

Advanced Mud Tech		MUD REPORT Water-based		Report No.	16	MD (ft)	7292					
Address 200 Main St. Houston TX 77000		E-mail contact@AMT.com		Report date	1/16/2010	TVD (ft)	7292					
E-mail contact@AMT.com		Phone 713-222-0123		Report time	23:00	Inc (deg)	1.00					
Stock point BIG warehouse		Phone 713-123-4567		Spud date	1/1/2010	Azi (deg)	56.00					
Operator Gaint Oil		Contractor GAS SERVICE		Rig	RIG No1	API well No.	123-456					
Report for F TOM / E GARY		Report for D ROSE/ R. ALLEN		Activity	Drilling		Cell 713-555-1234					
Well name/No.		Field/Block		County/Parish/Offshore area		State/Province	Country					
Pegasus #8		SOUTH TAXES		Harris		TX	USA					
Section-Township-Range		Sec028 T17N/R12W		Mfr. SMITH		Pump #						
BIT		PUMP		1		2						
Description		OD (in)	ID (in)	Length (ft)	Description	OD (in)	Top (ft)					
DP	4.500	3.826	6517	Surface Casin	10.750	0	1914					
DP	5.000	3.000	461									
HDP	6.500	2.750	282									
DC	8.000	3.000	32									
Description		ID (in)	MD (ft)	Washout								
OH	10.000	7292										
Mfr.		SMITH		Pump #	1 2 3 4							
Bit type		REED		Liner ID (in)	5.500 5.500							
Bit No.		1		Rod OD (in)								
Size (in)		9.875		Stk length (in)	12.000 12.000							
Depth (ft)		7292		Eff. (%)	95.00 95.00							
TFA (in2)		0.663		(stk/min)	103.00 102.00							
Nozzle (1/32in)		12/12/12/12/12		(bb/stk)	0.0838 0.0838							
				(gpm)	362.5 359.0							
				Total (gpm)	721.5 Pump P. (psi) 2846							
DRILLING INFO		VOLUME (bbl)		CIRCULATION		SOLIDS CONTROL EQUIPMENT						
WOB (lbf)	15000	Hole	710	Path	Minutes	Strokes	Screen size	Time (hr)	U/F (ppg)	O/F (ppg)	Time (hr)	
Rot. wt. (lbf)		Annulus	557	Surf. - bit	5.77	1182	Shaker 1	200/200/200/200	24.00	De-sander		
S/O wt. (lbf)		String	99	Btm up	32.44	6650	Shaker 2	200/200/200/200	25.00	De-silter		
P/U wt. (lbf)		Pits	277	Surf. - surf	38.20	7832	Shaker 3			Centrifuge		
RPM (rpm)	80.0	Storage	196	Pits	16.12	3306	Shaker 4			Barite rec.		
ROP (ft/hr)	30	Total circ.	933	Total circ.	54.33	11137	Mud cleaner					
MUD PROPERTY						INVENTORY AND COST						
Property		Sample 1*	Sample 2	Sample 3	Sample 4	Product	Price(\$)	Initial	Rec	Final	Used	Cost (\$)
Sample from		Pit	Flowline			ALUMINUM STEARATE	80.00	5	0	5	0	0.00
Time sample taken		09:00	12:00			XYZ BAR	10.00	40	0	40	0	0.00
Flowline temp. (F)		120	120			XYZ BX	20.00	150	0	140	10	200.00
Depth (ft)		7200	7290			XYZ DF-2	350.00	0	0	0	0	0.00
MW (ppg)		10.20	10.30			XYZ DRILL N	100.00	30	0	28	2	200.00
Funnel viscosity (sec/qt)		38	38			XYZ OW	1000.00	0	0	0	0	0.00
Temp. for PV (F)		120	120			XYZ P	100.00	0	0	0	0	0.00
PV (cP)		22	23			XYZ Phait	100.00	0	0	0	0	0.00
YP (lbf/100ft2)		12	12			XYZ Spar(Cypan)	200.00	35	0	30	5	1000.00
Gel strength (10 sec) (lbf/100ft2)		6	6			Benotone 38	150.00	0	0	0	0	0.00
Gel strength (10 min) (lbf/100ft2)		18	17			BULK BAR	150.00	35	0	32	3	450.00
Gel strength (30 min) (lbf/100ft2)						CaCl2	30.00	0	0	0	0	0.00
API filtrate (ml/30 min)		20.20	20.00			CALCIUM CARB	0.00	120	0	120	0	0.00
Temp. for HTHP (F)						CARB MED	20.00	0	0	0	0	0.00
HTHP filtrate (ml/30 min)						Desco	50.00	74	0	70	4	200.00
Cake thickness API (1/32in)		2	2			FLO THIN HT	120.00	60	0	58	2	240.00
Cake thickness HTHP (1/32in)						GRAPHITE	60.00	40	0	40	0	0.00
Solids content (%)		10.50	12.00			LIME	10.00	118	0	116	2	20.00
Oil content (%)		0.00	0.00			MICA	15.00	144	0	144	0	0.00
Water content (%)		89.50	88.00			Oil Dry	15.00	0	0	0	0	0.00
Sand content (%)		0.10	0.10			Oil Mud Loan	2.00	0	0	0	0	0.00
MBT capacity (lb/bbl)		20.00	20.00			SAPP	100.00	5	0	5	0	0.00
pH		8.80	8.80			SODA ASH	15.00	160	0	145	15	225.00
Mud alkalinity(Pm) (ml/N50 H2SO4)		0.80	0.80			WALNUT	20.00	180	0	150	30	600.00
Filtrate alkalinity(Pf) (ml/N50 H2SO4)		0.05	0.05			WT22	90.00	0	0	0	0	0.00
Filtrate alkalinity(Mf) (ml/N50 H2SO4)		0.60	0.60			XYZ DD SOAP	40.00	32	0	32	0	0.00
Calcium (mg/L)						XYZ GEL	10.00	425	0	400	25	250.00
Chlorides (mg/L)		600.00	600.00			XYZ MUL S	900.00	4	0	4	0	0.00
Total hardness (mg/L)		120.00	120.00			Pallets	19.50	0	10	0	10	195.00
Excess lime (lb/bbl)		0.19	0.19			Wraps	17.50	0	10	0	10	175.00
K+ (mg/L)						Trucking	1.00					0.00
Make up water: Chlorides (mg/L)						Engineer 24 Hr	750.00				1	750.00
Solids adjusted for salt (%)		10.49	11.99									
LCM (lb/bbl)												
Mud type		WBM	MW	9-11	Viscosity	30-50	Product (\$)	Subtotal (\$)	Tax (\$)	Daily total (\$)	Pre. total (\$)	Cum. total (\$)
API filtrate		nc	HPHT filtrate	pH			3385.00	4505.00	356.73	4861.73	23794.61	28656.34
RECOMMENDED TOUR TREATMENTS						REMARKS						
Pump Premix HV Sweep per Co-Man						Drilling ahead while continuing break over of system to an XYZ BX system as per program. While tripping for new Bit, one minor tight spot was encountered. TIH with no well bore issues.						
1. Transfer 70 bbls to premix												
2. Gel - 6 sx 1 sx BX												
3. Cypan - 1 sx												
4. Drill N - 1/2 can												
Active System : Tourly Treatment While Drilling												
1. Water - As needed for weight & volume												
2. Drill N - 2 cans slowly (4 hours)												
3. 3 sxs Cypan												
Run all solids control equipment while drilling												
Jet and clean pits as needed to control weight												
Keep hole full and pipe moving at all times												
ANNULAR HYDRAULICS						ADDITION (bbl) LOSS (bbl) VOL. TRACK (bbl) FANN						
Section (in)	10.050 x 4.500	10.000 x 4.500	10.000 x 5.000	10.000 x 6.500	10.000 x 8.000	Other mud	Cuttings	17	Start vol.	917	600	56
Sect. length (ft)	1914	4603	461	282	32	Diesel	Seepage	14	Daily addition	31	300	34
Ann. vel. (ft/min)	219.1	221.9	235.9	306.4	491.5	Water	Dump		Daily loss	31	200	
Crit. vel. (ft/min)	256.0	256.6	263.3	292.9	361.9	Products	31	Shakers	From storage	0	100	
Crit. rate (gpm)	843.5	835.0	805.6	690.0	531.6	Other water		Centrifuge	To storage	0	60	
Eff. vis. (cP)	50	50	47	40	30			Other	End vol.	917	30	
Flow	Lam	Lam	Lam	Tur	Tur			Pit cleaning	Received	6		
ECD (ppg)	10.51	10.51	10.51	10.53	10.54			Returned		3	4	
P. drop (psi)	30	74	9	10	5	BIT HYDRAULICS		TIME DISTRIBUTION		SOLIDS ANALYSIS		
Slip vel. (ft/s)	36.5	36.5	36.8	37.9	39.5	No. of nozzles	6	Rig up / Service		Low gravity (%Vol)	6.99	
CTR (%)	83.35	83.54	84.39	87.62	91.97	TFA (in2)	0.663	Drilling	7.00	Low gravity (lb/bbl)	63.65	
CCI	Good	Good	Good	Good	Good	Nozzle vel. (ft/s)	349	Circulating	1.00	High gravity (%Vol)	3.49	
						Impact force (lbf)	1332	Tripping	12.00	High gravity (lb/bbl)	51.37	
						DP bit (psi)	1113	Surveys		Bentonite (%Vol)	0.98	
						HHP bit (HP)	468.7	Logging		Bentonite(lb/bbl)	8.90	
						HSI	6.12	Run casing		Drill solids (%Vol)	6.02	
						Sys HHP (HP)	1198.0	Testing		Drill solids(lb/bbl)	54.75	
						Sys HHP (%)	39.12	Cementing		DS/Bent ratio	6.15	
						BH ECD (ppg)	10.54	Coring / Reaming		Avg. SG of solids	3.13	
								PU BHA/BIT	4.00			
The information in this report is based on our experience and represents our best judgment in the matter and is intended to be helpful, but we cannot assume responsibility for any loss or accident that may result from its use. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any materials or uses.											MUDPRO PVI	