



Cementing Service Report

9210068

Client Name Whiting Petroleum Corp.	Well Name Horsetail 07G - 1812	Rig Unit Drilling Co. 409	Job Date March 12,2016	Call Sheet 1065610
Client Representative Mr. Kenny Ray Wilkerson	Surface Well Location Sec 18:T10N:R57W	Down Hole Well Location	Job Type Production Casing	Lead Supervisor Hall, Andrew J (25267)

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)
8.500	15.000	1,870.000	14,010.000	--	--

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	144.57	8.921	10.625	0.0	1,870.0
5.500	23.000	P-110	14,520.0	13,160.0	296.36	4.670	6.050	0.0	13,989.0

Products

Stage 1

From Depth (ft):

To Depth (ft):

Acids/Blends/Fluids :

Scavenger: 115 Sacks of 65% Class G / 35% Poz (1-2-0 G), Density = 11 lb/gal, Volume Pumped = 50 (bbl)

Water Temperature(°F) = 50 , Bulk Temperature(°F) = 60 , Slurry Temperature(°F) = 70

+ 0.4 % of ASM-3 (Preblend),

+ 0.5 % of CFL-10 (Preblend),

+ 0.1 % of LTR (Preblend),

+ 0.25 lb/sack of LCL-7 (Preblend),

+ 0.01 gal/bbl of CDF-3L (Add On The Fly)

Stage 2

From Depth (ft): 0

To Depth (ft): 1800

Acids/Blends/Fluids :

Lead 1: 325 Sacks of 65% Class G / 35% Poz (1-2-0 G), Density = 13.5 lb/gal, Volume Pumped = 86.2 (bbl)

Water Temperature(°F) = 50 , Bulk Temperature(°F) = 60 , Slurry Temperature(°F) = 70

+ 0.4 % of ASM-3 (Preblend),

+ 0.5 % of CFL-10 (Preblend),

+ 0.1 % of LTR (Preblend),

+ 0.25 lb/sack of LCL-7 (Preblend),

+ 0.01 gal/bbl of CDF-3L (Add On The Fly)

Stage 3

From Depth (ft): 1800

To Depth (ft): 13989

Acids/Blends/Fluids :

Tail: 2130 Sacks of 65% Class G / 35% Poz (1-2-0 G), Density = 13.5 lb/gal, Volume Pumped = 569 (bbl)

Water Temperature(°F) = 50 , Bulk Temperature(°F) = 60 , Slurry Temperature(°F) = 70

+ 0.3 % of ASM-3 (Preblend),

+ 0.5 % of CFL-10 (Preblend),

+ 0.1 % of LTR (Preblend),

+ 0.2 % of SPC-2 (Preblend),

+ 0.25 lb/sack of LCL-7 (Preblend),

+ 0.01 lb/gal of CDF-3L (Add On The Fly)

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

Tool Type	Depth (ft)	Supplier
Float Collar	13,940.000	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>
444002	TRAILER	Iron	201386	PICKUP	1 Ton	03/12/2016 07:00	03/12/2016 18:00
445047	TRAILER	SCM Twin	745047	TRACTOR	Tandem - Tractor	03/12/2016 07:00	03/12/2016 18:00
201191	PICKUP	1 Ton				03/12/2016 07:00	03/12/2016 18:00
446173	TRAILER	Bulker	746173	TRACTOR	Tandem - Tractor	03/12/2016 07:00	03/12/2016 18:00
449122	TRAILER	1600 Porta Bulker				03/12/2016 07:00	03/12/2016 18:00
Crew and Bonuses							
<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>		<u>Second End Shift</u>		
Hall, Andrew J (25267)	03/12/2016 07:00	03/12/2016 18:00					
Decenick, Jorden (30684)	03/12/2016 07:00	03/12/2016 18:00					
Pigg, Martin (28301)	03/12/2016 07:00	03/12/2016 18:00					
Devine, Richard (29733)	03/12/2016 07:00	03/12/2016 18:00					
Decenick, Jorden (30684)	03/12/2016 07:00	03/12/2016 18:00					
Decenick, Jorden (30684)	03/12/2016 07:00	03/12/2016 18:00					

Treatment Reports & Remarks

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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	Mar 12,2016 07:00	Arrive On Location		--	--	--	--	0.00
2	Mar 12,2016 07:30	Crew Briefing (Rig in)		--	--	--	--	0.00
3	Mar 12,2016 08:30	Rig in Complete		--	--	--	--	0.00
4	Mar 12,2016 12:00	Crew Briefing (Pre Job)		--	--	--	--	0.00
5	Mar 12,2016 13:00	Pressure Test Start	Water	1.00	5,000.0	--	3.00	3.00
6	Mar 12,2016 13:02	Pressure Test Complete		--	--	--	--	3.00
7	Mar 12,2016 13:04	Pump Preflush	Water	6.00	1,000.0	--	30.00	33.00
		Remarks: Mud flush						
8	Mar 12,2016 13:10	Pump Preflush	Water	6.00	1,000.0	--	30.00	63.00
		Remarks: Visweep						
9	Mar 12,2016 13:15	Pump	65% Class G / 35% Poz (1-2-0 G)	8.00	500.0	--	50.00	113.00
10	Mar 12,2016 13:21	Pump	65% Class G / 35% Poz (1-2-0 G)	8.00	500.0	--	86.20	199.20
11	Mar 12,2016 13:30	Pump	65% Class G / 35% Poz (1-2-0 G)	8.00	500.0	--	569.00	768.20
12	Mar 12,2016 15:15	Wash	Water	1.00	50.0	--	5.00	773.20
		Remarks: Wash lines						
13	Mar 12,2016 15:18	Drop Plug		--	--	--	--	773.20
14	Mar 12,2016 15:21	Displace Fluid	Water	8.00	1,800.0	--	309.00	1,082.20
15	Mar 12,2016 16:20	Bump Plug		--	2,300.0	--	--	1,082.20
16	Mar 12,2016 16:25	Check Float		--	--	--	--	1,082.20
17	Mar 12,2016 16:40	Wash	Water	2.00	50.0	--	15.00	1,097.20
18	Mar 12,2016 17:00	Rig Out		--	--	--	--	1,097.20
19	Mar 12,2016 17:40	Job Complete		--	--	--	--	1,097.20
		Remarks: AAR						
20	Mar 12,2016 18:00	Leave Location		--	--	--	--	1,097.20

Did Float Hold: Yes
 Fluid Returns : Yes
 Type : Cement
 Volume (bbl) : 25
 Temperature (°F) : 90
 FDAS Functioning Correctly : Yes
 Was the Program Followed As Per Design? : Yes



Treatment Reports & Remarks	
Material Transfer Sheet Number	
<u>Material Transfer Sheet Number</u>	
64979	
64980	
64982	
64983	
64984	
64985	



Client Whiting
Ticket No. 9210068
Location Sec18:T10N:R57W
Comments Pumped job according to prog.

Client Rep Kenny/Tyson
Well Name Horsetail 07G-1812
Job Type Production Casing

Supervisor Andy Hall
Unit No. 745051
Service District 505 Fort Lupton
Job Date 03/12/2016

