

Mark K. Mosley
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
726 E. Michigan
Hobbs, NM 88240
(505) 393-4141

February 17, 1983

New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Case 7855

Attention: Mr. Don Nutter

Gentlemen:

Convert Langlie Jack Well No. 4 to Water Injection Well.

Conoco Inc. respectfully requests authority to convert the Langlie Jack Well No. 4 from a producing oil well to an active water injection well. The subject well is located 660' FSL and 1980' FEL of Section 20, T-24S, R-37E, Lea County, New Mexico. *FNL*

The proposed average daily injection rate into this closed system well is 400 barrels of water per day, with a maximum of 600 BWPD. Proposed average injection pressure is 850 psi surface pressure, with a maximum 1000 psi. Injection will be confined to the producing zone. There are no known sources of underground drinking water in the area of this application.

During conversion procedures, we plan to acidize with 3,000 gallons of Haliburton's PAD acid followed by 250 gallons gelled 10# brine water with 200# rocksalt and 1,680 gallons 2 percent KCL treated fresh water.

This application is consistent with operations being conducted in the Langlie Jack Waterflood System and administrative approval is requested.

Very truly yours,

RER:cbd

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24
S**



LEA COUNTY, NEW MEXICO

FEB 24 1983

Case 7855

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Storage
Application qualifies for administrative approval? ☒ Yes ☐ No

II. Operator: Conoco Inc.

Address: P. O. Box 460, Hobbs, N.M. 88240

Contact party: Hugh Ingram Phone: 393-4141

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? ☒ yes ☐ no
If yes, give the Division order number authorizing the project R-3269

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

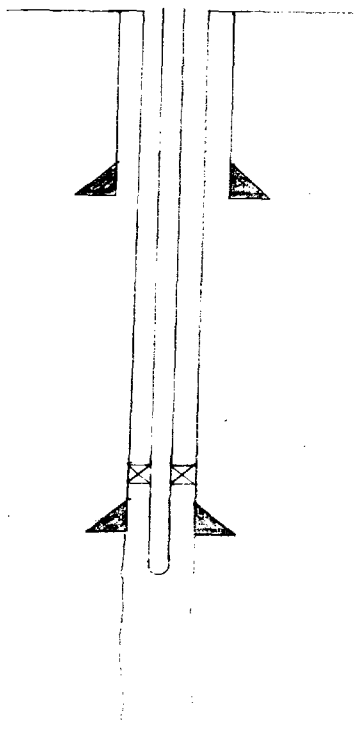
I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: M. K. Mosley Title: Division Manager

Signature: M. K. Mosley Date: 2/8/83

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

Conoco Inc. Langlie Jack Unit
OPERATOR LEASE
4 660' FNL & 1980' FEL 20 24-S 37-E
WELL NO. FOOTAGE LOCATION SECTION TOWNSHIP RANGE
Lea County, New Mexico

SchematicTabular DataSurface Casing

Size 10-3/4" @ 399' " Cemented with 225 sx.
 TOC Sfc. feet determined by Circ.
 Hole size 13-3/4"

Intermediate Casing

Size " Cemented with sx.
 TOC feet determined by
 Hole size

Long string

Size 7" @ 3,303' " Cemented with 900 sx.
 TOC Sfc. feet determined by Circ.
 Hole size 8-3/4"
 Total depth 3595'

Injection interval - Open Hole - 6-1/4" Dia

3303 feet to 3595 feet
 (perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with plastic set in a

(material)

BAKER-AD-1 Tension packer at 3250 feet
 (brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Seven River-Queen
- Name of field or Pool (if applicable) Langlie Mattix
- Is this a new well drilled for injection? ☐ Yes ☒ No

If no, for what purpose was the well originally drilled? Producing oil well.

- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.

Jalmat Yates Gas Zone, Top @ 2900'.

WELLS IN AREA OF REVIEW - LANGLEIE JACK UNIT NO. 4

<u>Well Name & No.</u>	<u>Type</u>	<u>Langlie Matrix</u>		<u>Casing</u>		<u>Cement</u>		<u>Date</u>	<u>Location</u>	<u>Record of</u>	
		<u>Prod/Inj Interval</u>	<u>Size</u>	<u>Depth</u>	<u>Sacks</u>	<u>TOC</u>	<u>Drilled</u>			<u>TD/PBD</u>	<u>Completion</u>
Langlie Jack Unit #1	P&A	3500' - 3565'	9 5/8" 7"	1175' 3248'	625 250	N/A 2540'	03-10-52	660' FSL & 1980' FEL of Sec. 17, T-24S, R-37E	3660' / 3565'	04-08-52	
Langlie Jack Unit #2	Inj	3485' - 3625'	9 5/8" 6"	281' 3350'	225 350	N/A N/A	11-08-39	660' FSL & 660' FEL of Sec. 17, T-24S, R-37E	3625' / 3620'	12-25-39	
Thomas "A" No. 1	Oil	3364' - 3580'	8 5/8" 5 1/2"	398' 3699'	175 190	N/A N/A	12-28-72	660' FSL & 1980' FWL of Sec. 17, T-24S, R-37E	3702' / 3699'	03-17-73	
Langlie Jack Unit #3	Oil	3409' - 3565'	10 3/4" 7"	379' 3399'	250 900	N/A N/A	03-07-40	990' FNL & 990' FEL of Sec. 20, T-24S, R-37E	3550' / 3500'	04-11-40	
Langlie Jack Unit #5	Oil	3500' - 3601'	8 5/8" 5 1/2"	380' 3420'	180 225	N/A N/A	07-09-39	660' FNL & 1980' FWL of Sec. 20, T-24S, R-37E	3601'	07-29-39	
Langlie Jack Unit #6	Inj	3455' - 3590'	11 3/4" 7"	357' 3405'	200 450	N/A N/A	06-10-47	660' FNL & 660' FWL of Sec. 20, T-24S, R-37E	3641'	08-07-47	
Langlie Jack Unit #7	Inj	3479' - 3581'	8 5/8" 5 1/2"	371' 3407'	175 825	N/A N/A	06-07-39	1980' FNL & 1980' FWL of Sec. 20, T-24S, R-37E	3622'	07-01-39	
Langlie Jack Unit #8	Oil	3230' - 3580'	8 5/8" 5 1/2"	317' 3230'	225 850	N/A N/A	02-07-39	1980' FNL & 1980' FEL of Sec. 20, T-24S, R-37E	3580'	03-12-39	
Langlie Jack Unit #9	Oil	3360' - 3582'	7 5/8" 5 1/2"	1173' 3210'	425 425	N/A N/A	05/20/82	1980' FNL & 660' FEL of Sec. 20, T-24S, R-37E	3582'	06-21-38	
Langlie Jack Unit #13	Oil	3485' - 3584'	10 3/4" 7"	360' 3387'	150 900	N/A N/A	06-05-39	1980' FSL & 1980' FEL of Sec. 20, T-24S, R-37E	3584'	07-03-39	
Meyer "B" Fed. No. 25	Oil	3400' - 3626'	8 5/8" 5 1/2"	365' 3696'	225 250	N/A N/A	08-27-72	660' FNL & 660' FWL of Sec. 21, T-24S, R-37E	3696' / 3672'	09-30-72	

LEGAL NOTICE

January 28, 1963

**CONVERT WELL TO
WATER INJECTION**

CONOCO INC., 726 E. Michigan, P.O. Box 460, Hobbs, New Mexico, Mr. M.K. Mosley, Division Manager of Production, intends for the purpose of secondary recovery to convert from producing oil well to water injection well its Langlie Jack Well No. 4, located 660' FSL and 1980' FEL of Section 20, T-24S, R-17E, Lea County, New Mexico, being a total depth of 3585' in the Seven Rivers, Queen formation. Operator plans to inject water at a rate of approximately 400 barrels per day with a surface pressure of about 850 psi. Any objections to this intent or requests for hearing must be filed with the New Mexico Oil Conservation Division, P.O. Box 8088, Santa Fe, New Mexico 87501 within 15 days from date of this publication.

specifications may be procured without charge at the office of the City Purchasing Agent.

In case of ambiguity or lack of clearness in stating proposal prices, the City of Hobbs reserves the right to adopt the most advantageous thereof, or to reject any or all bids and waive irregularities.

CITY OF HOBBS,
NEW MEXICO
Joseph K. Harvey,
City Manager

**AHHH...
Just What
I was looking**

For...

and

on

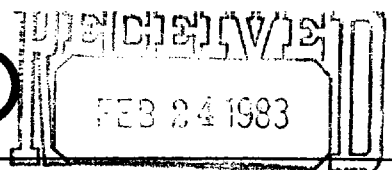
sale!

HOBBS

NEWS-

SUN





Mark K. Mosley
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
726 E. Michigan
Hobbs, NM 88240
(505) 393-4141

OIL CONSERVATION DIVISION
SANTA FE

February 17, 1983

*Sent via certified
mail 2-22-83*

United States Geological Survey
P. O. Box 26124
Albuquerque, NM 87125

Attention: Gene Daniels

Gentlemen:

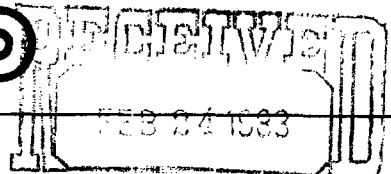
Convert to Water Injection, Langlie Jack Unit No. 4, Section 20, T-24S,
R-37E, Lea County, New Mexico.

Conoco Inc. plans to convert the subject well from a producing oil well to an active water injection well.

Attached for your information and file is a copy of our Application to the New Mexico Oil Conservation Division.

Very truly yours,

RER:cbd
Enc.



Mark K. Mosley
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
726 E. Michigan
Hobbs, NM 88240
(505) 393-4141

February 17, 1983

*Sent via certified
mail 2-22-83*

John Hendrix
Oil Producers
403 Wall Towers West
Midland, TX 79701

Gentlemen:

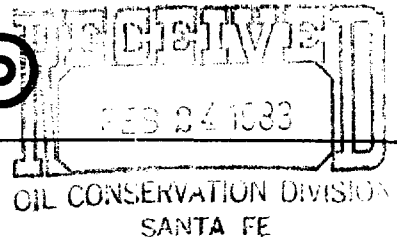
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R-37E, Lea County, New Mexico.

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Very truly yours,

RER:cbd
Enc.



Mark K. Mosley
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
726 E. Michigan
Hobbs, NM 88240
(505) 393-4141

February 17, 1983

*sent via certified
mail 2-22-83*

Doyle Hartman Oil Operators
P. O. Box 10426
Midland, TX 79701

Gentlemen:

Convert to Water Injection, Langlie Jack Unit No. 4, Section 20, T-24S,
R-37E, Lea County, New Mexico.

Conoco Inc. plans to convert the subject well from a producing oil well to an active water injection well.

Attached for your information and file is a copy of our Application to the New Mexico Oil Conservation Division.

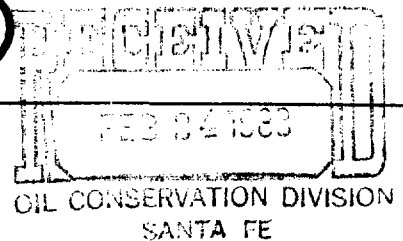
Very truly yours,

RER:cbd
Enc.

CONOCO

Mark K. Mosley
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
726 E. Michigan
Hobbs, NM 88240
(505) 393-4141



February 17, 1983

*Sent via certified
mail 2-22-83*

John Yuronka
102 Petroleum Bldg.
Midland, TX 79701

Gentlemen:

Convert to Water Injection, Langlie Jack Unit No. 4, Section 20, T-24S,
R-37E, Lea County, New Mexico.

Conoco Inc. plans to convert the subject well from a producing oil well to an active water injection well.

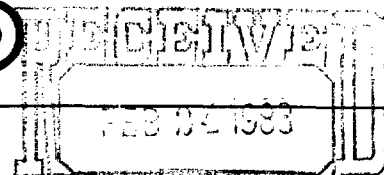
Attached for your information and file is a copy of our Application to the New Mexico Oil Conservation Division.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Mark K. Mosley".

RER:cbd
Enc.

CONOCO



Mark K. Mosley
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
726 E. Michigan
Hobbs, NM 88240
(505) 393-4141

OIL CONSERVATION DIVISION
SANTA FE

February 17, 1983

*Sent via certified
mail 2-22-83*

Henry H. Harrison
1120 Wilma
Tyler, TX 75701

Dear Sir:

Convert to Water Injection, Langlie Jack Unit No. 4, Section 20, T-24S,
R-37E, Lea County, New Mexico.

Conoco Inc. plans to convert the subject well from a producing oil well to an active water injection well.

Attached for your information and file is a copy of our Application to the New Mexico Oil Conservation Division.

Very truly yours,

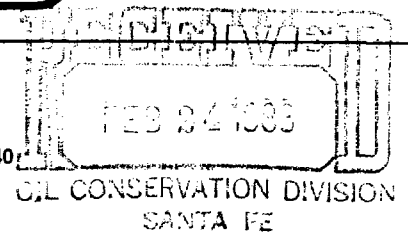
MR Mosley

RER:cbd
Enc.

CONOCO

Mark K. Mosley
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
726 E. Michigan
Hobbs, NM 88240
(505) 393-4141



February 17, 1983

*sent via certified
mail 2-22-83*

Amoco Production Company
P. O. Box 68
Hobbs, NM 88240

Gentlemen:

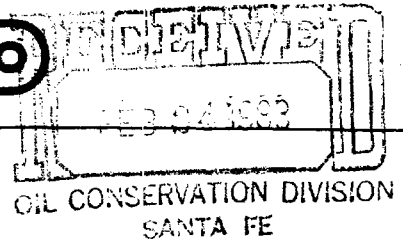
Convert to Water Injection, Langlie Jack Unit No. 4, Section 20, T-24S,
R-37E, Lea County, New Mexico.

Conoco Inc. plans to convert the subject well from a producing oil well to an active water injection well.

Attached for your information and file is a copy of our Application to the New Mexico Oil Conservation Division.

Very truly yours,

RER:cbd
Enc.



Mark K. Mosley
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
726 E. Michigan
Hobbs, NM 88240
(505) 393-4141

February 17, 1983

*Sent via certified
mail 2-22-83*

ARCO Oil and Gas Company
P. O. Box 1710
Hobbs, NM 88240

Gentlemen:

Convert to Water Injection, Langlie Jack Unit No. 4, Section 20, T-24S,
R-37E, Lea County, New Mexico.

Conoco Inc. plans to convert the subject well from a producing oil well to an active water injection well.

Attached for your information and file is a copy of our Application to the New Mexico Oil Conservation Division.

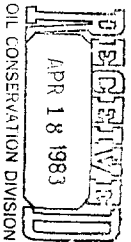
Very truly yours,

RER:cbd
Enc.

DOYLE, HARTMAN

Oil Operator
500 N. MAIN
P. O. BOX 10426
MIDLAND, TEXAS 79702

(915) 684-4011
April 15, 1983



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION



TONEY ANAYA
GOVERNOR

POST OFFICE BOX 9928
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Conoco, Inc.
Post Office Box 460
Hobbs, New Mexico 88240

Attention: Mr. M. K. Mosley
Division Manager

Re: Salt Water Disposal
Agreement dated
April 15, 1983

April 11, 1983

Case 785

Gentlemen:

Please find enclosed two copies of the above mentioned contract which we have signed. After Conoco signs the same, please return one fully executed copy to us.

We realize the contract furnished by Conoco largely addresses the problem of operating the Langlie Jack Unit injection system from the viewpoint of the Operator. In this regard, we have several small points that bother us, but we are not making an issue of them. We realize that Conoco is aware of the fact that we will be shortly expending a considerable amount of money in both placing our King Foundation No. 1 well back on stream, and in connecting the produced water from our well to your system. We know that Conoco will afford us the same fair treatment as is now being afforded the other non-operators that are presently tied to the Langlie Jack Unit injection system.

By copy of this letter to the New Mexico Oil Conservation Division, we are today dropping any and all opposition to Conoco's administrative application for the conversion of its Langlie Jack No. 4 well (B-20-24-37) to a water injection well.

Thank you for your consideration and cooperation in this matter.

Very truly yours,
Doyle Hartman
Doyle Hartman

cc: Mr. Dave Wacker, Hobbs
Mr. William F. Carr, Santa Fe
Mr. William P. Aycock, Midland

✓ Certified mail to: Mr. R. L. Stamets, Santa Fe

Doyle Hartman
P. O. Box 10426
Midland, Texas 79702

Re: Conoco Inc., Langlie
Jack Unit No. 4, Injection
Well, Lea County, New Mexico

Dear Mr. Hartman:

This letter is to confirm that you as a leasehold owner within one-half mile of the proposed injection well do have a right to object.

I erred in my interpretation in the reading of Rule 701 during our phone conversation last week and have now set this matter for hearing on April 27, 1983.

I regret any resulting confusion on this issue.

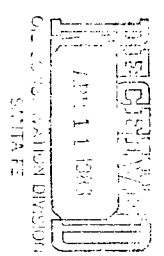
Sincerely,

R. L. STAMETS
Technical Support Chief

RLS/jc

Called Hartman's office 4-11-83 left word for Michelle that we had a problem with the water

DOYLE HARTMAN
Oil Operator
500 N. MAIN
P. O. BOX 10426
MIDLAND, TEXAS 79702
(915) 684-4011
April 6, 1983



Re: Conoco's Request for
Administrative Approval
Langlie Jack Unit No. 4
Lea County, New Mexico

Code 7855

Gentlemen:

Please find enclosed a copy of Conoco's letter to our office dated February 11, 1983, whereby we were notified by Conoco of their intention to convert their Langlie Jack Unit No. 4 (B-20-24S-37E) to a water injection well. Since we were notified as an offset operator of Conoco's administrative application to the New Mexico Oil Conservation Division, it was our assumption that we had standing in this matter when (in an effort to protect our correlative rights) we voiced our objection to Conoco's proposal.

We appreciate the NMCD calling our attention to the fact that if we have an objection to Conoco's water injection, we have no standing to object to Conoco's application for the Langlie Jack No. 4 well, but should instead request relief by making application to the New Mexico Oil Conservation Division to have Conoco be required to restrict water injection into the injection wells which directly offset our King Foundation No. 1.

At this time, based on correspondence and conversations with Conoco, we are hopeful that we can work out a mutually agreeable arrangement whereby we can obtain relief from high water production for our King Foundation Lease without bringing any action before the NMCD.

In this regard, please find enclosed additional correspondence between ourselves and Conoco dating from March 4, 1983.

In the event a mutually agreeable conclusion to this matter cannot be reached, we will entertain other possible action at that time.

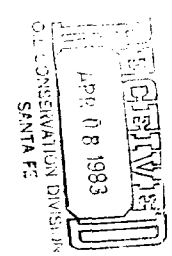
Once again, thank you for your advice.

Very truly yours,
Doyle Hartman
Doyle Hartman

DOYLE HARTMAN
Oil Operator
500 N. MAIN
P. O. BOX 10426
MIDLAND, TEXAS 79702
(915) 684-4011
April 5, 1983

Conoco, Inc.
Post Office Box 460
Hobbs, New Mexico 88240
Attention: Mr. Dave Wacker
Division Engineer

Re: Water Disposal Agreement
Langlie Jack Unit No. 4
Lea County, New Mexico



Code 7855

Gentlemen:

Reference is made to our letter to you dated March 29, 1983, and the follow-up telephone call I made to your office this morning regarding the proposed Water Disposal Agreement submitted to you by us on March 11, 1983.

It is my understanding that you will meet with your Division Manager on Wednesday, April 6, 1983, to discuss this matter. We have furnished all the information you have requested, including a water analysis of the water produced from our King Foundation No. 1 and an analysis of the water presently being injected in the Langlie Jack unit. As you know, the analyses show the two water types to be compatible.

Please let us hear from you as soon as possible so that we can place our King Foundation No. 1 back on production.

Very truly yours,
DOYLE HARTMAN
Michelle Hartman
Administrative Assistant

/mh

cc: Mr. Joe Ramey, Santa Fe
Mr. William F. Carr, Santa Fe
Mr. William P. Aycock, Midland
Mr. James A. Davidson, Midland