

PKRVO208731013

SWD

4/11/02

MAR 27 2002

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
Oil Conservation Division 1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505 FORM C-108 Revised 4-1-98

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance  
 Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval?  Yes \_\_\_\_\_ No

II. OPERATOR: DKD, L. L. C.

ADDRESS: P. O. Box 682 Tatum, NM 88267

CONTACT PARTY: Danny R. Watson PHONE: (505)398-3490

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? \_\_\_\_\_ Yes  No  
If yes, give the Division order number authorizing the project:

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:  
1. Proposed average and maximum daily rate and volume of fluids to be injected;  
2. Whether the system is open or closed;  
3. Proposed average and maximum injection pressure;  
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,  
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

\*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

\*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the

EXHIBIT 10

Division, they need not be resubmitted).

- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Eddie W Seay Agent TITLE:

SIGNATURE: Eddie W Seay 2/28/02 DATE:

- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: when drilled

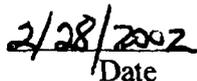
DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

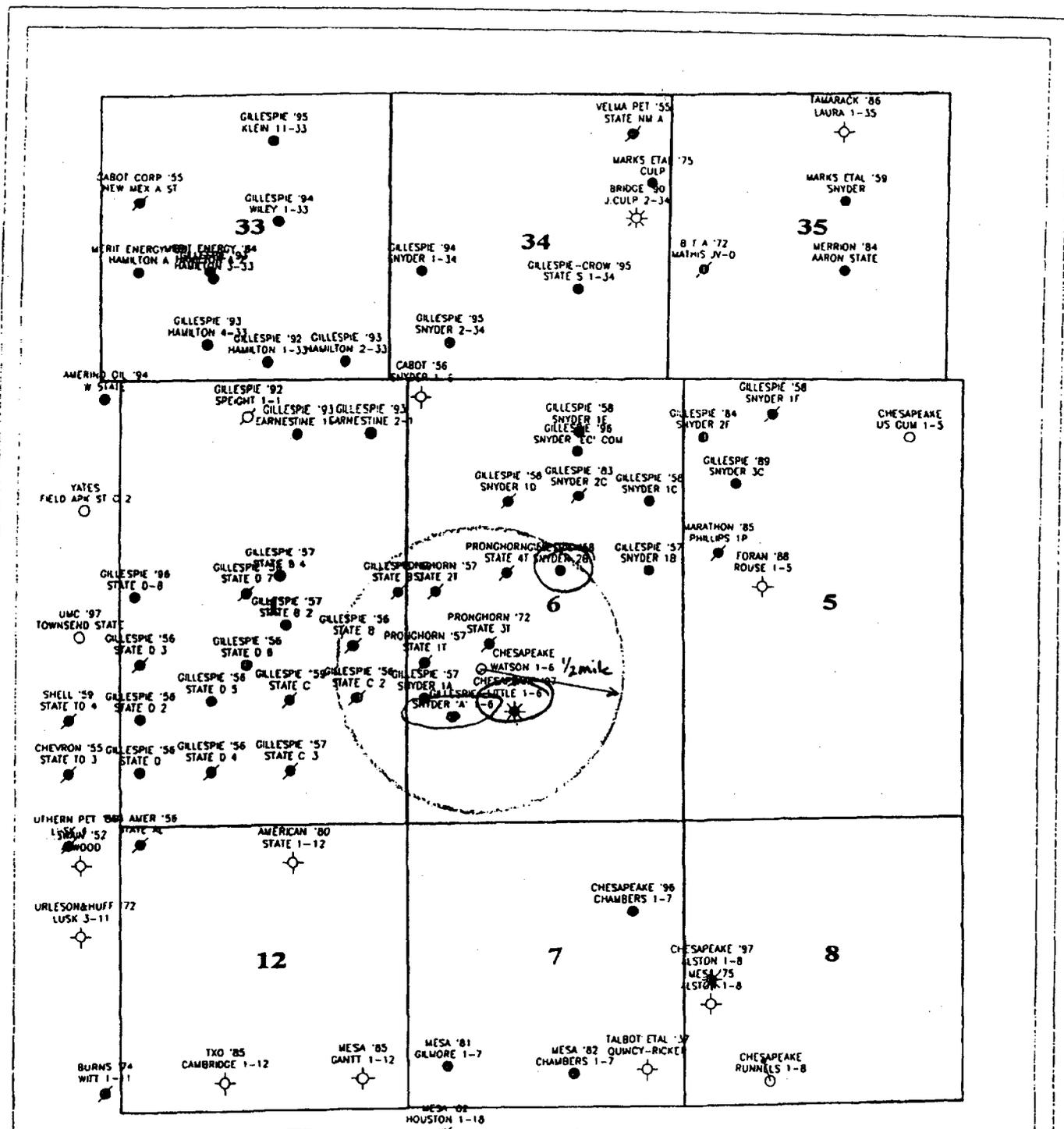
ATTACHMENT TO APPLICATION C-108

Watson 6 #1  
Unit N, Sect. 6, T. 16 S., R. 36 E.  
Lea Co., NM

- III. Well data information sheets attached.
- IV. No.
- V. Map attached.
- VI. List of wells and data attached.
- VII. Proposed Operation
- 1) Average daily injection volume is 1500 bls. per day.
  - 2) Closed system.
  - 3) The average injection pressure is 500 psig with a maximum injection pressure of 1000 psig.
  - 4) Produced water from the area, see attached water analysis.
  - 5) Attached analysis.
- VIII. The proposed disposal formation is interbedded shale and limestone. The primary Geologic name is Cisco and Canyon with secondary zone such as Bough C and Townsend. The Cisco/Canyon is from 10,340' to 11,088'. The fresh water formation in this area is the Ogallala which ranges in thickness from top of H2O at 60 ft. to the base of the fresh water at 240'.
- IX. Acid as needed.
- X. Previously submitted.
- XI. Attached.
- XII. I, Eddie W. Seay, have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water pertaining to this well.

  
Signature

  
Date



D.K.D.L.L.C.

Watson 1-6  
 Lea County, New Mexico  
 Section 6-16S-36E

CREIGHT		3/1600
2" = 1 Mile		



INJECTION WELL DATA SHEET

OPERATOR: DKD L.L.C.

WELL NAME & NUMBER: Watson 6 #1 (30-025-34197)

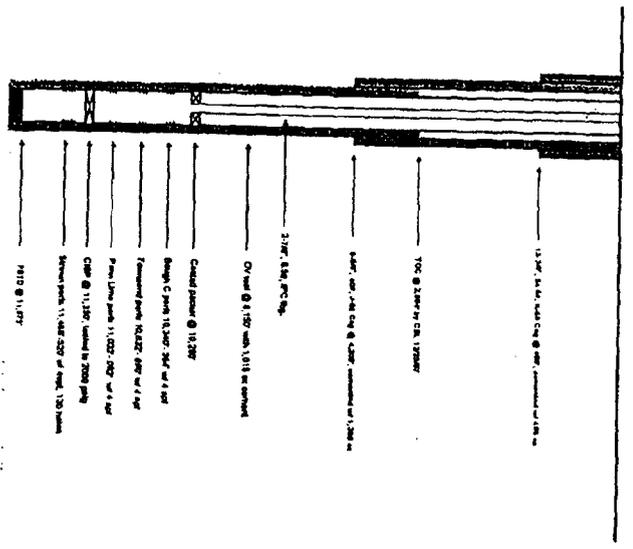
WELL LOCATION: 2857/S 1417/W

FOOTAGE LOCATION

UNIT LETTER

SECTION 6 TOWNSHIP 16 RANGE 36 E

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2" Casing Size: 13 7/8"

Cemented with: 4 1/2" SX. OR

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 11" Casing Size: 9 5/8"

Cemented with: 1 3/5" SX. OR

Top of Cement: Surface Method Determined: Circulated

Production Casing

Hole Size: 7 7/8" Casing Size: 5 1/2"

Cemented with: 1 7/20" SX. OR

Top of Cement: 8864 Method Determined: CBL

Total Depth: 11,856

Injection Interval

10,340 feet to 11,062

Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2 7/8 " Lining Material: IPC or 2 1/2 Chromed

Type of Packer: Baker Model "R"

Packer Setting Depth: 10,280

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection? Yes X No \_\_\_\_\_

If no, for what purpose was the well originally drilled? \_\_\_\_\_

Producing Oil well

2. Name of the Injection Formation: Cisco / Canyon

3. Name of Field or Pool (if applicable): NE Shae Bar

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. STRAWN

11,488 / 11,520 CIBP sat at 11,350 and tested to 3000 psig

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: \_\_\_\_\_

The Strawn underlays the injection zone and is at 11,500 ±. The Wolfcamp overlies the injection zone at 9680 ±.

D.K.D. L.L.C.

Wellbore Schematic

WELL : WATSON 1-6  
LOCATION : SECTION 6-16S-36 E  
COUNTY : LEA STATE : NEW MEXICO  
FIELD : LOVINGTON STRAWN PROJECT  
ELEVATION : GL: 3,869' KB: 3,887'

