

Client Name Whiting Petroleum Corp.	Well Name Razor Federal 12F - 1306B	Rig Unit Drilling Co. 409	Job Date November 29, 2015	Call Sheet 1062817
Client Representative BJ	Surface Well Location SE NW Sec 12:T10N:R58W	Down Hole Well Location	Job Type Production Casing	Lead Supervisor Hall, Andrew J (25267)

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)
8.500	15.000	0.000	14,164.000	--	--

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)
5.500	20.000	P-110	11,080.0	12,640.0	313.06	4.778	6.050	0.0	14,117.0

Products

Stage 1

From Depth (ft):	0
To Depth (ft):	5000

Acids/Blends/Fluids :

Lead 1: 680 Sacks of 50% Class III / 50% Poz (1-1-0 III), Density = 12 lb/gal, Volume Pumped = 237 (bbl)
 Water Temperature(°F) = 60 , Bulk Temperature(°F) = 70 , Slurry Temperature(°F) = 80
 + 0.3 % of ASM-3 (Preblend),
 + 0.5 % of CFL-10 (Preblend),
 + 2 % of FWC-2 (Preblend),
 + 0.1 % of LTR (Preblend),
 + 0.25 lb/sack of LCL-7 (Preblend)

Stage 2

From Depth (ft):	5000
To Depth (ft):	14117

Acids/Blends/Fluids :

Tail: 1290 Sacks of 65% Class C / 35% Poz (1-2-0 Class C), Density = 13.5 lb/gal, Volume Pumped = 430 (bbl)
 Water Temperature(°F) = 60 , Bulk Temperature(°F) = 70 , Slurry Temperature(°F) = 80
 + 0.3 % of ASM-3 (Preblend),
 + 0.5 % of CFL-10 (Preblend),
 + 25 % of Silica Flour (Preblend),
 + 4 % of FWC-2 (Preblend),
 + 0.1 % of LTR (Preblend),
 + 0.2 % of SPC-2 (Preblend),
 + 0.25 lb/sack of LCL-7 (Preblend)

Fluid & Cement Data

Expected Cement Top: --

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



Cementing Service Report

9209134

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>
449087	TRAILER	Utility Trailer	200925	PICKUP	1 Ton	11/29/2015 03:00	11/29/2015 20:00
445046	TRAILER	SCM Twin	745046	TRACTOR	Tandem - Tractor	11/29/2015 03:00	11/29/2015 20:00
445070	TRAILER	SCM Twin	745070	TRACTOR	Tandem - Tractor	11/29/2015 03:00	11/29/2015 20:00
201380	PICKUP	1/2 Ton				11/29/2015 03:00	11/29/2015 20:00
449102	TRAILER	1600 Porta Bulker				11/29/2015 03:00	11/29/2015 20:00
449183	TRAILER	1600 Porta Bulker				11/29/2015 03:00	11/29/2015 20:00
Crew and Bonuses							
<u>Employee</u>	<u>Start Shift</u>		<u>End Shift</u>		<u>Second Start Shift</u>		<u>Second End Shift</u>
Hall, Andrew J (25267)	11/29/2015 03:00		11/29/2015 20:00				
Leue, David (28684)	11/29/2015 03:00		11/29/2015 20:00				
Daylong, Eric (28076)	11/29/2015 03:00		11/29/2015 20:00				
Yates, William (29930)	11/29/2015 03:00		11/29/2015 20:00				
Decenick, Scott (30083)	11/29/2015 03:00		11/29/2015 20:00				
Spirek, Matthew (26921)	11/29/2015 03:00		11/29/2015 20:00				
Decenick, Scott (30083)	11/29/2015 03:00		11/29/2015 20:00				
Daylong, Eric (28076)	11/29/2015 03:00		11/29/2015 20:00				
Treatment Reports & Remarks							

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	Nov 29,2015 03:00	Arrive On Location		--	--	--	--	0.00	
2	Nov 29,2015 03:30	Crew Briefing (Rig in)		--	--	--	--	0.00	
3	Nov 29,2015 04:30	Rig in Complete		--	--	--	--	0.00	
4	Nov 29,2015 04:35	Stop		--	--	--	--	0.00	
		Remarks: Wait on rig to finish running casing							
5	Nov 29,2015 14:30	Crew Briefing (Pre Job)		--	--	--	--	0.00	
6	Nov 29,2015 15:55	Pressure Test Start	Water	1.00	6,500.0	--	3.00	3.00	
7	Nov 29,2015 15:57	Pressure Test Complete		--	--	--	--	3.00	
8	Nov 29,2015 15:58	Pump Preflush	Water	7.00	1,000.0	--	30.00	33.00	
		Remarks: Mud Flush							
9	Nov 29,2015 16:04	Pump Preflush	Water	7.00	1,000.0	--	30.00	63.00	
		Remarks: Visweep							
10	Nov 29,2015 16:11	Drop Plug On The Fly	Water	--	1,000.0	--	--	63.00	
		Remarks: Bottom plug							
11	Nov 29,2015 16:12	Pump Spacer	Water	7.00	1,000.0	--	10.00	73.00	
12	Nov 29,2015 16:14	Pump	50% Class III / 50% Poz (1-1-0 III)	8.00	700.0	--	237.00	310.00	
13	Nov 29,2015 16:44	Pump	65% Class C / 35% Poz (1-2-0 Class C)	9.00	700.0	--	430.00	740.00	
14	Nov 29,2015 17:35	Wash	Water	2.00	60.0	--	5.00	745.00	
		Remarks: Wash lines before starting on displacement							
15	Nov 29,2015 17:40	Drop Plug		--	--	--	--	745.00	
		Remarks: Top plug							
16	Nov 29,2015 17:42	Displace Fluid	Water	9.00	1,500.0	--	313.50	1,058.50	
17	Nov 29,2015 18:30	Bump Plug	Water	--	2,000.0	--	--	1,058.50	
18	Nov 29,2015 19:00	Rig Out		--	--	--	--	1,058.50	
19	Nov 29,2015 19:30	Job Complete		--	--	--	--	1,058.50	
		Remarks: AAR							
20	Nov 29,2015 20:00	Leave Location		--	--	--	--	1,058.50	
Did Float Hold:		Yes							
Fluid Returns :		Yes							
Type :		Cement							
Volume (bbl) :		20							
Temperature (°F) :		90							
FDAS Functioning Correctly :		Yes							
Was the Program Followed As Per Design? :		Yes							



Treatment Reports & Remarks

Material Transfer Sheet Number

Material Transfer Sheet Number

63876

63877

63878

63998

63999

64000