DAILY GEOLOGICAL REPORT

Maclean-1

Report No. 4
Report Period: 00:00 – 24:00 hrs, 19th October 2005

Wellsite Geologists: Geoff Geary / Rob Blackmore

Rig	Ocean Patriot	**WD (m)**	57.0 m	**Depth @ 00:00 hrs**	673.0 m (651.5 m TVDSS)
Rig Type	Semi-Submersible	**RT (m)**	21.5 m	**Depth Last Report (@ 00:00 hrs)**	355.0 m (333.5 m TVDSS)
Spud	16/10/05 03:30 hrs	**Last CSG (mRT)**	340 mm (13 3/8") @ 350.0 mMDRT	**24hr. Progress**	318.0 m
Days from Spud	3	**MW (SG)**	1.06 sg	**Last Survey**	0.72 Deg @ 755.28 mMDRT
Bit Size	311 mm (12 ¼")	**Last FIT (SG)**	1.66 sg EMW @ 358.0 mMDRT	**Est.Pore Pressure**	1.03 sg @ 414.0 mMDRT

Operations Summary

24hrs. Drilling Summary	Continued picking up BHA. RIH and tagged cement at 314.0 mMDRT. Drilled out cement and shoetrack. Conditioned KCL/PHPA mud while displacing well. Drilled 3 m of new formation to 358 mMDRT. Performed FIT to 1.66 sg EMW @ 358.0 mMDRT. Drilled ahead in 311 mm (12 ¼") hole.
Current Status @ 06:00hrs (20th October 2005)	TD well at 06:00 hrs @ 766.0 mMDRT.
Lithological Summary 00:00-06:00 hrs	Predominantly Claystone with minor interbedded Sandstone and Conglomerate. (See cuttings descriptions below for details).
Expected Next Activity	POOH and begin plug and abandonment operations. No wireline logging.

B-grd Gas %	
ave	max
0.11	**0.18**

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Cuttings Descriptions

Depth (mRT)		ROP (m/hr.) Min.-Max.	Descriptions (Lithology / Shows)	Backgrnd gas%	
Top	BTM	(Ave.)		ave	max
355	520	8.5-87.4 (30.0)	**Calcilutite interbedded with Argillaceous Calcilutite, Marl and trace Calcarenite** **Calcilutite (20-100%):** medium to light grey, soft, amorphous, argillaceous in part, trace shell fragments, forams, bryozoan fragments. **Calcilutite (0-60%):** argillaceous, very light to medium light grey, very soft, amorphous, dispersive, 20-35% argillaceous matrix, grading to *Calcilutite*, trace very fine dark green glauconite grains, trace fine dark green disseminated glauconite and nodular glauconite, trace fine pyrite & coarse nodular pyrite. **Calcarenite (Tr-0%):** pale yellowish-brown, light grey, firm-hard, argillaceous, trace glauconite grains. **Marl (0-20%):** medium dark grey, very soft, dispersive, amorphous, 35-45% argillaceous matrix grading to **Argillaceous Calcilutite,** trace calcisilt, trace very fine dark green disseminated glauconite, trace fossil fragments and forams.	0.08	0.2
520	584	16.6-117.6 (35.5)	**Argillaceous Calcilutite interbedded with Marl and Calcareous Claystone** **Calcilutite (20-40%):** argillaceous, very light to medium light grey, very soft, amorphous, dispersive, 20-35% argillaceous matrix, grading to *Marl*, trace fine dark green disseminated glauconite and nodular glauconite, trace fine pyrite. **Marl (20-40%):** light medium grey, very soft, dispersive, amorphous, 35-45% clay matrix grading to *Calcareous Claystone*, trace very fine dark green disseminated glauconite and coarse nodules, trace fossil fragments and forams. **Claystone (20-40%):** calcareous, medium grey to medium dark grey, minor dark greenish grey, soft, amorphous, dispersive, 15-35% calcareous matrix grading to *Marl,* trace very fine dark green disseminated glauconite, trace fossil fragments and forams, trace fine pyrite & coarse nodular pyrite.	0.37	0.84

584	630	5.1-111.9 (20.0)	**Interbedded Claystone, Sandstone, Siltstone and Greensand** **Claystone (20-50%):** medium to dark yellowish brown and greyish brown, dark brown grey to brown black in part, soft to slightly firm, amorphous to blocky, hard in part, 5-20% silt to very fine sandstone (vfL-fL) grading to *Silty Claystone*, trace well-rounded fine to coarse grained weathered (dusky brown) glauconite pellets, generally firm to hard ("pisolitic" glauconite), trace-10% fine to medium nodular dark green glauconite, trace rounded cemented "pisolitic" glauconite, trace nodular pyrite and rounded concretions. **Siltstone (15-50%):** medium to dark yellowish brown and greyish brown, dark brown grey to brown black, soft to firm, occasionally hard, quartz silt to very fine sand (silt-vfL), grading to *Arenaceous Siltstone*, non-calcareous, 10-25% detrital clay matrix grading to *Argillaceous Siltstone*, trace-10% fine to coarse glauconite, locally occurring in patches, trace-1% white mica. **Sandstone (Tr-40%):** lithic arkose, medium yellowish brown, dark brown grey, light grey, greyish green to brown black in part, firm, friable to soft, loose, very hard in part, very fine - fine (vfL-fL, dom. vfL), subangular-subrounded, lithic with up to 30% lithic grains (chert, volcanic and feldspathic), moderately to very well sorted, 5-10% silt, 10-15% authigenic clay matrix (chlorite, kaolinite and minor illite/smectite), trace-10% detrital clay matrix, 5-10% mica (biotite and muscovite), trace-5% pyrite (framboidal in part), trace-10% dark lithics (titanium oxide with trace zircon and tourmaline), non-calcareous, trace -10% sideritic and pyritic cement, variably glauconitic with trace-30% coarse patchy and pelletal glauconite, grading to *Glauconitic Sandstone*, poor inferred porosity, no fluorescence or cut. **Greensand (Tr-10%):** olive brown**,** dark yellowish green to dusky green, soft -firm, loose grains in part, very fine to coarse grained, trace nodular glauconite, trace -20% quartz sand and silt.	0.82	1.88
630	672	5.4-130.3 (15.5)	**Interbedded Claystone, Sandstone, Conglomerate and minor Coal** **Claystone (0-95%):** white to very light grey, soft, dispersive, washing out in drilling mud, 5-10% silt to very fine sand dispersed through matrix, trace very fine carbonaceous grains. **Sandstone (5-100%):** clear-frosted, translucent, white and light to medium dark grey, loose, coarse to very coarse and granular (dom cU), conglomeratic in part, quartzose, angular (broken fragments) to well rounded, poorly sorted, trace argillaceous matrix coating grains, trace nodular pyrite and pyritic cement, trace lithics, trace rounded carbonaceous fragments, very good inferred porosity, no fluorescence or cut. **Conglomerate (0-80%):** clear-frosted, translucent, white and light to medium dark grey, loose, granular, quartzose, angular (broken fragments) to well rounded, poorly sorted, trace white argillaceous matrix coating grains, very good inferred porosity, no fluorescence or cut. **Coal (Tr-0%):** brownish black to black, soft to firm, brittle, fibrous, very fine to large fragments.	0.28	1.06

672	708	5.9-16.0 (19.2)	**Interbedded Claystone with Conglomerate and more minor Sandstone** **Claystone (20-100%):** white to very light grey, soft, dispersive, washing out in drilling mud, 5-10% silt to very fine sand dispersed through matrix, trace very fine carbonaceous grains. **Sandstone (Tr-30%):** clear-frosted, translucent, white and light to medium dark grey, loose, coarse to very coarse and granular (dom cU), conglomeratic in part, quartzose, angular (broken fragments) to well rounded, poorly sorted, trace argillaceous matrix coating grains, trace nodular pyrite and pyritic cement, trace lithics, trace rounded carbonaceous fragments, very good inferred porosity, no fluorescence or cut. **Conglomerate (0-60%):** clear-frosted, translucent, white and light to medium dark grey, loose, granular, quartzose, angular (broken fragments) to well rounded, poorly sorted, trace white argillaceous matrix coating grains, very good inferred porosity, no fluorescence or cut.	0.13	0.18
708	766	5.0-22.0 (19.6)	**Predominantly Massive Claystone with minor interbedded Fine Sandstone and Coal** **Claystone (90-100%):** light grey to brownish-grey, soft, dispersive, washing out in drilling mud, 5-10% silt to very fine sand dispersed through matrix, trace very fine carbonaceous grains. **Sandstone (Tr-10%):** clear-frosted, translucent, white and light to medium dark grey, loose to very rarely cemented fragments, fine to medium (fU-mL), poorly sorted, trace argillaceous matrix cementing grains, trace nodular pyrite and pyritic cement, trace lithics, no fluorescence or cut. **Coal (0%-Tr):** brownish black to black, soft to firm, brittle, fibrous, very fine to small fragments.	0.11	0.16

Gas Data

Depth (mRT)	Type	% TG	C1 ppm	C2	C3	iC4	nC4	iC5	NC5
520.0	Peak	0.2	2148	5	2	9	2	1	1
568.5	Peak	0.84	7044	0	0	26	1	1	1
590.5	Peak	1.88	13598	1	1	12	4	3	1
635.0	Peak	1.06	9843	11	13	35	38	1	3
687.0	Peak	0.18	1785	2	2	5	2	6	1

Type: TG-Total Recorded Gas (%), BG-Back Ground (%), P-Peak, C–Connection, T–Trip, W-Wipertrip, FC-Flow Check , P-Pumps off

Oil Show

Depth (mRT)	Oil stain	Fluor% / Color	Fluor Type	Cut Fluor	Cut Type	Res Ring	Gas Peak	BG
NIL								

Mud Data

@ 675.0 mMDRT

Mud Type	MW (sg)	Viscosity PVYP	API Fluid Loss (cc)	HTHP Fluid Loss (cc)	LGS %	Ph	Glycol (mg/l)
KCL/PHPA	1.06	15/24	5	-	0.9	10	-

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Provisional Formation Tops

Formation (Seismic Horizon)	Prognosed** (mRT)	Actual* (mRT)	Difference (High/Low) (m)	Based on
Sea bed (sf)	94.5	78.5	16.0 H	Seabed
Lakes Entrance Fm	524.5	520.0	4.5 H	LWD
Gurnard Fm	604.5	584.0	20.5 H	LWD
Kingfish Fm	637.5	630.0	7.5 H	LWD
Volador Fm	678.5	672.0	6.5 H	LWD
Strzelecki Gp or "Older"	720.5	708.0	12.5 H	LWD
Total Depth	771.0	766.0		TD

* Wellsite pick

Comments

1. LWD sensor-bit offset distances:

   Resistivity = 3.39 m
   Gamma-Ray = 6.42 m
   Directional = 9.80 m

2. No mudlogging gas data obtained between 643-651 mMDRT due to a blocked line.

3. High LWD Resistivity readings between 630-685 mMDRT would appear to be related to the presence of the granular sandstone "conglomerate," based on the cuttings returned.

4. Carbide lag check carried out at 566.0 mMDRT and hole found to be in-gauge.

5. Gas data was obtained from the auxiliary gas detection system from 588-655 mMDRT due to a problem with the primary gas detection system.

----------END OF REPORT----------