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

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

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

WELL API NO. 30-015-28992
5. Indicate Type of Lease STATE [ ] FEE [X]
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name OSAGE BOYD 15 SWD
8. Well Number 1
9. OGRID Number 328947
10. Pool name or Wildcat SWD; CISCO-CANYON
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3454' GR

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)
1. Type of Well: Oil Well [ ] Gas Well [ ] Other [ ]
2. Name of Operator SPUR ENERGY PARTNERS, LLC
3. Address of Operator 9655 KATY FREEWAY, SUITE 500, HOUSTON, TX 77024
4. Well Location Unit Letter F; 1980 feet from the NORTH line and 1980 feet from the WEST line
Section 15 Township 19S Range 25E NMPM County EDDY

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

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

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.

OCD Engineering bureau requested additional data for the Osage SRT interpretation due to previous acid frac be submitted via sundry for proper processing.

Spud Date: [ ]

Rig Release Date: [ ]

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

SIGNATURE [Signature] TITLE Agent for Spur Energy DATE 3/11/2024

Type or print name Ben Stone E-mail address: ben@sosconsulting.us PHONE: 936-377-5696
For State Use Only

APPROVED BY: [ ] TITLE [ ] DATE [ ]
Conditions of Approval (if any):



**Cross Section and Fracture  
Gradient Correlation for  
Osage Boyd SWD Injection  
Pressure Increase**

February 21, 2024

# Introduction



- \* 3 Step Rate Tests have been performed by Spur in the Dagger Draw area where bottom hole pressure gauges have been run
  - \* Secret Et Al SWD #1 – Tested Oct. 2022
  - \* Lakewood Farms 18 1 SWD – Tested November 2023
  - \* Osage Boyd 15 1 SWD – Tested November 2023
  
- \* The Osage Boyd SWD is stratigraphically/geologically similar to the Secret SWD and Lakewood Farms SWD causing us to be curious when it showed to have fractured sooner than either of those wells
  
- \* Spur’s theory is that since the well was initially gel acid-fractured in 1996, this “break” in pressure is likely the already existing fractures “opening-up” allowing enhance conductivity and not new fractures being created
  
- \* A cross section and base map were prepared to show the geological similarities



# Test Summary

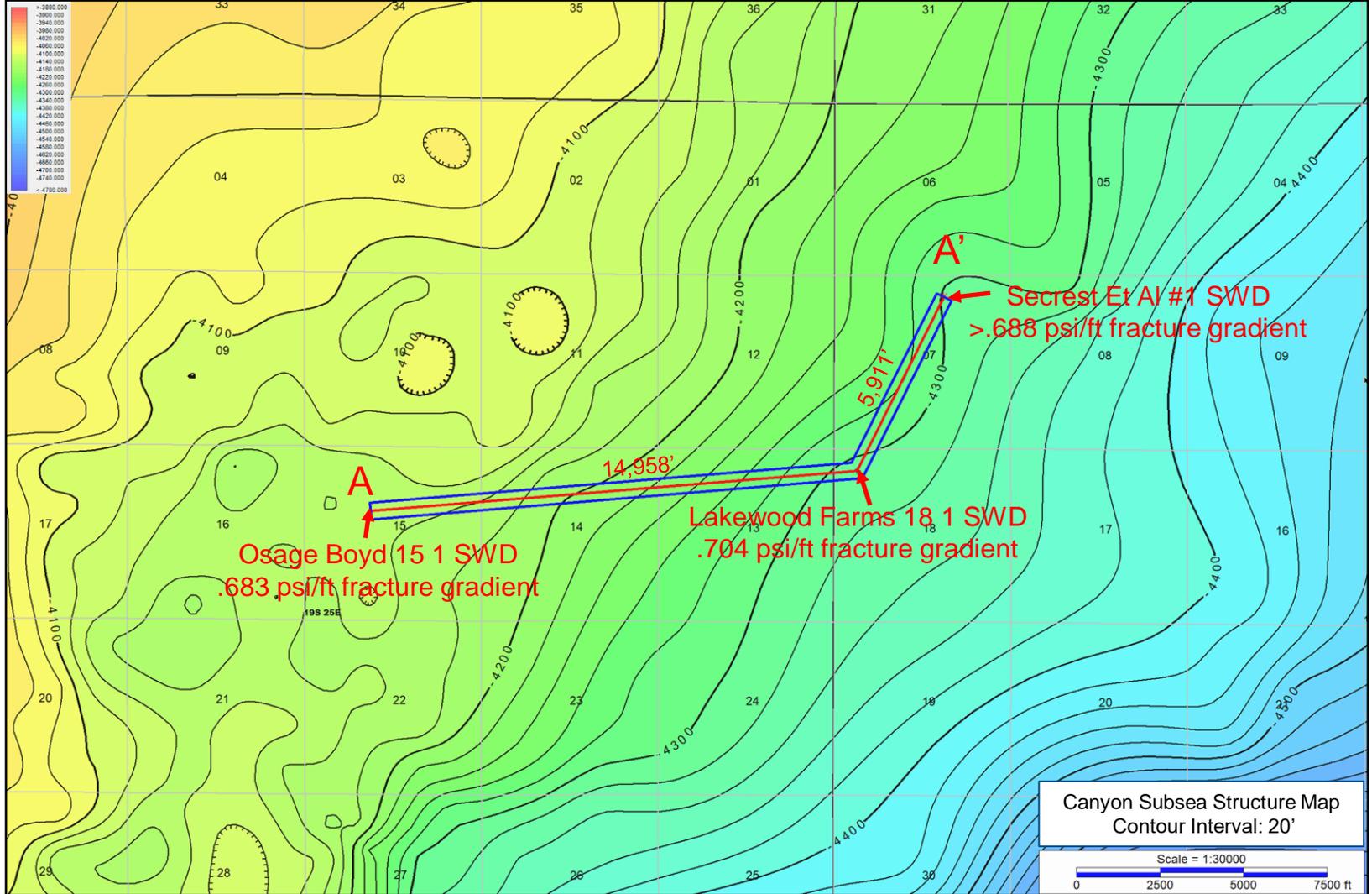


- \* The Secret Et Al #1 SWD did **not** fracture the formation
  - \* Fracture gradient is above .688psi/ft,
    - \* Based on the maximum BHP observed during that test
- \* The Lakewood Farms 18-1 SWD was tested in November of 2023 and did reach fracture pressure
  - \* Fracture gradient is known to be .704 psi/ft
- \* The Osage Boyd 15 1 SWD was tested in November of 2023 and did reach formation breakdown pressure
  - \* Estimated fracture opening pressure at around .683 psi/ft





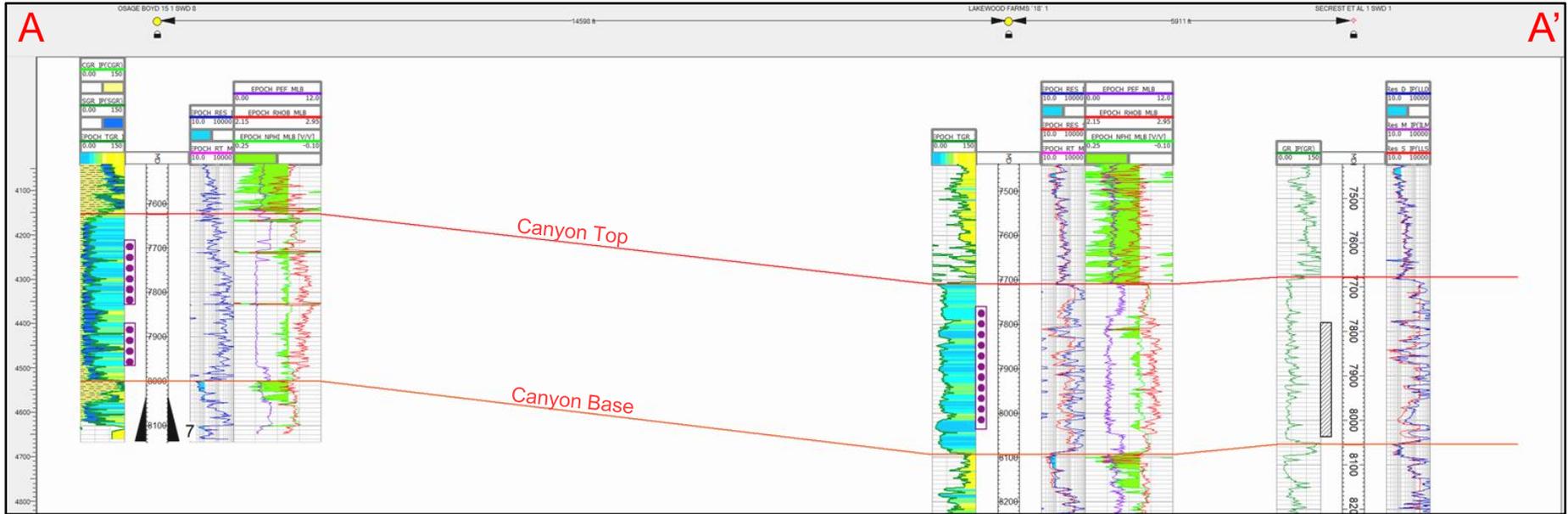
# Base Map





# Structural Cross Section

- \* Perforated intervals very similar in all three wells
- \* Rock Quality comparable in all three wells



Osage Boyd 15 1 SWD  
 .683 psi/ft fracture gradient

Lakewood Farms 18 1 SWD  
 .704 psi/ft fracture gradient

Secret Et Al #1 SWD  
 >.688 psi/ft fracture gradient



# Summary



- \* Secret SWD SRT did not fracture the rock, so we know the gradient is  $>.688$  psi/ft
- \* Lakewood Farms SWD has a clear break/fracture pressure and was not fractured during its original completion to our knowledge
- \* The Osage Boyd SWD pre-stimulated fracture gradient is likely similar to the Lakewood Farms at  $\sim.704$  psi/ft
  - \* The requested 2,000 psi maximum allowable injection pressure correlates to  $.693$  psi/ft ( $.01$  psi/ft higher than observed fracture opening pressure)



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**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 322299

**CONDITIONS**

Operator: Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	OGRID: 328947
	Action Number: 322299
	Action Type: [C-103] Sub. General Sundry (C-103Z)

**CONDITIONS**

Created By	Condition	Condition Date
mgebremichael	None	3/11/2024