

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

NMOCD

Hobbs

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

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*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.**

5. Lease Serial No.  
NMNM118722

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.  
SD WE 14 FED P7 3H

9. API Well No.  
30-025-43086-00-X1

10. Field and Pool, or Exploratory  
JENNINGS

11. County or Parish, and State  
LEA COUNTY, NM

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

2. Name of Operator  
CHEVRON USA INC  
Contact: DENISE PINKERTON  
E-Mail: leakejd@chevron.com

3a. Address  
1616 W. BENDER BLVD  
HOBBS, NM 88240

3b. Phone No. (include area code)  
Ph: 432-687-7375

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 14 T26S R32E SESE 215FSL 698FEL

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

| TYPE OF SUBMISSION                                    | TYPE OF ACTION                                |                                           |                                                    |                                           |
|-------------------------------------------------------|-----------------------------------------------|-------------------------------------------|----------------------------------------------------|-------------------------------------------|
| <input type="checkbox"/> Notice of Intent             | <input type="checkbox"/> Acidize              | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off   |
| <input checked="" type="checkbox"/> Subsequent Report | <input type="checkbox"/> Alter Casing         | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity   |
| <input type="checkbox"/> Final Abandonment Notice     | <input type="checkbox"/> Casing Repair        | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete                | <input checked="" type="checkbox"/> Other |
|                                                       | <input type="checkbox"/> Change Plans         | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon       | Drilling Operations                       |
|                                                       | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back        | <input type="checkbox"/> 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 recompleat 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 recompleat 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.)

04/16/2016: SPUD WELL @ 16:30 HRS. DRILL SURFACE HOLE FR 112-838.

04/17/2016: RUN 13 3/8", 54.5#, J-55, STC CSG SET @ 828' FC @ 782'.  
PRESS TEST LINES TO 3000PSI. PMP 40 BBLS OF SPACER @ 8.3PPG.  
MIX & PUMP 960 SX CMT @ 14.8PPG. DROP PLUG & DISPL W/119 BBLS 8.3PPG FW. FULL RETURNS THROUGHOUT  
JOB. FINAL CIRC PRESS PRIOR TO BUMPING PLUG 316PSI @ 2.1BPM. 94 BBLS CMT TO SURFACE. CMT IN PLACE  
@ 05:36.

05/28/2016: TEST BOPE TO 250PSI LOW/5000PSI HIGH. PRESS TEST 13 3/8" SURF CSG TO 1500PSI FOR 30  
MINS. GOOD.  
DRILL INTERMEDIATE HOLE FR 848-1185, 1894, 2692, 3401, 4050, 4580.

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

**Electronic Submission #353131 verified by the BLM Well Information System**

**For CHEVRON USA INC, sent to the Hobbs**

**Committed to AFMSS for processing by DEBORAH MCKINNEY on 09/30/2016 (16DLM1073SE)**

Name (Printed/Typed) DENISE PINKERTON

Title REGULATORY SPECIALIST

Signature (Electronic Submission)

Date 09/30/2016

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

Approved By

Title

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.

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

**Additional data for EC transaction #353131 that would not fit on the form**

**32. Additional remarks, continued**

05/30/2016: RUN 9 5/8" INTERMEDIATE CSG, 40#, HCK-55, LTC, SET @ 4570'. FC @ 4482. PRESS LINES TO 500PSI LOW & 3000PSI HIGH. PUMP 35 BBLS DYED FW SPACER. MIX & PUMP 1055 SX LEAD @ 11.9PPG, & 462 SX TAIL @ 14.8PPG. BUMP PLUG W/500PSI OVER FINAL CIRC PRESS. HOLD 1640PSI FOR 5 MINS. FULL RETURNS THROUGHOUT JOB. FINAL CIRC PRESS PRIOR TO BUMPING PLUG 1140PSI @ 3.0BPM. 543 SX CMT RETURNED TO SURF. CMT IN PLACE @ 22:45 HRS. WOC 8 HRS.

05/31/2016: TAG CMT @ 4477. PRESS TEST 9 5/8: CSG TO 2765PSI FOR 30 MINS. DRILL 10' NEW FORMATION TO 4590, 5097, 6340, 7138, 7592, 8212, 8556, 8665, 8835, 8938, 9095, 9130, 9215, 9285, 9356, 9442, 9490, 9702, 9918, 10180, 10534, 10900, 11066, 11270, 11600, 11949, 12300, 12500, 12753, 12853, 13265, 13470, 13803. (\*\*\*TD REACHED ON 06/06/2016)

06/07/2016: RUN 5 1/2", 20#, HCP-110 TXP BTC PRODUCTION CSG SET @ 13,768'. LC @ 13697, RSI TOOL @ 13629, MRKR JT @ 8499'. CMT W/624 SX LEAD @ 6.8BPM @ 11.5PPG, 906 SX LEAD @ 6.8BPM @ 12.5PPG, & 121 SX TAIL @ 5.5BPM @ 15PPG. FINAL CIRC PRESS 1815PSI @ 3.4BPM. BUMP PLUG 552PSI OVER FCP @ 2367PSI. CMT IN PLACE @ 09:45 HRS. RETURNS DURING JOB.

06/08/2016: RIG DOWN.



30-25-43086

# Phoenix Technology Services SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER 60046

OPERATOR Chevron

WELL NAME SD WE 14 Fed P7 3H

COUNTY &amp; STATE

Lea County, New Mexico

API WELL NUMBER 30-025-43086

PROPOSED DIRECTION 356.27

| TIE-IN DATA |           |        |         |        |        |           |
|-------------|-----------|--------|---------|--------|--------|-----------|
| MEASURED    | VERTICAL  |        |         | N-S    | E-W    | DATA      |
| DEPTH       | DEPTH     | INCLIN | AZIMUTH | COORD  | COORD  | SOURCE    |
| 813.00 ft   | 812.96 ft | 0.9°   | 300.0°  | 5.10 N | 4.04 W | Teledrift |

| FIRST     | FIRST  |        |         |
|-----------|--------|--------|---------|
| SURVEY    | SURVEY |        |         |
| DATE      | DEPTH  | INCLIN | AZIMUTH |
| 28-May-16 | 948 ft | 1.1°   | 315.4°  |

| SURVEY INSTRUMENT |
|-------------------|
| TYPE              |
| Phoenix MWD       |

| LAST     | LAST     |        |         |
|----------|----------|--------|---------|
| SURVEY   | SURVEY   |        |         |
| DATE     | DEPTH    | INCLIN | AZIMUTH |
| 1-Jun-16 | 8,499 ft | .5     | 160.1   |

TO THE BEST OF MY KNOWLEDGE I  
CERTIFY THIS SURVEY DATA TO BE  
TRUE AND CORRECT.

| PROJECTED | PROJECTED |        |         |
|-----------|-----------|--------|---------|
| TD SURVEY | TD SURVEY |        |         |
| DATE      | DEPTH     | INCLIN | AZIMUTH |
| 1-Jun-16  | 8,556 ft  | .5     | 160.1   |

Lance Mosby

PRINT YOUR NAME ABOVE

Lance Mosby

SIGN YOUR NAME ABOVE

## MAGNETIC DECLINATION OR TOTAL GRID

| TOTAL CORRECTION USED | 6.60 |
|-----------------------|------|
| DECLINATION OR GRID   | GRID |

06/01/16

TODAY'S DATE

MWD SUPERVISOR 1

Robert Brewer

DIRECTIONAL DRILLER 1

Casey Tubbe

MWD SUPERVISOR 2

Lance Mosby

DIRECTIONAL DRILLER 2

Monte Gordon

12329 Cutten Rd., Houston, Texas 77066 (713)337-0600 (Voice), (713)337-0599 (Fax)



## **Chevron**

**Lea County, NM (NAD27 NME)**

**SD WE 14 Fed**

**P7 3H**

**OH / Job 60046**

**Survey: Phoenix MWD Surveys**

## **Standard Survey Report**

**02 June, 2016**







# Phoenix Technology Services

## Survey Report



**Company:** Chevron  
**Project:** Lea County, NM (NAD27 NME)  
**Site:** SD WE 14 Fed  
**Well:** P7 3H  
**Wellbore:** OH / Job 60046  
**Design:** Surveys (Pace X30)

**Local Co-ordinate Reference:** Well P7 3H  
**TVD Reference:** RKB @ 3198.00usft (Pace X30)  
**MD Reference:** RKB @ 3198.00usft (Pace X30)  
**North Reference:** Grd  
**Survey Calculation Method:** Minimum Curvature  
**Database:** Compass 5000 GCR

|                    |                                      |                      |                |
|--------------------|--------------------------------------|----------------------|----------------|
| <b>Project</b>     | Lea County, NM (NAD27 NME)           |                      |                |
| <b>Map System:</b> | US State Plane 1927 (Exact solution) | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)              |                      |                |
| <b>Map Zone:</b>   | New Mexico East 3001                 |                      |                |

|                              |              |                          |                    |
|------------------------------|--------------|--------------------------|--------------------|
| <b>Site</b>                  | SD WE 14 Fed |                          |                    |
| <b>Site Position:</b>        |              | <b>Northing:</b>         | 377,311.00 usft    |
| <b>From:</b>                 | Map          | <b>Easting:</b>          | 711,217.00 usft    |
| <b>Position Uncertainty:</b> | 0.00 usft    | <b>Slot Radius:</b>      | 13-3/16 "          |
|                              |              | <b>Latitude:</b>         | 32° 2' 7.83756 N   |
|                              |              | <b>Longitude:</b>        | 103° 38' 6.19467 W |
|                              |              | <b>Grid Convergence:</b> | 0.36 "             |

|                             |           |                            |                                  |
|-----------------------------|-----------|----------------------------|----------------------------------|
| <b>Well</b>                 | P7 3H     |                            |                                  |
| <b>Well Position</b>        | +N/-S     | 0.00 usft                  | <b>Northing:</b> 377,548.00 usft |
|                             | +E/-W     | 0.00 usft                  | <b>Easting:</b> 715,223.00 usft  |
| <b>Position Uncertainty</b> | 0.00 usft | <b>Wellhead Elevation:</b> | 0.00 usft                        |
|                             |           | <b>Latitude:</b>           | 32° 2' 9.93036 N                 |
|                             |           | <b>Longitude:</b>          | 103° 38' 19.64032 W              |
|                             |           | <b>Ground Level:</b>       | 3.165 00 usft                    |

|                  |                   |                            |                        |
|------------------|-------------------|----------------------------|------------------------|
| <b>Wellbore</b>  | OH / Job 60046    |                            |                        |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b>         | <b>Declination (°)</b> |
|                  | HDGM              | 4/18/2016                  | 6.97                   |
|                  |                   | <b>Dip Angle (°)</b>       | 59.75                  |
|                  |                   | <b>Field Strength (nT)</b> | 48,036                 |

|                          |                                |                      |                           |
|--------------------------|--------------------------------|----------------------|---------------------------|
| <b>Design</b>            | Surveys (Pace X30)             |                      |                           |
| <b>Audit Notes:</b>      |                                |                      |                           |
| <b>Version:</b>          | 1.0                            | <b>Phase:</b> ACTUAL | <b>Tie On Depth:</b> 0.00 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b>  | <b>+E/-W (usft)</b>       |
|                          | 0.00                           | 0.00                 | 0.00                      |
|                          |                                | <b>Direction (°)</b> | 356.27                    |

|                       |                      |                                        |                     |
|-----------------------|----------------------|----------------------------------------|---------------------|
| <b>Survey Program</b> | <b>Date</b> 6/2/2016 |                                        |                     |
| <b>From (usft)</b>    | <b>To (usft)</b>     | <b>Survey (Wellbore)</b>               | <b>Tool Name</b>    |
| 135.97                | 813.00               | Teledrift MWD Surveys (OH / Job 60046) | MWD                 |
| 948.00                | 8,556.00             | Phoenix MWD Surveys (OH / Job 60046)   | PHX+MWD+HDGM        |
|                       |                      |                                        | <b>Description</b>  |
|                       |                      |                                        | MWD - Standard      |
|                       |                      |                                        | PHX+OWSG MWD + HDGM |

|                                    |                        |                    |                              |                     |                     |                                |                                |                               |                              |
|------------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|--------------------------------|-------------------------------|------------------------------|
| <b>Survey</b>                      |                        |                    |                              |                     |                     |                                |                                |                               |                              |
| <b>Measured Depth (usft)</b>       | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Vertical Section (usft)</b> | <b>Dogleg Rate (°/100usft)</b> | <b>Build Rate (°/100usft)</b> | <b>Turn Rate (°/100usft)</b> |
| 813.00                             | 0.90                   | 300.00             | 812.96                       | 5.10                | -4.04               | 5.35                           | 0.00                           | 0.00                          | 0.00                         |
| 813.01                             | 0.90                   | 300.00             | 812.97                       | 5.10                | -4.04               | 5.35                           | 0.00                           | 0.00                          | 0.00                         |
| <b>Tie-in to Teledrift Surveys</b> |                        |                    |                              |                     |                     |                                |                                |                               |                              |
| 948.00                             | 1.10                   | 315.40             | 947.94                       | 6.55                | -5.87               | 6.92                           | 0.25                           | 0.15                          | 11.41                        |
| <b>First Phoenix MWD Survey</b>    |                        |                    |                              |                     |                     |                                |                                |                               |                              |
| 1,126.00                           | 1.90                   | 273.70             | 1,125.88                     | 7.96                | -10.02              | 8.59                           | 0.73                           | 0.45                          | -23.43                       |
| 1,303.00                           | 4.80                   | 264.00             | 1,302.56                     | 7.37                | -20.31              | 8.68                           | 1.66                           | 1.64                          | -5.48                        |
| 1,480.00                           | 6.50                   | 265.40             | 1,478.70                     | 5.79                | -37.67              | 8.23                           | 0.96                           | 0.96                          | 0.79                         |
| 1,658.00                           | 6.60                   | 266.00             | 1,655.54                     | 4.27                | -57.91              | 8.03                           | 0.07                           | 0.06                          | 0.34                         |



# Phoenix Technology Services

## Survey Report



Company: Chevron  
 Project: Lea County, NM (NAD27 NME)  
 Site: SD WE 14 Fed  
 Well: P7 3H  
 Wellbore: OH / Job 60046  
 Design: Surveys (Pace X30)

Local Co-ordinate Reference: Well P7 3H  
 TVD Reference: RKB @ 3198.00usft (Pace X30)  
 MD Reference: RKB @ 3198.00usft (Pace X30)  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature  
 Database: Compass 5000 GCR

### Survey

| Measured Depth (usft)    | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|--------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 1.836.00                 | 6.00            | 264.40      | 1,832.46              | 2.65         | -77.38       | 7.68                    | 0.35                    | -0.34                  | -0.90                 |
| 2.013.00                 | 6.20            | 265.40      | 2,008.46              | 0.98         | -96.11       | 7.23                    | 0.13                    | 0.11                   | 0.56                  |
| 2.190.00                 | 6.70            | 263.40      | 2,184.34              | -0.97        | -115.89      | 6.56                    | 0.31                    | 0.28                   | -1.13                 |
| 2.368.00                 | 4.80            | 261.60      | 2,361.43              | -3.25        | -133.58      | 5.44                    | 1.07                    | -1.07                  | -1.01                 |
| 2.546.00                 | 4.90            | 260.60      | 2,538.80              | -5.58        | -148.45      | 4.08                    | 0.07                    | 0.06                   | -0.56                 |
| 2.723.00                 | 5.20            | 263.00      | 2,715.11              | -7.79        | -163.86      | 2.87                    | 0.21                    | 0.17                   | 1.36                  |
| 2.900.00                 | 5.20            | 265.40      | 2,891.38              | -8.42        | -179.82      | 2.29                    | 0.12                    | 0.00                   | 1.36                  |
| 3.078.00                 | 5.30            | 264.50      | 3,068.63              | -10.85       | -196.04      | 1.92                    | 0.07                    | 0.06                   | -0.51                 |
| 3.254.00                 | 4.50            | 272.70      | 3,243.99              | -11.30       | -211.03      | 2.44                    | 0.60                    | -0.45                  | 4.66                  |
| 3.431.00                 | 4.30            | 280.90      | 3,420.47              | -9.72        | -224.48      | 4.89                    | 0.37                    | -0.11                  | 4.63                  |
| 3.609.00                 | 3.80            | 283.50      | 3,598.03              | -7.08        | -236.77      | 8.32                    | 0.30                    | -0.28                  | 1.46                  |
| 3.786.00                 | 3.90            | 280.10      | 3,774.63              | -4.66        | -248.40      | 11.50                   | 0.14                    | 0.06                   | -1.92                 |
| 3.964.00                 | 2.90            | 277.60      | 3,952.31              | -3.00        | -258.82      | 13.83                   | 0.57                    | -0.56                  | -1.40                 |
| 4.141.00                 | 2.20            | 274.70      | 4,129.14              | -2.13        | -266.65      | 15.21                   | 0.40                    | -0.40                  | -1.64                 |
| 4.319.00                 | 1.50            | 242.20      | 4,307.05              | -2.94        | -272.12      | 14.76                   | 0.69                    | -0.39                  | -18.26                |
| 4.496.00                 | 1.40            | 208.50      | 4,483.99              | -5.92        | -275.20      | 11.98                   | 0.48                    | -0.06                  | -19.04                |
| 4.522.00                 | 1.40            | 207.50      | 4,509.99              | -6.48        | -275.49      | 11.44                   | 0.09                    | 0.00                   | -3.85                 |
| 4.685.00                 | 1.70            | 202.30      | 4,672.93              | -10.48       | -277.33      | 7.57                    | 0.20                    | 0.18                   | -3.19                 |
| 4.862.00                 | 1.20            | 310.10      | 4,849.89              | -11.72       | -279.75      | 6.49                    | 1.33                    | -0.28                  | 60.90                 |
| 5.040.00                 | 1.60            | 313.70      | 5,027.84              | -8.80        | -282.97      | 9.61                    | 0.23                    | 0.22                   | 2.02                  |
| 5.217.00                 | 1.90            | 316.60      | 5,204.76              | -4.96        | -286.77      | 13.69                   | 0.18                    | 0.17                   | 1.64                  |
| 5.395.00                 | 0.90            | 308.00      | 5,382.70              | -1.96        | -289.90      | 16.89                   | 0.57                    | -0.56                  | -4.83                 |
| 5.573.00                 | 0.80            | 305.80      | 5,560.68              | -0.37        | -292.01      | 18.61                   | 0.06                    | -0.06                  | -1.24                 |
| 5.751.00                 | 1.10            | 297.20      | 5,738.66              | 1.14         | -294.54      | 20.28                   | 0.19                    | 0.17                   | -4.83                 |
| 5.929.00                 | 1.10            | 295.10      | 5,916.62              | 2.64         | -297.60      | 21.98                   | 0.02                    | 0.00                   | -1.18                 |
| 6.106.00                 | 1.50            | 297.60      | 6,093.58              | 4.44         | -301.20      | 24.01                   | 0.23                    | 0.23                   | 1.41                  |
| 6.283.00                 | 1.10            | 320.30      | 6,270.53              | 6.82         | -304.33      | 26.59                   | 0.36                    | -0.23                  | 12.82                 |
| 6.461.00                 | 0.80            | 319.30      | 6,448.51              | 9.08         | -306.24      | 28.96                   | 0.17                    | -0.17                  | -0.56                 |
| 6.638.00                 | 0.60            | 294.90      | 6,625.50              | 10.40        | -307.88      | 30.39                   | 0.20                    | -0.11                  | -13.79                |
| 6.816.00                 | 1.00            | 261.80      | 6,803.48              | 10.57        | -310.26      | 30.72                   | 0.33                    | 0.22                   | -18.60                |
| 6.993.00                 | 1.10            | 249.50      | 6,980.45              | 9.76         | -313.38      | 30.11                   | 0.14                    | 0.06                   | -6.95                 |
| 7.170.00                 | 0.40            | 146.00      | 7,157.44              | 8.65         | -314.63      | 29.09                   | 0.71                    | -0.40                  | -58.47                |
| 7.347.00                 | 0.10            | 97.80       | 7,334.44              | 8.12         | -314.13      | 28.52                   | 0.19                    | -0.17                  | -27.23                |
| 7.525.00                 | 0.20            | 333.50      | 7,512.44              | 8.37         | -314.12      | 28.78                   | 0.15                    | 0.08                   | -69.83                |
| 7.702.00                 | 0.90            | 114.50      | 7,689.43              | 8.07         | -312.99      | 28.40                   | 0.60                    | 0.40                   | 79.66                 |
| 7.879.00                 | 0.80            | 133.80      | 7,866.41              | 6.64         | -310.83      | 26.83                   | 0.17                    | -0.06                  | 10.90                 |
| 8.056.00                 | 1.00            | 156.50      | 8,043.39              | 4.37         | -309.32      | 24.47                   | 0.23                    | 0.11                   | 12.82                 |
| 8.234.00                 | 0.70            | 111.00      | 8,221.37              | 2.56         | -307.69      | 22.55                   | 0.40                    | -0.17                  | -25.56                |
| 8.411.00                 | 0.60            | 137.30      | 8,398.36              | 1.49         | -306.05      | 21.38                   | 0.18                    | -0.06                  | 14.86                 |
| 8.499.00                 | 0.50            | 160.10      | 8,486.36              | 0.79         | -305.61      | 20.65                   | 0.27                    | -0.11                  | 25.91                 |
| Final Phoenix MWD Survey |                 |             |                       |              |              |                         |                         |                        |                       |
| 8.556.00                 | 0.50            | 160.10      | 8,543.35              | 0.32         | -305.44      | 20.18                   | 0.00                    | 0.00                   | 0.00                  |
| Projection to TD         |                 |             |                       |              |              |                         |                         |                        |                       |





Phoenix Technology Services  
Survey Report



Company: Chevron  
Project: Lea County, NM (NAD27 NME)  
Site: SD WE 14 Fed  
Well: P7 3H  
Wellbore: OH / Job 60046  
Design: Surveys (Pace X30)

Local Co-ordinate Reference: Well P7 3H  
TVD Reference: RKB @ 3198.00usft (Pace X30)  
MD Reference: RKB @ 3198.00usft (Pace X30)  
North Reference: Gnd  
Survey Calculation Method: Minimum Curvature  
Database: Compass 5000 GCR

Survey Annotations

| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                     |
|-----------------------------|-----------------------------|-------------------|-----------------|-----------------------------|
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                             |
| 813.01                      | 812.97                      | 5.10              | -4.04           | Tie-in to Teledrift Surveys |
| 948.00                      | 947.94                      | 6.55              | -5.87           | First Phoenix MWD Survey    |
| 8,489.00                    | 8,486.36                    | 0.79              | -305.61         | Final Phoenix MWD Survey    |
| 8,556.00                    | 8,543.35                    | 0.32              | -305.44         | Projection to TD            |

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_





# Directional Survey

|                                            |                               |                                              |                        |                                |                  |
|--------------------------------------------|-------------------------------|----------------------------------------------|------------------------|--------------------------------|------------------|
| Well Name<br>SALADO DRAW WE 14 FED P7 003H |                               | Lease                                        | Field Name<br>JENNINGS | Business Unit<br>Mid-Continent |                  |
| Ground Elevation (ft)<br>3,165.00          | Original RKB (ft)<br>3,197.60 | Current RKB Elevation<br>3,197.60, 3/28/2016 |                        | Mud Line Elevation (ft)        | Water Depth (ft) |

|                                |                                  |                                      |                                          |
|--------------------------------|----------------------------------|--------------------------------------|------------------------------------------|
| Wellbore Name<br>Original Hole | Parent Wellbore<br>Original Hole | Min Kick Off Depth (ftKB)<br>8,556.0 | Vertical Section Direction (°)<br>356.27 |
| Northing (Y) (ft)              | Easting (X) (ft)                 | UTM Grid Zone                        |                                          |

|                   |                   |                        |                    |               |                |
|-------------------|-------------------|------------------------|--------------------|---------------|----------------|
| Date<br>4/16/2016 | Definitive?<br>Y  | Description<br>MWD     |                    | Planned?<br>N |                |
| MD Tie In (ftKB)  | TVD Tie In (ftKB) | Inclination Tie In (°) | Azimuth Tie In (°) | NSTie In (ft) | EW Tie In (ft) |

## Survey Data

| MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) | NS (ft) | EW (ft) | VS (ft) | DLS (°/100ft) | Method   | Survey Company | Build (°/100ft) | Depart (ft) | Turn (°/100ft) | Unuse<br>d data |
|-----------|----------|---------|------------|---------|---------|---------|---------------|----------|----------------|-----------------|-------------|----------------|-----------------|
| 136       | 0.60     | 319.17  | 136.00     | 0.54    | -0.47   | 0.57    | 0.44          | Magn MWD |                | 0.44            | 0.71        | 234.68         | N               |
| 316       | 0.70     | 8.70    | 315.99     | 2.34    | -0.92   | 2.39    | 0.31          | Magn MWD |                | 0.06            | 2.51        | -              | N               |
| 436       | 0.40     | 326.70  | 435.98     | 3.41    | -1.03   | 3.47    | 0.40          | Magn MWD |                | -0.25           | 3.57        | 265.00         | N               |
| 532       | 0.30     | 321.70  | 531.98     | 3.89    | -1.37   | 3.97    | 0.11          | Magn MWD |                | -0.10           | 4.13        | -5.21          | N               |
| 625       | 0.40     | 271.70  | 624.98     | 4.09    | -1.85   | 4.20    | 0.33          | Magn MWD |                | 0.11            | 4.49        | -53.76         | N               |
| 717       | 0.80     | 292.70  | 716.97     | 4.35    | -2.76   | 4.52    | 0.49          | Magn MWD |                | 0.43            | 5.15        | 22.83          | N               |
| 810       | 1.00     | 302.70  | 809.98     | 5.04    | -4.05   | 5.29    | 0.27          | Magn MWD |                | 0.22            | 6.46        | 10.75          | N               |
| 813       | 0.90     | 299.70  | 812.96     | 5.06    | -4.09   | 5.32    | 3.72          | Magn MWD |                | -3.33           | 6.51        | -              | N               |
| 838       | 0.90     | 299.70  | 837.96     | 5.26    | -4.43   | 5.54    | 0.00          | Extrap.  |                | 0.00            | 6.87        | 100.00         | N               |
| 948       | 1.10     | 315.40  | 947.94     | 6.44    | -5.92   | 6.81    | 0.31          | Magn MWD |                | 0.18            | 8.75        | 14.27          | N               |
| 1,126     | 1.90     | 273.70  | 1,125.88   | 7.85    | -10.06  | 8.48    | 0.73          | Magn MWD |                | 0.45            | 12.76       | -23.43         | N               |
| 1,303     | 4.80     | 264.00  | 1,302.56   | 7.26    | -20.36  | 8.57    | 1.66          | Magn MWD |                | 1.64            | 21.62       | -5.48          | N               |
| 1,480     | 6.50     | 265.40  | 1,478.70   | 5.68    | -37.71  | 8.12    | 0.96          | Magn MWD |                | 0.96            | 38.14       | 0.79           | N               |
| 1,658     | 6.60     | 266.00  | 1,655.54   | 4.16    | -57.96  | 7.92    | 0.07          | Magn MWD |                | 0.06            | 58.11       | 0.34           | N               |
| 1,836     | 6.00     | 264.40  | 1,832.46   | 2.54    | -77.42  | 7.57    | 0.35          | Magn MWD |                | -0.34           | 77.46       | -0.90          | N               |
| 2,013     | 6.20     | 265.40  | 2,008.46   | 0.87    | -96.16  | 7.12    | 0.13          | Magn MWD |                | 0.11            | 96.16       | 0.56           | N               |
| 2,190     | 6.70     | 263.40  | 2,184.34   | -1.08   | -115.94 | 6.46    | 0.31          | Magn MWD |                | 0.28            | 115.95      | -1.13          | N               |
| 2,368     | 4.80     | 261.60  | 2,361.43   | -3.36   | -133.63 | 5.34    | 1.07          | Magn MWD |                | -1.07           | 133.67      | -1.01          | N               |
| 2,546     | 4.90     | 260.60  | 2,538.80   | -5.69   | -148.49 | 3.98    | 0.07          | Magn MWD |                | 0.06            | 148.60      | -0.56          | N               |
| 2,723     | 5.20     | 263.00  | 2,715.11   | -7.91   | -163.91 | 2.77    | 0.21          | Magn MWD |                | 0.17            | 164.10      | 1.36           | N               |
| 2,900     | 5.20     | 265.40  | 2,891.38   | -9.53   | -179.87 | 2.19    | 0.12          | Magn MWD |                | 0.00            | 180.12      | 1.36           | N               |
| 3,078     | 5.30     | 264.50  | 3,068.63   | -10.96  | -196.09 | 1.82    | 0.07          | Magn MWD |                | 0.06            | 196.40      | -0.51          | N               |
| 3,254     | 4.50     | 272.70  | 3,243.99   | -11.42  | -211.08 | 2.34    | 0.60          | Magn MWD |                | -0.45           | 211.39      | 4.66           | N               |
| 3,431     | 4.30     | 280.90  | 3,420.47   | -9.83   | -224.53 | 4.79    | 0.37          | Magn MWD |                | -0.11           | 224.75      | 4.63           | N               |
| 3,609     | 3.80     | 283.50  | 3,598.03   | -7.20   | -236.82 | 8.23    | 0.30          | Magn MWD |                | -0.28           | 236.93      | 1.46           | N               |
| 3,786     | 3.90     | 280.10  | 3,774.63   | -4.77   | -248.45 | 11.40   | 0.14          | Magn MWD |                | 0.06            | 248.50      | -1.92          | N               |
| 3,964     | 2.90     | 277.60  | 3,952.31   | -3.11   | -258.87 | 13.73   | 0.57          | Magn MWD |                | -0.56           | 258.89      | -1.40          | N               |





# Directional Survey

|                                            |                               |                                              |                        |                                |                  |
|--------------------------------------------|-------------------------------|----------------------------------------------|------------------------|--------------------------------|------------------|
| Well Name<br>SALADO DRAW WE 14 FED P7 003H |                               | Lease                                        | Field Name<br>JENNINGS | Business Unit<br>Mid-Continent |                  |
| Ground Elevation (ft)<br>3,165.00          | Original RKB (ft)<br>3,197.60 | Current RKB Elevation<br>3,197.60, 3/28/2016 |                        | Mud Line Elevation (ft)        | Water Depth (ft) |

## Survey Data

| MD (ft) | Inc (°) | Azm (°) | TVD (ft) | NS (ft) | EW (ft) | VS (ft) | DLS (°/100ft) | Method   | Survey Company | Build (°/100ft) | Depart (ft) | Turn (°/100ft) | Unuse<br>d data |
|---------|---------|---------|----------|---------|---------|---------|---------------|----------|----------------|-----------------|-------------|----------------|-----------------|
| 4,141   | 2.20    | 274.70  | 4,129.14 | -2.24   | -266.70 | 15.11   | 0.40          | Magn MWD |                | -0.40           | 266.71      | -1.84          | N               |
| 4,319   | 1.50    | 242.20  | 4,307.05 | -3.05   | -272.16 | 14.66   | 0.69          | Magn MWD |                | -0.39           | 272.18      | -18.26         | N               |
| 4,496   | 1.40    | 208.50  | 4,483.99 | -6.03   | -275.24 | 11.89   | 0.48          | Magn MWD |                | -0.06           | 275.31      | -19.04         | N               |
| 4,522   | 1.40    | 207.50  | 4,509.99 | -6.59   | -275.54 | 11.35   | 0.09          | Magn MWD |                | 0.00            | 275.62      | -3.85          | N               |
| 4,580   | 1.40    | 207.50  | 4,567.97 | -7.85   | -276.20 | 10.14   | 0.00          | Magn MWD |                | 0.00            | 276.31      | 0.00           | N               |
| 4,685   | 1.70    | 202.30  | 4,672.93 | -10.43  | -277.38 | 7.64    | 0.32          | Magn MWD |                | 0.29            | 277.58      | -4.95          | N               |
| 4,862   | 1.20    | 310.10  | 4,849.90 | -11.66  | -279.79 | 6.56    | 1.33          | Magn MWD |                | -0.28           | 280.04      | 60.90          | N               |
| 5,040   | 1.60    | 313.70  | 5,027.84 | -8.74   | -283.02 | 9.69    | 0.23          | Magn MWD |                | 0.22            | 283.15      | 2.02           | N               |
| 5,217   | 1.90    | 316.60  | 5,204.76 | -4.91   | -286.82 | 13.76   | 0.18          | Magn MWD |                | 0.17            | 286.86      | 1.64           | N               |
| 5,395   | 0.90    | 308.00  | 5,382.71 | -1.90   | -289.95 | 16.97   | 0.57          | Magn MWD |                | -0.56           | 289.95      | -4.83          | N               |
| 5,573   | 0.80    | 305.80  | 5,560.69 | -0.31   | -292.06 | 18.69   | 0.06          | Magn MWD |                | -0.08           | 292.06      | -1.24          | N               |
| 5,751   | 1.10    | 297.20  | 5,738.66 | 1.19    | -294.58 | 20.36   | 0.19          | Magn MWD |                | 0.17            | 294.59      | -4.83          | N               |
| 5,929   | 1.10    | 295.10  | 5,916.63 | 2.70    | -297.65 | 22.06   | 0.02          | Magn MWD |                | 0.00            | 297.66      | -1.18          | N               |
| 6,106   | 1.50    | 297.60  | 6,093.58 | 4.49    | -301.24 | 24.08   | 0.23          | Magn MWD |                | 0.23            | 301.28      | 1.41           | N               |
| 6,283   | 1.10    | 320.30  | 6,270.54 | 6.88    | -304.38 | 26.66   | 0.36          | Magn MWD |                | -0.28           | 304.46      | 12.82          | N               |
| 6,461   | 0.80    | 319.30  | 6,448.51 | 9.13    | -306.28 | 29.04   | 0.17          | Magn MWD |                | -0.17           | 306.42      | -0.56          | N               |
| 6,638   | 0.60    | 294.90  | 6,625.50 | 10.46   | -307.93 | 30.47   | 0.20          | Magn MWD |                | -0.11           | 308.11      | -13.79         | N               |
| 6,816   | 1.00    | 261.80  | 6,803.48 | 10.63   | -310.31 | 30.79   | 0.33          | Magn MWD |                | 0.22            | 310.49      | -18.60         | N               |
| 7,170   | 0.40    | 146.00  | 7,157.47 | 9.16    | -312.68 | 29.49   | 0.35          | Magn MWD |                | -0.17           | 312.81      | -32.71         | N               |
| 7,347   | 0.10    | 97.80   | 7,334.46 | 8.63    | -312.18 | 28.92   | 0.19          | Magn MWD |                | -0.17           | 312.30      | -27.23         | N               |
| 7,525   | 0.20    | 333.50  | 7,512.46 | 8.89    | -312.17 | 29.16   | 0.15          | Magn MWD |                | 0.06            | 312.29      | 132.42         | N               |
| 7,702   | 0.90    | 114.50  | 7,689.46 | 8.59    | -311.04 | 28.80   | 0.60          | Magn MWD |                | 0.40            | 311.16      | -              | N               |
| 7,879   | 0.80    | 133.80  | 7,866.44 | 7.16    | -308.88 | 27.24   | 0.17          | Magn MWD |                | -0.06           | 308.96      | 10.90          | N               |
| 8,056   | 1.00    | 156.50  | 8,043.42 | 4.88    | -307.37 | 24.87   | 0.23          | Magn MWD |                | 0.11            | 307.41      | 12.82          | N               |
| 8,234   | 0.70    | 111.00  | 8,221.40 | 3.07    | -305.74 | 22.95   | 0.40          | Magn MWD |                | -0.17           | 305.75      | -25.56         | N               |
| 8,411   | 0.60    | 137.30  | 8,398.39 | 2.00    | -304.10 | 21.78   | 0.18          | Magn MWD |                | -0.06           | 304.11      | 14.86          | N               |
| 8,499   | 0.50    | 160.10  | 8,486.38 | 1.30    | -303.66 | 21.05   | 0.27          | Magn MWD |                | -0.11           | 303.66      | 25.91          | N               |
| 8,556   | 0.50    | 160.10  | 8,543.38 | 0.83    | -303.49 | 20.58   | 0.00          | Magn MWD |                | 0.00            | 303.49      | 0.00           | N               |
| 8,559   | 0.28    | 182.51  | 8,546.38 | 0.82    | -303.48 | 20.56   | 8.79          | Magn MWD |                | -7.33           | 303.49      | 747.00         | N               |
| 8,647   | 11.04   | 359.83  | 8,633.85 | 9.05    | -303.52 | 28.78   | 12.86         | Magn MWD |                | 12.23           | 303.65      | 201.50         | N               |





# Directional Survey

|                                            |                               |                                              |                        |                                |                  |
|--------------------------------------------|-------------------------------|----------------------------------------------|------------------------|--------------------------------|------------------|
| Well Name<br>SALADO DRAW WE 14 FED P7 003H |                               | Lease                                        | Field Name<br>JENNINGS | Business Unit<br>Mid-Continent |                  |
| Ground Elevation (ft)<br>3,165.00          | Original RKB (ft)<br>3,197.60 | Current RKB Elevation<br>3,197.60, 3/28/2016 |                        | Mud Line Elevation (ft)        | Water Depth (ft) |

| Survey Data |         |         |            |          |         |          |               |             |                |                 |            |                |                 |
|-------------|---------|---------|------------|----------|---------|----------|---------------|-------------|----------------|-----------------|------------|----------------|-----------------|
| MD (ftKB)   | Inc (") | Azm (") | TVD (ftKB) | NS (ft)  | EW (ft) | VS (ft)  | DLS (°/100ft) | Method      | Survey Company | Build (°/100ft) | Depth (ft) | Turn (°/100ft) | Unuse<br>d data |
| 8,736       | 23.18   | 359.44  | 8,718.75   | 35.19    | -303.72 | 54.87    | 13.64         | Magn<br>MWD |                | 13.64           | 305.75     | -0.44          | N               |
| 8,825       | 33.67   | 349.63  | 8,796.96   | 77.11    | -308.34 | 97.01    | 12.87         | Magn<br>MWD |                | 11.79           | 317.84     | -11.02         | N               |
| 8,913       | 40.35   | 348.69  | 8,867.19   | 129.10   | -318.33 | 149.54   | 7.62          | Magn<br>MWD |                | 7.59            | 343.52     | -1.07          | N               |
| 9,002       | 45.43   | 358.12  | 8,932.44   | 189.14   | -325.04 | 209.88   | 9.19          | Magn<br>MWD |                | 5.71            | 376.06     | 10.60          | N               |
| 9,090       | 53.75   | 1.78    | 8,989.45   | 256.06   | -324.96 | 276.66   | 9.97          | Magn<br>MWD |                | 9.45            | 413.73     | -<br>404.93    | N               |
| 9,179       | 66.20   | 0.83    | 9,033.90   | 332.95   | -323.25 | 353.27   | 14.02         | Magn<br>MWD |                | 13.99           | 464.05     | -1.07          | N               |
| 9,267       | 80.60   | 359.75  | 9,058.97   | 417.06   | -322.85 | 437.18   | 16.41         | Magn<br>MWD |                | 16.36           | 527.42     | 407.86         | N               |
| 9,356       | 91.88   | 3.58    | 9,064.80   | 505.67   | -320.26 | 525.43   | 13.38         | Magn<br>MWD |                | 12.67           | 598.55     | -<br>400.19    | N               |
| 9,533       | 92.00   | 6.58    | 9,058.81   | 681.85   | -304.60 | 700.22   | 1.70          | Magn<br>MWD |                | 0.07            | 746.79     | 1.69           | N               |
| 9,621       | 91.88   | 5.60    | 9,055.83   | 769.30   | -295.27 | 786.88   | 1.12          | Magn<br>MWD |                | -0.14           | 824.02     | -1.11          | N               |
| 9,710       | 92.00   | 3.07    | 9,052.81   | 857.99   | -288.54 | 874.94   | 2.84          | Magn<br>MWD |                | 0.13            | 905.21     | -2.84          | N               |
| 9,799       | 92.00   | 3.44    | 9,049.71   | 946.79   | -283.49 | 963.23   | 0.42          | Magn<br>MWD |                | 0.00            | 988.32     | 0.42           | N               |
| 9,888       | 92.09   | 2.52    | 9,046.53   | 1,035.62 | -278.87 | 1,051.56 | 1.04          | Magn<br>MWD |                | 0.10            | 1,072.51   | -1.03          | N               |
| 9,977       | 92.03   | 359.20  | 9,043.33   | 1,124.54 | -277.53 | 1,140.21 | 3.73          | Magn<br>MWD |                | -0.07           | 1,158.28   | 400.76         | N               |
| 10,065      | 91.91   | 356.86  | 9,040.31   | 1,212.43 | -280.56 | 1,228.11 | 2.66          | Magn<br>MWD |                | -0.14           | 1,244.46   | -2.66          | N               |
| 10,154      | 91.54   | 356.42  | 9,037.63   | 1,301.23 | -285.77 | 1,317.07 | 0.65          | Magn<br>MWD |                | -0.42           | 1,332.24   | -0.49          | N               |
| 10,243      | 89.85   | 357.10  | 9,036.55   | 1,390.08 | -290.80 | 1,406.05 | 2.05          | Magn<br>MWD |                | -1.90           | 1,420.17   | 0.76           | N               |
| 10,332      | 89.85   | 358.22  | 9,036.78   | 1,479.00 | -294.44 | 1,495.02 | 1.26          | Magn<br>MWD |                | 0.00            | 1,508.03   | 1.26           | N               |
| 10,420      | 89.88   | 0.33    | 9,036.99   | 1,566.99 | -295.55 | 1,582.90 | 2.40          | Magn<br>MWD |                | 0.03            | 1,594.62   | -<br>406.69    | N               |
| 10,509      | 89.85   | 359.35  | 9,037.20   | 1,655.99 | -295.80 | 1,671.72 | 1.10          | Magn<br>MWD |                | -0.03           | 1,682.20   | 403.39         | N               |
| 10,598      | 89.88   | 359.79  | 9,037.41   | 1,744.99 | -296.46 | 1,760.58 | 0.50          | Magn<br>MWD |                | 0.03            | 1,769.99   | 0.49           | N               |
| 10,687      | 89.78   | 1.84    | 9,037.67   | 1,833.97 | -295.20 | 1,849.29 | 2.31          | Magn<br>MWD |                | -0.11           | 1,857.58   | -<br>402.19    | N               |
| 10,776      | 89.82   | 3.04    | 9,037.98   | 1,922.89 | -291.41 | 1,937.77 | 1.35          | Magn<br>MWD |                | 0.04            | 1,944.85   | 1.35           | N               |
| 10,864      | 90.12   | 0.92    | 9,038.03   | 2,010.83 | -288.37 | 2,025.33 | 2.43          | Magn<br>MWD |                | 0.34            | 2,031.40   | -2.41          | N               |
| 10,953      | 90.12   | 359.31  | 9,037.84   | 2,099.83 | -288.19 | 2,114.13 | 1.81          | Magn<br>MWD |                | 0.00            | 2,119.51   | 402.69         | N               |
| 11,041      | 90.00   | 0.22    | 9,037.75   | 2,187.83 | -288.55 | 2,201.96 | 1.04          | Magn<br>MWD |                | -0.14           | 2,206.77   | -<br>408.06    | N               |
| 11,130      | 90.25   | 0.20    | 9,037.56   | 2,276.83 | -288.23 | 2,290.75 | 0.28          | Magn<br>MWD |                | 0.28            | 2,295.00   | -0.02          | N               |
| 11,219      | 90.06   | 0.42    | 9,037.31   | 2,365.82 | -287.74 | 2,379.53 | 0.33          | Magn<br>MWD |                | -0.21           | 2,383.26   | 0.25           | N               |
| 11,308      | 90.12   | 359.86  | 9,037.17   | 2,454.82 | -287.53 | 2,468.33 | 0.63          | Magn<br>MWD |                | 0.07            | 2,471.60   | 403.87         | N               |
| 11,397      | 90.15   | 358.54  | 9,036.97   | 2,543.81 | -288.77 | 2,557.21 | 1.48          | Magn<br>MWD |                | 0.03            | 2,560.15   | -1.48          | N               |





# Directional Survey

|                                            |                               |                                              |                        |                                |                  |
|--------------------------------------------|-------------------------------|----------------------------------------------|------------------------|--------------------------------|------------------|
| Well Name<br>SALADO DRAW WE 14 FED P7 003H |                               | Lease                                        | Field Name<br>JENNINGS | Business Unit<br>Mid-Continent |                  |
| Ground Elevation (ft)<br>3,165.00          | Original RKB (ft)<br>3,197.60 | Current RKB Elevation<br>3,197.60, 3/28/2016 |                        | Mud Line Elevation (ft)        | Water Depth (ft) |

## Survey Data

| MD (ft) | Incl (°) | Azm (°) | TVD (ft) | NS (ft)  | EW (ft) | VS (ft)  | DLS (°/100ft) | Method      | Survey Company | Build (°/100ft) | Depth (ft) | Turn (°/100ft) | Unuse<br>d data |
|---------|----------|---------|----------|----------|---------|----------|---------------|-------------|----------------|-----------------|------------|----------------|-----------------|
| 11,575  | 90.03    | 356.36  | 9,036.69 | 2,721.62 | -296.69 | 2,735.16 | 1.23          | Magn<br>MWD |                | -0.07           | 2,737.75   | -1.22          | N               |
| 11,663  | 90.12    | 357.87  | 9,036.57 | 2,809.51 | -301.12 | 2,823.15 | 1.72          | Magn<br>MWD |                | 0.10            | 2,825.60   | 1.72           | N               |
| 11,753  | 90.15    | 359.04  | 9,036.36 | 2,899.48 | -303.54 | 2,913.08 | 1.30          | Magn<br>MWD |                | 0.03            | 2,915.32   | 1.30           | N               |
| 11,841  | 89.75    | 0.94    | 9,036.43 | 2,987.47 | -303.56 | 3,000.89 | 2.21          | Magn<br>MWD |                | -0.45           | 3,002.85   | -              | N               |
| 11,930  | 89.78    | 358.92  | 9,036.80 | 3,076.47 | -303.67 | 3,089.70 | 2.27          | Magn<br>MWD |                | 0.03            | 3,091.42   | 406.93         | N               |
| 12,019  | 89.69    | 358.99  | 9,037.21 | 3,165.45 | -305.29 | 3,178.61 | 0.13          | Magn<br>MWD |                | -0.10           | 3,180.14   | 0.08           | N               |
| 12,107  | 89.78    | 357.90  | 9,037.62 | 3,253.42 | -307.68 | 3,266.64 | 1.24          | Magn<br>MWD |                | 0.10            | 3,267.93   | -1.24          | N               |
| 12,196  | 89.66    | 358.52  | 9,038.05 | 3,342.37 | -310.46 | 3,355.49 | 0.71          | Magn<br>MWD |                | -0.13           | 3,356.76   | 0.70           | N               |
| 12,285  | 89.82    | 1.62    | 9,038.46 | 3,431.36 | -310.35 | 3,444.28 | 3.49          | Magn<br>MWD |                | 0.18            | 3,445.37   | -              | N               |
| 12,373  | 89.54    | 3.53    | 9,038.95 | 3,519.26 | -306.40 | 3,531.74 | 2.19          | Magn<br>MWD |                | -0.32           | 3,532.58   | 401.01         | N               |
| 12,462  | 89.82    | 2.32    | 9,039.45 | 3,608.15 | -301.86 | 3,620.14 | 1.40          | Magn<br>MWD |                | 0.31            | 3,620.75   | 2.17           | N               |
| 12,550  | 89.94    | 359.91  | 9,039.63 | 3,696.12 | -300.14 | 3,707.82 | 2.74          | Magn<br>MWD |                | 0.14            | 3,708.29   | -1.36          | N               |
| 12,639  | 89.88    | 359.44  | 9,039.77 | 3,785.12 | -300.65 | 3,796.66 | 0.53          | Magn<br>MWD |                | -0.07           | 3,797.04   | 406.35         | N               |
| 12,727  | 89.85    | 2.55    | 9,039.98 | 3,873.10 | -299.12 | 3,884.35 | 3.53          | Magn<br>MWD |                | -0.03           | 3,884.63   | -0.53          | N               |
| 12,817  | 90.03    | 0.82    | 9,040.07 | 3,963.05 | -296.47 | 3,973.95 | 1.93          | Magn<br>MWD |                | 0.20            | 3,974.13   | 405.56         | N               |
| 12,905  | 90.31    | 3.02    | 9,039.81 | 4,051.00 | -293.53 | 4,061.51 | 2.52          | Magn<br>MWD |                | 0.32            | 4,061.62   | -1.92          | N               |
| 12,994  | 90.25    | 1.53    | 9,039.38 | 4,139.92 | -289.99 | 4,150.02 | 1.68          | Magn<br>MWD |                | -0.07           | 4,150.07   | 2.50           | N               |
| 13,083  | 90.31    | 359.17  | 9,038.94 | 4,228.92 | -289.45 | 4,238.79 | 2.65          | Magn<br>MWD |                | 0.07            | 4,238.81   | -1.67          | N               |
| 13,172  | 90.22    | 358.66  | 9,038.53 | 4,317.90 | -291.13 | 4,327.69 | 0.58          | Magn<br>MWD |                | -0.10           | 4,327.70   | 401.84         | N               |
| 13,261  | 90.31    | 358.21  | 9,038.12 | 4,406.86 | -293.57 | 4,416.63 | 0.52          | Magn<br>MWD |                | 0.10            | 4,416.63   | -0.57          | N               |
| 13,349  | 90.28    | 358.91  | 9,037.66 | 4,494.83 | -295.78 | 4,504.56 | 0.80          | Magn<br>MWD |                | -0.03           | 4,504.56   | -0.51          | N               |
| 13,438  | 90.25    | 356.24  | 9,037.25 | 4,583.75 | -299.54 | 4,593.52 | 3.00          | Magn<br>MWD |                | -0.03           | 4,593.52   | 0.80           | N               |
| 13,526  | 90.25    | 354.85  | 9,036.87 | 4,671.48 | -306.38 | 4,681.51 | 1.58          | Magn<br>MWD |                | 0.00            | 4,681.51   | -3.00          | N               |
| 13,615  | 90.30    | 356.90  | 9,036.44 | 4,760.24 | -312.78 | 4,770.51 | 2.30          | Magn<br>MWD |                | 0.06            | 4,770.51   | -1.58          | N               |
| 13,704  | 90.30    | 357.80  | 9,035.98 | 4,849.14 | -316.89 | 4,859.49 | 1.01          | Magn<br>MWD |                | 0.00            | 4,859.49   | 2.30           | N               |
| 13,778  | 90.20    | 358.90  | 9,035.65 | 4,923.11 | -319.02 | 4,933.44 | 1.49          | Magn<br>MWD |                | -0.14           | 4,933.44   | 1.01           | N               |
| 13,803  | 90.20    | 358.90  | 9,035.57 | 4,948.11 | -319.50 | 4,958.41 | 0.00          | Extrap.     |                | 0.00            | 4,958.41   | 1.49           | N               |





# Casing Summary

|                                            |                               |                                              |                        |                                |                  |
|--------------------------------------------|-------------------------------|----------------------------------------------|------------------------|--------------------------------|------------------|
| Well Name<br>SALADO DRAW WE 14 FED P7 003H |                               | Lease                                        | Field Name<br>JENNINGS | Business Unit<br>Mid-Continent |                  |
| Ground Elevation (ft)<br>3,165.00          | Original RKB (ft)<br>3,197.60 | Current RKB Elevation<br>3,197.60, 3/28/2016 |                        | Mud Line Elevation (ft)        | Water Depth (ft) |

## Surface, Planned?N, 828ftKB

| Set Depth (MD) (ftKB)<br>828 |                       | Set Tension (kips) |         | String Nominal OD (in)<br>13 3/8 |       | String Min Drift (in)<br>12.469 |                       | Centralizers<br>9     |          | Scratchers    |                  |
|------------------------------|-----------------------|--------------------|---------|----------------------------------|-------|---------------------------------|-----------------------|-----------------------|----------|---------------|------------------|
| 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         | 13 3/8             | 12.625  | 54.50                            | J-55  | ST&C                            | 0                     | 33                    | 33.00    | 2,730.0       | 1,130.0          |
| 1                            | 13-3/8 UH-2 CSG Head  | 13 3/8             | 12.625  | 54.50                            | J-55  | ST&C                            | 33                    | 36                    | 2.88     | 2,730.0       | 1,130.0          |
| 1                            | Pup Joint             | 13 3/8             | 12.625  | 54.50                            | J-55  | ST&C                            | 36                    | 39                    | 3.72     | 2,730.0       | 1,130.0          |
| 18                           | Casing Joint          | 13 3/8             | 12.625  | 54.50                            | J-55  | ST&C                            | 39                    | 782                   | 743.11   | 2,730.0       | 1,130.0          |
| 1                            | Float Collar          | 13 3/8             | 12.625  | 54.50                            | J-55  | ST&C                            | 782                   | 784                   | 1.32     | 2,730.0       | 1,130.0          |
| 1                            | Casing Joint          | 13 3/8             | 12.625  | 54.50                            | J-55  | ST&C                            | 784                   | 826                   | 42.45    | 2,730.0       | 1,130.0          |
| 1                            | TX Pattern Float Shoe | 13 3/8             | 12.625  | 54.50                            | J-55  | ST&C                            | 826                   | 828                   | 1.77     | 2,730.0       | 1,130.0          |

## Intermediate Casing 1, Planned?N, 4,570ftKB

| Set Depth (MD) (ftKB)<br>4,570 |               | Set Tension (kips) |         | String Nominal OD (in)<br>9 5/8 |        | String Min Drift (in) |                       | Centralizers<br>31    |          | Scratchers    |                  |
|--------------------------------|---------------|--------------------|---------|---------------------------------|--------|-----------------------|-----------------------|-----------------------|----------|---------------|------------------|
| 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 | 9 5/8              | 8.835   | 40.00                           | HCK-55 | LTC                   | 0                     | 35                    | 35.00    |               | 4,230.0          |
| 1                              | Hanger        | 9 5/8              | 8.835   | 40.00                           | HCK-55 | LTC                   | 35                    | 36                    | 1.63     |               | 4,230.0          |
| 1                              | Hanger PUP    | 9 5/8              | 8.835   | 40.00                           | HCK-55 | LTC                   | 36                    | 41                    | 4.20     |               | 4,230.0          |
| 10<br>6                        | Casing Joint  | 9 5/8              | 8.835   | 40.00                           | HCK-55 | LTC                   | 41                    | 4,482                 | 4,441.23 |               | 4,230.0          |
| 1                              | Float Collar  | 9 5/8              | 8.835   | 40.00                           | HCK-55 | LTC                   | 4,482                 | 4,483                 | 1.48     |               | 4,230.0          |
| 2                              | Casing Joint  | 9 5/8              | 8.835   | 40.00                           | HCK-55 | LTC                   | 4,483                 | 4,568                 | 85.10    |               | 4,230.0          |
| 1                              | Float Shoe    | 9 5/8              | 8.835   | 40.00                           | HCK-55 | LTC                   | 4,568                 | 4,570                 | 1.64     |               |                  |

## Production Casing, Planned?N, 13,788ftKB

| Set Depth (MD) (ftKB)<br>13,788 |              | Set Tension (kips) |         | String Nominal OD (in)<br>5 1/2 |         | String Min Drift (in) |                       | Centralizers<br>71    |          | Scratchers    |                  |
|---------------------------------|--------------|--------------------|---------|---------------------------------|---------|-----------------------|-----------------------|-----------------------|----------|---------------|------------------|
| 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 Jt   | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 0                     | 34                    | 34.00    |               |                  |
| 1                               | Hanger       | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 34                    | 35                    | 1.14     |               |                  |
| 1                               | Hanger PUP   | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 35                    | 39                    | 4.51     |               |                  |
| 20<br>5                         | Casing Joint | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 39                    | 8,499                 | 8,459.50 |               |                  |
| 1                               | Pup Jt       | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 8,499                 | 8,504                 | 5.14     |               |                  |
| 12<br>5                         | Casing Joint | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 8,504                 | 13,619                | 5,115.15 |               |                  |
| 1                               | RSI PUP      | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 13,619                | 13,629                | 10.48    |               |                  |
| 1                               | RSI          | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 13,629                | 13,636                | 6.62     |               |                  |
| 1                               | RSI PUP      | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 13,636                | 13,646                | 10.21    |               |                  |
| 1                               | Casing Joint | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 13,646                | 13,687                | 40.47    |               |                  |
| 1                               | LC PUP       | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 13,687                | 13,697                | 10.15    |               |                  |
| 1                               | Land Collar  | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 13,697                | 13,698                | 1.57     |               |                  |
| 1                               | Casing Joint | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 13,698                | 13,741                | 42.05    |               |                  |
| 1                               | Float Collar | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 13,741                | 13,743                | 2.41     |               |                  |
| 1                               | Vibrator     | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 13,743                | 13,745                | 2.22     |               |                  |
| 1                               | Casing Jbint | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 13,745                | 13,785                | 40.18    |               |                  |
| 1                               | Float Shoe   | 5 1/2              | 4.778   | 20.00                           | HCP-110 | TXP-BTC               | 13,785                | 13,788                | 2.69     |               |                  |





# Cement Summary

## Surface Casing Cement

|                                            |                               |                                              |                        |                                |                  |
|--------------------------------------------|-------------------------------|----------------------------------------------|------------------------|--------------------------------|------------------|
| Well Name<br>SALADO DRAW WE 14 FED P7 003H |                               | Lease                                        | Field Name<br>JENNINGS | Business Unit<br>Mid-Continent |                  |
| Ground Elevation (ft)<br>3,165.00          | Original RKB (ft)<br>3,197.60 | Current RKB Elevation<br>3,197.60, 3/28/2016 |                        | Mud Line Elevation (ft)        | Water Depth (ft) |

### Original Hole

|                                |                                |                                      |                                          |
|--------------------------------|--------------------------------|--------------------------------------|------------------------------------------|
| Wellbore Name<br>Original Hole | Directional Type<br>Horizontal | Min Kick Off Depth (ftKB)<br>8,556.0 | Vertical Section Direction (*)<br>356.27 |
| Hole Size (in)                 | Act Top (ftKB)                 |                                      | Act Btm (ftKB)                           |
| 17 1/2                         | 32.6                           |                                      | 838.0                                    |
| 12 1/4                         | 838.0                          |                                      | 4,580.0                                  |
| 8 3/4                          | 4,580.0                        |                                      | 13,803.0                                 |

### <typ>, <make> on <dtmstart>

|          |      |       |              |         |    |
|----------|------|-------|--------------|---------|----|
| Sub-Type |      |       | Install Date |         |    |
| Des      | Make | Model | WP (psi)     | Service | SN |

### Surface, Planned? -N, 828ftKB

|                               |                       |                           |         |                       |       |                              |            |                        |                       |                       |  |
|-------------------------------|-----------------------|---------------------------|---------|-----------------------|-------|------------------------------|------------|------------------------|-----------------------|-----------------------|--|
| Casing Description<br>Surface |                       | Wellbore<br>Original Hole |         | Run Date<br>4/16/2016 |       | Set Depth (MD) (ftKB)<br>828 |            | Stick Up (ftKB)<br>0.3 |                       | Set Tension (kips)    |  |
| Centralizers<br>9             |                       |                           |         |                       |       | Scratchers                   |            |                        |                       |                       |  |
| 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         | 13 3/8                    | 12.625  | 54.50                 | J-55  |                              | ST&C       | 33.00                  | 0                     | 33                    |  |
| 1                             | 13-3/8 UH-2 CSG Head  | 13 3/8                    | 12.625  | 54.50                 | J-55  |                              | ST&C       | 2.88                   | 33                    | 36                    |  |
| 1                             | Pup Joint             | 13 3/8                    | 12.625  | 54.50                 | J-55  |                              | ST&C       | 3.72                   | 36                    | 39                    |  |
| 18                            | Casing Joint          | 13 3/8                    | 12.625  | 54.50                 | J-55  |                              | ST&C       | 743.11                 | 39                    | 782                   |  |
| 1                             | Float Collar          | 13 3/8                    | 12.625  | 54.50                 | J-55  |                              | ST&C       | 1.32                   | 782                   | 784                   |  |
| 1                             | Casing Joint          | 13 3/8                    | 12.625  | 54.50                 | J-55  |                              | ST&C       | 42.45                  | 784                   | 826                   |  |
| 1                             | TX Pattern Float Shoe | 13 3/8                    | 12.625  | 54.50                 | J-55  |                              | ST&C       | 1.77                   | 826                   | 828                   |  |

### Intermediate Casing 1, Planned? -N, 4,570ftKB

|                                             |               |                           |         |                       |        |                                |            |                        |                       |                       |  |
|---------------------------------------------|---------------|---------------------------|---------|-----------------------|--------|--------------------------------|------------|------------------------|-----------------------|-----------------------|--|
| Casing Description<br>Intermediate Casing 1 |               | Wellbore<br>Original Hole |         | Run Date<br>5/30/2016 |        | Set Depth (MD) (ftKB)<br>4,570 |            | Stick Up (ftKB)<br>0.3 |                       | Set Tension (kips)    |  |
| Centralizers<br>31                          |               |                           |         |                       |        | Scratchers                     |            |                        |                       |                       |  |
| 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 | 9 5/8                     | 8.835   | 40.00                 | HCK-55 |                                | LTC        | 35.00                  | 0                     | 35                    |  |
| 1                                           | Hanger        | 9 5/8                     | 8.835   | 40.00                 | HCK-55 |                                | LTC        | 1.63                   | 35                    | 36                    |  |
| 1                                           | Hanger PUP    | 9 5/8                     | 8.835   | 40.00                 | HCK-55 |                                | LTC        | 4.20                   | 36                    | 41                    |  |
| 106                                         | Casing Joint  | 9 5/8                     | 8.835   | 40.00                 | HCK-55 |                                | LTC        | 4,441.23               | 41                    | 4,482                 |  |
| 1                                           | Float Collar  | 9 5/8                     | 8.835   | 40.00                 | HCK-55 |                                | LTC        | 1.48                   | 4,482                 | 4,483                 |  |
| 2                                           | Casing Joint  | 9 5/8                     | 8.835   | 40.00                 | HCK-55 |                                | LTC        | 85.10                  | 4,483                 | 4,568                 |  |
| 1                                           | Float Shoe    | 9 5/8                     | 8.835   | 40.00                 | HCK-55 |                                | LTC        | 1.64                   | 4,568                 | 4,570                 |  |

### Production Casing, Planned? -N, 13,788ftKB

|                                         |              |                           |                      |            |                                 |                  |                        |          |                       |                       |
|-----------------------------------------|--------------|---------------------------|----------------------|------------|---------------------------------|------------------|------------------------|----------|-----------------------|-----------------------|
| Casing Description<br>Production Casing |              | Wellbore<br>Original Hole | Run Date<br>6/8/2016 |            | Set Depth (MD) (ftKB)<br>13,788 |                  | Stick Up (ftKB)<br>0.5 |          | Set Tension (kips)    |                       |
| Centralizers<br>71                      |              |                           |                      |            | Scratchers                      |                  |                        |          |                       |                       |
| 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 Jt   | 5 1/2                     | 4.778                | 20.00      | HCP-110                         |                  | TXP-BTC                | 34.00    | 0                     | 34                    |
| 1                                       | Hanger       | 5 1/2                     | 4.778                | 20.00      | HCP-110                         |                  | TXP-BTC                | 1.14     | 34                    | 35                    |
| 1                                       | Hanger PUP   | 5 1/2                     | 4.778                | 20.00      | HCP-110                         |                  | TXP-BTC                | 4.51     | 35                    | 39                    |
| 205                                     | Casing Joint | 5 1/2                     | 4.778                | 20.00      | HCP-110                         |                  | TXP-BTC                | 8,459.50 | 39                    | 8,499                 |
| 1                                       | Pup Jt       | 5 1/2                     | 4.778                | 20.00      | HCP-110                         |                  | TXP-BTC                | 5.14     | 8,499                 | 8,504                 |
| 125                                     | Casing Joint | 5 1/2                     | 4.778                | 20.00      | HCP-110                         |                  | TXP-BTC                | 5,115.15 | 8,504                 | 13,619                |
| 1                                       | RSI PUP      | 5 1/2                     | 4.778                | 20.00      | HCP-110                         |                  | TXP-BTC                | 10.48    | 13,619                | 13,629                |
| 1                                       | RSI          | 5 1/2                     | 4.778                | 20.00      | HCP-110                         |                  | TXP-BTC                | 6.62     | 13,629                | 13,636                |
| 1                                       | RSI PUP      | 5 1/2                     | 4.778                | 20.00      | HCP-110                         |                  | TXP-BTC                | 10.21    | 13,636                | 13,646                |





# Cement Summary

Surface Casing Cement

|                                            |                               |                                              |                        |                                |                  |
|--------------------------------------------|-------------------------------|----------------------------------------------|------------------------|--------------------------------|------------------|
| Well Name<br>SALADO DRAW WE 14 FED P7 003H |                               | Lease                                        | Field Name<br>JENNINGS | Business Unit<br>Mid-Continent |                  |
| Ground Elevation (ft)<br>3,165.00          | Original RKB (ft)<br>3,197.60 | Current RKB Elevation<br>3,197.60, 3/28/2016 |                        | Mud Line Elevation (ft)        | Water Depth (ft) |

| Jts | Item Des     | OD (in) | ID (in) | Wt (lb/ft) | Grade   | Top Conn Sz (in) | Top Thread | Len (ft) | Top Depth (MD) (ftKB) | Ben Depth (MD) (ftKB) |
|-----|--------------|---------|---------|------------|---------|------------------|------------|----------|-----------------------|-----------------------|
| 1   | Casing Joint | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 40.47    | 13,646                | 13,687                |
| 1   | LC PUP       | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 10.15    | 13,687                | 13,697                |
| 1   | Land Collar  | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 1.57     | 13,697                | 13,698                |
| 1   | Casing Joint | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 42.05    | 13,698                | 13,741                |
| 1   | Float Collar | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 2.41     | 13,741                | 13,743                |
| 1   | Vibrator     | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 2.22     | 13,743                | 13,745                |
| 1   | Casing Joint | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 40.18    | 13,745                | 13,785                |
| 1   | Float Shoe   | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 2.69     | 13,785                | 13,788                |

## Surface Casing Cement, Casing, 4/17/2016 03:30

|                                         |  |                                                      |  |                           |  |
|-----------------------------------------|--|------------------------------------------------------|--|---------------------------|--|
| Cementing Start Date<br>4/17/2016       |  | Cementing End Date<br>4/17/2016                      |  | Wellbore<br>Original Hole |  |
| Evaluation Method<br>Returns to Surface |  | Cement Evaluation Results<br>107 bbls cmt to surface |  |                           |  |
| Comment                                 |  |                                                      |  |                           |  |

## 1, 32.6-838.0ftKB

|                                    |                                  |                                  |                               |                                       |                   |
|------------------------------------|----------------------------------|----------------------------------|-------------------------------|---------------------------------------|-------------------|
| Top Depth (ftKB)<br>32.6           | Bottom Depth (ftKB)<br>838.0     | Full Return?<br>Y                | Vol Cement Ret (bbl)<br>107.0 | Top Plug?<br>Y                        | Bottom Plug?<br>N |
| Initial Pump Rate (bbl/min)<br>4.4 | Final Pump Rate (bbl/min)<br>2.1 | Avg Pump Rate (bbl/min)<br>5.1   |                               | Final Pump Pressure (psi)<br>316.0    |                   |
| Plug Bump Pressure (psi)<br>875.0  |                                  | Pipe Reciprocated?<br>N          |                               | Reciprocation Stroke Length (ft)<br>N |                   |
| Reciprocation Rate (spm)           |                                  | Pipe Rotated?<br>N               |                               | Pipe RPM (rpm)                        |                   |
| Depth Tagged (MD) (ftKB)           |                                  | Tag Method                       |                               | Drill Out Diameter (in)               |                   |
| Drill Out Date                     |                                  | Depth Plug Drilled Out To (ftKB) |                               | Drill Out Date                        |                   |

## Spacer

|                      |                               |                           |                               |                                |
|----------------------|-------------------------------|---------------------------|-------------------------------|--------------------------------|
| Fluid Type<br>Spacer | Fluid Description             | Quantity (sacks)          | Class                         | Volume Pumped (bbl)<br>40.0    |
| Estimated Top (ftKB) | Estimated Bottom Depth (ftKB) | Percent Excess Pumped (%) | Yield (ft <sup>3</sup> /sack) | Fluid Mix Ratio (gal/sack)     |
| Free Water (%)       | Density (lb/gal)<br>8.33      | Zero Gel Time (min)       | Thickening Time (hr)          | 1st Compressive Strength (psi) |

## Cement Fluid Additives

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

## Tail

|                              |                                        |                                    |                                       |                                    |
|------------------------------|----------------------------------------|------------------------------------|---------------------------------------|------------------------------------|
| Fluid Type<br>Tail           | Fluid Description                      | Quantity (sacks)<br>960            | Class<br>C                            | Volume Pumped (bbl)<br>227.0       |
| Estimated Top (ftKB)<br>32.6 | Estimated Bottom Depth (ftKB)<br>838.0 | Percent Excess Pumped (%)<br>125.0 | Yield (ft <sup>3</sup> /sack)<br>1.33 | Fluid Mix Ratio (gal/sack)<br>6.37 |
| Free Water (%)               | Density (lb/gal)<br>14.80              | Zero Gel Time (min)                | Thickening Time (hr)                  | 1st Compressive Strength (psi)     |

## Cement Fluid Additives

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

## Displacement

|                            |                               |                           |                               |                                |
|----------------------------|-------------------------------|---------------------------|-------------------------------|--------------------------------|
| Fluid Type<br>Displacement | Fluid Description             | Quantity (sacks)          | Class                         | Volume Pumped (bbl)<br>119.0   |
| Estimated Top (ftKB)       | Estimated Bottom Depth (ftKB) | Percent Excess Pumped (%) | Yield (ft <sup>3</sup> /sack) | Fluid Mix Ratio (gal/sack)     |
| Free Water (%)             | Density (lb/gal)              | Zero Gel Time (min)       | Thickening Time (hr)          | 1st Compressive Strength (psi) |

## Cement Fluid Additives

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





# Cement Summary

Intermediate Casing Cement

|                                            |                               |                                              |                                             |
|--------------------------------------------|-------------------------------|----------------------------------------------|---------------------------------------------|
| Well Name<br>SALADO DRAW WE 14 FED P7 003H | Lease                         | Field Name<br>JENNINGS                       | Business Unit<br>Mid-Continent              |
| Ground Elevation (ft)<br>3,165.00          | Original RKB (ft)<br>3,197.60 | Current RKB Elevation<br>3,197.60, 3/28/2016 | Mud Line Elevation (ft)<br>Water Depth (ft) |

|                                |                                |                                      |                                          |
|--------------------------------|--------------------------------|--------------------------------------|------------------------------------------|
| <b>Original Hole</b>           |                                |                                      |                                          |
| Wellbore Name<br>Original Hole | Directional Type<br>Horizontal | Min Kick Off Depth (ftKB)<br>8,556.0 | Vertical Section Direction (°)<br>356.27 |
| Hole Size (in)                 | Act Top (ftKB)                 | Act Btm (ftKB)                       |                                          |
| 17 1/2                         | 32.6                           | 838.0                                |                                          |
| 12 1/4                         | 838.0                          | 4,580.0                              |                                          |
| 8 3/4                          | 4,580.0                        | 13,803.0                             |                                          |

<typ>, <make> on <dtmstart>

|          |              |       |          |         |    |
|----------|--------------|-------|----------|---------|----|
| Sub-Type | Install Date |       |          |         |    |
| Des      | Make         | Model | WP (psi) | Service | SN |

**Surface, Planned? - N, 828ftKB**

|                               |                           |                       |                              |                        |                    |
|-------------------------------|---------------------------|-----------------------|------------------------------|------------------------|--------------------|
| Casing Description<br>Surface | Wellbore<br>Original Hole | Run Date<br>4/16/2016 | Set Depth (MD) (ftKB)<br>828 | Stick Up (ftKB)<br>0.3 | Set Tension (kips) |
| Centralizers<br>9             | Scratchers                |                       |                              |                        |                    |

| 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         | 13 3/8  | 12.625  | 54.50      | J-55  |                  | ST&C       | 33.00    | 0                     | 33                    |
| 1   | 13-3/8 UH-2 CSG Head  | 13 3/8  | 12.625  | 54.50      | J-55  |                  | ST&C       | 2.88     | 33                    | 36                    |
| 1   | Pup Joint             | 13 3/8  | 12.625  | 54.50      | J-55  |                  | ST&C       | 3.72     | 36                    | 39                    |
| 18  | Casing Joint          | 13 3/8  | 12.625  | 54.50      | J-55  |                  | ST&C       | 743.11   | 39                    | 782                   |
| 1   | Float Collar          | 13 3/8  | 12.625  | 54.50      | J-55  |                  | ST&C       | 1.32     | 782                   | 784                   |
| 1   | Casing Joint          | 13 3/8  | 12.625  | 54.50      | J-55  |                  | ST&C       | 42.45    | 784                   | 826                   |
| 1   | TX Pattern Float Shoe | 13 3/8  | 12.625  | 54.50      | J-55  |                  | ST&C       | 1.77     | 826                   | 828                   |

**Intermediate Casing 1, Planned? - N, 4,570ftKB**

|                                             |                           |                       |                                |                        |                    |
|---------------------------------------------|---------------------------|-----------------------|--------------------------------|------------------------|--------------------|
| Casing Description<br>Intermediate Casing 1 | Wellbore<br>Original Hole | Run Date<br>5/30/2016 | Set Depth (MD) (ftKB)<br>4,570 | Stick Up (ftKB)<br>0.3 | Set Tension (kips) |
| Centralizers<br>31                          | Scratchers                |                       |                                |                        |                    |

| 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 | 9 5/8   | 8.835   | 40.00      | HCK-55 |                  | LTC        | 35.00    | 0                     | 35                    |
| 1   | Hanger        | 9 5/8   | 8.835   | 40.00      | HCK-55 |                  | LTC        | 1.63     | 35                    | 36                    |
| 1   | Hanger PUP    | 9 5/8   | 8.835   | 40.00      | HCK-55 |                  | LTC        | 4.20     | 36                    | 41                    |
| 106 | Casing Joint  | 9 5/8   | 8.835   | 40.00      | HCK-55 |                  | LTC        | 4,441.23 | 41                    | 4,482                 |
| 1   | Float Collar  | 9 5/8   | 8.835   | 40.00      | HCK-55 |                  | LTC        | 1.48     | 4,482                 | 4,483                 |
| 2   | Casing Joint  | 9 5/8   | 8.835   | 40.00      | HCK-55 |                  | LTC        | 85.10    | 4,483                 | 4,568                 |
| 1   | Float Shoe    | 9 5/8   | 8.835   | 40.00      | HCK-55 |                  | LTC        | 1.64     | 4,568                 | 4,570                 |

**Production Casing, Planned? - N, 13,788ftKB**

|                                         |                           |                      |                                 |                        |                    |
|-----------------------------------------|---------------------------|----------------------|---------------------------------|------------------------|--------------------|
| Casing Description<br>Production Casing | Wellbore<br>Original Hole | Run Date<br>6/8/2016 | Set Depth (MD) (ftKB)<br>13,788 | Stick Up (ftKB)<br>0.5 | Set Tension (kips) |
| Centralizers<br>71                      | Scratchers                |                      |                                 |                        |                    |

| 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 Jt   | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 34.00    | 0                     | 34                    |
| 1   | Hanger       | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 1.14     | 34                    | 35                    |
| 1   | Hanger PUP   | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 4.51     | 35                    | 39                    |
| 205 | Casing Joint | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 8,459.50 | 39                    | 8,499                 |
| 1   | Pup Jt       | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 5.14     | 8,499                 | 8,504                 |
| 125 | Casing Joint | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 5,115.15 | 8,504                 | 13,619                |
| 1   | RSI PUP      | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 10.48    | 13,619                | 13,629                |
| 1   | RSI          | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 6.62     | 13,629                | 13,636                |
| 1   | RSI PUP      | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 10.21    | 13,636                | 13,646                |





# Cement Summary

## Intermediate Casing Cement

|                                            |                               |                                              |  |                        |  |                                |                  |
|--------------------------------------------|-------------------------------|----------------------------------------------|--|------------------------|--|--------------------------------|------------------|
| Well Name<br>SALADO DRAW WE 14 FED P7 003H |                               | Lease                                        |  | Field Name<br>JENNINGS |  | Business Unit<br>Mid-Continent |                  |
| Ground Elevation (ft)<br>3,165.00          | Original RKB (ft)<br>3,197.60 | Current RKB Elevation<br>3,197.60, 3/28/2016 |  |                        |  | Mud Line Elevation (ft)        | Water Depth (ft) |

| 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   | Casing Joint | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 40.47    | 13,646                | 13,687                |
| 1   | LC PUP       | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 10.15    | 13,687                | 13,697                |
| 1   | Land Collar  | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 1.57     | 13,697                | 13,698                |
| 1   | Casing Joint | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 42.05    | 13,698                | 13,741                |
| 1   | Float Collar | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 2.41     | 13,741                | 13,743                |
| 1   | Vibrator     | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 2.22     | 13,743                | 13,745                |
| 1   | Casing Joint | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 40.18    | 13,745                | 13,785                |
| 1   | Float Shoe   | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 2.69     | 13,785                | 13,788                |

### Intermediate Casing Cement, Casing, 5/30/2016 19:50

|                                         |  |                                                             |  |                           |  |
|-----------------------------------------|--|-------------------------------------------------------------|--|---------------------------|--|
| Cementing Start Date<br>5/30/2016       |  | Cementing End Date<br>5/30/2016                             |  | Wellbore<br>Original Hole |  |
| Evaluation Method<br>Returns to Surface |  | Cement Evaluation Results<br>235 bbl /543 sx CMT to surface |  |                           |  |

Comment  
Design lift pressure - 970 psi

### 1, 32.6-4,580.0ftKB

|                                    |                                  |                                  |                               |                                      |                   |
|------------------------------------|----------------------------------|----------------------------------|-------------------------------|--------------------------------------|-------------------|
| Top Depth (ftKB)<br>32.6           | Bottom Depth (ftKB)<br>4,580.0   | Full Return?<br>Y                | Vol Cement Ret (bbl)<br>235.0 | Top Plug?<br>Y                       | Bottom Plug?<br>N |
| Initial Pump Rate (bbl/min)<br>5.4 | Final Pump Rate (bbl/min)<br>3   | Avg Pump Rate (bbl/min)<br>6.5   |                               | Final Pump Pressure (psi)<br>1,140.0 |                   |
| Pipe Reciprocated?<br>N            | Reciprocation Stroke Length (ft) | Reciprocation Rate (spm)         |                               | Pipe Rotated?<br>N                   |                   |
| Depth Tagged (MD) (ftKB)           | Tag Method                       | Depth Plug Drilled Out To (ftKB) |                               | Drill Out Diameter (in)              |                   |
|                                    |                                  |                                  |                               | Drill Out Date                       |                   |

### Spacer

|                              |                                       |                                |                                       |                                     |  |
|------------------------------|---------------------------------------|--------------------------------|---------------------------------------|-------------------------------------|--|
| Fluid Type<br>Spacer         | Fluid Description<br>Dyed Spacer      | Quantity (sacks)<br>3          | Class<br>C                            | Volume Pumped (bbl)<br>35.0         |  |
| Estimated Top (ftKB)<br>32.6 | Estimated Bottom Depth (ftKB)<br>32.6 | Percent Excess Pumped (%)<br>0 | Yield (ft <sup>3</sup> /sack)<br>2.43 | Fluid Mix Ratio (gal/sack)<br>13.77 |  |
| Free Water (%)<br>0          | Density (lb/gal)<br>8.30              | Zero Gel Time (min)<br>0       | Thickening Time (hr)<br>0             | 1st Compressive Strength (psi)<br>0 |  |

### Cement Fluid Additives

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

### Lead

|                              |                                          |                                    |                                       |                                     |  |
|------------------------------|------------------------------------------|------------------------------------|---------------------------------------|-------------------------------------|--|
| Fluid Type<br>Lead           | Fluid Description<br>50:50 POZ/C         | Quantity (sacks)<br>1,055          | Class<br>C                            | Volume Pumped (bbl)<br>456.0        |  |
| Estimated Top (ftKB)<br>32.6 | Estimated Bottom Depth (ftKB)<br>2,731.0 | Percent Excess Pumped (%)<br>150.0 | Yield (ft <sup>3</sup> /sack)<br>2.43 | Fluid Mix Ratio (gal/sack)<br>13.77 |  |
| Free Water (%)<br>0          | Density (lb/gal)<br>11.90                | Zero Gel Time (min)<br>0           | Thickening Time (hr)<br>0             | 1st Compressive Strength (psi)<br>0 |  |

### Cement Fluid Additives

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

### Tail

|                                 |                                           |                                   |                                       |                                     |  |
|---------------------------------|-------------------------------------------|-----------------------------------|---------------------------------------|-------------------------------------|--|
| Fluid Type<br>Tail              | Fluid Description<br>Class C + 0.25% D800 | Quantity (sacks)<br>462           | Class<br>C                            | Volume Pumped (bbl)<br>109.0        |  |
| Estimated Top (ftKB)<br>2,731.0 | Estimated Bottom Depth (ftKB)<br>4,578.0  | Percent Excess Pumped (%)<br>85.0 | Yield (ft <sup>3</sup> /sack)<br>1.33 | Fluid Mix Ratio (gal/sack)<br>6.35  |  |
| Free Water (%)<br>0             | Density (lb/gal)<br>14.80                 | Zero Gel Time (min)<br>0          | Thickening Time (hr)<br>0             | 1st Compressive Strength (psi)<br>0 |  |

### Cement Fluid Additives

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





# Cement Summary

Intermediate Casing Cement

|                                            |                               |                                              |                        |                                |                  |
|--------------------------------------------|-------------------------------|----------------------------------------------|------------------------|--------------------------------|------------------|
| Well Name<br>SALADO DRAW WE 14 FED P7 003H |                               | Lease                                        | Field Name<br>JENNINGS | Business Unit<br>Mid-Continent |                  |
| Ground Elevation (ft)<br>3,165.00          | Original RKB (ft)<br>3,197.60 | Current RKB Elevation<br>3,197.60, 3/28/2016 |                        | Mud Line Elevation (ft)        | Water Depth (ft) |

| Displacement               |                                   |                           |                               |                                |
|----------------------------|-----------------------------------|---------------------------|-------------------------------|--------------------------------|
| Fluid Type<br>Displacement | Fluid Description<br>Displacement | Quantity (sacks)          | Class                         | Volume Pumped (bbl)<br>340.0   |
| Estimated Top (ftKB)       | Estimated Bottom Depth (ftKB)     | Percent Excess Pumped (%) | Yield (ft <sup>3</sup> /sack) | Fluid Mix Ratio (gal/sack)     |
| Free Water (%)             | Density (lb/gal)<br>8.30          | Zero Gel Time (min)       | Thickening Time (hr)          | 1st Compressive Strength (psi) |

| Cement Fluid Additives |      |      |
|------------------------|------|------|
| Add                    | Type | Conc |
|                        |      |      |





# Cement Summary

Production Casing Cement

|                                            |                               |                                              |                        |                                |                  |
|--------------------------------------------|-------------------------------|----------------------------------------------|------------------------|--------------------------------|------------------|
| Well Name<br>SALADO DRAW WE 14 FED P7 003H |                               | Lease                                        | Field Name<br>JENNINGS | Business Unit<br>Mid-Continent |                  |
| Ground Elevation (ft)<br>3,165.00          | Original RKB (ft)<br>3,197.60 | Current RKB Elevation<br>3,197.60, 3/28/2016 |                        | Mud Line Elevation (ft)        | Water Depth (ft) |

## Original Hole

|                                |                                |                                      |                                          |
|--------------------------------|--------------------------------|--------------------------------------|------------------------------------------|
| Wellbore Name<br>Original Hole | Directional Type<br>Horizontal | Min Kick Off Depth (ftKB)<br>8,556.0 | Vertical Section Direction (°)<br>356.27 |
| Hole Size (in)                 | Act Top (ftKB)                 | Act Btm (ftKB)                       |                                          |
| 17 1/2                         | 32.6                           | 838.0                                |                                          |
| 12 1/4                         | 838.0                          | 4,580.0                              |                                          |
| 8 3/4                          | 4,580.0                        | 13,803.0                             |                                          |

<typ>, <make> on <dtmstart>

|          |              |       |          |         |    |
|----------|--------------|-------|----------|---------|----|
| Sub-Type | Install Date |       |          |         |    |
| Des      | Make         | Model | WP (psi) | Service | SN |

## Surface, Planned? -N, 828ftKB

| Casing Description<br>Surface |                       | Wellbore<br>Original Hole | Run Date<br>4/16/2016 |            | Set Depth (MD) (ftKB)<br>828 |                  | Stick Up (ftKB)<br>0.3 |          | Set Tension (kips)    |                       |  |
|-------------------------------|-----------------------|---------------------------|-----------------------|------------|------------------------------|------------------|------------------------|----------|-----------------------|-----------------------|--|
| Centralizers<br>9             |                       |                           |                       |            | Scratchers                   |                  |                        |          |                       |                       |  |
| 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         | 13 3/8                    | 12.625                | 54.50      | J-55                         |                  | ST&C                   | 33.00    | 0                     | 33                    |  |
| 1                             | 13-3/8 UH-2 CSG Head  | 13 3/8                    | 12.625                | 54.50      | J-55                         |                  | ST&C                   | 2.88     | 33                    | 36                    |  |
| 1                             | Pup Joint             | 13 3/8                    | 12.625                | 54.50      | J-55                         |                  | ST&C                   | 3.72     | 36                    | 39                    |  |
| 18                            | Casing Joint          | 13 3/8                    | 12.625                | 54.50      | J-55                         |                  | ST&C                   | 743.11   | 39                    | 782                   |  |
| 1                             | Float Collar          | 13 3/8                    | 12.625                | 54.50      | J-55                         |                  | ST&C                   | 1.32     | 782                   | 784                   |  |
| 1                             | Casing Joint          | 13 3/8                    | 12.625                | 54.50      | J-55                         |                  | ST&C                   | 42.45    | 784                   | 826                   |  |
| 1                             | TX Pattern Float Shoe | 13 3/8                    | 12.625                | 54.50      | J-55                         |                  | ST&C                   | 1.77     | 826                   | 828                   |  |

## Intermediate Casing 1, Planned? -N, 4,570ftKB

| Casing Description<br>Intermediate Casing 1 |               | Wellbore<br>Original Hole |         | Run Date<br>5/30/2016 |        | Set Depth (MD) (ftKB)<br>4,570 |            | Suck Up (ftKB)<br>0.3 |                          | Set Tension (kips)       |  |
|---------------------------------------------|---------------|---------------------------|---------|-----------------------|--------|--------------------------------|------------|-----------------------|--------------------------|--------------------------|--|
| Centralizers<br>31                          |               |                           |         |                       |        | Scratchers                     |            |                       |                          |                          |  |
| Jts                                         | Item Des      | OD (in)                   | ID (in) | Wt (lb/ft)            | Grade  | Top Conn Sz<br>(in)            | Top Thread | Len (ft)              | Top Depth (MD)<br>(ftKB) | Btm Depth (MD)<br>(ftKB) |  |
| 1                                           | Landing Joint | 9 5/8                     | 8.835   | 40.00                 | HCK-55 |                                | LTC        | 35.00                 | 0                        | 35                       |  |
| 1                                           | Hanger        | 9 5/8                     | 8.835   | 40.00                 | HCK-55 |                                | LTC        | 1.63                  | 35                       | 36                       |  |
| 1                                           | Hanger PUP    | 9 5/8                     | 8.835   | 40.00                 | HCK-55 |                                | LTC        | 4.20                  | 36                       | 41                       |  |
| 106                                         | Casing Joint  | 9 5/8                     | 8.835   | 40.00                 | HCK-55 |                                | LTC        | 4,441.23              | 41                       | 4,482                    |  |
| 1                                           | Float Collar  | 9 5/8                     | 8.835   | 40.00                 | HCK-55 |                                | LTC        | 1.48                  | 4,482                    | 4,483                    |  |
| 2                                           | Casing Joint  | 9 5/8                     | 8.835   | 40.00                 | HCK-55 |                                | LTC        | 85.10                 | 4,483                    | 4,568                    |  |
| 1                                           | Float Shoe    | 9 5/8                     | 8.835   | 40.00                 | HCK-55 |                                | LTC        | 1.64                  | 4,568                    | 4,570                    |  |

## Production Casing, Planned? -N, 13,788ftKB

| Casing Description<br>Production Casing |              | Wellbore<br>Original Hole | Run Date<br>6/8/2016 | Set Depth (MD) (ftKB)<br>13,788 |         | Stick Up (ftKB)<br>0.5 |            | Set Tension (kips) |                       |                       |
|-----------------------------------------|--------------|---------------------------|----------------------|---------------------------------|---------|------------------------|------------|--------------------|-----------------------|-----------------------|
| Centralizers<br>71                      |              |                           |                      | Scratchers                      |         |                        |            |                    |                       |                       |
| 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 Jt   | 5 1/2                     | 4.778                | 20.00                           | HCP-110 |                        | TXP-BTC    | 34.00              | 0                     | 34                    |
| 1                                       | Hanger       | 5 1/2                     | 4.778                | 20.00                           | HCP-110 |                        | TXP-BTC    | 1.14               | 34                    | 35                    |
| 1                                       | Hanger PUP   | 5 1/2                     | 4.778                | 20.00                           | HCP-110 |                        | TXP-BTC    | 4.51               | 35                    | 39                    |
| 205                                     | Casing Joint | 5 1/2                     | 4.778                | 20.00                           | HCP-110 |                        | TXP-BTC    | 8,459.50           | 39                    | 8,499                 |
| 1                                       | Pup Jt       | 5 1/2                     | 4.778                | 20.00                           | HCP-110 |                        | TXP-BTC    | 5.14               | 8,499                 | 8,504                 |
| 125                                     | Casing Joint | 5 1/2                     | 4.778                | 20.00                           | HCP-110 |                        | TXP-BTC    | 5,115.15           | 8,504                 | 13,619                |
| 1                                       | RSI PUP      | 5 1/2                     | 4.778                | 20.00                           | HCP-110 |                        | TXP-BTC    | 10.48              | 13,619                | 13,629                |
| 1                                       | RSI          | 5 1/2                     | 4.778                | 20.00                           | HCP-110 |                        | TXP-BTC    | 6.62               | 13,629                | 13,636                |
| 1                                       | RSI PUP      | 5 1/2                     | 4.778                | 20.00                           | HCP-110 |                        | TXP-BTC    | 10.21              | 13,636                | 13,646                |





# Cement Summary

Production Casing Cement

|                                            |                               |                                              |  |                        |  |                                |                  |
|--------------------------------------------|-------------------------------|----------------------------------------------|--|------------------------|--|--------------------------------|------------------|
| Well Name<br>SALADO DRAW WE 14 FED P7 003H |                               | Lease                                        |  | Field Name<br>JENNINGS |  | Business Unit<br>Mid-Continent |                  |
| Ground Elevation (ft)<br>3.165 00          | Original RKB (ft)<br>3.197 60 | Current RKB Elevation<br>3.197.60, 3/28/2016 |  |                        |  | Mud Line Elevation (ft)        | Water Depth (ft) |

| 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   | Casing Joint | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 40.47    | 13,646                | 13,687                |
| 1   | LC PUP       | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 10.15    | 13,687                | 13,697                |
| 1   | Land Collar  | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 1.57     | 13,697                | 13,698                |
| 1   | Casing Joint | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 42.05    | 13,698                | 13,741                |
| 1   | Float Collar | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 2.41     | 13,741                | 13,743                |
| 1   | Vibrator     | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 2.22     | 13,743                | 13,745                |
| 1   | Casing Joint | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 40.18    | 13,745                | 13,785                |
| 1   | Float Shoe   | 5 1/2   | 4.778   | 20.00      | HCP-110 |                  | TXP-BTC    | 2.69     | 13,785                | 13,788                |

## Cementing Casing Cement, Casing, 6/8/2016 06:45

|                                    |  |                                                           |  |                           |  |
|------------------------------------|--|-----------------------------------------------------------|--|---------------------------|--|
| Cementing Start Date<br>6/8/2016   |  | Cementing End Date<br>6/8/2016                            |  | Wellbore<br>Original Hole |  |
| Evaluation Method<br>Lift Pressure |  | Cement Evaluation Results<br>Final Lift pressure 1815 psi |  |                           |  |

Comment  
Actual final lift pressure exceeded design lift pressure. Design lift pressure 1043

## 1, 2,610.0-13,803.0ftKB

|                                    |                                  |                                  |                             |                                      |                                     |
|------------------------------------|----------------------------------|----------------------------------|-----------------------------|--------------------------------------|-------------------------------------|
| Top Depth (ftKB)<br>2,610.0        | Bottom Depth (ftKB)<br>13,803.0  | Full Return?<br>Y                | Vol Cement Ret (bbl)<br>0.0 | Top Plug?<br>Y                       | Bottom Plug?<br>Y                   |
| Initial Pump Rate (bbl/min)<br>4.7 | Final Pump Rate (bbl/min)<br>3.5 | Avg Pump Rate (bbl/min)<br>6.8   |                             | Final Pump Pressure (psi)<br>1,815.0 | Plug Bump Pressure (psi)<br>2,367.0 |
| Pipe Reciprocated?<br>N            | Reciprocation Stroke Length (ft) | Reciprocation Rate (spm)         |                             | Pipe Rotated?<br>N                   | Pipe RPM (rpm)                      |
| Depth Tagged (MD) (ftKB)           | Tag Method                       | Depth Plug Drilled Out To (ftKB) |                             | Drill Out Diameter (in)              | Drill Out Date                      |

## Spacer

|                                 |                                                                                                                     |                           |                               |                                |  |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------------|--------------------------------|--|
| Fluid Type<br>Spacer            | Fluid Description<br>MUDPUSH Express Spacer<br>D047 - .2 gal/bbl B389 - .45 lb/bbl BW/V Spacer D035 - 117.74 lb/bbl | Quantity (sacks)          | Class                         | Volume Pumped (bbl)<br>30.0    |  |
| Estimated Top (ftKB)<br>1,963.0 | Estimated Bottom Depth (ftKB)<br>2,610.0                                                                            | Percent Excess Pumped (%) | Yield (ft <sup>3</sup> /sack) | Fluid Mix Ratio (gal/sack)     |  |
| Free Water (%)                  | Density (lb/gal)<br>10.00                                                                                           | Zero Gel Time (min)       | Thickening Time (hr)          | 1st Compressive Strength (psi) |  |

## Cement Fluid Additives

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

## Lead

|                                 |                                                                                                                            |                                   |                                       |                                     |  |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------|-------------------------------------|--|
| Fluid Type<br>Lead              | Fluid Description<br>50:50 Poz/H + .2% D046 + 6.5% D020 + 8% D154 + .2% D065 + 2lb/sk B288 + 2 lb/sk B289 + .1% D208 spike | Quantity (sacks)<br>624           | Class<br>H                            | Volume Pumped (bbl)<br>299.0        |  |
| Estimated Top (ftKB)<br>2,610.0 | Estimated Bottom Depth (ftKB)<br>8,556.0                                                                                   | Percent Excess Pumped (%)<br>50.0 | Yield (ft <sup>3</sup> /sack)<br>2.69 | Fluid Mix Ratio (gal/sack)<br>15.77 |  |
| Free Water (%)                  | Density (lb/gal)<br>11.50                                                                                                  | Zero Gel Time (min)               | Thickening Time (hr)                  | 1st Compressive Strength (psi)      |  |

## Cement Fluid Additives

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

## Lead

|                                 |                                                                                            |                                   |                                       |                                    |  |
|---------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------|------------------------------------|--|
| Fluid Type<br>Lead              | Fluid Description<br>TXI + 3% D020 + .2% D046 + .2% D065 + .4% D238 + .4% D013 + .06% D208 | Quantity (sacks)<br>906           | Class<br>H                            | Volume Pumped (bbl)<br>258.0       |  |
| Estimated Top (ftKB)<br>8,556.0 | Estimated Bottom Depth (ftKB)<br>12,788.0                                                  | Percent Excess Pumped (%)<br>35.0 | Yield (ft <sup>3</sup> /sack)<br>1.60 | Fluid Mix Ratio (gal/sack)<br>8.62 |  |
| Free Water (%)                  | Density (lb/gal)<br>12.50                                                                  | Zero Gel Time (min)               | Thickening Time (hr)                  | 1st Compressive Strength (psi)     |  |





# Cement Summary

Production Casing Cement

|                                            |                               |                                              |                        |                                |                  |
|--------------------------------------------|-------------------------------|----------------------------------------------|------------------------|--------------------------------|------------------|
| Well Name<br>SALADO DRAW WE 14 FED P7 003H |                               | Lease                                        | Field Name<br>JENNINGS | Business Unit<br>Mid-Continent |                  |
| Ground Elevation (ft)<br>3,165.00          | Original RKB (ft)<br>3,197.60 | Current RKB Elevation<br>3,197.60, 3/28/2016 |                        | Mud Line Elevation (ft)        | Water Depth (ft) |

## Cement Fluid Additives

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

## Tail

|                                  |                                                                                                       |                                  |                                       |                                    |
|----------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------------|------------------------------------|
| Fluid Type<br>Tail               | Fluid Description<br>Class H + .2% D046 + .2%<br>D065 + .4% D167 + .15%<br>D800 + 75% D151 + .1% D208 | Quantity (sacks)<br>121          | Class<br>H                            | Volume Pumped (bbl)<br>47.0        |
| Estimated Top (ftKB)<br>12,788.0 | Estimated Bottom Depth (ftKB)<br>13,803.0                                                             | Percent Excess Pumped (%)<br>0.0 | Yield (ft <sup>3</sup> /sack)<br>2.18 | Fluid Mix Ratio (gal/sack)<br>9.55 |
| Free Water (%)                   | Density (lb/gal)<br>15.00                                                                             | Zero Gel Time (min)              | Thickening Time (hr)                  | 1st Compressive Strength (psi)     |

## Cement Fluid Additives

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

## Displacement

|                            |                                                         |                           |                               |                                    |
|----------------------------|---------------------------------------------------------|---------------------------|-------------------------------|------------------------------------|
| Fluid Type<br>Displacement | Fluid Description<br>20 bbls Acetic Acid 284 bbls<br>FW | Quantity (sacks)          | Class                         | Volume Pumped (bbl)<br>304.0       |
| Estimated Top (ftKB)       | Estimated Bottom Depth (ftKB)                           | Percent Excess Pumped (%) | Yield (ft <sup>3</sup> /sack) | Fluid Mix Ratio (gal/sack)<br>8.33 |
| Free Water (%)             | Density (lb/gal)<br>8.33                                | Zero Gel Time (min)       | Thickening Time (hr)          | 1st Compressive Strength (psi)     |

## Cement Fluid Additives

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