



9208170

| | | | | |
|---|--|-------------------------|--------------------------------|--|
| Client Name Anadarko Petroleum Corporation | Well Name Ft St Vrain 17 | Rig Basic 1524 | Job Date November 04,2015 | Call Sheet 1062222 |
| Client Representative Mr. Nick Lang | Surface Well Location SE SE Sec 34:T4N:R67W | Down Hole Well Location | Job Type Bradenhead Squeeze | Lead Supervisor Laeger, Kacey (25046) |

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 | -- | 4,650.000 | 505.000 | -- | -- |

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 | 32.16 | 8.097 | 9.625 | 0.0 | 505.0 |
| 4.500 | 11.600 | J-55 | 4,960.0 | 5,350.0 | 72.27 | 4.000 | 5.000 | 0.0 | 4,650.0 |

Tubing

| Size | Weight | Grade | Collapse Pressure | Capacity | I.D. | O.D. | Depth From | Depth To |
|-------|---------|-------|-------------------|----------|-------|-------|------------|-----------|
| (in) | (lb/ft) | | (psi) | (bbl) | (in) | (in) | (ft) | (ft) |
| 1.660 | 2.330 | J-55 | 8,490.000 | 8.590 | 1.380 | 1.880 | 0.000 | 4,641.000 |

Products**Stage 1**

From Depth (ft): 3444

To Depth (ft): 4650

Acids/Blends/Fluids :

Tail: 355 Sacks of 1-1-0 G, Density = 14.6 lb/gal, Volume Pumped = 70.8 (bbl)

Water Temperature(°F) = 55 , Bulk Temperature(°F) = 60 , Slurry Temperature(°F) = 65

- + 0.6 % of CFL-2 (Preblend),
- + 0.5 % of CFR (Preblend),
- + 0.4 % of LTR (Preblend),
- + 0.6 % of SMS (Preblend),
- + 0.2 % of SPC-2 (Preblend),
- + 0.25 lb/sack of LCL-7 (Preblend)

Stage 2

From Depth (ft): 100

To Depth (ft): 1000

Acids/Blends/Fluids :

Tail: 200 Sacks of 0:1:0 Type III, Density = 14.8 lb/gal, Volume Pumped = 47.4 (bbl)

Water Temperature(°F) = 60 , Bulk Temperature(°F) = 65 , Slurry Temperature(°F) = 70

- + 0.25 lb/sack of LCL-7 (Preblend),
- + 0.3 % of CFR-2 (Preblend),
- + 0.3 % of CFL-3 (Preblend),
- + 0.4 % of CDF-4P (Preblend)



Cementing Service Report

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Fluid & Cement Data

Expected Cement Top: Depth (ft): 100

Wellbore Fluid

| <u>Fluid Type</u> | <u>Viscosity (cP)</u> | <u>Density (lbs/gal)</u> | <u>Yield Point (psi)</u> | <u>Temperature (°F)</u> | <u>Recorded@</u> |
|-------------------|-----------------------|--------------------------|--------------------------|-------------------------|--------------------|
| Water | -- | -- | -- | -- | Apr 08, 2015 17:07 |

Attachment & Tools

Down Hole Tools

| <u>Tool Type</u> | <u>Depth (ft)</u> | <u>Supplier</u> |
|------------------|-------------------|-----------------|
| Bridge Plug | 6,698.000 | Third Party |

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> |
|-----------------------|------------------|-----------------|-------------------------|------------------|------------------|-------------------------|--------------------------|
| 201173 | PICKUP | 1 Ton | 449086 | TRAILER | Utility Trailer | 11/04/2015 07:30 | 11/04/2015 12:00 |
| 445047 | TRAILER | SCM Twin | 745047 | TRACTOR | Tandem - Tractor | 11/04/2015 07:30 | 11/04/2015 12:00 |
| 446167 | TRAILER | Bulker | 746167 | TRACTOR | Tandem - Tractor | 11/04/2015 07:30 | 11/04/2015 12:00 |
| 201380 | PICKUP | 1/2 Ton | | | | 11/04/2015 07:30 | 11/04/2015 12:00 |

Crew and Bonuses

| <u>Employee</u> | <u>Start Shift</u> | <u>End Shift</u> | <u>Second Start Shift</u> | <u>Second End Shift</u> |
|-------------------------|--------------------|------------------|---------------------------|-------------------------|
| Laeger, Kacey (25046) | 11/04/2015 07:30 | 11/04/2015 09:39 | | |
| Hansen, Ted (29055) | 11/04/2015 07:30 | 11/04/2015 09:39 | | |
| Barden, Sean (27711) | 11/04/2015 07:30 | 11/04/2015 09:39 | | |
| Spirek, Matthew (26921) | 11/04/2015 07:30 | 11/04/2015 09:39 | | |

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 | Nov 04,2015 07:30 | Arrive On Location | | -- | -- | -- | -- | 0.00 | |
| | | Remarks: 1 hour early | | | | | | | |
| 2 | Nov 04,2015 07:35 | Crew Briefing (Rig in) | | -- | -- | -- | -- | 0.00 | |
| | | Remarks: Held | | | | | | | |
| 3 | Nov 04,2015 08:30 | Wait on Client (non Sanjel) | | -- | -- | -- | -- | 0.00 | |
| | | Remarks: Wait on rig to finish circulating and water to show up | | | | | | | |
| 4 | Nov 04,2015 09:20 | Rig in Complete | | -- | -- | -- | -- | 0.00 | |
| 5 | Nov 04,2015 09:40 | Crew Briefing (Pre Job) | | -- | -- | -- | -- | 0.00 | |
| 6 | Nov 04,2015 09:45 | Wait On Instructions | | -- | -- | -- | -- | 0.00 | |
| | | Remarks: Wait on rig to to pull tubing and spot mud | | | | | | | |
| 7 | Nov 04,2015 12:36 | Pressure Test Start | Water | 1.00 | 200.0 | -- | 1.00 | 1.00 | |
| | | Remarks: Filled lines | | | | | | | |
| 8 | Nov 04,2015 12:38 | Pressure Test Complete | Water | -- | 3,800.0 | -- | -- | 1.00 | |
| | | Remarks: Lines held good | | | | | | | |
| 9 | Nov 04,2015 12:39 | Pump | Water | 2.00 | 1,500.0 | -- | 5.00 | 6.00 | |
| | | Remarks: Est circulation good circulation | | | | | | | |
| 10 | Nov 04,2015 12:41 | Pump Preflush | Water | 2.00 | 1,500.0 | -- | 20.00 | 26.00 | |
| | | Remarks: 20bbls SMS | | | | | | | |
| 11 | Nov 04,2015 12:52 | Pump Spacer | Water | 1.80 | 2,000.0 | -- | 5.00 | 31.00 | |
| | | Remarks: 5bbls fresh water spacer | | | | | | | |
| 12 | Nov 04,2015 12:53 | Mix Cement | 1-1-0 G | 1.50 | 2,200.0 | -- | 71.50 | 102.50 | |
| | | Remarks: 355sks of 1:1:0 Poz G at 14.6lb/gal | | | | | | | |
| 13 | Nov 04,2015 13:44 | Displace Fluid | Water | 1.50 | 2,200.0 | -- | 5.00 | 107.50 | |
| | | Remarks: Dispalce to balance plug | | | | | | | |
| 14 | Nov 04,2015 13:46 | Finish Displacement | Water | -- | -- | -- | -- | 107.50 | |
| 15 | Nov 04,2015 13:50 | Wash | Water | -- | -- | -- | -- | 107.50 | |
| | | Remarks: Wait pump unit | | | | | | | |
| 16 | Nov 04,2015 14:10 | Wait On Instructions | | -- | -- | -- | -- | 107.50 | |
| | | Remarks: Wait on rig to finish pulling tubing for stage two | | | | | | | |
| 17 | Nov 04,2015 14:57 | Pressure Test | Water | -- | 2,700.0 | -- | -- | 0.00 | |
| | | Remarks: Lines held good | | | | | | | |
| 18 | Nov 04,2015 14:59 | Establish Circulation | Water | 2.00 | 500.0 | -- | 10.00 | 10.00 | |
| | | Remarks: Good circulation | | | | | | | |
| 19 | Nov 04,2015 15:04 | Mix Cement | 0:1:0 Type III | 2.00 | 1,000.0 | -- | 50.00 | 60.00 | |
| | | Remarks: 200sks of TypeIII at 14.8 lb/gal | | | | | | | |
| 20 | Nov 04,2015 15:30 | Displace Fluid | Water | 2.00 | 1,000.0 | -- | 1.00 | 61.00 | |
| | | Remarks: Diplace to balance | | | | | | | |
| 21 | Nov 04,2015 15:35 | Wash | Water | -- | -- | -- | -- | 61.00 | |
| | | Remarks: Wash pump unit | | | | | | | |
| 22 | Nov 04,2015 15:55 | Rig Out | | -- | -- | -- | -- | 61.00 | |
| 23 | Nov 04,2015 16:10 | Job Complete | | -- | -- | -- | -- | 107.50 | |
| 24 | Nov 04,2015 16:15 | Leave Location | | -- | -- | -- | -- | 107.50 | |
| Pressure Pumping • Completions Canada • USA • International | | | | | sanjel.com Print Date: November 09, 2015 Service Report: 9208170 Page 3 of 4 V4.3.0.0 | | | | |

Treatment Reports & Remarks

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

63683

63684