

| | | | | |
|--|--|------------------------------|-------------------------------|---|
| Client Name Whiting Petroleum Corp. | Well Name Horsetail 07E-0634 | Rig Unit Drilling Co. 409 | Job Date December 28,2015 | Call Sheet 1063500 |
| Client Representative BJ | Surface Well Location SE NW Sec 7:T10N:R57W | Down Hole Well Location | Job Type Production Casing | Lead Supervisor Maguire, Matthew (26325) |

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) |
|-----------|------------|---------------|-------------|---------------|-------------|
| 8.500 | 15.000 | 2,008.000 | 13,703.000 | -- | -- |

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 | J-55 | 2,020.0 | 3,520.0 | 155.23 | 8.921 | 10.625 | 0.0 | 2,008.0 |
| 5.500 | 15.500 | J-55 | 4,040.0 | 4,810.0 | 326.16 | 4.950 | 6.050 | 0.0 | 13,703.0 |

Products

Stage 1

From Depth (ft): 0

To Depth (ft): 5000

Acids/Blends/Fluids :

Lead 1: 670 Sacks of 50% Class III / 50% Poz (1-1-0 III), Density = 12 lb/gal, Volume Pumped = 233.9 (bbl)

Water Temperature(°F) = 61 , Bulk Temperature(°F) = 60 , Slurry Temperature(°F) = 71

- + 0.3 % of ASM-3 (Preblend),
- + 0.5 % of CFL-10 (Preblend),
- + 2 % of FWC-2 (Preblend),
- + 0.1 % of LTR (Preblend),
- + 0.25 lb/sack of LCL-7 (Preblend)

Stage 2

From Depth (ft): 5000

To Depth (ft): 13635

Acids/Blends/Fluids :

Tail: 1230 Sacks of 65% Class C / 35% Poz (1-2-0 Class C), Density = 13.5 lb/gal, Volume Pumped = 409.6 (bbl)

Water Temperature(°F) = 61 , Bulk Temperature(°F) = 60 , Slurry Temperature(°F) = 71

- + 0.3 % of ASM-3 (Preblend),
- + 0.5 % of CFL-10 (Preblend),
- + 25 % of Silica Flour (Preblend),
- + 4 % of FWC-2 (Preblend),
- + 0.1 % of LTR (Preblend),
- + 0.2 % of SPC-2 (Preblend),
- + 0.25 lb/sack of LCL-7 (Preblend)

Stage 3

From Depth (ft):

To Depth (ft):

Acids/Blends/Fluids :

| 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 | | |
| Water Based Mud | -- | 10.000 | -- | -- | Jul 11, 2015 17:09 | | |
| Units & Personnel | | | | | | | |
| Units | | | | | | | |
| Truck Unit No. | Main Type | Sub Type | Tractor Unit No. | Main Type | Sub Type | Time On Location | Time Off Location |
| 449087 | TRAILER | Utility Trailer | 201017 | PICKUP | 1 Ton | 12/28/2015 16:40 | 12/29/2015 02:00 |
| 445046 | TRAILER | SCM Twin | 745046 | TRACTOR | Tandem - Tractor | 12/28/2015 16:40 | 12/29/2015 02:00 |
| 445024 | TRAILER | SCM Twin | 745024 | TRACTOR | Tandem - Tractor | 12/28/2015 16:40 | 12/29/2015 02:00 |
| 449183 | TRAILER | 1600 Porta Bulker | | | | 12/28/2015 16:40 | 12/29/2015 02:00 |
| 449102 | TRAILER | 1600 Porta Bulker | | | | 12/28/2015 16:40 | 12/29/2015 02:00 |
| Crew and Bonuses | | | | | | | |
| Employee | Start Shift | End Shift | | | Second Start Shift | Second End Shift | |
| Maguire, Matthew (26325) | 12/28/2015 16:40 | 12/29/2015 02:00 | | | | | |
| Ripka, Robert (23825) | 12/28/2015 16:40 | 12/29/2015 02:00 | | | | | |
| Hilt, Brandon (30128) | 12/28/2015 16:40 | 12/29/2015 02:00 | | | | | |
| Barden, Sean (27711) | 12/28/2015 16:40 | 12/29/2015 02:00 | | | | | |
| Hilt, Brandon (30128) | 12/28/2015 16:40 | 12/29/2015 02:00 | | | | | |
| Barden, Sean (27711) | 12/28/2015 16:40 | 12/29/2015 02:00 | | | | | |
| 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 | Dec 28,2015 16:40 | Arrive On Location | | -- | -- | -- | -- | 0.00 |
| | | Remarks: Signed in at lease entrance. | | | | | | |
| 2 | Dec 28,2015 16:45 | Tailgate Meeting | | -- | -- | -- | -- | 0.00 |
| | | Remarks: JSA. | | | | | | |
| 3 | Dec 28,2015 17:00 | Crew Briefing (Rig in) | | -- | -- | -- | -- | 0.00 |
| 4 | Dec 28,2015 20:00 | Rig in Complete | | -- | -- | -- | -- | 0.00 |
| 5 | Dec 28,2015 20:05 | Crew Briefing (Pre Job) | | -- | -- | -- | -- | 0.00 |
| 6 | Dec 28,2015 20:15 | STEACS Briefing | | -- | -- | -- | -- | 0.00 |
| 7 | Dec 28,2015 20:30 | Sign-off on Safety | | -- | -- | -- | -- | 0.00 |
| 8 | Dec 28,2015 20:40 | Start - Fluid | Water | 2.00 | 40.0 | -- | 2.00 | 2.00 |
| | | Remarks: Filled lines. | | | | | | |
| 9 | Dec 28,2015 20:48 | Pressure Test Start | Water | -- | 4,500.0 | -- | -- | 2.00 |
| 10 | Dec 28,2015 20:49 | Pressure Test Complete | Water | -- | 4,500.0 | -- | -- | 2.00 |
| | | Remarks: All lines held pressure. | | | | | | |
| 11 | Dec 28,2015 21:53 | Pump Preflush | Water | 5.00 | 700.0 | -- | 30.00 | 32.00 |
| | | Remarks: Mudflush (SAPP + WS-30). | | | | | | |
| 12 | Dec 28,2015 21:58 | Pump Preflush | Water | 7.00 | 800.0 | -- | 30.00 | 62.00 |
| | | Remarks: Visweep (WG-1L). | | | | | | |
| 13 | Dec 28,2015 22:01 | Mix Cement | 50% Class III / 50% Poz (1-1-0 III) | 8.00 | 1,100.0 | -- | 234.00 | 296.00 |
| | | Remarks: LEAD: | | | | | | |
| 14 | Dec 28,2015 22:30 | Mix Cement | 65% Class C / 35% Poz (1-2-0 Class C) | 8.00 | 700.0 | -- | 409.60 | 705.60 |
| | | Remarks: TAIL: | | | | | | |
| 15 | Dec 28,2015 23:30 | Stop | | -- | -- | -- | -- | 705.60 |
| 16 | Dec 28,2015 23:35 | Drop Plug | Water | -- | -- | -- | -- | 705.60 |
| 17 | Dec 28,2015 23:36 | Displace Fluid | Water | 8.00 | 2,000.0 | -- | 302.70 | 1,008.30 |
| 18 | Dec 29,2015 23:25 | Bump Plug | Water | -- | 2,000.0 | -- | -- | 1,008.30 |
| | | Remarks: Bumped 500psi over. | | | | | | |
| 19 | Dec 29,2015 00:27 | Check Float | Water | -- | 2,000.0 | -- | -- | 1,008.30 |
| | | Remarks: Float held. | | | | | | |
| 20 | Dec 29,2015 00:30 | Stop | | -- | -- | -- | -- | 1,008.30 |
| 21 | Dec 29,2015 00:40 | Wash | Water | 1.50 | 100.0 | -- | 20.00 | 1,008.30 |
| 22 | Dec 29,2015 01:10 | Rig Out | | -- | -- | -- | -- | 1,008.30 |
| | | Remarks: Revisit JSA. | | | | | | |
| 23 | Dec 29,2015 01:50 | Pre-Departure Meeting | | -- | -- | -- | -- | 1,008.30 |
| 24 | Dec 29,2015 01:55 | Job Complete | | -- | -- | -- | -- | 1,008.30 |
| 25 | Dec 29,2015 02:00 | Leave Location | | -- | -- | -- | -- | 1,008.30 |
| | | Remarks: Revisit JSA, leave location safely. | | | | | | |

Treatment Reports & Remarks

Did Float Hold: Yes
Fluid Returns : Yes
Type : Cement
Volume (bbl) : 50
Temperature (°F) : 71
FDAS Functioning Correctly : Yes
Was the Program Followed As Per Design? : Yes

Material Transfer Sheet Number

Material Transfer Sheet Number

63171
63172
63173
63174



| | | | | | |
|------------|-----------------------------|------------|---------------------|------------------|-----------------|
| Client | Whiting Petroleu Corp. | Client Rep | Mr. Kenny Wilkerson | Supervisor | Matthew Maguire |
| Ticket No. | 9208197 | Well Name | Horsetail O7E-0634 | Unit No. | 445046 |
| Location | SE NW Sec 7:T10N:R57W | Job Type | Production Casing | Service District | 505 |
| Comments | Pup job per client request. | | | Job Date | 12/28/2015 |

