Sanjel

Pumping Service Report

9191941

Client Name	Well Name	Rig	Job Date	Call Sheet
Whiting Petroleum Corp.	Horsetail 33M-2804	Pioneer Drilling 54	July 15,2014	1044172
Client Representative	**Surface Well Location**	**Down Hole Well Location**	**Job Type**	
Matt	SW SW Sec 33:T10N:R57W		Surface 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)
13.500	25.000	0.000	1,550.000	--	--

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	0.000		--	--	--	--	--	--	--

Products

Stage 1

From Depth (ft): 0

To Depth (ft): 1545

Acids/Blends/Fluids :

Tail: 660 Sacks of 0:1:0 Type III, Density = 14.2 lb/gal, Volume Pumped = 172.79 (bbl)
Water Temperature(°F) = 70 , Bulk Temperature(°F) = 80 , Slurry Temperature(°F) = 90
+ 1 % of CaCl2 (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

Attachment & Tools

Down Hole Tools

Tool Type	Depth (ft)	Supplier
Guide Shoe	--	Third Party
Float Collar	--	Third Party

Tubular Plugs

Tubular Plug Type	Size (in)	Supplier
Rubber Top	9.625	Sanjel

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Units & Personnel

Units

Truck Unit No.	Main Type	Sub Type	Tractor Unit No.	Main Type	Sub Type	Time On Location	Time Off Location
201025	PICKUP	1 Ton	449087	TRAILER	Utility Trailer	07/15/2014 20:00	07/16/2014 05:30
445070	TRAILER	SCM Twin	745070	TRACTOR	Tandem - Tractor	07/15/2014 20:00	07/16/2014 05:30
201168	PICKUP	1 Ton				07/15/2014 20:00	07/16/2014 05:30

Crew and Bonuses

Employee	Start Shift	End Shift	Second Start Shift	Second End Shift
Hall, Andrew J	07/15/2014 20:00	07/16/2014 05:30		
Hansen, Kevin	07/15/2014 20:00	07/16/2014 05:30		
Lopez, Armando	07/15/2014 20:00	07/16/2014 05:30		
Martinez, Fernando	07/15/2014 20:00	07/16/2014 05:30		
Smock, Curtis	07/15/2014 20:00	07/16/2014 05:30		

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	Jul 15,2014 20:00	Arrive On Location		--	--	--	--	0.00
2	Jul 15,2014 20:15	Tailgate Meeting		--	--	--	--	0.00
3	Jul 15,2014 20:30	Rig In		--	--	--	--	0.00
4	Jul 15,2014 21:00	Stop		--	--	--	--	0.00
	Remarks: Wait for rig to run casing							
5	Jul 16,2014 01:15	Safety Meeting		--	--	--	--	0.00
6	Jul 16,2014 01:30	Sign-off on Safety		--	--	--	--	0.00
7	Jul 16,2014 01:45	Pressure Test	Water	1.00	3,000.0	--	2.00	2.00
8	Jul 16,2014 01:50	Pump Spacer	Water	6.00	100.0	--	20.00	22.00
9	Jul 16,2014 02:15	Pump	0:1:0 Type III	5.00	150.0	--	172.79	194.79
10	Jul 16,2014 03:10	Drop Plug		--	10.0	--	--	194.79
11	Jul 16,2014 03:12	Displace Fluid	Water	6.00	500.0	--	119.50	314.29
12	Jul 16,2014 03:38	Bump Plug		--	1,000.0	--	--	314.29
13	Jul 16,2014 03:41	Check Float		--	--	--	--	314.29
14	Jul 16,2014 04:00	Wash	Water	2.00	22.0	--	20.00	334.29
15	Jul 16,2014 04:30	Rig Out		--	--	--	--	334.29
16	Jul 16,2014 05:00	Job Complete		--	--	--	--	334.29
17	Jul 16,2014 05:15	Pre-Departure Meeting		--	--	--	--	334.29
18	Jul 16,2014 05:30	Leave Location		--	--	--	--	334.29

Did Float Hold: Yes

Fluid Returns : Yes

Type : Cement

Volume (bbl) : 35

Temperature (°F) : 100

FDAS Functioning Correctly : Yes

Was the Program Followed As Per Design? : Yes

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Treatment Reports & Remarks

Material Transfer Sheet Number

Material Transfer Sheet Number
46747
46749

Comments To Service Report

Rig was still running casing when we got to location. We pumped job accourding to prog. Sanjel equipment and crew did a good job.