

Santa Fe Main Office  
Phone: (505) 476-3441  
General Information  
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State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
Revised July 18, 2013

Online Phone Directory Visit:  
<https://www.emnrd.nm.gov/ocd/contact-us/>

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

|  |  |   |
|--|--|---|
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br>(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)<br>1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <b>SWD</b> |  | WELL API NO.<br><b>30-015-38972</b>   |
| 2. Name of Operator<br><b>SPUR ENERGY PARTNERS LLC</b>   |  | 5. Indicate Type of Lease<br>STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 3. Address of Operator<br><b>9655 KATY FREEWAY, SUITE 500, HOUSTON, TX 77024</b>   |  | 6. State Oil & Gas Lease No.  |
| 4. Well Location<br>Unit Letter <b>A</b> : <b>660</b> feet from the <b>NORTH</b> line and <b>540</b> feet from the <b>EAST</b> line<br>Section <b>09</b> Township <b>17S</b> Range <b>29E</b> NMPM <b>EDDY</b> County  |  | 7. Lease Name or Unit Agreement Name<br><b>EMPIRE STATE SWD 9</b>                                   |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.)<br><b>3582' GR</b>  |  | 8. Well Number <b>4</b>   |
| 9. OGRID Number<br><b>328947</b>   |  | 10. Pool name or Wildcat<br><b>SWD; CISCO</b>   |

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

|  |  |   |  |
|--|--|---|--|
| <b>NOTICE OF INTENTION TO:</b><br>PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/><br>TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/><br>PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/><br>DOWNHOLE COMMINGLE <input type="checkbox"/><br>CLOSED-LOOP SYSTEM <input type="checkbox"/><br>OTHER: <input type="checkbox"/> PERFORM SRT <input checked="" type="checkbox"/> |  | <b>SUBSEQUENT REPORT OF:</b><br>REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/><br>COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input type="checkbox"/><br>CASING/CEMENT JOB <input type="checkbox"/><br>OTHER: <input type="checkbox"/> |  |
|--|--|---|--|

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

Spur Energy Partners LLC requests to run a step rate test to determine if injection pressure can be increased without fracturing the formation.

Please find procedure and wellbore diagram attached for your review.

Spud Date:

Rig Release Date:

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

SIGNATURE Sarah Chapman TITLE REGULATORY DIRECTOR DATE 08/11/2025

Type or print name SARAH CHAPMAN E-mail address: SCHAPMAN@SPURENERGY.COM PHONE: 832-930-8613  
**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
 Conditions of Approval (if any): \_\_\_\_\_

**Empire State SWD 9 #4****Step Rate Test**

Hunter Spragg - 817.914.0987

AFE - TBD

NW Shelf  
Eddy County, NM**OBJECTIVES**

Perform a step rate test on the Empire State SWD 9 #4 to determine if injection pressure can be raised without fracturing the formation. 45-minute steps chosen due to lower permeability but a large open-hole interval of 420'. Also, stabilization has been seen within 30 minutes in the SRTs that have been performed on offset wells with similar interval lengths and permeability.

- Estimated Frac tank set and fill - 9/1/2025
- Estimated BHP Bomb set date - 9/2/2025
- Estimated Well SI date - 9/4/2024
- Estimated SRT date - 9/6/2025
- Estimated Pressure Bomb retrieval date - 9/7/2025

| Well Information         |  |
|--------------------------|--|
| Surface Location (NAD83) | Latitude: 32.8546448° / Longitude: -104.0730438° |
| Ground Elevation / KB    | 3,582' / 18.5'                                   |
| API Number               | 30-015-38972                                     |
| AFE Number               | TBD  |

| Wellbore Details |                            |
|------------------|----------------------------|
| TVD / PBTD       | TVD: 8,805' / PBTD: 8,805' |
| Perforations MD' | 8,385' - 8,805'            |

| Casing & Tubing Details - Current/Planned |                 |              |       |       |          |         |           |              |            |            |
|---|-----------------|--------------|-------|-------|----------|---------|-----------|--------------|------------|------------|
| Size                                      | Depth (MD)      | Weight lb/ft | Grade | ID In | Drift In | Thread  | Burst psi | Collapse psi | Yield Mlbs | Cap bbl/ft |
| 7" csg                                    | 0' - 8,385'     | 26.0         | L-80  | 6.276 | 6.151    |         | 7,240     | 5,410        | 604        | .0383      |
| 3.5" std Polycore tbg                     | 0' - 6,078'     | 9.3          | L-80  | 2.625 | 2.500    | EUE 8RD | 10,160    | 10,540       | 207        | .0066      |
| 3.5" Mod Polycore tbg                     | 6,078' - 8,321' | 9.3          | L-80  | 2.441 | 2.347    | EUE 8RD | 10,160    | 10,540       | 207        | .0058      |

**PROCEDURE**

Spur Energy Partners LLC is committed to providing a safe working environment for all personnel. A safety meeting will be held prior to commencing each operation in order to define/clarify objectives, roles and responsibilities, identify all potential risk/hazards and establish a work procedure that is safe and environmentally sound. Meetings are to be documented on the reports returned to Spur Energy Partners LLC.

**PERFORM SAFETY CHECKS AND SAFETY MEETING**

1. Perform a safety meeting prior to rigging up ANY equipment on location. Discuss the job procedure and objective with all personnel on location. Document the safety meeting on the daily report sent to Spur. Make note of all potential risks/hazards, and clearly identify an emergency route and emergency vehicle. Also make note of any new or inexperienced personnel on location. Ensure proper Personal Protective Equipment (PPE) is used during the job. Minimums are hard hats, steel toes, safety glasses, H<sub>2</sub>S monitors, and FR certified clothing as required. Designate a smoking area off location and 100' from any potential hydrocarbons.

**Preparation**

1. Set 3 - 500 bbl Frac tanks on location and begin filling with produced water from the facility. Do not use fresh water or produced water from any of the other surrounding facilities. Fill completely. Leave hoses attached to water tanks at the facility so water in water tanks can be utilized at the end of the test if needed.
2. Replace all wellhead valves with 3k rated valves.

**72 hours before SRT**

3. Notify OCD representative that SRT is planned to occur in 72 hours.
4. Notify OCD that a MIT will be ran with the pump truck and recorded in the data van on the date of the SRT. Ask if a chart recorder is required, if so, ensure one is on location for the day of the SRT.
5. MIRU Precision Pressure Data Slickline truck and crane, utilize a lubricator for well control.
6. Run in hole with BHP Bomb and set at 8,321' from surface on top of the 2.31F profile nipple.
  - a) Ensure bomb is rated to 10k psi or greater and can collect 1 million data points and is set to collect data 1 time every second. This will give us 11.5 days of data collection in case we occur any delays.

**48 hours before SRT**

7. Shut in well and isolate injection line. Ensure 0 injection is able to occur.

**Step Rate Test Procedure**

8. RU pump and manifold all 3 frac tanks together. Run 1 - 2" injection lines.
  - a) RU an injection line and pressure transmitter to the production casing-tubing annulus and pressure up to 500 psi and perform an MIT.
    - i. Have the service company save and export this data, call this file "Vermejo SWD MIT prior to SRT" and clear the data and prepare for SRT data collection.
  - b) Ensure pumps can pump can output 8 bpm at 3000 psi.
  - c) Max pressure limit for this job is 2700 psi.
  - d) Install pressure transmitters on the tubing, not the discharge of the pump, and another transmitter on the production casing.
  - e) A turbine meter is to be used to measure injection rate.
  - f) Rig injection line up to the tubing.
9. Close bottom master valve and open all other valves and test Iron and wellhead to 3000 psi.

10. Open lower master valve and begin step rate test. Follow the below schedule exactly. Do not stop injection. Do not alter schedule. Steps need to be exactly at prescribed rates and for exactly 45 minutes unless:

- a) Breakdown is observed and 2 more steps passed that are not in the schedule.
  - i. If this is the case and there is pressure headroom, we will divide the remaining pressure rating of the wellhead by number of remaining steps needed to get to 3 and add 1 and target a starting pressure for those remaining step instead of rate.
    - 1. I.e. Stage 6 break is observed at 2500 psi and wellhead is rated to 3000 psi.  $3000-2500 = 500$  psi. 2 more stages needed, add one.  $500/3 = 166$  psi. Stage 7 should be started at 2666 psi and stage 8 started at the end of stage 7 pressure plus 166 psi. Rate is to be held steady through the remainder of the stage. Stage length is to be the same as the previous stages.
  - ii. If there is no more pressure headroom available, hold the rate steady for the amount of time equivalent to running the needed number of extra stages add notes in stage notes.
    - 1. I.e. if breakdown is observed on stage 6, and the ending pressure of stage 6 is 2950 psi and job is rated to 3000 psi, keep the same rate of stage 6 for stage 7 and 8.

| Step Rate Test - Proposed |                   |                 |            |                    |                         |
|---------------------------|-------------------|-----------------|------------|--------------------|-------------------------|
| Step                      | Time Start (mins) | Time End (mins) | Rate (BPM) | Stage Volume (Bbl) | Cumulative Volume (Bbl) |
| 1                         | 0                 | 45              | 0.30       | 14                 | 14                      |
| 2                         | 45                | 90              | 0.60       | 27                 | 41                      |
| 3                         | 90                | 135             | 1.20       | 54                 | 95                      |
| 4                         | 135               | 180             | 2.40       | 108                | 203                     |
| 5                         | 180               | 225             | 3.60       | 162                | 365                     |
| 6                         | 225               | 270             | 4.80       | 216                | 581                     |
| 7                         | 270               | 315             | 6.00       | 270                | 851                     |

11. RD pump and iron.

12. MIRU Slickline unit and crane if required.

13. RIH to 8,321' to retrieve the BHP Bomb. Send all data to Engineer.

## Appendix

### Current Tubing Detail

#### TUBING DETAIL

KB 18'

1 JT 3-½" STD POLYCORE 33'

2 3-½" PUPS STD POLYCORE 13'

183 JTS 3-½" STD POLYCORE 6,032'

68 JTS 3-½" MODIFIED POLYCORE 2,215'

O/O TOOL W/ 2.31F PROFILE NIPPLE 2'

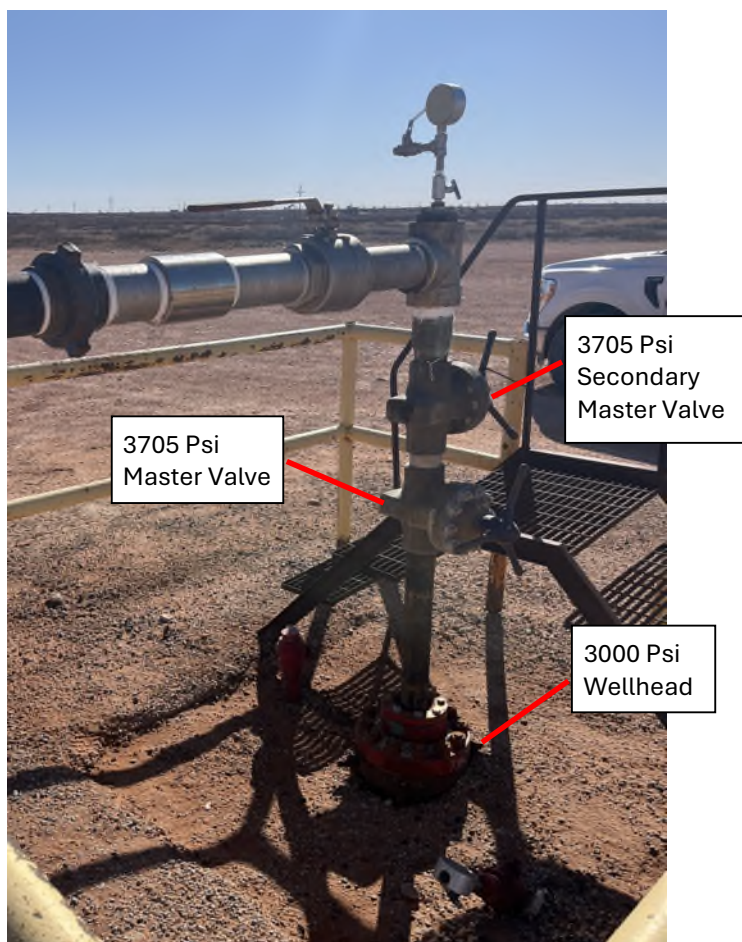
7" x 3-½" NP AS1X PACKER @ +/- 8,321' - 8'

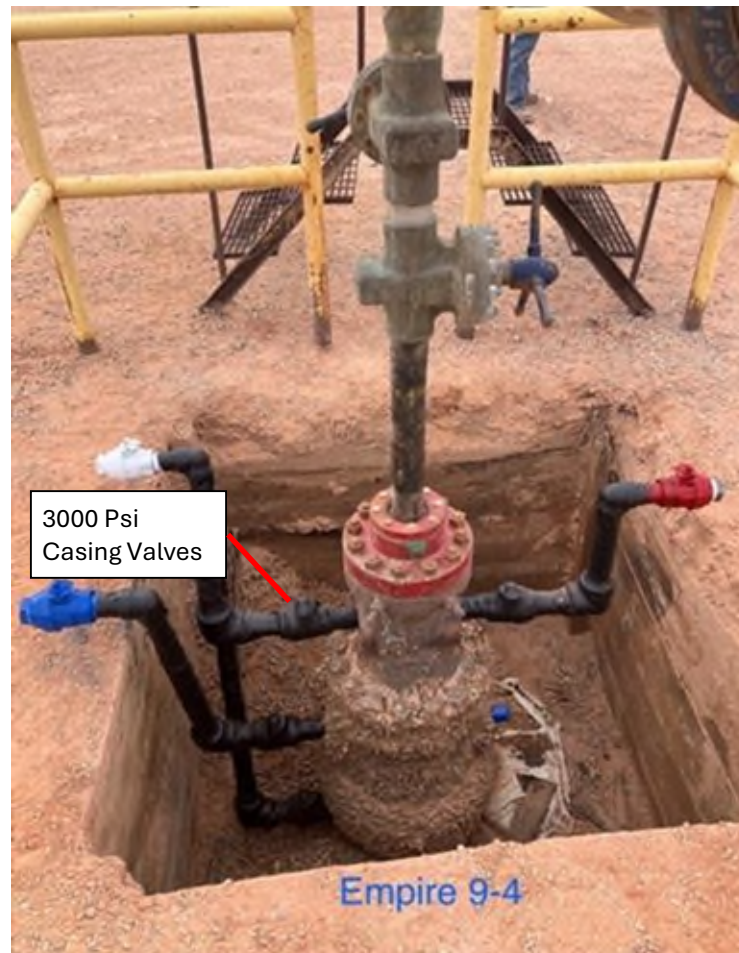
SS XO

2-7/8" 6' NP SUB

SS 2.25" R PROFILE NIPPLE

### Wellhead







# Empire State SWD 9 #4

Eddy County, NM  
API# 30-015-38972

SPUD DATE: 10/11/2011  
ELEV: 3,582' GL 18.5' KB

## 13-3/8" 48# H-40 Csg @ 248'

17-1/2" HOLE  
CMT W/ 500 SX  
CIRC 309SX TO SURF

## 9-5/8" 40# J-55 Csg @ 2,405'

12-1/4" HOLE  
CMT W/ 750 SX  
CIRC 32SX TO SURF

### TUBING DETAIL

KB 18'  
1 JT 3-1/2" STD POLYCORE 33'  
2 3-1/2" PUPS STD POLYCORE 13'  
183 JTS 3-1/2" STD POLYCORE 6,032'  
68 JTS 3-1/2" MODIFIED POLYCORE 2,215'  
O/O TOOL W/ 2.31F PROFILE NIPPLE 2'  
7" x 3-1/2" NP AS1X PACKER @ +/- 8,321' - 8'  
SS XO  
2-7/8" 6' NP SUB  
SS 2.25" R PROFILE NIPPLE

DV TOOL @ 6,999'

## 7" 26# L-80 Csg @ 8,385'

### FC @ 8,259'

8-3/4" HOLE  
CMT W/ 450SX IN 1<sup>ST</sup> STAGE, CIRC 110 TO SURFACE  
CMT W/ 1050 SX IN 2<sup>ND</sup> STAGE, CIRC 245 TO SURFACE

CISCO OPEN HOLE (8,385'-8,805')

TD @ 8,805'  
TVD @ 8,805'  
PBDT @ 8,805'

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CONDITIONS

Action 494108

CONDITIONS

|   |   |
|---|---|
| Operator:<br>Spur Energy Partners LLC<br>9655 Katy Freeway<br>Houston, TX 77024 | OGRID:<br>328947                                    |
|   | Action Number:<br>494108                            |
|   | Action Type:<br>[C-103] NOI General Sundry (C-103X) |

CONDITIONS

| Created By     | Condition | Condition Date |
|----------------|-----------|----------------|
| anthony.harris | None      | 8/13/2025      |