



| Treatment Reports & Remarks | |
|---------------------------------------|--|
| Material Transfer Sheet Number | |
| <u>Material Transfer Sheet Number</u> | |
| 65218 | |
| 65219 | |
| 65220 | |

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 | Jul 19,2015 13:10 | Arrive On Location | | -- | -- | -- | -- | 0.00 |
| 2 | Jul 19,2015 13:20 | Crew Briefing (Rig in) | | -- | -- | -- | -- | 0.00 |
| 3 | Jul 19,2015 14:20 | Rig in Complete | | -- | -- | -- | -- | 0.00 |
| 4 | Jul 19,2015 14:30 | Crew Briefing (Pre Job) | | -- | -- | -- | -- | 0.00 |
| 5 | Jul 19,2015 14:55 | Start - Fluid | Water | 2.00 | -- | -- | 2.00 | 2.00 |
| | | Remarks: Fill lines | | | | | | |
| 6 | Jul 19,2015 14:57 | Pressure Test Start | | -- | 3,000.0 | -- | -- | 0.00 |
| 7 | Jul 19,2015 14:59 | Pressure Test Complete | | -- | -- | -- | -- | 0.00 |
| 8 | Jul 19,2015 15:03 | Pump Spacer | Water | 4.00 | 100.0 | -- | 20.00 | 22.00 |
| | | Remarks: 10 bbls with red dye | | | | | | |
| 9 | Jul 19,2015 15:15 | Mix Cement | Control Set C | 6.00 | 300.0 | -- | 150.00 | 172.00 |
| | | Remarks: Pumped 355 sacks Density 12 Yield 2.46 Water 14.52 | | | | | | |
| 10 | Jul 19,2015 15:40 | Mix Cement | 0:1:0 Type III | 6.00 | 270.0 | -- | 65.00 | 237.00 |
| | | Remarks: Pumped 240 sacks Density 14.2 Yield 1.46 Water 7.36 | | | | | | |
| 11 | Jul 19,2015 15:52 | Drop Plug | | -- | -- | -- | -- | 237.00 |
| | | Remarks: Sanjel plug | | | | | | |
| 12 | Jul 19,2015 15:55 | Displace Fluid | Water | 6.00 | 100.0 | -- | 142.00 | 379.00 |
| 13 | Jul 19,2015 16:28 | Bump Plug | | -- | -- | -- | -- | 379.00 |
| | | Remarks: Pressure before plug landed was 650 psi landed plug with 1160 psi | | | | | | |
| 14 | Jul 19,2015 16:30 | Check Float | | -- | -- | -- | -- | 379.00 |
| | | Remarks: Got 1.5 bbls back | | | | | | |
| 15 | Jul 19,2015 16:33 | Pressure Test | | -- | -- | -- | -- | 379.00 |
| | | Remarks: Pressure tested casing at 1500 for 5 min | | | | | | |
| 16 | Jul 19,2015 16:40 | Stop | | -- | -- | -- | -- | 0.00 |
| | | Remarks: Got 65 bbls 148 sacks of cement to surface | | | | | | |
| 17 | Jul 19,2015 16:45 | Wash | | -- | -- | -- | -- | 0.00 |
| 18 | Jul 19,2015 17:15 | Rig Out | | -- | -- | -- | -- | 0.00 |
| 19 | Jul 19,2015 17:45 | Job Complete | | -- | -- | -- | -- | 0.00 |
| 20 | Jul 19,2015 17:50 | Pre-Departure Meeting | | -- | -- | -- | -- | 0.00 |
| 21 | Jul 19,2015 18:00 | Leave Location | | -- | -- | -- | -- | 0.00 |

Did Float Hold: Yes

Fluid Returns : Yes

Type : Cement

Volume (bbl) : 65

Temperature (°F) : 80

FDAS Functioning Correctly : Yes

Was the Program Followed As Per Design? : Yes

9204371

| | | | | |
|--|---|------------------------------|----------------------------|---|
| Client Name Whiting Petroleum Corp. | Well Name Razor Federal 12F-1307A | Rig Unit Drilling Co. 409 | Job Date July 19,2015 | Call Sheet 1059261 |
| Client Representative Tyson | Surface Well Location SE NE Sec 12:T10N:R58W | Down Hole Well Location | Job Type Surface Casing | Lead Supervisor Lopez, Armando (29064) |

Well Profile

| | |
|--|-------------|
| Well Type: | Oil |
| Maximum Treating Pressure (psi): | --- |
| Predicted Bottom Hole Static Temperature (°F): | 100.00 @ -- |
| Bottom Hole Circulating Temperature (°F): | 80.00 @ -- |
| Bottom Hole Logged Temperature (°F): | --- @ -- |

Open Hole

| Size (in) | Excess (%) | TMD From (ft) | TMD To (ft) | TVD From (ft) | TVD To (ft) |
|-----------|------------|---------------|-------------|---------------|-------------|
| 13.500 | 30.000 | 0.000 | 1,895.000 | -- | -- |

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) |
|--------------|-------------------|-------|----------------------------|----------------------------------|-------------------|--------------|--------------|--------------------|------------------|
| 9.625 | 36.000 | K-55 | 2,020.0 | 3,520.0 | 146.24 | 8.921 | 10.625 | 0.0 | 1,891.6 |

Products

Stage 1

| | |
|--|------|
| From Depth (ft): | 1194 |
| To Depth (ft): | 1976 |
| Acids/Blends/Fluids : | |
| Lead 1: 355 Sacks of Control Set C, Density = 12 lb/gal, Volume Pumped = 160 (bbl) | |
| Water Temperature(°F) = 70 , Bulk Temperature(°F) = 70 , Slurry Temperature(°F) = 78 | |
| + 0.25 lb/sack of LCL-7 (Preblend) | |

Stage 2

| | |
|--|------|
| From Depth (ft): | 0 |
| To Depth (ft): | 1194 |
| Acids/Blends/Fluids : | |
| Tail: 240 Sacks of 0:1:0 Type III, Density = 14.2 lb/gal, Volume Pumped = 65 (bbl) | |
| Water Temperature(°F) = 70 , Bulk Temperature(°F) = 70 , Slurry Temperature(°F) = 79 | |
| + 2 % of CaCl2 (Preblend), | |
| + 0.25 lb/sack of LCL-7 (Preblend) | |

Stage 3

| | |
|---|--|
| From Depth (ft): | |
| To Depth (ft): | |
| Acids/Blends/Fluids : | |
| Extra Cement: 1 Sacks of 0:1:0 Type III, Density = 14.8 lb/gal, Volume Pumped = 1 (bbl) | |
| + 2 % of CaCl2 (Preblend) | |

Fluid & Cement Data

Expected Cement Top: Surface

Wellbore Fluid

| Fluid Type | Viscosity (cP) | Density (lbs/gal) | Yield Point (psi) | Temperature (°F) | Recorded@ |
|------------|----------------|-------------------|-------------------|------------------|--------------------|
| Water | -- | 8.340 | -- | -- | Jul 07, 2015 14:19 |

Attachment & Tools

Down Hole Tools

| <u>Tool Type</u> | <u>Depth (ft)</u> | <u>Supplier</u> |
|------------------|-------------------|-----------------|
| Guide Shoe | 1,891.000 | Third Party |
| Guide/Float Shoe | 1,830.000 | Third Party |

Tubular Plugs

| <u>Tubular Plug Type</u> | <u>Size (in)</u> | <u>Supplier</u> |
|--------------------------|------------------|-----------------|
| Rubber Top | 9.625 | 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> |
|-----------------------|------------------|-----------------|-------------------------|------------------|------------------|-------------------------|--------------------------|
| 201191 | PICKUP | 1 Ton | 449093 | TRAILER | Utility Trailer | 07/19/2015 13:10 | 07/19/2015 18:00 |
| 445051 | TRAILER | SCM Twin | 745051 | TRACTOR | Tandem - Tractor | 07/19/2015 13:10 | 07/19/2015 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> |
|------------------------|--------------------|------------------|---------------------------|-------------------------|
| Lopez, Armando (29064) | 07/19/2015 13:10 | 07/19/2015 18:00 | | |
| Bark, Eric (28944) | 07/19/2015 13:10 | 07/19/2015 18:00 | | |
| Cox, Brandon (27419) | 07/19/2015 13:10 | 07/19/2015 18:00 | | |
| Betts, Dallas (30257) | 07/19/2015 13:10 | 07/19/2015 18:00 | | |

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