

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

PHELPS 11-32CHZ

Ensign 17

Post Job Summary **Cement Intermediate Casing**

Date Prepared: 3/13/2014
Version: 1

Service Supervisor: NIELSON, BRANDON

Submitted by: TRIER, DEREK

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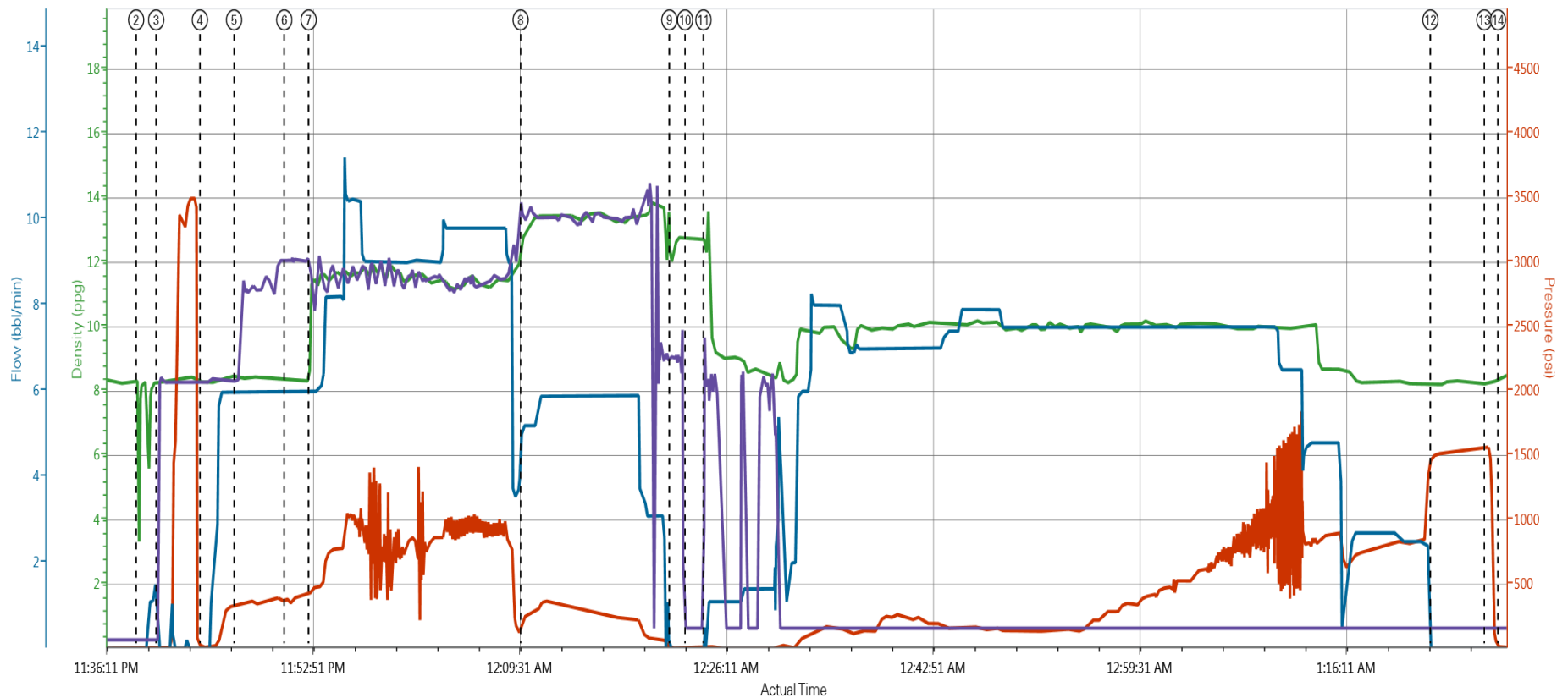
Pumping Schedule

Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume	Downhole Volume
1	1	Spacer	Mud Flush III	8.40	6.00	24.0 bbl	24.0 bbl
1	2	Cement Slurry	ExtendaCem B1	11.50	8.5	355.0 sacks	355.0 sacks
1	3	Cement Slurry	FracCem B2	13.50	6.0	185.0 sacks	185.0 sacks

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Data Acquisition

ENSIGN PHELPS 11-32CHZ



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

① Shutdown 8.34;4;0;0.28 ④ Pump Spacer 1 8.28;14;0;8.31 ⑦ Pump Lead Cement 11.32;452;6;11.63 ⑩ Drop Top Plug 12.76;4;0;0.64 ⑬ Other 8.25;1573;0;0.64
 ② Start Job 8.34;3;0;0.28 ⑤ Pump Spacer 2 8.47;348;6;8.31 ⑧ Pump Tail Cement 12.77;216;5.2;13.38 ⑪ Pump Displacement 12.41;7;0.5;8.22 ⑭ End Job 8.41;9;0;0.64
 ③ Test Lines 8.27;12;0;0.28 ⑥ Pump Spacer 1 8.36;387;6;12.08 ⑨ Shutdown 12.03;8;0;9.01 ⑫ Bump Plug 8.25;1495;0;0.64

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Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
02/17/2014 12:00		Call Out					call crew headed to yard from another job
02/17/2014 17:00		Arrive At Loc					
02/17/2014 21:15		Casing on Bottom					
02/17/2014 21:30		Rig-Up Equipment					
02/17/2014 22:30		Rig-Up Completed					
02/17/2014 23:00		Safety Meeting					
02/17/2014 23:40		Start Job					
02/17/2014 23:41		Test Lines	1	1			test lines with H2O to 2500psi
02/17/2014 23:44		Pump Spacer 1	6	24		320.0	pump 20bbl H2O spacer
02/17/2014 23:46		Pump Spacer 2	6	10		350.0	mix and pump 24bbl of mudflush III spacer AND 10 bbl h2o
02/17/2014 23:55		Pump Lead Cement	8.5	146		863.0	mix and pump 355sks @ 11.5#/gal
02/18/2014 00:09		Pump Tail Cement	6	58		376.0	mix and pump 185sks @ 13.5#/gal
02/18/2014 00:21		Shutdown					
02/18/2014 00:23		Drop Top Plug					
02/18/2014 00:24		Pump Displacement	7.5	305		534.0	pump 10bbl H2O, followed by 285bbl of 10.1#/gal mud, followed by 10bbl H2O totaling 305 bbl
02/18/2014 01:22		Bump Plug	2.5			850.0	bump plug 500 psi over final lift pressure
02/18/2014 01:27		Check Floats				1570.0	floats held with 2 bbl back to the truck
02/18/2014 01:28		End Job					

The Road to Excellence Starts with Safety

Sold To #: 301256		Ship To #: 3117316		Quote #:		Sales Order #: 901126301	
Customer: ENSIGN UNITED STATES DRILLING EBUSI				Customer Rep: 17, Ensign			
Well Name: PHELPS			Well #: 11-32CHZ		API/UWI #: 05-123-37684		
Field: WATTENBERG		City (SAP): LOCHBUIE		County/Parish: Weld		State: Colorado	
Lat: N 40.01 deg. OR N 40 deg. 0 min. 36 secs.				Long: W 104.792 deg. OR W -105 deg. 12 min. 28.8 secs.			
Contractor: Ensign Drilling			Rig/Platform Name/Num: Ensign 17				
Job Purpose: Cement Intermediate Casing							
Well Type: Development Well			Job Type: Cement Intermediate Casing				
Sales Person: MANLEY, TREVOR			Srvc Supervisor: NIELSON, BRANDON			MBU ID Emp #: 479703	
Job Personnel							
HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs
BARNES, BRIAN L	9.5	485204	BEYER, BEAU Jon	9.5	560301	GIBBS, JASON	9.5
NIELSON, BRANDON K	9.5	479703					
Equipment							
HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10857080C	4 mile	11036295C	4 mile	11542778	4 mile	11633848	4 mile
12010172	4 mile						
Job				Job Times			
Formation Name				Date		Time	
Formation Depth (MD)		Top		Bottom		Time Zone	
Form Type		BHST		On Location		17 - Feb - 2014	
Job depth MD		6500. ft		Job Started		17:00	
Water Depth		Wk Ht Above Floor		Job Completed		17:00	
Perforation Depth (MD)		From		To		18 - Feb - 2014	
				Departed Loc		01:28	
						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
Sales/Rental/3 rd Party (HES)							
Description				Qty	Qty uom	Depth	Supplier
SHOE,FLT,7 8RD,2-3/4 SS II VLV				1	EA		
CLR,FLT,7 8RD 17-26PPF,2-3/4SSII				1	EA		
CTRZR ASSY,API,7 CSG X 8 3/4HOLE,HNGD				20	EA		
CENTRALISER SLIDER II,#0700-0834S				10	EA		
CLAMP - LIMIT - 7 - HINGED -				1	EA		
KIT,HALL WELD-A				1	EA		
Description				Qty	Qty uom	Depth	Supplier
PLUG,CMTG,TOP,7,HWE,5.66 MIN/6.54 MAX CS				1	EA		
PLUG,CMTG,BOT,7,HWE,5.66 MIN/6.54 MAX CS				1	EA		
Fluid Data							
Stage/Plug #: 1							

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Mud Flush III	MUD FLUSH III - SBM (528788)	24.00	bbl	8.4			6.0	
2	ExtendaCem B1	EXTENDACEM (TM) SYSTEM (452981)	355.0	sacks	11.5	2.31	12.99	8.5	12.99
	12.99 Gal	FRESH WATER							
3	FracCem B2	FRACCEN (TM) SYSTEM (452963)	185.0	sacks	13.5	1.75	8.32	6.0	8.32
	0.05 %	SA-1015, 50 LB SACK (102077046)							
	8.32 Gal	FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns		Actual Displacement	305	Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement	7.5	Avg. Job			
Cement Left In Pipe	Amount	0 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID		Frac ring # 2 @	ID		Frac Ring # 3 @	ID		Frac Ring # 4 @
The Information Stated Herein Is Correct				Customer Representative Signature					

