

Hydro Resources 13027 County Rd 18 FT Lupton, CO 80621 Phone: 303-857-4171 Version 3.25		DRILLING MUD REPORT 1 <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:25%;">Date 08/22/14</td> <td style="width:50%;">Measured Depth 2,916 ft.</td> <td style="width:25%;">T.V. Depth</td> </tr> <tr> <td>Spud Date 08/20/14</td> <td>Present Activity TD/Circ</td> <td>Rig No. 2</td> </tr> </table>	Date 08/22/14	Measured Depth 2,916 ft.	T.V. Depth	Spud Date 08/20/14	Present Activity TD/Circ	Rig No. 2
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Spud Date 08/20/14	Present Activity TD/Circ	Rig No. 2						

OPERATOR: Augustus	CONTRACTOR: Excell
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Operator's Representative:	Contractor's Representative: Mark
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Well Name & No. Lundgren Farms 22-08	Field: Legal: SENW S8-T5N-R46W	County, Parish: Yuma	State: CO
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BIT DATA		CASING & DRILLING ASSEMBLY					PUMP INFORMATION		HYDRAULICS	
BIT SIZE	SIZE	SIZE	SET @	SIZE	FT	PIT VOL.	PUMP #1	PUMP #2	ANNULAR VELOCITY	
6.25	7	508				Pipe Capacity	GD200FXN		Drill Pipe	173 ft/min
						23 bbls	5.5 x14		Drill Collar	173 ft/min
2						Ann Volume	59 SPM		CIRCULATING PRESSURE	
						87 bbls	3.68 G/ST		1286 psi	
Jets (32nd)						Hole Volume	217 GPM		BOT. UP	17 min
13	13	Drill Collar	3.5	3.0	335	110 bbls	5.17 BPM		TIME TO BIT	4.5 min
13	12	Drill Collar				Total Cir Vol	Total GPM	Total BPM	CIR TIME	41 min
12		Drill Pipe	3.5	2.8		210 bbls	217	5.17		
		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)				Jet Velocity 114 Ft/Sec
Time Sample Taken	0445			Nozzle Area 0.61 Sq In
Depth (ft)	2916			Horsepower 0.4 HP/SQ.In
Mud Weight (ppg)	8.60			Impact Force 3.6 lbf/Sq. In
Mud Gradient (psi/ft)	0.4472			Press Loss at Bit 100psi
				Pressure Loss at Bit 8%

Funnel Viscosity @ 75 °F	27	Recommended Equipment			
Plastic Visc. cp @ 75 °F	1	Cntrfuge <input checked="" type="checkbox"/>	Shaker <input checked="" 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	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)	8.0	LCM:	Excess Lime:		lb/bbl
Filtrate API HTHP (cm3/30 min)	x	RECOMMENDED TOURLY TREATMENT			

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	0.0/1.3				
Chloride (mg/l)	11500				
Total Hardness as Calcium (mg/l)	420				
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 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											

TECHNICAL REP: Carla Restivo	WAREHOUSE: 13027 CR 18	NAME:
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ANS. SERVICE:	PHONE: (303) 857-4171	PHONE:

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