



Cementing Service Report

9207880

Client Name Whiting Petroleum Corp.	Well Name Razor Federal 12F-0104B	Rig Unit Drilling Co. 409	Job Date August 20,2015	Call Sheet 1060130
Client Representative BJ	Surface Well Location SE NE Sec 12:T10N:R58W	Down Hole Well Location	Job Type Intermediate Casing	Lead Supervisor Svoboda, Miloslav (28226)

Well Profile

Well Type: Oil

Maximum Treating Pressure (psi): ---

Predicted Bottom Hole Static Temperature (°F): 100.00 @ --

Bottom Hole Circulating Temperature (°F): 80.00 @ --

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>
8.750	35.000	1,884.000	6,491.000	0.000	5,866.000

Casing

<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Collapse Pressure</u>	<u>Internal Yield Pressure</u>	<u>Capacity</u>	<u>I.D.</u>	<u>O.D.</u>	<u>Depth From</u>	<u>Depth To</u>
<u>(in)</u>	<u>(lb/ft)</u>		<u>(psi)</u>	<u>(psi)</u>	<u>(bbl)</u>	<u>(in)</u>	<u>(in)</u>	<u>(ft)</u>	<u>(ft)</u>
9.625	36.000	J-55	2,020.0	3,520.0	145.65	8.921	10.625	0.0	1,884.0
7.000	32.000	L-80	8,600.0	9,060.0	233.62	6.094	7.656	0.0	6,476.0

Products

Stage 1

From Depth (ft): 0

To Depth (ft): 4088

Acids/Blends/Fluids :

Lead 1: 470 Sacks of 1-2-6 PozG, Density = 12.5 lb/gal, Volume Pumped = 158 (bbl)
Water Temperature(°F) = 75 , Bulk Temperature(°F) = 80 , Slurry Temperature(°F) = 85
+ 6 % of Gel (Preblend),
+ 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): 4088

To Depth (ft): 6476

Acids/Blends/Fluids :

Tail: 235 Sacks of 1-1-2 PozG, Density = 13.5 lb/gal, Volume Pumped = 64 (bbl)
Water Temperature(°F) = 75 , Bulk Temperature(°F) = 80 , Slurry Temperature(°F) = 85
+ 2 % of Gel (Preblend),
+ 8 % of SilFume (Preblend),

Print Date: August 21, 2015
Service Report: 9207880
Page 1 of 5 V4.2.0.0

+ 0.1 % of CFR-5 (Preblend),
+ 0.7 % of CFL-3 (Preblend),
+ 0.2 % of LTR (Preblend),
+ 0.25 lb/sack of Polyflake (Preblend)

Fluid & Cement Data

Expected Cement Top: Surface

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	--	8.340	--	--	Jul 07, 2015 14:19
Water Based Mud	--	10.200	--	--	Jul 11, 2015 17:09

Attachment & Tools

Down Hole Tools

<u>Tool Type</u>	<u>Depth (ft)</u>	<u>Supplier</u>
Guide Shoe	6,476.000	Third Party
Float Collar	6,432.000	Third Party

Tubular Plugs

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



Cementing Service Report

9207880

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>
449083	TRAILER	Utility Trailer	201017	PICKUP	1 Ton	08/20/2015 16:29	08/21/2015 05:00
445070	TRAILER	SCM Twin	745070	TRACTOR	Tandem - Tractor	08/20/2015 16:29	08/21/2015 05:00
449102	TRAILER	Bulker				08/20/2015 16:29	08/21/2015 05:00
200910	PICKUP	1/2 Ton				08/20/2015 16:29	08/21/2015 05:00

Crew and Bonuses

<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>	<u>Second End Shift</u>
Svoboda, Miloslav (28226)	08/20/2015 13:00	08/21/2015 08:49		
Faircloth, Branden (29706)	08/20/2015 13:00	08/21/2015 08:49		
Hansen, Ted (29055)	08/20/2015 13:00	08/21/2015 08:49		
Lewis, Rand (22464)	08/20/2015 13:00	08/21/2015 08:49		
Faircloth, Branden (29706)	08/20/2015 13:00	08/21/2015 08:49		
Spirek, Matthew (26921)	08/20/2015 13:00	08/21/2015 08:49		

Treatment Reports & Remarks

Print Date: August 21, 2015
Service Report: 9207880
Page 3 of 5 V4.2.0.0



Cementing Service Report

9207880

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	Aug 20,2015 16:30	Arrive On Location		--	--	--	--	0.00
		Remarks: on lease						
2	Aug 20,2015 17:30	Crew Briefing (Rig in)		--	--	--	--	0.00
		Remarks: tailgate meeting						
3	Aug 21,2015 00:45	Rig in Complete		--	--	--	--	0.00
		Remarks: stand up iron						
4	Aug 21,2015 01:00	Crew Briefing (Pre Job)		--	--	--	--	0.00
		Remarks: JSA with rig crew						
5	Aug 21,2015 01:36	Pressure Test Start	Water	2.00	4,000.0	--	2.00	2.00
6	Aug 21,2015 01:38	Pressure Test Complete		--	--	--	--	2.00
		Remarks: pressure held						
7	Aug 20,2015 01:39	Pump Preflush	Water	3.50	150.0	--	10.00	12.00
		Remarks: fresh water with red dye						
8	Aug 21,2015 01:43	Mix Cement	1-2-6 PozG	6.00	600.0	--	158.00	170.00
		Remarks: mixed & pumped away						
9	Aug 21,2015 02:09	Mix Cement	1-1-2 PozG	5.00	400.0	--	64.00	234.00
		Remarks: mixed & pumped away						
10	Aug 21,2015 02:23	Drop Plug		0.00	0.0	--	--	234.00
		Remarks: plug dropped						
11	Aug 21,2015 02:29	Displace Fluid	Water Based Mud	4.00	500.0	--	232.00	466.00
		Remarks: last 10 bbl slow to 2bbl/min						
12	Aug 21,2015 03:27	Bump Plug	Water Based Mud	--	1,600.0	--	--	466.00
		Remarks: bumped 500 psi over						
13	Aug 21,2015 03:29	Check Float	Water Based Mud	--	--	--	--	466.00
		Remarks: 1 bbl of mud back						
14	Aug 21,2015 03:45	Wash		--	--	--	--	466.00
		Remarks: wash pump						
15	Aug 21,2015 04:20	Rig Out		--	--	--	--	466.00
16	Aug 21,2015 04:35	Job Complete		--	--	--	--	466.00
17	Aug 21,2015 04:45	Pre-Departure Meeting		--	--	--	--	466.00
18	Aug 21,2015 05:00	Leave Location		--	--	--	--	466.00

Print Date: August 21, 2015
Service Report: 9207880
Page 4 of 5 V4.2.0.0



Cementing Service Report

9207880

Did Float Hold: Yes

Fluid Returns : Yes

Type : Cement

Volume (bbl) : 53

Temperature (°F) : 100

FDAS Functioning Correctly : Yes

Was the Program Followed As Per Design? : No

Company man doesn't want to pump 20 bbl of visweep. He changed it to 10 bbl of fresh. Phone call was made to coordinator.

Material Transfer Sheet Number

Material Transfer Sheet Number

65494

65495

65496

Print Date: August 21, 2015

Service Report: 9207880

Page 5 of 5 V4.2.0.0



Client	Whiting Petroleum Corp.	Client Rep	Kenny	Supervisor	Miloslav Svoboda
Ticket No.	9207880	Well Name	Razor Federal 12F-0104B	Unit No.	745070
Location	SE NE Sec 12-T 10N-R58W	Job Type	Intermediate Casing	Service District	Fort Lupton
Comments	Lead: 470 Skis 1-2-6 PozG; Density= 12.5 lb./gal Tail: 235 Skis 1-1-2 PozG; Density= 13.5 lb./gal				
		Job Date	08/21/2015		

