

# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

## **GARY E. JOHNSON**

Governor

Betty Rivera

Cabinet Secretary

Yours very truly,

Chris Williams

Supervisor, District 1

1/16/03

Lori Wrotenbery
Director
Oil Conservation Division

Oil Conservation Division 1220 S. Francis Drive Santa Fe, NM 87505	
RE: Proposed:  MC DHC NSL NSP SWD WFX PMX	
Gentlemen:  I have examined the application for the:  EMSU No. 222 located in Unit O, Sec. 6, T21S-R36E  EMSU No. 252 located in Unit W, Sec. 6, T21S-R36E  EMSU No. 196 located in Unit E, Sec. 5, T21S-R36E  EMSU No. 575 located in Unit N, Sec. 31, T20S-R37	E, Lea County, New Mexico,
Operator Lease & Well No. Unit S-T-R	. Carrier Lie
and my recommendations are as follows:	
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Chevron U.S.A. Production Company Kevin Hickey New Mexico Waterflood Petroleum Engineer 15 Smith Road Midland, Texas 79705

# ChevronTexaco

January 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT - OCD FORM C-108 EUNICE MONUMENT SOUTH UNIT EUNICE MONUMENT OIL POOL LEA COUNTY, NEW MEXICO

State of New Mexico Energy and Minerals Dept. Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505

Attention: Ms. Lori Wrotenbery, Director

Ladies and Gentlemen:

Chevron U.S.A. Production Co. requests your approval of the subject application to inject water into the following Eunice Monument South Unit Wells:

- EMSU No. 222 located in Unit O, Sec. 6, T21S-R36E, Lea County, New Mexico,
- EMSU No. 252 located in Unit W, Sec. 6, T21S-R36E, Lea County, New Mexico,
- EMSU No. 196 located in Unit E, Sec. 5, T21S-R36E, Lea County, New Mexico
- EMSU No. 575 located in Unit N, Sec. 31, T20S-R37E, Lea County, New Mexico.

Chevron plans on converting these producers to an injection as part of an ongoing infill drilling and pattern re-alignment program. These conversions will provide the much needed injection support in this area and enhance the production of the EMSU secondary recovery unit.

Attached is an OCD Form C-108 with information relative to the water injection conversion of the referenced wells.

A copy of this letter and application is being sent to applicable surface land owners and  $\frac{1}{10000}$  offset operators by certified mail as their notice.

Your prompt consideration and approval of this application will be greatly appreciated. If further information is required, please contact me at (915) 687-7260.

Sincerely,

Kevin F. Hickey
Petroleum Engineer

New Mexico Waterfloods

File

Attachments

Lingto

# 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

1.	PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage Application qualifies for administrative approval? X Yes No
11.	OPERATOR: ChevronTexaco Inc.
	ADDRESS: 15 Smith Road Midland TX 79705
	CONTACT PARTY: Kevin Hickey - Petroleum Engineer PHONE: 915-687-7260
111.	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? X Yes No  If yes, give the Division order number authorizing the project: R-7766
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:
	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injected;</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,</li> <li>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.).</li> </ol>
*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.
tX.	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 Division, they need not be resubmitted)
*X1.	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.
ХИ.	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.
ХШ,	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: Kevin F. Hickey TITLE: Petroleum Engineer
	NAME: Kevin F. Hickey  SIGNATURE: Petroleum Engineer  DATE: 10, 2003
*	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:

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

## III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
  - (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
  - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
  - (3) A description of the tubing to be used including its size, lining material, and setting depth.
  - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
  - (1) The name of the injection formation and, if applicable, the field or pool name.
  - (2) The injection interval and whether it is perforated or open-hole.
  - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
  - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
  - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

# XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;  $+ \sqrt{ }$
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

# EMSU Nos. 196, 222, 252, and 575 Conversion to Injection Eunice Monument South Unit Lea County, NM

## **INFORMATION FOR NMOCD FORM C-108**

ITEM I

(See OCD Form C-108)

ITEM II

(See OCD Form C-108)

ITEM III

See attached wellbore schematics.

ITEM IV

(See OCD Form C-108)

#### ITEM V

This was originally submitted as Exhibit No. 28 Case No. 8398 heard at a Commissioner's hearing on 11-07-84 (Order No. 7766 - effective 12-27-84). Smaller area maps relating to the conversions are attached.

#### ITEM VI

Attached are three tables. Table 1 is a list of all the Eunice Monument South Unit wells in the area of review. Table 2 is a list of all other wells that penetrated the injection interval in the area of review. Detailed wellbore schematics are included for those wells in Tables 1 and 2 as part of Item VI. Finally Table 3 is a list of all wells that are in the in the shallower Eumont field that did not penetrate the proposed injection interval. This is for information only.

#### TEM VII

Sec attached table showing items VII (1), (2), and (3) for the subject wells of this C-108 application. Items VII (4) and (5) are consistent with the original C-108 application and its Exhibit No. 33a.

## ITEM VIII

This was originally submitted as Exhibit No. 34a and 36 of Case No. 8398 heard at a Commissioner's hearing on 11-07-84 (Order No. 7766 - effective 12-27-84). Copies of these Exhibits are enclosed.

## ITEM IX

All wells will be restimulated with 15% Hydrochloric (HCl) acid prior to injection.

#### ITEM X

Logging and test data have been filed with the OCD.

## ITEM XI

This was originally submitted as Exhibit No. 37 of Case 8398 heard at a Commissioner's hearing on 11-07-84 (Order No. 7766 - effective 12-27-84). A copy of this Exhibit is enclosed.

#### ITEM XII

This was originally submitted as Exhibit No. 38 of Case 8398 heard at a Commissioner's hearing on 11-07-84 (Order No. 7766 - effective 12-27-84). A copy of this Exhibit is enclosed.

AA 2003 FLLL VED Hobbs OCD

# EMSU Nos. 196, 222, 252, and 575 Conversion to Injection Eunice Monument South Unit Lea County, NM

#### ITEM XIII

All surface land owners and offset operators are being notified by Certified Mail with a copy of the C-108 Form. A legal notice was published in the Hobbs News-Sun on January 5, 2003. The actual newspaper ad and an affidavit of publication is included with this application.

KCC , ED

Hobbs
OCD