

## DAILY GEOLOGICAL REPORT

<b>Date:</b>	19 April 2008	<b>Rig:</b>	West Triton
<b>Report Number:</b>	13	<b>Bit Diameter:</b>	216 mm
<b>Report Period:</b>	06:00 - 06:00 Hours	<b>Last Casing:</b>	340 mm @ 896.3 mMDRT
<b>Spud Date:</b>	07-Apr-2008 19:30 Hours	<b>FIT:</b>	1.61 sg EMW @ 906.0 mMDRT
<b>Days From Spud:</b>	11.4	<b>Mud Weight:</b>	1.18 sg
<b>Depth @ 0600 Hrs:</b>	3137.0 mMDRT	<b>ECD:</b>	1.32 sg
	-3099.8 mTVDAHD	<b>Mud Type:</b>	KCl Polymer
<b>Lag Depth:</b>	3137.0 mMDRT	<b>Mud Chlorides:</b>	68000.00 mg/L
<b>Last Depth:</b>	3035.0 mMDRT	<b>Dxc</b>	1.2
<b>Progress:</b>	102.0 m	<b>Last Survey:</b>	3105.73 mMDRT
<b>Water Depth:</b>	54.1 m	<b>Deviation:</b>	Inc. 0.90°
<b>RT:</b>	37.0 m	<b>Azimuth:</b>	Az. 302.99°

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## OPERATIONS SUMMARY

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**24 HOUR SUMMARY:** Drilled 216mm hole to well TD at 3137.0 mMDRT. Commenced Schlumberger Wireline VSI logging Suite #1.

**NEXT 24 HOURS:** Complete wireline programme. Commence P&A operations.

### CURRENT OPERATION

**06:00 HRS (19-Apr-2008):** Performing VSI logging at station depth 2165.0 mMDRT.

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## GEOLOGICAL SUMMARY

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### LITHOLOGY

**INTERVAL:** 3000.0 to 3137.0 mMDRT (-2962.8 to -3099.8 mTVDAHD)  
**ROP (Range):** 14.0 to 69.0 m/h  
**Av. ROP:** 36.0 m/h

### SANDSTONE interbedded with SILTSTONE and minor CLAYSTONE

**SANDSTONE (45 to 83%):** translucent to transparent, occasional light olive grey, trace olive grey to light olive grey, fine to medium, local coarse, angular when coarse to sub rounded when fine, locally poor to well sorted, loose, minor olive grey to light olive grey aggregates, friable to very hard, trace whitish pale green and olive grey argillaceous matrix, weak to very strong silica cement, local trace to common pyritic cement, abundant re-crystallized quartz, trace calcareous, trace muscovite and biotite flakes, trace carbonaceous specks, trace quartz silt, microcrystalline pyrite, fractured grains, no to poor visible porosity, trace hydrocarbon fluorescence.

**SILTSTONE (15 TO 50%):** brownish grey, brownish black, olive grey in part, carbonaceous material, quartz silt, very fine to fine quartz, grading to very fine SANDSTONE in part, trace very fine nodular pyrite, local biotite, pyrite in part, trace pyritic veins, occasional black SHALE, firm to hard, brittle in part, friable, sub fissile.

**CLAYSTONE (2 to 20%):** medium grey to dark grey, light greenish grey, silicified, trace disseminated pyrite, trace carbonaceous specks, hard to very hard, sub blocky to angular, fissile.

### HYDROCARBON FLUORESCENCE

3095.0 to 3137.0 m (Nil to 2%)

1 (Nil to 1%): pin point, dull to moderately bright yellow mineral fluorescence, no cut.

2 (Nil to 2%): dull to bright yellow natural fluorescence, very slow to moderately fast streaming cut, thin weak yellow fluorescing residual ring.

**GAS SUMMARY**

Background Gas							
INTERVAL (mMDRT)	Total Gas (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)
3000.0 - 3137.0	0.21	1826	44	22	3	5	2

Gas Peak							
INTERVAL (mMDRT)	Total Gas (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)
3113.5	1.02	8788	325	166	18	29	12

**SAMPLE QUALITY**

Good quality  
5 meters samples

**MWD**

Schlumberger LWD Run 3 Sensor Distances

GR = 10.22 m                      RES SHALLOW BUTTON = 11.05 m  
 RES BIT = 4.55 m                      RES MEDIUM BUTTON = 10.93 m  
 RES RING = 10.58 m                      RES DEEP BUTTON = 10.75 m

**WIRELIN**

Commenced Suite #1: Run 1 VSI

**WATER BASED MUD DATA**

DATE MUD CHECK	MUD TYPE	MW (sg)	pH	KCl (%)	Cl (mg/L)	Barite (%)	Rm (ohm.m)	Rmf (ohm.m)	Rmc (ohm.m)
18-Apr-2008	KCl polymer	1.18	9	11	68000	1.9	0.068	0.0586	0.108

**RUN SUMMARY**

Run #	Tool String	Log From Depth (m)	Log To Depth (m)	Repeat From Depth (m)	Repeat To Depth (m)	Comments
1	VSI	3080.0	2165.0	0.0	0.0	60 m spacing check-shots from TD till loss of Signal

**TEMPERATURE DATA**

Date Mud Checked: 18-Apr-2008  
 Date Time Circulation Stopped: 18-Apr-2008 11:00 AM  
 Circulation Time: 10.00 h

Run #	Run Date	Tool String	Max BHT (°C)	Max BHT Depth (m)	Date Time Logger on Bottom	Time Since Circ. Stopped (h)
1	4/19/2008	VSI	111.00	3080.0	19-Apr-2008 04:30	17.50

**Marine mammal observation:**

Start date/time of whale observation prior to start of seismic source (at least 15 mins)	01:00 19-April-2008
Start date/time seismic source	01:45 19-April-2008
Was soft start used?	Yes, 500psi build up over 10 minutes
Were whales seen within 3 km prior to VSP starting?	No
Did whales move in within 3 km once VSP started?	No
Did VSP stop due to whales?	No
End date/time seismic source	TBA
Whale sighting sheet filled in?	None sighted
Weather & visibility	Excellent
Additional comments	Nil

*NB: VSP cannot commence or must be shutdown if whales are sighted within 3 km of the rig.  
 (<http://www.doir.wa.gov.au/documents/mineralsandpetroleum/envsheetmar02.pdf>)*

**REMARKS**

Drilled 216 mm hole to well TD at 3137.0 mMDRT reached 18<sup>th</sup> April. Circulated bottoms up, pulled out of hole and laid out BHA. Rigged up Schlumberger Wireline, picked up VSI, performed tool checks and ran in hole. Performed VSI check shots at 458.0 mMDRT, 824.0 mMDRT and 2775.0 mMDRT. Performed Gamma Ray correlation pass and commenced VSI logging Run 1 from 3080.0 mMDRT.

**WELLSITE GEOLOGISTS**

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