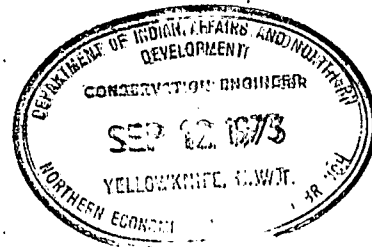




WELL HISTORY REPORT  
CRANSWICK, B-1 A-42  
YUKON TERRITORY



Prepared by:  
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ENGINEER 'C'

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ATTACHMENTS

Sample Descriptions

Drill Stem Tests

WELL HISTORY  
REPORT

Section I - Summary of Well Data

- (a) Well Name and Number  
Amoco PCP B-1 Cranswick YT A-42
- (b) Permittee  
Amoco: Pan Canadian Petroleum
- (c) Name of Operator  
Amoco Canada Petroleum Company Ltd.  
444 - 7th Avenue S. W.  
Calgary, Alberta
- (d) Location  
Unit A Section 42 Grid 65-50 133-00  
Latitude  $65^{\circ} 41' 12.624''$ N  
Longitude  $133^{\circ} 7' 52.104''$ W  
Ref. Mkr. 300A426550133000  
Univ. Well Loc. Ref. Lat  $65.68683^{\circ}$  N  
Long  $133.13114^{\circ}$  W
- (e) Co-ordinates  
80' South of Vibrator Point 21
- (f) Permit No.  
#6206
- (g) Drilling Contractor  
Name: Peter Bawden Drilling Limited  
Rig: #31  
Type: Rotary
- (h) Drilling Authority  
#597  
12-4-72
- (i) Classification  
Wildcat Exploratory
- (j) Elevation  
Ground: 2012'  
KB: 2034.3'

- (k) Spudded  
22:00 HRS  
14-4-72
  
- (l) Completed Drilling  
15:15 HRS  
3-15-73
  
- (m) Depths  
TD 1400 '  
PBD 0'
  
- (n) Well Status  
Abandoned
  
- (o) Rig Released  
Released to tear out rate @ 16:00 HRS 3-20-73
  
- (p) Hole Size  
26" 0' - 605 '  
17½" 605' - 2200 '  
12½" 2200' - 6575 '  
8½" 6575' - 14000'
  
- (q) Casing  
Casing Size: 13 3/8"  
Grade: K55 ST&C  
Weight: 68#  
Amount: 53 JTS  
Set at: 2200.84' KB  
  
Casing Size: 9 5/8"  
Grade: N-80  
Weight: 43.5# and 47#  
Amount: 171 JTS  
Set at: 6575' KB

Section II - Geological Summary

(a) <u>Formation Tops</u> (see attachments)	<u>E-Log</u>	<u>Sample Tops</u>
Glacial Drift	-	
Cretaceous	-	205
Mississippian	1800	-

<u>Formation Tops</u>	<u>E-Log</u>	<u>Sample Tops</u>
Devonian		
Marker Bed	-	-
Canol	6912	6936
Hume	7087	7073
Headless Shale	7411	7358
Landry	7637	7561
Cranswick } - 60%	8679	8328
Delorme	9766	10768
Siluro-Ordovician		
Mt. Kindle	10792	11436
Cherty Marker	11765	
Cambrian		
McDougall		

- (b) Cored Intervals  
- nil
- (c) Core Descriptions  
- nil
- (d) Sample Descriptions  
- see attachments
- (e) Paleontological Determinations  
- nil

Section III - Engineering Summary

- (a) Drill Stem Tests  
- see attachments

- (b) Casing Record

Conductor Pipe

Hole size:

Conductor size: 28"

Weight:

Grade:

Joints run: 1

KB setting depth: 32'

Cement & additives: 100 sacs neat permafrost

Surface Casing

Hole Size: 26"  
 Casing size: 20"  
 Weight: 94#  
 Grade: H-40  
 Joints run: 15  
 KB setting depth: 601'  
 Cement & Additives: 1400 sacs permafrost, 520 sacs neat+ 3% CaCl<sub>2</sub>  
 Date run: 4-19-72  
 Date cemented: 4-19-72

Intermediate Casing

Hole Size: 17½"  
 Casing size: 13 3/8"  
 Weight: 68#  
 Grade: K-55  
 Joints run: 53  
 KB setting depth: 2200'  
 Cement & Additives: 1500 sacs neat Class G, 700 sacs permafrost  
 Date run: 4-27-72  
 Date cemented: 4-27-72

Intermediate Casing

Hole Size: 12¼"  
 Casing Size: 9 5/8"  
 Weight: 43.5#, 47#  
 Grade: N-80  
 Joints run: 171  
 KB setting depth: 6575'  
 Cement & Additives: 1st stage - 675 sacs oilwell + 2% CaCl<sub>2</sub>  
 2nd stage - 402 sacs neat + 2% CaCl<sub>2</sub>  
 Date run: 1-14-73  
 Date cemented: 1-14-73

(c) Bit Record

<u>BIT</u>	<u>SIZE</u>	<u>TYPE</u>	<u>MAKE</u>	<u>IN</u>	<u>OUT</u>	<u>FT.</u>	<u>HRS.</u>
1	17 ½	YTIA	REED	0	515	515	28 1/4
2	17 ½	SDGHJ	SMITH	515	605	90	2 1/4
3	26	Hole	SMITH	0	605	605	21 1/4
		526D					
4	12 ½	S44	SEC	605	877	272	9
5	12 ½	S44	SEC	877	2200	1323	33
2	17 ½	DGHJ	SMITH	601	1918	1317	35
6	17 ½	Hole	REED	1918	1928	10	2
		Opener					

<u>BIT</u>	<u>SIZE</u>	<u>TYPE</u>	<u>MAKE</u>	<u>IN</u>	<u>OUT</u>	<u>FT.</u>	<u>HRS.</u>
7	17 1/2	SIJ	REED	1928	2200	272	7
8	12 1/2	XV	HW	2200	2474	274	20 1/4
9	12 1/2	M44N	SEC	2474	3232	758	30 1/4
10	12 1/2	M44	SEC	3232	3415	183	16 3/4
11	12 1/2	YMG-J	REED	3415	3862	447	36 3/4
12	12 1/2	XDV	HW	3862	4492	630	30
13	12 1/2	S44	SEC	4492	5297	805	40 1/2
14	12 1/2	S44	SEC	5297	5436	139	14 1/2
15	12 1/2	SBUG-J	REED	5436	5609	173	20 1/2
16	12 1/2	YHG	REED	5609	5798	189	23 3/4
17	12 1/2	SBUG-J	REED	5798	5857	59	6 3/4
18	12 1/2	4JS	SMITH	5857	5871	14	6 3/4
19	12 1/2	H77U	SEC	Reaming			60 1/4
20	12 1/2	M44N	SEC	Tight			70
21	12 1/2	M44N	SEC	Hole			16 1/4
22	12 1/2	H775	SEC	5871	5875	4	3 1/4
23	12 1/2	YHWG	REED	5875	5883	8	5
24	12 1/2	SBUG	REED	5883	5902	19	11
25	12 1/2	YHWG-J	REED	5902	5922	20	12
26	12 1/2	H88	SEC	5922	5968	46	23 3/4
27	12 1/2	M88	SEC	5968	6014	46	15 1/2
28	12 1/2	SCH5	REED	6014	6126	112	34 1/2
29	12 1/2	SCH5	REED	6126	6161	35	14 1/2
30	12 1/2	SBUG	REED	6161	6220	59	16 1/2
31	12 1/2	M44	REED	6220	6221	1	3 1/4
32	12 1/2	RG7XJ	HW	6221	6441	220	65
33	12 1/2	3JS	SMITH	Unable to Break Through Casing		None	3 3/4
34	12 1/2	H775	SEC	6441	6500	59	15 1/4
35	12 1/2	SCHJ	REED	6500	6544	44	8 1/2
36	12 1/2	RG7XJ	HW	6544	6570	26	9
37	12 1/2	H88	SEC				1 3/4
38	12 1/2	H7SG	SEC				1 1/2
39	8 1/2	SBV	REED				1/2
40	8 1/2	SSIG-J	REED	6575	6577	2	1/2
41	8 1/2	SHG	REED	6577	6580	3	1 3/4
42	8 1/2	RG7XJ	HW	6580	7230	650	45 1/2
43	8 1/2	5JS	SMITH	7230	7891	661	59 3/4
44	8 1/2	4JS	SMITH	7891	8313	422	31 1/2
45	8 1/2	3JS	SMITH	8312	8900	588	38 3/4
46	8 1/2	SCM5	REED	8900	9192	292	23
47	8 1/2	H77S	SEC	9192	9464	272	25 3/4

<u>BIT</u>	<u>SIZE</u>	<u>TYPE</u>	<u>MAKE</u>	<u>IN</u>	<u>OUT</u>	<u>FT.</u>	<u>HRS.</u>
48	8 1/2	6JS	SMITH	9464	10131	667	56 1/2
49	8 1/2	6JS	SMITH	10131	10596	465	41 1/2
50	8 1/2	SBV	REED	10596	10770	174	18 3/4
51	8 1/2	H77S	SEC	10770	10952	182	18 1/2
52	8 1/2	SS7	SMITH	10952	11045	93	6
53	8 1/2	SHG	REED	11045	11174	129	12 3/4
54	8 1/2	SHG	REED	11174	11292	188	15 1/4
55	8 1/2	SS5	SMITH	11292	11477	185	17
56	8 1/2	H7UG J	SEC	11477	11512	35	2 3/4
57	8 1/2	SS7	SMITH	11512	11810	298	27 3/4
58	8 1/2	H88	SEC	11810	12020	210	18
59	8 1/2	H100	SEC	12020	12110	90	8 1/4
60	8 1/2	H7UG J	SEC	12110	12169	59	12 1/4
61	8 1/2	H88	SEC	12169	12322	153	23 3/4
62	8 1/2	H55R	HW	12322	12505	183	20 1/2
63	8 1/2	FCHJ	REED	12505	12746	241	30 1/4
64	8 1/2	SS-5	SMITH	12746	12969	223	21 1/2
65	8 1/2	M88	SEC	12969	13370	401	36 3/4
66	8 1/2	SBU	REED	13370	13377	7	3/4
67	8 1/2	H88	SEC	13377	13564	187	17 1/2
68	8 1/2	H100	SEC	13564	13761	197	20 1/2
69	8 1/2	H100	SEC	13761	13938	177	22 1/4
70	8 1/2	H88	SEC	13938	14000	62	5 1/2

(d) Mud Report

<u>TYPE</u>	<u>QUANTITY</u>
Gel	501310#
Bennex	2144#
Cellex	8600#
Soda Ash	10475#
Barite	272300#
Xpel-G	10465#
Visbestos	6300#
Caustic	4550#
Bicarbonate	2100#
Baroid	2700#
Desilter	23#
Kwik-Seal	1140#
WL-100	1000#
Walnut Shells	3750#
No-Stick	31 Gals.



(e) Deviation Record

<u>Depth</u>	<u>Deviation</u>	<u>Depth</u>	<u>Deviation</u>
80	1/8	4984	6
180	0	5075	6 1/2
270	3/4	5170	6 1/2
420	1 1/2	5265	6 3/4
545	1 1/2	5359	7
605	1 1/2	5430	7 1/2
655	1	5514	7
805	1 7/8	5609	6
950	1 1/2	5703	7
1110	1 1/2	5795	4 1/4
1660	1 1/2	5857	4
1985	2 1/2	6125	3 1/4
2038	2 1/2	6210	3 1/4
2200	2 3/4	6420	3 1/2
870	2 1/8	6665	2 3/4
1390	1 3/4	6850	3
1928	2 1/2	7230	4 1/2
2200	4	7370	3 3/4
2300	3 3/4	7560	4 1/2
2320	3 1/2	7880	4
2371	3 3/4	8310	2 1/4
2470	4 5/8	8900	2
2530	4	9180	2 1/4
2650	4 3/4	9460	1 3/4
2780	4 3/4	10130	5 1/2
2970	4	10650	3 1/2
3158	3 3/4	10952	2 1/4
3300	5 1/4	11174	4 1/2
3372	5 3/4	11400	6
3494	6 1/4	11470	5
3560	6	11512	5
3660	6	11810	3 1/2
3720	6 1/4	12012	2 1/4
3780	6 1/8	12169	3 1/2
3900	6 1/4	12320	4
4000	6 1/2	12500	5 1/2
4189	6	12965	5 1/2
4275	6 3/4	13375	5 3/4
4470	8	13560	7 1/2
4550	7	13761	8 1/8
4610	7 1/2	13938	6 1/2
4790	7		

(f) Abandonment Plugs

- Plug #1 - 14,000' - 13,900'KB  
50 sxs Oilwell + .2% CFR12  
06:00 Hrs. 3-18-73
  - Plug #2 - 10,510' - 10,760'KB Felt @ 10,470'KB  
126 sxs Oil well + .2% CFR12  
09:30 Hrs. 3-18-73
  - Plug #3 - 8150' - 8500'KB Felt @ 8070'KB  
176 sxs Oilwell + .4% HR4  
19:00 Hrs. 3-18-73
  - Plug #4 - 6625' - 6500'KB Felt @ 6480'KB  
54 sxs Oilwell + .2% CFR4  
05:00 Hrd. 3-19-73
  - Plug #5 - Surface plug in 13 3/8" csg. from 400 'KB to surface  
370 sxs Oilwell 'G' + 3% CaCl<sub>2</sub>  
0220 Hrs. 04-28-72
- Cut off casing & welded on cap 3' below ground level. 10 sxs neat Oilwell on top.

(g) Lost Circulation Zones

- 11915' - 12012' KB  
Mixed mud with lost circulation material and recommended drilling.

(h) Report of Blowouts

Nil

Section IV - Logs

<u>DATE</u>	<u>RUN NO.</u>	<u>TYPE</u>	<u>INTERVAL</u>
23-04-72	1	Dual	605' - 2188'
10-21-72	2	Induction	2067' - 2125'
03-03-73	3	Laterlog	6570' - 1249'
16-03-73	4		12000' - 13960'
23-04-72	1	Borehole	605' - 2194'
03-03-73	2	Compensated	6570' - 12484'
16-03-73	3	Sonic Log	12000' - 13970'
04-03-73	1	Continuous	6576' - 12484'
15-03-73	2	Dipmeter	12400' - 13960'
03-03-73	1	Sidewall Porosity Log	6570' - 12240'

<u>DATE</u>	<u>RUN NO.</u>	<u>TYPE</u>	<u>INTERVAL</u>
03-03-73	1	Formation Density Log	6570' - 12493'
10-01-73	1	Induction Electrical	2100' - 5878'
12-01-73	2		5550' - 6561'
12-01-72		Microlaterlog	2066' - 3516'

Section V - Analysis

- (a) Core Analysis  
Nil
- (b) Water Analysis  
Nil
- (c) Gas Analysis  
Nil
- (d) Oil Analysis  
Nil

Section VI - Completion Summary

- (a) Tubing Record  
Nil
- (b) Perforation Record  
Nil
- (c) Cementation Record  
Surface Plug in 13 3/8" casing from 400' KB to surface  
370 sxs oilwell 'G' + 3% CaCl<sub>2</sub>  
Plug #1 - 14,000'-13,900'KB  
50-sxs Oilwell +.2% CFR12  
Plug #2 - 10,510'-10,760' KB Felt @ 10,470' K.B.  
126 sxs Oilwell +.2% CFR12  
Plug #3 - 8150'-8500' KB Felt @ 8070' KB  
176 sxs Oilwell + .4% HR4  
Plug #4 - 6625'-6500' KB Felt @ 6480' KB  
54 sxs Oilwell + .2% CFR4  
Surface Cap - 10 sxs Neat Oilwell on top
- (d) Acidization and Fracturing Record  
Nil
- (e) Back Pressure and Production Test

SAMPLE DESCRIPTIONS

60 - 70 Loose gravel, with fine and coarse sand, grey shale, volcanics, trace limestone and chert, silty.

70 - 80 Gravel, with fine and coarse quartz sand, shale, volcanics, trace silt.

80 - 90 As above with trace grey shale.

90 - 100 Coarse and fine grained quartz sand, pebbly, trace siltstone, trace calcite (Gravel), trace shale, trace chert, trace volcanics.

100 - 110 Quartz sand, fine and coarse grained, pebbly, siltstone, trace very red shale.

110 - 120 Quartz sand, fine and coarse grained, with siltstone pebbly, trace shale.

120 - 130 Quartz sand, fine to medium grained, trace siltstone pebbly.

130 - 140 Quartz sand as above, coarse and fine, trace siltstone, trace chert, trace limestone, pebbly (gravel).

140 - 150 Very fine grained, tight, quartz sand, pebbly with chert, trace siltstone, trace quartzite, gravel.

150 - 160 Very fine grained, quartz sand and siltstone, pebbly, volcanics, trace limestone.

160 - 170 Micaceous shale, with volcanics, chert, and fine grained quartz sand as above, pebbly.

170 - 180 Very fine grained quartz sand, trace chert, with grey shale, trace siltstone and trace volcanics, pebbly.

180 - 190 Grey shale, siltstone, and very fine grained quartz sand.

190 - 200 Grey, micro-micaceous shale, with fine grained quartz sand, trace siltstone, trace feldspar.

200 - 210 Grey shale, micro-micaceous and very fine grained quartz sand, trace siltstone.

210 - 220 Soft, grey, micro-micaceous shale, with trace tight, very fine grained quartz sand and siltstone.

220 - 230 Grey, micro-micaceous, shale, with trace pyrite, trace siltstone.

230 - 240 Grey shale as above, with trace very fine grained quartz sand, trace sand and siltstone.

240 - 250 Soft, grey, micro-micaceous shale, trace pyrite.

250 - 260 Grey, micro-micaceous shale, trace pyrite, and trace sand.

260 - 270	As above.
270 - 280	Grey shale, micro-micaceous, trace pyrite, and very slight trace sand.
280 - 290	As above.
290 - 300	As above.
300 - 310	Grey, micro-micaceous shale, slightly pyritic.
310 - 320	As above.
320 - 330	As Above.
330 - 340	Grey, micro-micaceous shale, slightly pyritic.
340 - 350	As above.
350 - 360	Grey, micro-micaceous shale.
360 - 370	As above.
370 - 380	Grey, micro-micaceous shale, with trace pyrite.
380 - 390	As above.
390 - 400	Grey, micro-micaceous shale, with very slight trace pyrite.
400 - 410	As Above
410 - 420	Grey, micro-micaceous shale, with very slight trace dolomite and limestone.
420 - 430	As above
430 - 440	Grey, micro-micaceous shale, and slight trace pyrite.
440 - 450	As above.
450 - 460	Grey, micro-micaceous shale, and slight trace pyrite.
460 - 470	As above.
470 - 480	Grey, micro-micaceous shale, and trace pyrite.
480 - 490	As above.
490 - 500	Grey, micro-micaceous shale, and trace pyrite.
500 - 510	Grey, micro-micaceous shale with trace pyrite.

510 - 520 Grey, micro-micaceous shale, with trace pyrite.

520 - 530 As above.

530 - 540 As Above.

540 - 550 As above.

550 - 560 Grey, micro-micaceous shale, slight trace light brown shale.

560 - 570 As above.

570 - 580 Grey, micro-micaceous shale, slight trace pyrite.

580 - 590 Grey, micro-micaceous shale.

590 - 600 Grey shale as above, with trace pyrite and trace black shale.

600 - 610 Grey shale.

610 - 620 Grey, micro-micaceous shale.

620 - 630 As above.

630 - 640 Grey, micro-micaceous shale, trace finely disseminated pyrite.

640 - 650 Grey, micro-micaceous shale.

650 - 660 Grey, micro-micaceous shale, trace finely disseminated pyrite.

660 - 670 As above.

670 - 680 Grey, micro-micaceous shale, trace pyrite.

680 - 690 Grey, micro-micaceous shale.

690 - 700 Grey, micro-micaceous shale.

700 - 710 As above.

710 - 720 Grey, micro-micaceous shale, with trace very finely disseminated pyrite, trace light brown shale.

720 - 730 As above.

730 - 740 Grey, micro-micaceous shale, trace pyrite, and trace hard light brown shale.

740 - 750	As above.
750 - 760	As above.
760 - 770	As above.
770 - 780	Grey, micro-micaceous shale with trace brown shale and trace rust shale.
780 - 790	
790 - 800	Grey, micro-micaceous shale, with trace pyrite.
800 - 810	Grey, micro-micaceous shale, with trace pyrite.
810 - 820	Grey, micro-micaceous shale.
820 - 830	Grey, micro-micaceous shale with trace pyrite.
830 - 840	Grey, micro-micaceous shale as above.
840 - 850	Grey shale, micro-micaceous in part, trace pyrite, and trace brown shale.
850 - 860	Grey, micro-micaceous shale, with trace finely disseminated pyrite.
860 - 870	Grey, micro-micaceous shale, and some finely disseminated pyrite.
870 - 880	As above.
880 - 890	As above.
890 - 900	Grey, micro-micaceous shale, and brown shale as above.
900 - 910	Grey, micro-micaceous shale, with some brown shale.
910 - 920	Grey, micro-micaceous shale, with trace brown shale.
920 - 930	As above.
930 - 940	Grey, micro-micaceous shale, with slight trace brown shale, trace pyrite.
940 - 950	Grey micaceous shale, trace brown shale, and trace pyrite.
950 - 960	Grey, micaceous shale, with trace brown shale, pyrite, and trace dark grey siliceous shale.
960 - 970	Grey, micro-micaceous shale.



970 - 980	As above.
980 - 990	Grey, micro-micaceous shale, and trace brown, siliceous shale, and pyrite.
990 - 1000	Grey, micro-micaceous shale, and trace pyrite.
1000 - 1010	Grey, micro-micaceous shale.
1010 - 1020	Grey, micro-micaceous shale.
1020 - 1030	Grey, micro-micaceous shale.
1030 - 1040	As above, with slight trace pyrite.
1040 - 1050	Grey, micro-micaceous shale.
1050 - 1060	Grey, micro-micaceous shale and 10% light brown siliceous shale.
1060 - 1070	Grey, micro-micaceous shale, and 5 to 10% light brown siliceous shale.
1070 - 1080	Grey, micro-micaceous shale, and trace light brown siliceous shale, trace pyrite.
1080 - 1090	As above.
1090 - 1100	Grey, micro-micaceous shale and trace pyrite.
1100 - 1110	As above.
1110 - 1120	Grey, micro-micaceous shale, with trace brown shale.
1120 - 1130	As above.
1130 - 1140	Grey, micro-micaceous shale, with trace brown shale.
1140 - 1150	Grey, micro-micaceous shale, with trace pyrite.
1150 - 1160	As above.
1160 - 1170	Grey shale as above, with trace brown shale.
1170 - 1180	Grey shale as above, with trace brown shale and pyrite.
1180 - 1190	As above.
1190 - 1200	Grey, micro-micaceous shale, with slight trace pyrite.
1200 - 1210	Grey, micro-micaceous shale, with 10% brown shale.

1210 - 1220	Grey, micro-micaceous shale, with 10% brown shale, and trace pyrite.
1220 - 1230	Grey, micro-micaceous shale, with 10% brown shale, trace pyrite.
1230 - 1240	Grey shale as above, with 10 to 15% brown shale, trace pyrite.
1240 - 1250	Grey, micro-micaceous shale, trace brown shale.
1250 - 1260	Grey shale as above, with trace brown shale, and trace pyrite.
1260 - 1270	Grey, micro-micaceous shale.
1270 - 1280	Grey, micro-micaceous shale, with trace brown shale.
1280 - 1290	Grey, micro-micaceous shale, trace brown shale, trace pyrite.
1290 - 1300	Grey shale, with trace brown shale.
1300 - 1310	Grey, micro-micaceous shale, with trace brown shale, pyrite.
1310 - 1320	Grey shale with trace pyrite.
1320 - 1330	Grey shale as above, with trace brown shale and pyrite.
1330 - 1340	Grey, micro-micaceous shale, with trace brown shale, trace pyrite.
1340 - 1350	As above.
1350 - 1360	As above.
1360 - 1370	Grey, micro-micaceous shale, with 10% brown shale and trace pyrite.
1370 - 1380	As above.
1380 - 1390	As above, with 10 to 15% brown shale.
1390 - 1400	As above.
1400 - 1410	Grey, micro-micaceous shale, with trace brown shale and trace finely disseminated pyrite.
1410 - 1420	Grey, micro-micaceous shale, with trace brown shale.
1420 - 1430	As above.
1430 - 1440	Grey, micro-micaceous shale, with trace brown shale and trace pyrite.

1440 - 1450	As above.
1450 - 1460	As above.
1460 - 1470	As above.
1470 - 1480	Grey, micro-micaceous shale, with trace brown shale, and trace pyrite.
1480 - 1490	Grey, micro-micaceous shale, and trace pyrite.
1490 - 1500	Grey, micro-micaceous shale, and some brown shale, with trace pyrite.
1500 - 1510	Grey, micro-micaceous shale, and pyrite.
1510 - 1520	Grey, micro-micaceous shale, trace pyrite, and trace brown shale.
1520 - 1530	Grey, micro-micaceous shale, and brown siliceous shale, 5 to 10%, and trace pyrite.
1530 - 1540	As above.
1540 - 1550	Grey, micro-micaceous shale, and trace pyrite.
1550 - 1560	Grey, micro-micaceous shale, and trace pyrite.
1560 - 1570	Grey, micro-micaceous shale, trace pyrite.
1570 - 1580	Grey, micro-micaceous shale, with trace pyrite.
1580 - 1590	As above.
1590 - 1600	As above.
1600 - 1610	Grey, micro-micaceous shale.
1610 - 1620	Grey and brownish micro-micaceous shale.
1620 - 1630	Grey and brownish-grey micro-micaceous shale, trace pyrite.
1630 - 1640	Grey, micro-micaceous shale.
1640 - 1650	Grey, micro-micaceous shale, trace pyrite.
1650 - 1660	Grey, micro-micaceous shale, trace pyrite.
1660 - 1670	Grey, micro-micaceous shale, trace pyrite, trace brown shale.

1670 - 1680	Grey, micro-micaceous shale, trace pyrite.
1680 - 1690	As above.
1690 - 1700	Grey, micro-micaceous shale, trace pyrite.
1700 - 1710	Grey, micro-micaceous shale, finely disseminated pyrite.
1710 - 1720	Grey, micro-micaceous shale, trace pyrite.
1720 - 1730	As above.
1730 - 1740	Grey, micro-micaceous shale, with trace pyrite.
1740 - 1750	Grey and brownish-grey, micro-micaceous shale, with trace pyrite.
1750 - 1760	Grey and brownish grey, micro-micaceous shale.
1760 - 1770	Grey, micro-micaceous shale, with trace pyrite.
1770 - 1780	Grey, micro-micaceous shale and trace brown shale, trace pyrite.
1780 - 1790	Grey and brownish-grey, micro-micaceous shale, trace pyrite.
1790 - 1800	As above.
1800 - 1810	Grey, micro-micaceous shale.
1810 - 1820	As above.
1820 - 1830	As above.
1830 - 1840	As above.
1840 - 1850	Grey, micro-micaceous shale.
1850 - 1860	Grey, micaceous shale, with finely disseminated pyrite.
1860 - 1870	Grey, micaceous shale, with trace pyrite.
1870 - 1880	Grey, micro-micaceous shale, trace pyrite.
1880 - 1890	Grey, micaceous shale, trace brown shale, trace pyrite.
1890 - 1900	Grey and brownish-grey, very slightly silty shale, trace pyrite.
1900 - 1910	Grey, micaceous shale, trace pyrite, slight trace brown shale.

1910 - 1920	Grey and brownish-grey, micro-micaceous shale, trace pyrite.
1920 - 1930	Grey and brownish-grey, micro-micaceous shale and trace pyrite.
1930 - 1940	As above.
1940 - 1950	Grey, micro-micaceous shale, with trace pyrite.
1950 - 1960	Grey shale as above, with trace pyrite, and slight trace brown shale.
1960 - 1970	Grey, micaceous shale, with trace brown shale, trace pyrite.
1970 - 1980	Grey, micro-micaceous shale, with trace pyrite.
1980 - 1990	Grey, micro-micaceous shale, and trace brown shale, trace pyrite.
1990 - 2000	Grey, micro-micaceous shale, with trace brown shale.
2000 - 2010	Grey, micro-micaceous shale, with trace pyrite, trace siltstone.
2010 - 2020	Grey, micro-micaceous shale, trace brown siltstone.
2020 - 2030	Grey shale as above, slightly silty.
2030 - 2040	Grey, micro-micaceous shale, brownish shale.
2040 - 2050	Grey, micro-micaceous shale and trace brownish shale.
2050 - 2060	As above.
2060 - 2070	Grey, micro-micaceous shale, trace pyrite, very slightly silty.
2070 - 2080	Grey and brownish-grey, micro-micaceous shale.
2080 - 2090	Grey, micro-micaceous shale.
2090 - 2100	Grey, micro-micaceous shale.
2100 - 2110	Grey, micro-micaceous shale, and brownish micaceous shale.
2110 - 2120	Grey, micaceous shale as above.
2120 - 2130	Grey and brownish-grey, micro-micaceous shale.

2130 - 2140	Grey, micro-micaceous shale, trace brown shale, very slightly silty.
2140 - 2150	Brownish-grey, micro-micaceous shale.
2150 - 2160	Brownish-grey, micro-micaceous shale, slightly silty.
2160 - 2170	Grey, micro-micaceous shale.
2170 - 2180	Grey and brownish-grey, micro-micaceous shale.
2180 - 2190	Grey, micro-micaceous shale, trace pyrite.
2190 - 2200	Grey, micro-micaceous shale.
2200 - 2210	Shale, dark grey, micro-micaceous (60 - 70% cavings)
2210 - 2230	As above.
2230 - 2240	As above.
2240 - 2250	As above.
2250 - 2260	As Above.
2260 - 2270	As above.
2270 - 2280	As above, with slickensides or bit damage
2280 - 2290	As above.
2290 - 2300	As above, with trace calcite infill in fractures.
2300 - 2310	Shale, dark grey, micro-micaceous
2310 - 2320	As above, with trace fissile grey shale.
2320 - 2330	As above.
2330 - 2340	As above, with trace fissile grey shale.
2340 - 2350	As above, with trace brown siltstone.
2350 - 2360	As above.
2360 - 2370	As above, with trace fissile grey shale.
2370 - 2380	As above.

2380 - 2390	As above.
2390 - 2400	As above.
2400 - 2410	Shale, dark grey, micro-micaceous, with trace carbonaceous partings.
2410 - 2420	As above (sample 99% cement).
2420 - 2430	As above.
2430 - 2440	As above.
2440 - 2450	As above, with trace white gypsum in fractures.
2450 - 2460	As above , with trace carbonaceous partings.
2460 - 2470	As above, with trace carbonaceous partings.
2470 - 2780	As above, with trace carbonaceous partings and secondary white calcite in veins.
2780 - 2790	As above, with trace carbonaceous partings.
2490 - 2500	As above.
2500 - 2510	Shale, dark grey, micro-micaceous, with carbonaceous partings.
2510 - 2520	As above, with trace pyrite
2520 - 2530	As above.
2530 - 2540	As above.
2540 - 2550	As above, with trace white calcite in fractures.
2550 - 2560	As above, with trace white calcite in fractures.
2560 - 2570	As above, with trace white calcite in fractures
2570 - 2580	As above.
2580 - 2590	As above.
2590 - 2600	As above.
2600 - 2610	Shale, dark grey, micro-micaceous, with carbonaceous partings and white calcite in fractures.

2610 - 2620	As above.
2620 - 2630	As above.
2630 - 2640	As above, with trace white calcite in fractures.
2640 - 2650	As above, with trace white calcite in fractures
2650 - 2660	As above.
2660 - 2670	As above.
2670 - 2680	As above.
2680 - 2690	As above.
2690 - 2700	As above, with trace pyrite and white calcite in fractures.
2700 - 2710	Shale, dark grey, micro-micaceous.
2710 - 2720	As above, with trace pyrite.
2720 - 2730	As above, with trace pyrite and carbonaceous partings.
2730 - 2740	As above, with trace pyrite and carbonaceous partings.
2740 - 2750	As above, with trace pyrite and carbonaceous partings.
2750 - 2760	As above.
2760 - 2770	As above.
2770 - 2780	As above.
2780 - 2790	As above, with carbonaceous partings, trace calcite in fractures, and trace buff shale (concretion).
2790 - 2800	As above, with carbonaceous partings, tract calcite in fractures, and trace buff shale (concretion)
2800 - 2810	Shale, dark grey, micro-micaceous, with carbonaceous partings, trace calcite and buff concretions.
2810 - 2820	As above, with carbonaceous partings and trace calcite in veins.
2820 - 2830	As above, with carbonaceous partings and trace calcite in veins.
2830 - 2840	As above, with carbonaceous partings, trace calcite in fractures and buff concretions.



- 2840 - 2850 As above, with carbonaceous partings, trace calcite in fractures and buff concretions.
- 2850 - 2860 As above, with buff concretions, trace secondary calcite and trace pyrite.
- 2860 - 2870 As above, with trace pyrite and secondary calcite.
- 2870 - 2880 As above, with buff concretions, trace secondary calcite and trace pyrite.
- 2880 - 2890 As above, with buff concretions, trace secondary calcite and trace pyrite.
- 2890 - 2900 As above, with buff concretions, trace secondary calcite and trace pyrite.
- 2900 - 2910 Shale, dark grey, micro-micaceous, with buff concretions and secondary white calcite.
- 2910 - 2920 As above, with carbonaceous partings and secondary white calcite.
- 2920 - 2930 As above, with trace pyrite.
- 2930 - 2940 As above, with secondary white calcite in fractures.
- 2940 - 2950 As above, with secondary calcite, buff concretions, and carbonaceous partings.
- 2950 - 2960 As above, with buff concretions and secondary white calcite.
- 2960 - 2970 As above, with secondary white calcite in veins
- 2970 - 2980 As above, with secondary white calcite, buff concretions and carbonaceous partings.
- 2980 - 2990 As above, with secondary white calcite, buff concretions and pyrite.
- 2990 - 3000 As above, with secondary white calcite.
- 3000 - 3010 Shale, dark grey, micro-micaceous, with trace brown concretions (marlstone).
- 3010 - 3020 As above.
- 3020 - 3030 As above, with trace brown concretions and trace pyrite.
- 3030 - 3040 As above, with secondary calcite and carbonaceous partings.

- 3040 - 3050 As above, with secondary calcite, carbonaceous partings, and trace pyrite.
- 3050 - 3060 As above, with trace pyrite.
- 3060 - 3070 As above, with trace pyrite.
- 3070 - 3080 As above, with brown concretions and trace pyrite.
- 3080 - 3090 As above, with brown concretions and secondary calcite.
- 3090 - 3100 As above, with secondary calcite in fractures.
- 3100 - 3110 Shale, dark grey, micro-micaceous, with trace pyrite and secondary calcite in fractures.
- 3110 - 3120 As above, with trace buff concretions and secondary white calcite.
- 3120 - 3130 As above, with trace pyrite, secondary calcite, and carbonaceous partings.
- 3130 - 3140 As above, with trace brown concretions and secondary calcite.
- 3140 - 3150 As above, with trace pyrite, secondary calcite, and carbonaceous partings.
- 3150 - 3160 As above, with trace buff concretions and secondary calcite.
- 3160 - 3170 As above, with trace buff concretions and secondary calcite.
- 3170 - 3180 As above, with trace buff concretions and secondary calcite.
- 3180 - 3190 As above, with trace buff concretions, secondary calcite, and pyrite.
- 3190 - 3200 As above, with trace buff concretions, secondary calcite, and pyrite.
- 3200 - 3210 Shale, dark grey, micro-micaceous, with carbonaceous partings.
- 3210 - 3220 As above.
- 3230 - 3230 No sample.
- 3230 - 3240 Shale, dark grey, micro-micaceous, with carbonaceous partings, secondary calcite, and pyrite.
- 3240 - 3250 As above, with carbonaceous partings, secondary calcite, and trace brown concretions.

- 3250 - 3260 Shale, dark grey, micro-micaceous, with carbonaceous partings, secondary calcite, and pyrite.
- 3260 - 3270 As above, with carbonaceous partings, secondary calcite, and pyrite.
- 3270 - 3280 As above, with trace brown concretions and secondary calcite.
- 3280 - 3290 As above.
- 3290 - 3300 As above, with brown concretions, secondary calcite, and carbonaceous partings.
- 3300 - 3310 Shale, dark grey, micro-micaceous, with brown concretions, (dolomite), carbonaceous partings and secondary calcite.
- 3310 - 3320 As above, with brown concretions, trace siltstone, carbonaceous partings, secondary calcite and pyrite.
- 3320 - 3330 As above, with brown concretions, carbonaceous partings, secondary calcite, and pyrite.
- 3330 - 3340 As above, with trace brown concretions and secondary calcite.
- 3340 - 3350 As above, with carbonaceous partings and pyrite.
- 3350 - 3360 As above, with carbonaceous partings and pyrite.
- 3360 - 3370 As above, with carbonaceous partings and secondary white calcite.
- 3370 - 3380 As above, with trace brown concretions, brown siltstone, carbonaceous partings, secondary calcite, and pyrite.
- 3380 - 3390 As above, with trace brown concretions, carbonaceous partings, secondary calcite, and pyrite.
- 3390 - 3400 As above, with trace brown concretions and secondary white calcite.
- 3400 - 3410 Shale, dark grey, micro-micaceous, with carbonaceous partings and secondary white calcite.
- 3410 - 3420 As above, with brown concretions (dolomite) and secondary white calcite.
- 3420 - 3430 As above, with brown concretions (dolomite) and secondary white calcite.
- 3430 - 3440 As above, with brown concretions, secondary white calcite and pyrite.

- 3440 - 3450 As above, with brown concretions, secondary calcite, carbonaceous partings, pyrite, and clear quartz (cement?).
- 3450 - 3460 As above, with brown concretions, secondary calcite, pyrite, and quartz lined vugs.
- 3460 - 3470 As above, with brown concretions, secondary calcite, and pyrite.
- 3470 - 3480 As above, with trace pyrite.
- 3480 - 3490 As above, with brown concretions, secondary calcite, carbonaceous partings, and pyrite.
- 3490 - 3500 As above, with brown concretions, secondary calcite, and pyrite.
- 3500 - 3510 Shale, dark grey, micro-micaceous, with trace brown concretions, secondary calcite, and pyrite.
- 3510 - 3520 As above.
- 3520 - 3530 As above, with trace brown concretions.
- 3530 - 3540 As above, with trace brown concretions and trace silt grains in shale.
- 3540 - 3550 As above, with trace brown concretions
- 3550 - 3560 As above, with brown concretions, and pyrite.
- 3560 - 3570 As above, with brown concretions, trace secondary calcite, pyrite, and glauconite and siltstone.
- 3570 - 3580 As above, with brown concretions (dolomite and quartz), trace argillaceous, glauconitic siltstone, secondary calcite, and pyrite.
- 3580 - 3590 As above, with brown concretions, secondary calcite, and trace argillaceous siltstone.
- 3590 - 3600 As above, with brown concretions, trace secondary calcite and trace siltstone.
- 3600 - 3610 Shale, dark grey, micro-micaceous, with brown concretions, secondary calcite, argillaceous, glauconitic siltstone, and pyrite.
- 3610 - 3620 As above, with brown concretions, secondary calcite, argillaceous siltstone, pyrite, and quartz.
- 3620 - 3630 Sandstone, clear, angular, quartz, very fine, glauconitic Kaolin cement, and shale as above, and trace siltstone as above.

- 3630 - 3640 Sandstone as above, with shale and siltstone as above.
- 3640 - 3650 Shale, dark grey, micro-micaceous, with brown concretions, trace secondary calcite and clear quartz.
- 3650 - 3660 As above, with brown concretions and trace pyrite.
- 3660 - 3670 As above, with brown concretions, trace pyrite, siltstone, and glauconite.
- 3670 - 3680 As above, with brown concretions, trace siltstone, pyrite and "foraminifera"
- 3680 - 3690 As above, with brown concretions, trace pyrite, siltstone, secondary calcite, and trace gypsum.
- 3690 - 3700 As above, with brown concretions, trace siltstone, glauconite, pyrite and forams.
- 3700 - 3710 Shale, dark grey, micro-micaceous, with brown concretions, trace siltstone, pyrite, secondary calcite and forams.
- 3710 - 3720 As above, with brown concretions, minor siltstone, trace secondary calcite, pyrite, and forams.
- 3720 - 3730 As above, with brown concretions, trace siltstone and gypsum.
- 3730 - 3740 As above, with brown concretions, trace siltstone, secondary calcite, pyrite, clear quartz, and forams.
- 3740 - 3750 As above, with brown concretions, trace siltstone, trace rusty shale, trace pyrite.
- 3750 - 3760 As above, with brown concretions, trace siltstone, trace rusty shale, trace pyrite.
- 3760 - 3770 As above, with brown concretions, trace siltstone, and trace pyrite.
- 3770 - 3780 As above, with brown concretions, and trace siltstone.
- 3780 - 3790 As above, with trace siltstone, secondary calcite, and pyrite.
- 3790 - 3800 As above, with brown concretions, trace siltstone, and pyrite.
- 3800 - 3810 Shale, dark grey, micro-micaceous, with interbedded brown argillaceous siltstone.
- 3810 - 3820 As above, with brown argillaceous siltstone, and trace pyrite.

- 3820 - 3830 As above, with brown concretions, brown argillaceous siltstone, trace pyrite.
- 3830 - 3840 As above, with abundant brown argillaceous siltstone, trace pyrite, and clear quartz.
- 3840 - 3850 No sample.
- 3850 - 3860 No sample.
- 3860 - 3900 Poor sample - Cavings - Shale as above, with trace siltstone and sandstone.
- 3900 - 3910 Shale, dark grey, micro-micaceous, with brown concretions, pyrite, trace siltstone, secondary calcite, and forams.
- 3910 - 3920 As above, with brown concretions, pyrite, trace brown argillaceous siltstone, trace secondary calcite, and glauconite.
- 3920 - 3930 As above, with brown concretions, pyrite, and trace brown argillaceous siltstone.
- 3930 - 3940 As above, with brown concretions, pyrite, trace brown argillaceous siltstone and secondary calcite.
- 3940 - 3950 As above, with brown concretions, pyrite, trace brown argillaceous siltstone and secondary calcite.
- 3950 - 3960 As above, with brown concretions, pyrite, trace brown argillaceous siltstone and secondary calcite.
- 3960 - 3970 As above, with brown concretions, pyrite, trace gypsum and secondary white calcite.
- 3970 - 3980 As above, with brown concretions, pyrite, trace gypsum and secondary calcite.
- 3980 - 3990 As above, with pyrite, gypsum, and trace white secondary calcite.
- 3990 - 4000 As above, with pyrite, gypsum, trace white secondary calcite.
- 4000 - 4010 Shale, dark grey, micro-micaceous, with brown concretions, pyrite, quartz crystals, gypsum, and secondary calcite.
- 4010 - 4020 As above, with brown concretions, pyrite, quartz crystals, gypsum, and secondary calcite.

- 4020 - 4030 As above, with pyrite, gypsum, and secondary calcite.
- 4030 - 4040 As above, with pyrite, carbonaceous partings, gypsum, and secondary calcite.
- 4040 - 4050 As above, with brown concretions, pyrite, carbonaceous partings, gypsum, and secondary calcite, and quartz crystals.
- 4050 - 4060 As above, with pyrite, carbonaceous partings, gypsum, secondary calcite, and quartz crystals.
- 4060 - 4070 As above, with pyrite, carbonaceous partings, gypsum, and secondary calcite.
- 4070 - 4080 As above, with brown concretions, pyrite, carbonaceous partings, gypsum, and secondary calcite.
- 4080 - 4090 As above, with pyrite, carbonaceous partings, gypsum, and secondary calcite.
- 4090 - 4100 As above, with brown concretions, pyrite, carbonaceous partings, gypsum, and secondary calcite.
- 4100 - 4110 Shale, dark grey, micro-micaceous, with pyrite and trace brown argillaceous siltstone.
- 4110 - 4120 As above, with trace brown concretions, pyrite, and white gypsum.
- 4120 - 4130 As above, with trace brown concretions, pyrite, and secondary white calcite.
- 4130 - 4140 As above, with trace brown concretions and pyrite.
- 4140 - 4150 As above, with trace brown concretions and pyrite.
- 4150 - 4160 As above, with trace brown concretions, pyrite, and gypsum.
- 4160 - 4170 As above, with trace brown concretions, pyrite, and gypsum.
- 4170 - 4180 As above, with trace brown concretions and pyrite.
- 4180 - 4190 As above, with trace brown concretions, pyrite, and gypsum.
- 4190 - 4200 As above, with trace brown concretions, pyrite, and gypsum.

- 4200 - 4210 Shale, dark grey, micro-micaceous, with trace brown concretions, carbonaceous partings, pyrite, secondary calcite, siltstone, and gypsum.
- 4210 - 4220 As above, with trace brown concretions, carbonaceous partings, pyrite, secondary calcite, and gypsum.
- 4220 - 4230 As above, with trace brown concretions, carbonaceous partings, pyrite, secondary calcite, and gypsum.
- 4230 - 4240 As above, with brown concretions, carbonaceous partings, pyrite, secondary calcite and gypsum.
- 4240 - 4250 As above, with trace brown concretions carbonaceous partings, and pyrite.
- 4250 - 4260 As above, with trace brown concretions, carbonaceous partings, pyrite, secondary calcite, and gypsum.
- 4260 - 4270 As above, with trace brown concretions, carbonaceous partings, pyrite, secondary calcite, and gypsum.
- 4270 - 4280 As above, with trace brown concretions, carbonaceous partings, pyrite, secondary calcite, and gypsum.
- 4280 - 4290 As above, with carbonaceous partings, pyrite, and gypsum.
- 4290 - 4300 As above, with carbonaceous partings, pyrite, gypsum, and secondary calcite.
- 4300 - 4310 Shale, dark grey, micro-micaceous, with trace carbonaceous partings, pyrite, gypsum, and secondary calcite.
- 4310 - 4320 As above, with trace brown concretions, carbonaceous partings, pyrite, secondary calcite, and gypsum.
- 4320 - 4330 As above, with brown concretions, carbonaceous partings, and pyrite.
- 4330 - 4340 As above, with brown concretions, carbonaceous partings, and pyrite.
- 4340 - 4350 As above, with brown concretions, carbonaceous partings, secondary calcite, gypsum, and pyrite.
- 4350 - 4360 As above, with brown concretions, carbonaceous partings, secondary calcite, gypsum, and pyrite.



- 4360 - 4370 As above, with brown concretions, carbonaceous partings, secondary calcite, gypsum, and pyrite.
- 4370 - 4380 As above, with brown concretions, carbonaceous partings, secondary calcite, gypsum, and pyrite.
- 4380 - 4390 As above, with brown concretions, carbonaceous partings, pyrite, gypsum, and trace siltstone.
- 4390 - 4400 As above, with carbonaceous partings, pyrite, and gypsum.
- 4400 - 4410 Shale, dark grey, micro-micaceous, with carbonaceous partings, pyrite, gypsum, and trace siltstone.
- 4410 - 4420 As above, with carbonaceous partings, pyrite, and gypsum.
- 4420 - 4430 As above, with carbonaceous partings and gypsum.
- 4430 - 4440 As above, with carbonaceous partings.
- 4440 - 4450 As above, with carbonaceous partings, pyrite.
- 4450 - 4460 As above, with trace brown concretions, pyrite, carbonaceous partings and secondary calcite.
- 4460 - 4470 As above, with trace brown concretions, pyrite, carbonaceous partings, and gypsum.
- 4470 - 4480 As above, with pyrite, carbonaceous partings, and trace brown argillaceous siltstone.
- 4480 - 4490 No sample.
- 4490 - 4560 Poor sample - Cavings - Shale, as above, with trace pyrite and gypsum.
- 4560 - 4570 Shale, dark grey, micro-micaceous, with trace gypsum and pyrite.
- 4570 - 4580 As above, with trace pyrite, gypsum, quartz crystals, and glauconite.
- 4580 - 4590 As above, with trace pyrite, gypsum, and quartz crystals.
- 4590 - 4600 As above, with trace brown concretions, gypsum, and quartz crystals.
- 4600 - 4610 Shale, dark grey, micro-micaceous, with trace pyrite and secondary calcite.

- 4610 - 4620 As above, with trace brown concretions, pyrite, gypsum and secondary calcite.
- 4620 - 4630 As above, with trace brown concretions, pyrite, gypsum and secondary calcite.
- 4630 - 4640 As above, with clear quartz crystals, pyrite, gypsum and secondary calcite.
- 4640 - 4650 As above, with trace brown concretions, pyrite, and white gypsum.
- 4650 - 4660 As above, with trace brown concretions, pyrite, and white gypsum.
- 4660 - 4670 As above, with trace pyrite and white gypsum.
- 4670 - 4680 As above, with trace brown concretions, pyrite, and gypsum.
- 4680 - 4690 As above, with trace pyrite and gypsum
- 4690 - 4700 As above, with trace pyrite and gypsum.
- 4700 - 4710 Shale, dark grey, micro-micaceous, with trace brown concretions (dolomite and quartz), pyrite, and white gypsum.
- 4710 - 4720 As above, with trace brown concretions (dolomite and quartz), pyrite, and white gypsum.
- 4720 - 4730 As above, with trace brown concretions, pyrite, gypsum, and carbonaceous partings.
- 4730 - 4740 As above, with trace brown concretions, pyrite, gypsum, and carbonaceous partings.
- 4740 - 4750 As above, with trace brown concretions, pyrite, gypsum and carbonaceous partings.
- 4750 - 4760 As above, with trace brown concretions, pyrite, and gypsum.
- 4760 - 4770 As above, with trace pyrite and gypsum.
- 4770 - 4780 As above, with trace pyrite and gypsum
- 4780 - 4790 As above, with trace pyrite and gypsum.
- 4790 - 4800 As above, with trace brown concretions, pyrite, gypsum, and secondary calcite.

- 4800 - 4810 Shale, dark grey, micro-micaceous, with trace brown concretions, pyrite, gypsum, and carbonaceous partings.
- 4810 - 4820 As above, with trace brown concretions, pyrite, and gypsum.
- 4820 - 4830 As above, with trace brown concretions, pyrite, and gypsum.
- 4830 - 4840 As above, with pyrite, gypsum, and quartz crystals.
- 4840 - 4850 As above, with trace brown concretions, pyrite, and gypsum.
- 4850 - 4860 As above, with trace pyrite and gypsum.
- 4860 - 4870 As above, with trace pyrite and gypsum.
- 4870 - 4880 As above, with trace pyrite, gypsum, and forams?
- 4880 - 4890 As above, with pyrite and gypsum.
- 4890 - 4900 As above, with pyrite and gypsum.
- 4900 - 4910 Shale, dark grey, micro-micaceous, with trace brown concretions, pyrite, and gypsum.
- 4910 - 4920 As above, with trace brown concretions, pyrite, gypsum, and secondary calcite.
- 4920 - 4930 As above, with trace brown concretions, pyrite, and gypsum.
- 4930 - 4940 As above, with pyrite and gypsum.
- 4940 - 4950 As above, with trace quartz crystals, pyrite and gypsum.
- 4950 - 4960 As above, with trace brown concretions, pyrite, and gypsum.
- 4960 - 4970 As above, with trace quartz crystals, pyrite, and gypsum.
- 4970 - 4980 Shale, dark grey and reddish brown, micro-micaceous, with trace pyrite.
- 4980 - 4990 Shale, dark grey, micro-micaceous with trace pyrite.
- 4990 - 5000 As above, with trace pyrite.
- 5000 - 5010 Shale, dark grey, micro-micaceous, with trace brown concretions, pyrite, and gypsum.
- 5010 - 5020 As above, with trace brown concretions, pyrite, and gypsum.
- 5020 - 5030 As above, with trace brown concretions, pyrite, and gypsum.

- 5030 - 5040 As above, with trace brown concretions and pyrite.
- 5040 - 5050 As above, with trace pyrite and carbonaceous partings.
- 5050 - 5060 As above, with trace brown concretions, pyrite, gypsum, and secondary calcite.
- 5060 - 5070 As above, with trace brown concretions, pyrite and gypsum.
- 5070 - 5080 As above, with trace brown concretions, pyrite, gypsum, and ammonite fragments.
- 4080 - 5090 As above, with trace brown concretions and pyrite.
- 5090 - 5100 As above, with trace pyrite.
- 5100 - 5110 Shale, dark grey, micro-micaceous, with trace brown concretions, pyrite, and gypsum.
- 5110 - 5120 As above, with trace brown concretions and pyrite.
- 5120 - 5130 As above, with trace pyrite and gypsum.
- 5130 - 5140 As above, with trace brown concretions and pyrite.
- 5140 - 5150 As above, with trace pyrite.
- 5150 - 5160 As above, with trace pyrite and gypsu.
- 5160 - 5170 As above, with trace pyrite and gypsum.
- 5170 - 5180 As above, with trace pyrite and gypsum.
- 5180 - 5190 As above, with trace pyrite and gypsum.
- 5190 - 5200 As above, with trace quartz crystals, pyrite, and gypsum.
- 5200 - 5210 Shale, dark grey, micro-micaceous, with pyrite, gypsum, and trace forams?
- 5210 - 5220 As above, with trace pyrite.
- 5220 - 5230 As above, with trace brown concretions, pyrite, gypsum, and forams?
- 5230 - 5240 As above, with trace pyrite, gypsum, and quartz crystals.
- 5240 - 5250 As above, with trace brown concretions, pyrite, gypsum, and quartz crystals.
- 5250 - 5260 As above, with trace pyrite, gypsum, quartz crystals, and forams?

5260 - 5270	No sample.
5270 - 5280	No sample.
5280 - 5290	No sample.
5290 - 5300	No sample.
5300 - 5310	Shale, dark grey, micro-micaceous, with trace gypsum and pyrite.
5310 - 5320	As above, with trace gypsum, pyrite, and clear quartz crystals.
5320 - 5330	As above, with trace gypsum and pyrite.
5330 - 5340	As above, with brown concretions, gypsum, pyrite, and quartz crystals.
5340 - 5350	As above, with brown concretions, gypsum, pyrite, and quartz crystals.
5350 - 5360	As above, with gypsum and pyrite.
5360 - 5370	Shale as above, and siltstone, salt and pepper, silica cement, trace argillaceous streaks.
5370 - 5400	Siltstone as above. Siltstone less than 1% of sample but penetration rate suggests siltstone with little or no shale.
5400 - 5450	Sample appears to be predominately cavings. The interval does appear to be a shale as above since no siltstone cuttings were found.
5450 - 5460	Shale, dark grey, micro-micaceous, with pyrite, gypsum in fractures, slightly calcareous.
5460 - 5470	Shale as above, with quartzite grains.
5470 - 5480	As above, abundant cavings.
5480 - 5490	Shale, dark grey, micro-micaceous, with pyrite and quartz grains.
5490 - 5500	Shale, grey to dark grey and grey to grey brown, micro-micaceous, slightly dolomitic with pyrite, gypsum, calcite in hairline fractures, trace siltstone, grey to brown.
5500 - 5510	As above.

- 5510 - 5520 Shale, dark grey, micro-micaceous, abundant pyrite, hairline fractures, secondary calcite, pyrite, gypsum, quartz grains, concretions.
- 5520 - 5530 As above, with shale, brown, slightly dolomitic in part.
- 5530 - 5540 Shale, medium to dark grey to grey-brown, micro-micaceous, dolomitic in part, with pyrite, gypsum, quartz grains, calcite, slight concretions.
- 5540 - 5550 As above, with trace limonite.
- 5550 - 5560 Shale, dark grey to medium grey to grey-brown, micro-micaceous, slightly black, platy, carbonaceous, trace pyrite, gypsum, quartz grains, calcite, concretions.
- 5560 - 5570 As above, with trace siltstone, grey-brown.
- 5570 - 5580 As above, with slight trace siltstone, grey-brown.
- 5580 - 5590 As above.
- 5590 - 5600 Shale, medium to dark grey, micro-micaceous, with fractures filled with pyrite, gypsum, some quartz grains, some concretions.
- 5600 - 5610 Cavings.
- 5610 - 5620 Shale, medium to dark grey, micro-micaceous, with fractures, with gypsum, some quartz grains and with pyrite concretions.
- 5620 - 5630 Shale, medium to dark grey, micro-micaceous, with fractures filled with gypsum and pyrite.
- 5630 - 5640 Shale as above, and siltstone tan to brown, siliceous, sandy in part, hard.
- 5640 - 5650 Siltstone, tan to brown, siliceous, sandy in part, hard, sharp.
- 5650 - 5660 Siltstone, brown to dark grey, siliceous with trace biotite, some slightly sandy, very hard, tight.
- 5660 - 5670 Siltstone, salt and pepper, brown to dark grey, siliceous, with thin streaks of sandstone, very finely grained, salt and pepper, siliceous, trace gypsum, no porosity.
- 5670 - 5680 Siltstone, brown to dark grey, very slightly dolomitic, argillaceous, with streaks of shale, dark grey, micro-micaceous, slightly carbonaceous.

- 5680 - 5690 Siltstone, salt and pepper, dark grey, with trace sandstone, very fine grained, salt and pepper, siliceous, with interbedded shale, as above, some gypsum.
- 5690 - 5700 Siltstone, as above.
- 5700 - 5710 Siltstone, salt and pepper, siliceous, with trace quartz grains and gypsum.
- 5710 - 5720 Siltstone, as above, with some pyrite.
- 5720 - 5730 No sample.
- 5730 - 5740 Shale, medium to dark grey, micro-micaceous with streaks of siltstone, grey, siliceous, fractures with gypsum and quartz grain filling.
- 5740 - 5750 Siltstone, salt and pepper, dark grey, siliceous, slightly dolomitic, with pyrite and fractures with gypsum, and quartz grains, and streaks of shale, dark grey, with pyrite, some slightly dolomitic.
- 5750 - 5760 Siltstone, brown to dark grey, siliceous to some slightly dolomitic, with pyrite and fractures with quartz grains and gypsum and streaks of sandstone, very fine grained, brown, salt and pepper, very siliceous, subangular, poorly sorted, no porosity.
- 5760 - 5770 Siltstone, salt and pepper, brown to dark grey, siliceous argillaceous, with gypsum, pyrite and quartz grains.
- 5770 - 5780 Siltstone, as above, with interbeds of shale, medium to dark grey, micro-micaceous, with pyrite, gypsum, and quartz grains infilling fractures.
- 5780 - 5790 Siltstone, brown to grey, siliceous, argillaceous, with interbeds of sandstone, very fine grained, salt and pepper, tan, slightly dolomitic, some silty, with pyrite, sub-rounded to subangular, poorly sorted, poor porosity.
- 5790 - 5800 Siltstone, grey, siliceous, dolomitic, argillaceous, with streaks of shale, dark grey, micro-micaceous, slightly carbonaceous.
- 5800 - 5810 Shale, medium to dark grey, micro-micaceous, slightly carbonaceous, with thin beds of siltstone as above.
- 5810 - 5820 Shale as above, with interbeds of siltstone, grey to dark grey, slightly dolomitic, argillaceous, with pyrite.

- 5820 - 5830 Shale, dark grey, micro-micaceous, slightly dolomitic, with fractures, pyrite, some slightly silty.
- 5830 - 5840 Shale, dark grey, micro-micaceous, slightly dolomitic, with fractures, pyrite, and streaks of siltstone, brown, siliceous, slightly dolomitic, argillaceous.
- 5840 - 5850 Siltstone, brown, siliceous, slightly dolomitic, argillaceous, with abundant pyrite.
- 5850 - 5860 As above, with streaks of shale, dark grey to black, carbonaceous, some dolomitic.
- 5860 - 5870 Siltstone, tan, salt and pepper, siliceous, slightly dolomitic, some argillaceous, hard.
- 5870 - 5880 Sandstone, very fine to fine grained, slightly silty, trace salt and pepper, very siliceous, arkosic, argillaceous, with fractures, quartz crystals, pyritic, angular to sub-rounded, poor porosity, poor sorting, trace Kaolin.
- 5880 - 5890 Sandstone, very fine to fine grained, as above.
- 5890 - 5900 Sandstone, very fine to fine grained, tan, salt and pepper, very siliceous, arkosic, slightly argillaceous, slightly pyritic, slightly silty, fractures with quartz crystals, sub-angular to sub-rounded, poor sorting, poor porosity.
- 5900 - 5910 Shale, dark grey to black, with some pyrite, and sandstone, very fine grained, tan, salt and pepper, siliceous, arkosic, slightly pyritic, some fractures with quartz crystals; siltstone, dark grey, siliceous, with pyrite.
- 5910 - 5920 As above.
- 5920 - 5930 Sandstone, very fine grained, salt and pepper, siliceous, arkosic, slightly silty, with fractures with quartz crystals and some pyrite and siltstone, dark grey, siliceous, with trace pyrite, streaks of shale, dark grey to black, with abundant pyrite.
- 5930 - 5940 Sandstone as above, very silty, with shale as above.
- 5940 - 5950 Siltstone, grey to dark grey, siliceous, with streaks of sandstone as above, and with shale, dark grey, with abundant pyrite.



- 5950 - 5960 Sandstone, very fine to fine grained, with occasional medium grained, salt and pepper, grey, siliceous, arkosic, slightly dolomitic, with fractures with quartz crystals and grains, shale, dark grey to black, slightly pyritic.
- 5960 - 5970 Siltstone, grey to dark grey, slightly sandy, sandstone as above, shale, dark grey with abundant pyrite.
- 5970 - 5980 Siltstone, grey to dark grey, siliceous; shale, dark grey, with abundant pyrite.
- 5980 - 5990 Sandstone, very fine to fine grained, occasional medium grained salt and pepper, siliceous, some slightly dolomitic, arkosic, with fractures, with quartz crystals and grains, trace gypsum.
- 5990 - 6000 Sandstone as above, sub-angular to sub-rounded, poor sorting, poor porosity, with some fractured porosity; siltstone, grey to dark grey, siliceous, argillaceous, some gypsum and Kaolin.
- 6000 - 6010 Sandstone, very fine to fine grained, salt and pepper, siliceous, arkosic, slightly argillaceous, with fractures, with quartz crystals, some kaolin and gypsum.
- 6010 - 6020 Siltstone, dark grey to black, siliceous, some pyrite, with sandstone as above.
- 6020 - 6030 Siltstone, grey to dark grey, siliceous, some pyrite, shale, grey to dark grey, some silty, micro-micaceous with pyrite.
- 6030 - 6040 Siltstone, grey to dark grey, siliceous to slightly dolomitic, micro-micaceous, with pyrite and kaolin, shale, grey to dark grey, micro-micaceous, some silty, with pyrite.
- 6040 - 6050 Siltstone and shale as above, sandstone very fine grained, salt and pepper, siliceous, arkosic, with kaolin and quartz crystals.
- 6050 - 6060 Siltstone, grey to dark grey, siliceous to slightly dolomitic, micro-micaceous, with pyrite, shale and sandstone as above.
- 6060 - 6070 Siltstone, grey to dark grey, siliceous to slightly dolomitic, with pyrite, kaolin, quartz, and fractures, shale, grey to dark grey, with pyrite, slightly dolomitic.

- 6070 - 6080 Siltstone, grey to dark grey, siliceous to slightly dolomitic, with pyrite, and fractures, with quartz; shale, grey to dark grey, micro-micaceous, some silty, with pyrite and some fractures, with quartz.
- 6080 - 6090 Siltstone as above, shale, grey to dark grey, micro-micaceous, some silty, some carbonaceous, trace pyrite, trace ironstone.
- 6090 - 6100 Siltstone, grey, siliceous, with pyrite, some sandy; shale, dark grey to black, micro-micaceous to carbonaceous.
- 6100 - 6110 Siltstone, grey, salt and pepper, some sandy, with pyrite, siliceous to slightly dolomitic, with fractures with quartz and shale, grey to dark grey, micro-micaceous, with pyrite, fractures with quartz.
- 6110 - 6120 Sandstone, very fine grained, silty, argillaceous, salt and pepper, slightly dolomitic to siliceous, with pyrite, siltstone, grey to dark grey, siliceous to slightly dolomitic, with pyrite; shale, dark grey, some slightly carbonaceous.
- 6120 - 6130 Sandstone, very fine grained, salt and pepper, siliceous, arkosic, micaceous and siltstone as above.
- 6130 - 6140 Siltstone, grey to dark grey, siliceous to very slightly dolomitic, argillaceous.
- 6140 - 6150 Siltstone, grey to dark grey, siliceous, argillaceous; shale, grey to dark grey, some silty, some micro-micaceous, with pyrite.
- 6150 - 6160 Siltstone, grey to dark grey, siliceous, argillaceous, micaceous, some sandy; shale, grey to dark grey, some silty, some micro-micaceous, with pyrite.
- 6160 - 6170 Siltstone, as above, some arkosic.
- 6170 - 6180 Shale, grey to dark grey, some silty, some micro-micaceous, with fractures with quartz grains, some pyrite.
- 6180 - 6190 Siltstone, dark grey to brown, argillaceous, siliceous, shale, dark grey to black, some silty, some soft carbonaceous, some pyrite.
- 6190 - 6200 Sandstone, very fine grained, salt and pepper, some dolomitic, argillaceous, with kaolin, friable to firm, sub-angular to sub-rounded, poor sorting, trace intergranular porosity, siltstone as above.

- 6200 - 6210 Shale, dark grey to black, micro-micaceous, with pyrite; sandstone, very fine grained to silty, salt and pepper, siliceous, friable to firm, kaolin, arkosic and sandstone, very fine to fine grained to silty, salt and pepper, siliceous, argillaceous, friable to firm, with kaolin, siltstone as above, trace intergranular porosity.
- 6210 - 6220 As above.
- 6220 - 6230 Siltstone, brown to dark grey, siliceous to dolomitic, argillaceous, trace pyrite.
- 6230 - 6240 Sandstone, very fine to fine grained, brown, salt and pepper, siliceous, arkosic, argillaceous, some pyrite, some kaolin, friable to firm, trace intergranular porosity, shale, dark grey, with pyrite and coal partings.
- 6240 - 6250 Shale, dark grey to dark brown, some silty, with pyrite.
- 6250 - 6260 Shale, dark grey to dark brown, silty to carbonaceous.
- 6260 - 6270 As above, some platéy.
- 6270 - 6280 Shale, dark grey to dark brown, silty, some carbonaceous.
- 6280 - 6290 Shale, dark grey to black, some platéy, some carbonaceous, trace coal.
- 6290 - 6300 Shale, dark grey, some silty.
- 6300 - 6310 Shale, as above, with interbeds siltstone, grey-brown, siliceous, sandy, dolomitic in part, argillaceous, with concretions and pyrite.
- 6310 - 6320 Shale, dark grey to dark grey-brown, platéy, some pyrite.
- 6320 - 6330 Shale as above, carbonaceous, with interbeds siltstone, grey-brown, very siliceous, with some pyrite.
- 6330 - 6340 Shale as above.
- 6340 - 6350 Sandstone, very fine grained, salt and pepper, siliceous arkosic, argillaceous, with kaolin, pyrite, and pyrite nodules, firm, sub-angular to sub-rounded, no porosity.
- 6350 - 6360 Shale, dark grey to brown, slightly silty to silty, with pyrite.
- 6360 - 6370 Siltstone, grey-brown to dark grey, siliceous, some pyrite.

- 6370 - 6380 Shale, grey to dark grey to black, some silty, some pyrite.
- 6380 - 6390 Sandstone, very fine grained, salt and pepper, siliceous, arkosic.
- 6390 - 6400 Shale, grey to dark grey, silty, with pyrite, siliceous to very slightly dolomitic.
- 6400 - 6410 As above.
- 6410 - 6420 Shale, grey to dark grey to black, some micro-micaceous, some silty, with trace pyrite, calcite.
- 6420 - 6430 Shale, grey to dark grey, some silty, with pyrite.
- 6430 - 6440 Shale, dark grey to black, siliceous, micro-micaceous, platy, with abundant pyrite.
- 6440 - 6450 Shale, dark grey, micaceous, siliceous, some pyrite.
- 6450 - 6460 Shale, grey to dark grey to black, siliceous, some silty, some micro-micaceous, with pyrite.
- 6460 - 6470 As above.
- 6470 - 6480 Shale as above, with streaks of siltstone, dark grey, siliceous argillaceous, some brown, slightly dolomitic.
- 6480 - 6490 Shale, grey to dark grey to black, some silty, some carbonaceous, some dolomitic.
- 6490 - 6500 Shale as above, with pyrite and siltstone, light to dark grey, dolomitic to siliceous, with pyrite, some fractures and calcite.
- 6500 - 6510 Siltstone, grey to dark grey, siliceous, pyritic, with fractures and quartz grains.
- 6510 - 6520 Sandstone, very fine grained, medium grey, salt and pepper, siliceous, argillaceous, with trace pyrite, kaolin and fractures with quartz grains.
- 6520 - 6530 Sandstone as above, becoming silty.
- 6530 - 6540 Shale, dark grey, some silty.
- 6540 - 6550 Siltstone, grey to dark grey, argillaceous, siliceous.
- 6550 - 6560 Siltstone as above, sandstone as above.

- 6560 - 6570 Shale, grey to dark grey, micro-micaceous, some silty, calcareous to dolomitic, with fractures, and siltstone, light to dark grey, siliceous to slightly dolomitic, argillaceous, with pyrite and fractures with quartz grains.
- 6570 - 6580 Siltstone, dark grey, siliceous to slightly dolomitic, argillaceous, some fractures with quartz grains, trace kaolin, pyrite.
- 6580 - 6590 Shale, black, some silty, carbonaceous.
- 6590 - 6600 No sample.
- 6600 - 6610 Siltstone, dark grey, siliceous to slightly dolomitic, argillaceous.
- 6610 - 6620 Shale, dark grey, silty, some carbonaceous.
- 6620 - 6630 Shale, dark grey, carbonaceous, with some laminated coal.
- 6630 - 6640 As above.
- 6640 - 6650 Shale as above, with fractures, with quartz, slightly dolomitic, abundant pyrite, some silty.
- 6650 - 6660 As above, with pyrite cubes and flakes.
- 6660 - 6670 Shale, dark grey to black, micro-micaceous, some silty, with pyrite.
- 6670 - 6680 As above.
- 6680 - 6690 Shale, as above.
- 6690 - 6700 Shale, medium to dark grey, micro-micaceous, some silty, slightly dolomitic, with pyrite.
- 6700 - 6710 As above, with fractures with limestone filling.
- 6710 - 6720 Shale, medium to dark grey, some silty, micro-micaceous, slightly dolomitic, with pyrite fractures, with secondary dolomite.
- 6720 - 6730 As above.
- 6730 - 6740 Shale, dark grey, very silty, siliceous with pelletoidal pyrite and siderite, some fossil fragments.
- 6740 - 6750 As above.

- 6750 - 6760 Shale, medium to dark grey, slightly silty, siliceous, some pyrite, some fractures, with dolomite and pyrite.
- 6760 - 6770 As above.
- 6770 - 6780 Shale as above.
- 6780 - 6790 Shale as above.
- 6790 - 6800 Shale as above.
- 6800 - 6810 Shale, medium to dark grey, slightly silty, micro-micaceous.
- 6810 - 6820 Shale, medium to dark grey, some silty, siliceous, with pyrite.
- 6820 - 6830 Shale, medium grey, siliceous to slightly dolomitic, micro-micaceous, slightly silty.
- 6830 - 6840 As above.
- 6840 - 6850 As above.
- 6850 - 6860 Shale, dark grey to black, siliceous, abundant pyrite, some carbonaceous.
- 6860 - 6870 As above.
- 6870 - 6880 Shale, as above, with fractures and calcite.
- 6880 - 6890 Shale, dark grey, some silty, some carbonaceous, with pyrite, slightly dolomitic.
- 6890 - 6900 Shale, as above, very silty, siltstone, brown, dolomitic, with pyrite.
- 6900 - 6910 Shale, dark grey to black, micro-micaceous, some silty, some carbonaceous, with pyrite, laminations coal.
- 6910 - 6920 Shale, dark grey to black, micro-micaceous, some silty, some carbonaceous, with abundant pyrite and fractures and quartz grains.
- 6920 - 6930 Shale, dark grey to black, micro-micaceous, very silty carbonaceous, abundant pyrite, some quartz grains, concretions, siltstone, medium grey, siliceous to slightly dolomitic, argillaceous.
- 6930 - 6940 Shale, dark grey to black, micro-micaceous, very silty, carbonaceous, some pyrite, some siltstone, interbedded as above.

- 6940 - 6950 Shale, dark grey to black, silty, micro-micaceous, with fractures, some pyrite and coal.
- 6950 - 6960 No sample.
- 6960 - 6970 Shale, dark grey to black, silty, micro-micaceous, with pyrite.
- 6970 - 6980 Siltstone, dark grey, siliceous, dolomitic.
- 6980 - 6990 Shale, dark grey to black, siliceous, with pyrite, carbonaceous, some fractures, with dolomite.
- 6990 - 7000 Shale, as above, with abundant pyrite.
- 7000 - 7010 Shale as above, with abundant fractures, with dolomite and quartz grains.
- 7010 - 7020 Shale, dark grey to black, siliceous carbonaceous, micro-micaceous, with laminated limestone, white, and some quartz in fractures, some pyrite.
- 7020 - 7030 Shale, as above, slightly dolomitic, streaks of siltstone, dark grey, siliceous to dolomitic.
- 7030 - 7040 Shale, black, siliceous to slightly dolomitic, carbonaceous, micro-micaceous, with pyrite.
- 7040 - 7050 As above, with abundant pyrite.
- 7050 - 7060 Shale, black, siliceous, carbonaceous, micro-micaceous, with trace pyrite.
- 7060 - 7070 Shale, dark grey to black, siliceous to slightly dolomitic, micro-micaceous, carbonaceous.
- 7070 - 7080 Limestone, grey to brown to buff, cryptocrystalline to chalky, silty to argillaceous, with trace quartz crystals and calcite crystals.
- 7080 - 7090 As above.
- 7090 - 7100 Shale, dark grey to black, siliceous to dolomitic, some micro-micaceous, with pyrite, trace quartzite.
- 7100 - 7110 Limestone, dark brown to tan, cryptocrystalline to chalky, silty, very argillaceous, some pyrite, fossil fragments (Brachiopods?)

- 7110 - 7120 Limestone, dark brown to buff, cryptocrystalline to chalky, silty, argillaceous, with pyrite fractures, calcite, anhydrite, fossil fragments.
- 7120 - 7130 Limestone, brown to tan, cryptocrystalline to chalky, some microcrystalline, silty, argillaceous, some pyrite.
- 7130 - 7140 Limestone, dark grey to grey-brown to tan, cryptocrystalline to chalky, silty, argillaceous, some pyrite, calcite, fractures.
- 7140 - 7150 Limestone, grey to grey-brown to tan, cryptocrystalline to chalky, becoming sucrosic, silty, argillaceous, some pyrite, fractures, calcite.
- 7150 - 7160 As above.
- 7160 - 7170 Limestone, dark grey-brown to tan, cryptocrystalline to chalky, sucrosic, silty, some argillaceous, pyrite.
- 7170 - 7180 Limestone, grey to dark grey-brown to tan, cryptocrystalline to sucrosic, silty, some argillaceous, pyrite, calcite, fractures and fossil fragments.
- 7180 - 7190 Limestone, dark grey-brown to tan, cryptocrystalline, silty, slightly argillaceous, trace calcite - crinoids?
- 7190 - 7200 As above.
- 7200 - 7210 Limestone, grey-brown to cream, mottled, cryptocrystalline to chalky slightly argillaceous, silty, pyrite, with fractures, calcite abundant, and fossil fragments.
- 7210 - 7220 Samples questionable.
- 7220 - 7230 Samples questionable.
- 7230 - 7240 Limestone, grey to dark grey, buff, cryptocrystalline to chalky, silty, slightly argillaceous, some with pyrite, and fossil fragments; shale, dark grey to black, calcareous
- 7240 - 7250 Limestone, grey to dark grey to buff, cryptocrystalline, some chalky, silty, slightly argillaceous, with pyrite.
- 7250 - 7260 As above.
- 7260 - 7270 Shale, dark grey to black, micro-micaceous, calcareous; Limestone, grey to dark grey to buff, silty, argillaceous, with pyrite, cryptocrystalline to chalky, trace crinoids, pelecypods.



- 7270 - 7280 Shale, black, calcareous; Limestone, grey to dark grey to buff, cryptocrystalline to chalky, silty, argillaceous, fossil fragments.
- 7280 - 7290 Limestone, grey to grey-brown to dark grey to buff, cryptocrystalline, silty.
- 7290 - 7300 Limestone, grey to grey-brown to brown, lithographic, cryptocrystalline to chalky, silty, some fractures, with calcite, pelecypods.
- 7300 - 7310 Shale, black, slightly dolomitic.
- 7310 - 7320 Limestone, grey to dark grey, lithographic to cryptocrystalline, silty, some pyrite, coral and fossil fragments.
- 7320 - 7330 Limestone, grey to dark grey, cryptocrystalline, silty, with fossil fragments.
- 7330 - 7340 As above.
- 7340 - 7350 As above.
- 7350 - 7360 Limestone, grey to dark grey, cryptocrystalline to chalky, silty with fractures, fossil fragments, shale, black, calcareous.
- 7360 - 7370 Limestone as above, lithographic to cryptocrystalline, silty, argillaceous, with pyrite fractures, calcite, fossil fragments, shale, black, calcareous.
- 7370 - 7380 Limestone, grey to dark grey to buff, cryptocrystalline, silty, argillaceous, with pyrite fractures, calcite, fossil fragments, shale, black, calcareous.
- 7380 - 7390 Limestone as above and Shale, black, calcareous.
- 7390 - 7400 Shale, black, calcareous and limestone, grey to dark grey to buff, silty, argillaceous, with fractures - pelecypods.
- 7400 - 7410 Limestone as above and shale, black, calcareous, silty.
- 7410 - 7420 Shale, black, calcareous, silty, and limestone as above.
- 7420 - 7430 Limestone, light grey to grey to dark grey, cryptocrystalline, some microcrystalline to chalky, silty, argillaceous.
- 7430 - 7440 Shale as above, Limestone, grey to dark grey, cryptocrystalline to chalky, silty, argillaceous, with pyrite and some stylolites.

- 7440 - 7450 Limestone, as above, with brachiopods, some calcite.
- 7450 - 7460 Limestone, grey brown, lithographic, silty.
- 7460 - 7470 Shale, black, calcareous, silty; limestone, light to dark grey, cryptocrystalline, silty.
- 7470 - 7480 Shale as above; limestone, cream to buff to grey, cryptocrystalline with some microcrystalline, silty, some pyrite, with fossil fragments, fractures abundant calcite.
- 7480 - 7490 Limestone as above.
- 7490 - 7500 Limestone, as above; shale, dark grey to black, calcareous, with pyrite.
- 7500 - 7510 Limestone, buff to dark grey, cryptocrystalline, silty, argillaceous, with pyrite.
- 7510 - 7520 Limestone, buff to dark grey, cryptocrystalline, silty, argillaceous, with some fossil fragments, calcite, fractures.
- 7520 - 7530 Limestone, cream to buff to grey-brown as above, with trace coral.
- 7530 - 7540 Limestone, grey-brown, cryptocrystalline, silty, with pyrite, crinoids, brachiopods, coral.
- 7540 - 7550 As above.
- 7550 - 7560 Limestone, dark grey to grey brown to buff, cryptocrystalline, silty, argillaceous.
- 7560 - 7570 As above.
- 7570 - 7580 Limestone, dark grey to grey brown to buff, cryptocrystalline, silty, argillaceous, with crinoids.
- 7580 - 7590 Limestone, dark grey to grey to buff, cryptocrystalline, silty, argillaceous, some fractures.
- 7590 - 7600 Limestone as above, some fractures.
- 7600 - 7610 Limestone, buff to brown to grey-brown, cryptocrystalline, silty.
- 7610 - 7620 Limestone, grey to dark grey to brown to buff, cryptocrystalline, silty, with streaks of shale, grey to black.

- 7620 - 7630 Limestone, grey to grey-brown to buff, cryptocrystalline, slightly silty, with pyrite, shale black, calcareous, dolomitic, silty, with pyrite. Hume
- 7630 - 7640 Limestone, grey to grey-brown to buff, cryptocrystalline, silty, with fractures (crinoid stems). Goss
- 7640 - 7650 Limestone, grey to dark grey to grey-brown, cryptocrystalline, silty, argillaceous, with pyrite, abundant calcite, trace fractures and quartz crystals.
- 7650 - 7660 Limestone, grey to grey-brown to cream, cryptocrystalline, silty, argillaceous, with pyrite, abundant calcite, some fractures, quartz crystals.
- 7660 - 7670 Limestone, grey to grey-brown to buff, cryptocrystalline, silty, argillaceous, with pyrite fractures, calcite.
- 7670 - 7680 Limestone, dark grey to grey-brown, cryptocrystalline, silty, argillaceous, with fractures and abundant calcite with shale inclusions.
- 7680 - 7690 Limestone, dark grey to grey-brown to buff, cryptocrystalline, trace coarse crystalline, silty, argillaceous, some fractures, some calcite.
- 7690 - 7700 Limestone, grey to grey-brown, lithographic to cryptocrystalline, silty, some fractures, and trace calcite.
- 7700 - 7710 Limestone, dark grey to grey to grey-brown, cryptocrystalline, silty, argillaceous, some fractures, with trace calcite (Iceland Spar).
- 7710 - 7720 Limestone, dark grey to grey-brown to buff, cryptocrystalline, some microcrystalline, silty, argillaceous, some fractures, calcite.
- 7720 - 7730 Limestone, grey to grey-brown to dark grey, cryptocrystalline, silty, argillaceous, with some fossil fragments.
- 7730 - 7740 Limestone as above, with shale, black calcareous, trace gilsonite.
- 7740 - 7750 Limestone, dark grey to grey-brown, silty, some fractures and trace calcite.
- 7750 - 7760 Limestone, dark grey to grey-brown, cryptocrystalline, silty, fractures and calcite; shale, black, calcareous.

- 7760 - 7770 Limestone, dark grey to grey-brown to grey, cryptocrystalline, silty, some fractures; shale, black, calcareous with pyrite.
- 7770 - 7780 Limestone, dark grey to grey, cryptocrystalline, silty, argillaceous, with black shale, calcareous.
- 7780 - 7790 Limestone, dark grey to grey to buff, cryptocrystalline to microcrystalline, silty, some pyrite, no porosity.
- 7790 - 7800 Limestone, grey to buff, cryptocrystalline to microcrystalline, silty, with pyrite, calcite.
- 7800 - 7810 Limestone, grey to grey-brown to buff, cryptocrystalline to microcrystalline, silty, with trace pyrite fractures, calcite, coral.
- 7810 - 7820 Limestone, grey to brown to buff, lithographic to cryptocrystalline to microcrystalline, silty, some fractures, calcite.
- 7820 - 7830 Limestone, dark grey to grey brown to buff, cryptocrystalline to microcrystalline, silty, argillaceous, with calcite, corals, brachiopods.
- 7830 - 7840 Limestone, dark grey to grey to buff, cryptocrystalline, silty, with calcite; dolomite, black, cryptocrystalline, silty, very argillaceous, slightly calcareous.
- 7840 - 7850 Limestone, dark grey to grey-brown, cryptocrystalline to microcrystalline, silty, argillaceous, pyrite, fossil fragments, some calcite; dolomite black, cryptocrystalline, silty, very argillaceous, slightly calcareous.
- 7850 - 7860 Limestone, dark grey to grey-brown, cryptocrystalline to microcrystalline, silty, argillaceous, with pyrite, coral fragments; dolomite, black, cryptocrystalline, silty, very argillaceous, slightly calcareous, with pyrite.
- 7860 - 7870 Limestone as above, with calcite; dolomite, dark grey to black, cryptocrystalline, silty, very argillaceous, slightly calcareous, with pyrite.
- 7870 - 7880 Dolomite, dark grey to black, cryptocrystalline, silty, very argillaceous, slightly calcareous; limestone, grey-brown, cryptocrystalline to microcrystalline, silty, with pyrite, some fractures, calcite crystals and fractured porosity.
- 7880 - 7890 Dolomite and limestone as above; Shale, black, calcareous, dolomitic, silty, with pyrite and calcite in planes and fractures.

- 7890 - 7900 Dolomite and Shale as above.
- 7900 - 7910 Shale, black, calcareous to dolomitic, silty, with pyrite, fractures, calcite and some fossil fragments.
- 7910 - 7920 Shale, black, calcareous to dolomitic, silty with pyrite, fractures, calcite and some fossil fragments.
- 7920 - 7930 Shale, black, calcareous to dolomitic, silty, with pelletoidal pyrite, and vein calcite.
- 7930 - 7940 Shale, black, calcareous to dolomitic, silty, with pelletoidal pyrite and pyrite.
- 7940 - 7950 As above.
- 7950 - 7960 Shale, black, calcareous to dolomitic, silty, with pyrite, some pelletoidal pyrite, and thin calcite filled fractures and veins.
- 7960 - 7970 Shale, black, calcareous to dolomitic, silty, trace pyrite, fossil fragments.
- 7970 - 7980 As above.
- 7980 - 7990 Shale, black, calcareous to dolomitic, silty with pyrite and laminated limestone, black, cryptocrystalline argillaceous, silty.
- 7990 - 8000 Shale, black, dolomitic to calcareous, silty, with some pyrite, calcite, fractures.
- 8000 - 8010 As above.
- 8010 - 8020 Shale, black, dolomitic to calcareous, silty, with pyrite, some fractures, calcite.
- 8020 - 8030 Shale, black, calcareous to dolomitic, some pyrite and few fractures with calcite.
- 8030 - 8040 As above.
- 8040 - 8050 Shale, black, dolomitic, slightly calcareous, silty with pyrite, fractures and fossil fragments.
- 8050 - 8060 Shale, black, slightly calcareous to dolomitic, some pyrite, few fractures and fossil fragments.
- 8060 - 8070 Shale, black, calcareous to dolomitic, with fractures and calcite.

- 8070 - 8080 Shale, black, calcareous to dolomitic, with laminated limestone, brown, cryptocrystalline, silty, some fractures, with abundant calcite crystals and pyrite.
- 8080 - 8090 Shale, black, calcareous to dolomitic, with trace pyrite.
- 8090 - 8100 Shale, black, calcareous to dolomitic, with pyrite, fossil fragments.
- 8100 - 8110 Shale, black, slightly calcareous to dolomitic, some pyrite.
- 8110 - 8120 Shale, black, calcareous to dolomitic, with fractures and calcite.
- 8120 - 8130 Shale, black, calcareous to dolomitic, some fractures, with calcite and laminated limestone, brown, cryptocrystalline silty.
- 8130 - 8140 Shale, black, calcareous to dolomitic, with trace pyrite.
- 8140 - 8150 Shale, black, calcareous to dolomitic, silty, with trace pyrite, fossil fragments, fractures and calcite.
- 8150 - 8160 Shale, black, calcareous to dolomitic, slightly silty, with streaks of siltstone, dark grey, calcareous, argillaceous.
- 8160 - 8170 As above.
- 8170 - 8180 Shale, dark grey to black, calcareous, silty.
- 8180 - 8190 Shale, dark grey to black, calcareous, silty in part.
- 8190 - 8200 As above.
- 8200 - 8210 Shale, black, calcareous, silty, with streaks of limestone, dark grey to black, silty, very argillaceous.
- 8210 - 8220 Limestone, dark grey to grey-brown, cryptocrystalline, silty, argillaceous, with fractures, fossil fragments.
- 8220 - 8230 Limestone, dark grey to grey-brown, cryptocrystalline, silty, argillaceous, with pyrite.
- 8230 - 8240 Limestone, grey to brown to buff, cryptocrystalline to microcrystalline, silty, with pyrite, some fractures, and calcite, streaks of shale, dark grey to black, silty, calcareous.
- 8240 - 8250 Limestone, grey to grey-brown, cryptocrystalline to microcrystalline to fine crystalline, silty, trace pyrite fractures, calcite, trace intercrystalline porosity.

- 8250 - 8260 Limestone, grey to grey-brown, cryptocrystalline to microcrystalline to fine crystalline, trace chalky, silty, trace pyrite, with crinoids, corals, fossil fragments, some bioclastic, trace intercrystalline porosity.
- 8260 - 8270 Limestone, dark grey to grey to grey brown to buff, cryptocrystalline to microcrystalline, some fine crystalline, trace chalky, silty, trace pyrite, abundant calcite, trace fractures, fossil fragments, cephalopods?
- 8270 - 8280 Limestone, dark grey to grey-brown, cryptocrystalline to microcrystalline, silty, argillaceous, with some calcite, fractures, fossil fragments, stylolites, bioclastic debris.
- 8280 - 8290 Limestone, dark grey, cryptocrystalline, silty, argillaceous, some calcite, crinoids, fossil fragments; shale dark grey to black, calcareous.
- 8290 - 8300 Limestone, dark grey, cryptocrystalline, silty, argillaceous, some fractures, calcite, some fossil fragments, crinoids; shale, dark grey to black, calcareous with pyrite.
- 8300 - 8310 As above.
- 8310 - 8320 Shale, dark grey to black, calcareous; limestone, grey, cryptocrystalline, silty, argillaceous, with some calcite inclusions, some fractures.
- 8320 - 8330 As above.
- 8330 - 8340 Limestone, dark grey to grey-brown to buff, cryptocrystalline to chalky, silty, slightly argillaceous, some pyrite.
- 8340 - 8350 Limestone, dark grey to grey to buff, cryptocrystalline to chalky, silty, very argillaceous, some calcite, some pyrite, shale, black, calcareous, silty; trace chert, black, crinoids, cephalopods, some fractures.
- 8350 - 8360 Limestone as above, with bioclastic debris.
- 8360 - 8370 Limestone, brown to buff, cryptocrystalline to chalky, silty, some calcite, trace crinoids.
- 8370 - 8380 As above and shale, dark grey to black, calcareous, silty.
- 8380 - 8390 Shale, dark grey to black, calcareous, silty.
- 8390 - 8400 Limestone, dark grey to medium grey to buff, cryptocrystalline, silty, argillaceous, some coral, crinoids.

- 8400 - 8410 Limestone, grey to brown to buff, cryptocrystalline, some chalky, silty, argillaceous, trace calcite, pyrite fractures, crinoids, fossiliferous.
- 8410 - 8420 Limestone, dark grey-brown to buff, cryptocrystalline to chalky, silty, argillaceous, some fractures, some calcite.
- 8420 - 8430 Limestone, as above, with trace cephalopods and crinoids.
- 8430 - 8440 Limestone, dark grey-brown to brown to buff, cryptocrystalline to chalky, silty, slightly argillaceous.
- 8440 - 8450 Limestone, dark grey brown to buff, cryptocrystalline to chalky, silty, argillaceous with trace pyrite.
- 8450 - 8460 Limestone, dark brown to grey to buff, cryptocrystalline to chalky, silty, trace calcite.
- 8460 - 8470 Limestone, dark grey brown to brown to buff, cryptocrystalline to microcrystalline to chalky, silty, some slight pelletoidal, silty, trace calcite filled fractures.
- 8480 - 8490 Limestone as above, with crinoids, cephalopods, fossil fragments, slightly argillaceous.
- 8490 - 8500 Limestone as above.
- 8500 - 8510 Limestone, dark brown to brown to cream to buff, cryptocrystalline to fine crystalline, some chalky, pelletoidal, silty, trace pyrite, with calcite and fossil fragments.
- 8510 - 8520 Limestone, dark brown to grey to brown to buff, cryptocrystalline to microcrystalline, some chalky, some pelletoidal, silty, slightly argillaceous, with fractures, calcite.
- 8520 - 8530 Limestone as above with laminated shale, black, calcareous.
- 8530 - 8540 Limestone, dark grey-brown to grey to buff, cryptocrystalline to chalky, some pelletoidal, silty, with fractures, calcite, fossil fragments.
- 8540 - 8550 Limestone, dark grey to grey to buff, cryptocrystalline, some chalky, silty, with fractures and with calcite, slightly argillaceous.
- 8550 - 8560 Limestone, dark grey to brown to buff, cryptocrystalline to microcrystalline to chalky, silty, slightly argillaceous, some fractures, some calcite, laminated dolomite, dark brown, cryptocrystalline.



- 8560 - 8570 Limestone, dark grey to grey-brown to buff, cryptocrystalline, some chalky, silty, very slightly argillaceous.
- 8570 - 8580 Limestone, dark brown to grey to buff, cryptocrystalline to microcrystalline, some chalky, silty, slightly argillaceous.
- 8580 - 8590 Limestone, dark grey to grey to buff, cryptocrystalline to microcrystalline to chalky, some silty, slightly argillaceous.
- 8590 - 8600 Limestone, dark grey-brown to buff, cryptocrystalline, chalky, silty, argillaceous.
- 8600 - 8610 Limestone, dark grey to buff, cryptocrystalline to some coarse crystalline, with calcite cement, some chalky, some pelletal, silty, some argillaceous; shale laminations, abundant fractures, calcite, trace crinoids, fossil fragments, bioclastic debris.
- 8610 - 8620 Limestone, dark brown to grey-brown to buff, cryptocrystalline to some coarse crystalline as above, some chalky, pelletal, silty, argillaceous, some spar and fractures, laminated shale, black, calcareous and bioclastic debris.
- 8620 - 8630 Limestone, dark grey-brown to grey to buff, cryptocrystalline to microcrystalline, silty, argillaceous, with calcite and streaks shale, black, calcareous, silty and dolomite, dark brown, cryptocrystalline, silty, calcareous.
- 8630 - 8640 As above.
- 8640 - 8650 Limestone, dark grey to grey, cryptocrystalline to microcrystalline, silty, argillaceous; dolomite, dark brown, cryptocrystalline, silty, calcareous.
- 8650 - 8660 Limestone, dark grey to grey, cryptocrystalline to microcrystalline, silty, argillaceous; dolomite, dark brown, cryptocrystalline, silty, argillaceous, calcareous.
- 8660 - 8670 Limestone, dark brown to buff, cryptocrystalline, silty, argillaceous, dolomitic, with calcite; shale, black dolomitic.
- 8670 - 8680 Dolomite, dark brown, cryptocrystalline, silty, argillaceous, calcareous; limestone, grey-brown to grey, cryptocrystalline to microcrystalline, chalky, some pyrite, silty, argillaceous, trace fossil fragments.

- 8680 - 8690 Limestone, dark brown to brown to grey, cryptocrystalline, silty, argillaceous, dolomitic, with laminated shale, black, dolomitic.
- 8690 - 8700 Limestone, dark brown to brown, cryptocrystalline, silty, argillaceous, slightly dolomitic, with fractures, and calcite; shale, black, calcareous, laminated.
- 8700 - 8710 Limestone, dark brown to brown, cryptocrystalline to microcrystalline, silty, very argillaceous, slightly dolomitic, with calcite fractures; laminated shale, black, calcareous.
- 8710 - 8720 Limestone, dark brown to grey, cryptocrystalline, silty, very argillaceous, with fractures, some calcite filled; shale, black, calcareous to dolomitic, with pyrite, silty; dolomite, dark brown, cryptocrystalline, silty, argillaceous.
- 8720 - 8730 Limestone, dark grey to grey, cryptocrystalline to microcrystalline, silty, slightly argillaceous, some calcite, some fractures, trace crinoids.
- 8730 - 8740 Limestone and dolomite as above.
- 8740 - 8750 Limestone, dark brown to grey, cryptocrystalline, silty, slightly argillaceous, with abundant fractures and abundant calcite; dolomite, dark brown, cryptocrystalline, silty argillaceous, calcareous, bituminous.
- 8750 - 8760 Limestone, dark grey to grey, cryptocrystalline, silty, slightly argillaceous, some calcite.
- 8760 - 8770 Limestone, dark grey to grey, cryptocrystalline, silty, very slightly argillaceous, with fractures, calcite and fossil fragments.
- 8770 - 8780 Limestone, dark brown to grey to buff, cryptocrystalline to microcrystalline, silty, argillaceous, some dolomitic, some thin laminated dolomite, dark brown, cryptocrystalline, silty, calcareous.
- 8780 - 8790 Limestone, grey brown to brown, cryptocrystalline, silty, with fractures filled with calcite, with dolomite laminations as above.
- 8790 - 8800 Limestone as above, with dolomite laminations, dark brown, cryptocrystalline, silty, calcareous.
- 8800 - 8810 Shale, black, some calcareous, some dolomitic; limestone, dark brown, cryptocrystalline, silty, argillaceous, dolomitic, with some fractures, and calcite, laminated dolomite as above.

- 8810 - 8820 Limestone with dolomite interbeds as above.
- 8820 - 8830 Limestone, dark brown to brown to grey, cryptocrystalline slightly silty, dolomitic, with laminated dolomite, dark brown, cryptocrystalline, silty, calcareous, fossil fragments.
- 8830 - 8840 Limestone, dark brown to brown to light brown, cryptocrystalline to microcrystalline, some chalky, silty, trace dolomitic.
- 8840 - 8850 Limestone, dark brown to brown mottled to light brown, cryptocrystalline, silty; dolomite, dark brown, cryptocrystalline, calcareous.
- 8850 - 8860 Limestone, dark brown to grey, 'birdseye', cryptocrystalline to microcrystalline, silty, with laminated shale, black and dolomite as above.
- 8860 - 8870 Limestone, dark brown to dark grey, cryptocrystalline, silty, with calcite, thin streaks dolomite, dark brown, cryptocrystalline, silty, calcareous.
- 8870 - 8880 Limestone, dark brown to dark grey, cryptocrystalline, silty, some fossil fragments, crinoids.
- 8880 - 8890 Limestone, dark grey to brown, cryptocrystalline to microcrystalline, silty, with trace calcite crystals and fossil fragments.
- 8890 - 8900 Limestone as above, with crinoids, bioclastic debris.
- 8900 - 8910 Limestone, dark grey to grey, cryptocrystalline to microcrystalline, slightly silty, very argillaceous, with crinoids, gastropods, and fossil fragments.
- 8910 - 8920 Limestone, dark grey to grey-brown to grey, silty, some argillaceous, with fossil fragments and laminated shale black, fossil fragments.
- 8920 - 8930 Limestone, dark brown to dark grey, some brown, cryptocrystalline to microcrystalline, silty, some crinoids.
- 8930 - 8940 Limestone, light to dark grey, cryptocrystalline, some microcrystalline, silty, slightly argillaceous, some fractures with calcite, fossil fragments, bioclastic debris.
- 8940 - 8950 Limestone, grey, some dark grey-brown, cryptocrystalline to microcrystalline, silty, slightly argillaceous, some fossil fragments.

- 8950 - 8960 Limestone, dark grey to grey-brown to grey, cryptocrystalline, silty, slightly argillaceous, trace pyrite, some fossil fragments, trace quartz crystals.
- 8960 - 8970 Limestone, dark grey, some light grey, cryptocrystalline, silty, with trace calcite and fossil fragments.
- 8970 - 8980 Limestone, light to dark grey, cryptocrystalline, silty, some calcite and fossil fragments.
- 8980 - 8990 Limestone, dark to light grey, cryptocrystalline, silty, some laminated shale, black, abundant fossil fragments.
- 8990 - 9000 Limestone, light to dark grey, cryptocrystalline to microcrystalline, silty, some argillaceous, with fractures, calcite filled, and abundant fossil fragments.
- 9000 - 9010 Limestone, medium to light grey, cryptocrystalline, 'birds-eye', silty, some argillaceous, some calcite filled fractures, fossil fragments.
- 9010 - 9020 Limestone, medium to dark grey, cryptocrystalline, silty, some dolomitic, with laminated shale, black, some calcite, fossil fragments.
- 9020 - 9030 Limestone, medium to dark grey, cryptocrystalline, silty, argillaceous, some laminated shale, black, some fractures, calcite filled, trace fossil fragments.
- 9030 - 9040 Limestone, light to dark grey, cryptocrystalline, silty, slightly argillaceous, trace calcite, abundant bioclastic debris, some crinoids.
- 9040 - 9050 Limestone, light to dark grey, cryptocrystalline to microcrystalline, silty, argillaceous, with some shale partings; crinoids, brachiopods, fossil fragments.
- 9050 - 9060 Limestone, light to dark grey, cryptocrystalline to microcrystalline, silty, argillaceous, some slightly dolomitic, with fractures, calcite filled, fossiliferous.
- 9060 - 9070 Limestone, medium grey, cryptocrystalline to microcrystalline, silty, argillaceous, with hairline fractures, calcite filled, fossil fragments.
- 9070 - 9080 Limestone, medium to dark grey, cryptocrystalline, some microcrystalline, silty, argillaceous, with fractures, calcite filled, fossil fragments.

- 9080 - 9090 As above, with some crinoids.
- 9090 - 9100 Limestone, medium grey, cryptocrystalline to microcrystalline, silty, with fractures, with abundant calcite veins and crystals, some chalky, some fossil fragments.
- 9100 - 9110 Limestone, medium to dark grey, cryptocrystalline to microcrystalline, silty, argillaceous, with fractures, with abundant fossil fragments.
- 9110 - 9120 Limestone, light to medium to dark grey, cryptocrystalline, silty, argillaceous, with inclusions, shale, black, and fractures, with abundant calcite, some fossil fragments crinoids, etc.
- 9120 - 9130 As above.
- 9130 - 9140 Limestone, light to dark grey, silty, cryptocrystalline, argillaceous, with laminated shale, black, and some fractures, abundant calcite, fossiliferous.
- 9140 - 9150 As above.
- 9150 - 9160 Limestone, light to dark grey, cryptocrystalline to microcrystalline, silty, argillaceous, some shale, laminated, abundant calcite, some fractures.
- 9160 - 9170 Limestone, light to dark grey, cryptocrystalline to microcrystalline, silty, argillaceous, with laminated shale, black, calcareous to dolomitic and with fractures, with calcite.
- 9170 - 9180 Limestone, light to dark grey, cryptocrystalline to chalky, silty, slightly argillaceous, with laminated shale, black, calcareous, some fractures, some calcite.
- 9180 - 9190 Questionable sample.
- 9190 - 9200 Limestone, grey to dark grey to dark brown, cryptocrystalline to microcrystalline, silty, argillaceous, with trace fractures, calcite filled and streaks of shale, black, dolomitic.
- 9200 - 9210 Limestone, grey to dark brown, cryptocrystalline, silty, argillaceous, with some hairline fractures, with calcite, shale as above.
- 9210 - 9220 Limestone, light to dark grey-brown, lithographic, cryptocrystalline to microcrystalline, silty, some fractures, some calcite, trace fossil fragments, trace sphalerite.

- 9220 - 9230 Limestone, light to dark grey, cryptocrystalline to microcrystalline, silty, trace fractures, trace calcite, trace fossil fragments, some shale laminations.
- 9230 - 9240 Limestone, light to dark grey to dark brown, cryptocrystalline to chalky, silty, trace fractures, trace calcite and fossil fragments.
- 9240 - 9250 As above.
- 9250 - 9260 Limestone, light to dark grey to dark brown, cryptocrystalline, some chalky, silty, with fractures with calcite.
- 9260 - 9270 Limestone, light to dark grey, cryptocrystalline to microcrystalline, some chalky, silty, with fractures, calcite, trace fossil fragments.
- 9270 - 9280 Limestone, light to dark grey, cryptocrystalline to microcrystalline, some chalky, silty, with fractures with calcite, and some fossil fragments.
- 9280 - 9290 As above.
- 9290 - 9300 Limestone, light to dark grey, cryptocrystalline to mostly microcrystalline, silty, with abundant banded fractures, calcite filled, some fossil fragments, crinoids.
- 9300 - 9310 Limestone, light grey to dark grey, cryptocrystalline to microcrystalline, silty, slightly argillaceous, with some fractures, and abundant calcite.
- 9310 - 9320 Limestone, dark grey to some light grey, cryptocrystalline, some microcrystalline, silty, some fractures with calcite.
- 9320 - 9330 As above.
- 9330 - 9340 Limestone, dark grey to medium grey, cryptocrystalline, some chalky, silty, fractures, and some calcite.
- 9340 - 9350 Limestone, dark grey to medium grey, cryptocrystalline, silty, some dolomitic, trace fractures and some calcite, trace crinoids.
- 9350 - 9360 Limestone, light grey to medium grey, cryptocrystalline, some chalky, trace fractures, some calcite, trace crinoids.
- 9360 - 9370 Limestone, medium grey to grey-brown, cryptocrystalline, silty, with fractures and calcite.

- 9370 - 9380 Limestone, medium grey to grey-brown, cryptocrystalline, chalky, silty, some fractures and abundant calcite.
- 9380 - 9390 Limestone, medium grey to dark grey-brown, cryptocrystalline, silty, dolomitic, some fractures and calcite.
- 9390 - 9400 Limestone, dark grey to dark brown, cryptocrystalline, silty, dolomitic, some fractures and calcite, streaks of dolomite, dark brown, cryptocrystalline, silty.
- 9400 - 9410 Limestone, grey to dark brown, cryptocrystalline, slightly silty, with pyrite, trace fractures, and calcite; some shale, laminated; dolomite, dark brown, cryptocrystalline, slightly silty, argillaceous, with pyrite.
- 9410 - 9420 Limestone as above, slightly dolomitic.
- 9420 - 9430 Limestone, grey to dark brown, cryptocrystalline to chalky, slightly silty, slightly dolomitic, some fractures with calcite, trace dolomite as above.
- 9430 - 9440 Limestone, light to medium to dark grey-brown, cryptocrystalline, slightly silty, slightly dolomitic, with fractures and calcite, trace dolomite, as above.
- 9440 - 9450 Limestone, light to dark grey, silty, abundant fractures and abundant calcite.
- 9450 - 9460 Limestone, light grey to brown to dark brown, cryptocrystalline to microcrystalline, very slightly silty, with pyrite, few fractures and calcite; laminated dolomite, dark brown, cryptocrystalline, silty, calcareous.
- 9460 - 9470 Limestone, light grey to medium grey, cryptocrystalline to microcrystalline, silty, few fractures with calcite; dolomite as above.
- 9470 - 9480 Limestone, light grey to medium grey to dark grey, cryptocrystalline to microcrystalline, some chalky, silty, with trace fractures and calcite; trace dolomite as above.
- 9480 - 9490 As above.
- 9490 - 9500 Limestone, light grey to dark brown, cryptocrystalline to microcrystalline to fine crystalline, silty, trace fractures, calcite veins and crystals; dolomite, dark brown, cryptocrystalline to microcrystalline, silty, calcareous; laminated shale, black, calcareous, trace porosity.

- 9500 - 9510 Limestone, light grey to dark brown, cryptocrystalline to microcrystalline to fine crystalline, silty, trace fractures, calcite veins and crystals, trace porosity.
- 9510 - 9520 Limestone, cream to light grey to grey, cryptocrystalline to microcrystalline, trace fractures, calcite, trace porosity.
- 9520 - 9530 Limestone, cream to light grey to grey, cryptocrystalline to microcrystalline to fine crystalline, trace fractures, calcite.
- 9530 - 9540 Limestone, light to medium to dark grey, cryptocrystalline to microcrystalline to fine crystalline, silty, dolomitic, trace fractures, calcite.
- 9540 - 9550 Limestone, light to medium to dark grey, cryptocrystalline to microcrystalline, silty, some dolomitic, trace hairline fractures, calcite, fossil fragments.
- 9550 - 9560 Limestone as above.
- 9560 - 9570 Limestone, cream to buff to light to dark grey, lithographic to cryptocrystalline to microcrystalline, trace fine crystalline and chalky, slightly silty, some slightly dolomitic, trace pyrite.
- 9570 - 9580 Limestone, cream to buff to lithographic, cryptocrystalline to fine crystalline, chalky, slightly silty, some slightly dolomitic.
- 9580 - 9590 Limestone, cream to grey to dark grey, cryptocrystalline, some lithographic, some microcrystalline, some chalky, slightly dolomitic, slightly silty, trace calcite.
- 9590 - 9600 Limestone, cream to buff to grey, lithographic, cryptocrystalline, slightly silty.
- 9600 - 9610 Limestone, light to dark grey to dark brown, lithographic to cryptocrystalline to microcrystalline, silty, dolomitic, with trace sphalerite, trace dolomite, dark grey, cryptocrystalline, silty, calcareous.
- 9610 - 9620 Limestone, light grey to grey to dark brown, lithographic to cryptocrystalline, silty, dolomitic, with pyrite, and some calcite.
- 9620 - 9630 Limestone, cream to light brown to brown, lithographic to cryptocrystalline to chalky, silty, dolomitic.



- 9630 - 9640 Limestone, light to dark grey to brown, lithographic to cryptocrystalline, silty.
- 9640 - 9650 As above.
- 9650 - 9660 Limestone to light brown to dark grey-brown, lithographic, cryptocrystalline, silty.
- 9660 - 9670 As above.
- 9670 - 9680 Limestone, light to dark grey to grey-brown, lithographic to cryptocrystalline, slightly silty, slightly argillaceous.
- 9680 - 9690 As above.
- 9690 - 9700 Limestone, light grey to light brown, cryptocrystalline, some microcrystalline, with trace pyrite, silty.
- 9700 - 9710 Limestone, light grey to brown, cryptocrystalline, some microcrystalline, silty.
- 9710 - 9720 Limestone, cream to light grey to dark grey, cryptocrystalline to microcrystalline, some chalky, silty, slightly dolomitic, with laminated shale, black.
- 9720 - 9730 Limestone as above.
- 9730 - 9740 Limestone, light brown, lithographic, with some grey to dark grey microcrystalline, and white chalky, slightly silty, slightly argillaceous, slightly dolomitic.
- 9740 - 9750 As above, with trace dolomite, light brown, cryptocrystalline, silty, and with laminated shale, black.
- 9750 - 9760 Limestone, cream to light brown, lithographic to chalky, slightly silty, slightly dolomitic.
- 9760 - 9770 As above.
- 9770 - 9780 Limestone, cream to light to dark brown, lithographic to cryptocrystalline.
- 9780 - 9790 As above.
- 9790 - 9800 Limestone, cream to light brown to very dark brown, lithographic to cryptocrystalline, slightly silty, slightly dolomitic, with streaks of dolomite, dark brown, cryptocrystalline, silty, calcareous.

- 9800 - 9810 Limestone, cream to light grey to dark brown, cryptocrystalline, silty, dolomitic.
- 9810 - 9820 Limestone, light grey to light brown to dark brown, cryptocrystalline to microcrystalline.
- 9820 - 9830 As above.
- 9830 - 9840 Limestone, cream to light brown to light grey to dark grey, lithographic to cryptocrystalline, slightly silty.
- 9840 - 9850 Limestone, light brown to dark brown, lithographic to cryptocrystalline, slightly silty.
- 9850 - 9860 Limestone, light grey to brown to dark brown, lithographic to cryptocrystalline to microcrystalline, silty, with some dolomitic.
- 9860 - 9870 As above, with trace pyrite.
- 9870 - 9880 Limestone, light brown to dark brown, cryptocrystalline to microcrystalline, silty, dolomitic; and dolomite, light grey to grey, microcrystalline, silty, calcareous.
- 9880 - 9890 Dolomite, cream to light grey to dark brown, microcrystalline, slightly calcareous, slightly silty, and limestone as above.
- 9890 - 9900 As above.
- 9900 - 9910 Dolomite, light to dark brown, microcrystalline, argillaceous, slightly silty, with pyrite, some fractures with secondary dolomite and calcite.
- 9910 - 9920 Dolomite, light brown to brown, cryptocrystalline to microcrystalline, silty, with fractures, with dolomite and calcite.
- 9920 - 9930 Dolomite as above, with some buff, lithographic, and with pyrite.
- 9930 - 9940 Dolomite, light brown to brown, lithographic to cryptocrystalline, silty with some calcite in fractures, and some calcite inclusions.
- 9940 - 9950 Dolomite, light to dark brown, cryptocrystalline to microcrystalline, silty, calcareous, with fractures and secondary dolomite.
- 9950 - 9960 Dolomite, light to dark brown to grey, lithographic to microcrystalline, slightly silty, calcareous, some fractures with calcite.

- 9960 - 9970 Dolomite, light grey to grey to brown to dark brown, lithographic to fine crystalline, slightly silty, slightly calcareous with pyrite.
- 9970 - 9980 Dolomite, light grey to dark brown, lithographic to cryptocrystalline, slightly calcareous, argillaceous, with pyrite, and partings and laminated shale, black.
- 9980 - 9990 Dolomite, light grey-green, lithographic to cryptocrystalline, slightly calcareous, with pyrite, and laminated shale, black.
- 9990 - 10,000 Dolomite, grey-green, lithographic to cryptocrystalline, slightly calcareous, argillaceous, silty, with pyrite, and laminated shale, black.
- 10,000 - 10,010 Dolomite, cream to buff, lithographic to cryptocrystalline, with pyrite; limestone, dark grey, cryptocrystalline, silty, argillaceous, with laminated shale, black, calcareous, trace bitumen.
- 10,010 - 10,020 As above.
- 10,020 - 10,030 Dolomite, light grey, lithographic to cryptocrystalline, with pyrite.
- 10,030 - 10,040 Dolomite, light grey-green, lithographic to cryptocrystalline, with some pyrite; limestone, cream, cryptocrystalline to chalky, dolomitic in part.
- 10,040 - 10,050 As above, dolomite, slightly calcareous.
- 10,050 - 10,060 Dolomite, light grey-green, lithographic to cryptocrystalline, with pyrite, slightly calcareous.
- 10,060 - 10,070 Dolomite, cream to light grey-green, lithographic to cryptocrystalline to chalky, with pyrite, very calcareous; limestone, dark grey, cryptocrystalline, silty, and white chalky, trace calcite.
- 10,070 - 10,080 As above.
- 10,080 - 10,090 Dolomite, grey-green, lithographic to cryptocrystalline, with pyrite, calcareous; limestone, dark grey to cream, cryptocrystalline to chalky.
- 10,090 - 10,100 Limestone, dark grey to grey-green to cream, cryptocrystalline to chalky, slightly dolomitic; dolomite, grey-green, cryptocrystalline, calcareous.

- 10,100 - 10,110 Dolomite, light grey-green to grey-green, cryptocrystalline, calcareous, with trace pyrite, and laminated shale, black; limestone, cream to light grey-green, cryptocrystalline to chalky, some dolomite.
- 10,110 - 10,120 As above.
- 10,120 - 10,130 As above.
- 10,130 - 10,140 Dolomite, grey-green to dark grey, cryptocrystalline, argillaceous, with intergradations of limestone, cream, chalky.
- 10,140 - 10,150 Dolomite, grey to grey-green, lithographic to cryptocrystalline, argillaceous, calcareous, with gradations of limestone, cream to light grey, cryptocrystalline to chalky.
- 10,150 - 10,160 Dolomite, grey-green to dark grey, lithographic to cryptocrystalline, argillaceous, calcareous, pyritic, with limestone gradations as above, with pyrite.
- 10,160 - 10,170 Dolomite, grey-green, lithographic to cryptocrystalline, argillaceous, calcareous.
- 10,170 - 10,180 Dolomite, grey-green to medium grey, lithographic to cryptocrystalline, argillaceous, calcareous, with gradations of limestone, cream to grey, cryptocrystalline to chalky.
- 10,180 - 10,190 Dolomite as above, with pyrite, with limestone, cream to grey, cryptocrystalline to chalky, silty, with pyrite.
- 10,190 - 10,200 Dolomite, grey-green, lithographic to cryptocrystalline, argillaceous, calcareous, with limestone gradations, cream cryptocrystalline to chalky.
- 10,200 - 10,210 Dolomite as above, with limestone gradations, cream, chalky, grey, cryptocrystalline.
- 10,210 - 10,220 Dolomite, grey-green, lithographic to cryptocrystalline, argillaceous, calcareous, with limestone as above, cream to light grey to dark grey-green, chalky, with pyrite.
- 10,220 - 10,230 As above, trace calcite.
- 10,230 - 10,240 No sample.
- 10,240 - 10,250 Dolomite, grey-green, lithographic to cryptocrystalline, argillaceous, calcareous, with pyrite, and gradational limestone, cream to grey-green, cryptocrystalline to chalky, with pyrite.
- 10,250 - 10,260 As above.

- 10,260 - 10,270 Dolomite, grey-green, lithographic to cryptocrystalline, argillaceous, calcareous, with pyrite; gradational to limestone, cream, grey-green, cryptocrystalline, chalky, with pyrite.
- 10,270 - 10,280 Dolomite as above, with fractures and calcite; limestone as above.
- 10,280 - 10,290 Dolomite, grey to grey-green, cryptocrystalline, slightly argillaceous, some pyrite, some calcite, with gradational limestone, white chalky.
- 10,290 - 10,300 Dolomite, cream to grey-green, cryptocrystalline to microcrystalline, no porosity.
- 10,300 - 10,310 Dolomite, cream, cryptocrystalline to microcrystalline, very slightly calcareous.
- 10,310 - 10,320 As above, with some fine crystalline, with rare pinpoint vugs, trace of disseminated pyrite; stylolites, and trace of shale, laminated, black.
- 10,320 - 10,330 Dolomite, cream, cryptocrystalline to microcrystalline, some fractures, some calcite and trace stylolites.
- 10,330 - 10,340 Dolomite, cream, cryptocrystalline to microcrystalline, with pyrite and calcite filled fractures; trace intercrystalline porosity, some shale, laminated, black.
- 10,340 - 10,350 As above.
- 10,350 - 10,360 As above.
- 10,360 - 10,370 Dolomite, cream, cryptocrystalline to medium crystalline, trace calcite, fair intercrystalline porosity.
- 10,370 - 10,380 Dolomite, cream to light grey, cryptocrystalline to medium crystalline, trace calcite, fair intercrystalline porosity.
- 10,380 - 10,390 Dolomite, cream to light grey, cryptocrystalline to microcrystalline, with fractures, and calcite, and laminated shale, black.
- 103,390 - 10,400 Dolomite, cream to light grey, cryptocrystalline to microcrystalline, with fractures, with calcite.
- 10,400 - 10,410 Dolomite, cream to light grey, cryptocrystalline to microcrystalline, some calcite and secondary dolomite.

- 10,410 - 10,420 Dolomite, cream to grey-green, cryptocrystalline to microcrystalline, trace pyrite and calcite.
- 10,420 - 10,430 Dolomite, cream to light brown, lithographic to cryptocrystalline, some argillaceous, with calcite, some stylolites.
- 10,430 - 10,440 Dolomite, light brown, lithographic to cryptocrystalline, some argillaceous, slightly calcareous, slightly silty, some calcite.
- 10,440 - 10,450 Dolomite, cream to light brown, lithographic to cryptocrystalline, with trace pyrite, calcareous, some calcite.
- 10,450 - 10,460 Dolomite, cream, lithographic to cryptocrystalline, some calcite, pyrite, and thin streaks of shale, black.
- 10,460 - 10,470 Dolomite, cream to light grey, cryptocrystalline to microcrystalline, some fractures, some calcite and secondary dolomite.
- 10,470 - 10,480 Dolomite, cream, cryptocrystalline, with fractures with secondary dolomite and calcite; shale, black.
- 10,480 - 10,490 Dolomite, cream to light brown, cryptocrystalline to microcrystalline, argillaceous, slightly calcareous, with fractures with secondary dolomite and calcite.
- 10,490 - 10,500 Dolomite, grey-green to light brown, cryptocrystalline to microcrystalline, argillaceous, slightly calcareous, with calcite and secondary dolomite; streaks of shale, black.
- 10,500 - 10,510 Dolomite, as above, with shale, black.
- 10,510 - 10,520 Dolomite, cream to light to dark brown, cryptocrystalline to microcrystalline, argillaceous, slightly calcareous, trace pyrite and fractures with calcite.
- 10,520 - 10,530 Dolomite, cream to light brown, cryptocrystalline to microcrystalline, argillaceous, slightly calcareous, with trace calcite.
- 10,530 - 10,540 Dolomite, cream to light brown, cryptocrystalline, argillaceous, slightly calcareous, trace pyrite, and calcite, trace laminated shale, black.
- 10,540 - 10,550 Dolomite, grey to cream, cryptocrystalline to chalky, some argillaceous, slightly calcareous, trace pyrite.

- 10,550 - 10,560 Dolomite, light grey to grey-brown, cryptocrystalline to chalky, slightly calcareous, trace pyrite, with fractures, calcite.
- 10,560 - 10,570 Dolomite, light grey to grey-brown, cryptocrystalline to chalky, slightly calcareous, trace pyrite and laminated shale, black.
- 10,570 - 10,580 Dolomite, light grey to grey-brown, cryptocrystalline to chalky, argillaceous, very calcareous, trace pyrite, some calcite.
- 10,580 - 10,590 As above, with streak shale, black.
- 10,590 - 10,600 Dolomite, grey-brown, cryptocrystalline, calcareous, with trace calcite and streaks of shale, black, calcareous.
- 10,600 - 10,610 Dolomite as above, with shale as above.
- 10,610 - 10,620 Dolomite, grey to grey-brown, calcareous, some calcite.
- 10,620 - 10,630 Dolomite, light grey, some cream, some grey-brown, cryptocrystalline to microcrystalline, slightly calcareous, with calcite and streaks of shale, black, calcareous.
- 10,630 - 10,640 Dolomite, light grey to grey-green, cryptocrystalline to microcrystalline to chalky, calcareous, with trace calcite.
- 10,640 - 10,650 Dolomite, grey-brown, lithographic to cryptocrystalline to chalky, with some calcite, and shale, black, calcareous.
- 10,650 - 10,660 Dolomite as above, with fractures, trace calcite, and shale black, calcareous.
- 10,660 - 10,670 Dolomite, cream to light grey-brown, cryptocrystalline to microcrystalline, calcareous, with trace calcite in fractures, shale, black, calcareous, with fractures and calcite.
- 10,670 - 10,680 Dolomite, cream to light grey, cryptocrystalline, argillaceous, with pyrite, slightly calcareous, with fractures and calcite.
- 10,680 - 10,690 As above.
- 10,690 - 10,700 Dolomite, grey, cryptocrystalline, argillaceous, with pyrite, fractures and calcite; shale laminated and streaks black, very calcareous.
- 10,700 - 10,710 Dolomite and shale as above.

- 10,710 - 10,720 Dolomite, cream to grey, cryptocrytstalline to microcrystalline, argillaceous, slightly calcareous, with pyrite, and laminated shale, black, calcareous.
- 10,720 - 10,730 Dolomite, cream to light grey, cryptocrystalline to microcrystalline to chalky, argillaceous, calcareous, pyrite, fractures, with secondary dolomite and calcite, and streaks of shale, black, calcareous with fractures, with calcite.
- 10,730 - 10,740 Dolomite, cream to light grey to brown, cryptocrystalline to very fine crystalline to chalky, argillaceous, calcareous, trace calcite.
- 10,740 - 10,750 Dolomite, grey to light brown, cryptocrystalline to microcrystalline to chalky, calcareous, trace fractures and calcite; shale, black, calcareous, with fractures and calcite.
- 10,750 - 10,760 Dolomite, cream to brown to grey, cryptocrystalline to very fine crystalline to chalky, argillaceous, calcareous, with fractures and calcite.
- 10,760 - 10,770 Dolomite as above, with pyrite; shale black, calcareous.
- 10,770 - 10,780 Dolomite, cream to buff, to grey-brown, cryptocrystalline to chalky, argillaceous, calcareous.
- 10,780 - 10,790 Dolomite, cream to buff to grey-brown, cryptocrystalline to chalky, argillaceous, calcareous, with pyrite, calcite fractures.
- 10,790 - 10,800 Dolomite, cream to light brown to grey, cryptocrystalline to chalky, with calcite.
- 10,800 - 10,810 Dolomite, cream to light brown to grey, cryptocrystalline to microcrystalline to chalky, argillaceous, with fractures calcite.
- 10,810 - 10,820 Dolomite, cream to light brown to grey, cryptocrystalline to microcrystalline, occasional fine crystalline (well cemented) to chalky, with fractures, calcite, very poor porosity, slightly calcareous.
- 10,820 - 10,830 Dolomite, cream to buff to grey, cryptocrystalline to microcrystalline to chalky, with pyrite, slightly calcareous, with fractures and calcite; some shale, laminated.
- 10,830 - 10,840 As above.



- 10,840 - 10,850 Dolomite, cream to light brown to light grey, cryptocrystalline to microcrystalline to chalky, with fractures and calcite.
- 10,850 - 10,860 Dolomite, cream to light brown, cryptocrystalline to microcrystalline to chalky, calcareous, with some calcite.
- 10,860 - 10,870 Dolomite, cream to light brown, cryptocrystalline to microcrystalline to chalky, calcareous, with pyrite, some calcite and fractures.
- 10,870 - 10,880 Dolomite, cream to light brown, cryptocrystalline to chalky, calcareous, with pyrite, some calcite.
- 10,880 - 10,890 Dolomite, cream to light brown to grey-brown, cryptocrystalline to microcrystalline to chalky, some calcareous, argillaceous, with pyrite, fractures and calcite.
- 10,890 - 10,900 Dolomite, cream to light brown to grey, cryptocrystalline, slightly calcareous, with pyrite, and calcite, some laminated shale, black.
- 10,900 - 10,910 Dolomite, cream to light brown, cryptocrystalline to chalky, slightly calcareous, trace disseminated pyrite and fractures, with calcite.
- 10,910 - 10,920 Dolomite as above.
- 10,920 - 10,930 Dolomite, cream to light brown to grey, cryptocrystalline, slightly calcareous, slightly argillaceous, with pyrite, fractures and calcite.
- 10,930 - 10,940 Dolomite, cream to light brown to grey, cryptocrystalline to chalky, slightly calcareous, slightly argillaceous, with fractures, with calcite.
- 10,940 - 10,950 No sample.
- 10,950 - 10,960 Dolomite, light brown to grey to cream, cryptocrystalline to microcrystalline to chalky, slightly argillaceous, some calcite, very poor sample.
- 10,960 - 10,970 Dolomite, cream to light brown to grey, cryptocrystalline to fine crystalline to chalky, some slightly calcareous, trace pyrite fractures and calcite, trace intercrystalline porosity.
- 10,970 - 10,980 Dolomite, cream to light brown to grey, cryptocrystalline to fine crystalline to chalky as above, trace fluorescence and cut.

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- 10,980 - 10,990 Dolomite, buff to light brown to brown, cryptocrystalline to very fine crystalline to chalky, slightly calcareous, some pyrite, fractures, calcite, trace intercrystalline porosity and trace fluorescence and cut.
- 10,990 - 11,000 As above.
- 11,000 - 11,010 As above.
- 11,010 - 11,020 Dolomite, buff to light brown to brown, lithographic to microcrystalline to chalky, slightly calcareous, some fractures and calcite.
- 11,020 - 11,030 Dolomite, buff to light brown to brown, lithographic to cryptocrystalline, slightly calcareous, some fractures and calcite.
- 11,030 - 11,040 Dolomite, buff to light brown to brown, lithographic to very fine crystalline, some calcareous, with fractures and calcite.
- 11,040 - 11,050 Dolomite, buff to light brown to brown, lithographic to cryptocrystalline, slightly calcareous, with fractures and calcite.
- 11,050 - 11,060 Dolomite, cream to light brown to grey, cryptocrystalline slightly calcareous, with pyrite, some fractures and calcite.
- 11,060 - 11,070 As above, with some laminated shale, black.
- 11,070 - 11,080 Dolomite, light brown to grey, cryptocrystalline, slightly calcareous, with calcite and fractures.
- 11,080 - 11,090 Dolomite, light brown to brown to buff, cryptocrystalline, slightly calcareous, with pyrite, calcite and fractures.
- 11,090 - 11,100 Dolomite, light brown to brown to grey, cryptocrystalline to microcrystalline, slightly calcareous, with pyrite fractures, calcite and laminated shale, black.
- 11,100 - 11,110 Dolomite, buff to light brown to brown, cryptocrystalline, calcareous fractures, calcite, shale laminated and trace cut, no porosity.
- 11,110 - 11,120 Dolomite, cream to light brown to grey, coarse crystalline, very slightly calcareous, with pyrite, some fractures and calcite, tight, trace galena.
- 11,120 - 11,130 Dolomite, buff to brown to grey-brown, coarse crystalline, with pyrite, very slightly calcareous, fractures and calcite trace intercrystalline porosity.

- 11,130 - 11,140 As above.
- 11,140 - 11,150 Dolomite, cream to buff to light brown, cryptocrystalline to microcrystalline, slightly calcareous, some fractures, calcite, and laminated shale, black.
- 11,150 - 11,160 As above.
- 11,160 - 11,170 Dolomite, cream to light brown to grey, cryptocrystalline, slightly calcareous, with abundant calcite (abundant cavings).
- 11,170 - 11,180 Dolomite, cream to light brown to grey, lithographic to cryptocrystalline, calcareous, with calcite (abundant cavings).
- 11,180 - 11,190 Dolomite, cream to buff to light brown, cryptocrystalline to microcrystalline, calcareous, with fractures and calcite.
- 11,190 - 11,200 Dolomite, cream to buff to grey, lithographic to cryptocrystalline to chalky, some slightly calcareous, with pyrite and calcite.
- 11,200 - 11,210 Dolomite, buff to light brown to grey, lithographic to cryptocrystalline, with some coarse crystalline, well cemented, some slightly calcareous, some fractures, with calcite, pyrite, chalcopryrite and some laminated shale, black, very slight trace porosity.
- 11,210 - 11,220 Dolomite, buff to brown to grey, lithographic, cryptocrystalline, slightly calcareous, with pyrite, and chalcopryrite, with fractures, with calcite and laminated shale, black, and dendritic.
- 11,220 - 11,230 Dolomite, buff to light brown to grey, lithographic to cryptocrystalline, calcareous, with pyrite, and chalcopryrite, some fractures and abundant calcite.
- 11,230 - 11,240 Dolomite as above, with streaks of shale, medium grey to grey, dolomitic, with clay.
- 11,240 - 11,250 Dolomite, cream to buff to grey, lithographic to cryptocrystalline, silty, argillaceous, calcareous, with fractures and calcite and laminated shale, black, some dead oil cut.
- 11,250 - 11,260 Dolomite as above, with pyrite, and chalcopryrite.
- 11,260 - 11,270 Dolomite, cream to grey, lithographic, very fine crystalline, calcareous, silty, argillaceous, with some pyrite, calcite, and laminated shale, black and dendritic shale.

- 11,270 - 11,280 Dolomite, cream to grey, lithographic to microcrystalline, occasional very fine crystalline, calcite, silty, argillaceous, with pyrite, some fractures and calcite and shale, laminated as above.
- 11,280 - 11,290 Sample questionable.
- 11,290 - 11,300 Dolomite, cream to light brown to grey, lithographic to microcrystalline to occasional very fine crystalline, trace sucrosic, calcareous, silty, argillaceous, with pyrite, calcite.
- 11,300 - 11,310 Dolomite, cream, cryptocrystalline to very fine crystalline to sucrosic, with some fine intercrystalline porosity, trace pyrite, trace pinpoint vugs.
- 11,310 - 11,320 Dolomite, cream, lithographic to medium crystalline, some sucrosic, with good intercrystalline porosity, trace pinpoint vugs.
- 11,320 - 11,330 Dolomite, cream, lithographic to very fine crystalline, with some calcite and trace intercrystalline porosity.
- 11,330 - 11,340 Dolomite, cream to light brown to grey, lithographic to medium crystalline (well cemented) some calcite and secondary dolomite, white, trace intercrystalline porosity.
- 11,340 - 11,350 Dolomite, cream to light brown to grey, cryptocrystalline to medium crystalline, some calcite and secondary dolomite, white, trace fine intercrystalline porosity.
- 11,350 - 11,360 Dolomite, cream to light brown to grey, microcrystalline to medium coarse crystalline (well cemented), pyrite and calcite, some intercrystalline porosity.
- 11,360 - 11,370 Dolomite, cream to light brown to grey, cryptocrystalline, with pyrite, some fractures, calcite and secondary dolomite, streaks of shale, black, dolomitic.
- 11,370 - 11,380 Dolomite, cream to light brown to brown to grey, cryptocrystalline to microcrystalline, with pyrite, argillaceous, some fractures, calcite, secondary dolomite.
- 11,380 - 11, 390 Dolomite, buff to light brown to grey-brown, cryptocrystalline to microcrystalline, with pyrite, argillaceous, some fractures and calcite.

- 11,390 - 11,400 Dolomite, buff to light brown to grey, cryptocrystalline, calcareous, argillaceous, with pyrite, some calcite.
- 11,400 - 11,410 Dolomite, light brown to grey, cryptocrystalline, some calcareous, silty, with fractures and with some calcite.
- 11,410 - 11,420 Dolomite, grey brown to grey, cryptocrystalline, slightly calcareous, with pyrite, some fractures, trace calcite.
- 11,420 - 11,430 Dolomite, grey to grey-brown, lithographic to cryptocrystalline, with pyrite, becoming siliceous, fractures and some calcite.
- 11,430 - 11,440 Dolomite, light grey, cryptocrystalline to microcrystalline to occasional very fine crystalline, some calcareous, with pyrite, siliceous in part.
- 11,440 - 11,450 Dolomite, grey-brown to light grey to off white, lithographic to cryptocrystalline, slightly calcareous, some siliceous, with fractures and abundant calcite.
- 11,450 - 11,460 Dolomite, cream to grey-brown to grey, lithographic to very fine crystalline, with pyrite, slightly calcareous, with some off white, siliceous, some fractures and abundant calcite.
- 11,460 - 11,470 Dolomite, cream to grey to light brown to off white, lithographic to microcrystalline, some siliceous, some calcite.
- 11,470 - 11,480 Dolomite, cream to grey to grey-brown, lithographic to very fine crystalline, some siliceous, with some calcite and laminated shale, black.
- 11,480 - 11,490 Dolomite, cream to grey to grey-brown, lithographic to cryptocrystalline, some very siliceous fractures and abundant calcite.
- 11,490 - 11,500 Dolomite, cream to grey-brown, lithographic to cryptocrystalline, some siliceous, with fractures and some calcite.
- 11,500 - 11,510 Dolomite, cream to light brown, lithographic to cryptocrystalline, siliceous, with calcite.
- 11,510 - 11,520 Dolomite, cream to light brown to grey, lithographic to cryptocrystalline, siliceous, with pyrite and some calcite.
- 11,520 - 11,530 Dolomite, grey to light to dark brown, lithographic to cryptocrystalline, siliceous, with pyrite, argillaceous, some silty, fractures, calcite, laminated shale, black, and trace sphalerite.

- 11,530 - 11,540 Dolomite, cream to light to dark brown, lithographic to micro-crystalline, some siliceous, with pyrite, argillaceous some calcite.
- 11,540 - 11,550 Dolomite, cream to light to dark brown, lithographic to very fine crystalline, some siliceous, some calcareous, argillaceous, with pyrite, calcite and laminated shale, black.
- 11,550 - 11,560 Dolomite, cream to light brown to grey brown, lithographic to very fine crystalline, some siliceous, some calcareous, with pyrite, some fractures and calcite.
- 11,560 - 11,570 As above.
- 11,570 - 11,580 Dolomite, cream to light to dark brown, lithographic to micro-crystalline, some siliceous, some calcareous, some fractures and calcite.
- 11,580 - 11,590 Dolomite, buff to light brown, sublithographic to cryptocrystalline, with trace fractures with secondary dolomite and trace limestone, buff, chalky, some laminated shale, black.
- 11,590 - 11,600 As above.
- 11,600 - 11,610 Dolomite, light grey to light brown, cryptocrystalline to very fine crystalline, calcareous, with fractures and calcite, trace intercrystalline porosity, trace minor fluorescence.
- 11,610 - 11,620 Dolomite, cream to light grey to light brown, cryptocrystalline to very fine crystalline, calcareous, with some fractures and calcite, trace intercrystalline porosity.
- 11,620 - 11,630 Dolomite, cream to light grey to light brown, lithographic to very fine crystalline, slightly calcareous, with calcite, trace intercrystalline porosity.
- 11,630 - 11,640 Dolomite, cream to light grey-brown to light grey, cryptocrystalline to very fine crystalline, slightly calcareous, some slightly argillaceous, with trace pyrite, some fractures abundant calcite and trace intercrystalline porosity.
- 11,640 - 11,650 Dolomite, cream to light grey-brown, cryptocrystalline to very fine crystalline and dark grey, medium crystalline, argillaceous, some laminated shale, black, some fractures, with calcite and secondary dolomite, dark grey, trace intercrystalline porosity.

- 11,650 - 11,660 Dolomite, cream to light grey-brown to dark grey, cryptocrystalline to medium crystalline, argillaceous, calcareous, shale, black, laminated with fractures and with calcite, trace intercrystalline porosity.
- 11,660 - 11,670 Dolomite as above, with medium crystalline, well cemented.
- 11,670 - 11,680 Dolomite, cream to light brown to grey to dark grey, lithographic to medium crystalline (occasional), argillaceous, calcareous, with shale, black laminated, some fractures, calcite.
- 11,680 - 11,690 Dolomite, buff to light brown to grey-brown, lithographic to medium crystalline (occasional), argillaceous, calcareous, with laminated shale, black, fractures and calcite.
- 11,690 - 11,700 Dolomite as above with trace pyrite.
- 11,700 - 11,710 Dolomite, buff to light brown, lithographic to medium crystalline, argillaceous, calcareous, with laminated shale, black, fractures and calcite, trace quartz grains.
- 11,710 - 11,720 Dolomite, buff to light brown to dark grey, cryptocrystalline to fine crystalline, calcareous, argillaceous, with pyrite, some fractures and calcite.
- 11,720 - 11,730 Dolomite, grey to light brown to dark grey, lithographic to very fine crystalline, calcareous, argillaceous, with some calcite.
- 11,730 - 11,740 Dolomite, grey to light brown to dark grey, lithographic to medium crystalline, calcareous, argillaceous, some calcite, trace intercrystalline porosity.
- 11,740 - 11,750 Dolomite as above, with some laminated shale, black.
- 11,750 - 11,760 Dolomite, cream to grey-brown to dark grey, cryptocrystalline to very fine crystalline, calcareous, argillaceous, some calcite and slight trace intercrystalline porosity.
- 11,760 - 11,770 Dolomite, grey to grey-brown to dark grey, calcareous, argillaceous, cryptocrystalline to very fine crystalline, some calcite.
- 11,770 - 11,780 Dolomite, grey to grey-brown to dark grey, cryptocrystalline to very fine crystalline, slightly calcareous, argillaceous, trace pyrite, some calcite, laminated shale, black.

- 11,780 - 11,790 Dolomite, grey to dark grey, lithographic to microcrystalline, slightly calcareous, very argillaceous, with fractures, calcite and black shale laminations; shale, black, dolomitic.
- 11,790 - 11,800 Dolomite, grey to grey-brown to dark grey, cryptocrystalline to very fine crystalline, occasional medium crystalline, slightly calcareous, argillaceous, fractures and calcite, shale as above.
- 11,800 - 11,810 Dolomite, grey to grey brown to dark grey, cryptocrystalline to microcrystalline, slightly calcareous, argillaceous, with some fractures and calcite.
- 11,810 - 11,820 Dolomite as above, with pyrite and calcite; limestone, dark grey, cryptocrystalline, silty; shale, black, dolomitic.
- 11,820 - 11,830 As above.
- 11,830 - 11,840 Dolomite, grey to grey-brown, cryptocrystalline to microcrystalline, slightly calcareous, argillaceous, trace calcite, trace fractures.
- 11,840 - 11,850 Dolomite, grey to grey-brown, cryptocrystalline to microcrystalline, slightly calcareous, argillaceous, with pyrite, trace calcite, trace fractures.
- 11,850 - 11,860 Dolomite, light grey to dark grey, cryptocrystalline to microcrystalline, calcareous, trace calcite.
- 11,860 - 11,870 Dolomite as above, with laminated shale, black.
- 11,870 - 11,880 Dolomite, light grey, cryptocrystalline to microcrystalline, occasional very fine crystalline, slightly calcareous; limestone, dark grey, cryptocrystalline, silty, argillaceous.
- 11,880 - 11,890 Dolomite, light grey, cryptocrystalline to microcrystalline, slightly calcareous, with some dark grey cryptocrystalline, argillaceous.
- 11,890 - 11,900 Dolomite, light to dark grey, some grey brown, lithographic to cryptocrystalline, calcareous, argillaceous, some calcite, some laminated shale, black, dolomitic.
- 11,900 - 11,910 Dolomite, light to dark grey, cryptocrystalline to microcrystalline, calcareous, argillaceous, with pyrite, some calcite and laminated shale, black, dolomitic.
- 11,910 - 11,920 Dolomite, dark grey-brown, cryptocrystalline to microcrystalline, slightly calcareous, argillaceous, with pyrite.



- 11,920 - 11,930 Dolomite, light grey to grey-brown to dark grey-brown, lithographic to microcrystalline, some calcareous, argillaceous, silty, with pyrite, trace fractures, calcite and limestone, dark grey, cryptocrystalline.
- 11,930 - 11,940 Dolomite, grey-brown, lithographic to cryptocrystalline, argillaceous, trace fractures and calcite, streaks of shale, black, calcareous, dolomitic.
- 11,940 - 11,950 Dolomite, light grey to grey-brown, lithographic to cryptocrystalline, trace pyrite and calcite.
- 11,950 - 11,960 No sample.
- 11,960 - 11,970 Dolomite, light grey to grey-brown to dark grey, cryptocrystalline to very fine crystalline, slightly calcareous, some argillaceous, trace fractures and calcite and limestone, dark grey, cryptocrystalline, argillaceous.
- 11,970 - 11,980 Dolomite, grey to dark grey, cryptocrystalline to fine crystalline, slightly calcareous, argillaceous (well cemented) fractures and calcite.
- 11,980 - 11,990 Dolomite, grey to dark grey, lithographic to medium crystalline, (well cemented) slightly calcareous, argillaceous, with pyrite, fractures, calcite and secondary dolomite.
- 11,990 - 12,000 Dolomite, grey to dark grey to dark brown, cryptocrystalline to medium coarse crystalline (well cemented), some calcareous, argillaceous, with pyrite, some calcite, also silty and some fractures, no intercrystalline porosity.
- 12,000 - 12,010 Dolomite, grey to dark grey, cryptocrystalline to fine crystalline, some calcareous, argillaceous, silty, with fractures and calcite. Samples very poor. Lost 600 Bbls mud at 12,012.
- 12,010 - 12,020 As above.
- 12,020 - 12,030 Dolomite, cream to light grey, cryptocrystalline to very fine crystalline, trace sucrosic, calcareous, with some calcite, trace intercrystalline porosity.
- 12,030 - 12,040 Dolomite, light grey to grey-brown to dark grey, lithographic to microcrystalline, slightly calcareous, argillaceous, some silty, trace calcite.
- 12,040 - 12,050 Dolomite, grey-brown to dark grey, lithographic to medium crystalline, slightly calcareous, argillaceous, some silty some calcite; shale, black, dolomitic.

- 12,050 - 12,060 Dolomite, grey to grey-brown to dark grey, cryptocrystalline to very fine crystalline, calcareous, silty, argillaceous, with trace fractures, calcite.
- 12,060 - 12,070 Dolomite, light grey to grey-brown, cryptocrystalline to microcrystalline, very calcareous, silty, with fractures and calcite.
- 12,070 - 12,080 Dolomite, grey to dark grey, cryptocrystalline to microcrystalline, calcareous, silty, with trace calcite.
- 12,080 - 12,090 As above, with some fractures and some calcite.
- 12,090 - 12,100 Dolomite, grey to grey-brown to dark grey, lithographic to microcrystalline, slightly calcareous, silty, some argillaceous, with fractures and calcite.
- 12,100 - 12,110 Dolomite, grey-brown, lithographic to microcrystalline, calcareous, silty, some argillaceous, with fractures and calcite.
- 12,110 - 12,120 Dolomite, grey to grey-brown to dark grey, cryptocrystalline to very fine crystalline, calcareous, silty, argillaceous, with trace fractures and calcite.
- 12,120 - 12,130 Dolomite, grey to grey-brown, lithographic to cryptocrystalline, silty, slightly calcareous, trace calcite and fractures.
- 12,130 - 12,140 Dolomite, grey to grey-brown, lithographic to cryptocrystalline, some calcareous, silty, with trace fractures, some calcite.
- 12,140 - 12,150 Dolomite, grey to grey-brown to dark grey, cryptocrystalline to fine crystalline, slightly calcareous, silty, argillaceous some calcite (abundant cavings.)
- 12,150 - 12,160 Dolomite, light grey to dark grey, lithographic to microcrystalline, argillaceous, slightly calcareous, trace pyrite and shale, laminated (abundant cavings).
- 12,160 - 12,170 Dolomite, light grey to dark grey, lithographic to very fine crystalline, slightly calcareous, some argillaceous, trace intercrystalline porosity (abundant cavings).
- 12,170 - 12,180 Dolomite, light to dark grey to grey-brown, lithographic to very fine crystalline, some calcareous, with pyrite, trace calcite, (abundant cavings).

- 12,180 - 12,190 Dolomite, grey to dark grey to black, lithographic to cryptocrystalline, slightly calcareous, silty, very argillaceous, trace pyrite, siliceous in part (some cavings), trace quartz grains (float), trace calcite.
- 12,190 - 12,200 Dolomite, grey to dark grey to black, lithographic to microcrystalline, slightly calcareous, silty, very argillaceous, pyrite, siliceous in part, with some laminated shale, black.
- 12,200 - 12,210 Dolomite, grey to grey-brown, cryptocrystalline to microcrystalline, slightly calcareous, slightly siliceous, trace pyrite.
- 12,210 - 12,220 Dolomite, light grey to grey, microcrystalline, slightly calcareous, trace pyrite.
- 12,220 - 12,230 Dolomite, light grey to grey-brown to dark grey, cryptocrystalline to very fine crystalline, slightly calcareous, silty, argillaceous, trace pyrite and calcite.
- 12,230 - 12,240 As above.
- 12,240 - 12,250 Dolomite, grey to dark grey, cryptocrystalline to very fine crystalline, calcareous, argillaceous, very silty.
- 12,250 - 12,260 Dolomite, grey, cryptocrystalline to microcrystalline, slightly calcareous, with trace pyrite.
- 12,260 - 12,270 Dolomite, grey to dark grey, cryptocrystalline to very fine crystalline, calcareous, argillaceous, very silty trace pyrite.
- 12,270 - 12,280 Dolomite, light grey to grey, cryptocrystalline to microcrystalline, calcareous, silty.
- 12,280 - 12,290 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, slightly calcareous, silty, very argillaceous, trace calcite, trace fractures, some laminated shale, black.
- 12,290 - 12,300 Dolomite, light grey to grey to grey-brown, cryptocrystalline to microcrystalline, calcareous, silty, trace pyrite, some calcite.
- 12,300 - 12,310 Dolomite, light grey to grey, cryptocrystalline to microcrystalline, calcareous, silty, trace pyrite, some calcite.
- 12,310 - 12,320 Dolomite, light grey, cryptocrystalline to microcrystalline, calcareous, silty, trace pyrite.

- 12,320 - 13,330 Dolomite, light grey, microcrystalline, slightly calcareous, silty, with trace pyrite.
- 13,330 - 13,340 Dolomite, light to dark grey, microcrystalline to very fine crystalline, silty, argillaceous, calcareous, with pyrite and some calcite.
- 13,340 - 13,350 Dolomite as above.
- 13,350 - 13,360 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, calcareous, silty, argillaceous, with trace pyrite and calcite.
- 12,360 - 12,370 Dolomite, dark grey, very fine crystalline to fine crystalline, calcareous, silty, argillaceous, trace fractures and calcite and laminated shale, black, trace intercrystalline porosity.
- 12,370 - 12,380 Dolomite, grey to dark grey interbeds, very fine crystalline, calcareous, silty, argillaceous, trace fractures and calcite, trace chert, dark grey.
- 12,380 - 12,390 Dolomite, grey to dark grey interbeds, very fine crystalline to fine crystalline, calcareous, silty, argillaceous with fractures, calcite, trace chert, dark grey to brown smokey, trace intercrystalline porosity.
- 12,390 - 12,400 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, calcareous, silty, argillaceous, some calcite, trace intercrystalline porosity.
- 12,400 - 12,410 Dolomite, dark grey, microcrystalline to very fine crystalline, some calcareous, silty, very argillaceous, some calcite, trace chert, brown, trace intercrystalline porosity.
- 12,410 - 12,420 Dolomite, grey-brown to dark grey interbeds, cryptocrystalline to microcrystalline, some calcareous, silty, argillaceous, trace pyrite, some calcite.
- 12,420 - 12,430 Dolomite, dark grey, cryptocrystalline to microcrystalline, some calcareous, silty, argillaceous, with some calcite.
- 12,430 - 12,440 Dolomite, dark grey, very fine crystalline to fine crystalline, some calcareous, silty, argillaceous, some fractures and calcite, trace intercrystalline porosity.
- 12,440 - 12,450 Dolomite, dark grey, very fine crystalline to fine crystalline as above, with laminated shale, black, trace intercrystalline porosity.

- 12,450 - 12,460 Dolomite, dark grey, very fine crystalline, some fine crystalline, some calcareous, silty, argillaceous, with fractures, calcite, pyrite, trace chert, clear.
- 12,460 - 12,470 Dolomite, brown, lithographic to cryptocrystalline, and dark grey, very fine crystalline, calcareous, silty, argillaceous to very argillaceous, with laminated shale, black, some fractures, calcite, trace chert, brown to white to clear.
- 12,470 - 12,480 Dolomite, brown to grey, lithographic to cryptocrystalline and dark grey to black, microcrystalline to very fine crystalline, some slightly calcareous, silty, very argillaceous, with laminated shale, black, some fractures, calcite, trace chert, brown to white to clear.
- 12,480 - 12,490 Dolomite, grey, cryptocrystalline to sucrosic and dark grey to black, microcrystalline to very fine crystalline, some slightly calcareous, silty, some very argillaceous, fractures, calcite, trace chert, white to brown to grey to clear.
- 12,490 - 12,500 Dolomite, grey to grey-brown and interbeds dark grey, cryptocrystalline to microcrystalline, silty, some argillaceous, some calcite.
- 12,500 - 12,510 Dolomite as above.
- 12,510 - 12,520 Dolomite, dark grey to grey-brown to grey, lithographic to very fine crystalline, slightly calcareous, silty, argillaceous, with some laminated shale, black.
- 12,520 - 12,530 Dolomite, grey to grey-brown to dark grey to black, lithographic to microcrystalline, calcareous, silty, argillaceous, trace pyrite and with laminated shale, black.
- 12,530 - 12,540 Dolomite, grey to dark grey to black, lithographic to medium coarse crystalline (interlocking), slightly calcareous, silty, argillaceous, with calcite, no porosity.
- 12,540 - 12,550 Dolomite, grey to dark grey to black, cryptocrystalline to medium coarse crystalline, calcite, silty, very argillaceous, trace calcite and fractures, no porosity.
- 12,550 - 12,560 Dolomite, grey, coarse crystalline (interlocking) and dark grey, cryptocrystalline to microcrystalline, slightly calcareous, silty, very argillaceous, with fractures.
- 12,560 - 12,570 Dolomite, grey to grey-brown to dark grey, cryptocrystalline to microcrystalline, slightly calcareous, silty, some argillaceous, with fractures and calcite.

- 12,570 - 12,580 Dolomite, dark grey, very fine crystalline, slightly calcareous, very silty, slight argillaceous, with calcite and fractures.
- 12,580 - 12,590 Dolomite as above, with trace pyrite.
- 12,590 - 12,600 Dolomite, grey to dark grey, very fine crystalline, slightly calcareous, very silty, some calcite.
- 12,600 - 12,610 Dolomite, dark grey to dark grey-black, cryptocrystalline to microcrystalline, slightly calcareous, some silty, very argillaceous, some calcite and fractures.
- 12,610 - 12,620 Dolomite as above, with trace pyrite.
- 12,620 - 12,630 Dolomite, dark grey-black, cryptocrystalline to microcrystalline, slightly calcareous, slightly silty, very argillaceous, some pyrite, calcite and fractures, and with streaks of shale, black, dolomitic.
- 12,630 - 12,640 Dolomite as above, with trace dolomite, light brown, cryptocrystalline, with pyrite.
- 12,640 - 12,650 Dolomite, grey to dark grey-black, cryptocrystalline to microcrystalline, calcareous, silty, argillaceous, with pyrite and banded fractures and calcite, trace quartz crystals.
- 12,650 - 12,660 Dolomite, grey to grey-brown, lithographic to microcrystalline, calcareous, silty, trace pyrite, fractures and calcite.
- 12,660 - 12,670 Dolomite, grey to grey-brown to dark grey-black, lithographic to microcrystalline, trace very fine crystalline, calcareous, some silty, some argillaceous, trace pyrite, fractures and calcite.
- 12,670 - 12,680 Dolomite, grey to dark grey-black, cryptocrystalline to fine crystalline, slightly calcareous, some silty, some argillaceous, trace pyrite, some calcite, trace fractures, trace intercrystalline porosity.
- 12,680 - 12,690 Dolomite, grey to dark grey, fine crystalline to medium crystalline, calcareous, some silty, some siliceous, some slightly argillaceous, with abundant calcite, some fractures and trace intercrystalline porosity.
- 12,690 - 12,700 Dolomite, grey to dark grey as above, no porosity.

- 12,700 - 12,710 Dolomite, grey to grey-brown to dark grey, lithographic to microcrystalline, some calcareous, some silty, pyrite, and some calcite, and fractures, no porosity.
- 12,710 - 12,720 Limestone, grey, sucrosic to chalky, silty, some dolomitic; dolomite as above, with shale laminated, black, dolomitic.
- 12,720 - 12,730 Dolomite, grey to dark grey, lithographic to microcrystalline, some calcareous, silty, trace pyrite, abundant calcite and some fractures; limestone, grey, microcrystalline to chalky, silty, some dolomitic.
- 12,730 - 12,740 Dolomite, grey to dark grey, cryptocrystalline to microcrystalline, some calcareous, silty, trace pyrite, trace fractures and calcite, some laminated shale, black, dolomitic.
- 12,740 - 12,750 Questionable, sample poor.
- 12,750 - 12,760 Dolomite, grey to grey-brown to dark grey, cryptocrystalline to medium crystalline (interlocked), some calcareous, silty, trace pyrite, fractures, abundant calcite; limestone, grey, fine crystalline to medium crystalline to chalky, silty, dolomitic.
- 12,760 - 12,770 Dolomite, grey to grey-brown, cryptocrystalline to medium crystalline, slightly calcareous, silty, trace pyrite, with fractures, calcite, and laminated shale, black, trace intercrystalline porosity.
- 12,770 - 12,780 Dolomite, grey to dark grey, cryptocrystalline to medium coarse crystalline, slightly calcareous, silty, with pyrite, trace fractures, abundant calcite and secondary dolomite; limestone, trace intercrystalline porosity.
- 12,780 - 12,790 Dolomite, grey to dark grey black, fine crystalline to coarse crystalline, some slightly calcareous, slightly silty, trace pyrite, slightly argillaceous, with some calcite and fractures, some laminated shale, black, dolomitic, possible 'slicks', trace quartz crystals, some intercrystalline porosity.
- 12,790 - 12,800 Dolomite, grey to dark grey, cryptocrystalline to medium crystalline, some calcareous, silty, pyrite, some calcite; limestone, grey, fine crystalline to medium crystalline, very silty, slightly dolomitic, trace intercrystalline porosity.

- 12,800 - 12,810 Dolomite, cream to grey to grey-brown, fine crystalline to medium crystalline, slightly calcareous, silty, with some calcite and trace fractures, trace intercrystalline porosity.
- 12,810 - 12,820 Dolomite, cream to light grey-brown, cryptocrystalline to microcrystalline, slightly calcareous, slightly silty, trace calcite, trace quartz crystals.
- 12,820 - 12,830 Dolomite, light grey-brown to dark grey-black, cryptocrystalline to medium crystalline, very slightly calcareous, some silty, some argillaceous, trace pyrite, some fractures and calcite, some laminated shale, black, dolomitic.
- 12,830 - 12,840 Dolomite as above, with some quartz crystals (fracture filling).
- 12,840 - 12,850 Dolomite, grey to dark grey to dark grey-black, cryptocrystalline to microcrystalline, slightly calcareous, silty, with some fractures and abundant calcite and with secondary dolomite.
- 12,850 - 12,860 Dolomite, dark grey, microcrystalline to very fine crystalline, calcareous, silty, with pyrite, some argillaceous, fractures, calcite; limestone, grey, microcrystalline to very fine crystalline, silty, with pyrite, some dolomitic, fractures, calcite.
- 12,860 - 12,870 Dolomite, dark grey, cryptocrystalline to microcrystalline, calcareous, silty, some argillaceous; some cream, medium crystalline, fractures, calcite; limestone as above, 30% calcite.
- 12,870 - 12,880 Dolomite, cream to grey to dark grey, cryptocrystalline to medium crystalline, calcareous, silty, with pyrite and calcite; limestone, cream to grey, cryptocrystalline to fine crystalline, silty, with pyrite, and calcite.
- 12,880 - 12,890 Dolomite as above, limestone, cream to grey, cryptocrystalline to fine crystalline, silty, with pyrite and calcite.
- 12,890 - 12,900 Dolomite, grey to dark grey, microcrystalline to fine crystalline, some calcareous, silty, with pyrite, calcite; limestone as above.
- 12,900 - 12,910 Dolomite, grey to dark grey, microcrystalline to fine crystalline, slightly calcareous, silty, trace pyrite, calcite and fractures, some laminated shale, black.
- 12,910 - 12,920 Dolomite as above.



- 12,920 - 12,930 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, slightly calcareous, silty with pyrite, calcite and fractures.
- 12,930 - 12,940 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, slightly calcareous, silty, with calcite and fractures.
- 12,940 - 12,950 Dolomite, grey to dark grey, very fine crystalline, slightly calcareous, silty, with calcite and fractures.
- 12,950 - 12,960 Dolomite, grey to dark grey-black, microcrystalline to very fine crystalline, calcareous, silty, slightly argillaceous, with fractures and calcite.
- 12,960 - 12,970 Dolomite, dark grey-black to grey, microcrystalline to very fine crystalline, silty, siliceous, with some secondary dolomite, calcite and fractures.
- 12,970 - 12,980 Dolomite, dark grey to dark grey-black, as above.
- 12,980 - 12,990 As above.
- 12,990 - 13,000 Dolomite, as above, with trace pyrite and some quartz crystals.
- 13,000 - 13,010 Dolomite, cream to grey to dark grey, cryptocrystalline to fine crystalline, some silty, siliceous, with calcite and fractures.
- 13,010 - 13,020 Dolomite, grey to grey-brown, very fine crystalline to fine crystalline, silty, siliceous, with fractures, secondary dolomite and laminated shale, black.
- 13,020 - 13,030 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, silty, siliceous, with some fractures and calcite.
- 13,030 - 13,040 As above.
- 13,040 - 13,050 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, silty, siliceous, trace fractures, calcite, secondary dolomite and quartz crystals.
- 13,050 - 13,060 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, some calcareous, silty, slightly siliceous, with fractures, calcite, secondary dolomite and quartz crystals.
- 13,060 - 13,070 Dolomite as above, dense, no quartz.

- 13,070 - 13,080 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, some calcareous, silty, slightly siliceous, pyrite, with fractures, calcite (abundant) and secondary dolomite.
- 13,080 - 13,090 Dolomite, cream to grey, microcrystalline to medium crystalline, silty, slightly siliceous, with some calcite.
- 13,090 - 13,100 Dolomite, cream to dark grey, microcrystalline to medium crystalline, some silty, siliceous, with some fractures and calcite.
- 13,100 - 13,110 Dolomite, cream to grey to dark grey, cryptocrystalline to fine crystalline, some silty, siliceous, with calcite and fractures.
- 13,110 - 13,120 Dolomite, grey to grey-brown, very fine crystalline to fine crystalline, silty, siliceous, with calcite, secondary dolomite and fractures.
- 13,120 - 13,130 Dolomite, grey to light grey-brown, microcrystalline, silty, siliceous, with some fractures and calcite.
- 13,130 - 13,140 Dolomite, grey to dark grey, very fine crystalline, silty, siliceous, with fractures and some calcite.
- 13,140 - 13,150 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, silty, some siliceous, trace fractures, trace calcite.
- 13,150 - 13,160 Dolomite, grey to dark grey-black, microcrystalline to very fine crystalline, silty, slightly argillaceous, trace fractures, secondary dolomite, calcite and some laminated shale, black.
- 13,160 - 13,170 Dolomite as above, with trace shale, black, dolomitic and carbonaceous.
- 13,170 - 13,180 Dolomite, grey to dark grey-black, very fine crystalline, silty, argillaceous, with some fractures, calcite, secondary dolomite and laminated shale, black.
- 13,180 - 13,190 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, some calcareous, silty, with fractures, some calcite and some secondary dolomite.
- 13,190 - 13,200 Dolomite as above, with trace pyrite and chert, dark grey.

- 13,200 - 13,210 Dolomite, dark grey to grey, very fine crystalline, silty with fractures with secondary dolomite, medium crystalline to coarse crystalline, and trace calcite.
- 13,210 - 13,220 Dolomite, grey to dark grey, very fine crystalline, silty, some fractures, some secondary dolomite, some calcite.
- 13,220 - 13,230 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, silty, some fractures, some secondary dolomite, some calcite.
- 13,230 - 13,240 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, silty, some fractures, calcite, secondary dolomite, trace chert, grey brown.
- 13,240 - 13,250 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, silty, some fractures, trace calcite, secondary dolomite, some chert, brown.
- 13,250 - 13,260 Dolomite, cream to grey to grey-brown, microcrystalline to fine crystalline, silty, some slightly calcareous, pyrite, with fractures, calcite abundant, secondary dolomite, trace chert, brown.
- 13,260 - 13,270 Dolomite, cream to grey to grey-brown, microcrystalline to fine crystalline, silty, some slightly calcareous, pyrite, trace fractures, some secondary dolomite, calcite.
- 13,270 - 13,280 Dolomite, grey to grey-brown to dark grey, microcrystalline to medium crystalline, some silty, trace pyrite, fractures, calcite, abundant secondary dolomite, some laminated shale, black, trace chert, brown.
- 13,280 - 13,290 Dolomite, grey to grey brown to dark grey, cryptocrystalline to microcrystalline, some calcareous, silty, with fractures calcite, secondary dolomite and laminated shale, black, trace chert, black, trace quartz crystals.
- 13,290 - 13,300 Dolomite, grey to dark grey, microcrystalline to very fine crystalline, slightly calcareous, some silty, pyrite, trace fractures, secondary dolomite, calcite.
- 13,300 - 13,310 Dolomite, light to dark grey, microcrystalline to medium crystalline, slightly calcareous, slightly silty, pyrite, with fractures, calcite, secondary dolomite and trace chert, grey to black.
- 13,310 - 13,320 Dolomite, light to dark grey to grey-black, microcrystalline to fine crystalline, some coarse crystalline as above.

- 13,320 - 13,330 Dolomite, grey to grey-brown to dark grey-black, lithographic to fine crystalline, slightly calcareous, silty, pyrite, some fractures, calcite and secondary dolomite, trace chert, brown.
- 13,330 - 13,340 As above,
- 13,340 - 13,350 Dolomite, light to dark grey, very fine crystalline to fine crystalline, some calcareous, silty, with trace fractures, secondary dolomite, abundant calcite, some chert, brown to grey to black.
- 13,350 - 13,360 Samples questionable, lost 2 cones
- 13,360 - 13,370 Samples questionable, as above.
- 13,370 - 13,380 Dolomite, light to dark grey, very fine crystalline to fine crystalline, some calcareous, silty, siliceous, with trace fractures, some secondary dolomite, abundant calcite, some chert, grey to brown to black, (30% calcite and secondary dolomite).
- 13,380 - 13,390 Dolomite, dark grey to grey-black, very fine crystalline to medium crystalline, some calcareous, silty, pyrite, siliceous, with fractures (secondary dolomite and calcite) 50%, some chert grey to brown to black.
- 13,390 - 13,400 Dolomite, grey to dark grey-black, very fine crystalline to medium crystalline, trace cream, coarse crystalline, silty, with pyrite, siliceous, some fractures, secondary dolomite, some chert, brown to grey.
- 13,400 - 13,410 Dolomite, as above, with some calcite, trace chert, brown to grey.
- 14,410 - 14,420 Dolomite, brown to grey to dark grey, lithographic to medium crystalline, silty, siliceous, with pyrite, trace fractures, with calcite, secondary dolomite, trace chert, grey to brown, trace quartz crystals.
- 14,420 - 14,430 Dolomite, grey to dark grey, microcrystalline to fine crystalline, silty, siliceous, slightly argillaceous, with pyrite, some chert, grey to brown to black, trace fractures, with calcite, secondary dolomite and trace shale, grey.
- 13,430 - 13,440 Dolomite, grey to grey-brown to dark grey, lithographic, fine crystalline to chalky, silty, some siliceous, with pyrite, trace fractures, calcite.

- 13,440 - 13,450 Dolomite, grey to cream, lithographic to fine crystalline to chalky, some silty, with pyrite, abundant calcite (60%), trace minor fluorescence, trace fractures.
- 13,450 - 13,460 Dolomite, cream to grey to dark grey, cryptocrystalline to fine crystalline to chalky, silty, with pyrite, trace fractures, trace calcite, some minor fluorescence.
- 13,460 - 13,470 Dolomite, cream to grey-brown, cryptocrystalline to fine crystalline, some silty, pyrite, and some calcite, some minor fluorescence.
- 13,470 - 13,480 Dolomite, cream to some grey, cryptocrystalline to microcrystalline, trace coarse crystals, some silty, trace pyrite, some secondary dolomite, some minor fluorescence.
- 13,480 - 13,490 Dolomite, cream, cryptocrystalline to medium crystalline, trace coarse crystals, pyrite, some calcite, trace fractures, secondary dolomite, minor fluorescence.
- 13,490 - 13,500 Dolomite, cream, cryptocrystalline to medium crystalline, trace pyrite, calcite, fractures, some secondary dolomite, some minor fluorescence, (all dolomite, cream, well indurated).
- 13,500 - 13,510 Dolomite as above.
- 13,510 - 13,520 Dolomite, cream to light grey, very fine crystalline to medium crystalline, trace pyrite, calcite, fractures, some minor fluorescence.
- 13,520 - 13,530 Dolomite, cream, cryptocrystalline to very fine crystalline, trace pyrite, trace fractures, trace secondary dolomite, abundant minor fluorescence.
- 13,530 - 13,540 Dolomite, cream to light grey, cryptocrystalline to medium crystalline, trace calcite, trace secondary dolomite, some minor fluorescence.
- 13,540 - 13,550 Dolomite, cream to light grey, cryptocrystalline to medium crystalline, trace secondary dolomite, abundant minor fluorescence.
- 13,550 - 13,560 Dolomite, cream to grey-brown, cryptocrystalline to medium crystalline, trace pyrite, trace calcite, trace secondary dolomite, some minor fluorescence.
- 13,560 - 13,570 Dolomite, light grey-brown, microcrystalline to very fine crystalline, slightly calcareous, trace calcite, trace minor fluorescence.
- 13,570 - 13,580 Dolomite, light grey-brown to light brown, microcrystalline to fine crystalline, slightly calcareous, slightly silty, trace calcite, trace secondary dolomite.

- 13,580 - 13,590 Dolomite, light grey-brown, microcrystalline to fine crystalline, slightly calcareous, slightly silty, trace calcite, trace secondary dolomite.
- 13,590 - 13,600 Dolomite, light brown, microcrystalline to very fine crystalline, slightly calcareous, slightly silty, pyrite, trace fractures, calcite, secondary dolomite.
- 13,600 - 13,610 Dolomite, light grey-brown, cryptocrystalline to very fine crystalline, slightly calcareous, slightly silty, pyrite, chalcopyrite, trace fractures, secondary dolomite.
- 13,610 - 13,620 Dolomite, light grey-brown to grey-brown, cryptocrystalline to very fine crystalline, slightly calcareous, slightly silty, pyrite, trace fractures, calcite.
- 13,620 - 13,630 Dolomite, light grey-brown to grey-brown, cryptocrystalline to fine crystalline, slightly calcareous, slightly silty, pyrite, trace fractures, some calcite.
- 13,630 - 13,640 Dolomite as above.
- 13,640 - 13,650 Dolomite, grey to grey-brown, cryptocrystalline to fine crystalline, slightly calcareous, slightly silty, some pyrite, trace fractures and calcite.
- 13,650 - 13,660 Dolomite, grey to grey-brown to dark grey, cryptocrystalline to very fine crystalline, slightly calcareous, silty, trace fractures, calcite, secondary dolomite.
- 13,660 - 13,670 Dolomite, grey-brown, cryptocrystalline to very fine crystalline, slightly calcareous, silty, with pyrite, calcite.
- 13,670 - 13,680 Dolomite, grey-brown to dark brown, cryptocrystalline to very fine crystalline, slightly calcareous, silty, with pyrite, trace calcite.
- 13,680 - 13,690 Dolomite as above.
- 13,690 - 13,700 Dolomite, grey-brown to dark brown, cryptocrystalline to fine crystalline, slightly calcareous, silty, trace pyrite, trace calcite, some secondary dolomite.
- 13,700 - 13,710 Dolomite, brown to dark grey-black, microcrystalline to fine crystalline, some slightly calcareous, some silty, with pyrite, trace fractures, secondary dolomite.
- 13,710 - 13,720 Dolomite, brown, cryptocrystalline to very fine crystalline, slightly calcareous, silty, trace pyrite, trace fractures, calcite, secondary dolomite.

- 13,720 - 13,730 Dolomite, brown to dark grey-brown, very fine crystalline to fine crystalline, slightly calcareous, slightly silty, trace pyrite, trace calcite, secondary dolomite.
- 13,730 - 13,740 Dolomite as above, with trace fractures and laminated shale, black.
- 13,740 - 13,750 Dolomite, light brown to dark grey-brown, microcrystalline to fine crystalline, slightly calcareous, silty, trace pyrite and trace calcite, and laminated shale, black.
- 13,750 - 13,760 As above.
- 13,760 - 13,770 Dolomite, light brown to brown, microcrystalline to very fine crystalline, slightly calcareous, slightly silty, trace secondary dolomite.
- 13,770 - 13,780 Dolomite, light brown to brown, microcrystalline to very fine crystalline, slightly calcareous, slightly silty, trace pyrite, calcite, secondary dolomite.
- 13,780 - 13,790 Dolomite, light brown to brown to dark grey black as above.
- 13,790 - 13,800 Dolomite, grey-brown to brown to grey-black, microcrystalline to very fine crystalline, slightly calcareous, slightly silty, trace pyrite, fractures, calcite, trace quartz crystals.
- 13,800 - 13,810 Dolomite, grey-brown to dark grey-brown, very fine crystalline to fine crystalline, slightly calcareous, slightly silty, trace pyrite, trace calcite, fractures, some laminated shale, black.
- 13,810 - 13,820 As above.
- 13,820 - 13,830 Dolomite, grey to medium grey-black, microcrystalline to very fine crystalline, some slightly calcareous, silty, argillaceous, pyrite, trace fractures and calcite.
- 13,830 - 13,840 As above, with some laminated shale, black, and trace limestone, brown, lithographic.
- 13,840 - 13,850 Dolomite, grey to dark grey-black, microcrystalline to very fine crystalline, slightly calcareous, silty, argillaceous, with pyrite, trace fractures, calcite, secondary dolomite, abundant laminated shale, black, trace limestone, black, lithographic, trace pelletoidal, streaks of shale, black, dolomitic.
- 13,850 - 13,860 Dolomite, grey to dark grey-black, microcrystalline to fine crystalline, slightly calcareous, slightly silty, argillaceous, with pyrite, trace fractures, some secondary dolomite and laminated shale, black.

- 13,860 - 13,870 Dolomite, grey to dark grey-black, microcrystalline to very fine crystalline, slightly calcareous, slightly silty, argillaceous, trace pyrite, fractures, calcite, with laminated shale, black and streaks of shale, black, dolomitic.
- 13,870 - 13,880 Dolomite as above, with trace secondary dolomite.
- 13,880 - 13,890 Dolomite, as above; limestone, buff to light grey, lithographic to very fine crystalline, silty, trace chert, white.
- 13,890 - 13,900 Dolomite, light grey to dark grey-black, microcrystalline to very fine crystalline, slightly calcareous, slightly silty, very argillaceous, trace pyrite, fractures, and calcite, abundant laminated shale, black, dolomitic, trace chert, white.
- 13,900 - 13,910 Dolomite, cream to grey to dark brown-black, microcrystalline to medium crystalline, slightly calcareous, some silty, very argillaceous, trace pyrite, fractures, calcite, secondary dolomite; abundant shale, laminated, black, dolomitic; shale, black, pyritic, dolomitic, trace quartzite, white; and floating quartz and quartz crystals.
- 13,910 - 13,920 Dolomite, grey-brown to dark grey-black, microcrystalline to coarse crystalline, slightly calcareous, argillaceous, pyrite; laminated shale, black, dolomitic and inclusions, trace fractures, secondary dolomite, calcite; shale, black, dolomitic, carbonaceous, trace pinpoint vuggy porosity.
- 13,920 - 13,930 Dolomite as above, trace quartz crystals.
- 13,930 - 13,940 Dolomite, grey-brown to dark grey-black, microcrystalline, some coarse crystalline, slightly calcareous, silty, argillaceous, trace pyrite, with laminations and streaks of shale, black, dolomitic, trace fractures, calcite and some secondary dolomite, trace pinpoint vuggy porosity.
- 13,940 - 13,950 As above.
- 13,950 - 13,960 Dolomite, grey to dark grey-black, cryptocrystalline to microcrystalline, slightly calcareous, silty, argillaceous, trace pyrite, trace calcite and secondary dolomite; trace limestone, light grey, chalky, silty.
- 13,960 - 13,970 Dolomite, light grey to dark grey-black, microcrystalline to very fine crystalline, calcareous, some silty, argillaceous, trace pyrite, trace calcite and secondary dolomite.
- 13,970 - 13,980 Dolomite, grey to dark grey-black, microcrystalline to very fine crystalline, calcareous, silty, very argillaceous, trace pyrite, calcite, secondary dolomite; trace limestone, light grey, chalky to sucrosic, silty.



- 13,980 - 13,990 Dolomite, dark grey-black, microcrystalline to very fine crystalline, calcareous, silty, very argillaceous, some pyrite, trace fractures, secondary dolomite; limestone, light grey, chalky to sucrosic, silty, trace intercrystalline porosity.
- 13,990 - 14,000 Dolomite, medium to dark grey-black, microcrystalline, calcareous, silty, argillaceous, trace pyrite, secondary dolomite, limestone as above, trace intercrystalline porosity.



CORE LABORATORIES — CANADA LTD.  
PETROLEUM RESERVOIR ENGINEERING



Company Amoco Canada Petroleum Company Ltd. Page 1 of 1  
Well Amoco PCP B-1 Cranswick YT A-42 File 933-3161  
Field Cranswick, Yukon Territories Analyst GA  
Location 65 41'12.62 N.L.  
133 07'52.10 W.L. Elevation: K.B. \_\_\_\_\_ Grd. 2012'  
Formation Hume Depth 7125' - 7272'  
Sampled from DST #1 (Top of Tool) by \_\_\_\_\_  
Sampling pressure \_\_\_\_\_ psig Sampling temp. \_\_\_\_\_ °F Ambient temp. \_\_\_\_\_ °F  
Date sampled Jan. 24/73 Date received Jan. 30/73 Date analysed Feb. 1/73  
Container pressure \_\_\_\_\_ Mud \_\_\_\_\_ Water cushion \_\_\_\_\_  
Recovery or flowrate: 180' Mud.

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Mud Filtrate Analysis

Resistivity 3.00 Ohm-meters @ 72°F  
Chloride 16 mg/liter

DRILL STEM TESTS















WELL NAME	OWNER	YR CORE	TOP	BOTTOM	LOCATION	TYPE
CRANSWICK YT A-42	AMOCO	PCP 73	50	100	C-55483	MICRO
			100	200	C-55483	
			200	300	C-55483	
			300	400	C-55483	
			400	500	C-55483	
			500	600	C-55483	
			600	700	C-55483	
			700	800	C-55483	
			800	900	C-55483	
			900	1000	C-55483	
			1000	1100	C-55483	
			1100	1200	C-55483	
			1200	1300	C-55483	
			1300	1400	C-55483	
			1400	1500	C-55483	
			1500	1600	C-55483	
			1600	1700	C-55483	
			1700	1800	C-55483	
			1800	1900	C-55483	
			1900	2000	C-55483	
			2000	2100	C-55483	
			2100	2200	C-55483	
			2200	2300	C-55483	
			2300	2400	C-55483	
			2400	2500	C-55483	
			2500	2600	C-55483	
			2630	2700	C-55483	
			2700	2800	C-55483	
			2800	2900	C-55483	
			2900	3000	C-55483	
			3000	2100	C-55483	
			3000	3100	C-55843	
			3100	3200	C-55483	
			3200	3300	C-55483	
			3300	3400	C-55483	
			3400	3500	C-55483	
			3500	3600	C-55483	
			3600	3700	C-55483	
			3700	3800	C-55483	
			3800	3900	C-55483	
			3900	4000	C-55483	
			4000	4100	C-55483	
			4100	4200	C-55483	
			4200	4300	C-55483	
			4300	4400	C-55483	
			4400	4500	C-55483	
			4500	4600	C-55483	
			4600	4700	C-55483	
			4700	4800	C-55483	
			4800	4900	C-55483	
			4900	5000	C-55483	
			5000	5100	C-55483	
			5100	5200	C-55483	
			5200	5270	C-55483	
			5300	5400	C-55483	
			5400	5500	C-55483	
			5500	5600	C-55483	

WELL NAME	OWNER	YR CORE	TOP	BOTTOM	LOCATION	TYPE
CRANSWICK YT A-42	AMOCO PCP	73	5600	5700	C-55483	MICRO
			5700	5800	C-55483	
			5800	5900	C-55483	
			5900	6000	C-55483	
			6000	6100	C-55483	
			6100	6200	C-55483	
			6200	6300	C-55483	
			6300	6400	C-55483	
			6400	6500	C-55483	
			6500	6600	C-55483	
			6600	6700	C-55483	
			6700	6800	C-55483	
			6800	6900	C-55483	
			6900	7000	C-55483	
			7080	7100	C-55483	
			7100	7150	C-55483	
			7160	7200	C-55483	
			7210	7250	C-55483	
			7260	7300	C-55483	
			7300	7350	C-55483	
			7360	7400	C-55483	
			7410	7450	C-55483	
			7460	7500	C-55483	
			7640	7700	C-55483	
			7710	7760	C-55843	
			7770		C-55483	

WELL NAME	OWNER	YR CORE	TOP	BOTTOM	LOCATION	TYPE
CROSSLEY LK, S. K-60	CPOG	69	1385 1388		C-12695 C-12696	MACRU

WELL NAME	OWNER	YR CORE	TOP	BOTTOM	LOCATION	TYPE
DAVIDSON CREEK P-02	IMP.TRIAD	60	1724	1728.8	C-16757	CONOD
			1728.8	1733.6	C-16758	
			1733.6	1738.4	C-16759	
			1738.4	1743.2	C-16760	
			1743.2	1748	C-16761	
			1748	1752.5	C-16762	
			1752	1757.2	C-16763	
			1757.2	1761.5	C-16764	

WELL NAME	OWNER	YR CORE	TOP	BOTTOM	LOCATION	TYPE
DAVIDSON CREEK P-02	IMP.TRIAD	60 1	1878		C-13457	PALYN