

Submit 3 Copies To Appropriate District

Office

District I

1625 N French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87440

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

RECEIVED

State of New Mexico

Energy, Minerals and Natural Resources

Form C-103

May 27, 2004

AUG 17 2011  
HOBBS

CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

WELL API NO.

30-025-28826

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

LG - 6690

7. Lease Name or Unit Agreement Name

Superior State

8. Well Number 2

9. OGRID Number

151416

10. Pool name or Wildcat

Morton; Wolfcamp

# 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

Fasken Oil and Ranch, Ltd.

3. Address of Operator

303 W. Wall, Suite 1800, Midland, TX 79701

4. Well Location

Unit Letter L : 1980' feet from the South line and 810' feet from the West line

Section 7 Township 15S Range 35E NMPM County Lea

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

4061' KB

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type \_\_\_\_\_ Depth to Groundwater \_\_\_\_\_ Distance from nearest fresh water well \_\_\_\_\_ Distance from nearest surface water \_\_\_\_\_

Pit Liner Thickness: \_\_\_\_\_ ml Below-Grade Tank: Volume \_\_\_\_\_ bbls; Construction Material \_\_\_\_\_

## 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 ☐

OTHER Add Perfs in the same zone ☒

### 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 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

The Temporary Abandonment status expired on this well 4-27-2011. Fasken Oil and Ranch, Ltd. proposes to add perfs to this well in the same zone and put the well back on production removing it from a Temporary Abandoned status and from the inactive well list. Please see attached procedure and wellbore diagram.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Kim Tyson TITLE Regulatory Analyst DATE 8-17-2011

Type or print name Kim Tyson

E-mail address: kimt@forl.com

Telephone No. (432) 687-1777

For State Use Only

APPROVED BY: [Signature] TITLE STAFF MGR DATE 8-17-2011

Conditions of Approval (if any)

AUG 17 2011

**Recommended Completion Procedure  
Superior State No. 2  
1980' FSL & 810' FWL  
Sec 7, T15S R35E  
AFE 1969**

<b>OBJECTIVE:</b>	Test Additional Wolfcamp Potential
<b>WELL DATA:</b>	
13-3/8" 54.5#J-55 ST&C csg:	Set at 406'. Cmt w/460 sx to surface
8-5/8" 24&28# K-55, S80 LT&C csg	Set at 4600' Cmt w/1900 sx to surface
5-1/2" 15.5&17#K-55 LT&C csg	Set at 10,500'. DV @ 7908'. Cmt w/1525 sx. TOC @ 4240' by TS
CIBP.	10,280' with 20' cement
Perforations:	Lower Wolfcamp. 10,406'-10,411'
TD.	10,500'
PBTD.	+/-10,260' cement on CIBP
Status:	TA'd November 2000

1. Notify NMOCD of intent to rig up and start workover. Check with Kim Tyson to make sure we have obtained pit permits before starting work.
2. Receive 250 bbl steel half-frac workover tank with gas buster, one 500 bbl test tank, 3k manual BOP with 2-3/8" pipe rams, 5-1/2" flowtree, and 2 sets of pipe racks on location.
3. Set matting boards, RUPU, and set pipe racks. NDWH and NU BOP. Build flowline from well head to both workover tank and test tank.
4. Receive 10,500' of 2-3/8" 4.7# EUE 8rd N-80 tubing and tally. RU reverse unit and fill reverse tank with produced water.
5. RU pump truck and test casing to 1,500 psi for 15". Notify Midland Office of results.
6. RIW with 4-3/4" bit, 3-1/2" drill collar, 5-1/2" casing scraper, 5- 3-1/2" drill collars and 2-3/8" tubing to PBTD @ +/- 10,260'. RU power swivel and drill out cement and CIBP @ 10,280'. RIW and tag new PBTD @ +/- 10,456' and circulate wellbore clean if able. POW with tools and release reverse equipment.
7. RUWL and packoff. Run GR/CCL log from PBTD to 50' above DV tool @ +/- 7850' correlated to Schlumberger's Simultaneous Compensated Neutron-Litho Density open hole log dated 9-6-84. RIW and set 5-1/2" CIBP @ 10,400' and dump 15' of Class "H" cement on top.
8. RIW with 5-1/2" HD packer, sn, and 2-3/8" tubing to put EOT @ +/- 10,300'. Set packer @ 10,300' and pressure test tubing, 100' of 5-1/2" casing and CIBP to 2,000 psi for 10". Monitor backside pressure. Bleed down pressure to workover tank. Report results to Midland office.
9. Release packer and RIW to put EOT @ 10,355'. RU pump truck and pickle 500 gallons of 15% HCl double inhibited down tubing and up to +/- 9,500' in the annulus at 1/2 bpm. Reverse out acid to workover tank. Circulate and displace well with produced water
10. Spot 500 gallons of double inhibited 15% HCl @ 10,355'. POW with packer and tubing.
11. RUWL and full lubricator. RIW with 3-1/8" slick casing gun and perforate Lower Wolfcamp as follows

10,350'-55'	2 JSPF	10 holes
10,314'-24'	2 JSPF	20 holes

All shots 60 degree phased; 0.40"EH, 30 total holes.

12. RIW with 5-1/2" HD treating packer, sn, and 2-3/8" tubing to +/- 10,275'. Reverse acid into tubing and ND BOP and NU flow tree, setting packer @ 10,275' with 16k once flowtree is nipped up. RU pump truck on tubing, break down perforations, and displace spot acid into formation with 12 bbls of produced water. Max pressure 5,000 psi. Record ISIP, 5", 10", and 15" shut-in pressures.
13. Flow well to workover pit until well dies. RU swab and swab back acid load. Record hourly entry rates and fluid cuts.
14. RU stimulation company. Trap 500 psi on backside and monitor throughout job. Acidize perfs 10,314'-55' with 2,000 gals of 15% HCl dropping 60 1.3 sg ball sealers evenly spaced for diversion. Keep treating rate under 5 bpm and 5,000 psi max pressure. Record ISIP, 5", 10", and 15" shut-in pressures. Report results to Midland Office.
15. Flow well back to workover pit until well dies. RU swab and swab back acid load. Record hourly entry rates and fluid cuts.
16. If new perforations provide commercial quantities of oil, NDWH, NU BOP, POW and LD packer. Artificial lift recommendations will be provided. Put well online, release all rental equipment & RDPU. If interval will not provide stand-alone commercial production, continue with procedure.

#### **Test Three Fingers Limestone**

17. NDWH and NU BOP. Release packer and POW with tubing and packer.
18. A decision will be made whether to run a RBP or CBP based upon the results from last interval. If we are completely abandoning the interval from 10,314'-55', then RUWL and RIW and set 10k CIBP @ +/- 10,300' at least 10' away from a casing collar. RIW and dump bail 35' of Class "H" cement on top.
19. If we are planning to keep the first interval in the final completion, RIW with 10k 5-1/2" RBP w/ ball catcher, 5-1/2" setting tool, 10' tubing sub, 5-1/2" packer, sn, and 2-3/8" tubing and set RBP @ 10,300'. PU, set packer @ +/- 10,270' and pressure test RBP to 2,000 psi for 10". Release packer, POW to put EOT @ 10,130' and spot 500 gals of 15% double inhibited HCl @ 10,130'. POW with tubing and packer. If CIBP was set, RIW, set packer @ +/- 10,200' and test CIBP to 2,000 psi for 10". POW to put EOT @ 10,130' and spot 500 gals of 15% HCl. POW with tubing and packer.
20. RIW with 3-1/8" slick casing gun and perforate Three Fingers Limestone as follows:

10,122'-29'	2 JSPF	14 holes
10,100'-04'	2 JSPF	8 holes
10,087'-90'	2 JSPF	6 holes
10,066'-68'	2 JSPF	4 holes

All shots 60 degree phased, 0.40"EH, 32 total holes

21. RIW with 5-1/2" HD treating packer, sn, and 2-3/8" tubing to +/- 10,000'. Reverse acid into tubing, ND BOP and NU flow tree, setting packer @ +/-10,000' with 16k once flowtree is nipped up. Break down perforations using 12 bbls of water and maximum rate of 5,000 psi. Record ISIP, 5", 10", and 15" shut-in pressures.
22. Flow well back to workover pit until well dies. RU swab and swab back acid load. Record hourly entry rates and fluid cuts.

23. RU stimulation company. Trap 500 psi on backside and monitor throughout job. Acidize perfs 10,066'-10,129' with 3,000 gals of 15% HCl dropping 60 1.3 sg ball sealers evenly spaced for diversion. Max rate 5 bpm and 5,000 psi max pressure. Record ISIP, 5", 10", and 15" shut-in pressures. Report results to Midland Office.
24. Flow well back to workover pit until well dies. RU swab and swab back acid load. Record hourly entry rates and fluid cuts.
25. Release packer and POW with tubing and packer.

**Frac Three Fingers Limestone using 3-1/2" Frac String**

26. Receive 10,000' of 3-1/2" 9.3# N-80 8rd EUE on location. Clean pins and boxes and tally. Replace 2-3/8" pipe rams with 3-1/2" pipe rams.
27. RIW with 5-1/2" x 2-7/8" Big Bore Arrowset 1X10K packer with frac hardened mandrel and frac hardened top sub, frac hardened profile nipple, frac hardened TOSSD with frac hardened top sub, 2-7/8" x 3-1/2" frac hardened xo, and 3-1/2" N-80 tubing. Test tubing to 9,500 psi above the slips while RIW.
28. Set packer @ +/- 10,000' in 20,000# compression. ND BOP and NU rental 3-1/2" flowtree.
29. RU pump truck and pressure tubing/casing annulus to 1,500 psi and hold for 30 minutes. Check for communication into tubing. Report results to Midland Office. Bleed down annulus pressure to pit. NOTE: If frac date is more than a few days away, it may be necessary to RDPU at this time.
30. Set and fill X frac tanks with fresh water. Add 3 lbs of biocide to each tank. RU 10k flowback iron and manifold.
31. RU service company. RU pump truck and put 1,500 psi on 3-1/2" x 5-1/2" annulus and monitor throughout job. Frac Three Fingers Limestone and via 3-1/2" tubing according to proposal to follow. Max pressure 9,630 psi (10,160 psi burst 3-1/2" 9.3# N-80 \* 80% + 1,500 psi backside support).
32. Flow back well through flowback manifold to pit. Monitor hourly flow rates and fluid cuts. Flow back to pit until well dies or is weak enough to kill with brine water.
33. NDWH and NU BOP w/ 3-1/2" pipe rams. Release frac packer @ +/- 10,000' and LD all 3-1/2" frac string and packer. If well appears to be a producer, release frac string and packer.
34. Replace 3-1/2" pipe rams with 2-3/8" pipe rams. RIW with 5-1/2" packer, sn, and 2-3/8" tubing. Set packer @ +/- 10,000'. RU swab and swab well to evaluate fluid entry and fluid cuts. Swab until well has cleaned up enough to run artificial lift equipment. (If RBP is in the well @ 10,300', run retrieving tool, 10' tubing sub, then packer during this step. After sufficiently swabbing well, RIW and retrieve RBP, POW and LD packer and RBP.)
35. Release packer and POW with tubing and packer.
36. RIW with production tubing and rods according to artificial lift recommendation to follow. Clean location and RDPU.

**If first two intervals are non-economic, test Basal Abo Dolomite**

37. RUWL. RIW and set 10k CIBP @ +/- 10,000' at least 35' from collar. Dump bail 35' of class "H" cement on top.

38. RIW with 5-1/2" packer, sn and 2-3/8" tubing and set packer @ +/- 9,900'. Test CIBP to 2,000 psi for 10" POW to put EOT @ 9,600' and spot 500 gals of 15% HCl @ 9,600'. POW with tubing and packer.

39. RUWL and full lubricator. RIW with 3-1/8" slick casing gun and perforate Basal Abo as follows:

9,590'-98'	2 JSPF	16 holes
9,563'-66'	2 JSPF	6 holes

All shots 60 degree phased, 0.40" EH, 22 total holes.

40. RIW with 5-1/2" packer, sn, and 2-3/8" tubing to put EOT @ +/- 9,500', reverse acid into tubing, ND BOP and NU flow tree, setting packer @ +/- 9,500' with 16k once flowtree is nipped up. Break down perforations using 12 bbls of water and maximum rate of 5,000 psi. Record ISIP, 5", 10", and 15" shut-in pressures.

41. Flow well back to workover pit until well dies. RU swab and swab back acid load. Record hourly entry rates and fluid cuts.

42. RU stimulation company. Pressure tubing/casing annulus to 500 psi and monitor throughout job. Acidize Basal Abo with 2,000 gals of 15% HCl dropping 44 1.3 sg bio ball sealers evenly spaced for diversion. Max pressure 5,000 psi. Record ISIP, 5", 10", and 15" shut-in pressures.

43. Flow well back to pit until well dies. RU swab and swab back acid load. Record hourly entry rates and fluid cuts. A decision will be made as to whether or not this interval justifies fracture stimulation.

44. NDWH and NU BOP. Release packer and POW with tubing and packer.

45. RIW with 5-1/2" x 2-7/8" Big Bore Arrowset 1X10K packer with frac hardened mandrel and frac hardened top sub, frac hardened profile nipple, frac hardened TOSSD with frac hardened top sub, 2-7/8" x 3-1/2" frac hardened xo, and 3-1/2" N-80 tubing. Test tubing to 9,500 psi above the slips while RIW.

46. Set packer @ +/- 9,500' in 20,000# compression. ND BOP and NU rental 3-1/2" flowtree.

47. RU pump truck and pressure tubing/casing annulus to 1,500 psi and hold for 30 minutes. Check for communication into tubing. Report results to Midland Office. Bleed down annulus pressure to pit. NOTE: If frac date is more than a few days away, it may be necessary to RDPU at this time.

48. Set and fill X frac tanks with fresh water. Add 3 lbs of biocide to each tank. RU 10k flowback iron and manifold.

49. RU service company. RU pump truck and put 1,500 psi on 3-1/2" x 5-1/2" annulus and monitor throughout job. Frac Basal Abo Dolomite via 3-1/2" tubing according to proposal to follow. Max pressure 9,630 psi (10,160 psi burst 3-1/2" 9.3# N-80 \* 80% + 1,500 psi backside support).

50. Flow back well through flowback manifold to pit. Monitor hourly flow rates and fluid cuts. Flow back to pit until well dies or is weak enough to kill with brine water.

51. NDWH and NU BOP w/ 3-1/2" pipe rams. Release frac packer @ +/- 9,500' and LD all 3-1/2" frac string and packer.

52. RIW w/ 5-1/2" packer, sn, and 2-3/8" tubing. Set packer @ +/- 9,500'. RU swab and swab well to evaluate fluid entry and fluid cuts. Swab until well has cleaned up enough to run artificial lift equipment.

53. Place well on production, release all rental equipment, and RDPU.

# Superior State No. 2

as of 11-3-10

GL: 4045'

KB: 4061'

Operator: **Fasken Oil and Ranch, Ltd.**

Location: 1980' FSL and 810' FWL

Sec 7, T15S, R25E

Lea County, NM

Compl: 9/24/1984

API #: 30-025-28826

TD: 10,500'

PBTD: 10,456'

Casing: 13-3/8" 54.5# J-55 ST&C @ 406'

w/460 sks "C"

TOC surf

8-5/8" 24&28# K-55, S-80 LT&C @ 4600'

w/1900sx (1700 light, 200 "C")

TOC surf

5-1/2" 15.5&17#/ft K-55 @ 10,500'

DV @ 7908'

w/ 1525 sx (1225 light, 300 "H")

TOC 4240' by Temp

Csg Detail Top to Bottom.

56' 17# K-55 @ Surface

7785' 15.5# K-55 @ 56'

2659' 17# K-55 @ 7841'

Hole Sizes 17-1/2" 406'

11" 4398'

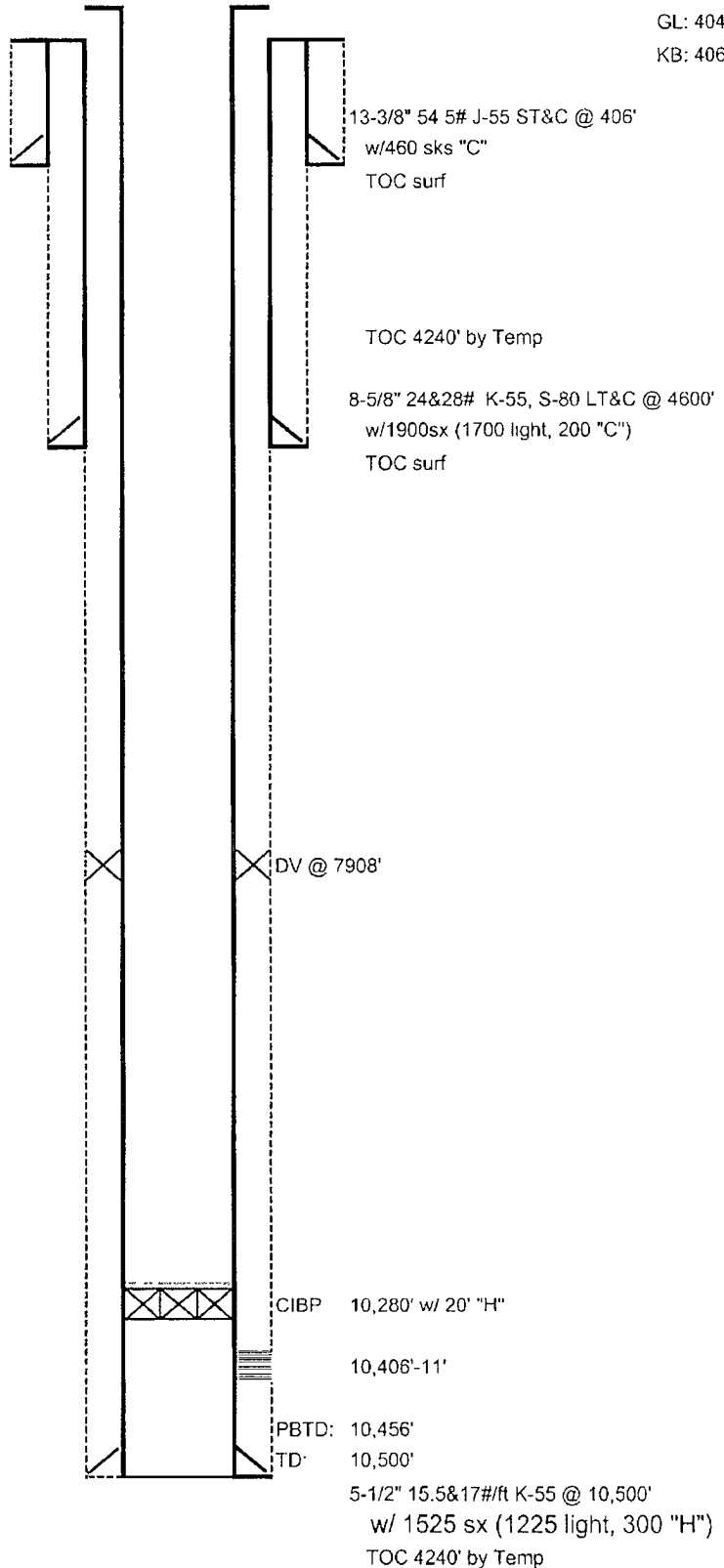
7-7/8" 10,500'

Perfs: 10,406'-11'

IP: 350 BOPD + 369 MCFPD + 15 BWPD (9/1984)

FLW 18/64", FTP 525 psi

CIBP: 10,280' w/ 20' "H"



Prod: TA Nov. 2000

Last Pulling Report: 11/27/2000

cwb

8-22-03

SuperiorStateNo2\_WBD.xls