

The Road to Excellence Starts with Safety

Sold To #: 345242		Ship To #: 3919592		Quote #:		Sales Order #: 0906164518					
Customer: NOBLE ENERGY INC-EBUS				Customer Rep: NOBLE REP							
Well Name: GUTTERSEN STATE			Well #: DD30-715		API/UWI #: 05-123-48667-00						
Field: WATTENBERG		City (SAP): ROGGEN		County/Parish: WELD		State: COLORADO					
Legal Description: SE SE-30-3N-63W-481FSL-817FEL											
Contractor: H & P DRLG				Rig/Platform Name/Num: H & P 321							
Job BOM: 7523 7523											
Well Type: HORIZONTAL OIL											
Sales Person: HALAMERICA\HB31357				Srv Supervisor: Kyle Bath							
Job											
Formation Name											
Formation Depth (MD)		Top				Bottom					
Form Type						BHST					
Job depth MD		17023ft				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	1953	0	1953	
Casing		5.5	4.892	17			0	17008	0	6727	
Open Hole Section			8.5				1953	17023	0	0	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	5.5			17023		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											
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)									
145.09 lbm/bbl		BARITE, BULK (100003681)									

iCem® Service
(v. 5.1.101.0)

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	DH Density (ppg)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	12/11/2019	07:30:00					CREW CALLED OUT, REQUESTED ON LOCATION 13:30
Event	2	Depart Yard Safety Meeting	12/11/2019	11:30:00					DISCUSS ROUTE AND HAZARDS
Event	3	Crew Leave Yard	12/11/2019	11:50:00					CREW DEPART YARD
Event	4	Arrive at Location from Service Center	12/11/2019	13:00:00					ARRIVE ON LOCATION, RIG RUNNING CASING UPON HES ARRIVAL, RECIEVED NUMBERS FROM CO REP, TD 17023, TP 17007.8, SJ 47.95, CSG 5.5 17#, PREV CSG 9 5/8 36# @ 1953.4, HOLE 8.5, MUD 9.4, TVD 6727
Event	5	Assessment Of Location Safety Meeting	12/11/2019	13:25:00					DISCUSS LOCATION HAZARDS AND HOW TO MITIGATE THEM, WATER TEST TEMP 65, PH 7, CHLORIDES 0
Event	6	Safety Meeting - Pre Rig-Up	12/11/2019	14:00:00					DISCUSS HAZARDS AND WAYS TO MITIGATE THEM
Event	7	Safety Meeting - Pre Job	12/11/2019	19:30:00					PRE JOB SAFETY MEETING WITH RIG CREW AND CO REP, RIG CIRCULATE 8000 STRKS, 108 SPM, 740 PSI

Event	8	Start Job	12/11/2019	19:52:37	START RECORDING DATA
Event	9	Check Weight	12/11/2019	19:55:14	
Event	10	Test Lines	12/11/2019	19:59:34	TEST LINES TO 4700 PSI
Event	11	Drop Bottom Plug	12/11/2019	20:06:28	LAUNCH BOTTOM PLUG
Event	12	Pump Spacer 1	12/11/2019	20:07:59	MIX AND PUMP 120 BBLS TUNED PRIME SPACER 11.5 PPG, 4 BPM 320 PSI
Event	13	Check Weight	12/11/2019	20:10:58	
Event	14	Drop Bottom Plug	12/11/2019	20:33:12	LAUNCH BOTTOM PLUG
Event	15	Pump Cap Cement	12/11/2019	20:33:58	MIX AND PUMP 140 SKS 42 BBLS CAP CEMENT 13.2 PPG, 1.67 FT3/SK, 8.03 GAL/SK 8 BPM 820 PSI, CALCULATED TOCC 2400
Event	16	Check Weight	12/11/2019	20:36:28	
Event	17	Pump Lead Cement	12/11/2019	20:40:00	MIX AND PUMP 474 SKS 140.9 BBLS LEAD CEMENT 13.2 PPG, 1.67 FT3/SK 8.04 GAL/SK 8 BPM 740 PSI, CALCULATED TOLC 3419
Event	18	Check Weight	12/11/2019	20:46:21	
Event	19	Pump Tail Cement	12/11/2019	20:58:36	MIX AND PUMP 1138 SKS 413 BBLS TAIL CEMENT 13.2 PPG, 2.04 FT3/SK, 9.79 GAL/SK, 8 BPM 1000 PSI, CALCULATED TOTC 6873

Event	20	Check Weight	12/11/2019	20:59:29	
Event	21	Check Weight	12/11/2019	21:18:23	
Event	22	Other	12/11/2019	21:44:47	PRESSURE UP, HAVE RIG RECIPROCATATE AND SLOW RATE
Event	23	Shutdown	12/11/2019	21:59:00	
Event	24	Clean Lines	12/11/2019	22:04:55	WASH PUMPS AND LINES
Event	25	Drop Top Plug	12/11/2019	22:08:37	LAUNCH TOP PLUG
Event	26	Pump Displacement	12/11/2019	22:08:41	PUMP 393 BBLS FRESH WATER DISPLACEMENT, FIRST 20 W/MMCR, ALL WITH BIOCID, AT START OF DISPLACEMENT RIG RECIPROCATED, 8 BPM 2800 PSI
Event	27	Bump Plug	12/11/2019	23:05:33	BUMPED PLUG AT 2300 PSI TOOK TO 2830 PSI
Event	28	Other	12/11/2019	23:08:25	CHECK FLOATS, FLOATS HELD TOOK 5 BBLS BACK TO TRUCK
Event	29	Safety Meeting - Pre Rig-Down	12/11/2019	23:10:00	DISCUSS HAZARDS AND WAYS TO MITIGATE THEM
Event	30	End Job	12/11/2019	23:11:09	STOP RECORDING DATA
Event	31	Depart Location Safety Meeting	12/12/2019	00:30:00	DISCUSS HAZARDS AND ROUTE
Event	32	Crew Leave Location	12/12/2019	01:00:00	THANK YOU FOR USING HALLIBURTON, KYLE BATH AND CREW

3.0 Attachments

3.1 JOB CHART.png

