



Cementing Service Report

9209038

Client Name Whiting Petroleum Corp.	Well Name Horsetail 07E-1834	Rig Unit Drilling Co. 409	Job Date December 16,2015	Call Sheet 1063315
Client Representative Mr. BJ Honeycutt	Surface Well Location SE NW Sec 7:T10N:R57W	Down Hole Well Location	Job Type Surface Casing	Lead Supervisor Schneider, Patrick (24093)

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

Size (in)	Excess (%)	TMD From (ft)	TMD To (ft)	TVD From (ft)	TVD To (ft)
13.500	30.000	0.000	2,070.000	--	--

Casing

Size	Weight	Grade	Collapse Pressure	Internal Yield Pressure	Capacity	I.D.	O.D.	Depth From	Depth To
(in)	(lb/ft)		(psi)	(psi)	(bbl)	(in)	(in)	(ft)	(ft)
9.625	36.000	J-55	2,020.0	3,520.0	159.02	8.921	10.625	0.0	2,057.0

Products

Stage 1

From Depth (ft):	0
To Depth (ft):	1557

Acids/Blends/Fluids :

Lead 1: 385 Sacks of Control Set C, Density = 12 lb/gal, Volume Pumped = 168.7 (bbl)
Water Temperature(°F) = 32 , Bulk Temperature(°F) = 19 , Slurry Temperature(°F) = 42
+ 0.25 lb/sack of LCL-7 (Preblend)

Stage 2

From Depth (ft):	1557
To Depth (ft):	2057

Acids/Blends/Fluids :

Tail: 240 Sacks of 0:1:0 Type III, Density = 14.2 lb/gal, Volume Pumped = 62.4 (bbl)
Water Temperature(°F) = 32 , Bulk Temperature(°F) = 19 , Slurry Temperature(°F) = 44
+ 2 % of CaCl₂ (Preblend),
+ 0.25 lb/sack of LCL-7 (Preblend)

Stage 3

From Depth (ft):	
To Depth (ft):	

Acids/Blends/Fluids :

Fluid & Cement Data

Expected Cement Top: Surface

Wellbore Fluid

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	8.340	--	--	Jul 07, 2015 14:19
Water Based Mud	--	--	--	--	Aug 24, 2015 15:49

Attachment & Tools

Down Hole Tools

<u>Tool Type</u>	<u>Depth (ft)</u>	<u>Supplier</u>
Guide/Float Shoe	2,057.000	Third Party
Float Collar	2,017.000	Third Party

Tubular Plugs

<u>Tubular Plug Type</u>	<u>Size (in)</u>	<u>Supplier</u>
Rubber Top	9.625	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>
201173	PICKUP	1 Ton	449093	TRAILER	Utility Trailer	12/15/2015 21:30	12/16/2015 13:30
445052	TRAILER	SCM Twin	745052	TRACTOR	Tandem - Tractor	12/15/2015 21:30	12/16/2015 13:30
446171	TRAILER	Bulker	746171	TRACTOR	Tandem - Tractor	12/15/2015 21:30	12/16/2015 13:30
446153	TRAILER	Bulker	746153	TRACTOR	Tandem - Tractor	12/15/2015 21:30	12/16/2015 13:30

Crew and Bonuses

<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>	<u>Second End Shift</u>
Schneider, Patrick (24093)	12/15/2015 21:30	12/16/2015 13:30		
Ripka, Robert (23825)	12/15/2015 21:30	12/16/2015 13:30		
Meisner, Jeremy (27681)	12/15/2015 21:30	12/16/2015 13:30		
Decenick, Jorden (30684)	12/15/2015 21:30	12/16/2015 13:30		
Vitera, John (29843)	12/15/2015 21:30	12/16/2015 13:30		

Treatment Reports & Remarks

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	Dec 16,2015 00:00	Arrive On Location		--	--	--	--	0.00
2	Dec 16,2015 00:05	Wait on Client (non Sanjel)		--	--	--	--	0.00
		Remarks: waited for rig to drill and run casing						
3	Dec 16,2015 08:00	Crew Briefing (Rig in)		--	--	--	--	0.00
		Remarks: discussed lease hazards and rig in procedures						
4	Dec 16,2015 08:30	Rig In		--	--	--	--	0.00
5	Dec 16,2015 09:00	Rig in Complete		--	--	--	--	0.00
6	Dec 16,2015 10:30	Crew Briefing (Pre Job)		--	--	--	--	0.00
		Remarks: discussed job scope and everyones dutys						
7	Dec 16,2015 11:19	Establish Circulation	Water	3.00	200.0	--	3.00	3.00
8	Dec 16,2015 11:22	Pressure Test Start	Water	--	2,000.0	--	--	3.00
9	Dec 16,2015 11:24	Pressure Test Complete	Water	--	0.0	--	--	3.00
		Remarks: good pressure test						
10	Dec 16,2015 11:24	Pump Preflush	Water	5.00	100.0	--	20.00	23.00
		Remarks: dyed water						
11	Dec 16,2015 11:27	Mix Cement	Control Set C	7.00	300.0	--	168.70	191.70
		Remarks: 385 sks lead cement @ 12.0 ppg yield = 2.46 h2o req = 14.52						
12	Dec 16,2015 11:52	Mix Cement	0:1:0 Type III	7.00	350.0	--	62.40	254.10
		Remarks: 240 sks tail cement @ 14.2 ppg yield = 1.46 h2o req = 7.36						
13	Dec 16,2015 12:05	Drop Plug	Water	--	0.0	--	--	254.10
14	Dec 16,2015 12:09	Displace Plug	Water	7.00	300.0	--	156.00	410.10
15	Dec 16,2015 12:45	Pumping Pressure Before Bump	Water	2.00	700.0	--	--	410.10
16	Dec 16,2015 12:46	Bump Plug	Water	--	1,200.0	--	--	410.10
		Remarks: bumped plug 500 psi over						
17	Dec 16,2015 12:49	Check Float	Water	--	0.0	--	--	410.10
		Remarks: floats held got 1.25 bbl back						
18	Dec 16,2015 12:55	Tailgate Meeting		--	--	--	--	410.10
		Remarks: revisited JSA						
19	Dec 16,2015 13:00	Rig Out		--	--	--	--	410.10
20	Dec 16,2015 13:10	Wash	Water	--	--	--	--	410.10
		Remarks: washed pumps and lines						
21	Dec 16,2015 13:20	Job Complete		--	--	--	--	410.10
22	Dec 16,2015 13:25	Pre-Departure Meeting		--	--	--	--	410.10
23	Dec 16,2015 13:30	Leave Location		--	--	--	--	410.10

Treatment Reports & Remarks

Did Float Hold: Yes
Fluid Returns : Yes
Type : Cement
Volume (bbl) : 40
Temperature (°F) : 55
FDAS Functioning Correctly : Yes
Was the Program Followed As Per Design? : Yes

Material Transfer Sheet Number

Material Transfer Sheet Number

63069

63070

63071



Client	Whiting Petroleum	Client Rep	Mr. BJ Honeycutt
Ticket No.	9209038	Well Name	Horsetail 07E-1834
Location	SE NW Sec. 7 - T10N-R57W	Job Type	Surface Casing
Comments	Lead Cement: 385 sks Control Set C + .25 lb/sk LCL-7 Tail Cement : 240 sks 0:1:0 Type III + 2% CaCl2 + .25 lb/sk LCL-7		

Supervisor	Pat Schneider
Unit No.	445052
Service District	Ft. Lupton
Job Date	12/16/2015

