STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

January 6, 1987

GARREY CARRUTHERS
GOVERNOR

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

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

Attention: Ralph E. Stanley
Contract Analyst

Re: Administrative Order NFL-149

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. 104 located 140 feet from the South line and 247 feet from the West line of Section 32, 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 in 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 waver 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.

(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 SW/4 SW/4 (Unit M) of Section 32, Township 24 South, Range 37 East, is currently dedicated to the Langlie Jal Unit Wells Nos. 26 and 95 also located in Unit M of said Section 32.

(5) Administrative Order No. NFL-101, dated October 11, 1984, authorized an Infill Well Finding for said Langlie Jal Unit Well No. 95 on the aforementioned proration unit. NFL-101 should remain in full force and not be effected by the entry of this order.

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

(7) The drilling and completion of the well for which a finding is sought should result in the production of an additional 62,000 MCF of gas from the proration unit which would not otherwise be recovered.

(8) 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.

(9) 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. 104 as described above, as an infill well on the existing 40-acre oil proration unit comprising the SW/4 SW/4 (Unit M) of Section 32, 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) Division Administrative Order No. NFL-101, dated October 11, 1984, shall also remain in full force and effect until further notice.

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

Sincerely,

Michael E. Stogner,
Examiner

xc: N.M.O.C.D. - Hobbs
NFL-101 File

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

January 6, 1987

GARREY CARRUTHERS
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STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

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

Attention: Ralph E. Stanley
Contract Analyst

Re: Administrative Order NFL-149

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. 104 located 140 feet from the South line and 247 feet from the West line of Section 32, 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 proration unit which cannot be so drained by any existing well within that unit, and must grant a waver 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.

(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 SW/4 SW/4 (Unit M) of Section 32, Township 24 South, Range 37 East, is currently dedicated to the Langlie Jal Unit Wells Nos. 26 and 95 also located in Unit M of said Section 32.

(5) Administrative Order No. NFL-101, dated October 11, 1984, authorized an Infill Well Finding for said Langlie Jal Unit Well No. 95 on the aforementioned proration unit. NFL-101 should remain in full force and not be effected by the entry of this order.

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

(7) The drilling and completion of the well for which a finding is sought should result in the production of an additional 62,000 MCF of gas from the proration unit which would not otherwise be recovered.

(8) 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.

(9) 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. 104 as described above, as an infill well on the existing 40-acre oil proration unit comprising the SW/4 SW/4 (Unit M) of Section 32, 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) Division Administrative Order No. NFL-101, dated October 11, 1984, shall also remain in full force and effect until further notice.

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

Sincerely,

Michael E. Stogner,
Examiner

xc: N.M.O.C.D. - Hobbs
NFL-101 File

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-104-M

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 simplier 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,

R. E. Stanley

Ralph E. Stanley
Contract Analyst

RES/jv

MISC/13:4

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. 104

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 succesful 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. 104 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 40 BOPD, a GOR of 1000 and a unit production decline of 20%, reserves for this well are estimated at 62,000 BO and 62 MMCF gas.

4. The cumulative production from the Langlie Jal Unit Well No. 26, which is within the 40 acre proration unit, is 210 MBO (gas production not available).

5. There is no future production from Langlie Jal Unit Well No. 26. This well was converted to injection service in January 1984 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 62,000 STBO and 62 MMCF gas.

7. The estimated recovery of the Langlie Jal Unit No. 104 is 62,000 STBO and 62 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.

Unoin Texas Petroleum Corp.		Lease: Langlie- Jal Unit		Well No.: 104
t Letter: M	Section: 32	Township: 24-S	Range: 37-E	County: Lea

Actual Footage Location of Well: 140' feet from the South line and 247' feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3230'	Seven-Rivers-Queen	Langlie Mattix	20 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

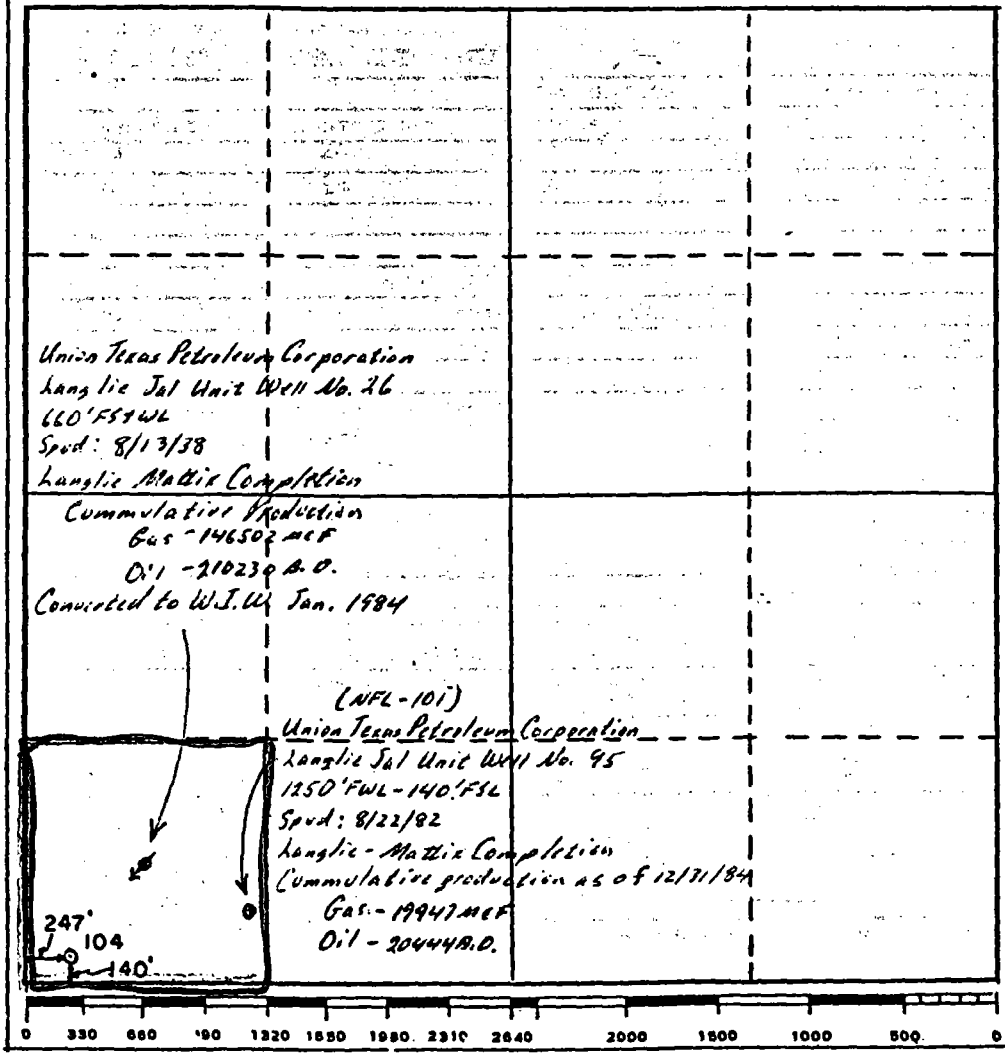
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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?

[X] Yes [ ] No If answer is "yes," type of consolidation Secondary Recovery Waterflood Unit

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.

Name: W. A. Huggins

Position: Regul. Compl. Coord.

Company: Union Texas Petroleum Corp.

Date: September 27, 1984

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: 9/24/84

Registered Professional Engineer and/or Land Surveyor

Mark E. Shower

Certificate No. 2189

NFLUTX C

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

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

ADMINISTRATIVE ORDER
NFL ~~104~~

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 Jal Unit Well No. 104

Location: Unit M Sec. 32 Twp. 24 S Rng. 37 E 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 Mattix Pool, and the standard spacing unit in said pool is 40 acres.

(4) That a Stand. 40-acre proration unit comprising the SW/4 SW/4 (Unit M) of Sec. 32, Twp. 24 S, Rng. 37 E, is currently dedicated to the Langlie Jal Unit Wells Nos. 26 and 95 located in Unit M of said section.

(5) That this proration unit is (✓) standard ( ) nonstandard; if nonstandard, said unit was previously approved by Order No. NA.

(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 62,000 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 ___

6. Underproduction restored as described above shall be produced in addition to the assigned allowable or shall be subject to cancellation at the next balancing date. Gas underproduction restored from the secondary gas bank shall not be eligible for further accumulation in the gas bank.

7. Underproduction restored from the primary gas bank and then cancelled for failure to produce shall not be eligible for placement in the secondary gas bank.

C. Withdrawal from gas bank.

1. At such time as gas is withdrawn from either the primary or secondary gas bank accounts the allocation to the pool shall be reduced by the allocation to marginal wells, and the gas volume withdrawn from the primary and secondary gas banks before allocating allowable to the non-marginal wells.

2. At no time shall withdrawal of gas from the combined primary and secondary gas banks in a pool exceed one-half of the pool allocation remaining after deducting the allocation to marginal wells.

3. Gas may be withdrawn from either the primary or secondary gas bank during emergency conditions when additional gas supplies are needed to meet market demand. During such periods the amount of gas produced from a banked well will be charged against the accrued bank account.

Items needed to administer gas banks:

1. List of A and AD factors each month for each pool having wells in primary gas banks.

2. List of wells, by pool, AC, deliverability and date placed in bank.

3. List of wells by pools accruing allowable in secondary gas bank.

4. Record of emergency withdrawals by wells, by pools.

5. Record of A 3 withdrawals from bank by well, by pools.

LANGLIE JAL UNIT NO. 104

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 succesful 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. 104 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 40 BOPD, a GOR of 1000 and a unit production decline of 20%, reserves for this well are estimated at 62,000 BO and 62 MMCF gas.

4. The cumulative production from the Langlie Jal Unit Well No. 26, which is within the 40 acre proration unit, is 210 MBO (gas production not available).

5. There is no future production from Langlie Jal Unit Well No. 26. This well was converted to injection service in January 1984 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 62,000 STBO and 62 MMCF gas.

7. The estimated recovery of the Langlie Jal Unit No. 104 is 62,000 STBO and 62 MMCF gas.

LANGLIE JAL UNIT NO. 104

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2. The infill drilling of Langlie Jal Unit Well No. 104 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.

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6. The estimate of remaining recoverable reserves that the original well could not recover is 62,000 STBO and 62 MMCF gas.

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