

The Road to Excellence Starts with Safety

Sold To #: 345242		Ship To #: 9030013		Quote #:		Sales Order #: 0906938396				
Customer: NOBLE ENERGY INC-EBUS					Customer Rep: Dave Nielson					
Well Name: REVEILLE			Well #: A35-762			API/UWI #: 05-123-50798-00				
Field: WATTENBERG		City (SAP): GILL		County/Parish: WELD			State: COLORADO			
Legal Description: SW SW-35-6N-64W-260FSL-405FWL										
Contractor: H & P DRLG					Rig/Platform Name/Num: H & P 517					
Job BOM: 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX41066					Srvc Supervisor: Nicholas Roles					
Job										
Job depth MD		17150ft		Job Depth TVD		6732ft				
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	17150	0	6732
Open Hole Section			8.5				1934	17162	1934	6732
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Float Shoe	5.5	1	HES	17150		Top Plug	5.5	1	HES	
Float Collar	5.5	1	HES	17101		Bottom Plug	5.5	2	HES	
						Centralizers	5.5	199	Summit	

Fluid Data										
Stage #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Tuned Prime	TUNED PRIME SPACER	120	bbl	11.5	3.7		6	4254	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /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 ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
3	ElastiCem w/ SCBL	ELASTICEM™ SYSTEM	737	sack	13.2	1.67	8.03	8	5918	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
4	NeoCem	NEOCEM™ SYSTEM	1119	sack	13.2	2.04	9.79	8	10955	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
5	Displacement	Treated Water Displacement	396	bbl	8.33			10		
Cement Left In Pipe		Amount	49 ft		Reason			Shoe Joint		
Mix Water:		pH 07	Mix Water Chloride:		0 ppm		Mix Water Temperature:		65 °F °C	
Cement Temperature:		65 °F °C	Plug Displaced by:		8.33 lb/gal		Disp. Temperature:		65 °F °C	
Plug Bumped?		Yes	Bump Pressure:		2432 psi		Floats Held?		Yes	
Cement Returns:		0 bbl								
Comment: Bumped plug at 396bbls, held pressure at 2900psi for 5min. Released pressure and checked floats, got 5bbls back, floats held. Got 71bbls spacer to surface. Estimated TOCap-1002', TOL-1838', TOT-7199'. Centralizer totals-995.7ft-17'102ft 199 centralizers.										

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	1/25/2021	22:30:00					Called out by service coordinator for OL time of 0430.
Event	2	Pre-Convoy Safety Meeting	1/26/2021	02:15:00					Discuss all hazards associated with journey, directions to destination, complete journey management if needed, and ensure all convoy is fit for duty.
Event	3	Depart from Service Center or Other Site	1/26/2021	02:30:00					Depart from service center or other job site.
Event	4	Arrive at Location from Service Center	1/26/2021	03:30:00					Upon arrival to location, signed in with onsite safety personnel. Met with company man and discussed job specific requirements and specifications.
Event	5	Other	1/26/2021	04:30:00					Mix water test results- PH-7, Chlo-0, Temp-65F.
Event	6	Pre-Rig Up Safety Meeting	1/26/2021	04:45:00					Held pre rig up JSA for hazards, hazard hunt with crew, and discussed plan for spotting equipment and rigging up lines for job. Discussed muster points and closest emergency location as well as coordinates.
Event	7	Rig-Up Equipment	1/26/2021	05:00:00					Begin rig up with crew.
Event	8	Rig-Up Completed	1/26/2021	05:30:00					Complete rig up for job to nearest point before red zone.
Event	9	Safety Meeting - Pre Job	1/26/2021	07:30:00	8.27	1.30	5.00	21.60	Held job specific hazards as well as confirming job procedure with co man and rest of crew associated with job.
Event	10	Drop Bottom Plug	1/26/2021	08:01:11	8.10	0.00	3.00	0.00	Dropped by HES supervisor, witnessed by company man.

Event	11	Start Job	1/26/2021	08:01:47	8.10	0.00	2.00	0.00	TD-17162', TP-17149.7' 5.5" 17#, FC-17101', RSI-17004.7', TVD-6732', SURF-1934' 9.625" 36#, OH-8.5" MUD-9.8#
Event	12	Test Lines	1/26/2021	08:03:30	8.49	0.00	185.00	3.70	Pumped 5bbls fresh water to fill lines, closed 2" lo torc, performed 500psi k/o function test, followed with 5th gear stall at 1290psi, perform 4500psi test on line. Held pressure, no leaks. Bled off pressure, pumped 1bbl to ensure lines still full and closed valve. Proceeded to bring pressure to 2000psi on Kelly line, pressure stabilized and held with no leaks.
Event	13	Pump Spacer 1	1/26/2021	08:10:06	8.39	0.00	65.00	4.70	Pumped 120bbls Tuned Prime 11.5# 3.7y 23.55g/s with 20g D-Air at 6bpm 340psi
Event	14	Check Weight	1/26/2021	08:15:57	11.65	4.40	298.00	17.90	Weight verified with pressurized mud scales. 11.55ppg
Event	15	Drop Bottom Plug	1/26/2021	08:31:08	11.28	0.00	48.00	127.50	Dropped by HES supervisor, witnessed by company man.
Event	16	Pump Cement	1/26/2021	08:35:53	11.22	0.00	45.00	127.50	Pumped 140sks or 40bbls Elasticem w/o CBL 13.2# 1.6y 7.63g/s at 8bpm 580psi.
Event	17	Pump Lead Cement	1/26/2021	08:41:44	13.20	8.00	576.00	0.10	Pumped 737sks or 219bbls Elasticem w/CBL 13.2# 1.67y 8.03g/s at 8bpm 612psi.
Event	18	Check Weight	1/26/2021	08:56:46	13.10	7.90	617.00	116.50	Weight verified with pressurized mud scales. 13.25ppg
Event	19	Pump Tail Cement	1/26/2021	09:11:38	13.04	7.90	472.00	0.10	Pumped 1119sks or 406.5bbls 13.2# 2.04y 9.79g/s Neocem at 8bpm 780psi.
Event	20	Check Weight	1/26/2021	09:14:12	13.18	8.00	807.00	20.60	Weight verified with pressurized mud scales. 13.25ppg
Event	21	Check Weight	1/26/2021	09:43:56	13.16	8.00	792.00	258.30	Weight verified with pressurized mud scales. 13.20ppg
Event	22	Shutdown	1/26/2021	10:06:01	11.72	0.00	54.00	421.60	Shutdown, wash up lines with 15bbls fresh water until clean.
Event	23	Drop Top Plug	1/26/2021	10:15:56	8.07	0.00	33.00	443.90	Dropped by HES supervisor, witnessed by company man.
Event	24	Pump Displacement	1/26/2021	10:16:04	8.07	0.00	33.00	0.00	Pumped 396bbls production water with 10g MMCR in first 20bbls.

Event	25	Bump Plug	1/26/2021	11:05:41	8.17	0.00	2877.00	409.20	Slowed down to 4bpm at 320bbls away, final circulating pressure- 2445psi, Bump pressure-2900psi.
Event	26	Other	1/26/2021	11:10:12	8.13	0.00	2960.00	0.00	Released pressure and got 5bbls fresh water to truck, floats held.
Event	27	End Job	1/26/2021	11:12:45	8.09	0.00	9.00	0.00	Got 71bbls spacer to surface. Estimated TOCap-1002', TOL-1838', TOT-7199'. Centralizer totals-995.7ft-17,102ft, 199 centralizers.
Event	28	Pre-Rig Down Safety Meeting	1/26/2021	11:15:00	8.07	0.00	8.00	0.00	Held safety meeting with crew prior to rig down, discussed possibility of trapped pressure, swing radius, slips trips and falls, pinch points and risks associated with rig down.
Event	29	Rig Down Lines	1/26/2021	11:30:00					Begin rig down
Event	30	Rig-Down Completed	1/26/2021	12:30:00					Rig down complete with no injuries, spills or damage to equipment.
Event	31	Pre-Convoy Safety Meeting	1/26/2021	12:45:00					Held safety meeting with convoy, discussed trip hazards, directions and all crew fit for duty prior to departure.
Event	32	Depart Location for Service Center or Other Site	1/26/2021	13:00:00					Depart location, if applicable journey will be submitted.

3.0 Attachments

3.1 Job Chart

