

## DAILY GEOLOGICAL REPORT

<b>Date:</b>	12 January 2009	<b>Rig:</b>	Ocean Patriot
<b>Report Number:</b>	25	<b>Bit Diameter:</b>	216 mm
<b>Report Period:</b>	06:00 - 06:00 Hours	<b>Last Casing:</b>	244 mm @ 3243.9 mMDRT
<b>Spud Date:</b>	20-Dec-2008 17:30 Hours	<b>FIT:</b>	1.60 sg EMW @ 3252.0 mMDRT
<b>Days From Spud:</b>	22.5	<b>Mud Weight:</b>	1.15 sg
<b>Depth @ 0600 Hrs:</b>	5270.0 mMDRT	<b>ECD:</b>	1.27 sg
	-3918.8 mTVDAHD	<b>Mud Type:</b>	KCl Polymer
<b>Lag Depth:</b>	5270.0 mMDRT	<b>Mud Chlorides:</b>	55000.00 mg/L
<b>Last Depth:</b>	5180.0 m MDRT	<b>Est. Pore Pressure:</b>	N/A
<b>Progress:</b>	90.0 m	<b>Last Survey:</b>	5230.64 mMDRT
<b>Water Depth:</b>	504.9 m	<b>Deviation:</b>	Inc. 30.04°
<b>RT:</b>	21.5 m		Az. 193.13°

### OPERATIONS SUMMARY

**24 HOUR SUMMARY:** Performed a 10-stand wiper trip. Continued drilling 216 mm directional hole from 5180.0 mMDRT to TD of 5270.0 mMDRT. Circulated bottoms-up. Pulled out of hole.

**NEXT 24 HOURS:** Continue pulling out of hole to surface. Download LWD recorded mode data. Lay down 216 mm BHA. Make-up cementing assembly. Plug and abandon Elver-1 well as per programme.

**CURRENT OPERATION**

**@ 06:00 HRS (12-Jan-2009):** Pulling out of hole at 1182.0 mMDRT.

### GEOLOGICAL SUMMARY

**LITHOLOGY**

**INTERVAL:** 5160.0 to 5211.0 mMDRT (-3823.9 to -3867.7 mTVDAHD)  
**ROP (Range):** 5.0 to 63.0 m/h  
**Av. ROP:** 34.0 m/h

**Massive SILTSTONE.**

SILTSTONE (100%): dominantly olive grey to brownish grey, trace medium light grey, non calcareous, trace very finely arenaceous, argillaceous in part grading to SILTY CLAYSTONE, trace greyish black silty carbonaceous specks, trace very fine glauconite grains, trace micromicaceous, trace disseminated pyrite, soft to dominantly firm, rare moderately hard, amorphous to sub-blocky, sub-fissile in part.

**INTERVAL:** 5211.0 to 5270.0 mMDRT (-3867.7 to -3918.8 mTVDAHD)  
**ROP (Range):** 22.0 to 69.0 m/h  
**Av. ROP:** 42.0 m/h

**Interbedded SILTSTONE and SANDSTONE.**

SILTSTONE (60 to 95%): dominantly olive grey to brownish grey, trace medium light grey, non calcareous, trace very finely arenaceous, argillaceous in part grading to SILTY CLAYSTONE, trace very fine glauconite grains, trace micromicaceous, trace disseminated pyrite, soft to dominantly firm, rare moderately hard, amorphous to sub-blocky, sub-fissile in part.

SANDSTONE (5 to 40%): clear to translucent, trace very light grey, very fine to trace coarse, dominantly fine, moderately sorted, sub-angular to sub-rounded, trace to common light brownish grey argillaceous matrix, very dispersive washing out, weak pyrite cement on coarse grains, weak siliceous cement, dominantly loose, poor inferred porosity, no hydrocarbon fluorescence.

**GAS SUMMARY**

Background Gas							
INTERVAL (mMDRT)	Total Gas (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)
5160.0 - 5211.0	0.03	210	9	5	1	2	2
5211.0 - 5270.0	0.03	191	12	8	1	2	2

**SAMPLE QUALITY**

5.0 metre bagged samples from 5160.0 m to 5270.0 mMDRT.  
All samples have been sent to BHI for splitting and distribution.

**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**

All primary and back-up tools tested.

**REMARKS**

After performing a 10-stand wiper trip, back-reaming to 4846.0 mMDRT, the drilling of the 216 mm (8 ½") directional hole continued from 5180.0 mMDRT to TD of 5270.0 mMDRT which was reached at 17:25 hrs on 11 January 2009.

After circulating bottoms-up, the 216 mm (8 ½") rotary drilling assembly was pulled out of the hole and flow-checked at the shoe. While at the shoe, the drill line was slipped and cut after which the 216 mm (8 ½") rotary drilling assembly continued to be pulled to the surface.

**WELLSITE GEOLOGISTS**

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