Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

HOBBS OCD
JUN 16 2014
RECEIVED

Form C-103
Revised July 18, 2013

WELL API NO. 30-025-41296

5. Indicate Type of Lease STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
STATE "AN"

1. Type of Well: Oil Well ☒ Gas Well ☐ Other

8. Well Number 15

2. Name of Operator
CHEVRON U.S.A. INC.

9. OGRID Number 4323

3. Address of Operator
15 SMITH ROAD, MIDLAND, TEXAS 79705

10. Pool name or Wildcat
VACUUM; BLINEBRY

4. Well Location
Unit Letter: G 1670 feet from NORTH line and 1650 feet from the EAST line
Section 7 Township 18S Range 35E NMPM County LEA

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
3970' GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

| NOTICE OF INTENTION TO: | | SUBSEQUENT REPORT OF: | |
|---|---|---|---|
| PERFORM REMEDIAL WORK ☐ | PLUG AND ABANDON ☐ | REMEDIAL WORK ☐ | ALTERING CASING ☐ |
| TEMPORARILY ABANDON ☐ | CHANGE PLANS ☐ | COMMENCE DRILLING OPNS. ☐ | P AND A ☐ |
| PULL OR ALTER CASING ☐ | MULTIPLE COMPL ☐ | CASING/CEMENT JOB ☐ | |
| DOWNHOLE COMMINGLE ☐ | | | |
| CLOSED-LOOP SYSTEM ☐ | | | |
| OTHER: | | OTHER: NEW DRILL | |

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

PLEASE FIND ATTACHED, REPORTS FOR WORK DONE FROM 02/20/2014 THROUGH 03/06/2014 FOR THE DRILLING OF THIS NEW WELL.

**SPUD DATE: 02/22/2014**
**02/23/2014: SET 8 5/8" CSG @ 1536. CMT W/820 SX CMT**
**03/04/2014: SET 5 ½" CSG @ 6497. CMT W/1300 SX CMT.**
**TD: 6501'**
**PBTD: 6497'**
**RIG RELEASED: 03/06/2014**

Spud Date: | Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [signature] TITLE REGULATORY SPECIALIST DATE 06/11/2014

Type or print name DENISE PINKERTON E-mail address: leakejd@chevron.com PHONE: 432-687-7375

For State Use Only

APPROVED BY: [signature] TITLE Petroleum Engineer DATE 06/20/14

Conditions of Approval (if any):

JUN 23 2014

# Summary Report

Drill
Drill and Suspend
Job Start Date: 2/20/2014
Job End Date: 3/6/2014

| Well Name | Lease | Field Name | Business Unit |
|---|---|---|---|
| NEW MEXICO STATE 'AN' 015 | New Mexico 'AN' State | Vacuum | Mid-Continent |

| Ground Elevation (ft) | Original RKB (ft) | Current RKB Elevation | Mud Line Elevation (ft) | Water Depth (ft) |
|---|---|---|---|---|
| 3,970.00 | 3,983.50 | 3,983.50, 1/14/2014 | 0.00 | 0.00 |

**Report Start Date:** 2/21/2014

Com

Rig released from previous well name at 2400 hrs.
R/D Ensign 802 and prep to MOB to AN State #15,Spot loads and continue R/U and prep to spud. Perform pre-spud rig inspection and address all issues.

**Report Start Date:** 2/22/2014

Com

Dress rig floor with handling equipment, lay out and strap BHA.

Pick Up BHA#1 as follows:
12 1/4" PDC bit (Ulterra U616S)
8" Shock Sub
8" Teledrift

TIH and tag at 62'
**Spud Well @ 1230 hrs

HOBBS OCD

JUN 16 2014

RECEIVED

Drlg f/ 60' to 650'
AROP = 107 fph
WOB = 5 – 10 kips
TD RPM = 60
GPM = 350 ppg
SPP = 300 psi
MW = 8.34 ppg
pH = 10

Drlg f/ 650' to 1235'
AROP = 97.5 fph
WOB = 10-20 kips
TD RPM = 60
GPM = 400 ppg
SPP = 300 psi
MW = 8.34 ppg
pH = 10

**Report Start Date:** 2/23/2014

Com

Drlg f/ 1,235' to 1,536'
AROP =67 fph
WOB = 10-20 kips
TD RPM = 60
GPM = 400 ppg
SPP = 300 psi
MW = 8.34 ppg
pH = 10

Pump 2 30 bbl high visc sweeps @ TD, circulate
three B/U. Flow check well – Static
MW=8.3
Visc=30
PH=10

Drop Totco survey tool

TOH f/1,536' to surface
L/D BHA, shock sub and bit.
Clean rig floor.

PJSM with Express

Run 8 5/8" 24# J-55 STC csg as follows:
Float Shoe
1 Shoe Jts
Float Collar
41 Joints
Centralizer place 10' above FS, 10' above FC and
one per 3 jts to surface.

Note:
Washed csg f/ 1435' – 1536'.

Circulate 1.5X B/U

PJSM Halliburton R/u and Pumping cement



Report Printed: 3/7/2014

| Well Name | Lease | Field Name | Business Unit |
|---|---|---|---|
| NEW MEXICO STATE 'AN' 015 | New Mexico 'AN' State | Vacuum | Mid-Continent |

| Ground Elevation (ft) | Original RKB (ft) | Current RKB Elevation | Mud Line Elevation (ft) | Water Depth (ft) |
|---|---|---|---|---|
| 3,970.00 | 3,983.50 | 3,983.50, 1/14/2014 | 0.00 | 0.00 |

| Com |
|---|
| Perform cmt job as follows:<br>Pressure test lines to 3000 psi<br>Pump 20 bbls of fresh water spacer at 8.34 ppg..<br>Mix and pump 500 sxs (152.3 bbls) of Extendacem D lead at 13.6 ppg.<br>Mix and pump 320 sxs (76.4 bbls) of Halcem tail at 14.8 ppg.<br>Drop top plug and displace cmt w/ 96.6 bbls of 8.34 ppg fluid.<br>Bump plug with 500 psi over final circulating pressure.<br>Bleed off pressure – floats held.<br><br>Details:<br>Full returns throughout job<br>Final circulation pressure prior to bumping plug 730 psi at 2 bpm<br>91 bbls of cmt to surface<br>Cmt in place at 06:45 hrs. |
| **Report Start Date:** 2/24/2014 |
| Com |
| Wait on cement.<br><br>Note:<br>Clean pits. R/U flare and panic line.<br>Prepared BOP for N/U |
| PJSM w/ Cotton's Welding. Rough cut 8 5/8" csg. L/D CRT & casing equipment. N/D conductor. Dress and make final cut on 8 5/8" casing. |
| Install 8 5/8" SOW x 11" 3M conventional wellhead. Test void to 1100 psi as per drilling procedure. |
| PJSM w/ Man welding nipple up crew. |
| PJSM and N/U 11" 3M x 11" 5M DSA, Spacer Spools & 11" 5M Class BOPE. Install flow lines, accumulator lines, etc. |
| PJSM w/ Man Welding and Test BOPE to 250 psi low / 3000 psi high (1500 high on annular) as per MCBU-SOP-008. Details documented in MCBU BOP Testing Sheet and stored in WellView attachments. Test accumulator for usable fluid, pre-charge and capacity.<br><br>Test 8 5/8" casing to 1500 psi for 30 minutes.<br><br>All test good. R/D testers. |
| Test casing 30 min @ 1500 psi,(test ok) R/U panic line, igniter, trip tank, Flow line, Stairs. |
| Lay out, strap, and P/U BHA |
| **Report Start Date:** 2/25/2014 |
| Com |
| Pick up & Make up BHA & TIH, install rotating head assy., tag cement @ 1481' Displace hole w/ 10 ppg Brine |
| Fix flow line leak |
| Displace hole to 10 ppg brine. Choke Drill Circ through all back yard equipment and gas buster. |
| Wash and Drill cement f/1481' t/ 1497'<br>Drlg flt equipment and clean out flt track F 1497; to 1500' |
| Drlg flt equipment and clean out flt track F 1500' to 11533" |
| Drlg f/ 1533' to 2509'<br>WOB- 10m to 20m<br>RPM- 40 to 80<br>GPM- 405 gpm<br>AVROP- 67 ft/hr |
| RIG SERVICE |
| Drlg f/ 2509' - 2635<br>WOB- 10m to 20m<br>RPM- 40 to 80<br>GPM- 405 gpm<br>AVROP- 63 ft/hr |
| **Report Start Date:** 2/26/2014 |
| Com |
| Drlg f/ 2,635' t/' 2,879'<br>WOB- 10m to 20m<br>RPM- 40 to 80<br>GPM- 405 gpm<br>AVROP- 41 ft/hr |

| Well Name | Lease | Field Name | Business Unit |
|---|---|---|---|
| NEW MEXICO STATE 'AN' 015 | New Mexico 'AN' State | Vacuum | Mid-Continent |

| Ground Elevation (ft) | Original RKB (ft) | Current RKB Elevation | Mud Line Elevation (ft) | Water Depth (ft) |
|---|---|---|---|---|
| 3,970.00 | 3,983.50 | 3,983.50, 1/14/2014 | 0.00 | 0.00 |

| Com |
|---|
| Drlg f/ 2,879' t/' 3,525'<br>WOB- 10m to 20m<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 36 ft/hr |
| **Report Start Date:** 2/27/2014 |
| Com |
| Drlg f/ 3,529' t/' 3,743'<br>WOB- 10m to 20m<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 36 ft/hr |
| Drlg f/ 3,743' t/' 3,990'<br>WOB- 10m to 20m<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 41 ft/hr |
| Drlg f/ 3,990' t/' 4,437'<br>WOB- 10m to 20m<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 37 ft/hr |
| **Report Start Date:** 2/28/2014 |
| Com |
| Drlg f/ 4,437' t/' 4,626'<br>WOB- 10m to 20m<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 32 ft/hr |
| Drlg f/ 4,626' t/' 4,816'<br>WOB- 10m to 20m<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 32 ft/hr |
| Drlg f/ 4816' t/ 5254"<br>WOB- 10m to 20m<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 36.5ft/hr |
| Rig Service |
| **Report Start Date:** 3/1/2014 |
| Com |
| Drlg f/ 5254' - 5360'<br>WOB- 17 k<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 36.5 ft/hr |
| Fix fuel line on truck motor |
| Drlg f/ 5,360' - 5,605'<br>WOB- 17 k<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 81 ft/hr |
| Drlg f/ 5,605' - 5,697'<br>WOB- 17 k<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 92 ft/hr |
| C / O Rot Head |
| Drlg f/ 5,697' - 5,833'<br>WOB- 17 k<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 30 ft/hr |
| |

| Well Name | Lease | Field Name | Business Unit |
|---|---|---|---|
| NEW MEXICO STATE 'AN' 015 | New Mexico 'AN' State | Vacuum | Mid-Continent |

| Ground Elevation (ft) | Original RKB (ft) | Current RKB Elevation | Mud Line Elevation (ft) | Water Depth (ft) |
|---|---|---|---|---|
| 3,970.00 | 3,983.50 | 3,983.50, 1/14/2014 | 0.00 | 0.00 |

| Com |
|---|
| Drlg f/ 5,833' - 5,968'<br>WOB- 17 k<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 14 ft/hr |
| Repair 3 phase electrical |
| Drlg f/ 5,915' - 5,968'<br>WOB- 17 k<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 15 ft/hr |
| Troubleshoot electrical problem (C- phase wire vibrate loose in socket ) |
| **Report Start Date:** 3/2/2014 |
| Com |
| Troubleshoot electrical problem (C- phase wire vibrate loose in socket ) |
| Drlg f/ 5,968 t / 6,058<br>WOB- 17 k<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 20 ft/hr |
| Drlg f/ 6,058' t / 6,191'<br>WOB- 17 k<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 22 ft/hr |
| Drlg f/ 6,191' t / 6,375'<br>WOB- 17 k<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 15 ft/hr |
| Rig Service |
| **Report Start Date:** 3/3/2014 |
| Com |
| Drlg f/ 6,378' t / 6,471'<br>WOB- 17 k<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 8 ft/hr |
| Drlg f/ 6,424' to TD @ 6,501'<br>WOB- 17 k<br>RPM- 45-65<br>GPM- 405 gpm<br>AVROP- 31 ft/hr |
| Pump sweep, circ hole clean, spot pill on bottom |
| TOH f/ open hole logs<br>TOH f / 6,470' t / 1,232' |
| PJSM and R/U Halliburton loggers. |
| Run O/H Logs<br><br>Logs to bottom successful |
| **Report Start Date:** 3/4/2014 |
| Com |
| Continue log well w/ Halliburton |
| Lay down logging tools and rig down unit |
| Safety meeting & rig up Express CRT tools |

# Summary Report

Drill
Drill and Suspend
Job Start Date: 2/20/2014
Job End Date: 3/6/2014

| Well Name | Lease | Field Name | Business Unit |
|---|---|---|---|
| NEW MEXICO STATE 'AN' 015 | New Mexico 'AN' State | Vacuum | Mid-Continent |

| Ground Elevation (ft) | Original RKB (ft) | Current RKB Elevation | Mud Line Elevation (ft) | Water Depth (ft) |
|---|---|---|---|---|
| 3,970.00 | 3,983.50 | 3,983.50, 1/14/2014 | 0.00 | 0.00 |

| Com |
|---|
| Run 5 1/2" csg as follows;<br>Float shoe @ 6497' bottom<br>2 jts 5 1/2" 17# L-80<br>Float collar @ 6418' top<br>19 jts 5 1/2" 17# L-80<br>Marker jt @ 5729' top<br>17 jts 5 1/2" 17# L-80<br>Stage tool @ 5041' top<br>133 jts 5 1/2" 17# L-80<br>2 Flint coated jts 5 1/2" 17# L-80<br>Fluted Hanger GE Vetco<br>Landing jt - 13.50' in |
| Pre job safety meeting with Halli cmt crew |
| Circ casing @ 6497' shoe depth while r/u Halli cmt lines |
| 1st stage cmt job<br>Test lines to 6000 psi<br>Pump 20 bbl Gel spacer<br>Mix and Pump 52 bbl (230 sxs) of VersaCem Lead cmt at 14.4 ppg<br>Mix and Pump 33 bbl (140 sxs) of VersaCem Tail cmt at 14.4 ppg<br>Drop Top plug and displace cmt w/ 148 bbl of brine water<br>Finial circ pres 760 psi<br>Bump plug w/ 1346 psi (600psi over)<br>Bleed pres, Floats holding<br>1 bbl back<br>230 / 140 / 370 sx |
| Weatherford drop open cone and let fall to DV tool<br>Open DV Tool w/ 690 psi at 1 bpm<br>circ thru DV tool, 30 bbl of cmt to surface |
| Circ while woc |
| **Report Start Date:** 3/5/2014 |
| Com |
| Circulate DB tool at 5041'/wait on first stage cement |
| 2nd stage cmt job<br>pump 20 bbl FWCA spacer<br>Lead 800 sks (294 bbl) Econocem HLC @ 12.5 ppg<br>Tail 130 sks (33 bbl) Halcem c @ 14.8 ppg<br>Drop plug, Disp w/ 116 bbl Fresh water<br>Bump plug and close MSC W 2970 psi<br>Bleed pressure, Floats Holding, 1 bbl back<br>cmt to surface 1 bbl<br>Flush bop and flow line<br>800 / 130 / 930 sx |
| R/d cmt head, l/d crt and landing jt |
| pick up 6.25 drill collar, pack off, set back pressure valve |
| nipple down flow line, trip tank, and stairs |
| pre-job safety meeting, jsa review, nipple down bop, set out |
| nipple up 11.75 well head and test 3000 psi |
| cleaning mud tanks, frac tanks, and portable mud system for release.<br><br>Release rig from NM. State AN #15 at 00:00 hrs 3-6-14 |



Report Printed: 3/7/2014

# Casing Summary

| Well Name | Lease | Field Name | Business Unit |
|---|---|---|---|
| NEW MEXICO STATE 'AN' 015 | New Mexico 'AN' State | Vacuum | Mid-Continent |

| Ground Elevation (ft) | Original RKB (ft) | Current RKB Elevation | Mud Line Elevation (ft) | Water Depth (ft) |
|---|---|---|---|---|
| 3,970.00 | 3,983.50 | 3,983.50, 1/14/2014 | 0.00 | 0.00 |

**Surface, Planned?-N, 1,536ftKB**

| Set Depth (MD) (ftKB) | Set Tension (kips) | String Nominal OD (in) | String Min Drift (in) | Centralizers | Scratchers |
|---|---|---|---|---|---|
| 1,536 | | 8 5/8 | 7.969 | 15 | |

| Jts | Item Des | OD (in) | ID (in) | Wt (lb/ft) | Grade | Top Thread | Top Depth (MD) (ftKB) | Btm Depth (MD) (ftKB) | Len (ft) | P Burst (psi) | P Collapse (psi) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Landing Joint | 8 5/8 | 8.094 | 24.00 | J-55 | | -15 | 1 | 15.75 | 2,950.0 | 1,370.0 |
| 0 | Casing Joint | 8 5/8 | 8.094 | 24.00 | J-55 | OUT | 1 | 1 | 0.00 | 2,950.0 | 1,370.0 |
| 9 | Casing Joint | 8 5/8 | 8.094 | 24.00 | J-55 | | 1 | 348 | 347.40 | 2,950.0 | 1,370.0 |
| 0 | Casing Joint | 8 5/8 | 8.094 | 24.00 | J-55 | Bad | 348 | 348 | 0.00 | 2,950.0 | 1,370.0 |
| 30 | Casing Joint | 8 5/8 | 8.094 | 24.00 | J-55 | | 348 | 1,498 | 1,149.70 | 2,950.0 | 1,370.0 |
| 1 | Float Collar | 8 5/8 | 8.094 | 24.00 | J-55 | | 1,498 | 1,499 | 1.16 | 2,950.0 | 1,370.0 |
| 1 | Casing Joint | 8 5/8 | 8.094 | 24.00 | J-55 | | 1,499 | 1,534 | 35.17 | 2,950.0 | 1,370.0 |
| 1 | Float Shoe | | 8.094 | 24.00 | J-55 | | 1,534 | 1,536 | 1.55 | | |

**Production Casing, Planned?-N, 6,497ftKB**

| Set Depth (MD) (ftKB) | Set Tension (kips) | String Nominal OD (in) | String Min Drift (in) | Centralizers | Scratchers |
|---|---|---|---|---|---|
| 6,497 | | 5 1/2 | | 62 | |

| Jts | Item Des | OD (in) | ID (in) | Wt (lb/ft) | Grade | Top Thread | Top Depth (MD) (ftKB) | Btm Depth (MD) (ftKB) | Len (ft) | P Burst (psi) | P Collapse (psi) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | Casing Joint | 5 1/2 | 4.892 | 17.00 | L-80 | | 0 | 0 | 0.00 | | 6,280.0 |
| 1 | Landing joint | 5 1/2 | 4.892 | 17.00 | L-80 | | 0 | 14 | 13.50 | | 6,280.0 |
| 1 | Fluted Hanger | 5 1/2 | 4.892 | | | | 14 | 18 | 4.00 | | 6,280.0 |
| 2 | Flint Coat | 5 1/2 | 4.892 | 17.00 | L-80 | | 18 | 94 | 76.20 | | 6,280.0 |
| 0 | Casing Joint | 5 1/2 | 4.892 | 17.00 | L-80 | | 94 | 94 | 0.00 | | 6,280.0 |
| 130 | Casing Joint | 5 1/2 | 4.892 | 17.00 | L-80 | | 94 | 5,041 | 4,947.39 | | |
| 1 | Stage Tool | 5 1/2 | 4.892 | | | | 5,041 | 5,044 | 2.50 | | |
| 18 | Casing Joint | 5 1/2 | 4.892 | 17.00 | L-80 | | 5,044 | 5,729 | 684.80 | | |
| 1 | Marker joint | 5 1/2 | 4.892 | 17.00 | L-80 | | 5,729 | 5,733 | 4.60 | | |
| 18 | Casing Joint | 5 1/2 | 4.892 | 17.00 | L-80 | | 5,733 | 6,418 | 685.15 | | |
| 1 | Float Collar | 5 1/2 | 4.892 | | | | 6,418 | 6,419 | 1.10 | | |
| 2 | Casing Joint | 5 1/2 | 4.892 | 17.00 | L-80 | | 6,419 | 6,496 | 76.15 | | 6,280.0 |
| 1 | Float Shoe | 5 1/2 | 4.982 | | | | 6,496 | 6,497 | 1.38 | | |

# Cement Summary

## Production Casing Cement

| Well Name | Lease | Field Name | Business Unit |
|---|---|---|---|
| NEW MEXICO STATE 'AN' 015 | New Mexico 'AN' State | Vacuum | Mid-Continent |

| Ground Elevation (ft) | Original RKB (ft) | Current RKB Elevation | Mud Line Elevation (ft) | Water Depth (ft) |
|---|---|---|---|---|
| 3,970.00 | 3,983.50 | 3,983.50, 1/14/2014 | 0.00 | 0.00 |

### Original Hole

| Wellbore Name | Directional Type | Kick Off Depth (ftKB) | Vertical Section Direction (°) |
|---|---|---|---|
| Original Hole | Vertical | | 0.00 |

| Hole Size (in) | Act Top (ftKB) | Act Btm (ftKB) |
|---|---|---|
| 12 1/4 | 13.5 | 1,536.0 |
| 7 7/8 | 1,536.0 | 6,471.0 |

### VG-Convention, Vetco Grey on 3/5/2014 08:00

| Type | Install Date |
|---|---|
| VG-Convention | 3/5/2014 |

| Des | Make | Model | WP (psi) | Service | SN |
|---|---|---|---|---|---|
| | | | | | |

### Surface, Planned?-N, 1,536ftKB

| Casing Description | Wellbore | Run Date | Set Depth (MD) (ftKB) | Stick Up (ftKB) | Set Tension (kips) |
|---|---|---|---|---|---|
| Surface | Original Hole | 2/23/2014 | 1,536 | 14.7 | |

| Centralizers | Scratchers |
|---|---|
| 15 | |

| Jts | Item Des | OD (in) | ID (in) | Wt (lb/ft) | Grade | Top Conn Sz (in) | Top Thread | Len (ft) | Top Depth (MD) (ftKB) | Btm Depth (MD) (ftKB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Landing Joint | 8 5/8 | 8.094 | 24.00 | J-55 | | | 15.75 | -15 | 1 |
| 0 | Casing Joint | 8 5/8 | 8.094 | 24.00 | J-55 | | OUT | 0.00 | 1 | 1 |
| 9 | Casing Joint | 8 5/8 | 8.094 | 24.00 | J-55 | | | 347.40 | 1 | 348 |
| 0 | Casing Joint | 8 5/8 | 8.094 | 24.00 | J-55 | | Bad | 0.00 | 348 | 348 |
| 30 | Casing Joint | 8 5/8 | 8.094 | 24.00 | J-55 | | | 1,149.70 | 348 | 1,498 |
| 1 | Float Collar | 8 5/8 | 8.094 | 24.00 | J-55 | | | 1.16 | 1,498 | 1,499 |
| 1 | Casing Joint | 8 5/8 | 8.094 | 24.00 | J-55 | | | 35.17 | 1,499 | 1,534 |
| 1 | Float Shoe | | 8.094 | 24.00 | J-55 | | | 1.55 | 1,534 | 1,536 |

### Production Casing, Planned?-N, 6,497ftKB

| Casing Description | Wellbore | Run Date | Set Depth (MD) (ftKB) | Stick Up (ftKB) | Set Tension (kips) |
|---|---|---|---|---|---|
| Production Casing | Original Hole | 3/4/2014 | 6,497 | -0.2 | |

| Centralizers | Scratchers |
|---|---|
| 62 | |

| Jts | Item Des | OD (in) | ID (in) | Wt (lb/ft) | Grade | Top Conn Sz (in) | Top Thread | Len (ft) | Top Depth (MD) (ftKB) | Btm Depth (MD) (ftKB) |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | Casing Joint | 5 1/2 | 4.892 | 17.00 | L-80 | | | 0.00 | 0 | 0 |
| 1 | Landing joint | 5 1/2 | 4.892 | 17.00 | L-80 | | | 13.50 | 0 | 14 |
| 1 | Fluted Hanger | 5 1/2 | 4.892 | | | | | 4.00 | 14 | 18 |
| 2 | Flint Coat | 5 1/2 | 4.892 | 17.00 | L-80 | | | 76.20 | 18 | 94 |
| 0 | Casing Joint | 5 1/2 | 4.892 | 17.00 | L-80 | | | 0.00 | 94 | 94 |
| 130 | Casing Joint | 5 1/2 | 4.892 | 17.00 | L-80 | | | 4,947.39 | 94 | 5,041 |
| 1 | Stage Tool | 5 1/2 | 4.892 | | | | | 2.50 | 5,041 | 5,044 |
| 18 | Casing Joint | 5 1/2 | 4.892 | 17.00 | L-80 | | | 684.80 | 5,044 | 5,729 |
| 1 | Marker joint | 5 1/2 | 4.892 | 17.00 | L-80 | | | 4.60 | 5,729 | 5,733 |
| 18 | Casing Joint | 5 1/2 | 4.892 | 17.00 | L-80 | | | 685.15 | 5,733 | 6,418 |
| 1 | Float Collar | 5 1/2 | 4.892 | | | | | 1.10 | 6,418 | 6,419 |
| 2 | Casing Joint | 5 1/2 | 4.892 | 17.00 | L-80 | | | 76.15 | 6,419 | 6,496 |
| 1 | Float Shoe | 5 1/2 | 4.982 | | | | | 1.38 | 6,496 | 6,497 |

# Cement Summary

**Production Casing Cement**

| Well Name | Lease | Field Name | Business Unit |
|---|---|---|---|
| NEW MEXICO STATE 'AN' 015 | New Mexico 'AN' State | Vacuum | Mid-Continent |

| Ground Elevation (ft) | Original RKB (ft) | Current RKB Elevation | Mud Line Elevation (ft) | Water Depth (ft) |
|---|---|---|---|---|
| 3,970.00 | 3,983.50 | 3,983.50, 1/14/2014 | 0.00 | 0.00 |

**Production Casing Cement, Casing, 3/4/2014 20:30**

| Cementing Start Date | Cementing End Date | Wellbore |
|---|---|---|
| 3/4/2014 | 3/5/2014 | Original Hole |

| Evaluation Method | Cement Evaluation Results |
|---|---|
| Returns to Surface | |

Comment

2 Stage cmt job
Test Lines 6000 psi
Stage #1
Test lines to 6000 psi
Pump 10 bbl Fresh Water
20 bbl Gel Spacer
Lead 230 sks (52 bbl) Versacem @ 14.4 ppg
Tail 140 sks (33 bbl) Veersacem @ 14.4 ppg
Drop Top Plug, Displace w/ 148 bbl Brine
Bump Plug, Floats Holding, 1 bbl back
Drop Cone and open DV Tool
Circ out 30 bbl cmt to surface
woc 3 hrs
Stage 2
Pump 20 bbl FWCA spacer
Lead 800 sks (294 bbl) Econocem HLC @ 12.5ppg
Tail 130 sks (33 bbl) Halcem c @ 14.8 ppg
Drop plug, Disp w/ 116 bbl Fresh Water
Bump Plug, Closed MSC w/ 2970 psi,
Floats holding, 1 bbl back
cmt to surface 61 bb (166 sks)

**<stagenum>, 1,493.0-6,497.0ftKB**

| Top Depth (ftKB) | Bottom Depth (ftKB) | Full Return? | Vol Cement Ret (bbl) | Top Plug? | Bottom Plug? |
|---|---|---|---|---|---|
| 1,493.0 | 6,497.0 | Y | 30.0 | Y | N |

| Initial Pump Rate (bbl/min) | Final Pump Rate (bbl/min) | Avg Pump Rate (bbl/min) | Final Pump Pressure (psi) | Plug Bump Pressure (psi) |
|---|---|---|---|---|
| 6 | 3 | 6 | 760.0 | 1,346.0 |

| Pipe Reciprocated? | Reciprocation Stroke Length (ft) | Reciprocation Rate (spm) | Pipe Rotated? | Pipe RPM (rpm) |
|---|---|---|---|---|
| N | | | N | |

| Depth Tagged (MD) (ftKB) | Tag Method | Depth Plug Drilled Out To (ftKB) | Drill Out Diameter (in) | Drill Out Date |
|---|---|---|---|---|
| | | | | |

**<typ>**

| Fluid Type | Fluid Description | Quantity (sacks) | Class | Volume Pumped (bbl) |
|---|---|---|---|---|
| | | | | |

| Estimated Top (ftKB) | Estimated Bottom Depth (ftKB) | Percent Excess Pumped (%) | Yield (ft³/sack) | Fluid Mix Ratio (gal/sack) |
|---|---|---|---|---|
| | | | | |

| Free Water (%) | Density (lb/gal) | Zero Gel Time (lbf/100ft²) | Thickening Time (hr) | 1st Compressive Strength (psi) |
|---|---|---|---|---|
| | | | | |

**Cement Fluid Additives**

| Add | Type | Conc |
|---|---|---|
| | | |

**<stagenum>, 13.5-1,493.0ftKB**

| Top Depth (ftKB) | Bottom Depth (ftKB) | Full Return? | Vol Cement Ret (bbl) | Top Plug? | Bottom Plug? |
|---|---|---|---|---|---|
| 13.5 | 1,493.0 | Y | 61.0 | Y | N |

| Initial Pump Rate (bbl/min) | Final Pump Rate (bbl/min) | Avg Pump Rate (bbl/min) | Final Pump Pressure (psi) | Plug Bump Pressure (psi) |
|---|---|---|---|---|
| 7 | 4 | 7 | 1,423.0 | 2,955.0 |

| Pipe Reciprocated? | Reciprocation Stroke Length (ft) | Reciprocation Rate (spm) | Pipe Rotated? | Pipe RPM (rpm) |
|---|---|---|---|---|
| N | | | N | |

| Depth Tagged (MD) (ftKB) | Tag Method | Depth Plug Drilled Out To (ftKB) | Drill Out Diameter (in) | Drill Out Date |
|---|---|---|---|---|
| | | | | |

**Preflush**

| Fluid Type | Fluid Description | Quantity (sacks) | Class | Volume Pumped (bbl) |
|---|---|---|---|---|
| Preflush | | | | 20.0 |

| Estimated Top (ftKB) | Estimated Bottom Depth (ftKB) | Percent Excess Pumped (%) | Yield (ft³/sack) | Fluid Mix Ratio (gal/sack) |
|---|---|---|---|---|
| | | | | |

| Free Water (%) | Density (lb/gal) | Zero Gel Time (lbf/100ft²) | Thickening Time (hr) | 1st Compressive Strength (psi) |
|---|---|---|---|---|
| | | | | |

**Cement Fluid Additives**

| Add | Type | Conc |
|---|---|---|
| | | |

Chevron

# Cement Summary

## Production Casing Cement

| Well Name | Lease | Field Name | Business Unit |
|---|---|---|---|
| NEW MEXICO STATE 'AN' 015 | New Mexico 'AN' State | Vacuum | Mid-Continent |

| Ground Elevation (ft) | Original RKB (ft) | Current RKB Elevation | Mud Line Elevation (ft) | Water Depth (ft) |
|---|---|---|---|---|
| 3,970.00 | 3,983.50 | 3,983.50, 1/14/2014 | 0.00 | 0.00 |

### Lead

| Fluid Type | Fluid Description | Quantity (sacks) | Class | Volume Pumped (bbl) |
|---|---|---|---|---|
| Lead | | 230 | | 52.0 |
| **Estimated Top (ftKB)** | **Estimated Bottom Depth (ftKB)** | **Percent Excess Pumped (%)** | **Yield (ft³/sack)** | **Fluid Mix Ratio (gal/sack)** |
| 1,493.0 | | | 1.28 | 5.47 |
| **Free Water (%)** | **Density (lb/gal)** | **Zero Gel Time (lbf/100ft²)** | **Thickening Time (hr)** | **1st Compressive Strength (psi)** |
| | 14.40 | | | |

**Cement Fluid Additives**

| Add | Type | Conc |
|---|---|---|
| | | |

### Tail

| Fluid Type | Fluid Description | Quantity (sacks) | Class | Volume Pumped (bbl) |
|---|---|---|---|---|
| Tail | | 140 | | 33.0 |
| **Estimated Top (ftKB)** | **Estimated Bottom Depth (ftKB)** | **Percent Excess Pumped (%)** | **Yield (ft³/sack)** | **Fluid Mix Ratio (gal/sack)** |
| | 6,497.0 | | 1.34 | 5.77 |
| **Free Water (%)** | **Density (lb/gal)** | **Zero Gel Time (lbf/100ft²)** | **Thickening Time (hr)** | **1st Compressive Strength (psi)** |
| | 14.40 | | | |

**Cement Fluid Additives**

| Add | Type | Conc |
|---|---|---|
| | | |

### Displacement

| Fluid Type | Fluid Description | Quantity (sacks) | Class | Volume Pumped (bbl) |
|---|---|---|---|---|
| Displacement | | | | 148.0 |
| **Estimated Top (ftKB)** | **Estimated Bottom Depth (ftKB)** | **Percent Excess Pumped (%)** | **Yield (ft³/sack)** | **Fluid Mix Ratio (gal/sack)** |
| | | | | |
| **Free Water (%)** | **Density (lb/gal)** | **Zero Gel Time (lbf/100ft²)** | **Thickening Time (hr)** | **1st Compressive Strength (psi)** |
| | 10.00 | | | |

**Cement Fluid Additives**

| Add | Type | Conc |
|---|---|---|
| | | |

### Preflush

| Fluid Type | Fluid Description | Quantity (sacks) | Class | Volume Pumped (bbl) |
|---|---|---|---|---|
| Preflush | | | | 20.0 |
| **Estimated Top (ftKB)** | **Estimated Bottom Depth (ftKB)** | **Percent Excess Pumped (%)** | **Yield (ft³/sack)** | **Fluid Mix Ratio (gal/sack)** |
| | | | | |
| **Free Water (%)** | **Density (lb/gal)** | **Zero Gel Time (lbf/100ft²)** | **Thickening Time (hr)** | **1st Compressive Strength (psi)** |
| | | | | |

**Cement Fluid Additives**

| Add | Type | Conc |
|---|---|---|
| | | |

### Lead

| Fluid Type | Fluid Description | Quantity (sacks) | Class | Volume Pumped (bbl) |
|---|---|---|---|---|
| Lead | | 800 | | 294.0 |
| **Estimated Top (ftKB)** | **Estimated Bottom Depth (ftKB)** | **Percent Excess Pumped (%)** | **Yield (ft³/sack)** | **Fluid Mix Ratio (gal/sack)** |
| 13.0 | 1,493.0 | | 2.06 | 11.09 |
| **Free Water (%)** | **Density (lb/gal)** | **Zero Gel Time (lbf/100ft²)** | **Thickening Time (hr)** | **1st Compressive Strength (psi)** |
| | 12.50 | | | |

**Cement Fluid Additives**

| Add | Type | Conc |
|---|---|---|
| | | |

### Tail

| Fluid Type | Fluid Description | Quantity (sacks) | Class | Volume Pumped (bbl) |
|---|---|---|---|---|
| Tail | | 130 | | 33.0 |
| **Estimated Top (ftKB)** | **Estimated Bottom Depth (ftKB)** | **Percent Excess Pumped (%)** | **Yield (ft³/sack)** | **Fluid Mix Ratio (gal/sack)** |
| | 1,493.0 | | 1.38 | 6.36 |
| **Free Water (%)** | **Density (lb/gal)** | **Zero Gel Time (lbf/100ft²)** | **Thickening Time (hr)** | **1st Compressive Strength (psi)** |
| | 14.80 | | | |

**Cement Fluid Additives**

| Add | Type | Conc |
|---|---|---|
| | | |

### Displacement

| Fluid Type | Fluid Description | Quantity (sacks) | Class | Volume Pumped (bbl) |
|---|---|---|---|---|
| Displacement | | | | 116.0 |
| **Estimated Top (ftKB)** | **Estimated Bottom Depth (ftKB)** | **Percent Excess Pumped (%)** | **Yield (ft³/sack)** | **Fluid Mix Ratio (gal/sack)** |
| | | | | |
| **Free Water (%)** | **Density (lb/gal)** | **Zero Gel Time (lbf/100ft²)** | **Thickening Time (hr)** | **1st Compressive Strength (psi)** |
| | 8.40 | | | |



Report Printed: 3/7/2014

# Cement Summary

## Production Casing Cement

| Well Name | Lease | Field Name | Business Unit |
|---|---|---|---|
| NEW MEXICO STATE 'AN' 015 | New Mexico 'AN' State | Vacuum | Mid-Continent |

| Ground Elevation (ft) | Original RKB (ft) | Current RKB Elevation | Mud Line Elevation (ft) | Water Depth (ft) |
|---|---|---|---|---|
| 3,970.00 | 3,983.50 | 3,983.50, 1/14/2014 | 0.00 | 0.00 |

**Cement Fluid Additives**

| Add | Type | Conc |
|---|---|---|
| | | |