



**Pumping
Service Report**

9198794

Client Name Whiting Petroleum Corp.	Well Name Horsetail 29G-2012B	Rig Pioneer Drilling 54	Job Date October 22, 2014	Call Sheet 1049225
Client Representative Dave	Surface Well Location Sec 29:T10N:R57W	Down Hole Well Location	Job Type Intermediate Casing	

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	0.000	6,000.000	--	--

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	J-55	--	--	--	--	--	0.0	6,000.0

Products

Stage 1

From Depth (ft): 0
To Depth (ft): 6000

Acids/Blends/Fluids :

Lead 1: 445 Sacks of 1:2:6 POZ G Gel, Density = 12.5 lb/gal, Volume Pumped = 149.75 (bbl)
Water Temperature(°F) = 60 , Bulk Temperature(°F) = 70 , Slurry Temperature(°F) = 80
+ 0.2 % of CFR (Preblend),
+ 0.5 % of CFL-4 (Preblend),
+ 0.15 % of LTR (Preblend),
+ 0.25 lb/sack of Polyflake (Preblend)

Tail: 210 Sacks of 1:1:0 Poz G Gel, Density = 13.5 lb/gal, Volume Pumped = 56.89 (bbl)
Water Temperature(°F) = 60 , Bulk Temperature(°F) = 70 , Slurry Temperature(°F) = 80
+ 8 % of Fume (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: --

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	5,981.000	Third Party
Float Collar	5,934.000	Third Party

Tubular Plugs

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

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>
449093	TRAILER	Utility Trailer	201191	PICKUP	1 Ton	10/22/2014 13:00	10/22/2014 20:00
445024	TRAILER	SCM Twin	745024	TRACTOR	Tandem - Tractor	10/22/2014 13:00	10/22/2014 20:00
446171	TRAILER	Bulker	746171	TRACTOR	Tandem - Tractor	10/22/2014 13:00	10/22/2014 20:00
446084	TRAILER	Bulker	746084	TRACTOR	Tandem - Tractor	10/22/2014 13:00	10/22/2014 20:00

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	10/22/2014 13:00	10/22/2014 20:00		
Estrada, John	10/22/2014 13:00	10/22/2014 20:00		
Doran, Benjamin	10/22/2014 13:00	10/22/2014 20:00		
Phillips, James	10/22/2014 13:00	10/22/2014 20:00		
Lindsay, Kevin	10/22/2014 13:00	10/22/2014 20:00		

**Service Ticket****9198794****Field Estimate**

Client Name Whiting Petroleum Corp.			Well Name Horsetail 29G-2012B		Surface Well Location Sec 29:T10N:R57W		Job Date October 22, 2014																																																																																																																																																																																																									
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Address 1700 Broadway, Suite. 2300			Client Representative Dave		State CO		County Weld																																																																																																																																																																																																									
City Denver			Postal Code 80290		Drilling Company Pioneer Drilling		Rig No. 54																																																																																																																																																																																																									
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<table border="1"><thead><tr><th>District</th><th>Service, Equipment & Material Type</th><th>Disc</th><th>13</th><th>Code</th><th>Quantity/Unit</th><th>Unit Price</th><th>Amount</th></tr></thead><tbody><tr><td>59</td><td>Travel Charge</td><td>60</td><td>13</td><td>1380</td><td>1</td><td>\$7.50</td><td>\$750.00</td></tr><tr><td>59</td><td>Service Charge 5001 to 6000 ft</td><td>60</td><td>13</td><td>1008</td><td>1</td><td>\$5,400.00</td><td>\$5,400.00</td></tr><tr><td>59</td><td>Twin Pumping</td><td>60</td><td>13</td><td>1150</td><td>1</td><td>\$1,080.00</td><td>\$1,080.00</td></tr><tr><td>59</td><td>Handling Service Charge</td><td>60</td><td>13</td><td>1480</td><td>757</td><td>\$3.30</td><td>\$2,498.10</td></tr><tr><td>59</td><td>Bulk Delivery / Return</td><td>60</td><td>13</td><td>1484</td><td>3020</td><td>\$2.55</td><td>\$7,701.00</td></tr><tr><td>59</td><td>SAM Unit</td><td>60</td><td>13</td><td>1497</td><td>1</td><td>\$1,015.00</td><td>\$1,015.00</td></tr><tr><td>59</td><td>VISWEEP</td><td>60</td><td>13</td><td>3180</td><td>840</td><td>\$1.75</td><td>\$1,470.00</td></tr><tr><td>59</td><td>Barite</td><td>60</td><td>13</td><td>3230</td><td>2300</td><td>\$1.00</td><td>\$2,300.00</td></tr><tr><td>59</td><td>1-2-0</td><td>60</td><td>13</td><td>3012</td><td>445</td><td>\$25.00</td><td>\$11,125.00</td></tr><tr><td>59</td><td>CFL-4</td><td>60</td><td>13</td><td>3133</td><td>192</td><td>\$48.10</td><td>\$9,235.20</td></tr><tr><td>59</td><td>Gel</td><td>60</td><td>13</td><td>3231</td><td>2297</td><td>\$1.00</td><td>\$2,297.00</td></tr><tr><td>59</td><td>LTR</td><td>60</td><td>13</td><td>3110</td><td>58</td><td>\$6.60</td><td>\$382.80</td></tr><tr><td>59</td><td>Polyflake</td><td>60</td><td>13</td><td>3247</td><td>112</td><td>\$5.00</td><td>\$560.00</td></tr><tr><td>59</td><td>1-1-0</td><td>60</td><td>13</td><td>3002</td><td>210</td><td>\$22.50</td><td>\$4,725.00</td></tr><tr><td>59</td><td>CFL-3</td><td>60</td><td>13</td><td>3132</td><td>122</td><td>\$13.20</td><td>\$1,610.40</td></tr><tr><td>59</td><td>SilFume</td><td>60</td><td>13</td><td>3233</td><td>1386</td><td>\$2.60</td><td>\$3,603.60</td></tr><tr><td>59</td><td>Gel</td><td>60</td><td>13</td><td>3231</td><td>347</td><td>\$1.00</td><td>\$347.00</td></tr><tr><td>59</td><td>LTR</td><td>60</td><td>13</td><td>3110</td><td>52</td><td>\$6.60</td><td>\$343.20</td></tr><tr><td>59</td><td>Polyflake</td><td>60</td><td>13</td><td>3247</td><td>53</td><td>\$5.00</td><td>\$265.00</td></tr><tr><td>59</td><td>CFR-5</td><td>60</td><td>13</td><td>3164</td><td>18</td><td>\$29.00</td><td>\$522.00</td></tr><tr><td>59</td><td>EnviroBag</td><td>60</td><td>13</td><td>1492</td><td>1</td><td>\$78.00</td><td>\$78.00</td></tr><tr><td>59</td><td>DF-3, Anti-foamer</td><td>60</td><td>13</td><td>3262</td><td>15</td><td>\$141.00</td><td>\$2,115.00</td></tr><tr><td>59</td><td>Environmental Surcharge</td><td>-</td><td>13</td><td>1493</td><td>1</td><td>\$50.00</td><td>\$50.00 *</td></tr><tr><td>59</td><td>Fuel Surcharge</td><td>-</td><td>13</td><td>2992</td><td>3</td><td>\$520.00</td><td>\$1,560.00 *</td></tr></tbody></table>									District	Service, Equipment & Material Type	Disc	13	Code	Quantity/Unit	Unit Price	Amount	59	Travel Charge	60	13	1380	1	\$7.50	\$750.00	59	Service Charge 5001 to 6000 ft	60	13	1008	1	\$5,400.00	\$5,400.00	59	Twin Pumping	60	13	1150	1	\$1,080.00	\$1,080.00	59	Handling Service Charge	60	13	1480	757	\$3.30	\$2,498.10	59	Bulk Delivery / Return	60	13	1484	3020	\$2.55	\$7,701.00	59	SAM Unit	60	13	1497	1	\$1,015.00	\$1,015.00	59	VISWEEP	60	13	3180	840	\$1.75	\$1,470.00	59	Barite	60	13	3230	2300	\$1.00	\$2,300.00	59	1-2-0	60	13	3012	445	\$25.00	\$11,125.00	59	CFL-4	60	13	3133	192	\$48.10	\$9,235.20	59	Gel	60	13	3231	2297	\$1.00	\$2,297.00	59	LTR	60	13	3110	58	\$6.60	\$382.80	59	Polyflake	60	13	3247	112	\$5.00	\$560.00	59	1-1-0	60	13	3002	210	\$22.50	\$4,725.00	59	CFL-3	60	13	3132	122	\$13.20	\$1,610.40	59	SilFume	60	13	3233	1386	\$2.60	\$3,603.60	59	Gel	60	13	3231	347	\$1.00	\$347.00	59	LTR	60	13	3110	52	\$6.60	\$343.20	59	Polyflake	60	13	3247	53	\$5.00	\$265.00	59	CFR-5	60	13	3164	18	\$29.00	\$522.00	59	EnviroBag	60	13	1492	1	\$78.00	\$78.00	59	DF-3, Anti-foamer	60	13	3262	15	\$141.00	\$2,115.00	59	Environmental Surcharge	-	13	1493	1	\$50.00	\$50.00 *	59	Fuel Surcharge	-	13	2992	3	\$520.00	\$1,560.00 *
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Comments				This service ticket is not an invoice; pricing is subject to review and change without notice. This signature confirms that I have read and comply with the terms and conditions page of this service ticket. X																																																																																																																																																																																																												



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Service Report**

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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	Oct 22, 2014 13:00	Arrive On Location	---	--	--	--	--	0.00
2	Oct 22, 2014 13:15	Tailgate Meeting	---	--	--	--	--	0.00
3	Oct 22, 2014 13:45	STEACS Briefing	---	--	--	--	--	0.00
4	Oct 22, 2014 14:30	Rig In	---	--	--	--	--	0.00
5	Oct 22, 2014 15:00	Stop	---	--	--	--	--	0.00
Remarks: Wait for rig to run casing								
6	Oct 22, 2014 15:30	Safety Meeting	---	--	--	--	--	0.00
7	Oct 22, 2014 16:00	Sign-off on Safety	---	--	--	--	--	0.00
8	Oct 22, 2014 16:10	Pressure Test	Water	2.00	3,000.0	--	3.00	3.00
9	Oct 22, 2014 16:15	Pump	Water	4.00	200.0	--	20.00	23.00
Remarks: Visweep								
10	Oct 22, 2014 16:30	Pump	1:2:6 POZ G Gel	6.50	200.0	--	149.75	172.75
11	Oct 22, 2014 16:55	Pump	1:1:0 Poz G Gel	6.50	350.0	--	56.84	229.59
12	Oct 22, 2014 17:15	Drop Plug	---	--	--	--	--	229.59
13	Oct 22, 2014 17:20	Displace Fluid	Water Based Mud	7.00	1,200.0	--	220.00	449.59
14	Oct 22, 2014 18:00	Bump Plug	---	--	2,200.0	--	--	449.59
15	Oct 22, 2014 18:05	Check Float	---	--	--	--	--	449.59
16	Oct 22, 2014 18:15	Wash	Water	2.00	22.0	--	20.00	469.59
17	Oct 22, 2014 18:45	Rig Out	---	--	--	--	--	469.59
18	Oct 22, 2014 19:15	Job Complete	---	--	--	--	--	469.59
19	Oct 22, 2014 19:30	Pre-Departure Meeting	---	--	--	--	--	469.59
20	Oct 22, 2014 20:00	Leave Location	---	--	--	--	--	469.59

Did Float Hold: Yes

Fluid Returns: Yes

Type: Cement

Volume (bbl): 20

Temperature (°F): 90

FDAS Functioning Correctly: Yes

Was the Program Followed As Per Design?: Yes

Material Transfer Sheet Number

Material Transfer Sheet Number

5457

54657

Comments To Service Report

Job went very good. We pumped job according to prog. Crew and equipment did a good job.