

ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION



January 5, 1987

GARREY CARRUTHERS  
GOVERNOR

Union Texas Petroleum Corporation  
P.O. Box 2120  
Houston, Texas 77252-2120

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-5800

Attention: Ralph E. Stanley  
Contract Analyst

Re: Administrative Order NFL-147

Dear Mr. Stanley:

Reference is made to your application for an Infill Well Finding and Well-Spacing Waiver made pursuant to Section 271.305(b) of the Federal Energy Regulatory Commission regulations, Natural Gas Policy Act of 1978, and Oil Conservation Division Order No. R-6013 for the following described well:

Langlie Jal Unit Well No. 103 located 1200 feet from the South line and 131 feet from the East line of Section 31, Township 24 South, Range 37 East, NMPM, Langlie Mattix Pool, Lea County, New Mexico.

THE DIVISION FINDS THAT:

(1) Section 271.305(b) of the Federal Energy Regulatory Commission Interim Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find, prior to the commencement of drilling, that the well is necessary to effectively and efficiently drain a portion of the reservoir covered by the production unit which cannot be so drained by any existing well within that unit, and must grant a waiver of existing well-spacing requirements.

(2) By Division Order No. R-6013, dated June 7, 1979, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.

Examiner

Michael E. Stogner

*[Handwritten Signature]*  
Sincerely

(2) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

(1) The applicant is hereby authorized to drill the Langlie Jai Unit Well No. 103 as described above, as an infill well on the existing 40-acre oil proration unit comprising the SE/4 SE/4 (Unit P) of Section 31, Township 24 South, Range 37 East, NMPM, Langlie Matix Pool, Lea County, New Mexico. The authorization for infill drilling granted by this order is an exception to applicable well spacing requirements and is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.

IT IS THEREFORE ORDERED THAT:

- (8) In order to permit effective and efficient drainage of said proration unit, the subject application should be approved as an exception to the standard well spacing requirements for the pool.
- (7) All the requirements of Division Order No. R-6013 have been complied with, and the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.
- (6) The drilling and completion of the well for which a finding is sought should result in the production of an additional 72,000 MCF of gas from the proration unit which would not otherwise be recovered.
- (5) Said unit is not being effectively and efficiently drained by the existing well on the unit.
- (4) A standard 40-acre oil proration unit comprising the SE/4 SE/4 (Unit P) of Section 31, Township 24 South, Range 37 East, is currently dedicated to the Langlie Jai Unit Well No. 27 also located in Unit P of said Section 31.
- (3) The well for which a finding is sought is to be completed in the Langlie Matix Pool, and the standard spacing unit in said pool is 40 acres.

Received 6/16/86  
Return ASAP

Union Texas Petroleum Corporation  
P.O. Box 2120  
Houston, Texas 77252-2120

Attention: Ralph E. Stanley  
Contract Analyst

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(2) By Division Order No. R-6013, dated June 7, 1979, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.

(3) The well for which a finding is sought is to be completed in the Langlie Mattix Pool, and the standard spacing unit in said pool is 40 acres.

(4) A standard 40-acre oil proration unit comprising the SE/4 SE/4 (Unit P) of Section 31, Township 24 South, Range 37 East, is currently dedicated to the Langlie Jal Unit Well No. 27 also located in Unit P of said Section 31.

(5) Said unit is not being effectively and efficiently drained by the existing well on the unit.

(6) The drilling and completion of the well for which a finding is sought should result in the production of an additional 72,000 MCF of gas from the proration unit which would not otherwise be recovered.

(7) All the requirements of Division Order No. R-6013 have been complied with, and the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.

(8) In order to permit effective and efficient drainage of said proration unit, the subject application should be approved as an exception to the standard well spacing requirements for the pool.

IT IS THEREFORE ORDERED THAT:

(1) The applicant is hereby authorized to drill the Langlie Jal Unit Well No. 103 as described above, as an infill well on the existing 40-acre oil proration unit comprising the SE/4 SE/4 (Unit P) of Section 31, Township 24 South, Range 37 East, NMPM, Langlie Mattix Pool, Lea County, New Mexico. The authorization for infill drilling granted by this order is an exception to applicable well spacing requirements and is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.

(2) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

Michael E. Stogner  
Examiner

N.M.O.C.D. - Hobbs

OIL CONSERVATION DIVISION  
P. O. Box 2088  
SANTA FE, NEW MEXICO  
87501

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

ADMINISTRATIVE ORDER

NFL \_\_\_\_\_

INFILL DRILLING FINDINGS AND WELL-SPACING WAIVER  
MADE PURSUANT TO SECTION 271.305(b) OF THE  
FEDERAL ENERGY REGULATORY COMMISSION REGULATIONS,  
NATURAL GAS POLICY ACT OF 1978 AND OIL CONSERVATION DIVISION  
ORDER NO. R-6013

I.

Operator Union Texas Petroleum Corp. Well Name and No. Langlie Tol Unit Well No. 103  
Location: Unit P Sec. 31 Twp. 24S Rng. 37E Cty. Lea

II.

THE DIVISION FINDS:

- (1) That Section 271.305(b) of the Federal Energy Regulatory Commission Interim Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find, prior to the commencement of drilling, that the well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by any existing well within that unit, and must grant a waiver of existing well-spacing requirements.
- (2) That by Order No. R-6013, dated June 7, 1979, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.
- (3) That the well for which a finding is sought is to be completed in the Langlie Unit Pool, and the standard spacing unit in said pool is 40 acres.
- (4) That a Standard 40-acre proration unit comprising the SE 1/4 SE 1/4 (Unit P) of Sec. 31, Twp. 24S, Rng. 37E, is currently dedicated to the Langlie Tol Unit Well No. 103 37 located in Unit P of said section.
- (5) That this proration unit is ( standard ( ) nonstandard; if nonstandard, said unit was previously approved by Order No. 10).
- (6) That said proration unit is not being effectively and efficiently drained by the existing well(s) on the unit.
- (7) That the drilling and completion of the well for which a finding is sought should result in the production of an additional 72,000 MCF of gas from the proration unit which would not otherwise be recovered.
- (8) That all the requirements of Order No. R-6013 have been complied with, and that the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.
- (9) That in order to permit effective and efficient drainage of said proration unit, the subject application should be approved as an exception to the standard well spacing requirements for the pool.

IT IS THEREFORE ORDERED:

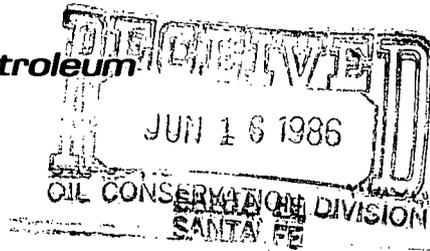
- (1) That the applicant is hereby authorized to drill the well described in Section I above as an infill well on the existing proration unit described in Section II(4) above. The authorization for infill drilling granted by this order is an exception to applicable well spacing requirements and is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.
- (2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_.

DIVISION DIRECTOR \_\_\_\_\_ EXAMINER \_\_\_\_\_



Union Texas Petroleum



1330 Post Oak Blvd.  
P.O. Box 2120  
Houston, Texas 77252-2120  
(713) 623-6544

June 11, 1986

New Mexico Dept. of Energy & Minerals  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Attn: Mr. Mike Stogner

**RE: Langlie Jal Unit 32-245-37E-103-P**

Dear Mike:

In order to respond to your request for an infill well finding, I have used the format that is prescribed by the Texas Railroad Commission. Since this format is simpler to understand and provides the same type of information that every jurisdictional agency requires, I have found it to be accepted by everyone.

I trust this will enable you to complete the filing process; however, if additional information is needed, please call me at (713) 968-3677.

Yours truly,

Ralph E. Stanley  
Contract Analyst

RES/jv

MISC/13:3

IN ORDER TO FULFILL THE REQUIREMENTS FOR AN INFILL WELL FILING, PLEASE ANSWER THE FOLLOWING:

EFFECTIVE AND EFFICIENT DRAINAGE FINDING

1. SUBMIT A DETAILED DESCRIPTION OF THE CIRCUMSTANCES NECESSITATING DRILLING OF ADDITIONAL WELL(S) ON THE PRORATION UNIT FOR EACH WELL. (I.E., MECHANICAL DIFFICULTY, RESERVOIR CHARACTERISTICS).
2. PROVE THE PRORATION UNIT TO BE REASONABLY PRODUCTIVE (I.E., STRUCTURE MAP ILLUSTRATING GAS-WATER CONTACTS AND RESERVOIR LIMITS OR OFFSET PRODUCTION IN THE SAME RESERVOIR).
3. CALCULATE THE ORIGINAL RECOVERABLE GAS IN PLACE OF PRORATION UNIT (I.E., VOLUMETRIC CALCUTATION USING RECOVERY FACTOR OR OTHER ACCEPTED ENGINEERING CALCULATIONS SUCH AS P/Z PLOT VS. CUMULATIVE PRODUCTION OF PRORATION UNIT). SHOW WORK.
4. PROVIDE CUMULATIVE PRODUCTION TO DATE OR ORIGINAL WELL ON PRORATION UNIT.
5. SUBMIT AN ESTIMATION OF FUTURE RECOVERY FROM ORIGINAL WELL IF THE ORIGINAL WELL IS STILL PRODUCTIVE. SHOW WORK.
6. ESTIMATE THE REMAINING RECOVERABLE RESERVES THAT THE ORIGINAL WELL ON THE PRORATION UNIT IS NOT CAPABLE OF RECOVERING. SHOW WORK.
7. ESTIMATE THE RECOVERY OF EACH ADDITIONAL WELL.

LANGLIE JAL UNIT NO. 103

1. A recent reservoir study indicated that porosity stringers in the Seven Rivers-Queen formations (the unitized interval) of the Langlie Jal Unit varied in quantity and quality from well to well. In order to decrease the discontinuity it was proposed that an infill well pilot project be undertaken. Infill drilling to decrease discontinuity thereby increasing flood efficiency was proven to be successful in the Langlie Jal Unit. Wells numbered 95 through 100, drilled in 1982, added 134,700 barrels of oil and 200 MMSCFG to existing reserves.
2. The infill drilling of Langlie Jal Unit Well No. 103 is a part of a project to increase well density from 40 acres per well and 80 acre 5-spot patterns to 20 acres per well and 40 acre 5-spot patterns.
3. Based on an initial production of 46 BOPD, a GOR of 1000 and a unit production decline of 20%, reserves for this well are estimated at 72,000 BO and 72 MMCF gas.
4. The cumulative production from the Langlie Jal Unit Well No. 27, which is within the 40 acre proration unit, is 54 MBO (gas production not available).
5. There is no future production from Langlie Jal Unit Well No. 27. This well was converted to injection service in June, 1972 to complete the 80 acre 5-spot patterns following unitization.
6. The estimate of remaining recoverable reserves that the original well could not recover is 72,000 STBO and 72 MMCF gas.
7. The estimated recovery of the Langlie Jal Unit No. 103 is 72,000 STBO and 72 MMCF gas.

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

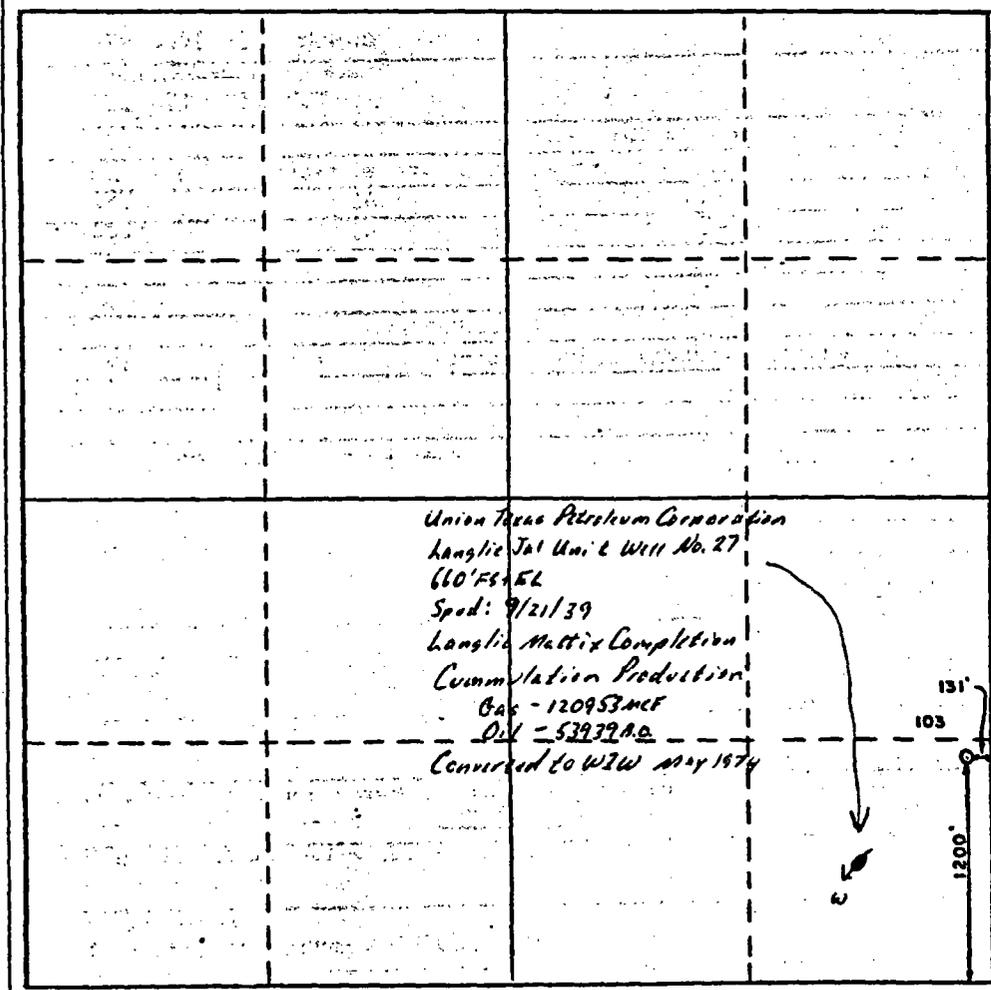
Union Texas Petroleum Corp.			Lease Langlie-Jal		Well No. 103
Section 31	Township 24-S	Range 37-e	County Lea		
Actual Footage Location of Well: 131 feet from the East line and 1200 feet from the South line					
Ground Level Elev. 3230	Producing Formation Seven Rivers - Queen	Pool Langlie Mattix (Queen)	Dedicated Acreage: 20 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*W. A. Higgins*  
Name

W. A. Higgins  
Position

Production Services Supr.  
Company

Union Texas Petroleum Corp.  
Date

September 19, 1983

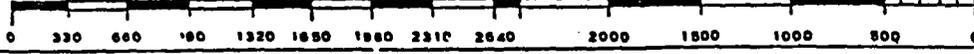
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
Sept. 15, 1983

Registered Professional Engineer and/or Land Surveyor

*Mark E. Shover*  
Certificate No.

2189



LANGLIE JAL UNIT NO. 103

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STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION



January 5, 1987

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GOVERNOR

Union Texas Petroleum Corporation  
P.O. Box 2120  
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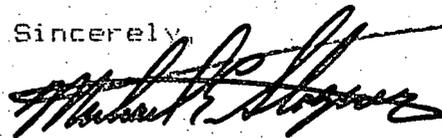
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Michael E. Stogner,  
Examiner