



**Pumping
Service Report**

9191403

Client Name Whiting Petroleum Corp.	Well Name Razor 26l-2316B	Rig Frontier Drilling 26	Job Date May 08,2014	Call Sheet 1041824
Client Representative Kenny Wilkerson	Surface Well Location Sec 26:T10N:R58W	Down Hole Well Location	Job Type Surface 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)
	13.500	50.000	0.000	1,566.000	--	--

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)
	9.625	36.000	J-55	2,020.0	3,520.0	121.06	8.921	10.625	0.0	1,566.0

Products

Stage 1

From Depth (ft): 0
To Depth (ft): 1209
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) = 50 , Slurry Temperature(°F) = 65
+ 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
449095	TRAILER	Utility Trailer	201025	PICKUP	1 Ton	05/08/2014 09:00	05/08/2014 16:00
445052	TRAILER	SCM Twin	745052	TRACTOR	Tandem - Tractor	05/08/2014 09:00	05/08/2014 16:00
446171	TRAILER	Bulker	746171	TRACTOR	Tandem - Tractor	05/08/2014 09:00	05/08/2014 16:00
446173	TRAILER	Bulker	746173	TRACTOR	Tandem - Tractor	05/08/2014 09:00	05/08/2014 16:00

Crew and Bonuses

Employee	Start Shift	End Shift	Second Start Shift	Second End Shift
Douglass, Brian	05/08/2014 09:00	05/08/2014 16:00		
Hansen, Kevin	05/08/2014 09:00	05/08/2014 16:00		
Morris, Theodore	05/08/2014 09:00	05/08/2014 16:00		
Phillips, James	05/08/2014 09:00	05/08/2014 16:00		
Rogers, Clifford	05/08/2014 09:00	05/08/2014 16:00		

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	May 08, 2014 09:00	Arrive On Location		--	--	--	--	0.00
2	May 08, 2014 09:20	Tailgate Meeting		--	--	--	--	0.00
3	May 08, 2014 11:45	Rig In		--	--	--	--	0.00
4	May 08, 2014 12:40	Safety Meeting		--	--	--	--	0.00
5	May 08, 2014 12:45	Sign-off on Safety		--	--	--	--	0.00
6	May 08, 2014 12:48	Establish Circulation	Water	2.00	50.0	--	2.00	2.00
		Remarks: fill lines						
7	May 08, 2014 12:49	Pressure Test		--	3,000.0	--	--	2.00
8	May 08, 2014 12:51	Pump Preflush	Water	4.00	100.0	--	20.00	22.00
9	May 08, 2014 12:58	Mix Cement	0:1:0 Type III	4.50	150.0	--	174.00	196.00
		Remarks: with calcium and polyflake						
10	May 08, 2014 13:43	Stop		--	--	--	--	196.00
11	May 08, 2014 13:44	Drop Plug		--	--	--	--	196.00
12	May 08, 2014 13:45	Pump Displacement	Water	5.00	550.0	--	118.00	314.00
13	May 08, 2014 14:14	Bump Plug		--	--	--	--	314.00
14	May 08, 2014 14:15	Check Float		--	--	--	--	314.00
		Remarks: float held						
15	May 08, 2014 14:15	Pressure Test		--	--	--	--	314.00
		Remarks: casing test 1500 psi for 30 mins						
16	May 08, 2014 14:46	Stop		--	--	--	--	314.00
17	May 08, 2014 14:48	Rig Out		--	--	--	--	314.00
18	May 08, 2014 15:40	Job Complete		--	--	--	--	314.00
19	May 08, 2014 15:50	Pre-Departure Meeting		--	--	--	--	314.00
20	May 08, 2014 16:00	Leave Location		--	--	--	--	314.00



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Did Float Hold: Yes
Fluid Returns : Yes
Type : Cement
Volume (bbl) : 62
Temperature (°F) : 65
FDAS Functioning Correctly : Yes
Was the Program Followed As Per Design? : Yes

Material Transfer Sheet Number

Material Transfer Sheet Number
46079
46078