

The Road to Excellence Starts with Safety

Sold To #: 345242		Ship To #: 3908446		Quote #:		Sales Order #: 0906208548					
Customer: NOBLE ENERGY INC-EBUS						Customer Rep: JIM TURNER					
Well Name: GUTTERSEN				Well #: Y05-771		API/UWI #: 05-123-48041-00					
Field: WATTENBERG		City (SAP): KEENESBURG		County/Parish: WELD		State: COLORADO					
Legal Description: SW NW-29-3N-64W-2206FNL-1010FWL											
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		19900ft		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	1932	0	1932	
Casing		5.5	4.892	17			0	19900	0	6928	
Open Hole Section			8.5				1932	19900	1932	6928	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	5.5			19900		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)									

3.50 lbm/bbl		SEM-94P, 35 LB SACK - (1023987)							
3.50 lbm/bbl		SEM-93P, 35 LB SACK - (1023977)							
0.33 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	13.21	1.66		6	8.39
8.39 Gal		FRESH WATER							
0.70 %		SCR-100, 1200 LB BAG - (1126328)							
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	503	sack	13.2	1.67		6	8.04
8.04 Gal		FRESH WATER							
0.30 %		SCR-100, 1200 LB BAG - (1126328)							
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	1441	sack	13.2	2.04		6	9.79
0.10 %		FE-2, 2000 LB BAG - (1005549)							
9.79 Gal		FRESH WATER							
0.10 %		SCR-100, 1200 LB BAG - (1126328)							
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	8.33				
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	440	bbl	8.33				
Cement Left In Pipe		Amount	42 ft		Reason			Shoe Joint	

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	Date	Time	Comments
Event	1	Call Out	1/2/2020	16:30:00	CREW CALLED OUT, REQUESTED ON LOCATION 22:30
Event	2	Depart Yard Safety Meeting	1/2/2020	20:00:00	DISCUSS ROUTE AND HAZARDS
Event	3	Crew Leave Yard	1/2/2020	20:25:00	CREW DEPART YARD
Event	4	Arrive at Location from Service Center	1/2/2020	21:00:00	ARRIVE ON LOCATION, RIG RUNNING CASING UPON HES ARRIVAL, RECIEVED NUMBERS FROM CO REP, TD 19900, TP 19880.9, SJ 47.3, CSG 5.5 17#, PREV CSG 9 5/8 36# @ 1932.5, HOLE 8.5 MUD 9.7
Event	5	Assessment Of Location Safety Meeting	1/2/2020	21:15:00	DISCUSS LOCATION HAZARDS AND HOW TO MITIGATE THEM, WATER TEST TEMP 65, CHLORIDES 0, PH 7
Event	6	Safety Meeting - Pre Rig-Up	1/2/2020	21:30:00	DISCUSS HAZARDS AND WAYS TO MITIGATE THEM
Event	7	Safety Meeting - Pre Job	1/2/2020	23:00:00	PRE JOB SAFETY MEETING WITH RIG CREW AND CO REP
Event	8	Start Job	1/3/2020	00:47:51	STARTED RECORDING DATA.
Event	9	Test Lines	1/3/2020	00:54:31	TEST LINES TO 6000, K/O 6300 PSI

Event	10	Drop Bottom Plug	1/3/2020	01:03:07	BOTTOM PLUG DROPPED , VERIFIED BY CO MAN.
Event	11	Pump Spacer 1	1/3/2020	01:03:12	PUMPED 174 SACKS/ 120 BBLS OF SPACER AT 11.5 PPG, 3.87 YIELD, AND 24.5 GAL/SK. PUMPED AT A RATE OF 6 BPM WITH A PSI OF 360.
Event	12	Check Weight	1/3/2020	01:06:19	VERIFIED WEIGHT WITH PRESSURIZED SCALES.
Event	13	Shutdown	1/3/2020	01:28:47	SHUT DOWN TO DROP 2ND BOTTOM PLUG.
Event	14	Drop Bottom Plug	1/3/2020	01:28:53	BOTTOM PLUG DROPPED , VERIFIED BY CO MAN.
Event	15	Pump Cap Cement	1/3/2020	01:29:20	PUMPED 140 SACKS / 41.39 BBLS CAP CEMENT 13.21 PPG, 1.66 YIELD, 8.39 GAL/SK. PUMPED AT 8 BPM 640 PSI. TOP OF CAP-2393'
Event	16	Check Weight	1/3/2020	01:33:07	VERIFIED WEIGHT WITH PRESSURIZED SCALES.
Event	17	Pump Lead Cement	1/3/2020	01:36:47	PUMPED 503 SACKS / 149.61 BBLS LEAD CEMENT AT 13.2 PPG, 1.67 YIELD, 8.04 GAL/SK. PUMPED AT 8 BPM 650 PSI. TOP OF LEAD 2- 3408'
Event	18	Check Weight	1/3/2020	01:49:44	VERIFIED WEIGHT WITH PRESSURIZED SCALES.
Event	19	Pump Tail Cement	1/3/2020	01:56:25	PUMPED 1441 SACKS / 523.55 BBLS TAIL CEMENT AT 13.2 PPG , 2.04 YIELD, 9.79 GAL/SK. PUMPED AT 8 BPM 830 PSI. TOP OF TAIL- 7075'

Event	20	Shutdown	1/3/2020	02:07:59	
Event	21	Check Weight	1/3/2020	02:17:16	VERIFIED WEIGHT WITH PRESSURIZED SCALES.
Event	22	Check Weight	1/3/2020	02:43:38	VERIFIED WEIGHT WITH PRESSURIZED SCALES.
Event	23	Shutdown	1/3/2020	03:05:06	STOPPED RECORDING DATA.
Event	24	Drop Top Plug	1/3/2020	03:15:30	DROPPED TOP PLUG, VERIFIED BY CO MAN.
Event	25	Pump Displacement	1/3/2020	03:15:35	PUMPED 460 BBLS OF FRESH WATER DISPLACEMENT. 10 GALLONS OF MMCR IN THE FIRST 20 BBLS, AND 6 #'S OF BE-3, 10 BPM 2700 PSI, RECIEVED TRACES OF TUNED PRIME TO SURFACE
Event	26	Bump Plug	1/3/2020	04:09:45	BUMP AT 2200 PSI TOOK TO 2650 PSI
Event	27	Other	1/3/2020	04:15:39	CHECK FLOATS, FLOATS HELD TOOK 5 BBLS BACK
Event	28	End Job	1/3/2020	04:17:18	
Event	29	Safety Meeting - Pre Rig-Down	1/3/2020	04:21:00	DISCUSS HAZARDS AND WAYS TO MITIGATE THEM
Event	30	Depart Location Safety Meeting	1/3/2020	05:45:00	DISCUSS HAZARDS AND ROUTE
Event	31	Crew Leave Location	1/3/2020	06:15:00	THANK YOU FOR USING HALLIBURTON, KYLE BATH/ JOSHUA WASHBURN AND CREW

3.0 Attachments

3.1 Job Chart

