

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

Phelps
Phelps A-32NHZ

Ensign/ Ensign/17

Post Job Summary
Cement Surface Casing

Date Prepared: 04/07/2014
Version: 1

Service Supervisor: PICKELL, CHRISTOPHER

Submitted by: MCKAY, ADAM

HALLIBURTON

Wellbore Geometry

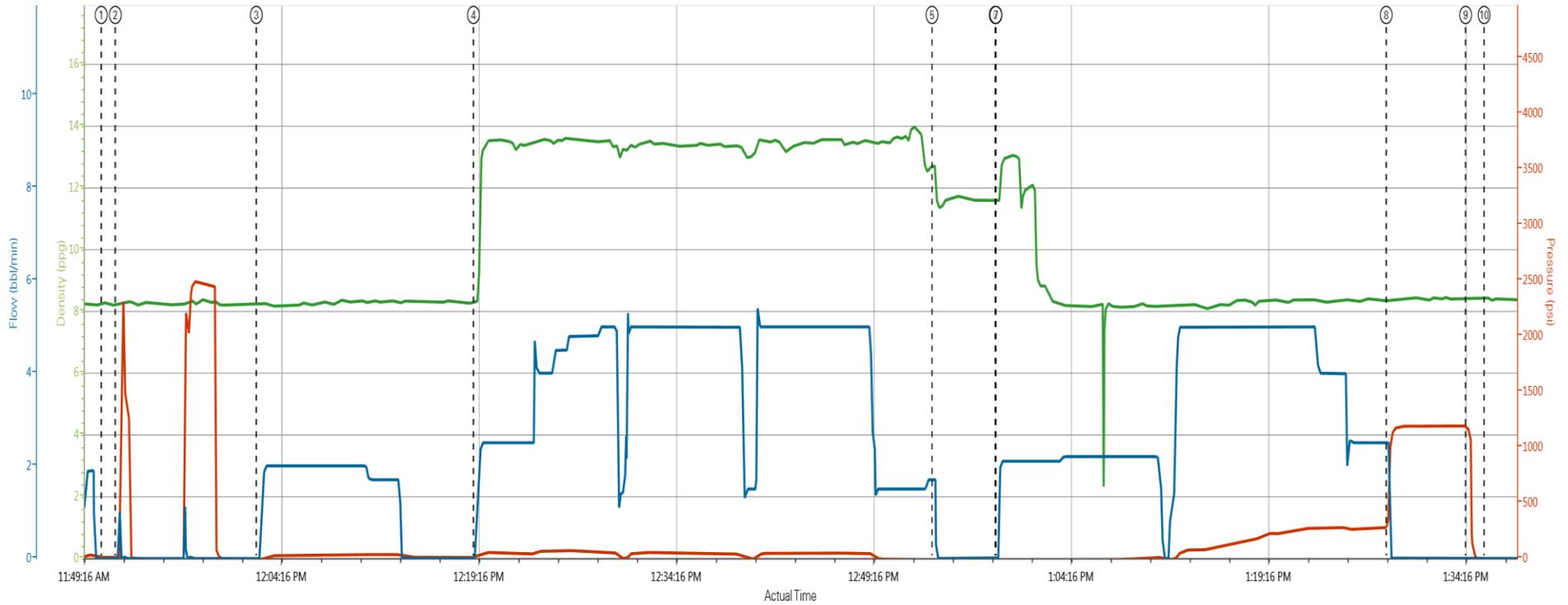
Job Tubulars					MD		Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	
Open Hole Section	Open Hole		13.500		0.00	1,215.00	
Casing	Surface Casing	9.63	8.921	36.00	0.00	1,208.00	43.00

Pumping Schedule

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	2.00	30.0 bbl	30.0 bbl
1	2	Cement Slurry	SwiftCem B2	13.40	5.00	430 sks	430 sks
1	3	Spacer	Displacement	8.33	5.00	91.6 bbls	91.6 bbls

Data Acquisition

PHELPS A-32NHZ (9 5/8" SURFACE)



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

- ① Start Job 8:31;10,0 ④ Pump Swiftcem 13.4# 8:31;9,0 ⑦ Pump Displacement 11.62;-18,0 ⑩ End Job 8:46;-21,0
- ② Test Lines 8:26;8,0 ⑤ Shutdown 12:66;-8,1.7 ⑧ Bump Plug 8:37;415;2,5
- ③ Pump Water 8:26;-8,0 ⑥ Drop Top Plug 11:58;-18,0 ⑨ Check Floats 8:38;1180,0

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Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
12/22/2013 05:30		Call Out					CREW CALLED OUT AT 0530 TO BE ON LOCATION AT 0930. CREW WAS CHRIS PICKELL, ROY NESBITT, WILLIAM JEWELL, JOSEPH SCILLEPI
12/22/2013 09:00		Depart from Service Center or Other Site					SAFETY MEETING HELD FOR JOURNEY THEN LEFT THE YARD FOR ENSIGN 17
12/22/2013 09:30		Arrive At Loc					ARRIVE AT LOCATION WITH RIG HAVING 1 JOINT LEFT
12/22/2013 09:45		Rig-Up Equipment					HAZARD HUNT PERFORMED. WATER TEST DONE. RIG UP PLANNED AND EXECUTED
12/22/2013 11:10		Pre-Job Safety Meeting					SAFETY MEETING WITH ALL PERSONEL ON LOCATION TO DISCUSS JOB SAFETY AND PROCEDURE
12/22/2013 11:50		Start Job					50 SKS OF PREMIUM G BROUGHT TO LOCATION FOR TOP OUT BUT DID NOT NEED TO TOP OUT
12/22/2013 11:51		Test Lines	1	2		2500.0	PRESSURE TEST LINES TO 2500 PSI. CHECK FOR VISIBLE LEAKS AND PRESSURE LOSS
12/22/2013 12:02		Pump Spacer 1	2	30		60.0	PUMP WATER. RETURNS WITH 1 BBL AWAY
12/22/2013 12:19		Pump Cement	5	137		50.0	PUMP SWIFCEM CEMENT 430 SKS 13.4 PPG 1.79 CUFT/SK 9.51 GAL/SK
12/22/2013 12:53		Shutdown					WASH PUMPS AND LINES ON TOP OF THE PLUG
12/22/2013 12:58		Drop Top Plug					PLUG PRELOADED. WITNESSED BY COMPANY MAN
12/22/2013 12:58		Pump Displacement	5	91.6		450.0	PUMP DISPLACEMENT USING WATER
12/22/2013 13:28		Bump Plug	2.5			415.0	CALCULATED PRESSURE TO LAND WAS 307. PLUG LANDED WITH 415 PSI GOING 500 OVER TO 1015
12/22/2013 13:34		Check Floats				1180.0	PRESSURE WAS HELD FOR 5 MINUTES THEN RELEASED. FLOATS HELD. 1 BBL BACK TO TANKS
12/22/2013 13:35		End Job					30 BBL OF CEMENT TO SURFACE
12/22/2013 13:40		Pre-Rig Down Safety Meeting					SAFETY MEETING HELD TO DISCUSS RIG DOWN SAFETY AND PROCEDURE
12/22/2013 13:45		Rig-Down Equipment					RIG DOWN ALL EQUIPMENT
12/22/2013 14:30		Depart Location for Service Center or Other Site					LEAVE LOCATION FOR THE YARD

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The Road to Excellence Starts with Safety

Sold To #: 301256		Ship To #: 3274106		Quote #:		Sales Order #: 900988785	
Customer: ENSIGN UNITED STATES DRILLING EBUSI				Customer Rep: Martinez, Mike			
Well Name: Phelps			Well #: A-32NHZ		API/UWI #: 05-123-37872		
Field: WATTENBERG		City (SAP): FORT LUPTON		County/Parish: Weld		State: Colorado	
Contractor: Ensign			Rig/Platform Name/Num: Ensign 17				
Job Purpose: Cement Surface Casing							
Well Type: Development Well				Job Type: Cement Surface Casing			
Sales Person: PLIENESS, RYAN			Srvc Supervisor: PICKELL, CHRISTOPHER			MBU ID Emp #: 396838	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
JEWELL, WILLIAM Uris	0.0	503358	NESBITT, ROY Iverson	0.0	537416	PICKELL, CHRISTOPHER Lee	0.0	396838
SCILEPPI, JOSEPH D	0.0	555492						

Equipment

HES Unit #	Distance-1 way						
10994445	4 mile	11036295C	4 mile	11410470C	4 mile	11410662	4 mile
11605597	4 mile						

Job Hours

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

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
					22 - Dec - 2013	05:30	MST
Form Type			BHST	On Location	22 - Dec - 2013	09:30	MST
Job depth MD	1215. ft		Job Depth TVD	Job Started	22 - Dec - 2013	11:50	MST
Water Depth			Wk Ht Above Floor	Job Completed	22 - Dec - 2013	13:35	MST
Perforation Depth (MD)	From		To	Departed Loc	22 - Dec - 2013	14:30	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
Open Hole				13.5				.	1215.		
Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1208.		

Sales/Rental/3rd 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		

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MILEAGE FOR CEMENTING CREW,ZI	10	MI		
ZI FUEL SURCHG-CARS/PICKUPS<1 1/2TON	10	MI		

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 ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water Spacer		30.00	bbl	8.33			2	
2	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)	430	sacks	13.4	1.79	9.51	5	9.51
	0.25 lbm	POLY-E-FLAKE (101216940)							
	9.51 Gal	FRESH WATER							
3	Displacement	Water	91.6	bbl	8.33			5	

Calculated Values

Pressures

Volumes

Displacement	91.6	Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns		Actual Displacement	91.6	Treatment	
Frac Gradient		15 Min		Spacers		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
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