

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NMOCD
Artesia

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

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.

5. Lease Serial No.
NMNM3606

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM101369

8. Well Name and No.
LAKE SHORE FED S C 10 4

9. API Well No.
30-015-31569-00-S1

10. Field and Pool or Exploratory Area
AVALON-DELAWARE

11. County or Parish, State
EDDY COUNTY, NM

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
FASKEN OIL & RANCH LIMITED
Contact: ADDISON LONG
E-Mail: addisonl@forl.com

3a. Address
6101 HOLIDAY HILL ROAD
MIDLAND, TX 79707

3b. Phone No. (include area code)
Ph: 432-556-8661

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 10 T21S R26E NWNW 1310FNL 1160FWL

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" 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 type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<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 checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<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 recomplete 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 must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Fasken Oil and Ranch, Ltd. proposes to recomplete the Lake shore SC 10 Fed. Com. No. 4 from the Strawn to the Wolfcamp. Please see attached procedure and current/proposed wellbore diagrams.

Note: Fasken is waiting on a com agreement to be approved, prior to doing this work.

NM OIL CONSERVATION
ARTESIA DISTRICT
MAR 20 2017
RECEIVED

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

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

**Electronic Submission #368350 verified by the BLM Well Information System
For FASKEN OIL & RANCH LIMITED, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 03/02/2017 (17PP0271SE)**

Name (Printed/Typed) ADDISON LONG Title REGULATORY ANALYST

Signature _____ Date 02/28/2017

DERAL OR STATE OFFICE USE APPROVED

MAR 8 2017

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Recommended Procedure
Lake Shore SC 10 Federal Com No. 4
AFE No. 3266
API No. 30-015-31569

OBJECTIVE: Repair suspected casing leak, recomplete to Wolfcamp

WELL DATA:

13-3/8" 54.5# J55 casing: Set at 625', w/200sx "H"+250sx 35/65POZ, 1" w/450 sx 15 stgs. TOC to surface.

9-5/8" 40# J55 casing: Set at 2160', w/200sx "H"+375sx 50/50 POZ+200sx "C". Circ to surf.

4-1/2" 11.6# L80&S95 casing: Set at 11,117'. DV @ 7664'. 1st stg 925sx Super "H", did not circ cmt thru DV. 2nd stg: 300sx BJ Lite+1300sx Super "C". **TOC 5492' by CBL.**

Perfs: Strawn: 6/15/01 9707-13, 9663-67' 3jspf, total 36h, 0.34"
 Strawn: 5/24/01 9772-88', 102h, 0.43"
 4-1/2" TS RBP @ 10,513' w/2sx sand, 5/23/01
 Morrow: 5/3/01 10,656'-63', 10,679-84', 10,708-16', total 92h, 0.38"
 CIBP @ 10,860' 5/2/01 w/2sx cmt.
 Morrow: 4/28/01 10,890-96', 24h, 0.32"
 CIBP @ 10,904' 4/27/01
 Morrow: 4/20/01 10,906'-24' (wet)

Tubing: Last tbg job 7/31/2001. 2-3/8" notched collar (0.30'), 1 jt 2-3/8" EUE 8rd L80 tbg (32.5' est), 2-3/8"x1.81" ID "F" nipple (1.5' est), 299 jts 2-3/8" EUE 8rd L80 tbg (9709.70' est), KB 15'. EOT 9759' KB.

TD: 11,117'

PBTD: 10,492' (RBP@ 10,513' w/2sx sd 5-23-01), (FC@11,078')

KB: 15.0'

Status: Shut-in suspected casing leak above TOC 5492' probably from Delaware open under the 9-5/8" at 2160' to the top of the Bone Spring at 4260'. Or beneath the DV at 7665'; did not circulate 1st stg cmt thru DV.

1. Obtain NMOCD sundry approval and pit permits. Test mast anchors. Set rig mats, pipe racks and catwalk. Set test tank and lay flowline.
2. RUPU. Open well to test tank and bleed pressure.
3. RU pump truck. Attempt to circulate the well via tubing with 3% KCL w/ clay stabilizer, corrosion inhibitor and oxygen scavenger; capacity at 9759' = 38 bbls in tubing (0.00387 bls/ft), 99 bbls casing/tubing annulus (0.0101 bbls/ft), total 136 bbls. Record volume required to circulate and calculate the initial static fluid level.
4. NDWH, NU BOP.
5. POW visually inspecting 299 jts 2-3/8" EUE 8rd L-80 tbg (9709.70' est'), 2-3/8"x1.81" ID "F" nipple (1.5' est), 1 jt 2-3/8" EUE 8rd L80 tbg (32.5' est) w/2-3/8" notched collar (0.30').
6. Receive +/-800' (about 26 jts) 2-3/8" EUE 8rd N-80 workstring tubing, and any replacement L-80 production tubing.

7. RIW with 3-7/8" cone bit, bit sub, 1-3-1/8" DC, 4-1/2" casing scraper, 5-3-1/8" DC's, top sub, SN, 2-3/8" EUE 8rd L-80 tubing (replace bad joints as needed) and 2-3/8" EUE 8rd N-80 workstring testing tubing to 6000 psi above slips. Tag sand at +/-10,492' on top of RBP at 10513'.
8. POW with 2-3/8" tubing, workstring and lay down BHA.
9. RIW 2-3/8" notched collar, SN, 2-3/8" EUE 8rd L-80 tubing and 2-3/8" EUE 8rd N-80 workstring to PBTD +/-10492'.
10. RU cementers and spot 25 sx class "H" cement or 209' (1.17 cuft/sk yield, casing capacity 0.0872 cuft/ft) above RBP with sand at +/-10,492' for a new PBTD of +/-10,157'. WOC 2 hours and tag plug at +/-10,157'.
11. Spot 10 bbls 9.5 ppg mud ladened fluid 10157'-9610'. RD cementers.
12. POW with 2-3/8" tubing, workstring and BHA.
13. RUWL with 3000 psi lubricator and grease. RIW and set 4-1/2" CIBP at 9610' (top Strawn perf 9663'). RDWL.
14. RIW with 2-3/8" notched collar, SN, 2-3/8" EUE 8rd L-80 tubing and 2-3/8" EUE 8rd N-80 workstring to CIBP at 9610'. Circulate well with 3% KCL w/clay stabilizer, corrosion inhibitor and oxygen scavenger.
15. RU cementers spotting 25 sx class "H" cement or 209' (1.17 cuft/sk yield) above CIBP 9610' for a PBTD of +/-9275' (bottom most proposed Wolfcamp perforations 8570'). WOC 2 hours and tag plug at +/-9275'. RD cementers.

Repair Casing Leak

16. POW with 2-3/8" tubing and BHA.
17. RIW with 4-1/2" x 2-3/8" Arrowset 1X packer, seating nipple, 2-3/8" EUE 8rd L-80 tubing and N-80 work string, and set packer at +/-9200', PBTD +/-9275'.
18. Test tubing/casing annulus to 500 psi and isolate leak in 4-1/2" casing. Suspect casing leak 1) above TOC 5492' in the Delaware from the 9-5/8" shoe at 2160' to the top of the Bone Spring at 4260', or 2) beneath the DV at 7665'; did not circulate 1st stg cmt thru DV. Attempt to establish 1 barrel per minute rate into leak at 500 psi. If needed spot 100 gals 15% HCl across leak interval to get desired injection rate for cement squeeze. Report results to Midland office.
19. POW with packer. A squeeze recommendation will follow...
20. RU pump truck and conduct MIT test on the casing to 500 psi maximum due to casing cement squeeze. Test casing to 500 psi with chart recorder. Report results to BLM and Midland office.

Recomplete to Wolfcamp

21. RIW with notched collar, SN, 2-3/8" EUE 8rd L-80 tubing to 8752'. RU acid transport and circulate well with 3% Kcl water containing packer fluid and clay stabilizer, and spot 500 gals of 15% NEFE triple inhibited HCl acid (estimated tubing depth to equal bottom Wolfcamp lime OH log perf 8570').
22. POW with 2-2/8" EUE 8rd L-80 tubing.
23. Perforate Wolfcamp with 3-1/8" casing gun as follows:

8438' – 52' 29h, 1JSPF, 0.40 EHD, 60° phased)
8559' – 70' 23h, 1JSPF, 0.40 EHD, 60° phased)

52 total holes by Schlumberger Platform Express Three Detector Litho-Density Compensated Neutron-GR log dated 27-Mar-2001. POW, make sure all shots fired, and RDWL.

24. RU pump truck and displace 12 bbl spot acid via casing with 3% KCl water containing clay stabilizer at maximum rate attainable with maximum 1000 psi surface treating pressure.
25. RIW with 4' x2-3/8" EUE 8rd N-80 tubing sub, Arrowset IX 10k packer, TOSSD with 1.81" "F" profile nipple, and 2-3/8" EUE 8rd L-80 tubing to +/- 8400'. Reverse 5 bbls 3% KCL water into tubing.
26. ND BOP. NUWH, setting packer in 12 points compression.
27. Swab and flow back acid and load water to steel test tank and evaluate.
28. RU pumping service. Install tree saver. Trap 1000 psi on annulus. Acidize Wolfcamp perms 8438-8570' via 2-3/8" tubing with 1500 gal 15% HCL NEFE DI acid (Cudd product or equivalent), dropping 75 7/8" RCN ball sealers evenly spaced after the first 250 gallons. Flush with 3% KCL water with clay stabilizer. Rate 4-6 bpm at max pressure 1000 psi. RD stimulation company and tree saver.
29. Flow back acid and swab load water to steel test tank and evaluate.
30. Turn well over to production and sales.
31. RDPU.

SRF/CWB
2/22/17

(LkShr10FedCom4 afe3266 Rpr Csk Lk_Rec to Wlfcmp rev SRF_CWB 02-22-17.doc)

Lake Shore SC 10 Federal Com No. 4

Current as of 7-31-2001

Operator: **Fasken Oil and Ranch, Ltd.**
 Location: 1310' FNL and 1160' FWL
 Sec 10, T21S, R26E
 Eddy County, NM
 Compl.: 5-29-01 11hr fl 414 mcf+3bw, 32/64"chk CP160psi
 API #: 30-015-31569

GL: 3212.5'
 KB: 3229.5'

TD: 11,117
 PBTD: 10,492' (**RBP@ 10,513'** w/2sx sd 5-23-01), (FC@11078')
 Casing: 13-3/8"54.5# J55 @ 625' Chry Cnyn 2154'
 w/200sx "H"+250sx 35/65POZ, 1" w/450 sx 15 stgs
 TOC surf
 9-5/8" 40# J55 @ 2160' Brshy Cnyn 3342'
 w/200sx "H"+375sx 50/50 POZ+200sx "C", circ to surf.
 TOC surf
 4-1/2" 11.6# L80 & S95 @ 11,117'

13-3/8"54.5# J55 @ 625'
 w/200sx "H"+250sx 35/65POZ, 1" w/450 sx 1
 TOC surf

9-5/8" 40# J55 @ 2160'
 w/200sx "H"+375sx 50/50 POZ+200sx "C", ci
 TOC surf

DV: 7664' Bone Spr 4260'
 1st stg 925sx Super "H", did not circ cmt thru DV
 2nd stg 300sx BJ Lite+1300sx Super "C"
 TOC 5492' by CBL

TOC 5492' by CBL

Tubing: Asof 7-31-01
 2-3/8" notched collar 0.30
 1 jt 2-3/8" EUE 8rd L80 tbg 32.5
 2-3/8"x1.81" ID "F" nipple 1.5
 AJL: 299 jts 2-3/8" EUE 8rd L80 tbg 9709.70
 32.47 (Estimated AJL to match rptd EOT) 9744.00
 Below KB 15.00
 EOT 9759.00

DV: 7664'
 did not circ cmt from 1st stg.
 2nd stg 300sx BJ Lite+1300sx Super "C"

Cisco 9236'

Perfs: Strawn Strawn 9,562'
 9663'-67' 1/18/2008 6/15/01
 9707'-13' 1/18/2008 6/15/01
 9772'-88' 4/17/2009 5/24/01
 RBP w/2sx sd 10,513' 5/23/01

EOT 9759.00
 9663'-67'
 9707'-13'
 9772'-88'

Perfs: Morrow Morrow 10,544'
 10,656'-63' 5/3/01
 10,679'-84' 5/3/01
 10,708'-16' 5/3/01
 CIPB 10,860' w/2sx 5/2/01

RBP 10,492' (**RBP@ 10,513'**w/2sx snd)
 10,656'-63'
 10,679'-84'
 10,708'-16'

Perfs: 10,890'-96' (Dec '82) 4/28/01
 CIPB 10,904' 4/27/01

CIPB 10,679'-84'
 10,890'-96' (Dec '82)

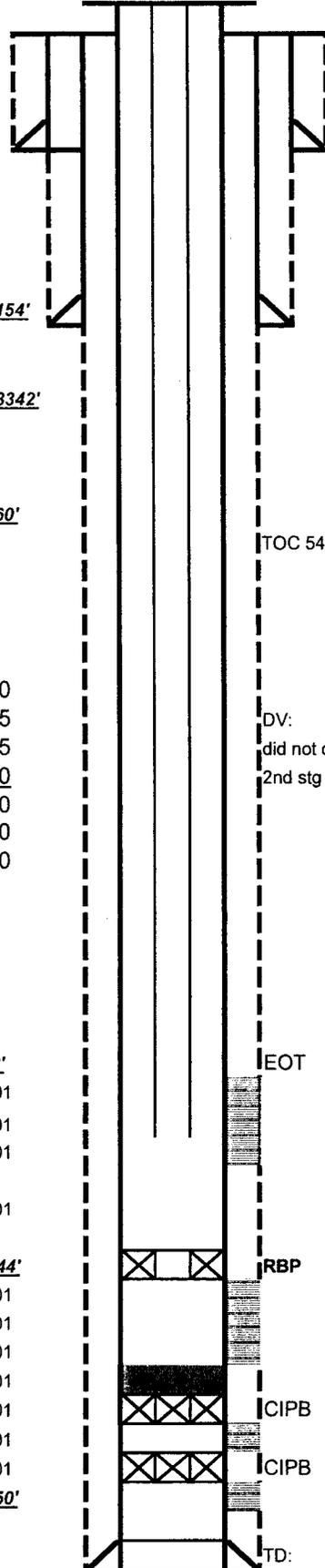
Perfs: 10,906'-24' (wet) 4/20/01

CIPB 10,904'
 10,906'-24' (wet)

Barnett 10,950'

Hole Sizes 17-1/2" 625', 12-1/4" 2160', 8-3/4" 11,117'
 Status: Shut-in suspected casing leak

4-1/2" 11.6# L80 & S95 @ 11,117'
 TD: 11,117
 TOC 5492' by CBL



Lake Shore SC 10 Federal Com No. 4

Proposed 2-22-17

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

Location: 1310' FNL and 1160' FWL
 Sec 10, T21S, R26E
 Eddy County, NM

Compl.: 5-29-01 11hr fl 414 mcf+3bw, 32/64"chk CP160psi
 API #: 30-015-31569

TD: 11,117
 PBTD: 10,492' (RBP@ 10,513' w/2sx sd 5-23-01), (FC@11078')
 Casing: 13-3/8"54.5# J55 @ 625' **Chry Cnyn 2154'**
 w/200sx "H"+250sx 35/65POZ, 1" w/450 sx 15 stgs
 TOC surf
 9-5/8" 40# J55 @ 2160' **Brshy Cnyn 3342'**
 w/200sx "H"+375sx 50/50 POZ+200sx "C", circ to surf.
 TOC surf

DV: 7664' **Bone Spr 4260'**
 1st stg 925sx Super "H", did not circ cmt thru DV
 2nd stg 300sx BJ Lite+1300sx Super "C"
 TOC 5492' by CBL

Tubing: Proposed
 4' x2-3/8" EUE 8rd N-80 tubing sub 4.00
 Arrowset IX 10k packer w/ 6.50
 TOSSD with 1.81" "F" PN 1.50
 AJL: 258 jts 2-3/8" EUE 8rd L-80 tubing **8373.00**
 32.45 **8385.00**
 Below KB 15.00
 EOT 8400.00

CIBP 9610' w/25sx "H" cmt to 9275' **Wolfcamp 8267'**

Plug 10492' w/17sx "H" cmt to 10157'
 w/9.5ppg mud laden fluid to 9650'. **Cisco 9236'**

Perfs: **Strawn** **Strawn 9,562'**
 9663'-67' 1/18/2008 6/15/01
 9707'-13' 1/18/2008 6/15/01
 9772'-88' 4/17/2009 5/24/01

RBP RBP w/2sx sd 10,513' 5/23/01

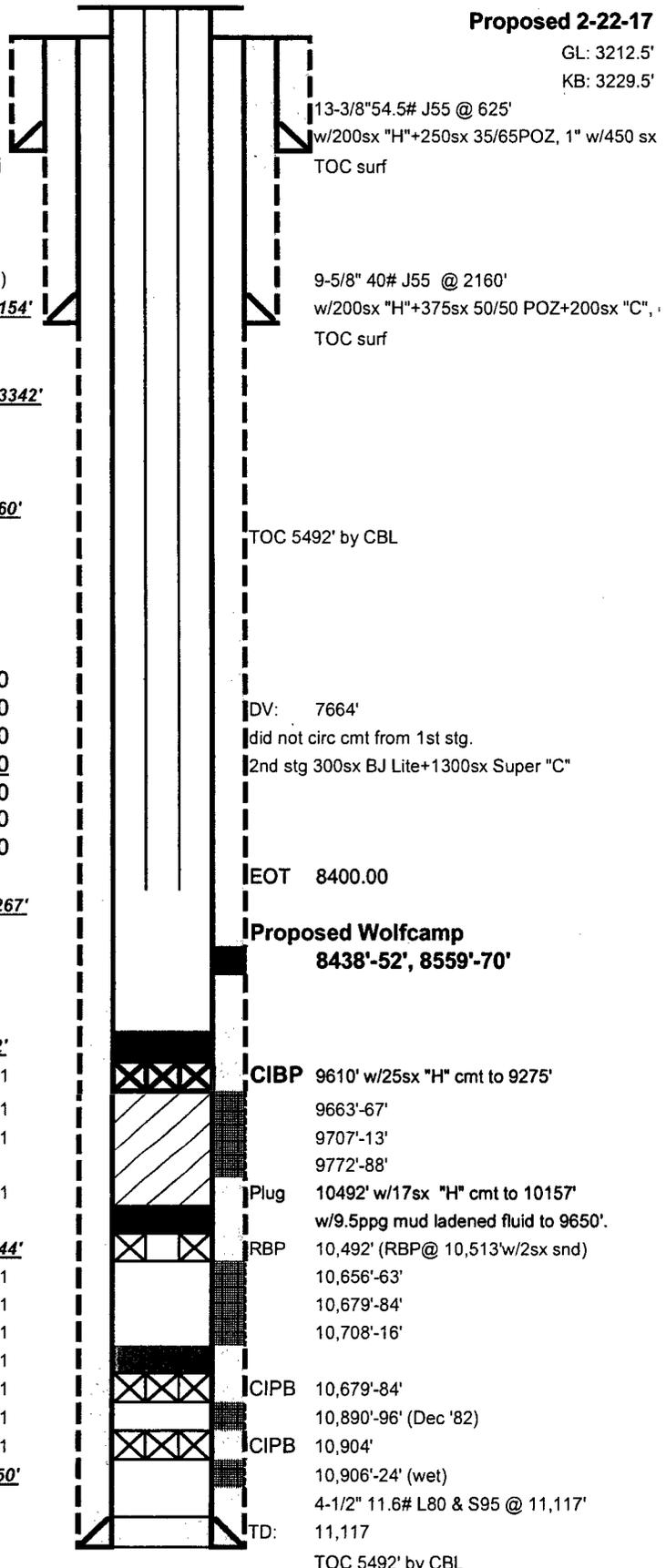
Perfs: **Morrow** **Morrow 10,544'**
 10,656'-63' 5/3/01
 10,679'-84' 5/3/01
 10,708'-16' 5/3/01
 CIPB 10,860' w/2sx 5/2/01

Perfs: 10,890'-96' (Dec '82) 4/28/01
 CIPB 10,904' 4/27/01

Perfs: 10,906'-24' (wet) 4/20/01
Barnett 10,950'

Hole Sizes 17-1/2" 625', 12-1/4" 2160', 8-3/4" 11,117'

Status: Shut-in suspected casing leak



13-3/8"54.5# J55 @ 625'
 w/200sx "H"+250sx 35/65POZ, 1" w/450 sx
 TOC surf

9-5/8" 40# J55 @ 2160'
 w/200sx "H"+375sx 50/50 POZ+200sx "C",
 TOC surf

TOC 5492' by CBL

DV: 7664'
 did not circ cmt from 1st stg.
 2nd stg 300sx BJ Lite+1300sx Super "C"

EOT 8400.00

Proposed Wolfcamp
8438'-52', 8559'-70'

CIBP 9610' w/25sx "H" cmt to 9275'
 9663'-67'
 9707'-13'
 9772'-88'

Plug 10492' w/17sx "H" cmt to 10157'
 w/9.5ppg mud laden fluid to 9650'.

RBP 10,492' (RBP@ 10,513'w/2sx snd)
 10,656'-63'
 10,679'-84'
 10,708'-16'

CIPB 10,679'-84'
 10,890'-96' (Dec '82)

CIPB 10,904'
 10,906'-24' (wet)

4-1/2" 11.6# L80 & S95 @ 11,117'
 TD: 11,117

TOC 5492' by CBL

GL: 3212.5'

KB: 3229.5'

cwb

9-4-14

Lake Shore10SCFedCom4_WBD.xls

Lake Shore Fed S C 10 4
30-015-31569
Fasken Oil & Ranch Limited
March 08, 2017
Conditions of Approval

Notify BLM at 575-361-2822 a minimum of 24 hours prior to commencing work.

Work to be completed by June 08, 2017.

- 1. Operator shall tag RBP at 10,492' and place Class H Cement on top tagging at 10,157' as proposed to seal the Morrow formation.**
- 2. Operator shall place CIBP at 9610' and place 25x Class H cement as proposed. WOC and tag.**
- 3. Must conduct a casing integrity test before perforating and fracturing. Submit results to BLM. The CIT is to be performed on the production casing to max treating pressure. Notify BLM if test fails**
- 4. Surface disturbance beyond the originally approved pad must have prior approval.**
- 5. Closed loop system required.**
- 6. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.**
- 7. Operator to have H2S monitoring equipment on location.**
- 8. A minimum of a 5000 (5M) BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (5M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.**
- 9. Subsequent sundry required detailing work done, C-102 form, and completion report with the new formation. Operator to include well bore schematic of current well condition when work is complete.**

10. See attached for general requirements.

JAM 030817

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

Permanent Abandonment of Production Zone Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within ninety (90) days from this approval.

If you are unable to plug back the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged back. Failure to do so will result in enforcement action.

2. **Notification:** Contact the appropriate BLM office at least 24 hours prior to the commencing of any plug back operations. For wells in Eddy County, call 575-361-2822. For wells in Lea County, call 575-393-3612

3. **Blowout Preventers:** A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. **Mud Requirement:** Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of brine water. Minimum nine (9) pounds per gallon.

5. **Cement Requirement:** Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. **Before pumping or bailing cement on top of CIBP, tag will be required to verify depth.**

Unless otherwise specified in the approved procedure, the cement plug shall consist of either **Neat Class "C"**, for up to 7,500 feet of depth or **Neat Class "H"**, for deeper than 7,500 feet plugs.

6. **Subsequent Plug back Reporting:** Within 30 days after plug back work is completed, file one original and three copies of the Subsequent Report, Form 3160-5 to BLM. The report should give in detail the manner in which the plug back work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date work was completed.**

7. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.