

<b>Hydro Resources</b> 13027 County Rd 18 FT Lupton, CO 80621 Phone: 303-857-4171 Version 1.25.1		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"><b>DRILLING MUD REPORT</b></td> <td style="text-align: center;">2</td> </tr> <tr> <td>Date</td> <td>Measured Depth</td> <td>T.V. Depth</td> </tr> <tr> <td style="text-align: center;">08/10/14</td> <td style="text-align: center;">2,667 ft.</td> <td></td> </tr> <tr> <td>Spud Date</td> <td>Present Activity</td> <td>Rig No.</td> </tr> <tr> <td style="text-align: center;">08/08/14</td> <td style="text-align: center;">TD/Circ</td> <td style="text-align: center;">2</td> </tr> </table>	<b>DRILLING MUD REPORT</b>		2	Date	Measured Depth	T.V. Depth	08/10/14	2,667 ft.		Spud Date	Present Activity	Rig No.	08/08/14	TD/Circ	2
<b>DRILLING MUD REPORT</b>		2															
Date	Measured Depth	T.V. Depth															
08/10/14	2,667 ft.																
Spud Date	Present Activity	Rig No.															
08/08/14	TD/Circ	2															

<b>OPERATOR:</b> Augustus		<b>CONTRACTOR:</b> Excell	
<b>Operator's Representative:</b>		<b>Contractor's Representative:</b> Mark	
<b>Well Name &amp; No.</b>	<b>Field:</b>	<b>County, Parish:</b>	<b>State:</b> CO
Hagemann 43-10	Legal: NESE S10-T1N-R46W	Yuma	
<b>BIT DATA</b>		<b>VOLUMES</b>	<b>PUMP INFORMATION</b>
<b>CASING &amp; DRILLING ASSEMBLY</b>		<b>Pit Vol.</b>	<b>PUMP #1</b> <b>PUMP #2</b>
Bit Size 6.25	Size 7 set @ 513 Ft	Pipe Capacity	GD/FXN200
Bit Type	Size set @ Ft	23 bbls	5.5 x14
Bit No.	Size set @ Ft	Ann Volume	61 SPM
Jets (32nd)	Size set @ Ft	78 bbls	3.67 G/ST
13 13	Drill Collar 3.5 2.8 335	Hole Volume	224 GPM
13 12	Drill Collar	101 bbls	5.33 BPM
12	Drill Pipe 3.5 3 2332	Total Cir Vol	Total GPM    Total BPM
	H.W. Drill Pipe	201 bbls	224    5.33
		<b>HYDRAULICS</b>	
		<b>ANNULAR VELOCITY</b>	
		Drill Pipe 178 ft/min	
		Drill Collar 178 ft/min	
		<b>CIRCULATING PRESSURE</b>	
		1189 psi	
		BOT. UP 15 min	
		SURF. TO BIT 4.3 min	
		TOT. CIR TIME 38 min	

Sample Fro <input checked="" type="checkbox"/> Flowline <input type="checkbox"/> Pit	<b>Mud Properties</b>	Calculate Alkalinity <input type="checkbox"/> Check	<b>HYDRAULICS</b>	
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	<b>Recommended Equipment</b>		
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	<b>Recommended Mud Properties</b>		
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	<b>RECOMMENDED TOURLY TREATMENT</b>		
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			

<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>	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															

<b>CHEMICALS</b>	TREAT O CLAY														
Starting Inventory															
Chemicals Received															
Closing Inventory															
Chemicals Used															
Daily Cost															
												<b>Est. Drayage:</b>			
												<b>Est. Taxes:</b>		\$ -	
												<b>Est. Daily Cost:</b>		\$ -	
												<b>Est. Cumulative Cost:</b>		\$ -	

<b>TECHNICAL REP:</b> Carla Restivo	<b>WAREHOUSE:</b> 13027 CR 18	<b>NAME:</b>
<b>CELL PHONE NO.:</b> 303-304-4528	<b>ADDRESS:</b> Ft. Lupton, CO 80621	<b>PHONE:</b>
<b>ANS. SERVICE:</b>	<b>PHONE:</b> (303) 857-4171	<b>PHONE:</b>

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