

**ENSIGN UNITED STATES DRILLING EBUSI  
PO BOX 17805 - DO NOT MAIL  
DENVER, Colorado**

Phelps 12-32NHZ

Ensign 17

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 12/01/2013  
Version: 1

Service Supervisor: SMITH, AARON

Submitted by: TRIER, DEREK

**HALLIBURTON**

# HALLIBURTON

## Wellbore Geometry

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Job Tubulars					MD		Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	
Open Hole Section	Open Hole		13.500		0.00	1,200.00	
Casing	Surface Casing	9.63	8.921	36.00	0.00	1,198.00	43.00

# HALLIBURTON

## ***Pumping Schedule***

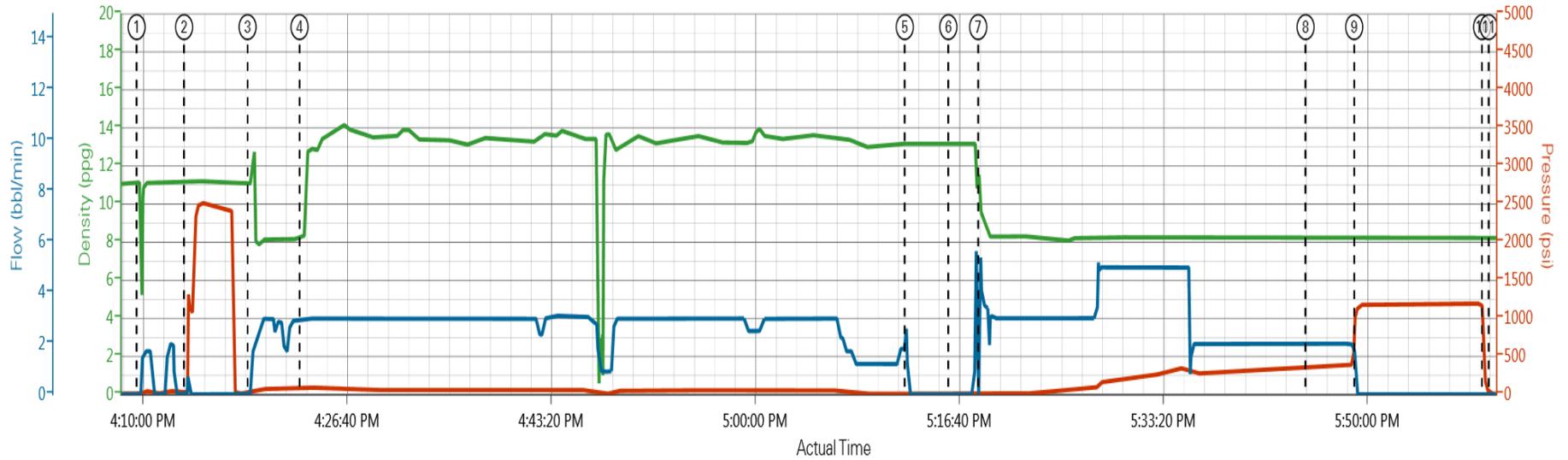
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<b>Stage /Plug #</b>	<b>Fluid #</b>	<b>Fluid Type</b>	<b>Fluid Name</b>	<b>Surface Density lbm/gal</b>	<b>Avg Rate bbl/min</b>	<b>Surface Volume</b>	<b>Downhole Volume</b>
1	1	Spacer	Fresh Water Spacer	8.33	5.00	10.0 bbl	10.0 bbl
1	2	Cement Slurry	SwiftCem B2	13.40	5.00	416.0 sacks	416.0 sacks
1	3	Spacer	Displacement	8.33	3.00	89.0 bbl	89.0 bbl

# HALLIBURTON

## Data Acquisition

### ENSING UNITED STATES DRILLING PHELPS 12-32NHZ SURFACE



DH Density (ppg) PS Pump Press (psi) Comb Pump Rate (bbbl/min)

- ① Start Job 11.13;9;0    ④ Pump Cement 8.2;78;2.9    ⑦ Pump Displacement 9.41;36;4.7    ⑩ Check Floats 8.19;235;0
- ② Test Lines 11.12;22;0    ⑤ Shutdown 13.2;23;0    ⑧ Other 8.15;359;2    ⑪ End Job 8.22;11;0
- ③ Pump Spacer 1 11.13;10;0    ⑥ Drop Top Plug 13.18;8;0    ⑨ Bump Plug 8.27;1135;0

▼ HALLIBURTON | iCem® Service

Created: 2013-11-30 14:55:21, Version: 2.0.606

Edit

Customer: ENSIGN UNITED STATES DRILLING  
Representative: AARON SMITH

Job Date: 11/30/2013 2:58:21 PM  
Sales Order #: 900937396

Well: PHELPS 12-32NHZ

# HALLIBURTON

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
11/30/2013 12:30		Arrive at Location from Service Center					WITH ALL EQUIPMENT AND MATERIALS,
11/30/2013 12:45		Assessment Of Location Safety Meeting					
11/30/2013 14:00		Pre-Rig Up Safety Meeting					RIG-UP JSA
11/30/2013 14:15		Rig-Up Equipment					
11/30/2013 14:15		Casing on Bottom					
11/30/2013 14:20		Circulate Well					
11/30/2013 14:30		Rig-Up Completed					
11/30/2013 15:09		Start Job					
11/30/2013 15:45		Pre-Job Safety Meeting					WITH CUSTOMER REP AND RIG CREW
11/30/2013 16:13		Test Lines					FRESH WATER WITH NO ADDITIVES
11/30/2013 16:18		Pump Spacer 1	5	10		85.0	FRESH WATER WITH NO ADDITIVES
11/30/2013 16:22		Pump Cement	5	132		52.0	416 SKS SWIFCEM B1 @ 13.4 PPG 1.79 YIELD, 9.51 GAL/SK
11/30/2013 17:12		Shutdown					
11/30/2013 17:17		Drop Top Plug					PRE-LOADED HWE TOP PLUG IN PLUG CONTAINER VERIFIED BY CUSTOMER REP
11/30/2013 17:18		Pump Displacement	3	89		390.0	FRESH WATER WITH NO ADDITIVES
11/30/2013 17:45		Cement Returns to Surface					@80 BBLS DISPLACEMENT, 9 BBLS TO THE PIT
11/30/2013 17:49		Bump Plug	3			1193.0	FINAL CIRCULATING PRESSURE 380, 338 PSI TO LAND, 512 PSI TO LIFT,
11/30/2013 17:59		Check Floats					FLOATS HELD, .5 BBLS BACK
11/30/2013 18:00		End Job					RIG DOWN JSA, JOURNEY MANAGMENT MEETING, THANKS AARON SMITH AND CREW

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 301256		<b>Ship To #:</b> 3117317		<b>Quote #:</b>		<b>Sales Order #:</b> 900937396	
<b>Customer:</b> ENSIGN UNITED STATES DRILLING EBUSI				<b>Customer Rep:</b> Weitzel, Craig			
<b>Well Name:</b> Phelps			<b>Well #:</b> 12-32NHZ		<b>API/UWI #:</b> 05-123-37685		
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> LOCHBUIE		<b>County/Parish:</b> Weld		<b>State:</b> Colorado	
<b>Lat:</b> N 40.01 deg. OR N 40 deg. 0 min. 36.158 secs.				<b>Long:</b> W 104.723 deg. OR W -105 deg. 16 min. 38.604 secs.			
<b>Contractor:</b> Ensign			<b>Rig/Platform Name/Num:</b> Ensign 17				
<b>Job Purpose:</b> Cement Surface Casing							
<b>Well Type:</b> Development Well				<b>Job Type:</b> Cement Surface Casing			
<b>Sales Person:</b> PLIENESS, RYAN			<b>Srvc Supervisor:</b> SMITH, AARON			<b>MBU ID Emp #:</b> 518187	

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DODSON, RICHARD Bryan	6.5	518192	SMITH, AARON David	6.5	518187	VIATOR, JASON R.	6.5	550394

**Equipment**

HES Unit #	Distance-1 way						
10025030	5 mile	11645063	5 mile	11812069C	5 mile	12010173	5 mile

**Job**

**Job Times**

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
					30 - Nov - 2013	09:00	MST
<b>Form Type</b>			<b>BHST</b>	<b>On Location</b>	30 - Nov - 2013	12:30	MST
<b>Job depth MD</b>	1200. ft		<b>Job Depth TVD</b>	1200. ft	<b>Job Started</b>	30 - Nov - 2013	16:09
<b>Water Depth</b>			<b>Wk Ht Above Floor</b>	3. ft	<b>Job Completed</b>	30 - Nov - 2013	18:00
<b>Perforation Depth (MD)</b>	<i>From</i>		<i>To</i>		<b>Departed Loc</b>	30 - Nov - 2013	19:00

**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
Open Hole				13.5				.	1200.		
Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1198.		

**Sales/Rental/3<sup>rd</sup> Party (HES)**

Description	Qty	Qty uom	Depth	Supplier
CMT CASING EQUIPMENT BOM	1	JOB		
BASKET - CEMENT - 9-5/8 CSG X 12-1/4	2	EA		
CENTRALIZER-9-5/8"-CSG-12 1/4"-HINGED	10	EA		
CLR,FLT,9-5/8 8RD 29.3-40PPF,2-3/4	1	EA		
SHOE,FLT,9-5/8 8RD,2-3/4 SUPER SEAL	1	EA		
Description	Qty	Qty uom	Depth	Supplier
KIT,HALL WELD-A	1	EA		
COLLAR-STOP-9 5/8"-FRICTION-HINGED	4	EA		
PLUG,CMTG,TOP,9 5/8,HWE,8.16 MIN/9.06 MA	1	EA		
MILEAGE FOR CEMENTING CREW,ZI	10	MI		
ZI FUEL SURCHG-CARS/PICKUPS<1 1/2TON	10	MI		

Fluid Data									
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	Fresh Water Spacer		10.0	bbl	8.33			5.0	
2	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)	416.0	sacks	13.4	1.79	9.51	5.0	9.51
	0.25 lbm	POLY-E-FLAKE (101216940)							
	9.51 Gal	FRESH WATER							
3	Displacement		89.0	bbl	8.33			3.0	
Calculated Values		Pressures		Volumes					
Displacement	89	Shut In: Instant		Lost Returns	0	Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns	9	Actual Displacement	89	Treatment	
Frac Gradient		15 Min		Spacers	10	Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe	Amount	43 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					

