



**Pumping  
Service Report**

**9198224**

Client Name Whiting Petroleum Corp.	Well Name Razor 27J-2209A	Rig Frontier 26	Job Date October 13, 2014	Call Sheet 1048682
Client Representative Kenny Wilkerson	Surface Well Location Sec 27:T10N:R58W	Down Hole Well Location	Job Type Intermediate Casing	

**Well Profile**

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)
8.750	35.000	0.000	6,100.000	--	--

**Casing**

Size (in)	Weight (lb/ft)	Grade	Collapse Pressure (psi)	Internal Yield Pressure (psi)	Capacity (bbl)	I.D. (in)	O.D. (in)	Depth From (ft)	Depth To (ft)
7.000	29.000	L-80	7,030.0	8,160.0	225.93	6.184	7.656	0.0	6,082.0

**Products**

**Stage 1**

From Depth (ft):

To Depth (ft):

Acids/Blends/Fluids :

Lead 1: 465 Sacks of 1:2:6 G, Density = 12.6 lb/gal, Volume Pumped = 157 (bbl)  
Water Temperature(°F) = 60 , Bulk Temperature(°F) = 65 , Slurry Temperature(°F) = 75  
+ 0.5 % of CFL-4 (Preblend),  
+ 0.2 % of CFR (Preblend),  
+ 6 % of Gel (Preblend),  
+ 0.15 % of LTR (Preblend),  
+ 0.25 lb/sack of Polyflake (Preblend)

Tail: 240 Sacks of 1:1:0 Poz G, Density = 13.5 lb/gal, Volume Pumped = 65 (bbl)  
Water Temperature(°F) = 60 , Bulk Temperature(°F) = 65 , Slurry Temperature(°F) = 75  
+ 0.7 % of CFL-3 (Preblend),  
+ 8 % of Silifume (Preblend),  
+ 2 % of Gel (Preblend),  
+ 0.3 % of LTR (Preblend),  
+ 0.25 lb/sack of Polyflake (Preblend),  
+ 0.1 % of CFR-5 (Preblend)

**Fluid & Cement Data**

Expected Cement Top: Surface

**Wellbore Fluid**

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	--	--	--	Oct 09, 2014 18:51
Water Based Mud	--	--	--	--	Oct 09, 2014 18:51

**Attachment & Tools**

**Tubular Plugs**

Tubular Plug Type	Size (in)	Supplier
Rubber Top	9.625	Third Party

Acidizing • Cementing • Coiled Tubing • Fracturing • Nitrogen

Canada • USA • International

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**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>
445052	TRAILER	SCM Twin	745052	TRACTOR	Tandem - Tractor	10/13/2014 18:30	10/14/2014 03:00
449087	TRAILER	Utility Trailer	201025	PICKUP	1 Ton	10/13/2014 18:30	10/14/2014 03:00

**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	10/13/2014 18:30	10/14/2014 03:00		
Bailey, Steven	10/13/2014 18:30	10/14/2014 03:00		
Klosterman, Austin	10/13/2014 18:30	10/14/2014 03:00		
Pigg, Martin	10/13/2014 18:30	10/14/2014 03:00		

**Treatment Reports & Remarks**



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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)
1	Oct 13,2014 18:30	Arrive On Location	---	0.00	0.0	0.0	0.00	0.00
2	Oct 13,2014 18:40	Tailgate Meeting	---	0.00	0.0	0.0	0.00	0.00
3	Oct 13,2014 18:50	Rig In	---	0.00	0.0	0.0	0.00	0.00
4	Oct 13,2014 19:50	Wait On Instructions	---	0.00	0.0	0.0	0.00	0.00
Remarks: Rig is running casing.								
5	Oct 13,2014 23:10	Safety Meeting	---	0.00	0.0	0.0	0.00	0.00
6	Oct 13,2014 23:20	Sign-off on Safety	---	0.00	0.0	0.0	0.00	0.00
7	Oct 13,2014 23:30	Establish Circulation	Water	1.50	200.0	0.0	3.00	3.00
Remarks: Filling lines.								
8	Oct 13,2014 23:32	Pressure Test Lines	Water	0.00	5,085.0	0.0	0.00	3.00
9	Oct 13,2014 23:35	Pump Preflush	Water	6.80	700.0	0.0	20.00	23.00
Remarks: Vissweep and barite.								
10	Oct 13,2014 23:35	Pump	1:2:6 G	7.00	800.0	0.0	157.00	180.00
Remarks: Mix up and pump lead 465 sacks @12.5#, Yield 1.89, WR 10.14, Cement 4500' to surface.								
11	Oct 14,2014 00:02	Pump	1:1:0 Poz G	7.00	800.0	0.0	65.00	245.00
Remarks: Mix up and pump tail 240 sacks @13.5#, Yield 1.52, WR 7.12, Cement 6000' to 4500'.								
12	Oct 14,2014 00:17	Drop Plug On The Fly	Water	0.00	0.0	0.0	0.00	245.00
13	Oct 14,2014 00:17	Displace Fluid	Water Based Mud	5.60	100.0	0.0	214.00	459.00
14	Oct 14,2014 00:56	Decrease Pump Rate	Water Based Mud	2.50	1,000.0	0.0	10.00	469.00
15	Oct 14,2014 01:03	Pumping Pressure Before Bump	Water Based Mud	0.00	1,100.0	0.0	224.00	469.00
16	Oct 14,2014 01:03	Bump Plug	Water Based Mud	0.00	1,700.0	0.0	0.00	469.00
17	Oct 14,2014 01:04	Check Float	---	0.00	0.0	0.0	0.00	469.00
Remarks: 1.5bbl back.								
18	Oct 14,2014 01:05	Pressure Test	Water	0.00	1,600.0	0.0	0.00	469.00
Remarks: 15 minute casing test @ 1500psi.								
19	Oct 14,2014 01:20	Rig Out	---	0.00	0.0	0.0	0.00	0.00
20	Oct 14,2014 02:20	Job Complete	---	0.00	0.0	0.0	0.00	0.00
21	Oct 14,2014 02:45	Pre-Departure Meeting	---	0.00	0.0	0.0	0.00	0.00
22	Oct 14,2014 03:00	Leave Location	---	0.00	0.0	0.0	0.00	0.00

Did Float Hold: Yes

Fluid Returns : Yes

Type : Cement

Volume (bbl) : 50

Temperature (°F) : 75

FDAS Functioning Correctly : Yes

Was the Program Followed As Per Design? : Yes



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**Treatment Reports & Remarks**

**Material Transfer Sheet Number**

Material Transfer Sheet Number

54509

54511

54510

**Comments To Service Report**

Job went according to prog and to customers request. Job went good.

Client	Whiting	Client Rep	Kenny Wilkerson	Supervisor	A. Klosterman
Ticket No.	9198224	Well Name	Razor 27J-2209A	Unit No.	445047
Location	Sec27:T10N:R58W	Job Type	Incomplete	Service District	505
Comments	Mix up and pump lead 465 sacks @12.5# Mix up and pump tail 240 sacks @13.5#				
				Job Date	10/13/2014

