

# HALLIBURTON

iCem® Service

**NOBLE ENERGY INC-EBUS**

**RAMPART A32-739**

Production Casing

Job Date: Saturday, September 11, 2021

Sincerely,

**Mike Loughran**

*The Road to Excellence Starts with Safety*

Sold To #: 345242		Ship To #: 9037137		Quote #:		Sales Order #: 0907371399				
Customer: NOBLE ENERGY INC-EBUS				Customer Rep: Jim Turner						
Well Name: RAMPART			Well #: A32-739			API/UWI #: 05-123-50930-00				
Field: WATTENBERG		City (SAP): GARDEN CITY		County/Parish: WELD			State: COLORADO			
Legal Description: SW SE-20-6N-64W-403FSL-1414FEL										
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		16901ft		Job Depth TVD		6822ft				
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	1931	0	1931
Casing		5.5	4.892	17			0	16901	0	6822
Open Hole Section			8.5				1931	16912	1931	6822
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Float Shoe	5.5			16900.8		Top Plug	5.5	1	HES	
Float Collar	5.5			16854.9		Bottom Plug	5.5	2	HES	
						Centralizers	5.5	206	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	3.7		6	4234
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™ Cement	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™ Cement	721	sack	13.2	1.67	8.03	8	5790
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™ Cement	1104	sack	13.2	2.04	9.79	8	10808
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	391	bbl	8.33			9	16422
Cement Left In Pipe		Amount	45.9 ft		Reason			Shoe Joint	
Mix Water:	pH 7	Mix Water Chloride:	Less 200 ppm		Mix Water Temperature:		74 °F		
Plug Bumped?	Yes	Plug Displaced by:	8.33 lb/gal		Disp. Temperature:		74 °F		
Cement Returns:	0 bbl.	Bump Pressure:	2465 psi		Floats Held?		Yes		
Comment: 64 bbl. spacer to surface									

## 2.0 Real-Time Job Summary

## 2.1 Job Event Log

Seq. No.	Activity	Date	Time	Dwnhole Density (ppg)	Cmb Pump Rate (gpm)	Pump A Pressure (psi)	Cmb Stg Total (bbl)	Comments
1	Call Out	9/10/2021	13:30:00					CREW CALLED OUT AT 1330 HRS. 9/10/2021. REQUESTED ON LOCATION 1930 HRS.
2	Pre-Convoy Safety Meeting	9/10/2021	16:45:00					CREW DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
3	Crew Leave Yard	9/10/2021	17:00:00					CRERW LEAVES YARD
4	Arrive At Loc	9/10/2021	19:00:00					MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING- 9.625" 36 LB/FT @ 1931', 5.5" CASING: 17 LB/FT TOTAL 16900.8', 8.5" HOLE, TD 16912', F/C 16854.9', TVD- 6822', WATER TEMP- 74 DEGREES, PH 7, CHLORIDES LESS 200 PPM. 206 CENTRALIZERS FROM 16855'-996'
5	Pre-Rig Up Safety Meeting	9/10/2021	19:10:00					HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP, AND WEATHER.
6	Rig-Up Equipment	9/10/2021	19:15:00					CREW STAGED EQUIPMENT AND RIGGED UP BULK, IRON AND WATER HOSES TO PERFORM JOB.
7	Pre-Job Safety Meeting	9/10/2021	19:50:00					SAFETY MEETING WITH HALLIBURTON, AND RIG PERSONNEL. CREW COMMUNICATED POTENTIAL SAFETY HAZARDS, AND JOB DETAILS.
8	Start Job	9/10/2021	20:34:14	8.27	0.0	31.05	0.00	
9	Start Job	9/10/2021	21:09:11	8.43	0.0	3.53	0.00	BEGIN RECORDING DATA
10	Test Lines	9/10/2021	21:18:41	8.34	0.0	41.98	2.09	TEST LINES TO 5000 PSI
11	Drop Bottom Plug	9/10/2021	21:46:53	8.55	0.0	16.25	0.62	BOTTOM PLUG VERIFIED BY JIM
12	Pump Spacer 1	9/10/2021	21:48:12	8.45	0.0	4.50	0.00	120 BBLS TUNED PRIME SPACER. 11.5 PPG, 3.7 YIELD, 23.55 GAL/SACK
13	Shutdown	9/10/2021	22:10:04	11.47	0.0	107.85	123.42	SHUTDOWN
14	Drop Bottom Plug	9/10/2021	22:15:30	11.48	0.0	43.04	123.42	SECOND BOTTOM PLUG VERIFIED BY JIM
15	Pump Cap Cement	9/10/2021	22:16:55	11.48	0.0	42.43	0.00	140 SACKS SBM CEM CAP CEMENT. 39.89 BBLS. 13.2 PPG, 1.6 YIELD, 7.63 GAL/SACK
16	Pump Lead Cement	9/10/2021	22:23:38	13.37	297.1	552.46	0.06	720 SACKS SBM CEM LEAD CEMENT. 214.44 BBLS. 13.2 PPG, 1.67 YIELD, 8.03 GAL/SACK

17	Pump Tail Cement	9/10/2021	22:53:43	13.08	324.4	642.62	0.06	1104 SACKS NEOCEM TAIL CEMENT. 401.1 BBLS. 13.2 PPG,, 2.04 YIELD, 9.79 GAL/SACK
18	Shutdown	9/10/2021	23:46:59	12.67	0.0	53.70	408.68	SHUTDOWN/WASH PUMPS AND LINES
19	Shutdown	9/10/2021	23:58:38	8.07	0.0	42.24	26.18	SHUTDOWN
20	Drop Top Plug	9/10/2021	23:59:57	8.08	0.0	33.71	26.18	TOP PLUG VERIFIED BY JIM
21	Pump Displacement	9/11/2021	00:02:01	8.08	0.0	33.42	0.00	391 BBLS. FIRST 20 BBLS HAS 10 GALLONS MICRO MATRIX CEMENT RETARDER. REMAINING DISPLACEMENT TREATED WATER BY MULTICHEM . 64 BBLS SPACER TO SURF. TOTC=7095', TOLC=1853', TOCC=1020' PRE JOB CALCULATIONS
22	Shutdown	9/11/2021	00:42:07	8.59	324.8	2932.57	351.54	SHUTDOWN DUE TO PUMP NOT GETTING WATER
23	Bump Plug	9/11/2021	00:51:47	8.62	0.0	3378.16	392.55	FCP 2465 PSI/4 BPM. BUMP PRESSURE 3478 PSI
24	Check Floats	9/11/2021	00:56:23	8.62	0.0	3474.03	0.00	FLOATS HOLD/6 BBLS BACK
25	End Job	9/11/2021	01:00:37	8.39	0.0	5.57	0.00	STOP RECORDING DATA
26	Pre-Rig Down Safety Meeting	9/11/2021	01:05:00					DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
27	Rig-Down Equipment	9/11/2021	01:10:00					RIG DOWN BULK AND MIXING EQUIPMENT
28	Rig-Down Completed	9/11/2021	02:10:00					ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL, AND LOCATION WAS CLEAN.
29	Crew Leave Location	9/11/2021	02:30:00					THANK YOU FOR USING HALLIBURTON – MIKE LOUGHRAN AND CREW.

3.0 Attachments

3.1 Job Chart

