



**Pumping
Service Report**

9188069

Client Name Whiting Petroleum Corp.	Well Name Razor 26K-2307	JobDate April 18,2014	Call Sheet 1041260
Client Representative Kenny Wilkerson	Location Sec 26:T10N:R58W	Job Type Liner 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					
<u>Size (in)</u>	<u>Excess (%)</u>	<u>TMD From (ft)</u>	<u>TMD To (ft)</u>	<u>TVD From (ft)</u>	<u>TVD To (ft)</u>
6.000	50.000	6,028.000	12,090.000	--	--

Casing									
<u>Size (in)</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Collapse Pressure (psi)</u>	<u>Internal Yield Pressure (psi)</u>	<u>Capacity (bbl)</u>	<u>I.D. (in)</u>	<u>O.D. (in)</u>	<u>Depth From (ft)</u>	<u>Depth To (ft)</u>
4.500	11.600	L-80	6,350.0	7,780.0	111.75	4.000	5.000	4,900.0	12,090.0

Products

Stage 1	
From Depth (ft):	0
To Depth (ft):	12090
Acids/Blends/Fluids :	
Tail: 620 Sacks of 1-1-0 G, Density = 13.7 lb/gal, Volume Pumped = 159 (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),	
+ 0.55 % of LTR (Preblend),	
+ 0.2 % of AS-3 (Preblend),	
+ 0.25 lb/sack of Polyflake (Preblend)	

Fluid & Cement Data

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

Attachment & Tools

Down Hole Tools		
<u>Tool Type</u>	<u>Depth (ft)</u>	<u>Supplier</u>
Liner Hanger	4,971.000	Third Party
Guide/Float Shoe	6,065.000	



**Pumping
Service Report**

9188069

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	04/17/2014 18:30	04/18/2014 03:00
445052	TRAILER	SCM Twin	745052	TRACTOR	Tandem - Tractor	04/17/2014 18:30	04/18/2014 03:00
449070	TRAILER	Bulker				04/17/2014 18:30	04/18/2014 03:00

Crew and Bonuses

Employee	Start Shift	End Shift	Second Start Shift	Second End Shift
Hall, Andrew J	04/17/2014 18:30	04/18/2014 03:00		
Joyner, Barlen	04/17/2014 18:30	04/18/2014 03:00		
Prigmore, Dominic	04/17/2014 18:30	04/18/2014 03:00		
Barden, Sean	04/17/2014 18:30	04/18/2014 03:00		
Hansen, Kevin	04/17/2014 18:30	04/18/2014 03:00		

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	Apr 17,2014 18:30	Arrive On Location	---	--	--	--	--	0.00
2	Apr 17,2014 18:45	Tailgate Meeting	---	--	--	--	--	0.00
3	Apr 17,2014 19:15	Rig In	---	--	--	--	--	0.00
4	Apr 17,2014 21:00	Safety Meeting	---	--	--	--	--	0.00
5	Apr 17,2014 21:20	Sign-off on Safety	---	--	--	--	--	0.00
6	Apr 17,2014 22:24	Pressure Test	Water	1.00	5,000.0	--	3.00	3.00
7	Apr 17,2014 22:28	Pump Preflush	Water	4.00	1,100.0	--	30.00	33.00
		Remarks: Viswep						
8	Apr 17,2014 22:40	Pump	1-1-0 G	5.00	1,200.0	--	159.00	192.00
9	Apr 17,2014 23:15	Drop Plug	---	--	--	--	--	192.00
10	Apr 17,2014 23:22	Displace Fluid	Water	4.00	1,800.0	--	156.00	348.00
11	Apr 18,2014 00:10	Check Float	---	--	2,000.0	--	--	348.00
		Remarks: Held for 2 min						
12	Apr 18,2014 00:20	Apply Annular Pressure	Water	1.00	0.0	1,600.0	2.00	350.00
13	Apr 18,2014 00:32	Displace Fluid	Water	6.00	1,000.0	--	110.00	460.00
14	Apr 18,2014 01:00	Wash	Water	1.50	22.0	--	20.00	480.00
15	Apr 18,2014 02:00	Rig Out	---	--	--	--	--	480.00
16	Apr 18,2014 02:30	Job Complete	---	--	--	--	--	480.00
17	Apr 18,2014 02:45	Pre-Departure Meeting	---	--	--	--	--	480.00
18	Apr 18,2014 03:00	Leave Location	---	--	--	--	--	480.00



**Pumping
Service Report**

9188069

Treatment Reports & Remarks

Did Float Hold: Yes
Fluid Returns : Yes
Type : Cement
Volume (bbl) : 20
Temperature (°F) : 80
FDAS Functioning Correctly : Yes
Was the Program Followed As Per Design? : Yes

Material Transfer Sheet Number

Material Transfer Sheet Number

9922

9923

Comments To Service Report

Job went good. Pumped job according to prog. All Sanjel equipment worked well. Crew did great job.



Client	Whiting Petroleum Corp.	Client Rep	Kenny Wilkerson	Supervisor	Andy Hall
Ticket No.	9188069	Well Name	Razor 26K-2307	Unit No.	445052
Location	Sec26:T10N:R58W	Job Type	Liner Casing	Service District	505 Fort Lupton
Comments				Job Date	04/17/2014

