

<b>Hydro Resources</b> 13027 County Rd 18 FT Lupton, CO 80621 Phone: 303-857-4171 Version 1.25.1			<span style="font-size: 2em; font-weight: bold; vertical-align: middle;">Hydro</span> <small>RESOURCES</small>		<b>DRILLING MUD REPORT</b>		3		
					Date	Measured Depth	T.V. Depth		
					08/26/14	2,912 ft.			
OPERATOR: Augustus Energy			CONTRACTOR: Excell						
Operator's Representative:			Contractor's Representative: Mark						
Well Name & No.		Field:	County, Parish:		State:	CO			
Barber 34-07 5N46W		Legal: SWSE, Sec7, Twp5N, Rng46W	Yuma						
BIT DATA			CASING & DRILLING ASSEMBLY			HYDRAULICS			
Pit Vol.			PUMP #1		PUMP #2		ANNULAR VELOCITY		
Bit Size	6.25	Size	7.25	set @	507	Ft	Pipe Capacity	200FXN	
Bit Type	MI516	Size		set @		Ft	21 bbls	5.25 x14	
Bit No.		Size		set @		Ft	Ann Volume	63 SPM	
Jets (32nd)		Size		set @		Ft	74 bbls	4.56 G/ST	
13	13	Drill Collar		5.78	2.5	337	Hole Volume	287 GPM	
13	12		Drill Collar					95 bbls	6.83 BPM
12		Drill Pipe		3.5	2.74	2575	Total Cir Vol	Total GPM	
		H.W. Drill Pipe					245 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)			102.5			Carbonates: 0 EPM		Jet Velocity 151 Ft/Sec	
Time Sample Taken			8:30am			Bicarbonates: 0 EPM		Horsepower 1 HP/SQ.In	
Depth (ft)			2912			Hydroxyls: 0 EPM		Impact Force 6.3 lbf/Sq. In	
Mud Weight (ppg)			8.6			Excess Lime: 0.00 lb/bbl		Press Loss at Bit 175psi	
Mud Gradient (psi/ft)			0.4472			Lime Needed: 0.00 lb/bbl		Press Loss at Bit 13%	
Funnel Viscosity @			31			<b>Recommended Equipment</b>			
Plastic Visc.cp @ 75 °F			4			Cntrfuge <input type="checkbox"/> Shaker <input type="checkbox"/> Desander <input type="checkbox"/> Degasser <input type="checkbox"/> Desilter <input type="checkbox"/> Other <input type="checkbox"/>			
Yield Point (lb/100ft <sup>2</sup> )			2			<b>Recommended Mud Properties</b>			
Gel Strength (lb/100ft <sup>2</sup> ) 10-sec			0			By Authority of: <input type="checkbox"/> Company Representative <input type="checkbox"/> Drilling Contractor			
Gel Strength (lb/100ft <sup>2</sup> ) 10-min			0			Mud Wt:		Filtrate:	
Gel Strength (lb/100ft <sup>2</sup> ) 30-min			x			Viscosity:			
Filtrate API (cm3/30 min)			8			LCM:		Excess Lime: lb/bbl	
Filtrate API HTHP (cm3/30 min)			x			<b>RECOMMENDED TOURLY TREATMENT</b>			
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			8						
Alkalinity Mud (Pm) cm3 N/50 Acid			x						
Alkalinity, Pf / Mf			0/8						
Chloride (mg/l)			12600						
Total Hardness as Calcium (mg/l)			140						
Oil Content (% by vol)			0						
LCM (lb/bbl)			x						
Excess Lime (lb/bbl)			x						
<b>DAILY REMARKS</b>									
<b>Solids Analysis</b>									
L.G. Solids		%	H.G. Solids		%				
L.G. Solids		ppb	H.G. Solids		ppb				
Corrected Solids		%	Average Sp. Gr.						
<b>CHEMICALS</b>									
Starting Inventory									
Chemicals Received									
Closing Inventory									
Chemicals Used									
Daily Cost									
<b>CHEMICALS</b>									
Starting Inventory									
Chemicals Received									
Closing Inventory									
Chemicals Used									
Daily Cost									
								<b>Est. Drayage:</b>	
								Est. Taxes: \$ -	
								Est. Daily Cost: \$ -	
								Est. Cumulative Cost: \$ 100.00	
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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