



Cementing Service Report

9206638

Client Name Whiting Petroleum Corp.	Well Name Razor Federal 12F-1302B	Rig Unit Drilling Co. 409	Job Date September 28,2015	Call Sheet 1061102
Client Representative BJ	Surface Well Location SE NE Sec 12:T10N:R58W	Down Hole Well Location	Job Type Intermediate Casing	Lead Supervisor Doran, Benjamin (27933)

Well Profile

Well Type:	Oil
Maximum Treating Pressure (psi):	---
Predicted Bottom Hole Static Temperature (°F):	100.00 @ --
Bottom Hole Circulating Temperature (°F):	80.00 @ --
Bottom Hole Logged Temperature (°F):	--- @ --

Open Hole

Size (in)	Excess (%)	TMD From (ft)	TMD To (ft)	TVD From (ft)	TVD To (ft)
8.750	--	1,890.000	6,505.000	--	--

Casing

Size	Weight	Grade	Collapse Pressure	Internal Yield Pressure	Capacity	I.D.	O.D.	Depth From	Depth To
(in)	(lb/ft)		(psi)	(psi)	(bbl)	(in)	(in)	(ft)	(ft)
7.000	32.000	---	--	--	--	--	--	0.0	6,484.0

Products

Stage 1

From Depth (ft):	0
To Depth (ft):	4600

Acids/Blends/Fluids :

Lead 1: 470 Sacks of 1-2-6 PozG, Density = 12.5 lb/gal, Volume Pumped = 158.2 (bbl)
Water Temperature(°F) = 65 , Bulk Temperature(°F) = 65 , Slurry Temperature(°F) = 70
+ 6 % of Gel (Preblend),
+ 0.2 % of CFR (Preblend),
+ 0.5 % of CFL-4 (Preblend),
+ 0.15 % of LTR (Preblend),
+ 0.25 lb/sack of Polyflake (Preblend)

Stage 2

From Depth (ft):	4600
To Depth (ft):	6505

Acids/Blends/Fluids :

Tail: 235 Sacks of 1-1-2 PozG, Density = 13.5 lb/gal, Volume Pumped = 63.6 (bbl)
Water Temperature(°F) = 65 , Bulk Temperature(°F) = 65 , Slurry Temperature(°F) = 70
+ 2 % of Gel (Preblend),
+ 8 % of SilFume (Preblend),
+ 0.1 % of CFR-5 (Preblend),
+ 0.7 % of CFL-3 (Preblend),
+ 0.2 % of LTR (Preblend),
+ 0.25 lb/sack of Polyflake (Preblend)

Fluid & Cement Data

Expected Cement Top: Surface

Wellbore Fluid

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	8.340	--	--	Jul 07, 2015 14:19
Water Based Mud	--	10.000	--	--	Jul 11, 2015 17:09

**Attachment & Tools****Down Hole Tools**

<u>Tool Type</u>	<u>Depth (ft)</u>	<u>Supplier</u>
Guide/Float Shoe	6,484.000	Third Party
Float Collar	6,442.000	Third Party

Tubular Plugs

<u>Tubular Plug Type</u>	<u>Size (in)</u>	<u>Supplier</u>
Rubber Top	7.000	Sanjel

Units & Personnel**Units**

<u>Truck Unit No.</u>	<u>Main Type</u>	<u>Sub Type</u>	<u>Tractor Unit No.</u>	<u>Main Type</u>	<u>Sub Type</u>	<u>Time On Location</u>	<u>Time Off Location</u>
200925	PICKUP	1 Ton	449095	TRAILER	Utility Trailer	09/28/2015 14:35	09/28/2015 22:00
445070	TRAILER	SCM Twin	745070	TRACTOR	Tandem - Tractor	09/28/2015 14:35	09/28/2015 22:00

Crew and Bonuses

<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>	<u>Second End Shift</u>
Doran, Benjamin (27933)	09/28/2015 14:35	09/28/2015 22:00		
Schneider, Patrick (24093)	09/28/2015 14:35	09/28/2015 22:00		
Meisner, Jeremy (27681)	09/28/2015 14:35	09/28/2015 22:00		
Wilson, Johnny (30052)	09/28/2015 14:35	09/28/2015 22:00		

Treatment Reports & Remarks

Treatment Report

Event #	Event Time	Event Description	Fluid Type	Rate (bbl/min)	Tubular Pressure (psi)	Annular Pressure (psi)	Stage Volume (bbl)	Total Volume (bbl)
1	Sep 28,2015 14:35	Arrive On Location		--	--	--	--	0.00
2	Sep 28,2015 14:40	Crew Briefing (Rig in)		--	--	--	--	0.00
3	Sep 28,2015 18:55	Rig in Complete		--	--	--	--	0.00
4	Sep 28,2015 19:00	Crew Briefing (Pre Job)		--	--	--	--	0.00
5	Sep 28,2015 19:27	Pressure Test Start		2.00	100.0	--	3.00	0.00
		Remarks: Fill lines						
6	Sep 28,2015 19:40	Pressure Test Complete		--	3,500.0	--	--	0.00
		Remarks: All lines held pressure						
7	Sep 28,2015 19:43	Pump Preflush	Water	7.00	500.0	--	20.00	0.00
		Remarks: Gel with polyflake						
8	Sep 28,2015 19:49	Mix Cement	1-2-6 PozG	8.30	1,000.0	--	158.20	0.00
		Remarks: Mix/Pump 470 Sacks @ 12.5 PPG						
9	Sep 28,2015 20:07	Mix Cement	1-1-2 PozG	8.30	992.0	--	63.60	0.00
		Remarks: Mix/Pump 235 Sacks @ 13.5 PPG						
10	Sep 28,2015 20:18	Drop Plug		--	--	--	--	0.00
11	Sep 28,2015 20:24	Displace Fluid	Water	8.00	950.0	--	232.40	0.00
12	Sep 28,2015 21:07	Bump Plug		--	2,203.0	--	--	0.00
13	Sep 28,2015 21:09	Check Float		--	--	--	--	0.00
		Remarks: 1.5 Back						
14	Sep 28,2015 21:10	Pressure Test		--	1,500.0	--	--	0.00
		Remarks: 10 Minute Casing Test						
15	Sep 28,2015 21:25	Rig Out		--	--	--	--	0.00
16	Sep 28,2015 21:50	Job Complete		--	--	--	--	0.00
17	Sep 28,2015 22:00	Leave Location		--	--	--	--	0.00

Did Float Hold: Yes
 Fluid Returns : Yes
 Type : Cement
 Volume (bbl) : 14
 Temperature (°F) : 70
 FDAS Functioning Correctly : Yes
 Was the Program Followed As Per Design? : Yes

Material Transfer Sheet Number

Material Transfer Sheet Number

65828
 65827
 65826