



## Pumping Service Report

**9203837**

Client Name Anadarko Petroleum Corporation	Well Name Gronala 5-7A	Rig ECWS 22	Job Date March 31,2015	Call Sheet 1056993
Client Representative Mr. Bill Smith	Surface Well Location SW NW Sec 7:T3N:R65W	Down Hole Well Location	Job Type Bradenhead Squeeze	Lead Supervisor Maguire, Matthew (26325)

### 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)
10.000	--	--	--	--	--

### 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)
8.625	24.000	J-55	1,370.0	2,950.0	41.65	8.097	9.625	0.0	654.0
4.500	11.600	J-55	4,960.0	5,350.0	117.95	4.000	5.000	0.0	7,589.0

### Tubing

Size (in)	Weight (lb/ft)	Grade	Collapse Pressure (psi)	Capacity (bbl)	I.D. (in)	O.D. (in)	Depth From (ft)	Depth To (ft)
1.660	2.400	J-55	8,490.000	2.630	1.380	2.200	0.000	1,420.000

### Products

#### Plug 1

From Depth (ft): 4760

To Depth (ft): 4116

Plug Type : Well Stability

Acids/Blends/Fluids :

Tail: 250 Sacks of 50% Class G / 50% Poz (1-1-0 G), Density = 14.6 lb/gal, Volume Pumped = 49.9 (bbl)

Water Temperature(°F) = 55 , Bulk Temperature(°F) = 55 , Slurry Temperature(°F) = 55

+ 0.6 % of CFL-2 (Preblend),

+ 0.5 % of CFR (Preblend),

+ 0.6 % of SMS (Preblend),

+ 0.2 % of SPC-2 (Preblend),

+ 0.4 % of LTR (Preblend)

#### Plug 2

From Depth (ft): 1420

To Depth (ft): 481

Plug Type : Well Stability

Acids/Blends/Fluids :

Tail: 360 Sacks of 0:1:0 Type III, Density = 14.8 lb/gal, Volume Pumped = 85.3 (bbl)

Water Temperature(°F) = 55 , Bulk Temperature(°F) = 55 , Slurry Temperature(°F) = 55

+ 0.3 % of CFL-3 (Preblend),

+ 0.3 % of CFR-2 (Preblend),

+ 0.5 % of CaCl<sub>2</sub> (Preblend),

+ 0.4 % of CDF-4P (Preblend),

+ 0.25 lb/sack of Polyflake (Preblend)



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### Fluid & Cement Data

Expected Cement Top: Depth (ft): 481

#### Wellbore Fluid

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	8.400	--	--	Jan 15, 2015 18:10

### Units & Personnel

#### Units

Truck Unit No.	Main Type	Sub Type	Tractor Unit No.	Main Type	Sub Type	Time On Location	Time Off Location
201173	PICKUP	1 Ton	449087	TRAILER	Utility Trailer	03/31/2015 08:00	03/31/2015 14:00
445070	TRAILER	SCM Twin	745070	TRACTOR	Tandem - Tractor	03/31/2015 08:00	03/31/2015 14:00
746508	BODY JOB	Baby Bulker				03/31/2015 08:00	03/31/2015 14:00
446152	TRAILER	Bulker	746152	TRACTOR	Tandem - Tractor	03/31/2015 08:00	03/31/2015 14:00

#### Crew and Bonuses

Employee	Start Shift	End Shift	Second Start Shift	Second End Shift
Maguire, Matthew (26325)	03/31/2015 08:00	03/31/2015 14:00		
Joyner, Barlen (28603)	03/31/2015 08:00	03/31/2015 14:00		
Cox, Brandon (27419)	03/31/2015 08:00	03/31/2015 14:00		
Peterson, Ryan (28158)	03/31/2015 08:00	03/31/2015 14:00		
Melgarejo Herrera, Eduardo (26606)	03/31/2015 08:00	03/31/2015 14:00		

### 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	Mar 31, 2015 08:00	Arrive On Location		--	--	--	--	0.00
		Remarks: Signed in at company dog house and checked in with company rep Mr. Bill Smith.						
2	Mar 31, 2015 08:10	Tailgate Meeting		--	--	--	--	0.00
		Remarks: Filled out JSA.						
3	Mar 31, 2015 08:30	Crew Briefing (Rig in)		--	--	--	--	0.00
4	Mar 31, 2015 09:00	Rig in Complete		--	--	--	--	0.00
5	Mar 31, 2015 09:03	Crew Briefing (Pre Job)		--	--	--	--	0.00
6	Mar 31, 2015 09:10	STEACS Briefing		--	--	--	--	0.00
7	Mar 31, 2015 09:25	Sign-off on Safety		--	--	--	--	0.00
8	Mar 31, 2015 09:37	Start - Fluid	Water	2.00	1,700.0	--	1.00	1.00
		Remarks: Filled lines.						
9	Mar 31, 2015 09:38	Pressure Test Start	Water	--	3,000.0	--	--	1.00
10	Mar 31, 2015 09:39	Pressure Test Complete	Water	--	3,000.0	--	--	1.00
		Remarks: All lines held pressure.						
11	Mar 31, 2015 09:40	Establish Circulation	Water	1.50	1,300.0	--	5.00	6.00
		Remarks: We had circulation.						
12	Mar 31, 2015 09:42	Pump Preflush	Water	2.00	1,900.0	--	20.00	26.00
		Remarks: Water + 350lbs SMS.						

Acidizing • Cementing • Coiled Tubing • Fracturing • Nitrogen

Canada • USA • International

Print Date:

April 07, 2015

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Event #	Event Time	Event Description	Fluid Type	Rate (bbl/min)	Tubular Pressure (psi)	Annular Pressure (psi)	Stage Volume (bbl)	Total Volume (bbl)
13	Mar 31,2015 09:50	Pump Spacer	Water	2.00	1,950.0	--	5.00	31.00
		Remarks: Fresh water spacer.						
14	Mar 31,2015 09:53	Mix Cement	50% Class G / 50% Poz (1-1-0 G)	2.00	2,000.0	--	49.90	80.90
		Remarks: WR=4.62,						
15	Mar 31,2015 10:24	Displace Fluid	Water	1.50	1,500.0	--	7.00	87.90
16	Mar 31,2015 10:29	Stop		--	--	--	--	87.90
17	Mar 31,2015 10:30	Pull Pipe		--	--	--	--	87.90
		Remarks: Rig pulled tubing.						
18	Mar 31,2015 11:30	Rig In		--	--	--	--	87.90
		Remarks: Rigged back up.						
19	Mar 31,2015 11:40	Start - Fluid	Water	1.00	400.0	--	1.00	88.90
		Remarks: Filled lines.						
20	Mar 31,2015 11:41	Pressure Test Lines	Water	--	2,000.0	--	--	88.90
		Remarks: All lines held pressure.						
21	Mar 31,2015 11:43	Establish Circulation	Water	2.00	650.0	--	5.00	93.90
		Remarks: We had circulation.						
22	Mar 31,2015 11:49	Mix Cement	0:1:0 Type III	1.50	1,500.0	--	85.30	179.20
		Remarks: WR=6.31,						
23	Mar 31,2015 12:53	Displace Fluid	Water	1.00	1,000.0	--	2.00	181.20
24	Mar 31,2015 12:55	Stop		--	--	--	--	181.20
25	Mar 31,2015 13:10	Wash	Water	1.50	100.0	--	20.00	181.20
26	Mar 31,2015 13:40	Rig Out		--	--	--	--	181.20
		Remarks: Revisit JSA.						
27	Mar 31,2015 13:50	Pre-Departure Meeting		--	--	--	--	181.20
28	Mar 31,2015 13:55	Job Complete		--	--	--	--	181.20
29	Mar 31,2015 14:00	Leave Location		--	--	--	--	181.20
		Remarks: Revisit JSA, leave location safely.						

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

57859

57860

57861