

Hydro Resources 13027 County Rd 18 FT Lupton, CO 80621 Phone: 303-857-4171 Version 3.25		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">DRILLING MUD REPORT</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">Date</td> <td style="text-align: center;">Measured Depth</td> <td style="text-align: center;">T.V. Depth</td> </tr> <tr> <td style="text-align: center;">07/26/14</td> <td style="text-align: center;">2,205 ft.</td> <td></td> </tr> <tr> <td style="text-align: center;">Spud Date</td> <td style="text-align: center;">Present Activity</td> <td style="text-align: center;">Rig No.</td> </tr> <tr> <td style="text-align: center;">07/25/14</td> <td style="text-align: center;">Drilling</td> <td style="text-align: center;">2</td> </tr> </table>	DRILLING MUD REPORT		1	Date	Measured Depth	T.V. Depth	07/26/14	2,205 ft.		Spud Date	Present Activity	Rig No.	07/25/14	Drilling	2
DRILLING MUD REPORT		1															
Date	Measured Depth	T.V. Depth															
07/26/14	2,205 ft.																
Spud Date	Present Activity	Rig No.															
07/25/14	Drilling	2															

OPERATOR: Augustus		CONTRACTOR: Excell	
Operator's Representative:		Contractor's Representative: Mark	
Well Name & No. Hagemann 31-19		Field:	
Legal:		County, Parish: Yuma	
		State: CO	
		VOLUMES	
		PUMP INFORMATION	
		HYDRAULICS	
BIT DATA		CASING & DRILLING ASSEMBLY	
		Pit Vol.	
		PUMP #1	
		PUMP #2	
		ANNULAR VELOCITY	
Bit Size	6.25	Size	7
Bit Type	TC MI5	set @	495 Ft
Bit No.	2	set @	Ft
Jets (32nd)	Size	set @	Ft
13	13	Drill Collar	3.5 3.0 339
13	12	Drill Collar	
12		Drill Pipe	3.5 2.8
		H.W. Drill Pipe	
Pipe Capacity	GD200FXN	Ann Volume	66 bbls
Hole Volume	283 GPM	Total Cir Vol	233 bbls
Drill Pipe	225 ft/min	Total GPM	283
Drill Collar	225 ft/min	Total BPM	6.74
CIRCULATING PRESSURE			
1326 psi			
BOT. UP		10 min	
SURF. TO BIT		2.5 min	
TOT. CIR TIME		35 min	

Sample Fro <input checked="" type="checkbox"/> Flowline <input type="checkbox"/> Pit		Mud Properties		Calculate Alkalinity <input type="checkbox"/> Check		HYDRAULICS	
Flowline Temperature (°F)		110°				Jet Velocity 149 Ft/Sec	
Time Sample Taken		2000				Horsepower 0.9 HP/SQ.In	
Depth (ft)		2205				Impact Force 6.1 lbf/Sq. In	
Mud Weight (ppg)		8.60				Press Loss at Bit 170psi	
Mud Gradient (psi/ft)		0.4472				Press Loss at Bit 13%	
Funnel Viscosity @ °F		28		Recommended Equipment			
Plastic Visc.cp @ 75 °F		2		Cntrfuge <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 checked="" 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)		7.2		LCM: Excess Lime: lb/bbl			
Filtrate API HTHP (cm3/30 min)		x		RECOMMENDED TOURLY TREATMENT			
Cake Thickness : (/32nds)		1					
Solids Content (% by vol)		2.3					
Water Content (% by Vol.)		97.7					
Sand Content (% by vol)		tr					
Bentonite Content (lb/bbl)		x					
pH <input checked="" type="checkbox"/> Strip <input type="checkbox"/> Meter		8.0					
Alkalinity Mud (Pm) cm3 N/50 Acid		x					
Alkalinity, Pf / Mf		0/2.0					
Chloride (mg/l)		12000					
Total Hardness as Calcium (mg/l)		920					
Oil Content (% by vol)		0					
LCM (lb/bbl)		0					
Excess Lime (lb/bbl)		0					

DAILY REMARKS

Calcium is high. If you anticipate it will be this high next time, I recommend mixing 2 sks soda ash just before you start mud-up. This will treat out calcium to below 500, which will make DRISPAC work better.

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															
		Est. Drayage:													
		Est. Taxes:		\$ -											
		Est. Daily Cost:		\$ -											
		Est. Cumulative 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:

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