

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

SRC Leffler P-23NHZ

Ensign 17

Post Job Summary **Cement Intermediate Casing**

Date Prepared: 1/14/2014
Version: 1

Service Supervisor: MCBRIDE, NATHAN

Submitted by: TRIER, DEREK

HALLIBURTON

HALLIBURTON

Wellbore Geometry

Job Tubulars					MD	
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft
Open Hole Section	Open Hole		8.750		600.00	7,910.00
Casing	Surface Casing	9.63	8.921	36.00	0.00	582.00
Casing	7" INTERMEDIATE	7.00	6.276	26.00	0.00	7,910.00

HALLIBURTON

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	5.00	20.0 bbl	20.0 bbl
1	2	Spacer	Fresh Water Spacer	8.33	5.00	10.0 bbl	10.0 bbl
1	3	Cement Slurry	Lead Cement	11.50	6.00	375.0 sacks	375.0 sacks
1	4	Cement Slurry	Tail Cement	13.50	6.00	170.0 sacks	170.0 sacks

HALLIBURTON

Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump		Pressure (psig)	Comments
08/14/2013 20:00		Arrive at Location from Service Center						All equipment and materials on location Rig Running Casing
08/14/2013 20:05		Assessment Of Location Safety Meeting						Hazard Hunt and review fluid location, wash up and truck layout
08/14/2013 20:10		Pre-Rig Up Safety Meeting						
08/15/2013 01:40		Casing on Bottom						
08/15/2013 01:45		Circulate Well						
08/15/2013 01:55		Rig-Up Equipment						
08/15/2013 02:40		Rig-Up Completed						
08/15/2013 03:00		Pre-Job Safety Meeting						
08/15/2013 03:26		Start Job						
08/15/2013 03:26		Drop Bottom Plug						
08/15/2013 03:27		Pump Water	2	2			180.0	Fill Lines
08/15/2013 03:31		Test Lines					3375.0	
08/15/2013 03:38		Pump Spacer	5	20			420.0	Mud Flush
08/15/2013 03:44		Pump Lead Cement	6	153.6			470.0	375sks @ 11.5ppg, 2.3yield, 12.99gal/sk
08/15/2013 04:12		Pump Tail Cement	6	52.7			152.0	170sks @ 13.5ppg, 1.74yield, 8.3gal/sk
08/15/2013 04:23		Shutdown						
08/15/2013 04:26		Drop Top Plug						
08/15/2013 04:27		Pump Displacement	5	20			55.0	Fresh Water
08/15/2013 04:35		Pump Displacement	5.8	260			527.0	Mud
08/15/2013 05:17		Pump Displacement	2	20.2			657.0	Fresh Water
08/15/2013 05:25		Bump Plug					1397.0	500psi Over
08/15/2013 05:42		Check Floats						Floats Good
08/15/2013 05:45		End Job						Thanks McBride and Crew

The Road to Excellence Starts with Safety

Sold To #: 301256	Ship To #: 3014860	Quote #:	Sales Order #: 900665480
Customer: ENSIGN UNITED STATES DRILLING EBUSI		Customer Rep: Gentry, Ron	
Well Name: SRC Leffler		Well #: P-23NHZ	API/UWI #:
Field: EATON	City (SAP): EATON	County/Parish: Weld	State: Colorado
Contractor: Ensign		Rig/Platform Name/Num: Ensign 17	
Job Purpose: Cement Intermediate Casing			
Well Type: Development Well		Job Type: Cement Intermediate Casing	
Sales Person: FLING, MATTHEW	Srvc Supervisor: MCBRIDE, NATHAN		MBU ID Emp #: 313810

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
MARKOVICH, STEVEN Michael	11.3	502964	MCBRIDE, NATHAN Charles	11.3	313810			

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10025030	70 mile	10867419C	70 mile	11362287C	70 mile	11526488	70 mile
11645063	70 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
TOTAL			Total is the sum of each column separately					

Job

Job Times

Formation Name								
Formation Depth (MD)	Top	Bottom			Called Out	Date	Time	Time Zone
Form Type		BHST			On Location	14 - Aug - 2013	16:00	MST
Job depth MD	7910. ft	Job Depth TVD	6814. ft		Job Started	14 - Aug - 2013	20:00	MST
Water Depth		Wk Ht Above Floor	5. ft		Job Completed	15 - Aug - 2013	03:26	MST
Perforation Depth (MD)	From	To			Deparated Loc	15 - Aug - 2013	05:45	MST
							07:20	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				8.75				600.	7910.		
7" INTERMEDIATE	Unknown		7.	6.276	26.		J-55	.	7910.		
Surface Casing	Unknown		9.625	8.921	36.		J-55	.	582.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
CENTRALIZER-9-5/8"-CSG-12 1/4"-HINGED	5	EA		
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	1	EA		
PLUG,CMTG,TOP,9 5/8,HWE,8.16 MIN/9.06 MA	1	EA		
Description	Qty	Qty uom	Depth	Supplier

MILEAGE FOR CEMENTING CREW,ZI					60	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	MUD FLUSH III	MUD FLUSH III - SBM (528788)	20.00	bbl	8.4			5.0	
2	Fresh Water Spacer		10.00	bbl	8.33			5.0	
3	Lead Cement	EXTENDACEM (TM) SYSTEM (452981)	375.0	sacks	11.5	2.3	12.99	6.0	12.99
	12.99 Gal	FRESH WATER							
4	Tail Cement	FRACCEM (TM) SYSTEM (452963)	170.0	sacks	13.5	1.74	8.3	6.0	8.3
	8.3 Gal	FRESH WATER							
5	Displacement		300.2	bbl	8.9			5.8	
Calculated Values		Pressures		Volumes					
Displacement	300.2	Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns		Actual Displacement	300.2	Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		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					

