



**Pumping
Service Report**

9193309

Client Name Whiting Petroleum Corp.	Well Name Wolf 12L-0103	Rig Pioneer Drilling 54	Job Date August 25, 2014	Call Sheet 1046084
Client Representative BJ	Surface Well Location Sec 12:T10N:R59W	Down Hole Well Location	Job Type Surface 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)
13.500	25.000	0.000	1,746.000	--	--

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	138.54	8.921	10.625	0.0	1,792.0

Products

Stage 1

From Depth (ft): 0
To Depth (ft): 1792

Acids/Blends/Fluids:

Tail: 740 Sacks of 0:1:0 Type III, Density = 14.2 lb/gal, Volume Pumped = 194 (bbl)
Water Temperature(°F) = 60 , Bulk Temperature(°F) = 60 , Slurry Temperature(°F) = 78
+ 1 % of CaCl₂ (Preblend),
+ 0.25 lb/sack of Polyflake (Preblend)

Extra Cement: 100 Sacks of 0:1:0 Type III, Density = 14.2 lb/gal, Volume Pumped = 26 (bbl)
Water Temperature(°F) = 60 , Bulk Temperature(°F) = 60 , Slurry Temperature(°F) = 60
+ 2 % of CaCl₂ (Prehydrate)

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	--	8.400	--	--	Jul 14, 2014 20:27

Attachment & Tools

Down Hole Tools

Tool Type	Depth (ft)	Supplier
Guide Shoe	--	Third Party
Float Collar	--	Third Party

Tubular Plugs

Tubular Plug Type	Size (in)	Supplier
Rubber Top	9.625	Client

Acidizing • Cementing • Coiled Tubing • Fracturing • Nitrogen
Canada • USA • International

Print Date: August 25, 2014
Service Report: 9193309
Page 1 of 3 V3.12.0.0



**Pumping
Service Report**

9193309

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>
201274	PICKUP	3/4 Ton				08/25/2014 07:00	08/25/2014 13:00
445047	TRAILER	SCM Twin	745047	TRACTOR	Tandem - Tractor	08/25/2014 07:00	08/25/2014 13:00
446153	TRAILER	Bulker	746153	TRACTOR	Tandem - Tractor	08/25/2014 07:00	08/25/2014 13:00
446084	TRAILER	Bulker	746084	TRACTOR	Tandem - Tractor	08/25/2014 07:00	08/25/2014 13:00

Crew and Bonuses

<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>	<u>Second End Shift</u>
Prigmore, Dominic	08/25/2014 07:00	08/25/2014 13:00		
Cheal, Samuel	08/25/2014 07:00	08/25/2014 13:00		
Melgarejo Herrera, Eduardo	08/25/2014 07:00	08/25/2014 13:00		
Gibson, Bruce	08/25/2014 07:00	08/25/2014 13:00		

Treatment Reports & Remarks

Treatment Report

<u>Event #</u>	<u>Event Time</u>	<u>Event Description</u>	<u>Fluid Type</u>	<u>Rate</u> (bbl/min)	<u>Tubular Pressure</u> (psi)	<u>Annular Pressure</u> (psi)	<u>Stage Volume</u> (bbl)	<u>Total Volume</u> (bbl)
1	Aug 25,2014 07:00	Arrive On Location	---	--	--	--	--	0.00
2	Aug 25,2014 07:10	Tailgate Meeting	---	--	--	--	--	0.00
3	Aug 25,2014 07:30	Rig In	---	--	--	--	--	0.00
4	Aug 25,2014 09:40	Sign-off on Safety	---	--	--	--	--	0.00
5	Aug 25,2014 09:45	Safety Meeting	---	--	--	--	--	0.00
6	Aug 25,2014 10:10	Start - Fluid	Water	1.00	20.0	--	1.50	0.00
		Remarks: Primed the lines						
7	Aug 25,2014 10:20	Pressure Test	Water	--	3,000.0	--	--	0.00
		Remarks: We had to pressure test twice due to loss of pressure.						
8	Aug 25,2014 10:25	Establish Circulation	Water	3.00	150.0	--	18.00	0.00
9	Aug 25,2014 10:33	Mix Cement	0:1:0 Type III	3.00	150.0	--	194.00	0.00
10	Aug 25,2014 11:48	Stop	---	0.00	--	--	0.00	0.00
11	Aug 25,2014 11:50	Drop Plug	---	--	--	--	--	0.00
12	Aug 25,2014 11:52	Pump Displacement	Water	4.00	300.0	--	135.00	0.00
		Remarks: bumped plug at exactly 135 bbls.						
13	Aug 25,2014 12:27	Hold Pressure	Water	--	1,500.0	--	--	0.00
14	Aug 25,2014 12:28	Check Float	Water	--	1,500.0	--	--	0.00
		Remarks: Held pressure for 5 min.						
15	Aug 25,2014 12:35	Stop	---	--	--	--	--	0.00
16	Aug 25,2014 12:55	Wash	Water	1.00	20.0	--	15.00	0.00
17	Aug 25,2014 13:10	Rig Out	---	--	--	--	--	0.00
18	Aug 25,2014 13:50	Pre-Departure Meeting	---	--	--	--	--	0.00
19	Aug 25,2014 14:00	Job Complete	---	--	--	--	--	0.00
20	Aug 25,2014 14:15	Leave Location	---	--	--	--	--	0.00

Acidizing • Cementing • Coiled Tubing • Fracturing • Nitrogen

Canada • USA • International

Print Date:

August 25, 2014

Service Report:

9193309

Page 2 of 3

V3.12.0.0



Treatment Reports & Remarks

Did Float Hold: Yes
Fluid Returns : Yes
Type : Cement
Volume (bbl) : 80
Temperature (°F) : 82
FDAS Functioning Correctly : Yes
Was the Program Followed As Per Design? : Yes

Material Transfer Sheet Number

Material Transfer Sheet Number
46915
46914

Comments To Service Report

Job went well. All Sanjel equipment operated fine. No issues



Client	Whiting Petroleum Corp	Client Rep	BJ	Supervisor	Dominic Prigmore
Ticket No.	9193309	Well Name	Wolf 12L-0103	Unit No.	445047
Location	Sec 12:T10N:R59W	Job Type	Surface Casing	Service District	Fort Lupton
Comments	Job Date 08/25/2014				

