

DAILY GEOLOGICAL REPORT

Date:	07 January 2009	Rig:	Ocean Patriot
Report Number:	20	Bit Diameter:	216 mm
Report Period:	06:00 - 06:00 Hours	Last Casing:	244 mm @ 3243.9 mMDRT
Spud Date:	20-Dec-2008 17:30 Hours	FIT:	1.60 sg EMW @ 3252.0 mMDRT
Days From Spud:	17.5	Mud Weight:	1.15 sg
Depth @ 0600 Hrs:	4433.0 mMDRT	ECD:	1.28 sg
•	-3286.9 mTVDAHD	Mud Type:	KCI Polymer
Lag Depth:	4430.3 mMDRT	Mud Chlorides:	60000 mg/L
Last Depth:	4384.0 mMDRT	Est. Pore Pressure:	N/A
Progress:	49.0 m	Last Survey:	4385.94 mMDRT
Water Depth:	504.9 m	Deviation:	Inc. 46.59°
RT:	21.5 m		Az. 189.37°

OPERATIONS SUMMARY

24 HOUR SUMMARY:	Drilled 216 mm directional hole from 4384.0 m to 4433.0 mMDRT. Pulled out of hole to change the bit. Downloaded recorded sonic data. Ran in hole to 974.0 mMDRT.
NEXT 24 HOURS:	Continue running in hole with the 216 mm rotary steerable drilling assembly. Drill 216 mm hole from 4433.0 mMDRT to TD of approximately 5462.0 mMDRT.
CURRENT OPERATION @ 06:00 HRS (07-Jan-2009):	Running in hole 216 mm rotary steerable drilling assembly while picking up 127 mm (5") high torgue drillpipe at 974.0 mMDRT.

GEOLOGICAL SUMMARY

LITHOLOGY

 INTERVAL:
 4360.0 to 4433.0 mMDRT (-3236.7 to -3286.9 mTVDAHD)

 ROP (Range):
 3.0 to 56.0 m/h

 Av. ROP:
 18.0 m/h

SILTSTONE increasing with depth, interbedded with trace SANDSTONE.

SILTSTONE (60 to 93%): light grey to medium grey, medium dark grey to trace grey black, non calcareous, trace very finely arenaceous, trace to minor micromicaceous, trace to common disseminated pyrite, trace to common pyrite nodules, trace very fine glauconite, soft to dominantly firm, dispersive, sub-fissile to sub-blocky.

SANDSTONE (7 to 40%): clear to translucent, trace frosted, trace very light grey, very fine to very coarse, dominantly coarse to very coarse, occasionally very fine to fine, moderately sorted, angular to dominantly sub-angular, minor sub-rounded, weak siliceous cement, weak pyrite cement, trace nodular pyrite, clean, loose, poor to fair inferred porosity, no hydrocarbon fluorescence.

GAS SUMMARY

Background Gas							
INTERVAL	Total Gas	C1	C2	C3	iC4	nC4	C5
(mMDRT)	(%)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
4360.0 - 4433.0	0.01	54	1	1	0	0	0

SAMPLE QUALITY

10.0 metre bagged sample from 4360.0 m to 4370.0 mMDRT (due to high ROP). 5.0 metre bagged samples from 4370.0 m to 4430.0 mMDRT.



MUDLOGGING EQUIPMENT / PERSONNEL

All systems fully functional.

MWD

Run #6, Bit Run #6: 216 mm LWD Tool offsets to bit:

Tool	Serial #	Distance to bit (m)
Gamma Ray	EcoScope YC85	9.84
APWD	EcoScope YC85	10.00
Density	EcoScope YC85	11.04
Caliper	UltraSonic Caliper	11.46
Resistivity	EcoScope YC85	12.88
Neutron Porosity	EcoScope YC85	13.13
Direction and Inclination	TelescopeMWD VG67	20.16
GVR Resistivity	GVR 41872	26.45
Sonic	SonicVision 46324	32.71

WIRELINE

Baker-Atlas wireline tools arrived on the rig on 05 January 2009. The wireline crew arrived on the rig on 06 January 2009 and commenced checking their tools.

REMARKS

The drilling of the 216 mm directional hole continued from 4384.0 mMDRT to 4433.0 mMDRT. After circulating the hole, the 216 mm rotary steerable assembly was pulled out of hole to surface and the recorded mode sonic data was downloaded. After changing the bit and batteries on the sonic tools, the 216 mm rotary steerable assembly was run back in hole while picking up joints of 127 mm (5") high torque drillpipe.

WELLSITE GEOLOGISTS

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