



**Pumping
Service Report**

9198784

Client Name Whiting Petroleum Corp.	Well Name Razor 27J-3409A	Rig Frontier 26	Job Date September 23, 2014	Call Sheet 1047566
Client Representative Mr. Kenny	Surface Well Location Sec 27-T10N-R58W	Down Hole Well Location	Job Type Intermediate Casing	

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)
8.750	32.500	0.000	6,150.000	---	---

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	228.46	6.184	7.656	0.0	6,150.0

Products

Plug 1

From Depth (ft): 0

To Depth (ft): 6153

Plug Type: Well Stability

Acids/Blends/Fluids:

Lead 1: 460 Sacks of 1-2-6 G, Density = 12.5 lb/gal, Volume Pumped = 154.84 (bbl)
Water Temperature(°F) = 70, Bulk Temperature(°F) = 80, Slurry Temperature(°F) = 90
+ 0.2 % of CFR,
+ 0.5 % of CFL-4,
+ 0.15 % of LTR,
+ 0.25 lb/sack of Polyflake

Tail: 210 Sacks of 1-1-0 G, Density = 13.5 lb/gal, Volume Pumped = 56.84 (bbl)
Water Temperature(°F) = 70, Bulk Temperature(°F) = 80, Slurry Temperature(°F) = 90
+ 8 % of Fume,
+ 2 % of Gel,
+ 0.1 % of CFR-5,
+ 0.7 % of CFL-3,
+ 0.3 % of LTR,
+ 0.25 lb/sack of Polyflake

Fluid & Cement Data

Expected Cement Top: --					
Wellbore Fluid					
Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	8.400	--	--	Aug 25, 2014 18:36
Water Based Mud	--	--	--	--	Aug 25, 2014 18:36

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Attachment & Tools

Down Hole Tools

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

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>
449087	TRAILER	Utility Trailer	201191	PICKUP	1 Ton	09/23/2014 12:30	09/23/2014 20:00
445051	TRAILER	SCM Twin	745051	TRACTOR	Tandem - Tractor	09/23/2014 12:30	09/23/2014 20:00
446075	TRAILER	Bulker	746075	TRACTOR	Tandem - Tractor	09/23/2014 12:30	09/23/2014 20:00
446084	TRAILER	Bulker	746084	TRACTOR	Tandem - Tractor	09/23/2014 12:30	09/23/2014 20:00
201114	PICKUP	3/4 Ton				09/23/2014 12:30	09/23/2014 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	09/23/2014 12:30	09/23/2014 20:00		
Cox, Brandon	09/23/2014 12:30	09/23/2014 20:00		
Lamp III, Larry	09/23/2014 12:30	09/23/2014 20:00		
Peterson, Ryan	09/23/2014 12:30	09/23/2014 20:00		
Martinez, Fernando	09/23/2014 12:30	09/23/2014 20:00		



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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	Sep 23, 2014 12:30	Arrive On Location	---	--	--	--	--	0.00
2	Sep 23, 2014 12:45	Tailgate Meeting	---	--	--	--	--	0.00
3	Sep 23, 2014 13:00	Rig In	---	--	--	--	--	0.00
4	Sep 23, 2014 13:45	Stop	---	--	--	--	--	0.00
Remarks: Wait for rig to finish running casing								
5	Sep 23, 2014 15:30	Safety Meeting	---	--	--	--	--	0.00
6	Sep 23, 2014 15:45	Sign-off on Safety	---	--	--	--	--	0.00
7	Sep 23, 2014 15:50	Pressure Test	Water	1.00	3,000.0	--	5.00	5.00
8	Sep 23, 2014 15:55	Pump Preflush	Water	4.00	1,000.0	--	20.00	25.00
9	Sep 23, 2014 16:10	Pump Spacer	---	4.00	500.0	--	5.00	30.00
10	Sep 23, 2014 16:20	Pump	1-2-6 G	6.00	800.0	--	154.84	184.84
11	Sep 23, 2014 16:48	Pump	1-1-0 G	6.00	1,000.0	--	56.84	241.68
12	Sep 23, 2014 17:00	Drop Plug	---	--	--	--	--	241.68
13	Sep 23, 2014 17:05	Displace Fluid	Water Based Mud	6.00	800.0	--	226.00	467.68
14	Sep 23, 2014 17:55	Bump Plug	---	--	1,630.0	--	--	467.68
15	Sep 23, 2014 18:00	Check Float	---	--	--	--	--	467.68
16	Sep 23, 2014 18:15	Wash	Water	2.00	22.0	--	20.00	487.68
17	Sep 23, 2014 18:45	Rig Out	---	--	--	--	--	487.68
18	Sep 23, 2014 19:30	Job Complete	---	--	--	--	--	487.68
19	Sep 23, 2014 19:45	Pre-Departure Meeting	---	--	--	--	--	487.68
20	Sep 23, 2014 20:00	Leave Location	---	--	--	--	--	487.68

Did Float Hold: Yes

Fluid Returns: Yes

Type: Cement

Volume (bbl): 26

Temperature (°F): 90

FDAS Functioning Correctly: Yes

Was the Program Followed As Per Design?: Yes

Material Transfer Sheet Number

Material Transfer Sheet Number

46797

46798

46799

Comments To Service Report

Pumped job according to prog. Waited on rig to finish running casing for 3 hours. Equipment did a good job.

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Client	Whiting Petroleum	Client Rep	Kenny	Supervisor	Andy Hall
Ticket No.	9198784	Well Name	Razor 27J-3409A	Unit No.	745051
Location	Sec 27:110N:R58W	Job Type	Intermediate Casing	Service District	505 Fort Lupton
Comments				Job Date	09/23/2014

