

**NOBLE ENERGY INC E-BUSINESS  
DO NOT MAIL-100 GLENBOROUGH DR  
HOUSTON, Texas**

Coltrane PMJ 28-5

Ensign 715

## **Post Job Summary** **Squeeze Hole in Casing**

Prepared for:  
Date Prepared: 3/19/2013  
Version: 1

Service Supervisor: FANTASIA, JOSEPH

Submitted by: FINNEY, SEAN

**HALLIBURTON**

# HALLIBURTON

## ***Wellbore Geometry***

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Job Tubulars					MD	
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft
Casing	Surface Casing	8.63	8.097	24.00	0.00	330.00
Production Casing	4 1/2" Production Casing				0.00	538.00
Open Hole Section	13" Open Hole		13.000		330.00	538.00

# HALLIBURTON

## ***Pumping Schedule***

Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume	Downhole Volume
1	1	Cement Slurry	15.8# Cement	15.79	2.00	250.0 sacks	250.0 sacks

## ***Fluids Pumped***

**Stage/Plug # 1      Fluid 1:**    15.8# Cement  
                                 HALCEM (TM) SYSTEM

Fluid Weight:    15.79 lbm/gal  
Slurry Yield:     1.15 ft3/sack  
Total Mixing Fluid: 5.00 Gal  
Surface Volume: 250.0 sacks  
                     Sacks: 250.0 sacks  
                     Pump Rate: 2.00 bbl/min

# HALLIBURTON

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump		Pressure (psig)		Comments
11/02/2012 07:00		Arrive at Location from Service Center							
11/02/2012 07:15		Assessment Of Location Safety Meeting							
11/02/2012 08:45		Start Job							
11/02/2012 08:50		Test Lines							PRESSURE TEST LINES TO 2500 PSI
11/02/2012 08:58		Pump Spacer 1	2	3				789.0	PUMP 3 BBLS WATER SPACER
11/02/2012 09:06		Pump Cement	2	50				989.0	250 SKS HALCEM MIXED AT 15.8 PPG USING SUPPLIED WATER. CEMENT TO SURFACE AT 40 BBLS OUT OF 50 BBLS TOTAL.. APPROX 10 BBLS CEMENT TO SURFACE.
11/02/2012 09:28		Pump Displacement	2	1				850.0	DISPLACE 1 BBL WATER
11/02/2012 09:30		End Job							

## The Road to Excellence Starts with Safety

Sold To #: 345242	Ship To #: 2961553	Quote #:	Sales Order #: 9940425
Customer: NOBLE ENERGY INC E-BUSINESS	Customer Rep: Beam, Ryan		
Well Name: Coltrane	Well #: PMJ 28-5	API/UWI #: 05-123-13989	
Field: WATTENBERG	City (SAP): EVANS	County/Parish: Weld	State: Colorado
Lat: N 40.373 deg. OR N 40 deg. 22 min. 23.426 secs.	Long: W 104.792 deg. OR W -105 deg. 12 min. 29.502 secs.		
Contractor: Ensign	Rig/Platform Name/Num: Leed 715		
Job Purpose: Squeeze Hole in Casing			
Well Type: Development Well	Job Type: Squeeze Hole in Casing		
Sales Person: AARON, WESLEY	Srv Supervisor: FANTASIA, JOSEPH	MBU ID Emp #: 485445	

## Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
FANTASIA, JOSEPH Brandon	3.5	485445	HINKLE, BRADLEY Dean	3.5	512123	RICHEY, JESSICA L	3.5	525703
SMITH, AARON David	3.5	518187						

## Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10248062C	35 mile	11341988C	35 mile	12010169	35 mile		

## Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours

TOTAL	Total is the sum of each column separately							
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## Job

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	02 - Nov - 2012	07:00	MST
Form Type	BHST		Job Started	02 - Nov - 2012	08:50	MST
Job depth MD	538. ft	Job Depth TVD	Job Completed	02 - Nov - 2012	09:30	MST
Water Depth		Wk Ht Above Floor	Departed Loc	02 - Nov - 2012	10:30	MST
Perforation Depth (MD)	From	To				

## 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
13" Open Hole				13.				330.	538.		
4 1/2" Production Casing	Unknown							.	538.		
Surface Casing	Used		8.625	8.097	24.			.	330.	.	330.

## Fluid Data

Stage/Plug #: 1	Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
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**HALLIBURTON**

***Cementing Job Summary***

1	15.8# Cement	HALCEM (TM) SYSTEM (452986)	250.0	sacks	15.79	1.15	5.0	2.0	5.0
5 Gal		FRESH WATER							
<i>The Information Stated Herein Is Correct</i>				<i><b>Customer Representative Signature</b></i>					