


<b>Hydro Resources</b> 13027 County Rd 18 FT Lupton, CO 80621 Phone: 303-857-4171								<b>DRILLING MUD REPORT</b>				2				
Date 08/10/14				Measured Depth 2,667 ft.				T.V. Depth								
Spud Date 08/08/14				Present Activity TD/Circ				Rig No.				2				
Version 1.25.1																
OPERATOR:		Augustus				CONTRACTOR:		Excell								
Operator's Representative:						Contractor's Representative:		Mark								
Well Name & No.		Field:				County, Parish:		Yuma		State:		CO				
Hagemann 43-10		Legal:		NESE S10-T1N-R46W		VOLUMES		PUMP INFORMATION		HYDRAULICS						
BIT DATA		CASING & DRILLING ASSEMBLY				Pit Vol.		PUMP #1		PUMP #2		ANNULAR VELOCITY				
Bit Size 6.25		Size 7		set @ 513 Ft		Pipe Capacity		GD/FXN200				Drill Pipe 178 ft/min				
Bit Type		Size		set @ Ft		23 bbls		5.5 x14				Drill Collar 178 ft/min				
Bit No.		Size		set @ Ft		Ann Volume		61 SPM				CIRCULATING PRESSURE				
Jets (32nd)		Size		set @ Ft		78 bbls		3.67 G/ST				1189 psi				
13 13		Drill Collar		3.5 2.8 335		Hole Volume		224 GPM				BOT. UP 15 min				
13 12		Drill Collar				101 bbls		5.33 BPM				SURF. TO BIT 4.3 min				
12		Drill Pipe		3.5 3 2332		Total Cir Vol		Total GPM		Total BPM		TOT. CIR TIME 38 min				
		H.W. Drill Pipe				201 bbls		224		5.33						
Sample Fro <input checked="" type="checkbox"/> Flowline <input type="checkbox"/> Pit		Mud Properties				Calculate Alkalinity <input type="checkbox"/> Check		HYDRAULICS								
Flowline Temperature (°F)		X								Jet Velocity 118 Ft/Sec		Nozzle Area				
Time Sample Taken		0040								Horsepower 0.5 HP/SQ.In		0.61 Sq In				
Depth (ft)		2667								Impact Force 3.8 lbf/Sq. In		ECD				
Mud Weight (ppg)		8.6								Press Loss at Bit 107psi		8.68 ppg				
Mud Gradient (psi/ft)		0.4472								Press Loss at Bit 9%						
Funnel Viscosity @ °F		28				Recommended Equipment										
Plastic Visc.cp @ 75 °F		2				Cntrfuge <input type="checkbox"/>		Shaker <input type="checkbox"/>		Desander <input type="checkbox"/>						
Yield Point (lb/100ft2)		2				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 type="checkbox"/> Drilling Contractor						
Gel Strength (lb/100ft2) 30-min		x				Mud Wt:		Filtrate:		Viscosity:						
Filtrate API (cm3/30 min)		8.8				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.)		98.0														
Sand Content (% by vol)		tr														
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		0.0/1.5														
Chloride (mg/l)		12400														
Total Hardness as Calcium (mg/l)		500														
Oil Content (% by vol)		0														
LCM (lb/bbl)		0														
Excess Lime (lb/bbl)		0														
DAILY REMARKS																
Solids Analysis																
L.G. Solids		%		H.G. Solids		%										
L.G. Solids		ppb		H.G. Solids		ppb										
Corrected Solids		%		Average Sp. Gr.												
CHEMICALS		GEL	LIME	CAUSTIC	SODA ASH	QDF PAC-1	HYDRO VIS-30	74L	SOAP STICK	SAW DUST	BAR	WAL NUT	DRIS PAC SL	DRIS PAC REG	BEADS	LUBE
Starting Inventory																
Chemicals Received																
Closing Inventory																
Chemicals Used																
Daily Cost																
CHEMICALS		TREAT O CLAY														
Starting Inventory																
Chemicals Received																
Closing Inventory																
Chemicals Used																
Daily Cost																
TECHNICAL REP:		Carla Restivo				WAREHOUSE		13027 CR 18				NAME:				
CELL PHONE NO.		303-304-4528				ADDRESS:		Ft. Lupton, CO 80621				PHONE:				
ANS. SERVICE:						PHONE:		(303) 857-4171				PHONE:				
IN CONSIDERATION OF THE FURNISHING OF THIS REPORT AND ORAL SUGGESTIONS, IT IS AGREED THAT NO RECOMMENDATIONS MADE HEREON SHALL BE CONSTRUED AS																
AUTHORIZING THE INFRINGEMENT OF ANY VALID PATENT, AND IT IS AGREED THAT SHALL NOT BE LIABLE FOR ANY DAMAGES																
RESULTING FROM THE FURNISHING OF THIS REPORT AND ORAL SUGGESTIONS, AND IS TO BE HELD HARMLESS.																