GEOLOGICAL REPORT

PARAMOUNT BERKLEY
NETLA P-57

HIGHWOOD WELLSITE SERVICES INC.

GEOLOGIST: JEFF BOULTER

41 RIVERVIEW CIRCLE

(403) 932-2916

COCHRANE ALBERTA

MARCH 01 1999

PARAMOUNT BERKLEY

NETLA P-57

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WELL HISTORY:

DRILLING SUMMARY

WELL NAME: Paramount Berkley Netla P-57 **LOCATION:** M-23 60 Deg 50' 123Deg 00'

ELEVATION: Grd.: 659.5 m KB: 664.65 m. **Final Total Depth:** 2408.63 m

SURFACE CO-ORDINATES: Lat: 60 42' 58.402" Long: 123 05' 12.126"

SPUD DATE: January 27, @ 01:00 hrs. **WELL STATUS:** gas well

CONTRACTOR: Precision Drilling Corporation **RIG No:** 379

HOLE DATA:

SURFACE	444.5 mm.	To	501.0 m.	No. of Bits Used: 5
INTERMEDIATE	222.0 mm.	To	2072.0 m.	No. of Bits Used: 2
MAIN	156 mm	To	2408.63 m	No. of Bits Used: 2

CASING DATA:

SURFACE: 339.7 mm. OD Wt.: 81.18 kg/m K-55 Landed @ 501.0 m KB

CEMENTED WITH: 62.0 tonnes of Class "G" cement + 1.0 % CaCl2

INTERMEDIATE: 177.8 mm OD Wt.: 34.22 kg/m 8 LTC L-80 Landed @ 2072.0 m KB

CEMENTED: 14.4 tonnes of 1-1-2 Class "G" & 19.2 tonnes 0-1-0 Class G

GEOLOGICAL MARKERS

KB Elev.: 664.65 m.

FORMATION	PROGNOSIS	SAMPLE	LOG md	SUBSEA
Scatter	557.65	570.0	567.0	97.65
Garbutt	586.65	599.0	598.0	66.65
Exshaw	680.65	693.0	693.0	-28.35
Kotcho	685.65	702.0	702.5	-37.85
Tetcho	1033.65	1123.0	1122.0	-457.35
Kakisa	1201.65	1283.0	1280.0	-615.35
Ft. Simpson	1228.65	1310.0	1305.0	-640.35
Muskwa	1964.65	1945.0	2045.0	-1380.35
Slave Point	1994.65	2070.0	2069.5	-1404.85
Watt Mtn	2086.65	2145.0	2142.0	-1477.35
Sulfur Point	2094.65	2153.0	2154.0	-1489.35
Horn River	2112.65	2171.0	2169.5	-1504.85
Nahanni	2152.65	2215.0	2201.0	-1536.35
Headless	2237.65	2285.0	2287.0	-1622.35
Landry	2260.65	2306.0	2304.5	-1639.85
Arnica	2286.65	2337.0	2337.0	-1672.35
Pre-Dev Qtzite	2332.65			
Total Depth	2357.65	2408.6	2401.4	-1736.75

LOGGING SUMMARY

LOG TYPE	INTERVAL	SCALE
SONIC/GR	0.0 - 2401.0	1: 600, 1: 240
GR/DENSITY/NEUTRON	501.0 - 2401.4	1: 600, 1: 240
HDIL/GR	501.0 - 2400.4	1: 600, 1: 240
HEXDIP LOG	2072.0 - 2400.4	1: 600, 1: 240

Logging Services By: BAKER ATLAS

DRILLING HISTORY

DATE	8AM DEPTH	MUD PROPERTIES WT.	VIS.	W.L	pH	OPERATIONS CONDUCTED
Jan 24	0	-	-	-	-	Tear out rig and move camp
Jan 25	0	-	-	-	-	Move rig
Jan 26	0	-	-	-	-	Rig up to spud, drill and cement conductor pipe
Jan 27	26	1050	45	-	-	Spud 311 mm pilot hole, wash out in conductor pipe, cement conductor pipe and wait on cement
Jan 28	27	1050	43	-	-	Wait on cement, drill out mouse hole and conductor pipe, drill ahead 311 mm pilot hole
Jan 29	187	1060	41	-	-	Drill 311 mm pilot hole and survey
Jan 30	357	1080	40	-	-	Work mud ring, pull out of hole and run in hole, drill ahead 311 mm pilot hole and survey
Jan 31	500	1100	41	-	-	Drilled pilot hole to casing point, pull out and change out kelly, run in and drill ahead 444.5 mm surface hole
Feb 01	99	1090	34	-	-	Drill ahead 444.5 mm hole and survey,pull out to change bit, drill ahead
Feb 02	259	1060	45	-	-	Drill ahead 444.5 mm surface hole, trip for mud ring, drill ahead
Feb 03	445	1110	57	-	-	Drill ahead 444.5 mm hole and survey, wiper trip, pull tight, back ream, drill ahead
Feb 04	500	1115	90	-	-	Drill ahead 444.5 mm hole and survey, wiper trip, circulate to condition hole, pull out to run casing, cement casing
Feb 05	500	1120	64	-	-	Weld casing bowl, nipple up, tear out diverter
Feb 06	501	1120.	60	-	-	Pressure test, run in hole and lay down 4.5" pipe, displace hole with invert, pull out and run with bit
Feb 07	552	940	54	-	-	Finish running in hole, drill out cement, drill ahead 222 mm hole
Feb 08	752	945	57	-	-	Drill ahead 222 mm hole and survey

Feb 09	863	940	56	-	-	Drill to 901.0 m, pull out to pick up directional tools, run in hole
Feb 10	925	940	60	-	-	Directional drill 222 mm hole
Feb 11	1168	940	57	-	-	Directional drill 222 mm hole, motor failure, pull out of hole, pick up motor, run in hole, directional drill
Feb 12	1275	910	48	-	-	Directional drill 222 mm hole
Feb 13	1500	940	46	-	-	Directional drill 222 mm hole
Feb 14	1721	940	48	-	-	Directional drill 222 mm hole
Feb 15	1941	940	47	-	-	Directional drill 222 mm hole
Feb 16	2072	940	47	-	-	Directional drill 222 mm hole to 2072.0 m, circulate hole, wiper trip, pull out of hole to log
Feb 17	2072	950	48	-	-	Run open hole logs, rig out loggers, run in hole for clean out trip, run casing
Feb 18	2072	960	44	-	-	Run casing, cement casing, nipple up
Feb 19	2072	-	-	-	-	Rig in testers and N2 unit, nipple up and pressure test, run in hole, drill out float collar
Feb 20	2076	960	48	-	-	Pressure test kelly cock, drill out cement, drill ahead 3.5 m for leak off test, displace hole, drill ahead 156 mm hole underbalanced
Feb 21	2164	960	47	-	-	Drilled 156 mm hole underbalanced and survey
Feb 22	2296	945	46	-	-	Drilled 156 mm hole underbalanced, formation water, shut off N2, drill ahead with invert, pull out of hole
Feb 23	2325	945	46	-	-	Drilled 156 mm hole
Feb 24	2379	955	43	-	-	Drilled 156 mm hole to total depth of 2408.63 m, circulate, wiper trip
Feb 25	2408	950	44	-	-	Circulate, pull out of hole, wait on loggers, rig in loggers, run open hole logs, wait for tester
Feb 26	2408	950	44	-	-	Wait for tester, rig in tester, run in hole for DST#1 2299.0 - 2319.0 m, start to pull out of hole
Feb 27	2408	950	46	-	-	Finish pulling out of hole, recover liquid, run in hole DST#2 2300.0 - 2320.0 m, unable to inflate packer, pull out of hole, clean out trip
Feb 28	2408	950	47	-	-	Clean out trip, DST #3 2306.0 - 2326.0 m, pull out of hole

DEVIATION SUMMARY

DEPTH(m)	INCLINATION	DEPTH(m)	INCLINATION
39.0	0.50	60	0.50
77.0	0.50	94	0.50
111.0	0.50	130.0	0.25
149.0	0.50	175.0	0.25
195.0	0.50	216.0	0.50
232.0	0.50	252.0	0.50
271.0	0.25	290.0	0.50
319.0	0.25	347.0	0.50
374.0	0.75	393.0	1.00
403.0	0.75	490	1.00

MD (m)	**Incl** (deg)	**Dir** (deg)	**TVD** (m)	**Vert Sec** (m)	**Rectangular Offsets** (m)	**DLS** (/30m)
536.0	0.90	331.90	536.0	-0.27	0.25 m N -0.13 m E	0.75
687.71	1.10	6.60	687.69	-2.39	2.75 m N -0.53 m E	0.12
839.63	2.30	301.10	839.55	-6.28	5.77 m N -2.97 m E	0.41
887.50	2.00	300.50	887.38	-7.99	6.69 m N -4.51 m E	0.19
896.83	2.20	302.10	896.71	-8.32	6.87 m N -4.80 m E	0.67
906.52	1.60	290.10	906.39	-8.96	7.01 m N -5.09 m E	2.22
915.89	1.30	281.60	915.76	-8.47	7.08 m N -5.32 m E	1.18
925.26	1.10	264.30	925.13	-8.55	7.09 m N -5.51 m E	1.32
935.62	1.10	249.70	935.49	-8.57	7.05 m N -5.70 m E	0.81
943.98	1.40	208.10	943.84	-8.50	6.93 m N -5.82 m E	3.34
953.62	1.80	205.60	953.48	-8.32	6.69 m N -5.50 m E	1.26
963.30	1.40	198.00	963.16	-8.12	6.44 m N -6.05 m E	1.40
972.67	1.00	179.00	972.52	-7.95	6.25 m N -6.08 m E	1.79
982.35	0.50	194.70	982.20	-7.84	6.12 m N -6.09 m E	1.66
992.03	0.60	154.50	991.88	-7.75	6.04 m N -6.08 m E	1.21
1001.41	0.90	146.50	1001.26	-7.63	5.93 m N -6.02 m E	1.01
1011.09	1.00	139.70	1010.94	-7.48	5.80 m N -5.92 m E	0.47
1020.41	1.20	138.00	1020.26	-7.31	5.67 m N -5.80 m E	0.65
1029.43	1.20	133.50	1029.28	-7.14	5.53 m N -5.67 m E	0.31

1039.11	1.00	140.30	1038.96	-6.97	5.40 m N	-5.54 m E	0.74
1048.82	1.30	93.60	1048.66	-6.85	5.33 m N	-5.38 m E	2.94
1058.51	1.40	93.50	1058.35	-6.76	5.31 m N	-5.15 m E	0.31
1068.21	1.70	89.30	1068.05	-6.66	5.31 m N	-4.89 m E	0.99
1077.19	1.60	109.30	1077.02	-6.54	5.27 m N	-4.64 m E	1.94
1086.89	1.60	132.70	1086.72	-6.33	5.13 m N	-4.41 m E	2.01
1096.59	1.50	150.70	1096.42	-6.09	4.93 m N	-4.25 m E	1.53
1105.93	1.70	149.50	1105.75	-5.83	4.70 m N	-4.12 m E	0.65
1115.63	1.90	160.70	1115.45	-5.53	4.43 m N	-3.99 m E	1.25
1125.32	1.60	150.20	1125.13	-5.23	4.16 m N	-3.87 m E	1.36
1134.67	1.10	136.00	1134.48	-5.02	3.98 m N	-3.75 m E	1.92
1144.01	1.10	121.00	1143.82	-4.87	3.87 m N	-3.61 m E	0.92
1153.70	0.70	83.70	1153.51	-1.53	3.83 m N	-3.47 m E	2.13
1162.62	0.50	86.80	1162.43	-1.44	3.84 m N	-3.38 m E	0.68
1172.31	0.70	64.80	1172.12	-1.34	3.86 m N	-3.28 m E	0.93
1182.02	0.60	45.70	1181.83	-2.15	3.92 m N	-3.19 m E	0.73
1191.50	0.70	46.10	1191.31	-2.05	4.00 m N	-3.11 m E	0.32
1200.88	0.70	53.30	1200.69	-1.95	4.07 m N	-3.03 m E	0.28
1210.58	0.60	77.60	1210.39	-1.84	4.12 m N	-2.93 m E	0.90
1219.53	0.90	69.20	1219.33	-1.73	4.15 m N	-2.82 m E	1.07
1229.19	0.60	54.60	1228.99	-1.61	4.21 m N	-2.70 m E	1.10
1238.20	0.80	60.20	1238.00	-1.50	4.27 m N	-2.61 m E	0.70
1247.90	0.70	76.00	1247.70	-1.38	4.32 m N	-2.50 m E	0.71
1257.58	1.00	73.20	1257.38	-1.23	4.36 m N	-2.36 m E	0.94
1266.81	0.60	61.30	1266.61	-4.83	4.31 m N	-2.21 m E	1.40
1275.81	0.40	89.90	1275.61	-4.81	4.33 m N	-2.14 m E	1.05
1285.18	0.50	136.50	1284.98	-4.76	4.30 m N	-2.08 m E	1.18
1294.87	0.30	134.80	1294.67	-4.69	4.25 m N	-2.03 m E	0.62
1304.55	0.50	141.10	1304.36	-4.62	4.20 m N	-1.99 m E	0.63
1313.93	0.40	110.90	1313.73	-4.56	4.16 m N	-1.93 m E	0.81
1323.27	0.50	113.40	1323.07	-4.50	4.13 m N	-1.86 m E	0.33
1332.66	0.50	122.70	1332.46	-4.43	4.09 m N	-1.79 m E	0.26
1351.71	0.60	72.70	1351.51	-4.43	4.07 m N	-1.63 m E	0.75
1370.74	0.60	54.30	1370.54	-4.31	4.16 m N	-1.45 m E	0.30
1380.06	0.80	67.40	1379.86	-4.31	4.22 m N	-1.35 m E	0.82
1389.36	0.80	66.60	1389.15	-4.29	4.27 m N	-1.23 m E	0.04
1398.69	0.60	59.90	1398.48	-4.28	4.32 m N	-1.13 m E	0.69
1408.34	1.00	57.00	1408.13	-4.28	4.39 m N	-1.01 m E	1.25
1417.68	0.90	64.00	1417.47	-4.28	4.46 m N	-0.88 m E	0.49
1427.01	1.10	142.70	1426.80	-4.18	4.43 m N	-0.76 m E	4.11
1436.35	1.40	149.30	1436.14	-3.98	4.26 m N	-0.65 m E	1.07
1445.68	1.40	147.80	1445.47	-3.75	4.06 m N	-0.53 m E	0.12
1455.35	1.30	151.80	1455.13	-3.53	3.87 m N	-0.41 m E	0.43
1465.04	1.30	148.70	1464.82	-3.31	3.67 m N	-0.30 m E	0.22
1474.72	1.20	133.00	1474.50	-3.10	3.51 m N	-0.17 m E	1.10

1493.45	1.00	195.50	1493.23	-3.09	3.22 m N	-0.07 m E	1.85
1503.16	0.70	221.80	1502.93	-2.95	3.09 m N	-0.14 m E	1.50
1512.50	0.70	217.60	1512.27	-2.85	3.01 m N	-0.21 m E	0.16
1522.18	0.60	210.70	1521.95	-2.75	2.92 m N	-0.27 m E	0.39
1531.84	0.70	208.40	1531.61	-2.64	2.82 m N	-0.32 m E	0.32
1541.48	0.70	198.60	1541.25	-2.52	2.71 m N	-0.37 m E	0.37
1551.15	0.60	201.80	1550.92	-2.42	2.61 m N	-0.41 m E	0.33
1560.45	0.70	190.30	1560.22	-2.31	2.51 m N	-0.44 m E	0.53
1569.90	1.10	181.70	1569.67	-2.16	2.36 m N	-0.45 m E	1.34
1579.30	1.30	172.10	1579.07	-1.98	2.17 m N	-0.44 m E	0.90
1588.98	1.10	176.40	1588.74	-1.79	1.96 m N	-0.42 m E	0.68
1598.74	0.20	22.30	1598.50	-1.72	1.89 m N	-0.40 m E	3.94
1608.55	0.50	27.00	1608.31	-1.78	1.94 m N	-0.38 m E	0.92
1618.30	0.80	25.10	1618.06	-1.88	2.04 m N	-0.33 m E	0.93
1628.04	0.60	21.90	1627.80	-2.00	2.15 m N	-0.28 m E	0.63
1637.84	0.60	28.20	1637.60	-2.10	2.24 m N	-0.24 m E	0.20
1647.59	0.30	16.00	1647.35	-2.18	2.31 m N	-0.21 m E	0.96
1657.34	0.40	23.50	1657.10	-2.24	2.37 m N	-0.19 m E	0.34
1667.09	0.40	28.50	1666.85	-2.30	2.43 m N	-0.16 m E	0.11
1676.87	0.60	47.20	1676.63	-2.38	2.49 m N	-0.10 m E	0.78
1686.87	0.70	42.20	1686.63	-2.48	2.57 m N	-0.02 m E	0.34
1696.47	0.70	38.20	1696.23	-2.59	2.66 m N	0.05 m E	0.15
1706.20	0.80	15.60	1705.96	-2.46	2.78 m N	0.11 m E	0.96
1716.03	1.00	21.70	1715.79	-2.61	2.92 m N	0.16 m E	0.68
1725.78	0.70	23.80	1725.54	-2.75	3.05 m N	0.21 m E	0.93
1735.48	0.10	287.10	1735.24	-2.81	3.11 m N	0.23 m E	2.22
1745.26	0.50	203.90	1745.02	-2.76	3.07 m N	0.20 m E	1.53
1754.95	0.40	198.70	1754.71	-2.69	3.00 m N	0.17 m E	0.33
1764.71	0.40	209.90	1764.47	-2.62	2.94 m N	0.15 m E	0.24
1774.50	0.10	238.80	1774.26	-2.58	2.91 m N	0.12 m E	0.97
1784.26	0.30	278.40	1784.02	-2.56	2.91 m N	0.09 m E	0.71
1794.02	0.30	271.00	1793.78	-2.54	2.91 m N	0.04 m E	0.12
1803.74	0.50	318.00	1803.50	-2.54	2.94 m N	-0.02 m E	1.14
1813.47	0.50	343.50	1813.22	-2.58	3.02 m N	-0.06 m E	0.68
1823.22	0.60	318.90	1822.97	-2.63	3.10 m N	-0.10 m E	0.78
1832.90	0.90	342.40	1832.65	-2.70	3.21 m N	-0.16 m E	1.31
1842.65	0.80	347.60	1842.40	-2.80	3.35 m N	-0.20 m E	0.39
1852.38	1.10	340.50	1852.13	-2.91	3.50 m N	-0.24 m E	0.99
1862.13	1.10	338.50	1861.88	-3.03	3.68 m N	-0.31 m E	0.12
1871.88	0.80	359.20	1871.63	-3.15	3.83 m N	-0.34 m E	1.39
1881.64	0.30	63.10	1881.39	-3.23	3.91 m N	-0.32 m E	2.21
1891.38	0.50	130.20	1891.13	-3.24	3.89 m N	-0.26 m E	1.46
1920.61	0.20	169.70	1920.36	-3.18	3.76 m N	-0.16 m E	0.38
1930.36	0.30	151.30	1930.11	-3.15	3.72 m N	-0.14 m E	0.39
1940.10	0.40	115.00	1939.85	-3.14	3.69 m N	-0.10 m E	0.73

1949.84	0.50	36.30	1949.59	-3.19	3.71 m N	-0.04 m E	1.77
1959.56	0.30	56.60	1959.31	-3.25	3.75 m N	0.00 m E	0.75
1969.33	0.60	25.40	1969.08	-3.33	3.81 m N	0.05 m E	1.16
1979.05	0.70	41.60	1978.80	-3.43	3.90 m N	0.11 m E	0.64
1988.79	0.70	41.60	1988.53	-3.55	3.99 m N	0.19 m E	0.00
1998.52	0.80	44.00	1998.26	-3.68	4.09 m N	0.27 m E	0.32
2008.25	0.70	56.80	2007.99	-3.79	4.17 m N	0.37 m E	0.60
2027.72	0.60	222.50	2027.46	-3.80	4.16 m N	0.40 m E	1.99
2037.50	0.60	235.90	2037.24	-3.70	4.09 m N	0.32 m E	0.43
2047.21	0.60	267.30	2046.95	-3.63	4.06 m N	0.23 m E	1.00
2056.98	0.50	71.60	2056.72	-3.64	4.07 m N	0.22 m E	3.35
2165.0	1.0						
2272.0	1.5						
2315.0	2.0						
2350.0	2.0						
2395.0	2.75						

BIT RECORD

No.	SIZE	MAKE	TYPE	DEPTH OUT	HOURS	CONDITION
1A	311	VAREL	L127	25	3.5	6-1-In
2A	311	REED	SDGH	125	14.25	4-4-In
3A	311	HUGHES	GT1	500	35.75	3-2-In
1B	444.5	SECURITY	S335	136	21.75	3-3-In
2B	444.5	VAREL	L127	501	8.8	3-3-In
1	222	SMITH	FDS+2	901	52.0	1-1-In
2	222	HUGHES	GT-18	2072	106.75	3-3-In
1C	156	REED	EHP53A	2324	43.25	
2C	156	REED	HZS84FSN	2408		

PARAMOUNT BERKLEY NETLA P-57

0-5:	Cement;
5-10:	Cement;
10-15:	SANDSTONE [100] - clear to yellow to reddish orange, unconsolidated, fine to medium grained, moderate sorting, rounded to sub angular, in part quartzose, frosted grains, micaceous, chert, glacial till, no visible porosity, no shows;
15-20:	SANDSTONE [100] - clear to yellow to reddish orange, unconsolidated, fine to medium grained, occasionally coarse fragments, moderate sorting, rounded to sub angular, in part quartzose, frosted grains, micaceous, chert, glacial till, no visible porosity, no shows;
20-25:	No sample bypass shakers;
25-30:	SANDSTONE [100] - clear to frosted white to yellowish white, unconsolidated, fine grained, well sorted, subangular to rounded, slightly quartzose, minor argillaceous grains, no visible porosity, no shows;
30-35:	SANDSTONE [100] - clear to frosted white to yellowish white, unconsolidated, fine grained, well sorted, subangular to rounded, slightly quartzose, minor argillaceous grains, no visible porosity, no shows;
35-40:	SANDSTONE [100] - clear to fosted white to partly light yellow, unconsolidated, clay and silty matrix, very fine to fine grained, well sorted, subangular to rounded, minor argillaceous grains, no visible porosity, no shows;
40-45:	SILTSTONE [100] - light brown to brownish grey, very fine to fine texture, firm to friable, in part sandy, micaceous, clay matrix, tight;
45-50:	SILTSTONE [100] - brownish grey to light brown, very fine to fine texture, friable to soft, sandy, partly micaceous, argillaceous, clay matrix, tight;
50-55:	SILTSTONE [100] - brownish grey to light brown, very fine to fine texture, friable to soft, sandy, partly micaceous, argillaceous, clay matrix, tight, grades to claystone;
55-60:	SILTSTONE [100] - brownish grey to light brown, very fine to fine texture, friable to soft, sandy, partly micaceous, argillaceous, clay matrix, tight, grades to claystone;
60-70:	SLITSTONE [70] - light brown to greyish brown, very fine to fine texture, friable, sandy, micaceous, argillaceous, clay matrix, tight; SANDSTONE [30] - greyish brown to grey, friable to unconsolidated, partly clay matrix, very fine grained, well sorted, subrounded to rounded, in part argillaceous, slightly micaceous, very poor intergranular porosity, no shows;
70-80:	SILTSTONE [80] - light grey to brown to greyish brown, very fine to fine texture, friable, sandy, argillaceous, partly micaceous, in part clay matrix, tight, partly grades to very fine grained sandstone; SHALE [20] - brown, fine texture, earthy lustre, firm, blocky, grades to claystone;

80-90:	SANDSTONE [50] - clear to white yellow, unconsolidated, fine grained, well sorted, subrounded to rounded, very poor intergranular porosity, no shows;
90-95:	SILTSTONE [100] - brown to brownish grey, fine texture, friable to partly firm, sandy, argillaceous, slightly micaceous, partly clay matrix, tight;
95-100:	SILTSTONE [100] - brown to brownish grey, fine texture, friable to partly firm, sandy, argillaceous, slightly micaceous, partly clay matrix, loose sand grains, tight;
100-105:	SILTSTONE [100] - brown to brownish grey, fine texture, friable to partly firm, sandy, argillaceous, slightly micaceous, partly clay matrix, loose sand grains, tight;
105-110:	SILTSTONE [80] - brown to brownish grey, fine to very fine texture, firm to friable, sandy, argillaceous, in part clay matrix, tight; SANDSTONE [20] - grey to greyish white to clear, friable to unconsolidated, very fine grained, well sorted, subrounded to rounded, no visible porosity, no shows;
110-115:	SILTSTONE [70] - brown, very fine to fine texture, firm to friable, sandy, micaceous, argillaceous, tight; SANDSTONE [30] - light greyish brown to grey to clear, friable to firm, partly calcareous, very fine to fine grained, well to moderately sorted, subrounded to rounded, minor argillaceous grains, partly micaceous, very poor intergranular porosity, no shows;
115-120:	SILTSTONE [100] - brown to brownish grey, fine texture, friable to partly firm, sandy, argillaceous, slightly micaceous, partly clay matrix, loose sand grains, tight;
120-125:	SILTSTONE [70] - brown, very fine to fine texture, firm to friable, sandy, micaceous, argillaceous, tight; SANDSTONE [30] - light greyish brown to grey to clear, friable to firm, partly calcareous, very fine to fine grained, well to moderately sorted, subrounded to rounded, minor argillaceous grains, partly micaceous, very poor intergranular porosity, no shows;
125-130:	SANDSTONE [100] - light grey to greyish white to greyish brown, friable to unconsolidated, very fine grained, well sorted, subrounded to rounded, micaceous, rare glauconite, partly argillaceous, scattered very poor intergranular porosity, no shows;
130-135:	SANDSTONE [90] - greyish white to grey, friable to unconsolidated, partly calcareous, fine grained, moderate to well sorted, subangular to rounded, micaceous, limy stringers, partly argillaceous, no visible porosity, no shows; SILTSTONE [10] - brown, very fine texture, firm to friable, argillaceous, tight;
135-140:	SANDSTONE [90] - greyish white to grey, friable to unconsolidated, partly calcareous, very fine grained, well sorted, subrounded to rounded, micaceous, partly argillaceous, no visible porosity, no shows; SILTSTONE [10] - brown, very fine texture, firm to friable, argillaceous, tight;

140-145: SANDSTONE [100] - clear to greyish white, unconsolidated to friable, very fine to fine grained, well to moderately sorted, rounded to subrounded, partly frosted grains, scattered ver poor intergranular porosity, no shows;

145-150: SANDSTONE [100] - clear to greyish white, unconsolidated to friable, very fine to fine grained, well to moderately sorted, rounded to subangular, argillaceous grains, micaceous, scattered very poor intergranular porosity, no shows;

150-160: SANDSTONE [90] - light grey to clear to brownish grey, friable to unconsolidated, minor silty matrix, very fine to fine grained, well to moderately sorted, rounded subangular, micaceous, argillaceous, in part silty, no visible porosity, no shows;
SILTSTONE [10] - brown, very fine texture, firm, argillaceous, tight;

160-165: SANDSTONE [90] - clear to greyish white, unconsolidated to friable, very fine to fine grained, well to moderately sorted, rounded to subangular, argillaceous grains, micaceous, scattered very poor intergranular porosity, no shows;
SHALE [10] - medium grey, rough texture, earthy, blocky;

165-170: SILTSTONE [100] - light greyish brown, very fine texture, silky lustre, firm, micaceous, tight;

170-175: SILTSTONE [100] - light greyish brown, very fine texture, silky lustre, firm, micaceous, in part sandy, tight;

175-180: SILTSTONE [100] - light greyish brown to brown, very fine to fine texture, firm, micaceous, sandy, argillaceous, tight, minor sandstone stringers;

180-185: SANDSTONE [90] - clear to yellowish white to brown, unconsolidated to friable, very fine to medium grained, moderate to well sorted, rounded to subrounded, colored chert, patchy very poor intergranular porosity, no shows;
SHALE [10] - medium to dark grey, rough texture, earthy lustre, blocky;

185-190: SANDSTONE [80] - clear to greyish white to brownish yellow, unconsolidated to friable, very fine to fine grained, well sorted, subrounded to rounded, no visible porosity, no shows;
SILTSTONE [20] - light brownish grey, very fine to fine texture, firm, sandy, argillaceous, tight;

190-195: SANDSTONE [50] - clear to greyish white to brownish yellow, unconsolidated to friable, very fine grained, well sorted, subrounded to rounded, no visible porosity, no shows;
SILTSTONE [50] - light brownish grey, very fine to fine texture, firm, sandy, argillaceous, tight;

195-200: SANDSTONE [50] - clear to greyish white to brownish yellow, friable, very fine grained, well sorted, subrounded to rounded, no visible porosity, no shows;
SILTSTONE [50] - light brownish grey, very fine to fine texture, firm, sandy, argillaceous, tight;

200-205:	SILTSTONE [70] - brown to greyish brown, very fine to fine texture, firm, in part sandy, argillaceous, tight; SANDSTONE [30] - greyish white, friable, very fine grained, well sorted, rounded to subrounded, in part micaceous, no visible porosity, no shows;
205-210:	SILTSTONE [90] - brown to brownish grey, very fine to fine texture, firm, slightly sandy, argillaceous, tight; SHALE [10] - grey to greyish brown, very fine to rough texture, earthy, blocky;
210-220:	SILTSTONE [70] - brown to brownish grey, very fine to fine texture, firm, slightly sandy, argillaceous, micaceous, tight; SHALE [10] - grey to greyish brown, very fine to rough texture, earthy, blocky; SANDSTONE [20] - grey to greyish white, friable, very fine grained, well sorted, subrounded to rounded, micaceous, no visible porosity, no shows;
220-225:	SHALE [100] - medium grey to greyish brown, rough to very fine texture, earthy, firm, partly micromicaceous, in part silty, blocky;
225-230:	SHALE [100] - medium grey to greyish brown, rough to very fine texture, earthy, firm, partly micromicaceous, in part silty, blocky;
230-235:	SHALE [100] - medium grey to greyish brown, rough to very fine texture, earthy, firm, partly micromicaceous, in part silty, blocky to subfissile;
235-240:	SHALE [80] - medium grey to greyish brown, rough to very fine texture, earthy, firm, partly micromicaceous, in part sandy, blocky to subfissile; SANDSTONE [20] - grey, friable, very fine grained, well sorted, rounded to subrounded, partly micaceous, slightly argillaceous, no visible porosity, no shows;
240-250:	SHALE [80] - medium to dark grey to greyish black, rough to very fine texture, earthy, firm, carbonaceous, partly micromicaceous, in part sandy, blocky to subfissile; SANDSTONE [20] - grey to greyish brown, friable, very fine grained, well sorted, rounded to subrounded, partly micaceous, slightly argillaceous, no visible porosity, no shows;
250-255:	SHALE [60] - medium grey, rough texture, earthy, partly micromicaceous, subfissile to blocky; SANDSTONE [40] - grey to white to clear, friable, partly calcareous, very fine grained, well sorted, subrounded to rounded, micaceous, partly argillaceous, rare glauconite, scattered very poor intergranular porosity, no shows;
255-260:	SHALE [50] - medium grey, rough texture, earthy, partly micromicaceous, subfissile to blocky; SANDSTONE [50] - grey to white to clear, friable, partly calcareous, very fine to fine grained, well sorted, subrounded to rounded, micaceous, partly argillaceous, rare glauconite, scattered very poor intergranular porosity, no shows;

260-265:	SHALE [60] - medium grey, rough texture, earthy, partly micromicaceous, subfissile to blocky; SANDSTONE [40] - grey to white to clear, friable, partly calcareous, very fine to fine grained, well sorted, subrounded to rounded, micaceous, partly argillaceous, rare glauconite, scattered very poor intergranular porosity, no shows;
265-270:	SHALE [100] - medium to dark grey to dark greyish brown, rough texture, earthy, firm, slightly carbonaceous, partly micromicaceous, subfissile to blocky;
270-275:	SHALE [100] - medium to dark greyish black, rough texture, earthy, firm, carbonaceous, micromicaceous, subfissile to blocky;
275-280:	SHALE [60] - medium to dark greyish black, rough texture, earthy, firm, carbonaceous, micromicaceous, rare glauconite, subfissile to blocky; SANDSTONE [40] - clear to yellow, unconsolidated, fine grained, well sorted, subangular to subrounded, rare chert, no visible porosity, no shows;
280-285:	SHALE [100] - medium to dark grey to greyish black, rough texture, earthy, firm, carbonaceous, micromicaceous, subfissile to blocky;
285-290:	SHALE [100] - medium to dark grey to greyish black, rough texture, earthy, firm, carbonaceous, micromicaceous, subfissile to blocky;
290-295:	SHALE [100] - medium to dark grey to greyish black, rough texture, earthy, firm, carbonaceous, micromicaceous, subfissile to blocky;
295-300:	SHALE [100] - medium to dark grey to greyish black, rough texture, earthy, firm, carbonaceous, micromicaceous, partly silty, subfissile to blocky;
300-305:	SHALE [100] - medium to dark grey, rough to fine texture, earthy, firm, micromicaceous, partly carbonaceous, sandy stringers, blocky to partly subfissile;
305-310:	SHALE [100] - medium to dark grey to greyish black, rough texture, earthy, firm, carbonaceous, micromicaceous, partly silty, subfissile to blocky;
310-315:	SHALE [100] - medium to dark grey to greyish black, rough texture, earthy, firm, carbonaceous, micromicaceous, subfissile to blocky;
315-320:	SHALE [100] - medium to dark grey to greyish brown, very fine to rough texture, earthy, micromicaceous, partly carbonaceous, silty, sandy stringers, blocky to partly subfissile;
320-325:	SHALE [80] - medium to dark grey, rough to fine texture, earthy, firm, partly micromicaceous, silty, blocky to subfissile; SANDSTONE [20] - grey, friable, very fine grained, well sorted, subrounded to rounded, argillaceous, silty, no visible porosity, no shows;
325-330:	SHALE [100] - medium to dark grey, very fine to rough texture, earthy, firm, micromicaceous, partly silty, blocky;

330-335: SHALE [100] - medium to dark grey, rough to partly smooth texture, earthy, firm, micromicaceous, silty, trace glauconite, partly sandy, blocky;

335-340: SHALE [70] - medium to dark grey, rough to partly smooth texture, earthy, firm, micromicaceous, silty, trace glauconite, partly sandy, blocky;
SANDSTONE [30] - light to dark grey, friable, siliceous, very fine grained, well sorted, subrounded to rounded, minor glauconite, no visible porosity, no shows;

340-345: SHALE [70] - medium to dark grey, rough to partly smooth texture, earthy, firm, micromicaceous, silty, trace glauconite, partly sandy, blocky;
SANDSTONE [30] - light to dark grey, friable, siliceous, very fine grained, well sorted, subrounded to rounded, partly argillaceous, minor glauconite, no visible porosity, no shows;

345-350: SHALE [60] - medium to dark grey, rough to partly smooth texture, earthy, firm, micromicaceous, silty, trace glauconite, partly sandy, blocky;
SANDSTONE [40] - light to dark grey, friable, in part calcareous, salt and pepper texture, very fine grained, well sorted, subrounded to rounded, argillaceous, glauconitic, no visible porosity, no shows;

350-355: SANDSTONE [100] - light to dark grey, clear to smoky yellow, friable to unconsolidated, in part calcareous, part salt and pepper texture, very fine to fine grained, well sorted, rounded to subrounded, glauconite, partly argillaceous, no visible porosity, no shows;

355-360: SANDSTONE [100] - light to dark grey, clear to smoky yellow, friable to unconsolidated, in part calcareous, part salt and pepper texture, very fine to fine grained, well sorted, rounded to subrounded, glauconite, partly argillaceous, shale partings, no visible porosity, no shows;

360-365: SANDSTONE [100] - light to dark grey, clear to smoky yellow, friable to unconsolidated, part salt and pepper texture, very fine to fine grained, well sorted, rounded to subrounded, glauconite, partly argillaceous, shale partings, no visible porosity, no shows;

365-370: SANDSTONE [100] - light to dark grey, clear to smoky yellow, friable to unconsolidated, partly salt and pepper texture, very fine to fine grained, well sorted, rounded to subrounded, glauconite, partly argillaceous, shale partings, no visible porosity, no shows;

370-375: SANDSTONE [100] - light to dark grey, friable, in part calcareous, slight salt and pepper texture, very fine grained, well sorted, rounded to subrounded, glauconite, partly argillaceous, pyrite, scattered very poor intergranular porosity, no shows;

375-380: SANDSTONE [100] - light to dark grey, friable, in part calcareous, slight salt and pepper texture, very fine grained, well sorted, rounded to subrounded, glauconite, partly argillaceous, pyrite, shale partings, scattered very poor intergranular porosity, no shows;

380-385: SANDSTONE [100] - light to dark grey, friable, in part calcareous, slight salt and pepper texture, very fine grained, well sorted, rounded to subrounded, glauconite, partly argillaceous, pyrite, micaceous, shale partings, scattered very poor intergranular porosity, no shows;

385-390: SANDSTONE [90] - light grey to white to dark grey, friable, partly calcareous, very fine grained, well sorted, rounded to subrounded, minor glauconite, patchy very poor intergranular porosity, no shows;
SHALE [10] - medium to dark grey, rough texture, earthy, carbonaceous, blocky;

390-395: SANDSTONE [90] - light grey to white to dark grey, friable, partly calcareous, very fine grained, well sorted, rounded to subrounded, minor glauconite, patchy very poor intergranular porosity, no shows;
SHALE [10] - medium to dark grey, rough texture, earthy, carbonaceous, blocky;

395-400: SANDSTONE [90] - light grey to white, friable, partly calcareous, very fine to fine grained, well sorted, rounded to subrounded, minor glauconite, patchy very poor intergranular porosity, no shows;
SHALE [10] - medium to dark grey, rough texture, earthy, carbonaceous, blocky;

400-405: SANDSTONE [90] - light grey to white to dark grey, friable, partly calcareous, very fine grained, well sorted, rounded to subrounded, minor glauconite, patchy very poor intergranular porosity, no shows;
SHALE [10] - medium to dark grey, rough texture, earthy, carbonaceous, blocky;

405-410: SANDSTONE [100] - white to clear to light grey, friable, very fine grained, well sorted, rounded to subrounded, trace glauconite, scattered very poor intergranular porosity, no shows;

410-415: SANDSTONE [100] - white to clear to light grey, friable, in part calcareous, very fine grained, well sorted, rounded to subrounded, trace glauconite, scattered very poor intergranular porosity, no shows;

415-420: SANDSTONE [100] - white to clear to light grey, friable, in part calcareous, very fine grained, well sorted, rounded to subrounded, trace glauconite, shale partings, scattered very poor intergranular porosity, no shows;

420-425: SANDSTONE [90] - white to clear to greyish white, friable, slightly calcareous, very fine grained, well sorted, rounded to subrounded, glauconite, very poor to poor intergranular porosity, no shows;
SHALE [10] - medium to dark grey, rough texture, earthy, blocky;

425-430: SANDSTONE [80] - light to medium grey, friable to firm, very fine grained, well sorted, rounded to subrounded, glauconite, argillaceous streaks, no visible porosity, no shows;
SHALE [20] - medium to dark grey, rough texture, earthy, slightly carbonaceous, blocky;

430-435: SANDSTONE [90] - light to medium grey, friable to firm, very fine grained, well sorted, rounded to subrounded, argillaceous streaks, glauconite, pyrite, partly micaceous, no visible porosity, no shows;
SHALE [10] - medium to dark grey, rough texture, earthy, slightly carbonaceous, blocky;

435-445: SANDSTONE [90] - light to medium grey, friable to firm, very fine grained, well sorted, rounded to subrounded, argillaceous streaks, glauconite, pyrite, partly micaceous, no visible porosity, no shows;
SHALE [10] - medium to dark grey, rough texture, earthy, firm, slightly carbonaceous, blocky;

445-450: SANDSTONE [100] - light grey to greyish offwhite, friable to firm, very fine grained, well sorted, rounded to subrounded, in part argillaceous, no visible porosity, shale partings, no shows;

450-455: SHALE [50] - medium to dark grey to partly greyish black, rough to fine texture, earthy, firm, in part carbonaceous, blocky to subfissile;
SANDSTONE [50] - light to medium grey, firm to friable, very fine grained, well sorted, subrounded to rounded, argillaceous, shaley, no visible porosity, no shows;

455-460: SHALE [60] - medium to dark grey to partly greyish black, rough to fine texture, earthy, firm, in part carbonaceous, blocky to subfissile;
SANDSTONE [40] - light to medium grey, firm to friable, very fine grained, well sorted, subrounded to rounded, argillaceous, trace glauconite, shaley, no visible porosity, no shows;

460-465: SHALE [65] - medium to dark grey to greyish black, rough to fine texture, earthy, firm, slightly carbonaceous, silty, blocky to slightly subfissile;
SANDSTONE [35] - light greyish white to clear, friable to unconsolidated, very fine to fine grained, well sorted, rounded to subrounded, in part argillaceous, in part very poor intergranular porosity, no shows;

465-475: SHALE [60] - medium to dark grey to greyish black, rough to fine texture, earthy, firm, silty, minor glauconite, slightly carbonaceous, blocky to slightly subfissile;
SANDSTONE [40] - light greyish white, friable, very fine grained, well sorted, rounded to subrounded, in part argillaceous, glauconite, in part very poor intergranular porosity, no shows;

475-480: SHALE [70] - medium to dark grey to greyish black, rough texture, earthy, firm, silty, minor glauconite, slightly carbonaceous, blocky;
SANDSTONE [30] - light greyish white to grey, friable, very fine grained, well sorted, rounded to subrounded, in part argillaceous, glauconite, partly micaceous, no visible porosity, no shows;

480-485: SHALE [50] - medium to dark grey to greyish black, rough texture, earthy, firm, silty, blocky;
SANDSTONE [50] - light greyish white to grey, friable, in part calcareous, very fine to fine grained, well sorted, rounded to subrounded, in part argillaceous, glauconite, no visible porosity, no shows;

485-490: SHALE [70] - medium to dark grey to greyish black, rough to smooth texture, earthy, firm, minor glauconite, partly carbonaceous, silty, blocky to subfissile; SANDSTONE [30] - light greyish white to grey, friable, in part calcareous, very fine to partly fine grained, well sorted, rounded to subrounded, in part argillaceous, glauconite, partly silty, no visible porosity, no shows;

490-495: SHALE [60] - medium to dark grey to greyish black, rough to smooth texture, earthy, firm, minor glauconite, carbonaceous, silty, blocky to subfissile; SANDSTONE [40] - clear to light greyish white to grey, unconsolidated to friable, very fine to fine grained, well sorted, rounded to subrounded, in part argillaceous, partly silty, no visible to poor intergranular porosity, no shows;

495-500: SHALE [40] - medium to dark grey to greyish black, rough to smooth texture, earthy, firm, minor glauconite, carbonaceous, silty, blocky to subfissile; SANDSTONE [60] - light greyish white to grey, firm to friable, calcareous, very fine to fine grained, well sorted, rounded to subrounded, in part argillaceous, glauconite, micaceous, clays, no visible to very poor intergranular porosity, no shows;

500-510: SHALE [90] - medium to dark grey to greyish black, rough to smooth texture, earthy, firm, minor glauconite, carbonaceous, silty, blocky to subfissile; SANDSTONE [10] - light greyish white to grey, firm to friable, calcareous, very fine to fine grained, well sorted, rounded to subrounded, in part argillaceous, glauconite, micaceous, clays, no visible to very poor intergranular porosity, no shows;

510-515: SHALE [90] - medium to dark grey, rough texure, earthy, firm to soft, carbonaceous, blocky to subfissile;
SILTSTONE [10] - grey to greyish brown, very fine texture, sandy, partly argillaceous, tight;

515-520: SHALE [100] - medium to dark grey to greyish black, rough texture, earthy, firm, micromicaceous, carbonaceous, minor glauconite, partly silty, blocky to subfissile;

520-525: SHALE [100] - medium to dark grey to greyish black, rough to fine texture, earthy, micromicaceous, carbonaceous, glauconite, silty, sandy stringers, blocky to subfissile;

525-530: SHALE [100] - medium to dark grey to greyish black, rough to fine texture, earthy, micromicaceous, carbonaceous, glauconite, silty, sandy stringers, blocky to subfissile;

530-535: SHALE [100] - medium to dark grey, rough to very fine texture, earthy, in part micromicaceous, slightly carbonaceous, blocky to subfissile;

535-540: SHALE [100] - medium to dark grey, rough to very fine texture, earthy, in part micromicaceous, slightly carbonaceous, rare pyrite, blocky to subfissile;

540-545: SHALE [100] - medium to dark grey, rough to very fine texture, earthy, in part micromicaceous, slightly carbonaceous, rare pyrite, minor sandstone stringers, blocky to subfissile;

545-550: SHALE [100] - medium to dark grey, rough to very fine texture, earthy, partly micromicaceous, in part carbonaceous, blocky to partly subfissile;

550-555: SHALE [100] - medium to dark grey, rough to very fine texture, earthy, partly micromicaceous, in part carbonaceous, blocky to partly subfissile;

555-560: SHALE [100] - medium to dark greyish black, rough to very fine texture, earthy, partly micromicaceous, carbonaceous, blocky to partly subfissile;

560-565: SHALE [100] - medium to dark grey to greyish black, rough to very fine texture, earthy, in part micromicaceous, carbonaceous, partly silty, blocky to subfissile;

SCATTER 570.0 m (94.65)

565-570: SHALE [100] - medium to dark grey to greyish black, rough to very fine texture, earthy, in part micromicaceous, carbonaceous, partly silty, blocky to subfissile;
SANDSTONE [trace] - brown to clear, friable, very fine grained, well sorted, rounded to subrounded, minor glauconite, scattered oil staining, poor intercrystalline porosity, dull golden fluorescence, fair yellow cut;

570-575: SHALE [60] - medium to dark grey to greyish black, rough to very fine texture, earthy, in part micromicaceous, carbonaceous, partly silty, blocky to subfissile;
SANDSTONE [40] - brown to clear, friable, very fine grained, well sorted, rounded to subrounded, minor glauconite, scattered oil staining, poor intercrystalline porosity, dull golden fluorescence, fair yellow cut;

575-580: SANDSTONE [80] - brown to clear, friable, very fine grained, well sorted, rounded to subrounded, minor glauconite, scattered oil staining, poor intercrystalline porosity, dull golden fluorescence, fair yellow cut;
SHALE [20] - medium to dark grey, rough to very fine texture, firm, carbonaceous, blocky to subfissile;

580-585: SANDSTONE [30] - brown to clear to brownish grey, friable, very fine grained, well sorted, rounded to subrounded, minor glauconite, scattered oil staining, poor intercrystalline porosity, patchy dull golden fluorescence, fair yellow cut;
SHALE [70] - medium to dark grey, rough to very fine texture, firm, carbonaceous, blocky to subfissile;

585-590: SANDSTONE [70] - brown to clear, friable, very fine grained, well sorted, rounded to subrounded, minor glauconite, scattered oil staining, poor intercrystalline porosity, scattered dull golden fluorescence, fair yellow cut;
SHALE [30] - medium to dark grey, rough to very fine texture, firm, carbonaceous, blocky to subfissile;

590-595: SANDSTONE [30] - brown to clear, friable, very fine grained, well sorted, rounded to subrounded, minor glauconite, silty, scattered oil staining, in part poor intercrystalline porosity, rare dull golden fluorescence, fair yellow milky cut;
SHALE [70] - medium to dark grey, rough to very fine texture, firm, carbonaceous, blocky to subfissile;

GARBUTT 599.0 m (65.65)

595-600:	SANDSTONE [10] - brownish grey to brown, friable, very fine grained, well sorted, subrounded to rounded, argillaceous, silty, patchy oil staining, no visible porosity, scattered dull golden fluorescence, milky yellow cut; SHALE [90] - medium to dark grey, very fine to rough texture, earthy, firm, carbonaceous, blocky;
600-605:	SHALE [100] - medium to dark grey to greyish brown, very fine to rough texture, earthy, firm, partly carbonaceous, blocky;
605-610:	SHALE [100] - medium to dark grey to greyish brown, very fine to rough texture, earthy, firm, partly carbonaceous, blocky to partly subfissile;
610-615:	SHALE [100] - medium to dark grey to greyish brown, very fine to rough texture, earthy, firm, partly carbonaceous, blocky to partly subfissile;
615-620:	SHALE [90] - medium to dark grey to greyish black, very fine to fine texture, earthy, firm, silty, partly carbonaceous, minor glauconite, blocky to subfissile; SILTSTONE [10] - greyish brown to brown, fine texture, firm, argillaceous, in part sandy, tight;
620-625:	SHALE [90] - medium to dark grey to greyish black, very fine to fine texture, earthy, firm, micromicaceous, silty, partly carbonaceous, minor glauconite, blocky to subfissile; SILTSTONE [10] - greyish brown to brown, fine texture, firm, argillaceous, in part sandy, tight;
630-635:	SHALE [100] - medium to dark grey to greyish black, rough to fine texture, earthy, firm, micromicaceous, partly carbonaceous, in part silty, blocky to subfissile;
635-640:	SHALE [100] - medium to dark grey, in part greyish black, rough to fine texture, earthy, firm, micromicaceous, carbonaceous, rare pyrite, limy stringers, blocky to subfissile;
640-645:	SHALE [100] - medium to dark grey, in part greyish black, rough to fine texture, earthy, firm, micromicaceous, carbonaceous, blocky to subfissile;
645-650:	SHALE [100] - medium to dark grey, in part greyish black, rough to fine texture, earthy, firm, partly micromicaceous, carbonaceous, blocky to subfissile;
650-655:	SHALE [100] - medium to dark grey, in part greyish black, rough to fine texture, earthy, firm, slightly silty, partly micromicaceous, in part carbonaceous, blocky to subfissile;
655-660:	SHALE [100] - medium to dark grey, in part greyish black, rough to fine texture, earthy, firm, partly micromicaceous, carbonaceous, minor clays, trace pyrite, blocky to subfissile;

660-665: SHALE [100] - medium to dark grey, in part greyish black, rough to fine texture, earthy, firm, carbonaceous, subfissile to blocky

665-670: SHALE [100] - medium to dark grey, very fine to rough texture, partly earthy, firm, partly carbonaceous, slightly micromicaceous, subfissile to blocky;

670-675: SHALE [100] - medium to dark grey, trace green waxy shale, very fine to rough texture, partly earthy, firm, partly carbonaceous, slightly micromicaceous, bentonite, subfissile to blocky;

675-680: SHALE [100] - medium to dark grey, trace green waxy shale, very fine to rough texture, partly earthy, firm, partly carbonaceous, slightly micromicaceous, bentonite, subfissile to blocky;

680-685: SHALE [100] - medium to dark grey, trace green waxy shale, very fine to rough texture, partly earthy, firm, partly carbonaceous, slightly micromicaceous, bentonite, rare pyrite, subfissile to blocky;

685-690: SHALE [100] - medium to dark grey to brownish grey, rough to very fine texture, earthy, firm to soft, partly micromicaceous, trace pyrite, blocky to subfissile;

EXSHAW 693.0 m (-28.35)

690-695: SHALE [100] - brownish grey to dark grey, rough to very fine texture, earthy, firm to soft, partly micromicaceous, trace pyrite, blocky to subfissile;

695-700: SHALE [100] - brownish grey to dark grey, rough to very fine texture, earthy, firm to soft, partly micromicaceous, trace pyrite, blocky to subfissile;

KOTCHO 702.0 m (-37.35)

700-705: SHALE [60] - dark brownish black to brown, rough texture, earthy, firm, carbonaceous, in part calcareous, blocky;
LIMESTONE [40] - medium to dark brown to mottled brown, microcrystalline, dense to slight chalky texture, argillaceous, earthy, tight;

705-710: SHALE [60] - dark brownish black to brown to light waxy grey, rough texture, earthy, firm, carbonaceous, in part calcareous, blocky;
LIMESTONE [40] - medium to dark brown to mottled brown, microcrystalline, dense to slight chalky texture, argillaceous, earthy, tight;

710-715: SHALE [70] - light grey, smooth to waxy texture, soft to firm, in part calcareous, pyrite, blocky;
LIMESTONE [30] - medium to dark brown to mottled brown, microcrystalline, dense to slight chalky texture, argillaceous, earthy, tight;

715-720: SHALE [80] - light grey to greyish brown, smooth to waxy texture, soft to firm, in part calcareous, pyrite, blocky;
LIMESTONE [20] - medium to dark brown to mottled brown, microcrystalline, dense to slight chalky texture, argillaceous, earthy, tight;

720-725: SHALE [100] - light grey to greyish brown, smooth to rough texture, in part waxy, firm to soft, calcareous, silty, minor limy stringers, blocky;

725-730: SHALE [100] - light to medium grey, rough to smooth texture, firm to partly soft, in part calcareous, pyrite, silty stringers, blocky;

730-735: SHALE [80] - light to medium grey, rough to smooth texture, firm to partly soft, in part calcareous, silty stringers, pyrite, blocky;
LIMESTONE [20] - light grey, microcrystalline, dense texture, tight;

735-740: SHALE [80] - light to medium grey, rough to smooth texture, firm to partly soft, in part calcareous, grades to mudstone, pyrite, blocky;
LIMESTONE [20] - light grey to greyish brown, microcrystalline, dense texture, tight;

740-745: SHALE [100] - light to slightly greyish brown, rough to smooth texture, firm to soft, calcareous, in part grades to mudstone, blocky;

745-750: SHALE [100] - light to slightly greyish brown, rough to smooth texture, firm to soft, calcareous, in part grades to mudstone, blocky;

750-755: SHALE [100] - light to slightly greyish brown, rough to smooth texture, firm to soft, calcareous, silty partings, in part grades to mudstone, blocky;

755-760: LIMESTONE [100] - light grey, mudstone, dense texture, argillaceous, shaley, tight;

760-765: LIMESTONE [80] - light grey, mudstone, dense texture, argillaceous, shaley, tight;
SHALE [20] - brown to greyish brown, rough texture, earthy, firm, blocky;

765-770: LIMESTONE [60] - light grey, mudstone, dense texture, argillaceous, shaley, tight;
SHALE [40] - grey to greyish brown, rough texture, earthy, firm, calcareous, blocky;

770-775: LIMESTONE [40] - light grey, mudstone, dense texture, argillaceous, shaley, tight;
SHALE [60] - grey to greyish brown, rough texture, earthy, firm, calcareous, blocky;

775-780: LIMESTONE [100] - light brown to buff, in part cryptocrystalline, mudstone, dense texture, firm to soft, argillaceous, tight;

780-785: LIMESTONE [100] - light brown to buff, in part cryptocrystalline, mudstone, dense texture, firm to soft, argillaceous, tight;

785-790: LIMESTONE [100] - cream to buff, cryptocrystalline to microcrystalline, dense texture, firm, in part argillaceous, minor shale partings, pyrite, tight;

790-795: LIMESTONE [100] - cream to buff, cryptocrystalline to microcrystalline, dense texture, firm, in part argillaceous, minor shale partings, pyrite, tight;

795-800: LIMESTONE [90] - cream to buff, cryptocrystalline to microcrystalline, dense texture, firm, in part argillaceous, minor shale partings, tight;
SHALE [10] - grey, very fine to rough texture, firm, in part calcareous, blocky;

800-805: SHALE [100] - grey to brownish grey, rough texture, in part earthy, firm, calcareous, blocky, limy stringers;

805-810: LIMESTONE [90] - cream to buff, cryptocrystalline to microcrystalline, in part mudstone, dense texture, firm, in part argillaceous, tight;
SHALE [10] - grey, very fine to rough texture, firm, in part calcareous, blocky;

810-815: LIMESTONE [70] - cream to buff, cryptocrystalline to microcrystalline, in part mudstone, dense texture, firm, in part argillaceous, tight;
SHALE [30] - light to medium grey, very fine to rough texture, firm, in part calcareous, blocky;

815-825: SHALE [80] - light to partly medium grey, very fine to fine texture, firm to hard, calcareous, grading to mudstone, blocky;
LIMESTONE [20] - light brown to buff, cryptocrystalline to partly microcrystalline, dense texture, partly argillaceous, rare fossil debris, tight;

825-830: SHALE [100] - light to medium grey, very fine to fine texture, firm, calcareous, grades to mudstone, limestone stringers, blocky;

830-835: SHALE [80] - light to partly medium grey to partly brownish grey, very fine to fine texture, firm to hard, calcareous, grading to mudstone, blocky;
LIMESTONE [20] - light brown to buff, cryptocrystalline to partly microcrystalline, dense texture, partly argillaceous, tight;

835-845: SHALE [90] - light to partly medium grey to partly brownish grey, very fine to fine texture, firm to hard, calcareous, grading to mudstone, blocky;
LIMESTONE [10] - light brown to buff, cryptocrystalline to partly microcrystalline, dense texture, partly argillaceous, tight;

845-850: SHALE [100] - light to medium grey, very fine to fine texture, firm, calcareous, minor pyrite, grades to mudstone, blocky;

850-855: SHALE [100] - light to medium grey, very fine to fine texture, firm, calcareous, trace pyrite, grades to mudstone, limestone stringers, blocky;

855-860: LIMESTONE [100] - grey to light greyish brown, mudstone, dense texture, argillaceous, tight;

860-865: LIMESTONE [100] - grey to light greyish brown, mudstone, dense texture, argillaceous, shale partings, tight;

865-870: SHALE [70] - light to partly medium grey to partly brownish grey, very fine to fine texture, firm, calcareous, grading to mudstone, blocky;
LIMESTONE [30] - light brown to buff to greyish brown, cryptocrystalline to partly microcrystalline, dense texture, partly argillaceous, tight;

870-875: SHALE [90] - light to partly medium grey to partly brownish grey, very fine to fine texture, firm to hard, calcareous, rare pyrite, grading to mudstone, blocky; LIMESTONE [10] - light brown to buff, cryptocrystalline to partly microcrystalline, dense texture, partly argillaceous, tight;

875-880: SHALE [90] - light to partly medium grey to brownish grey, in part waxy texture, earthy, very fine to fine texture, firm, calcareous, grading to mudstone, blocky; LIMESTONE [10] - light brown to buff, cryptocrystalline to partly microcrystalline, dense texture, partly argillaceous, tight;

880-885: SHALE [100] - light to medium grey, very fine to fine texture, firm to hard, slightly earthy, calcareous, trace pyrite, grades to mudstone, blocky;

885-890: SHALE [100] - light to medium grey, very fine to fine texture, firm to hard, slightly earthy, calcareous, grades to mudstone, blocky;

890-895: SHALE [100] - light to medium grey, very fine to fine texture, firm to hard, slightly earthy, calcareous, trace pyrite, grades to mudstone, blocky;

895-900: SHALE [100] - light to medium grey, very fine to fine texture, firm to hard, slightly earthy, calcareous, grades to mudstone, blocky;

900-910: SHALE [80] - light to partly medium grey to brownish grey, in part waxy texture, earthy, very fine to fine texture, firm, calcareous, grading to mudstone, blocky; LIMESTONE [20] - light brown to buff, cryptocrystalline to partly microcrystalline, dense texture, partly argillaceous, tight;

910-920: SHALE [100] - light to medium grey, very fine to fine texture, firm to hard, slightly earthy, calcareous, trace pyrite, grades to mudstone, blocky;

920-925: SHALE [100] - light to medium grey, very fine to fine texture, firm to hard, slightly earthy, calcareous, trace pyrite, grades to mudstone, limestone stringers, blocky;

925-930: SHALE [100] - light to medium grey, very fine to fine texture, firm to hard, slightly earthy, calcareous, trace pyrite, grades to mudstone, blocky;

930-935: SHALE [100] - light to medium grey to brownish grey, rough to smooth, in part waxy texture, firm to soft, partly earthy, calcareous, grades to mudstone, blocky;

935-940: SHALE [100] - light to medium grey, very fine to fine texture, firm to hard, slightly earthy, calcareous, grades to mudstone, blocky;

940-945: SHALE [100] - light to medium grey to brownish grey, rough to smooth, in part waxy texture, firm to soft, partly earthy, calcareous, grades to mudstone, blocky;

945-950: SHALE [100] - light to medium grey to brownish grey, rough to smooth, in part waxy texture, firm to soft, partly earthy, calcareous, grades to mudstone, limestone stringers, blocky;

950-955: SHALE [100] - light to medium grey to brownish grey, rough to smooth, in part waxy texture, firm to soft, partly earthy, calcareous, grades to mudstone, limestone stringers, blocky;

955-960:	SHALE [100] - light to medium grey to brownish grey, rough to smooth, in part waxy texture, firm to soft, partly earthy, calcareous, grades to mudstone, limestone stringers, blocky to subfissile;
960-965:	SHALE [100] - light to medium grey to brownish grey, rough texture, in part waxy texture, firm, partly earthy, calcareous, grades to mudstone, blocky;
965-970:	SHALE [100] - light to medium grey to brownish grey, rough texture, firm, partly earthy, calcareous, grades to mudstone, blocky to subfissile;
970-975:	SHALE [100] - light to medium grey to brownish grey, rough texture, firm, partly earthy, calcareous, grades to mudstone, blocky;
975-980:	SHALE [100] - light to medium grey to brownish grey, rough texture, firm, partly earthy, calcareous, grades to mudstone, blocky to subfissile;
980-985:	SHALE [100] - light to medium grey to brownish grey, rough to smooth, in part waxy texture, firm to soft, partly earthy, calcareous, grades to mudstone, blocky to subfissile;
985-990:	SHALE [100] - light to medium grey, rough to smooth texture, slightly waxy, firm to partly soft, calcareous, grades to mudstone, blocky to subfissile;
990-995:	SHALE [100] - light to medium grey, rough to smooth texture, slightly waxy, firm to partly soft, partly micromicaceous, calcareous, grades to mudstone, blocky to subfissile;
995-1000:	SHALE [100] - grey to brownish grey, rough to very fine texture, in part earthy, firm, micromicaceous, in part calcareous, blocky to subfissile;
1000-1005:	SHALE [100] - grey to brownish grey, rough to smooth texture, in part earthy, firm, micromicaceous, in part calcareous, blocky to subfissile;
1005-1010:	SHALE [100] - grey to brownish grey, rough to smooth texture, in part earthy, firm, micromicaceous, in part calcareous, blocky to subfissile;
1015-1020:	SHALE [100] - grey to brownish grey, rough to smooth texture, earthy, firm, micromicaceous, in part calcareous, blocky to subfissile;
1020-1025:	SHALE [100] - grey to brownish grey, rough to smooth texture, earthy, firm, micromicaceous, in part calcareous, blocky to subfissile;
1025-1030:	SHALE [100] - grey to brownish grey, rough to smooth texture, earthy, firm, micromicaceous, in part calcareous, blocky to subfissile;
1030-1035:	SHALE [100] - brown to greyish brown, smooth to slight waxy texture, earthy, firm to partly soft, partly calcareous, , blocky to subfissile;
1035-1040:	SHALE [100] - grey to greyish brown, rough to very fine texture, in part earthy, firm, slightly micromicaceous, in part calcareous, blocky;
1040-1045:	SHALE [100] - greyish brown to grey, rough to partly smooth texture, earthy, firm, partly calcareous, blocky to slightly subfissile;

1045-1050:	SHALE [100] - greyish brown to grey, rough to partly smooth texture, earthy, firm, partly calcareous, blocky to slightly subfissile;
1050-1055:	SHALE [100] - brown to greyish brown, rough to partly smooth texture, earthy, firm, partly micromicaceous, in part calcareous, limy stringers, blocky to subfissile;
1055-1060:	SHALE [100] - brown to greyish brown, rough to smooth texture, earthy, firm, partly micromicaceous, in part calcareous, limestone stringers, blocky to subfissile;
1060-1065:	LIMESTONE [70] - brown to brownish grey, microcrystalline, dense texture, hard, argillaceous, tight; SHALE [30] - brown to brownish grey, rough to partly smooth texture, earthy, firm, calcareous, subfissile to blocky;
1065-1070:	LIMESTONE [30] - brown to brownish grey, microcrystalline, dense texture, hard, argillaceous, tight; SHALE [70] - brown to brownish grey, rough to partly smooth texture, earthy, firm, calcareous, subfissile to blocky;
1070-1075:	SHALE [100] - brown to greyish brown, rough to partly smooth texture, earthy, firm, in part micromicaceous, calcareous, subfissile to blocky;
1075-1080:	LIMESTONE [10] - brown to brownish grey, microcrystalline, dense texture, hard, argillaceous, tight; SHALE [90] - brown to brownish grey, rough to partly smooth texture, slightly waxy, earthy, firm, calcareous, subfissile to blocky;
1080-1090:	SHALE [90] - brown to brownish grey, rough to partly smooth texture, slightly waxy, earthy, firm, calcareous, subfissile to blocky; LIMESTONE [10] - brown to brownish grey, microcrystalline, dense texture, hard, argillaceous, tight;
1090-1095:	SHALE [100] - brownish grey to grey, rough to smooth texture, partly waxy, earthy, firm, calcareous, limy stringers, blocky to subfissile;
1095-1100:	SHALE [100] - grey to greyish brown, rough to very fine texture, firm, partly micromicaceous, partly calcareous, limy stringers, blocky;
1100-1105:	SHALE [100] - brownish grey to grey, rough to smooth texture, partly waxy, earthy, firm, calcareous, limy stringers, blocky to subfissile;
1105-1110:	SHALE [100] - grey to greyish brown, rough to very fine texture, firm, partly micromicaceous, partly calcareous, limy stringers, blocky;
1110-1115:	SHALE [100] - brownish grey to grey, rough to smooth texture, partly waxy, earthy, firm, calcareous, blocky to subfissile;
1115-1120:	SHALE [100] - grey to greyish brown, rough to very fine texture, firm, partly micromicaceous, partly calcareous, blocky;

TETCHO 1123.0 m (-458.35)

1120-1125:	SHALE [80] - greyish brown to brown, rough to fine texture, firm, slightly micromicaceous, calcareous, blocky; LIMESTONE [20] - brown to dark brownish grey, microcrystalline, dense to slight chalky texture, firm to partly soft, argillaceous, tight;
1125-1130:	LIMESTONE [100] - light to dark brown, microcrystalline, dense to chalky texture, firm to soft, argillaceous, tight;
1130-1135:	LIMESTONE [100] - light to medium brown, partly buff, cryptocrystalline to microcrystalline, dense to chalky texture, firm to soft, argillaceous, tight;
1135-1140:	LIMESTONE [90] - light to medium brown, partly buff, cryptocrystalline to microcrystalline, dense to chalky texture, firm to soft, argillaceous, tight; SHALE [10] - brownish grey to grey, rough to fine texture, firm, partly micromicaceous, calcareous, blocky;
1140-1145:	LIMESTONE [90] - light to medium brown, partly buff, cryptocrystalline to microcrystalline, dense to chalky texture, firm to soft, argillaceous, tight; SHALE [10] - brownish grey to grey, rough to fine texture, firm, partly micromicaceous, calcareous, blocky;
1145-1150:	LIMESTONE [100] - light brown to brownish offwhite to tan, cryptocrystalline to microcrystalline, partly mudstone, dense to chalky texture, firm to soft, argillaceous, tight;
1150-1155:	LIMESTONE [100] - light brown to brownish offwhite to tan, cryptocrystalline to microcrystalline, partly mudstone, dense to chalky texture, firm to soft, argillaceous, trace pyrite, tight;
1155-1160:	LIMESTONE [100] - light greyish white to brownish offwhite to tan, cryptocrystalline to microcrystalline, dense texture, firm to hard, argillaceous, shale partings, tight;
1160-1165:	LIMESTONE [100] - tan to light brown, cryptocrystalline to microcrystalline, partly mudstone, dense texture, firm, argillaceous, tight;
1165-1170:	LIMESTONE [100] - tan to light brown, cryptocrystalline to microcrystalline, partly mudstone, dense texture, firm, argillaceous, tight;
1170-1175:	LIMESTONE [100] - light greyish white to brownish offwhite to tan, cryptocrystalline to microcrystalline, dense texture, firm to hard, argillaceous, shale partings, tight;
1175-1180:	LIMESTONE [100] - light brown to brownish offwhite to tan, cryptocrystalline to microcrystalline, partly mudstone, dense to chalky texture, firm to soft, argillaceous, tight;

1180-1185: LIMESTONE [100] - light greyish white to brownish offwhite to tan, cryptocrystalline to microcrystalline, dense texture, firm to hard, argillaceous, shale partings, tight;

1185-1190: LIMESTONE [100] - light brown to brownish offwhite to tan, cryptocrystalline to microcrystalline, partly mudstone, dense to chalky texture, firm to soft, argillaceous, shale stringers, tight;

1190-1195: LIMESTONE [100] - light greyish white to brownish offwhite to tan, cryptocrystalline to microcrystalline, dense texture, firm to hard, argillaceous, shale partings, tight;

1195-1205: LIMESTONE [100] - light brown to brownish offwhite to tan, cryptocrystalline to microcrystalline, partly mudstone, dense to chalky texture, firm to soft, argillaceous, shale stringers, tight;

1205-1215: LIMESTONE [80] - light to medium brown to greyish brown, cryptocrystalline to microcrystalline, dense texture, firm, minor pyrite, argillaceous, tight;
SHALE [20] - grey, very fine texture, earthy, partly micromicaceous, calcareous, blocky;

1215-1225: LIMESTONE [60] - light to medium brown to greyish brown, cryptocrystalline to microcrystalline, dense texture, firm, minor pyrite, argillaceous, tight;
SHALE [30] - grey, very fine texture, earthy, partly micromicaceous, calcareous, blocky;
SILTSTONE [10] - greyish green, very fine texture, hard, argillaceous, calcareous, tight;

1225-1230: SHALE [70] - light to medium grey, very fine to fine texture, earthy, partly micromicaceous, calcareous, in part silty, blocky;
SILTSTONE [30] - greyish green, very fine texture, hard, argillaceous, calcareous, limestone stringers, tight;

1230-1235: SHALE [90] - light to medium grey, very fine to fine texture, earthy, partly micromicaceous, calcareous, in part silty, blocky;
SILTSTONE [10] - greyish green, very fine texture, hard, argillaceous, calcareous, limestone stringers, tight;

1235-1240: SHALE [90] - light to medium grey, very fine to fine texture, earthy, micromicaceous, calcareous, in part silty, blocky;
SILTSTONE [10] - greyish green, very fine texture, hard, argillaceous, calcareous, tight;

1240-1245: SHALE [70] - light to medium grey, very fine to fine texture, earthy, micromicaceous, calcareous, in part silty, blocky;
SILTSTONE [20] - greyish green, very fine texture, hard, argillaceous, calcareous, tight;
LIMESTONE [10] - light brown to brownish grey, microcrystalline, dense texture, argillaceous, tight;

1245-1250: SHALE [70] - light to medium grey, very fine to fine texture, earthy, micromicaceous, calcareous, in part silty, blocky;
SILTSTONE [20] - greyish green, very fine texture, hard, argillaceous, calcareous, tight;
LIMESTONE [10] - light brown to brownish grey, microcrystalline, dense texture, argillaceous, tight;

1250-1255: SHALE [70] - light to medium grey, very fine to fine texture, earthy, micromicaceous, calcareous, in part silty, blocky;
LIMESTONE [30] - light brown to offwhite, microcrystalline, dense texture, argillaceous, tight;

1255-1260: SHALE [100] - light to medium grey to slightly greyish green, very fine to fine texture, in part earthy, partly micromicaceous, silty, calcareous, siltstone stringers, blocky;

1260-1265: SHALE [70] - light to medium grey, very fine to fine texture, earthy, micromicaceous, calcareous, in part silty, blocky;
LIMESTONE [30] - light brown to offwhite, microcrystalline, dense texture, argillaceous, tight;

1265-1275: SHALE [70] - light to medium grey, very fine to fine texture, earthy, micromicaceous, calcareous, in part silty, blocky;
LIMESTONE [30] - light brown to offwhite, microcrystalline to very fine crystalline, dense texture, argillaceous, tight;

KAKISA 1280.0 m (-615.35)

1275-1280: SHALE [50] - light to medium grey, very fine to fine texture, earthy, micromicaceous, calcareous, in part silty, blocky;
SILTSTONE [20] - greyish green, very fine texture, hard, argillaceous, calcareous, tight;
LIMESTONE [30] - light brown to brownish grey, microcrystalline, dense texture, argillaceous, tight;

1280-1285: SHALE [100] - light to medium grey to slightly greyish green, very fine to fine texture, partly earthy, firm, in part micromicaceous, calcareous, silty, blocky;

1285-1290: SHALE [70] - light to medium grey, very fine to fine texture, earthy, micromicaceous, calcareous, in part silty, blocky;
LIMESTONE [30] - light brown to offwhite, microcrystalline, dense texture, argillaceous, tight;

1290-1295: SHALE [80] - light to medium grey, very fine to fine texture, in part earthy, slightly micromicaceous, calcareous, blocky;
LIMESTONE [20] - light brown to offwhite, microcrystalline, dense texture, argillaceous, tight;

1295-1300: SHALE [90] - light to medium grey, very fine to fine texture, in part earthy, slightly micromicaceous, calcareous, blocky;
LIMESTONE [10] - light brown to offwhite, cryptocrystalline to microcrystalline, dense texture, argillaceous, tight;

1300-1305: SHALE [90] - light to medium grey, very fine to fine texture, in part earthy, slightly micromicaceous, calcareous, blocky;
LIMESTONE [10] - light brown to offwhite, cryptocrystalline to microcrystalline, dense texture, argillaceous, tight;

FORT SIMPSON 1310.0 m (-645.35)

1305-1310: SHALE [80] - light to medium grey, very fine to fine texture, in part earthy, slightly micromicaceous, calcareous, blocky;
LIMESTONE [20] - light brown to offwhite, cryptocrystalline to microcrystalline, dense texture, argillaceous, tight;

1310-1315: SHALE [100] - brownish red to grey, very fine to rough texture, in part earthy, firm, micromicaceous, non calcareous, blocky;

1315-1320: SHALE [100] - light to medium grey to brownish red, very fine to rough texture, in part earthy, firm, micromicaceous, in part calcareous, blocky;

1320-1325: SHALE [100] - light grey to greyish green to partly brown, very fine to rough texture, partly earthy, firm, slightly micromicaceous, minor silty stringers, blocky;

1325-1330: SHALE [100] - light grey to greyish green to brownish red, very fine to smooth texture, in part waxy, partly earthy, firm, slightly micromicaceous, minor calcareous siltone stringers, blocky to subfissile;

1330-1335: SHALE [100] - light grey to greyish green to brownish red, very fine to smooth texture, in part waxy, partly earthy, firm, slightly micromicaceous, minor calcareous siltstone stringers, blocky to subfissile;

1335-1340: SHALE [100] - light grey to greyish green to brownish red, very fine to smooth texture, in part waxy, partly earthy, firm, slightly micromicaceous, minor limestone stringers, blocky to subfissile;

1340-1345: SHALE [100] - light grey to greyish green to brownish red, very fine to smooth texture, in part waxy, partly earthy, firm, slightly micromicaceous, minor limestone stringers, blocky to subfissile;

1345-1350: SHALE [100] - light grey to greyish green, very fine to fine texture, earthy, firm, micromicaceous, blocky to subfissile;

1350-1355: SHALE [100] - light grey to green grey to brownish red, very fine to fine texture, earthy, firm, micromicaceous, blocky to subfissile;

1355-1360:	SHALE [100] - brownish red to greyish green to grey, very fine to smooth texture, earthy, firm, micromicaceous, minor limestone streaks, blocky to subfissile;
1360-1365:	SHALE [100] - light grey to greyish green, very fine to fine texture, earthy, firm, micromicaceous, blocky to subfissile;
1365-1370:	SHALE [100] - light grey to green grey to brownish red, very fine to fine texture, earthy, firm, micromicaceous, limestone stringers, blocky to subfissile;
1370-1375:	SHALE [100] - brownish red to greyish green to grey, very fine to smooth texture, earthy, firm, micromicaceous, blocky to subfissile;
1375-1380:	SHALE [100] - light grey to green grey to brownish red, very fine to fine texture, earthy, firm, micromicaceous, limestone stringers, blocky to subfissile;
1380-1385:	SHALE [100] - light grey to greyish green, very fine to fine texture, earthy, firm, micromicaceous, blocky to subfissile;
1385-1390:	SHALE [100] - light grey to partly greyish green, very fine to fine texture, earthy, firm, micromicaceous, blocky to subfissile;
1390-1395:	SHALE [100] - light grey to green grey to brownish red, very fine to fine texture, earthy, firm, micromicaceous, limestone stringers, blocky to subfissile;
1395-1400:	SHALE [100] - light grey to partly greyish green, very fine to fine texture, earthy, firm, micromicaceous, blocky to subfissile;
1400-1405:	SHALE [100] - light to medium grey, rough to very fine texture, in part earthy, firm, partly micromicaceous, blocky;
1405-1410:	SHALE [100] - light to medium grey, rough to very fine texture, in part earthy, firm, partly micromicaceous, rare silty stringers, blocky;
1410-1415:	SHALE [100] - light to medium grey, rough to very fine texture, in part earthy, firm, partly micromicaceous, rare limy stringers, blocky;
1415-1420:	SHALE [100] - light to medium grey, rough to very fine texture, in part earthy, firm, partly micromicaceous, blocky;
1420-1425:	SHALE [90] - light to medium grey, rough to very fine texture, earthy, firm, micromicaceous, blocky; LIMESTONE [10] - light brown to offwhite to olive, microcrystalline to very fine crystalline, lithographic to slight granular texture, tight;
1425-1435:	SHALE [60] - light to medium grey, rough to very fine texture, earthy, firm, micromicaceous, blocky; LIMESTONE [40] - light brown to offwhite to olive, microcrystalline to very fine crystalline, lithographic to slight granular texture, slightly argillaceous, tight;
1435-1440:	SHALE [70] - light to medium grey, rough to very fine texture, earthy, firm, micromicaceous, blocky; LIMESTONE [30] - light brown to offwhite to olive, microcrystalline to very fine crystalline, lithographic to slight granular texture, slightly argillaceous, tight;

1440-1445: SHALE [90] - light to medium grey, rough to very fine texture, earthy, firm, micromicaceous, blocky;
LIMESTONE [10] - light brown to offwhite to olive, microcrystalline to very fine crystalline, lithographic to slight granular texture, tight;

1445-1450: SHALE [80] - light to medium grey, rough to very fine texture, earthy, firm, micromicaceous, blocky to subfissile;
LIMESTONE [20] - light brown to offwhite to olive, microcrystalline to very fine crystalline, lithographic to slight granular texture, tight;

1450-1455: SHALE [90] - light to medium grey, rough to very fine texture, earthy, firm, micromicaceous, blocky to partly subfissile;
LIMESTONE [10] - light brown to offwhite to olive, microcrystalline to very fine crystalline, lithographic to slight granular texture, tight;

1455-1460: SHALE [100] - light to medium grey, rough to fine texture, in part earthy, firm, micromicaceous, blocky to subfissile;

1460-1465: SHALE [90] - light to medium grey, rough to very fine texture, earthy, firm, micromicaceous, blocky to partly subfissile;
LIMESTONE [10] - light brown to offwhite to olive, microcrystalline to very fine crystalline, lithographic to slight granular texture, tight;

1465-1470: SHALE [100] - light to medium grey, rough to fine texture, in part earthy, firm, micromicaceous, blocky to subfissile;

1470-1480: SHALE [100] - light to medium grey, rough to fine texture, in part earthy, firm, micromicaceous, blocky, minor limy stringers;

1480-1485: SHALE [100] - light to medium grey, rough to fine texture, in part earthy, firm, micromicaceous, blocky, minor limy stringers;

1485-1490: SHALE [100] - light to medium grey, rough to fine texture, in part earthy, firm, micromicaceous, blocky to subfissile;

1490-1500: SHALE [90] - light to medium grey, rough to very fine texture, earthy, firm, micromicaceous, trace pyrite, blocky to partly subfissile;
LIMESTONE [10] - light brown to offwhite, microcrystalline to occasionally very fine crystalline, lithographic to slight granular texture, tight;

1500-1505: SHALE [90] - light to medium grey, rough to smooth texture, earthy, firm, micromicaceous, blocky to partly subfissile;
LIMESTONE [10] - light brown to offwhite, microcrystalline to occasionally very fine crystalline, lithographic to slight granular texture, tight;

1505-1510: SHALE [100] - light to medium grey to greyish brown, rough to smooth texture, in part earthy, firm, micromicaceous, blocky to subfissile;

1510-1515: SHALE [100] - light to medium grey to greyish brown, rough to smooth texture, firm,
micromicaceous, blocky to subfissile;

1515-1520: SHALE [100] - light to medium grey, rough to fine texture, firm, micromicaceous, blocky to subfissile;

1520-1525: SHALE [100] - light to medium grey to greyish brown, rough to smooth texture, firm, micromicaceous, blocky to subfissile;

1525-1530: SHALE [100] - light to medium grey to greyish brown, rough to smooth texture, in part earthy, firm, micromicaceous, blocky to subfissile;

1530-1535: SHALE [100] - light to medium grey to greyish brown, rough to smooth texture, firm, micromicaceous, blocky to subfissile;

1535-1540: SHALE [100] - light to medium grey to greyish brown, rough to smooth texture, firm, micromicaceous, blocky to subfissile;

1540-1545: SHALE [100] - light to medium grey to greyish brown, rough to smooth texture, in part earthy, firm, micromicaceous, blocky to subfissile;

1545-1555: SHALE [100] - light to medium grey, rough to fine texture, firm, micromicaceous, blocky to subfissile;

1555-1565: SHALE [100] - light to medium grey to greyish brown, rough to smooth texture, in part earthy, firm, micromicaceous, blocky to subfissile;

1565-1570: SHALE [100] - light to medium grey to greyish brown, rough to smooth texture, firm, micromicaceous, blocky to subfissile;

1570-1575: SHALE [100] - light to medium grey, rough to fine texture, firm, micromicaceous, blocky to subfissile;

1575-1580: SHALE [100] - light to medium grey to greyish brown, rough to smooth texture, firm, micromicaceous, blocky to subfissile;

1580-1585: SHALE [100] - light to dark grey to greyish black, rough to very fine texture, firm, micromicaceous, slightly carbonaceous, blocky to subfissile;

1585-1590: SHALE [100] - light to dark grey to greyish black, rough to very fine texture, firm, micromicaceous, slightly carbonaceous, subfissile to blocky;

1590-1595: SHALE [100] - light to dark grey to greyish black, rough to very fine texture, firm, micromicaceous, subfissile to blocky;

1595-1600: SHALE [100] - light to dark grey to greyish black, rough to very fine texture, firm, micromicaceous, blocky to partly subfissile;

1600-1605: SHALE [100] - light to dark grey to greyish black, rough to smooth texture, firm, micromicaceous, blocky to partly subfissile;

1605-1610:	SHALE [100] - light to dark grey to greyish black, rough to smooth texture, firm, micromicaceous, subfissile to blocky;
1610-1615:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, subfissile to blocky;
1615-1620:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, blocky to partly subfissile;
1620-1625:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to partly subfissile;
1625-1630:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, blocky to partly subfissile;
1630-1635:	SHALE [100] - light to dark grey to greyish black, rough to smooth texture, firm, micromicaceous, blocky to partly subfissile;
1635-1640:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, blocky to partly subfissile;
1640-1645:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, blocky to partly subfissile
1645-1650:	SHALE [100] - light to dark grey to greyish black, rough to smooth texture, firm, micromicaceous, subfissile to blocky;
1650-1655:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, blocky to partly subfissile;
1655-1660:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to partly subfissile;
1660-1675:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, blocky to partly subfissile;
1675-1680:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, blocky to subfissile;
1680-1685:	SHALE [100] - light to dark grey to greyish black, rough to smooth texture, firm, micromicaceous, subfissile to blocky;
1685-1690:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, trace limestone, subfissile to blocky;
1690-1695:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1695-1700:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, blocky to subfissile;
1700-1705:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, subfissile to blocky;

1705-1710:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, rare limy streaks, blocky to subfissile;
1710-1715:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1715-1720:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, subfissile to blocky;
1720-1725:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1725-1730:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, trace limestone, subfissile to blocky;
1730-1735:	SHALE [100] - light to dark grey, rough to smooth texture, firm, micromicaceous, subfissile to blocky;
1735-1740:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1740-1745:	SHALE [100] - light to dark grey to partly greyish black, rough to smooth texture, firm, micromicaceous, subfissile to blocky;
1745-1750:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1750-1755:	SHALE [100] - light to dark grey to partly greyish black, rough to smooth texture, firm, micromicaceous, subfissile to blocky;
1755-1760:	SHALE [80] - light to dark grey, very fine to fine texture, firm, partly micromicaceous, in part calcareous, slightly carbonaceous, blocky; LIMESTONE [20] - light brown, microcrystalline, chalky to dense texture, argillaceous, tight;
1760-1765:	SHALE [90] - light to dark grey, very fine to fine texture, firm, partly micromicaceous, in part calcareous, slightly carbonaceous, blocky; LIMESTONE [10] - light brown, microcrystalline, chalky to dense texture, argillaceous, tight;
1765-1770:	SHALE [95] - light to dark grey, very fine to fine texture, firm, partly micromicaceous, in part calcareous, slightly carbonaceous, blocky; LIMESTONE [05] - light brown, microcrystalline, chalky to dense texture, argillaceous, tight;
1770-1775:	SHALE [100] - light to dark grey to partly greyish black, rough to smooth texture, firm, micromicaceous, limestone stringers, subfissile to blocky;
1775-1780:	SHALE [100] - light to dark grey to partly greyish black, rough to smooth texture, firm, micromicaceous, subfissile to blocky;
1780-1785:	SHALE [100] - light to dark grey to partly greyish black, rough to smooth texture, firm, micromicaceous, limestone stringers, subfissile to blocky;

1785-1790:	SHALE [100] - light to dark grey to partly greyish black, rough to smooth texture, firm, micromicaceous, subfissile to blocky;
1790-1795:	SHALE [95] - light to dark grey, very fine to fine texture, firm, partly micromicaceous, in part calcareous, slightly carbonaceous, blocky; LIMESTONE [05] - light brown, microcrystalline, chalky to dense texture, argillaceous, tight;
1795-1800:	SHALE [80] - light to dark grey, very fine to fine texture, firm, partly micromicaceous, in part calcareous, blocky to partly subfissile; LIMESTONE [20] - light brown, microcrystalline, chalky to dense texture, argillaceous, tight;
1800-1805:	SHALE [100] - light to dark grey to partly greyish black, rough to smooth texture, firm, micromicaceous, subfissile to blocky;
1805-1810:	SHALE [100] - light to dark grey to partly greyish black, rough to smooth texture, firm, micromicaceous, limestone stringers, subfissile to blocky;
1810-1815:	SHALE [95] - light to dark grey, very fine to fine texture, firm, partly micromicaceous, in part calcareous, slightly carbonaceous, blocky; LIMESTONE [05] - light brown, microcrystalline, chalky to dense texture, argillaceous, tight;
1815-1820:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1820-1825:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, minor limestone stringers, blocky to subfissile;
1825-1830:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1830-1835:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, minor limestone stringers, blocky to subfissile;
1835-1840:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, minor limestone stringers, blocky to subfissile;
1840-1845:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1845-1855:	SHALE [100] - light to dark grey to greyish brown, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1855-1865:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1865-1870:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1870-1875:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, trace pyrite, blocky to subfissile;

1875-1880:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1880-1885:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, minor limestone stringers, blocky to subfissile;
1885-1890:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1890-1895:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, trace pyrite, blocky to subfissile;
1895-1900:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1900-1905:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1905-1910:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, minor limestone stringers, blocky to subfissile;
1910-1915:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1915-1920:	SHALE [100] - light to dark grey to greyish brown, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1920-1925:	SHALE [100] - light to dark grey to greyish brown, rough to very fine texture, firm, micromicaceous, subfissile to blocky;
1925-1930:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1930-1935:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1935-1940:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, trace pyrite, subfissile to blocky;
1940-1945:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1945-1950:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1950-1955:	SHALE [100] - light to dark grey to greyish brown, rough to very fine texture, firm, micromicaceous, subfissile to blocky;
1955-1960:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, subfissile to blocky;

1960-1965:	SHALE [100] - light to dark grey, rough to fine texture, firm, micromicaceous, blocky to subfissile;
1965-1970:	SHALE [100] - light to dark grey, rough to fine texture, firm, micromicaceous, blocky to subfissile;
1970-1975:	SHALE [100] - light to dark grey, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
1975-1980:	SHALE [100] - light to dark grey, rough to fine texture, firm, micromicaceous, blocky to subfissile;
1980-1985:	SHALE [100] - light to dark grey to greyish brown, rough to very fine texture, firm, micromicaceous, subfissile to blocky;
1985-1990:	SHALE [100] - light to dark grey, rough to fine texture, firm, micromicaceous, blocky to subfissile;
1990-1995:	SHALE [100] - light to dark grey to greyish brown, rough to very fine texture, firm, micromicaceous, subfissile to blocky;
1995-2000:	SHALE [100] - light to dark grey, rough to fine texture, firm, micromicaceous, blocky to subfissile;
2000-2005:	SHALE [100] - light to dark grey, rough to fine texture, firm, micromicaceous, blocky to subfissile;
2005-2010:	SHALE [100] - light to dark grey to greyish brown, rough to very fine texture, firm, micromicaceous, subfissile to blocky;
2010-2015:	SHALE [100] - light to dark grey, rough to fine texture, firm, micromicaceous, blocky to subfissile;
2015-2020:	SHALE [100] - light to dark grey to greyish brown, rough to very fine texture, firm, micromicaceous, subfissile to blocky;
2020-2025:	SHALE [100] - light to dark grey, rough to fine texture, firm, micromicaceous, blocky to subfissile;
2025-2030:	SHALE [100] - light to dark grey to greyish brown, rough to very fine texture, firm, micromicaceous, blocky to subfissile;
2030-2035:	SHALE [100] - light to dark grey to greyish brown, very fine to rough texture, partly earthy, firm, micromicaceous, trace limestone, blocky to subfissile;
2035-2040:	SHALE [100] - light to dark grey to greyish brown, rough to very fine texture, firm, micromicaceous, partly carbonaceous, blocky to subfissile;
2040-2045:	SHALE [100] - light to dark grey to greyish brown, rough to very fine texture, slightly earthy, firm, micromicaceous, partly carbonaceous, blocky to subfissile;

MUSKWA 2045.0 m (-1380.35)

2045-2050:	SHALE [100] - light to dark grey to greyish black, rough to very fine texture, slightly earthy, firm, micromicaceous, partly carbonaceous, pyrite, blocky to subfissile;
2050-2055:	SHALE [100] - dark brownish black to greyish black, rough texture, earthy, firm, carbonaceous, pyrite, calcareous streaks, blocky;
2055-2060:	SHALE [100] - dark black to brownish black, rough texture, earthy, firm, carbonaceous, pyrite, blocky;
2060-2065:	SHALE [100] - dark black to brownish black, rough texture, earthy, firm, carbonaceous, pyrite, blocky;
2065-2070:	SHALE [100] - dark brownish black to greyish black, rough texture, earthy, firm, carbonaceous, pyrite, calcareous streaks, blocky;
2070-2072:	LIMESTONE [100] - brownish grey to mottled brown, microcrystalline, dense texture, hard, argillaceous, no visible porosity, no shows;
2072-2075:	LIMESTONE [100] - brownish grey to mottled brown, microcrystalline, dense texture, hard, argillaceous, no visible porosity, no shows;
2075-2080:	LIMESTONE [30] - brownish grey to mottled brown, microcrystalline, dense texture, hard, argillaceous, no visible porosity, no shows; GRAINSTONE [70] - dark grey to black, greyish clear black, firm, very fine crystalline, argillaceous, shaley, grades to sandy limestone, no visible porosity;
2080-2085:	LIMESTONE [100] - mottled brown to brown, microcrystalline, dense texture, hard, argillaceous, calcite infilled micro fractures, no visible porosity;
2085-2090:	LIMESTONE [100] - mottled brown to brown, microcrystalline, dense texture, hard, argillaceous, calcite infilled micro fractures, no visible porosity;
2090-2095:	LIMESTONE [100] - light brown to mottled brown, microcrystalline, in part mudstone, dense texture, hard, argillaceous, calcite infilled fractures, no visible porosity;
2095-2100:	LIMESTONE [100] - light brown to mottled brown to tan, microcrystalline, in part mudstone, dense texture, hard, argillaceous, no visible porosity;
2100-2105:	LIMESTONE [100] - light dark brown to mottled brown, microcrystalline, in part mudstone, dense texture, hard, argillaceous, calcite infilled fractures, no visible porosity;
2105-2110:	LIMESTONE [100] - buff to cream, microcrystalline, slight porcelaneous lustre, fractured, dense texture, hard, scattered very poor fracture porosity, no shows;
2110-2115:	LIMESTONE [100] - cream to tan to light brown, microcrystalline, partly mudstone, in part fractured, dense texture, slightly dolomitic, no visible porosity, no shows;

2115-2120: LIMESTONE [100] - cream to tan to light brown, microcrystalline, partly mudstone, dense texture, no visible porosity, no shows;

2120-2125: LIMESTONE [100] - cream to tan to light brown, microcrystalline, partly mudstone, dense texture, no visible porosity, no shows;

2125-2130: LIMESTONE [100] - cream to tan to light brown to slightly white, microcrystalline, partly mudstone, dense texture to partly chalky, shaley streaks, no visible porosity, no shows;

2130-2135: LIMESTONE [100] - light to dark brown to tan to slightly mottled brownish white, microcrystalline, partly mudstone, dense texture to partly chalky, argillaceous, no visible porosity, no shows;

2135-2140: LIMESTONE [100] - light to dark brown to mottled brownish white, microcrystalline, dense to partly chalky texture, hard, argillaceous, no visible porosity, no shows;

2140-2145: LIMESTONE [100] - light to dark brown to mottled brownish white, microcrystalline, dense to partly chalky texture, hard, argillaceous, no visible porosity, no shows;

WATT MOUNTAIN 2145.0 m (-1480.35)

2145-2150: LIMESTONE [100] - dark brown to blackish brown, mudstone to partly microcrystalline, earthy lustre, hard, argillaceous, no visible porosity, no shows;

SULFUR POINT 2153.0 m (-1488.35)

2150-2155: LIMESTONE [100] - dark brown to black, mudstone, earthy lustre, hard, argillaceous, minor brown shaley partings, no visible porosity, no shows;

2155-2160: LIMESTONE [100] - light to medium brown, mottled brownish white, partly microcrystalline, mudstone, dense to framental texture, hard, argillaceous, minor brown shaley partings, no visible porosity, no shows;

2160-2165: LIMESTONE [100] - light to medium brown, mottled brownish white, partly microcrystalline, mudstone, dense to framental texture, hard, argillaceous, dark brown shaley partings, no visible porosity, no shows;

2165-2170: LIMESTONE [100] - mottled light brownish white to brown, partly cryptocrystalline to microcrystalline, in part mudstone, dense to framental texture, hard, argillaceous, no visible porosity, no shows;

HORN RIVER 2171.0 m (-1506.35)

2170-2175: LIMESTONE [100] - mottled light to dark brownish white to brown, partly cryptocrystalline to microcrystalline, in part mudstone, dense to framental texture, hard, argillaceous, no visible porosity, no shows;

2175-2180: LIMESTONE [100] - mottled light to dark brownish white to brown, partly cryptocrystalline to microcrystalline, in part mudstone, dense to framental texture, hard, argillaceous, no visible porosity, no shows;

2180-2185: LIMESTONE [100] - dark grey to blackish brown to speckled, mudstone, dense texture, hard, argillaceous, shaley, calcaite infilled fractures, no visible porosity, no shows;

2185-2190: LIMESTONE [100] - dark grey to blackish brown to speckled to light brown, mudstone, dense texture, hard, argillaceous, shaley, calcaite infilled fractures, no visible porosity, no shows;

2190-2195: LIMESTONE [100] - light to dark brown to mottled brownish grey white, microcrystalline to partly vert fine crystalline, in part mudstone, dense to slight hackly texture, hard, argillaceous, shaley, no visible porosity, no shows;

2195-2200: LIMESTONE [100] - dark brown to greyish black, mudstone, dense texture, earthy lustre, hard, argillaceous, shaley, no visible porosity, no shows;

2200-2205: LIMESTONE [100] - dark brown to greyish black, mudstone, dense texture, earthy lustre, hard, argillaceous, shaley, no visible porosity, no shows;

2205-2210: LIMESTONE [100] - dark brown to greyish black, mudstone, dense texture, earthy lustre, hard, argillaceous, trace pyrite, shaley, no visible porosity, no shows;

2210-2215: LIMESTONE [100] - dark brown to greyish black, mudstone, dense texture, rare chalky white stringers, earthy lustre, hard, argillaceous, shaley, no visible porosity, no shows;

NAHANNI 2215.0 m (-1550.35)

2215-2220: LIMESTONE [100] - dark brown to mottled brownish white, in part microcrystalline, mudstone, dense to slight fragmented texture, earthy lustre, hard, argillaceous, shaley, no visible porosity, no shows;

2220-2225: LIMESTONE [100] - dark brown to mottled brownish white, in part microcrystalline, mudstone, dense to slight fragmented texture, earthy lustre, hard, argillaceous, no visible porosity, no shows;

2225-2230: LIMESTONE [100] - light to dark brown to brownish white, microcrystalline to partly very fine crystalline, in part mudstone, dense to slight fragmented texture, slight earthy lustre, hard, argillaceous, no visible porosity, no shows;

2230-2235: LIMESTONE [100] - light to dark brown to brownish white, microcrystalline to partly very fine crystalline, in part mudstone, dense to slight fragmented texture, slight earthy lustre, hard, argillaceous, no visible porosity, no shows;

2235-2240: LIMESTONE [100] - light to dark brown to mottled brownish white, microcrystalline, in part mudstone, dense to slight hackly texture, slight earthy lustre, hard, argillaceous, no visible porosity, no shows;

2240-2245: LIMESTONE [100] - light to dark brown to tan, slightly microcrystalline, in part mudstone, dense texture, slight earthy lustre, hard, argillaceous, no visible porosity, no shows;

2245-2250: LIMESTONE [100] - light to dark brown to tan, slightly microcrystalline, in part mudstone, dense texture, slight earthy lustre, hard, argillaceous, trace pyrite, minor calcite crystals, no visible porosity, no shows;

2250-2255: LIMESTONE [100] - light to dark brown to tan, slightly microcrystalline, in part mudstone, dense texture, slight earthy lustre, hard, argillaceous, no visible porosity, no shows;

2255-2260: LIMESTONE [100] - light to dark brown, mudstone, dense texture, hard, argillaceous, shale partings, no visible porosity, no shows;

2260-2265: LIMESTONE [100] - light to dark brown to tan, mudstone, dense texture, earthy lustre, hard, argillaceous, trace pyrite, no visible porosity, no shows;

2265-2270: LIMESTONE [100] - light to dark brown to tan, mudstone, earthy lustre, dense texture, hard, argillaceous, calite infilled minor fractures, no visible porosity, no shows;

2270-2275: LIMESTONE [100] - mottled dark brown, partly microcrystalline, in part mudstone, dense texture, hard, partly argillaceous, calcite crystals, no visible porosity, no shows;

2275-2280: LIMESTONE [100] - mottled dark brown, partly microcrystalline, in part mudstone, dense texture, hard, argillaceous, calcite crystals, no visible porosity, no shows;

2280-2285: LIMESTONE [100] - medium to dark brown to partly mottled brown, partly microcrystalline, mudstone, dense texture, hard, argillaceous, no visible porosity, no shows;

HEADLESS 2285.0 m (-1620.35)

2285-2290: LIMESTONE [100] - medium to dark brown to partly mottled brown, partly microcrystalline, mudstone, dense to slight waxy texture, hard, argillaceous, no visible porosity, no shows, trace green pyritic waxy shale;

2290-2295: LIMESTONE [95] - medium to dark brown to partly mottled brown, partly microcrystalline, mudstone, dense to slight waxy texture, hard, argillaceous, no visible porosity, no shows;
SHALE [05] - green, waxy to smooth texture, firm, pyritic, blocky;

2295-2300: LIMESTONE [90] - medium to dark brown to partly mottled brown to greyish brown, partly microcrystalline, mudstone, dense to slight waxy texture, hard, argillaceous, no visible porosity, no shows;
SHALE [10] - green to greyish green, waxy to smooth texture, firm, pyritic, blocky;

2300-2306: LIMESTONE [70] - light brown to tan, mudstone, dense to slight waxy texture, hard, argillaceous, no visible porosity, no shows;
SHALE [30] - green to greyish green, waxy to smooth texture, firm, pyritic, blocky;

LANDRY 2306.0 m (-1641.35)

2306-2309: DOLOMITE [100] - white, cryptocrystalline to fine crystalline, partly euhedral to subhedral crystals, dense texture, partly bituminous, scattered very poor intercrystalline porosity, no shows;

2309-2315: DOLOMITE [100] - white, cryptocrystalline to fine crystalline, partly euhedral to subhedral crystals, dense texture, partly bituminous, scattered very poor intercrystalline porosity, no shows;

2315-2320: DOLOMITE [100] - white to light white grey, cryptocrystalline to fine crystalline, partly euhedral to subhedral crystals, dense texture, partly bituminous, scattered very poor intercrystalline porosity, no shows;

2320-2325: DOLOMITE [100] - white to light white grey, cryptocrystalline to fine crystalline, partly euhedral to subhedral crystals, dense texture, partly bituminous, scattered very poor intercrystalline porosity, no shows, contaminated with LCM;

2325-2330: DOLOMITE [100] - white to light white grey, cryptocrystalline to microcrystalline, dense texture, partly bituminous, rare very poor intercrystalline porosity, no shows, contaminated with LCM;

2330-2335: DOLOMITE [100] - white to smoky grey, cryptocrystalline, dense texture, partly bituminous, no visible porosity, no shows, contaminated with LCM;

ARNICA 2337.0 m (-1672.35)

2335-2340: DOLOMITE [100] - light brown to brownish grey to tan, cryptocrystalline to slightly microcrystalline, dense texture, partly argillaceous, no visible porosity, no shows;

2340-2345: DOLOMITE [100] - light brown to tan, cryptocrystalline to slightly microcrystalline, dense texture, partly argillaceous, no visible porosity, no shows;

2345-2350: DOLOMITE [100] - light brown to tan to partly mottled brownish white, cryptocrystalline to slightly microcrystalline, dense texture, partly argillaceous, trace pyrite, no visible porosity, no shows;

2350-2355: DOLOMITE [100] - light to medium brown to tan to partly mottled brownish white, cryptocrystalline to slightly microcrystalline, dense texture, partly argillaceous, trace pyrite, no visible porosity, no shows;

2355-2360: DOLOMITE [100] - light brown to tan, partly cryptocrystalline, grading to mudstone, dense texture, partly argillaceous, trace pyrite, no visible porosity, no shows;

2360-2365: DOLOMITE [90] - light brown to tan, partly cryptocrystalline, grading to mudstone, dense texture, partly argillaceous, trace pyrite, no visible porosity, no shows;
LIMESTONE [10] - offwhite, microcrystalline, chalky texture, soft, argillaceous, tight;

2365-2370: DOLOMITE [95] - light brown to tan, partly cryptocrystalline, grading to mudstone, dense texture, partly argillaceous, trace pyrite, no visible porosity, no shows;
LIMESTONE [05] - offwhite, microcrystalline, chalky texture, soft, argillaceous, tight;

2370-2375: DOLOMITE [90] - light brown to grey, partly cryptocrystalline, grading to mudstone, dense texture, partly argillaceous, partly anhydritic, trace pyrite, no visible porosity, no shows;
LIMESTONE [10] - offwhite, microcrystalline, chalky texture, soft, argillaceous, tight;

2375-2380: DOLOMITE [90] - grey to greyish brown to dark grey, cryptocrystalline to partly microcrystalline, dense texture, argillaceous, in part anhydritic, slightly calcareous, no visible porosity, no shows;
LIMESTONE [10] - greyish offwhite, microcrystalline, slightly chalky texture, firm, argillaceous, no visible porosity, no shows;

2380-2385: DOLOMITE [100] - light to dark grey to greyish brown, cryptocrystalline to partly microcrystalline, dense texture, argillaceous, in part calcareous, dolomitic shale partings, no visible porosity, no shows;

2385-2390: DOLOMITE [100] - greyish brown, mudstone, dense texture, argillaceous, no visible porosity, no shows;

2390-2395: DOLOMITE [100] - light to dark grey to greyish brown, cryptocrystalline to partly microcrystalline, dense texture, argillaceous, in part calcareous, no visible porosity, no shows;

2395-2400: DOLOMITE [90] - light to dark grey to greyish brown, cryptocrystalline to partly microcrystalline, dense texture, argillaceous, in part calcareous, no visible porosity, no shows;
LIMESTONE [10] - dark brown, cryptocrystalline, fragmental texture, altered, argillaceous, tight;

2400-2405:	DOLOMITE [70] - light to dark grey to greyish brown, cryptocrystalline to partly microcrystalline, dense texture, argillaceous, in part calcareous, no visible porosity, no shows; LIMESTONE [30] - dark brown, cryptocrystalline, fragmental texture, altered, argillaceous, tight;
2405-2408:	DOLOMITE [70] - greyish brown, cryptocrystalline to partly microcrystalline, dense texture, argillaceous, in part calcareous, slightly anhydritic, no visible porosity, no shows; AHYDRITE [25] - offwhite to brownish orange, cryptocrystalline to microcrystalline, dense to chalky texture, tight; LIMESTONE [05] - dark brown, cryptocrystalline, fragmental texture, altered, argillaceous, tight;

TOTAL DEPTH 2408.63 m FEBRUARY 24,1999 @ 22:00 hours