



Cementing Service Report

9209128

Client Name Whiting Petroleum Corp.	Well Name Razor Federal 12F - 1305A	Rig Unit Drilling Co. 409	Job Date November 13, 2015	Call Sheet 1062452
Client Representative Kenny	Surface Well Location SE NE Sec 12:T10N:R58W	Down Hole Well Location	Job Type Surface 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)
13.500	30.000	0.000	1,861.000	--	--

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)
9.625	36.000	J-55	2,020.0	3,520.0	142.25	8.921	10.625	0.0	1,840.1

Products

Stage 1

From Depth (ft):	0
To Depth (ft):	1370

Acids/Blends/Fluids :

Lead 1: 355 Sacks of Control Set C, Density = 12 lb/gal, Volume Pumped = 155.53 (bbl)
Water Temperature(°F) = 60 , Bulk Temperature(°F) = 70 , Slurry Temperature(°F) = 80
+ 0.25 lb/sack of LCL-7 (Preblend)

Stage 2

From Depth (ft):	1370
To Depth (ft):	1795.6

Acids/Blends/Fluids :

Tail: 240 Sacks of 0:1:0 Type III, Density = 14.2 lb/gal, Volume Pumped = 62.4 (bbl)
Water Temperature(°F) = 60 , Bulk Temperature(°F) = 70 , Slurry Temperature(°F) = 80
+ 2 % of CaCl₂ (Preblend),
+ 0.25 lb/sack of LCL-7 (Preblend)

Stage 3

From Depth (ft):	
To Depth (ft):	

Acids/Blends/Fluids :

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	--	--	--	--	Aug 24, 2015 15:49

**Attachment & Tools****Tubular Plugs**

<u>Tubular Plug Type</u>	<u>Size (in)</u>	<u>Supplier</u>
Rubber Top	9.625	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>
449086	TRAILER	Utility Trailer	201025	PICKUP	1 Ton	11/12/2015 08:30	11/13/2015 03:30
445047	TRAILER	SCM Twin	745047	TRACTOR	Tandem - Tractor	11/12/2015 08:30	11/13/2015 03:30

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)	11/12/2015 08:30	11/13/2015 03:30		
Pyfer, Kevin (29802)	11/12/2015 08:30	11/13/2015 03:30		
Dunsbergen, Scott (29737)	11/12/2015 08:30	11/13/2015 03:30		
Devine, Richard (29733)	11/12/2015 08:30	11/13/2015 03:30		

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 12,2015 08:30	Arrive On Location		--	--	--	--	0.00	
2	Nov 12,2015 09:00	Crew Briefing (Rig in)		--	--	--	--	0.00	
3	Nov 12,2015 10:15	Rig in Complete		--	--	--	--	0.00	
4	Nov 12,2015 11:30	Crew Briefing (Pre Job)		--	--	--	--	0.00	
5	Nov 13,2015 00:15	Pressure Test Start	Water	1.00	3,000.0	--	3.00	3.00	
6	Nov 13,2015 00:20	Pressure Test Complete		--	--	--	--	3.00	
7	Nov 13,2015 00:22	Establish Circulation	Water	5.00	500.0	--	20.00	23.00	
8	Nov 13,2015 00:26	Pump	Control Set C	8.00	500.0	--	155.53	178.53	
9	Nov 13,2015 00:46	Pump	0:1:0 Type III	8.00	500.0	--	62.40	240.93	
10	Nov 13,2015 00:56	Drop Plug		--	--	--	--	240.93	
11	Nov 13,2015 00:58	Displace Fluid	Water Based Mud	7.00	700.0	--	138.79	379.72	
12	Nov 13,2015 01:35	Bump Plug		--	1,400.0	--	--	379.72	
13	Nov 13,2015 01:40	Check Float		--	--	--	--	379.72	
14	Nov 13,2015 02:00	Rig Out		--	--	--	--	379.72	
15	Nov 13,2015 03:00	Job Complete		--	--	--	--	379.72	
		Remarks: AAR							
16	Nov 13,2015 03:30	Leave Location		--	--	--	--	379.72	
Did Float Hold: Yes Fluid Returns : Yes Type : Cement Volume (bbl) : 60 Temperature (°F) : 90 FDAS Functioning Correctly : Yes Was the Program Followed As Per Design? : Yes									
Material Transfer Sheet Number									
Material Transfer Sheet Number									
63773									
63774									
63775									