

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 345242		<b>Ship To #:</b> 9029982		<b>Quote #:</b>		<b>Sales Order #:</b> 0907007200				
<b>Customer:</b> NOBLE ENERGY INC-EBUS				<b>Customer Rep:</b> Charles Culver						
<b>Well Name:</b> REVEILLE			<b>Well #:</b> A34-746			<b>API/UWI #:</b> 05-123-50793-00				
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> GARDEN CITY		<b>County/Parish:</b> WELD			<b>State:</b> COLORADO			
<b>Legal Description:</b> SE SW-34-6N-64W-632FSL-1508FWL										
<b>Contractor:</b> H & P DRLG				<b>Rig/Platform Name/Num:</b> H & P 517						
<b>Job BOM:</b> 7523										
<b>Well Type:</b> HORIZONTAL OIL										
<b>Sales Person:</b> HALAMERICA\HX41066				<b>Srvc Supervisor:</b> Vaughn Oteri						
<b>Job</b>										
<b>Job depth MD</b>		17277ft		<b>Job Depth TVD</b>		6741ft				
<b>Well Data</b>										
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	0	9.625	8.921	36			0	1943	0	1943
Casing	0	5.5	4.892	17			0	17262	0	6741
Open Hole Section			8.5				1943	17277	1943	6741
<b>Tools and Accessories</b>										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Float Shoe	5.5			17262		Top Plug	5.5	1	HES	
Float Collar	5.5			17213		Bottom Plug	5.5	2	HES	
						Centralizers	5.5	203	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	Tuned Prime	TUNED PRIME SPACER SYS	120	bbl	11.5	3.7		8	
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™ SYSTEM	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	ElastiCem w/ SCBL	ELASTICEM™ SYSTEM	737	sack	13.2	1.67	8.03	8	5918
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	NEOCER™ SYSTEM	1131	sack	13.2	2.04	9.79	8	11072
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	399	bbl	8.33				
Cement Left In Pipe		Amount	49 ft		Reason			Shoe Joint	
Mix Water:		pH 7	Mix Water Chloride:		0 ppm		Mix Water Temperature:		70°F
Plug Bumped?		Yes	Plug Displaced by:		8.33 lb/gal Treated Water		Floats Held?		Yes
Cement Returns:		0 bbl	Bump Pressure:		2348 psi				
Comment: 203 centralizers From 17214 to 948- TOC=1009, TOL=1843, TOT=7208. 57bbls of spacer back to surface.									

## 2.0 Real-Time Job Summary

## 2.1 Job Event Log

Type	Seq. No.	Activity	Date	Time	PS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Comments
Event	1	Call Out	3/6/2021	00:01:00				Call out from ARC hub.
Event	2	Pre-Convoy Safety Meeting	3/6/2021	00:30:00				Held pre-Convoy meeting with all HES drivers to discuss driving directions and hazards.
Event	3	Depart from Service Center or Other Site	3/6/2021	01:00:00				Depart from Ft. Lupton co HES yard.
Event	4	Arrive At Loc	3/6/2021	02:00:00				Arrived on location met with company rep to discuss job process and concerns.
Event	5	Start Job	3/6/2021	08:57:31	-7.00	8.44	0.00	Filled pumps and lines with fresh water.
Event	6	Test Lines	3/6/2021	09:06:35	73.00	8.58	0.00	Pressure tested pumps and lines with fresh water 4535psi, found no leaks and pressure held good.
Event	7	Test Lines	3/6/2021	09:11:52	1833.00	8.58	0.00	Pressure tested IBOP to 1937psi, pressure held good.
Event	8	Drop Bottom Plug	3/6/2021	09:12:30	-1.00	8.56	0.00	Released bottom plug witnessed by company rep.
Event	9	Pump Spacer 1	3/6/2021	09:13:54	-52.00	8.52	0.00	Mixed and pumped 120bbbls of 11.5ppg Tuned Prime spacer at 8.0bpm 390psi
Event	10	Check Weight	3/6/2021	09:21:48	376.00	11.56	7.90	Confirmed weight on scales
Event	11	Drop Bottom Plug	3/6/2021	09:36:13	-50.00	11.39	0.00	Released bottom plug witnessed by company rep.
Event	12	Pump Lead Cement	3/6/2021	09:39:17	-58.00	11.36	0.00	Mixed and pumped 140sks of 13.2ppg Y-1.6 g/sk-7.63 ElastiCem at 9.5bpm 460psi
Event	13	Check Weight	3/6/2021	09:40:12	-59.00	11.35	0.00	Confirmed weight on scales.
Event	14	Pump Lead Cement	3/6/2021	09:47:07	199.00	12.97	5.80	Mixed and pumped 737sks or 210bbbls of 13.2ppg Y-1.6 G/sk-8.03 ElastiCem at 9.5bpm 410psi.
Event	15	Pump Tail Cement	3/6/2021	10:13:20	399.00	13.07	9.50	Mixed and pumped 1131sks or 416bbbls of 13.2ppg Y-2.07 g/sk-9.79 NeoCem at 9.5bpm 374psi
Event	16	Check Weight	3/6/2021	10:14:11	490.00	13.00	9.50	Confirmed weight on scales
Event	17	Shutdown	3/6/2021	11:01:13	49.00	13.05	0.00	
Event	18	Clean Lines	3/6/2021	11:01:25	22.00	13.05	0.00	Washed pumps and lines with fresh water.

Event	19	Drop Top Plug	3/6/2021	11:08:47	-5.00	8.19	0.00	Released top plug witnessed by company rep.
Event	20	Pump Displacement	3/6/2021	11:08:51	-7.00	8.19	0.00	Pumped 399bbls of treated water to displace cement
Event	21	Bump Plug	3/6/2021	11:55:37	3210.00	8.23	0.00	Bumped plug 500psi over final pump pressure.
Event	22	Other	3/6/2021	12:01:22	3372.00	8.23	0.00	Released pressure back to pump truck to check floats, Floats held good 5.5bbl back.
Event	23	End Job	3/6/2021	12:04:17	-39.00	8.14	0.00	203 centralizers From 17214 to 948- TOC=1009, TOL=1843, TOT=7208. 57bbls of spacer back to surface.

## 3.0 Attachments

### 3.1 Job Chart

