

The Road to Excellence Starts with Safety

Sold To #: 345242		Ship To #: 9029950		Quote #:		Sales Order #: 0906999456				
Customer: NOBLE ENERGY INC-EBUS						Customer Rep: Dave Nielson				
Well Name: REVEILLE			Well #: A34-757			API/UWI #: 05-123-50789-00				
Field: WATTENBERG		City (SAP): GARDEN CITY		County/Parish: WELD		State: COLORADO				
Legal Description: SE SW-34-6N-64W-609FSL-1508FWL										
Contractor: H & P DRLG					Rig/Platform Name/Num: H & P 517					
Job BOM: 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX41066					Srvc Supervisor: Thomas Haas					
Job										
Job depth MD		17060ft		Job Depth TVD		6695ft				
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	1927	0	1927
Casing	0	5.5	4.892	17			0	17060	0	6695
Open Hole Section			8.5				1927	17072	1927	6695
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Float Shoe	5.5	1	HES	17060		Top Plug	5.5	1	HES	
Float Collar	5.5	1	HES	17011		Bottom Plug	5.5	2	HES	
						Centralizers	5.5	201	Summit	

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	Tuned Prime	TUNED PRIME SPACER	120	bbl	11.5	3.7	23.55	8	4288	
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	ElastiCem	ELASTICEM™ SYSTEM	140	sack	13.2	1.6	7.63	8	1068	
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	ElastiCem w/ SCBL	ELASTICEM (TM) SYSTEM	711	sack	13.2	1.67	8.03	8	5709	
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	NeoCem	NEOCEM™ SYSTEM	1129	sack	13.2	2.04	9.79	8	11053	
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	Displacement	395	bbl	8.33			10		
Cement Left In Pipe		Amount	49 ft		Reason			Shoe Joint		
Mix Water:		pH 7	Mix Water Chloride:			<300 ppm		Mix Water Temperature:		74 °F
Cement Temperature:		N/A	Plug Displaced by:			8.4 lb/gal Treat H2O		Disp. Temperature:		56 °F
Plug Bumped?		Yes	Bump Pressure:			2337 psi		Floats Held?		Yes
Comment: Plug bumped at calculated displacement, final circulating pressure of 2337 psi, held 5 min casing at 2900 psi, released pressure to the truck, floats held, 5 bbl back. Interface returned to surface 320 bbl into displacement, 62 bbl spacer to surface. Calculated TOC @ 1011', Calculated TOL @ 1846', and Calculated TOT @ 7024'.										

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	3/1/2021	06:00:00					CREW CALLED OUT AT 6:00 3/1/2021, REQUESTED ON LOCATION 12:00 3/1/2021. CREW PICKED UP CEMENT, CHEMICALS (50 GAL D-AIR, 10 GAL MMCR), 100 LBS SUGAR, FROM FORT LUPTON, CO. BULK 660: 11071487/11633848, PUMP ELITE: 12644845/11645460.
Event	2	Pre-Convoy Safety Meeting	3/1/2021	08:45:00					DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW
Event	3	Crew Leave Yard	3/1/2021	09:00:00					STARTED JOURNEY MANAGEMENT.
Event	4	Arrive At Loc	3/1/2021	11:00:00					END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING: 9.625" 36# @ 1927', CASING: 5.5" 17# @ 17060', 49' SHOE JOINT, 8.5" OPEN HOLE, TVD @ 6695', 9.8 PPG WELL FLUID, FRESH WATER DISPLACEMENT.
Event	5	Pre-Rig Up Safety Meeting	3/1/2021	11:30:00					HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND WEATHER.
Event	6	Rig-Up Equipment	3/1/2021	11:40:00					CREW STAGED EQUIPMENT AND RIGGED UP BULK, IRON, AND WATER HOSES TO PERFORM JOB.
Event	7	Pre-Job Safety Meeting	3/1/2021	14:00:00	8.39	0.00	-4.00	15.60	MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS.
Event	8	Start Job	3/1/2021	14:36:12	8.48	0.00	-14.00	0.00	START JOB DATA RECORDING.

Event	9	Test Lines	3/1/2021	14:37:38	8.47	0.00	48.00	1.90	KICKOUTS SET @ 500 PSI, KICKED OUT @ 1230 PSI, 5TH GEAR STALL OUT @ 1800 PSI. PRESSURE TESTED IRON TO 4800.
Event	10	Test Lines	3/1/2021	14:41:16	8.49	0.50	1522.00	3.10	TESTED I-BOP TO 1800 PSI.
Event	11	Drop Bottom Plug	3/1/2021	14:42:10	8.45	0.00	122.00	3.10	PLUG WAS LOADED DIRECTLY INTO LANDING JOINT, VERIFIED BY COMPANY MAN.
Event	12	Pump Spacer 1	3/1/2021	14:42:49	8.45	0.90	32.00	3.10	PUMP 120 BBLS OF TUNED SPACER @ 11.5 LB/GAL, ADDED 30 GAL D-AIR, DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	13	Shutdown	3/1/2021	14:58:44	11.25	0.00	68.00	114.70	SHUTDOWN TO DROP BOTTOM PLUG.
Event	14	Drop Bottom Plug	3/1/2021	14:59:34	11.17	0.00	27.00	0.00	PLUG WAS LOADED DIRECTLY INTO LANDING JOINT, VERIFIED BY COMPANY MAN.
Event	15	Pump Cap Cement	3/1/2021	15:00:45	11.15	0.00	26.00	0.00	PUMP 140 SKS OF ELASTICEM @ 13.2 LB/GAL, 1.60 YIELD, 7.63 GAL/SK, 39.9 BBLS, CALCULATED TOC @ 1011', DENSITY VERIFIED BY PRESSURIZED MUD SCALES. ADDED 10 GAL OF D-AIR.
Event	16	Pump Lead Cement	3/1/2021	15:07:03	13.30	8.60	520.00	48.20	PUMP 711 SKS OF ELASTICEM @ 13.2 LB/GAL, 1.67 YIELD, 8.03 GAL/SK, 211.5 BBLS, CALCULATED TOL @ 1846', DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	17	Pump Tail Cement	3/1/2021	15:33:01	13.23	8.60	554.00	223.10	PUMP 1129 SKS OF NEOCEM @ 13.2 LB/GAL, 2.04 YIELD, 9.79 GAL/SK, 410.2 BBLS, CALCULATED TOT @ 7024', DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	18	Shutdown	3/1/2021	16:26:01	13.32	0.00	165.00	437.00	SHUTDOWN TO CLEAN PUMPS/LINES AND DROP TOP PLUG.
Event	19	Drop Top Plug	3/1/2021	16:33:08	8.29	0.00	29.00	7.40	PLUG WAS LOADED DIRECTLY INTO LANDING JOINT, VERIFIED BY COMPANY MAN.
Event	20	Pump Displacement	3/1/2021	16:33:11	8.29	0.00	29.00	0.00	BEGIN CALCULATED DISPLACEMENT 395 BBL FRESH WATER. 10 GAL MMCR IN FIRST 20 BBL, LAST 40 BBL WITH FRESH WATER. ADDED 10 GAL OF D-AIR.

Event	21	Bump Plug	3/1/2021	17:17:44	8.37	0.00	2723.00	399.50	PLUG BUMPED AT CALCULATED DISPLACEMENT, FINAL CIRCULATING PRESSURE OF 2337 PSI. INTERFACE TO SURFACE AT 320 BBL, 62 BBL OF SPACER TO SURFACE.
Event	22	Other	3/1/2021	17:18:17	8.36	0.00	2806.00	399.50	HELD 5 MIN CASING TEST AT 2900 PSI.
Event	23	Check Floats	3/1/2021	17:22:50	8.35	0.00	2911.00	399.50	RELEASED PRESSURE BACK TO THE TRUCK, FLOATS HELD, 5 BBL TO THE TRUCK.
Event	24	End Job	3/1/2021	17:26:29	8.28	2.70	16.00	399.90	END JOB DATA RECORDING.
Event	25	Pre-Rig Down Safety Meeting	3/1/2021	17:30:00	8.30	1.40	20.00	22.00	DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	26	Rig-Down Completed	3/1/2021	18:10:00					ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL.
Event	27	Pre-Convoy Safety Meeting	3/1/2021	18:20:00					DISCUSSED ROUTES HAZARDS AND COMMUNICATION WITH CREW.
Event	28	Crew Leave Location	3/1/2021	18:30:00					THANK YOU FOR USING HALLIBURTON - THOMAS HAAS AND CREW.

3.0 Attachments

3.1 Job Chart

