

**HALLIBURTON**

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**NOBLE ENERGY INC E-BUSINESS**

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**Foose A18-9  
Wattenberg  
Weld County , Colorado**

**Recement Service**  
**06-Mar-2013**

**Job Site Documents**

# HALLIBURTON

## Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 345242	Ship To #: 2985075	Quote #:	Sales Order #: 900268951
Customer: NOBLE ENERGY INC E-BUSINESS		Customer Rep: Hohnstein, Chris	
Well Name: Foose	Well #: A18-9	API/UWI #: 05-123-13528	
Field: Wattenberg	City (SAP): GREELEY	County/Parish: Weld	State: Colorado
Lat: N 40.484 deg. OR N 40 deg. 29 min. 1.838 secs.		Long: W 104.586 deg. OR W -105 deg. 24 min. 51.17 secs.	
Contractor: Workover		Rig/Platform Name/Num: Leed 717	
Job Purpose: Recement Service			
Well Type: Development Well		Job Type: Recement Service	
Sales Person: FLING, MATTHEW		Srvc Supervisor: BULINSKI, MATTHEW	MBU ID Emp #: 483865

### Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BROOM, KENDALL L	4.5	524682	BULINSKI, MATTHEW J	4.5	483865	IPSON, TIMOTHY J	4.5	485018
MILLER, GEOFFREY Alan	4.5	460232	NESBITT, ROY Iverson	4.5	537416			

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10866493C	41 mile	11019824C	41 mile	11542778	41 mile	11562562	41 mile
11605698	41 mile	53301	41 mile				

### Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
3-6-13	4.5	2						

TOTAL Total is the sum of each column separately

### Job

### Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Form Type	Job depth MD	Job Depth TVD	Water Depth	Perforation Depth (MD)	From	To	Called Out	Date	Time	Time Zone
				BHST	4200. ft	4200. ft						06 - Mar - 2013	05:00	MST
											On Location	06 - Mar - 2013	08:45	MST
											Job Started	06 - Mar - 2013	09:51	MST
											Job Completed	06 - Mar - 2013	12:52	MST
											Departed Loc	06 - Mar - 2013	13:30	MST

### Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
12." Open Hole				12.				305.	700.		
9" Open Hole				9.				700.	7000.		
4 1/2" Production Casing	Unknown		4.5	4.	11.6				7000.		7000.
Surface Casing	Used		8.625	8.097	24.		J-55		305.		305.
1 1/4"	Unknown		1.25	.671	3.02		K-55		4200.		

### Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
Stage Tool										Centralizers			

### Miscellaneous Materials

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

### Fluid Data

# HALLIBURTON

## Cementing Job Summary

Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk	
1	15.8# Cement	HALCEM (TM) SYSTEM (452986)	400.0	sacks	15.8	1.15	5.0		5.0	
	5 Gal	FRESH WATER								
2	13.5 FracCem	FRACCEM (TM) SYSTEM (452963)	300.0	sacks	13.5	1.48	7.07		7.07	
	7.07 Gal	FRESH WATER								
Calculated Values		Pressures		Volumes						
Displacement	3	Shut In: Instant		Lost Returns	0	Cement Slurry	160	Pad		
Top Of Cement		5 Min		Cement Returns	0	Actual Displacement	3	Treatment		
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	183	
Rates										
Circulating	1.5	Mixing	2	Displacement	1.5	Avg. Job	2			
Cement Left In Pipe	Amount	0 ft	Reason	Shoe Joint						
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID			
The Information Stated Herein Is Correct				Customer Representative Signature						