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Date: 21 Aug 2005 Geology Report Number: 4 (associated DDR # 16)

	Well Details										
Depth MDBRT:	1,893.0m	Rig:	OCEAN PATRIOT	Date:	21 Aug 2005						
Depth TVDBRT:	1,893.0m	RTE amsl:	21.5m	Report Start:	00:00						
Depth TVDSS:	1,871.5m	GLE amsl:	155.5m	Report End:	24:00						
Progress:	887.0m	Last Csg Size:	13.375in	Days On Location:	15.81						
Hole Size:	12.250in	Last Csg Shoe:	1,000.1m	Days since Spud:	7.50						
Hole Size Carbide:		F.I.T. / L.O.T.:	0.00ppg / 12.49ppg								

Operations Summary							
24hr Summary:	Drill ahead in the Gippsland Limestone and into the Lakes Entrance Formation. Lakes Entrance at 1755m MD 1733.5m SS.						
Forward Plan:	Drill ahead 12 1/4" hole through Lakes Entrance and Latrobe Formation.						

	WBM Data											
Mud Type:	PHPA	Flowline Temp:		CI:	43000mg/l	Low Gravity Solids:		Viscosity	54sec/qt			
Sample From:	Active	MWD Circ Temp:		Hard/Ca:	520mg/l	High Gravity Solids:		PV YP	13cp 13lb/100ft²			
Time:	21.30	Glycol CP Temp:		MBT:		Solids (corrected):		Gels 10s	8			
Weight:	10.00ppg	Glycol:	2.5%vol	PM:		H2O:	90%	Gels 10m	12			
ECD TD:		Nitrates:		PF:	0.05	Oil:		Fann 003	6			
ECD Shoe:		Sulphites:		MF:	0.3	Sand:		Fann 006 Fann 100	9 25			
ECD Cuttings:		API FL:	5.4cc/30min	pH:	8.9	Barite:		Fann 200	32			
KCI Equiv:	7%	API Cake:	1/32nd"	PHPA Excess:				Fann 300	39			
								Fann 600	52			

Formation Tops									
Formation	Progr	nosed	Act	Actual		Thickness	Pick Criteria		
Formation	MDBRT	TVDSS	MDBRT	TVDSS	+ / - TVD	MD	PICK CITIETIA		
Gippsland Limestone	176.00m	154.00m	177.00m	155.50m	1.50m	1,578.00m	Mud line		
Base Pleistocene	599.00m	577.00m							
Lakes Entrance	1,758.00m	1,736.00m	1,755.00m	1,733.50m	-2.50m	0.00m	lithology & LWD		
Latrobe Formation	2,092.00m	2,070.00m							
Base Tuna Flounder Channel	2,167.00m	2,145.00m							
K2 Sand Marker	2,601.00m	2,579.00m							
Ma2 Marker	2,875.00m	2,844.00m							
Top Reservoir ZC1 marker	3,035.00m	2,989.00m							
Top Zone 2	3,095.00m	3,043.00m							
Top Zone 5	3,208.00m	3,146.00m							
Top Volcanics Unit 1	3,313.00m	3,241.00m							
TD	3,380.00m								

	Gas Peaks										
Lagged	Gas	Total	C1	C2	C3	iC4	nC4	C5	GOR	LHR	OCQ
Depth	Type	Gas	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)			
1776.00	Drilled	0	773	10	6	4	1	1			
Comment -	Background gas	•	•	•		'	1				
1790.00	Drilled	0	800	9	6	3	1	1			
Comment -	Background gas	•	•	•		'	1				
1849.00	Drilled	0	1294	18	11	5	2	2			
Comment -	Background gas	•		•		•	•			•	



Pore Pressure / Wellbore Stability						
Estimated Pore Pressure:	8.60					
Hole Condition, Cavings:	othing abnormal noted.					
Gas Indicators - BG, TG, CG:	See gas summary					
Losses:	Nothing abnormal noted.					
Remarks:	Nothing abnormal.					

				Survey				
MDBRT	Incl.	Corr. Az	TVDBRT	'V' Sect	Dogleg	N/S	E/W	Tool Type
(m)	(deg)	(deg)	(m)	(deg)	(deg/30m)	(m)	(m)	
1466.44	0.6	319.4	1466.43	-1.7	0.1	1.9	-0.9	MWD
1495.45	0.5	333.2	1495.44	-1.9	0.6	2.1	-1.1	MWD
1524.52	0.6	322.9	1524.51	-2.1	0.5	2.3	-1.2	MWD
1553.75	0.6	337.4	1553.73	-2.3	0.5	2.6	-1.4	MWD

06:00 Hrs Update						
Time:	06:00 Hrs on 22 Aug 2005					
Depth:	2006					
Progress Since Midnight:	e Midnight: 113					
Drilling Status:	Drill ahead in the Lakes Entrance, rotating and sliding as required					
Formation:	Lakes Entrance Formation top 1755m MD 1733.5m SS					
Lithology:	Argillaceous Claystone grading to Claystone with depth.					
ROP:	Rotating 27m/hr Sliding 9.5m/hr					
Gas:	No peaks Background 2.7 units C1 626ppm, C2 11ppm, C3 7ppm. C4 4ppm, C5 0ppm					

Wellsite Geologist(s) (Days) - M.Woodmansee (Nights) - R.Blackmore

	Lithology Report								
Depth I	Interval	Main							
Depth (mRT)	Depth Range	Lithology	Qualifier	Description					
1030.0	1040.0	MRL		MARL, It gy, It olv gy, Very soft, to Soft, sub-blocky, 55% calcerous clay, 45% siliceous clay, 0.1% Coal, 0.1% Feldspar,					
1030.0	1040.0	Lst		Limestone, It gy, It brnish gy, Firm, to Moderately hard, blocky,					
1020.0	1030.0	MRL		MARL, lt gy, lt olv gy, Very soft, to Soft, sub-blocky, 55% calcerous clay, 45% siliceous clay, 0.1% Coal, 0.1% Feldspar,					
1010.0	1020.0	MRL		MARL, vlt gy, lt olv gy, Very soft, to Soft, amorphous, to sub-blocky, 60% calcerous clay, 40% siliceous clay, 1% Foram, 0.1% Coal,					
1010.0	1020.0	Ca		Calcarenite, v It gy, It olv gy, Soft, sub-blocky, Well Rounded, Well sorted, Very Spherical, 40% calcerous clay, 60% calcerous sand, 70% fine grained, 30% medium grained, 10% porosity, hydrocarbon shows.					
1006.0	1010.0	Ca		Calcarenite, v It gy, It olv gy, Soft, sub-blocky, Well Rounded, Well sorted, Very Spherical, 40% calcerous clay, 60% calcerous sand, 70% fine grained, 30% medium grained, 10% porosity, hydrocarbon shows.					
1006.0	1010.0	MRL		MARL, vlt gy, lt olv gy, Very soft, to Soft, amorphous, to sub-blocky, 60% calcerous clay, 40% siliceous clay, 1% Foram, 0.1% Coal,					
1040.0	1050.0	Lst		Limestone, It gy, It brnish gy, Firm, to Moderately hard, blocky,					
1040.0	1050.0	MRL		MARL, lt gy, lt olv gy, Very soft, to Soft, sub-blocky, 55% calcerous clay, 45% siliceous clay, 0.1% Coal, 0.1% Feldspar,					
1050.0	1060.0	MRL		MARL, lt gy, lt olv gy occ sl yelsh brn, Very soft, to Soft, amorphous, to sub-blocky, 53% calcerous clay, 47% siliceous clay,					
1050.0	1060.0	Lst		Limestone, off wh, v lt gy, Soft, to Firm, to blocky, 100% calcerous clay,					
1060.0	1070.0	MRL		MARL, It gy, It olv gy occ sI yelsh brn, Very soft, to Soft, amorphous, to sub-blocky, 53% calcerous clay, 47% siliceous clay,					
1070.0	1080.0	MRL		MARL, It gy, It olv gy occ sI yelsh brn, Very soft, to Soft, amorphous, to sub-blocky, 53% calcerous clay, 47% siliceous clay,					
1080.0	1090.0	MRL		MARL, lt gy, lt olv gy, Very soft, to Soft, amorphous, to sub-blocky, 53% calcerous clay, 47%					



	Lithology Report								
Depth I	Interval	Main							
Depth (mRT)	Depth Range	Lithology	Qualifier	Description					
				siliceous clay,					
1090.0	1100.0	MRL		MARL, It gy, It olv gy , Very soft, to Soft, amorphous, to sub-blocky, 53% calcerous clay, 47% siliceous clay,					
1100.0	1110.0	MRL		MARL, It gy, It olv gy, Very soft, to Soft, amorphous, to sub-blocky, 53% calcerous clay, 47% siliceous clay, 0.1% Pyrite, 0.1% Foram,					
1110.0	1120.0	Lst		Limestone, It gy, It olv gy, Very soft, to Soft, amorphous, to dispersive, 67% calcerous clay, 33% siliceous clay, 0.1% Pyrite, 0.1% Foram, 0.1% Coal,					
1120.0	1130.0	Lst		Limestone, It gy, It olv gy, Very soft, to Soft, amorphous, to dispersive, 67% calcerous clay, 33% siliceous clay, 0.1% Pyrite, 0.1% Foram, 0.1% Coal,					
1130.0	1140.0	Lst		Limestone, It gy, It olv gy, Very soft, to Soft, amorphous, to dispersive, 67% calcerous clay, 33% siliceous clay, 0.1% Pyrite, 0.1% Foram, 0.1% Coal,					
1140.0	1150.0	Lst		Limestone, It gy, It olv gy, Very soft, to Soft, amorphous, to dispersive, 67% calcerous clay, 33% siliceous clay, 0.1% Pyrite, 0.1% Foram, 0.1% Coal,					
1150.0	1160.0	Lst		Limestone, It gy, It olv gy, Very soft, to Soft, amorphous, to dispersive, 63% calcerous clay, 37% siliceous clay, 0.1% Pyrite, 0.1% Foram,					
1160.0	1170.0	Lst		Limestone, It gy, It olv gy, Very soft, to Soft, amorphous, to dispersive, 63% calcerous clay, 37% siliceous clay, 0.1% Pyrite, 0.1% Foram, 0.1% Coal,					
1170.0	1180.0	Lst		Limestone, It gy, It olv gy, Very soft, to Soft, amorphous, to dispersive, 63% calcerous clay, 37% siliceous clay, 0.1% Pyrite, 0.1% Foram, 0.1% Coal,					
1180.0	1190.0	Lst		Limestone, It gy, It olv gy , Very soft, to Soft, amorphous, to dispersive, 65% calcerous clay, 35% siliceous clay, 0.1% Pyrite, 0.1% Foram, 0.1% Coal,					
1190.0	1200.0	Lst		Limestone, It gy, It olv gy , Very soft, to Soft, amorphous, to dispersive, 65% calcerous clay, 35% siliceous clay, 0.1% Foram,					
1200.0	1210.0	Lst		Limestone, It gy, It olv gy , Very soft, to Soft, amorphous, to dispersive, 65% calcerous clay, 35% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1210.0	1220.0	Lst		Limestone, It gy, It olv gy , Very soft, to Soft, amorphous, to dispersive, 66% calcerous clay, 34% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1220.0	1230.0	Са		Calcarenite, It gy, It olv gy, Soft, to Firm, sub-blocky, to blocky, Well Rounded, Well sorted, Very Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 0.1% Pyrite, 10% porosity, hydrocarbon shows.					
1220.0	1230.0	MRL		MARL, It gy, It olv gy , Very soft, to Soft, amorphous, to dispersive, 60% calcerous clay, 40% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1230.0	1240.0	Ca		Calcarenite, It gy, It olv gy, Soft, to Firm, sub-blocky, to blocky, Well Rounded, Well sorted, Very Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 0.1% Pyrite, 10% porosity, hydrocarbon shows.					
1230.0	1240.0	MRL		MARL, It gy, It olv gy , Very soft, to Soft, amorphous, to dispersive, 60% calcerous clay, 40% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1240.0	1250.0	Ca		Calcarenite, It gy, It olv gy, Firm, to Moderately hard, sub-blocky, to blocky, Well Rounded, Well sorted, Very Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 0.1% Pyrite, 10% porosity, hydrocarbon shows.					
1240.0	1250.0	MRL		MARL, It gy, It olv gy, Very soft, to Soft, amorphous, to dispersive, 60% calcerous clay, 40% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1250.0	1260.0	Ca		Calcarenite, It gy, It olv gy, Firm, to Moderately hard, sub-blocky, to blocky, Well Rounded, Well sorted, Very Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 0.1% Pyrite, 10% porosity, hydrocarbon shows.					
1250.0	1260.0	MRL		MARL, It gy, It olv gy, Very soft, to Soft, amorphous, to dispersive, 60% calcerous clay, 40% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1260.0	1270.0	Ca		Calcarenite, It gy, It olv gy, Firm, to Moderately hard, sub-blocky, to blocky, Well Rounded, Well sorted, Very Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 0.1% Pyrite, 10% porosity, hydrocarbon shows.					
1260.0	1270.0	MRL		MARL, It gy, It olv gy, Very soft, to Soft, amorphous, to sub-blocky, 60% calcerous clay, 40% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1270.0	1280.0	MRL		MARL, It gy, It olv gy, Very soft, to Firm, amorphous, to sub-blocky, 60% calcerous clay, 40% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1280.0	1290.0	MRL		MARL, It gy, It olv gy, Very soft, to Firm, amorphous, to sub-blocky, 60% calcerous clay, 40% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1290.0	1300.0	MRL		MARL, It gy, It olv gy, Very soft, to Firm, amorphous, to sub-blocky, 60% calcerous clay, 40% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1300.0	1310.0	MRL		MARL, It gy, It olv gy, Very soft, to Firm, amorphous, to sub-blocky, 60% calcerous clay, 40%					



	Lithology Report								
Depth I	r	Main							
Depth (mRT)	Depth Range	Lithology	Qualifier	Description					
				siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1300.0	1310.0	Ca		Calcarenite, It gy, It olv gy, , Firm, to Moderately hard, sub-blocky, to blocky, Well Rounded, Well sorted, Very Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 0.1% Pyrite, 5% porosity, hydrocarbon shows.					
1310.0	1320.0	Ca		Calcarenite, It gy, It olv gy, , Firm, to Moderately hard, sub-blocky, to blocky, Well Rounded, Well sorted, Very Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 0.1% Pyrite, 5% porosity, hydrocarbon shows.					
1310.0	1320.0	MRL		MARL, gn-gy, dk gn-gy, Very soft, to Firm, amorphous, to sub-blocky, 60% calcerous clay, 40% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1320.0	1330.0	MRL		MARL, gn-gy, dk gn-gy, Soft, to Firm, amorphous, to sub-blocky, 52% calcerous clay, 48% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1330.0	1340.0	MRL		MARL, gn-gy, dk gn-gy, Soft, to Firm, amorphous, to sub-blocky, 52% calcerous clay, 48% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1340.0	1350.0	MRL		MARL, gn-gy, dk gn-gy, occ lt olv gy, Soft, to Firm, blocky, to sub-blocky, 52% calcerous clay, 48% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1350.0	1360.0	MRL		MARL, gn-gy, dk gn-gy, occ lt olv gy, Soft, to Firm, blocky, to sub-blocky, 52% calcerous clay, 48% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1360.0	1370.0	MRL		MARL, gn-gy, dk gn-gy, occ lt olv gy, Soft, to Firm, blocky, to sub-blocky, 52% calcerous clay, 48% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1370.0	1380.0	MRL		MARL, It-dk gn-gy,, Soft, to Firm, blocky, to sub-blocky, 52% calcerous clay, 48% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1380.0	1390.0	MRL		MARL, It-dk gn-gy,, Soft, to Firm, sub-blocky, to blocky, 52% calcerous clay, 48% siliceous clay, 0.1% Foram, 0.1% Pyrite,					
1390.0	1400.0	Ca		Calcarenite, It brnish gy, Firm, to Moderately hard, sub-blocky, to blocky, Rounded, Moderately sorted, Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 5% porosity, hydrocarbon shows.					
1390.0	1400.0	MRL		MARL, lt-dk gn-gy,, Soft, to Firm, amorphous, to sub-blocky, 52% calcerous clay, 48% siliceous clay, 0.1% Foram,					
1400.0	1410.0	Ca		Calcarenite, It brnish gy, Firm, to Moderately hard, sub-blocky, to blocky, Rounded, Moderately sorted, Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 5% porosity, hydrocarbon shows.					
1400.0	1410.0	MRL		MARL, It-dk gn-gy,, Soft, to Firm, amorphous, to sub-blocky, 52% calcerous clay, 48% siliceous clay, 0.1% Foram,					
1410.0	1420.0	Ca		Calcarenite, It brnish gy, yelsh brn, Firm, to Moderately hard, sub-blocky, to blocky, Rounded, Moderately sorted, Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 5% porosity, hydrocarbon shows.					
1410.0	1420.0	MRL		MARL, It-dk gn-gy,, Soft, to Firm, amorphous, to sub-blocky, 52% calcerous clay, 48% siliceous clay, 0.1% Foram,					
1510.0	1520.0	MRL		MARL, It olv gy, Very soft, to Soft, sub-blocky, 58% calcerous clay, 2% calcerous sand, 40% siliceous clay, 0.1% Coal,					
1420.0	1430.0	Ca		Calcarenite, It brnish gy, yelsh brn, Firm, to Moderately hard, sub-blocky, to blocky, Rounded, Moderately sorted, Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 5% porosity, hydrocarbon shows.					
1420.0	1430.0	MRL		MARL, lt-dk gn-gy,, Soft, to Firm, amorphous, to sub-blocky, 58% calcerous clay, 42% siliceous clay, 0.1% Foram,					
1440.0	1450.0	MRL		MARL, lt-dk gn-gy,, Soft, to Firm, amorphous, to dispersive, 58% calcerous clay, 42% siliceous clay, 0.1% Foram,					
1440.0	1450.0	Ca		Calcarenite, It brnish gy, yelsh brn, Firm, to Moderately hard, sub-blocky, to blocky, Rounded, Moderately sorted, Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 5% porosity, hydrocarbon shows.					
1430.0	1440.0	Ca		Calcarenite, It brnish gy, yelsh brn, Firm, to Moderately hard, sub-blocky, to blocky, Rounded, Moderately sorted, Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 5% porosity, hydrocarbon shows.					
1430.0	1440.0	MRL		MARL, lt-dk gn-gy,, Soft, to Firm, amorphous, to sub-blocky, 58% calcerous clay, 42% siliceous clay, 0.1% Foram,					
1450.0	1460.0	Ca		Calcarenite, It brnish gy, yelsh brn, Firm, to Moderately hard, sub-blocky, to blocky, Rounded, Moderately sorted, Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 5% porosity, hydrocarbon shows.					
1450.0	1460.0	MRL		MARL, It grnish-gy, It olv gy, Soft, to Firm, amorphous, to dispersive, 58% calcerous clay, 42% siliceous clay, 0.1% Foram,					



	Lithology Report						
Depth Interval		Main					
Depth (mRT)	Depth Range	Lithology	Qualifier	Description			
1460.0	1470.0	Ca		Calcarenite, It brnish gy, yelsh brn, Firm, to Moderately hard, sub-blocky, to blocky, Rounded, Moderately sorted, Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 5% porosity, hydrocarbon shows.			
1460.0	1470.0	MRL		MARL, It grnish-gy, It olv gy, Soft, to Firm, amorphous, to dispersive, 58% calcerous clay, 42% siliceous clay, 0.1% Foram,			
1470.0	1480.0	Ca		Calcarenite, It brnish gy, yelsh brn, Firm, to Moderately hard, sub-blocky, to blocky, Rounded, Moderately sorted, Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 5% porosity, hydrocarbon shows.			
1470.0	1480.0	MRL		MARL, It grnish-gy, It olv gy, Soft, to Firm, amorphous, to dispersive, 58% calcerous clay, 42% siliceous clay, 0.1% Foram,			
1480.0	1490.0	Ca		Calcarenite, It brnish gy, yelsh brn, Firm, to Moderately hard, sub-blocky, to blocky, Rounded, Moderately sorted, Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 5% porosity, hydrocarbon shows.			
1480.0	1490.0	MRL		MARL, It grnish-gy, It olv gy, Soft, to Firm, amorphous, to dispersive, 58% calcerous clay, 42% siliceous clay, 0.1% Foram,			
1490.0	1500.0	Ca		Calcarenite, It brnish gy, yelsh brn, Firm, to Moderately hard, sub-blocky, to blocky, Rounded, Moderately sorted, Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 5% porosity, hydrocarbon shows.			
1490.0	1500.0	MRL		MARL, It grnish-gy, It olv gy, Soft, to Firm, sub-blocky, to blocky, 58% calcerous clay, 42% siliceous clay, 0.1% Foram,			
1500.0	1510.0	Ca		Calcarenite, It brnish gy, yelsh brn, Firm, to Moderately hard, sub-blocky, to blocky, Rounded, Moderately sorted, Spherical, 40% calcerous clay, 60% calcerous sand, 70% very fine grained, 30% fine grained, 0.1% Calcite cement, 0.1% Foram, 5% porosity, hydrocarbon shows.			
1500.0	1510.0	MRL		MARL, lt grnish-gy, lt olv gy, Soft, to Firm, sub-blocky, to blocky, 60% calcerous clay, 40% siliceous clay, 0.1% Foram,			
1520.0	1530.0	MRL		MARL, It olv gy, Very soft, to Soft, sub-blocky, 58% calcerous clay, 2% calcerous sand, 40% siliceous clay, 0.1% Coal,			
1530.0	1540.0	MRL		MARL, lt grnish-gy, lt olv gy, Soft, to Firm, sub-blocky, to blocky, 60% calcerous clay, 40% siliceous clay, 0.1% Foram,			
1540.0	1550.0	MRL		MARL, It olv gy, Very soft, to Soft, sub-blocky, 40% calcerous clay, 2% calcerous sand, 58% siliceous clay, 0.1% Foram, 0.1% Crinoid, 0.1% Coal,			
1550.0	1560.0	MRL		MARL, It olv gy, Very soft, to Soft, sub-blocky, 40% calcerous clay, 2% calcerous sand, 58% siliceous clay, 0.1% Coal,			
1560.0	1570.0	MRL		MARL, It olv gy, Very soft, to Soft, amorphous, to sub-blocky, 39% calcerous clay, 5% calcerous sand, 56% siliceous clay, 0.1% Coal, 0.1% Crinoid,			
1570.0	1580.0	MRL		MARL, It olv gy, rare slightly brnish It olv gy, Very soft, to Soft, sub-blocky, 39% calcerous clay, 5% calcerous sand, 56% siliceous clay, 0.1% Coal,			
1580.0	1590.0	MRL		MARL, It olv gy, Soft, to Friable, sub-blocky, 39% calcerous clay, 5% calcerous sand, 56% siliceous clay, 0.1% Coal, 0.1% Pyrite,			
1590.0	1600.0	MRL		MARL, It olv gy, Soft, to Friable, sub-blocky, 47% calcerous clay, 5% calcerous sand, 48% siliceous clay, 0.1% Coal, 0.1% Pyrite,			
1600.0	1610.0	MRL		MARL, It olv gy, rare slightly brnish It olv gy, Very soft, to Soft, sub-blocky, 54% calcerous clay, 5% calcerous sand, 41% siliceous clay, 0.1% Coal, 0.1% Crinoid,			
1610.0	1620.0	MRL		MARL, It olv gy, Soft, to Firm, sub-blocky, 54% calcerous clay, 5% calcerous sand, 41% siliceous clay, 0.1% Coal, 0.1% Pyrite,			
1620.0	1630.0	MRL		MARL, It olv gy, Soft, to Firm, sub-blocky, 54% calcerous clay, 5% calcerous sand, 41% siliceous clay, 0.1% Coal, 0.1% Pyrite,			
1630.0	1640.0	MRL		MARL, It olv gy, rr sl brnish olv gy, Soft, to Firm, sub-blocky, 55% calcerous clay, 5% calcerous sand, 40% siliceous clay, 0.1% Coal, 0.1% Pyrite,			
1630.0	1640.0	Lst		Limestone, v lt olv brn, of wh, transl, Firm, to Moderately hard, blocky, 100% calcerous clay,			
1640.0	1650.0	Lst		Limestone, v lt olv brn, of wh, transl, Firm, to Moderately hard, blocky, 100% calcerous clay,			
1640.0	1650.0	MRL		MARL, It olv gy, rr sl brnish olv gy, Soft, to Firm, sub-blocky, 55% calcerous clay, 5% calcerous sand, 40% siliceous clay, 0.1% Coal, 0.1% Pyrite,			
1650.0	1660.0	MRL		MARL, It olv gy, Soft, to Firm, sub-blocky, 54% calcerous clay, 5% calcerous sand, 41% siliceous clay, 0.1% Coal,			
1660.0	1670.0	MRL		MARL, It olv gy, occ sl brnish It olv gy., Soft, to Firm, sub-blocky, 54% calcerous clay, 5% calcerous sand, 41% siliceous clay, 0.1% Coal,			
1670.0	1680.0	MRL		MARL, It olv gy, Soft, to Firm, sub-blocky, 54% calcerous clay, 5% calcerous sand, 41% siliceous clay, 0.1% Coal,			



Lithology Report						
Depth I	Depth Interval					
Depth (mRT)	Depth Range	- Main Lithology	Qualifier	Description		
1680.0	1690.0	MRL		MARL, It olv gy, Soft, to Firm, sub-blocky, 54% calcerous clay, 5% calcerous sand, 41% siliceous clay, 0.1% Coal,		
1690.0	1700.0	MRL		MARL, It olv gy, Soft, to Firm, sub-blocky, 54% calcerous clay, 5% calcerous sand, 41% siliceous clay, 0.1% Coal,		
1700.0	1710.0	MRL		MARL, It olv gy, grnish gy to off wh, Soft, to Firm, sub-blocky, to blocky, 54% calcerous clay, 5% calcerous sand, 41% siliceous clay, 0.1% Coal,		
1710.0	1720.0	MRL		MARL, It olv gy, grnish gy to off wh, Soft, to Firm, sub-blocky, to blocky, 54% calcerous clay, 5% calcerous sand, 41% siliceous clay, 0.1% Coal,		
1720.0	1730.0	MRL		MARL, It olv gy, grnish gy to off wh, Soft, to Firm, sub-blocky, to blocky, 54% calcerous clay, 5% calcerous sand, 41% siliceous clay, 0.1% Coal,		
1730.0	1740.0	MRL		MARL, It olv gy, grnish gy to off wh, Soft, to Firm, sub-blocky, to blocky, 45% calcerous clay, 10% calcerous sand, 45% siliceous clay, 0.1% Coal,		
1740.0	1750.0	MRL		MARL, It olv gy, grnish gy to off wh, Soft, to Firm, sub-blocky, to blocky, 45% calcerous clay, 10% calcerous sand, 45% siliceous clay, 0.1% Coal,		
1750.0	1760.0	MRL		MARL, It olv gy, grnish gy to off wh, Soft, to Firm, sub-blocky, to blocky, 45% calcerous clay, 10% calcerous sand, 45% siliceous clay, 0.1% Coal, 0.1% Pyrite, 0.1% Ooliths, 0.1% Foram,		
1760.0	1770.0	MRL		MARL, It olv gy, grnish gy to off wh, Soft, to Firm, sub-blocky, to blocky, 40% calcerous clay, 60% siliceous clay, 1% Coal, 0.1% Pyrite, 0.1% Ooliths, 0.1% Foram,		
1770.0	1780.0	Clyst		Claystone, It olv gy, grnish gy to off wh, Soft, to Firm, sub-blocky, to blocky, 35% calcerous clay, 5% calcerous sand, 60% siliceous clay, 0.1% Dolomite cement, 1% Coal, 0.1% Pyrite, 0.1% Ooliths, 0.1% Foram,		
1780.0	1790.0	Clyst		Claystone, It olv gy, grnish gy, Soft, to Firm, sub-blocky, to blocky, 35% calcerous clay, 5% calcerous sand, 60% siliceous clay, 0.1% Dolomite cement, 0.1% Ostracod, 0.1% Foram, 0.1% Pyrite,		
1790.0	1800.0	Clyst		Claystone, It olv gy, It gy, Soft, to Firm, sub-blocky, to blocky, 35% calcerous clay, 5% calcerous sand, 60% siliceous clay, 0.1% Dolomite cement, 0.1% Ostracod, 0.1% Foram, 0.1% Pyrite,		
1800.0	1810.0	Clyst		Claystone, It olv gy, It gy, Soft, to Firm, sub-blocky, to blocky, 35% calcerous clay, 5% calcerous sand, 60% siliceous clay, 0.1% Dolomite cement, 0.1% Ostracod, 0.1% Foram, 0.1% Pyrite,		
1810.0	1820.0	Clyst		Claystone, It-med gy, Very soft, to Soft, amorphous, to sub-blocky, 25% calcerous clay, 75% siliceous clay, 0.1% Foram,		
1820.0	1830.0	Clyst		Claystone, It-med gy, off wh, Very soft, to Soft, amorphous, to sub-blocky, 35% calcerous clay, 5% calcerous sand, 60% siliceous clay, 0.1% Foram, 1% Pyrite, 1% Ostracod,		
1830.0	1840.0	Ca		Calcarenite, It gy, off wh, Soft, to Firm, sub-blocky, to blocky, Sub-angular, Poor sorted, Slightly Elongated, 40% calcerous clay, 60% calcerous sand, 0.1% Calcite cement, 1% Foram, 1% Pyrite, 1% Ostracod,		
1820.0	1830.0	Ca		Calcarenite, It gy, off wh, Soft, to Firm, sub-blocky, to blocky, Sub-angular, Poor sorted, Slightly Elongated, 40% calcerous clay, 60% calcerous sand, 0.1% Calcite cement, 1% Foram, 1% Pyrite, 1% Ostracod,		
1830.0	1840.0	Clyst		Claystone, It-med gy, off wh, Very soft, to Soft, amorphous, to sub-blocky, 35% calcerous clay, 5% calcerous sand, 60% siliceous clay, 0.1% Foram, 1% Pyrite, 1% Ostracod,		
1840.0	1850.0	MRL		MARL, It-med gy, off wh, Very soft, to Soft, amorphous, to sub-blocky, 60% calcerous clay, 40% siliceous clay, 0.1% Foram, 1% Pyrite, 1% Ostracod,		
1850.0	1860.0	Clyst		Claystone, It-med gy, off wh, Very soft, to Soft, amorphous, to sub-blocky, 35% calcerous clay, 5% calcerous sand, 60% siliceous clay, 0.1% Foram, 1% Pyrite, 1% Ostracod,		
1860.0	1870.0	Clyst		Claystone, It med gy, med gy, Very soft, to Soft, amorphous, to sub-blocky, 36% calcerous clay, 64% siliceous clay, 0.1% Pyrite, 0.1% Coal, 0.1% Ostracod,		
1870.0	1880.0	Clyst		Claystone, It med gy, med gy, Very soft, to Soft, amorphous, to sub-blocky, 36% calcerous clay, 64% siliceous clay, 0.1% Pyrite, 0.1% Coal, 0.1% Ostracod,		
1880.0	1890.0	Clyst		Claystone, It med gy, med gy, Very soft, to Soft, amorphous, to sub-blocky, 36% calcerous clay, 64% siliceous clay, 0.1% Pyrite, 0.1% Ostracod,		
1890.0	1900.0	Clyst		Claystone, It med gy - med gy, occ lt gy, Very soft, to Soft, amorphous, to sub-blocky, 36% calcerous clay, 64% siliceous clay, 0.1% Pyrite, 0.1% Coal, 0.1% Ostracod,		
1900.0	1910.0	Clyst		Claystone, It med gy -med gy, occ It gy, Very soft, to Soft, amorphous, to sub-blocky, 36% calcerous clay, 64% siliceous clay, 0.1% Pyrite, 0.1% Ostracod,		
1910.0	1920.0	Clyst		Claystone, It med gy - med gy, occ It gy, Very soft, to Soft, amorphous, to sub-blocky, 33% calcerous clay, 67% siliceous clay, 0.1% Pyrite, 0.1% Coal,		
1920.0	1930.0	Clyst		Claystone, It med gy -med gy, occ It gy, Very soft, to Soft, amorphous, to sub-blocky, 19% calcerous clay, 81% siliceous clay, 0.1% Pyrite,		
1930.0	1940.0	Clyst		Claystone, It med gy - med gy, Very soft, to Soft, sub-blocky, 19% calcerous clay, 81% siliceous		



Lithology Report							
Depth Interval		Main					
Depth (mRT)	Depth Range	Lithology	Qualifier	Description			
				clay, 0.1% Pyrite,			
1940.0	1950.0	Clyst		Claystone, It med gy - md gy, Very soft, to Soft, sub-blocky, 19% calcerous clay, 81% siliceous clay, 0.1% Pyrite, 0.1% Glauconite,			