

The Road to Excellence Starts with Safety

Sold To #: 345242		Ship To #: 9059403		Quote #:		Sales Order #: 0907458835				
Customer: NOBLE ENERGY INC-EBUS				Customer Rep: John Drahota						
Well Name: ROTH			Well #: A32-779			API/UWI #: 05-123-51328-00				
Field: WATTENBERG		City (SAP): GARDEN CITY		County/Parish: WELD			State: COLORADO			
Legal Description: NE NE-30-6N-64W-972FNL-270FEL										
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		17161ft		Job Depth TVD		6831ft				
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		9.625	8.921	36			0	1926	0	1926
Casing		5.5	4.892	17			0	17161	0	6831
Open Hole Section			8.5				1926	17172	1926	6831
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Float Shoe	5.5	1	HES	17161		Top Plug	5.5	1	HES	
Float Collar	5.5	1	HES	17117.1		Bottom Plug	5.5	2	HES	
						Centralizers	5.5	218	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	Spacer	Tuned Prime Cement Spacer	120	bbl	11.5	3.74		6	4284
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 Cement	ElastiCem™	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	Lead Cement	ElastiCem™	757	sack	13.2	1.67	8.03	8	6079
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 Cement	NeoCem™	1107	sack	13.2	2.04	9.79	8	10838
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	397.1	bbl	8.33			10	16678
Cement Left In Pipe		Amount	43.9 ft		Reason			Shoe Joint	
Mix Water:	pH 6	Mix Water Chloride:	LESS 200 ppm		Mix Water Temperature:		66°F		
Plug Bumped?	Yes	Plug Displaced by:	8.33 lb/gal Treated Water		Disp. Temperature:		66°F		
Cement Returns:	0 bbl.	Bump Pressure:	2561 psi		Floats Held?		Yes		
Comment: APPROX 45 BBLS. SPACER TO SURFACE. FLOATS HOLD. 6 BBLS. BACK TO PUMP TRUCK									

2.0 Real-Time Job Summary

2.1 Job Event Log

Seq. No.	Activity	Date	Time	Pump A Pressure (psi)	Dwnhole Density (ppg)	Cmb Pump Rate (bbl/min)	Cmb Stg Total (bbl)	Comments
1	Call Out	10/23/2021	09:20:00					CREW CALLED OUT AT 0920 HOURS 10/23/2021 WHILE ON ANOTHER LOCATION., REQUESTED ON LOCATION 1330 HRS. 10/23/2021.
2	Pre-Convoy Safety Meeting	10/23/2021	14:40:00					CREW DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
3	Crew Leave Yard	10/23/2021	14:45:00					CREW LEAVES YARD
4	Arrive At Loc	10/23/2021	15:55:00					END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING- 9.625" 36 LB/FT @ 1926', 5.5" CASING: 17 LB/FT TOTAL 17161', 8.5" HOLE, TD 17172', F/C 17117.1, TVD- 6831'. CASING LANDED @ 17:00. WATER 66 DEGREES, PH 6, CHLORIDES LESS 200 PPM. 218 CENTRALIZERS
5	Pre-Rig Up Safety Meeting	10/23/2021	16:10:00					HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP, AND WEATHER.
6	Rig-Up Equipment	10/23/2021	16:15:00					CREW STAGED EQUIPMENT AND RIGGED UP BULK, IRON AND WATER HOSES TO PERFORM JOB.
7	Start Job	10/23/2021	17:39:07	-2.14	-0.90	0.00	0.54	
8	Pre-Job Safety Meeting	10/23/2021	18:10:00	-4.22	8.38	0.00	16.87	SAFETY MEETING WITH HALLIBURTON, AND RIG PERSONNEL. CREW COMMUNICATED POTENTIAL SAFETY HAZARDS, AND JOB DETAILS.
9	Start Job	10/23/2021	18:42:50	-3.63	8.39	0.00	16.87	BEGIN RECORDING DATA
10	Drop Bottom Plug	10/23/2021	18:43:47	-0.81	8.41	0.00	0.00	BOTTOM PLUG BY DRAHOTA
11	Test Lines	10/23/2021	18:45:58	914.79	8.43	0.00	2.18	TEST LINES 4800 PSI. TEST RIGS VALVE TO 2000 PSI
12	Pump Spacer 1	10/23/2021	18:53:29	10.47	8.41	0.00	0.00	120 BBLS TUNED PRIME SPACER. 11.5 PPG. 3.74 YIELD. 23.76 GAL/SACK
13	Shutdown	10/23/2021	19:14:40	84.09	11.07	0.00	112.94	SHUTDOWN

14	Drop Bottom Plug	10/23/2021	19:16:47	39.78	11.04	0.00	112.94	BOTTOM PLUG BY DRAHOTA
15	Pump Cap Cement	10/23/2021	19:19:17	43.73	11.03	0.00	0.00	140 SACKS SBM CEM ELASTICEM CAP CEMENT. 39.89 BBLS. 13.2 PPG, 1.6 YIELD, 7.63 GAL/SACK
16	Pump Lead Cement	10/23/2021	19:26:11	411.67	13.12	5.66	0.09	757 SACKS SBMCCEM ELASTICEM LEAD CEMENT. 225.15 BBLS. 13.2 PPG, 1.67 YIELD, 8.03 GAL/SACK
17	Pump Tail Cement	10/23/2021	19:59:52	320.65	13.15	7.96	0.07	1107 SACKS NEOCEM TAIL CEMENT. 402.2 BBLS. 13.2 PPG, 2.04 YIELD, 9.79 GAL/SACK
18	Shutdown	10/23/2021	20:55:51	209.75	13.64	0.00	438.76	SHUT DOWN
19	Clean Lines	10/23/2021	20:57:41	75.92	13.64	0.00	438.76	CLEAN PUMPS AND LINES
20	Drop Top Plug	10/23/2021	21:06:52	30.63	7.44	0.00	459.94	TOP PLUG BY DRAHOTA
21	Pump Displacement	10/23/2021	21:06:55	30.37	7.44	0.00	0.00	397.1 BBLS DISPLACEMENT. FIRST 20 BBLS HAS 10 GALLONS MICRO MATRIX CEMENT RETARDER. REMAINING 377.1 IS TREATED. APPROX 45 BBLS. SPACER TO SURFACE. PRE-JOB CALCULATIONS TOC=994', TOLC=1827', TOTC=7328'.
22	Bump Plug	10/23/2021	21:59:30	3308.56	7.74	0.00	393.88	FCP 2561 PSI / 4 BPM. BUMP PRESSURE 3461 PSI
23	Check Floats	10/23/2021	22:04:44	3455.71	7.74	0.00	393.88	FLOATS HOLD. 6 BBLS. BACK TO PUMP TRUCK
24	End Job	10/23/2021	22:08:03	10.02	7.49	0.00	393.88	STOP RECORDING DATA.
25	Pre-Rig Down Safety Meeting	10/23/2021	22:10:00					DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
26	Rig-Down Equipment	10/23/2021	22:15:00					RIG DOWN BULK AND MIXING EQUIPMENT
27	Rig-Down Completed	10/23/2021	23:00:00					ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL, AND LOCATION WAS CLEAN.
28	Crew Leave Location	10/23/2021	23:15:00					THANK YOU FOR USING HALLIBURTON – MIKE LOUGHRAN AND CREW.

3.0 Attachments

3.1 Job Chart

