



**Basker-4**

Date : 14 May 2006

Geology Report Number : 12

( associated DDR # 18 )

**Well Details**

Depth MDRT:	3241.0m	Rig:	OCEAN PATRIOT	Date:	14 May 2006
Depth TVDBRT:	3062.0m	RTE amsl:	21.5m	Report Start:	00:00
Depth TVDSS:	3040.5m	LAT amsl:	154.5m	Report End:	24:00
Progress:	108.0m	Last Csg Size:	13.375in	Days On Location:	16.44
Hole Size:	12.250in	Last Csg. Shoe (TVD):	987.2m	Days since Spud:	76.50
Hole Size Carbide:		Last Csg. Shoe (MD):	998.5m		
		F.I.T. / L.O.T.:	12.50ppg /		

**Operations Summary**

24hr Summary:	<p>Drilled the interval from 3133-3241m MDRT at 2400hrs</p> <p>3133 - 3184m MDRT Interbedded Sandstone (loose fine to very coarse), Argillaceous Sandstone (very fine to fine grained), Silty Claystone ( gradational to Carbonaceous Claystone) and thin Coal stringers. ROP 2 - 44 m/hr 6 m/hr average ROP Background gas 0.9%TG</p> <p>Preliminary pick for the top of the "Zone 0" Reservoir Sandstone is 3184m MDRT = 3006m TVDRT.</p> <p>3184 - 3196m MDRT Capping Coal Seam overlying clean, medium grained Sandstone grading down to Carbonaceous Claystone. ROP 2 - 27 m/hr 4 m/hr average ROP Background gas 1.6%TG</p> <p>Preliminary pick for the top of the "Zone 1.1" Reservoir Sandstone is at 3196m MDRT = 3017.9m TVDRT</p> <p>3196 - 3241m MDRT Interbeds of clean, coarser grained Sandstone and variably Carbonaceous Claystone - latter grading to thin Coal Seams and Highly Carbonaceous Claystone in places. ROP 2.2 - 66 m/hr 5.7 m/hr average ROP Background gas 0.45%TG Hydrocarbon fluorescence was observed from 3230 - 3235m see "oil shows" for description.</p>
Forward Plan:	Drill ahead 311mm hole to TD.

**WBM Data**

Mud Type: PHPA/KCL/Glycol	Flowline Temp:	Cl:	45000mg/l	Low Gravity Solids:	Viscosity	63sec/qt
Sample From: Active pit	MWD Circ Temp:	Hard/Ca:	520mg/l	High Gravity Solids:	PV	18cp
Time: 20:15	Glycol CP Temp:	MBT:	4.5	Solids (corrected):	YP	38lb/100ft <sup>2</sup>
Weight: 9.50ppg	Glycol: 2.1%vol	PM:	0.4	H2O: 91%	Gels 10s	10
ECD TD:	Nitrates:	PF:	0.05	Oil: 0%	Gels 10m	18
ECD Shoe:	Sulphites:	MF:	0.7	Sand: .5	Fann 003	8
ECD Cuttings:	API FL: 4.8cc/30min	pH: 8.8	Barite:		Fann 006	11
KCl Equiv: 8%	API Cake: 1/32nd"	PHPA Excess:			Fann 100	36
					Fann 200	47
					Fann 300	56
					Fann 600	74

**Formation Tops**

Formation	Prognosed		Actual		Diff.	Thickness (MD)	Pick Criteria
Latrobe Gp	2190.00	2068.00	2190.00	2065.20	2.80	609.00	LWD GR-RES
K2 Sandstone "marker"	2775.00	2591.50	2799.00	2612.30	-20.80	251.00	LWD and Sample
Ma2 Sandstone	3045.00	2857.50	3050.00	2852.00	5.50	134.00	LWD GR-RES
Reservoir Zone 0 Sand	3195.90	2978.00	3184.00	2984.50	-6.50	0.00	LWD GR-RES

**Oil Shows**

From	To	Formation	Lithology	White Light			UV Light			Rating
				Stain	Cut	Residue	Fluor.	Cut Fluor.	Residue	
3230.00m	3240.00m			nil	nil	nil	dull greenish / yellow	slow bluish / green	mod bright bluish / green	fair



Gas													
Depth Range	Gas Type	Total Gas (%)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)	C1/C2 (ppm)	C1/C3 (ppm)	F1* (ppm)	F2* (ppm)	F3* (ppm)
3133.00 - 3184.00	Background	0.90	6369	619	288	42	68	47	10.29	22.11	135.51	110	2,122.77
Comment:													
3136.50 -	Peak	1.20	9283	915	341	43	61	38	10.15	27.22	244.29	104	3,437.47
Comment:													
3158.00 -	Peak	1.20	9080	857	353	48	71	48	10.6	25.72	189.17	119	2,999.79
Comment:													
3184.00 - 3196.00	Background	1.60	12323	1090	502	76	136	101	11.31	24.55	122.01	212	3,341.62
Comment:													
3186.00 -	Peak	4.00	33182	2606	987	147	245	170	12.73	33.62	195.19	392	8,285.04
Comment: This peak sourced from coal seam with 80% coal described in ctgs sample at 3186m MDRT.													
3189.00 -	Peak	2.30	16925	1542	817	133	226	152	10.98	20.72	111.35	359	5,571.59
Comment: Associated with a medium grained quartz sandstone bed													
3196.00 - 3241.00	Background	0.45	2581	304	173	32	57	53	8.49	14.92	48.7	89	801
Comment:													
3197.50 -	Peak	2.63	20495	1855	1021	179	316	212	11.05	20.07	96.67	495	6,715.19
Comment: Associated with a medium to coarse grained quartz sandstone bed													
3211.00 -	Peak	4.00	33512	2754	1354	202	369	225	12.17	24.75	148.94	571	10,425.19
Comment: From near top of sandstone bed with minor drilling break and increased resistivity. C1/C5 cross plot suggests hydrocarbon.													
3216.50 -	Peak	2.40	19193	1511	743	119	202	135	12.7	25.83	142.17	321	5,359.51
Comment: Probably associated with coal seam since 20% coal in ctgs from 3215-3220m MDRT sample.													
3226.00 -	Peak	2.90	23808	1893	775	142	207	106	12.58	30.72	224.6	349	8,784.26
Comment: Appears to be associated with significant 50-60% coal in ctgs sample 3225m MDRT													
3237.50 -	Peak	3.95	29892	2466	1245	226	340	206	12.12	24.01	145.11	566	10,196.24
Comment: Associated with coarse loose sand, resistivity indicates hydrocarbons.													

F1\*: C1 / C5      F2\*: iC4 + nC4      F3\*: (C2 + C3) / (C5 / (iC4 + nC4))

Survey									
MDRT (m)	Incl. (deg)	Corr. Az (deg)	TVDBRT (m)	'V' Sect (deg)	Dogleg (deg/30m)	N/S (m)	E/W (m)	Tool Type	
3126.92	7.6	272.8	2949.32	899.2	1.5	-66.5	-896.8	MWD	
3154.38	7.0	271.5	2976.56	902.7	0.8	-66.3	-900.3	MWD	
3184.68	6.2	274.4	3006.66	906.1	0.8	-66.2	-903.8	MWD	
3212.14	5.6	271.9	3033.97	908.9	0.7	-66.0	-906.6	MWD	
3241.95	5.1	272.7	3063.65	911.7	0.5	-65.9	-909.4	MWD	

06:00 Hrs Update	
Time:	06:00 Hrs on 15 May 2006
Depth:	3281 / 3102.5
Progress Since Midnight:	43
Drilling Status:	Drilling ahead 311mm (12 1/4") hole at 3284m MDRT
Formation:	Latrobe Formation Zone 0 @ 3184 mMDRT 3006 mTVDRT Zone 1.1 @ 3196 mMDRT, 3017.9 mTVDRT
Lithology:	Interbedded Sandstone, Argillaceous Sandstone, Silty Claystone and Coal.
ROP:	2.5 - 35 m/hr 7.1 m/hr average
Gas:	Background 0.8% Ci 5303 ppm, C2 570 ppm, C3 306 ppm, iC4 50 ppm, nC4 94 ppm, C5 76 ppm  Peak 3248.5m 6.2% associated with coal.  Peak 3252m 6.4% C1 46058 ppm, C2 3640 ppm, C3 1838 ppm, iC4 274 ppm, nC4 495 ppm, C5 293 ppm, hydrocarbon.  Peak 3258m 2.8% associated with coal  Peak 3268m 5.4% associated with coal

Wellsite Geologist(s)	
(Days) - Mike Woodmansee	(Nights) - Stuart Duff

Lithology Report					
Depth Interval		Main Lithology	Lithology %	Qualifier	Description
Depth (mRT)	Depth Range				
2960.0	2965.0	Clyst	40	slyt	Claystone, lt - med brnsh gy, very soft to soft, sub-blocky to amorphous, 25% siliceous clay, 75% siliceous silt, 5% coal.
3140.0	3145.0	Sst	10	arg	Sandstone, lt gy, lt brn, very soft to firm, sub-blocky to amorphous, sub-angular to rounded, to well sorted, slightly elongated to slightly spherical, 40% siliceous clay, 15% siliceous silt, 45% siliceous sand, 60% very fine grained, 40% fine grained, 1% coal, trace of pyrite, 10% porosity.
3140.0	3145.0	Clyst	20	slyt	Claystone, lt gy, v lt - dk brnsh gy,, soft to firm, sub-blocky to sub-fissile, 60% siliceous clay, 40% siliceous silt, 2% coal.
3140.0	3145.0	Sst	70		Sandstone, clr-transl quartz grains, loose, angular to sub-rounded, well sorted, elongated to slightly spherical, 5% siliceous clay, 95% siliceous sand, 20% medium grained, 75% coarse grained, 5% very coarse grained, trace of pyrite cement, trace of pyrite, 20% porosity.
3180.0	3185.0	C	80		Coal, blk, vitreous, bituminous and bright, moderately hard to hard, conchoidal to blocky, trace of pyrite.
3180.0	3185.0	Clyst	20	carb	Claystone, medium to dark greyish brown and sometimes blackish brown, soft to firm, sub-blocky to sub-fissile, 70% siliceous clay, 30% siliceous silt, 4% coal, trace of pyrite.
3185.0	3190.0	Sst	80		Sandstone, light grey overall and clr-transl quartz grains, loose, angular to sub-rounded, moderately sorted to well sorted, elongated to slightly spherical, 100% siliceous sand, 10% very fine grained, 15% fine grained, 70% medium grained, 5% coarse grained, trace of pyrite cement, trace of pyrite, 20% porosity.
3185.0	3190.0	C	2		Coal, blk, vitreous, bituminous and bright, moderately hard to hard, conchoidal to blocky, trace of pyrite.
3190.0	3195.0	Sst	70		Sandstone, light grey overall and clr-transl quartz grains, loose, angular to sub-rounded, moderately sorted, elongated to slightly spherical, 100% siliceous sand, 10% fine grained, 50% medium grained, 35% coarse grained, 5% very coarse grained, 0.2% pyrite cement, trace of pyrite, 20% porosity.
3202.5	3205.0	C	20		Coal, blk, vitreous, bituminous and bright, moderately hard to hard, conchoidal to blocky, trace of pyrite.
3220.0	3225.0	Sst	5		Sandstone, light grey overall and clr-transl quartz grains, loose to friable, angular to sub-rounded, poor sorted to moderately sorted, elongated to slightly spherical, 100% siliceous sand, 2% fine grained, 20% medium grained, 50% coarse grained, 20% very coarse grained, 5% granular grained, 0.2% pyrite cement, 0.2% calcite cement, trace of pyrite, trace of coal/lignite, trace of mica, 16% porosity.
3220.0	3225.0	C	45		Coal, blk, vitreous, bituminous and bright, moderately hard to hard, conchoidal to blocky, trace of pyrite.
3220.0	3225.0	Clyst	50	carb	Claystone, medium to dark greyish brown and sometimes blackish brown, soft to firm, sub-blocky to sub-fissile, 70% siliceous clay, 30% siliceous silt, 4% coal, trace of pyrite.
3230.0	3235.0	C	5		Coal, blk, vitreous, bituminous and bright, moderately hard to hard, conchoidal to blocky, trace of pyrite.
3230.0	3235.0	Sst	25	arg	Sandstone, lt olive gy to light and medium shades of brownish grey, very soft to moderately hard, sub-blocky to amorphous, sub-angular to rounded, to well sorted, slightly elongated to slightly spherical, 30% siliceous clay, 15% siliceous silt, 55% siliceous sand, 60% very fine grained, 40% fine grained, 2% coal, trace of pyrite, 10% porosity, hydrocarbon show.
3230.0	3235.0	Sst	35		Sandstone, light grey overall and clr-transl quartz grains, loose to friable, angular to sub-rounded, poor sorted to moderately sorted, elongated to slightly spherical, 100% siliceous sand, 2% fine grained, 20% medium grained, 50% coarse grained, 25% very coarse grained, 0.2% pyrite cement, 0.2% calcite cement, trace of pyrite, trace of coal/lignite, trace of mica, 16% porosity.