

**DOYLE HARTMAN**

*Oil Operator*

500 NORTH MAIN

P.O. BOX 10426

MIDLAND, TEXAS 79702

(915) 684-4011

(915) 682-7616 FAX

*David*

8

**Via Hand Delivery and Certified Mail, Return Receipt Requested**

March 5, 2001

*CASE FILE -*

*12614*

Energen Resources Corporation  
3300 N. A St., Bldg. 4, Suite 100  
Midland, TX 79705

Attn: Mike McLennan, General Manager of Operations  
Ken Gray, Landman

Re: Energen Resources Corporation  
Langlie Lynn Unit No. 3 Water Injection Well  
Langlie Lynn Unit Waterflood Project  
T-23-S, R-36-E  
Lea County, New Mexico

Gentlemen:

We are currently in the process of performing a study of our 160-acre New Mexico "AA" State lease (**State of New Mexico Lease No. B-934**) consisting of the NE/4 Section 22, T-23-S, R-36-E, Lea County, New Mexico. Our study has also encompassed a review of offset wells.

In this regard, a review of recently-acquired records reveals that Energen performed a rework of its Langlie Lynn Unit No. 3 Langlie Mattix water injection well (L-23-23S-36E), in February, 2000, which included the addition of 184 new perforations, from 3490' to 3536', with the top of the newly perforated interval being at the boundary between the Langlie Mattix pool and the low-pressure Jalmat gas pool.

In recognition of the fact that (1) Energen's new Langlie Lynn Unit No. 3 perforations, which are to be subjected to high-pressure water injection, are immediately adjacent to the above-lying low-pressure Jalmat gas interval, and (2) we own diagonal Jalmat gas rights, in the NE/4 Section 22, T-23-S, R-36-E, this letter is our **notice** that we will expect Energen (at all times) to closely monitor its injection pressures and rates, and not lose high-pressure injection water out of zone, and into the adjacent low-pressure Jalmat interval, by exceeding the New Mexico Oil Conservation Division's

Energen Resources Corporation  
March 5, 2001  
Page 2

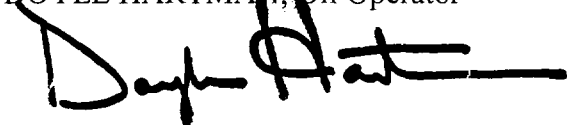
0.2 psi/ft surface injection pressure rule (New Mexico Oil Conservation Division Memo No. 3-77); i.e., by not injecting above the frac gradient, or above a surface pressure of 698 psi ( $0.2 \text{ psi/ft} \times 3490 \text{ ft} = 698 \text{ psi}$ ).

Fortunately, as to the NE/4 Section 22, T-23-S, R-36-E, the low-pressure Jalmat interval does not appear, to date, to have been adversely impacted by any out-of-zone water injection. However, as an offset Jalmat gas owner, to Energen's Langlie Lynn Unit No. 3 water injection well, we want to ensure that Energen's high-pressure Langlie Mattix water injection is kept totally within the Langlie Mattix interval, and is not allowed to escape into the above-lying low-pressure Jalmat interval.

Therefore, we ask that Energen both closely monitor and properly regulate its water injection rates and surface injection pressures, to ensure that no injection water is lost out of zone, to the low-pressure Jalmat gas interval, as has previously occurred corresponding to the nearby Lanexco-operated El Paso State No. 1 Jalmat gas well situated in J-22-23S-36E, which is within the boundaries of the Langlie Lynn Unit waterflood.

Very truly yours,

DOYLE HARTMAN, Oil Operator



Doyle Hartman

rcs  
wp7\corresp.dh\energen.nm-aa-state

cc: Energen Resources Corporation  
3300 N. A St., Bldg. 4, Suite 100  
Midland, TX 79705  
Attn: Terry Lawler, Production Superintendent  
Sammy Reed, Production Superintendent  
Denise Menoud, Production Tech

Lori Wrotenbury  
New Mexico Oil Conservation Division  
1220 S. Saint Francis Dr.  
Santa Fe, NM 87505-4000



Energen Resources Corporation  
March 5, 2001  
Page 3

Chris Williams, Supervisor  
New Mexico Oil Conservation Division  
1625 French Dr.  
Hobbs, NM 88240

New Mexico State Land Office  
310 Old Santa Fe Trail (85701)  
P.O. Box 1148  
Santa Fe, NM 87504-1148  
Attn: Ray B. Powell, Commissioner  
Jamie Bailey, Director, Oil, Gas and Minerals

Robert W. Lansford, President  
Lanexco, Inc.  
1105 W. Kansas  
Jal, NM 88252

Raptor Resources, Inc.  
P.O. Box 160430  
Austin, TX 78716  
Attn: Russell Douglass, President  
Mike Nell, Vice President

Gruy Petroleum Management Company  
600 Las Colinas Blvd. E, Suite 1100  
Irving, TX 75039-5611  
Attn: Richard R. Frazier, President and COO  
Zeno Farris, Manager of Operation Administration

Reggie Reston, Production Supervisor  
Gruy Petroleum Management Company  
1601 N. Turner, Suite 212  
Hobbs, NM 88240

Energen Resources Corporation  
March 5, 2001  
Page 4

BP Permian Business Unit  
501 Westlake Park Blvd., WL 4, Suite 200  
Houston, TX 77079  
Attn: Marshall Gile, Business Unit Leader  
Johanna Meinhardt, Asset Manager SE NM  
Lee Scarborough, Senior Land Negotiator, SE NM

James A. Davidson  
214 W. Texas, Suite 710  
Midland, TX 79702

William P. Aycock  
1207 W. Wall  
Midland, TX 79701

DOYLE HARTMAN, Oil Operator (Dallas)

DOYLE HARTMAN, Oil Operator (Jal Field Office)  
Harold Swain, Supervisor

DOYLE HARTMAN, Oil Operator (Midland)  
Linda Land  
Don L. Mashburn  
Steve Hartman  
John Allred

# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

LAND COMMISSIONER

PHIL R. LUCERO



STATE GEOLOGIST

EMERY C. ARNOLD

Memo No. 3-77

August 24, 1977

DIRECTOR  
JOE D. RAMEY

## MEMORANDUM

TO: OPERATORS AND ATTORNEYS

FROM: JOE D. RAMEY, SECRETARY-DIRECTOR

SUBJECT: APPLICATIONS FOR APPROVAL OF SECONDARY RECOVERY OR SALT  
WATER DISPOSAL INJECTION WELLS

The Commission has delayed revising its Rules and Regulations relative to injection wells because of the impending U. S. Environmental Protection Agency Underground Injection Control Regulations. During the interim before those regulations may be finalized, the following policy shall apply to applications for approval of injection wells whether by hearing or by administrative order:

- (1) No surface injection pressure greater than 0.2 psi per foot of depth to the top of the injection zone will be permitted unless there is strong evidence that the strata confining the injection fluid has a fracture gradient which would support a higher pressure.
- (2) That applications must include a tabular summary of all wells within one-half mile of the injection well(s) and which penetrate the injection zone showing all casing strings, setting depths, sacks of cement used, cement tops, total depth, producing interval, well identification, and location. Applications for expansion of projects need not include the tabulation if the same is on file and no additional wells are included.
- (3) Application must include a schematic of all plugged and abandoned wells within the one-half mile radius and which have penetrated the injection zone showing all information required under (2) above plus the size and location of all plugs and the date of abandonment. Applications for expansion of projects need not include the schematics if the same is on file and no additional wells are included.