dark brown, minor pale brown. Fine carbonate spotting variable in distribution. Minor interbedded sandstone. Bed'g 20°	4.43	v, chl, qtz, flu 20°
15.00		5		5.30	v3 qtz, flu, carb. 20°
	3.02		6.53, qtz, fluorite vein 15°, 2.5cm thick.	5.65–5.90	vein flu, qtz, carb. 20° intersected width 12mm. moly f.g. 1%, wolf. 1%.
8.00	2.97	10			
11.00	2.90		sandstone 17.10 – 19.80.		
14.00	2.97	15		14.35 to 14.74	qtz, fluorite vein 30°, width 80cm single crystal brown of WO_4
				16.40 to 17.27	qtz vein 35°, width 20 [illegible] bladed WO_4 upto 1%, crystals elongate upto 20mm.
17.00	2.98		17.82 – 10mm wide vein qtz, 50°, trace moly and minute WO_4 crystals ≤ 1%	17.60 to 17.70	qtz vein 40° very fine WO_4 blad crystals < 1%, 10mm width
			17.95 – 10mm vein qtz, 30° fine crystals WO_4 1mm – 5mm < 1%	18.55	5mm vein c f.g. cassiterite 10°
19.80	3.14	20		19.78 / 19.80	Fault f1, 75° slickensided. Fault f2, 75° slickensided
23.00	3.10	25	sandstone 24.35 – 26.26. – m.g. pale grey to tan.	23.18	qtz, fluor vein 40°, 15mm, bladed WO_4 1mm – 10mm, 1%
				24.06 to 24.17	qtz vein 10 mm wide 35°, upto 1% fine moly, trace WO_4, bism
26.00	1.21			26.30	qtz, carb vein, 10mm wide, 40% moly f.g. 45°
27.20	1.64				
29.00	2.95	29.90 / 30	**Sandstone** medium grained dark brown coarse feldspathic – massive	29.36 / 29.55	Thin darker layers with fine fractures < 1mm filled with cassiterite?
			29.74 Fault f1, slickensided 45°	29.74 / 29.84 / 30.44	qtz, carb vein, single crystal WO_4 1% bis., 20mm wide 35°
32.00	1.04		34.25 – qtz, carb vein, 60° fine crystals WO_4 upto 1%.	32.90	qtz vein 15mm, single crystal WO_4 moly. 30°.
32.90	2.05		34.53 – qtz. vein, 45°, 16mm, fine WO_4 to 1%		
35.00	2.98	35	Shale 34.90 – 35.75	34.95	f1 fault, slickensided, 40°
38.00	3.14	40	40.30 – 10mm qtz, carb vein c 5% moly, 45°	39.76	vein, v3, qtz, flu 80°
41.00	1.25			41.30 to 43.25	15mm wide vein, qtz, carb f.g. vuggy – c trace moly, WO_4 close to 43.25
43.10	0.85				
44.00	2.40	45	44.20 – 46.65 – Series of vuggy veins fracturing sandstone, and bleaching to pale tan – contain pyrite, minor qtz. fluorite	44.75	fine speckled moly and single crystal WO_4 at top of vein network total content ≤ 1%
46.30	3.27				
49.50		50	49.50 – 49.65 – qtz vein long crystal WO_4 15mm and patch of moly 0.5%	48.88 / 49.37	qtz vein fluorite, 0.5% WO_4 width 35mm 88°

22 020

ABERFOYLE

DIAMOND DRILL LOG

HOLE Nº [illegible] Page N

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
50.65	50	**Sandstone**							
0.86		Massive dark brown, medium grained, slight tone variation to grey and pale brown. - minor interbedded shale.						51.20	q/z, fluor, carb vein 70mm wide, 1% WO4, 80°.
2.31								53.65	U4, q/z, fluorite 5% chlor.
53.00									
3.00	55								
56.00		56.25, two q/z veins 5mm, 35°						58.70	3 q/z vein minor fluorite width 30 mm, trace mol WO4, single coarse crystal
3.06		56.65 q/z vein 88°, 10mm.						58.90	
		57.33 q/z vein 30°, 10mm							
		57.03 q/z vein 35° 20mm.							
59.06		Bleached sandstone 56.35 - 59.77							
		57.73. intersecting q/z carb vein 45°, 7mm.						58.40	fault, f, slickensided 25°
	60							59.33	q/z vein 20mm 40°.
2.93		Bleached sandstone 61.80 - 62.20							
62.00								61.30	, q/z vein 80°, 20mm.
		62.43 - 62.73 - q/z vein, 1.0mm wide, containing 1-2% WO4 as bleached crystals to 5mm						62.40	q/z vein 40°, 15mm.
3.10		62.24 - 10mm q/z vein 88°.						62.89	q/z vein 45°, 20mm; 1m pale chlor.
65.00	65	63.38 - 64.22 - q/z vein, trace specks of molyb. WO4, 10 cm wide, 30°.						63.30	q/z vein 50mm. 85°.
3.00									
63.00		68.65 - q/z vein 10-15mm, 10°.							
3.06	70	Shale 69.40 - 69.61 - dark brown fine g.						68.20 68.95	3 q/z vein, trace moly 10° 10 mm wide.
71.00		71.20 - 72.35 - 30 mm wide q/z vein with 1% bleached crystals WO4 to 5mm, trace moly.						69.34	q/z vein & chl, 85°, 15mm
3.03								70.48	q/z vein, 15mm 80°
		Sandstone - massive dark brown m.g.						71.00	q/z vein 70mm, 85°
74.00		74.60 - 74.75 - several q/z veins 80°-85°.						71.30	" 25mm; 85°
3.01	75							72.77	q/z vein 40mm, 45°
77.00		77.40, 10 mm q/z vein 45°						74.60	q/z vein 30mm 80°, trace WO4.
		77.50, q/z vein 5mm, 10% WO4 crystals 80°						75.40	q/z vein 50mm, 80°
3.00								76.55	3 20mm q/z vein with speck moly, bleached WO4 crystals 85
80.00	80	79.55 - 80.20 - q/z vein 10mm, 1% moly, 5% WO4						76.75	
		80.20 - 80.45, series of q/z veins - 80° comprising trace moly 1% WO4 as blades to 5mm						78.23	vein 15m, 45°, 1% WO4
3.07								79.00	to 79.20, 15mm q/z vein speck moly, WO4
		82.20 - 82.60 - vein 50mm wide with stringer 10 mm wide 10°, 45°. upto 1% WO4 as fine crystals and clusters						81.80	100 mm q/z vein 45° with 1% fine WO4
83.00									
3.02	85								
86.00		85.66 q/z carb vein 15mm 85°						85.40	80mm q/z, chl, vein & vughy specks WO4, 35°
		85.72 q/z carbonate, single large crystal WO4, 20mm 75°							
3.01									
		Fine criss cross network of veins, q/z, carb. down to 89.00, generally to 1mm wide.						87.24 to 87.46	3 q/z, fluorite vein 25mm wide with upto 1% WO4, trace moly, 15°
88.01	90								
3.00		Shale 91.20 - 92.00 - bleached pale brown							
92.00		From 90.65 - 92.54 the sandstone is bleached pale cream.						93.20	80 mm q/z vein, 80°, minor fluo
		Shale 92.79 - 93.09, 93.40 - 93.85							
2.96		Shale 95.31 - 95.07; 96.35 - 96.75							
95.00	95								
		96.45 - 96.55, 20mm vein q/z, fluor, carb. < 1% WO4 large crystals, < 1% moly as fine clusters.						96.35	q/z, fluorite, chl vein, 85° 60 mm 1% WO4, 1% moly large crystals
3.04									
98.00		Fine network of veins 1 - 10mm wide generally 20 - 45°, barren.						99.40	q/z vein 45°, 30 mm wide
2.90	100							99.42	q/z vein 75° 100 mm wide.

29 021

ABERFOYLE DIAMOND DRILL LOG HOLE # [illegible]

Feature Bedding, Foliation, Fragment (size & shape), Shearing, Fault, Vein (carbonate / 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
101.00	100	Sandstone - massive medium grained, dark brown.						100.16	qtz, carb, chl vein, 10mm 35°
3.00		101.74 - qtz carb vein 60mm, fine specks moly, and elongate WO4 to 2mm length.						101.53 to 101.46	qtz, carb vein 10mm, specks WO4, moly f.g.
		101.38 - 101.55 - 10mm vein 30°, 1% moly						102.30 to 102.44	25mm qtz carb, fl. vein c 1% WO4 crystals to 2mm and very fine moly. 35°
104.00		103.07 - 103.22 - 10mm qtz vein 25° 5% WO4 trace moly							
3.12	105	104.62 - 105.00 - 10mm qtz vein 1% WO4 as fine crystals 2mm long, minor specks moly.						104.82	80mm qtz vein, 80° 1% WO4, single speck moly
		106.47 - qtz vein 10°, barren 10mm.						105.67	5mm qtz vein, 1% WO4, 35°
107.00		107.73 - 108.08 - two veins 20mm wide, 1-2% WO4 as fine bladed crystals - upto 1% Sn						107.00	several intersecting veins 90°, 80 barren
3.06								107.60	qtz vein 45°, single crystal WO4
								108.54	7mm vein, 30°, 1% moly f.g.
110.00	110	109.20 - qtz, carb vein 7mm, 40°, 40% bis.						109.50	10mm vein 88°, 5% WO4, upto 1% moly, trace Sn
3.02		Sandstone - massive dark brown m.g. Fine network of qtz, carbonate veins 20°-60° barren.						110.35 110.65	2 qtz, carb veins 40°, barren.
113.00									
3.07	115							114.27 to 114.34	qtz, carb vein 10mm, 30° 1% WO4, 1% moly
116.00		Shale fine grained - dark brown, massive minor sandstone to 10cm.						115.23	qtz, amph. vein 5mm, 85°, trace W
3.00	118.4							117.78 to 118.70	25°, 100mm qtz vein, 1% coarse bladed crystals WO4
119.00		Sandstone - massive, dark brown medium grained.						119.84	20mm qtz vein 40°, specks moly
2.26	120	120.85 - 80mm qtz vein, trace fine WO4, bladed X'ls 45°						120.18	15mm qtz vein 58°, 1% WO4 0.5% moly
121.35 / 0.72 / 122.00		Minor interbedded shale to 30cm. dark brown fine grained.							
3.02		124.42 - 124.68 - 5mm vein 10°, 1% moly, 0.5% WO4						123.67 to 124.04	qtz, carb vein 20°, 25mm c 1% bi !, 1% WO4, 0.5% moly
125.00	125								
2.94		127.06 - 127.38, 20°, 10-25mm qtz vein, 1% f.g. WO4 bladed to 2mm in length.						126.73 to 126.90	30mm, qtz vein 35° 5% WO4 10mm long, 5% moly
128.00		128.32 - intersecting veins. 35° 10mm wide c 5% WO4 1% moly						128.00 to 128.27	40mm, 35° vein, with W/moly 1% WO4
3.00	130	129.92, vein 70mm 90°, barren qtz, carb.						128.75 128.87	two qtz veins 70mm wide barren.
		130.12, vein 10mm 10°, barren qtz, carb flux.						129.70	10mm vein 25° trace W
131.00		130.80 - intersecting veins 15mm, 45°, 30°, 10% WO4 5% moly - coarse f.						130.65	Fault f1, 45°
								131.00	vein, qtz 30°, 10mm, 5% moly
3.57		Shale 131.13 - 131.65, 133.00 - 134.08						131.26 to 131.35	40mm qtz vein, 10% c.g. WO4 1% moly f.g.
								133.45	15cm qtz vein 1% WO4, trace mo 45°
134.00								134.93 to 135.07	20mm qtz vein, 1% c.g. WO4 80
2.95	135	136.22 - 25mm qtz, carb vein 10% WO4, f.g. to m.g. 35						135.42	20mm qtz, fl., carb, chl vein c trace c.g. WO4 80°
137.00		Network of qtz/carb veins 10°-45° in m.g. massive dark brown sandstone.							
2.97								138.32	15mm qtz vein 40°, single speck moly
140.00	140 139.87	Chaotic Sandstone / Shale, bleached from 140.58 - 144.00 - 140.47 - 70mm, 85° qtz vein trace f.g. WO4, moly.						140.10	30mm, 40° qtz vein 5% f.g. moly trace WO4
3.03		143.00 - 143.30 - 10mm, 25° vuggy qtz carb vein trace WO4						142.15	100mm vein 90°, qtz, fine WO4 specks
143.00		144.20 Fault, slickensided 45° f1	F					142.55	15mm vein, 45°, 1% f.g. WO4
	144.00							143.65	80mm qtz vein, 2% f.g. moly 2% m.g. WO4
2.98	145	Sandstone - m.g., initially bleached - major fault 143.65 - 144.50 - 88°-80°, slickens'd F4	F						
146.00		chaotic shale/sst 145.42 - 146.00. - bleached pale cream.						145.14 to 145.50	10mm qtz vein, 35° f.g. moly specks, f.g. trace WO4
3.16								146.30	146.60 - 25mm qtz vein 10°.
								148.65	qtz carb vein 5°, 10mm, 10%
149.00		Shale 148.43 - 149.22 - dark brown f.g.						149.30	f.g. moly
	150	dark brown Sandstone.						149.82	100mm, 85° qtz, fluo, carb vein

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%

Box depth	CORE REC'D
	3.05
152.00	2.90
155.00	3.17
158.00	3.05
161.00	3.06
164.00	2.00
166.00	3.45
169.00	3.20
172.30	3.02
175.40	3.12
178.50	3.09
181.60	3.24
184.30	1.09
185.90	2.10
188.00	3.10
191.00	3.08
194.00	3.00
197.00	3.08
200.00	

GEOLOGY (DEPTH m)

150 — Sandstone - massive medium grained dark brown to 152.30 - bleached to cream colour 152.30 - 153.40.
chaotic sst/shale 154.60 - 155.30, bleached.
massive dark brown sandstone from 155.30.
shale 157.50 - 157.85

160 — 159.05 - 159.19 - 35°, 10mm qtz, xd vein 1% WO4, 0.5% moly

Sandstone - As above.

169.90 - fault 35°, f2 - vuggy xd, f.g. qtz.
170.17 - qtz vein 15mm, 45° 1% Sn
Sandstone becomes intensely bleached & leached 170.50 - 172.50.
173.04 - 173.30 - qtz vein 45°, c trace f.g. WO4 <1%
Bleached zone 173.30 - 173.65 - fractured irregular pyrite cemented veins - shear zone?
174.85 - 15mm qtz vein c single c.g. WO4 X'l.
175.05 - 175.25 - zone of veining - 20% Sn f.g. massive aggregate.
176.00 - 15mm qtz, carb vein, 45° trace moly, WO4 f.g.
178.30, intersecting veins, 20% WO4, 60°, 45°
Silicified recrystallized zone 178.30 - 179.95 f.g. - pale grey.
179.55 - qtz, carb vein 5% c.g. WO4, 15mm 45°
Dark brown massive medium grained Sandstone from 179.95.
182.75 - qtz vein 60°, 20mm, trace f.g. WO4
184.93 - 185.03 - 10mm 85° qtz vein 1% Sn very minor f.g. WO4, moly.
185.15 - 185.27, qtz vein 90°, 1% Sn
187.15 - 187.90 - irregular network of veins 10°-30° 5% f.g. Sn, up to 1% WO4, trace f.g. moly.

190 — Sandstone - dark brown m.g. massive.
191.40 - 191.60 - qtz, carb vein 20°, 1% f.g. WO4, 1% Sn 5% moly, 5% bis?
194.51 - 194.70 - irregular qtz carb vein system, interspined with a few specks moly 20°-10°, 10-30mm.
196.06 — Irregular veined fractured contact.
Feldspar porphyry. - fine to m.g. becoming coarse from 196.70 - feldspars to 10mm. locally sericitic alteration.
197.47 — Contact 15°. - f.g. quartz rich matrix.
Sandstone - altered, bleached fractured, tan dark brown, re X'ed - fine to medium grained.
200 — Irregular dyke material 198.72 - 199.15

MINERALIZATION (DEPTH m)

151.75 - 152.00 — two overlapping veins qtz 20° 10mm, 10% moly 5% WO4 fine to m.g.
Network of veins qtz, qtz, carb - barren, 45° - 10°.
157.75 - 158.35 — 10 - 20mm qtz, carb vein 10°-15° trace moly, 1% f.g. WO4
158.75 - 158.96 — 20mm qtz vein 30°, trace very f.g. WO4
160.07 - 160.47 — 7-10mm qtz, flu, chl vein 15 very minor f.g. specks WO4
161.40 - 162.24 — 5-20mm qtz, carb vein c upl 1% f.g. moly, 0.5% f.g. WO4
162.44 — 15mm qtz vein 45° 1% WO4
163.90 — intersecting qtz vein 30°, barren
164.18 - 164.46 — FAULT, 10°, slickensided clay veined, F2
166.00 - 166.60 — FAULT, fractured clay cement 10°-15°, F4
167.85 — vein qtz, 15mm, barren 40°
168.25 — clay seam.
168.63 — Fault f1, slickensided 70°
169.25 - 169.60 — 2 veins of qtz, 10-20mm, 40°
169.83 — qtz vein, 40mm, 5% Sn, 45°
170.75 — qtz vein 20mm 45°, trace f.g. moly
171.20 - 172.37 — FAULT, 10°, slickensided talc veneer F1, trace moly.
172.50 - 172.65 — qtz vein 15mm, trace WO4 f.g.
174.40 - 174.63 — series of qtz, fluorite veins to 1% WO4 as irregular masses trace moly.
175.40 - 175.35, chaotic veins barren.
177.55 — qtz vein 90° 80mm. barren.
177.85 — 15cm qtz vein, trace c.g. WO4 90°
178.50 — 10cm qtz vein, 1% WO4
178.83 - 179.02 — 2 intersecting qtz vein 15°-20° WO4 30% - c.g.
180.40 — qtz vein 30°, 20mm, [illegible] g. WO4
181.40 — Fault 30°, f2, clay [illegible] fill
181.90 — fault f1, 40°, clay coated
182.20 — qtz vein 40°, 20mm, up to 1% WO4 moly
183.60 — qtz vein 45°, 23mm, up to 1% WO4
184.10 — qtz vein 10cm, 45°, 0.5% WO4 f.g. very minor moly
184.50 — qtz vein 50mm, 90°
185.90 - 186.30 — two qtz veins 5% Sn, 1% moly 0.5% WO4, 30°-35°
186.92 - 188.05 — 10-20mm qtz vein, 10% c.g. WO4 5% Sn
188.00 — 10mm vein 20% moly. 50°
189.57 - 189.77 — 25mm qtz vein 1% c.g. WO4 1% Sn, single mass moly
190.37 — 20mm qtz vein, trace moly WO4
190.60 - 191.00 — irregular qtz carb. veins 10°- 1-5% moly.
192.65 - 193.60 — network of qtz veins, grained 5% moly, 0.5% cass 0.5% WO4 f.g.
194.16 - 194.35 — qtz vein trace WO4, 15mm 35°
195.30 - 196.06 — 195.50 several qtz veins 10°-30° fractured qtz veined, irregular orientation.
trace fine grained WO4 and moly. << 1%
198.72 - 199.45 — qtz vein 30°, 1% moly trace WO4
199.50 — qtz vein, 35° trace moly
199.70 — qtz vein 35° trace WO4

22 023

ABERFOYLE — DIAMOND DRILL LOG — HOLE Nº LC[illegible]

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	DEPTH m	MINERALIZATION
3.00	200 – 201.77	Sandstone – As above – silicified, fractured veined – foliation. chaotic, RX'ed. Contact 45°	200.32 – 200.74; 200.94	Two qtz veins 15°-25° with trace very f.g. moly, WO4, 200 qtz vein 20mm, 1% very f.g. WO4
3.04	205	Feldspar Porphyry. m.g. pale cream feldspar to 5mm, fine dusty tourmaline, appear to be locally RX'ed. Sandstone xenolith? 202.80 - 203.60. Feldspar content variable, generally altered pale cream colour, some still fresh pale off white – size variation from 1mm to 10mm, commonly 5mm. Patchy dark green alteration (chlorite / amphibole?).	206.20; 206.47	f.g. moly, WO4 patches 10mm. vein chl, qtz, po, cpy 25°
3.04			206.60 – 206.75	f.g. moly, WO4 dissem
			207.25 – 207.35	f.g. bladed WO4.
0.65	210	Pale grey/cream colour 208.10 - 209.00. Crude banding 208.70, 209.40, 40°-45°.	209.14 – 209.35	f.g. dissem moly; " " "
2.34		Sandstone xenoliths 210.05 - 210.62, angular and rounded, qtz veined.	212.25	212.35 – 10cm qtz veins 1% WO4 45°, 15°
3.03	215	From 212.63 – feldspar size varies from 1mm to 5-10mm 213.20. – subrounded qtz phenocrysts. – colour pale creamy white	215.40	– 215.87 – fine grained dissem WO4, X'ls are to 1mm [illegible]
3.08		From 214.00 - 223.35 the dyke is predominantly pale grey with patchy siderite alteration, minor fine grained chlorite / amphibole. feldspars are variably altered – vary in size ≤1mm to 10mm. minor patchy epidote alteration.	216.00	– 216.45 – flourite qtz, carb vein vuggy py, amph, lone needle & f.g. WO4?
			217.60; 218.05	– patchy cassiterite. f.g. dissem moly.
3.04	220		219.17	– 219.40 – patchy diss. WO4
			220.0	dissem WO4
2.92			220.8	dissem f.g WO4
	223.35 – 223.60	Transitional Zone – sandstone and irregular dyke stringers	223.35	fine radiating needles WO4
2.97	225 – 226.15	Shale – fine grained dark brown, massive and chaotic – sandstone clasts / cobbles are present. – fractured, veined 225.35 – 226.15.	223.75 – 224.0	irregular network of brown qtz / qtz carb veins.
			224.43 – 224.83	irregular network of qtz, carb veins – trace fractured f.g. WO4
1.01		ReX'ed altered feldspar porphyry? fine grained siliceous – feldspars rarely visible – pale grey to off white in colour.	227.10	vuggy py-rock vein, possible fault 15mm 40°, minor bx'n
2.11	230	From 228.10 - 229.56 chaotic sandstone shale, dyke stringers interspersed (probably represents large xenolith). Elongate shale xenoliths 229.60 - 229.70. 10 cm in length – RX'ed. minor xenoliths 229.70 – 232.45	229.00	f.g. patchy moly.
3.06		At 232.45 – relatively unaltered porphyry, cream feldspars		↑
3.05	235	From 232.65 – 234.70 – altered, rexl'ed weak foliation 10°-15° patchy siderite alteration. 234.70 – 236.75 – large shale xenoliths up to 20cm long, fractured, veined. minor fine feldspars visible – colour grey to pale grey.		disseminated dark brown black crystals, sometimes needle like others as patchy aggregates (probably fine grained WO4?)
2.90	240	From 236.75 – 244.20 – becomes siliceous pale grey to grey – foliated in parts 10°-15° patchy siderite alteration – minor xenoliths to 10cm in length – rarely are fine remnant feldspars visible. Epidote alteration 242.00 - 242.55.		↓
3.00				
3.05	245	Euhedral to subhedral feldspars 244.20 - 245.60 – variable altered – generally 1-2mm long – best seen 242.00 - 242.20 and 243.10 - 245.20. – patchy siderite altn common.		
3.10		Becomes massive, with rare feldspars visible siliceous from 245.60. abundant patchy siderite (after feldspars?). foliation 5°-10°		Irregular fine patchy tourmaline.
3.02	250			

Depth marks (left margin): 203.00, 206.00, 209.00, 209.75, 212.00, 215.00, 218.00, 221.00, 224.00, 227.00, 228.00, 230.00, 233.00, 236.00, 239.00, 242.00, 245.00, 248.00

22 024

ABERFOYLE . DIAMOND DRILL LOG HOLE

Feature Bedding · Foliation · Fragment (size & shape) · Shearing · Fault · Vein (● carbonate, ● 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
		Altered feldspar porphyry contd							
251.00	250	Foliation around 251.00, 10°.							
3.16		At 251.83 - relatively unaltered feldspar euhedral 1mm - 10mm.							
254.00		From 252.29 - 253.03 - altered by tourmaline and orange siderite.							Epidote alteration 253.03 to 253.43
2.16	255	Foliation 253.03 - 254 - 0° - 5°, un-altered feldspars 253.70 - 254 and 254.30 - 254.46							
256.20									
0.88		Massive siliceous, textureless pale grey/white from 254.46 - patchy siderite							
257.00		alteration - epidote alteration 257.08 - 257.43							
3.00		Altered tourmalinized sandstone xenoliths 256.70 - 257.75							
260.00	260	Foliated 259.00 - 260.65 -							dusty clots of
2.95		Rare feldspars over the interval 260.00 - 270.00 - massive siliceous fine grained, irregular patchy siderite and							↑
263.00		minor epidote alteration - Foliation							Trace stringers of pyrite and dusty dark brown mineral, WO_4?
2.94	265	present 0° - 5°, marked by stringers of tourmaline and fine feldspars.							↓
266.00									
2.75									
269.00									
1.80	270								
270.70									
3.14									
273.90									
1.06									
275.00	275	Partially altered and unaltered feldspars to 5mm 276.20 - 278.40, also subrounded quartz phenocrysts, patchy zones of pale green fine grained epidote.							Patchy aggregates and stringers of WO_4? subparallel to foliation, trace f.g. moly
2.90									
278.00		Predominantly altered - rare visible feldspars 278.40 - 281.90 - pale grey to grey white							
3.02	280	Highly siliceous, milky white 281.90 - 283.84 with minor patches of well developed feldspars.							
281.00		minor elongate angular xenoliths.							
3.00									
284.00								285.25	vein with clay, orthopy.
2.62 Pet sample taken out	285							286.43	fine stringers of dark brown mineral WO_4? f.g. dusty
287.00								286.70	fine stringers subparallel and patchy aggregates of dusty dark brown WO_4?
2.22		From 283.84 - 296.70 are a number of large xenoliths of f.g. dark brown shale, clastic sandstone and shale - fractured, veined						288.94	
289.25									
0.85	290	and with stringers and zones of fine grained							
290.00		altered porphyry. Minor relatively unaltered						291.00	stringers of f.g. dusty brown mineral WO_4?
3.00		feldspars common in porphyry stringers. Contact? at 292.55						291.83	
293.00									
3.00	295	contact is hard to define, It has been defined on the basis of abundance of shale/sandstone, relative to porphyry material.							
296.00	296.7							296.70	crumbly clay zone, Fz?
3.60		Sandstone Predominantly dark brown - fine to medium grained, minor interbedded dark brown siliceous shale - sequence appears						297.70	Irregular, glassy vein/dyke zone, foliation 0°-15°, 20-5mm - fine dusty WO_4 5%, total 5
299.00	300	to be recrystallized						298.17	Intercalated fine grained porphyry stringers 10% total rock.

22 025

ABERFOYLE

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
3.20	300	Sandstone – As above. 301.20 – 301.65 – qtz vein, 45° c fine dusty WO4? 1% some fine crystals 302.45 – 302.77 – qtz vein, 75°, 5% dusty WO4? a few specks moly						300.6 300.70 302.34	f.g. dusty WO4 and trace f.g. moly qtz vein c f.g. dusty WO4? to 5% qtz vein, 35°, 30mm, trace f.g. moly
2.85	305	Sandstone is massive dark brown, medium and fine grained, minor shale bands.						303.8 304.76 305.7	irregular qtz veins, interjoined fractures 20°, mainly f.g. dusty stringers WO4, some c.g. bladed crystals 5% qtz vein 40° 20mm 1% f.g. moly
3.08		307.70 – 308.10 – qtz vein 50mm, 15°, 5% f.g. dusty WO4 1% patchy moly						306.7 307.83	qtz vein 35 – 50mm, 30° ≤1% f.g. dusty WO4, moly
3.04	310	minor veining, barren 1% of total rock.						309.15	qtz vein 10mm, 35°, 1% WO4 as large crystals
3.00	313.13							310.40 311.56 312.24 313.05 313.37	qtz vein 40°, 25mm, specks f.g. moly qtz vein 40°, 15mm, 5% f.g. dusty WO4 qtz vein 10–30mm 5–10°, 1–5% clots of dusty WO4, minor specks 20mm qtz vein, up to 1% f.g. moly
	314.70	Shale – massive to finely foliated, dark brown fine grained, siliceous.							
3.00	315	314.70 – 90°, 5mm qtz vein 20% f.g. moly 314.90 – irregular qtz vein 8mm, 20% f.g. moly 315.55 – intersecting qtz veins, 5mm, 80°, 5% WO4 f.g.						314.35	qtz vein 40° 25mm, 5% f.g. moly 1% dusty patches f.g. WO4
3.05		SANDSTONE – massive medium grained dark brown – bleached sandstone 317.25 – 318.5						316.65 316.80 317.52 317.70	qtz vein 38° – 1% c.g. WO4 and 0.5% f.g. patchy moly qtz vein 15mm, 5°, 1% f.g. WO4 and moly
2.94	320	f.g. tan chaotic shale 320.00 – 320.50 321.73, qtz vein 30°, 20mm, trace f.g. moly WO4, 5% patchy Sn						319.43 320.0 320.85 321.23	qtz vein, 10°, 20mm, 10% WO4 as patchy aggregates, 1% f.g. moly qtz vein 25° 10mm 5% WO4 patchy aggregates, 1% f.g. moly
2.93	325	322.43 – 322.55 – irregular qtz vein 10°, 10–15mm, 5% WO4, as patchy aggregates, 1% f.g. moly. Shale 323.75 – 324.45.						322.15 322.25 323.6 324.37	qtz vein, 40°, 10mm, 5% WO4, 1% trace 10mm qtz porphyry dyke, no minerals phenocrysts intersecting barren qtz veins, 10mm, 90° qtz carb vein 40°, 10mm 0.5% WO4, [illegible]
3.02								326.0 326.25 327.15 327.74 328.2 328.32 328.6	qtz vein 45°, c.g. WO4 crystals 5% f.g. aggregates moly up to 5% to 327.25, barren qtz vein, trace c.g. [illegible] qtz vein 15mm, 5°, 5% c.g. WO4 crystal & 5% f.g. clusters moly qtz vein 75°, trace < 1% moly W
3.00	330	Bleached sandstone around qtz vein 328.32. Shale 329.80 – 330.40, f.g. chaotic, siliceous							
3.00		Sandstone – massive dark brown, fine to medium grained. 332.76, qtz vein 15mm 80° up to 10% WO4, trace patchy Sn 333.32 – 333.52 – qtz vein 2% c.g. bis? a 2% WO4						332.37 332.65 333.07 333.21 334.17 334.37	qtz carb, films 10°–15°, 25mm 5% c.g. patchy WO4, 1–2% patchy moly qtz vein 20mm 40°, 0.5% WO4 qtz vein 10mm, 20°, trace ≤1% moly, Sn
3.00	335	335.60 – 335.90 – qtz vein 0°–5°, 10mm locally 20mm. 1% moly f.g. aggregates, 1–2% WO4 c.g. some crosscutting veinlets carb, chl, qtz c arsenopy. 337.14 – 337.86 – Intersecting qtz, carb veins 10°–0° 5–10mm, ≤1% dusty WO4 and moly f.g.						336.3	qtz vein 88°, 5% c.g. WO4, trace moly 40mm
3.04	340 341.05	Bleached sandstone.						339.2 340.4	qtz vein 30°, 10mm. trace < 1% WO4 qtz vein 45°, 60mm 1% c.g. WO4.
1.73 lost core tube came off.		Chaotic Shale – bleached pale tan, irregular sandstone clasts. – slumped brecciated subrounded fragments of sandstone and shale and fine grained shaly matrix.						341.60 344.4	341.95 – qtz carb vein 10°, 5mm barren 50mm qtz vein, fine acicular tourm.
2.94	345 345.07	Sandstone – bleached to tan colour down to 346.50 – then dark brown massive with some bleached zones.						346.75	irregular qtz carb vein 5mm 10°–15°
3.03	350	chaotic shale 349.50 – 349.70.						347.57 348.12 348.67	5mm qtz vein 38°, 1% f.g. moly & WO4 qtz, carb vein 5 – 30mm, 5°–20° irregular. 1% WO4, 0.5% Sn & 1% f.g. crystals

Depth marks (left margin): 302.00, 305.00, 308.00, 311.00, 314.00, 317.00, 320.00, 323.00, 326.00, 329.00, 332.00, 335.00, 338.00, 341.00, 344.00, 347.00, 349.80

020 00

ABERFOYLE — **DIAMOND DRILL LOG** — **HOLE Nº** C1435 — Page Nº

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

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

CORE REC'D	DEPTH m	GEOLOGY	DEPTH m	MINERALIZATION
3.03	350	Sandstone - contd. Dark brown, massive, medium grained. Bleached to pale tan. 349.65 - 354.00.	350.17	qtz, carb vein 35°, 10mm 5% WO4
(353.00) 2.97	355	Chaotic shale 353.00 - 354.00.	352.90	5mm qtz vein, 88°, 20% WO4, 10% moly
			353.30	qtz, carb vein, 50mm, 85°.
(356.00) 2.95		Sandstone bleached 358.20 - 359.00 - Brx'ed zone 358.70 - 358.80 - open vuggy veins, single vein with moly.	358.20	healed fault, F3, qtz, carb 65°
			358.77	qtz vein 50°, 2% c.g. WO4, 2%
			358.87	patchy moly, 1% Sn
(359.00) 2.38	360	From 359.00 the sandstone is fine grained siliceous with chaotic zones of interlayered shale, locally bleached - colour is predominantly dark brown.	360	Fault, F2, healed, qtz, fluo, sid, 85°
			360.58	vein c amph, arsenopy, 10% cass 25mm.
(361.40) 3.20			361.70	irregular qtz carb vein network 10° 1% moly, 9% cass, 5-20 mm
			362.75	amph, arsenopy vein 5mm 45°
(364.40) 3.60	365			
	367.65	contact plane 40°, several siderite veinlets.		
(367.50) 0.59		**Altered Siliceous Basic Volcanic** -		
(368.00) 3.00	370	Fine grained, siliceous dark brown and patchy zones dark green.		
	369.72	qtz, cass, fluor rock - patchy aggregates f.g. cass.		2% patchy cassiterite
(371.00)	370.12	**Altered Basic Volcanic** - f.g. siliceous grey maroon, greenish brown - patchy carbonate veinlets. Altered feldspars and irregular cherty concretions. Contact is a qtz, fluorite vein	371.60	qtz, fluorite, carb, amph vein 65°
	371.80		371.80	qtz, fluorite vein, 45°
3.05		**Quartz, carbonate rock** - medium grained dark black and white. Abundant patchy carbonate segregations (some after altered feldspars) minor siderite, epidote alteration		fine grained patchy aggregate of cassiterite upto 1%.
	373.10	**Talc carbonate rock** - medium grained bright green with irregular pale cream carbonate veins and stringers. Some visible carbonate altered feldspar. (Probably highly altered basic volcanic). Core loss 50%.		Fault contact 45° slickensided, sheared zone serpentinised.
(374.00) 0.50 core loss	375			
(375.00) NO CORE	376.00	CAVITY - NO CORE RECOVERED - FAULT ZONE		
(376.00) 0.75		**Altered Siliceous Basic Volcanic** - fine grained, siliceous grey to tan, finely veined by siderite - remnant altered feldspars.		
(377.00) 0.90		cherty concretions common.	378.30	Fault, F3, qtz, carb, clay, healed open 15°, vuggy pyrite, slickensided
(378.00) 1.50				
(379.50)	380	Chert - f.g. chaotic - pale tan - finely veined.		
2.00	380.25	**Altered Basic Volcanic** - completely leached pale tan medium grained carbonate rock from 380.25 to 383.80.	380.44	Fault, F1, slickensided 35°
(381.40)			381.33	Fault, F3, healed qtz carbonate fluorite 80°
1.40 core loss		Siliceous finely veined dark olive green with minor fine altered feldspars 383.80 - 386.10	F2	Breccia 384.10, 30°, slickensided
(383.60) 2.50	385	From 386.10 - 387.85 - variably bleached, dark brown to pale tan - rounded vesicles 387.33. Fine scale carbonate veining common.	F4	Breccia 387.75 - 387.85, 30°
(386.00)			F4	Breccia zone 385.25 to 385.70 angular fragments, silicified 25°
3.07	387.85		387.00	16cm qtz carb/fluorite vein 45° 1% WO3
			387.80	10cm qtz carb vein at contact 65
	388.45	Bleached bedded pale tan carbonate siltstone Bg. 45°		
(389.00) 2.70	390	**Basalt** - f.g. olive green grading to dark green from 388.45 - 389.60 - massive. Bleached to tan colour 389.60 - 391.70 fine carbonate veining. Chert concretions fault bounded 390.17 - 390.40.	389.60 / 389.85	Shear Zone, bleached crushed basic volcanic.
(391.60) 3.13	392		390.17	Fault F1, slickensided 40°
			390.40	Fault F2, slickensided, 40°, healed qtz carbonate
(394.00) 0.75	394	Massive fine grained siliceous dark brown grading to dark olive green from		
(395.00) 1.60	396	390.40 - 395.95 - Bleached pale tan 395.95 -	396.22	250mm qtz vein, amph-kaol 90°
	398.20	End of Bore 398.20. Logged A Eadie 8-3-80		

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