DOYLE HARTMAN

Oll Operator

3811 TURTLE CREEK BLVD., SUITE 200 DALLAS, TEXAS 75219

> (214) 520-1800 (214) 520-0811 FAX

November 15, 1999

VIA FACSIMILE: 505/827-8177 and FEDERAL EXPRESS

ZPAGES

Lori Wrotenbery, Director New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87505

Re:

Chevron's November 10, 1999 Water Injection Application Eunice Monument South Unit Waterflood Program

Dear Ms. Wrotenbery:

Reference is made to Chevron's November 10, 1999 application to convert additional wells to water injection within the Chevron-operated Eunice Monument South Unit ("EMSU") waterflood project (copy of application enclosed).

In order that we do not inadvertently waive any legal rights, while waiting to be furnished with sufficient supporting documentation regarding Chevron's newly proposed injection wells, please <u>initially</u> consider this letter as our objection to Chevron's application.

However, Doyle Hartman is not opposed to additional injection wells being added to the EMSU waterflood project providing that Chevron can make a satisfactory showing that its proposed additional injection wells can be installed and operated in accordance with the following set of industry-accepted injection practices and standards:

- 1) The proposed additional EMSU water injection will be kept, at all times, within Chevron's originally approved EMSU water injection interval.
- The proposed new EMSU injection wells have been properly cemented with adequate volumes of API sulfate-resistant cement and the individual injection well cement jobs demonstrate satisfactory bonding and pipe characteristics using a state-of-the-art 360° bond-pipe evaluation tool such as Schlumberger's USI-GR-CCL log.
- The wellhead injection pressure for the proposed injection wells will always be kept at or below the NMOCD's maximum surface injection pressure limit of 0.2 psi/ft.

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Case No. 12320 Exhibit No. 5

Submitted by:
Chevron U.S.A. Production Co.
Hearing Date: March 2, 2000

Ms. Lori Wrotenbery November 15, 1999 Page 2

- 4) The primary cement job for the proposed injection wells has not been compromised by nitro-glycerin stimulation or excessive acid treatments.
- 5) The individual well and overall project injection-to-withdrawal ratios are kept at 1.0 or less ensuring that out-of-zone non-oil-recovery injection is not occurring.
- The proposed new injection wells do not exhibit injection profiles that indicate a large volume (or percentage) of injection water is exiting the wellbore at the upper part of the injection interval.

For the following reasons, we are requesting that the foregoing requirements be met:

- A) Our State "A" Nos. 4 and 5 Eurnout gas wells (Sections 5 and 8, T-21-S, R-36-B) are now producing water from a Eurnout completion interval that was originally non-productive of water; and
- B) We have experienced additional significant negative impact (on the order of several million dollars), in the overall Eunice-Monument-Jalmat trend, due to water injection projects that have injected substantial volumes of water out of zone, although such injection projects were to have originally been operated in accordance with NMOCD rules and regulations.

Very truly yours

Doyle Hartman

DH/so Enclosures

co w/ enca.:

VIA FACSIMILE: \$05/227-8177
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7 PAGES

Michael Stogner, Chief Hearing Examiner New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87505 Ms. Lori Wrotenbery November 15, 1999 Page 3

VIA FACSIMILE: 915/687-7905 and FEDERAL EXPRESS

7 PAGES

Tracy G. Love, Petroleum Engineer Chevron U.S.A. Production Co. P.O. Box 1150 Midland, TX 79702

VIA FACSIMILE: 505/986-0741

7 PAGES

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ANERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

Lanservation division 2040 SOUTH PACHECO SANTA FE, NEW MEXICO 87505

FORM C-108 Revised 4-1-98

APPLICATION FOR AUTHORIZATION TO INJECT

i.	PURPOSE:X Secondary RecoveryPressure MaintenanceDisposalStor Application qualifies for administrative approval?X YesNo	age
п.	OPERATOR: Chevron U.S.A. Production Co.	
	ADDRESS: P. O. Box 1150 Midland, TX 79702	
	CONTACT PARTY: Tracy Love - Petroleum Engineer PHONE: (915) 687-7645	-
ш.	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.	
ľV.	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 circ drawn around each proposed injection well. This circle identifies the well's area of review.	le
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:	
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and. 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 chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearb wells, etc.). 	
• VШ.	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 w 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.	ith
Œ.	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	;d).
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.	
KIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.	8
	NAME: Tracy G. Love TITLE: Petroleum Engineer	
	NAME: Tracy G. Love SIGNATURE: DATE: 11/10/99	
•	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: 11/07/84 Case No. 8398 (Order No. 7766 - Effective 12/27/8-	<u>1)</u>

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) Lesse 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 coment 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:
- (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, 2040 South Pacheco, Santa Fe, New Mexico 87505, within 15 days.

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

Legal Notice (11/10/99)

Chevron U.S.A. Production Co. has applied to Oil Conservation Division of the State of New Mexico for approval to convert the EMSU #210, #212, #222, #252, and #258 to injection in their Eunice Monument South Unit. These wells are designed to improve recovery efficiency of the waterflood patterns and enhance production of the EMSU secondary recovery project. The wells are located in the following locations: #210 -Section 4, Unit K, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #212 - Section 5, Unit I, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #222 - Section 6, Unit O, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #252 - Section 6, Unit W, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #258 - Section 4, Unit U, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico. Water will be injected into the unitized interval of the Eunice Monument Grayburg-San Andres Pool which has an upper limit of 100 feet below mean sea level or the top of the Grayburg formation. whichever is higher, to a lower limit being the base of the San Andres formation. Injection will at an expected maximum rate of 1500 barrels of water per day and an expected maximum pressure of 750 pounds per square inch. Persons wanting to contact Chevron U.S.A. should direct their inquiries to Tracy Love, Chevron U.S.A. Production Co., P.O. Box 1150, Midland, TX 79702, phone (915) 687-7645.

Interested Parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, NM 87501, within 15 days of this notice.

