



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

Administrative Order IPI-292

February 15, 2008

Apache Corporation  
6120 South Yale, Suite 1500  
Tulsa, OK, 74136-4224

Attention: Kevin Mayes

**RE: Injection Pressure Increase Request**

East Blinebry Drinkard Unit Waterflood Project  
Drinkard Pool (19190) and  
Blinebry Oil & Gas Pool (Oil 6660)  
Township 21 South, Range 37 East, NMPM, Lea County, New Mexico

The Oil Conservation Division received your request on behalf of Apache Corporation (OGRID 873) dated January 21, 2008 to increase the maximum allowed surface injection pressure on all eighteen (18) injection wells within this project, and the additional data you supplied on February 14, 2008.

The permitted maximum surface injection pressure of 1121 psi has been in effect after Division Order No. R-12394 was issued in Case No. 13503 on July 22, 2005, which order approved the first 17 wells in this project for injection. Well No. 57 was approved for injection with administrative order WFX-819 on May 15, 2006, and allowed the same injection pressure limit.

It is our understanding additional injection pressure is needed in order to accelerate fill-up of these reservoirs and therefore to improve waterflood performance. The basis for granting this pressure increase is the Step Rate Tests run in December of 2007 on 8 of the 18 existing injection wells.

Apache Corporation is hereby authorized to utilize up to 2100 psi as the maximum surface injection pressure for all injection wells in this waterflood project, but is prohibited from injecting at pressures that would induce fracturing in individual wells.

This project currently includes the following 18 injection wells:

| API          | OCD<br>Well<br>Num | Feet | NS | Feet | EW | Unit | Sec | Inj<br>Top | Inj<br>Bottom | Inj<br>Permit |
|--------------|--------------------|------|----|------|----|------|-----|------------|---------------|---------------|
| 30-025-06325 | 3                  | 2970 | S  | 330  | W  | M    | 1   | 5880       | 5971          | R-12394       |
| 30-025-06334 | 56                 | 660  | S  | 810  | W  | M    | 1   | 5810       | 5987          | R-12394       |
| 30-025-06476 | 13                 | 330  | N  | 1650 | W  | C    | 11  | 5943       | 6730          | R-12394       |
| 30-025-06478 | 17                 | 330  | S  | 1980 | E  | O    | 11  | 5604       | 6650          | R-12394       |
| 30-025-06479 | 18                 | 660  | N  | 330  | E  | A    | 11  | 5759       | 5852          | R-12394       |
| 30-025-06481 | 20                 | 1980 | S  | 330  | E  | I    | 11  | 5696       | 6703          | R-12394       |
| 30-025-06527 | 15                 | 330  | N  | 330  | E  | A    | 11  | 6595       | 6766          | R-12394       |
| 30-025-06529 | 23                 | 1650 | N  | 1650 | E  | G    | 11  | 5724       | 5894          | R-12394       |
| 30-025-06535 | 27                 | 2310 | N  | 330  | W  | E    | 11  | 6453       | 6570          | R-12394       |
| 30-025-06536 | 26                 | 1980 | N  | 1980 | E  | G    | 11  | 6582       | 6708          | R-12394       |
| 30-025-06539 | 30                 | 1650 | N  | 660  | W  | E    | 12  | 5740       | 6747          | R-12394       |
| 30-025-06541 | 31                 | 330  | N  | 1980 | W  | C    | 12  | 5796       | 5996          | R-12394       |
| 30-025-06546 | 36                 | 1980 | N  | 660  | W  | E    | 12  | 5712       | 5908          | R-12394       |
| 30-025-06550 | 48                 | 660  | S  | 660  | W  | M    | 12  | 5720       | 5815          | R-12394       |
| 30-025-06556 | 37                 | 1980 | N  | 660  | W  | E    | 13  | 5680       | 6703          | R-12394       |
| 30-025-06566 | 53                 | 660  | N  | 1650 | W  | C    | 13  | 5702       | 5888          | R-12394       |
| 30-025-06575 | 45                 | 660  | N  | 330  | E  | A    | 14  | 5741       | 5877          | R-12394       |
| 30-025-29061 | 57                 | 1650 | S  | 1650 | W  | K    | 1   | 5600       | 6970          | WFX-819       |

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected fluid is not being confined to the injection zone, is endangering fresh water aquifers, or is causing waste of oil and gas.

Sincerely,



Mark E. Fesmire, P.E.  
Director

cc: Oil Conservation Division - Hobbs  
File: Case 13503 (R-12394)