



## Pumping Service Report

**9191266**

API# 05-123-392570000

Client Name Whiting Petroleum Corp.	Well Name Razor 33M - 2803	Rig Pioneer Drilling 54	Job Date January 04, 2015	Call Sheet 1052817
Client Representative Mr. Brody	Surface Well Location SWSW Sec 33:T10N:R58W	Down Hole Well Location	Job Type Intermediate Casing	Lead Supervisor Maguire, Matthew (26325)

### 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)
8.750	30.000	--	--	--	--

### 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	222.00	6.184	7.656	0.0	6,000.0
9.625	0.000		--	--	--	--	--	--	--

### Products

#### Stage 1

From Depth (ft): 0

To Depth (ft): 4650

Acids/Blends/Fluids :

Lead 1: 460 Sacks of 1:2:6 POZ G Gel, Density = 12.5 lb/gal, Volume Pumped = 154.9 (bbl)

Water Temperature(°F) = 50 , Bulk Temperature(°F) = 50 , Slurry Temperature(°F) = 50

+ 0.2 % of CFR (Preblend),

+ 0.5 % of CFL-4 (Preblend),

+ 0.15 % of LTR (Preblend),

+ 0.25 lb/sack of Polyflake (Preblend)

#### Stage 2

From Depth (ft): 6000

To Depth (ft): 4650

Acids/Blends/Fluids :

Tail: 210 Sacks of 1-1-0 G, Density = 13.5 lb/gal, Volume Pumped = 56.8 (bbl)

Water Temperature(°F) = 50 , Bulk Temperature(°F) = 50 , Slurry Temperature(°F) = 50

+ 8 % of SilFume (Preblend),

+ 2 % of Gel (Preblend),

+ 0.1 % of CFR-5 (Preblend),

+ 0.7 % of CFL-3 (Preblend),

+ 0.3 % of LTR (Preblend),

+ 0.25 lb/sack of Polyflake (Preblend)

### Fluid & Cement Data

Expected Cement Top: Surface

#### Wellbore Fluid

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	8.400	--	--	Jul 14, 2014 20:27
Water Based Mud	--	--	--	--	Oct 09, 2014 19:06



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### Attachment & Tools

#### Down Hole Tools

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

#### Tubular Plugs

<u>Tubular Plug Type</u>	<u>Size (in)</u>	<u>Supplier</u>
Rubber Top	7.000	Client

### 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>
201168	PICKUP	1 Ton	449093	TRAILER	Utility Trailer	01/04/2015 06:00	01/04/2015 19:00
445070	TRAILER	SCM Twin	745070	TRACTOR	Tandem - Tractor	01/04/2015 06:00	01/04/2015 19:00
201168	PICKUP	1 Ton				01/04/2015 06:00	01/04/2015 19:00

#### Crew and Bonuses

<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>	<u>Second End Shift</u>
Maguire, Matthew (26325)	01/04/2015 06:00	01/04/2015 19:00		
Pyfer, Kevin (29802)	01/04/2015 06:00	01/04/2015 19:00		
Cox, Brandon (27419)	01/04/2015 06:00	01/04/2015 19:00		
Peterson, Ryan (28158)	01/04/2015 06:00	01/04/2015 19:00		
Hall, Austin (28887)	01/04/2015 06:00	01/04/2015 19:00		

### Treatment Reports & Remarks

**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	Jan 04,2015 06:00	Arrive On Location		--	--	--	--	0.00
2	Jan 04,2015 06:10	Tailgate Meeting		--	--	--	--	0.00
		Remarks: Filled out JSA.						
3	Jan 04,2015 06:15	Crew Briefing (Rig in)		--	--	--	--	0.00
4	Jan 04,2015 13:00	Rig in Complete		--	--	--	--	0.00
5	Jan 04,2015 14:20	Crew Briefing (Pre Job)		--	--	--	--	0.00
6	Jan 04,2015 14:30	STEACS Briefing		--	--	--	--	0.00
7	Jan 04,2015 14:40	Sign-off on Safety		--	--	--	--	0.00
8	Jan 04,2015 15:00	Start - Fluid	Water	--	--	--	--	0.00
		Remarks: Filled lines.						
9	Jan 04,2015 15:01	Pressure Test Start		--	3,000.0	--	--	0.00
10	Jan 04,2015 15:02	Pressure Test Complete		--	3,000.0	--	--	0.00
		Remarks: All lines held pressure.						
11	Jan 04,2015 15:03	Pump	Water	3.00	190.0	--	10.00	10.00
		Remarks: With indicator dye.						
12	Jan 04,2015 15:06	Pump Preflush	Water	2.00	130.0	--	20.00	30.00
		Remarks: Pre flush.						
13	Jan 04,2015 15:31	Mix Cement	1:2:6 POZ G Gel	7.00	800.0	--	155.00	185.00
		Remarks: WR=10.14, Y=1.89, D=12.5, Sk Wt=92.1, 111.1 bbls mix water.						
14	Jan 04,2015 15:53	Mix Cement	1-1-0 G	7.00	400.0	--	56.80	241.80
		Remarks: WR=7.12, Y=1.52, D=13.5, Sk Wt=91.9, 35.6 bbls mix water.						
15	Jan 04,2015 16:07	Drop Plug		--	--	--	--	241.80
16	Jan 04,2015 16:08	Displace Fluid	Water Based Mud	7.00	2,242.0	--	221.70	463.50
17	Jan 04,2015 16:46	Bump Plug		--	2,242.0	--	--	463.50
		Remarks: Bumped plug 500psi over.						
18	Jan 04,2015 16:48	Check Float		--	2,242.0	--	--	463.50
		Remarks: Float failed.						
19	Jan 04,2015 17:10	Pressure Test		--	860.0	--	--	463.50
		Remarks: Pressured up head and left on well.						
20	Jan 04,2015 17:12	Stop		--	--	--	--	463.50
21	Jan 04,2015 17:15	Wash	Water	1.50	100.0	--	20.00	463.50
22	Jan 04,2015 17:45	Rig Out		--	--	--	--	463.50
		Remarks: Revisit JSA.						
23	Jan 04,2015 17:55	Job Complete		--	--	--	--	463.50
24	Jan 04,2015 18:00	Pre-Departure Meeting		--	--	--	--	463.50
25	Jan 04,2015 18:10	Leave Location		--	--	--	--	463.50
		Remarks: Revisit JSA.						

**Treatment Reports & Remarks**

Did Float Hold: No  
Fluid Returns : Yes  
Type : Cement  
Volume (bbl) : 41.7  
Temperature (°F) : 50  
FDAS Functioning Correctly : Yes  
Was the Program Followed As Per Design? : Yes

**Material Transfer Sheet Number**Material Transfer Sheet Number

55422

55420

55421