

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

PHELPS 12-32CHZ

Ensign 17

Post Job Summary **Cement Surface Casing**

Date Prepared: 3/23/2014
Version: 1

Service Supervisor: OTERI, VAUGHN

Submitted by: TRIER, DEREK

HALLIBURTON

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Wellbore Geometry

Job Tubulars					MD	
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft
Open Hole Section	OPEN HOLE		12.250		0.00	1,210.00
Casing	SURFACE CASING	9.63	8.921	36.00	0.00	1,208.00

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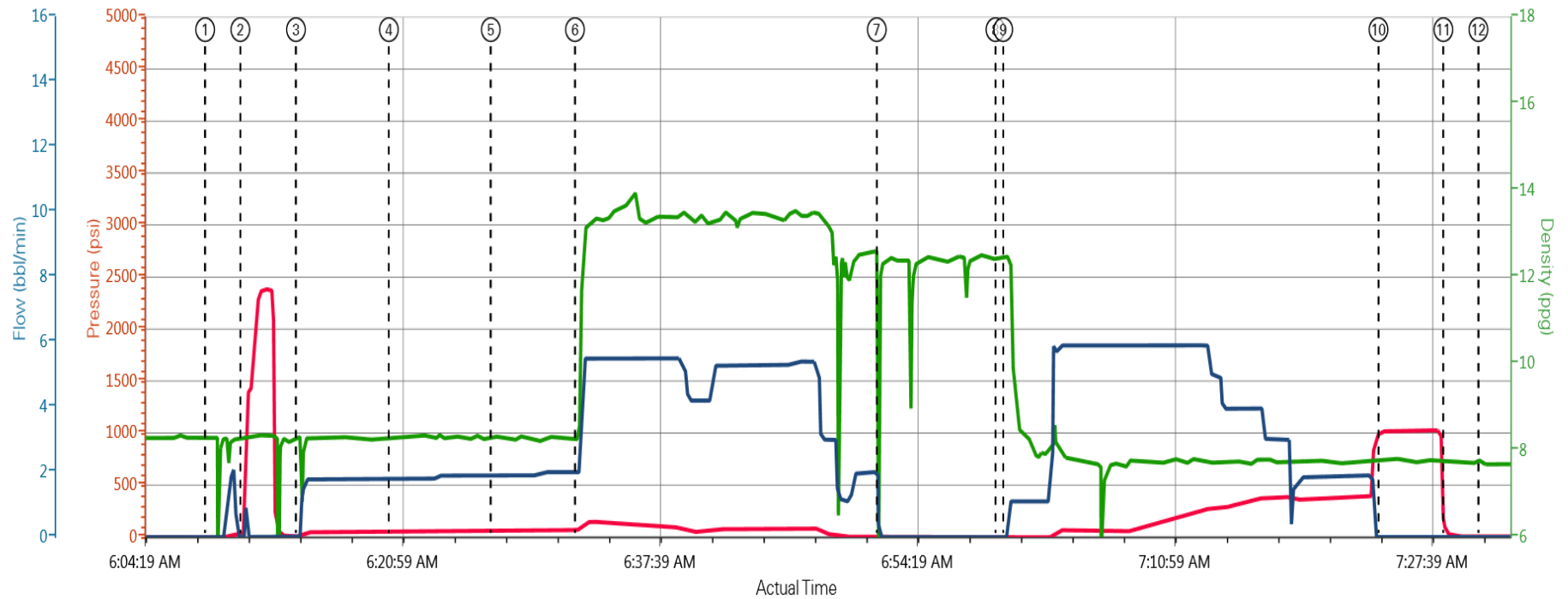
Pumping Schedule

Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume	Downhole Volume
1	1	Spacer	Fresh Water Spacer	8.33	2.00	10.0 bbl	10.0 bbl
1	2	Spacer	Mud Flush III	8.4	2.00	12.0 bbl	12.0 bbl
1	1	Spacer	Fresh Water Spacer	8.33	2.00	10.0 bbl	10.0 bbl
1	3	Cement Slurry	SwiftCem B2	13.40	5.50	280.0 sacks	280.0 sacks

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Data Acquisition

SYNERGY PHELPS 12-32CHZ SURFACE



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

- | | | | |
|--------------------------|------------------------------|------------------------------|-------------------------|
| ① Start Job 2;8.3;0 | ④ Pump Spacer 2 45;8.31;1.8 | ⑦ Shutdown 5;11.72;0 | ⑩ Bump Plug 1014;7.78;0 |
| ② Test Lines 41;8.33;0 | ⑤ Pump Spacer 1 58;8.33;1.9 | ⑧ Drop Top Plug 3;12.48;0 | ⑪ Other 49;7.73;0 |
| ③ Pump Spacer 1 6;8.33;0 | ⑥ Pump Lead Cement 71;8.24;2 | ⑨ Pump Displacement 3;12.5;0 | ⑫ End Job 6;7.74;0 |

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Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
03/03/2014 18:21		Call Out					CALL OUT FROM ARS OFFICE
03/03/2014 22:30		Arrive at Location from Service Center					MET WITH COMPANY REP ADVISED THAT THEY WERE STILL DRILLING DISCUSSED JOB PROCESS AND CONCERNS
03/04/2014 04:00		Casing on Bottom					ADVISED BY RIG CREW THAT CASING WAS ON BOTTOM AND WAS SAFE TO RIG UP
03/04/2014 06:05		Start Job					HELD SAFTY MEETING IN DOG HOUSE WITH ALL HANDS ON LOCATION TO DISCUSS JOB PROCESS AND HAZARDS
03/04/2014 06:07		Test Lines				2255.0	PRESSURE TESTED PUMPS AND LINES FOUND NO LEAKS AND PRESSURE HELD GOOD
03/04/2014 06:10		Pump Spacer 1	2	10		43.0	PUMPED 10BBL OF FRESH WATER
03/04/2014 06:16		Pump Spacer 2	2	12		45.0	MIXED 12BBL OF MUD FLUSH
03/04/2014 06:23		Pump Spacer 1	2	10		50.0	PUMPED FRESH WATER WITH TRACER DYE
03/04/2014 06:28		Pump Cement	5.5	89		146.0	MIXED 13.4PPG SWIFTCM WITH FRESH WATER
03/04/2014 06:48		Shutdown					
03/04/2014 06:56		Drop Top Plug					RELEASED PLUG WITNESSED BY COMPANY REP
03/04/2014 06:56		Pump Displacement	6	90		220.0	PUMPED FRESH WATER TO DISPLACE CEMENT
03/04/2014 07:21		Bump Plug	2			392.0	BUMP PLUG 500PSI OVER FINAL PUMP PRESSURE
03/04/2014 07:25		Check Floats		1		1020.0	RELEASED PRESSURE BACK TO PUMP TRUCK TO CHECK FLOATS, FLOATS HELD GOOD
03/04/2014 07:27		End Job					

The Road to Excellence Starts with Safety

Sold To #: 301256	Ship To #: 3117315	Quote #:	Sales Order #: 901164628
Customer: ENSIGN UNITED STATES DRILLING EBUSI		Customer Rep: Weitzel, Craig	
Well Name: PHELPS		Well #: 12-32CHZ	API/UWI #: 05-123-37683
Field: WATTENBERG	City (SAP): LOCHBUIE	County/Parish: Weld	State: Colorado
Lat: N 40.01 deg. OR N 40 deg. 0 min. 36.205 secs.		Long: W 104.793 deg. OR W -105 deg. 12 min. 26.885 secs.	
Contractor: Ensign Drilling		Rig/Platform Name/Num: Ensign 17	
Job Purpose: Cement Surface Casing			
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: MANLEY, TREVOR		Srvc Supervisor: OTERI, VAUGHN	MBU ID Emp #: 443828

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DEY, JERRY A	10.0	505015	MULLER, MICHEL B	10.0	529830	OTERI, VAUGHN Steeves	10.0	443828

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10829457	5 mile	11064535	5 mile	11362287C	5 mile		

Job

Job Times

Formation Name				Date	Time	Time Zone
Formation Depth (MD)	Top	Bottom		Called Out	03 - Mar - 2014	18:21 MST
Form Type	BHST			On Location	03 - Mar - 2014	22:30 MST
Job depth MD	1208. ft	Job Depth TVD	1208. ft	Job Started	04 - Mar - 2014	06:05 MST
Water Depth		Wk Ht Above Floor	4. ft	Job Completed	04 - Mar - 2014	07:27 MST
Perforation Depth (MD)	From	To		Departed Loc	04 - Mar - 2014	08:30 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				12.25				.	1210.		
SURFACE CASING	Unknown		9.625	8.921	36.		J-55	.	1208.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
CMT SURFACE CASING BOM	1	JOB		
CLR,FLT,9-5/8 8RD 29.3-40PPF,2-3/4	1	EA		
SHOE,GID,9-5/8 8RD	1	EA		
KIT,HALL WELD-A	1	EA		
COLLAR-STOP-9 5/8"-FRICTION-HINGED	4	EA		
Description	Qty	Qty uom	Depth	Supplier
PLUG,CMTG,TOP,9 5/8,HWE,8.16 MIN/9.06 MA	1	EA		
MILEAGE FOR CEMENTING CREW,ZI	20	MI		
BASKET - CEMENT - 9-5/8 CSG X 12-1/4	2	EA		
ZI FUEL SURCHG-CARS/PICKUPS<1 1/2TON	20	MI		

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	Fresh Water Spacer		10.00	bbl	8.33			2.0	
2	Spacer	Mud Flush III	12.0	Bbl	8.4			2.0	
1	Fresh Water Spacer		10.00	bbl	8.33			2.0	
3	SwiftCem B2	SWIFTCem (TM) SYSTEM (452990)	280.0	sacks	13.4	1.79	9.51	5.5	9.51
9.51 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	90.0	Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement	6.0	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 @	ID		
The Information Stated Herein Is Correct				Customer Representative Signature					

