

HALLIBURTON

NOBLE ENERGY INC E-BUSINESS

**Booth 31-31
Wattenberg
Weld County , Colorado**

Recement Service
27-Dec-2012

Job Site Documents

The Road to Excellence Starts with Safety

Sold To #: 345242	Ship To #: UNKNOWN	Quote #:	Sales Order #: 0
Customer: NOBLE ENERGY INC E-BUSINESS	Customer Rep: Swift, Carl		
Well Name: Booth	Well #: 31-31	API/UWI #: 05-123-22312	
Field: Wattenberg	City (SAP): UNKNOWN	County/Parish: Weld	State: Colorado
Lat: N 40.274 deg. OR N 40 deg. 16 min. 26.929 secs.	Long: W 104.478 deg. OR W -105 deg. 31 min. 18.804 secs.		
Contractor: Leed	Rig/Platform Name/Num: Leed 715		
Job Purpose: Recement Service			
Well Type: Development Well	Job Type: Recement Service		
Sales Person: AARON, WESLEY	Srv Supervisor: SNYDER, JONATHAN	MBU ID Emp #: 435616	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
JEWELL, WILLIAM Uris	7.0	503358	MULLER, MICHEL B	7.0	529830	ROMERO, JOSEPH M	7.0	512137
SNYDER, JONATHAN Leroy	7.0	435616						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10866497C	36 mile	11064046C	36 mile	11410470C	36 mile	11518548	36 mile
11764737	36 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
12/27/2012	7	4						

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	4666. ft	. ft	Wk Ht Above Floor	4. ft				27 - Dec - 2012	05:00	MST
											On Location	27 - Dec - 2012	09:30	MST
											Job Started	27 - Dec - 2012	11:50	MST
											Job Completed	27 - Dec - 2012	15:11	MST
											Departed Loc	27 - Dec - 2012	16:30	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
10" Open Hole				10.				592.	6129.		
4 1/2" Production Casing	Unknow n		4.5	4.	11.6				7000.		7000.
Surface Casing	Used		8.625	8.097	24.		J-55		592.		592.
1 1/4" tubing	Used		1.25	.671	3.02		P-105		4666.		4666.

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

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	13.5 FracCem	FRACCEM (TM) SYSTEM (452963)	165.0	sacks	13.5	1.48	7.07		7.07
	5 lbm	ENHANCER 923, BULK (101894003)							
	0.2 %	ECONOLITE (100001580)							
	3 lbm	SILICALITE - COMPACTED, 50 LB SK (100012223)							
	0.2 %	FE-2 (100001615)							
	0.2 %	HALAD(R)-344, 50 LB (100003670)							
	7.07 Gal	FRESH WATER							
2	15.8# Cement	CMT - PREMIUM - CLASS G, 94 LB SK (100003685)	300.0	sacks	15.8	1.15	4.99		4.99
	94 lbm	CMT - PREMIUM - CLASS G REG OR TYPE V, BULK (100003685)							
	4.989 Gal	FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement	7	Shut In: Instant		Lost Returns		Cement Slurry	104.5	Pad	
Top Of Cement	0	5 Min		Cement Returns	13	Actual Displacement	7	Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
Rates									
Circulating	1	Mixing		2	Displacement	2	Avg. Job	2	
Cement Left In Pipe	Amount 0 ft	Reason							
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					