OCD Artesia

Form 3160-5
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

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.

SUBMIT IN TRIPLICATE – *Other instructions on page 2.*

5. Lease Serial No.
NM-101856 NMNM-046483

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☑ Gas Well ☐ Other

8. Well Name and No.
Shell Federal No. 1

2. Name of Operator
Fasken Oil and Ranch, Ltd.

9. API Well No.
30-015-10881

3a. Address
6101 Holiday Hill Road
Midland, TX 79707

3b. Phone No. *(include area code)*
432-687-1777

10. Field and Pool or Exploratory Area
Wildcat

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
Unit Letter K, Sec. 5, T21S, R24E, 1980' FSL & 1980' FWL

11. County or Parish, State
Eddy, New Mexico

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☑ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☑ Plug Back	☐ 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 Shell Federal No. 1 from the Atoka zone considered by the NMOCD as a wildcat to the Indian Basin; Strawn pool. Please see attached procedure and current and proposed wellbore diagrams.

A closed loop system will be used for the recompletion operations. A sundry notice has been submitted to the MNOCD for approval.

NM OIL CONSERVATION
ARTESIA DISTRICT
DEC 01 2014
RECEIVED

Provide C-102 to NMOCD

SEE ATTACHED FOR
CONDITIONS OF APPROVAL
Accepted for record
NMOCD 12/5

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
Kim Tyson

Title Regulatory Analyst

Signature Kim Tyson

Date 10/16/2014

APPROVED
NOV 14 2014
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

Recommended Recompletion Procedure
Shell Federal No. 1
1980' FSL & 1980' FWL
Sec 5, T21S, R24E
Eddy County, New Mexico

OBJECTIVE:	Strawn Recompletion
WELL DATA:	
13-3/8" 48#/ft H-40 ST&C casing:	Set at 310' KB Cmt w/325 sx to surf.
8-5/8" 24.0#/ft J-55 ST&C 8rd casing:	Set at 3100' KB, Cmt w/1100sx Incor w/ 4% gel + 330 sx neat w/2% CaCl2 to surf.
4-1/2" 11.6# N-80&J-55 (1750'-7450') casing:	Set at 9,900' KB, Cmt w/ 450 sx, TOC 7750' by temp survey. 10.73' marker joint @ 9260.38'
Perfs:	Morrow: 9570'-9572' 4 JSPF Original, 9657'-9662' 2 JSPF 11-10-93, 9727'-9731' 2 JSPF 11-10-93. CIBP 9560' 7-3-14 CIBP 9550' w/35' "H"7-8-14 Atoka (7-9-14): 9181'-87', 9193'-9200', 9336'-46', 9406'-22' (1jspf, 1-11/16" SG), total 43 holes.
Tubing:	2-3/8" Arrowset I 10k pkr w/ TOSSD w/1.81" "F" PN, 272 jts 2-3/8 EUE 8rd 6.5#/ft N-80 tbg, EOT 8559'
TD:	9,901'
PBTD:	9515' (CIBP@9550w/35' "H")
Last Tubing Pull:	7-8-14

1. Set test tank and lay flowline.
2. RU pump truck and fill tubing w/ 35 bbls 3% KCL w/ clay stabilizer, corrosion inhibitor and oxygen scavenger.
3. NDWH, NU BOP.
4. Release packer and POW with tubing and packer.
5. RUWL and RIW w/ 3.625" gauge ring to 9150' FS and set 4-1/2" CIBP at +/-9150'. Dump 35' class "H" cement above CIBP for a PBTD of 9115'.

minimum of 50' above top perf.

6. RU pump truck and test plug and casing to 500 psi.
7. RIW with notched collar, SN, 2-3/8 EUE 8rd 6.5#/ft N-80 tubing to 8568'.
8. RU pump truck and acid transport and circulate well with 3% Kcl water containing packer fluid and clay stabilizer, and test CIBP to **2500** psi. Spot 500 gals of 15% NEFE triple inhibited HCl acid (estimated tubing depth to equal bottom Strawn lime OH log perf 8568').
9. POW with tubing.
10. RUWL with 3000 psi lubricator and grease. Perforate **Strawn lime** with 3-1/8" casing gun as follows:

8568' – 76' Lime (15h, 2JSPF, 0.40 EHD, 60° phased)

15 total holes by Schlumberger GR/Sonic log dated 12-15-66. POW, make sure all shots fired, and RDWL.

11. RU pump truck and displace 12 bbl spot acid via casing with 3% KCl water containing clay stabilizer at maximum rate attainable with maximum **2500** psi surface treating pressure.
12. 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 N-80 tubing to +/- 8550'. Reverse 5 bbls 3% KCL water into tubing.
13. ND BOP. NUWH, setting packer in 12 points compression.
14. Swab and flow back acid and load water to steel test tank and evaluate.

15. RU pumping service. Install tree saver. Trap 1500 psi on annulus. Acid frac Strawn perfs 8568-76' via 2-3/8" tubing with 1000 gal XL Gelled 15% HCL acid + 1000 gals Gelled 15% HCL acid + 35% CO2, flushing with 3% KCL water with clay stabilizer and 35% CO_2. Rate 5-10 bpm at max pressure 5000 psi. RD stimulation company and tree saver.
16. Swab and flow back acid and load water to steel test tank and evaluate.
17. Flow well and evaluate.
18. Return well to sales.
19. RDPU.

Add Strawn Sands

20. RUWL with 3000 psi lubricator and grease. Perforate **Strawn sands** with 1-11/16" strip gun as follows:

    8639' – 54' Sand (16h, 1JSPF)
    8718' – 26' Sand (9h, 1JSPF)
    8758' – 66' Sand (9h, 1JSPF)
    8895' – 8910' Sand (16h, 1JSPF)

    18 total holes by Schlumberger GR/Sonic log dated 12-15-66. POW, make sure all shots fired, and RDWL.

21. Return well to sales.

10/2/14

Well: **Shell Federal No. 1**

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

Location: 1980' FSL and 1980' FWL
Sec 5, T21S, R24E
Eddy County, NM

Spudded: 10/30/1966

API #: 30-015-10881

Current as of 7-9-14

RKB: 3383'

TD: 9901'

PBTD: 9515' (CIBP@9550w/35' "H")

Casing: **13-3/8" 48# H-40 ST&C @ 310'**
w/325sx Incor w/ 2% $CaCl_2$
circulated to surface
8-5/8" 24# J-55 ST&C 8rd thd @ 3100'
w/1100sx Incor w/ 4% gel + 330 sx neat w/2% CaCl2
circulated 276 sx to surface
4-1/2" 11.6# N-80&J-55 @ 9900'
450 sx Incor

TOC: TOC 7750' by Temp survey
4-1/2" 11.6# N-80: Surf-1750'
4-1/2" 11.6# J-55: **1750'-7450'**
4-1/2" 11.6# N-80: 7450'-9900'

Tubing: 7-8-14

JTS		
	2-3/8" Arrowset I 10k pkr,	
1	TOSSD w/1.81" "F" PN	
272	2-3/8" EUE 8rd N80 tbg	
	EOT	8559'

Perfs: Atoka

			#hls
7/9/2014	9181'-87'	(1jspf, 1-11/16" SG)	7
7/9/2014	9193'-9200'	(1jspf, 1-11/16" SG)	8
7/9/2014	9336'-46'	(1jspf, 1-11/16" SG)	11
7/9/2014	9406'-22'	(1jspf, 1-11/16" SG)	17
			43

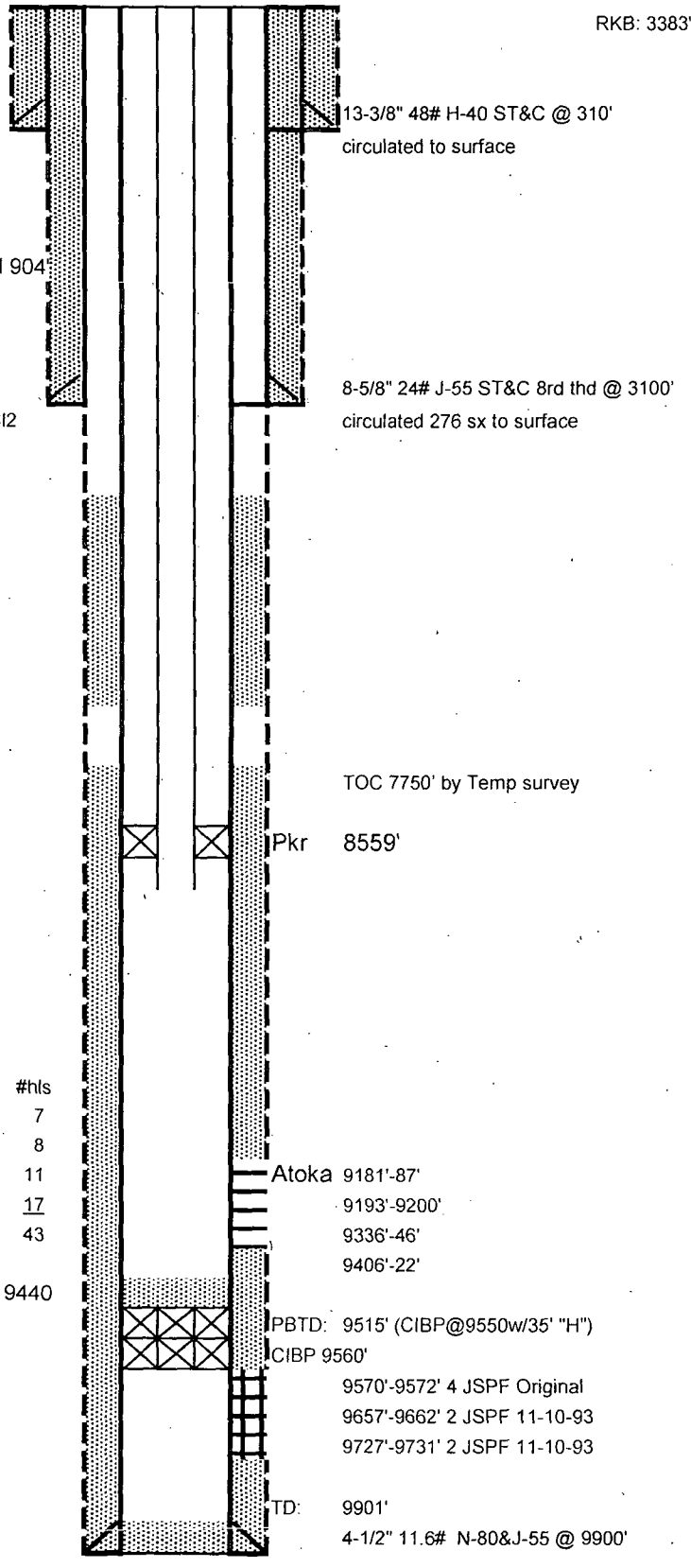
7/8/2014 CIBP 9550' w/35' "H" cmt

7/3/2014 CIBP 9560'

Perfs: Morrow
9570'-9572' 4 JSPF Original
9657'-9662' 2 JSPF 11-10-93
9727'-9731' 2 JSPF 11-10-93

Hole Sizes 17-1/2" 310', 12-1/4" 3100', 7-7/8" 9901'

Status: Morrow gas producer, 7 mcfd.



cwb
10-2-14
Shell 1 wb diagram.xls

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TOC: TOC 7750' by Temp survey
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1	TOSSD w/1.81" "F" PN	
272	2-3/8" EUE 8rd N80 tbg	
	EOT	8559'

Proposed
CIBP 9150' w/35' "H" cmt

Perfs:	Atoka		#hls
7/9/2014	9181'-87'	(1jspf, 1-11/16" SG)	7
7/9/2014	9193'-9200'	(1jspf, 1-11/16" SG)	8
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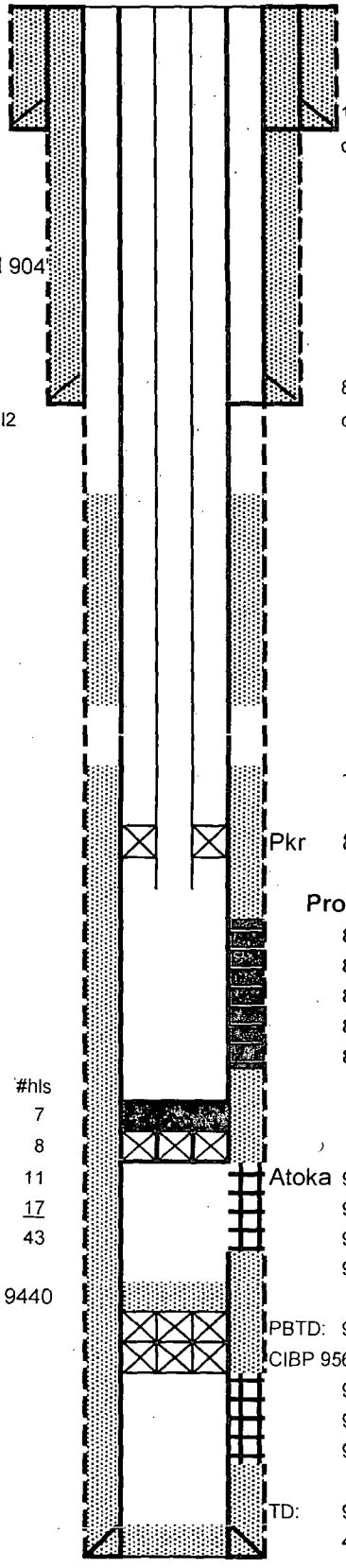

PROPOSED as of 10-2-14
RKB: 3383'

13-3/8" 48# H-40 ST&C @ 310'
circulated to surface

8-5/8" 24# J-55 ST&C 8rd thd @ 3100'
circulated 276 sx to surface

TOC 7750' by Temp survey

Pkr 8559'

Proposed Strawn
8568'-8576' (Lime)
8639'-8654' (sd)
8718'-8726' (sd)
8758'-8766' (sd)
8895'-8910' (sd)

Atoka 9181'-87'
9193'-9200'
9336'-46'
9406'-22'

PBTD: 9515' (CIBP@9550w/35' "H")
CIBP 9560'
9570'-9572' 4 JSPF Original
9657'-9662' 2 JSPF 11-10-93
9727'-9731' 2 JSPF 11-10-93

TD: 9901'
4-1/2" 11.6# N-80&J-55 @ 9900'

cwb
10-2-14
Shell 1 wb diagram.xls

Shell Federal 1
30-015-10881
Fasken Oil and Ranch, Ltd.
November 14, 2014
Conditions of Approval

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

Work to be completed by February 14, 2015.

1. **Operator shall set a CIBP at 9,131' (minimum of 50' above top most perforation) and place 25 sx Class H cement on top. Tag required.**

2. **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.**

3. Before casing or a liner is added or replaced, prior BLM approval of the design is required. Use notice of intent Form 3160-5.

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 **3000 (3M)** 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 (3M 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 and completion report for the new formations. Operator to include well bore schematic of current well condition when work is complete.**

10. **See attached for general requirements.**

JAM 111414

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

General Requirements for Plug Backs

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.**

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. **Before pumping cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.**

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.