

LANGFLE JACK UNIT - INJECTION WELL DATA

Company, Lease & Well No.	TD And/or PBD	Surface Casing			Intermediate Casing			Producing Casing			Producing Interval
		Size	Depth	Cement	Size	Depth	Cement	Size	Depth	Cement	
CITIES SERVICE OIL CO. Thomas "F" No. 1 660' FSL & 1980' FEL Section 17-24-37	3660/ 3605'	9 5/8"	1174'	625	None			7"	3249'	250	OH 3249-3605'
CONTINENTAL OIL COMPANY Jack A-20 No. 1 1980' FSL & 660 FEL Section 20-24-37	3585'	10 3/4"	220'	225	7 5/8"	1187'	425	5 1/2"	3210'	425	OH 3210-3585'
Jack A-20 No. 6 660' FSL & 1980' FEL Section 20-24-37	3593'	10 3/4"	376'	175	None			7"	3330'	900	OH 3330-3593'
Jack A-29 No. 1 330' FNL & 330" FEL Section 29-24-37	3605'	10 3/4"	231'	225	7 5/8"	1199'	425	5 1/2"	3238'	425	OH 3238-3605'
GULF OIL CORPORATION Rilla No. 1 660' FSL & 660 FEL Section 17-24-37	3625'	13 3/4"	281'	225	None			6"	3350'	350	OH 3350-3625'
KING, WARREN & DYE Harrison No. 1 1980' FNL & 1980' FNL Section 20-24-37	3582'	8 5/8"	371'	175	None			5 1/2"	3405'	425	OH 3405-3582'
Harrison No. 3 660' FNL & 660' FNL Section 20-24-37	3611'	11 3/4"	357'	200	None			7"	3405'	450	OH 3405-3611'
PAN AMERICAN PETROLEUM CORP. Hoyer "B" No. 4 1980' FNL & 660' FNL Section 21-24-37	3682'	13 5/8"	281'	200	8 5/8"	1269'	400	5 1/2"	3295'	130	OH 3295-3682'

Case 3603  
EXHIBIT NO. 4

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE  
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF  
CONTINENTAL OIL COMPANY FOR APPROVAL  
OF THE LAGLIE JACK UNIT AGREEMENT  
EMBRACING 680 ACRES, MORE OR LESS,  
LOCATED IN SECTIONS 17, 20, 21, AND 29,  
TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM,  
LEA COUNTY, NEW MEXICO, AND FOR PER-  
MISSION TO INSTALL AND OPERATE A WATER-  
FLOOD WITHIN THE BOUNDARIES OF SAID  
UNIT AREA

*Case 3603*

A P P L I C A T I O N

Comes now Applicant, Continental Oil Company, and  
respectfully requests approval of the Langlie Jack Unit Agree-  
ment embracing 680.00 acres, more or less, described as:

S/2 SE/4 Section 17,  
E/2, N/2 NW/4 and SE/4 NW/4, Section 20  
SW/4 NW/4 and W/2 SW/4, Section 21,  
NE/4 NE/4, Section 29  
Township 24 South, Range 37 East,  
Lea County, New Mexico

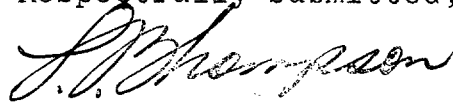
and for permission to install and operate a waterflood within  
said unit, and in support thereof Applicant would show:

1. That the Langlie Jack Unit Agreement is  
attached hereto and marked Exhibit 1.
2. That designation of Unit Area and preliminary  
approval of the Unit Agreement by the U.S.  
Geological Survey was given November 21, 1966.
3. That the attached lease plat marked Exhibit 2  
shows the Langlie Jack Unit and surrounding  
area.
4. That production in the Unit Area is at an  
advanced stage of depletion and that recovery  
by primary methods is at or near the economic  
limit.

5. That engineering investigations indicate that waterflooding the Langlie Jack Unit Area will be physically and economically feasible.
6. That agreement between the Working Interest Owners has proceeded to the extent that a logical and systematic secondary recovery operation is assured.
7. That the formation to be unitized and waterflooded is the Seven Rivers and Queen formations which are specifically indicated on the radioactivity log of the Continental Oil Company Jack B-26 No. 2 well attached hereto and marked Exhibit 3.
8. That all proposed injection wells are or will be completed in such a manner that injected water will be confined to the unitized formation. The present status of all proposed injection wells is shown on the tabulation of injection well data attached hereto and marked Exhibit 4, and on the schematic diagrams attached hereto and marked Exhibits 4-1 through 4-8.
9. That applicant proposes to inject a total of approximately 4,800 barrels of water per day into the 8 proposed injection wells on a modified peripheral pattern. Said water will be obtained either from Jalmat oil wells in the area or from an outside supplier.
10. That the said waterflood will be installed and operated in conformance with Rule 701E.
11. That the proposed unitization and secondary recovery will result in the recovery of hydrocarbons which would not be recovered by primary methods and is therefore in the interest of conservation and prevention of waste.

Wherefore, Applicant respectfully requests that this matter be set for hearing before the Commission's duly qualified Examiner and that upon hearing an order be entered approving the Langlie Jack Unit Agreement, and granting permission to install and operate a waterflood within the Unit Area as described herein above.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "L. P. Thompson".

L. P. THOMPSON  
District Manager  
Hobbs District

LPT-JS