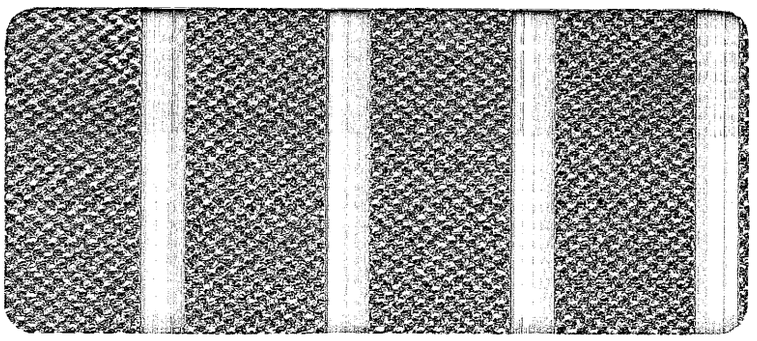

WCR VOL 1

MOONFISH-1, ST 1

W1064, 1065

W1064, 1065

WELL COMPLETION REPORT

MOONFISH-1
AND
MOONFISH ST1

VOLUME 1 - BASIC DATA

GIPPSLAND BASIN VICTORIA

ESSO AUSTRALIA LIMITED

Compiled by :- Greg Clota and Jon Reeve

WELL COMPLETION REPORT

VOLUME 1: BASIC DATA

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FIGURES

APPENDICES

ESSO AUSTRALIA LTD

1. WELL DATA RECORD

LOCATION		:	Latitude : 38°09'0.78" South Longitude : 148°0'30.51" East X=588362mE Y=5777022mN Map Projection: UTM Zone 55 Geographical Location: Bass Strait, Victoria Field : Moonfish
PERMIT		:	Vic/L10
ELEVATION		:	23m
WATER DEPTH		:	52m
TOTAL DEPTH	MOONFISH 1	:	3045m (Driller), Not logged to TD m (Logger)
	MOONFISH 1 ST	:	2803m (Driller), 2802m (Logger)
PLUG BACK TYPE		:	Cement Plugs
REASONS FOR PLUGGING BACK	MOONFISH 1	:	Plugged back for sidetrack
	MOONFISH 1 ST	:	Abandonment
MOVE IN		:	11/5/92 1130 hours
SPUDDED	MOONFISH 1	:	12/5/92 1530 hours
KICKED OFF	MOONFISH 1 ST	:	28/6/92 1015 hours
REACHED TD	MOONFISH 1	:	21/6/92 1300 hours
	MOONFISH 1 ST	:	12/7/92 0630 hours
RIG RELEASED		:	21/7/92 0330 hours
OPERATOR		:	Esso Australia Resources Ltd
PERMIT OR LICENCE		:	BHP Petroleum (Australia) Pty Ltd and Esso Australia Resources Limited.
ESSO INTEREST		:	50%
OTHER INTEREST		:	BHPP 50%
CONTRACTOR		:	Atwood Oceanics Drilling
RIG NAME		:	Falcon
EQUIPMENT TYPE		:	Semi-submersible
TOTAL RIG DAYS		:	70 2/3
DRILLING AFE NO		:	L61012102
TYPE COMPLETION		:	Plug and abandon
WELL CLASSIFICATION		:	Before Drilling New field Wildcat After Drilling Discovery well - oil/gas

OPERATIONS SUMMARY

The Atwood Falcon arrived at Moonfish 1 at 11:30 hours, May 11, 1992. M/V Lady Penelope and M/V Lady Caroline ran and set the eight anchors. The Atwood Falcon was ballasted to 55ft drilling draft at 23:10 hours, May 11, 1992. The final location was 11.0 m on a true bearing of 180 from the called location. Water depth was 52m; RKB to mudline was 75m.

MOONFISH 1

a) 26" HOLE SECTION

The 26" bit/26" hole opener BHA was made up and stabbed into the TGB. Moonfish 1 was spudded at 15:30 hours, May 12, 1992. The 26" hole section was drilled from 75m to 186m using seawater and high viscosity sweeps every stand to clean the hole. The hole was circulated clean prior to making a wiper trip to 85m. The hole was circulated clean prior to dropping a survey and POOH (Survey 3/4).

Seven joints of 94lb/ft 20" casing plus cross-over joint and 18 3/4" wellhead assembly were run with the casing shoe set at 172.1m. The casing was cemented with a lead slurry of 340 sacks of class `G' plus 3.1% prehydrated gel and a tail slurry of 450 sacks of class `G' neat cement.

The BOP stack was run and latched to the 18 3/4" wellhead. The casing and connector were pressure tested to 500psi.

b) 17 1/2" HOLE SECTION

A 17 1/2" bit and kick-off assembly were picked up and RIH to the TOC at 163m. The cement and shoe were drilled out and the rathole cleaned out prior to drilling 17 1/2" hole from 186m to 440m. At 440m the steering assembly was used to commence the hole deviation. Drilling proceeded to 860m. The hole was circulated clean and a wiper trip was made to the 20" casing shoe. The hole was circulated clean before tripping out of the hole to run E-logs (AS-GR-AMS).

Eleven joints of 68lb/ft and 66 joints of 54.5lb/ft 13 3/8" casing were run with the casing shoe set at 842.8m. The casing was cemented with 860 sacks of class `G' neat cement. After circulating the riser and washing the wellhead and BOP stack the pack-off was set and tested to 200/2000psi. The blue pod of the BOP's was function tested and the yellow pod was pressure tested to 200/5000psi. The surface lines were pressure tested to 200/2000psi.

c) 12 1/4" HOLE SECTION

A 12 1/4" Hycalog PDC bit, DS40HF, was run into the hole to drill out the float collar, cement and shoe. The rat hole was cleaned out and 3m of new formation were penetrated (863m). The Phase II PIT was performed to a maximum pressure of 950psi with no leak off (EMW = 16.0ppg). Drilling proceeded from 863m to 1044m where a trip was made to change the BHA configuration in an attempt to stop building hole angle. Drilling continued from 1044m to 1822m. Samples were circulated for geological evaluation throughout this section. A new bit, 12 1/4" Smith MF27D, and BHA configuration was used to drill from 1822m to 1914m. A Hycalog PDC bit, DS47H was run and drilled from 1914m to 1991m. Hole angle was dropping at an unacceptable rate, therefore, a further trip was made to change the bit and BHA. A new bit, 12 1/4" Smith MF27D, was run to bottom (1991m). The MWD tool failed to pulse; 2m of new formation were drilled (1993m) in an attempt to jar the MWD pulsar into action. A trip was made for the MWD tool and a new bit. At surface the dump valve for the downhole mud motor was changed out. A new bit, Reed HP51AJ, was run and drilled from 1993m to 2008.5m. Core 1 was

cut from 2008.5m to 2021.75m (Rec 98%) with a 9 7/8" corebit, after a 12 1/4" corebit failed to reach bottom. A re-run bit, MF27D, was used to ream out the cored hole section to 12 1/4" and drill new formation from 2021.75m to 2068m. A trip was made to change the bit and BHA due to hole direction problems. The BOP stack was tested prior to making up a re-run bit, Reed HP51AJ, and drilling ahead from 2068m to 2207m. Samples were circulated to surface over this interval for geological examination. A new mud motor and PDC bit, Hycalog DS47H, were made up and used to drill ahead from 2207m to 2224m. A bit trip was made due to poor penetration rate. A new bit, Reed HP51A, was used to drill ahead from 2224m to 2257m. Cores 2 (2257-2275m), 3 (2275-2293m) and 4 (2293-2299m) were cut using a 9 7/8" corebit. A re-run bit, Smith MF27D, and bottom hole rotary assembly were made up and used to ream the cored interval from 2257m to 2299m and new formation to 2303m. A bit trip was made due to poor penetration rate. A new bit HP51AJ was used to drill ahead from 2303m to 2375m.

Intermediate logs were run at 2375m. Suite 2 logs run were; DLL-MSFL-LDL-CNL-NGS-AMS, RFT-GR-AMS. Hole problems were encountered during the logging program. Initially the loggers could not pass 1968m. Three tool configurations were tried before attempting to run TLC logs which could not pass 1963m. A wiper trip was made and the loggers were able to reach bottom on wireline. The MDT was run and became stuck at 2260.5m after fishing the tool successfully a wiper trip was made and 2m of formation was drilled to clean the hole of junk. The logging program was completed without further difficulties.

A new bit, Reed HP51AJ, drilled ahead from 2377m to 2481m, where the bit was pulled due to a poor rate of penetration. Tight hole conditions required backreaming from 2472m to 2301m. At surface it was found that the bearings from cone 3 had been left in the hole. Consequently a re-run HTC JD4, junk basket and new stabilisers were picked up and run in the hole to 1735m where the string stood up. The bit was then reamed to 1843m and then the hole circulated clean. The tight hole was attributed to the new in gauge stabilisers in the BHA so the bit was pulled out of the hole in order to change these out. Back reaming was required between 1640m and 1610m.

The BHA was changed and the bit tripped back in the hole to 1843m but had to reamed to 2110m. It was then possible to run stands in the hole to 2456m and then wash to 2481m. The junk sub was worked on bottom and then 8m of formation drilled to 2489m, where the junk sub was again worked prior to pulling out of the hole.

d) **8.5" HOLE SECTION**

The 12.25" BHA was laid out and an 8.5" BHA and bit (HP51AJ) picked up and run in the hole. Drilling continued to 2586m before back reaming to 2489m. A 75 barrel high viscosity pill was pumped around the hole before reaming back to 2586m. New hole was then drilled to 2642m where the bit was pulled. Drilling breaks were circulated out at 2563m and 2624m and also prior to pulling the bit. The bit and stabilisers were all 1/8" undergauge.

A Smith MF2DL was picked up together with new stabilisers and additional drill collars. These were made up and run in to 2489m and reamed to 2642m. Hole was drilled to 2845m and bottoms up circulated prior to dropping a survey. The bit was pulled, back reaming from 2845m to 2641m and from 2531m and 2041m. The survey was retrieved at the shoe prior to reaching the surface.

A Hughes ATMP22GD bit was picked up and run into 2817m and then washed to bottom. Drilling continued to 2934m where the bottom hole cuttings were circulated to surface prior to dropping a survey. The pipe was back reamed to 2730m and then pulled to 2170m to recover the survey, which was a misrun. No problems were encountered running in the hole, but the pipe was washed from 2905m to TD. Drilling then continued to 3037m,

performing flowchecks, after one metre drill breaks, at 2980m, 2986m, 2990m, 3018m and 3021m; all indicated no flow.

Gas from 3021m peaked at 752 units and then only dropped back to a background level of 250 units. Consequently a 10-10-10 test was performed. Drilling then continued to 3045m while waiting for the test results to be circulated to surface. The result of 278-420-320 units of gas dictated drilling stop and the mud weight be increased from 10.6ppg.

The mud weight was duly increased by 0.5ppg increments to 12.7ppg and another 10-10-10 test conducted. This gave a result of 12-11-10 units so a 5 stand wiper trip was pulled, backreaming out, prior to again circulating bottoms up. The wiper trip gas was only 13.5 units. A survey was then dropped and a wiper trip to the shoe commenced. The pipe was backreamed out of the 8.5" hole from 3045m to 2489m and then two stands were pulled with normal drag in the 12.25" hole After racking back the second stand the third stand was found to be stuck, at 2444m.

A stand was picked up and an attempt was made to work the pipe down, but without success, while circulating. After 5.5 hours of jarring up a 40 barrel pill of Bio-spot was spotted around the bit and 6.5" collars. This was displaced at a rate of one barrel every 15 minutes, while continuing to work the jars for 12 hours, but the pipe was not worked free. The Bio-spot was then pumped out of the hole, but at bottoms up the mud weight was cut to 12.1ppg from 12.7ppg by gas which reached a maximum of 1056 units. Consequently the mud weight was raised, ultimately to 13.2ppg before the background gas level dropped to an acceptable 30 units. There was then no further movement detected in the jars.

A flow check showed the hole to be static so a wireline was run in to retrieve the survey tool which had been dropped prior to commencing the wiper trip. Bottoms up was then again circulated to surface, reaching a maximum of 75 units over a background of 32 units, before rigging up to run a free point indicator. Torque and stretch measurements indicated that the pipe was now stuck up to about 1850m. With the wireline rigged down and the goose neck made up to the top drive the mud was circulated, 110 units of gas being recorded at bottoms up. Cementing lines were then rigged up and cement plug #1 of neat cement at 15.8ppg, was pumped and spotted in the annulus from 2444m to 2344m. While waiting on cement the annulus and drill pipe were shut in and the pressures recorded for 8 hours. There was no build up in pressure in the annulus, but in the drill pipe the pressure increased from an initial shut in pressure of 195psi to 1230psi.

The pressure was then bled off and an injection rate attempted through the bit using the cement unit. However, the pressure increased to 2000psi after only pumping 0.75 barrels of mud, so was held for 30 minutes without any bleed off being observed. The annulus was checked for leaks, holding up to 400psi without leaking off and then holding 200psi for 30 minutes without any loss of pressure. Finally the drill pipe was again pressured up, to 4000psi, and the pressure held for 30 minutes, but without any observed pressure drop.

With the integrity of the cement plug confirmed the drillpipe was perforated over the interval 2294m to 2295.2m using a 1.2m Enerjet gun and then cement plug #2 was set over the interval 2295m to 2195m. The plug comprised of 330 sacks of class "G" cement mixed in 40 barrels of freshwater to a slurry density of 15.8ppg. After waiting on cement the drillpipe was further perforated from 2091.2m to 2090m. This was about 100m higher than planned but the gun could not be worked past an obstruction at 2094m.

Circulation was broken and the mud weight was progressively reduced from 12.7ppg to 10.2ppg by half pound per gallon increments. With 10.2ppg mud all around a 160 barrel pill of Enviro-spot was placed around the BHA. A free point indicator was then run down inside the drillpipe and found the free point at 1875m. With the free point indicator rigged down the Enviro-spot pill was circulated out and cement plug #3 spotted from 2091m to 1870m. The pipe was then severed using a pipe severing charge at 1828m, and pulled out of the hole. The bottom joint was laid out before running back to 1828m to set cement

plug #4. The first stage of plug #4 was set from 1825m to 1705m with the second stage immediately on top, from 1705m to 1609m. After waiting on cement the top of the second stage was tagged and the third stage was set from 1609m to 1549m. Finally plug #5 was set from 950m to 854m. The abandonment of Moonfish 1 was completed at 1730hrs on 27/6/1992, all further rig operations being conducted on Moonfish 1 sidetrack 1, aimed at intersecting the T.Longus sands not intersected in Moonfish 1.

MOONFISH 1 ST1

a) 12 1/4" HOLE SECTION

After setting the final cement plug in Moonfish 1 at 950m the pipe was pulled out of the hole. While waiting on cement the BOP stack and surface equipment were satisfactorily pressure tested before picking up a new 12.5" bit and BHA.

The mill tooth bit, Reed HP12GJ, was run in and tagged the top of the cement plug at 854m. This was dressed off to 861m, before pulling out of the hole to pick up the MWD, mud motor and Hycalog DS40HF bit.

Once back on bottom Moonfish 1 ST 1 was kicked off at 888m and steered to 1214m, (inclined at 24 degrees and on a bearing of 132 degrees), where a wiper trip was pulled. No tight hole was encountered during the trip. Once back on bottom drilling continued to 1674m, primarily by rotating the string, but by sliding for about 5m at the beginning of each stand to maintain the inclination. An 8 stand wiper trip was made to check the inclinometer prior to drilling ahead. Once back on bottom drilling continued to 1788m, where the bit was pulled to change the BHA in order to try to maintain the hole inclination.

A Hughes ATM11HG bit was made up to a packed BHA and run in the hole to 898m. From 898m the bit was washed and reamed to 1239m and then also over the following intervals, 1617m to 1641m, 1693m to 1698m and 1755m to 1788m. Drilling continued, but the surveys indicated that the hole inclination was falling at an unacceptable rate, so the bit was pulled at 1879m to change the BHA.

A building BHA was made up to a Reed HP51HJKS bit and run in the hole to TD, reaming only the interval 1819m to 1835m on the way down. Hole was drilled, while gradually building angle, to 2222m, where the bit was pulled. A 10 stand wiper trip at 2074m required backreaming out of the hole, but ran in to bottom without any problems. Once out of the hole the BOP stack and surface equipment were satisfactorily pressure tested before picking up a new bit.

The BHA was changed and made up to a new Reed HP51HJKS bit and run in the hole. The pipe was tripped in to 2176m, testing the MWD on the way in, and then reaming to TD. The MWD ceased working at 2210m prior to reaching TD, but drilling continued 2372m, where the bit was tripped to pick up a replacement MWD.

Another Reed HP51HJKS bit was made up with a changed MWD GR sonde and run in the hole to 2372m. Surveys were taken at 2228m, 2285m and 2341m prior to drilling ahead. Drilling continued to 2471m, before dropping a single shot survey. This was required due to the failing of the directional part of the MWD. The survey result indicated the hole angle had fallen off too rapidly, so the bit was pulled to change the BHA. The hole had to be back reamed from 2471m to 2244m, with 60klbs over pull.

The Smith MWD tools were changed out for Sperry-Sun MWD equipment. A new BHA was made up to build angle and a new Reed HP51HJKS was run into the hole to 2200m. The Sperry-Sun MWD re-logged a section of hole with gamma-resistivity from 2200 to 2350m and then the bit was reamed to bottom. Drilling proceeded from 2471 to 2680m. A

10 stand wiper trip was made and then drilling continued to 2803m. A wiper trip was made to the 13 3/8" casing shoe before POOH to run E-logs.

The following logs were run: DLL-MSFL-LDL-CNL-NGS-AMS, AS-GR-AMS, FMS-GR-AMS, CSAT-GR-AMS, RFT-GR-AMS (Pretests & Samples), CST and MSCT-GR. During the RFT (Pretests) run sticky hole conditions were encountered necessitating a wiper trip. A further wiper trip was run after collecting the first RFT sample at 2758.5m prior to completing the logging programme.

Schlumberger were then rigged down and open-ended drillpipe run into the hole. Bottoms up were circulated and cemented and cement plug #1 set from 2260m to 2180m. Cement plug #2 was then set from 2130m to 1990m and plug #3 set from 1910m to 1780m.

Abandonment plug #4 was set from 1700m to 1576m, and excess drillpipe laid down. The string was then pulled out of the hole to 902m and cement plug #5 set from 902m to 825m, laid down drillpipe, collars, 12 1/4" bit and stabilisers and ran in hole to set plug #6 from 825m to 780m. A bridge plug was set at 695m and casing cut at 165m. The 13 3/8" spear assembly was run into the hole and the 13 3/8" casing picked up, pulled out of hole and laid down. Cement plug #7 was set from 200m to 100m and excess drillpipe laid down.

The riser and slip joint were pulled and laid down and the BOP stack landed in the moonpool. The 20" casing was cut at 86m and the 20" casing stub, pile joint, PGB and TGB pulled and set on beams in the moonpool. The Falcon was deballasted to transit draft, the anchors retrieved and bolstered and the rig taken under tow to the Whaleshark 1 location.

ESSO AUSTRALIA LTD.
MOONFISH-1 FINAL WELL REPORT
CASING DATA

OD (In.)	WEIGHT (LB/FT)	GRADE	CONNECTION	LENGTH (M)	SHOE DEPTH (mMD-RKB)	CENTRALIZER POSITION	REMARKS
20	94	X-56	JV	12.78	172.1	NONE	FLOAT SHOE JOINT
20	94	X-56	JV	62.48		NONE	5 INTERMEDIATE JOINTS
20	129	X-52	JV x ALT-2	12.57		NONE	CROSSOVER JOINT
24	670	----	ALT-2	11.28		NONE	WH/PILE S/N EP-13 CENTRALIZERS ON MIDDLE OF JOINTS 1 AND 2 W/RINGS
				99.11			
13-3/8	54.5	K-55	BTC	12.32	842.76		FLOAT SHOE JOINT
	54.5	K-55	BTC	11.46		1 ACROSS MIDDLE	FLOAT JOINT
	54.5	K-55	BTC	12.25		1 ACROSS MIDDLE	FLOAT COLLAR JOINT
	54.5	K-55	BTC	598.54		1 ACROSS FIRST EIGHT COLLARS	52 INTERMEDIATE JOINTS
	68	K-55	BTC	131.19		NONE	11 INTERMEDIATE JOINTS
	68	K-55	BTC	3.00		NONE	CASING HANGER PUP JOINT RKB-HGR-74m
				768.76			

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MOONFISH-1 FINAL WELL REPORT
CEMENT DATA

DATE (1992)	TYPE JOB	INTERVAL (mMD-RKB)	TYPE CEMENT	VOLUME (SX)	SLURRY WEIGHT (PPG)	ADDITIVES	MI WAT
13-MAY	20" PRIMARY LEAD	172-75	CLASS "G"	310	12.1	3.1% PH-GEL	F
13-MAY	20" PRIMARY TAIL		CLASS "G"	450	15.8	----	S
16-MAY	13-3/8" PRIMARY	842.76-443	CLASS "G"	860	15.8	----	S
24-JUN	P & A PLUG No.1	2444-2344	CLASS "G"	267	15.8	----	F
25-JUN	P & A PLUG No.2	2295-2195	CLASS "G"	330	15.8	----	F
26-JUN	P & A PLUG No.3	2091-1870	CLASS "G"	650	15.8	----	F
27-JUN	P & A PLUG No.4	1825-1549	CLASS "G"	902	15.8	----	F
27-JUN	K-OFF PLUG No.1	950-854	CLASS "G"	540	17.0	21-GP10B CFR-3L	F
18-JUL	P & A PLUG No.5	2260-2180	CLASS "G"	260	15.8	----	F

ESSO AUSTRALIA LTD.
MOONFISH-1 FINAL WELL REPORT
CEMENT DATA

DATE (1992)	TYPE JOB	INTERVAL (mMD-RKB)	TYPE CEMENT	VOLUME (SX)	SLURRY WEIGHT (PPG)	ADDITIVES	MIX WATER	REMARKS
18-JUL	P & A PLUG No.6	2130-1990	CLASS "G"	465	15.8	----	FW	SECOND PLUG IN S/T HOLE.
18-JUL	P & A PLUG No.7	1910-1780	CLASS "G"	420	15.8	----	FW	THIRD PLUG SET IN S/T HOLE.
18-JUL	P & A PLUG No.8	1700-1576	CLASS "G"	430	15.8	----	FW	TOP OF LATROBE PLUG IN S/T HOLE. TAGGED WITH 15 KIPS.
19-JUL	P & A PLUG No.9	902-825	CLASS "G"	400	15.8	----	SW	13-3/8" SHOE PLUG-TAGGED @ 825m.
19-JUL	P & A PLUG No.10	825-780	CLASS "G"	100	15.8	----	SW	SECOND 13-3/8" SHOE PLUG.
19-JUL	P & A PLUG No.11	200-100	CLASS "G"	460	15.8	2% CACl2	SW	TOP PLUG-TESTED TO 500 PSI.

5. SAMPLES, CONVENTIONAL CORES, SIDEWALL CORES

MOONFISH 1

Interval (m)	Type
185 - 3045	Cuttings samples - 3 sets of washed and oven dried plus 1 set of bagged air dried cuttings. Samples from 185 - 1500m @ 10m intervals Samples from 1500 - 3045m @ 5m intervals
1500 - 3020	Mud samples @ 100m intervals
2008.5 - 2021.75	Core 1 - Cut 13.25m, Recovered 12.94m
2257.0 - 2275.0	Core 2 - Cut 18m, Recovered 18m
2275.0 - 2293.0	Core 3 - Cut 18m, Recovered 18m
2293.0 - 2299.0	Core 4 - Cut 6m, Recovered 6m

MOONFISH 1 STI

Interval (m)	Type
860 - 2803	Cuttings samples - 3 sets of washed and oven dried plus 1 set of bagged air dried cuttings. Samples from 860 - 1500m @ 10m intervals Samples from 1500 - 2803m @ 5m intervals
1000 - 2800	Mud samples @ 100m intervals
1548 - 2765	Sidewall cores - shot 37, recovered 21
1848 - 1887.5	Mechanical sidewall cores - attempted 5, recovered 2

6. WIRELINE LOGS AND SURVEYS

MOONFISH 1

Type and Scale		From	To
	Suite 1		
AS-GR-AMS	1:200	75	855
	Suite 2		
DLL-MSFL-LDL-CNL-NGS-AMS	1:200	1600	2368
NGS (Continued)	1:200	843	1600
RFT-GR-AMS	(73 Pretests/9 Samples)	1800	2297.1

MOONFISH 1 ST

	Suite 2		
DLL-MSFL-LDL-CNL-NGS-AMS	1:200	1550	2797
AS-GR-AMS	1:200	843	2799
FMS-GR-AMS	1:200	1550	2801
CSAT-GR-AMS	1:200	865	2795
RFT-GR-AMS	(44 Pretests/6 Samples)	1838.8	2738.6
MSCT-GR	(Attempted 5, recovered 2)	1848	1887.5
CST	(37 Shot, recovered 21)	1548	2765

SUMMARY OF WIRELINE FORMATION TEST PROGRAMME
MOONFISH 1

Test	Depth (m)	Chamber (l)	Recovery Oil (l)	Recovery Gas (ft3)	Recovery Form Water (l)	Recovery Filt (l)	Form Press. (Psia)	Hydro Press. (Psia)	Remarks
1/1	1800.0	Pretest					2289.0	2950	Good
1/2	1812.0	Pretest					2304.2	2969	Good
1/3	1828.1	Pretest					2323.6	2994	Good
1/4	1850.1	Pretest					2359.8	3029	Good
1/5	1854.1	Pretest					2360.7	3035	Good
1/6	1858.0	Pretest					2360.9	3042	Good
1/7	1860.5	Pretest					2362.7	3045	Good
1/8	1862.0	Pretest					2364.5	3048	Good
1/9	1864.0	Pretest					2367.2	3050	Good
1/10	1871.5	Pretest					2381.3	3062	Good
1/11	1882.0	Pretest						3080	Tight
1/12	1881.8	Pretest					2401.8	3079	Good
1/13	1888.6	Pretest						3090	Tight
1/14	1888.2	Pretest					2416.0	3089	Low Perm
1/15	1904.0	Pretest					2428.9	3115	Good
1/16	1906.0	Pretest						3119	Tight
1/17	1906.4	Pretest					2432.7	3118	Good
1/18	1907.5	Pretest					2430.9	3120	Good
1/19	1910.1	Pretest					2433.1	3124	Good
1/20	1914.5	Pretest					2436.9	3131	Good
1/21	1922.1	Pretest					2444.3	3144	Good
1/22	1925.1	Pretest					2448.1	3149	Good
1/23	1930.0	Pretest					2454.3	3157	Good
1/24	1935.6	Pretest					2461.3	3166	Good
2/25	1914.5	22.7	22.7	38.8			2437.0	3132	Good
		3.8		Pres			2437.0	3132	Good
3/26	1864.0	22.7	Trace	RTSTM		20	2367.0	3049	Good
		3.8	Trace	RTSTM	3.8		2367.0	3051	Good

SUMMARY OF WIRELINE FORMATION TEST PROGRAMME MOONFISH 1

Test	Depth (m)	Chamber (l)	Recovery Oil (l)	Recovery Gas (ft3)	Recovery Form Water (l)	Recovery Filt (l)	Form Press. (Psia)	Hydro Press. (Psia)	Remarks
4/27	1904.0	22.7	Trace	RTSTM		20.5	2427.0	3114	Good
		3.8	Trace			3.8	2427.0	3115	Good
5/28	1852.6	Pretest					2359.6	3098	Good
5/29	1856.0	Pretest					2360.2	3104	Good
5/30	1861.5	Pretest					2363.3	3113	Good
5/31	1863.1	Pretest					2365.5	3115	Good
5/32	1916.6	Pretest					2437.1	3202	Slightly unstable
5/33	1927.6	Pretest					2450.7	3221	Good
5/34	1933.5	Pretest					2457.8	3231	Good
5/35	1956.1	Pretest					2485.2	3268	Good
5/36	1959.0	Pretest					2491.9	3271	Slightly unstable
5/37	1962.0	Pretest					2496.6	3275	Slightly unstable
5/38	1975.6	Pretest					2525.9	3299	Slightly unstable
5/39	1982.5	Pretest						3314	Tight
5/40	1985.0	Pretest					2520.0	3315	Good
5/41	1987.0	Pretest					2527.7	3317	Slightly unstable
5/42	1997.0	Pretest						3335	Tight
5/43	1997.7	Pretest					2541.7	3336	Good
5/44	1999.1	Pretest					2544.1	3337	Slightly unstable
5/45	2001.0	Pretest					2550.3	3339	Good
5/46	2005.1	Pretest					2549.1	3346	Good
5/47	2008.6	Pretest					2557.3	3352	Good
5/48	2009.5	Pretest					2557.8	3355	Good
5/49	2011.6	Pretest						3359	Tight
5/50	2011.2	Pretest						3360	Tight
5/51	2011.0	Pretest					2935.2	3357	Seal failure
5/52	2011.0	Pretest					2561.0	3357	Good
5/53	2020.5	Pretest						3372	Tight
5/54	2020.8	Pretest					2567.2	3371	Good
5/55	2135.5	Pretest					2755.0	3568	Good

SUMMARY OF WIRELINE FORMATION TEST PROGRAMME
MOONFISH 1

Test	Depth (m)	Chamber (l)	Recovery Oil (l)	Recovery Gas (ft3)	Recovery Form Water (l)	Recovery Filt (l)	Form Press. (Psia)	Hydro Press. (Psia)	Remarks
5/56	2139.0	Pretest					2757.1	3572	Good
5/57	2141.5	Pretest					2760.2	3579	Good
5/58	2149.5	Pretest					2771.7	3589	Good
5/59	2154.0	Pretest					2778.6	3597	Good
5/60	2256.0	Pretest					2960.8	3764	Good
5/61	2258.6	Pretest					2906.7	3770	Good, low perm
5/62	2259.6	Pretest					2909.3	3770	Good
5/63	2255.5	Pretest						3766	Tight
5/64	2256.6	Pretest					2924.8	3768	Good
5/65	2260.6	Pretest					2906.9	3771	Good
5/66	2263.1	Pretest					2916.9	3776	Good
5/67	2265.6	Pretest					2913.1	3779	Good
5/68	2269.1	Pretest					2917.2	3786	Good
5/69	2272.0	Pretest					2919.2	3792	Good
5/70	2279.6	Pretest					2928.2	3804	Good
5/71	2287.6	Pretest					3002.4	3818	Seal failure
5/72	2287.6	Pretest					2940.0	3819	Good
5/73	2297.1	Pretest					2951.0	3832	Good
5/74	2263.3	Pretest					2915.3	3777	Good
5/75	2260.8	Pretest					2905.8	3771	Good
6/76	2265.5	22.7	Trace			20	2910.0	3780	Good
		3.8				3.5	2910.0	3780	Good
7/77	2260.5								MDT tool failed
8/78	2265.5	45.4	1	5.3		41	2913.7	3746	Good
		3.8	0.5	RTSTM		2.5	2911.8	3745	Good
9/79	2135.5	Pretest					1628	3534	Low Perm
9/80	2135.7	Pretest					2755.8	3535	Mod perm

SUMMARY OF WIRELINE FORMATION TEST PROGRAMME
MOONFISH 1

Test	Depth (m)	Chamber (l)	Oil (l)	Recovery Gas (ft3)	Form Water (l)	Filt (l)	Form Press. (Psia)	Hydro Press. (Psia)	Remarks
9/81	2136.2								Packer ruptured
10/82	2135.7	45.4	5.0	14.1		37	2750.4	3530	Good
		3.8	1.0	2.6		2.2	2750.4	3525	Good
11/83	2009.3	45.4	0.25	222.5		2.5	2557.0	3317	Good
		3.8	Trace	17.7		Trace	2557.0	3315	Good
12/84	1999.4	45.4	3	7.0		30	2529.8	3287	Good
		3.8	0.5	3.5		2.5	2529.8	3283	Good
13/85	2260.5	45.4	35	9.2			2902.0	3712	Good
		3.8		Pres			2902.0	3710	Good

SUMMARY OF WIRELINE FORMATION TEST PROGRAMME
MOONFISH 1 ST1

Test	Depth (m)	Chamber (l)	Recovery Oil (l)	Recovery Gas (ft3)	Recovery Form Water (l)	Recovery Filt (l)	Form Press. (Psia)	Hydro Press. (Psia)	Remarks
1/1	1838.8	Pretest						2906	MDT tool failed
2/2	1838.8	Pretest					2400	2901	Low hydro press
3/3	1838.8	Pretest					2400.8	2936	Good
3/4	1841.4	Pretest					2406.4	2940	Good
3/5	1845.5	Pretest					2404.6	2945	Good
3/6	1848.1	Pretest					2409.4	2951	Good
3/7	1851.0	Pretest					2416.5	2953	Good
3/8	1853.1	Pretest					2416.7	2958	Good
3/9	1858.6	Pretest					2418.8	2965	Good
3/10	1859.7	Pretest					2419.9	2970	Good
3/11	1873.5	Pretest					2436.7	2990	Good
3/12	1874.5	Pretest					2438.4	2991	Good
3/13	1876.5	Pretest					2440.8	2993	Good
3/14	1890.0	Pretest					2455.9	3015	Good
3/15	1895.4	Pretest					2463.3	3023	Good
3/16	1899.0	Pretest					2468.4	3030	Good
3/17	1904.0	Pretest					2475.6	3039	Good
3/18	1916.0	Pretest					2489.4	3055	Good
3/19	1959.1	Pretest					2540.0	3122	Good
3/20	2013.5	Pretest					2627.2	3207	Good
3/21	2033.1	Pretest					2675.1	3235	Good
3/22	2039.1	Pretest					2681.1	3245	Good-low perm
2/23	2047.7	Pretest					2716.8	3262	Good
3/24	2085.3	Pretest						3316	Tight
3/25	2085.1	Pretest						3318	Tight
3/26	2085.0	Pretest						3315	Tight
3/27	2096.0	Pretest						3333	Tight
3/28	2096.2	Pretest						3331	Tight
4/29	2085.4	Pretest						3314	Tight
4/30	2085.2	Pretest						3319	Tight

SUMMARY OF WIRELINE FORMATION TEST PROGRAMME
MOONFISH 1 ST 1

Test	Depth (m)	Chamber (l)	Recovery Oil (l)	Recovery Gas (ft3)	Recovery Form. Water (l)	Recovery Filt (l)	Form Press. (Psia)	Hydro Press. (Psia)	Remarks
4/31	2096.1	Pretest						3338	Tight
4/32	2109.5	Pretest					2785.8	3358	Good-Low Perm
4/33	2217.0	Pretest					-	3518	Lost seat
4/34	2217.0	Pretest						3518	Tight
4/35	2220.1	Pretest					2912.1	3522	Good
4/36	2221.6	Pretest					2915.0	3523	Good
4/37	2223.1	Pretest					2917.6	3524	Good
4/38	2239.6	Pretest					2526.0	3548	Low perm
4/39	2239.6	Pretest					2938.6	3548	Good
4/40	2246.1	Pretest						3560	Tight
4/41	2275.1	Pretest					2983.4	3604	Good
4/42	2454.5	Pretest					3232.6	3885	Good
4/43	2609.6	Pretest					3501.5	4134	Good
4/44	2738.6	Pretest					3622.8	4336	Good
5/45	1858.5	45.4	40	74.2		5	2417.0	2958	Good
		3.8		Pres			2417.0	2957	Good
6/46	2033.0	Pretest							Seat failed
6/47	2032.8	Pretest							Seat failed
6/48	2032.8	45.4	0.5	RTSTM		42	2674.0	3246	Good
		3.8	1.5	RTSTM		2	2674.0	3250	Good
7/49	1851.1	Pretest							Seat failed
7/50	1851.0	Pretest					2414.6	2956	Slow to fill
7/51	1851.3	Pretest					1836		Tight
7/52	1850.8	45.4	Trace	16		19.5	2407.9	2956	Slow to fill
		3.8		8		1.2	2407.9	2956	Slow to fill
8/53	1848.0	45.4	8	17.7		33	2409.2	2948	Good
		3.8	0.25	10		3	2402.7	2946	HP gauge plugged

SUMMARY OF WIRELINE FORMATION TEST PROGRAMME
MOONFISH 1 ST 1

Test	Depth (m)	Chamber (l)	Oil (l)	Recovery Gas (ft3)	Form Water (l)	Filt (l)	Form Press. (Psia)	Hydro Press. (Psia)	Remarks
9/54	1838.7	45.4	1.5	RTSTM		42	2388.9	2932	Good
		3.8	Trace	RTSTM		3.5	2389.4	2934	Good
10/55	1819.0	45.4		214	Trace		2358.9	2900	Good
		3.8		18	Trace		2359.2	2900	Good

TEMPERATURE RECORD
MOONFISH 1 & ST1

LOGGING RUN	THERMO DEPTH (M)	MAX REC TEMP (C^0)	CIRCULATION TIME (t_k) (hours)	TIME AFTER CIRCULATION STOPPED (t)	HORNER TEMP (C^0)	GEOTHERMAL GRADIENT (C^0/km)
MOONFISH 1						
Suite 1						
AS-GR-AMS	843	41	1.5	3.75		
Suite 2						
DLL-MSFL-LDL-CNL-NGS-AMS	2343	78	1.4	8.0	90.2	36.5
RFT-GR-AMS (PRETESTS)	2297	87	1.4	31.25	90.2	36.5
RFT-GR-AMS (SAMPLES)	2265.5	88	1.4	36.25	90.2	36.5
MOONFISH 1 ST1						
Suite 2						
DLL-MSFL-LDL-CNL-NGR-AMS	2771	92	1.25	10.25	105.9	36
AS-GR-AMS	2771	97	1.25	17.25	105.9	36
FMS-GR-AMS	2771	100	1.25	17.25	105.9	36
CSAT-GR-AMS	2802	N/R	1.25	22.25	105.9	36
RFT-GR-AMS (PRETESTS)	2738.5	100	1.5	23.0	105.9	36
RFT-GR-AMS (SAMPLES)	2033	78.8	1.5	4.5	105.9	36
MSCT-GR (ATTEMPTED 5, REC 2)	-	83	1.5	39.0	105.9	36
CST (SHOT 36, REC 21)	-				105.9	36

Ref:MOON014.doc

FIGURES

LOCALITY MAP
MOONFISH-1, 1ST

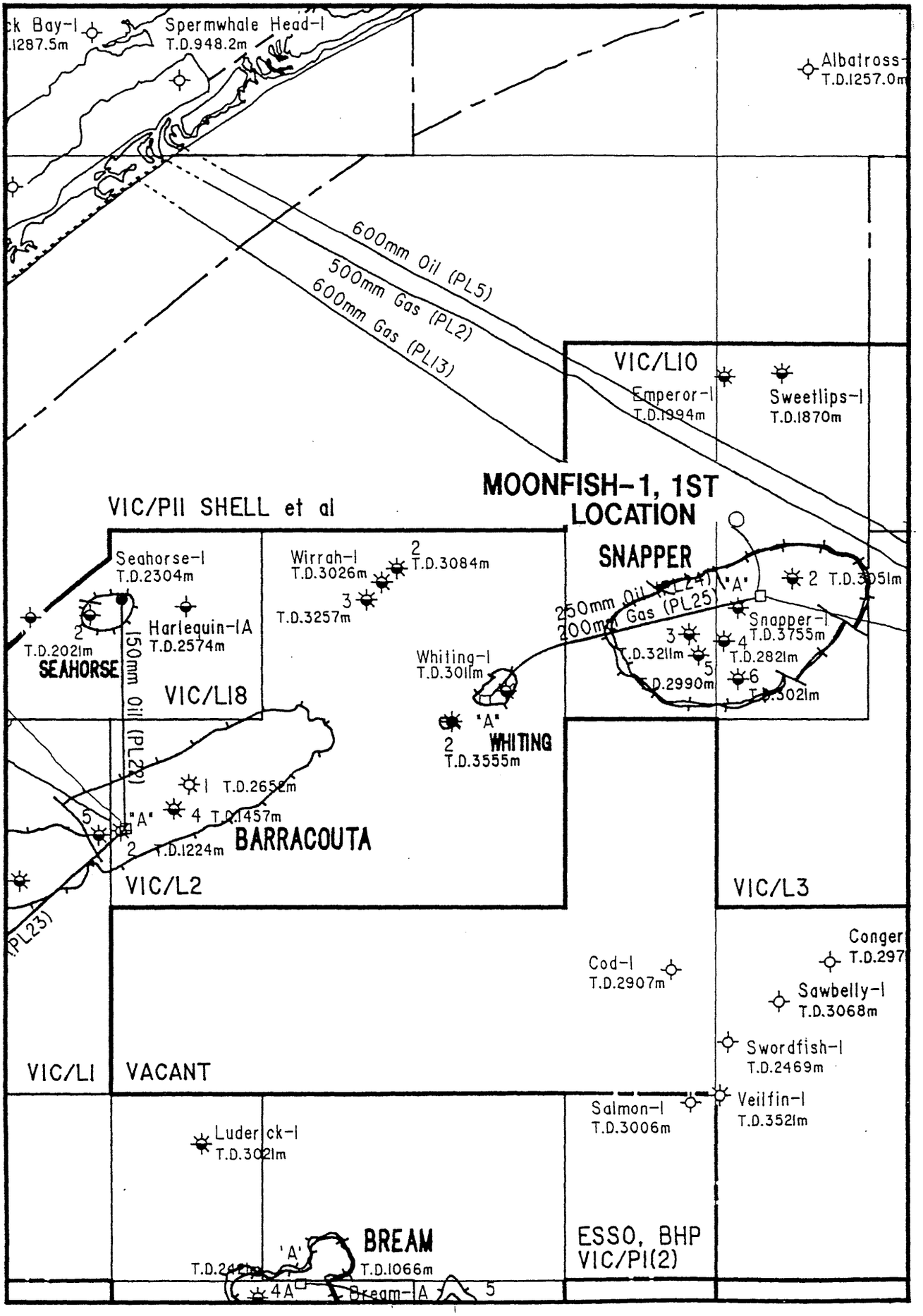

FIGURE 1

DWG. 2484/OP/15

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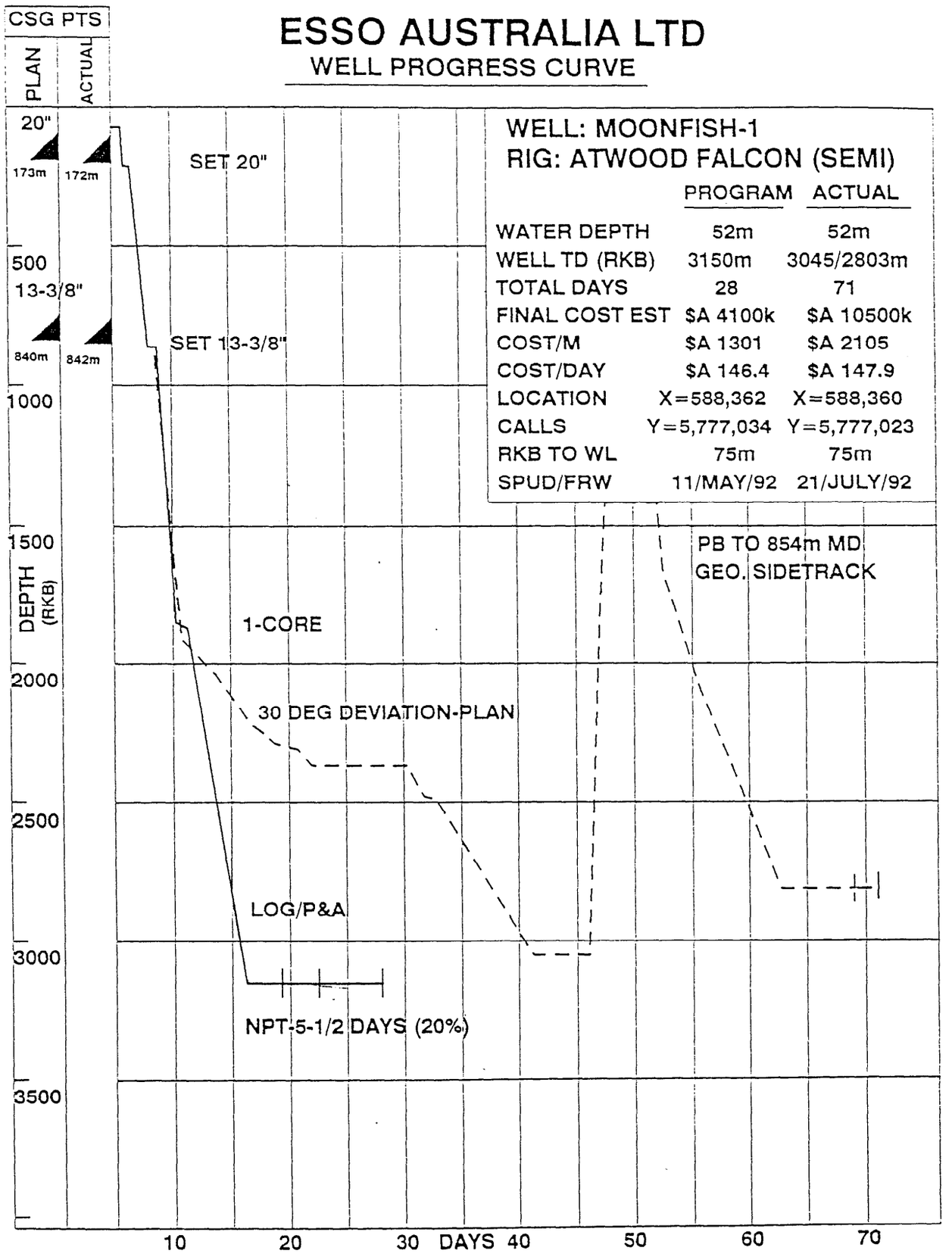
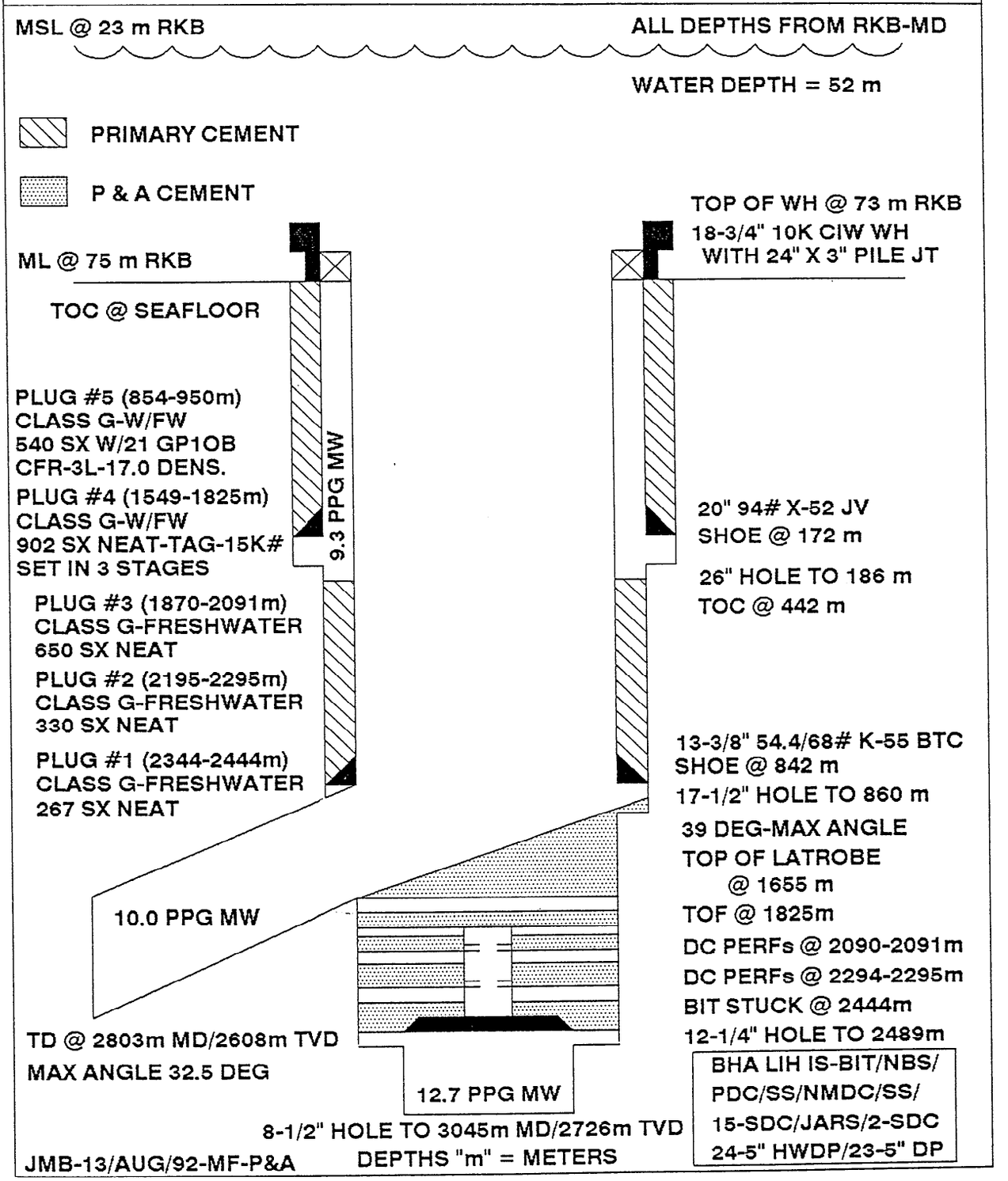
WELL PROGRESS CURVE



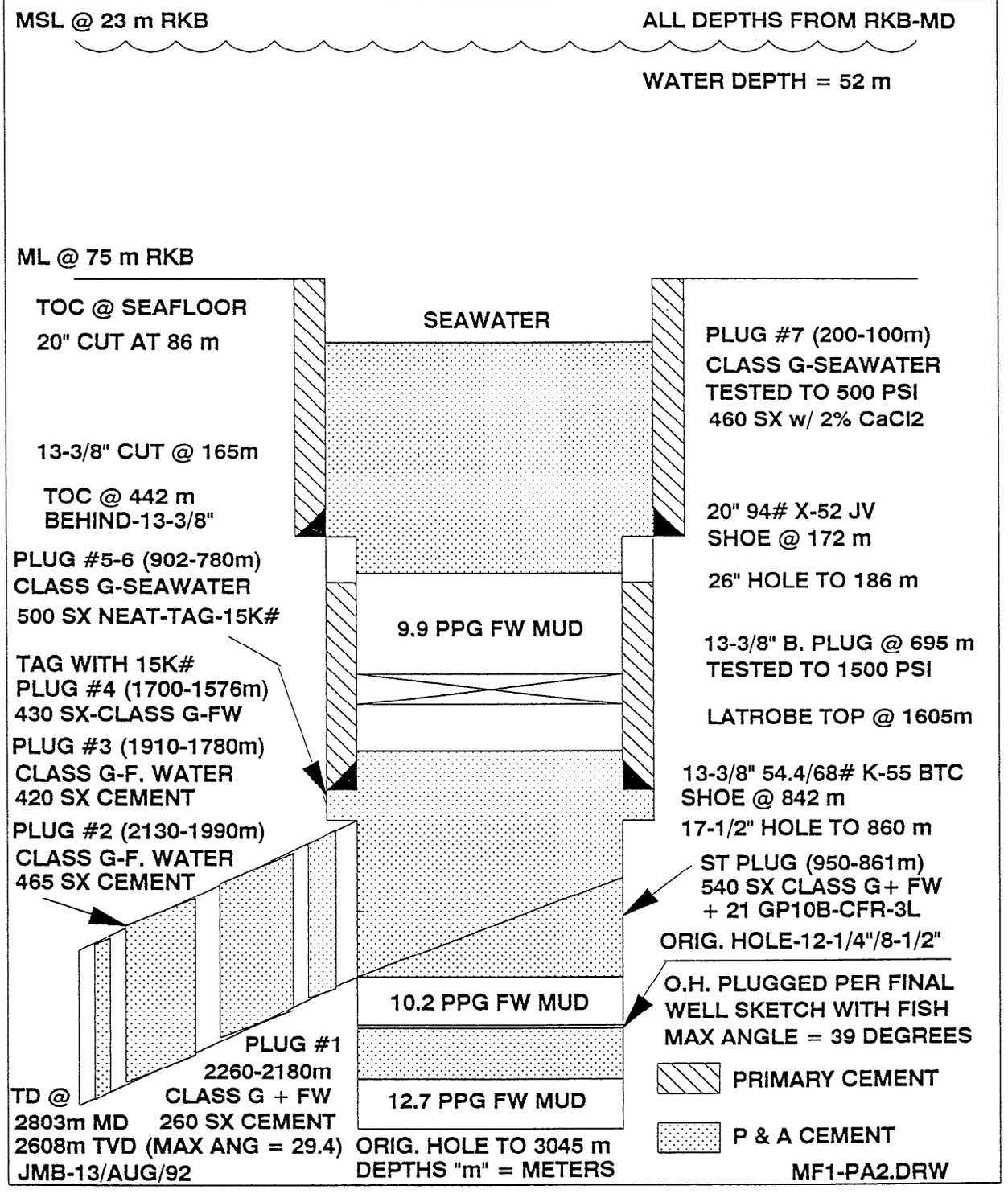
WELL: MOONFISH-1
RIG: ATWOOD FALCON (SEMI)

	PROGRAM	ACTUAL
WATER DEPTH	52m	52m
WELL TD (RKB)	3150m	3045/2803m
TOTAL DAYS	28	71
FINAL COST EST	$A 4100k	$A 10500k
COST/M	$A 1301	$A 2105
COST/DAY	$A 146.4	$A 147.9
LOCATION	X=588,362	X=588,360
CALLS	Y=5,777,034	Y=5,777,023
RKB TO WL	75m	75m
SPUD/FRW	11/MAY/92	21/JULY/92

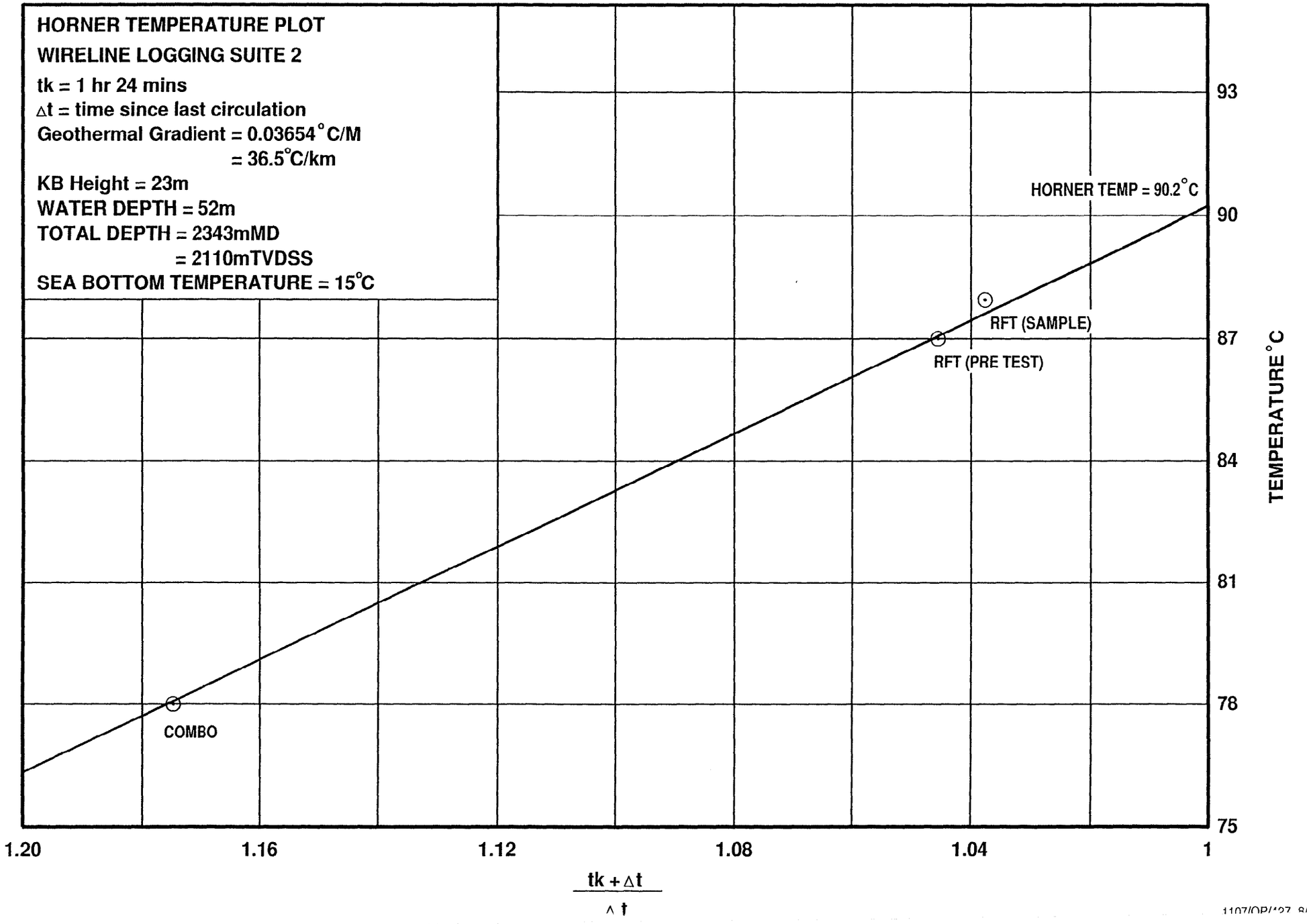
ESSO AUSTRALIA LTD.
MOONFISH-1 FINALIZED WELL SKETCH



ESSO AUSTRALIA LTD.
MOONFISH-1 P & A WELLBORE SKETCH

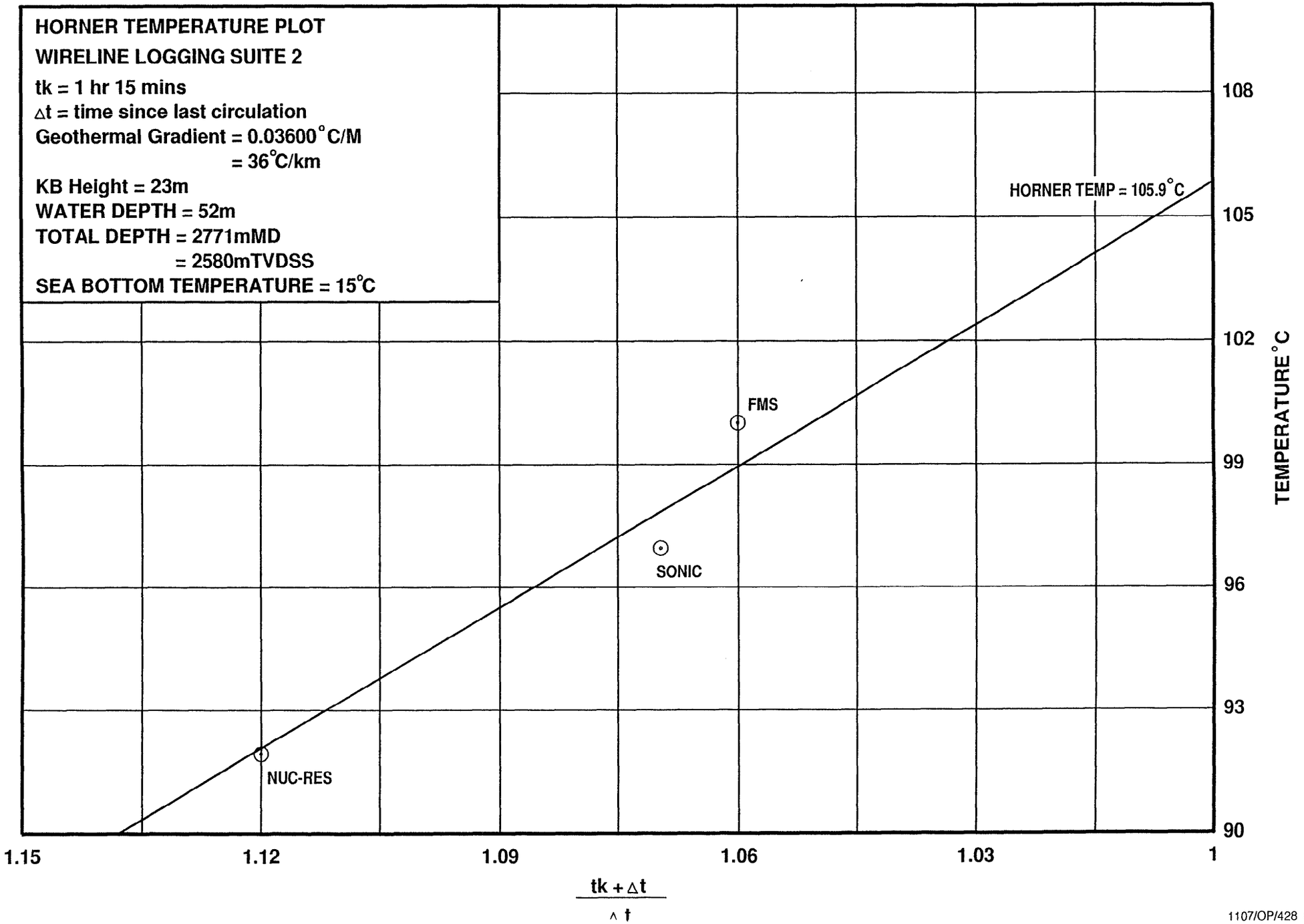


MOONFISH - 1



1107/OP/127 8/

MOONFISH - 1 ST 1



APPENDIX 1

MOONFISH 1

Lithology Descriptions

Depth (m)	%	Description
860-70	100	LIMESTONE: Calcarenite/calcisiltite, medium grey to medium dark grey, moderately to very argillaceous, common forams, trace fossil fragments, trace ooids, rare pyrite nodules, trace glauconite, firm to moderately hard, occasional hard aggregates, slightly dolomitic in part, blocky.
870-80	100	LIMESTONE: Medium grey to medium dark grey, calcisiltite, moderately to very argillaceous, trace fine calcareous sand, trace forams, rare ooids, trace glauconite, trace carbonaceous fragments, firm to moderately hard, blocky.
880-90	100	LIMESTONE: Light to medium grey, occasionally medium dark grey, calcisiltite, predominantly as above, trace fossil fragments, trace light brown hard cryptocrystalline aggregates with angular fracture.
890-900	100	LIMESTONE: Calcisiltite, as above with calcarenite, light grey, off white, pale brown, firm to medium, trace carbonaceous fragments and glauconite, slightly dolomitic, hard, angular fracture, blocky.
900-10	100	LIMESTONE: Calcisiltite, as above with common nodular pyrite, moderately argillaceous, firm to moderately hard, blocky.
910-20	100	LIMESTONE: Light to medium grey, grey brown in part, calcisiltite, common very fine to fine calcareous sand, trace glauconite, trace carbonaceous fragments, trace fossil fragments, trace forams, soft to firm, occasionally moderately hard, blocky, massive in part.
920-30	100	LIMESTONE: Calcisiltite, as above with trace nodular pyrite.
930-40	100	LIMESTONE: Calcisiltite, as above with common fossil fragments and forams.
940-50	100	LIMESTONE: Calcisiltite, as above, trace anhydrite, common fossil fragments and forams, firm to moderately hard, blocky.

MOONFISH 1

Depth(m)	%	Description
950-60	100	LIMESTONE: Medium grey, olive grey, calcisiltite, common very fine to fine calcareous sand, moderately to very argillaceous, trace carbonaceous specks, trace glauconite, trace fossil fragments and forams, firm to moderately hard, blocky, platy in part.
960-70	100	LIMESTONE: Calcisiltite, as above, trace anhydrite.
970-80	100	LIMESTONE: Calcisiltite, as above with calcarenite, buff, light grey, fine to very fine, common fossil fragments, trace ooids, moderately hard to hard, blocky, angular fracture.
980-90	100	LIMESTONE: Medium grey, olive grey, calcisiltite, trace to common very fine to fine, calcareous sand, moderately to locally very argillaceous, trace foram and fossil fragments, trace ooids, trace nodular pyrite, firm to moderately hard, blocky to massive.
990-1000	100	LIMESTONE: As above, trace anhydrite, calcisiltite.
1000-10	100	LIMESTONE: As above, calcisiltite.
1010-20	100	LIMESTONE: Light grey, olive grey, medium grey in part, calcisiltite, trace fine calcareous sand, common fossil fragments and forams, trace disseminated and nodular pyrite, moderate to very argillaceous, firm to moderately hard, slightly sticky in part, massive to blocky.
1020-30	100	LIMESTONE: As above.
1030-40	100	LIMESTONE: As above, becoming increasingly argillaceous.
1040-50	100	LIMESTONE: Medium brown grey, olive grey, calcisiltite, common very fine to fine calcareous sand, trace disseminated pyrite, trace forams and fossil fragments, very argillaceous, firm to moderately hard, blocky.
1050-60	100	LIMESTONE: As above, calcisiltite, locally grading to siltstone.
1060-70	90	LIMESTONE: Medium brown grey, olive grey, calcisiltite, trace very fine to fine calcareous sand, trace disseminated pyrite, trace fossil fragments, trace carbonaceous specks, firm to moderately hard, blocky.

Depth(m)	%	Description
	10	SILTSTONE: Medium to dark grey, moderately calcareous, very argillaceous, trace carbonaceous fragments, slightly micromicaceous, firm to moderately hard, sub blocky to platy in part.
1070-80	80	LIMESTONE: As above.
	20	SILTSTONE: As above.
1080-90	70	LIMESTONE: As above, calcisiltite with common fine calcareous sand, grades in part to calcarenite.
	30	SILTSTONE: As above.
1090-1100	80	LIMESTONE: As above.
	20	SILTSTONE: As above.
1100-10	70	LIMESTONE: Light brown grey, light grey, grey brown, calcisiltite/calcilutite, becoming very argillaceous, trace very fine calcareous sand, trace disseminated pyrite, trace lithic fragments, rare foram and fossil fragments, firm to moderately hard, blocky.
	30	SILTSTONE: Light to medium grey, grey brown, moderately calcareous, very argillaceous, slightly micromicaceous, trace nodular and disseminated pyrite, trace carbonaceous specks, firm to moderately hard, locally hard, blocky to platy.
1110-20	70	SILTSTONE: As above.
	30	LIMESTONE: As above, calcisiltite/calcilutite, trace glauconite in part.
1120-30	70	SILTSTONE: As above.
	30	LIMESTONE: As above.
1130-40	60	LIMESTONE: Light grey to light brown grey, calcisiltite/calcilutite, trace fine calcareous sand in part, moderately to very argillaceous, trace fossil fragments and forams, trace glauconite in part, trace pyrite nodules, firm to moderately hard, blocky.
	40	SILTSTONE: Light to medium grey, grey brown in part, moderately calcareous, trace lithic fragments, trace carbonaceous specks, soft to firm, moderately hard, blocky to sub blocky, platy in part.
1140-50	60	LIMESTONE: As above.
	40	SILTSTONE: As above.
1150-60	70	SILTSTONE: Medium to dark grey, very argillaceous, moderately calcareous, trace lithic and carbonaceous fragments.

MOONFISH 1

Depth(m)	%	Description
	30	LIMESTONE: Light brown grey, calcisiltite, very argillaceous, trace glauconite, trace fossil fragments, firm to moderately hard.
1160-70	60	SILTSTONE: As above.
	40	LIMESTONE: Predominantly as above with common fine calcareous sand, common forams and fossil fragments, trace nodular pyrite, firm to moderately hard, blocky.
1170-80	60	SILTSTONE: As above.
	40	LIMESTONE: As above.
1180-90	90	SILTSTONE: Medium to dark grey, very argillaceous, trace fine sand, moderately to locally very calcareous, trace carbonaceous specks, trace glauconite, firm to moderately hard, blocky to platy.
	10	LIMESTONE: As above
1190-1200	90	SILTSTONE: As above.
	10	LIMESTONE: As above, with trace free vein calcite.
1200-10	100	SILTSTONE: Medium grey, grey brown, olive grey, very argillaceous, moderately to locally very calcareous, trace very fine sand in part, trace carbonaceous specks, trace anhydrite, minor white vein calcite, moderately hard, blocky to platy.
1210-20	100	SILTSTONE: As above.
1220-30	100	SILTSTONE: As above.
1230-40	100	SILTSTONE: Medium grey, brown grey, olive grey, very argillaceous, moderately to occasionally very calcareous, trace carbonaceous fragments, trace disseminated pyrite, soft to firm, blocky to platy.
1240-50	100	SILTSTONE: As above, becoming soft to sticky in part, very argillaceous, occasionally grades to claystone.
1250-60	100	SILTSTONE: Medium grey, grey brown, olive grey, very argillaceous, moderately to locally very calcareous, trace fossil/foram fragments, rare glauconite, trace nodular pyrite, firm, blocky.
1260-70	100	SILTSTONE: As above, trace white vein calcite in part, occasional mottled texture.

Depth(m)	%	Description
1270-80	100	SILTSTONE: Predominantly as above, locally very argillaceous, grades in part to claystone.
1280-90	100	SILTSTONE: As above.
1290-1300	100	SILTSTONE: Medium to dark grey, grey brown, olive grey, moderately argillaceous, locally very calcareous, mottled texture in part, trace glauconite, trace fossil/foram fragments, trace fine sand in part, firm to moderately hard, blocky to platy.
1300-10	100	SILTSTONE: As above.
1310-20	100	SILTSTONE: Medium to dark grey, brown grey, olive grey, moderately to very argillaceous, moderately to locally very calcareous, trace fine sand, trace fossil/foram fragments, rare glauconite, trace disseminated pyrite, firm to locally moderately hard, blocky to platy.
1320-30	100	SILTSTONE: Medium to dark grey, light brown grey, moderately argillaceous, moderately to occasionally very calcareous, slightly arenaceous in part, trace carbonaceous specks, trace foram, firm to moderately hard, blocky to platy.
1330-40	100	SILTSTONE: Predominantly as above, trace glauconite, trace carbonaceous fragments, firm, blocky to platy.
1340-50	100	SILTSTONE: As above.
1350-60	80 20	SILTSTONE: As above. LIMESTONE: Light grey to light brown grey, calcisiltite, trace to common very fine calcareous sand, moderately to very argillaceous, trace lithics, trace glauconite, moderately hard, blocky.
1360-70	80 20	SILTSTONE: As above. LIMESTONE: As above.
1370-80	100	SILTSTONE: Medium to dark grey, brown grey, moderately argillaceous, moderate to locally very calcareous, trace lithics, slightly micromicaceous, firm to moderately hard, blocky.
1380-90	100	SILTSTONE: As above.
1390-1400	100	SILTSTONE: As above, with common very fine arenaceous inclusions.

MOONFISH 1

Depth(m)	%	Description
1400-10	100	SILTSTONE: Medium to dark grey, olive grey in part, moderately to locally very argillaceous, moderately calcareous, trace carbonaceous specks, trace arenaceous inclusions, trace glauconite, slightly micromicaceous, firm, blocky to massive.
1410-20	100	SILTSTONE: As above.
1420-30	100	SILTSTONE: Medium to dark grey, olive grey, moderately argillaceous, moderately calcareous, trace carbonaceous specks, slightly micromicaceous, firm to moderately hard, blocky.
1430-40	100	SILTSTONE: As above, trace fossil fragments.
1440-50	100	SILTSTONE: As above, becoming increasingly argillaceous, grades to calcareous claystone in part.
1450-60	100	SILTSTONE: As above.
1460-70	100	SILTSTONE: Medium to dark grey, light brown grey, moderately to locally very argillaceous, moderately calcareous, trace lithics, trace glauconite, trace carbonaceous fragments, slightly arenaceous in part, trace disseminated pyrite, moderately hard to locally hard, blocky.
1470-80	100	SILTSTONE: As above, trace forams.
1480-90	100	SILTSTONE: As above, becoming increasing argillaceous, grades to calcareous claystone in part.
1490-1500	100	SILTSTONE: Light to medium grey, light brown grey, moderately to very argillaceous, moderately to locally very calcareous, trace lithic fragments, trace carbonaceous specks, trace nodular pyrite, soft to firm, massive to blocky.
1500-05	100	SILTSTONE: As above, grading to claystone in part.
1505-10	100	SILTSTONE: Medium grey, brown grey, moderately to very argillaceous, moderately to locally very calcareous, slightly arenaceous in part, trace fossil fragments, firm to soft, occasionally moderately hard, massive to blocky, marly texture in part.

Depth(m)	%	Description
1510-15	100	SILTSTONE: As above.
1515-20	100	SILTSTONE: As above.
1520-25	100	SILTSTONE: As above, locally very argillaceous, grades in part to calcareous claystone.
1520-25	100	SILTSTONE: As above.
1525-30	100	SILTSTONE: Dark grey, olive grey, grey brown, moderately to very calcareous, moderately to predominantly very argillaceous, trace glauconite, trace carbonaceous fragments, slightly micromicaceous, firm to moderately hard, blocky, marly in part.
1530-35	100	SILTSTONE: As above.
1535-40	100	SILTSTONE: As above.
1540-45	100	SILTSTONE: Light to medium grey, grey brown, moderately argillaceous, slightly arenaceous in part, moderately to very calcareous, trace carbonaceous specks, trace fossil/foram fragments, trace disseminated pyrite, soft to firm, moderately hard in part, blocky to platy in part, marly texture.
1545-50	100	SILTSTONE: As above.
1550-55	100	SILTSTONE: Predominantly as above, trace anhydrite, trace arenaceous inclusions.
1555-60	100	SILTSTONE: As above.
1560-65	100	SILTSTONE: Light to medium grey, brown grey, occasionally green grey, moderately to predominantly very argillaceous, grades to claystone in part, moderately calcareous, trace carbonaceous specks, slightly micromicaceous, firm to moderately hard, blocky.
1565-70	100	SILTSTONE: As above, trace glauconite, slightly arenaceous in part.
1570-75	100	SILTSTONE: As above.
1575-80	100	SILTSTONE: As above, with minor lithic fragments, becoming increasingly argillaceous, grades to claystone.
1580-85	100	SILTSTONE: As above.

Depth(m)	%	Description
1585-90	100	SILTSTONE: As above, with minor white to light grey calcarenite.
1590-95	100	SILTSTONE: Light to medium grey, brown grey, moderately argillaceous, moderately calcareous, trace carbonaceous fragments, slightly micromicaceous, rare nodular pyrite, firm to moderately hard, blocky to platy, marly texture in part.
1595-1600	100	SILTSTONE: As above.
1600-05	100	SILTSTONE: As above.
1605-10	100	SILTSTONE: Predominantly as above, with trace glauconite, trace fossil fragments, firm to moderately hard, blocky to platy.
1610-15	100	SILTSTONE: As above, with trace forams.
1615-20	100	SILTSTONE: As above.
1620-25	100	SILTSTONE: Light to medium grey, brown grey, moderately argillaceous, moderately to very calcareous, grades to calcisiltite, slightly micromicaceous, trace carbonaceous fragments, moderately hard, blocky.
1625-30	100	SILTSTONE: Predominantly as above, rare glauconite, firm to moderately hard, marly texture in part, grades to calcisiltite/calcilutite.
1630-35	100	SILTSTONE: As above.
		Top of Latrobe approximately 1638m
1635-40	100	SILTSTONE: As above.
	TR	TUFFACEOUS SILTSTONE: Medium to dark brown, occasionally light orange, yellow orange, slightly to moderately arenaceous, trace nodular pyrite, trace glauconite, moderately hard to hard, blocky.
1640-45	80	SILTSTONE: As above.
	20	TUFFACEOUS SILTSTONE: As above.
1645-50	70	SILTSTONE: Light to medium grey, brown grey, moderately to very argillaceous, very calcareous, grades to calcisiltite/calcilutite, slightly micromicaceous, trace fine quartz and calcareous sand, trace fossil and forams, firm to moderately hard, massive to blocky, marly texture in part.
	30	TUFFACEOUS SILTSTONE: Medium to dark brown, light yellow/orange, slightly to

Depth(m)	%	Description
		moderately arenaceous, common glauconite, trace nodular pyrite, trace lithic fragments, moderately to hard, massive to blocky.
1650-55	30	SANDSTONE: Clear to translucent, frosted, coarse to very coarse, angular, moderately to good sorting, trace pyrite cement, common milky quartz, loose, inferred good porosity, no fluorescence.
	40	SILTSTONE: As above.
	30	TUFFACEOUS SILTSTONE: As above.
1655-60	60	SANDSTONE: Clear to translucent, frosted, coarse to very coarse, angular, moderately good sorting, trace pyritic cement, common coarse milky quartz, trace nodular pyrite, loose, inferred good porosity, trace pale yellow mineral fluorescence only.
	40	SILTSTONE: Pale grey brown, light grey, moderately calcareous, moderately to very argillaceous, slightly micromicaceous, trace carbonaceous fragments, moderately hard, blocky.
1660-65	80	SANDSTONE: As above, no fluorescence.
	20	SILTSTONE: As above.
1665-70	80	SANDSTONE: As above.
	20	SILTSTONE: As above.
	TR	COAL: Brown black, lignitic, very argillaceous, dull lustre, brittle, blocky to subfissile.
1670-75	60	SANDSTONE: As above.
	30	COAL: As above.
	10	SILTSTONE: As above.
1675-80	10	SANDSTONE: Clear to translucent, frosted, coarse to very coarse, angular to subangular, moderate to good sorting, common milky quartz, loose, inferred good porosity, no fluorescence.
	50	SILTSTONE: Medium brown, light grey, moderately argillaceous, slightly calcareous in part, slightly micromicaceous, trace coal fragments, mottled texture in part, firm to moderately hard, blocky.
	40	COAL: Brown black, lignitic, argillaceous, dull lustre, brittle, blocky.
1680-85	80	SILTSTONE: As above.
	20	SANDSTONE: As above.
	TR	COAL: As above.

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Depth(m)	%	Description
1685-90	100	SILTSTONE: Light to medium brown, light grey, moderately argillaceous, slightly arenaceous, trace carbonaceous specks and microlaminae, trace glauconite, trace lithic fragments, soft to firm, moderately hard, dispersive clay, massive to blocky.
1690-95	100	SILTSTONE: As above.
1695-1700	100	SILTSTONE: As above.
1700-05	10	SANDSTONE: Clear to translucent, frosted, coarse to very coarse, angular to subangular, moderate to good sorting, common milky quartz, loose, inferred good porosity, no fluorescence.
	90	SILTSTONE: As above.
1705-10	80	SILTSTONE: Medium brown, occasionally light grey, orange brown, moderately to very argillaceous, trace carbonaceous specks, slight mottled texture in part, slightly micromicaceous, soft to firm, platy, massive, dispersive clay.
	20	COAL: Brown, black, lignitic, very argillaceous and silty, brittle, blocky to subfissile.
	TR	SANDSTONE: As above.
1710-15	90	SILTSTONE: Light to medium brown, light grey in part, slightly calcareous in part, slightly to occasionally very argillaceous, trace carbonaceous fragments, mottled texture in part, firm to moderately hard, blocky.
	10	COAL: Black, brown black, slightly argillaceous, dull lustre, brittle, blocky to subfissile.
1715-20	100	SILTSTONE: As above, with arenaceous inclusions.
	TR	COAL: As above.
1720-25	90	SILTSTONE: As above.
	10	COAL: As above.
	TR	SANDSTONE: Clear to translucent, frosted, coarse to very coarse, subangular to angular, moderate to good sorting, common milky quartz, loose, inferred good porosity, no fluorescence.
1725-30	100	SILTSTONE: Predominantly as above with common white to cream, tuffaceous inclusions.
	TR	COAL: As above.
1730-35	100	SILTSTONE: As above.

Depth(m)	%	Description
	TR	COAL: As above.
1735-40	80	SANDSTONE: Clear to translucent, frosted, angular to subangular, moderate to good sorting, trace argillaceous matrix in part, trace pyrite cement, trace quartz over growths in part, common coarse angularly fractured milky quartz, loose, inferred good porosity, no fluorescence.
	20	SILTSTONE: Light to medium grey, light to medium brown, slightly calcareous in part, slightly micromicaceous, moderately to very argillaceous, trace glauconite, trace carbonaceous specks and microlaminae, firm to moderately hard, slightly dispersive in part.
1740-45	80	SANDSTONE: As above.
	20	SILTSTONE: As above.
1745-50	100	SANDSTONE: As above.
	TR	SILTSTONE: As above.
1750-55	90	SANDSTONE: Clear to translucent, frosted, coarse to very coarse, occasionally angular to subrounded, moderate to good sorting, trace silica cement, trace kaolinite matrix, common coarse milky quartz, loose, common fractured grains, inferred good porosity, no show.
1755-60	90	SANDSTONE: As above.
	10	SILTSTONE: As above.
1760-65	90	SANDSTONE: As above.
	10	SILTSTONE: As above.
1765-70	100	SANDSTONE: As above, with trace quartz overgrowth.
	TR	SILTSTONE: As above.
1770-75	100	SANDSTONE: As above.
	TR	SILTSTONE: As above.
1775-80	100	SANDSTONE: As above.
	TR	SILTSTONE: As above.
1780-85	100	SANDSTONE: As above.
	TR	SILTSTONE: As above.
1785-90	100	SANDSTONE: As above.
	TR	SILTSTONE: As above.
1790-95	100	SANDSTONE: As above.
	TR	SILTSTONE: As above.
1795-1800	100	SANDSTONE: As above.
	TR	SILTSTONE: As above.

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Depth(m)	%	Description
1800-05	100	SANDSTONE: Clear to translucent, frosted, coarse to very coarse, angular to subangular, moderate to good sorting, trace silica cement, trace kaolinite matrix, common milky and smoky quartz, trace coal fragments, loose, inferred good porosity, no show.
	TR	SILTSTONE: Light to medium grey, moderately argillaceous, slightly arenaceous in part, trace carbonaceous specks, slightly calcareous, firm to moderately hard, blocky to subfissile, platy.
1805-10	100	SANDSTONE: Clear to translucent, frosted, coarse to very coarse, angular to subangular, moderate to good sorting, trace silica cement, trace kaolinite matrix, trace coal fragments, trace quartz overgrowths, common milky and smoky quartz, loose fractured grains, inferred good porosity.
	TR	SILTSTONE: Light to medium grey, very argillaceous, slightly calcareous, micromicaceous, trace carbonaceous fragments, slightly arenaceous, firm to moderately hard, blocky.
1810-15	100	SANDSTONE: As above.
	TR	SILTSTONE: As above.
1815-20	80	SANDSTONE: As above.
	20	SILTSTONE: Light to medium grey, off white to light brown, slightly calcareous, very argillaceous, slightly tuffaceous, trace carbonaceous fragments, micromicaceous in part, soft to moderately hard, massive to blocky, dispersive clays.
1820-25	90	SILTSTONE: Medium to dark grey, very argillaceous, slightly calcareous, micromicaceous in part, trace disseminated pyrite, trace lithic fragments, moderately hard to hard, blocky.
	10	SANDSTONE: Clear to translucent, frosted, angular to subangular, moderate to good sorting, trace calcareous cement, common angular milky quartz, loose, inferred good porosity, trace pale yellow mineral fluorescence, no cut, no residue.
1825-30	30	SANDSTONE: As above.
	60	COAL: Brown, black, black, argillaceous to silty, dull to subvitreous lustre, brittle, blocky.
	10	SILTSTONE: As above, occasionally medium brown.

Depth(m)	%	Description
1830-35	30	SANDSTONE: As above.
	70	COAL: As above, with trace pyrite.
	TR	SILTSTONE: As above.
1835-40	80	CLAYSTONE: Light brown, cream, slightly silty, trace carbonaceous flecks, sticky, dispersive, massive to amorphous.
	20	SILTSTONE: As above.
1840-45	100	CLAYSTONE: Light brown, cream, off white, slightly silty, trace carbonaceous flecks, soft to sticky, dispersive, massive to amorphous.
	TR	COAL: Brown black, argillaceous/silty, dull to subvitreous lustre, brittle, blocky.
1845-50	90	CLAYSTONE: As above.
	10	SILTSTONE: Clear to translucent, frosted, very coarse, subangular to subrounded, moderate to good sorting, trace mica (muscovite), trace milky quartz, loose, fractured grains, inferred fair to good porosity, trace pale yellow mineral fluorescence only, no cut, no residue.
1850-55	80	CLAYSTONE: As above.
	20	SANDSTONE: As above, with trace pale yellow mineral fluorescence, no cut, no residue.
1855-60	40	SANDSTONE: Clear to translucent, frosted, coarse to very coarse, subangular to subrounded, moderate sorting, trace kaolinite matrix, common coarse milky quartz, loose, inferred good porosity. 20% pale yellow mineral fluorescence, no cut, no residue.
	20	COAL: Black, brown black, argillaceous/silty, lignitic, brittle, blocky.
	40	CLAYSTONE: As above.
1860-65	80	COAL: As above.
	20	SANDSTONE: As above, 20% fluorescence as above.
	TR	CLAYSTONE: As above.
1865-70	40	SANDSTONE: As above, trace fluorescence as above.
	60	CLAYSTONE: Medium brown, cream, grey brown, common coal fragments and specks, slightly micromicaceous, soft to dispersive, massive to amorphous.
	TR	CLAYSTONE: As above.
1870-75	80	CLAYSTONE: As above.

Depth(m)	%	Description
	10	SANDSTONE: As above, trace fluorescence, as above.
	10	COAL: As above.
1875-80	85	CLAYSTONE: As above.
	10	COAL: As above.
	5	SANDSTONE: As above, trace fluorescence as above.
1880-85	90	CLAYSTONE: Medium brown, grey brown, common carbonaceous specks, micromicaceous, occasional lithic fragments, soft to dispersive, massive to amorphous.
	5	COAL: As above.
	5	SANDSTONE: Clear to opaque, coarse to very coarse, subrounded, occasional milky quartz, moderate to good sorting, loose, inferred good porosity, 15% pale yellow mineral fluorescence, no cut, no residue.
1885-90	100	CLAYSTONE: As above, occasionally, moderately hard, grey green.
	TR	SANDSTONE: As above, trace mineral fluorescence as above.
	TR	COAL: As above.
1890-95	100	CLAYSTONE: As above.
	TR	SANDSTONE: As above, trace mineral fluorescence as above.
	TR	COAL: As above.
1895-1900	80	CLAYSTONE: Medium brown, medium grey, off white, cream, slightly silty, trace carbonaceous specks, soft to dispersive, massive to amorphous.
	20	COAL: Black, brown black, lignitic, slightly silty/argillaceous, brittle, blocky.
1900-05	90	CLAYSTONE: As above, 50% pale yellow mineral and hydrocarbon fluorescence with weak diffuse streaming cut.
	10	SANDSTONE: Clear to translucent, frosted, medium to coarse, angular to subangular, moderate sorting, loose, inferred good porosity, no show.
1905-10	90	CLAYSTONE: Light grey, cream, medium brown, slightly silty, trace carbonaceous specks, soft to dispersive, amorphous. 50% pale yellow mineral and hyrdrocarbon fluorescence, occasional weak diffuse streaming cut, thin ring residue.
	10	SANDSTONE: Clear to translucent, fine to medium, subangular to subrounded, good sorting, loose, inferred good porosity, no fluorescence.

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Depth(m)	%	Description
1910-15	10	SANDSTONE: Clear to translucent, frosted, fine to coarse, subangular to subrounded, poor sorting, trace kaolinite matrix, loose, inferred good porosity, no fluorescence.
	80	CLAYSTONE: Cream to light brown, light to medium grey, waxy texture, slightly silty, micromicaceous in part, slightly calcareous in part, moderately hard, brittle, blocky to platy, flinty in part. 50% pale yellow mineral and hydrocarbon fluorescence, weak diffuse to slow streaming cut, thin spotty ring residue.
	10	COAL: Brown, black, argillaceous/silty, lignitic, brittle, blocky.
1915-20	10	SANDSTONE: Clear to translucent, fine to medium, occasionally coarse, subangular to subrounded, poor sorting, trace kaolinite matrix, loose, inferred good porosity, trace dull yellow green patchy fluorescence, occasional moderate streaming cut, moderately thick ring residue.
	90	CLAYSTONE: Cream to light brown, light to medium grey, waxy texture, slightly silty, micromicaceous in part, slightly calcareous in part, moderately hard, brittle, blocky to platy, flinty in part. 50% pale yellow mineral and hydrocarbon fluorescence, weak diffuse to slow streaming cut, thin spotty ring residue.
1920-25	20	SANDSTONE: As above, trace fluorescence, as above.
	80	CLAYSTONE: As above, with 80% fluorescence as above.
1925-30	30	SANDSTONE: Clear to translucent, frosted, fine to very coarse, subangular to angular, subrounded in part, poor sorting, trace kaolinite matrix, common very coarse angular milky quartz, loose, inferred good porosity. Trace dull yellow green patchy fluorescence, occasional moderate streaming cut, moderately thick ring residue.
	70	CLAYSTONE: As above, with 40% fluorescence as above.
1930-35	60	SANDSTONE: As above with trace nodular pyrite. 10% dull patchy yellow green fluorescence, occasionally weak streaming cut, thin ring residue.
	40	CLAYSTONE: As above, no fluorescence.
1935-40	80	SANDSTONE: As above, 10% fluorescence as above.
	20	CLAYSTONE: As above.

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Depth(m)	%	Description
1940-45	30	SANDSTONE: Clear to translucent, fine to coarse, angular to subrounded, poor sorting, trace kaolinite matrix, trace pyrite, common milky quartz, loose, trace dull patchy yellow/green fluorescence, weak streaming cut, thin ring residue.
	40	COAL: Black, brown black, argillaceous/silty, micromicaceous, trace disseminated pyrite, brittle, blocky.
	30	CLAYSTONE: Light brown to light grey, off white, cream, waxy texture in part, micromicaceous, soft to predominantly firm, moderately hard, brittle, blocky to flinty.
1945-50	20	SANDSTONE: As above, trace fluorescence, as above.
	80	CLAYSTONE: Predominantly as above, become slightly dispersive in part.
	TR	COAL: As above.
1950-55	10	SANDSTONE: Clear to translucent, frosted, coarse to very coarse, subangular to subrounded, moderate sorting, trace kaolinite matrix, trace pyrite, loose, inferred fair porosity, no show.
	90	CLAYSTONE: Off white, light brown, cream, light medium grey, slightly silty, soft to firm, moderately hard, blocky to massive, amorphous. 30% pale yellow mineral and hydrocarbon fluorescence, weak diffuse streaming cut, thin to nil ring residue.
1955-60	10	SANDSTONE: As above, no show.
	90	CLAYSTONE: As above, slightly arenaceous in part, 40% pale yellow mineral and hydrocarbon fluorescence, weak diffuse streaming cut, thin ring residue.
1960-65	40	SANDSTONE: As above, trace pinpoint yellow blue fluorescence, very slow streaming diffuse cut, thin ring residue.
	60	CLAYSTONE: As above, trace pale yellow mineral fluorescence.
	TR	COAL: As above.
1965-70	20	SANDSTONE: Clear to translucent, fine to coarse, occasionally very coarse, subangular to subrounded, moderate sorting, occasional milky quartz, loose, inferred fair porosity, trace yellow blue pinpoint fluorescence, very slow diffuse, streaming cut, thin ring residue.
	80	CLAYSTONE: As above, occasionally silty, trace pale yellow, mineral fluorescence.
1970-75	95	CLAYSTONE: Off white, brown, brown grey, green grey, cream, grading to

Depth(m)	%	Description
		argillaceous siltstone, soft to firm, occasionally dispersive, carbonaceous laminae, blocky to amorphous, trace pale yellow mineral fluorescence.
	5	SANDSTONE: As above, no show.
	TR	COAL: As above.
1975-80	100	CLAYSTONE: As above, slightly silty.
	TR	SANDSTONE: As above, no show.
	TR	COAL: As above.
1980-85	90	CLAYSTONE: Off white, light brown, light to medium grey, medium brown, slightly arenaceous, micromicaceous, trace carbonaceous specks, soft to firm, occasionally moderately hard, massive to amorphous. 40% pale yellow mineral and hydrocarbon fluorescence, weak to occasionally moderate streaming cut, thin to nil ring residue.
	10	SANDSTONE: Clear to translucent, fine to coarse, subangular to subrounded, poor to moderate sorting, trace kaolinite matrix, trace mica, loose, inferred fair porosity, no show.
1985-90	100	CLAYSTONE: As above, 10% fluorescence as above.
	TR	SANDSTONE: As above, no show.
1990-95	30	CLAYSTONE: As above, trace fluorescence as above.
	60	SILTSTONE: Medium to dark grey, medium brown, slightly arenaceous, trace glauconite, trace pyrite, slightly micromicaceous, trace carbonaceous specks, trace nodular pyrite, moderately hard, blocky to subfissile, slightly calcareous.
	10	SANDSTONE: As above, no show.
1995-2000	20	SANDSTONE: Clear to translucent, off white, fine to coarse, subangular to subrounded, poor sorting, trace silica cement, trace kaolinite matrix, trace pyrite, trace lithic fragments, loose, friable, poor to fair porosity, 20% moderately bright to patchy bright yellow green fluorescence, good fast streaming cut, thin to moderate ring residue.
	80	SILTSTONE: Light to medium grey, grey brown, moderately argillaceous, slightly calcareous, slightly arenaceous, micromicaceous, trace carbonaceous specks, trace nodular pyrite, moderately hard, blocky to subfissile.
2000-05	30	SANDSTONE: Clear to translucent, fine to coarse, predominantly medium, subangular to

Depth(m)	%	Description
		subrounded, poor to moderate sorting, trace silica cement, trace kaolinite matrix, trace pyrite, friable to loose, poor to fair porosity, 30% fluorescence as above.
	70	SILTSTONE: As above.
2005-6	60	COAL: Black, brown, black, argillaceous/silty, lignitic, dull to subvitreous lustre, blocky, brittle.
	20	SANDSTONE: As above, 10% fluorescence, as above.
	20	SILTSTONE: As above.
2006-8.5	60	SANDSTONE: Clear to translucent, medium to coarse, subangular to subrounded, moderate to good sorting, trace silica cement, trace common kaolinite matrix, trace pyrite, trace milky/smoky quartz, predominantly loose, friable, fair porosity, 20% moderately bright to patchy bright yellow green fluorescence, moderately fast streaming cut, good crush cut, thin to moderate ring residue, trace oil in mud.
	40	SILTSTONE: As above.
2008.5-2021.4		See Core Descriptions - Core # 1.
2021.4-2025	90	CLAYSTONE: Light grey, dark grey, light to dark brown, off white, silty, soft to moderately firm, moderately hard, amorphous, no shows.
	5	SANDSTONE: Clear to translucent, fine to medium, subangular to subrounded, good sorting, common kaolinite matrix, loose, inferred poor porosity, no show.
	5	COAL: Brown, black, silty, hard, brittle, blocky.
2025-30	100	CLAYSTONE: Off white, light grey, olive grey, light brown, slightly argillaceous, soft to firm, hard, amorphous to massive, dispersive.
	TR	SANDSTONE: As above.
	TR	COAL: As above.
2030-35	95	CLAYSTONE: Off white to dark grey, green to grey, brown, silty, micromicaceous in part, slightly calcareous in part, moderately hard, brittle, flinty in part.
	5	COAL: Black, hard, brittle, blocky.
2035-40	95	CLAYSTONE: Off white, light grey, dark grey, green to grey, brown, silty,

Depth(m)	%	Description
		carbonaceous in part, soft dispersive, massive amorphous, blocky in part, flinty in part, 15% bright green to yellow fluorescence, weak diffuse streaming cut, thin ring residue.
	5	SANDSTONE: Clear to translucent, brownish, fine to medium, subangular to subrounded, good sorting, loose, friable, trace bright yellow fluorescence, weak streaming cut, thin ring residue.
2040-45	95	CLAYSTONE: Off white, light to dark grey, brown, silty in part, calcareous, massive to amorphous, soft to dispersive in part, hard, blocky in part, 10% moderately bright green to yellow fluorescence, faint diffuse cut, thin ring residue.
	5	COAL: Brown, black, hard, blocky, flaky, brittle.
2045-50	75	CLAYSTONE: Off white, light grey, green to grey, soft to dispersive, calcareous, amorphous to massive, no show.
	20	SILTSTONE: Brown, dark grey, slightly arenaceous, trace carbonaceous specks, moderately hard, blocky, flinty, slightly micromicaceous, no show.
	5	SANDSTONE: Translucent to clear, fine to medium, subangular to subrounded, loose, inferred poor porosity, trace bright yellow to green fluorescence, strong streaming cut, thin ring residue (spotty)
	TR	COAL: As above.
2050-55	80	CLAYSTONE: As above.
	20	SILTSTONE: Brown, olive brown, dark grey, slightly arenaceous, carbonaceous, slightly calcareous, moderately hard, blocky, slightly micromicaceous, no shows.
	TR	COAL: As above.
2055-60	30	SILTSTONE: Brown, grey to green, dark grey, slightly arenaceous, carbonaceous in part, calcareous in part, moderately hard, blocky, slightly micromicaceous.
	60	CLAYSTONE: Off white, light grey, green grey, light brown, soft to dispersive, amorphous to massive.
	10	COAL: Black, brown, bituminous, vitreous, hard, blocky, brittle.
2060-65	70	SILTSTONE: Medium to dark brown, light to medium grey, moderately to very argillaceous, slightly carbonaceous, common calcareous microlaminae, micromicaceous, firm to moderately hard, blocky.
	30	CLAYSTONE: As above.

Depth(m)	%	Description
	TR	COAL: As above.
2065-70	70	SILTSTONE: Green to grey, light to dark grey, brown, slightly carbonaceous, calcareous, micromicaceous, trace pyrite, soft to moderately hard, blocky, flinty.
	20	CLAYSTONE: As above.
	10	COAL: As above.
2070-75	10	SANDSTONE: Light grey, off white, light brown, very fine to fine, occasionally medium, subangular to subrounded, good sorting, trace silica cement, abundant kaolinite, trace mica, trace carbonaceous specks, friable, very poor porosity, 10% pale yellow green, moderately bright patchy fluorescence, good moderately fast streaming cut, moderately spotty ring residue.
	60	SILTSTONE: Light to medium grey, grey brown, medium brown, moderately to very argillaceous, slightly micromicaceous, trace carbonaceous fragments, slightly calcareous, moderately hard, blocky to subfissile.
	30	CLAYSTONE: Off white, cream, light brown, slightly arenaceous, soft to sticky, dispersive, massive to amorphous.
	TR	COAL: As above.
2075-80	20	SANDSTONE: As above, 20% moderately bright to patchy bright yellow green fluorescence, moderately fast streaming cut, moderately spotty ring residue.
	70	SILTSTONE: As above, trace forams.
	10	CLAYSTONE: As above.
	TR	COAL: As above.
2080-85	20	SANDSTONE: Light grey, light brown, very fine to fine, subangular to subrounded, moderately to good sorting, trace silica cement, abundant kaolinite matrix, trace mica (muscovite), trace carbonaceous specks, friable to firm, poor to nil porosity, 10%, pale yellow moderately bright patchy fluorescence, good streaming crush cut, thick ring residue.
	70	SILTSTONE: As above.
	10	CLAYSTONE: As above.
	TR	COAL: As above.
2085-90	10	SANDSTONE: Predominantly as above, fine to occasionally medium, friable, poor to fair porosity, 10% moderately bright to patchy, bright pale yellow fluorescence, good fast streaming cut, thick spotty ring residue.
	90	SILTSTONE: As above.

Depth(m)	%	Description
	TR	COAL: Brown black, black, argillaceous, subvitreous lustre, subbituminous, brittle, blocky to subfissile.
2090-95	10	SANDSTONE: As above, trace fluorescence as above.
	90	SILTSTONE: Light to medium grey, medium brown, very argillaceous, micromicaceous, trace carbonaceous fragments, soft, dispersive, massive.
	TR	COAL: As above, lignitic in part.
2095-2100	TR	SANDSTONE: As above, no show.
	90	SILTSTONE: As above.
	10	COAL: As above.
2100-05	10	SANDSTONE: Light grey, light brown, very fine to fine, subangular, good sorting, trace silica cement, locally abundant argillaceous/silty matrix, common mica, common carbonaceous fragments and microlaminae, friable, very poor to poor porosity, no fluorescence.
	80	SILTSTONE: Light grey, medium brown, cream, very argillaceous, slightly arenaceous in part, common carbonaceous microlaminae, micromicaceous, soft to dispersive, moderately hard, massive to amorphous, blocky.
	10	COAL: As above.
2105-10	20	SANDSTONE: Light grey, light brown, off white, very fine to predominantly fine, subangular, good sorting, trace silica cement, abundant argillaceous/sitly matrix, trace carbonaceous microlaminae, trace mica, trace pyrite, friable, poor to fair porosity, trace dull to patchy moderately bright, pale yellow fluorescence, weak crush cut, thin ring residue.
	80	SILTSTONE: Medium brown, light grey, cream, waxy texture, trace pyrite, slightly micromicaceous, common carbonaceous specks, soft to moderately hard, blocky to massive.
	TR	COAL: Brown black, subvitreous lustre, argillaceous/silty in part, brittle, blocky to subfissile.
2110-15	20	SANDSTONE: As above, trace moderately bright to patchy bright, pale yellow fluorescence, occasionally very slow streaming cut, weak crush cut, thin ring residue.
	80	SILTSTONE: As above.
	TR	COAL: As above.

Depth(m)	%	Description
2115-20	30	SANDSTONE: Light grey, light brown, off white, very fine to fine, subangular, good sorting, trace silica cement, abundant argillaceous/silty matrix, common mica, trace carbonaceous microlaminae and specks, rare glauconite, trace pyrite, friable, very poor to nil porosity, trace dull to patchy moderately bright, pale yellow fluorescence, occasionally weak slow streaming cut, weak crush cut, thin ring residue.
	70	SILTSTONE: As above.
	TR	COAL: As above.
2120-25	30	SANDSTONE: As above, trace fluorescence as above.
	70	SILTSTONE: As above.
	TR	COAL: As above.
2125-30	10	SANDSTONE: As above, trace fluorescence as above.
	80	SILTSTONE: As above.
	10	COAL: As above.
2130-35	40	SANDSTONE: Light grey, light brown, clear to translucent, very fine to fine, occasionally moderate to coarse, subangular to subrounded, poor to moderate sorting, trace silica cement, common argillaceous/silty matrix, common mica (muscovite), common pyrite, common coarse milky quartz, friable to loose in part, very poor to inferred fair porosity, 20% medium bright to patchy bright pale yellow fluorescence, moderately fast streaming cut, good crush cut, moderate ring residue.
	55	SILTSTONE: Medium brown, light to medium grey, moderately to very argillaceous, slightly calcareous, micromicaceous, common pyrite, mottled texture in part, soft to moderately hard, massive to blocky.
	5	COAL: Black, subbituminous, abundant pyrite, very argillaceous in part, brittle, blocky to subfissile.
2135-40	20	SANDSTONE: As above, 20% dull to patchy moderately bright, pale yellow fluorescence, weak crush cut, thin to nil ring residue.
	80	SILTSTONE: As above.
	TR	COAL: As above.
2140-45	30	SANDSTONE: Light brown, orange brown, clear to translucent, off white, fine to medium, occasionally very coarse, angular to

Depth(m)	%	Description
		subrounded, poor sorting, common to abundant kaolinite matrix, trace silica cement, trace lithics, trace mica, friable, loose in part, poor to fair porosity, 30% moderately bright to patchy bright, pale yellow to straw fluorescence, slow streaming cut, moderately thick ring residue.
	70	SILTSTONE: As above.
2145-50	70	SILTSTONE: As above.
	30	SANDSTONE: As above. 15% dull pale yellow green patchy fluorescence, no cut.
	TR	COAL: As above.
	TR	CLAYSTONE: As above.
2150-53	70	SANDSTONE: Clear to translucent, off white, medium to occasionally coarse, angular to subrounded, moderate sorting, trace silica cement, trace kaolinite matrix, trace pyrite, trace carbonaceous fragments, predominantly loose, inferred good porosity, 40% dull to patchy moderately bright, yellow green fluorescence, faint instant cut, thin to nil ring residue.
	30	SILTSTONE: As above.
	TR	COAL: As above.
2153-55	5	SANDSTONE: As above, 10% dull patchy pale yellow green fluorescence, no cut.
	80	SILTSTONE: As above.
	15	CLAYSTONE: As above.
	TR	COAL: As above.
2155-60	40	SILTSTONE: As above.
	40	CLAYSTONE: As above.
	20	COAL: As above.
	TR	SANDSTONE: As above, trace fluorescence as above, slow streaming milky cut, moderately patchy ring residue.
2160-65	35	SILTSTONE: Light brown, buff, very argillaceous, subrounded, moderate sorting, common carbonaceous fragments and specks, trace pyrite, trace glauconite, soft to firm, blocky to platy.
	60	CLAYSTONE: Off white, buff, commonly carbonaceous, soft to dispersive, massive to amorphous.
	5	COAL: As above.
	TR	SANDSTONE: As above, trace fluorescence as above, no cut.
2165-70	30	SILTSTONE: Brown, light to dark grey, moderately argillaceous, calcareous in part, micromicaceous, trace pyrite, carbonaceous

Depth(m)	%	Description
		fragments, firm to moderately hard, blocky, platy.
	65	CLAYSTONE: Off white, grey, soft to dispersive, massive to amorphous, slightly silty in part.
	5	SANDSTONE: Clear to translucent, fine to very coarse, angular to subrounded, moderate sorting, trace fluorescence, yellow to green, no cut, milky crush cut, faint patchy ring residue.
2170-75	60	SILTSTONE: As above, moderate pyrite.
	25	CLAYSTONE: As above.
	10	SANDSTONE: Clear to translucent, brown, medium to very coarse, angular to subangular, moderate sorting, hard, friable, 5% fluorescence, green to yellow, no cut, moderate crush cut, thin to moderate spotty ring residue.
	5	COAL: Black, dark brown, brittle, pyrite laminae, flaky.
2175-80	90	SILTSTONE: Light to dark grey, medium brown, moderately to locally very argillaceous, slightly calcareous in part, micromicaceous, common carbonaceous fragments, slightly arenaceous in part, firm to moderately hard, blocky to subfissile.
	10	CLAYSTONE: Off white, light grey, slightly arenaceous, trace carbonaceous fragments, soft, disseminated, massive to amorphous.
	TR	SANDSTONE: As above, no show
	TR	COAL: As above.
2180-85	30	SILTSTONE: As above.
	40	CLAYSTONE: Off white, light grey, slightly arenaceous, soft to dispersive, massive to amorphous, 40% dull to patchy moderately bright pale yellow fluorescence, very weak diffuse cut, nil to trace ring residue.
	30	SANDSTONE: Light grey, off white, occasionally clear to translucent, very fine to fine, occasionally coarse, subangular, predominantly good sorting, abundant kaolinite/siltstone matrix, common mica and carbonaceous laminae, friable, tight, no show.
	TR	COAL: As above.
2185-90	10	SANDSTONE: Clear to translucent, light brown, very fine to fine, occasionally coarse, angular to subangular, trace silica cement, abundant kaolinite matrix, common mica, trace carbonaceous fragments, friable,

Depth(m)	%	Description
		occasionally loose, very poor to nil porosity, no fluorescence.
	50	CLAYSTONE: Off white, light grey, cream, slightly to moderately arenaceous, trace carbonaceous fragments, soft to plastic, massive to amorphous, 30% dull to moderately bright pale yellow fluorescence, weak diffuse instant cut, nil residue.
	40	SILTSTONE: Medium brown, light to medium grey, moderately to very argillaceous, mottled texture, abundant mica, trace carbonaceous fragments, moderately hard, blocky to subfissile in part.
2190-95	15	SANDSTONE: As above, trace dull pinpoint pale yellow green fluorescence, no cut.
	50	CLAYSTONE: As above.
	35	SILTSTONE: As above, 30% pale yellow mineral fluorescence.
	TR	COAL: As above.
2195-2200	15	SANDSTONE: Clear to translucent, very fine to fine, occasionally coarse, subangular to subrounded, moderate sorting, trace silica cement, common kaolinite matrix, common mica (muscovite), trace carbonaceous fragments, loose, occasional aggregates, poor to nil porosity, no show.
	65	CLAYSTONE: As above.
	10	SILTSTONE: As above, 10% pale yellow, mineral fluorescence as above.
	10	COAL: As above.
2200-05	TR	SANDSTONE: As above, trace pale yellow green dull pinpoint fluorescence, no cut.
	25	CLAYSTONE: As above.
	5	SILTSTONE: As above, trace mineral fluorescence.
	70	COAL: Black, slightly argillaceous, subconchoidal fracture, trace pyrite, trace silt, brittle, blocky to subfissile.
2205-10	20	SANDSTONE: White, light grey, clear to translucent, light brown, very fine to fine, subangular, good sorting, trace common silica cement, abundant kaolinite matrix, trace calcareous cement, trace pyrite, trace lithic fragments, friable to moderately hard, tight yellow/orange mineral fluorescence only.
	60	SILTSTONE: Light grey to medium green grey, brown grey, moderately argillaceous, micromicaceous, trace carbonaceous specks, slightly siliceous, arenaceous in part, moderately hard, blocky to subfissile.

Depth(m)	%	Description
	20	CLAYSTONE: Off white to light grey, slightly arenaceous, soft to firm, blocky to massive.
2210-15	10	SANDSTONE: Predominantly as above, common pyrite, common kaolinite matrix, slight calcareous cement, tight, no shows, pale yellow/gold mineral fluorescence only.
	40	SILTSTONE: As above.
	30	CLAYSTONE: As above.
	20	COAL: Brown black, black, lignitic, very argillaceous, brittle, blocky.
2215-20	10	SANDSTONE: As above, trace pale yellow/orange, mineral fluorescence.
	70	CLAYSTONE: Off white, light brown, slightly arenaceous, slightly micromicaceous, soft, firm, blocky, massive.
	20	SILTSTONE: As above, trace pyrite.
2220-25	20	SANDSTONE: As above, common pyrite, calcareous/dolomite cement, tight, no show.
	30	SILTSTONE: As above, very siliceous, occasional waxy texture.
	50	CLAYSTONE: As above, predominantly kaolinite.
2225-30	30	BASIC IGNEOUS INTRUSIVE: Light green grey, light grey, light brown, fine crystalline, occasionally cryptocrystalline, pyritic, common pyroxene and olivine, hard, brittle, blocky to platy, flinty.
	20	CLAYSTONE: As above.
	50	SILTSTONE: As above.
2230-35	50	BASIC IGNEOUS INTRUSIVE: As above.
	40	SILTSTONE: As above, trace fossil fragments.
	10	CLAYSTONE: As above.
	TR	COAL: Black, bituminous, subvitreous lustre, brittle blocky to subfissile.
2235-40	30	BASIC IGNEOUS INTRUSIVE: Light green grey, light grey, light brown, fine crystalline, euhedral crystals, occasionally cryptocrystalline, very pyritic, common pyroxene and olivine, hard, brittle, blocky to platy flinty.
	30	CLAYSTONE: Off white, light brown, buff, trace carbonaceous specks, slightly arenaceous, soft to firm, sticky, massive to blocky, amorphous.
	40	SILTSTONE: Olive grey, light to medium grey, occasionally grey green, slightly micromicaceous, slightly calcareous in part,

Depth(m)	%	Description
		trace disseminated pyrite, moderately hard, blocky to subfissile in part.
	TR	COAL: Brown black, black, sub bituminous, very argillaceous/silty, slightly pyritic, grades to carbonaceous siltstone, hard to brittle, blocky to subfissile.
2240-45	10	BASIC IGNEOUS INTRUSIVE: Light green grey, light grey, light brown, finely crystalline, euhedral crystals, subophitic texture, very pyritic in part, common pyroxene and olivine, hard to very hard, brittle, blocky to platy, flinty.
	70	CLAYSTONE: As above.
	20	SILTSTONE: As above.
	TR	COAL: As above.
2245-50	TR	BASIC IGNEOUS INTRUSIVE: As above.
	90	CLAYSTONE: Off white, pale grey, slightly arenaceous, trace carbonaceous specks, predominantly kaolinite, soft, dispersive massive to amorphous.
	5	SILTSTONE: Light to medium brown, very argillaceous, trace carbonaceous fragments, slightly micromicaceous, trace pyrite, firm to moderately hard, blocky.
	5	COAL: As above.
2250-55	90	CLAYSTONE: As above, occasionally light to medium brown.
	10	SILTSTONE: As above, moderately pyritic.
	TR	COAL: As above.
2255-57	10	BASIC IGNEOUS INTRUSIVE: Light green grey, light grey, brown in part, finely crystalline, euhdral, very pyritic, common pyroxene and olivine, hard to very hard, brittle, blocky, platy, flinty.
	10	SILTSTONE: Light brown, buff, olive grey, grey brown, very argillaceous, slightly siliceous, micromicaceous, trace carbonaceous fragments, firm to moderately hard, massive to blocky.
	80	CLAYSTONE: (Altered volcanics), off white to white, light brown, abundant kaolinite, trace felspar and pyroxene, trace pyrite, soft, amorphous, 80% bright pale yellow solid fluorescence, weak diffuse to slow streaming cut, thin ring residue, trace oil in mud.
	TR	COAL: Black, bituminous, subvitreous lustre, brittle, blocky.
2257-99		SEE CORE DESCRIPTIONS - Core #2, #3, #4

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Depth(m)	%	Description
2299-2305	100	CLAYSTONE: Medium to dark grey, slightly silty, very carbonaceous, trace coal fragments, micromicaceous, slightly siliceous, trace pyrite, hard, blocky to subfissile.
2305-10	20	SANDSTONE: Clear to translucent, off white, fine to medium, subangular to subrounded, poor to moderate sorting, moderately silica cemented, common dolomite cement, abundant kaolinite matrix, trace carbonaceous fragments, hard, loose grains in part, tight, trace patchy bright pale yellow fluorescence, very weak diffuse cut, trace to nil ring residue.
	80	CLAYSTONE: As above.
	TR	COAL: Brown, black, black, subvitreous lustre, brittle, blocky to subfissile.
2310-15	10	SANDSTONE: Predominantly as above, occasionally coarse loose quartz, no fluorescence.
	80	CLAYSTONE: As above.
	10	SILTSTONE: Light brown to grey brown, moderate argillaceous, arenaceous, common carbonaceous and coal fragments, common lithic fragments, firm to moderately hard, blocky.
	TR	COAL: As above.
2315-20	10	SANDSTONE: As above, no fluorescence.
	80	CLAYSTONE: As above, occasionally green grey, slightly arenaceous in part.
	10	SILTSTONE: As above.
	TR	COAL: As above.
2320-25	20	SANDSTONE: Clear to translucent, frosted, fine to coarse, angular to subangular, poor sorting, trace calcareous/silica cement, common kaolinite matrix, common fractured milky quartz, moderately hard to predominantly loose, inferred very poor to nil porosity, no fluorescence.
	80	CLAYSTONE: As above.
2325-30	10	SANDSTONE: Clear to translucent, off white, fine to occasionally coarse, subangular to subrounded, poor to moderate sorting, weak silica/calcareous cement, common kaolinite matrix, trace milky quartz, moderately hard to predominantly loose, inferred nil porosity, no fluorescence.
	90	CLAYSTONE: Medium to dark grey, occasionally green grey, slightly silty, slightly calcareous, micromicaceous, trace foram, trace lithic fragments, trace disseminated

Depth(m)	%	Description
		pyrite, slightly siliceous, moderately hard to hard, blocky to subfissile.
	TR	COAL: Brown black, silty/argillaceous, dull lustre, brittle blocky to subfissile.
2330-35	10	SANDSTONE: As above, abundant kaolinite matrix.
	90	CLAYSTONE: As above, becoming off white to white in part.
2335-40	100	CLAYSTONE: As above, slightly arenaceous in part, slightly to moderately calcareous, trace forams.
2340-45	10	SANDSTONE: Off white, clear to translucent, fine to occasionally medium, subangular to subrounded, good sorting, abundant argillaceous matrix, trace milky quartz, loose, inferred very poor to nil porosity, no fluorescence.
	90	CLAYSTONE: Medium grey, light to medium brown, slightly to moderately silty, trace coaly fragments, micromicaceous, firm to moderately hard, blocky to subfissile.
	TR	COAL: Black, subbituminous, dull lustre, brittle, blocky to subfissile.
2345-50	10	SANDSTONE: As above, very argillaceous matrix, tight, no fluorescence.
	90	CLAYSTONE: Predominantly as above, trace disseminated pyrite.
2350-55	10	SANDSTONE: White, clear to translucent, fine to medium, subangular to subrounded, good sorting, trace silica cement, weak calcareous cement, abundant kaolinite matrix, trace mica, trace carbonaceous fragments, moderately hard to loose, tight, no fluorescence.
	80	CLAYSTONE: Predominantly as above, slightly calcareous, trace foram and fossil fragments.
2355-60	10	SANDSTONE: Clear to light brown, fine, subangular to subrounded, good sorting, abundant kaolinite matrix, trace mica, trace medium loose quartz grains, friable, tight, trace dull yellow green patchy fluorescence, very weak diffuse crush cut, no ring residue.
	90	CLAYSTONE: Medium brown, light to medium grey, slightly silty, trace carbonaceous fragments, mottled texture in part, firm to moderately hard, blocky to subfissile.

Depth(m)	%	Description
2360-65	30	SANDSTONE: Clear to translucent, light brown, fine to coarse, angular to subrounded, poor sorting, moderate to strong silica cement, common kaolinite matrix, common milky quartz, trace pyrite, hard, loose fractured grains, trace fluorescence as above.
	70	CLAYSTONE: As above.
2365-70	10	SANDSTONE: As above, trace fluorescence as above.
	90	CLAYSTONE: Predominantly as above, trace glauconite, moderately calcareous.
	TR	COAL: Black, bituminous, vitreous lustre, hard to brittle, blocky.
2370-75	10	SANDSTONE: As above, no fluorescence.
	90	CLAYSTONE: Predominantly as above, occasionally firm to sticky, massive to blocky, subfissile in part.
2375-80	20	SANDSTONE: Clear to translucent, off white, fine to medium, subangular to subrounded, moderate sorting, trace silica cement, common kaolinite matrix, trace milky quartz, friable to moderately hard, predominantly loose, poor porosity, no fluorescence.
	70	CLAYSTONE: Light to medium grey, green grey, slightly silty, slightly calcareous, trace carbonaceous and lithic fragments, firm to moderately hard, blocky to subfissile.
	10	SILTSTONE: Medium to dark brown, moderately argillaceous, mottled texture, trace carbonaceous fragments, micromicaceous, moderately hard, subfissile to blocky.
	TR	COAL: Black, subbituminous, argillaceous/silty, brittle, blocky.
2380-85	20	SANDSTONE: Predominantly as above, becoming predominantly fine.
	70	CLAYSTONE: As above.
	10	SILTSTONE: As above.
	TR	COAL: As above.
2385-90	50	SANDSTONE: Clear to translucent, frosted, fine to coarse, subangular to subrounded, poor sorting, weak silica cement, common kaolinite matrix, common milky quartz, trace nodular pyrite, moderately hard, loose, poor porosity, no fluorescence.
	40	CLAYSTONE: Light to medium grey, slightly silty, trace carbonaceous specks, slightly calcareous, firm to moderately hard, blocky.
	10	SILTSTONE: Medium brown, argillaceous, trace carbonaceous fragments,

Depth(m)	%	Description
		micromicaceous, mottled texture in part, moderately hard, blocky to subfissile.
	TR	COAL: Brown black, argillaceous/silty, slightly micromicaceous, moderately hard to brittle, blocky to subfissile.
2390-95	30	SANDSTONE: As above, trace pale yellow pin point fluorescence, slow weak streaming cut, trace ring residue.
	60	SILTSTONE: As above.
	10	CLAYSTONE: As above.
	TR	COAL: As above.
2395-2400	30	SANDSTONE: As above, moderate silica cement in part, poor porosity, 30% moderately bright yellow/gold solid fluorescence, very weak diffuse streaming cut, thin ring residue.
	30	CLAYSTONE: As above.
	40	SILTSTONE: As above.
2400-05	20	SANDSTONE: Light grey, clear to translucent, fine to coarse, subangular to subrounded, poor to moderate sorting, strong silica cement in part, common kaolinite matrix, trace mica, trace lithic fragments, moderately hard, occasionally loose, very poor to nil porosity, 20% fluorescence as above.
	70	CLAYSTONE: As above.
	10	SILTSTONE: As above.
	TR	COAL: As above.
2405-10	40	SANDSTONE: Clear to translucent, light grey, fine to coarse, subangular to subrounded, poor to moderate sorting, weak to moderate silica cement, common kaolinite matrix, trace nodular pyrite, trace lithic fragments, common milky quartz, trace mica, friable to loose in part, fair to poor porosity, trace fluorescence as above.
	50	CLAYSTONE: Light to medium grey, trace carbonaceous fragments, locally slightly silty, trace fossil fragments, slightly micromicaceous, firm to moderately hard, blocky, subfissile.
	10	SILTSTONE: Medium to dark brown, common carbonaceous fragments, trace mica, firm to moderately hard, blocky to subfissile.
	TR	COAL: Brown black, black, argillaceous/silty, common pyrite, trace mica, hard, brittle, blocky.
2410-15	20	SANDSTONE: As above, trace fluorescence, as above.
	40	CLAYSTONE: As above.

Depth(m)	%	Description
	40	SILTSTONE: As above.
	TR	COAL: As above, grades to carbonaceous claystone.
2415-20	30	SANDSTONE: Clear to translucent, light grey, fine to coarse, subangular to subrounded, poor sorting, weak silica cement, common kaolinite matrix, trace lithic fragments, common milky quartz, trace mica, friable, fair to poor porosity, 5% fluorescence, as above, no cut, no ring residue.
	50	CLAYSTONE: As above.
	20	SILTSTONE: As above.
	TR	COAL: As above.
2420-25	40	SANDSTONE: As above, trace pyrite cement, moderate silica cement, poor porosity 5% fluorescence as above.
	40	CLAYSTONE: As above.
	20	SILTSTONE: As above.
	TR	COAL: As above.
2425-30	20	SANDSTONE: As above, trace fluorescence as above, no cut.
	50	CLAYSTONE: As above.
	25	SILTSTONE: As above.
	5	COAL: As above.
2430-35	25	SANDSTONE: Clear, translucent, subangular to subrounded, fine to medium, occasionally coarse, moderate sorting, weak to moderate silica cement, trace kaolinite matrix, trace pyrite, common milky quartz, friable to loose, trace dull yellow fluorescence, no cut.
	30	SILTSTONE: Medium brown, argillaceous, micromicaceous, trace carbonaceous fragments, moderately hard, blocky.
	45	CLAYSTONE: As above.
	TR	COAL
2435-40	TR	SANDSTONE: As above, no show.
	20	SILTSTONE: As above.
	75	CLAYSTONE: As above.
	5	COAL: As above.
2440-45	TR	SANDSTONE: As above, common pyrite cement, trace mineral fluorescence.
	10	SILTSTONE: As above.
	85	CLAYSTONE: As above.
	5	COAL: As above.
2445-50	TR	SANDSTONE: As above, trace mineral fluorescence.

Depth(m)	%	Description
	5	SILTSTONE: As above, common glauconite, common carbonaceous fragments.
	90	CLAYSTONE: As above, common glauconite, common pyrite.
	5	COAL: Black, brown, moderately argillaceous, brittle to hard, conchoidal fracture in part, woody texture in part.
2450-55	TR	SANDSTONE: As above, no show.
	10	SILTSTONE: As above.
	90	CLAYSTONE: As above.
	TR	COAL: As above.
2455-60	30	SANDSTONE: Clear, translucent, light grey, subangular to predominantly subrounded, fine to coarse, poor sorting, weak silica cement, common kaolinite matrix, trace pyrite, common milky quartz, fair inferred porosity, friable to predominantly loose, trace yellow fluorescence, no cut.
	15	SILTSTONE: Medium brown, argillaceous, occasionally micromicaceous, common carbonaceous fragments, trace pyrite, slightly arenaceous, blocky to massive, firm to hard.
	50	CLAYSTONE: As above.
	5	COAL: As above.
2460-65	5	SANDSTONE: Clear, translucent, light grey, fine to coarse, subrounded, poor sorting, trace kaolinite matrix, trace silica cement, trace milky quartz, loose, inferred poor porosity, no show.
	30	SILTSTONE: As above.
	55	CLAYSTONE: As above.
	10	COAL: As above.
2465-70	TR	SANDSTONE: Light grey, off white, fine to coarse, predominantly medium, subangular to subrounded, moderate sorting, moderate silica cement, trace kaolinite matrix, trace pyrite, trace milky quartz, moderately hard to friable, loose in part, poor to nil porosity, no show.
	90	CLAYSTONE: Medium grey, grey brown, medium brown, moderately silty, trace carbonaceous fragments, slightly micromicaceous, slightly calcareous, firm to moderately hard, massive to blocky.
	10	SILTSTONE: As above.
	TR	COAL: Brown black, black, subbituminous, subvitreous lustre, trace pyrite, brittle, blocky to subfissile.
2470-75	TR	SANDSTONE: As above.
	90	CLAYSTONE: As above.
	10	COAL: As above.

Depth(m)	%	Description
2475-80	60	CLAYSTONE: Medium grey, medium brown, grey brown, moderately silty, slightly micromicaeous, common carbonaceous fragments, common disseminated pyrite, slightly calcareous, arenaceous in part, firm to moderately hard, massive to blocky, occasionally subfissile.
	40	COAL: As above.
2480-85	TR	SANDSTONE: Clear to translucent, rounded, medium, good sorting, common silica cement, trace pyrite, moderately hard, aggregates, poor to nil porosity, no show.
	50	SILTSTONE: Medium brown, carbonaceous, micromicaceous, common lithic fragments, blocky to platy, firm to moderately hard.
	40	CLAYSTONE: Off white, light grey, slightly calcareous, micromicaceous, soft to moderately hard, amorphous to massive.
	10	COAL: Black, occasionally brown, pyrite, subconchoidal fracture, brittle, blocky.
2485-89	40	SILTSTONE: As above.
	50	CLAYSTONE: As above.
	10	COAL: As above.
2489-90	90	CLAYSTONE: Predominantly light grey, firm to moderately hard, slightly calcareous, micromicaceous, rare carbonaceous specks, rare pyrite, blocky to subfissile.
	10	COAL: As above
2490-95	90	CLAYSTONE: Light grey, occasionally light brown, grey, off white and slightly greenish grey, firm to occasionally moderately hard, slightly calcareous, slightly silty in part, local common carbonaceous specks, rare disseminated pyrite, micromicaceous in part, rare forams, greenish grey is mottled with white specks, probably tuffaceous, light brown, grey, (approx 10%) has moderately bright uniform yellow gold fluorescence, very slow diffuse cut to crush cut, trace yellow gold ring residue fluorescence.
	10	CARBONACEOUS SHALE: Dark brown to black, firm to hard, micromicaceous in part, very coaly, subfissile, platy to blocky.
	TR	SANDSTONE: Colourless, coarse grains, subangular, well sorted, moderate silica cement, common white clay matrix, friable, poor porosity, no show.
2495-2500	20	SANDSTONE: White, very fine grained, subrounded to rounded, well sorted, weak silica cement, abundant white hygroturgid matrix, friable, 100% uniform moderately

Depth(m)	%	Description
		yellow gold fluorescence, slight to moderate streaming yellow cut, thin film, thin ring residue.
	80	CLAYSTONE: As above
	TR	COAL:
2500-05	20	SANDSTONE: White, translucent, occasionally clear, very fine to medium, predominantly fine, subrounded to rounded, moderate sorting, weak silica cement, abundant argillaceous matrix, friable and loose, 100% uniform moderately bright yellow gold fluorescence, slow streaming yellow cut, thin to moderate ring residue.
	80	CLAYSTONE: As above
	TR	COAL: As above
2505-10	15	SANDSTONE: As above, 100% uniform, moderately bright yellow gold fluorescence, moderate to slight streaming yellow cut, thin ring residue.
	85	CLAYSTONE: As above
	TR	COAL:
2510-15	10	SANDSTONE: Clear to translucent, white, very fine to fine, subrounded, occasionally subangular, good sorting, weak silica cement, common clay matrix, friable to loose, show 5% As above, crush cut only.
	90	CLAYSTONE: Light grey, light brown grey, light green grey, non calcareous, slightly arenaceous, trace pyrite, common carbonaceous flecks, trace forams, occasionally micromicaceous, firm to moderately hard, blocky.
	TR	COAL:
2515-20	15	SANDSTONE: As above, occasionally medium, 30% fluorescence as above, very weak diffuse cut, nil ring residue.
	85	CLAYSTONE: As above
	TR	COAL: As above
2520-25	20	SANDSTONE: Clear, translucent, occasionally white, very fine to medium, predominantly fine, moderate sorting, subangular to subrounded, weak silica cement, common argillaceous matrix, trace mica, friable to loose (larger grains), poor to nil porosity, 30% patchy, moderately bright yellow gold fluorescence, weak streaming cut, fast streaming crush cut, thin ring residue.
	80	CLAYSTONE: As above, grades to argillaceous siltstone.
	TR	COAL: As above

Depth(m)	%	Description
2525-30	5	SANDSTONE: As above, trace fluorescence as above, fast streaming cut, yellow crush cut.
	70	CLAYSTONE: As above.
	25	SILTSTONE: Medium brown, argillaceous, common pyrite, common carbonaceous flecks, soft to moderately hard, micromicaceous, blocky.
	TR	COAL: As above.
2530-35	TR	SANDSTONE: As above, no show.
	80	CLAYSTONE: As above.
	20	SILTSTONE: As above.
	TR	COAL: As above.
2535-40	TR	SANDSTONE: As above, no show.
	40	SILTSTONE: As above.
	60	CLAYSTONE: As above.
2540-45	15	SANDSTONE: White, clear, very fine, occasionally green, good sorting, subrounded, weak silica cement, abundant argillaceous matrix, trace pyrite, common carbonaceous flecks, slight calcareous cement, friable to loose, 100% moderately bright patchy, yellow fluorescence, slow streaming crush cut, ring residue.
	40	SILTSTONE: As above.
	45	CLAYSTONE: As above.
	TR	COAL: As above.
2545-50	30	SANDSTONE: As above, becoming predominantly medium grained, locally well cemented into hard aggregates, 100% fluorescence, As above.
	10	SILTSTONE: As above.
	60	CLAYSTONE: As above.
2550-55	15	SANDSTONE: As above, occasionally very coarse to coarse grained, trace pyrite cement, trace fluorescence, 100% show as above.
	20	SILTSTONE: As above.
	65	CLAYSTONE: Light grey to off white, occasionally light brown grey, soft, soluble, sticky, non to trace calcareous, micromicaceous, carbonaceous flecks, commonly silty.
2555-60	30	SANDSTONE: White, translucent, fine to coarse, subangular to subrounded, poor to moderate sorting, trace weak calcareous cement, trace pyrite cement, trace common white clay matrix, trace mica, trace feldspar, friable to loose, 30-100%, patchy moderately bright yellow gold fluorescence, slow diffuse

Depth(m)	%	Description
		cut, weak to moderate crush cut, thin ring residue, colourless.
	10	COAL: Black, very dark brown, firm, blocky, dull, even fracture.
	20	SILTSTONE: Light grey brown, firm to moderately hard, argillaceous, slightly calcareous in part, blocky, trace pyrite nodules.
	40	CLAYSTONE: As above.
2560-63	90	SANDSTONE: As above.
	10	COAL: As above.
2563-65	20	SANDSTONE: As above.
	10	SILTSTONE: As above.
	70	CLAYSTONE: As above.
2565-70	40	SANDSTONE: As above, visible light to medium brown oil stain, 50% patchy yellow gold, bright fluorescence, fast to slow streaming cut, thin ring residue, colourless.
	60	CLAYSTONE: As above.
2570-75	40	SANDSTONE: Predominantly as above, white to colourless, fine to coarse, predominantly medium, subangular to subrounded, poor to moderate sorting, weak to fair silica cement, local abundant white argillaceous matrix, trace feldspar, trace mica, poor porosity, friable to locally hard, 50-100% patchy to moderately bright yellow gold fluorescence, slow diffusive cut, moderate crush cut, thin colourless residue ring.
	20	SILTSTONE: Brown, occasionally grey brown, firm to moderately hard, argillaceous, common carbonaceous specks, micromicaceous laminae, subfissile, non calcareous.
	40	CLAYSTONE: Light grey, off white, cream, occasionally light green grey, very soft to moderately hard, hygroturgid in part, pyrite, locally silty and sandy, locally speckled white, predominantly tuffaceous.
	TR	VOLCANICS: Creamy, white, firm, fine to medium crystalline, abundant weathered feldspars with acicular ground mass of colourless crystals.
	TR	COAL: As above.
2575-80	40	SANDSTONE: As above, 100% show as above streaming cut, moderate ring residue.
	10	SILTSTONE: As above.
	50	CLAYSTONE: As above, with abundant pyrite nodules and occasionally coaly laminae.

Depth(m)	%	Description
2580-85	10	COAL: Black, dull to subvitreous, hard, blocky to platy in part, subconchoidal to uneven fracture.
	30	SANDSTONE: White to colourless, fine to coarse, predominantly medium, subangular, poor to moderate sorting, weak silica cement, abundant white argillaceous matrix, trace to 30% fluorescence as above, moderate crush cut, thin colourless ring residue, grading to sandy claystone.
	50	CLAYSTONE: Grey, greenish in part, soft to firm, pyritic, non calcareous, common forams.
	10	SILTSTONE: As above.
2585-90	80	CLAYSTONE: Grey brown to brown, occasionally grey, common white, soft, sticky, carbonaceous flecks, silty and sandy in part, non calcareous, pyritic in part.
	10	COAL: As above.
	10	SANDSTONE: As above, show as above.
2590-95	60	CLAYSTONE: As above.
	30	SANDSTONE: As above, show as above.
	10	SILTSTONE: Grey brown, firm to hard, blocky, carbonaceous, argillaceous in part, occasionally sandy, pyritic in part.
2595-2600	80	SANDSTONE: White, colourless, medium grey, occasionally fine to coarse, subangular to angular, weak to moderate calcareous cement, trace pyrite cement, abundant white argillaceous matrix in part, trace mica, trace feldspar, friable, poor to fair porosity, 30-100% patchy dull to moderately bright yellow gold fluorescence, slow streaming to diffuse cut, moderate crush cut, moderate ring residue.
	10	CLAYSTONE: As above.
	10	COAL: Black to brown black, dull, hard, argillaceous, blocky, grading to carbonaceous shale.
2600-05	60	SANDSTONE: White, clear, translucent, fine to medium, subangular to subrounded, moderate sorting, weak to moderate silica cement, trace pyrite cement, trace calcareous cement, trace mica, very abundant white argillaceous matrix, friable, occasionally medium to coarse loose grains, poor to nil porosity, 100% moderately bright uniform yellow gold fluorescence, weak diffuse yellow cut, fast streaming crush cut, thin ring residue.
	30	CLAYSTONE: As above.
	10	COAL: As above.

Depth(m)	%	Description
2605-10	50	SANDSTONE: As above, show as above.
	45	CLAYSTONE: As above.
	5	COAL: As above.
2610-15	50	SANDSTONE: As above, common pyrite cement, show as above.
	40	CLAYSTONE: Grey, brown grey, argillaceous, grades to siltstone, carbonaceous, pyritic, firm to moderately hard, blocky.
	10	COAL: As above.
2615-20	20	SANDSTONE: As above, 30% moderately bright patchy yellow gold fluorescence, slow streaming crush cut.
	80	CLAYSTONE: As above.
	TR	COAL: As above.
2620-25	80	SANDSTONE: Clear to translucent, occasionally milky, fine to medium, occasionally coarse, subrounded to round, occasionally subangular, moderate sorting, common white argillaceous matrix, occasional pyrite cement, weak to moderate silica cement, trace mica, poor to nil porosity, 100% moderately bright yellow gold patchy fluorescence, very weak diffuse yellow cut, slow streaming crush cut, very thin ring residue.
	20	CLAYSTONE: As above, grades to argillaceous siltstone.
	TR	COAL: As above.
2625-30	20	SANDSTONE: As above, show 30%, as above.
	80	CLAYSTONE: Grey, grey brown, green grey, silty, pyritic, carbonaceous laminae, slightly calcareous, soft to moderately hard, blocky to platy, grades to argillaceous siltstone.
	TR	COAL: As above.
2630-35	10	SANDSTONE: Clear, translucent, white, very fine to fine, round, well sorted, occasionally medium to coarse, angular, loose grains, common white argillaceous matrix, trace pyrite cement, trace mica, nil to poor porosity, friable to loose, 10% patchy moderately bright yellow gold fluorescence, no cut. Coarse quartz grains have dull uniform, blue yellow fluorescence, slow streaming cut, thin ring residue.
	90	CLAYSTONE: As above.
	TR	COAL:

Depth(m)	%	Description
2640-45	15	SANDSTONE: As above predominantly medium to coarse, no show.
	80	CLAYSTONE: As above.
	5	COAL: As above.
2645-50	80	CLAYSTONE: Grey to dark grey, hard, silty, trace very fine quartz, occasionally carbonaceous, non to slightly calcareous, trace mica, blocky to occasionally subfissile.
	10	SILTSTONE: Grey brown, hard, sandy, abundant carbonaceous coaly detritus, common pyrite nodules, trace mica, blocky.
	10	SANDSTONE: Off white to light brown, translucent, very fine to medium, angular to subangular, moderate sorting, moderate silica cement, local pyrite cement, trace to common interstitial clay, trace feldspar and carbonaceous detritus, trace mica, trace to poor porosity, friable to hard, 100% moderate bright uniform yellow to yellow gold fluorescence, slow streaming cut, moderately colourless ring residue.
2650-55	80	CLAYSTONE: As above, becoming predominantly light grey brown, soft, soluble, slightly calcareous, silty.
	10	SILTSTONE: As above.
	10	SANDSTONE: Trace fluorescence as above.
2655-2660	90	CLAYSTONE: As above.
	5	SILTSTONE: As above.
	5	SANDSTONE: As above, no show
2660-65	90	CLAYSTONE: Predominantly light grey, brown as above, also dark grey to dark grey brown claystone described at 2650m becoming very silty in part.
	5	SILTSTONE: As above.
	5	SANDSTONE: As above, no show.
2665-2670	100	CLAYSTONE: Light grey brown as above.
	TR	SILTSTONE: As above.
	TR	SANDSTONE: As above.
2670-75	75	CLAYSTONE: As above, slightly to moderately calcareous.
	20	SILTSTONE: Light grey to grey, speckled black, firm to hard, blocky, carbonaceous specks, trace lithic fragments, slightly calcareous, argillaceous in part.
	5	SANDSTONE: Off white to light brown, very fine to medium grained, moderate sorting, subrounded to subangular, moderate silica cement, abundant white argillaceous matrix, common feldspar and lithic fragments,

Depth(m)	%	Description
		trace carbonaceous specks, friable to hard, nil porosity, 100% dull yellow gold, fluorescence, moderate crush cut, thin ring residue.
2675-80	90	CLAYSTONE: As above.
	10	SILTSTONE: As above.
	TR	SANDSTONE: As above, no show.
2680-85	100	CLAYSTONE: As above.
	TR	SILTSTONE: As above.
2685-90	75	SILTSTONE: Light brown grey, brown, moderately argillaceous, slightly calcareous, common mica, common pyrite, trace crystalline calcareous (dolomite?) sand, common carbonaceous fragments, occasional lithic fragments, soft to firm, blocky.
	25	CLAYSTONE: Light grey, slightly calcareous, trace micromicaceous, occasional pyrite, slightly silty, soft to moderately hard, platy to blocky.
	TR	SANDSTONE: As above, no show.
2690-95	30	SILTSTONE: As above.
	70	CLAYSTONE: As above, occasional pyrite nodules.
	TR	SANDSTONE: As above, no show.
2695-2700	60	SILTSTONE: As above.
	40	CLAYSTONE: As above, grades to argillaceous siltstone.
2700-2705	90	SILTSTONE: Grey to brown grey, speckled, firm to predominantly hard, common abundant carbonaceous detritus, non calcareous, trace pyrite nodules, blocky.
	10	CLAYSTONE: As above.
2705-10	80	SILTSTONE: As above.
	20	CLAYSTONE: As above, very sandy in part.
2710-15	50	SILTSTONE: As above, becoming very argillaceous.
	50	CLAYSTONE: Grey to grey brown, soft to firm, non calcareous, carbonaceous specks, silty, subfissile.
2715-20	60	CLAYSTONE: As above.
	40	SILTSTONE: As above.
2720-25	80	CLAYSTONE: As above.
	20	SILTSTONE: As above.

Depth(m)	%	Description
2725-30	100	CLAYSTONE: Light grey brown, soft to firm, slightly silty, trace to common carbonaceous specks, non calcareous, subfissile.
	TR	SILTSTONE: As above.
2730-35	90	CLAYSTONE: As above.
	10	SILTSTONE: As above.
2735-40	90	CLAYSTONE: As above, becoming very sticky.
	10	SILTSTONE: As above.
2740-45	90	CLAYSTONE: As above, very sticky.
	10	SANDSTONE: As above.
2745-50	100	CLAYSTONE: Light grey brown, light brown, soft to occasionally firm, generally sticky, locally silty, with carbonaceous detritus and micromicaceous, non calcareous, subfissile.
2750-55	100	CLAYSTONE: As above, becoming speckled black and hard in part.
2755-60	100	CLAYSTONE: As above, commonly speckled black, moderately hard, subfissile.
2762	90	CLAYSTONE: As above.
	5	SILTSTONE: Light grey brown, soft to firm, very argillaceous, non calcareous, sticky.
	5	SANDSTONE: Colourless, translucent, silty to medium, predominantly very fine, poor sorting, subrounded to subangular, loose quartz, no show.
2760-65	90	CLAYSTONE: As above.
	10	SILTSTONE: As above.
	TR	SANDSTONE: As above.
2765-70	90	CLAYSTONE: Light grey brown to light grey, grey, soft to firm, occasionally moderately hard, sticky, silty, common carbonaceous detritus, micromicaceous in part, subfissile.
	10	SILTSTONE: As above.
	TR	SANDSTONE: Off white to light grey, translucent, very fine to moderate, poor sorting, subrounded to subangular, weak to moderate dolomite cement, common white to grey argillaceous matrix, trace lithic grains, friable to hard, trace to poor porosity, no show.
2770-75	90	CLAYSTONE: As above.

Depth(m)	%	Description
	10	SILTSTONE: As above.
	TR	SANDSTONE: As above.
2775-80	100	CLAYSTONE: As above.
	TR	SILTSTONE: As above.
	TR	SANDSTONE: As above, no shows.
2780-85	90	CLAYSTONE: As above.
	10	SILTSTONE: As above.
	TR	SANDSTONE: As above, no shows.
2785-90	90	CLAYSTONE: As above.
	10	SILTSTONE: As above.
	TR	SANDSTONE: As above, no shows.
2790-95	100	CLAYSTONE: Light grey brown to light brown, soft to firm, sticky, silty, micromicaceous, non calcareous, occasionally common carbonaceous detritus, rare trace pyrite, trace microfossil, subfissile.
	TR	SILTSTONE: As above.
	TR	SANDSTONE: As above.
2795-2800	90	CLAYSTONE: As above, very silty in part.
	10	SANDSTONE: White to light grey, very fine to medium, moderate sorting, subangular to subrounded, moderate calcareous/dolomite cement, moderate white argillaceous matrix, trace granular lithic fragments, nil to trace porosity, friable, no show.
	TR	SILTSTONE: As above.
2800-05	90	CLAYSTONE: As above.
	10	SANDSTONE: As above, 80% patchy moderately bright yellow gold fluorescence, slow streaming yellow cut, moderate film residue, yellow brown in colour.
2805-10	90	CLAYSTONE: As above.
	10	SANDSTONE: As above, 40% show as above, thin film residue.
2810-15	90	CLAYSTONE: As above.
	10	SANDSTONE: As above, becoming commonly light brown, no show.
2815-20	80	CLAYSTONE: Grey to brownish grey, soft to firm, sticky, non calcareous, common silty carbonaceous specks in part, trace pyrite, subfissile.
	20	SANDSTONE: Off white, light grey, light orange brown, fine to medium, moderate sorting, subangular, moderately calcareous cement, occasional secondary pyrite cement, common grey and green lithic grains, common white interstitial clay, friable to

Depth(m)	%	Description
		hard, trace to poor porosity, 20% patchy dull yellow gold fluorescence, weak to moderate crush cut, thin ring residue, colourless.
2825-30	100	CLAYSTONE: As above.
	TR	SANDSTONE: As above.
2830-35	95	CLAYSTONE: As above.
	5	SANDSTONE: As above, show as above.
2835-40	50	CLAYSTONE: As above.
	40	SILTSTONE: Grey to brown grey, soft to firm, locally hard, argillaceous, non calcareous, common carbonaceous detritus, micromicaceous, subblocky to subfissile.
	10	SANDSTONE: As above, 50% patchy fluorescence, as above, weak crush cut, thin ring residue.
2840-45	100	CLAYSTONE: As above.
	TR	SILTSTONE: As above.
	TR	SANDSTONE: As above.
2845-50	90	CLAYSTONE: As above.
	10	SILTSTONE: As above.
2850-55	70	CLAYSTONE: As above.
	30	SILTSTONE: Grey, dark grey, firm to hard, very argillaceous in part, slightly calcareous in part, carbonaceous specks, common pyrite nodules, blocky to subfissile.
2855-60	70	CLAYSTONE: As above.
	30	SILTSTONE: As above.
	TR	SANDSTONE: Off white to light grey, light orange brown, very fine to medium, moderate sorting, moderate calcareous cement, trace interstitial clay, trace to common grey lithic fragments, poor porosity, friable to hard, 50% patchy moderately bright yellow gold fluorescence, moderate streaming cut, thin colourless residue.
2860-65	60	CLAYSTONE: Predominantly as above, light to grey brown, grey to dark grey in part, occasionally light green grey, soft to firm, hard in part, slightly calcareous, commonly silty, common pyrite nodules, trace forams, blocky to subfissile.
	40	SILTSTONE: As above.
2865-70	90	CLAYSTONE: Predominantly grey to dark grey, firm, slightly calcareous, slightly silty in part, common pyrite nodules, trace forams, blocky to subfissile.
	10	SILTSTONE: As above.

Depth(m)	%	Description
2870-75	90	CLAYSTONE: As above.
	10	SILTSTONE: As above.
2875-80	90	CLAYSTONE: As above.
	10	SILTSTONE: As above.
2880-85	70	CLAYSTONE: As above.
	30	SILTSTONE: As above.
2885-90	70	CLAYSTONE: As above.
	30	SILTSTONE: As above.
2890-95	80	CLAYSTONE: As above.
	20	SILTSTONE: As above.
2895-2900	80	CLAYSTONE: As above.
	20	SILTSTONE: As above.
2900-10	90	CLAYSTONE: Grey to dark grey, firm, slightly calcareous, hygroturgid, silty in part trace forams, subfissile.
	10	SILTSTONE: As above.
2910-15	80	CLAYSTONE: As above.
	20	SILTSTONE: Grey, brown grey in part, soft to firm, occasionally moderately hard, slightly calcareous, argillaceous, very sandy in part, trace pyrite nodules, common carbonaceous detritus, subfissile.
2915-20	80	CLAYSTONE: As above.
	20	SILTSTONE: As above.
2920-25	90	CLAYSTONE: As above.
	10	SILTSTONE: As above.
2925-30	90	CLAYSTONE: As above.
	10	SILTSTONE: As above.
2930-35	90	CLAYSTONE: As above.
	10	SILTSTONE: As above.
2935-40	80	CLAYSTONE: As above.
	20	SILTSTONE: As above.
2940-45	90	CLAYSTONE: Grey to dark grey, brownish streak, firm to hard, micromicaceous, non calcareous, slightly silty in part, carbonaceous specks in part, trace forams, blocky to subfissile, trace vein calcite.
	10	SILTSTONE: As above.
2945-50	90	CLAYSTONE: As above.
	10	SILTSTONE: As above.

Depth(m)	%	Description
2950-55	90	CLAYSTONE: As above.
	10	SILTSTONE: As above.
2955-60	60	CLAYSTONE: As above, becoming common grey brown.
	40	SILTSTONE: Grey to dark grey, grey brown, firm to hard, commonly very argillaceous, common carbonaceous and coaly fragments, trace pyrite, micromicaceous, subfissile to blocky.
2960-65	70	CLAYSTONE: As above, trace vein calcite.
	30	SILTSTONE: As above.
2965-70	80	CLAYSTONE: As above.
	20	SILTSTONE: As above.
2970-75	80	CLAYSTONE: As above, trace vein calcite.
	20	SILTSTONE: As above.
2975-80	20	SANDSTONE: White, colourless, very fine to medium, predominantly very fine, poor to moderate sorting, subrounded, trace weak calcareous cement, abundant white hygroturgid clay matrix, friable, poor porosity, no show.
	70	CLAYSTONE: As above.
	10	SILTSTONE; As above, abundant carbonaceous detritus.
2980-85	20	SANDSTONE: As above, no show, trace lithic grains.
	10	SILTSTONE: As above.
	70	CLAYSTONE: As above.
2985-90	50	CLAYSTONE: Grey to dark grey, brownish grey, soft to firm, very hard, slightly calcareous, slightly silty in part, blocky.
	50	SANDSTONE; White, very fine to medium grains, poor sorting, round to subrounded, weak calcareous cement, abundant white argillaceous matrix, trace mica, trace granular lithic grains, friable, trace to poor porosity, dull orange mineral fluorescence.
2990-95	80	SANDSTONE: As above, very fine to medium, rare calcite, angular to rounded, trace coal and carbonaceous detritus, friable, no show, dull orange mineral fluorescence.
	20	CLAYSTONE: As above.
2995-3000	80	SANDSTONE: As above, very fine to medium, becoming predominantly fine to medium, angular to subrounded, friable, dull orange mineral fluorescence.
	20	CLAYSTONE: As above.

Depth(m)	%	Description
3000-05	60	CLAYSTONE: As above.
	40	SANDSTONE: As above.
3005-10	70	CLAYSTONE: As above.
	30	SANDSTONE: As above, tight.
3010-15	90	CLAYSTONE: As above, very silty grading to siltstone.
	10	SANDSTONE: As above.
3015-20	50	SANDSTONE: Colourless, white, very fine to medium, subrounded to rounded, moderate sorting, weak calcareous cement, trace locally abundant white argillaceous matrix, trace mica, friable to loose, clean in part, good porosity, dull orange mineral fluorescence.
	40	CLAYSTONE: Light brown, soft, streaky, plastic, hygroturgid, slightly calcareous.
	10	SILTSTONE: Light grey brown to grey, firm to hard, slightly argillaceous, sandy, micaceous, carbonaceous, blocky to subfissile.
3022	100	SANDSTONE: Colourless, occasionally white, silty to medium, subrounded to rounded, moderate to poor sorting, trace calcareous/dolomite cement, predominantly clean, trace mica, loose quartz, good to excellent porosity, dull orange and mineral fluorescence.
3020-25	70	SANDSTONE: As above, predominantly fine to medium with moderately argillaceous matrix, no show.
	20	CLAYSTONE: As above.
	10	SILTSTONE: As above.
3025-30	60	SANDSTONE: As above.
	30	CLAYSTONE: As above.
	10	SILTSTONE: As above.
3030-35	60	CLAYSTONE: As above.
	30	SANDSTONE: White, very fine to fine, subrounded to rounded, moderate sorting, weak calcareous cement, abundant white argillaceous matrix, friable, trace green and black lithic grains, trace asphalt residue, trace to poor porosity, no show.
3035-40	40	SANDSTONE: As above, predominantly fine to medium grained, friable, trace porosity, no show.
	30	CLAYSTONE: As above.
	30	SILTSTONE: As above.

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Depth(m)	%	Description
3040-45	70	CLAYSTONE: Light grey brown, soft, sticky, plastic, trace carbonaceous specks, dispersive subfissile.
	20	SANDSTONE: As above.
	10	SILTSTONE: As above.

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Lithology Descriptions

Depth(m)	%	Description
860-870	100	Cement
870-880	100	LIMESTONE: Calcilutite to calcisiltite, light to medium grey, very argillaceous, firm to occasionally hard, blocky. Abundant cement contamination.
880-890	100	LIMESTONE: As above, trace disseminated pyrite in part, trace fossil fragments, trace to common microfossils.
890-900	100	LIMESTONE: Calcilutite, light to medium grey, very argillaceous, firm to occasionally hard, various fossils with common forams and bryozoan fragments, trace disseminated and nodular pyrite, blocky.
900-910	100	LIMESTONE: Calcilutite to calcisiltite, as above, trace echinoid fragments.
910-920	100	LIMESTONE: Calcilutite, as above, very argillaceous, trace fossils, grading to calcareous claystone.
920-30	100	LIMESTONE: Calcilutite, as above, very argillaceous grading to calcareous claystone.
930-40	20	LIMESTONE: As above, slightly dolomitic.
	80	CLAYSTONE: Light to medium grey, moderately calcareous, trace fossil fragments and forams, trace pyrite, (nodular and disseminated) blocky, grading to argillaceous limestone.
940-50	30	LIMESTONE: Light grey, calcilutite, firm, very argillaceous common forams grades to claystone.
	70	CLAYSTONE: Light to medium grey, very calcareous, common fossil fragments, disseminated pyrite, firm, blocky.
950-60	60	LIMESTONE: Calcilutite, very light grey, soft to firm, slightly argillaceous, common fossil fragments, trace forams, blocky.
	40	CLAYSTONE: As above.
960-70	80	LIMESTONE: As above.
	20	CLAYSTONE: As above.

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Depth(m)	%	Description
970-80	100	LIMESTONE: Light grey to grey, calcilutite, marly, very argillaceous, trace forams and fossil fragments, firm, blocky, grading to calcareous claystone.
980-90	100	LIMESTONE: As above.
990-1000	100	LIMESTONE: Calclutite to biosparite, off white to light grey, soft to firm, locally hard, generally argillaceous, abundant fossil fragments (bryozoan, echinoid) abundant forams, rare disseminated pyrite, occasional trace carbonaceous specks, blocky.
1000-10	100	LIMESTONE: As above.
1010-1020	100	LIMESTONE: As above, very argillaceous grading to calcareous claystone.
1020-30	100	LIMESTONE: As above, calcilutite, light grey, soft to firm, argillaceous, common fossil fragments, trace forams, trace disseminated pyrite, trace carbonaceous specks, blocky.
1030-40	100	LIMESTONE: As above, very argillaceous, grading to calcareous claystone.
1040-50	100	LIMESTONE: As above, very argillaceous, slightly dolomitic, grading to calcareous claystone.
1050-60	100	LIMESTONE: Calcilutite, light grey, very argillaceous, soft to firm, shell fragments and forams, trace carbonaceous specks, trace disseminated pyrite, blocky to subfissile.
1060-70	100	LIMESTONE: As above, calcilutite.
1070-80	100	LIMESTONE: As above, calcisiltite, very argillaceous grading to calcareous claystone.
1080-90	100	LIMESTONE: Calcisiltite, as above, dolomitic, trace spicules.
1090-1100	100	LIMESTONE: Calcisiltite, as above, dolomitic.
1100-1110	100	LIMESTONE: Calcisiltite, as above, dolomitic.
	TR	DOLOMITE: Light grey, crystalline, trace pyrite, very hard, brittle.
1110-20	90	LIMESTONE: Calcisiltite, as above, slightly dolomitic, very argillaceous.

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Depth(m)	%	Description
	10	CLAYSTONE: Grey, moderately to very calcareous, micromicaceous, trace disseminated pyrite, common calcareous and fossil detritus fragments, firm, subfissile.
1120-30	90	LIMESTONE: Calcilutite, light grey, moderately argillaceous, soft to firm, micromicaceous, trace forams, trace carbonaceous specks and carbonaceous detritus, blocky to subfissile.
	10	CLAYSTONE: As above, grading in part to calcisiltite.
1130-40	80	LIMESTONE: Calcilutite, as above becoming dolomitic.
	20	CLAYSTONE: As above.
1140-50	90	LIMESTONE: Light grey to off white, calcilutite to calcisiltite, soft to firm, argillaceous, trace disseminated pyrite, trace micromica, trace forams, dolomitic.
	- 10	CLAYSTONE: As above.
1150-60	70	LIMESTONE: As above.
	30	CLAYSTONE: As above, dolomitic, grading to argillaceous calcilutite.
1160-70	80	LIMESTONE: As above, calcisiltite, very dolomitic, trace glauconite.
	20	CLAYSTONE: As above, dolomitic.
1170-80	80	LIMESTONE: Calcisiltite, very dolomitic.
	20	CLAYSTONE: As above, dolomitic.
1180-90	80	LIMESTONE: Calcisiltite, off white to light grey, soft to firm, argillaceous, dolomitic, trace disseminated pyrite, slightly micromicaceous, common forams, grades to dolomitic claystone.
	20	CLAYSTONE: Light grey, soft to moderately hard, dolomitic/calcareous, trace glauconite, trace pyrite, carbonaceous specks in part, silty texture due to calcareous/dolomitic ciliate particles, subfissile.
1190-1200	100	LIMESTONE: Calcilutite to calcisiltite, very light grey, argillaceous, trace pyrite, trace forams, rare glauconite, soft to firm argillaceous, trace pyrite, trace forams, trace glauconite, soft to firm, dolomitic.
	TR	CLAYSTONE: As above.
1200-10	100	LIMESTONE: Calcisiltite, as above.
1210-20	90	LIMESTONE: Calcisiltite, as above.

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Depth(m)	%	Description
	10	CLAYSTONE: Grey to light grey, firm to hard, moderately dolomitic, silty texture, trace disseminated pyrite, subfissile.
1220-30	80	LIMESTONE: Calcisiltite, as above, common trace pyrite, occasionally translucent, microcrystalline calcite, very hard.
	20	CLAYSTONE: As above.
1230-40	70	LIMESTONE: As above, calcisiltite.
	30	CLAYSTONE: As above, dolomitic.
1240-50	100	LIMESTONE: Calcisiltite, off white to light grey, predominantly marly texture, occasionally translucent and microcrystalline, trace pyrite, trace forams, occasional shell fragments, dolomitic, firm, hard, generally slightly to moderately argillaceous.
	TR	CLAYSTONE: As above.
1250-60	100	LIMESTONE: Calcisiltite, as above.
1260-70	100	LIMESTONE: Calcisiltite as above becoming more calcilutite, slightly argillaceous.
1270-80	100	LIMESTONE: Calcisiltite to calcilutite, light grey, marly texture, slightly argillaceous, slightly dolomitic, trace forams, firm to hard, subfissile, occasionally colourless to yellow white, microcrystalline to crystalline, hard to very hard, dolomitic, trace disseminated pyrite.
1280-90	100	LIMESTONE: Calcisiltite to calcilutite, as above, becoming more argillaceous.
1290-1300	100	LIMESTONE: Calcisiltite to calcilutite, as above, becoming more dolomitic.
1300-10	100	LIMESTONE: Calcisiltite, locally very argillaceous, grading to calcareous claystone.
1310-20	100	LIMESTONE: Calcilutite, light grey, marly texture, trace pyrite nodules, rare glauconite, common forams, generally argillaceous, occasionally recrystallised, firm, blocky to subfissile, dolomitic.
1320-30	100	LIMESTONE: As above, calcilutite to calcisiltite.
1330-40	100	LIMESTONE: As above, calcilutite to calcisiltite, locally very argillaceous grading to calcareous claystone.

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Depth(m)	%	Description
1340-50	80	LIMESTONE: As above, calcilutite, locally very argillaceous grading to calcareous claystone.
	20	CLAYSTONE: Light grey to grey, silty texture, firm to moderately hard, calcareous/dolomitic, trace pyrite, trace fossil shell fragments, blocky.
1350-60	90	LIMESTONE: As above, Calcilutite to calcisiltite.
	10	CLAYSTONE: As above.
1360-70	80	LIMESTONE: As above, Calcilutite to calcisiltite, as above becoming more dolomitic.
	20	CLAYSTONE: As above.
1370-80	100	LIMESTONE: Calcilutite to calcisiltite, marly to silty texture, argillaceous, dolomitic, trace disseminated and nodular pyrite, trace to common forams, soft to moderately hard, blocky to subfissile.
1380-1400	100	LIMESTONE: Predominantly calcilutite.
1400-10	100	LIMESTONE: Predominantly calcilutite, becoming more argillaceous, grading to calcareous claystone.
1410-20	100	LIMESTONE: Predominantly calcilutite, locally grading to calcareous claystone.
1420-30	100	LIMESTONE: Predominantly calcilutite, locally very argillaceous, grading to calcareous claystone.
1430-40	100	LIMESTONE: Calcilutite, slightly calcisiltic in part.
1440-50	100	LIMESTONE: Calcilutite to calcisiltite, light grey, common very light grey, dolomitic, moderately to very argillaceous, common forams, trace disseminated pyrite, trace bryozoans, grading to calcareous claystone, occasionally colourless, microcrystalline, hard with trace glauconite and common shell debris.
1450-60	100	LIMESTONE: As above, calcilutite to calcisiltite, abundant forams.
1460-70	100	LIMESTONE: As above, calcilutite, abundant forams.

Depth(m)	%	Description
1470-80	100	LIMESTONE: As above, calcilutite, abundant forams, very argillaceous in part, grading to calcareous claystone.
1480-90	100	LIMESTONE: As above, calcilutite.
1490-1500	100	LIMESTONE: As above, calcilutite to calcisiltite.
1500-10	100	LIMESTONE: As above, predominantly calcilutite with silty texture.
1510-20	90	LIMESTONE: Calcilutite to calcisiltite, light grey, firm, very argillaceous in part, generally slightly to moderately argillaceous, disseminated pyrite, trace forams, common white, sparitic, microcrystalline, abundant shell debris, hard, no porosity.
	10	CLAYSTONE: Light grey to olive grey, firm, very calcareous, trace disseminated pyrite, silty texture, blocky to subfissile.
1520-30	90	LIMESTONE: As above, common white and sparitic, hard.
	10	CLAYSTONE: As above.
1530-40	90	LIMESTONE: As above, predominantly calcilutite, common white to off white and sparitic.
	10	CLAYSTONE: As above.
1540-45	90	LIMESTONE: Off white to light grey, calcilutite to calcisiltite, soft to hard, slightly to moderately argillaceous, disseminated pyrite, blocky, trace forams, slightly sparitic in part.
	10	CLAYSTONE: As above.
1545-50	90	LIMESTONE: As above, calcisiltite.
	10	CLAYSTONE: As above.
1550-55	100	LIMESTONE: Calcisiltite, off white to light grey as above.
1555-60	80	LIMESTONE: Light grey, calcilutite, argillaceous, dolomitic, trace forams, trace pyrite, firm to hard, blocky, occasionally clear and microcrystalline.
	20	CLAYSTONE: Light grey to grey, firm to moderately hard, dolomitic, trace forams, trace pyrite, subfissile to blocky.
1560-65	90	LIMESTONE: Calcilutite, very light grey, as above.
	10	CLAYSTONE: As above.

Depth(m)	%	Description
1565-70	90	LIMESTONE: Calcilutite, silty texture, as above.
	10	CLAYSTONE: As above.
1570-75	100	LIMESTONE: Calcilutite, as above.
1575-80	100	LIMESTONE: Very light grey to light grey, calcisiltite, slightly to moderately argillaceous, dolomitic, common forams, rare glauconite, rare carbonaceous specks, subblocky.
1580-85	80	LIMESTONE: Calcisiltite, as above becoming slightly brownish in part.
	20	CLAYSTONE: Light grey to grey, firm to moderately hard, dolomitic, trace forams, trace pyrite, subfissile.
1585-90	90	LIMESTONE: Off white to light grey to light brown grey, calcisiltite to calcarenite, argillaceous in part, common forams, dolomitic, firm to hard, blocky.
	10	CLAYSTONE: As above.
1590-95	100	LIMESTONE: As above, becoming calcilutite.
1595-1600	90	LIMESTONE: Calcilutite, very light grey as above.
	10	CLAYSTONE: As above.
1600-05	100	LIMESTONE: As above, calcisiltite to calcarenite.
1605-15	50	LIMESTONE: As above.
	40	SILTSTONE: Light brown, green, mottled green yellow to yellow brown, abundant glauconite, argillaceous matrix, trace fine to medium quartz, glauconite weathered to yellow limonite. Slightly hygroturgid, noncalcareous, blocky.
	10	SANDSTONE: Colourless, very fine to fine, subrounded, well sorted, rounded, loose, unconsolidated, good porosity, no show.
1615-20	80	SILTSTONE: As above, becoming very sandy, grading to silty sandstone.
	20	SANDSTONE: Light brown, occasionally mottled green, fine grains, rare, well sorted, strong dolomitic cement, trace glauconite, nil porosity, no show.
1620-25	20	SILTSTONE: As above.
	20	SANDSTONE: (1) As above.
	60	SANDSTONE: (2) Colourless to light brown, medium to very coarse, granular in

Depth(m)	%	Description
		part, angular to well rounded, poor sorting, weak dolomitic cement, moderate to strong secondary pyrite cement in part, friable to very hard, no porosity, no show.
1625-35	80	SANDSTONE: Colourless to light grey, very coarse to granular, angular to rounded, moderate to well sorted, weak pyrite cement, moderate clay matrix, predominantly quartz, trace white feldspars, trace mica, trace dolomitic cement in part, friable, fair porosity, no show.
	20	CLAYSTONE: Light grey to grey, firm, slightly calcareous, trace glauconite, subfissile.
1635-40	100	SANDSTONE: As above, angular to subrounded, weak pyrite and silica cement friable, predominantly loose quartz, good porosity, no show.
1640-45	80	SANDSTONE: As above.
	10	CLAYSTONE: Light grey, light greenish grey, slightly calcareous, trace mica, trace carbonaceous specks, subfissile, firm.
	10	COAL: Dark brown to black, bituminous to lignitic, dull to subvitreous, hard, blocky.
1645-50	30	COAL: As above.
	60	SANDSTONE: As above.
	10	SILTSTONE: Brown to dark orange brown, argillaceous, carbonaceous, firm to friable, blocky to subfissile.
1650-55	30	COAL: As above.
	20	SILTSTONE: As above.
	50	SANDSTONE: Colourless, fine to granular, angular to rounded, poor sorting, trace pyrite cement, weak dolomitic cement, trace mica, trace feldspars, predominantly loose quartz, fair porosity, no show.
1655-1665	80	SANDSTONE: Off white to light brown, light orange brown, very fine to granular, predominantly medium to coarse, angular to subangular, poor sorting, weak pyrite cement, abundant white and tan clay matrix, hygroturgid, friable, poor porosity, no show. (Dull orange mineral fluorescence)
	20	SILTSTONE: As above.
1665-70	80	SANDSTONE: As above, no show, abundant hygroturgid matrix.
	20	CLAYSTONE: Brown to dark brown, firm to hard, platy, micromicaceous, carbonaceous, subfissile.

Depth(m)	%	Description
1670-75	30	SANDSTONE: As above, no show.
	40	CLAYSTONE: Off white to tan, silty, hygroturgid in part, soft to firm.
	30	SILTSTONE: Light brown, micromicaceous, carbonaceous specks in part, firm, subfissile.
1675-80	70	SANDSTONE: As above, fine to granular, no show.
	30	CLAYSTONE: Brown to dark brown, firm, very to moderately carbonaceous, slightly silty, non calcareous, blocky, grades to carbonaceous shale.
1680-85	20	CLAYSTONE: As above, trace pyrite.
	20	COAL: Black to dark brown, dull, firm to hard, blocky, even fracture, lignitic to subbituminous.
	30	SILTSTONE: Light brown to brown, light grey brown, argillaceous, soft in part, generally firm, non calcareous, carbonaceous streaks and specks, micaceous, blocky.
	30	SANDSTONE: Off white to light grey, very fine to fine, occasionally medium to very coarse, moderate to poor sorting, subangular, silica cement, abundant white argillaceous matrix, trace mica, friable, poor porosity, no shows.
1685-90	10	COAL: As above, trace pyrite.
	20	SANDSTONE: As above.
	20	CLAYSTONE: As above.
	50	SILTSTONE: As above, becoming very argillaceous and hygroturgid.
1690-95	70	SILTSTONE: As above.
	10	CLAYSTONE: As above.
	10	SANDSTONE: As above.
	10	COAL: As above.
1695-1700	30	COAL: Black to brown black, dull to subvitreous lustre, firm, blocky to subplaty, lignitic.
	20	SILTSTONE: As above, very carbonaceous.
	50	CLAYSTONE: Light brown to off white, soft to firm, slightly silty, non calcareous, hygroturgid, dispersive, micromicaceous in part.
1700-05	70	CLAYSTONE: Off white, slightly greenish, tan, soft to firm, microlaminae, non calcareous, soapy texture, subfissile.
	20	SILTSTONE: Brown to light brown, firm, argillaceous matrix, carbonaceous specks, micaceous, coaly microlaminae, blocky to subfissile.

Depth(m)	%	Description
	10	COAL: As above.
1705-10	40	CLAYSTONE: As above.
	60	SANDSTONE: Colourless, fine to predominantly medium to coarse, subangular to rounded, moderate sorting, trace silica cement, clean, good to excellent porosity, no show.
1710-15	80	SANDSTONE: As above, coarse to very coarse, granular in part, trace pyrite, good porosity, no show.
	20	CLAYSTONE: As above.
1715-25	100	SANDSTONE: Predominantly as above, colourless, very coarse to granular, angular to subrounded, well sorted, unconsolidated, quartz, clean, moderate quartz overgrowths, good porosity, no show.
1725-35	100	SANDSTONE: As above.
1735-45	100	SANDSTONE: As above, trace white feldspars.
1745-55	90	SANDSTONE: As above.
	10	CLAYSTONE: Light grey to slightly greenish grey, firm, blocky, slightly silty, carbonaceous specks.
1755-60	100	SANDSTONE: As above, trace red and grey chert, good porosity, no show.
1760-65	100	SANDSTONE: As above, predominantly very coarse, angular, trace white feldspars, no show.
1765-70	100	SANDSTONE: As above, fine to very coarse poor sorting, angular to subrounded, occasionally round, no show.
1770-80	100	SANDSTONE: As above, colourless, off white to light grey, fine to granular, predominantly medium to very coarse, poor sorting, subangular to angular, occasionally subrounded to rounded, trace pyrite cement, trace common white interstitial clay, quartz, trace grey chert and white feldspars, unconsolidated loose quartz, fair to good porosity, no show.
1780-90	100	SANDSTONE: As above.
1790-95	100	SANDSTONE: As above, abundant cavings from reaming to TD.

Depth(m)	%	Description
1795-1800	80	SANDSTONE: As above, strong silica cement in part, very hard, poor porosity.
	20	CLAYSTONE: White to off white, firm, laminated, micromicaceous, subfissile.
1800-05	100	COAL: Black, brown in part, dull to subvitreous, hard, brittle, conchoidal fracture, subbituminous.
1805-10	80	COAL: As above.
	20	CLAYSTONE: Light grey to light brown, soft to firm, silty in part, coaly microlaminae, dispersive in part blocky.
1810-15	80	CLAYSTONE: Off white to light brown, tan, firm, coaly microlaminae in part, micromicaceous, soapy texture, non calcareous, subfissile, partially hygroturgid.
	20	COAL: As above.
1815-20	60	CLAYSTONE: Off white, light grey, very light tan, soft to firm, sandy texture, slightly silty in part, hygroturgid in part, non calcareous, fissile.
	40	SILTSTONE: Very light brown, firm, laminated, argillaceous, common carbonaceous detritus, non calcareous, subfissile.
1820-25	20	SILTSTONE: As above.
	80	SANDSTONE: Colourless to white, medium to very coarse grains, moderate sorting, angular to subrounded, trace silica cement, common to abundant white hygroturgid clay matrix, loose quartz, fair porosity, 100% dull yellow white fluorescence, clay matrix has bright yellow white fluorescence, very weak cut and crush cut, thin colourless residue.
1825-30	70	SANDSTONE: As above, show as above.
	30	COAL: Black brown black, hard, dull lustre, uneven fracture, blocky to subfissile.
1830-35	50	COAL: As above.
	40	SILTSTONE: Light brown to brown, argillaceous, carbonaceous detritus, slightly micromicaceous, firm, friable non calcareous.
	10	CLAYSTONE: Dark brown, very carbonaceous, firm to hard, subfissile.
1835-40	90	SILTSTONE: As above, very argillaceous grades to claystone.
	10	CLAYSTONE: Brown to light brown, occasionally silty, micromicaceous, soft to firm, subfissile, non calcareous.

Depth(m)	%	Description
1840-45	80	CLAYSTONE: Light brown to off white, firm, non calcareous, micromicaceous, occasionally silty, occasional carbonaceous microlaminae, hygroturgid, dispersive, subfissile.
	20	SILTSTONE: Light brown, mottled white, black, carbonaceous, argillaceous in part, firm, laminated, subfissile.
1845-50	20	COAL: Black to brown black, firm, earthy, blocky, generally argillaceous, grades to carbonaceous shale.
	80	CLAYSTONE: As above, becoming brown to dark brown in part, micromicaceous, very carbonaceous, subfissile, non calcareous.
1850-55	50	SILTSTONE: Light brown to brown, speckled black, occasionally white mottled brown, micromicaceous, non calcareous, common carbonaceous detritus, argillaceous in part, blocky to subfissile.
	40	CLAYSTONE: As above.
	10	SANDSTONE: Light grey, very fine to silty, well sorted, subrounded, weak silica cement, trace interstitial clay, friable, fair porosity, 100% bright yellow white fluorescence, slow streaming cut, thin colourless residue ring.
1855-60	80	CLAYSTONE: As above.
	20	SILTSTONE: As above.
1860-65	70	CLAYSTONE: Off white to light brown grey, very light grey, soft, slightly sandy in part, non calcareous, hygroturgid, dispersive.
	30	COAL: Black, dull, hard, brittle, uneven fracture, blocky to splintery.
1865-70	100	CLAYSTONE: As above.
1870-75	100	CLAYSTONE: As above.
1875-80	40	SANDSTONE: Clear, translucent, medium to coarse, subangular to subrounded, well sorted, trace pyrite cement, loose quartz, good inferred porosity, no show.
	60	CLAYSTONE: As above.
	TR	SILTSTONE: Grey brown, silt to very fine sand, slightly carbonaceous, trace yellow blue solid fluorescence, very slow dispersive cut, thick fluorescent ring residue.
1880-85	60	SANDSTONE: White, clear, occasionally milky, fine to coarse, subrounded, occasionally subangular, poor sorting, trace pyrite cement, trace silica overgrowths, occasional argillaceous matrix, friable to

Depth(m)	%	Description
		loose quartz, 60% moderately bright yellow patchy fluorescence, weak crush cut, thin ring residue.
	40	CLAYSTONE: Grey, grey brown, olive grey, off white, slightly carbonaceous, slightly calcareous, trace pyrite, occasionally mottled, soft to moderately hard, blocky.
	TR	COAL: Black, argillaceous, pyritic, subconchoidal fracture, brittle, blocky.
1885-95	80	SANDSTONE: White, grey, clear, fine to medium, occasionally coarse, subrounded to rounded, well sorted, abundant argillaceous matrix, poor porosity, soft to loose with increasing grain size, 100% moderately bright patchy yellow fluorescence, weak crush cut, thin ring residue.
	20	CLAYSTONE: As above.
	TR	COAL: As above.
1895-1900	90	SANDSTONE: As above, 100% moderately bright patchy yellow fluorescence, very weak diffuse cut, nil ring residue.
	10	CLAYSTONE: As above.
1900-05	60	SANDSTONE: As above, show 50% as above.
	20	SILTSTONE: Brown, brown grey, moderately argillaceous, slightly carbonaceous, trace pyrite, moderately hard, blocky.
	10	CLAYSTONE: As above.
	10	COAL: As above.
1905-10	10	SANDSTONE: White, clear, translucent, fine to medium, occasionally coarse, subrounded to rounded, moderate sorting, common argillaceous matrix, friable to loose quartz, poor porosity, trace fluorescence as above, no cut.
	90	COAL: Black, pyritic, liginitic, slightly argillaceous, hackly fracture, brittle, hard, blocky.
1910-15	20	SANDSTONE: White, clear, light brown, very fine to medium, occasionally coarse, subrounded to subangular, poor sorting, abundant argillaceous matrix, trace silica cement, friable to moderately hard very poor inferred porosity, trace patchy yellow blue fluorescence, weak diffuse cut, crush cut, very thin ring residue.
	80	CLAYSTONE: White, light grey, brown, moderately argillaceous, carbonaceous, non

Depth(m)	%	Description
		calcareous, trace pyrite, soft to moderately hard, occasionally dispersive, blocky.
1915-20	30	SANDSTONE: As above, no show.
	65	CLAYSTONE: As above, slightly micromicaceous
	10	COAL: As above.
1920-25	20	SANDSTONE: As above, predominantly subrounded, medium to occasionally coarse, no show.
	70	CLAYSTONE: As above, becoming silty.
	10	COAL: As above.
1925-30	5	SANDSTONE: As above, no show.
	95	CLAYSTONE: As above.
	TR	COAL: As above.
1930-35	100	CLAYSTONE: Off white, light brown, slightly silty, occasional fine sand, trace pyrite, occasional carbonaceous specks, slightly micromicaceous, soft to dispersive amorphous to blocky.
	TR	COAL: As above.
1935-40	100	CLAYSTONE: As above.
1940-45	20	SANDSTONE: Off white, light grey, fine to medium grained, subangular, well sorted, weak silica cement, moderate interstitial clay, trace common lithic grains, friable, poor porosity, 80% uniform bright yellow white fluorescence, slow streaming white cut, colourless thin ring residue.
	10	SILTSTONE: Brown, argillaceous, micaceous, carbonaceous specks, firm subfissile.
	70	CLAYSTONE: As above.
	TR	COAL: As above.
1945-50	20	COAL: Black, dull, hard, blocky, bituminous.
	70	CLAYSTONE: As above.
	10	SILTSTONE: As above, very argillaceous.
1950-55	100	CLAYSTONE: As above, predominantly off white, occasionally light brown, silty, non calcareous, dispersive, soft to firm, subfissile to fissile.
1955-60	90	CLAYSTONE: As above.
	10	SILTSTONE: Light brown, soft to firm, argillaceous, micaceous, trace carbonaceous specks, subfissile.

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Depth(m)	%	Description
1960-65	40	SANDSTONE: White to off white, fine grained, occasionally medium, subrounded to rounded, weak to moderate sorting, trace weak silica cement, abundant hygroturgid white clay matrix, trace mica, friable, poor porosity, 20% patchy moderately bright yellow white fluorescence, weak crush cut, colourless thin ring residue.
	10	COAL: Black, dull to subvitreous, firm to hard, even fracture, blocky.
	50	CLAYSTONE: As above.
1965-70	30	SILTSTONE: Light brown, firm, argillaceous, common carbonaceous microlaminae, micaceous, laminated, subfissile.
	70	CLAYSTONE: Predominantly light brown to brownish white, very soft, hygroturgid, dispersive, non calcareous, silty, carbonaceous specks.
1970-75	100	CLAYSTONE: White to cream, soft, soapy to waxy texture, soluble, subfissile, silty in part.
1975-80	50	CLAYSTONE: As above very sandy grading to argillaceous sandstone.
	40	ARGILLACEOUS SANDSTONE: Off white to white, very fine to fine, well sorted, abundant white argillaceous matrix, friable, no show.
	10	COAL: Black, dull, hard, brittle, even fracture, bituminous.
1980-85	20	SANDSTONE: Off white, fine to medium grained, subrounded to subangular, well sorted, moderate silica cement, common to abundant white argillaceous matrix, trace mica, friable to hard, poor porosity, trace to 20% patchy moderate to dull yellow white fluorescence, weak crush cut, colourless thin ring residue.
	20	SILTSTONE: Off white to light brown, firm, laminated, argillaceous, carbonaceous specks, non calcareous, subfissile.
	10	COAL: As above.
	50	CLAYSTONE: As above.
1985-90	10	SANDSTONE: As above, no show.
	10	SILTSTONE: As above.
	10	COAL: Black, dull to subvitreous, hard, brittle, blocky.
	70	CLAYSTONE: As above.
1990-95	10	COAL: As above.
	10	SANDSTONE: As above, no show.

Depth(m)	%	Description
	80	CLAYSTONE: As above, off white, firm, soluble non calcareous, silty to sandy in part, occasionally carbonaceous specks, non calcareous, subfissile.
1995-2000	10	COAL: As above.
	20	SANDSTONE: White to light grey, fine to very fine, subrounded, well sorted, weak silica cement, abundant white argillaceous matrix, friable to moderately hard, poor porosity, no show.
	20	SILTSTONE: As above.
	50	CLAYSTONE: As above.
2000-05	20	SANDSTONE: As above, no show.
	80	CLAYSTONE: As above.
	TR	COAL: As above.
2005-10	30	SANDSTONE: Off white, very fine to medium, poor to moderate sorting, subrounded to subangular, weak to moderate silica cement, common abundant hygroturgid white clay matrix, friable to hard, trace to poor porosity, 80% patchy to uniform dull yellow white fluorescence, weak crush cut, trace to thin colourless ring residue.
	70	CLAYSTONE: As above.
2010-15	30	SANDSTONE: As above, predominantly medium grained, angular to subangular, well sorted, abundant argillaceous matrix, friable, poor porosity, 20% show, As above.
	10	COAL: Black, dull to occasionally subvitreous, firm, uneven to subconchoidal fracture, subbituminous.
	60	CLAYSTONE: As above.
2015-20	90	CLAYSTONE: Off white to predominantly light brown, soft to firm, micaceous, carbonaceous microlaminae, silty in part, soluble, dispersive, subfissile.
	10	COAL: Black, occasionally brown black, hard, bright dull to subvitreous, subconchoidal fracture, blocky to platy.
2020-25	100	COAL: As above, very argillaceous and brown in part grading to carbonaceous shale.
2025-30	10	SANDSTONE: Off white, light grey, very fine to fine grained, well sorted, subrounded, moderate silica cement, trace interstitial clay, hard, trace porosity, no show.
	90	CLAYSTONE: As above predominantly light brown, generally silty, locally abundant carbonaceous laminae, trace mica.

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Depth(m)	%	Description
2030-35	50	COAL: Black, dull to resinous, firm to hard, blocky, argillaceous in part, very bituminous.
	20	SILTSTONE: Off white, very argillaceous, common very fine sand, soluble dispersive matrix, trace mica, 100% bright yellow white uniform fluorescence, weak crush cut, thin ring residue.
	30	CLAYSTONE: As above.
2035-40	20	SANDSTONE: Off white to light brown, very fine to medium, subangular to subrounded, poor sorting, weak silica cement, trace to abundant hygroturgid white argillaceous matrix, friable, poor to fair porosity, 100% moderately bright yellow white fluorescence, slow streaming to moderate crush cut, moderate slightly brownish ring residue.
	10	COAL: As above.
	70	CLAYSTONE: Off white, light brown, soluble, dispersive, micaceous, non calcareous, silty to sandy, carbonaceous specks in part, subfissile.
2040-45	20	COAL: Black, resinous, moderately hard to brittle, slightly argillaceous in part, blocky.
	10	SANDSTONE: As above, 50% moderately bright patchy yellow fluorescence, very weak crush cut, thin ring residue.
	70	CLAYSTONE: As above.
2045-50	25	COAL: As above.
	5	SANDSTONE: As above, 50% fluorescence as above, slow streaming milky cut, very thin ring residue.
	70	CLAYSTONE: As above, very sandy in part.
2050-55	5	SANDSTONE: Off white, brown, occasionally clear, very fine to fine, occasionally medium, subrounded, moderate sorting, weak silica cement, common argillaceous matrix, trace pyrite, poor to nil porosity, 50% moderately dull solid yellow fluorescence, good fast streaming crush cut, thin ring residue.
	10	SILTSTONE: Brown, brown grey, argillaceous, carbonaceous, occasionally mottled, micromicaceous, non calcareous, friable to firm, blocky.
	5	COAL: As above.
	80	CLAYSTONE: White, light grey, light brown, slightly calcareous, silty, occasionally sandy in part, very common nodular pyrite, common carbonaceous specks and laminae, soft, dispersive, amorphous to blocky.

Depth(m)	%	Description
2055-60	5	SANDSTONE: As above, trace show as above, crush cut only.
	30	SILTSTONE: As above.
	5	COAL: Black, brown, slightly argillaceous, dull, occasionally woody texture, subconchoidal fracture, hard, brittle in part.
	60	CLAYSTONE: As above, becoming very carbonaceous in part.
2060-65	30	SILTSTONE: As above.
	70	CLAYSTONE: As above, slightly silty to fine sand.
	TR	COAL: As above.
2065-70	40	COAL: As above.
	10	SILTSTONE: As above.
	50	CLAYSTONE: As above.
2070-75	60	COAL: As above, becoming resinous.
	5	SANDSTONE: White, light brown, fine to medium, subrounded, good sorting, common argillaceous matrix, friable, 50% moderately bright yellow fluorescence, weak streaming milky cut, crush cut, nil ring residue.
	35	CLAYSTONE: As above.
2075-80	5	SANDSTONE: 50% fluorescence as above.
	95	COAL: Black, brown, resinous, occasionally bituminous, slightly argillaceous, slightly pyritic in part, firm to moderately hard, subfissile to blocky.
	TR	CLAYSTONE: As above, sandy in part.
2080-85	5	SANDSTONE: As above, 50% dull yellow patchy fluorescence as above.
	65	COAL: As above.
	30	CLAYSTONE: Off white, light brown, silty, micromicaeous, occasional pyrite, soft to dispersive, amorphous to blocky, grades to argillaceous siltstone.
2085-90	15	SANDSTONE: Clear, white, light brown, fine, well rounded, good sorting, occasional argillaceous matrix, weak silica cement, good to fair inferred porosity, friable to loose quartz, 100% bright yellow blue patchy fluorescence, moderate streaming milky cut, thin ring residue.
	60	COAL: As above.
	25	CLAYSTONE: As above, becoming sandy in part.
2090-95	TR	SANDSTONE: As above, abundant argillaceous matrix, tight, show as above, crush cut only.

Depth(m)	%	Description
	25	COAL: As above.
	60	CLAYSTONE: As above.
	15	SILTSTONE: Light brown, brown, micromicaceous, non calcareous, carbonaceous specks, very argillaceous in part, firm, blocky.
2095-2100	5	SANDSTONE: White, light brown, clear, fine to medium, subangular to subrounded, poor sorting, common argillaceous matrix in part, occasionally weak silica cement, poor to fair inferred porosity, friable to loose quartz, 100% bright blue yellow solid fluorescence, very weak slow streaming cut, interstitial crush cut, moderately thick ring residue.
	30	COAL: As above.
	40	SILTSTONE: As above.
	25	CLAYSTONE: As above, silty in part.
2100-05	TR	COAL: As above.
	TR	SILTSTONE: As above.
	100	CLAYSTONE: Off white, light brown, brown grey, silty, non calcareous, slightly micromicaceous, trace pyrite, soft to firm, amorphous to blocky, grades to argillaceous siltstone in part.
2105-10	5	SANDSTONE: As above, predominantly fine, 100% fluorescence as above, crush cut only.
	5	COAL: As above.
	90	CLAYSTONE: As above.
2110-15	10	COAL: Black, occasionally brown black, dull, hard, brittle, blocky, subbituminous.
	10	SANDSTONE: Light brown, fine to medium grained, subangular to subrounded, trace weak silica cement, trace to common white argillaceous matrix, friable, fair to good porosity, 100% dull yellow white spotted bright yellow white fluorescence, weak crush cut, trace residue.
	80	CLAYSTONE: As above, predominantly white to very light brown.
2115-20	100	CLAYSTONE: As above, predominantly brownish white, occasionally light grey, soluble, dispersive.
2120-25	20	SANDSTONE: White, fine grained, rounded, well sorted, weak silica cement, . common abundant white argillaceous matrix, micaceous, rare carbonaceous specks, friable, poor to fair porosity, 100% patchy dull yellow white fluorescence, weak crush cut, trace colourless ring residue.

Depth(m)	%	Description
	10	COAL: As above.
	10	SILTSTONE: Light to medium brown, firm, argillaceous, micaceous, occasionally carbonaceous specks, laminated, subfissile.
	60	CLAYSTONE: As above.
2125-30	30	SANDSTONE: As above, abundant white clay matrix, trace to poor porosity, 100% patchy dull to moderately bright yellow fluorescence, weak crush cut, thin ring residue.
	70	CLAYSTONE: Off white to light brown, generally as above, soluble, dispersive, firm micromicaceous, occasional carbonaceous specks, silty to sandy in part, subfissile.
2130-35	20	COAL: Black, dull, firm to hard, blocky, trace to common amber with slow milky white cut, thick residue.
	10	SANDSTONE: As above, show as above.
	70	CLAYSTONE: As above, predominantly light brown, very silty and micaceous in part, grading to argillaceous siltstone.
2135-40	30	COAL: As above.
	30	CLAYSTONE: As above, off white to light brown.
	40	SANDSTONE: Colourless to white, very fine to very coarse, predominantly coarse, subangular, moderate sorting, trace silica cement, trace to common white interstitial clay, predominantly loose quartz, good inferred porosity, 20% patchy dull yellow white fluorescence, weak crush cut, thin colourless residue ring.
2140-45	70	SANDSTONE: Colourless, very fine to very coarse, predominantly coarse, angular to subangular, moderate to well sorted, trace silica cement, trace pyritic cement, trace white interstitial clay, predominantly loose quartz, trace nodular pyrite, trace white feldspars and grey chert, good porosity, 20% spotted dull to bright yellow white fluorescence, slow weak crush cut, thin colourless residue ring.
	10	COAL: As above, very argillaceous in part, grading to carbonaceous shale.
	20	CLAYSTONE: As above.
2145-50	20	COAL: Black to brown black, dull, occasionally subvitreous, hard laminae in part, argillaceous in part, grades to carbonaceous shale.
	30	SILTSTONE: Light grey to light grey brown, firm to friable, laminated, micaceous,

Depth(m)	%	Description
		argillaceous, carbonaceous microlaminae, sandy in part, grading to silty siltstone, trace pyrite nodules.
	50	CLAYSTONE: As above.
2150-55	10	COAL: As above.
	20	SILTSTONE: As above.
	30	SANDSTONE: Off white, very fine to fine occasionally medium grained, subrounded, moderately well sorted, pyritic cement, abundant white clay matrix, friable, poor porosity, 100% moderately bright yellow white fluorescence, no cut, weak crush cut, thin ring residue.
	50	CLAYSTONE: As above.
2155-60	60	SANDSTONE: Colourless to white, very fine to coarse, predominantly medium, angular to subangular, moderate sorting, weak silica cement, quartz overgrowths, common white clay matrix, friable to predominantly loose quartz, good to fair porosity, 60% spotted to patchy dull to moderately bright yellow white fluorescence, weak slow crush cut, thin colourless residue ring.
	10	COAL: As above.
	30	CLAYSTONE: As above.
2160-65	60	SANDSTONE: As above, 10% fluorescence as above.
	40	COAL: Black to grey black, dull to earthy, firm, blocky to platy, irregular fracture, common fossil plant texture.
2165-70	30	SANDSTONE: Colourless, white, very fine to coarse, poor sorting, angular to subangular, weakly cemented, abundant white argillaceous matrix, trace mica, friable, poor porosity, 50% moderately bright patchy yellow fluorescence, very slow streaming cut, weak to moderate crush cut, thin ring residue.
	40	COAL: Black, dull, firm to hard, blocky, bituminous, trace to common amber.
	10	SILTSTONE: Brown, firm, argillaceous, micaceous, carbonaceous specks, subfissile.
	20	CLAYSTONE: Light brown, off white, soft, soluble, dispersive, micaceous, occasionally silty, subfissile.
2170-75	80	VOLCANICS: White to off white, occasionally mottled grey, translucent to opaque, microcrystalline, anhedral to euhedral crystalline texture, predominantly white feldspars, trace pyrite, feldspars variably weathered to clay, soft to very hard.

Depth(m)	%	Description
	20	COAL: As above.
2175-80	30	COAL: Black, dull, firm to hard, blocky, trace pyrite, blocky to splintery.
	70	VOLCANICS: As above.
2180-85	100	VOLCANICS: As above.
2185-90	100	VOLCANICS: Off white to light grey, finely crystalline, euhedral, predominantly white feldspars, trace pyrite, feldspars slightly weathered to clay, predominantly hard to very hard, brittle (abundant 60% coal and clay cavings)
2190-95	100	VOLCANICS: Off white to light grey, finely crystalline, predominantly euhedral feldspars, occasional quartz phenocrysts, trace mafic crystals (Pyroxene and Olivine), cryptocrystalline, occasionally subophitic texture, trace pyrite, hard, brittle, blocky, abundant cavings.
2195-2200	70	VOLCANICS: As above.
	20	CLAYSTONE: White, cream, light grey, sugary texture, carbonaceous specks, pyrite, soft, amorphous to blocky, altered volcanic.
	10	COAL: Black, pyrite, hard, brittle, subconchoidal fracture, platy.
2200-05	10	VOLCANICS: As above.
	30	CLAYSTONE: Altered volcanic as above.
	60	COAL: As above.
2205-10	10	VOLCANICS: As above.
	60	CLAYSTONE: White, light grey, cream, sugary texture in part, altered feldspars, occasionally quartz crystals, trace pyrite, soft, dispersive, amorphous, altered volcanics.
	30	COAL: As above.
2210-15	TR	VOLCANICS: As above.
	80	CLAYSTONE: As above.
	20	SILTSTONE: Light brown, micromicaceous, carbonaceous specks, slightly argillaceous, soft to firm, blocky.
	TR	COAL: As above.
2215-20	TR	VOLCANICS: As above.
	80	CLAYSTONE: As above, weathered volcanics
	20	SILTSTONE: As above, 100% moderate yellow blue patchy fluorescence, crush cut, thin fluorescent ring residue.
	TR	COAL: As above.

Depth(m)	%	Description
2220-22	70	SANDSTONE: Clear, translucent, fine to predominantly medium, rounded, good sorting, angular, common argillaceous matrix in part, good to excellent inferred porosity, friable to loose quartz. 80% dull blue yellow patchy to pinpoint fluorescence, very weak slow streaming cut, crush cut, very thin ring residue.
	20	COAL: As above.
	10	CLAYSTONE: As above, altered volcanic, 50% moderately bright yellow solid fluorescence, crush cut only, thin ring residue.
2222-2225	80	SANDSTONE: As above, 40% Fluorescence, as above.
	20	CLAYSTONE: As above.
	TR	COAL: As above.
2225-2230	20	SANDSTONE: As above, no show.
	20	SILTSTONE: Brown to pinkish brown, firm, micaceous, carbonaceous detritus, trace pyrite, non calcareous, laminated, subfissile.
	30	VOLCANICS: Off white, light grey, greenish in part, slightly altered, euhedral to anhedral crystals, predominantly feldspars, very pyritic in part, occasionally anhedral mafic crystals. Grades to devitrified "glass".
	30	CLAYSTONE: Light grey, white to off white, light brown, altered volcanics, traces of relic texture, slightly calcareous in part, firm, blocky.
2230-35	20	SANDSTONE: As above, no show.
	20	SILTSTONE: As above.
	50	CLAYSTONE: Altered volcanics as above, 50% moderately bright yellow patchy fluorescence, no cut, no crush cut.
	10	COAL: As above.
2235-40	10	SANDSTONE: As above, no show.
	50	SILTSTONE: As above.
	40	CLAYSTONE: As above, 30% fluorescence, as above.
2240-45	60	CLAYSTONE (1): Light grey, cream, off white, soluble, trace relict texture in part, silty in part, soft to firm, blocky.
	30	CLAYSTONE (2): Grey, olive grey, carbonaceous specks, trace lithic fragments, firm to moderately hard, blocky.
	10	SILTSTONE: Light brown, brown grey, micromicaceous, common lithic fragments, occasional carbonaceous specks, firm, blocky.
	TR	COAL: Black, vitreous, pyritic, splintery, conchoidal fracture, very hard.

Depth(m)	%	Description
2245-50	70	CLAYSTONE (1): As above.
	10	CLAYSTONE (2): As above.
	TR	SILTSTONE: As above.
	20	COAL: As above.
2250-55	90	CLAYSTONE (1): As above, very common pyritic nodules
	10	COAL: As above, becoming resinous in part.
2255-60	90	CLAYSTONE (1): As above, abundant pyritic nodules.
	10	SANDSTONE: Light brown, brown grey, very fine to silty, subrounded, well sorted, strong silica cement, trace argillaceous matrix, micaceous, nil porosity, no show.
	TR	COAL: As above.
2260-65	100	CLAYSTONE (1): As above, light grey, predominantly off white, occasionally cream, soluble, dispersive, silty to sandy, non calcareous, soft, 30% dull pink to orange pink mineral fluorescence.
2265-70	40	SANDSTONE: Off white, speckled brownish, very fine to coarse, predominantly fine to medium, moderate sorting, weak silica cement, abundant white argillaceous matrix, common mica, trace green chlorite, trace carbonaceous microlaminae, poor to trace porosity, trace dull yellow white fluorescence, slight crush cut, trace residue ring, abundant (80%) pink to orange pink mineral fluorescence.
	60	CLAYSTONE: As above, becoming light pinkish brown, very micaceous and grading to siltstone in part.
2270-75	60	SANDSTONE: As above, no show, abundant pink mineral fluorescence.
	20	CLAYSTONE: As above, pink mineral fluorescence.
	20	SILTSTONE: Brown to light brown, occasionally mottled white, non calcareous, micaceous, carbonaceous detritus in part, soft to friable, sandy in part, subfissile.
2275-80	90	SANDSTONE: White to colourless, translucent, very fine to very coarse, angular, moderately sorted, weak silica cement, common to abundant white argillaceous matrix, common mica, friable to loose, quartz, fair porosity, no show.
	10	CLAYSTONE: As above.

Depth(m)	%	Description
2280-85	100	SANDSTONE: As above, predominantly coarse to very coarse grained, silt and very fine sand matrix, trace pyrite, predominantly loose quartz, no show.
2285-90	30	SANDSTONE: As above, predominantly very coarse grained, no show.
	70	CLAYSTONE: Light brown, occasionally white, non calcareous, micromicaceous, carbonaceous specks, soluble, dispersive, soft, subfissile.
2290-95	60	SANDSTONE: White to colourless, translucent, very fine to coarse, predominantly medium, moderate to well sorted, subangular to angular, weak silica cement, trace pyritic cement, common to abundant white argillaceous matrix, occasional silty matrix, common mica, friable, poor porosity, no show.
	30	CLAYSTONE: As above.
	10	SILTSTONE: Brown to light brown, non calcareous, mica, trace carbonaceous specks, sandy in part, very argillaceous in part, soft to firm, subfissile to blocky.
2295-2300	90	SANDSTONE: As above, predominantly medium, well sorted, friable to loose, no show.
	10	CLAYSTONE: As above.
2300-05	60	SANDSTONE: As above, fine to very coarse, predominantly coarse to very coarse, no show.
	40	CLAYSTONE: White to off white, occasionally speckled grey, soft, soluble, dispersive, trace very fine quartz, non calcareous, micaceous, in part, trace altered feldspars.
2305-10	30	SANDSTONE: As above, no show.
	60	CLAYSTONE: Off white to predominantly light to very light brown, soft soluble dispersive, non calcareous, micromicaceous, trace carbonaceous specks, subfissile, very silty in part, grading to argillaceous.
	10	SILTSTONE: Light brown, micromicaceous, non calcareous, carbonaceous specks, occasionally off white and sandy, soft to firm, subfissile.
2310-15	40	SANDSTONE: Colourless to white, very fine to very coarse, predominantly medium grained, subangular to angular, occasionally subrounded, moderate sorting, weak silica cement, common abundant white argillaceous

Depth(m)	%	Description
		matrix, trace mica, trace feldspar, trace pyrite, friable, predominantly loose quartz, fair to good porosity, no show.
	50	SILTSTONE: As above, very argillaceous grading to silty claystone.
	10	CLAYSTONE: As above.
2315-20	70	SANDSTONE: As above, predominantly fine to coarse, poor sorting, no show.
	10	SILTSTONE: As above.
	10	CLAYSTONE: As above, predominantly white.
	10	COAL: Black to brown black, hard, brittle, dull to earthy, blocky, subconchoidal to irregular fracture, argillaceous in part.
2320-25	80	SANDSTONE: As above, no show.
	20	CLAYSTONE: As above, predominantly white.
	TR	COAL: As above.
2325-30	20	VOLCANICS: Off white to cream, pale green grey to yellow green, microcrystalline to cryptocrystalline, glassy, soft to very hard, euhedral to anhedral crystals. Predominantly feldspars and altered feldspars, blocky, trace pyrite.
	20	CLAYSTONE: Off white to light brown, soft, soluble, dispersive, micromicaceous, non calcareous, silty.
	60	SANDSTONE: As above, fair to predominantly coarse, no show.
2330-35	10	VOLCANICS: As above.
	90	CLAYSTONE: Off white to very light brown, soft, soluble, dispersive micromicaceous, non calcareous, silky lustre in part.
	TR	COAL: Black, dull, firm to hard, blocky.
2335-40	100	CLAYSTONE: As above, greyish in part, relic textures in part, probably very altered volcanics.
	TR	COAL: Black, dull to subvitreous, hard, brittle, blocky, even fracture.
2340-45	50	CLAYSTONE: As above.
	50	VOLCANICS: White to off white, microcrystalline, ophitic texture, euhedral to subhedral crystals, predominantly feldspars, predominantly altered to white kaolinite, trace dark mafics, abundant pyritic nodules, friable to hard.
2345-50	60	SANDSTONE: White to colourless, translucent, very fine to coarse, poor sorting,

Depth(m)	%	Description
		angular to subrounded, moderate calcareous/dolomitic cement, common white argillaceous matrix, trace pyrite, trace green (chlorite?) grains, common feldspars, nil porosity, hard. 100% Patchy moderately bright yellow fluorescence, no cut no residue, (mineral fluorescence).
	40	CLAYSTONE: As above.
2350-55	80	SANDSTONE: Clear, translucent, occasionally greenish, subangular to subrounded, fine to predominantly medium, fair to good sorting, dolomitic cement in part, trace pyrite, trace argillaceous matrix, very hard to loose quartz, nil to inferred good porosity, mineral fluorescence only.
	10	CLAYSTONE: As above.
	10	COAL: Black, brown, very argillaceous in part, slightly pyritic, resinous to woody texture, even fracture, moderately hard to hard, blocky.
2355-60	60	SANDSTONE: As above, predominantly medium loose quartz, occasional pyrite nodules, trace mineral fluorescence only.
	30	SILTSTONE: Light brown, brown, argillaceous, common lithic fragments, common carbonaceous specks, occasionally fine sand, firm, blocky.
	10	CLAYSTONE: As above.
2360-65	20	SANDSTONE: As above, predominantly dolomite cemented, nil porosity, occasional muscovite fragments, mineral fluorescence only.
	70	SILTSTONE: As above, occasionally off white, carbonaceous laminae.
	5	CLAYSTONE: As above.
	5	COAL: As above grades to carbonaceous claystone in part.
2365-70	10	SANDSTONE: As above, mineral fluorescence only.
	80	SILTSTONE: As above becoming soft.
	10	CLAYSTONE: As above.
	TR	COAL: As above.
2370-72	TR	SANDSTONE: As above, no show.
	80	SILTSTONE: Brown, light brown, off white, very argillaceous in part, carbonaceous laminae and specks, trace lithic fragments, occasionally micromicaceous, moderately calcareous, soft to firm, amorphous to blocky, mineral fluorescence.
	20	CLAYSTONE: As above.
	TR	COAL: As above.

Depth(m)	%	Description
2372-2380	20	SILTSTONE: As above.
	10	COAL: Black, brown black, firm to hard, blocky, dull, argillaceous, subfissile to blocky grading to carbonaceous shale.
	30	SANDSTONE: Off white to light grey, very fine to medium, rare coarse, subangular to subrounded, poor to moderate sorting, weak silica cement, common to abundant white to grey argillaceous matrix, friable, trace porosity, no show.
	40	CLAYSTONE: Off white to light grey, light brown to brown grey, silty and sandy in part, carbonaceous in part, very soft and soluble in part, firm and blocky in part, non calcareous.
2380-85	40	SANDSTONE: Colourless to white, very fine to very coarse, rounded to angular with increasing grain size, poor sorting, weak to moderate dolomitic cement, trace interstitial clay, trace carbonaceous detritus in part, trace altered feldspars, common mica, friable to occasionally hard, poor porosity, no show.
	10	COAL: As above.
	20	SILTSTONE: As above.
	30	CLAYSTONE: As above.
2385-90	100	SANDSTONE: As above, predominantly medium to coarse grained, subangular, weak dolomitic cement, predominantly abundant white kaolinite clay matrix, trace pyrite, fair porosity, no show.
2390-95	10	COAL: Black, brown black, dull, hard to firm, blocky to platy, trace pyrite, trace sand and clay.
	10	SILTSTONE: Light brown to grey brown, argillaceous, non calcareous, carbonaceous specks, firm, blocky.
	20	CLAYSTONE: Off white to light grey, grey to brown grey, soft to firm, silty to sandy, non calcareous, micaceous, soluble and dispersive.
	60	SANDSTONE: As above.
2395-2400	20	COAL: As above, very argillaceous in part.
	30	SILTSTONE: As above, predominantly very carbonaceous.
	40	SANDSTONE: As above.
2400-05	80	CLAYSTONE: Off white to light brown, becoming predominantly grey to light grey, soft to firm, soluble, sandy, pyritic, becoming sticky in part, subfissile.
	10	COAL: Black, dull, hard, brittle, conchoidal fracture, blocky to subplaty.

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Depth(m)	%	Description
	10	SANDSTONE: White, very fine grained, subrounded to rounded, well sorted, weak calcareous cement, trace pyrite, abundant white argillaceous matrix, friable, nil to trace porosity, no show.
2405-10	80	CLAYSTONE: As above.
	10	COAL: As above.
	10	SANDSTONE: As above.
2410-15	100	CLAYSTONE: As above, becoming very silty in part, grading to argillaceous siltstone.
2415-20	50	SANDSTONE: Colourless to white, very fine to coarse, predominantly medium, angular, moderate sorting, weak dolomitic cement, trace to common white argillaceous matrix, trace mica, trace pyrite, friable, fair porosity, no show, dull yellow pink mineral fluorescence.
	10	COAL: As above, subvitreous to vitreous in part, non calcareous.
	30	CLAYSTONE: As above.
2420-25	80	SANDSTONE: As above, no show.
	20	CLAYSTONE: As above.
2425-2430	60	SANDSTONE: As above, predominantly medium to coarse grained, no show.
	40	CLAYSTONE: Light brown to brown, firm to hard, soluble, silty to very silty in part, micaceous in part, common coal detritus, non calcareous, blocky, laminated.
2430-35	20	COAL: Black to brownish black, firm to hard, dull to earthy, argillaceous in part, platy, grades to carbonaceous shale.
	30	SANDSTONE: As above.
	20	CARBONACEOUS SHALE: Dark brown, firm to hard, blocky to platy, subfissile to fissile.
	30	CLAYSTONE: As above.
2435-40	10	COAL: As above.
	20	SANDSTONE: As above.
	70	CLAYSTONE: As above.
2440-45	20	SANDSTONE: As above.
	10	COAL: As above.
	70	CLAYSTONE: As above.
2445-50	20	COAL: Black, dull to subvitreous, firm to hard, blocky, even fracture, argillaceous in part.
	50	CLAYSTONE: As above.

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Depth(m)	%	Description
	30	SANDSTONE: Off white to light grey, very fine to medium, subangular to subrounded, moderate sorting, weak dolomitic cement, abundant white argillaceous matrix, carbonaceous detritus in part, micaceous, friable, poor porosity, no show.
2450-55	90	SANDSTONE: As above predominantly medium grained, subangular, moderate to well sorted, weak dolomitic cement, trace to common matrix, good porosity, no show, dull orange pink mineral fluorescence.
	10	COAL: As above.
2455-60	100	SANDSTONE: As above, white to colourless, very fine to coarse, predominantly weak dolomitic cement, fair porosity, no show, mineral fluorescence as above.
2460-65	70	SANDSTONE: As above, predominantly medium, weak dolomitic cement in part, mineral fluorescence only.
	30	SILTSTONE: Brown, brown grey, slightly to moderately argillaceous in part, carbonaceous specks, trace lithics, soft to firm, massive to blocky.
	TR	COAL: As above.
2465-70	50	SANDSTONE: Clear, translucent, angular to subangular, very fine to medium, predominantly fine, moderate sorting strong dolomitic cement in part, trace pyrite, nil to inferred fair porosity, very hard to loose quartz, mineral fluorescence only.
	50	SILTSTONE: As above, becoming very carbonaceous
	TR	COAL: As above.
2470-80	30	SANDSTONE: As above.
	70	SILTSTONE: As above.
2480-85	30	SANDSTONE: As above, trace pyritic cement, moderate silica cement in part.
	70	SILTSTONE: Brown, brown grey, off white, argillaceous, very carbonaceous in part, carbonaceous specks and laminae, common lithics, grades to silty claystone in part, soft to firm, blocky.
2485-90	100	SILTSTONE: As above, very argillaceous, trace dolomite.
2490-95	10	COAL: Black, subvitreous, hard, brittle, blocky, subconchoidal fracture.
	30	SILTSTONE: As above.

Depth(m)	%	Description
	60	SANDSTONE: White, colourless, occasionally light grey, fine to medium, medium to well sorted, subrounded, weak to strong dolomitic cement, clean in part, common white kaolinite matrix in part, trace mica, trace pyrite, friable to very hard, trace porosity, abundant mineral fluorescence.
2495-2500	40	SANDSTONE: As above, strong dolomitic/calcareous cement, abundant white argillaceous matrix, abundant mineral fluorescence.
	60	SILTSTONE: As above, predominantly brown to grey.
2500-05	10	SANDSTONE: As above, mineral fluorescence only.
	90	SILTSTONE: As above.
	TR	COAL: As above.
2505-10	60	SANDSTONE: White, clear, light brown, fine to medium, angular to subangular, moderate sorting, strong dolomitic cement in part, occasional white argillaceous matrix, trace pyrite, nil to poor porosity, 90% yellow mineral fluorescence.
	40	SILTSTONE: As above, becoming very argillaceous in part.
2510-15	30	SANDSTONE: As above, mineral fluorescence only, occasional pyritic cement.
	40	SILTSTONE: As above, becoming very argillaceous in part.
	30	CLAYSTONE: White, light brown, light grey, silty, carbonaceous, trace pyrite, carbonaceous specks and laminae, firm, blocky.
2515-20	90	SANDSTONE: Clear, white, translucent, subangular to subrounded, medium, good sorting, strong dolomitic/calcarareous cement in part, occasionally white argillaceous matrix, trace pyrite, loose to very hard, nil to fair porosity, 90% dull yellow solid mineral fluorescence, 10% moderately bright yellow solid fluorescence, slow streaming milky cut, good crush cut, thin to moderate fluorescence, ring residue.
	10	CLAYSTONE: As above, grades to argillaceous siltstone.
2520-25	50	SANDSTONE; As above, 70% dull yellow mineral fluorescence, 30% moderately bright yellow gold patchy to solid fluorescence, slow streaming milky cut to crush cut only in part, thin ring residue.

Depth(m)	%	Description
	50	CLAYSTONE: As above.
2525-30	30	SANDSTONE (1): As above, 100% mineral fluorescence as above.
	50	SANDSTONE (2): Clear, white, translucent, fine to medium, subrounded, good sorting, common argillaceous matrix, weak dolomitic cement in part, trace lithic grains, friable to loose quartz, poor to fair inferred porosity, 50% yellow gold patchy fluorescence, weak to moderate milky streaming cut, good crush cut, thin ring residue.
	20	CLAYSTONE: As above.
2530-35	100	SANDSTONE (2): As above predominantly loose quartz, 60% dull pin point to moderately bright patchy yellow gold fluorescence, very weak diffuse milky cut from aggregates with white argillaceous matrix only, thin ring residue.
2535-40	70	SANDSTONE (2): As above, fluorescence As above.
	10	SANDSTONE (1): As above, mineral fluorescence only as above.
	10	CLAYSTONE: As above.
	10	SILTSTONE: Light brown, brown, very argillaceous, carbonaceous specks and laminae, trace lithics, firm to moderately hard, blocky.
	TR	COAL: Black, black brown, argillaceous, slightly pyritic, earthy lustre, blocky fracture, hard, brittle, subplaty to blocky.
2540-45	70	SANDSTONE: Clear, white, light grey, fine to medium, subrounded, moderate sorting, weak to strong silica and dolomitic cement, occasionally white argillaceous matrix, trace pyrite coatings, occasional lithics, friable to hard, trace to poor porosity, 80% yellow gold moderately bright patchy fluorescence, very weak streaming milky cut, good crush cut, thin ring residue.
	20	SILTSTONE: As above, very argillaceous in part.
	10	COAL: As above.
2545-50	10	SANDSTONE: As above, poor porosity, 20% fluorescence as above, crush cut only.
	70	CLAYSTONE: Grey, light grey, slightly calcareous, trace pyrite, carbonaceous specks common, occasional carbonaceous laminae, hard, blocky to platy, subfissile to fissile in part, grades to carbonaceous shale.
	20	SILTSTONE: As above.

Depth(m)	%	Description
2550-55	10	SILTSTONE: As above.
	30	SANDSTONE: As above, also white, fine grained, subangular, well sorted, moderate dolomitic/silica cement, common interstitial white matrix, hard, nil porosity, no show.
	60	CLAYSTONE: As above, but becoming predominantly light to dark brown silty in part.
2555-60	30	SANDSTONE: Clear to translucent, medium to coarse, predominantly medium, subangular to subrounded, moderate to good sorting, trace silica cement, minor kaolinite matrix in part, trace nodular pyrite, trace milky quartz, moderately hard, loose in part, very poor to occasionally poor porosity, 20% Moderately bright patchy pale yellow fluorescence, very weak crush cut, thin ring residue.
	60	SILTSTONE: Light to occasionally medium brown, grey brown, moderate to very argillaceous, common carbonaceous fragments, trace mica, trace lithics, firm to moderately hard, blocky.
	10	CLAYSTONE: Light to medium grey, slightly silty, trace disseminated pyrite, slightly calcareous, moderately hard, blocky to massive.
	TR	COAL: Brown black, black, lignitic, slightly to moderately argillaceous/silty, brittle, blocky to subfissile in part.
2560-65	10	SANDSTONE: As above, becoming fine to medium, trace fluorescence as above.
	80	SILTSTONE: As above, slightly arenaceous in part.
	10	CLAYSTONE: As above.
2565-70	40	SILTSTONE: As above.
	60	CLAYSTONE: Light grey to medium grey, olive grey, slightly silty, trace carbonaceous specks, slightly micromicaceous, soft to firm, massive to blocky.
2570-75	30	SILTSTONE: As above.
	70	CLAYSTONE: As above.
2575-80	30	SANDSTONE: Off white, clear to translucent, medium to coarse, occasionally fine, subangular to subrounded, moderate sorting, trace silica cement, trace kaolinite matrix, trace nodular pyrite, trace lithic fragments, predominantly loose, occasionally hard aggregates, poor porosity, no fluorescence.
	30	SILTSTONE: As above.
	40	CLAYSTONE: As above.

Depth(m)	%	Description
2580-85	30	SANDSTONE: Off white, clear to translucent, medium to coarse , subangular to subrounded, moderate sorting, common silica cement, moderate kaolinite matrix, trace nodular pyrite, trace mica (muscovite), moderately hard, occasional loose grains, very poor to nil porosity, 10% very dull pale yellow, yellow green fluorescence, very weak crush cut, trace ring residue.
	30	SILTSTONE: Light to medium grey brown, medium brown, moderately argillaceous, common carbonaceous fragments, trace lithics, trace mica, moderately hard, blocky.
	40	CLAYSTONE: Light to medium grey, olive grey, slightly silty, micromicaceous, slightly calcareous in part, firm to moderately hard, massive to blocky.
2585-90	40	SANDSTONE: Predominantly as above, trace lithic fragments, very poor porosity, 30% fluorescence as above.
	50	SILTSTONE: As above.
	10	CLAYSTONE: As above.
2590-95	50	SANDSTONE: Off white, light grey, occasionally light brown, fine to predominantly medium, occasionally coarse, angular to subrounded, moderate sorting, common silica cement, trace dolomitic cement, trace to locally common kaolinite matrix, trace lithic fragments, trace pyrite, moderately hard, very poor to nil porosity, 10% fluorescence as above.
	30	SILTSTONE: As above.
	20	CLAYSTONE: As above.
	TR	COAL: Brown black, black, dull to subvitreous lustre, argillaceous in part, brittle, blocky to subfissile.
2595-2600	80	SANDSTONE: Predominantly as above, with abundant kaolinite matrix, moderately silica cement, very poor to nil porosity, no shows.
	20	SILTSTONE: As above.
2600-05	70	SANDSTONE: Off white, light grey, occasionally light brown, fine to predominantly medium to coarse, angular to subrounded, moderate sorting, common silica cement, trace to common kaolinite matrix, common nodular pyrite and pyritic cement, trace lithic fragments, common milky quartz, hard, tight, no fluorescence.
	30	SILTSTONE: Medium brown, light brown grey, moderately argillaceous, slightly

Depth(m)	%	Description
		arenaceous, micromicaceous, trace carbonaceous fragments, trace lithic fragments, firm to moderately hard, blocky.
2605-10	60	SANDSTONE: Off white, clear to translucent, medium to occasionally coarse, subangular to subrounded, moderate to locally good sorting, moderate silica cement, trace to locally common kaolinite matrix, trace feldspar, trace nodular pyrite, moderately hard, loose in part, poor to nil porosity, no fluorescence.
	30	SILTSTONE: As above.
	10	COAL: Brown black, black, argillaceous /silty, moderately hard, brittle, blocky.
2610-15	70	SANDSTONE: As above, becoming predominantly loose, 10% moderately bright patchy to pinpoint blue yellow fluorescence, very weak diffuse cut, weak crush cut, no ring residue.
	30	SILTSTONE: As above.
	TR	COAL: As above.
2615-20	50	SANDSTONE: As above, becoming predominantly subangular with increasing grain size, common argillaceous matrix in part, 5% fluorescence as above, crush cut only.
	30	SILTSTONE: As above.
	20	CLAYSTONE: Grey, light grey, silty in part, non calcareous, trace lithics, slightly carbonaceous, firm to moderately hard, subfissile.
2620-25	40	SANDSTONE: Clear to off white, subrounded, medium, occasionally fine, fair to good sorting, weak silica cement in part, common argillaceous matrix, loose in part, moderately hard, nil to fair porosity, 5% fluorescence as above, crush cut only.
	40	SILTSTONE: As above.
	20	CLAYSTONE: As above, becoming cream in part, slightly sandy in part, carbonaceous specks.
2625-30	50	SANDSTONE: White, clear, translucent, fine to medium, occasionally coarse, subangular to subrounded, moderate sorting, common silica cement, common white argillaceous matrix, occasional mica, common pyrite nodules, hard, rarely loose, nil to trace porosity, no fluorescence.
	30	SILTSTONE: As above.
	20	CLAYSTONE: As above.
	TR	COAL: As above.

Depth(m)	%	Description
2630-35	20	SANDSTONE: As above, nil porosity, no fluorescence.
	70	SILTSTONE: Brown, light brown, grey, argillaceous, moderately carbonaceous, common carbonaceous streaks and specks, coal laminae, occasional lithics, trace mica, occasional moderate silica cement, very fine sand in part, firm to hard, blocky to platy.
	10	CLAYSTONE: As above.
	TR	COAL: As above.
2435-40	90	SILTSTONE: As above, becoming predominantly grey.
	10	CLAYSTONE: As above.
	TR	SANDSTONE: As above, mineral fluorescence only.
2640-45	20	SANDSTONE: Clear, white, light grey, very fine to medium, predominantly fine, subangular, poor to moderate sorting, strong silica cement, locally common argillaceous matrix, trace mica, common pyritic cement and nodules, occasional loose quartz, hard, trace to nil porosity, no show.
	70	SILTSTONE: As above, very argillaceous in part.
	10	CLAYSTONE: As above.
2645-50	50	SANDSTONE: As above, fine to medium, good sorting, subrounded, weak silica cement, predominantly loose, trace to fair porosity, no show, mineral fluorescence only.
	40	CLAYSTONE: White, cream, non calcareous, trace sand, common carbonaceous laminae and streaks, firm, blocky.
	10	SILTSTONE: As above.
2650-55	80	SANDSTONE: As above, no show.
	20	CLAYSTONE: As above, very silty in part.
	TR	SILTSTONE: As above.
2655-60	80	SANDSTONE: As above, predominantly loose, no show.
	20	CLAYSTONE: As above.
	TR	COAL: Black, subvitreous, subconchoidal fracture, slightly pyritic, brittle, hard, blocky to platy.
2660-65	30	SANDSTONE: White, light grey, clear, subangular, medium grained, good sorting, moderate silica cement, trace pyrite cement, hard, trace porosity, no show.
	70	CLAYSTONE: Light brown, light grey, silty in part, non calcareous, very carbonaceous in part, common coaly laminae, trace lithic

Depth(m)	%	Description
		grains, soft to firm, dispersive in part, blocky to subfissile.
2665-70	10	SANDSTONE: As above, locally common white argillaceous matrix, no show.
	90	CLAYSTONE: As above.
2670-75	10	SANDSTONE: As above.
	20	SILTSTONE: Light brown, brown grey, very argillaceous, moderately carbonaceous, common lithic fragments, weak silica cement, grades to very fine sand, trace mica, moderately hard, blocky.
	70	CLAYSTONE: As above.
2675-80	40	SANDSTONE: White, light grey, occasionally clear, fine to medium, subrounded to rounded, poor to moderate sorting, common silica cement, abundant white argillaceous matrix, trace pyrite, friable to moderately hard, occasionally loose quartz, trace to fair porosity, 10% moderately bright yellow patchy fluorescence, crush cut only, thin ring residue.
	60	CLAYSTONE: As above.
	TR	COAL: Black, brown, earthy, argillaceous, trace pyrite, brittle, blocky, hard.
2680-85	60	SANDSTONE: As above, trace fluorescence as above, crush cut only.
	40	CLAYSTONE: As above, grades to argillaceous siltstone.
2685-90	70	SANDSTONE: Off white, light grey, clear to translucent, fine to medium, occasionally coarse, angular to subrounded, poor to moderate sorting, moderate silica cement, locally common kaolinite matrix, trace lithic carbonaceous fragments, moderately hard, loose in part, poor to nil porosity, trace dull patchy pale yellow/yellow green fluorescence, weak crush cut, thin ring residue.
	30	CLAYSTONE: Light to medium grey, grey brown, occasionally medium brown, silty in part, moderately carbonaceous, slightly micromicaceous, moderately hard, blocky to subfissile in part.
2690-95	90	SANDSTONE: Clear to translucent, medium to occasionally coarse, subrounded, good sorting, trace silica cement, common kaolinite matrix, trace nodular pyrite, trace milky quartz, trace mica (muscovite), trace lithic fragments, moderately hard to predominantly loose, inferred poor to fair porosity, no fluorescence.

Depth(m)	%	Description
	10	CLAYSTONE: As above.
2695-2700	80	SANDSTONE: Predominantly as above, poor to nil porosity, no fluorescence.
	20	CLAYSTONE: As above.
2700-05	90	SANDSTONE: Off white, light grey, clear to translucent, medium to coarse, subangular to subrounded, moderate to good sorting, common kaolinite matrix, trace silica cement, trace nodular pyrite, trace smoky and milky quartz, moderately hard to loose, poor to inferred fair porosity, trace dull yellow/green patchy fluorescence, very weak crush cut, thin ring residue.
	10	CLAYSTONE: As above.
2705-10	70	SANDSTONE: Off white, light grey, clear to translucent, fine to predominantly medium to coarse, angular to subrounded, poor sorting, trace silica cement, trace to common kaolinite matrix, trace lithic fragments, common milky quartz, trace carbonaceous fragments, moderately hard, loose in part, very poor to poor porosity, trace fluorescence as above.
	30	CLAYSTONE: As above.
2710-15	80	SANDSTONE: Off white, light grey, clear to translucent, fine, predominantly medium to coarse, angular to subrounded, poor sorting, trace silica cement, trace to locally common kaolinite matrix, trace nodular pyrite, trace milky quartz, trace lithic fragments, minor carbonaceous/coaly fragments, moderately hard to loose, very poor to nil porosity, trace dull patchy yellow green fluorescence, weak crush cut, thin ring residue.
	20	CLAYSTONE: Light brown grey, medium grey, medium brown, slightly silty, trace carbonaceous fragments, slightly micromicaceous, moderately hard, blocky to subfissile in part.
2715-20	90	SANDSTONE: As above, trace fluorescence as above.
	10	CLAYSTONE: As above.
2720-25	80	SANDSTONE: Predominantly as above, common kaolinite matrix, trace carbonaceous fragments, moderately hard, very poor to nil porosity, trace mineral fluorescence only.
	20	CLAYSTONE: As above.
2725-30	20	SANDSTONE: As above, trace orange mineral fluorescence only.

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Depth(m)	%	Description
	80	CLAYSTONE: Light brown grey, medium brown, slightly silty, common carbonaceous fragments, common coaly microlaminae, micromicaceous, firm to moderately hard, blocky to subfissile.
2730-35	40	SANDSTONE: Off white, clear to translucent, medium to occasionally coarse, subangular to subrounded, moderate to good sorting, trace silica cement, common kaolinite matrix, trace nodular pyrite, trace smoky and milky quartz, trace coaly fragments, trace lithic fragments, moderately hard to predominantly loose, very poor to inferred fair porosity, no fluorescence.
	60	CLAYSTONE: As above.
2735-40	40	SANDSTONE: As above, mineral fluorescence only.
	60	CLAYSTONE: As above.
	TR	COAL: Brown black, black, dull to occasionally vitreous lustre, very argillaceous/silty, moderately hard, brittle, blocky.
2740-45	90	SANDSTONE: Off white, light grey, clear to translucent in part, medium to coarse, occasionally fair, angular to subrounded, moderate to poor sorting, common silica cement, common kaolinite matrix, common pyrite cement and nodules, trace lithic fragments, trace carbonaceous/coal fragments, common milky quartz, moderately hard, very poor to nil porosity, mineral fluorescence only.
	10	CLAYSTONE: Grey brown, olive grey, slightly silty, slightly calcareous in part, trace disseminated pyrite, trace carbonaceous fragments, micromicaceous in part, moderately hard, occasionally hard, blocky to subfissile.
	TR	COAL: Brown black, very argillaceous/silty, earthy, brittle, blocky, subfissile.
2745-50	20	SANDSTONE: As above, very poor to nil porosity, no fluorescence.
	80	CLAYSTONE: Light brown grey, medium grey, olive grey, occasionally medium brown, slightly silty, trace carbonaceous fragments, slightly micromicaceous, trace carbonaceous fragments, firm to hard, blocky to subfissile.
	TR	COAL As above.
2750-55	10	SANDSTONE: As above, no fluorescence.

Depth(m)	%	Description
	90	CLAYSTONE: Predominantly as above, occasionally waxy texture, slightly silty in part.
2755-60	TR	SANDSTONE: As above, predominantly very fine to fine, loose quartz, no show.
	100	CLAYSTONE: As above, moderately carbonaceous.
2760-65	100	CLAYSTONE: Brown, off white, light grey, slightly calcareous, common carbonaceous specks and laminae, common lithics, silty in part, grades to carbonaceous shale in part, firm to hard, blocky to platy, subfissile in part.
	TR	SANDSTONE: As above, nil porosity, no show.
2765-70	100	CLAYSTONE: As above.
	TR	SANDSTONE: As above, nil porosity, no fluorescence.
2770-75	70	SANDSTONE: White, light grey, occasionally light brown, fine to coarse, predominantly fine to medium, subrounded, occasionally subangular, poor to moderate sorting, common dolomitic/silica cement, occasional pyritic cement, trace pyrite nodules, occasionally argillaceous matrix, very hard, nil porosity, mineral fluorescence only.
	30	CLAYSTONE: Brown, light grey, carbonaceous, trace pyrite, siliceous, hard to very hard, blocky.
2775-80	70	SANDSTONE: As above, nil porosity, very hard, no show, 80% very dull orange yellow mineral fluorescence.
	30	CLAYSTONE: As above, coaly laminae in part.
2780-85	70	SANDSTONE: As above, nil porosity, no show, mineral fluorescence only.
	30	CLAYSTONE: As above.
2785-90	90	SANDSTONE: Clear, white, smoky, grey, brown, occasionally red brown, subangular to angular, fine to very coarse, angular broken fragments, poor sorting, abundant silica/dolomitic cement, common disseminated pyrite, nodular pyrite, vein pyrite, occasional local argillaceous matrix, very hard, nil porosity, no show, yellow orange mineral fluorescence.
	10	CLAYSTONE: Brown, light grey, dark brown, carbonaceous, coaly laminae in part,

Depth(m)	%	Description
		common pyrite, very siliceous in part, common lithic fragments, firm to hard, blocky to platy, occasionally subfissile.
2790-95	95	SANDSTONE: As above, nil porosity, no show.
	5	CLAYSTONE: As above.
2795-2800	90	SANDSTONE: As above, tight, no show.
	10	CLAYSTONE: As above.
2800-03	70	SANDSTONE: As above, slightly chloritic in part, tight, no show.
	30	CLAYSTONE: As above.

APPENDIX 2

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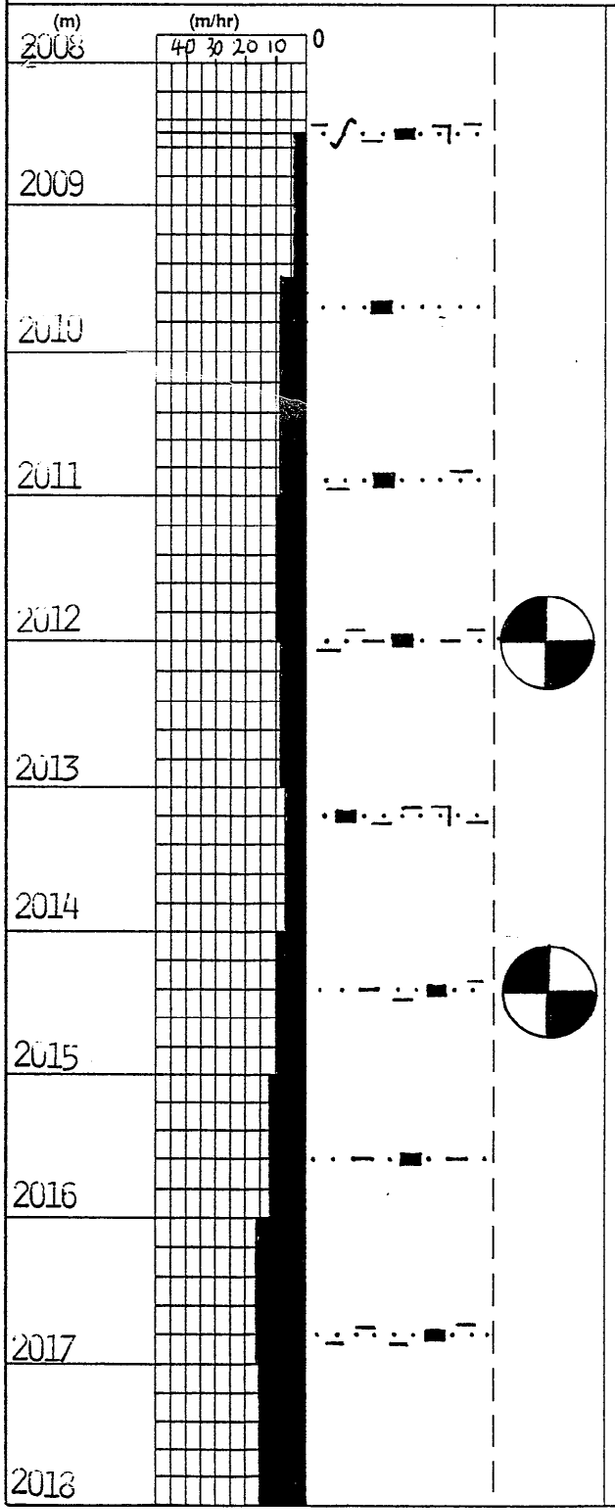
CORE DESCRIPTION

CORE No.:	1	**WELL:**	Moonfish 1
Interval cored:	2008.5-2021.75m	Recovered:	12.94 (98%)
Cut:	13.25m	Bit Size:	9 7/8"
Bit type:	RC412	Date:	24th May 1992
Described by:	Clota/Feltman/Barwick		



Descriptive Lithology

2008.5 SANDSTONE: Off white, light grey, light brown, fine to medium, subangular to subrounded, good sorting, abundant kaolinite matrix, trace silica cement, common mica (muscovite?), trace carbonaceous fragments, rare glauconite, friable, very poor to nil porosity, no fluorescence.

2009.7 SANDSTONE: Light brown, light grey, very fine to fine, subangular to subrounded, good sorting, trace silica cement, trace carbonaceous specks and laminae, moderately hard, poor to nil porosity, no fluorescence.

2010.9 SANDSTONE: Light brown, medium grey, very fine to fine, subangular to subrounded, good sorting, trace silica cement, common kaolinite matrix, common carbonaceous fragments, moderately hard, poor to nil porosity, no fluorescence.

2012.0 LAMINATED SANDSTONE: Light grey, light brown, fine to medium, subangular to subrounded, good sorting, abundant kaolinite matrix, trace silica cement, abundant carbonaceous/silty laminae (<1mm), hard, poor to fair porosity, 20% dull to patchy moderately bright yellow green fluorescence, moderate streaming cut, thin ring residue.

2013.2 SANDSTONE: Light grey, occasionally dark grey, fine, subangular to subrounded, well sorted, moderate silica cement, abundant kaolinite matrix, common mica (muscovite), common carbonaceous specks, friable, poor porosity, no fluorescence.

2014.4 LAMINATED SANDSTONE: Light to dark grey, cream in part, fine to medium, angular to subrounded, good sorting, common silica cement, common kaolinite matrix, friable to hard, very poor to nil porosity, (abundant carbonaceous laminae <1mm), 5% pale yellow pin point fluorescence, trace crush cut, nil to faint ring residue.

2015.6 LAMINATED SANDSTONE: Light to dark grey, brown, very fine to fine, subangular to angular, good sorting, trace kaolinite matrix, strong silica cement, abundant carbonaceous/silty laminae (<1mm), friable to moderately hard, poor to nil porosity, no fluorescence.

2016.8 SANDSTONE: Off white, light grey, medium, angular to subrounded, good sorting, trace silica cement, abundant kaolinite matrix, common carbonaceous/silty laminae (<1mm), friable, poor porosity, no fluorescence.

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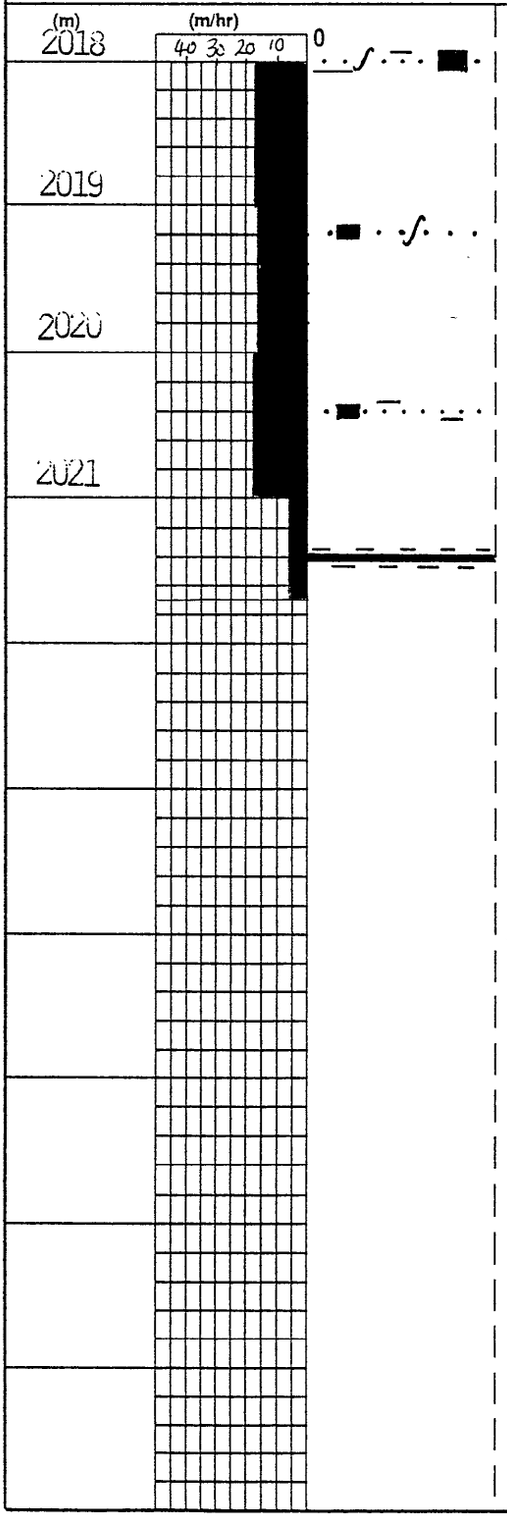
CORE DESCRIPTION

CORE No.:	1	**WELL:**	Moonfish 1
Interval cored:	2008.5-2021.75m	Recovered:	12.94 (98%)
Cut:	13.25m	Bit Size:	9 7/8"
Bit type:	RC412	Date:	24th May 1992
Described by:	Clota/Feltman/Barwick		

Interval	Depth & ROP	Graphic	Shows	Descriptive Lithology
				

2018 SANDSTONE: Light grey, grey brown, fine to medium, subangular, good sorting, common kaolinite matrix, common carbonaceous specks and laminae, rare glauconite, friable, poor to nil porosity, no shows, trace mineral fluorescence only.

2019.2 SANDSTONE: Light grey, off white, medium, subangular to subrounded, good sorting, trace silica cement, trace kaolinite matrix, rare glauconite, rare carbonaceous specks, friable, poor to fair porosity, no shows.

2020.4 SANDSTONE: Light grey, grey brown, fine to medium, subangular to subrounded, good sorting, trace silica cement, common kaolinite matrix, common carbonaceous laminae, friable, poor to nil porosity, no shows.

2021.4 COAL: Black, argillaceous, trace disseminated pyrite, subvitrious lustre, brittle, fissile to blocky.

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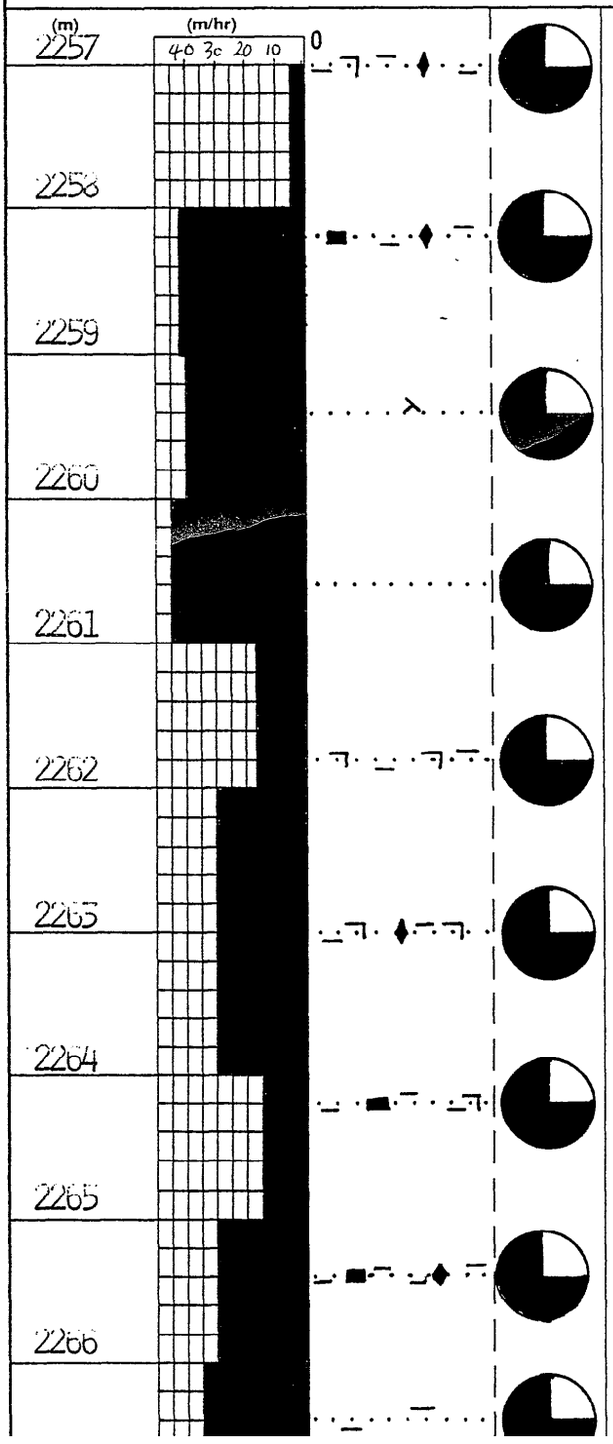
CORE DESCRIPTION

CORE No.:	2	**WELL:**	Moonfish 1
Interval cored:	2257-2275m	Recovered:	18m (100%)
Cut:	18m	Bit Size:	9 7/8"
Bit type:	RC412	Date:	24th May 1992
Described by:	Clota/Feltman/Barwick		



Descriptive Lithology

2257 ARKOSE: Light grey, light brown, medium to coarse, angular to subangular, good sorting, abundant silty/kaolinite matrix, trace pyrite, trace mica, moderately hard, friable, very poor to nil porosity, 80% bright pale yellow soluble fluorescence, fast to instant streaming cut, moderately thick ring residue, light brown oil stain in white light, weak petroliferous odour.
2258.2 SANDSTONE: Light grey, grey brown, medium to very coarse, angular to subangular, moderate sorting, trace silica cement, moderate argrillaceous/silty matrix, trace pyrite, common very coarse milky and smoky quartz, fair to good porosity, common 1 mm carbonaceous laminae, 90% bright pale yellow solid fluorescence, instant to fast streaming cut, moderately thick ring residue, light brown stain in white light, weak petroliferous odour.
2259.4 SANDSTONE: Light brown, medium to coarse, subangular to subrounded, good sorting, weak to moderate silica cement, trace lithic fragments, trace feldspar, good porosity, 100% pale yellow fluorescence, instant cut, thick ring residue, light brown oil stain in white light, strong petroliferous odour.
2260.6 SANDSTONE: Light brown, very coarse to granular, subangular to subrounded, moderate to good sorting, weak silica cement, trace silty matrix, trace smoky quartz, friable to very friable, very good porosity, 100% pale yellow bright solid fluorescence, instant cut, very thick ring residue, thick medium brown oil stain in white light, strong petroliferous odour.
2261.8 SANDSTONE: Off white, light brown, fine to medium, subangular to subrounded, moderate to good sorting, moderate silica cement, common argillaceous/silty matrix, common mica, common feldspar, friable to moderately hard, very poor porosity, 60-80% bright pale yellow solid fluorescence, fast to instant streaming cut, moderately thick ring residue, light brown oil stain in white light, weak petroliferous odour.
2263: ARKOSE: Light brown, off white, fine to medium, subangular to subrounded, moderate to good sorting, abundant kaolinite/silty matrix, trace pyrite, common mica, friable to moderately hard, very poor to nil porosity, 80% pale yellow solid fluorescence, fast to instant streaming cut, moderately thick ring residue, light brown oil stain in white light, weak petroliferous odour.
2264.2 ARKOSE: Light brown, light grey, medium to coarse, subangular to angular, moderate sorting, abundant kaolinite/silty matrix, trace mica, common carbonaceous laminae (<1mm), friable to moderately hard, 60% bright pale yellow solid fluorescence, moderately fast streaming cut, moderate ring residue, light brown oil stain in white light, weak petroliferous odour.
2265.4 SANDSTONE: Light brown to light grey, medium to occasionally coarse, moderate to good sorting, weak silica cement, abundant kaolinite/silty matrix, trace carbonaceous fragments, common milky quartz, trace feldspar and pyrite, moderately hard, very poor porosity, 100% pale yellow solid bright fluorescence, instant to fast streaming cut, moderately thick ring residue, light brown oil stain in white light, weak to moderate petroliferous odour.
2266.4 ARKOSE: Light grey to light brown, medium to coarse, angular to subangular, moderate to good sorting, abundant argillaceous/kaolinite matrix,, friable to moderately hard, poor porosity, 60% pale yellow solid fluorescence, fast to instant

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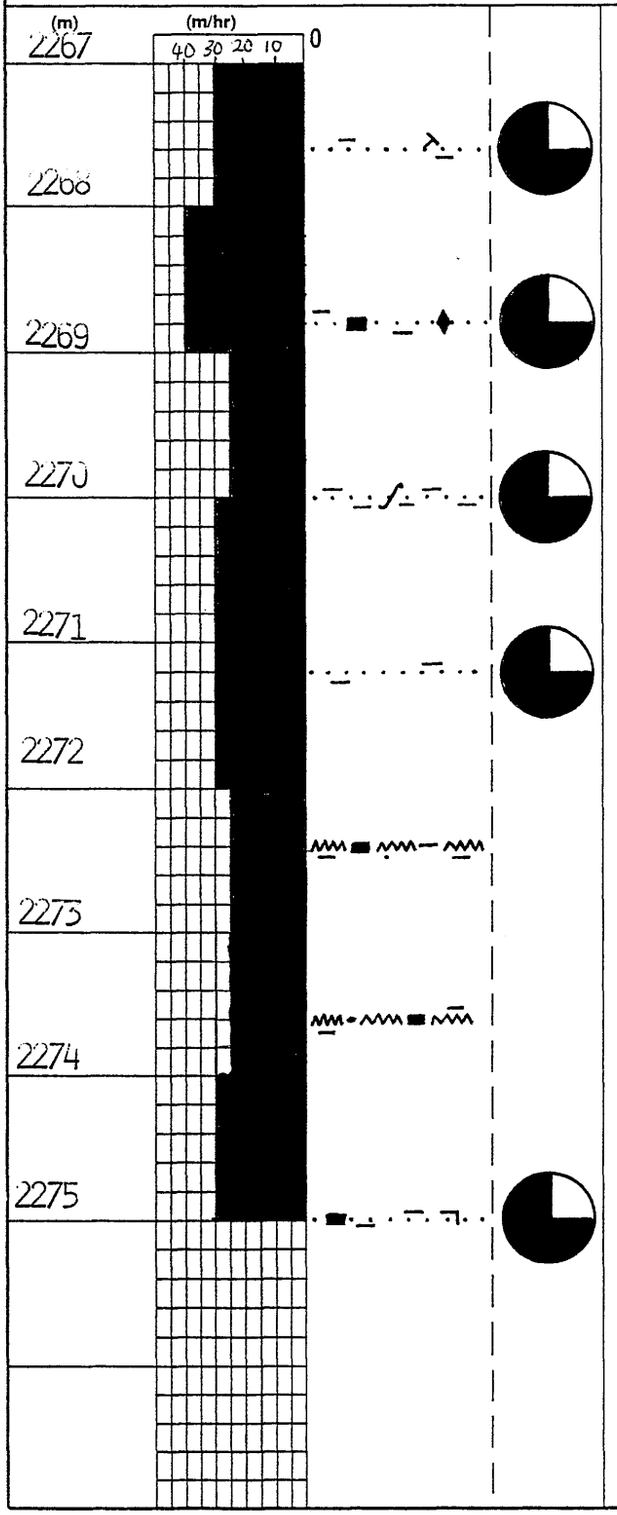
CORE DESCRIPTION

CORE No.:	2	**WELL:**	Moonfish 1
Interval cored:	2257-2275m	Recovered:	18m (100%)
Cut:	18m	Bit Size:	9 7/8"
Bit type:	RC412	Date:	24th May 1992
Described by:	Clota/Feltman/Barwick		

Interval	Depth & ROP	Graphic	Shows	Descriptive Lithology



2267.6 ARKOSE: Light grey, light brown, medium to coarse, angular to subangular, moderate sorting, moderate kaolinite/silty matrix, trace milky quartz, trace lithic fragments, friable to moderately hard, fair porosity, 60% pale yellow solid bright fluorescence, instant to fast streaming cut, moderately thick ring residue, weak petroliferous odour, light brown stain in white light.

2268.8 SANDSTONE: Light grey, light brown, medium, subangular, moderate to good sorting, trace silica cement, moderate kaolinite matrix, trace carbonaceous fragments, trace pyrite, friable, fair porosity, 40% bright pale yellow fluorescence, fast to instant streaming cut, thin to moderate ring residue, light brown oil stain in white, weak petroliferous odour.

2270 ARKOSE: Light brown, medium to coarse, subangular to angular, moderate to good sorting, abundant kaolinite matrix, trace glauconite, trace milky quartz, friable to moderately hard, nil to very poor porosity, 60% pale yellow patchy fluorescence, fast to instant streaming cut, moderate ring residue, light brown oil stain, weak petroliferous odour.

2271.2 SANDSTONE: Light brown, light grey, medium to coarse, subangular to angular, moderate to good sorting, trace silica cement, trace kaolinite matrix, common milky quartz, trace smoky quartz, trace feldspar, friable, fair porosity, 80% pale yellow solid fluorescence, instant streaming cut, moderately thick ring residue, light brown oil stain in white light, moderate petroliferous odour.
2272.4 SILTSTONE: Dark grey, grey black, moderately argillaceous, very carbonaceous, micromicaceous, slightly arenaceous, moderately silty, hard, subblocky, fissile to massive.

2273.6 SILTSTONE: As above.

2275 SANDSTONE: Clear to light grey, medium to predominantly coarse, angular to subrounded, moderate to good sorting, trace silica cement, trace to common kaolinite matrix, trace to common feldspar, common mica, trace coaly fragments, friable, poor to fair porosity, 60-80% bright pale yellow solid fluorescence , instant to fast streaming cut, moderately thick ring residue, weak petroliferous odour, light brown oil stain in white light.

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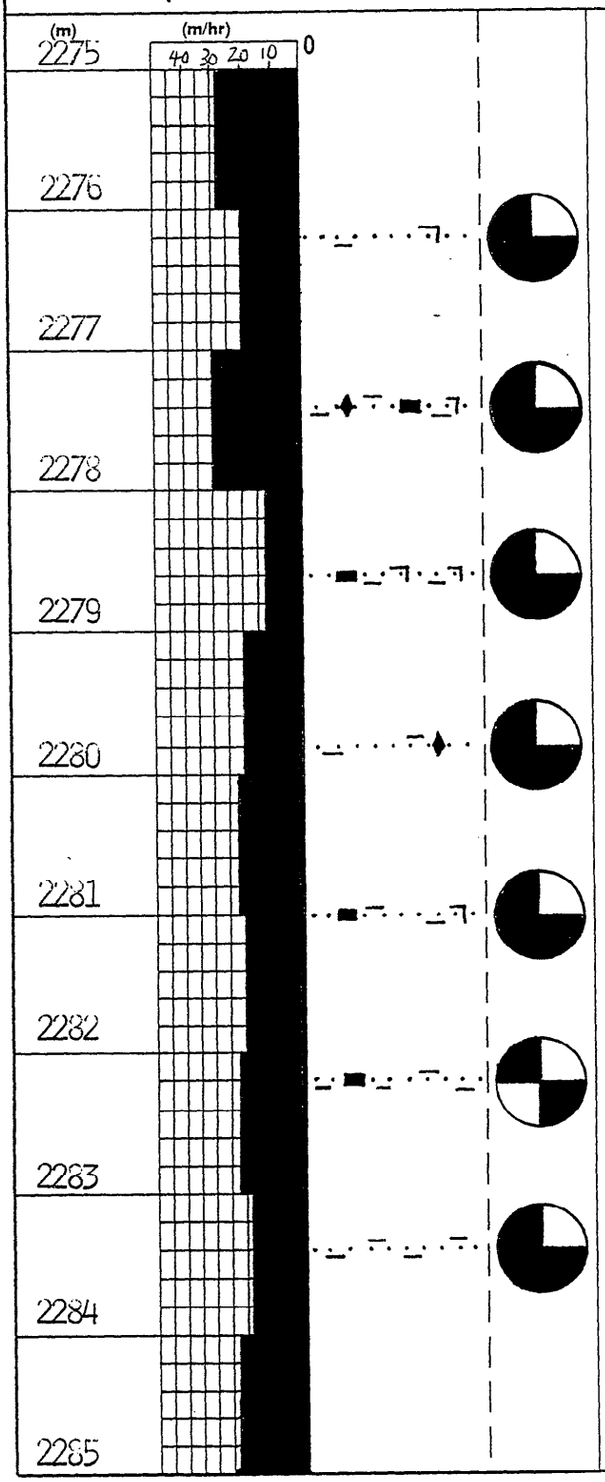
CORE DESCRIPTION

CORE No.:	3	**WELL:**	Moonfish 1
Interval cored:	2275-2293m	Recovered:	18m (100%)
Cut:	18m	Bit Size:	9 7/8"
Bit type:	RC412	Date:	29h May 1992
Described by:	Clota		



Descriptive Lithology

2276.2 SANDSTONE: Light grey, clear to translucent, medium to very coarse, subangular to subrounded, moderate to good sorting, weak silica cement, trace kaolinite matrix, trace mica, common smoky quartz, friable, fair to good porosity, 80% bright pale yellow solid fluorescence, instant to fast streaming cut, moderately thick ring residue, light brown stain in white light, weak petroliferous odour.

2277.4 ARKOSE: Light brown, light grey, coarse to very coarse, angular to subangular, moderate to good sorting, abundant argillaceous/silty matrix, trace pyrite, trace coal fragments, trace mica, very poor to nil porosity, 40% moderately bright to patchy bright pale yellow fluorescence, fast streaming cut, moderate ring residue, light brown oil stain in white light, very weak petroliferous odour.

2278.6: SANDSTONE: Off white, light brown, medium to coarse, subangular to subrounded, moderate to good sorting, weak silica cement, common kaolinite matrix, common mica, trace feldspar, trace carbonaceous fragments, friable, 80% moderately bright to patchy bright pale yellow fluorescence, fast streaming cut, moderate ring residue, trace light brown oil stain in white light, very weak petroliferous odour.

2279.8: SANDSTONE: Light grey, light brown, medium to coarse, subangular to subrounded, moderate to good sorting, trace silica cement, common argillaceous matrix, trace pyrite, common smoky and milky quartz, moderately hard to friable, very poor to nil porosity, 40% patchy bright yellow fluorescence, fast streaming cut, moderately spotty ring residue, trace light brown oil stain in white light, weak petroliferous odour.

2281 SANDSTONE: Light brown, light grey, medium to occasionally coarse, subangular to subrounded, moderate to good sorting, weak silica cement, moderate argillaceous matrix, common feldspar, trace mica, trace carbonaceous fragments, trace smoky quartz, moderately hard, very poor porosity, 60% moderately bright to patchy pale yellow fluorescence, instant fast streaming cut, moderate ring residue, light brown stain in white light, weak petroliferous odour.

2282.2 SANDSTONE: Light grey, light brown, medium to subangular, good sorting, weak silica cement, abundant argillaceous/silty matrix, trace feldspar, trace carbonaceous fragments, hard, very poor to nil porosity, 40% moderately bright to patchy bright pale yellow fluorescence, fast streaming cut, thin to moderate ring residue, very weak petroliferous odour.

2283.4 SANDSTONE: Light brown, fine to medium, subangular to subrounded, moderate sorting, weak silica cement, abundant argillaceous/silty matrix, hard, poor to very poor porosity, 80% moderately bright to patchy bright pale yellow fluorescence, fast streaming cut, thin to moderately bright, trace light brown stain in white light, weak petroliferous odour.

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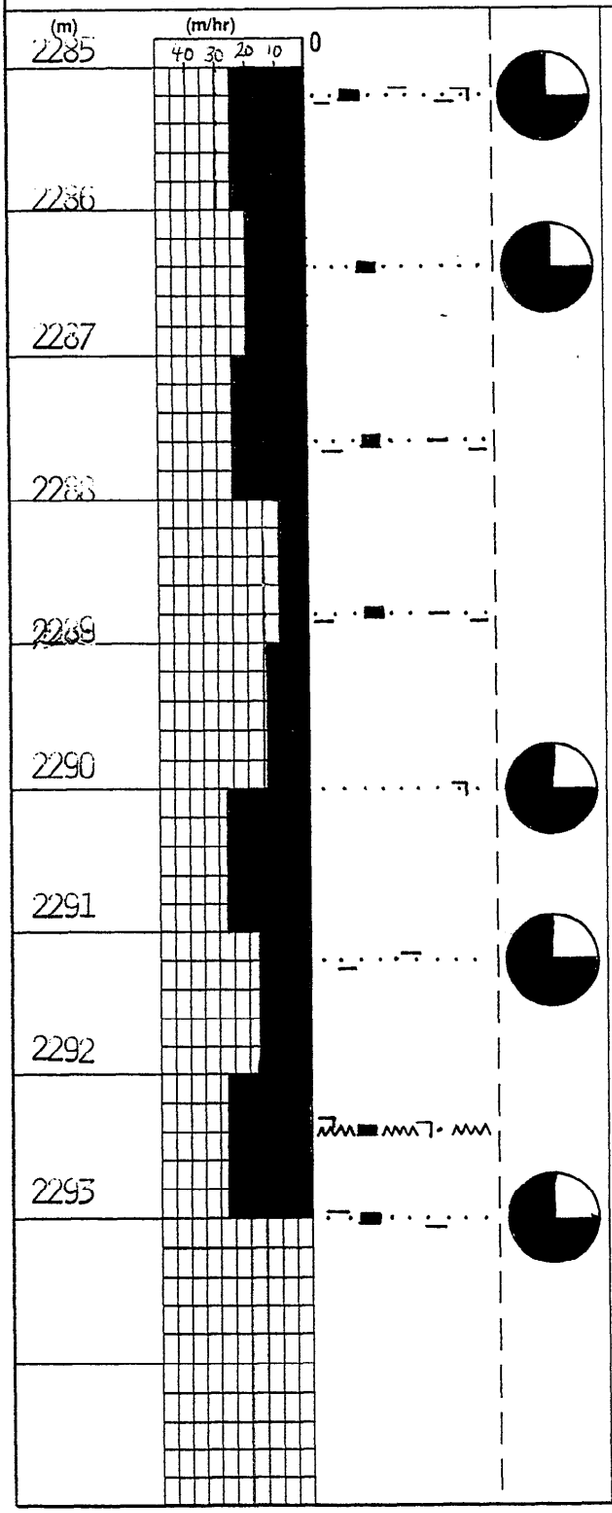
CORE DESCRIPTION

CORE No.:	3	**WELL:**	Moonfish 1
Interval cored:	2275-2293m	Recovered:	18m (100%)
Cut:	18m	Bit Size:	9 7/8"
Bit type:	RC412	Date:	29h May 1992
Described by:	Clota		



Descriptive Lithology

2285.2 SANDSTONE: Light grey to light brown, coarse to very coarse, subangular, moderate to good sorting, abundant kaolinite matrix, trace feldspar, trace carbonaceous fragments, common smoky quartz, trace mica, moderately hard to friable, very poor to nil porosity, 60% patchy bright pale yellow fluorescence, fast to instant streaming cut, moderate ring residue, light brown oil stain in white light, weak petroliferous odour.
2286.4 SANDSTONE: Light grey to light brown, coarse to very coarse, subangular, moderate to good sorting, weak silica cement, common kaolinite matrix, common pyrite, trace carbonaceous fragments, common feldspar, moderately hard, friable, poor to very poor porosity, 60% patchy bright pale yellow fluorescence, fast to instant streaming cut, moderate ring residue, weak light brown oil stain, very weak petroliferous odour.
2287.6 SANDY LAMINATE: SANDSTONE: Light to medium grey, grey brown, fine to medium, subangular to subrounded, moderate to good sorting, common silica cement, abundant kaolinite/silty matrix, common mica, trace feldspar, trace carbonaceous fragments, hard, tight, no fluorescence, abundant carbonaceous and siltstone laminae.
SILTSTONE: Medium to dark grey, very carbonaceous, micromicaceous, arenaceous, hard, massive to blocky.
2288.8 SANDY LAMINATE: As above no fluorescence.

2290: SANDSTONE: Light brown, coarse to very coarse, subangular to angular, moderate to good sorting, trace silica cement, trace mica, common milky quartz, friable to crumbly, good porosity, 40% patchy bright pale yellow fluorescence, instant streaming cut, moderate ring residue, moderately thick, light brown oil stain, weak petroliferous odour.
2291.2 SANDSTONE: Light grey to light brown, medium to coarse, subangular to subrounded, moderate to good sorting, weak silica cement, common kaolinite (silty matrix, trace feldspar, trace smoky quartz, friable, fair porosity, 60% bright patchy pale yellow fluorescence, fast streaming cut, moderately thick ring residue, light brown oil stain in white light, weak petroliferous odour.
2292.4 SILTSTONE: Dark grey, grey black, very carbonaceous, slightly arenaceous, common mica, trace carbonaceous fragments, hard, subfissile to massive (common arenaceous lenses).
2293: SANDSTONE: Light brown, light grey, medium to coarse, very coarse in part, kaolinite matrix, trace carbonaceous fragments, friable, fair to good porosity, 80-100% bright pale yellow fluorescence, fast to instant streaming cut, moderately thick ring residue, moderate light brown oil stain in white light, moderate petroliferous odour.

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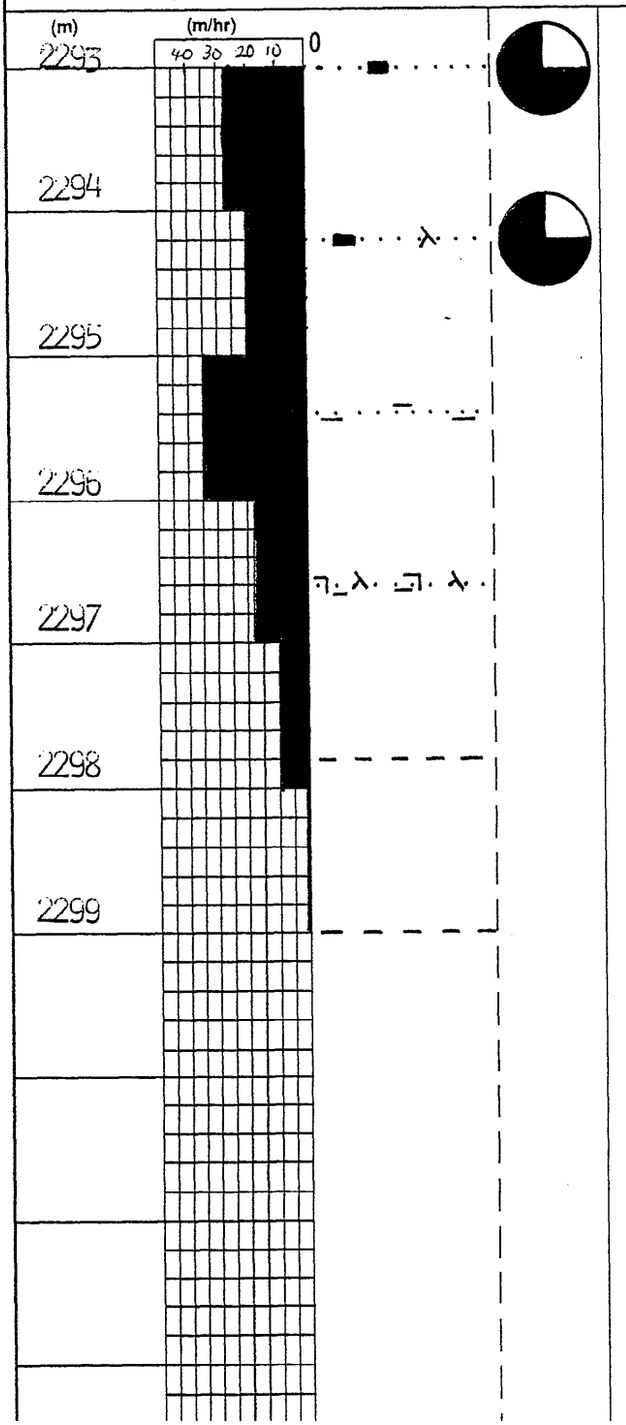
CORE DESCRIPTION

CORE No.:	4	**WELL:**	Moonfish 1
Interval cored:	2293-2299m	Recovered:	6m (100%)
Cut:	6m	Bit Size:	9 7/8"
Bit type:	RC412	Date:	30h May 1992
Described by:	Clota		



Descriptive Lithology

2293 SANDSTONE: Light grey, clear to translucent, coarse to very coarse, subangular to subrounded, moderate to good sorting, trace silica cement, trace carbonaceous fragments, common feldspar, friable, good porosity, 80% moderately bright to patchy bright pale yellow fluorescence, instant to fast streaming cut, moderately thick ring residue, light brown oil stain in white light, moderate petroliferous odour.

2294.2 SANDSTONE: Light grey, clear to translucent, medium to predominantly coarse to very coarse, subangular, moderate sorting, trace silica cement, trace carbonaceous fragments, trace feldspar, trace lithic fragments, friable good sorting, 60-80% moderately bright to patchy bright pale yellow fluorescence, instant to fast streaming cut thin to moderate ring residue, light brown oil stain in white light, moderate petroliferous odour.

2295.4 SANDSTONE: Clear to translucent, light grey, coarse to very coarse, subangular, moderate to good sorting, weak silica cement, abundant argillaceous/kaolinite matrix, trace feldspar, trace smoky quartz, friable, moderately hard, poor to fair porosity, no fluorescence.

2296.6 SANDSTONE: With abundant carbonaceous laminae, medium to dark grey, medium brown, medium to coarse, subangular to subrounded, moderate sorting, moderate silica cement, common argillaceous/silty matrix, common lithic fragments, common mica, common feldspar, hard, tight, no fluorescence. (Carbonaceous laminae grade to coal in part).

2297.8 CLAYSTONE/SHALE: Medium to dark grey, grey black, very carbonaceous, micromicaceous, hard, dense, massive to subfissile. (Approximately 10^0 dip to core plane).

2299 CLAYSTONE/SHALE: As above.

Ref:61:moon02.doc

APPENDIX 3

MOONFISH 1 ST 1

Sidewall Core Descriptions

No.	Depth (m)	Rec. (mm)	Description (Gas C1/C2/C3/C4/C5)
1	2765	25	SHALE: Brown, brown grey, slightly calcareous, slightly carbonaceous, trace siltstone, firm, fissile. GAS: 68:18:10:3:1
2	2752	20	SHALE: Dark brown, brown grey, slightly calcareous, common carbonaceous specks, common silt to very fine sand, firm, fissile. GAS: 45:26:20:8:1
3	2730	15	SILTSTONE: Light brown, light brown grey, non calcareous, very argillaceous, trace very fine sand, carbonaceous specks, mica, moderately hard, fissile in part GAS: 78:15:7
4	2664	22	SHALE: Black, brown black, non calcareous, occasional carbonaceous specks, slightly micromicaceous, trace siltstone, firm to moderately hard, fissile. GAS: 62:25:10:3
5	2636	-	Bullet lost.
6	2572	-	Bullet lost.
7	2499	20	SHALE: Brown, dark brown, non calcareous, common carbonaceous specks, moderately micromicaceous, trace siltstone, firm, fissile. GAS: 62:19:14:5
8	2441	25	SHALE: Light brown grey, grey, moderately calcareous, occasional carbonaceous specks, moderately micromicaceous, occasional silt, firm, fissile to subfissile. GAS: 69:22:9
9	2405	-	Bullet empty.
10	2373	-	Bullet lost.
11	2338	28	SHALE: Dark brown, brown black, common disseminated pyrite, moderately calcareous, trace mica, occasional carbonaceous specks, subfissile, moderately hard. GAS: 52:28:15:5:TR
12	2305	-	Bullet lost.
13	2289	-	Bullet lost.

Sidewall Core Descriptions

No.	Depth (m)	Rec. (mm)	Description (Gas C1/C2/C3/C4/C5)
14	2263	15	SILTSTONE: Off white, light brown, occasional pyrite, common carbonaceous specks, very argillaceous, firm, subfissile. GAS: 33:12:21:24:10
15	2250	17	CLAYSTONE: Light grey, light brown grey, cream to brown, common carbonaceous specks, non calcareous, trace pyrite, trace silt, soft to firm, subfissile in part GAS: 50:14:14:18:4
16	2211	-	Bullet lost.
17	2144	-	Bullet lost.
18	2096	20	SHALE: Light brown, brown grey, occasional coal laminae, common silt in part, non calcareous, trace pyrite, trace micromica, common carbonaceous specks, fissile, moderately hard. GAS: 37:32:22:9:TR
19	2093	15	SANDSTONE: Light brown, very fine, subrounded, good sorting, common white argillaceous matrix, occasional carbonaceous specks, trace calcite cement, hard, laminated sand, no fluorescence. GAS: 33:27:27:13:TR
20	2085.5	-	Bullet lost.
21	2051	23	CLAYSTONE: Light brown, brown, occasional silt to very fine sand, hygroturgid, common mica, common carbonaceous specks, soft to firm, massive to subfissile. GAS: 29:31:25:12:3
22	2039	-	Bullet lost.
23	2033	22	SANDSTONE: Light brown, very fine to fine, moderate sorting, common white argillaceous matrix, occasional carbonaceous specks, trace calcite cement, poor porosity, 100% yellow green solid fluorescence, moderate streaming milky cut, moderate spotty ring residue, petroliferous odour. GAS: 2:3:29:42:24
24	2017	18	SILTSTONE: Light brown, tan, moderately argillaceous, common muscovite, common carbonaceous fragments, soft to firm, subfissile. GAS: 37:32:24:7
25	1993	-	Bullet lost

Sidewall Core Descriptions

No.	Depth (m)	Rec. (mm)	Description (Gas C1/C2/C3/C4/C5)
26	1971	15	CLAYSTONE: Light grey, trace mica, trace carbonaceous specks, dispersive, occasional carbonaceous laminae, firm, subfissile. GAS: 30:18:26:15:11
27	1951	-	Bullet lost.
28	1916	-	Filter cake only
29	1913	18	CLAYSTONE: Light brown grey, silty, micromicaceous, occasional carbonaceous specks, trace pyrite, firm, subfissile. GAS: 17:27:32:20:4
30	1872	25	SHALE: Dark grey, dark brown grey, moderately carbonaceous, slight mottled texture, moderately hard, fissile. GAS: 13:42:34:11
31	1813	-	Bullet lost
32	1699	45	CLAYSTONE: Light grey, olive grey, slightly silty, micromicaceous, slight waxy texture, moderately hard, subfissile. GAS: 32:26:27:13:2
33	1662	25	CLAYSTONE: Light grey, grey brown, silty in part, slightly micromicaceous, trace carbonaceous specks, trace carbonaceous fragments, moderately hard, subfissile. GAS: 23:16:27:28:6
34	1620	-	Bullet lost.
35	1609	-	Bullet lost.
36	1603	30	CALCAREOUS CLAYSTONE: Medium to dark grey, moderately silty, moderately carbonaceous, slightly micromicaceous, firm, plastic in part, massive. GAS: 42:14:23:16:5
37	1548	55	CALCAREOUS CLAYSTONE: As above. GAS: 84:10:6:TR

MOONFISH 1 ST 1

Sidewall Core Descriptions

(Cores taken using Mechanical Sidewall Coring Tool - MSCT)

1	1848	35	SANDSTONE: Off white, light grey, fine, subangular to subrounded, good sorting, very weak calcareous cement, moderate kaolinite matrix, trace carbonaceous specks, trace mica (muscovite), friable to moderately hard, poor porosity, 80% moderately bright patchy pale yellow/green fluorescence, fast streaming cut, moderately thick ring residue. GAS: 62:6:17:14:1
2	1858.5		Not recovered.
3	1874.5		Not recovered.
4	1883		Not recovered.
5	1887.5	20	SANDSTONE: Off white, light grey, very fine to fine, subangular, good sorting, abundant kaolinite matrix, trace carbonaceous fragments, trace lithic fragments, trace mica, friable to moderately hard, very poor porosity, 90% moderately bright patchy pale yellow/green fluorescence, weak fast streaming cut, moderate crush cut, thin to moderate ring residue. GAS: 52:13:15:15:5

APPENDIX 4

RFT SAMPLE TEST REPORT

WELL: MOONFISH 1 SEAT NO: 2/25

OBSERVER: G CLOTA DATE: 3.6.92 RUN NO: 2

	CHAMBER 1 (22.7 lit)	CHAMBER 2 (3. 8 lit)
SEAT NO	2/25-1	2/25-2
DEPTH	1914.5m	1914.5m
A. RECORDING TIMES		
Tool Set	0708 hrs	- hrs
Time open	4 mins	- mins
Chamber Open	0712 hrs	0720 hrs
Chamber Full	0.3 mins	0.16 mins
Seal Chamber	0719 hrs	0725 hrs
Fill Time	7 mins	5 mins
Finish Build Up	0719 hrs	0725 hrs
Build Up Time	6.6 mins	4.84 mins
Tool Retract	- hrs	0725 hrs
Total Time	- mins	17 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	3132 psia	- psia
Initial Form'n Press	2437.0 psia	- psia
Initial Flowing Press	1205 psia	2431 psia
Final Flowing Press	1805 psia	2431 psia
Final Form'n Press	- psia	2437.0 psia
Final Hydrostatic	- psia	3132 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.03 ohmm	0.03 ohmm
Temperature at sample depth	78.6 deg C	78.6 deg C
Length of Cir	1.4 hrs	hrs
Time/Date Circ Stopped	0130 hrs 2/6/92	
Time since Circ	29 hrs 38 mins	
D. SAMPLE RECOVERY		
Surface Pressure	1500 psia	Preserved
Amt Gas	38.8 cu ft	- cu ft
Amt Oil	22.7 lit	- lit
Amt Water (Total)	- lit	- lit
Amt Others	- lit	- lit

WELL: MOONFISH 1 SEAT NO: 2/25

OBSERVER: G CLOTA DATE: 3.6.92 RUN NO: 2

E. SAMPLE PROPERTIES		
Gas Composition		
C1	4800 ppm	- ppm
C2	2000 ppm	- ppm
C3	1600 ppm	- ppm
C4	1150 ppm	- ppm
C5	600 ppm	- ppm
C6+	- ppm	- ppm
CO2/H2S	5 % / ppm	5 % / pm
Oil Properties	47.6 deg API @ 15.6 deg C	- deg API @ - deg C
Colour	Dark Brown	
Flourescence	Pale yellow/Blue white	
GOR	271.6 cu ft/bbl	
Pour Point	20.5 deg C	
Water Properties		
Resistivity	- ohm-m @ - deg C	- ohm-m @ - deg C
NaCl Equivalent	- ppm	- ppm
Cl-titrated	- ppm	- ppm
Tritium	- DPM -	DPM
ph	-	
Est Water Type	-	
F. MUD FILTRATE PROPERTIES		
Resistivity	0.0602 ohm-m @ 18 deg C	0.0602 ohm-m @ 18 deg C
NaCl Equivalent	280,000 ppm	280,000 ppm
Cl-titrated	72,000 ppm	72,000 ppm
ph	9.0	9.0
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	10.3+ ppg	10.3+ ppg
Calc Hydrostatic	3063 psi	3063 psi
Serial No. (Preserved)		RFSAD 1131
Choke Size/Probe Type	1x40,000/MARTINEAU	1x20,000/MARTINEAU
REMARKS	Formation pressure as per	Formation pressure as per
	Reservoir Technology report	Reservoir Technology report

Ref:MOON17.doc

RFT SAMPLE TEST REPORT

WELL: MOONFISH 1 SEAT NO: 3/26

OBSERVER: G CLOTA DATE: 3.6.92 RUN NO: 3

	CHAMBER 1 (22.7 lit)	CHAMBER 2 (3.8 lit)
SEAT NO	3/26-1	3/26-2
DEPTH	1864.0m	1864.0m
A. RECORDING TIMES		
Tool Set	1137 hrs	- hrs
Time open	3 mins	- mins
Chamber Open	1140 hrs	1150 hrs
Chamber Full	0.16 mins	1 mins
Seal Chamber	1149 hrs	1152 hrs
Fill Time	9 mins	2 mins
Finish Build Up	1149 hrs	1152 hrs
Build Up Time	8.86 mins	1 mins
Tool Retract	- hrs	1154 hrs
Total Time	- mins	17 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	3049 psia	- psia
Initial Form'n Press	2367.0 psia	- psia
Initial Flowing Press	2355 psia	2329 psia
Final Flowing Press	2365 psia	2355 psia
Final Form'n Press	- psia	2367.0 psia
Final Hydrostatic	- psia	3051 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.03 ohmm	0.03 ohmm
Temperature at sample depth	77.4 deg C	77.4 deg C
Length of Cir	hrs	hrs
Time/Date Circ Stopped		
Time since Circ		
D. SAMPLE RECOVERY		
Surface Pressure	600 psia	400 psia
Amt Gas	RTSTM cu ft	RTSTM cu ft
Amt Oil	TR lit	SL TR lit
Amt Water (Total)	20 lit	3.8 lit
Amt Others	- lit	- lit

WELL: MOONFISH 1 SEAT NO: 3/26

OBSERVER: G CLOTA DATE: 3.6.92 RUN NO: 3

E. SAMPLE PROPERTIES		STSTM
Gas Composition		
C1	5400 ppm	- ppm
C2	2580 ppm	- ppm
C3	1360 ppm	- ppm
C4	520 ppm	- ppm
C5	140 ppm	- ppm
C6+	- ppm	- ppm
CO2/H2S	7 % /- ppm	% / pm
Oil Properties	- deg API @ deg C	- deg API @ - deg C
Colour	Very light brown	Very light brown
Flourescence	Pale yellow	Pale yellow
GOR	cu ft/bbl	
Pour Point	deg C	
Water Properties		
Resistivity	0.099 ohm-m @ 19 deg	0.115 ohm-m @ 19 deg C
NaCl Equivalent	110000 ppm	90000 ppm
Cl-titrated	49000 ppm	35000 ppm
Tritium	- DPM	- DPM
ph	7.2	7.2
Est Water Type	Filtrate & Formation H_2O	Formation water
F. MUD FILTRATE PROPERTIES		
Resistivity	0.0602 ohm-m @ 18 deg C	0.0602 ohm-m @ 18 deg C
NaCl Equivalent	280000 ppm	280000 ppm
Cl-titrated	72000 ppm	72000 ppm
ph	9.0	9.0
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	10.3+ ppg	10.3+ ppg
Calc Hydrostatic	2983 psi	2983 psi
Serial No. (Preserved)		
Choke Size/Probe Type	1x40,000/MARTINEAU	1x20,000/MARTINEAU
REMARKS	Thin oil stain on recovered sample.	Very thin oil film on recovered water.
	Formation pressure as per Reservoir Technology report	Formation pressure as per Reservoir Technology report

Ref:MOON18.doc

RFT SAMPLE TEST REPORT

WELL: MOONFISH 1 SEAT NO: 4/27

OBSERVER: G CLOTA DATE: 3.6.92 RUN NO: 4

	CHAMBER 1 (22.7 lit)	CHAMBER 2 (3.8 lit)
SEAT NO	4/27-1	4/27-2
DEPTH	1904.0m	1904.0m
A. RECORDING TIMES		
Tool Set	1630 hrs	- hrs
Time open	17 mins	- mins
Chamber Open	1647 hrs	1744 hrs
Chamber Full	36 mins	6 mins
Seal Chamber	1743 hrs	1807 hrs
Fill Time	56 mins	23 mins
Finish Build Up	1743 hrs	1807 hrs
Build Up Time	20 mins	17 mins
Tool Retract	- hrs	1808 hrs
Total Time	- mins	98 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	3114 psia	- psia
Initial Form'n Press	2427.0 psia	- psia
Initial Flowing Press	115 psia	93 psia
Final Flowing Press	2384 psia	2321 psia
Final Form'n Press	- psia	2427.0 psia
Final Hydrostatic	- psia	3115 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.03 ohmm	0.03 ohmm
Temperature at sample depth	78 deg C	78 deg C
Length of Cir	hrs	hrs
Time/Date Circ Stopped		
Time since Circ		
D. SAMPLE RECOVERY		
Surface Pressure	500 psia	- psia
Amt Gas	RTSTM cu ft	- cu ft
Amt Oil	TR lit	TR lit
Amt Water (Total)	20.5 lit	3.8 lit
Amt Others	- lit	- lit

WELL: MOONFISH 1 SEAT NO: 4/27

OBSERVER: G CLOTA DATE: 3.6.92 RUN NO: 4

E. SAMPLE PROPERTIES		STSTM
Gas Composition		
C1	42419 ppm	- ppm
C2	10547 ppm	- ppm
C3	5368 ppm	- ppm
C4	1797 ppm	- ppm
C5	732 ppm	- ppm
C6+	- ppm	- ppm
CO2/H2S	8 % /- ppm	- % / ppm
Oil Properties	- deg API @ deg C	- deg API @ - deg C
Colour	Clear	Clear
Flourescence	Pale yellow/blue white	Pale yellow/blue white
GOR	- cu ft/bbl	
Pour Point	- deg C	
Water Properties		
Resistivity	0.0641ohm-m @ 17 deg	0.0659 ohm-m @ 17 deg C
NaCl Equivalent	250,000 ppm	250,000 ppm
Cl-titrated	46,000 ppm	68,000 ppm
Tritium	- DPM	- DPM
ph	8.0	7.1
Est Water Type	Filtrate & Formation H_2O	Filtrate
F. MUD FILTRATE PROPERTIES		
Resistivity	0.0602 ohm-m @ 18 deg C	0.0602 ohm-m @ 18 deg C
NaCl Equivalent	280,000 ppm	280,000 ppm
Cl-titrated	72,000 ppm	72,000 ppm
ph	9.0	9.0
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	10.3+ ppg	10.3+ ppg
Calc Hydrostatic	3046 psi	3046 psi
Serial No. (Preserved)		
Choke Size/Probe Type	1x40,000/MARTINEAU	1x20,000/MARTINEAU
REMARKS	Trace condensate film on water sample.	Trace condensate film on water sample.
	Formation pressure as per Reservoir Technology report	Formation pressure as per Reservoir Technology report

Ref:MOON19.doc

RFT SAMPLE TEST REPORT

WELL: MOONFISH 1 SEAT NO: 6/76

OBSERVER: G CLOTA DATE: 6.6.92 RUN NO: 6

	CHAMBER 1 (22.7 lit)	CHAMBER 2 (3.8 lit)
SEAT NO	6/76-1	6/76-2
DEPTH	2265.5m	2265.5m
A. RECORDING TIMES		
Tool Set	1801 hrs	- hrs
Time open	4 mins	- mins
Chamber Open	1805 hrs	1901 hrs
Chamber Full	30 mins	5 mins
Seal Chamber	1900 hrs	1929 hrs
Fill Time	55 mins	28 mins
Finish Build Up	1900 hrs	1929 hrs
Build Up Time	25 mins	23 mins
Tool Retract	- hrs	1930 hrs
Total Time	- mins	89 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	3780 psia	- psia
Initial Form'n Press	2910.0 psia	- psia
Initial Flowing Press	141 psia	106 psia
Final Flowing Press	2850 psia	2891 psia
Final Form'n Press	- psia	2910.0psia
Final Hydrostatic	- psia	3780 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.06 ohmm	0.06 ohmm
Temperature at sample depth	88 deg C	88.2 deg C
Length of Cir	hrs	hrs
Time/Date Circ Stopped		
Time since Circ		
D. SAMPLE RECOVERY		
Surface Pressure	500 psia	200 psia
Amt Gas	- cu ft	- cu ft
Amt Oil	TR lit	- lit
Amt Water (Total)	20 lit	3.5 lit
Amt Others	- lit	- lit

WELL: MOONFISH 1 SEAT NO: 6/76

OBSERVER: G CLOTA DATE: 6.6.92 RUN NO: 6

E. SAMPLE PROPERTIES		
Gas Composition		
C1	- ppm	- ppm
C2	- ppm	- ppm
C3	- ppm	- ppm
C4	- ppm	- ppm
C5	- ppm	- ppm
C6+	- ppm	- ppm
CO2/H2S	% /- ppm	% / pm
Oil Properties	- deg API @ deg C	- deg API @ - deg C
Colour	Light brown	-
Flourescence	Yellow/green	-
GOR	cu ft/bbl	
Pour Point	deg C	
Water Properties		
Resistivity	0.0723ohm-m @ 16 deg	0.0821 ohm-m @ 16 deg C
NaCl Equivalent	130,000 ppm	110,000 ppm
Cl-titrated	66,000 ppm	65,000 ppm
Tritium	- DPM	- DPM
ph	7.0	6.4
Est Water Type	Filtrate	Filtrate
F. MUD FILTRATE PROPERTIES		
Resistivity	0.0804 ohm-m @ 19 deg C	0.0804 ohm-m @ 19 deg C
NaCl Equivalent	110,000 ppm	110,000 ppm
Cl-titrated	72,000 ppm	72,000 ppm
ph	9.1	9.1
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	10.4+ ppg	10.4+ ppg
Calc Hydrostatic	- psi	- psi
Serial No. (Preserved)		
Choke Size/Probe Type	1x40000/MARTINEAU	1x20000/MARTINEAU
REMARKS	Trace oil scum on sample too small for API and PPT	
	Formaiton pressure as per Reservoir Technology report	Formation pressure as per Reservoir Technology report

Ref:MOON31.doc

RFT SAMPLE TEST REPORT

WELL: MOONFISH 1 SEAT NO: 8/78

OBSERVER: G CLOTA DATE: 6.6.92 RUN NO: 8

	CHAMBER 1 (45.4 lit)	CHAMBER 2 (3.8 lit)
SEAT NO	8/78-1	8/78-2
DEPTH	2265.5m	2265.5m
A. RECORDING TIMES		
Tool Set	1258 hrs	- hrs
Time open	3 mins	- mins
Chamber Open	1301 hrs	1622 hrs
Chamber Full	184 mins	32 mins
Seal Chamber	1620 hrs	1707 hrs
Fill Time	199 mins	45 mins
Finish Build Up	1620 hrs	1707 hrs
Build Up Time	15 mins	13 mins
Tool Retract	- hrs	1707 hrs
Total Time	- mins	249 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	3746 psia	- psia
Initial Form'n Press	2913.7 psia	- psia
Initial Flowing Press	94 psia	193 psia
Final Flowing Press	2694 psia	2864 psia
Final Form'n Press	- psia	2911.8 psia
Final Hydrostatic	- psia	3745 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.05 ohmm	0.05 ohmm
Temperature at sample depth	80 deg C	81.2 deg C
Length of Cir	hrs	hrs
Time/Date Circ Stopped		
Time since Circ		
D. SAMPLE RECOVERY		
Surface Pressure	1100 psia	1200 psia
Amt Gas	5.3 cu ft	RTSTM cu ft
Amt Oil	1 lit	0.5 lit
Amt Water (Total)	41 lit	2.5 lit
Amt Others	- lit	- lit

WELL: MOONFISH 1 SEAT NO: 8/78

OBSERVER: G CLOTA DATE: 6.6.92 RUN NO: 8

E. SAMPLE PROPERTIES		
Gas Composition		
C1	149000 ppm	202200 ppm
C2	13860 ppm	12910 ppm
C3	3610 ppm -	406 ppm
C4	800 ppm	125 ppm
C5	TR ppm	TR ppm
C6+	- ppm	- ppm
CO2/H2S	10% /- ppm	% / pm
Oil Properties	33 deg API @ 15.6 deg C	40 deg API @ 15.6 deg C
Colour	Dark brown	Dark brown
Flourescence	Yellow/gold	Yellow/gold
GOR	843 cu ft/bbl	-
Pour Point	23 deg C	12 deg C
Water Properties		
Resistivity	0.073ohm-m @ 17 deg	0.088 ohm-m @ 16 deg C
NaCl Equivalent	155000 ppm	115000 ppm
Cl-titrated	62000 ppm	56000 ppm
Tritium	- DPM	- DPM
ph	7.1	7.4
Est Water Type	Filtrate	Filtrate & Form water
F. MUD FILTRATE PROPERTIES		
Resistivity	0.0804 ohm-m @ 19 deg C	0.0804 ohm-m @ 19 deg C
NaCl Equivalent	110000 ppm	110000 ppm
Cl-titrated	72000 ppm	72000 ppm
ph	9.0	9.0
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	10.5+ ppg	10.5+ ppg
Calc Hydrostatic	3690 psi	3690 psi
Serial No. (Preserved)		
Choke Size/Probe Type	1x40000/MARTINEAU	1x20000/MARTINEAU
REMARKS	Trace oil scum on sample too small for API and PPT	Formation pressure as per Reservoir Technology report
	Formation pressure as per Reservoir Technology report	

Ref:MOON35

RFT SAMPLE TEST REPORT

WELL: MOONFISH 1 SEAT NO: 9-81

OBSERVER: G CLOTA DATE: 8.6.92 RUN NO: 9

	CHAMBER 1 (45.4 lit)	CHAMBER 2 (lit)
SEAT NO	9/81-1	-
DEPTH	2136.2m	-
A. RECORDING TIMES		
Tool Set	2040 hrs	- hrs
Time open	2 mins	- mins
Chamber Open	2042 hrs	- hrs
Chamber Full	Lost packer seat mins	- mins
Seal Chamber	could not re seat - hrs	- hrs
Fill Time	mins	- mins
Finish Build Up	- hrs	- hrs
Build Up Time	- mins	- mins
Tool Retract	- hrs	- hrs
Total Time	- mins	- mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	- psia	- psia
Initial Form'n Press	- psia	- psia
Initial Flowing Press	- psia	- psia
Final Flowing Press	- psia	- psia
Final Form'n Press	- psia	- psia
Final Hydrostatic	- psia	- psia
C. TEMPERATURE		
Rm @ Sample Depth	- ohmm	- ohmm
Temperature at sample depth	- deg C	- deg C
Length of Cir	- hrs	- hrs
Time/Date Circ Stopped	-	
Time since Circ	-	
D. SAMPLE RECOVERY		
Surface Pressure	- psia	- psia
Amt Gas	- cu ft	- cu ft
Amt Oil	- lit	- lit
Amt Water (Total)	- lit	- lit
Amt Others	- lit	- lit

WELL: MOONFISH 1 SEAT NO:

OBSERVER: G CLOTA DATE: 8.6.92 RUN NO: 9

E. SAMPLE PROPERTIES		
Gas Composition		
C1	- ppm	- ppm
C2	- ppm	- ppm
C3	- ppm	- ppm
C4	- ppm	- ppm
C5	- ppm	- ppm
C6+	- ppm	- ppm
CO2/H2S	% /- ppm	% / pm
Oil Properties	- deg API @ deg C	- deg API @ - deg C
Colour	-	-
Flourescence	-	-
GOR	-	-
Pour Point	-	-
Water Properties		
Resistivity	-ohm-m @ deg	- ohm-m @ deg C
NaCl Equivalent	- ppm	- ppm
Cl-titrated	- ppm	- ppm
Tritium	- DPM	- DPM
ph	-	-
Est Water Type	-	
F. MUD FILTRATE PROPERTIES		
Resistivity	0.804 ohm-m @ 19 deg C	ohm-m @ deg C
NaCl Equivalent	110000 ppm	- ppm
Cl-titrated	71000 ppm	- ppm
ph	8.8	-
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	- ppg	- ppg
Calc Hydrostatic	- psi	- psi
Serial No. (Preserved)		
Choke Size/Probe Type	-	
REMARKS	Packer ruptured.	

Ref:MOON33.doc

RFT SAMPLE TEST REPORT

WELL: MOONFISH #1 SEAT NO: 10/82

OBSERVER: D Barwick DATE: 09.06.92 RUN NO: 10

	CHAMBER 1 (45.4 lit)	CHAMBER 2 (3.8 lit)
SEAT NO	10/82-1	10/82-2
DEPTH	2135.7m	2135.7m
A. RECORDING TIMES		
Tool Set	0039 hrs	- hrs
Time open	6 mins	- mins
Chamber Open	0045 hrs	0206 hrs
Chamber Full	30 mins	4 mins
Seal Chamber	0205 hrs	0237 hrs
Fill Time	80 mins	31 mins
Finish Build Up	0205 hrs	0237 hrs
Build Up Time	50 mins	27 mins
Tool Retract	- hrs	0242 hrs
Total Time	- mins	123 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	3530 psia	- psia
Initial Form'n Press	2750.4 psia	- psia
Initial Flowing Press	80 psia	907 psia
Final Flowing Press	2569 psia	2684 psia
Final Form'n Press	- psia	2750.4 psia
Final Hydrostatic	- psia	3525 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.04 ohmm	0.04 ohmm
Temperature at sample depth	81.6 deg C	78.5 deg C
Length of Cir	hrs	hrs
Time/Date Circ Stopped	hrs	
Time since Circ	hrs/mins	
D. SAMPLE RECOVERY		
Surface Pressure	1500 psia	1300 psia
Amt Gas	14.1 cu ft	2.6 cu ft
Amt Oil	5.0 lit	1.0 lit
Amt Water (Total)	37.0 lit	2.2 lit
Amt Others	- lit	- lit

WELL: MOONFISH #1 SEAT NO: 10/82

OBSERVER: D Barwick DATE: 09.06.92 RUN NO: 10

E. SAMPLE PROPERTIES		
Gas Composition		
C1	39860 ppm	2380 ppm
C2	1950 ppm	310 ppm
C3	570 ppm	150 ppm
C4	140 ppm	30 ppm
C5	- ppm	- ppm
C6+	- ppm	- ppm
CO2/H2S	8%/- ppm	8%/- ppm
Oil Properties	42 deg API @ 15.6 deg C	42 deg API @ 15.6 deg C
Colour	Dark Brown/Green	Dark Brown/Green
Flourescence	Bright Yellow/Gold	Bright Yellow/Gold
GOR	448	413
Pour Point	24 deg C	24 deg C
Water Properties		
Resistivity	0.078 ohm-m @ 16 deg C	0.081 ohm-m @ 14 deg C
NaCl Equivalent	140000 ppm	110000 ppm
Cl-titrated	ppm	59000 ppm
Tritium	DPM	- DPM
ph		6.8
Est Water Type	Filtrate & Mud	Filtrate
F. MUD FILTRATE PROPERTIES		
Resistivity	.0804 ohm-m @ 19 deg C	.0804 ohm-m @ 19 deg C
NaCl Equivalent	110000 ppm	110000 ppm
Cl-titrated	71000 ppm	71000 ppm
ph	8.8	8.8
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	10.6 ppg	10.6 ppg
Calc Hydrostatic	3516 psi	3516 psi
Serial No. (Preserved)		-
Choke Size/Probe Type	1 x 40000/Martineau	1 x 20000/Martineau
REMARKS	Formation pressure as per Reservoir Technology report	Formation pressure as per Reservoir Technology report

Ref:MOON25.doc

RFT SAMPLE TEST REPORT

WELL: MOONFISH #1 SEAT NO: 11/83

OBSERVER: G Clota DATE: 09.06.92 RUN NO: 11

	CHAMBER 1 (45.4 lit)	CHAMBER 2 (3.8 lit)
SEAT NO	11/83-1	11/83-2
DEPTH	2009.3m	2009.3m
A. RECORDING TIMES		
Tool Set	0731 hrs	- hrs
Time open	3 mins	- mins
Chamber Open	0734 hrs	0829 hrs
Chamber Full	5 mins	6 mins
Seal Chamber	0829 hrs	0845 hrs
Fill Time	55 mins	16 mins
Finish Build Up	0829 hrs	0845 hrs
Build Up Time	50 mins	10 mins
Tool Retract	- hrs	0845 hrs
Total Time	- mins	74 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	3317 psia	- psia
Initial Form'n Press	2557.0 psia	- psia
Initial Flowing Press	187 psia	1744 psia
Final Flowing Press	1744 psia	2530 psia
Final Form'n Press	- psia	2557.0 psia
Final Hydrostatic	- psia	3315 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.05 ohmm	0.05 ohmm
Temperature at sample depth	76.9 deg C	76.5 deg C
Length of Cir	hrs	hrs
Time/Date Circ Stopped	hrs	
Time since Circ	hrs/mins	
D. SAMPLE RECOVERY		
Surface Pressure	1900 psia	1900 psia
Amt Gas	222.5 cu ft	17.7 cu ft
Amt Oil	0.25 lit	TR lit
Amt Water (Total)	2.5 lit	TR lit
Amt Others	- lit	- lit

WELL: MOONFISH #1 SEAT NO: 11/83

OBSERVER: G Clota DATE: 09.06.92 RUN NO: 11

E. SAMPLE PROPERTIES		
Gas Composition		
C1	22740 ppm	750 ppm
C2	1130 ppm	30 ppm
C3	390 ppm	10 ppm
C4	130 ppm	- ppm
C5	- ppm	- ppm
C6+	- ppm	- ppm
CO2/H2S	10%/- ppm	N/A ppm
Oil Properties	52.2 deg API @ 15.6 deg C	deg API @ deg C
Colour	Red Brown	
Flourescence	Pale Yellow/Blue White	
GOR	141510 cu ft/bbl	
Pour Point	-5 deg C	
Water Properties		
Resistivity	0.079 ohm-m @ 12 deg C	0.108 ohm-m @ 12 deg C
NaCl Equivalent	145000 ppm	90000 ppm
Cl-titrated	58000 ppm	41000 ppm
Tritium	- DPM	- DPM
ph	7.3	7.2
Est Water Type	Filtrate	Filtrate & Water
F. MUD FILTRATE PROPERTIES		
Resistivity	.0804 ohm-m @ 19 deg C	.0804 ohm-m @ 19 deg C
NaCl Equivalent	110000 ppm	110000 ppm
Cl-titrated	71000 ppm	71000 ppm
ph	8.8	8.8
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	10.6 ppg	10.6 ppg
Calc Hydrostatic	3264 psi	3264 psi
Serial No. (Preserved)		-
Choke Size/Probe Type	1 x 40000/Martineau	1 x 20000/Martineau
REMARKS	Strain Gauge Pressures	Strain Gauge Pressures
	Formation pressure as per Reservoir Technology report	Formation pressure as per Reservoir Technology report

Ref:MOON26.doc

RFT SAMPLE TEST REPORT

WELL: MOONFISH #1 SEAT NO: 12/84

OBSERVER: G Clota DATE: 09.06.92 RUN NO: 12

	CHAMBER 1 (45.4 lit)	CHAMBER 2 (3.8 lit)
SEAT NO	12/84-1	12/84-2
DEPTH	1999.4m	1999.4m
A. RECORDING TIMES		
Tool Set	1246 hrs	- hrs
Time open	4 mins	- mins
Chamber Open	1250 hrs	1602 hrs
Chamber Full	Did Not Fill	41 mins
Seal Chamber	1600 hrs	1648 hrs
Fill Time	190 (Not Full) mins	5 mins
Finish Build Up	1602 hrs	1648 hrs
Build Up Time	2 mins	4 mins
Tool Retract	- hrs	1652 hrs
Total Time	- mins	246 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	3287 psia	- psia
Initial Form'n Press	2529.8 psia	- psia
Initial Flowing Press	194 psia	189 psia
Final Flowing Press	452 psia	2113 psia
Final Form'n Press	- psia	2529.8 psia
Final Hydrostatic	- psia	3283 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.04 ohmm	0.04 ohmm
Temperature at sample depth	77.1 deg C	76.4 deg C
Length of Cir	hrs	hrs
Time/Date Circ Stopped	hrs	
Time since Circ	hrs/mins	
D. SAMPLE RECOVERY		
Surface Pressure	400 psia	1200 psia
Amt Gas	7.0 cu ft	3.5 cu ft
Amt Oil	3 lit	0.5 lit
Amt Water (Total)	30 lit	2.5 lit
Amt Others	- lit	- lit

WELL: MOONFISH #1 SEAT NO: 12/84

OBSERVER: G Clota DATE: 09.06.92 RUN NO: 12

E. SAMPLE PROPERTIES		
Gas Composition		
C1	159000 ppm	13600 ppm
C2	26100 ppm	100 ppm
C3	8600 ppm	TR ppm
C4	2570 ppm	TR ppm
C5	500 ppm	TR ppm
C6+	- ppm	- ppm
CO2/H2S	N/A ppm	N/A ppm
Oil Properties	45 deg API @ 15.6 deg C	45 deg API @ 15.6 deg C
Colour	Medium to Dark Brown	Medium to Dark Brown
Flourescence	Yellow/Gold	Yellow/Gold
GOR	371	1122.5
Pour Point	27 deg C	27 deg C
Water Properties		
Resistivity	0.66 ohm-m @ 14 deg C	0.068 ohm-m @ 14 deg C
NaCl Equivalent	150000 ppm	145000 ppm
Cl-titrated	69000 ppm	66000 ppm
Tritium	- DPM	- DPM
ph	7.9	7.2
Est Water Type	Filtrate	Filtrate
F. MUD FILTRATE PROPERTIES		
Resistivity	.0804 ohm-m @ 19 deg C	.0804 ohm-m @ 19 deg C
NaCl Equivalent	110000 ppm	110000 ppm
Cl-titrated	71000 ppm	71000 ppm
ph	8.8	8.8
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	10.6 ppg	10.6 ppg
Calc Hydrostatic	3248 psi	3248 psi
Serial No. (Preserved)		-
Choke Size/Probe Type	1 x 40000/Martineau	1 x 20000/Martineau
REMARKS	Strain Gauge Pressures Sample Collected @ 1999m for 110 min prior to 1999.4m Formation pressure as per Reservoir Technology report	Strain Gauge Pressures Formation pressure as per Reservoir Technology report

Ref:MOON27.doc

RFT SAMPLE TEST REPORT

WELL: MOONFISH #1 SEAT NO: 13/85

OBSERVER: D Barwick DATE: 09.06.92 RUN NO: 13

	CHAMBER 1 (45.4 lit)	CHAMBER 2 (3.8 lit)
SEAT NO	13/85-1	13/85-2
DEPTH	2260.5m	2260.5m
A. RECORDING TIMES		
Tool Set	2030 hrs	- hrs
Time open	6 mins	- mins
Chamber Open	2036 hrs	2043 hrs
Chamber Full	27 secs	2 secs
Seal Chamber	2042 hrs	2045 hrs
Fill Time	6 mins	2 mins
Finish Build Up	2042 hrs	2045 hrs
Build Up Time	5.5 mins	2 mins
Tool Retract	- hrs	2049 hrs
Total Time	- mins	19 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	3712 psia	- psia
Initial Form'n Press	2902.0 psia	- psia
Initial Flowing Press	1725 psia	2877.7 psia
Final Flowing Press	2407 psia	2877.8 psia
Final Form'n Press	- psia	2902.0 psia
Final Hydrostatic	- psia	3710 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.04 ohmm	0.04 ohmm
Temperature at sample depth	86.6 deg C	87.1 deg C
Length of Cir	hrs	hrs
Time/Date Circ Stopped	hrs	
Time since Circ	hrs/mins	
D. SAMPLE RECOVERY		
Surface Pressure	700 psia	Preserved psia
Amt Gas	9.2 cu ft	cu ft
Amt Oil	35 lit	lit
Amt Water (Total)	- lit	lit
Amt Others	- lit	lit

WELL: MOONFISH #1 SEAT NO: 13/85

OBSERVER: D Barwick DATE: 09.06.92 RUN NO: 13

E. SAMPLE PROPERTIES		
Gas Composition		
C1	11300 ppm	ppm
C2	600 ppm	ppm
C3	160 ppm	ppm
C4	TR ppm	ppm
C5	TR ppm	ppm
C6+	- ppm	ppm
CO2/H2S	N/A ppm	ppm
Oil Properties	43 deg API @ 15.6 deg C	deg API @ deg C
Colour	Dark Brown	
Flourescence	Yellow/Gold	
GOR	42 cu ft/bbl	
Pour Point	26 deg C	
Water Properties		
Resistivity		ohm-m @ deg C
NaCl Equivalent	ppm	ppm
Cl-titrated	ppm	ppm
Tritium	DPM	DPM
ph		
Est Water Type		
F. MUD FILTRATE PROPERTIES		
Resistivity	.084 ohm-m @ 19 deg C	.084 ohm-m @ 19 deg C
NaCl Equivalent	110000 ppm	110000 ppm
Cl-titrated	71000 ppm	71000 ppm
ph	8.8	8.8
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	10.6 ppg	10.6 ppg
Calc Hydrostatic	3717 psi	3717 psi
Serial No. (Preserved)		RFS - AD/092
Choke Size/Probe Type	1 x 40000/Martineau	1 x 20000/Martineau
REMARKS	Strain Gauge Pressures	Strain Gauge Pressures
	Formation pressure as per Reservoir Technology report	Formation pressure as per Reservoir Technology report

Ref:MOON28.doc

RFT SAMPLE TEST REPORT

WELL: MOONFISH #1 ST1 SEAT NO: 5/45

OBSERVER: D BARWICK DATE: 04.09.92 RUN NO: 5

	CHAMBER 1 (45.4 lit)	CHAMBER 2 (3.8 lit)
SEAT NO	5/45-1	5/45-2
DEPTH	1858.5m	1858.5m
A. RECORDING TIMES		
Tool Set	0358 hrs	- hrs
Time open	9 mins	- mins
Chamber Open	0407 hrs	0422 hrs
Chamber Full	3 mins	9 secs
Seal Chamber	0422 hrs	0436 hrs
Fill Time	15 mins	14 mins
Finish Build Up	0422 hrs	0436 hrs
Build Up Time	12 mins	14 mins
Tool Retract	- hrs	0436 hrs
Total Time	- mins	38 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	2958 psia	- psia
Initial Form'n Press	2417.0 psia	- psia
Initial Flowing Press	500 psia	886 psia
Final Flowing Press	1977 psia	2417 psia
Final Form'n Press	- psia	2417.0 psia
Final Hydrostatic	- psia	2957 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.09 ohmm	0.10 ohmm
Temperature at sample depth	79.1 deg C	78.2 deg C
Length of Cir	hrs	hrs
Time/Date Circ Stopped	hrs	
Time since Circ	hrs mins	
D. SAMPLE RECOVERY		
Surface Pressure	1500 psia	Preserved
Amt Gas	74.2 cu ft	- cu ft
Amt Oil	40 lit	- lit
Amt Water (Total)	5 lit	- lit
Amt Others	- lit	- lit

WELL: MOONFISH #1 ST1 SEAT NO: 5/45

OBSERVER: D BARWICK DATE: 04.09.92 RUN NO: 5

E. SAMPLE PROPERTIES		
Gas Composition		
C1	280800 ppm	- ppm
C2	31360 ppm	- ppm
C3	7280 ppm	- ppm
C4	3770 ppm	- ppm
C5	765 ppm	- ppm
C6+	- ppm	- ppm
CO2/H2S	4.2%/- ppm	% / ppm
Oil Properties	38.3 deg API @ 15.6 deg C	- deg API @ - deg C
Colour	Red/Brown	
Flourescence	Yellow/Green	
GOR	295 cu ft/bbl	
Pour Point	17 deg C	
Water Properties		
Resistivity	.185 ohm-m @ 18 deg C	- ohm-m @ - deg C
NaCl Equivalent	42000 ppm	- ppm
Cl-titrated	24000 ppm	- ppm
Tritium	- DPM	- DPM
ph	6.8	
Est Water Type	Filtrate	
F. MUD FILTRATE PROPERTIES		
Resistivity	.168 ohm-m @ 13 deg C	.168 ohm-m @ 13 deg C
NaCl Equivalent	60000 ppm	60000 ppm
Cl-titrated	23000 ppm	23000 ppm
ph	9.1	9.1
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	9.95 ppg	9.95 ppg
Calc Hydrostatic	2944 psi	2944 psi
Serial No. (Preserved)		RFS-AD-1114
Choke Size/Probe Type	1x40000/MARTINEAU	1x20000/MARTINEAU
REMARKS		Preserved
	Formation pressure as per Reservoir Technology report	Formation pressure as per Reservoir Technology report

Ref:MOON20.doc

RFT SAMPLE TEST REPORT

WELL: MOONFISH #1 ST1 SEAT NO: 6/48

OBSERVER: D BARWICK DATE: 16.07.92 RUN NO: 6

	CHAMBER 1 (45.4 lit)	CHAMBER 2 (3.8 lit)
SEAT NO	6/48-1	6/48-2
DEPTH	2032.8m	2032.8m
A. RECORDING TIMES		
Tool Set	2048 hrs	- hrs
Time open	4 mins	- mins
Chamber Open	2052 hrs	2128 hrs
Chamber Full	29 mins	7 mins
Seal Chamber	2128 hrs	2157 hrs
Fill Time	36 mins	29 mins
Finish Build Up	2128 hrs	2157 hrs
Build Up Time	7 mins	22 mins
Tool Retract	- hrs	2200 hrs
Total Time	- mins	72 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	3246 psia	- psia
Initial Form'n Press	2674.0 psia	- psia
Initial Flowing Press	41 psia	304 psia
Final Flowing Press	2296 psia	2440 psia
Final Form'n Press	- psia	2674.0 psia
Final Hydrostatic	- psia	3250 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.09 ohmm	0.09 ohmm
Temperature at sample depth	78.6 deg C	78.8 deg C
Length of Cir	hrs	hrs
Time/Date Circ Stopped	hrs	
Time since Circ	hrs/mins	
D. SAMPLE RECOVERY		
Surface Pressure	650 psia	1250 psia
Amt Gas	RTSTM	RTSTM
Amt Oil	0.5 lit	1.5 lit
Amt Water (Total)	42 lit	2 lit
Amt Others	- lit	- lit

WELL: MOONFISH #1 ST1 SEAT NO: 6/48

OBSERVER: D BARWICK DATE: 16.07.92 RUN NO: 6

E. SAMPLE PROPERTIES		
Gas Composition		
C1	20280 ppm	44460 ppm
C2	17420 ppm	4480 ppm
C3	5540 ppm	1810 ppm
C4	860 ppm	280 ppm
C5	TR ppm	130 ppm
C6+	- ppm	TR ppm
CO2/H2S	4%/ ppm	4.6% ppm
Oil Properties	32.2 deg API @ 15.6 deg C	32.8 deg API @ 15.6 deg C
Colour	Chocolate Brown	Chooclate Brown
Flourescence	Yellow/Gold	Yellow/Gold
GOR	- cu ft/bbl	-
Pour Point	26 deg C	26 deg C
Water Properties		
Resistivity	.127 ohm-m @ 15 deg C	.136 ohm-m @ 15deg C
NaCl Equivalent	67000 ppm	62000 ppm
Cl-titrated	29500 ppm	27000 ppm
Tritium	- DPM	- DPM
ph	7.2	7.4
Est Water Type	Filtrate	Filtrate
F. MUD FILTRATE PROPERTIES		
Resistivity	.180 ohm-m @ 15 deg C	.180 ohm-m @ 15 deg C
NaCl Equivalent	48000 ppm 48000	ppm
Cl-titrated	22500 ppm	22500 ppm
ph	9	9
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	9.95 ppg	9.95 ppg
Calc Hydrostatic	3220 psi	3220 psi
Serial No. (Preserved)		-
Choke Size/Probe Type	No Choke/Martineau	No Choke/Martineau
REMARKS	Formation pressure as per Reservoir Technology report	Formation pressure as per Reservoir Technology report

Ref:MOON21.doc

RFT SAMPLE TEST REPORT

WELL: MOONFISH #1 ST1 SEAT NO: 7/52

OBSERVER: D BARWICK DATE: 16.07.92 RUN NO: 7

	CHAMBER 1 (45.4 lit)	CHAMBER 2 (3.8 lit)
SEAT NO	7/52-1	7/52-2
DEPTH	1850.8m	1850.8m
A. RECORDING TIMES		
Tool Set	0325 hrs	- hrs
Time open	2 mins	- mins
Chamber Open	0327 hrs	0424 hrs
Chamber Full	- mins	- mins
Seal Chamber	0423 hrs	0456 hrs
Fill Time	56 mins	32 mins
Finish Build Up	0423 hrs	0456 hrs
Build Up Time	0 mins	0 mins
Tool Retract	- hrs	0505 hrs
Total Time	- mins	100 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	2956 psia	- psia
Initial Form'n Press	2407.9 psia	- psia
Initial Flowing Press	90 psia	242 psia
Final Flowing Press	517 psia	2018 psia
Final Form'n Press	- psia	2407.9 psia
Final Hydrostatic	- psia	2956 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.1 ohmm	0.1 ohmm
Temperature at sample depth	76.3 deg C	76.5 deg C
Length of Cir	hrs	hrs
Time/Date Circ Stopped	hrs	
Time since Circ	hrs/mins	
D. SAMPLE RECOVERY		
Surface Pressure	500 psia	1500 psia
Amt Gas	16 cuft	8 cuft
Amt Oil	Oil Film	- lit
Amt Water (Total)	19.5 lit	1.2 lit
Amt Others	- lit	- lit

WELL: MOONFISH #1 ST1 SEAT NO: 7/52

OBSERVER: D BARWICK DATE: 16.07.92 RUN NO: 7

E. SAMPLE PROPERTIES		
Gas Composition		
C1	94850 ppm	110230 ppm
C2	11590 ppm	10100 ppm
C3	4640 ppm	3810 ppm
C4	770 ppm	594 ppm
C5	230 ppm	216 ppm
C6+	TR ppm	- ppm
CO2/H2S	1.5%/- ppm	4%/- ppm
Oil Properties	25.3 deg API @ 15.6 deg C	- deg API @ - deg C
Colour	Greenish Brown	
Flourescence	Yellow Green	
GOR	Oil Recovery too Small	
Pour Point	27 deg C	
Water Properties		
Resistivity	0.155 ohm-m @ 21 deg C	.15 ohm-m @ 21 deg C
NaCl Equivalent	50000 ppm	50000 ppm
Cl-titrated	25500 ppm	25500 ppm
Tritium	- DPM	- DPM
ph	7.2	7.3
Est Water Type	Filtrate	Filtrate
F. MUD FILTRATE PROPERTIES		
Resistivity	.180 ohm-m @ 15 deg C	.180 ohm-m @ 15 deg C
NaCl Equivalent	48000 ppm	48000 ppm
Cl-titrated	22500 ppm	22500 ppm
ph	9	9
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	9.95 ppg	9.95 ppg
Calc Hydrostatic	2933 psi	2933 psi
Serial No. (Preserved)		-
Choke Size/Probe Type	No Choke/Martineau	No Choke/Martineau
REMARKS	Chamber Partly filled from 1851m, aborted due to low permeability. Build up not done to reduce time @ sample depth. Formation pressure as per Reservoir Technology report	Build up not complete to reduce time @ sample depth. Formation pressure as per Reservoir Technology report

RFT SAMPLE TEST REPORT

WELL: MOONFISH #1 ST1 SEAT NO: 8/53

OBSERVER: G Clota DATE: 17.07.92 RUN NO: 8

	CHAMBER 1 (45.4 lit)	CHAMBER 2 (3.8 lit)
SEAT NO	8/53-1	8/53-2
DEPTH	1848.0m	1848.0m
A. RECORDING TIMES		
Tool Set	0840 hrs	- hrs
Time open	5 mins	- mins
Chamber Open	0845 hrs	0903 hrs
Chamber Full	13 mins	2 mins
Seal Chamber	0903 hrs	0911 hrs
Fill Time	18 mins	8 mins
Finish Build Up	0903 hrs	0911 hrs
Build Up Time	5 mins	6 mins
Tool Retract	- hrs	0912 hrs
Total Time	- mins	32 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	2948 psia	- psia
Initial Form'n Press	2409.2 psia	- psia
Initial Flowing Press	2407 psia	1063 psia
Final Flowing Press	2398 psia	2382 psia
Final Form'n Press	- psia	2402.7 psia
Final Hydrostatic	- psia	2946 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.11 ohmm	0.11 ohmm
Temperature at sample depth	77.2 deg C	77.2 deg C
Length of Cir	hrs	hrs
Time/Date Circ Stopped	hrs	
Time since Circ	hrs/mins	
D. SAMPLE RECOVERY		
Surface Pressure	1100 psia	1000 psia
Amt Gas	17.7 cuft	10 cuft
Amt Oil	8 lit	0.25 lit
Amt Water (Total)	33 lit	3.0 lit
Amt Others	- lit	- lit

WELL: MOONFISH #1 ST1 SEAT NO: 8/53

OBSERVER: G Clota DATE: 17.07.92 RUN NO: 8

E. SAMPLE PROPERTIES		
Gas Composition		
C1	89440 ppm	273000 ppm
C2	11200 ppm	40600 ppm
C3	6620 ppm	17280 ppm
C4	2420 ppm	5470 ppm
C5	720 ppm	680 ppm
C6+	ppm	ppm
CO2/H2S	2%/- ppm	2%/- ppm
Oil Properties	37.2 deg API @ 15.6 deg C	37.2 deg API @ 15.6 deg C
Colour	Honey Brown	Honey Brown
Flourescence	Yellow Green	Yellow Green
GOR	352	6360
Pour Point	22 deg C	22 deg C
Water Properties		
Resistivity	0.144 ohm-m @ 19 deg C	0.141 ohm-m @ 15 deg C
NaCl Equivalent	75000 ppm	76000 ppm
Cl-titrated	28500 ppm	30500 ppm
Tritium	- DPM	- DPM
ph	7.2	7.2
Est Water Type	Filtrate	Filtrate
F. MUD FILTRATE PROPERTIES		
Resistivity	.180 ohm-m @ 15 deg C	.180 ohm-m @ 15 deg C
NaCl Equivalent	48000 ppm	48000 ppm
Cl-titrated	22500 ppm	22500 ppm
ph	9.0	9.0
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	9.95 ppg	9.95 ppg
Calc Hydrostatic	2929 psi	2929 psi
Serial No. (Preserved)		-
Choke Size/Probe Type	- /Martineau	- /Martineau
REMARKS	Formation pressure as per Reservoir Technology report	Strain Gauge Pressures for Formation Pressures. HP Gauge Plugging. Formation pressure as per Reservoir Technology report

Ref:MOON23.doc

RFT SAMPLE TEST REPORT

WELL: MOONFISH #1 ST1 SEAT NO: 9/54

OBSERVER: G Clota DATE: 17.07.92 RUN NO: 9

	CHAMBER 1 (45.4 lit)	CHAMBER 2 (3.8 lit)
SEAT NO	9/54-1	9/54-1
DEPTH	1838.7m	1838.7m
A. RECORDING TIMES		
Tool Set	1205 hrs	- hrs
Time open	11 mins	- mins
Chamber Open	1216 hrs	1235 hrs
Chamber Full	8 mins	1 mins
Seal Chamber	1234 hrs	1243 hrs
Fill Time	18 mins	8 mins
Finish Build Up	1234 hrs	1243 hrs
Build Up Time	10 mins	7 mins
Tool Retract	- hrs	1245 hrs
Total Time	- mins	40 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	2932 psia	- psia
Initial Form'n Press	2388.9 psia	- psia
Initial Flowing Press	189 psia	1616 psia
Final Flowing Press	2381 psia	2374 psia
Final Form'n Press	- psia	2389.4 psia
Final Hydrostatic	- psia	2934 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.1 ohmm	0.1 ohmm
Temperature at sample depth	77.4 deg C	77.4 deg C
Length of Cir	hrs	hrs
Time/Date Circ Stopped	hrs	
Time since Circ	hrs/mins	
D. SAMPLE RECOVERY		
Surface Pressure	500 psia	750 psia
Amt Gas	RTSTM	RTSTM
Amt Oil	1.5 lit	TR lit
Amt Water (Total)	42 lit	3.5 lit
Amt Others	- lit	- lit

WELL: MOONFISH #1 ST1 SEAT NO: 9/54

OBSERVER: G Clota DATE: 17.07.92 RUN NO: 9

E. SAMPLE PROPERTIES		
Gas Composition		
C1	271960 ppm	239200 ppm
C2	117040 ppm	81200 ppm
C3	82000 ppm	49680 ppm
C4	33280 ppm	42200 ppm
C5	5440 ppm	8840 ppm
C6+	ppm	ppm
CO2/H2S	1.2%/- ppm	0.5%/- ppm
Oil Properties	19 deg API @ 15.6 deg C	- deg API @ - deg C
Colour	Chocolate Brown	Chocolate Brown
Flourescence	Pale Yellow	Pale Yellow
GOR	-	-
Pour Point	22 deg C	-
Water Properties		
Resistivity	0.13 ohm-m @ 14 deg C	0.12 ohm-m @ 14 deg C
NaCl Equivalent	78000 ppm	82000 ppm
Cl-titrated	29500 ppm	30500 ppm
Tritium	- DPM	- DPM
ph	7.2	7.3
Est Water Type	Filtrate	Filtrate
F. MUD FILTRATE PROPERTIES		
Resistivity	.180 ohm-m @ 15 deg C	.180 ohm-m @ 15 deg C
NaCl Equivalent	48000 ppm	48000 ppm
Cl-titrated	22500 ppm	22500 ppm
ph	9.0	9.0
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	9.95 ppg	9.95 ppg
Calc Hydrostatic	2914 psi	2914 psi
Serial No. (Preserved)		-
Choke Size/Probe Type	- /Martineau	- /Martineau
REMARKS	Possible H2O Contamination in Oil Sample for API Formation pressure as per Reservoir Technology report	Oil Sample Too Small to Measure for Properties Formation pressure as per Reservoir Technology report

Ref:MOON24.doc

RFT SAMPLE TEST REPORT

WELL: MOONFISH 1 ST1 SEAT NO: 10/55

OBSERVER: G CLOTA DATE: 17.7.92 RUN NO: 10

	CHAMBER 1 (45.4 lit)	CHAMBER 2 (3.8 lit)
SEAT NO	10/55-1	10-55-2
DEPTH	1819.0m	1819.0m
A. RECORDING TIMES		
Tool Set	1610 hrs	- hrs
Time open	22 mins	- mins
Chamber Open	1632 hrs	1653 hrs
Chamber Full	1 mins	10 secs
Seal Chamber	1653 hrs	1700 hrs
Fill Time	21 mins	7 mins
Finish Build Up	1653 hrs	1700 hrs
Build Up Time	20 mins	6.8 mins
Tool Retract	- hrs	1701 hrs
Total Time	- mins	51 mins
B. SAMPLE PRESSURE		
Initial Hydrostatic	2900 psia	- psia
Initial Form'n Press	2358.9 psia	- psia
Initial Flowing Press	1706 psia	2342 psia
Final Flowing Press	2351 psia	2357 psia
Final Form'n Press	- psia	2359.2 psia
Final Hydrostatic	- psia	2900 psia
C. TEMPERATURE		
Rm @ Sample Depth	0.1 ohmm	0.1 ohmm
Temperature at sample depth	77.9 deg C	77.9. deg C
Length of Cir	hrs	hrs
Time/Date Circ Stopped		
Time since Circ		
D. SAMPLE RECOVERY		
Surface Pressure	1800 psia	200 psia
Amt Gas	214 cu ft	18 cu ft
Amt Oil	- lit	- lit
Amt Water (Total)	TR lit	TR lit
Amt Others	TR MUD & COND lit	TR COND lit

WELL: MOONFISH 1 ST1 SEAT NO: 10/55

OBSERVER: G CLOTA DATE: 17.7.92 RUN NO: 10

E. SAMPLE PROPERTIES		
Gas Composition		
C1	572000 ppm	292000 ppm
C2	134400 ppm	56000 ppm
C3	50400 ppm	24120 ppm
C4	21360 ppm	11350 ppm
C5	16320 ppm	2040 ppm
C6+	- ppm	- ppm
CO2/H2S	2 % /- ppm	0.5 % / pm
Oil Properties	- deg API @ deg C	- deg API @ - deg C
Colour	-	-
Flourescence	-	-
GOR	-	-
Pour Point	-	-
Water Properties		
Resistivity	1.26ohm-m @ 15 deg	0.180 ohm-m @ 15 deg C
NaCl Equivalent	7000 ppm	2500 ppm
Cl-titrated	4000 ppm	800 ppm
Tritium	- DPM	- DPM
ph	7.1	7.2
Est Water Type	Formation	Formation
F. MUD FILTRATE PROPERTIES		
Resistivity	0.180 ohm-m @ 15 deg C	0.180 ohm-m @ 15 deg C
NaCl Equivalent	48000 ppm	48000 ppm
Cl-titrated	22500 ppm	22500 ppm
ph	9.0	9.0
Tritium in Mud	- DPM	- DPM
G. GENERAL CALIBRATION		
Mud Weight	9.95 ppg	9.95 ppg
Calc Hydrostatic	2885 psi	2885 psi
Serial No. (Preserved)		
Choke Size/Probe Type	1x40000/MARTINEAU	1x20000/MARTINEAU
REMARKS report	2 gas bombs, 1st sample EPR 1016 sample EPR 007 Formation pressure as per Reservoir Technology report	Formation pressure as per Reservoir Technology

Ref:MOON32.doc

APPENDIX 5

MOONFISH 1/ST 1

VELOCITY SURVEY REPORT

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