

The Road to Excellence Starts with Safety

Sold To #: 345242	Ship To #: 3190768	Quote #:	Sales Order #: 0901713885
Customer: NOBLE ENERGY INC E-BUSINESS		Customer Rep: JW Irwin	
Well Name: ROHN STATE	Well #: LD10-66 HN	API/UWI #: 05-123-37631-00	
Field:	City (SAP): RAYMER	County/Parish: WELD	State: COLORADO
Legal Description: SE NE-9-9N-58W-1725FNL-330FEL			
Contractor:		Rig/Platform Name/Num: H&P 326	
Job BOM: 7522			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HB60191		Srvc Supervisor: Bradley Hinkle	
Job			

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type		BHST	225 degF
Job depth MD	6110ft	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	0	9.625	8.921	36	BTC	J-55	0	1208	0	0
Casing	0	7	6.276	26	BTC	P-110	0	6110	0	0
Open Hole Section			8.75				632	6120		0

### Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	7	1		6110	Top Plug	7	1	HES
Float Shoe	7	1			Bottom Plug	7	1	HES
Float Collar	7	1		6065	SSR plug set	7	1	HES
Insert Float	7	1			Plug Container	7	1	HES
Stage Tool	7	1			Centralizers	7	1	HES

### Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty

### Fluid Data

Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	11.5 lb/gal Tuned Spacer III	Tuned Spacer III	50	bbl	11.5	7.17		5		
149.45 lbm/bbl		BARITE, BULK (100003681)								
36 gal/bbl		FRESH WATER								
0.50 lbm/bbl		POLY-E-FLAKE (101216940)								

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
2	Lead Cement	EXPANDACEM (TM) SYSTEM	450	sack	13.6	1.88		7	8.54
8.54 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	Displacement	Water Based Mud	233	bbl	10.5			7	
<b>Cement Left In Pipe</b>	<b>Amount</b>	42 ft			<b>Reason</b>	Shoe Joint			
<b>Comment</b> 5 bbls Tuned Spacer to surface. Top of Cement at 1,581 feet.									

# HALLIBURTON

NOBLE ENERGY INC E-BUSINESS  
NOBLE ROHIN STATE LD10-66 HN INTERMEDIATE  
Case 1

## 1.6 Job Event Log

Event	Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Downhole Density (ppg)	Pass-Side Pump Pressure (psi)	Pass-Side Pump Rate (bbl/min)	Comment
Event 1			Arrive at Location from Service Center	Arrive at Location from Service Center	10/6/2014	03:00:00	USER				PERFORM SITE ASSESSMENT AND PRE RIG UP SAFETY MEETING. RIG RUNNING CASING.
Event 2			Safety Meeting	Safety Meeting	10/6/2014	08:15:00	COM12	0.38	-10.00	0.00	SAFETY MEETING WITH ALL PERSONNEL ON LOCATION.
Event 3			Start Job	Start Job	10/6/2014	08:51:20	COM12	8.78	1.00	0.00	
Event 4			Test Lines	Test Lines	10/6/2014	09:11:45	COM12	8.34	4213.00	0.00	PRESSURE TEST LINES TO 4250 PSI.
Event 5			Drop Bottom Plug	Drop Bottom Plug	10/6/2014	09:13:40	USER	8.39	4154.00	0.00	BOTTOM PLUG PRELOADED.
Event 6			Pump Spacer 1	Pump Spacer 1	10/6/2014	09:16:01	COM12	8.25	8.00	0.00	PUMP 50 BBLs TUNED SPACER MIXED AT 11.5 PPG USING SUPPLIED WATER. DENSITY VERIFIED BY SCALE.
Event 7			Shutdown	Shutdown	10/6/2014	09:34:34	USER	10.44	21.00	0.00	SHUTDOWN TO WEIGH UP CEMENT AND DROP BOTTOM PLUG.
Event 8			Drop Bottom Plug	Drop Bottom Plug	10/6/2014	09:39:08	USER	10.50	21.00	0.00	BOTTOM PLUG PRELOADED.
Event 9			Pump Cement	Pump Cement	10/6/2014	09:41:23	COM12	10.57	25.00	1.10	PUMP 150 BBLs EXPANDACEM (450 SACKS) MIXED AT 13.6 PPG USING SUPPLIED WATER. DENSITY VERIFIED BY SCALE.
Event 10			Shutdown	Shutdown	10/6/2014	10:16:02	USER	12.91	31.00	0.00	TOP PLUG PRELOADED.
Event 11			Drop Top Plug	Drop Top Plug	10/6/2014	10:17:48	COM12	13.29	25.00	0.00	PUMP 233 BBLs MUD SUPPLIED BY RIG. GOOD RETURNS THROUGHOUT. 5 BBLs SPACER TO SURFACE.
Event 12			Pump Displacement	Pump Displacement	10/6/2014	10:18:35	COM12	12.82	30.00	0.50	

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Event	Description	Date	Time	COM12	8.70	1418.00	0.00	
Event 13	Bump Plug	10/6/2014	11:02:54	COM12	8.70	1418.00	0.00	BUMP PLUG AT 1250 PSI AND PRESSURE BROUGHT TO 1700 PSI.
Event 14	Test Lines	10/6/2014	11:08:08	COM12	8.71	3098.00	0.00	CASING TEST TO 3000 PSI FOR 15 MINUTES.
Event 15	Check Floats	10/6/2014	11:31:04	USER	8.66	151.00	0.00	FLOATS HELD. 2.5 BBLs BACK.
Event 16	Pre-Rig Down Safety Meeting	10/6/2014	11:32:11	USER				PRE RIG DOWN SAFETY MEETING WITH HES AND RIG PERSONNEL.
Event 17	End Job	10/6/2014	11:32:49	USER				