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

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 12866 ORDER NO. R-11816

APPLICATION OF C. W. TRAINER FOR APPROVAL OF A SALT WATER DISPOSAL WELL, LEA COUNTY, NEW MEXICO.

#### **ORDER OF THE DIVISION**

#### **BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on August 1, 2002, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 16th day of August, 2002, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

## **FINDS THAT:**

- (1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.
- (2) The applicant, C. W. Trainer ("Trainer"), seeks authority to utilize its State "GA" Well No. 6 (**API No.** 30-025-03687) located 660 feet from the North line and 990 feet from the West line (Unit D) of Section 16, Township 15 South, Range 36 East, NMPM, Lea County, New Mexico, to dispose of produced water into the San Andres and Glorieta formations from a depth of 4,749 feet to 6,230 feet.
- (3) Trainer originally filed the subject application for administrative approval on March 18, 2002.
- (4) The Law Office of Heidel, Samberson, Newell, Cox & McMahon sent a letter to Trainer dated March 27, 2002 on behalf of U. S. Alexander, the surface owner at the site of the State "GA" Well No. 6, objecting to the application. A copy of this letter was received by the Division on or about March 28, 2002.
- (5) Due to the objection by U. S. Alexander, Trainer's application was set for hearing before a Division examiner.

- (6) Trainer appeared at the hearing through legal counsel.
- (7) Notice of this hearing was sent to U. S. Alexander and to all offset operators within one-half mile of the State "GA" Well No. 6. Neither U. S. Alexander nor any other party appeared at the hearing in opposition to the application.
- (8) Trainer did not present testimony at the hearing; however, legal counsel for Trainer requested that the Division issue an order in this case based upon the Form C-108 (Application to Inject) and supporting data originally filed by Trainer in this matter.
  - (9) Trainer's evidence demonstrates that:
    - (a) the subject well was drilled by Shell Oil Company in November, 1955 to a total depth of approximately 13,682 feet;
    - (b) the well was plugged and abandoned in January, 1967;
    - (c) the well is currently equipped with 13 3/8 inch casing set at a depth of 352 feet and cemented to surface, and 8 5/8 inch casing set at a depth of 4,749 feet and cemented to surface; and
    - (d) Trainer proposes to:
      - i) re-enter, drill out cement plugs and clean out the well to a depth of approximately 6,230 feet;
      - ii) set 2 7/8 inch internally coated tubing in a packer set at a depth of 4,675 feet; and
      - iii) inject into the San Andres and Glorieta formations through the open-hole interval from approximately 4,749 feet to 6,230 feet.

- (10) The evidence presented demonstrates that there is a well within the "area of review" that is not plugged and abandoned in a manner that will ensure that the injected fluid is confined to the injection interval. The Columbian Carbon Company M. Graham Well No. 1, located 330 feet from the South line and 990 feet from the West line (Unit M) of Section 9, Township 15 South, Range 36 East, NMPM, has no plugs within the vertical interval from 5,020 feet to 13,547 feet.
- (11) The evidence further demonstrates that there is a well within the "area of review" that is not cemented in a manner that will ensure that the injected fluid is confined to the injection interval. The C. W. Trainer State "GB" Well No. 1 (API No. 30-025-03689) located 660 feet from the North line and 1988 feet from the West line (Unit C) of Section 16, Township 15 South, Range 36 East, NMPM, has 8 5/8 inch intermediate casing set at a depth of 4,748 feet and cemented to surface, and 5 ½ inch production casing set at a depth of 13,674 feet and cemented to a depth of approximately 12,151 feet.
- (12) Prior to commencing injection operations into the State "GA" Well No. 6, Trainer should be required to re-enter and re-plug the M. Graham Well No. 1 and perform remedial cement operations on the State "GB" Well No. 1, both in a manner approved by the supervisor of the Division's Hobbs District Office.
- (13) The evidence presented demonstrates that the State "GA" Well No. 6 will be adequately cased and cemented so as to preclude the movement of fluid from the injection zone into other formations, including any fresh water aquifers.
- (14) Approval of the application will prevent the drilling of unnecessary wells and will otherwise prevent waste and protect correlative rights.

### IT IS THEREFORE ORDERED THAT:

- (1) The applicant, C. W. Trainer, is hereby authorized to utilize its State "GA" Well No. 6 (**API No. 30-025-03687**) located 660 feet from the North line and 990 feet from the West line (Unit D) of Section 16, Township 15 South, Range 36 East, NMPM, Lea County, New Mexico, to dispose of produced water into the San Andres and Glorieta formations through the open-hole interval from a depth of 4,749 feet to 6,230 feet.
- (2) Prior to commencing injection operations into the State "GA" Well No. 6, a cement plug shall be set at a depth of approximately 6,230 feet in order to isolate the open-hole interval within the wellbore from 6,230 feet to 7,408 feet.

- (3) Prior to commencing injection operations into the State "GA" Well No. 6, the applicant shall re-enter and re-plug the Columbian Carbon Company M. Graham Well No. 1 located 330 feet from the South line and 990 feet from the West line (Unit M) of Section 9, Township 15 South, Range 36 East, NMPM, in a manner that will ensure that this wellbore will not provide an avenue for the escape of injected fluids from the injection interval, and in a manner approved by the supervisor of the Division's Hobbs District Office.
- (4) Prior to commencing injection operations into the State "GA" Well No. 6, the applicant shall perform remedial cement operations on the C. W. Trainer State "GB" Well No. 1 located 660 feet from the North line and 1988 feet from the West line (Unit C) of Section 16, Township 15 South, Range 36 East, NMPM, in a manner that will ensure that this wellbore will not provide an avenue for the escape of injected fluids from the injection interval, and in a manner approved by the supervisor of the Division's Hobbs District Office.
- (5) The operator shall take all steps necessary to ensure that the injected fluids enter only the proposed injection interval and are not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.
- (6) Injection shall be accomplished through 2 7/8 inch internally plastic-lined tubing installed in a packer set at approximately 4,675 feet. The casing-tubing annulus shall be filled with an inert fluid and a gauge or approved leak-detection device shall be attached to the annulus in order to determine leakage in the casing, tubing, or packer.
- (7) The injection well or pressurization system shall be equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to no more than 950 psi.
- (8) The Division Director may administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.
- (9) Prior to commencing injection operations and every five years thereafter, the casing shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing.
- (10) The operator shall give advance notice to the Supervisor of the Division's Hobbs District Office of the date and time (i) disposal equipment will be installed on the State "GA" Well No. 6; (ii) the mechanical integrity pressure test will be conducted on

the State "GA" Well No. 6; and (iii) remedial work will be performed on the M. Graham Well No. 1 and the State "GB" Well No. 1, so these operations may be witnessed.

- (11) The operator shall immediately notify the Supervisor of the Division's Hobbs District Office of the failure of the tubing, casing or packer in the disposal well or the leakage of water, oil or gas from or around any producing or plugged and abandoned well within the area, and shall take all steps as may be timely and necessary to correct such failure or leakage.
- (12) The operator shall obtain a native formation water sample from the San Andres formation and from the Glorieta formation during recompletion operations on the State "GA" Well No. 6. The operator shall cause these water samples to be analyzed and the results provided to the Santa Fe Office of the Division.
- (13) The operator shall submit monthly reports of the disposal operations on Form C-120-A in accordance with Division Rules No. 706 and 1120.
- (14) The injection authority granted herein for the State "GA" Well No. 6 shall terminate one year after the date of this order if the operator has not commenced injection operations into the well; provided, however, the Division, upon written request by the operator, may grant an extension for good cause.
- (15) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

LORI WROTENBERY Director

SEAL