



## Pumping Service Report

9202395

Client Name Whiting Petroleum Corp.	Well Name Razor 11F-0205A	Rig Frontier 26	Job Date February 18,2015	Call Sheet 1055501
Client Representative Kenny	Surface Well Location SE NW Sec 11:T10N:R58W	Down Hole Well Location	Job Type Surface Casing	Lead Supervisor Johnson, Quintin (23945)

### Well Profile

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

### Open Hole

Size (in)	Excess (%)	TMD From (ft)	TMD To (ft)	TVD From (ft)	TVD To (ft)
13.500	25.000	0.000	1,882.000	--	--

### 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	143.96	8.921	10.625	0.0	1,862.2

### Products

#### Stage 1

From Depth (ft):	0
To Depth (ft):	1265.4

Acids/Blends/Fluids :

Lead 1: 340 Sacks of Control Set C, Density = 12 lb/gal, Volume Pumped = 149 (bbl)  
Water Temperature(°F) = 60 , Bulk Temperature(°F) = 60 , Slurry Temperature(°F) = 60  
+ 0.25 lb/sack of Polyflake (Preblend)

#### Stage 2

From Depth (ft):	1265.4
To Depth (ft):	1862.2

Acids/Blends/Fluids :

Tail: 220 Sacks of 0:1:0 Type III, Density = 14.2 lb/gal, Volume Pumped = 57.2 (bbl)  
Water Temperature(°F) = 60 , Bulk Temperature(°F) = 60 , Slurry Temperature(°F) = 60  
+ 2 % of CaCl<sub>2</sub> (Preblend),  
+ 0.25 lb/sack of Polyflake (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	--	8.400	--	--	Jul 14, 2014 20:27



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### Attachment & Tools

#### Down Hole Tools

<u>Tool Type</u>	<u>Depth (ft)</u>	<u>Supplier</u>
Guide Shoe	--	Third Party
Float Collar	--	Third Party

#### 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>
449095	TRAILER	Utility Trailer	201173	PICKUP	1 Ton	02/18/2015 20:00	02/19/2015 07:00
445024	TRAILER	SCM Twin	745024	TRACTOR	Tandem - Tractor	02/18/2015 20:00	02/19/2015 07:00
446167	TRAILER	Bulker	746167	TRACTOR	Tandem - Tractor	02/18/2015 20:00	02/19/2015 07:00
446172	TRAILER	Bulker	746172	TRACTOR	Tandem - Tractor	02/18/2015 20:00	02/19/2015 07:00

#### Crew and Bonuses

<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>	<u>Second End Shift</u>
Johnson, Quintin (23945)	02/18/2015 20:00	02/19/2015 07:00		
Cox, Brandon (27419)	02/18/2015 20:00	02/19/2015 07:00		
Crane, Troy (29924)	02/18/2015 20:00	02/19/2015 07:00		
Meisner, Jeremy (27681)	02/18/2015 20:00	02/19/2015 07:00		

### Treatment Reports & Remarks

#### Treatment Report

<u>Event #</u>	<u>Event Time</u>	<u>Event Description</u>	<u>Fluid Type</u>	<u>Rate</u> (bbl/min)	<u>Tubular Pressure</u> (psi)	<u>Annular Pressure</u> (psi)	<u>Stage Volume</u> (bbl)	<u>Total Volume</u> (bbl)
1	Feb 18, 2015 20:00	Arrive On Location		--	--	--	--	0.00
		Remarks: arrived on time						
2	Feb 18, 2015 20:15	Tailgate Meeting		--	--	--	--	0.00
		Remarks: talked about blowing off trucks and spotting						
3	Feb 18, 2015 22:00	Crew Briefing (Rig in)		--	--	--	--	0.00
4	Feb 18, 2015 00:20	Rig In		--	--	--	--	0.00
		Remarks: rigged in our trucks and water						
5	Feb 19, 2015 02:20	Rig in Complete		--	--	--	--	0.00
		Remarks: rig in done, gather for safety meeting						
6	Feb 19, 2015 02:45	Crew Briefing (Pre Job)		--	--	--	--	0.00
		Remarks: talked about the job scope and safety concerns						
7	Feb 19, 2015 02:46	Sign-off on Safety		--	--	--	--	0.00
		Remarks: signed their and our JSA						
8	Feb 19, 2015 03:13	Pressure Test Start	Water	2.00	105.0	--	2.00	2.00
		Remarks: filled lines for pressure test						



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### Treatment Report

Event #	Event Time	Event Description	Fluid Type	Rate (bbl/min)	Tubular Pressure (psi)	Annular Pressure (psi)	Stage Volume (bbl)	Total Volume (bbl)
9	Feb 19,2015 13:17	Pressure Test	Water	0.00	2,500.0	--	0.00	2.00
		Remarks: pressured lines and they held good						
10	Feb 19,2015 03:18	Pressure Test Complete		--	--	--	--	2.00
		Remarks: opened up to pump job						
11	Feb 19,2015 03:19	Pump Preflush	Water	4.00	96.0	--	20.00	22.00
		Remarks: pumped fresh ahead						
12	Feb 19,2015 03:32	Mix Cement	Control Set C	5.00	120.0	--	149.00	171.00
		Remarks: mixed lead slurry at 12 # density						
13	Feb 19,2015 04:10	Mix Cement	0:1:0 Type III	5.00	150.0	--	57.20	228.20
		Remarks: mixed tail at 14.2 # density						
14	Feb 19,2015 04:38	Stop		--	--	--	--	228.20
		Remarks: stopped to drop plug						
15	Feb 19,2015 04:43	Drop Plug		--	--	--	--	228.20
		Remarks: dropped our 9.625 plug with company man						
16	Feb 19,2015 04:45	Pump Displacement	Water	5.00	460.0	--	140.60	368.80
		Remarks: washed up going down hole and pumped fresh for bumping plug						
17	Feb 19,2015 05:20	Bump Plug		2.00	1,218.0	--	140.60	368.80
		Remarks: bumped plug as calculated						
18	Feb 19,2015 05:21	Check Float	Water	--	--	--	--	368.80
		Remarks: got .5 bbls back						
19	Feb 19,2015 05:23	Pressure Test	Water	1.00	1,500.0	--	2.00	368.80
		Remarks: casing test						
20	Feb 19,2015 05:53	Stop		--	--	--	--	368.80
		Remarks: stop and bled off casing test						
21	Feb 19,2015 06:15	Wash	Water Based Mud	2.00	150.0	--	15.00	368.80
		Remarks: washed mix side and did run backs						
22	Feb 19,2015 06:25	Rig Out		--	--	--	--	368.80
		Remarks: rig out our trucks and water						
23	Feb 19,2015 06:50	Job Complete		--	--	--	--	368.80
		Remarks: do a complete walk around and check pins						
24	Feb 19,2015 07:00	Leave Location		--	--	--	--	368.80
		Remarks: go back to Sanjel Yard						

Did Float Hold: Yes

Fluid Returns : Yes

Type : Cement

Volume (bbl) : 58

Temperature (°F) : 65

FDAS Functioning Correctly : Yes

Was the Program Followed As Per Design? : Yes



Treatment Reports & Remarks	
Material Transfer Sheet Number	
<u>Material Transfer Sheet Number</u>	
55615	
55613	