

**ENSIGN UNITED STATES DRILLING  
PO BOX 17805  
DENVER, Colorado**

PHELPS 11-32CHZ

Ensign 17

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

Prepared for:  
Date Prepared:  
Version: 1

Service Supervisor: NIELSON, BRANDON

Submitted by: FINNEY, SEAN

**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		12.250		0.00	1,209.00	
Casing	Surface Casing	9.63	8.921	36.00	0.00	1,209.00	43.00

# HALLIBURTON

## ***Pumping Schedule***

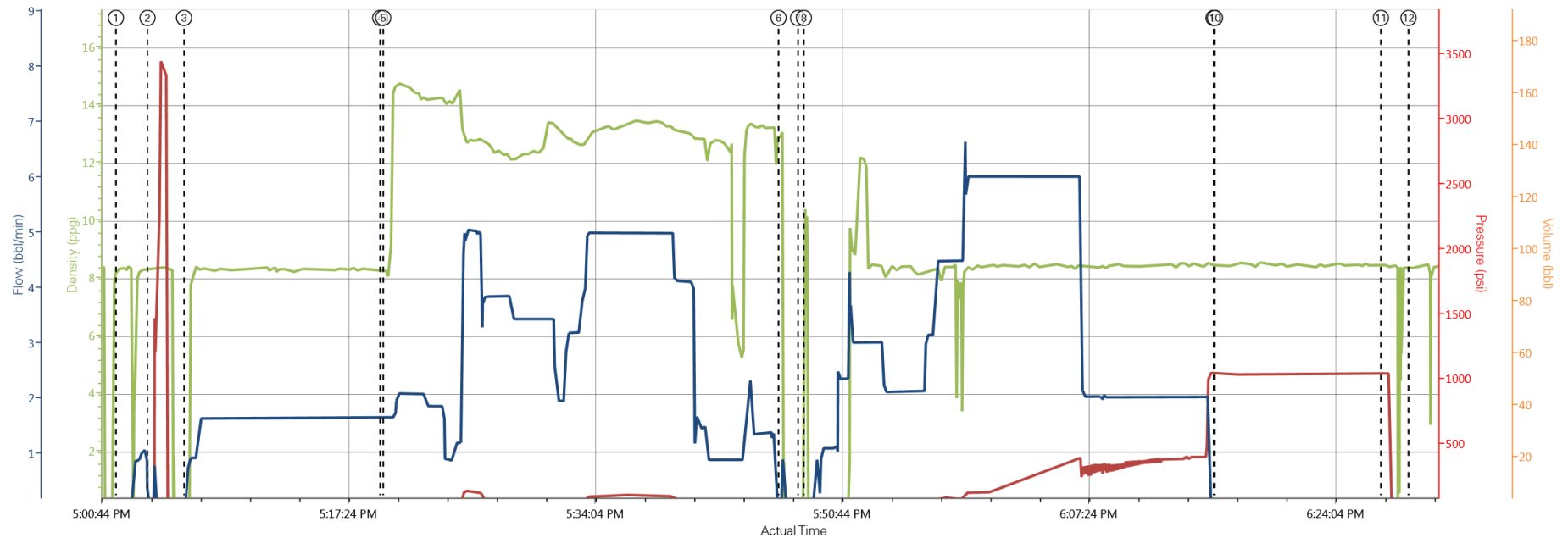
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Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume	Downhole Volume
1	1	Spacer	Fresh Water Spacer	8.33	1.50	20.0 bbl	20.0 bbl
1	2	Cement Slurry	SwiftCem B2	13.40	5.00	268.0 sacks	268.0 sacks
1	3	Spacer	Displacement	0.00	6.00	89.0 bbl	89.0 bbl

# HALLIBURTON

## Data Acquisition

ENSING PHELPS 11-32CHZ



① Start Job 8.3;0.98;0.0	④ Pump Spacer 2 8.26;44.95;0.1.7	⑦ Drop Top Plug -0.77;6.84;0.0	⑩ Bump Plug 8.46;1045.9;0.0
② Test Lines 8.39;20.52;0.0	⑤ Pump Cement 8.3;46.9;0.1.7	⑧ Pump Displacement 10.15;18.57;0.0	⑪ Other 8.49;1052.74;0.0
③ Pump Spacer 1 -0.58;6.84;0.0	⑥ Shutdown 13.02;3.91;0.0	⑨ Start Job 8.44;1044.92;0.0	⑫ End Job 8.33;50.22;0.0

▲ HALLIBURTON | iCem® Service

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Edit

# HALLIBURTON

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
02/08/2014 07:00		Call Out					
02/08/2014 11:45		Crew Leave Yard					
02/08/2014 12:00		Arrive At Loc					
02/08/2014 12:15		Assessment Of Location Safety Meeting					RIG WAS JUST STARTING TO RUN CASING
02/08/2014 15:30		Casing on Bottom					
02/08/2014 15:35		Rig-Up Equipment					
02/08/2014 16:00		Rig-Up Completed					
02/08/2014 16:30		Safety Meeting					
02/08/2014 17:01		Start Job					
02/08/2014 17:04		Test Lines					TESTE LINES TO 2500 PSI NO VISIBLE LEAKS
02/08/2014 17:06		Pump Spacer 1	1.5	20		45.0	DYE WATER
02/08/2014 17:19		Pump Cement	5	85.4		116.0	268 SKS VARICEM MIXED @ 13.4 PPG WITH FRESH WATER
02/08/2014 17:46		Drop Top Plug					PLUG PRE LOADED WITNESSED BY TOOL PUSHER
02/08/2014 17:46		Shutdown					
02/08/2014 17:48		Pump Displacement	6	89.5		327.0	FRESH WATER. CEMENT RETURNED TO SURFACE 77 BBL INTO LEAVING US WITH 12.5 BACK
02/08/2014 18:16		Bump Plug	3			500.0	CALCULATED PRESSURE TO LAND WAS 333 PSI. BUMPED PLUG AND HELD FOR 10 MINUTES
02/08/2014 18:26		Check Floats					FLOATS HELD
02/08/2014 18:30		End Job					

### The Road to Excellence Starts with Safety

<b>Sold To #:</b> 301256		<b>Ship To #:</b> 3117316		<b>Quote #:</b>		<b>Sales Order #:</b> 901101281	
<b>Customer:</b> ENSIGN UNITED STATES DRILLING				<b>Customer Rep:</b> Gentry, Ron			
<b>Well Name:</b> PHELPS		<b>Well #:</b> 11-32CHZ		<b>API/UWI #:</b> 05-123-37684			
<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 secs.				<b>Long:</b> W 104.792 deg. OR W -105 deg. 12 min. 28.8 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> GREGORY, JON		<b>Srvc Supervisor:</b> NIELSON, BRANDON			<b>MBU ID Emp #:</b> 479703		
<b>Job Personnel</b>							
<b>HES Emp Name</b>	<b>Exp Hrs</b>	<b>Emp #</b>	<b>HES Emp Name</b>	<b>Exp Hrs</b>	<b>Emp #</b>	<b>HES Emp Name</b>	<b>Exp Hrs</b>
BARNES, BRIAN L	9.0	485204	DA COSTA, CHARLES Angelo	9.0	551308	NIELSON, BRANDON K	9.0
<b>Equipment</b>							
<b>HES Unit #</b>	<b>Distance-1 way</b>	<b>HES Unit #</b>	<b>Distance-1 way</b>	<b>HES Unit #</b>	<b>Distance-1 way</b>	<b>HES Unit #</b>	<b>Distance-1 way</b>
10824253C	5 mile	11748359	5 mile	11923776C	5 mile	12010172	5 mile
<b>Job Hours</b>							
<b>Date</b>	<b>On Location Hours</b>	<b>Operating Hours</b>	<b>Date</b>	<b>On Location Hours</b>	<b>Operating Hours</b>	<b>Date</b>	<b>On Location Hours</b>
<b>TOTAL</b>			<i>Total is the sum of each column separately</i>				
<b>Job</b>				<b>Job Times</b>			
<b>Formation Name</b>				<b>Date</b>			
<b>Formation Depth (MD)</b> <b>Top</b>				<b>Time</b>			
<b>Bottom</b>				<b>Time Zone</b>			
<b>Form Type</b>				<b>Called Out</b>			
<b>Job depth MD</b>				<b>On Location</b>			
<b>Water Depth</b>				<b>Job Started</b>			
<b>Perforation Depth (MD)</b> <b>From</b>				<b>Job Completed</b>			
<b>To</b>				<b>Departed Loc</b>			
<b>Well Data</b>							
<b>Description</b>	<b>New / Used</b>	<b>Max pressure psig</b>	<b>Size in</b>	<b>ID in</b>	<b>Weight lbm/ft</b>	<b>Thread</b>	<b>Grade</b>
Open Hole				12.25			
Surface Casing	Unknown		9.625	8.921	36.		J-55
<b>Fluid Data</b>							
<b>Stage/Plug #: 1</b>							
<b>Fluid #</b>	<b>Stage Type</b>	<b>Fluid Name</b>	<b>Qty</b>	<b>Qty uom</b>	<b>Mixing Density lbm/gal</b>	<b>Yield ft3/sk</b>	<b>Mix Fluid Gal/sk</b>
							<b>Rate bbl/min</b>
							<b>Total Mix Fluid Gal/sk</b>

1	Fresh Water Spacer		20.00	bbl	8.33			1.5	
2	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)	268.0	sacks	13.4	1.79	9.51	5.0	9.51
9.51 Gal		FRESH WATER							
3	Displacement		89.00	bbl	8.33			6.0	
<b>Calculated Values</b>		<b>Pressures</b>		<b>Volumes</b>					
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns		12.5	Actual Displacement	89.5	Treatment
Frac Gradient		15 Min		Spacers		20	Load and Breakdown		Total Job
<b>Rates</b>									
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					

