DRILLING FLUID REPORT

RMN drilling fluids

Report #	37	Date :	14-Oct-2006
Rig No	32	Spud :	8-Sep-2006
Depth	3169 to 3182		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 / LOCATION / STATE	PEP 160 / OTWAY Basin / VICTORIA

DRILLING ASSEMBLY			JET SIZE			CASING				MUD VOLUME (BBL)		CIRCULATION DATA			
BIT SIZE	TYPE	24	24	24	13 3/8	SURFACE SET @	997	ft	HOLE	PITS	PUMP SIZE		CIRCULATION PRESS (PSI)	3000	psi
6.00	Smith XR+						304	M	330	440	5 X 8.5	Inches			
DRILL PIPE SIZE 3.5	TYPE 15.5 #	Length 2935 Mtrs			9 5/8	INTERMEDIATE SET @	4107	ft	TOTAL CIRCULATING VOL.		PUMP MODEL	ASSUMED EFF	BOTTOMS UP (min)	45	min
							1252	M	770		3 x NAT 8-P80	97 %			
DRILL PIPE SIZE 3.50	TYPE HW	Length 86 Mtrs			7	PRODUCTION/ LINER Set @	9839	ft	IN STORAGE		BBL/STK@ 100%	STK / MIN	TOTAL CIRC. TIME (min)	151	min
							2999	M	120		0.0516	118			
DRILL COLLAR SIZE (")		Length			MUD TYPE						BBL/MIN	GAL / MIN	ANN VEL. (ft/min) DP	256	
4.75		161 Mtrs			5% KCl-PHPA-POLYMER						5.91	248	DCs	452	

	MUD PROPERTIES	
SAMPLE FROM	Below shkrs	Below shkrs
TIME SAMPLE TAKEN		11.00
DEPTH (ft) - (m) Metres		3,182
FLOWLINE TEMPERATURE ^{0}C ^{0}F		51 124
WEIGHT ppg / SG		10.55 1.267
FUNNEL VISCOSITY (sec/qt) API @ 51 ^{0}C		36
PLASTIC VISCOSITY cP @ 55 ^{0}C		10
YIELD POINT (lb/100ft^2)		5
GEL STRENGTHS (lb/100ft^2) 10 sec/10 min		1 3
RHEOLOGY q 600 / q 300		25 15
RHEOLOGY q 200 / q 100		12 7
RHEOLOGY q 6 / q 3		1 1
FILTRATE API (cc's/30 min)		6.0
HPHT FILTRATE (cc's/30 min) @ ^{0}F		
CAKE THICKNESS API : HPHT (32nd in)		1 --
SOLIDS CONTENT (% by Volume)		7.8
LIQUID CONTENT (% by Volume) OIL/WATER		92.2
SAND CONTENT (% by Vol.)		Tr
METHYLENE BLUE CAPACITY (ppb equiv.)		12.0
pH		9.5
ALKALINITY MUD (Pm)		0.18
ALKALINITY FILTRATE (Pf / Mf)		0.15 0.70
CHLORIDE (mg/L)		159,000
TOTAL HARDNESS AS CALCIUM (mg/L)		80
SULPHITE (mg/L)		120
K+ (mg/L)		52,500
KCl (% by Wt.)		10.0
PHPA (ppb)		0.83

MUD PROPERTY SPECIFICATIONS					
Mud Weight	>=10.5	API Filtrate	6 - 8	HPHT Filtrate	NA
Plastic Vis	ALAP	Yield Point	8 - 15	pH	9.0 - 9.5
KCl	>5%	PHPA	0.75 - 1.5	Sulphites	80 - 120

OBSERVATIONS

Increasing mud weight due to formation flowing slightly. Using salt at present.

OPERATIONS SUMMARY

Drill / slide to 3182 m. Circulate bottoms up.
Pump slug and POH. Flow check at 2991 m - slight flow.
POH - 2846 m - Flow Check - slight flow.
POH - 2729 m - Flow Check - slight flow.
RIH to bottom - no fill.
Circulate bottoms up (4000 units gas plus oil show) and weight up to 10.5+ ppg. Flow check - hole ok.
POH. Flow check every 15 stands.
Change bit and service mwd tools.
RIH.

Mud Accounting (bbls)

FLUID BUILT & RECEIVED		FLUID DISPOSED		SUMMARY	
Premix (drill water)		Desander		INITIAL VOLUME	914
Premix (recirc from sump)		Desilter			
Drill Water		Downhole	9	+ FLUID RECEIVED	
Direct Recirc Sump		Dumped	10	- FLUID LOST	24
Other (eg Diesel)		Centrifuge	5	FLUID in STORAGE	120
TOTAL RECEIVED		TOTAL LOST	24	FINAL VOLUME	890

Solids Control Equipment

	Type	Hrs		Cones	Hrs	FLC 514	Size	Hrs
Centrifuge	DE1000	7	Desander			Shaker #1	4 x 310	12
Degasser		9	Desilter			Shaker #2	4 x 310	12

	Overflow (ppg)	Underflow (ppg)	Output (Gal/Min.)
Centrifuge	10.3	15.6	0.50

Product	Price	Start	Received	Used	Close	Cost
Barite	$ 8.20	530	160	66	624	$ 541.20
Salt	$ 8.65	696	816	312	1200	$ 2,698.80

Solids Analysis	%	PPB
High Grav solids	0.8	11.21
Total LGS	8.7	82.2
Bentonite equiv.	0.4	3.8
Drilled Solids	8.3	75.2
Salt	9.9	92.1
n @ 11.00 Hrs	0.74	
K @ 11.00 Hrs	0.78	

Bit Hydraulics & Pressure Data	
Jet Velocity	60
Impact force	81
HHP	5
HSI	0.2
Bit Press Loss	34
CSG Seat Frac Press	2200 psi
Equiv. Mud Wt.	13.80 ppg
ECD	11.45 ppg
Max Pressure @ Shoe :	1663 psi

DAILY COST	CUMULATIVE COST
$3,240.00	$110,978.56

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