


<b>Hydro Resources</b> 13027 County Rd 18 FT Lupton, CO 80621 Phone: 303-857-4171 Version 3.25										 <b>Hydro</b> RESOURCES										<b>DRILLING MUD REPORT</b> 1 Date 07/26/14 Measured Depth 2,205 ft. T.V. Depth Spud Date 07/25/14 Present Activity Drilling Rlg No. 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																								
BIT DATA					CASING & DRILLING ASSEMBLY					VOLUMES					PUMP INFORMATION					HYDRAULICS																			
Bit Size 6.25					Size 7 set @ 495 Ft					Pit Vol. Pipe Capacity 17 bbls					PUMP #1 GD200FXN					PUMP #2					ANNULAR VELOCITY														
Bit Type TC M15					Size set @ Ft					Ann Volume 66 bbls					5.5 x14 63 SPM					Drill Pipe 225 ft/min					Drill Collar 225 ft/min														
Bit No. 2					Size set @ Ft					Hole Volume 83 bbls					4.49 G/ST 283 GPM					CIRCULATING PRESSURE 1326 psi					BOT. UP 10 min														
Jets (32nd)					Size set @ Ft					Total Cir Vol 233 bbls					6.74 BPM 6.74					SURF. TO BIT 2.5 min					TOT. CIR TIME 35 min														
13 13					Drill Collar 3.5 3.0 339																																		
13 12					Drill Collar																																		
12					Drill Pipe 3.5 2.8																																		
					H.W. Drill Pipe																																		
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 Nozzle Area									
Time Sample Taken										2000																				Horsepower 0.9 HP/SQ.In 0.61 Sq In									
Depth (ft)										2205																				Impact Force 6.1 lbf/Sq. In ECD									
Mud Weight (ppg)										8.60																				Press Loss at Bit 170psi 8.65 ppg									
Mud Gradient (psi/ft)										0.4472																				Press Loss at Bit 13%									
Funnel Viscosity @ °F										28																				Recommended Equipment									
Plastic Visc.cp @ 75 °F										2																				Cnrlfuge <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									
Solids Analysis																														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.									
L.G. Solids %										H.G. Solids %																													
L.G. Solids ppb										H.G. Solids ppb																													
Corrected Solids %										Average Sp. Gr.																													
CHEMICALS										GEL LIME CAUSTIC SODA 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																														Est. Drayage:									
Closing Inventory																														Est. Taxes: \$ -									
Chemicals Used																														Est. Daily Cost: \$ -									
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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