

HALLIBURTON

iCem[®] Service

NOBLE ENERGY INC

RAMPART A32-730

Production Casing

Job Date: Monday, September 06, 2021

Sincerely,

KYLE BATH

The Road to Excellence Starts with Safety

Sold To #: 345242		Ship To #: 9037086		Quote #: 0022870127		Sales Order #: 0907365340				
Customer: NOBLE ENERGY INC-EBUS				Customer Rep: Dave Nielsen						
Well Name: RAMPART			Well #: A32-730		API/UWI #: 05-123-50929-00					
Field: WATTENBERG		City (SAP): GARDEN CITY		County/Parish: WELD		State: COLORADO				
Legal Description: SW SE-20-6N-64W-380FSL-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: Kyle Bath						
Job										
Job depth MD		16863ft		Job Depth TVD		6863ft				
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	1960	0	1960
Casing		5.5	4.892	17			0	16863	0	6826
Open Hole Section			8.5				1960	16872	1959	6826
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Float Shoe	5.5	1	HES	16863		Top Plug	5.5	1	HES	
Float Collar	5.5	1	HES	16817		Bottom Plug	5.5	2	HES	
						Centralizers	5.5	204	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	Spacer	Tuned Prime Cement Spacer	120	bbl	11.5	3.7			4234
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	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 ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Lead Cement	ElastiCem™ Cement	719	sack	13.2	1.67	8.03	8	5774
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	Tail Cement	NeoCem™ Cement	1102	sack	13.2	2.04	9.79	8	10789
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	Displacement	0	bbl	8.33				16380
Cement Left In Pipe		Amount	46 ft		Reason			Shoe Joint	
Mix Water:		pH 7	Mix Water Chloride:		0 ppm		Mix Water Temperature:		72 °F
Plug Bumped?		Yes	Plug Displaced by:		8.33 lb/gal Treated Water		Disp. Temperature:		72 °F
Cement Returns:		0 bbl.	Bump Pressure:		2332 psi		Floats Held?		Yes

2.0 Real-Time Job Summary

2.1 Job Event Log

Seq. No.	Activity	Date	Time	Cmb Pump Rate (bbl/min)	Cmb Stg Total (bbl)	Dwnhole Density (ppg)	Pump A Pressure (psi)	Comments
1	Call Out	9/6/2021	07:30:00					CREW CALLED OUT, REQUESTED ON LOCATION 13:30
2	Depart Yard Safety Meeting	9/6/2021	10:45:00					PRE CONVOY SAFETY MEETING WITH ALL HES EE
3	Crew Leave Yard	9/6/2021	11:00:00					CREW DEPART YARD FOR LOCATION
4	Arrive At Loc	9/6/2021	12:00:00					ARRIVE ON LOCATION, RECIEVED NUMBERS FROM CO REP, TD 16872, TP 16862.6, SJ 45.9, CSG 5.5 17#, PREV CSG 9 5/8 36# @ 1959.6, HOLE 8.5, MUD 10.1, TVD 6826, 204 CENTALIZERS, WATER TEST, TEMP 72, CHLORIDES 0, PH 7
5	Assessment Of Location Safety Meeting	9/6/2021	12:15:00					SAFETY MEETING WITH ALL HES EE TO ASSESS ALL HAZARDS
6	Safety Meeting - Pre Rig-Up	9/6/2021	12:30:00					PRE RIG UP SAFETY MEETING WITH ALL HES EE
7	Safety Meeting - Pre Job	9/6/2021	16:00:00	0.00	0.00	9.01	-9.92	PRE JOB SAFETY MEETING WITH RIG CREW AND CO REP
8	Start Job	9/6/2021	16:39:58	0.00	0.00	8.75	-0.66	START RECORDING DATA
9	Drop Bottom Plug	9/6/2021	16:40:07	0.00	0.00	7.93	9.28	LAUNCH BOTTOM PLUG
10	Test Lines	9/6/2021	16:43:00	0.00	5.04	8.40	31.87	TEST LINES TO 5000 PSI
11	Pump Spacer 1	9/6/2021	16:49:18	0.00	0.00	8.50	1.71	PUMP 120 BBLS TUNED PRIME SPACER 11.5 PPG 7 BPM 250 PSI
12	Check Weight	9/6/2021	16:54:44	7.52	29.17	11.48	559.63	VERIFY WEIGHT ON PRESSURIZED MUD SCALES
13	Drop Bottom Plug	9/6/2021	17:09:52	0.00	114.16	11.82	28.95	LAUNCH BOTTOM PLUG

14	Pump Cap Cement	9/6/2021	17:10:04	1.66	0.03	11.80	40.74	MIX AND PUMP 140 SKS 39.9 BBLS CAP CEMENT 13.2 PPG, 1.6 FT3/SK, 7.63 GAL/SK 7.5 BPM 615 PSI, CALCULATED TOCC 995
15	Pump Lead Cement	9/6/2021	17:16:41	5.50	0.09	13.07	385.09	MIX AND PUMP 719 SKS 213.9 BBLS LEAD CEMENT 13.2 PPG, 1.67 FT3/SK, 8.03 GAL/SK 8.5 BPM 690 PSI, CALCULATED TOLC 1828
16	Pump Tail Cement	9/6/2021	17:45:23	8.39	0.07	13.28	629.40	MIX AND PUMP 1102 SKS 400.4 BBLS TAIL CEMENT 13.2 PPG, 2.04 FT3/SK, 9.79 GAL/SK 8.5 BPM 1090 PSI, CALCULATED TOTC 7048
17	Shutdown	9/6/2021	18:38:17	0.00	410.65	12.93	40.72	SHUTDOWN, WASH PUMPS AND LINES TO TANK
18	Drop Top Plug	9/6/2021	18:47:56	0.00	426.91	8.01	16.92	LAUNCH TOP PLUG
19	Pump Displacement	9/6/2021	18:47:59	0.00	0.00	8.01	15.73	PUMP 390 BBLS TREATED FRESH WATER DISPLACEMENT, FIRST 20 BBLS WITH MMCR, 10 BPM, 2900 PSI, RECIEVED 70 BBLS TUNED PRIME SPACER TO SURFACE
20	Other	9/6/2021	19:02:06	0.00	130.19	8.04	1293.75	SHUTDOWN, RIG CRT LEAKING, RIG CHANGE CUP AND CONTINUE DISPLACEMENT
21	Bump Plug	9/6/2021	19:44:46	0.00	385.94	8.15	2702.08	BUMP PLUG AT 2332 PSI TOOK TO 2865 PSI
22	Check Floats	9/6/2021	19:50:20	0.00	0.00	8.17	2865.38	FLOATS HELD TOOK 5 BBLS BACK
23	End Job	9/6/2021	19:52:36	0.00	0.00	8.02	-20.14	STOP RECORDING DATA
24	Safety Meeting - Pre Rig-Down	9/6/2021	19:56:09					PRE RIG DOWN SAFETY MEETING WITH ALL HES EE
25	Depart Location Safety Meeting	9/6/2021	21:00:00					PRE DEPARTURE SAFETY MEETING WITH ALL HES EE
26	Crew Leave Location	9/6/2021	21:30:00					THANK YOU FOR USING HALLIBURTON, KYLE BATH AND CREW

3.0 Attachments

3.1 Job Chart

