

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 345242		Ship To #: 2781032		Quote #:		Sales Order #: 7338576	
Customer: NOBLE ENERGY INC E-BUSINESS				Customer Rep: HEARD, SHANE			
Well Name: DF Ranch			Well #: 1161-10-13			API/UWI #: 05-123-31061-00	
Field: GROVER		City (SAP): HEREFORD		County/Parish: Weld		State: Colorado	
Legal Description: Section SWNE Township 10N Range 61W							
Lat: N 40.939 deg. OR N 40 deg. 56 min. 22.056 secs.				Long: W 104.189 deg. OR W -105 deg. 48 min. 38.34 secs.			
Contractor: FORT			Rig/Platform Name/Num: FORT5				
Job Purpose: Cement Multiple Stages							
Well Type: Development Well			Job Type: Cement Multiple Stages				
Sales Person: FLING, MATTHEW			Srvc Supervisor: LAVALLEY, LARRY			MBU ID Emp #: 419296	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BANUELOS, GUADALUPE	8.5	372277	HALE, ROBERT E	8.5	470588	LAVALLEY, LARRY P	8.5	419296
RAMOS, REFUGIO Castro	8.5	435413	REA, WADE Hammond	8.5	459536			

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10248053C	90 mile	10724567C	90 mile	10972458	90 mile	11142998	90 mile
11338223	90 mile	11362287C	90 mile	11398319	90 mile		

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
4/30/10	7	3	5/1/10	1.5	.5			

TOTAL Total is the sum of each column separately

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
Form Type			BHST	On Location	30 - Apr - 2010	17:00	MST
Job depth MD	7914. ft		Job Depth TVD	Job Started	30 - Apr - 2010	18:00	MST
Water Depth			Wk Ht Above Floor	Job Completed	30 - Apr - 2010	00:45	MST
Perforation Depth (MD)	From		To	Departed Loc	30 - Apr - 2010	01:30	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
Multiple Stage Cementer	New							1059.	7279.		
Open Hole				7.875				1087.	7914.		
Production casing	New		5.5	4.892	17.				7900.		

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	MUD FLUSH III	MUD FLUSH III - SBM (528788)	1,000.00	Gal	8.4	.0	42.0	4.0	
2	MUD FLUSH III	MUD FLUSH III - SBM (528788)	1,000.00	Gal	8.4	.0	42.0	4000.0	
3	Tail Cement 13.5#	FRACCEM (TM) SYSTEM (452963)	75.0	sacks	13.5	1.7	8.16	4.0	8.16
	8.162 Gal	FRESH WATER							
4	2nd Stage Lead 12.5#	ECONOCEM (TM) SYSTEM (452992)	720.0	sacks	12.5	1.95	10.62	6.0	10.62
	10.696 Gal	FRESH WATER							
5	2nd Stage Tail 13.5#	FRACCEM (TM) SYSTEM (452963)	105.0	sacks	13.5	1.7	8.16	6.0	8.16
	8.162 Gal	FRESH WATER							
6	Clayfix-3		110.00	bbl	8.33	.0	.0	.0	
	2.5 gal/Mgal	CLAYFIX 3, TOTETANK (101583425)							

Calculated Values		Pressures		Volumes			
Displacement	168	Shut In: Instant		Lost Returns	0	Cement Slurry	305
Top Of Cement		5 Min		Cement Returns	0	Actual Displacement	165
Frac Gradient		15 Min		Spacers	9	Load and Breakdown	
						Total Job	495

Rates

Circulating		Mixing	6	Displacement	6	Avg. Job	6
Cement Left In Pipe	Amount	16 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