



Pumping Service Report

9206038

Client Name Anadarko Petroleum Corporation	Well Name Karich 2 - 32	Rig Leed 723	Job Date June 02,2015	Call Sheet 1058134
Client Representative Mr. Nate Windholz	Surface Well Location NW NE Sec 32:T3N:R66W	Down Hole Well Location	Job Type Abandonment Plugs	Lead Supervisor Contreras, Bennie (23469)

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):	--- @ --

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)
8.625	24.000	J-55	1,370.0	2,950.0	46.05	8.097	9.625	0.0	723.0

Size	Weight	Grade	Collapse Pressure	Capacity	I.D.	O.D.	Depth From	Depth To
(in)	(lb/ft)		(psi)	(bbl)	(in)	(in)	(ft)	(ft)
1.660	2.400	J-55	8,490.000	13.300	1.380	2.200	0.000	7,190.000
2.875	6.500	J-55	7,680.000	41.620	2.441	3.668	0.000	7,190.000

Products

Plug 1

From Depth (ft): 6258

To Depth (ft): 7190

Plug Type : Abandonment

Acids/Blends/Fluids :

Plug: 20 Sacks of Thermal 35, Density = 15.8 lb/gal, Volume Pumped = 5.4 (bbl)

Water Temperature(°F) = 60 , Bulk Temperature(°F) = 70 , Slurry Temperature(°F) = 73

+ 0.3 % of CFR-2 (Preblend),

+ 0.3 % of ASM-3 (Preblend)

Plug 2

From Depth (ft): 3934

To Depth (ft): 4642

Plug Type : Abandonment

Acids/Blends/Fluids :

Plug: 20 Sacks of 0-1-0 C, Density = 15.8 lb/gal, Volume Pumped = 4.1 (bbl)

Water Temperature(°F) = 60 , Bulk Temperature(°F) = 70 , Slurry Temperature(°F) = 74

+ 0.5 % of CFR-2 (Preblend),

+ 0.25 % of FMC (Preblend),

+ 0.5 % of LWA (Preblend),

+ 0.25 lb/sack of Polyflake (Preblend)

Fluid & Cement Data

Expected Cement Top: Depth (ft): 3934

Wellbore Fluid

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	--	--	--	Oct 29, 2014 06:51



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Attachment & Tools

Tubular Plugs

<u>Tubular Plug Type</u>	<u>Size (in)</u>	<u>Supplier</u>
Rubber Top	3.500	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>
201274	PICKUP	3/4 Ton				06/02/2015 10:00	06/02/2015 15:30
740018-1	BODY JOB	C & A				06/02/2015 10:00	06/02/2015 15:30
446092	TRAILER	Bulker	746092	TRACTOR	Tandem - Tractor	06/02/2015 10:00	06/02/2015 15:30

Crew and Bonuses

<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>	<u>Second End Shift</u>
Contreras, Bennie (23469)	06/02/2015 10:00	06/02/2015 15:30		
McMartin, Granite (22138)	06/02/2015 10:00	06/02/2015 15:30		
Johnson, Jakob (30073)	06/02/2015 10:00	06/02/2015 15:30		

Treatment Reports & Remarks



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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	Jun 02,2015 10:00	Arrive On Location		--	--	--	--	0.00
		Remarks: Arrived.						
2	Jun 02,2015 10:20	Crew Briefing (Rig in)		--	--	--	--	0.00
		Remarks: Steacs						
3	Jun 02,2015 12:30	Rig in Complete		--	--	--	--	0.00
		Remarks: Rig in complete.						
4	Jun 02,2015 12:31	Crew Briefing (Pre Job)		--	--	--	--	0.00
		Remarks: Muster, Nearest med., Amb. and driver, Location safety equipt., Job scope.						
5	Jun 02,2015 12:55	Pressure Test Start	Water	--	3,200.0	--	--	0.00
		Remarks: Pressure test 3200 psi.						
6	Jun 02,2015 12:57	Pressure Test Complete		--	--	--	--	0.00
		Remarks: Test complete.						
7	Jun 02,2015 12:58	Batch Mix	Thermal 35	6.00	--	--	5.40	0.00
		Remarks: Batch mix 5.4 BBLs of Thermal 35 @ 15.8 lb/ gal. Scaled for accuracy.						
8	Jun 02,2015 13:11	Pump	Thermal 35	1.90	2,200.0	--	5.40	5.40
		Remarks: Pump 5.4 BBLs of cement @ 15.8 lb /gal.						
9	Jun 02,2015 13:15	Displace Fluid	Water	1.90	2,800.0	--	10.50	15.90
		Remarks: Displace 10.5 BBLs of water.						
10	Jun 02,2015 13:21	Stop		--	0.0	--	--	15.90
		Remarks: Stop and wait for second plug.						
11	Jun 02,2015 14:28	Pressure Test	Water	--	3,200.0	--	--	15.90
		Remarks: Pressure test 3200 psi.						
12	Jun 02,2015 14:32	Batch Mix	0-1-0 C	6.00	--	--	4.10	20.00
		Remarks: Batch mix 4.1 BBLs of 0-1-0 C cement @ 15.8 lb/gal.						
13	Jun 02,2015 13:10	Pump	0-1-0 C	1.90	2,200.0	--	4.10	24.10
		Remarks: Pump 4.1 BBLs of cement @ 15.8 lb/gal.						
14	Jun 02,2015 14:44	Displace Fluid	Water	1.90	2,000.0	--	6.00	30.10
		Remarks: Displace BBLs of water.						
15	Jun 02,2015 14:50	Rig Out		--	--	--	--	30.10
		Remarks: Rig out iron.						
16	Jun 02,2015 15:00	Job Complete		--	--	--	--	30.10
		Remarks: Job complete.						
17	Jun 02,2015 15:30	Leave Location		--	--	--	--	30.10
		Remarks: Leave.						

Did Float Hold: Not Applicable

Fluid Returns : No

Type :

Volume (bbl) :

Temperature (°F) : --

FDAS Functioning Correctly : Yes

Was the Program Followed As Per Design? : Yes



Pumping Service Report

9206109

Client Name Anadarko Petroleum Corporation	Well Name Karich 2 - 32	Rig Leed 723	Job Date June 03,2015	Call Sheet 1058152
Client Representative Mr. Nate Windholz	Surface Well Location NW NE Sec 32:T3N:R66W	Down Hole Well Location	Job Type Abandonment Plugs	Lead Supervisor Schneider, Patrick (24093)

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)
9.000	40.000	747.000	1,210.000	--	--

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)
8.625	24.000	J-55	1,370.0	2,950.0	47.57	8.097	9.625	0.0	747.0

Tubing

Size	Weight	Grade	Collapse Pressure	Capacity	I.D.	O.D.	Depth From	Depth To
(in)	(lb/ft)		(psi)	(bbl)	(in)	(in)	(ft)	(ft)
2.875	6.500	J-55	7,680.000	7.000	2.441	3.668	0.000	1,210.000

Products

Plug 1

From Depth (ft): 314

To Depth (ft): 1210

Plug Type : Abandonment

Acids/Blends/Fluids :

Tail: 270 Sacks of 0:1:0 Type III, Density = 14.8 lb/gal, Volume Pumped = 64 (bbl)

Water Temperature(°F) = 61 , Bulk Temperature(°F) = 65 , Slurry Temperature(°F) = 84

+ 0.25 lb/sack of Polyflake (Preblend),

+ 0.5 % of CaCl₂ (Preblend),

+ 0.3 % of CFR-2 (Preblend),

+ 0.3 % of CFL-3 (Preblend),

+ 0.4 % of CDF-4P (Preblend)

Fluid & Cement Data

Expected Cement Top: Depth (ft): 314

Wellbore Fluid

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	--	--	--	Oct 29, 2014 06:51



Pumping Service Report

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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>
201409	PICKUP	3/4 Ton				06/03/2015 08:30	06/03/2015 11:45
445047	TRAILER	SCM Twin	745047	TRACTOR	Tandem - Tractor	06/03/2015 08:30	06/03/2015 11:45
446047	TRAILER	Bulker	746047	TRACTOR	Tandem - Tractor	06/03/2015 08:30	06/03/2015 11:45
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)	06/03/2015 08:30	06/03/2015 11:45					
Cox, Brandon (27419)	06/03/2015 08:30	06/03/2015 11:45					
Meisner, Jeremy (27681)	06/03/2015 08:30	06/03/2015 11:45					
Yates, William (29930)	06/03/2015 08:30	06/03/2015 11:45					
Treatment Reports & Remarks							



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	Jun 03,2015 08:30	Arrive On Location		--	--	--	--	0.00
		Remarks: arrived 30 min early						
2	Jun 03,2015 08:35	Crew Briefing (Rig in)		--	--	--	--	0.00
		Remarks: discussed lease hazards and rig in procedure						
3	Jun 03,2015 09:00	Rig In		--	--	--	--	0.00
4	Jun 03,2015 09:20	Rig in Complete		--	--	--	--	0.00
5	Jun 03,2015 09:30	Crew Briefing (Pre Job)		--	--	--	--	0.00
		Remarks: discussed job scope and everyones dutys						
6	Jun 03,2015 10:05	Start - Fluid	Water	1.00	--	--	1.00	1.00
		Remarks: filled lines						
7	Jun 03,2015 10:07	Pressure Test Start	Water	--	2,000.0	--	--	1.00
8	Jun 03,2015 10:09	Pressure Test Complete	Water	--	0.0	--	--	1.00
		Remarks: good pressure test						
9	Jun 03,2015 10:09	Pump Preflush	Water	2.50	150.0	--	10.00	11.00
		Remarks: mud flush						
10	Jun 03,2015 10:13	Pump Spacer	Water	2.50	175.0	--	20.00	31.00
		Remarks: fresh water						
11	Jun 03,2015 10:21	Mix Cement	0:1:0 Type III	3.00	250.0	--	64.00	95.00
		Remarks: 270 sks plug cement @ 14.8 ppg yield = 1.33 h2o req = 6.31 total h2o = 41 bbl						
12	Jun 03,2015 10:30	N/A	0:1:0 Type III	--	--	--	--	95.00
		Remarks: mud scaled cement @ 14.8 ppg						
13	Jun 03,2015 10:40	N/A		--	--	--	--	95.00
		Remarks: mud scaled cement @ 14.7 ppg						
14	Jun 03,2015 10:50	Displace Fluid	Water	1.50	200.0	--	1.50	96.50
		Remarks: displaced to balance						
15	Jun 03,2015 10:51	Balance Plug	Water	--	0.0	--	--	96.50
16	Jun 03,2015 10:55	Tailgate Meeting		--	--	--	--	96.50
		Remarks: revisited JSA						
17	Jun 03,2015 11:00	Rig Out		--	--	--	--	96.50
18	Jun 03,2015 11:10	Wash	Water	--	--	--	--	96.50
		Remarks: washed pumps and lines						
19	Jun 03,2015 11:30	Job Complete		--	--	--	--	96.50
20	Jun 03,2015 11:35	Pre-Departure Meeting		--	--	--	--	96.50
21	Jun 03,2015 11:45	Leave Location		--	--	--	--	96.50

Did Float Hold: Not Applicable
 Fluid Returns : Yes
 Type : Spacer
 Volume (bbl) : 5
 Temperature (°F) : 65
 FDAS Functioning Correctly : Yes
 Was the Program Followed As Per Design? : Yes