Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**

JUN 29 2015

***Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***

***SUBMIT IN TRIPLICATE - Other instructions on reverse side.***

RECEIVED

| | |
|---|---|
| 1. Type of Well<br>☒ Oil Well ☐ Gas Well ☐ Other | 5. Lease Serial No.<br>NMNM110835 |
| | 6. If Indian, Allottee or Tribe Name |
| | 7. If Unit or CA/Agreement, Name and/or No. |
| | 8. Well Name and No.<br>RESOLUTE BTO FEDERAL 1H |
| 2. Name of Operator<br>YATES PETROLEUM CORPORATION Contact: LAURA WATTS<br>E-Mail: laura@yatespetroleum.com | 9. API Well No.<br>30-025-42214 |
| 3a. Address<br>105 SOUTH FOURTH STREET<br>ARTESIA, NM 88210<br>3b. Phone No. (include area code)<br>Ph: 575-748-4272<br>Fx: 575-748-4585 | 10. Field and Pool, or Exploratory<br>WILDCAT; BONE SPRING |
| 4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*<br>Sec 12 T25S R32E NENE 50FNL 440FEL | 11. County or Parish, and State<br>LEA COUNTY, NM |

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION | TYPE OF ACTION | | | |
|---|---|---|---|---|
| ☒ Notice of Intent | ☐ Acidize | ☐ Deepen | ☐ Production (Start/Resume) | ☐ Water Shut-Off |
| ☐ Subsequent Report | ☐ Alter Casing | ☐ Fracture Treat | ☐ Reclamation | ☐ Well Integrity |
| ☐ Final Abandonment Notice | ☐ Casing Repair | ☐ New Construction | ☐ Recomplete | ☒ Other |
| | ☐ Change Plans | ☐ Plug and Abandon | ☐ Temporarily Abandon | |
| | ☐ Convert to Injection | ☐ Plug Back | ☐ Water Disposal | |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The TOC was found to be at 5,442 ft by CBL. Since the intermediate casing shoe is at 4,902 ft and we did not tie back our cement to 500 ft above the casing shoe, Yates Petroleum Corporation plans to fix this as follows:

After we frac the well, drill out our frac plugs and flow back the well until it dies, we will attempt a bradenhead squeeze and run another CBL to verify. If the bradenhead squeeze is unsuccessful we will perforate just above our TOC and squeeze cement to tie back into our intermediate casing.

Per Attached Procedure

After cmt squeeze Job - Submit Electronic Copy of CBL to BLM

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #302649 verified by the BLM Well Information System**
**For YATES PETROLEUM CORPORATION, sent to the Hobbs**
**Committed to AFMSS for processing by ED FERNANDEZ on 06/11/2015 ()**

Name *(Printed/Typed)* LAURA WATTS — Title REG REPORTING TECHNICIAN

Signature (Electronic Submission) — Date 05/22/2015

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

APPROVED
JUN 19 2015
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Approved By Ed Fernandez — Title — Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. — Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

JUL 01 2015

YATES PETROLEUM CORPORATION
105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210
TELEPHONE (575) 748-1471

Sent 6/11/15

**Resolute BTO Federal #1H**
**50' FNL & 440' FEL**
**Sec. 12-25S-32E**
**Lea County, New Mexico**
**API # 30-025-42214**

**Bradenhead Squeeze Procedure**
**AFE005714**

**Executive Summary:**
Procedure to perform a bradenhead squeeze down the 9 ⅝" x 5 ½" annulus.

| | | | |
|---|---|---|---|
| **TD:** | 15,455' | **GR:** | 3,522' |
| **PBTD:** | 15,451' | **KB:** | 3,343.5' |

**Surface Casing:** 13 ⅜" 48# J-55 at 1,122'. Cemented with 575 sx. Cement circulated.
**Intermediate Casing:** 9 ⅝" 36# and 40# J-55 and HCK-55 at 4,902'. Cemented with 1,265 sx. Cement circulated.
**Production Casing:** 5 ½" 17# P-110 at 15,455'. Cemented with 1,810 sx. TOC at 5,442' by CBL.

**Bradenhead Squeeze Procedure:**

1. MIRU pump truck to determine injection rate down 9 ⅝" x 5 ½" annulus. RDMO pump truck.
2. MIRU WSU and all necessary safety equipment. ND frac stack and NU BOP.
3. Pick up 2 ⅞" tbg and TIH with RBP. Set the RBP at 5,600' and load the hole with 3% KCL water. TOH.
4. MIRU cementing equipment to pump bradenhead squeeze down the 9 ⅝" x 5 ½" annulus. The capacity of the annulus is .2691 $ft^3/ft$, so the minimum cement volume needed is 4,902' * .2691 = 1,319 $ft^3$ (≈ ±1,350 $ft^3$).
5. Pump the cement slurry down the 9 ⅝" x 5 ½" annulus while holding 2,000 psi on the 5 ½" casing. Do not displace the cement. Shut the annulus in and release the pressure on the 5 ½" casing. WOC for a minimum of 24 hours.
6. MIRU WL to run a CBL with 1,500 psi on the casing from the RBP to surface. - Submit Electronic copy of CBL To BLM ASAP
7. TIH with retrieving tool, latch on and release RBP and TOH.
8. TIH with production equipment, RDMO and turn the well over to the Production Dept.

**Area Engineer:** Brice A Letcher **Date:** 6/10/2015
Brice A. Letcher

6/10/15

**WELL NAME:** Resolute BTO Federal #1H **FIELD**

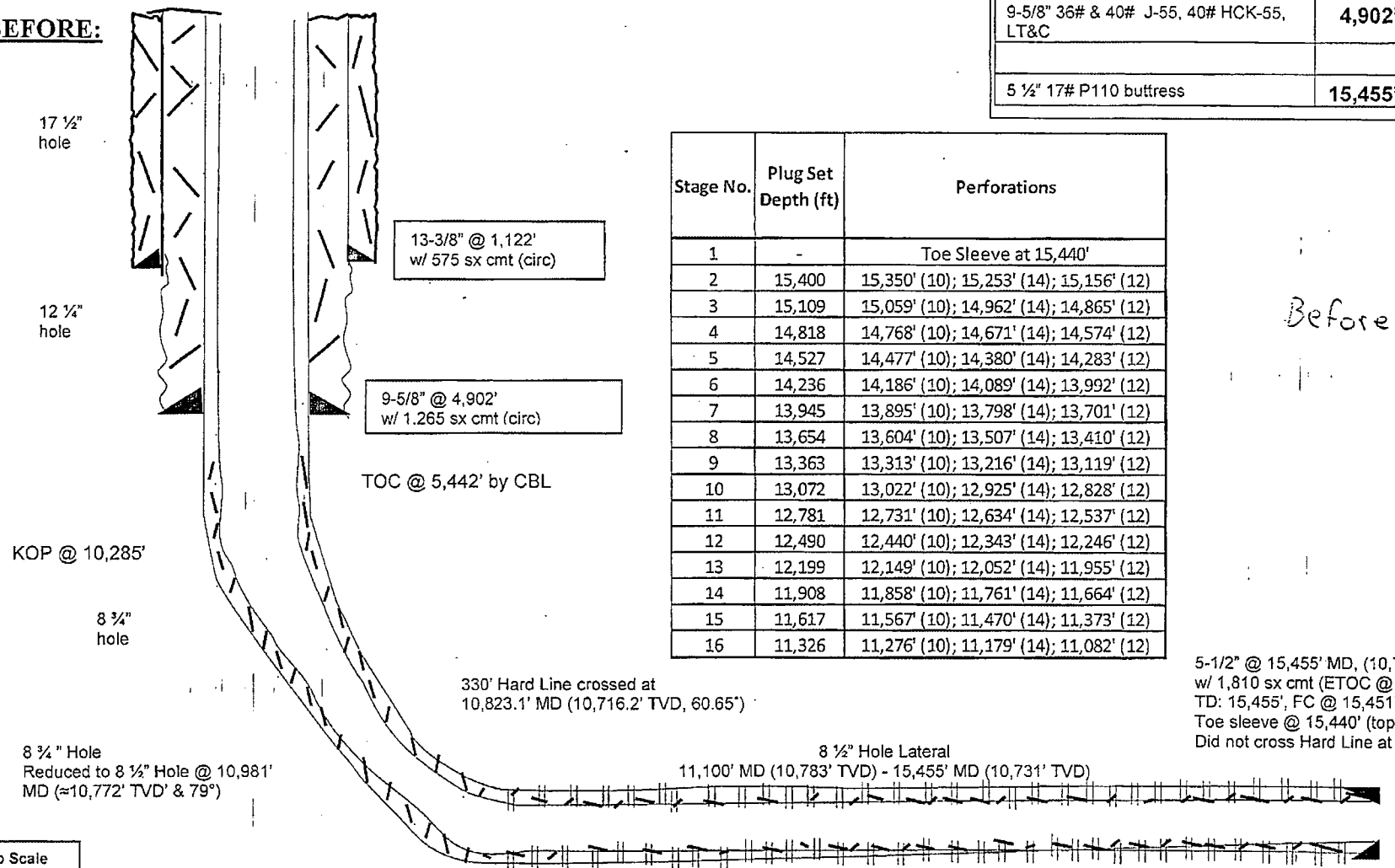
**LOCATION:** Unit A, 50' FNL and 440' FEL (Surf ) Sec 12-25S-32E Lea County

**GL:** 3,522' **ZERO:** **KB:** 3,543.5'

**SPUD DATE:** 3/23/15 **COMPLETION DATE:**

**COMMENTS:** API No.: 30-025-42214.

**BEFORE:**




Not to Scale
6/10/15
BAL

Note: All frac plugs have been drilled out.

**CASING PROGRAM**

| | |
|---|---|
| 13-3/8" 48# J-55 ST&C | **1,122'** |
| | |
| 9-5/8" 36# & 40# J-55, 40# HCK-55, LT&C | **4,902'** |
| | |
| 5 ½" 17# P110 buttress | **15,455'** |

| Stage No. | Plug Set Depth (ft) | Perforations |
|---|---|---|
| 1 | - | Toe Sleeve at 15,440' |
| 2 | 15,400 | 15,350' (10); 15,253' (14); 15,156' (12) |
| 3 | 15,109 | 15,059' (10); 14,962' (14); 14,865' (12) |
| 4 | 14,818 | 14,768' (10); 14,671' (14); 14,574' (12) |
| 5 | 14,527 | 14,477' (10); 14,380' (14); 14,283' (12) |
| 6 | 14,236 | 14,186' (10); 14,089' (14); 13,992' (12) |
| 7 | 13,945 | 13,895' (10); 13,798' (14); 13,701' (12) |
| 8 | 13,654 | 13,604' (10); 13,507' (14); 13,410' (12) |
| 9 | 13,363 | 13,313' (10); 13,216' (14); 13,119' (12) |
| 10 | 13,072 | 13,022' (10); 12,925' (14); 12,828' (12) |
| 11 | 12,781 | 12,731' (10); 12,634' (14); 12,537' (12) |
| 12 | 12,490 | 12,440' (10); 12,343' (14); 12,246' (12) |
| 13 | 12,199 | 12,149' (10); 12,052' (14); 11,955' (12) |
| 14 | 11,908 | 11,858' (10); 11,761' (14); 11,664' (12) |
| 15 | 11,617 | 11,567' (10); 11,470' (14); 11,373' (12) |
| 16 | 11,326 | 11,276' (10); 11,179' (14); 11,082' (12) |

Before

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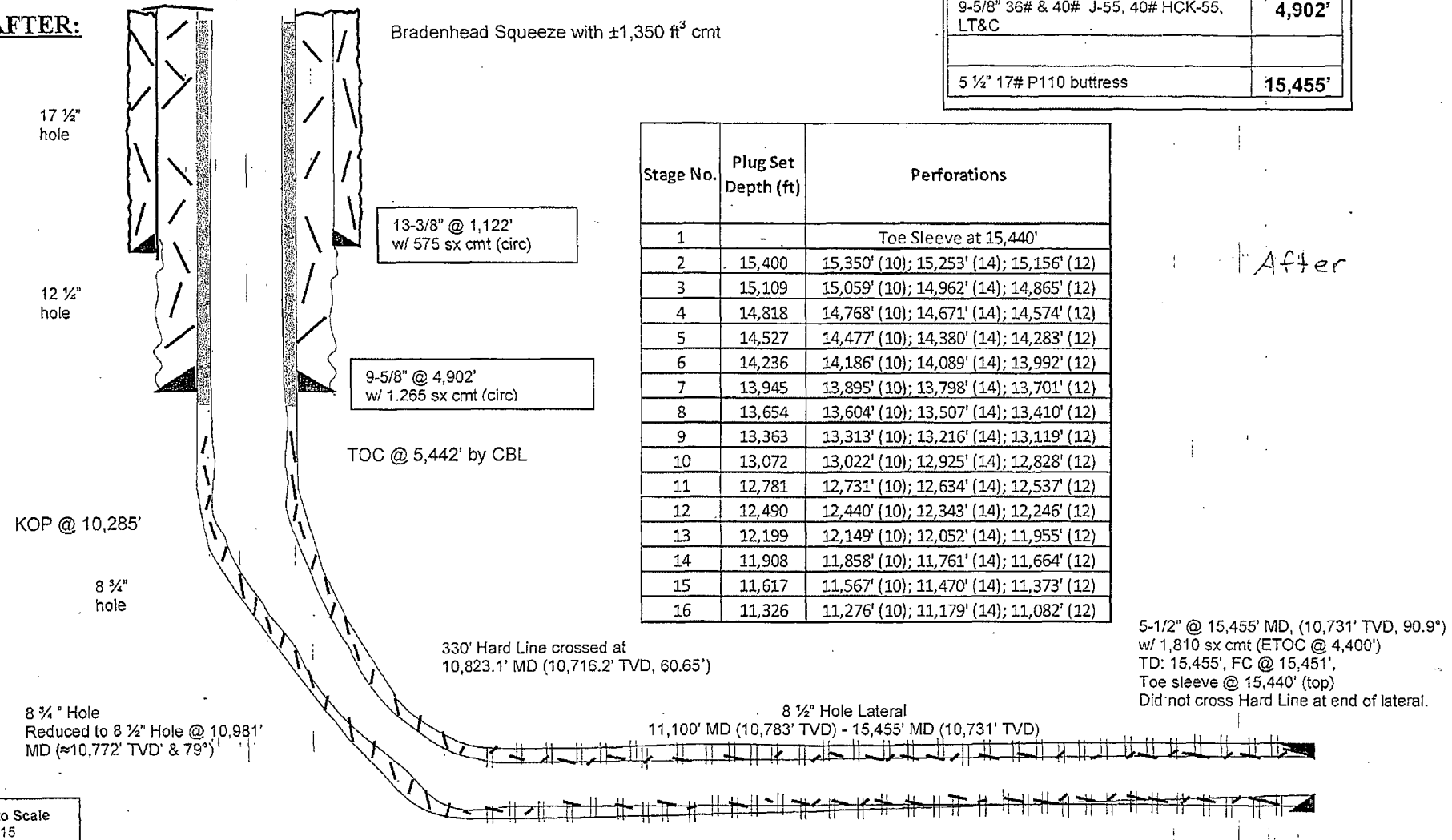


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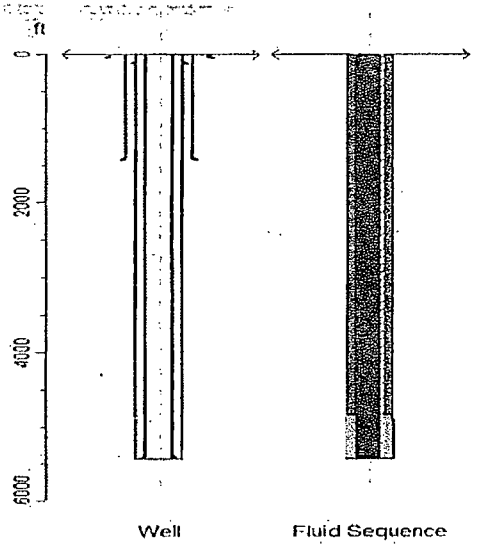
After

Note: All frac plugs have been drilled out.

# WELL DATA




IMPORTANT:
The well data shown on this page is based on information available when this treatment program was prepared. This data must be confirmed on location with the wellsite supervisor prior to the treatment. Any changes in the well data need to be reviewed for their impact on the treatment design.

**Fluid Placement**

| Fluid Name | Volume bbl | Density lb/gal | Top of Fluid ft |
|---|---|---|---|
| Fresh Water | 40.0 | 8.34 | 0.0 |
| **12.0ppg Reg. PVLTail** | **230.0** | **12.00** | **0.0** |
| **12.0ppg PVL Lead w/FLAC** | **35.5** | **12.00** | **4843.8** |
| Treated Water | 126.5 | 8.32 | 0.0 |

Total Liquid Volume : 432.0 bbl

**Well Data**

| | |
|---|---|
| Job Type : | Squeeze Cementing |
| Total Depth (Measured) : | 5442.0 ft |
| True Vertical Depth (TVD) : | 5442.0 ft |
| BHST (Tubular Bottom Static Temperature) : | 124 degF |
| BHCT (Tubular Bottom Circulating Temperature) : | 111 degF |

**Open Hole**

| Mean Diameter without Excess | Bottom Depth | Annular Excess |
|---|---|---|
| 8.750 in | 5442.0 ft | **35.0 %** |

**Previous Casing**

| OD | Weight | Grade | Thread | Inner Capacity | Bottom Depth |
|---|---|---|---|---|---|
| 9 5/8 in | 40.0 lb/ft | J-55 | LTC | 0.43 ft3/ft | 126.4 ft |
| 9 5/8 in | 36.0 lb/ft | J-55 | LTC | 0.43 ft3/ft | 3106.1 ft |
| 9 5/8 in | 40.0 lb/ft | J-55 | LTC | 0.43 ft3/ft | 4133.5 ft |
| 9 5/8 in | 40.0 lb/ft | HCK-55 | LTC | 0.43 ft3/ft | 4902.0 ft |

**Casing**

| OD | Weight | Grade | Thread | Inner Capacity | Bottom Depth |
|---|---|---|---|---|---|
| 5 1/2 in | 17.0 lb/ft | P-110 | BTC | 0.13 ft3/ft | **5442.0 ft** |

Annular Capacity (without Excess) : Casing Bottom / Open Hole : 0.25 ft3/ft
Annular Capacity (without Excess) : Previous Casing Bottom / Casing : 0.26 ft3/ft



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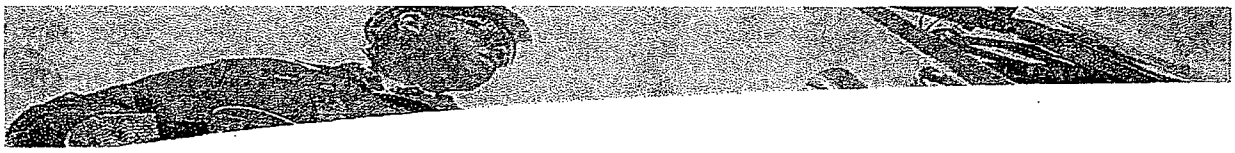

# FLUID SYSTEMS

| Fresh Water | | | |
|---|---|---|---|
| System | Water | | |
| Density | 8.34 lb/gal | | |
| Total Volume | 40.0 bbl | | |
| Additives | Code | Description | Concentration |
| | | | |

| 12.0ppg Reg. PVL Tail (650 sacks, 75 lb per sack of Blend) | | | |
|---|---|---|---|
| System | Conventional | | |
| Density | 12.00 lb/gal | | |
| Yield | 1.99 ft3/sk | | |
| Mix Water | 11.076 gal/sk | | |
| Mix Fluid | 11.076 gal/sk | | |
| Total Volume | 230.0 bbl | | |
| Expected Thickening Time | 70 Bc at 03:51 hr:mn | | |
| Additives | Code | Description | Concentration |
| | D044 | NaCl | 5.0 % BWOW |
| | D049 | Cement | 75 lb/sk WBWOB |
| | D020 | Extender | 4.0 % BWOB |
| | D046 | Anti Foam | 0.2 % BWOB |
| | D201 | Retarder | 0.1 % BWOB |
| | D065 | Dispersant | 0.3 % BWOB |
| | D208 | Viscosifier | 0.1 % BWOB |
| | D130 | Lost Circulation Control Agent | 0 lb/sk WBWOB |
| | D042 | Extender | 5 lb/sk WBWOB |

| 12.0ppg PVL Lead w/FLAC (100 sacks, 75 lb per sack of Blend) | | | |
|---|---|---|---|
| System | Conventional | | |
| Density | 12.00 lb/gal | | |
| Yield | 2.00 ft3/sk | | |
| Mix Water | 11.069 gal/sk | | |
| Mix Fluid | 11.069 gal/sk | | |
| Total Volume | 35.5 bbl | | |
| Expected Thickening Time | 70 Bc at 05:01 hr:mn | | |
| Expected ISO/API Fluid Loss | 53 mL in 16.0 min | | |
| Additives | Code | Description | Concentration |
| | D044 | NaCl | 5.0 % BWOW |
| | D049 | Cement | 75 lb/sk WBWOB |
| | D020 | Extender | 4.0 % BWOB |
| | D046 | Anti Foam | 0.2 % BWOB |
| | D201 | Retarder | 0.1 % BWOB |
| | D065 | Dispersant | 0.3 % BWOB |
| | D208 | Viscosifier | 0.1 % BWOB |
| | D130 | Lost Circulation Control Agent | 0 lb/sk WBWOB |
| | D042 | Extender | 5 lb/sk WBWOB |
| | D167 | Fluid loss | 0.4 % BWOB |

Some of the chemicals specified in this program may have toxic properties. All personnel should be familiar with the inherent dangers and appropriate safeguards to prevent accidental injury. Use of the chemicals may be governed by certain laws and regulations and should only be used in accordance with such. Please refer to the MSDS sheets for the recommended safety precautions and required minimum personal protective equipment.



Schlumberger

# PROCEDURES

NOTE: Well MUST BE circulated 2 times bottoms up with casing on bottom prior to job execution

1. Rig up Schlumberger following WS Standard 5
2. Confirm well data and calculations with company representative on location (slurry and mix water volumes, # sacks, displacement volume and what fluid).
3. Confirm mud properties with company representative or mud company representative. Schlumberger supervisor to document mud yield point, viscosity, and density in cement treatment report
4. Verify rigs circulating pressure prior to start of cementing job. If Circulating pressures are greater than 20% of CemCADE simulation, initiate Management of Change.
5. Conduct a safety and procedure meeting with all personnel present before treatment begins. Go over contingency and recommendations plans.
6. Pressure test treating lines to 1000 psi above the final job pressure as a minimum
7. Client to close rams on surface to perform Injectivity Test
8. Pump 20.0bbls Fresh Water and Perform Injectivity & determine Max Rate & Pressure
9. Mix and pump 35.5 bbls of 100sxs, 12.0 ppg PVL w/FLAC (Fluid Loss Additive Control) Lead @ 1.5 to 2.0 bpm rate. If slurry density varies more than 0.2 ppg from the design density, then stop pumping downhole and recirculate slurry in mix tub until density is within range.
10. Mix and pump 230.0 bbls of 650sxs, 12.0 ppg Regular PVL Tail and 1.5 to 2.0 bpm rate, squeezing until Pmax provided by client is reached. If slurry density varies more than 0.2 ppg from the design density, then stop pumping downhole and recirculate slurry in mix tub until density is within range. Note: Do not exceed maximum allowable squeeze pressure - Pmax
11. Shut-in Well with 500psi on Surface.
12. Shut-down and Wash-up Schlumberger line and pump to waste pit.

Note: Squeeze Job is through Bul Heading cement slurry at surface with BOP closed, and Injectivity MUST BE performed prior to squeezing to determine maximum allowable rate and pressure. This has to be approved by client prior to job execution.



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