Hydro Resources	Hydro	DRILLING MUD REPORT	1
13027 County Rd 18		Date	Measured Depth	T.V. Depth
FT Lupton, CO 80621		10/09/14	2,943 ft.	2943 ft
Phone: 303-857-4171		Spud Date	Present Activity	Rig No.
Version 3.25		10/07/14	TD/circ	2

OPERATOR:	Augustus	CONTRACTOR:	Excell
Operator's Representative:		Contractor's Representative:	Mark Zion
Well Name & No. / Field:		County, Parish:	Yuma / State: CO
McConnell 21-23 / Legal:	NENW S23-T4N-R47W		

BIT DATA		CASING & DRILLING ASSEMBLY				
Bit Size	6.25	Size	7	set @		Ft
Bit Type		Size		set @		Ft
Bit No.		Size		set @		Ft
Jets (32nd)		Size		set @		Ft
		Drill Collar	3.5	3.0	335	
		Drill Collar				
		Drill Pipe	3.5	2.8		
		H.W. Drill Pipe				

VOLUMES	PUMP INFORMATION		HYDRAULICS	
Pit Vol.	PUMP #1	PUMP #2	ANNULAR VELOCITY	
Pipe Capacity	GD200FXN		Drill Pipe	214 ft/min
23 bbls	5.5 x14		Drill Collar	214 ft/min
Ann Volume	55 SPM		CIRCULATING PRESSURE	
88 bbls	4.89 G/ST		1179 psi	
Hole Volume	269 GPM		BOT. UP	14 min
111 bbls	6.40 BPM		SURF. TO BIT	3.6 min
Total Cir Vol	Total GPM	Total BPM	TOT. CIR TIME	33 min
211 bbls	269	6.40		

Sample Fro ☐ Flowline ☑ Pit

Mud Properties	
Flowline Temperature (°F)	
Time Sample Taken	2200
Depth (ft)	2943
Mud Weight (ppg)	8.90
Mud Gradient (psi/ft)	0.4628
Funnel Viscosity @ °F	29
Plastic Visc.cp @ 75 °F	5
Yield Point (lb/100ft2)	5
Gel Strength (lb/100ft2) 10-sec	1
Gel Strength (lb/100ft^2) 10-min	3
Gel Strength (lb/100ft^2) 30-min	x
Filtrate API (cm3/30 min)	4.0
Filtrate API HTHP (cm3/30 min)	x
Cake Thickness (/32nds)	1
Solids Content (% by vol)	4.3
Water Content (% by Vol.)	95.7
Sand Content (% by vol)	tr
Bentonite Content (lb/bbl)	x
pH ☑ Strip ☐ Meter	7.5
Alkalinity Mud (Pm) cm3 N/50 Acid	x
Alkalinity, Pf / Mf	0/.35
Chloride (mg/l)	12,200
Total Hardness as Calcium (mg/l)	1350
Oil Content (% by vol)	0
LCM (lb/bbl)	0
Excess Lime (lb/bbl)	0

Calculate Alkalinity ☐ Check

HYDRAULICS		
Jet Velocity		Nozzle Area
Horsepower		
Impact Force		ECD
Press Loss at Bit		9.09 ppg
Press Loss at Bit		

Recommended Equipment

Cntrfuge ☑ Shaker ☑ Desander ☐
Degasser ☐ Desilter ☐ Other ☐

Recommended Mud Properties

By Authority of: ☑ Company Representative ☐ Drilling Contractor

Mud Wt:		Filtrate:		Viscosity:		
LCM:				Excess Lime:		lb/bbl

RECOMMENDED TOURLY TREATMENT

DAILY REMARKS

This hole started with new mud.

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	DYNA PAC	HYDRO VIS 30	74L	SOAP STICK	SAW DUST	BAR	110 RD	DRIS PAC SL	DRIS PAC REG	NU 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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