

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 345242		Ship To #: 3919055		Quote #:		Sales Order #: 0906328670				
Customer: NOBLE ENERGY INC-EBUS					Customer Rep: NOBLE REP					
Well Name: VOGLER STATE			Well #: D33-769			API/UWI #: 05-123-48559-00				
Field: WATTENBERG		City (SAP): KEENESBURG		County/Parish: WELD			State: COLORADO			
Legal Description: SW SW-21-3N-64W-1065FSL-1010FWL										
Contractor: H & P DRLG					Rig/Platform Name/Num: H & P 321					
Job BOM: 7523 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HB31357					Srcv Supervisor: Kyle Bath					
Job										
Formation Name										
Formation Depth (MD)		Top				Bottom				
Form Type		BHST								
Job depth MD		17538ft				Job Depth TVD				
Water Depth		Wk Ht Above Floor								
Perforation Depth (MD)		From				To				
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	1917	0	0
Casing		5.5	4.892	17			0	17538	0	0
Open Hole Section			8.5				1917	17558	0	0
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	5.5			17538		Top Plug	5.5		HES	
Float Shoe	5.5					Bottom Plug	5.5		HES	
Float Collar	5.5					SSR plug set	5.5		HES	
Insert Float	5.5					Plug Container	5.5		HES	
Stage Tool	5.5					Centralizers	5.5		HES	
Fluid Data										
Stage/Plug #: 1										

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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 Spacer	SBM FDP-C1337-18 CEMENT SPACER SYS	120	bbl	11.5	3.87			
	1 lbm/bbl	FE-2, 2000 LB BAG - (1005549)							
	3.50 lbm/bbl	SEM-94P, 35 LB SACK - (1023987)							
	3.50 lbm/bbl	SEM-93P, 35 LB SACK - (1023977)							
	145.2420 lbm/bbl	BARITE, BULK (100003681)							
	0.10 gal/bbl	D-AIR 3000L, 5 GAL PAIL (101007444)							

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 (TM) SYSTEM	140	sack	13.2	1.65		6	8.4
	0.35 %	SCR-100, 1200 LB BAG - (1126328)							
	8.40 Gal	FRESH WATER							

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	496	sack	13.2	1.67		6	8.04
	0.31 %	SCR-100, 1200 LB BAG - (1126328)							
	8.04 Gal	FRESH WATER							

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 NT1	NeoCem TM	1179	sack	13.2	2.04		6	9.79
	0.09 %	SCR-100, 1200 LB BAG - (1126328)							
	0.09 %	FE-2, 2000 LB BAG - (1005549)							
	9.79 Gal	FRESH WATER							

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	MMCR Displacement	MMCR Displacement	20	bbl	8.34				
	0.50 gal/bbl	MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)							

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
6	Displacement	Displacement	386	bbl	8.33				

Cement Left In Pipe	Amount	48 ft	Reason	Shoe Joint
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Cementing Job Summary

Mix Water: pH ##	Mix Water Chloride: ## ppm	Mix Water Temperature: ## °F °C
Cement Temperature: ## °F °C	Plug Displaced by: ## lb/gal kg/m3 XXXX	Disp. Temperature: ## °F °C
Plug Bumped? Yes/No	Bump Pressure: ##### psi MPa	Floats Held? Yes/No
Cement Returns: ## bbl m3	Returns Density: ## lb/gal kg/m3	Returns Temperature: ## °F °C
Comment		

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comments
Event	1	Call Out	Call Out	2/26/2020	08:00:00	USER	CREW CALLED OUT, REQUESTED ON LOCATION 17:30
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	2/26/2020	12:15:00	USER	DISCUSS ROUTE AND HAZARDS
Event	3	Crew Leave Yard	Crew Leave Yard	2/26/2020	12:30:00	USER	CREW DEPART YARD
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	2/26/2020	13:30:00	USER	ARRIVE ON LOCATION, RIG RUNNING CASING UPON HES ARRIVAL, RECIEVED NUMBERS FROM CUSTOMER, TD 17558, TP 17537.9, SJ 47.47, CSG 5.5" 17#, PREV CSG 9 5/8 36# @ 1917, HOLE 8.5, MUD 10, TVD 6894
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	2/26/2020	13:45:00	USER	DISCUSS LOCATION HAZARDS AND HOW TO MITIGATE THEM, WATER TEST TEMP 65, PH 7, CHLORIDES 0
Event	6	Safety Meeting - Pre Rig-Up	Safety Meeting - Pre Rig-Up	2/26/2020	21:00:00	USER	DISCUSS HAZARDS AND WAYS TO MITIGATE THEM
Event	7	Safety Meeting - Pre Job	Safety Meeting - Pre Job	2/27/2020	00:30:00	USER	PRE JOB SAFETY MEETING WITH RIG CREW AND CO REP
Event	8	Start Job	Start Job	2/27/2020	01:19:15	COM4	START RECORDING DATA
Event	9	Drop Bottom Plug	Drop Bottom Plug	2/27/2020	01:19:46	COM4	LAUNCH BOTTOM PLUG
Event	10	Pump Spacer 1	Pump Spacer 1	2/27/2020	01:40:55	COM4	PUMP 120 BBLS TUNED PRIME SPACER 11.5 PPG 3.87 YIELD 24.42 GAL/SK ,8 BPM PSI 330
Event	11	Check Weight	Check Weight	2/27/2020	01:42:34	COM4	VERIFY WEIGHT ON PRESSURIZED SCALES
Event	12	Check Weight	Check Weight	2/27/2020	01:57:39	COM4	VERIFY WEIGHT ON PRESSURIZED SCALES
Event	13	Drop Bottom Plug	Drop Bottom Plug	2/27/2020	02:05:51	COM4	LAUNCH BOTTOM PLUG
Event	14	Pump Cap Cement	Pump Cap Cement	2/27/2020	02:08:51	COM4	MIX AND PUMP 140 SKS 41.2 BBLS CAP CEMENT 13.2 PPG, 1.65 FT3/SK, 8.4 GAL/SK 8 BPM 500 PSI, CALCULATED TOCC 2412
Event	15	Check Weight	Check Weight	2/27/2020	02:14:21	COM4	VERIFY WEIGHT ON PRESSURIZED SCALES

Event	16	Pump Lead Cement	Pump Lead Cement	2/27/2020	02:15:21	COM4	MIX AND PUMP 496 SKS, 147.5 BBLS OF LEAD 2 CEMENT 13.2 PPG, 1.67 YIELD, 8.04 GAL/SK, 8BPM 592 PSI . CALCULATED TOP OF LEAD 3450.15 FT.
Event	17	Pump Tail Cement	Pump Tail Cement	2/27/2020	02:36:36	COM4	MIX AND PUMP 1179 SKS, 428 BBLS OF TAIL CEMENT, 13.2 PPG, 2.04 YIELD , 9.79 GAL/SK, 8 BPM 730 PSI, CALCULATED TOP OF TAIL 7065.84 FT
Event	18	Check Weight	Check Weight	2/27/2020	02:54:05	COM4	VERIFY WEIGHT ON PRESSURIZED SCALES
Event	19	Check Weight	Check Weight	2/27/2020	03:02:03	COM4	VERIFY WEIGHT ON PRESSURIZED SCALES
Event	20	Check Weight	Check Weight	2/27/2020	03:04:14	COM4	VERIFY WEIGHT ON PRESSURIZED SCALES
Event	21	Shutdown	Shutdown	2/27/2020	03:39:11	COM4	SHUTDOWN TO WASH PUMP AND LINES.
Event	22	Drop Top Plug	Drop Top Plug	2/27/2020	03:43:53	COM4	LAUNCHED TOP PLUG
Event	23	Pump Displacement	Pump Displacement	2/27/2020	03:43:56	COM4	PUMPED 406 BBLS OF FRESH WATER DISPLACEMENT WITH THE FIRST 20 BBLS HAVING MMCR IN IT AND 6 #'S OF BE-3 THROUGHOUT THE REST OF DISPLACEMENT. 10 BPM WITH A PSI OF
Event	24	Bump Plug	Bump Plug	2/27/2020	04:31:29	COM4	BUMPED PLUG 2550 TOOK TO 2703 PSI.
Event	25	Check Floats	Check Floats	2/27/2020	04:37:51	USER	CHECKED FLOATS TO THE PUMP, 5 BBLS RETURNED.
Event	26	End Job	End Job	2/27/2020	04:40:13	COM4	STOPPED RECORDING DATA
Event	27	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	2/27/2020	04:45:00	USER	DISCUSS HAZARDS AND WAYS TO MITIGATE THEM
Event	28	Depart Location Safety Meeting	Depart Location Safety Meeting	2/27/2020	06:00:00	USER	DISCUSS HAZARDS AND ROUTE
Event	29	Crew Leave Location	Crew Leave Location	2/27/2020	06:15:00	USER	THANK YOU FOR USING HALLIBURTON, KYLE BATH AND CREW

3.0 Attachments

3.1 Job Chart

