

Sold To #: 345242		Ship To #: 3624283		Quote #: 0022103378		Sales Order #: 0902809889					
Customer: NOBLE ENERGY INC E-BUSINESS				Customer Rep: Jim Turner							
Well Name: MOSER			Well #: H22-750		API/UWI #: 05-123-40617-00						
Field: WATTENBERG		City (SAP): HUDSON		County/Parish: WELD		State: COLORADO					
Legal Description: SE SW-22-3N-65W-400FSL-2244FWL											
Contractor: H & P DRLG				Rig/Platform Name/Num: H & P 321							
Job BOM: 7523											
Well Type: HORIZONTAL OIL											
Sales Person: HALAMERICA\HB45834				Srv Supervisor: Vaughn Oteri							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST		230 degF					
Job depth MD		12000ft		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		36			0	1840	0		
Casing		5.5	4.892	20		P-110	0	11990	0		
Open Hole Section			8.5				1840	12000			
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	5.5					Top Plug	5.5	1	HES		
Float Shoe	5.5			11990		Bottom Plug	5.5	1	HES		
Float Collar	5.5			11941		SSR plug set	5.5				
Insert Float	5.5					Plug Container	5.5				
Stage Tool	5.5					Centralizers	5.5				
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	12.0 lb/gal Tuned Spacer III	Tuned Spacer III			40	bbl	12	3.13	19.4	6	

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	12.0 lb/gal Tuned Spacer III	Tuned Spacer III	40	bbl	12	3.13		6	
178.42 lbm/bbl		BARITE, BULK (100003681)							
35.35 gal/bbl		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 Lead	ELASTICEM (TM) SYSTEM	582	sack	13.2	1.6		5	7.7
7.70 Gal		FRESH WATER							
0.30 %		SCR-100 (100003749)							
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	ElastiCem	ELASTICEM (TM) SYSTEM	855	sack	13.6	1.9		6	8.68
8.68 Gal		FRESH WATER							
0.45 %		SCR-100 (100003749)							
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	Water	Water	263.9	bbl	8.33				
Cement Left In Pipe		Amount	42 ft		Reason			Shoe Joint	
Comment 10 bbl of spacer back to surface									

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	PS Pump Press (psi)	DH Density (ppg)	PS Pump Rate (bbl/min)	Comments
Event	1	Call Out	Call Out	10/10/2015	17:00:00	USER				Callout for Job @ 1700 HRS
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	10/10/2015	21:00:00	USER				Journey Management Meeting with HES Crew Prior to Departing Service Center
Event	3	Arrive At Loc	Arrive At Loc	10/10/2015	22:00:00	USER				Arrive on Location @ 2200 on 10-10-15 (Requested O/L time of 2300)
Event	4	Start Job	Start Job	10/11/2015	03:58:37	COM4				Water Provided by Rig, Tested Good for Mixing Cement
Event	5	Test Lines	Test Lines	10/11/2015	04:00:55	COM4	4131.00	8.83	0.00	Pressure Test Lines to 4131 PSI
Event	6	Drop Bottom Plug	Drop Bottom Plug	10/11/2015	04:05:11	COM4	3.00	8.66	0.00	Drop Bottom Plug
Event	7	Pump Spacer 1	Pump Spacer 1	10/11/2015	04:09:56	COM4	304.00	12.32	3.50	Mix and Pump 40 bbls Tuned Spacer @ 12 lb/gal (15 Gals of Musol-A and SEM 7 added on Batch Mixer)
Event	8	Pump Spacer 2	Pump Spacer 2	10/11/2015	04:18:48	USER	288.00	12.35	6.00	Mix and Pump 40 bbls Tuned Spacer @ 12 lb/gal
Event	9	Pump Lead Cement	Pump Lead Cement	10/11/2015	04:29:32	COM4	617.00	12.95	8.00	Mix and Pump 582 sks (165.8 bbls) ElastiCem Cement @ 13.2 lb/gal (Density Verified By Pressurized Scales)
Event	10	Check Weight	Check weight	10/11/2015	04:30:39	COM4	578.00	12.94	8.00	Density Verified by Pressurized Scales
Event	11	Pump Tail Cement	Pump Tail Cement	10/11/2015	04:50:03	COM4	622.00	13.47	8.00	Mix and Pump 855 sks (289.3 bbls) ElastiCem Cement @ 13.6 lb/gal (Density Verified by Pressurized Scales)
Event	12	Check Weight	Check weight	10/11/2015	04:51:19	COM4	591.00	13.40	8.00	Density Verified by Pressurized Scales
Event	13	Shutdown	Shutdown	10/11/2015	05:30:38	COM4	57.00	12.54	0.00	
Event	14	Clean Lines	Clean Lines	10/11/2015	05:41:54	COM4	46.00	12.45	0.00	Washed pumps and lines with fresh water

Event	15	Drop Top Plug	Drop Top Plug	10/11/2015	05:43:24	COM4	26.00	9.35	2.40	Released top plug witnessed by company rep
Event	16	Pump Displacement	Pump Displacement	10/11/2015	05:48:55	COM4	612.00	8.07	12.10	Pumped 263.9 bbl of fresh water to displace cement
Event	17	Bump Plug	Bump Plug	10/11/2015	06:21:51	COM4	2807.00	8.21	0.00	Bumped plug 500psi over final pump pressure
Event	18	Pressure Up Well	Pressure Up Well	10/11/2015	06:23:00	COM4	3050.00	8.21	0.00	Pressure up well per noble policy
Event	19	Other	Other	10/11/2015	06:37:29	COM4	3391.00	8.19	0.00	Released pressure back to pump to check floats , 2bbl back floats held good
Event	20	End Job	End Job	10/11/2015	06:48:04	COM4				10bbl of spacer back to surface