



# Cementing Service Report

9207975

Client Name Whiting Petroleum Corp.	Well Name Razor Federal 12F-0105A	Rig Unit Drilling Co. 409	Job Date November 07,2015	Call Sheet 1062291
Client Representative BJ	Surface Well Location SE NE Sec 12:T10N:R58W	Down Hole Well Location	Job Type Intermediate Casing	Lead Supervisor Klosterman, Austin (27698)

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										
	<u>Size (in)</u>		<u>Excess (%)</u>		<u>TMD From (ft)</u>	<u>TMD To (ft)</u>		<u>TVD From (ft)</u>		<u>TVD To (ft)</u>
	8.750		--		0.000	6,445.000		--		--
Casing										
	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Collapse Pressure</u>	<u>Internal Yield Pressure</u>	<u>Capacity</u>	<u>I.D.</u>	<u>O.D.</u>	<u>Depth From</u>	<u>Depth To</u>
	(in)	(lb/ft)		(psi)	(psi)	(bbl)	(in)	(in)	(ft)	(ft)
	7.000	32.000		--	--	--	--	--	0.0	6,425.0

Products	
Stage 1	
From Depth (ft):	4700
To Depth (ft):	0
Acids/Blends/Fluids :	
Lead 1: 470 Sacks of 1-2-6 PozG, Density = 12.5 lb/gal, Volume Pumped = 158 (bbl)	
Water Temperature(°F) = 55 , Bulk Temperature(°F) = 60 , Slurry Temperature(°F) = 75	
+ 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):	6445
To Depth (ft):	4700
Acids/Blends/Fluids :	
Tail: 235 Sacks of 1-1-2 PozG, Density = 13.5 lb/gal, Volume Pumped = 64 (bbl)	
Water Temperature(°F) = 55 , Bulk Temperature(°F) = 60 , 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					
<u>Fluid Type</u>	<u>Viscosity (cP)</u>	<u>Density (lbs/gal)</u>	<u>Yield Point (psi)</u>	<u>Temperature (°F)</u>	<u>Recorded@</u>
Water	--	8.340	--	--	Jul 07, 2015 14:19
Water Based Mud	--	10.000	--	--	Jul 11, 2015 17:09

#### Attachment & Tools

##### 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>
201386	PICKUP	1 Ton	444002	TRAILER	Iron	11/07/2015 13:30	11/07/2015 18:00
445070	TRAILER	SCM Twin	745070	TRACTOR	Tandem - Tractor	11/07/2015 13:30	11/07/2015 18:00
746145	TRACTOR	Tandem - Tractor	446145	TRAILER	Bulker	11/07/2015 13:30	11/07/2015 18:00

##### Crew and Bonuses

<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>	<u>Second End Shift</u>
Klosterman, Austin (27698)	11/07/2015 13:30	11/07/2015 18:00		
Pyfer, Kevin (29802)	11/07/2015 13:30	11/07/2015 18:00		
Dunsbergen, Scott (29737)	11/07/2015 13:30	11/07/2015 18:00		
Peterson, Ryan (28158)	11/07/2015 13:30	11/07/2015 18:00		

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	Nov 07,2015 13:30	Arrive On Location		0.00	0.0	0.0	0.00	0.00
2	Nov 07,2015 13:40	Crew Briefing (Rig in)		0.00	0.0	0.0	0.00	0.00
3	Nov 07,2015 14:40	Rig in Complete		0.00	0.0	0.0	0.00	0.00
4	Nov 07,2015 14:50	Crew Briefing (Pre Job)		0.00	0.0	0.0	0.00	0.00
5	Nov 07,2015 15:06	Pressure Test Start	Water	0.00	4,100.0	0.0	0.00	0.00
6	Nov 07,2015 15:07	Pressure Test Complete		0.00	4,100.0	0.0	0.00	0.00
7	Nov 07,2015 15:10	Pump	1-2-6 PozG	7.50	800.0	0.0	158.00	158.00
Remarks: Mix up and pump lead, 470sx @12.5#, Yield 1.89, WR 10.14.								
8	Nov 07,2015 15:08	Pump Preflush	Water	7.20	600.0	0.0	10.00	168.00
Remarks: Fresh ahead.								
9	Nov 07,2015 15:35	Pump	1-1-2 PozG	7.50	400.0	0.0	64.00	64.00
Remarks: Mix up and pump tail, 235sx @13.5#, Yield 1.52, WR 7.12								
10	Nov 07,2015 15:46	Drop Plug On The Fly	Water Based Mud	0.00	0.0	0.0	0.00	64.00
11	Nov 07,2015 15:47	Displace Fluid	Water Based Mud	8.00	250.0	0.0	210.00	274.00
12	Nov 07,2015 16:15	Decrease Pump Rate	Water Based Mud	3.00	1,100.0	0.0	20.00	294.00
13	Nov 07,2015 16:18	Pumping Pressure Before Bump	Water Based Mud	0.00	1,200.0	0.0	0.00	294.00
14	Nov 07,2015 16:19	Bump Plug	Water Based Mud	0.00	2,000.0	0.0	0.00	294.00
Remarks: Held for 5 minutes for a casing test as well.								
15	Nov 07,2015 16:24	Check Float		0.00	0.0	0.0	0.00	294.00
Remarks: 1.5 bbls. back.								
16	Nov 07,2015 17:00	Rig Out		0.00	0.0	0.0	0.00	294.00
17	Nov 07,2015 17:30	Job Complete		0.00	0.0	0.0	0.00	168.00
18	Nov 07,2015 18:00	Leave Location		0.00	0.0	0.0	0.00	168.00
Did Float Hold: Yes Fluid Returns : Yes Type : Cement Volume (bbl) : 40 Temperature (°F) : 70 FDAS Functioning Correctly : Yes Was the Program Followed As Per Design? : Yes								
Material Transfer Sheet Number								
Material Transfer Sheet Number								
63698								
63696								
63697								