

DAILY GEOLOGICAL REPORT

Date:	01 November 2005	Rig:	Ocean Patriot
Report Number:	10	Bit Diameter:	216 mm (8.5")
Report Period:	06:00 - 06:00 Hours	Last Casing:	340 mm @ 817.6 mMDRT
Spud Date:	24-Oct-2005 03:30 Hours	FIT:	1.70 sg EMW @ 827.0 mMDRT
Days From Spud:	8.1	Mud Weight:	1.22 sg
Depth @ 0600 Hrs:	2610.0 mMDRT	Mud Type:	KCL/PHPA
	2588.5 mTVDAHD	Mud Chlorides:	47, 000 mg/L
Lag Depth:	2610.0 mMDRT		1.03 sg
Last Depth:	2036.0 m MDRT	Last Survey:	2610.0 mMDRT
Progress:	574.0 m	Deviation:	Inc. 1.41°
Water Depth:	58.6 m		Az. 56.39°
RT:	21.5 m		

OPERATIONS SUMMARY

24 HOUR SUMMARY: Drilled ahead 216 mm hole to TD at 2610 mMDRT.

NEXT 24 HOURS: POOH to run wireline log. Run (1) Dual CSAT (check shot)

CURRENT OPERATION @ 06:00 HRS (01-Nov-2005): Pulling out of hole after reaching TD of 2610.0 mMDRT at 01:45 hrs on the 1st November 2005.

GEOLOGICAL SUMMARY

LITHOLOGY

INTERVAL: 2020.0 to 2198.0 m MDRT (-1998.3 to -2176.3 m TVDAHD)
ROP (Range): 11.0 to 81.0 m/h
Av. ROP: 37.0 m/h

Massive Calcareous Claystone

CALCAREOUS CLAYSTONE (100%) : light grey - medium light grey, rare medium grey, soft to occasionally firm, sub blocky, trace disseminated pyrite, trace dark carbonaceous and pyritic patches, rare glauconite.

INTERVAL: 2198.0 to 2210.0 m MDRT (-2176.3 to -2188.3 m TVDAHD)
ROP (Range): 21.0 to 46.0 m/h
Av. ROP: 35.0 m/h

Massive Calcareous Claystone with trace Sandstone and Siltstone

SILTSTONE (0-1%): brownish grey, very soft to firm, sub-blocky to amorphous, micro micaceous, carbonaceous specks and flakes, very argillaceous.

SANDSTONE (0-1%): clear to off-white, fine to medium, moderately sorted, rounded to angular, moderate to poor sphericity, common argillaceous matrix, trace glauconite, poor to fair inferred porosity, no fluorescence.

CALCAREOUS CLAYSTONE (98-100%): light grey - medium light grey, rare medium grey, soft to occasionally firm, sub-blocky, trace disseminated pyrite, trace dark carbonaceous and pyritic patches, glauconite and small glauconite nodules.

INTERVAL: 2210.0 to 2240.0 m MDRT (-2188.3 to -2218.3 m TVDAHD)
ROP (Range): 24.0 to 85.0 m/h
Av. ROP: 47.0 m/h

Siltstone, Carbonaceous Siltstone occasionally grading to Coal, Calcareous Claystone and trace Sandstone

SILTSTONE (60-80%): brownish grey, very soft to rarely firm, sub-blocky, rarely sub-fiissile, carbonaceous specks and laminae, grading to Carbonaceous Siltstone in part.

CARBONACEOUS SILTSTONE (trace): brownish black to black, firm, brittle in part, silty, gradational to Coal in part.

CALCAREOUS CLAYSTONE (20 - 40%) : light grey, off white, very soft to firm, sub blocky to amorphous in part, glauconitic in part.

SANDSTONE (trace): very light grey, soft aggregates, very fine to fine grained, well sorted, rounded, 60% argillaceous matrix, matrix supported. No fluorescence.

SANDSTONE (trace): clear to off white, medium to coarse and loose, poorly sorted, sub rounded to very angular, commonly fractured grains, moderate to poor sphericity, fair inferred porosity. No fluorescence.

INTERVAL: 2240.0 to 2270.0 m MDRT (-2218.3 to -2248.3 m TVDAHD)

ROP (Range): 15.0 to 63.0 m/h

Av. ROP: 40.0 m/h

Claystone, Siltstone and minor Sandstone

CLAYSTONE (60 - 80%): very light grey, light greyish brown, very soft to rarely firm, calcareous, rare glauconite, trace very fine sand grains.

SILTSTONE (10 - 40%): brownish grey, very soft to rarely firm, sub-blocky, rarely sub-fiissile, carbonaceous specks and laminae, grading to Carbonaceous Siltstone in part.

SANDSTONE (0 - 10%): clear, loose, medium to coarse, moderately sorted, sub angular to rounded, moderate sphericity, fair to good inferred porosity. No fluorescence.

INTERVAL: 2270.0 to 2344.0 m MDRT (-2248.3 to -2322.3 m TVDAHD)

ROP (Range): 17.0 to 63.0 m/h

Av. ROP: 39.0 m/h

Interbedded Kaolinitic Sandstone and Sandstone with minor interbedded Siltstone

KAOLINITIC SANDSTONE (0-95%) : white to rarely clear, dominantly very soft aggregates to loose grains, fine - coarse, poorly sorted, locally well sorted, sub-angular to rounded, moderate to high sphericity, abundant white kaolinitic matrix to 95%, gradational to white Claystone, poor - fair inferred porosity, no fluorescence.

SANDSTONE (0-90%) : clear to white, very light grey, loose to very soft aggregates, fine to coarse, poorly sorted, occasionally well sorted in fine aggregates, sub angular to sub rounded, moderate sphericity, high sphericity in fine component, common white argillaceous matrix washing out in part, occasionally matrix supported in fine aggregates, poor - fair inferred porosity. No Fluorescence.

SILTSTONE (5-40%): brownish grey, very soft to rarely firm, sub-blocky, rarely sub-fiissile, carbonaceous specks and laminae, grading to Carbonaceous Siltstone in part, trace lithic fragments and pyrite.

INTERVAL: 2344.0 to 2370.0 m MDRT (-2322.3 to -2348.3 m TVDAHD)

ROP (Range): 13.0 to 67.0 m/h

Av. ROP: 34.0 m/h

Massive Siltstone with interbedded minor Kaolinitic Sandstone

SILTSTONE (90-100%): brownish grey, very soft to rarely firm, sub-blocky, rarely sub-fiissile, carbonaceous specks and laminae, grading to Carbonaceous Siltstone in part, trace lithic fragments and pyrite.

KAOLINITIC SANDSTONE (0-10%) : white to rarely clear, dominantly very soft aggregates to loose grains, fine - coarse, poorly sorted, locally well sorted, sub -angular to rounded, moderate to high sphericity, abundant white kaolinitic matrix to 95%, gradational to white Claystone, poor - fair inferred porosity. No fluorescence.

INTERVAL: 2370.0 to 2565.0 m MDRT (-2348.3 to -2543.3 m TVDAHD)

ROP (Range): 15.0 to 88.0 m/h

Av. ROP: 42.0 m/h

Interbedded Argillaceous Sandstone with Siltstone, Carbonaceous Siltstone and trace Coal

ARGILLACEOUS SANDSTONE (30-90%): clear to white, very light grey, loose to very soft aggregates, fine to coarse, poorly sorted, occasionally well sorted in fine aggregates, sub angular to sub rounded, common off-white argillaceous matrix washing out in part, poor - fair inferred porosity. No Fluorescence.

SILTSTONE (0-70%): brownish grey, very soft to rarely firm, sub-blocky, rarely sub-fiissile, carbonaceous specks and laminae, grading to Carbonaceous Siltstone in part, trace lithic fragments and pyrite.

CARBONACEOUS SILTSTONE (0-10%): light grey to speckled black/white, soft to firm, sub-blocky to blocky, common platy carbonaceous specks, rare carbonaceous laminae, rare to common disseminated pyrite, grading into Siltstone.

COAL (0-Tr%) : black to dark brown, sub-blocky to platy, firm to brittle, hackly fracture, shiny lustre to dull matt colour.

INTERVAL: 2565.0 to 2610.0 m MDRT (-2543.3 to -2588.5 m TVDAHD)
ROP (Range): 17.0 to 106.0 m/h
Av. ROP: 42.0 m/h

Massive Claystone with minor interbedded Argillaceous Sandstone, Silty Claystone and trace Coal

CLAYSTONE (70-90%): light olive grey to grey, soft to firm, rare silty grains, mildly calcareous in part, trace micro-mica, trace micro-pyrite, trace carbonaceous laminae.

ARGILLACEOUS SANDSTONE (0-10%): white to light grey, fine to medium grained, sub-angular to sub-rounded, moderately sorted, trace calcite cement, trace nodular and disseminated pyrite, local aggregates weakly cemented, moderate inferred porosity. No shows. (probably cavings)

COAL (0-Tr%): brownish black, mainly shiny lustre, platy to blocky, firm to brittle, slightly argillaceous in part.

SILTY CLAYSTONE (10-30%): light brownish grey to light olive grey, occasionally white, soft to amorphous, trace carbonaceous specks, trace micromica, rare very fine sand, trace pyrite, grading into Claystone.

HYDROCARBON FLUORESCENCE

No Shows

GAS SUMMARY

Background Gas							
INTERVAL (m MDRT)	Total Gas (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)
2020.0 - 2198.0	0.34	2607	67	39	43	17	49
2198.0 - 2210.0	0.37	2171	78	39	34	16	52
2210.0 - 2240.0	0.97	9337	598	215	92	36	44
2240.0 - 2270.0	1.08	9932	695	244	82	34	32
2270.0 - 2344.0	0.67	5667	261	100	43	22	24
2344.0 - 2370.0	1.25	10203	756	376	92	88	47
2370.0 - 2565.0	0.78	6326	386	182	52	52	33
2370.0 - 2460.0	0.92	7378	463	220	66	61	40
2565.0 - 2610.0	0.74	6467	340	130	35	27	23

Gas Peak							
INTERVAL (m MDRT)	Total Gas (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)
2222.5 - 2222.5	1.47	11889	721	232	102	37	58
2260.0 - 2260.0	1.79	14371	912	339	116	58	43
2348.5 - 2348.5	1.72	13528	856	360	102	79	50
2585.0 - 2585.0	1.24	11071	610	227	56	50	38

CALCIMETRY

Interval (m MDRT)	Calcite Range	Dolomite Range
1920.0 - 1940.0	25 - 25 %	nil
1960.0 - 1980.0	18 - 18 %	nil
2000.0 - 2020.0	22 - 22 %	nil
2070.0 - 2090.0	27 - 27 %	nil
2110.0 - 2130.0	24 - 24 %	nil
2150.0 - 2170.0	21 - 21 %	nil

Calcimetry measurements ceased at 2170 mMDRT.

MWD

Sensor to bit distances:

Directional	32.73 m
BAT Sonic	28.03 m
CNP Porosity	23.21 m
SLD Density	20.40 m
EWR-P4 Resistivity	13.72 m
DGR Gamma Ray	11.51 m

WIRELINE

Wireline crew onboard seismic tools have been checked.

REMARKS

TD 2610.0 mMDRT at 01:45 hrs on the 1st November 2005.

WELLSITE GEOLOGISTS

Rob Blackmore / Mike Woodmansee