



**Pumping
Service Report**

9198766

Client Name Anadarko Petroleum Corporation	Well Name COPPER 31-15 Copper 31-15	Rig ECWS 21	Job Date October 07, 2014	Call Sheet 1048354
Client Representative Mr. Daniel Olmeda	Surface Well Location NW NW Sec 15:T2N:R68W	Down Hole Well Location	Job Type Bradenhead Squeeze	

Well Profile

Maximum Treating Pressure (psi):	---	
Predicted Bottom Hole Static Temperature (°F):	---	@ --
Bottom Hole Circulating Temperature (°F):	---	@ --
Bottom Hole Logged Temperature (°F):	---	@ --

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)
4.500	11.600		--	--	--	--	--	0.0	1,300.0
8.625	24.000		--	--	--	--	--	0.0	1,300.0

Tubing

Size	Weight	Grade	Collapse Pressure	Capacity	I.D.	O.D.	Depth From	Depth To
(in)	(lb/ft)		(psi)	(bbl)	(in)	(in)	(ft)	(ft)
1.315	1.660		--	--	--	--	0.000	1,300.000

Products

Treatment Interval 1

From Depth (ft): 300

To Depth (ft): 1300

Acids/Blends/Fluids:

Tail: 130 Sacks of 0:1:0 Type III, Density = 14.8 lb/gal, Volume Pumped = 44 (bbl)
Water Temperature(°F) = 70 , Bulk Temperature(°F) = 70 , Slurry Temperature(°F) = 70
+ 0.25 lb/sack of Polyflake (Preblend),
+ 0.5 % of CaCl₂ (Preblend),
+ 0.3 % of CFR-2 (Preblend),
+ 0.3 % of CFL-1 (Preblend),
+ 0.4 % of CDF-4P (Preblend)

Fluid & Cement Data

Expected Cement Top: Depth (ft): 300

Wellbore Fluid

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	--	--	--	Oct 07, 2014 12:31
Water Based Mud	--	--	--	--	Oct 07, 2014 16:56



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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>
449087	TRAILER	Utility Trailer	201025	PICKUP	1 Ton	10/07/2014 14:40	10/07/2014 18:00
445051	TRAILER	SCM Twin	745051	TRACTOR	Tandem - Tractor	10/07/2014 14:40	10/07/2014 18:00
746508	BODY JOB	Baby Bulker				10/07/2014 14:40	10/07/2014 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>
Price, Ryan	10/07/2014 14:40	10/07/2014 18:00		
Hardwick, Waco	10/07/2014 14:40	10/07/2014 18:00		
Young, Craig	10/07/2014 14:40	10/07/2014 18:00		
Hall, Austin	10/07/2014 14:40	10/07/2014 18:00		

Treatment Reports & Remarks

Treatment Report

<u>Event #</u>	<u>Event Time</u>	<u>Event Description</u>	<u>Fluid Type</u>	<u>Rate</u> (bbl/min)	<u>Tubular Pressure</u> (psi)	<u>Annular Pressure</u> (psi)	<u>Stage Volume</u> (bbl)	<u>Total Volume</u> (bbl)
1	Oct 07, 2014 14:40	Arrive On Location		--	--	--	--	0.00
2	Oct 07, 2014 14:45	Tailgate Meeting		--	--	--	--	0.00
3	Oct 07, 2014 14:50	Rig In		--	--	--	--	0.00
4	Oct 07, 2014 15:20	Safety Meeting		--	--	--	--	0.00
5	Oct 07, 2014 15:30	Sign-off on Safety		--	--	--	--	0.00
6	Oct 07, 2014 15:33	Pump		--	--	--	--	0.00
		Remarks: filled lines for pressure test						
7	Oct 07, 2014 15:34	Pressure Test		--	1,500.0	--	--	0.00
8	Oct 07, 2014 15:36	Pump Spacer	Water	2.00	600.0	--	5.00	0.00
9	Oct 07, 2014 15:38	Pump Preflush	Water Based Mud	2.00	600.0	--	10.00	0.00
		Remarks: pumped SAPP						
10	Oct 07, 2014 15:44	Pump Spacer	Water	1.00	25.0	--	5.00	0.00
11	Oct 07, 2014 15:50	Mix Cement	0:1:0 Type III	2.00	800.0	--	3.00	0.00
12	Oct 07, 2014 15:51	Stop		--	--	--	--	0.00
		Remarks: bulk line packed off shut down to clear lines						
13	Oct 07, 2014 16:00	Mix Cement	0:1:0 Type III	2.00	800.0	--	41.00	0.00
14	Oct 07, 2014 16:25	Pump Displacement	Water	1.50	800.0	--	1.00	0.00
15	Oct 07, 2014 16:26	Stop		--	--	--	--	0.00
16	Oct 07, 2014 16:40	Wash		--	--	--	--	0.00
17	Oct 07, 2014 17:20	Rig Out		--	--	--	--	0.00
18	Oct 07, 2014 17:50	Job Complete		--	--	--	--	0.00
19	Oct 07, 2014 17:55	Pre-Departure Meeting		--	--	--	--	0.00
20	Oct 07, 2014 18:00	Leave Location		--	--	--	--	0.00



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Did Float Hold: Not Applicable
Fluid Returns : Not Expected
Type :
Volume (bbl) :
Temperature (°F) : --
FDAS Functioning Correctly : Yes
Was the Program Followed As Per Design? : Yes

Material Transfer Sheet Number

Material Transfer Sheet Number
9617
9618

Comments To Service Report

Job went pretty good. bulk delivery packed off at the pump at beginning of cement. So we shut down and got bulk line clear and proceeded to finish job with no issues. Team did a great job reacting to problem and resolving quickly and safely. Company rep happy with job.