

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

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

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

WELL API NO. 30-015-28164
5. Indicate Type of Lease STATE [] FEE [x]
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name LAKEWOOD FARMS SWD 18
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.) 3385' 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 SWD
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 D : 660 feet from the NORTH line and 660 feet from the WEST line
Section 18 Township 19S Range 26E NMPM EDDY County

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 [x]
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: []

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 perform a step rate test to determine if injection pressure can be raised without fracturing the formation.

Proposed procedes and other documentation attached for your review.

Spud Date:

[Empty box for Spud Date]

Rig Release Date:

[Empty box for 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 06/08/2023

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):

Eddy County, NM
API# 30-015-28164

9-5/8" 1ST SQUEEZE 1/13/2015 - LEAK AROUND 400'
LEAD CMT W/ 200 SX CLASS C 10% GEL, 2% CaCL2, 12.5 PPG
TAIL CMT W/ 200 SX CLASS C 3% CaCL2 14.8 PPG

DV TOOL @922'

9-5/8" 36# J-55 @ 1112'
CMT W/ 150 SX CLASS C 2% CaCL2
TAILED W/ 800 SX CLASS C 35:65:6
CIRC 123 SX TO SURF

9-5/8" 2ND SQUEEZE 1/16/2015
CMT W/ 200 SX CLASS C 3% CaCL2 14.8 PPG

TUBING DETAIL (6/11/2015)
12' KB
235 JTS 3-1/2" 9.3# L-80 TUBING CLS LINED
T2 ON/OFF TOOL NIC COATED
INJECTION PACKER 2-7/8" X 7" @7,709'
NI. COAT TBG SUB

DV TOOL @6,394'

7" 26# HCL-80 @ 8,359'
STAGE 1: CMT W/ 375 SX
STAGE 2: CMT W/ 400 SX CLASS C+
400 SX CALSS C BLEND
STAGE 3: CMT W/ 125 SX CLASS C

CISCO/CANYON PERFS (7,760' - 8,037')
- 6/9/2015: PERFS, 2 SPF, 366 HOLES

8 3/4" HOLE DRILLED TO 8,512'

7 7/8" HOLE DRILLED TO 9,200'

CEMENT PLUG FROM 8,650'-8,400'

CEMENT PLUG FROM 8,950'-9,200'

TD @ 9,550'
PBTD @ 8,336'

Lakewood Farms SWD 18 #1**Step Rate Test**

Hunter Spragg - 817.914.0987

AFE - TBD


NW Shelf
Eddy County, NM
OBJECTIVES

Perform a step rate test on the Lakewood Farms SWD to determine if injection pressure can be raised without fracturing the formation. 45-minute steps chosen due to lower permeability. Literature suggests Cisco/Canyon averages 5-10 md.

- Estimated BHP Bomb set date - 4 days before the job
- Estimated Well SI date - 2 days before the job
- Estimated SRT Date - TBD
- Pressure Bomb retrieval date - the day after the job

Well Information	
Surface Location (NAD83)	Latitude: 32.6662407° / Longitude: -104.4276733°
Ground Elevation / KB	3,385' / 12'
API Number	30-015-28164
AFE Number	TBD - \$75,000

Wellbore Details	
TVD / PBSD	TVD: 9,550' / PBSD: 8,336'
Perforations MD'	7,760' - 8,037'

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' - 8,359'	26	HCL-80	6.276	6.151	?	7,240	7,800	604	0.0383
3.5" CLS tbg	0' - 7,709'	9.3	L-80	2.750	2.440	EUE 8RD	10,540	10,160	207	0.0073

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, H₂S monitors, and FR certified clothing as required. Designate a smoking area off location and 100' from any potential hydrocarbons.

Preparation

1. Set 2 - 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. Wellhead is shown to be rated to 5k psi with 2k wing valves. Ensure wing valves have been upsized all remaining wellhead valves have the same or higher rating.

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. Ensure well is on a vacuum; MIRU Precision Pressure Data Slickline truck and crane, utilize a pack-off for well control.
6. Run in hole with BHP Bomb and set at 7,705' from surface on top of the 2 7/8" X 3 1/2" XO.
 - 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 frac tanks together. Run 1 - 2" injection lines - unless pump company recommends 2 lines.
 - a) RU an injection line and pressure transmitter to the production casing-tubing annulus and pressure up to 500 psi and preform an MIT.
 - i. Have the service company save and export this data, call this file "Lakewood Farms MIT prior to SRT" and clear the data and prepare for SRT data collection.
 - b) Ensure pumps can pump can output 5 bpm at 4000 psi.
 - c) Max pressure limit for this job is 3300 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 tubing master valve to 3700 psi.

10. Open lower master valve and begin step rate test. Follow the below schedule exactly. Do not stop injection. Do not alter schedule unless breakdown is observed. 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 - 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 duration 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 wellhead is rated to 3000 psi, keep the same rate for the duration of stage 6 for stage 7 and 8.

Step Rate Test - 3k Well Head					
Step	Time Start (mins)	Time End (mins)	Rate (BPM)	Stage Volume (Bbl)	Cumulative Volume (Bbl)
1	0	45	0.25	11	11
2	45	90	0.45	20	32
3	90	135	0.90	41	72
4	135	180	1.80	81	153
5	180	225	2.70	122	275
6	225	270	3.60	162	437
7	270	315	4.50	203	639

- 11. RD pump and iron.
- 12. MIRU Slickline unit and crane if required.
- 13. RIH to 7,705' to retrieve the BHP Bomb. Send all data to Engineer.

Appendix

Current Tubing Detail

Current Tubing String										
Tubing Description					Set Depth (ftKB)		Run Date			
Production Tubing					7,716.1		12/4/2021			
Item Des	Grade	Wt (lb/ft)	OD (in)	ID (in)	Len (ft)	Jts	Cum Len (ft)	Top (ftKB)	Btm (ftKB)	
KB Correction				0.00	12.00		7,716.17	-0.1	11.9	
Tubing 3 1/2 Duo-Lined				2.50	7,688.12	235	7,704.17	11.9	7,700.1	
X/O 3 1/2 - 2 7/8				2.50	0.50	1	16.05	7,700.1	7,700.6	
On & Off Tool				2.31	2.00	1	15.55	7,700.6	7,702.6	
ASI Arrow Set PKR 7"				2.44	7.00	1	13.55	7,702.6	7,709.6	
Pup Joint				2.44	6.05	1	6.55	7,709.6	7,715.6	
Pump Out Plug Collar					0.50	1	0.50	7,715.6	7,716.1	

Current Wellhead



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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 225364

CONDITIONS

Operator: Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	OGRID: 328947
	Action Number: 225364
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	please limit your max pressure for your test to 3k x 0.95= 2850 psi 5% safety factor has been deducted. Thanks.	8/16/2023