


<div>Hydro Resources 13027 County Rd 18 FT Lupton, CO 80621 Phone: 303-857-4171 Version 1.25.1</div>								<div>DRILLING MUD REPORT3</div> <table><tr><td>Date 10/22/14</td><td>Measured Depth 3,011 ft.</td><td>T.V. Depth</td></tr><tr><td>Spud Date 10/21/14</td><td>Present Activity Circulating TD</td><td>Rig No. 2</td></tr></table>						Date 10/22/14	Measured Depth 3,011 ft.	T.V. Depth	Spud Date 10/21/14	Present Activity Circulating TD	Rig No. 2
Date 10/22/14	Measured Depth 3,011 ft.	T.V. Depth																	
Spud Date 10/21/14	Present Activity Circulating TD	Rig No. 2																	
OPERATOR:		Augustus Energy				CONTRACTOR:		Excell											
Operator's Representative:						Contractor's Representative:		Mark											
Well Name & No.		Field:		Wild Cat				County, Parish:		Yuma		State:		CO					
Haven Hill 14-15 4n47w		Legal:		SWNE,Sec3,Twp2s,Rng44w				VOLUMES		PUMP INFORMATION		HYDRAULICS							
BIT DATA		CASING & DRILLING ASSEMBLY				Pit Vol.		PUMP #1		PUMP #2		ANNULAR VELOCITY							
Bit Size	6.25	Size	7.25	set @	484	Ft	Pipe Capacity		200FXN				Drill Pipe		180 ft/min				
Bit Type	Mi516	Size		set @		Ft	2 bbls		5.25 x14				Drill Collar		1244 ft/min				
Bit No.		Size		set @		Ft	Ann Volume		63 SPM				CIRCULATING PRESSURE						
Jets (32nd)		Size		set @		Ft	108 bbls		4.56 G/ST				1530 psi						
13	13	Drill Collar		5.78	2.5	337	Hole Volume		287 GPM				BOT. UP		16 min				
13	13	Drill Collar					110 bbls		6.83 BPM				SURF. TO BIT		0.3 min				
12		Drill Pipe				2674	Total Cir Vol		Total GPM		Total BPM		TOT. CIR TIME		38 min				
		H.W. Drill Pipe					260 bbls		287		6.83								
Sample Fro <input type="checkbox"/> Flowline <input type="checkbox"/> Pit		Mud Properties				Calculate Alkalinity <input checked="" type="checkbox"/>		Check		HYDRAULICS									
Flowline Temperature (°F)		111				Carbonates:		0		EPM		Jet Velocity		151 Ft/Sec		Nozzle Area			
Time Sample Taken		5:59am				Carbonates:		0		EPM		Horsepower		1 HP/SQ.In		0.61 Sq In			
Depth (ft)		3011				Hydroxyls:		0		EPM		Impact Force		6.3 lbf/Sq. In		ECD			
Mud Weight (ppg)		8.6				Excess Lime:		0.00		lb/bbl		Press Loss at Bit		175psi		9.04 ppg			
Mud Gradient (psi/ft)		0.4472				Lime Needed:		0.00		lb/bbl		Press Loss at Bit		11%					
Funnel Viscosity @		28				Recommended Equipment													
Plastic Visc.cp @ 75 °F		2				Centrifuge <input checked="" type="checkbox"/>		Shaker <input checked="" type="checkbox"/>		Desander <input type="checkbox"/>									
Yield Point (lb/100ft2)		1				Degasser <input type="checkbox"/>		Desilter <input type="checkbox"/>		Other <input type="checkbox"/>									
Gel Strength (lb/100ft2) 10-sec		0				Recommended Mud Properties													
Gel Strength (lb/100ft2) 10-min		0				By Authority of:		<input type="checkbox"/>		Company Representative		<input checked="" type="checkbox"/>		Drilling Contractor					
Gel Strength (lb/100ft2) 30-min		x				Mud Wt:		8.5-9.2		Filtrate:		6-8cc		Viscosity:		28-32			
Filtrate API (cm3/30 min)		6.8				LCM:								Excess Lime:		lb/bbl			
Filtrate API HTHP (cm3/30 min)		x				RECOMMENDED TOURLY TREATMENT													
Cake Thickness (/32nds)		1																	
Solids Content (% by vol)		2.0																	
Water Content (% by Vol.)		98																	
Sand Content (% by vol)		.1																	
Bentonite Content (lb/bbl)		x																	
pH <input checked="" type="checkbox"/> Strip <input type="checkbox"/> Meter		7.5																	
Alkalinity Mud (Pm) cm3 N/50 Acid		x																	
Alkalinity, Pf / Mf		.00/1.49																	
Chloride (mg/l)		12900																	
Total Hardness as Calcium (mg/l)		560																	
Oil Content (% by vol)		x																	
LCM (lb/bbl)		x																	
Excess Lime (lb/bbl)		x																	
														DAILY REMARKS					
Solids Analysis						Mud looks good, everything is in spec.													
L.G. Solids				%		H.G. Solids				%									
L.G. Solids				ppb		H.G. Solids				ppb									
Corrected Solids				%		Average Sp. Gr.													
CHEMICALS																			
Starting Inventory																			
Chemicals Received																			
Closing Inventory																			
Chemicals Used																			
Daily Cost																			
CHEMICALS																			
Starting Inventory																			
Chemicals Received																			
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TECHNICAL REP:		Jeremy Cigich				WAREHOUSE:		13027 CR 18				NAME:							
CELL PHONE NO.		(970)302-3793				ADDRESS:		Ft. Lupton, CO 80621				PHONE:							
ANS. SERVICE:						PHONE:		(303) 857-4171				PHONE:							
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