


<div>Hydro Resources 13027 County Rd 18 FT Lupton, CO 80621 Phone: 303-857-4171</div>				<div></div>				<div>DRILLING MUD REPORT</div>				2			
Version 1.25.1				Date 10/19/14				Measured Depth 2,980 ft.				T.V. Depth 2980 ft			
OPERATOR: Augustus				CONTRACTOR: Excell				Spud Date 10/17/14				Present Activity TD/Circ			
Operator's Representative:				Contractor's Representative: Mark Zion				County, Parish: Yuma				State: CO			
Well Name & No. Field: Buffalo Grass				Cooper 24-34 Legal: SESW S34-T4N-R47W				VOLUMES				PUMP INFORMATION			
BIT DATA				CASING & DRILLING ASSEMBLY				Pit Vol.				PUMP #1 PUMP #2			
ANNULAR VELOCITY				Drill Pipe 261 ft/min				Drill Collar 261 ft/min				CIRCULATING PRESSURE			
1182 psi				BOT. UP 11 min				SURF. TO BIT 2.7 min				TOT. CIR TIME 27 min			
Sample Fro <input checked="" type="checkbox"/> Flowline <input type="checkbox"/> Pit				Mud Properties				Calculate Alkalinity <input type="checkbox"/> Check				HYDRAULICS			
Flowline Temperature (°F)				0600				Jet Velocity 172 Ft/Sec				Nozzle Area			
Time Sample Taken				2980				Horsepower 1.5 HP/SQ.in				0.61 Sq In			
Depth (ft)				8.8				Impact Force 8.4 lbf/Sq. In				ECD			
Mud Weight (ppg)				0.4576				Press Loss at Bit 234psi				8.91 ppg			
Mud Gradient (psi/ft)				28				Press Loss at Bit 20%							
Funnel Viscosity @ °F				2				Recommended Equipment							
Plastic Visc.cp @ 75 °F				3				Centrifuge <input checked="" type="checkbox"/> Shaker <input checked="" type="checkbox"/> Desander <input type="checkbox"/>							
Yield Point (lb/100ft2)				0				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				x				By Authority of: <input type="checkbox"/> Company Representative <input type="checkbox"/> Drilling Contractor							
Gel Strength (lb/100ft2) 30-min				7.2				Mud Wt:				Filtrate:			
Filtrate API (cm3/30 min)				x				LCM:				Viscosity:			
Filtrate API HTHP (cm3/30 min)				1				RECOMMENDED TOURLY TREATMENT							
Cake Thickness (/32nds)				3.5											
Solids Content (% by vol)				96.5											
Water Content (% by Vol.)				tr											
Sand Content (% by vol)				x											
Bentonite Content (lb/bbl)				8.0											
pH <input checked="" type="checkbox"/> Strip <input type="checkbox"/> Meter				x											
Alkalinity Mud (Pm) cm3 N/50 Acid				0.0											
Alkalinity, Pf / Mf				13400											
Chloride (mg/l)				680											
Total Hardness as Calcium (mg/l)				0											
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 DYNASH HYDRO 74L SOAP SAW BAR 110 DRIS DRIS NU															
VIS 30 PAC PAC REG WELL															
Starting Inventory															
Chemicals Received															
Closing Inventory															
Chemicals Used															
Daily Cost															
CHEMICALS															
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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