

<b>Hydro Resources</b> 13027 County Rd 18 FT Lupton, CO 80621 Phone: 303-857-4171 Version 3.15								<b>DRILLING MUD REPORT</b> 2							
				Date 12/12/14		Measured Depth 2,705 ft.		T.V. Depth 2705 ft							
				Spud Date 12/10/14		Present Activity TD/Circ		Rig No. 2							
OPERATOR: Omimex			CONTRACTOR: Excell												
Operator's Representative:			Contractor's Representative: Mark												
Well Name & No.		Field:	Ballyneal		County, Parish:		Phillips		State:	CO					
Sagehorn 12-34-6-45		Legal:	NWSW S34-T6N-R45W		VOLUMES		PUMP INFORMATION		HYDRAULICS						
BIT DATA		CASING & DRILLING ASSEMBLY			Pit Vol.		PUMP #1	PUMP #2	ANNULAR VELOCITY						
Bit Size	6.25	Size	7	set @		Ft	Pipe Capacity	GD FXN200	Drill Pipe	232 ft/min					
Bit Type	TC MI5	Size		set @		Ft	23 bbls	5.5 x14	Drill Collar	232 ft/min					
Bit No.		Size		set @		Ft	Ann Volume	65 SPM	CIRCULATING PRESSURE						
Jets (32nd)		Size		set @		Ft	81 bbls	4.48 G/ST	1345 psi						
12	12	Drill Collar	3.5			Ft	Hole Volume	291 GPM	BOT. UP	12 min					
13	13	Drill Collar				Ft	104 bbls	6.93 BPM	SURF. TO BIT	3.3 min					
13		Drill Pipe	3.5		2370	Ft	Total Cir Vol	Total GPM	Total BPM	TOT. CIR TIME					
		H.W. Drill Pipe				Ft	254 bbls	291	6.93						
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	153 Ft/Sec	Nozzle Area						
Time Sample Taken		0600					Horsepower	1 HP/SQ.In	0.61 Sq In						
Depth (ft)		2705					Impact Force	6.6 lbf/Sq. In	ECD						
Mud Weight (ppg)		8.8					Press Loss at Bit	184psi	8.89 ppg						
Mud Gradient (psi/ft)		0.4576					Press Loss at Bit	14%							
Funnel Viscosity @			°F	28		Recommended Equipment									
Plastic Visc.cp @		75	°F	3		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/100ft <sup>2</sup> ) 10-min		1			By Authority <input type="checkbox"/>		Company Representative <input type="checkbox"/>		Drilling Contractor <input type="checkbox"/>						
Gel Strength (lb/100ft <sup>2</sup> ) 30-min		x			Mud Wt:		Filtrate:		Viscosity:						
Filtrate API (cm3/30 min)		4.8			LCM:				Excess Lime:						
Filtrate API HTHP (cm3/30 min)		x			RECOMMENDED TOURLY TREATMENT										
Cake Thickness (/32nds)		1													
Solids Content (% by vol)		3.5													
Water Content (% by Vol.)		96.5													
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		.00/1.5													
Chloride (mg/l)		13200													
Total Hardness as Calcium (mg/l)		500													
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	HYDRO-THIN	COTTON HULLS	MF-351	CAL NITRATE	SALT	SAPP	SAWD UST	BIO-CLEAR	1771
Starting Inventory															
Chemicals Received															
Closing Inventory															
Chemicals Used															
Daily Cost															
CHEMICALS															
Starting Inventory															
Chemicals Received															
Closing Inventory															
Chemicals Used															
Daily 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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