



Cementing Service Report

9209044

Client Name Whiting Petroleum Corp.	Well Name Horsetail 07E - 1801	Rig Unit Drilling Co. 409	Job Date January 06,2016	Call Sheet 1063650
Client Representative Kenny	Surface Well Location NW 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	2,053.000	--	--

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	157.63	8.921	10.625	0.0	2,039.0

Products

Stage 1

From Depth (ft):	0
To Depth (ft):	1400

Acids/Blends/Fluids :

Lead 1: 390 Sacks of Control Set C, Density = 12 lb/gal, Volume Pumped = 171 (bbl)
Water Temperature(°F) = 52 , Bulk Temperature(°F) = 30 , Slurry Temperature(°F) = 59
+ 0.25 lb/sack of LCL-7 (Preblend)

Stage 2

From Depth (ft):	1400
To Depth (ft):	2039

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) = 52 , Bulk Temperature(°F) = 30 , Slurry Temperature(°F) = 62
+ 2 % of CaCl₂ (Preblend),
+ 0.25 lb/sack of LCL-7 (Preblend)

Fluid & Cement Data

Expected Cement Top: Surface

Wellbore Fluid

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	8.340	--	--	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	2,039.000	Third Party
Float Collar	1,999.000	Third Party
Tubular Plugs		
<u>Tubular Plug Type</u>	<u>Size (in)</u>	<u>Supplier</u>
Rubber Top	9.625	Third Party

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>
449086	TRAILER	Utility Trailer	201168	PICKUP	1 Ton	01/06/2016 00:00	01/06/2016 19:00
445024	TRAILER	SCM Twin	745024	TRACTOR	Tandem - Tractor	01/06/2016 00:00	01/06/2016 19:00
446200	TRAILER	Bulker	746200	TRACTOR	Tandem - Tractor	01/06/2016 00:00	01/06/2016 19:00
446201	TRAILER	Bulker	746201	TRACTOR	Tandem - Tractor	01/06/2016 00:00	01/06/2016 19:00
201346	PICKUP	1/2 Ton				01/06/2016 00:00	01/06/2016 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>			
Schneider, Patrick (24093)	01/06/2016 00:00	01/06/2016 19:00					
Yates, William (29930)	01/06/2016 00:00	01/06/2016 19:00					
Decenick, Scott (30083)	01/06/2016 00:00	01/06/2016 19:00					
Decenick, Jorden (30684)	01/06/2016 00:00	01/06/2016 19:00					
Joyner, Barlen (28603)	01/06/2016 00:00	01/06/2016 19:00					

Treatment Reports & Remarks								
Treatment Report								
<u>Event #</u>	<u>Event Time</u>	<u>Event Description</u>	<u>Fluid Type</u>	<u>Rate</u>	<u>Tubular Pressure</u>	<u>Annular Pressure</u>	<u>Stage Volume</u>	<u>Total Volume</u>
				<u>(bbl/min)</u>	<u>(psi)</u>	<u>(psi)</u>	<u>(bbl)</u>	<u>(bbl)</u>
1	Jan 06,2016 00:00	Arrive On Location		--	--	--	--	0.00
2	Jan 06,2016 00:05	Crew Briefing (Rig in)		--	--	--	--	0.00
		Remarks: discussed lease hazards and rig in procedures						
3	Jan 06,2016 00:30	Wait to rig in (Wait on Client)		--	--	--	--	0.00
		Remarks: waited for rig to finish drilling and run casing						
4	Jan 06,2016 08:00	Rig In		--	--	--	--	0.00
5	Jan 06,2016 09:00	Rig in Complete		--	--	--	--	0.00
6	Jan 06,2016 09:05	Wait On Instructions		--	--	--	--	0.00
		Remarks: waited for rig to run casing						
7	Jan 06,2016 15:15	Crew Briefing (Pre Job)		--	--	--	--	0.00
		Remarks: discussed job scope and everyones dutys						
8	Jan 06,2016 15:54	Start - Fluid	Water	1.00	--	--	1.00	1.00
		Remarks: filled lines						

Treatment Report								
Event #	Event Time	Event Description	Fluid Type	Rate (bbl/min)	Tubular Pressure (psi)	Annular Pressure (psi)	Stage Volume (bbl)	Total Volume (bbl)
9	Jan 06,2016 15:56	Pressure Test Start	Water	--	2,000.0	--	--	1.00
10	Jan 06,2016 15:58	Pressure Test Complete	Water	--	0.0	--	--	1.00
		Remarks: good pressure test						
11	Jan 06,2016 15:58	Pump Preflush	Water	2.00	100.0	--	20.00	21.00
		Remarks: 10 bbl fresh water & 10 bbl dyed water						
12	Jan 06,2016 16:10	Mix Cement	Control Set C	7.00	250.0	--	171.00	192.00
		Remarks: 390 sks lead cement @ 12.0 ppg yield = 2.46 h2o req = 14.52						
13	Jan 06,2016 16:37	Mix Cement	0:1:0 Type III	6.00	350.0	--	62.40	254.40
		Remarks: 240 sks tail cement @ 14.2 ppg yield = 1.46 h2o req = 7.36						
14	Jan 06,2016 16:50	Drop Plug	Water Based Mud	--	0.0	--	--	254.40
15	Jan 06,2016 16:58	Displace Plug	Water Based Mud	7.00	400.0	--	154.50	408.90
		Remarks: slowed last 10 bbl to 2 bbl per min						
16	Jan 06,2016 17:34	Pumping Pressure Before Bump	Water Based Mud	2.00	550.0	--	--	408.90
17	Jan 06,2016 17:35	Bump Plug	Water Based Mud	2.00	1,500.0	--	--	408.90
		Remarks: bumped plug to 1,500 psi						
18	Jan 06,2016 17:36	Hold Pressure	Water Based Mud	--	1,500.0	--	--	408.90
		Remarks: 10 min casing test						
19	Jan 06,2016 17:49	Check Float	Water Based Mud	--	0.0	--	--	408.90
		Remarks: floats held got 1 bbl back						
20	Jan 06,2016 17:55	Tailgate Meeting		--	--	--	--	408.90
		Remarks: revisited JSA						
21	Jan 06,2016 18:00	Rig Out		--	--	--	--	408.90
22	Jan 06,2016 18:15	Wash	Water	--	--	--	--	408.90
		Remarks: washed pumps and lines						
23	Jan 06,2016 18:45	Job Complete		--	--	--	--	408.90
24	Jan 06,2016 18:50	Pre-Departure Meeting		--	--	--	--	408.90
25	Jan 06,2016 19:00	Leave Location		--	--	--	--	408.90
Did Float Hold:		Yes						
Fluid Returns :		Yes						
Type :		Cement						
Volume (bbl) :		90						
Temperature (°F) :		70						
FDAS Functioning Correctly :		Yes						
Was the Program Followed As Per Design? :		Yes						

Treatment Reports & Remarks

Material Transfer Sheet Number

Material Transfer Sheet Number

63236

63237

63238

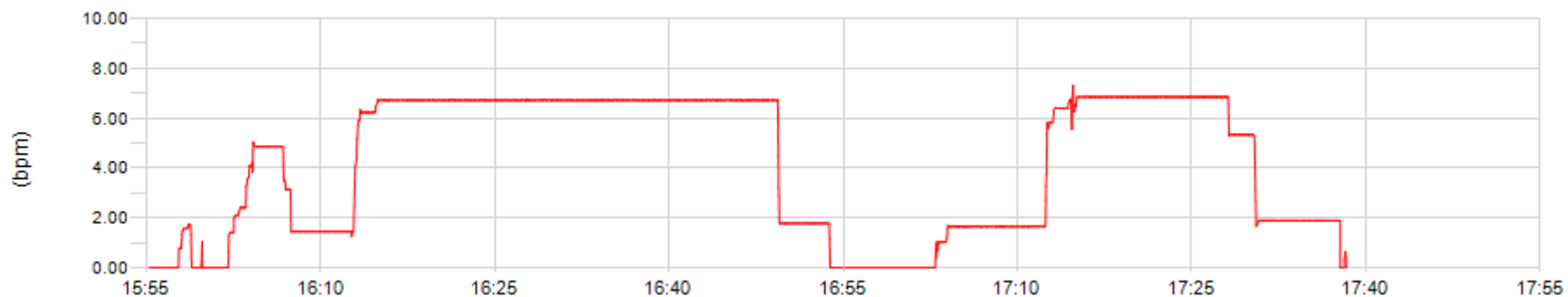


Client Whiting Petroleum
Ticket No. 9209044
Location NW NW Sec. 7-T10N-R57W
Comments Lead Cement: 390 sks Control Set C + .25 lb/sk LCL-7 @ 12.0 ppg
Tail Cement: 240 sks 0:1:0 Type III + 2% CaCl₂ + .25 lb/sk LCL-7 @ 14.2 ppg

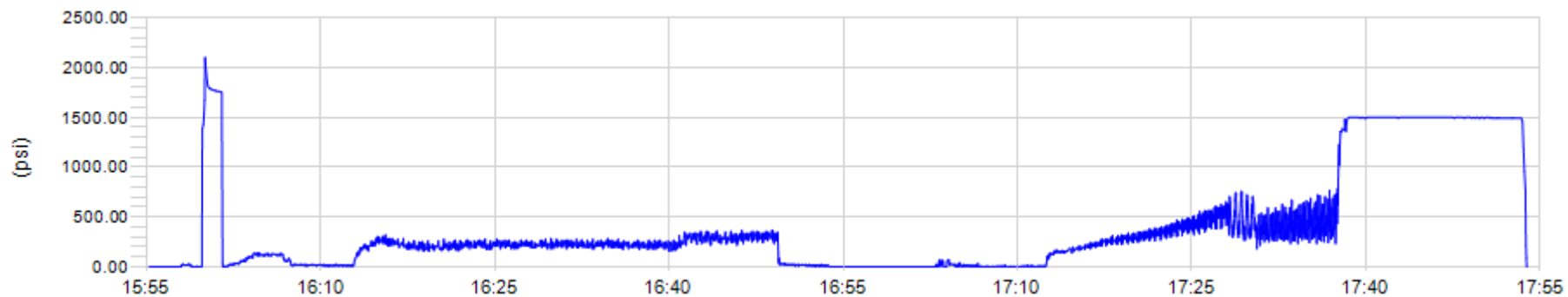
Client Rep Mr. BJ Honeycutt
Well Name Horsetail 07E-1801
Job Type Surface Casing

Supervisor Pat Schneider
Unit No. 745024
Service District Ft. Lupton
Job Date 01/06/2016

Unit 745024 Rate Total



Unit 745024 Pump Pressure



Unit 745024 Density

