



**Pumping
Service Report**

9188773

Client Name Whiting Petroleum Corp.	Well Name Razor 27J-2209A	Rig Frontier Drilling 26	Job Date October 18, 2014	Call Sheet 1048928
Client Representative Mr Tyson	Surface Well Location Sec 26:T10N:R58W	Down Hole Well Location	Job Type Liner Casing	

Well Profile

Well Type:	Oil
Maximum Treating Pressure (psi):	---
Predicted Bottom Hole Static Temperature (°F):	200.00 @ --
Bottom Hole Circulating Temperature (°F):	200.00 @ --
Bottom Hole Logged Temperature (°F):	--- @ --

Open Hole

Size (in)	Excess (%)	TMD From (ft)	TMD To (ft)	TVD From (ft)	TVD To (ft)
6.000	15.000	4,900.000	13,700.000	--	--

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
4.500	11.600	L-80	6,350.0	7,780.0	129.16	4.000	5.000	4,950.0	13,260.0

Drill Pipe

Size (in)	Weight (lb/ft)	Grade	Collapse Pressure (psi)	Capacity (bbl)	I.D. (in)	O.D. (in)	Depth From (ft)	Depth To (ft)
4.000	0.000		--	--	--	--	0.000	--

Products

Stage 1

From Depth (ft): 4900

To Depth (ft): 13700

Acids/Blends/Fluids :

Tail: 590 Sacks of 1-1-0 G, Density = 13.7 lb/gal, Volume Pumped = 155.5 (bbl)
Water Temperature(°F) = 60 , Bulk Temperature(°F) = 60 , Slurry Temperature(°F) = 60
+ 8 % of SilFume (Preblend),
+ 2 % of Gel (Preblend),
+ 0.1 % of CFR-5 (Preblend),
+ 0.7 % of CFL-4 (Preblend),
+ 1 % of FWCA-H (Preblend),
+ 0.45 % of LTR (Preblend),
+ 0.2 % of AS-3 (Preblend),
+ 0.25 lb/sack of Polyflake (Preblend)

Fluid & Cement Data

Expected Cement Top: --

Wellbore Fluid

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	--	--	--	May 20, 2014 04:37
Water Based Mud	--	--	--	--	Jun 17, 2014 09:17

Acidizing • Cementing • Coiled Tubing • Fracturing • Nitrogen

Canada • USA • International

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Attachment & Tools

Down Hole Tools

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

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	201017	PICKUP	1 Ton	10/18/2014 12:00	10/18/2014 21:30
445052	TRAILER	SCM Twin	745052	TRACTOR	Tandem - Tractor	10/18/2014 12:00	10/18/2014 21:30

Crew and Bonuses

<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>	<u>Second End Shift</u>
Johnson, Quintin	10/18/2014 12:00	10/18/2014 21:30		
Meisner, Jeremy	10/18/2014 12:00	10/18/2014 21:30		
Cox, Brandon	10/18/2014 12:00	10/18/2014 21:30		
Bark, Eric	10/18/2014 12:00	10/18/2014 21:30		

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 18, 2014 12:00	Arrive On Location	---	--	--	--	--	0.00
		Remarks: arrived ahead of schedule						
2	Oct 18, 2014 12:10	Tailgate Meeting	---	--	--	--	--	0.00
		Remarks: talked about spotting trucks						
3	Oct 18, 2014 12:20	STEACS Briefing	---	--	--	--	--	0.00
		Remarks: held our JSA between sanjel crew						
4	Oct 18, 2014 18:00	Sign-off on Safety	---	--	--	--	--	0.00
		Remarks: signed their and our Jsa						
5	Oct 18, 2014 18:01	Safety Meeting	---	--	--	--	--	0.00
		Remarks: talked about the job scope and safety concerns						
6	Oct 18, 2014 19:15	Start - Fluid	Water	2.00	1,000.0	--	2.00	2.00
		Remarks: filled lines for pressure test						
7	Oct 18, 2014 19:17	Pressure Test	Water	0.00	5,000.0	--	0.00	0.00
		Remarks: pressured lines and the held						
8	Oct 18, 2014 19:22	Pump Preflush	Water	5.00	1,600.0	--	30.00	0.00
		Remarks: pump WG-1L for a invert spacer						
9	Oct 18, 2014 19:28	Pump Spacer	Water	5.00	1,800.0	--	5.00	0.00
		Remarks: pumped fresh between invert and slurry						
10	Oct 18, 2014 19:29	Mix Cement	1-1-0 G	5.00	1,900.0	--	160.00	0.00
		Remarks: mixed slurry at 13.7						
11	Oct 18, 2014 20:04	Drop Plug	---	--	--	--	--	0.00
		Remarks: drop 3rd party dart						
12	Oct 18, 2014 20:10	Pump Displacement	Water	5.00	2,400.0	--	166.50	0.00
		Remarks: displaced dart down till it bumped at 161.5 pumped another 5 bbls to create a wet shoe						
13	Oct 18, 2014 20:52	Check Float	---	--	850.0	--	--	0.00
		Remarks: got .5 bbls back						
14	Oct 18, 2014 21:28	Reverse Circulate	Water	7.00	2,800.0	--	166.00	0.00
		Remarks: reversed the hole clean						
15	Oct 18, 2014 22:10	Stop	---	--	--	--	--	0.00
		Remarks: stop rig off for wsh up						
16	Oct 18, 2014 22:22	Wash	Water	15.00	150.0	--	20.00	0.00
		Remarks: wash pump mixing side and run backs						
17	Oct 18, 2014 23:00	Rig Out	---	--	--	--	--	0.00
		Remarks: rig our iron and water hoses out						
18	Oct 18, 2014 23:30	Pre-Departure Meeting	---	--	--	--	--	0.00
		Remarks: journey mangement						
19	Oct 18, 2014 23:40	Job Complete	---	--	--	--	--	0.00
		Remarks: job down check pins and do a complete walk around						
20	Oct 18, 2014 23:50	Leave Location	---	--	--	--	--	0.00
		Remarks: Go back to Sanjel yard						



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Treatment Reports & Remarks

Did Float Hold: Yes
Fluid Returns : Yes
Type : Cement
Volume (bbl) : 30
Temperature (°F) : 75
FDAS Functioning Correctly : Yes
Was the Program Followed As Per Design? : Yes

Material Transfer Sheet Number

Material Transfer Sheet Number

54585

54586

54587



Client	Whiting Petroleum Corp.	Client Rep	Mr. Tyson	Supervisor	Quintin Johnson
Ticket No.	9188773	Well Name	Razor 27J-2209A	Unit No.	445052
Location	Sec 26:T10N:R58W	Job Type	Liner Casing	Service District	Ft Lupton CO
Comments	590 sacks of 1-1-0 G @ 13.7 lbs/gal				
				Job Date	10/18/2014

