

Handwritten initials and signature: JHK, Betty, Ray



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

April 4, 1994 APR 7 1994

Arco Oil and Gas Company
P.O. Box 1610
Midland, Texas 79702

Attention: Mr. Gary B. Smallwood

Dear Mr. Smallwood:

Pursuant to Division Order No. R-9984 dated October 5, 1993, Arco Oil and Gas Company is required, prior to commencing injection operations within certain wells in the Empire Abo Unit Pressure Maintenance Project, to conduct repairs on five active producing wells and re-plug five PA'd wells.

My staff has received and reviewed your revised wellbore diagrams submitted in order to demonstrate that these wellbores will not serve as a conduit for migration of injected fluid. After examination of the revised wellbore schematics, the Division finds that the following wells are constructed and/or plugged and abandoned adequately to confine the injected fluid to the injection zone, and therefore no additional work is necessary:

| <u>WELL NAME</u> | <u>WELL LOCATION</u> |
|-----------------------------|----------------------|
| Empire Abo Unit No. M-10 | Unit O, 10-18S-27E ✓ |
| Empire Abo Unit No. M-12 | Unit A, 10-18S-27E |
| Empire Abo Unit No. M-15 | Unit B, 11-18S-27E |
| Empire Abo Unit No. N-12 | Unit A, 10-18S-27E |
| State "BL" No. 1 | Unit B, 4-18S-28E |
| Chalk Bluff Draw Ut. No. 18 | Unit M, 16-18S-27E |
| Chalk Bluff Draw Ut. No. 12 | Unit A, 17-18S-27E |
| Chalk Bluff Draw Ut. No. 20 | Unit N, 17-18S-27E |

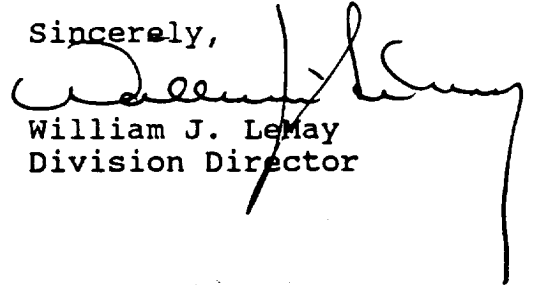
The Federal "EA" Well No. 1, located in Unit D of Section 12, Township 18 South, Range 27 East, NMPM, does not appear to be presently constructed so as to confine the injected fluid to the injection zone, and therefore, no injection within one half mile of this well shall take place until such time as Arco repairs or plugs this well.

Arco shall consult with the supervisor of the Artesia district office of the Division to determine whether the State Well No. 1,

located in Unit D of Section 3, Township 18 South, Range 28 East, NMPM, is adequately plugged. Such determination may require that Arco provide the Division additional geologic information with regards to the location of the Abo formation within the wellbore.

If you should have additional questions, please contact Mr. David Catanach at (505) 827-5800.

Sincerely,



William J. Lemay
Division Director

xc: OCD-Artesia
Case File-10813

*Jim
Mark We reviewed the
Ray James P. Dungan
St # 1 in 3-18-28
& have turned Arco base to
inject near this well
R.L.*

WELLBORE SCHEMATIC

Cmt Plug @ Surface.

State #1

James P. Dunigan - Operator

330' FNL & 345' FWL (D)

Sec 3, T-18S, R-28E, Eddy County, NM

API 30-015-05889

DF-3664'

Spudded 06/30/60

Completed 07/16/60

P&A'd 07/19/60

11" Hole.
8-5/8" casing @ 610'.
Set w/350 sxs cmt.

Salt

no plug @ shoe

There appears to be production in the S/2 of Sec. 3-18S-28E @ the 2400' level coinciding with the cement plug in this well.

Need plug @ 1450' Qu.

5A

Cmt Plug 2300' to 2350'.

Top of Abo Reef @ 6394'.

This well was drilled below the original w/o contact. Injection in the ARCO Empire Abo Unit is therefore not in communication with it.

Cmt Plug 6146' to 6405'.

TD @ 6405'.

Injection will be deeper than this plug.