

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-HOBBS

FORM APPROVED  
OMB NO. 1004-0137  
Expires July 31, 2010

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.

HOBBS OCD  
MAY 06 2011

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Energen Resources Corporation

3a. Address

3300 N. A St., Bldg. 4, Ste. 100 Midland, TX 79705

3b. Phone No. (include area code)

(432) 684-3692

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

760' FNL & 2090' FEL  
Section 33, T15S, R-35-E

5. Lease Serial No.

NM-04411 Fee

6. If Indian, Allottee or Tribe Name

N/A

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

NM 91055X

8. Well Name and No.

West Lovington 11

Strawn Unit

9. API Well No.

30-025-32852

10. Field and Pool, or Exploratory Area

Lovington Strawn, West

11. County or Parish, State

Lea County NM

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

TYPE OF SUBMISSION

- ☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- |   |   |  |   |
|---|---|--|---|
| <input type="checkbox"/> Acidize              | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Alter Casing         | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity |
| <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 recompletable 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 shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletable in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

See attached NMCD approved C-101

This well is to be plugged back and recompletable to another pool. Successful recompletable will remove the well from the West Lovington Strawn Unit. The well will be renamed Klein Fee #1



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

Name (Printed/Typed)

Tracie J Cherry

Title Sr. Regulatory Analyst

Signature

Date 01-27-11

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

PETROLEUM ENGINEER

Date

MAY 17 2011

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, makes 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.



***KLEIN FEE #1 (Formerly WLSU #11)***

**API #: 30-025-32852/ AFE #: PB071110**

**Abo/Wolfcamp**

**Lea County, New Mexico**

**COMPLETION PROCEDURE**

**December 30, 2010**

**A. OBJECTIVE:**

1. Perforate the Abo and Wolfcamp, acidize and frac as necessary & test for productivity.
2. Put the well on production into the existing/upgraded production facilities.

**B. WELL DATA:**

See attached wellbore diagram...

**C. PROCEDURE:**

**NO PAINTED TOOLS ARE TO BE RAN IN THIS WELL.**  
**USE ONLY BESTOLIFE "2000" THREAD COMPOUND.**  
**WATCH FOR EXCESSIVE USE OF THE THREAD COMPOUND.**  
**KEEP A TIW VALVE OPEN & ON THE RIG FLOOR @ ALL TIMES.**

1. Notify the Lea County/Zip Franklin Memorial Airport Manager or his representative @ (505) 393-4943 or 396-8521 prior to MIRUPU (Aeronautical Study Number - 2006-ASW-8462-OE).
2. MIRU workover rig w/ 2-15 ft rig mats (1 for the Rig & 1 for the Tubing).  
**Note:** Make sure that the derrick is properly flagged w/ a minimum 2'x 2' stiffened Aviation Orange colored flag & a red or white medium intensity flashing beacon light in accordance w/ the FAA 70/7460-1K Circular Advisory.
3. MI & set 1-500 barrel lined frac tank, steam clean the inside of the tank & fill the tank w/ enough FFW & Schlumberger's L-64 liquid clay stabilizer to satisfy all of the anticipated fluid requirements for this Completion.  
**Note:** Be sure & filter the water down to 2 microns through a FTR filter unit.

### C. PROCEDURE CONTINUED:

4. NU a 7-1/16" x 3M# manual BOP w/ 2 7/8" & CSO rams.
5. POOH with 2-7/8" tubing.
6. RU Gray or Schlumberger WL under a pack-off, run their CBL/VDL/CMT/GR/CCL & a CNL/GR/CCL log from PBTB back up to 6,000' FS & RDWL. Determine TOC and notify Midland Engineering.  
**Note:** Tie these logs into Gillespie's Klein Fee #1 CNL/Litho-Density/GR log dated 3/18/1995.
7. RU WL under a full lubricator & perforate w/ 4" "EXP" guns loaded w/ 3-25.0 gram, Titan "SDP" (P# -EXP-3325-321T, 0.42" EHD / 47.4" PD) 120 degree phased JSPF above the TOC per engineering instructions.
8. RU a kill truck to pump into casing to verify ability for squeeze cement job. Vary rate and monitor pressure. Notify Midland Engineering and wait for orders.
9. RU WL under a full lubricator, RIH and set CICR above squeeze perms. POOH RD WL, RIH with Stinger on 2-7/8" tubing.
10. RU a Schlumberger Well Services Cementers. RU on tubing and test annulus w/ BOP closed and tubing out of CICR. Test circulation. Sting into CICR and establish pump in rate. Squeeze cement through perms per instructions. Sting out of CICR and reverse excess cement. POOH w/ Tubing. WOC.
11. RIH w/ 4-3/4" bit and DC. Drill Cement and CICR, RIH to PBTB. Pressure test cement Squeeze to 1000#. Pump clean up, PUH to 10364' then spot 300 gallons of 15% HCl double inhibited (5 GPT) acid w/ the pre-determined/lab-tested additives using 2% FKCLPF & RD Schlumberger.  
**Note:** These additives are to be derived from the acid/oil compatibility-testing conducted from off-setting Strawn production prior to moving on this well.
12. Finish POOH w/ the 2 7/8" tubing & LD the BHA.

### STAGE 1 Test

13. RU Wireline under a full-lubricator & perforate Zone 1 w/ 3 1/8" "Select-Fire/EEG" guns loaded w/ 3-19 gram Titan "SDP" (P# -EXP-3319-322T, 0.40" EHD / 38.9" PD) 120 degree phased JSPF @ the following intervals:  
10,364' (1 ft / 3 holes)  
10,350' through 10,364' (14 ft / 42 holes)  
for a total of 45 holes in the 2 intervals over the 15' of gross interval & RDWL.  
**Note:** Plan to perforate from the bottom-upward. Once the first/bottom interval has been shot, pump into these holes to insure that the future acid will be going past all of the intervals.

**C. PROCEDURE CONTINUED:**

14. RIH w/ a 2 7/8" x 5 1/2" "Arrow-Set 1X" packer w/ a WL re-entry guide, XO, 2 7/8" x 2.25" seat nipple & the 2 7/8" L-80 6.50# EUE 8rd ERW R-2 tubing down to within 50-60' of the top perforation. Set packer, ND BOP, install wellhead. RU to frac down tubing.
15. RU Schlumberger Well Services for Stage #1 & prepare to acidize Zone 1 via the 2-7/8" tubing w/ the 300 gallons of spot acid plus 3.0M gallons of additional 15% HCl acid (3,300 gallons total) & sand-frac Zone 1 as per the attached Schlumberger Frac-Schedule using 6,000# as your absolute maximum pressure for this job.
16. Call the start of the flush when falling off of the 2.0 ppg sand & flush the end of the 2.0 ppg stage w slick 2% FKCLW down to within 2-3 barrels of the top perforation, SD & record the Instant through 15-minute casing pressures (Also note the closure time & pressures).
17. Flow the well back to the test tank until dead.
18. RU the swab-tools w/ a new swab-mandrel & no-go, plan on using 2 load/wire cups & commence swabbing.
19. Recover the load water ASAP to determine the entry rate & oil-cut after the acid treatment.
20. If the well kicks-off & sustains flow, begin flow-testing @ once for results. Wait on orders before proceeding.

**Stage 2 Test**

21. RU to release packer. ND wellhead, equalize packer, Unset packer. Kill well if needed. NU BOP, POH w/ packer.
22. RU Wireline under a full-lubricator. RIH w/ a 5 1/2" 10M# Plugwell "Quick-Drill" CIBP. Set the CIBP above Zone 1 @ 10,250' & POOH.
23. RIH & perforate Zone 2 and Zone 3 w/ 3 1/8" "Select-Fire/EEG" guns loaded w/ 3-19 gram Titan "SDP" (P# -EXP-3319-322T, 0.40" EHD / 38.9" PD) 120 degree phased JSPF @ the following intervals:  
9,810' through 9,824' (14 ft / 42 holes)  
9,702' through 9,710' (8 ft / 24 holes)  
for a total of 66 holes in the 2 intervals over the 24' of gross interval & RDWL
24. RIH w/ a 2 7/8" "Arrow-Set 1X" packer w/ a Wireline re-entry guide, XO, 2 7/8" x 2.25" seat nipple & the 2 7/8" L-80 6.50# EUE 8rd ERW R-2 tubing. Place end of tubing @ 9,824' . PU Schlumberger pumping and spot 500 gal 15% HCl acid. PUH and Set packer, ND BOP, install wellhead. RU to treat down tubing.

**C. PROCEDURE CONTINUED:**

25. RU Schlumberger Well Services to break down and acidize Zone 2 & 3 via the 2-7/8" tubing w/ the spot acid plus 5.0M gallons of additional 15% HCl acid dropping 75 1.3 SG "Hi-Temp Bio-balls".
26. Start straight out on acid, pump 500 gallons of the acid ahead, increase the rate up to 5-8 BPM w/ a maximum pressure of 6,000#, attempt to ball-out w/ the evenly spaced ball-sealers, SD, surge the balls & allow them ample time to fall.
27. Continue with sand-frac Zone 2 & 3 as per the attached Schlumberger Frac-Schedule using 6,000# as your absolute maximum pressure for this job.
28. Call the start of the flush when falling off of the 2.0 ppg sand & flush the end of the 2.0 ppg stage w slick 2% FKCLW down to within 2-3 barrels of the top perforation, SD & record the Instant through 15-minute casing pressures (Also note the closure time & pressures).
29. Open the well back up to the reserve ASAP & commence load recovery @ a controlled & monitored rate of 1-1 1/2 BPM. **Note:** If the well starts to cut significant oil during the flow-back, switch the stream of flow to the test tank right away to avoid any spray of oil over the reserve, pasture or field.
30. Continue flow-testing the well @ the 1-1 1/2 BPM rate to recover the load water & evaluate the well or until the well dies.
31. RU the swab-tools w/ a new swab-mandrel & no-go, plan on using 2 load/wire cups & commence swabbing.
32. Recover the load water ASAP to determine the entry rate & oil-cut after the acid treatment.
33. If the well kicks-off & sustains flow, begin flow-testing @ once for results. Wait on orders before proceeding.

**Put on Production**

34. ND wellhead, equalize and release packer. NU BOP, POOH with tubing.
35. PU & RIH w/ a 4 3/4" 5-Bladed mill, BS, XO & 2 7/8" API SN on the 2 7/8" tubing.
36. Drill-out the the CIBP @ 10,250' then continue on down & wash the sand out back down to the PBSD @ 11,455'.
37. Circulate the hole until the returns are clean & free of any sand, displace the hole w/ 170 barrels of good/clean 2% FKCLW then POOH w/ the tubing & LD the BHA.

**C. PROCEDURE CONTINUED:**

38. If the casing is not flowing back, pour 5 gallons of corrosion inhibitor down the casing & RIH w/ production string as per Superintendent's design.
39. If the tubing is not flowing back, pour 5 gallons of corrosion inhibitor down the tubing & PU & RIH w/ a rod string as per Superintendent's design.
40. L&P the tubing to 500# w/ filtered 2% KCl water, check for good pump action, re-check the pump spacing (Plan to leave the pump spaced 1 ft off of bottom w/ 8-10 ft of polish rod out above the stuffing box) & clamp the rods off.
41. RD the pulling unit, clean the location & turn the well over to the Production Group to set the pumping unit, plumb-in & place the well on production.

**D. ATTACHMENTS:**

**Wellbore Diagram**

# ENERGEN RESOURCES CORP

Klein Fee No. 1  
(formerly WLSU #011)

LEA COUNTY, NM

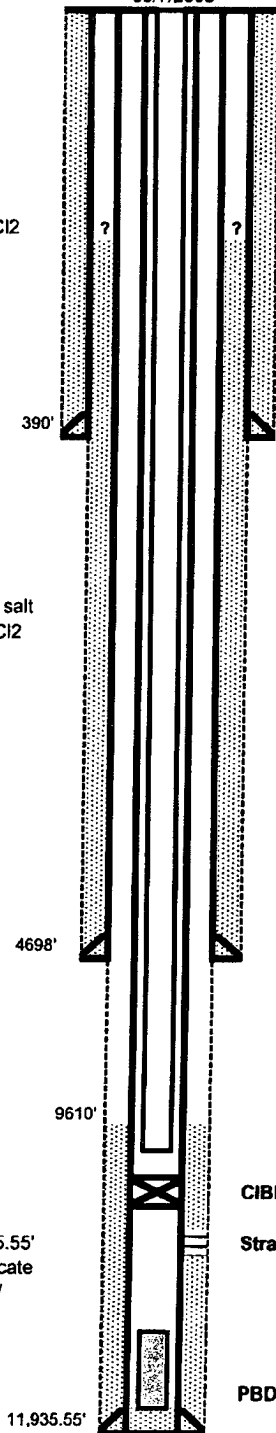
Current Condition TA'd  
09/7/2005

Conductor:  
None

Surface Casing:  
13-3/8" 48#, H-40 @ 390'  
Cemented to surface  
with 440 sx Class "C" w/2% CaCl2  
Circulated 75 sx to surface

Intermediate Casing:  
8-5/8" 32#, J-55 & S-80 @ 4698'  
700 sx total  
(L) 500 sx Class "C" Lite w/5% salt  
(T) 200 sx Class "C" w/1% CaCl2  
TOC: Unknown

Production Casing:  
5-1/2" 17#, S-95 & N-80 @ 11,935.55'  
Preflushed w/ 1000 gals metasilicate  
and cmted w/ 600sx Class "H" w/  
.70% FL-25, 3% KCl, .2% FP-8.  
Displaced w/ 277 BFW.  
TOC: 9610' BTS



GL Elevation: 3981'

KB Elevation: 3996.5' -- 15.5' above GL

Location: 760' FNL x 2090' FEL

Sec 33-15S-35E

Spud: 02/15/1995

API : 30-025-32852

Tubing Detail (all depths KB)

#	Item	Size	Weight	Grade	From	To
347	Tubing	2 7/8"	6.5	N-80	Surf	11100'

CIBP set at 11475' (no Cement)

Strawn Perfs: 11,572-11,582' w/ 2 JSPF (21 holes)

PBD: 11,796' (2 Vann guns left in hole--One Loaded and One Fired); 11,898'

TD: 11,935'

Note: 03/31/95 Dropped bar to fire guns. Guns did not fire. Made several attempts to fish bar. While pulling fishing tool after third fishing attempt, the fishing tool tripped the mechanical tubing release dropping the Van guns to PBD. Left in hole: 4" loaded carrier guns, firing head, handling sub with no-go, 1 jt. 2-7/8" 6.5# N-80 tbg & mechanical tubing release. (total footage 50.7')

7/7/98 Fished firing bar and dropped Vann Guns. Had 1/32" CaCO3 scale on firing bar.