



**Pumping  
Service Report**

**9190949**

Client Name Whiting Petroleum Corp.	Well Name Razor 26I-2314B	Job Date April 25, 2014	Call Sheet 1041477
Client Representative Braxton Plenkett	Location Sec 26:T10N:R58W	Job Type Surface Casing	Rig Frontier Drilling 26

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)	
13.500		50.000		0.000		1,560.000		--		--	
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	122.05	8.921	10.625	0.0	1,578.8	

Products	
Stage 1	
From Depth (ft):	0
To Depth (ft):	12090
Acids/Blends/Fluids :	
Tail: 665 Sacks of 0:1:0 Type III, Density = 14.2 lb/gal, Volume Pumped = 174 (bbl)	
Water Temperature(°F) = 55 , Bulk Temperature(°F) = 65 , Slurry Temperature(°F) = 70	
+ 1 % of CaCl2,	
+ 0.25 % of Polyflake	

Fluid & Cement Data					
Expected Cement Top:		Surface			
Wellbore Fluid					
Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	--	--	--	Apr 17, 2014 14:37



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**Units & Personnel**

**Units**

Truck Unit No.	Main Type	Sub Type	Tractor Unit No.	Main Type	Sub Type	Time On Location	Time Off Location
449093	TRAILER	Utility Trailer	201191	PICKUP	1 Ton	04/25/2014 09:00	04/25/2014 16:55
445052	TRAILER	SCM Twin	745052	TRACTOR	Tandem - Tractor	04/25/2014 09:00	04/25/2014 16:55
446152	TRAILER	Bulker	746152	TRACTOR	Tandem - Tractor	04/25/2014 09:00	04/25/2014 16:55
446172	TRAILER	Bulker	746172	TRACTOR	Tandem - Tractor	04/25/2014 09:00	04/25/2014 16:55

**Crew and Bonuses**

Employee	Start Shift	End Shift	Second Start Shift	Second End Shift
Douglass, Brian	04/25/2014 09:00	04/25/2014 16:55		
Cox, Brandon	04/25/2014 09:00	04/25/2014 16:55		
Paiu, Corneliu	04/25/2014 09:00	04/25/2014 16:55		
Cheal, Samuel	04/25/2014 09:00	04/25/2014 16:55		
Leue, David	04/25/2014 09:00	04/25/2014 16:55		
Hughes, Terril	04/25/2014 09:00	04/25/2014 16:55		

**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	Apr 25,2014 09:00	Arrive On Location		--	--	--	--	0.00
2	Apr 25,2014 09:10	Tailgate Meeting		--	--	--	--	0.00
3	Apr 25,2014 09:20	Wait On Instructions		--	--	--	--	0.00
		Remarks: rig still running casing						
4	Apr 25,2014 11:30	Rig In		--	--	--	--	0.00
5	Apr 25,2014 12:30	Safety Meeting		--	--	--	--	0.00
6	Apr 25,2014 12:40	Sign-off on Safety		--	--	--	--	0.00
7	Apr 25,2014 12:46	Establish Circulation	Water	2.00	50.0	--	2.00	2.00
		Remarks: fill lines						
8	Apr 25,2014 12:48	Pressure Test		--	3,000.0	--	--	2.00
9	Apr 25,2014 12:50	Pump Preflush	Water	4.00	75.0	--	20.00	22.00
10	Apr 25,2014 13:00	Mix Cement	0:1:0 Type III	4.00	100.0	--	174.00	196.00
		Remarks: with calcium and polyflake						
11	Apr 25,2014 14:28	Drop Plug		--	--	--	--	196.00
12	Apr 25,2014 14:30	Pump Displacement	Water	5.00	600.0	--	117.00	313.00
13	Apr 25,2014 15:01	Bump Plug		--	--	--	--	313.00
14	Apr 25,2014 15:03	Check Float		--	--	--	--	313.00
		Remarks: float held						
15	Apr 25,2014 15:04	Pressure Test		--	1,500.0	--	--	313.00
		Remarks: casing test 1500 psi for 30 mins						
16	Apr 25,2014 15:34	Stop		--	--	--	--	313.00
17	Apr 25,2014 15:40	Rig Out		--	--	--	--	313.00
18	Apr 25,2014 16:30	Job Complete		--	--	--	--	313.00
19	Apr 25,2014 16:45	Pre-Departure Meeting		--	--	--	--	313.00
20	Apr 25,2014 16:55	Leave Location		--	--	--	--	313.00

Did Float Hold: Yes  
Fluid Returns : Yes  
Type : Cement  
Volume (bbl) : 61  
Temperature (°F) : 65  
FDAS Functioning Correctly : Yes  
Was the Program Followed As Per Design? : Yes

## Material Transfer Sheet Number

Material Transfer Sheet Number  
9970  
9987