

The Road to Excellence Starts with Safety

Sold To #: 345242		Ship To #: 9029951		Quote #:		Sales Order #: 0906942266				
Customer: NOBLE ENERGY INC-EBUS				Customer Rep: Jim Turner/ Dave Nielsen						
Well Name: REVEILLE			Well #: A35-750			API/UWI #: 05-123-50801-00				
Field: WATTENBERG		City (SAP): GILL		County/Parish: WELD			State: COLORADO			
Legal Description: SW SW-35-6N-64W-260FSL-428FWL										
Contractor: H & P DRLG				Rig/Platform Name/Num: H & P 517						
Job BOM: 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX41066				Srvc Supervisor: Michael Loughran						
Job										
Job depth MD		17,367'		Job Depth TVD		6,656'				
Well Data										
Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Casing	0	9.625	8.921	36			0	1934	0	1934
Casing	0	5.5	4.892	17			0	17367	0	6656
Open Hole Section			8.5				1934	17381	1934	6656
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Float Shoe	5.5	1	HES	17,367		Top Plug	5.5	1	HES	
Float Collar	5.5	1	HES	17,318		Bottom Plug	5.5	2	HES	
RSI Sleeve	5.5	1	HES	17,219		Centralizers	5.5	180	HES	

Fluid Data										
Stage #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Spacer	TUNED PRIME SPACER	120	bbl	11.5	3.7	23.55	6	4,289	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	Cap	ELASTICEM™ SYSTEM	140	sack	13.2	1.6	7.63	8	1,068	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
3	Lead	ELASTICEM™ SYSTEM	759	sack	13.2	1.67	8.03	8	6,095	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
4	Tail	NEOCEM™ SYSTEM	1130	sack	13.2	2.04	9.79	8	11,063	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
5	Displacement	TREATED FRESH WATER	401	bbl	8.33			10		
Cement Left In Pipe										
Amount		49 ft			Reason				Shoe Joint	
Mix Water:		pH 7.0		Mix Water Chloride:		200 ppm		Mix Water Temperature:		63 °F
Cement Temperature:		N/A		Plug Displaced by:		8.33 lb/gal		Disp. Temperature:		60 °F
Plug Bumped?		Yes		Bump Pressure:		2,479 psi		Floats Held?		Yes
Cement Returns:		0 bbls		Returns Density:		11.5 lb/gal		Returns Temperature:		N/A
Comment: Pumped 113 BBLS SPACER, 40 BBLS CAP, 223 BBLS LEAD, 411 BBLS TAIL. PUMPED 350 BBLS TREATED WATER WITH 10 GALS MMCR IN THE FIRST 20. TOTAL DISPLACEMENT OF 401 BBLS. SEE SPACER/OBM INTERFACE AT 335 BBLS. GOOD SPACER AT 355 BBLS. 46 BBLS GOOD SPACER TO SURFACE. TOP CAP=987', TOP OF LEAD=1819', TOP OF TAIL=7322'.										

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	DH Density (ppg)	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	1/30/2021	18:45:00					CREW CALLED OUT AT 18:45 HRS. 1/30/2021. REQUESTED ON LOCATION TIME OF 01:00 HRS. 1/31/2021.
Event	2	Arrive At Loc	1/30/2021	23:30:00					MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING- 9.625" 36 LB/FT @ 1,934', 5.5" CASING: 17 LB/FT TOTAL 17,367.2', 8.5" HOLE, TD 17,381', 49.6' SHOE TRAC, TVD- 6,656'. RSI SLEEVE @ 17,219'. WATER TEMP 62 DEGREES, PH 7, CHLORIDES LESS 200 PPM. 180 CENTRALIZERS 954.2' TO 17,318.5'. MW- 10.7 LB/GAL. RIG CIRCULATED 3 BOTTOMS UP PRIOR TO CEMENT JOB.
Event	3	Pre-Rig Up Safety Meeting	1/31/2021	01:30:00					HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND WEATHER.
Event	4	Rig-Up Equipment	1/31/2021	01:40:00					CREW STAGED EQUIPMENT AND RIGGED UP BULK, IRON AND WATER HOSES TO PERFORM JOB.
Event	5	Pre-Job Safety Meeting	1/31/2021	08:40:00	0.00	0.00	-25.00	0.00	SAFETY MEETING WITH HALLIBURTON, AND RIG PERSONNEL. CREW COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS.
Event	6	Start Job	1/31/2021	09:46:48	8.39	0.00	-22.00	0.00	BEGIN RECORDING DATA
Event	7	Drop Bottom Plug	1/31/2021	09:48:44	0.02	0.00	-21.00	0.00	DROP BOTTOM PLUG
Event	8	Test Lines	1/31/2021	09:52:05	8.46	0.00	247.00	4.90	TEST LINES TO 4500 PSI
Event	9	Pump Spacer 1	1/31/2021	09:57:54	8.42	0.00	50.00	0.00	113 BBL. TUNED PRIME SPACER. 11.7 PPG, 3.45 YIELD, 21.77 GAL/SACK. D-AIR MIX ON FLY. TUNED SPACER WEIGHT AND VOLUME CHANGED. ENGINEER WAS CALLED TO VERIFY AND GET CORRECT BLEND DATA
Event	10	Shutdown	1/31/2021	10:21:43	12.05	4.40	265.00	121.80	SHUTDOWN TO DROP PLUG
Event	11	Drop Bottom Plug	1/31/2021	10:22:51	12.04	0.00	34.00	0.00	DROP BOTTOM PLUG
Event	12	Pump Cement	1/31/2021	10:24:52	12.09	0.00	33.00	0.00	140 SACKS ELASTICEM CAP CEMENT. 39.89 BBL. 13.2 PPG, 1.6 YIELD, 7.63 GAL/SACK
Event	13	Pump Lead Cement	1/31/2021	10:32:27	13.19	6.50	500.00	40.60	759 SACKS ELASTICEM LEAD CEMENT. 225.75 BBL. 13.2 PPG, 1.67 YIELD, 8.03 GAL/SACK
Event	14	Pump Tail Cement	1/31/2021	11:04:02	13.45	6.30	477.00	2.90	1130 SACKS NEOCEM TAIL CEMENT. 410.56 BBL. 13.2 PPG, 2.04 YIELD, 9.79 GAL/SACK

Event	15	Shutdown	1/31/2021	11:22:57	13.42	8.00	1013.00	149.30	WATER SUPPLY STOPPED FROM 400 BBL UPRIGHTS. BOTH TANKS WERE OPEN. POSSIBLY SUCKED UP DEBRIS FROM UPRIGHT. SHUTDOWN TO FIX CEMENT WEIGHT
Event	16	Resume	1/31/2021	11:25:54	13.39	0.00	32.00	150.20	RESUME PUMPING
Event	17	Shutdown	1/31/2021	11:31:31	13.00	3.80	231.00	167.30	SHUTDOWN TO FIX CEMENT WEIGHT
Event	18	Resume	1/31/2021	11:34:23	11.75	0.00	34.00	167.80	RESUME PUMPING
Event	19	Shutdown	1/31/2021	12:13:40	13.11	0.00	163.00	437.00	SHUTDOWN TO WASH PUMPS AND LINES
Event	20	Drop Top Plug	1/31/2021	12:19:07	8.17	0.00	57.00	451.90	DROP TOP PLUG
Event	21	Pump Displacement	1/31/2021	12:20:51	8.25	0.00	8.00	0.00	401.7 BBL TREATED DISPLACEMENT. ADD 10 GALLONS MICRO MATRIX RETARDER IN FIRST 20 BBLS OF DISPLACEMENT
Event	22	Bump Plug	1/31/2021	13:11:59	8.34	0.00	3041.00	406.40	FINAL CIRCULATING PRESSURE 2479 PSI AT 4.1 BPM. BUMP PRESSURE 3050 PSI. SEE SPACER/OBM INTERFACE AT 335 BBLS. GOOD SPACER AT 355 BBLS. 46 BBLS GOOD SPACER TO SURFACE.
Event	23	Other	1/31/2021	13:17:09	8.33	0.00	3148.00	0.00	CHECK FLOATS. FLOATS HOLD. 5.5 BBLS. BACK. CALCULATED TOPS... TOP CAP=987', TOP OF LEAD=1819', TOP OF TAIL=7322'.
Event	24	End Job	1/31/2021	13:20:26					STOP RECORDING DATA
Event	25	Pre-Rig Down Safety Meeting	1/31/2021	13:22:00					DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	26	Rig-Down Equipment	1/31/2021	13:25:32					RIG DOWN BULK AND MIXING EQUIPMENT
Event	27	Rig-Down Completed	1/31/2021	14:30:54					ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL AND LOCATION WAS CLEAN.
Event	28	Pre-Convoy Safety Meeting	1/31/2021	14:45:00					CREW DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
Event	29	Crew Leave Location	1/31/2021	15:00:00					THANK YOU FOR USING HALLIBURTON – MIKE LOUGHRAN AND CREW.

3.0 Attachments

3.1 Job Chart

