



DRILLING FLUID REPORT

Report #	36	Date :	13-Oct-2006
Rig No	32	Spud :	8-Sep-2006
Depth	3119	to	3169
			Metres

OPERATOR BEACH Petroleum LTD		CONTRACTOR ENSIGN Int'l Energy SVCs	
REPORT FOR Brian MARRIOTT - Scott HEALEY		REPORT FOR Andy BAKER	
WELL NAME AND No GLENAIRE # 1 ST1		FIELD PEP 160	LOCATION OTWAY Basin
		STATE VICTORIA	

DRILLING ASSEMBLY		JET SIZE		CASING		MUD VOLUME (BBL)		CIRCULATION DATA			
BIT SIZE 6.00	TYPE Smith XR+	24	24	24	13 3/8 SURFACE SET @ 997 ft 304 M	HOLE 329	PITS 402	PUMP SIZE 5 X 8.5 Inches		CIRCULATION PRESS (PSI) 3050 psi	
DRILL PIPE SIZE 3.5	TYPE 15.5 #	Length 3253 Mtrs		9 5/8 INTERMEDIATE SET @ 4107 ft 1252 M	TOTAL CIRCULATING VOL. 731		PUMP MODEL 3 x NAT 8-P80		ASSUMED EFF 97 %		BOTTOMS UP (min) 50 min
DRILL PIPE SIZE 3.50	TYPE HW	Length 86 Mtrs		7 PRODUCTION/ LINER Set @ 9839 ft 2999 M	IN STORAGE 183		BBL/STK@ 100% 0.0516		STK / MIN 118		TOTAL CIRC. TIME (min) 154 min
DRILL COLLAR SIZE (") 4.75	Length 161 Mtrs		MUD TYPE 5% KCI-PHPA-POLYMER				BBL/MIN 5.91		GAL / MIN 248		ANN VEL. (ft/min) 256
										DP 452	

MUD PROPERTIES			MUD PROPERTY SPECIFICATIONS					
SAMPLE FROM	Below shkrs	Below shkrs	Mud Weight	>=10.3	API Filtrate	6 - 8	HPHT Filtrate	NA
TIME SAMPLE TAKEN	14.15	23.00	Plastic Vis	ALAP	Yield Point	8 - 15	pH	9.0 - 9.5
DEPTH (ft) - (m)	Metres	3,150	KCI	>5%	PHPA	0.75 - 1.5	Sulphites	80 - 120

FLOWLINE TEMPERATURE	° C ° F	51 124	52 126	OBSERVATIONS Salt added directly to mud system to increase mud weight over one circulation after well was seen to be flowing slightly. Salt added to premix to pre-weight it to 10.3 ppg. Premix being added to slowly build tank volume and to maintain properties. Maintaining yield point at relatively low levels so as to minimise drill string pressure losses. Despite low yield point, hole cleaning not compromised due to high annular velocities. Will be maintaining mud weight at or above 10.3 ppg.
WEIGHT	ppg / SG	10.30	1.236	
FUNNEL VISCOSITY (sec/qt) API @ 52 °C		36	36	
PLASTIC VISCOSITY cP @ 55 °C		10	9	
YIELD POINT (lb/100ft²)		5	6	
GEL STRENGTHS (lb/100ft²) 10 sec/10 min		1 3	1 3	
RHEOLOGY q 600 / q 300		25 15	24 15	
RHEOLOGY q 200 / q 100		11.5 7	11.5 7	
RHEOLOGY q 6 / q 3		1 1	1 1	
FILTRATE API (cc's/30 min)		6.5	6.6	
HPHT FILTRATE (cc's/30 min) @ ° F				
CAKE THICKNESS API : HPHT (32nd in)		1 --	1 --	
SOLIDS CONTENT (% by Volume)		8.0	7.9	
LIQUID CONTENT (% by Volume) OIL/WATER		92.0	92.1	

SAND CONTENT (% by Vol.)	Tr	Tr	OPERATIONS SUMMARY RIH to 3054 m. Wash to bottom. Drill / slide to 3169 m. Slight flow, after high gas readings, was experienced at 3127 m with a mud weight at the time of 10.2 ppg. Increased mud weight to 10.3 ppg. Elevated Gas readings at 3153 m (2900 units), 3153.76 m (1200), 3154.27 m (80), 3156 m (230), 3157 m (510) and 3159 m (185).
METHYLENE BLUE CAPACITY (ppb equiv.)	12.5	12.0	
pH	10.0	10.0	
ALKALINITY MUD (Pm)	0.30	0.28	
ALKALINITY FILTRATE (Pf / Mf)	0.22 0.98	0.24 0.94	
CHLORIDE (mg/L)	129,500	131,000	
TOTAL HARDNESS AS CALCIUM (mg/L)	40	40	
SULPHITE (mg/L)	120	100	
K+ (mg/L)	65,625	60,375	
KCI (% by Wt.)	12.5	11.5	
PHPA (ppb)	0.82	0.84	

Mud Accounting (bbls)				Solids Control Equipment									
FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY		Type	Hrs	Cones	Hrs	FLC 514	Size	Hrs	
Premix (drill water)		Desander		INITIAL VOLUME	833	Centrifuge	DE1000	21	Desander		Shaker #1	4 x 310	22
Premix (recirc from sump)	110	Desilter				Degasser		6	Desilter		Shaker #2	4 x 310	22
Drill Water		Downhole	13	+ FLUID RECEIVED	110								
Direct Recirc Sump		Dumped	10	- FLUID LOST	29								
Other (eg Diesel)		Centrifuge	6	FLUID in STORAGE	183								
TOTAL RECEIVED	110	TOTAL LOST	29	FINAL VOLUME	914								
								Overflow (ppg)		Underflow (ppg)		Output (Gal/Min.)	
								Centrifuge	10.3	15.6		0.20	

Product	Price	Start	Received	Used	Close	Cost	Solids Analysis		Bit Hydraulics & Pressure Data		
AMC Biocide G	\$ 185.35	10		1	9	\$ 185.35		%	PPB	Jet Velocity	60
AMC PAC-L	\$ 159.98	53		5	48	\$ 799.90	High Grav solids	0.8	11.34	Impact force	79
AMC PHPA	\$ 118.90	42		1	41	\$ 118.90	Total LGS	8.3	78.7	HHP	5
Salt	\$ 8.65	1152		456	696	\$ 3,944.40	Bentonite equiv.	0.5	4.2	HSI	0.2
Sodium sulphite	\$ 33.30	42		1	41	\$ 33.30	Drilled Solids	7.8	71.4	Bit Press Loss	33
Xanthan Gum	\$ 359.25	76		1	75	\$ 359.25	Salt	8.2	75.8	CSG Seat Frac Press	2200 psi
							n @ 23.00 Hrs	0.68		Equiv. Mud Wt.	13.80 ppg
							K @ 23.00 Hrs	1.12		ECD	11.04 ppg
										Max Pressure @ Shoe :	1791 psi

DAILY COST		CUMULATIVE COST	
\$5,441.10		\$107,738.56	

Any opinion and/or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation or warranty is made by ourselves or our agents as to its correctness or completeness, and no liability is assumed for any damages resulting from the use of same.