

**ENCANA OIL & GAS (USA) INC. - EBUS  
DO NOT MAIL - 370 17TH ST STE 1700  
DENVER, Colorado**

Frederiksen 1A-28 H-A368

Ensign 135

## **Post Job Summary** **Cement Surface Casing**

Date Prepared: 3/11/2014  
Version: 1

Service Supervisor: NIELSON, BRANDON

Submitted by: ESTENSSORO, SEBASTIAN

**HALLIBURTON**

## ***Wellbore Geometry***

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Job Tubulars					MD		TVD		Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	Top ft	Bottom ft	
Casing	SURFACE CASING	9.63	8.921	36.00	0.00	841.00	0.00	841.00	42.00

# HALLIBURTON

## ***Pumping Schedule***

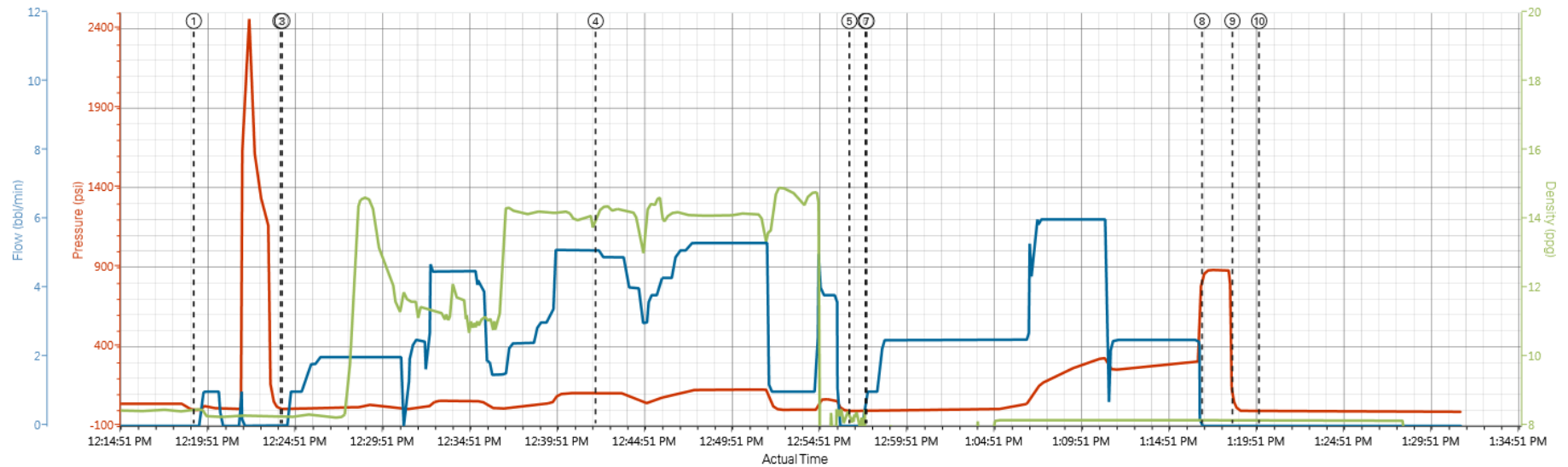
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Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume	Downhole Volume
1	1	Spacer	WATER SPACER	8.34	4.00	30.0 bbl	30.0 bbl
1	2	Cement Slurry	SWIFTCEM	14.20	5.00	290.0 sacks	290.0 sacks

# HALLIBURTON

## Data Acquisition

Halliburton Cement



PS Pump Press (psi) Comb Pump Rate (bbl/min) Recirc Density (ppg)

① Start Job 1;0;8.48 ③ Pump Spacer 1 5;0;8.27 ⑤ Shutdown -6;0;8 ⑦ Pump Displacement -1;1;6.99 ⑨ Other 32;0;8.16  
 ② Test Lines 6;0;8.3 ④ Pump Cement 99;5;14.19 ⑥ Drop Top Plug 0;1;7.02 ⑧ Bump Plug 865;0;8.17 ⑩ End Job -10;0;8.16

▲ HALLIBURTON | iCem® Service

Created: 2014-03-02 09:01:30, Version: 3.0.121

Edit

# HALLIBURTON

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump		Pressure (psig)	Comments
03/02/2014 03:45		Call Out						
03/02/2014 07:30		Crew Leave Yard						
03/02/2014 08:15		Arrive At Loc						
03/02/2014 08:25		Assessment Of Location Safety Meeting						RIG WAS JUST STARTING TO RUN CASING
03/02/2014 08:30		Rig-Up Equipment						
03/02/2014 09:15		Rig-Up Completed						
03/02/2014 10:45		Casing on Bottom						CASING CREW STARTED RIGGING DOWN.
03/02/2014 11:45		Safety Meeting						JSA WITH ALL INVOLVED PERSONAL
03/02/2014 12:19		Start Job						
03/02/2014 12:21		Test Lines						
03/02/2014 12:24		Pump Spacer 1	4	30			54.0	FRESH WATER
03/02/2014 12:36		Pump Cement	5	79.5			93.0	290 SKS SWIFTCEM MIXED @ 14.2 PPG WITH FRESH WATER
03/02/2014 12:56		Shutdown						
03/02/2014 12:57		Drop Top Plug						PLUG PRE LOADED WITNESSED BY COMPANY REP
03/02/2014 12:57		Pump Displacement	6	60.5			290.0	FRESH WATER. CEMENT RETURNED TO SURFACE 40 BBL INTO LEAVING US WITH 20 BBL BACK TO SURFACE.
03/02/2014 13:17		Bump Plug	2.5				315.0	CALCULATED PRESSURE TO LAND WAS 274 PSI
03/02/2014 13:19		Check Floats					882.0	FLOATS HELD
03/02/2014 13:20		End Job						

### The Road to Excellence Starts with Safety

<b>Sold To #:</b> 340078	<b>Ship To #:</b> 3117310	<b>Quote #:</b>	<b>Sales Order #:</b> 901161847
<b>Customer:</b> ENCANA OIL & GAS (USA) INC. - EBUS		<b>Customer Rep:</b> 135, Ensign	
<b>Well Name:</b> Frederiksen		<b>Well #:</b> 1A-28 H-A368	<b>API/UWI #:</b> 05-123-37663-00
<b>Field:</b>	<b>City (SAP):</b> LONGMONT	<b>County/Parish:</b> Weld	<b>State:</b> Colorado
<b>Contractor:</b> Ensign Drilling		<b>Rig/Platform Name/Num:</b> Ensign 135	
<b>Job Purpose:</b> Cement Surface Casing			
<b>Well Type:</b> Development Well		<b>Job Type:</b> Cement Surface Casing	
<b>Sales Person:</b> GREGORY, JON		<b>Srvc Supervisor:</b> NIELSON, BRANDON	<b>MBU ID Emp #:</b> 479703

### Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
HARRAH, THADDEUS Gregory	6.3	552592	NIELSON, BRANDON K	6.3	479703	ROMERO, JOSEPH M	6.3	512137

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
11398319	30 mile	11526488	30 mile	11667703C	30 mile	12010172	30 mile

### Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
<b>TOTAL</b>	<i>Total is the sum of each column separately</i>							

### Job

Formation Name					<b>Job Times</b>			
Formation Depth (MD)	Top	Bottom			Called Out	Date	Time	Time Zone
Form Type	BHST				On Location	02 - Mar - 2014	03:45	MST
Job depth MD	841. ft		Job Depth TVD	841. ft	Job Started	02 - Mar - 2014	08:15	MST
Water Depth			Wk Ht Above Floor	4. ft	Job Completed	02 - Mar - 2014	12:19	MST
Perforation Depth (MD)	From	To			Departed Loc	02 - Mar - 2014	13:20	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
SURFACE CASING	Unknown		9.625	8.921	36.		J-55	.	841.	.	841.

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
1	WATER SPACER		30.00	bbl	8.34			4.0	
2	SWIFTCEM	SWIFTCEM (TM) SYSTEM (452990)	290.0	sacks	14.2	1.54	7.66	5.0	7.66
7.66 Gal		FRESH WATER							
The Information Stated Herein Is Correct				Customer Representative Signature					

