



**Pumping
Service Report**

9198095

| | | | | |
|---|--|-------------------------|--------------------------------|-----------------------|
| Client Name Anadarko Petroleum Corporation | Well Name Williams 11-20 | Rig BWS 12 | Job Date October 28, 2014 | Call Sheet 1049552 |
| Client Representative Socorro Olivas | Surface Well Location NW SE Sec 20:T2N:R68W | Down Hole Well Location | Job Type Bradenhead Squeeze | |

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 | -- | 770.000 | 1,210.000 | -- | -- |

| 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 | 49.04 | 8.097 | 9.625 | 0.0 | 770.0 |
| | 4.500 | 11.600 | J-55 | 4,960.0 | 5,350.0 | 18.81 | 4.000 | 5.000 | 0.0 | 1,210.0 |

| 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 | 2.330 | J-55 | 8,490.000 | 2.240 | 1.380 | 1.880 | 0.000 | 1,210.000 |

Products

Plug 1

From Depth (ft):

To Depth (ft):

Plug Type : N/A

Acids/Blends/Fluids :

Plug: 190 Sacks of 0:1:0 Type III, Density = 14.8 lb/gal, Volume Pumped = 45 (bbl)
Water Temperature(°F) = 60 , Bulk Temperature(°F) = 58 , Slurry Temperature(°F) = 60
+ 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): 671

Wellbore Fluid

| Fluid Type | Viscosity (cP) | Density (lbs/gal) | Yield Point (psi) | Temperature (°F) | Recorded@ |
|------------|----------------|-------------------|-------------------|------------------|--------------------|
| Water | -- | 8.400 | -- | -- | Aug 24, 2014 17:22 |



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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> |
|-----------------------|------------------|-----------------|-------------------------|------------------|-----------------|-------------------------|--------------------------|
| 201274 | PICKUP | 3/4 Ton | | | | 10/28/2014 07:00 | 10/28/2014 09:40 |
| 740067 | BODY JOB | C & A | | | | 10/28/2014 07:00 | 10/28/2014 09:40 |
| 746502 | BODY JOB | Baby Bulker | | | | 10/28/2014 07:00 | 10/28/2014 09:40 |

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 | 10/28/2014 07:00 | 10/28/2014 09:40 | | |
| Laeger, Kacey | 10/28/2014 07:00 | 10/28/2014 09:40 | | |
| Curtner, Jerry | 10/28/2014 07:00 | 10/28/2014 09:40 | | |
| Daylong, Eric | 10/28/2014 07:00 | 10/28/2014 09:40 | | |

Treatment Reports & Remarks



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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 28,2014 07:00 | Arrive On Location | --- | -- | -- | -- | -- | 0.00 |
| 2 | Oct 28,2014 07:05 | Tailgate Meeting | --- | -- | -- | -- | -- | 0.00 |
| | | Remarks: Held | | | | | | |
| 3 | Oct 28,2014 07:15 | STEACS Briefing | --- | -- | -- | -- | -- | 0.00 |
| | | Remarks: Held | | | | | | |
| 4 | Oct 28,2014 07:50 | Rig In | --- | -- | -- | -- | -- | 0.00 |
| 5 | Oct 28,2014 08:05 | Safety Meeting | --- | -- | -- | -- | -- | 0.00 |
| 6 | Oct 28,2014 08:20 | Sign-off on Safety | --- | -- | -- | -- | -- | 0.00 |
| 7 | Oct 28,2014 08:23 | Start - Fluid | --- | 1.00 | 20.0 | -- | 1.00 | 1.00 |
| | | Remarks: Filled lines | | | | | | |
| 8 | Oct 28,2014 08:25 | Pressure Test | Water | -- | -- | -- | -- | 1.00 |
| | | Remarks: 3100 lines held | | | | | | |
| 9 | Oct 28,2014 08:27 | Pump Preflush | Water | 2.00 | 450.0 | -- | 5.00 | 6.00 |
| | | Remarks: 5bbls fresh ahead | | | | | | |
| 10 | Oct 28,2014 08:30 | Pump Preflush | Water | 2.00 | 450.0 | -- | 20.00 | 26.00 |
| | | Remarks: 20bbls of Well seal | | | | | | |
| 11 | Oct 28,2014 08:39 | Pump Spacer | Water | 2.00 | 450.0 | -- | 5.00 | 31.00 |
| | | Remarks: 5bbls fresh behind | | | | | | |
| 12 | Oct 28,2014 08:41 | Mix Cement | 0:1:0 Type III | 2.50 | 1,800.0 | -- | 45.00 | 76.00 |
| | | Remarks: 190sks of Typelll at 14.8 lb/gal | | | | | | |
| 13 | Oct 28,2014 08:57 | Displace Fluid | Water | 1.00 | 250.0 | -- | 1.00 | 77.00 |
| | | Remarks: Displace to clear lines | | | | | | |
| 14 | Oct 28,2014 08:59 | Stop | --- | -- | -- | -- | -- | 77.00 |
| 15 | Oct 28,2014 09:03 | Wash | --- | -- | -- | -- | 15.00 | 77.00 |
| 16 | Oct 28,2014 09:17 | Rig Out | --- | -- | -- | -- | -- | 77.00 |
| 17 | Oct 28,2014 09:30 | Job Complete | --- | -- | -- | -- | -- | 77.00 |
| 18 | Oct 28,2014 09:30 | Pre-Departure Meeting | --- | -- | -- | -- | -- | 77.00 |
| | | Remarks: Held | | | | | | |
| 19 | Oct 28,2014 09:40 | Leave Location | --- | -- | -- | -- | -- | 77.00 |

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

Material Transfer Sheet Number

Material Transfer Sheet Number

54734