

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

*OCD
Hobbs*

FORM APPROVED
OMB NO. 1004-0135
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

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

MAY 01 2014

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		7. If Unit or CA/Agreement, Name and/or No. 8910086380	
2. Name of Operator LEGACY RESERVES OPERATING LP Contact: BLAIN LEWIS E-Mail: blewis@legacylp.com		8. Well Name and No. PEARSALL QN SAND UT 18	
3a. Address 303 W WALL SUITE 1600 MIDLAND, TX 79702	3b. Phone No. (include area code) Ph: 432-689-5200 Ext: 5201	9. API Well No. 30-025-00845-00-S1	
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 5 T18S R32E SESW 990FSL 1650FWL		10. Field and Pool, or Exploratory PEARSALL	
		11. County or Parish, and State LEA COUNTY, NM	

RECEIVED

12. CHECK 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"/> Fracture Treat	<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 shall 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 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 site is ready for final inspection.)

THIS WELL IS CURRENTLY NAMED THE PEARSALL QUEEN SAND UNIT #18. APPROVAL HAS BEEN OBTAINED FROM ALL PEARSALL QUEEN SAND UNIT OWNERS TO PLUG AND ABANDON THE UNECONOMIC QUEEN PRODUCING INTERVAL AND RECOMPLETE THE WELL IN SEVEN RIVERS. IF THE RECOMPLETION IS SUCCESSFUL A NEW PRODUCTION FACILITY WILL BE INSTALLED AT THE WELL LOCATION. AN AMENDMENT IN THE PLAN OF DEVELOPMENT OF THE PEARSALL QUEEN SAND UNIT REFLECTING THIS CHANGE WILL BE SUBMITTED. ATTACHED IS THE PROPOSED WORKOVER PROCEDURE.

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

APPROVED
[Signature]
APR 28 2014
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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

Electronic Submission #240310 verified by the BLM Well Information System For LEGACY RESERVES OPERATING LP, sent to the Hobbs Committed to AFMSS for processing by WESLEY INGRAM on 04/25/2014 (14WWW010755)

Name (Printed/Typed) BLAIN LEWIS	Title SENIOR ENGINEER
Signature (Electronic Submission)	Date 03/27/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By EDWARD FERNANDEZ	Title PETROLEUM ENGINEER	Date 04/28/2014
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 Hobbs

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.

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

MAY 08 2014

PROCEDURE TO RECOMPLETE IN SEVEN RIVERS
Pearsall Queen Sand Unit #18 (name will change to Legacy #1)
Pearsall, Seven Rivers Field
Lea County, New Mexico

Well Data: 4-1/2", 10.5# (prob. J-55) casing at 3850' with 340 sx, TOC at 500' (calc.)
Grayburg (Queen) perms: 3713'-3736'
Un-perf'd Seven Rivers pay: likely 3000'-3600' (will be evaluated by new GR/CNL logs)
2-3/8" J-55, anchored tubing at 3766' with 5/8" rod string and 1.5" pump

Volumes: 4-1/2" csg x 2-7/8" tbg annulus = 0.0079 bbls/ft
4-1/2" csg = 0.0159 bbls/ft
2-7/8" tbg = 0.00579 bbls/ft

- 1) **Day one:** MIRU pulling unit. POH and visually inspect rods and pump (\$12,000 is in AFE to replace rods if necessary). NU BOP. POH with tubing. Unload 3700' of 2-7/8", 6.5#, N-80, EUE, 8R work string.
- 2) **Day two:** RIH with 3-7/8" bit, casing scraper and production tubing. RIH to bottom at +/- 3800'. POH and lay down casing scraper and bit. *See COA*
- * 3) MIRU wireline unit. RIH with GR/CNL log tools and log from bottom to 2500'. Send log via email to Blain Lewis to pick perms. POH with logging tools. RIH with 4-1/2" CIBP and set on wireline at +/- 3650'. POH with wireline. RIH with 3-1/8" select-fire slick gun and perf Seven Rivers with 10 total holes to be picked from GR/CNL log. POH with wireline. RIH with bailer on wireline and dump 2 sx (20') cement on CIBP for PBTB 3630'. POH and RDMO wireline unit.
- * 4) **Day three:** RIH with 10K packer and 2-7/8" work string tubing to +/- 2900'. MIRU frac equipment as per attached recommendation with +/- 1,200 bbls 2% KCl water. Circulate hole with +/- 40 bbls 2% KCl water and set packer at +/- 2900'. Test casing annulus to 500 psig for 15 min. and monitor throughout stimulation. NU frac valve to 2-7/8" tubing and treat Seven Rivers perms at 6-10 BPM and 8,000 psig maximum with spearhead of 2,000 gals (47.6 bbls) 15% NEFE HCl. Frac down 2-7/8" tubing at 15-20 BPM, 8000 psig maximum. Flush to top perf with linear gelled 2% KCl water. Report ISIP and 5-10-15 min. SIP's. RDMO frac equipment and leave well SI overnight.
- 5) **Day four:** Open and flow down to tank. Release packer and POH laying down work string and packer.
- 6) RIH with BPMA, perf sub, SN, TAC and remainder of production tubing (hydrotest tubing in hole) to set bottom of BPMA above perms at +/- 3000', SN at +/- 2965' and TAC at +/- 2960'. ND BOP. NU wellhead.

- 7) Day five: RIH with 1.25" bore insert pump and rods, seat pump, space out and hang on pumping unit. Load and pressure test tubing. Put well on pump. RDMO pulling unit.
- 8) Optimize production rate by adjusting SPM or pump size as necessary.

ESTIMATED COSTS:

Pulling unit - 5 days	\$ 25,000
Stimulation services	\$ 60,000
Wireline services	\$ 20,000
Rental tools	\$ 15,000
Contract labor	\$ 15,000
Rod string	\$ 12,000
3000' 2 3/8" tbg	\$ 10,000
Misc. equip	\$ 7,000
5% contingencies	\$ 6,800
TOTAL	\$170,800

PREPARED BY: Blain Lewis Date: 12/06/13



PEARSALL QUEEN SAND UNIT #18

Current wellbore diagram

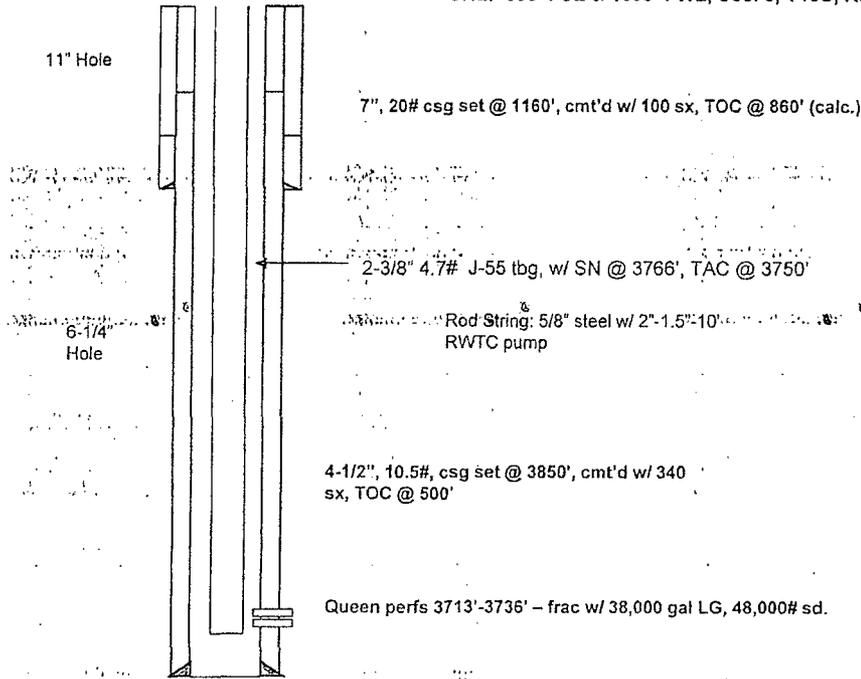
FIELD: Tamano East
COUNTY: Lea
STATE: New Mexico

GL: 3808'
KB: Unknown
SPUD DATE: 06/18/59,
Re-entered 5/12/62

LATEST UPDATE: 12/06/2013
BY: BKL
API No: 30-025-00845

Location:

SHL: 990' FSL & 1650' FWL, Sec. 5, T18S, R32E



PBTD 3810'
TD 3850'



PEARSALL QUEEN SAND UNIT #18

Proposed wellbore diagram

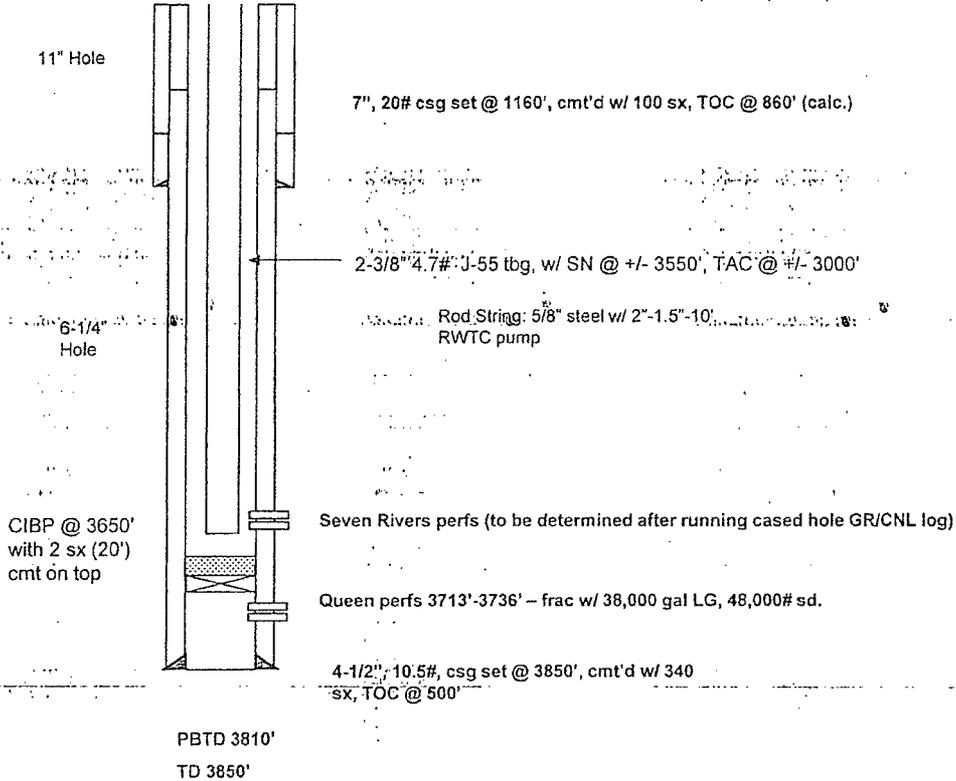
FIELD: Tamano East
COUNTY: Lea
STATE: New Mexico

GL: 3808'
KB: Unknown
SPUD DATE: 06/18/59,
Re-entered 5/12/82

LATEST UPDATE: 12/06/2013
BY: BKL
API No: 30-025-00845

Location:

SHL: 990' FSL & 1650' FWL, Sec. 5, T18S, R32E



Legacy Reserves Operating Conditions of Approval

NMLC064098: Pearsall Queen Sand Unit 18

API: 30-025-00845

Lea County, New Mexico

1. **Due to being within the Lesser Prairie Chicken habitat, this workover** activity will be restricted to the hours of 9:00am through 3:00am for the period of March 1 through June 15. Exceptions to these restrictions may be granted by BLM's Johnny Chopp <jchopp@blm.gov> 575.234.2227 or Bob Ballard <bballard@blm.gov> 575.234.5973.
2. Surface disturbance beyond the existing pad must have prior approval
3. Before casing or a liner is added, replaced, or repaired prior BLM approval of the design is required. Use notice of intent Form 3160-5.
4. **Provide BLM with an electronic copy (Adobe Acrobat Document) of a cement bond log recorded from 3500' to surface. This is to confirm top of cement.**
5. Notify BLM 575-393-3612 Lea Co as work begins. Some procedures are to be witnessed. If there is no response, call 575-361-2822, leave a voice mail with the API#, workover purpose, and a call back phone number.
6. **Operator shall place a CIBP at 3650' and place 35' cement on top. Tag required. Tag to be witness by BLM field inspector.**
7. **Must conduct a casing integrity test before any perforating** or fracturing can be done. Submit results to BLM. The CIT is to be performed on the production casing to 500 psig for 30 minutes and chart recorded.
8. A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.
9. Functional H₂S monitoring equipment shall be on location.
10. A minimum of a 2000 (2M) 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 (2M 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.
11. All waste (i.e. 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.

12. 11. Operator shall update POD and address as to why this well is no longer needed as a unit well.
13. File a **subsequent sundry** Form 3160-5 within 30 days of well work. Include an updated wellbore diagram. File the subsequent sundry for the well stimulation separately if it is delayed as much as 25 days.
14. Submit the BLM Form 3160-4 **Recompletion Report** within 30 days of the date all BLM approved procedures are complete.
15. Workover approval is good for 90 days (completion to be within 90 days of approval). A legitimate request is necessary for extension of that date.
16. If workover is successful operator shall submit a sundry to remove "UNIT" from the well name and production will be reported to the lease

EGF.042514