Az. 332.49°



# DAILY GEOLOGICAL REPORT

Date:	20 March 2008	Rig:	West Triton
Report Number:	12	Bit Diameter:	216 mm (8 ½")
Report Period:	06:00 - 06:00 Hours	Last Casing:	244mm casing @ 902.1 mMDRT
Spud Date:	10-Mar-2008 13:00 Hours	FIT:	1.78 sg EMW @ 902.0 m MDRT
Days From Spud:	9.7	Mud Weight:	1.17 sg
Depth @ 0600 Hrs:	2414.0 mMDRT	ECD:	C C
•	-2375.8 mTVDAHD	Mud Type:	KCL Polymer
Lag Depth:	2410.0 mMDRT	Mud Chlorides:	47000.00 mg/L
Last Depth:	2116.0 mMDRT		3
Progress:	298.0 m		
Water Depth:	90.0 m	Last Survey:	2116.50 mMDRT
RT:	38.0 m	Deviation:	Inc. 0.57°

# **OPERATIONS SUMMARY**

**24 HOUR SUMMARY:** POOH to change bit, laid out bit 4RR. Made up bit 5 and RIH, drilled 216 mm section from 2116.0 to 2414.0 mMDRT.

**NEXT 24 HOURS:** Drill 216 mm section to target depth.

CURRENT OPERATION @ 06:00 HRS (20-Mar-2008): Drilling 216 mm section at 15-20 m/hr.

# **GEOLOGICAL SUMMARY**

### LITHOLOGY

INTERVAL:	2116.0 to 2150.0 mMDRT	(-2077.8 to -2111.8 mTVDAHD)
ROP (Range):	12.0 to 111.0 m/h	
Av. ROP:	55.0 m/h	

#### Interbedded CALCAREOUS CLAYSTONE and SILTSTONE

CALCAREOUS CLAYSTONE (80 to 90%): pale to light grey, light to medium grey, occasionally medium brown grey, common to abundant calcite fragments, trace micro fossils, occasional ooliths, trace very fine quartz grains, minor to locally common carbonaceous laminations and specks, occasional nodular and disseminated pyrite, firm to moderately hard, sub-blocky to blocky, dispersive in part.

CALCAREOUS SILTSTONE (10 to 20%): medium grey, medium grey brown, minor dark grey, abundantly argillaceous and common grading to calcareous claystone, common nodular and disseminated pyrite, common micro fossils and ooliths, occasional calcite fragments, minor carbonaceous specks, moderately hard to hard, very hard in part, sub-blocky.

INTERVAL:	2150.0 to 2210.0 mMDRT	(-2111.8 to -2171.8 mTVDAHD)
ROP (Range):	22.0 to 137.0 m/h	
Av. ROP:	61.0 m/h	

#### Interbedded CALCAREOUS SILTSTONE and CLAYSTONE

CALCAREOUS SILTSTONE (10 to 70%): pale to medium grey, light brown grey, minor dark grey, argillaceous and locally grading to calcareous claystone, common nodular and disseminated pyrite, common to abundant micro fossils and ooliths, common to abundant fine to coarse calcite fragments, minor carbonaceous specks, moderately hard to hard, very hard in part, sub-blocky.

CALCAREOUS CLAYSTONE (30 to 90%): off white to pale grey, pale to light grey, light brown grey, minor calcite fragments, trace micro fossils, minor to locally common carbonaceous laminations and specks, occasional nodular and disseminated pyrite, firm, sub-blocky, dispersive.

INTERVAL:	2210.0 to 2295.0 mMDRT	(-2171.8 to -2256.8 mTVDAHD)
ROP (Range):	26.0 to 130.0 m/h	
Av. ROP:	66.0 m/h	



## Interbedded CALCAREOUS SILTSTONE and CLAYSTONE

CALCAREOUS SILTSTONE (70 to 90%): medium to dark grey, dominantly medium grey, argillaceous and locally grading to calcareous claystone, trace nodular and disseminated pyrite, trace micro fossils, occasional fine to medium calcite fragments, trace carbonaceous material, trace micromicaceous, firm to moderately hard, sub-fissile to sub-blocky.

CALCAREOUS CLAYSTONE (10 to 30%): off white to pale grey, pale to light grey, light brown grey, minor calcite fragments, trace micro fossils, minor carbonaceous laminations and specks, trace nodular and disseminated pyrite, common silty laminations and locally grading to calcareous siltstone, firm, sub-blocky, dispersive in part.

INTERVAL:	2295.0 to 2340.0 mMDRT	(-2256.8 to -2301.8 mTVDAHD)
ROP (Range):	29.0 to 105.0 m/h	
Av. ROP:	65.0 m/h	

#### CALCAREOUS SILTSTONE with minor CALCAREOUS CLAYSTONE interbeds

CALCAREOUS CLAYSTONE (5 to 20%): off white to pale grey, pale to light grey, light brown grey, minor calcite fragments, trace micro fossils, minor carbonaceous laminations and specks, trace nodular and disseminated pyrite, common silty laminations and grading to calcareous siltstone, firm, sub-blocky, dispersive in part.

CALCAREOUS SILTSTONE (85 to 95%): medium to dark grey, dominantly medium grey, trace medium bluish grey, argillaceous and locally grading to calcareous claystone, common nodular and disseminated pyrite, common micro fossils, common to abundant fine to medium translucent calcite fragments, trace carbonaceous material, trace micromicaceous, moderately hard to hard, very hard in part, sub-fissile to sub-blocky.

INTERVAL:	2340.0 to 2370.0 mMDRT	(-2301.8 to -2331.8 mTVDAHD)
ROP (Range):	9.0 to 103.0 m/h	
Av. ROP:	63.0 m/h	

### Interbedded CALCAREOUS SILTSTONE and CALCAREOUS CLAYSTONE

CALCAREOUS CLAYSTONE (10%): off white to pale grey, pale to light grey, light brown grey, minor calcite fragments, trace micro fossils, minor carbonaceous laminations and specks, trace nodular and disseminated pyrite, common silty laminations and grading to calcareous siltstone, firm, sub-blocky, dispersive in part.

CALCAREOUS SILTSTONE (90%): light to medium grey, medium to dark grey, trace medium bluish grey, commonly argillaceous and locally grading to calcareous claystone, minor nodular and disseminated pyrite, common micro fossils, common to abundant fine to medium translucent calcite fragments, trace carbonaceous material, trace micromicaceous, moderately hard to hard, very hard in part, sub-blocky to sub-fissile.

INTERVAL:	2370.0 to 2410.0 mMDRT	(-2331.8 to -2371.8 mTVDAHD)
ROP (Range):	8.0 to 36.0 m/h	
Av. ROP:	15.0 m/h	

#### CALCAREOUS CLAYSTONE with minor CALCAREOUS CLAYSTONE beds

CALCAREOUS SILTSTONE (90 to 95%): off white to pale grey, medium to dark grey in part, commonly argillaceous and locally grading to calcareous claystone, occasional micromicaceous, common to abundant calcareous fragments, common nodular and disseminated pyrite, occasional lithics and carbonaceous specks, firm to hard, sub-blocky.

CALCAREOUS CLAYSTONE (10 to 5%): off white to pale grey, pale to light grey, light brown grey, minor calcite fragments, trace carbonaceous laminations and specks, trace nodular and disseminated pyrite, common silty laminations and grading to calcareous siltstone, firm, sub-blocky, dispersive.

HYDROCARBON FLUORESCENCE

No Shows

## GAS SUMMARY

Background Gas							
	Total Gas	C1	C2	C3	iC4	nC4	C5
	(70)	(ppin)	(ppiii)	(ppin)	(ppiii)	(ppin)	(ppiii)
2116.0 - 2150.0	0.11	778	2	1	0	0	0
2150.0 - 2210.0	0.15	796	2	1	0	0	0
2210.0 - 2295.0	0.11	966	1	0	0	0	0
2295.0 - 2340.0	0.02	115	0	0	0	0	0
2340.0 - 2370.0	0.01	46	0	0	0	0	0

### CALCIMETRY

Interval (m MDRT)	Calcite Range	Dolomite Range
2116.0 - 2150.0	24 - 24 %	8 - 8 %
2150.0 - 2210.0	20 - 30 %	3 - 3 %
2210.0 - 2295.0	21 - 35 %	2 - 5 %
2295.0 - 2340.0	23 - 23 %	2 - 2 %
2340.0 - 2370.0	46 - 46 %	4 - 4 %

### MWD

 MWD SENSOR OFFSET FROM BIT

 GR
 : 12.33m

 RES
 : 12.86m

 BAT SONIC
 : 26.53m

 NEUTRON
 : 34.53m

 DENSITY
 : 33.42m

 SURVEY
 : 18.74m

 RAB
 : 5.91m

## REMARKS

When inspected at surface bit 4RR was found to be balled, the bit was laid out and new 216 mm five blade Reed RSX519M-A6 bit 5 was made up and run in hole to 2116.0 mMDRT, washing and reaming as required. Drilling of the 216 mm section continued from 2116.0 to 2414.0 mMDRT. Calcium Carbonate and sea water pills were pumped around the bit during connections and whilst drilling to minimise bit balling.

## WELLSITE GEOLOGISTS

Fred Fernandes / Adam Cruickshank