



**Chevron** U.S.A. Inc.  
P.O. Box 1150, Midland, TX 79702

DIVISION

12 10 07

December 4, 1990

PROPOSED REPLACEMENT INJECTION WELL  
EUNICE MONUMENT OIL POOL  
EUNICE MONUMENT SOUTH UNIT B  
WELL NUMBER 855  
LEA COUNTY, NEW MEXICO

New Mexico Oil Conservation Division  
310 Old Santa Fe Trail, Room 206  
Santa Fe, New Mexico 87503

Attention: William J. LeMay, Director

Gentlemen:

The New Mexico District of Chevron USA Inc. respectfully requests your administrative approval for an unorthodox location for the subject proposed replacement injection well. This well will replace a well in the proration unit, not completed in the Eunice Monument Oil Pool, that will not be tendered to the Unit by the original operator. We further request that you waive the 20 day waiting period requirement of Rule 104 (F) (IV) since the subject proration unit of the unorthodox location is surrounded by proration units included in the Unit and operated by Chevron.

The proposed location for this Eunice Monument South Unit B injection well, 1450' FNL, 870' FWL, Sec. 11, T20S, R36E, Unit E, as shown on the attached plat, will be in an approved waterflood project, under Form C-108 submitted 7/9/90, Order Nos. R-7765-B, R-7766-A, and R-7767-A (copies enclosed). This location will also meet the spacing requirements of Rule 104 (F) (I) which states that a well will be no closer than 330 feet to the outer boundary of the unitized area, and no closer than 10 feet to any quarter-quarter section line. The location was chosen to eliminate conflict with existing pipelines and other surface facilities that prevent us from drilling in an orthodox location.

Chevron has notified all working interest owners in the Eunice Monument South Unit B and expects to receive sufficient approval by mid-December, thereby satisfying Unit Operating Agreement requirements. Also, all directly offsetting unit wells, completed in the Eunice Monument Oil Pool, and their respective proration units are included in the Unit and are operated by Chevron.

Based upon the foregoing information, Chevron requests your administrative approval of the attached application for permit to drill this well at an unorthodox location. To enable Chevron to drill this proposed well this year, we are further requesting that

the Oil Conservation Division waive the 20 day waiting requirements in granting this administrative application.

For further information regarding this matter, please contact A. W. Bohling or S. P. McDonald at (915) 687-7100. Your prompt consideration will be greatly appreciated.

Sincerely,

  
R. C. ANDERSON

SPM/AWB

Attachments

cc. Oil Conservation Division  
District 1  
P. O. Box 1980  
Hobbs, New Mexico 88240  
Attn: Mr. Jerry T. Sexton

Kellahin, Kellahin and Aubrey  
Attorneys at Law  
P. O. Box 2265  
Santa Fe, New Mexico 87504-2265  
Attn: Mr. Tom Kellahin

Submit to Appropriate District Office  
State Lease - 6 copies  
Fee Lease - 5 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-101  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

API NO. (assigned by OCC on New Wells)
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>	7. Lease Name or Unit Agreement Name <i>EUNICE Monument South Unit (Exp-B)</i>
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>	8. Well No. <i>855</i>
2. Name of Operator <i>CHEVRON USA INC</i>	9. Pool name or Wildcat <i>EUNICE Monument GRAYBURG</i>
3. Address of Operator <i>P.O. Box 1150 MIDLAND TX 79702 ATTN: ED DOHERTY</i>	
4. Well Location Unit Letter <i>E</i> : <i>870</i> Feet From The <i>West</i> Line and <i>1450</i> Feet From The <i>North</i> Line Section <i>11</i> Township <i>20S</i> Range <i>36E</i> NMPM <i>LEA</i> County	

10. Proposed Depth <i>4200</i>	11. Formation <i>GRAYBURG</i>	12. Rotary or C.T. <i>ROTARY</i>
13. Elevations (Show whether DF, RT, GR, etc.) <i>3585.6 GR</i>	14. Kind & Status Plug Bond <i>BLANKET</i>	15. Drilling Contractor <i>UNKNOWN</i>
16. Approx. Date Work will start		

17. PROPOSED CASING AND CEMENT PROGRAM					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
<i>12 1/4</i>	<i>8 5/8</i>	<i>23</i>	<i>1200</i>	<i>800 SX.</i>	<i>SURF.</i>
<i>7 7/8</i>	<i>5 1/2</i>	<i>15.5</i>	<i>4200</i>	<i>900 SX.</i>	<i>SURF.</i>

MUD PROGRAM:

*0 - 1200 FW Spud mud 9.0 ppg.  
1200 - 4200 BW Starch 10#*

BOPE Equipment:

*3000 psi WP SEE ATTACHED CHEVRON CLASS III BOP DRAWING*

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE *E.O. Doherty* TITLE *Dir. T.A.* DATE *11/12/90*

TYPE OR PRINT NAME *E.O. DOHERTY* TELEPHONE NO. *915 687-7812*

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

State of New Mexico  
 District Office  
 State Leases - 4 copies  
 Fee Leases - 3 copies

State of New Mexico  
 Energy, Minerals and Natural Resources Department

Form C-182  
 Revised 1-1-89

**OIL CONSERVATION DIVISION**  
 P.O. Box 2088  
 Santa Fe, New Mexico 87504-2088

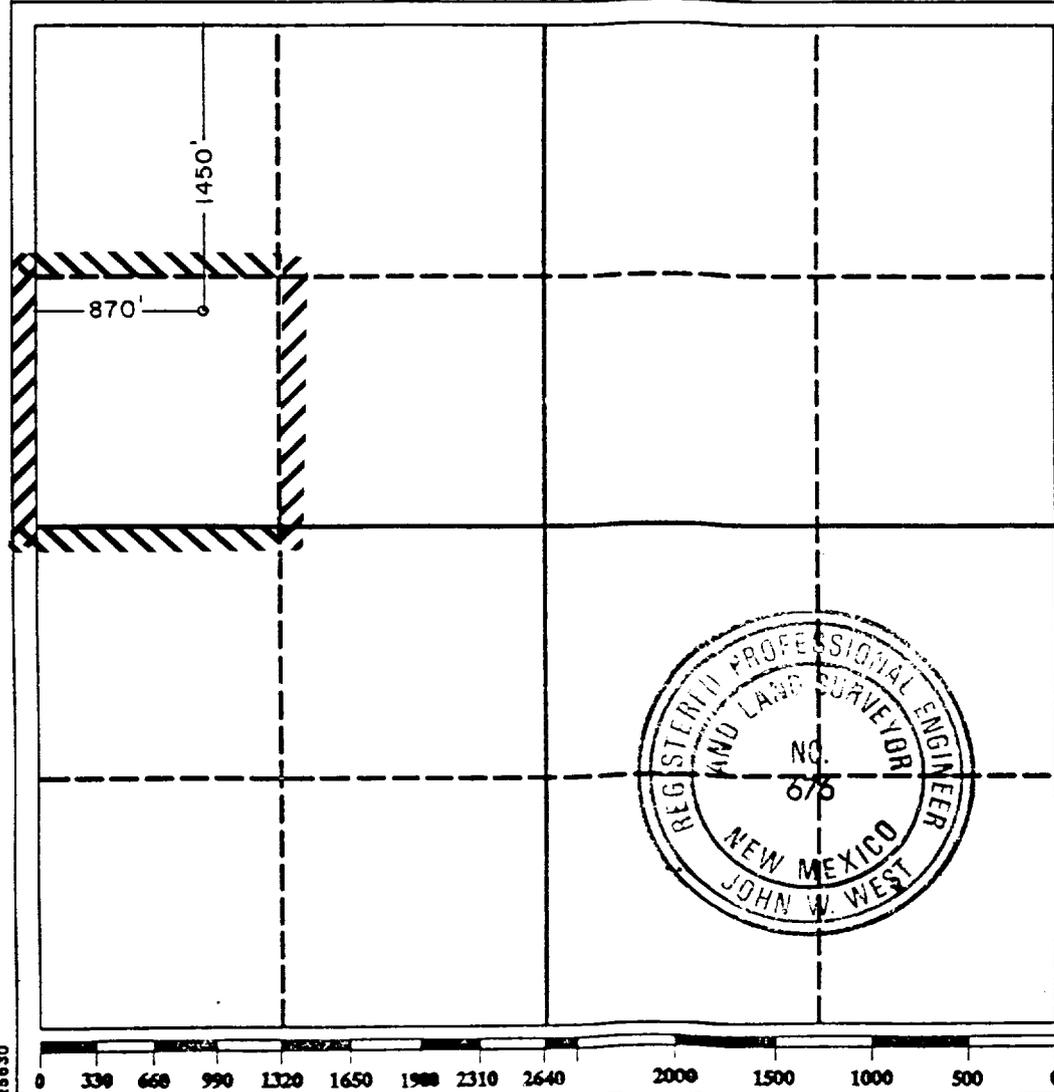
**DISTRICT I**  
 P.O. Box 1980, Hobbs, NM 88240

**DISTRICT II**  
 P.O. Drawer DD, Artesia, NM 88210

**DISTRICT III**  
 1000 Rio Brazos Rd., Aztec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**  
 All Distances must be from the outer boundaries of the section

Operator CHEVRON U.S.A. INC.			Lease EUNICE-MONUMENT SOUTH UNIT (EXP. -B)		Well No. 855
Unit Letter E	Section 11	Township 20 SOUTH	Range 36 EAST	County LEA	
Actual Footage Location of Well: 1450 feet from the NORTH line and 870 feet from the WEST line					
Ground level Elev. 3585.6	Producing Formation EUNICE MONUMENT		Pool GRAYBURG	Dedicated Acreage: Acres	
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.</p> <p>2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).</p> <p>3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  <input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.</p>					



**OPERATOR CERTIFICATION**  
 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature  
E. O. Doherty

Printed Name  
E. O. DOHERTY

Position  
T.A. Delg.

Company  
CHEVRON USA INC

Date  
11/29/90

**SURVEYOR CERTIFICATION**  
 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
11-26-90

Signature & Seal of Professional Surveyor  
John W West

Certificate No. JOHN W. WEST, 676  
RONALD J. EIDSON, 3239

## APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  yes  no
- II. Operator: Chevron U.S.A. Inc.  
Address: P.O. Box 670 Hobbs, New Mexico 88240  
Contact party: J. D. Dolan Phone: 505-393-4121
- 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 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:
- 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 a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological 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 source 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. Chevron EXHIBIT NO. 19  
(if well logs have been filed)
- \* 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 source 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: Jimmy D. Dolan Title Reservoir Engineer  
Signature: J. D. Dolan Date: 7-9-90
- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

## 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 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:

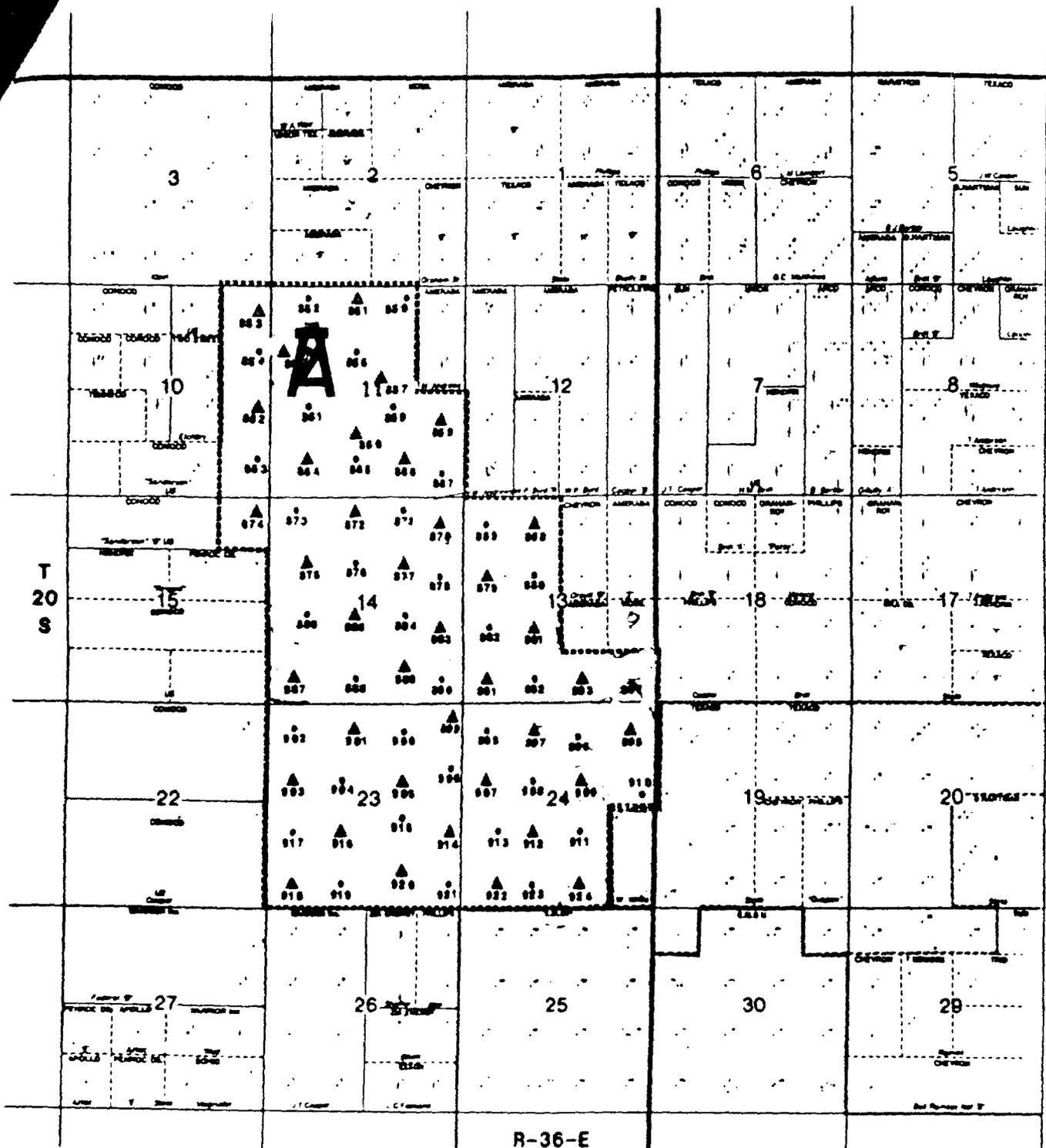
- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

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

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**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.

# Proposed Well Numbering Scheme



**LEGEND**

○ Location of Offing	● Proposed Producer
● Oil	▲ Proposed Injector
◆ P&A Oil	
◆ TA or O Oil	
○ Gas	
○ P&A Gas	
○ TA or O Gas	
● Oil & Gas	
◆ P&A Oil & Gas	
○ Dry & Abn	
○ W	


**Chevron USA Inc.**  
 Central Region - Exploration, Land and Production

**PROPOSED**  
**EUNICE MONUMENT EXPANSION**  
 Lea County, New Mexico

Scale: 1" = 1000'

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. 10059  
Order No. R-7765-B

APPLICATION OF CHEVRON U.S.A. INC.  
FOR THE EXPANSION OF THE EUNICE  
MONUMENT SOUTH UNIT AREA AND FOR THE  
AMENDMENT OF DIVISION ORDER NO. R-7765,  
AS AMENDED, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on August 22, 1990, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 19th day of October, 1990, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) Division Case Nos. 10059, 10060 and 10061 were consolidated at the time of the hearing for the purpose of testimony.

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(3) By Order No. R-7765, as amended, dated December 27, 1984, the Division, upon application of Gulf Oil Corporation, statutorily unitized, pursuant to the "Statutory Unitization Act," Sections 70-7-1 through 70-7-21, NMSA-1978, all mineral interests in the Eunice Monument Grayburg-San Andres Pool underlying the Eunice Monument South Unit Area which encompasses some 14,189.84 acres, more or less, in Lea County, New Mexico, for the purpose of instituting a waterflood project for the secondary recovery of oil and associated gas within said pool.

(4) Sufficient ratification of the plan for unit operations having been obtained by Gulf Oil Corporation, pursuant to the requirements of Division Order No. R-7765, as amended, unitized operations commenced at 7:00 a.m. on February 1, 1985.

(5) The applicant, Chevron U.S.A. Inc. (Chevron), seeks to amend said Division Order No. R-7765, as amended, to statutorily expand the Eunice Monument South Unit Area, pursuant to said "Statutory Unitization Act," Sections 70-7-1 through 70-7-21, NMSA-1978, to include an additional 3,000 acres, more or less, within the Eunice Monument Grayburg-San Andres Pool comprised of the following described acreage in Lea County, New Mexico:

TOWNSHIP 20 SOUTH, RANGE 36 EAST, NMPM

Section 10: E/2 E/2  
 Section 11: W/2, W/2 NE/4, SE/4  
 Section 13: W/2, S/2 SE/4  
 Section 14: All  
 Section 15: NE/4 NE/4  
 Section 23: All  
 Section 24: N/2, SW/4, W/2 SE/4

(6) The applicant proposed that the expanded area as described above be designated the Eunice Monument South Unit Expansion Area B (hereinafter referred to as Expansion Area B), and that the initial unit area be designated the Eunice Monument South Unit Area A (hereinafter referred to as Unit Area A).

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(7) Expansion Area B has been approved by the Bureau of Land Management and the Commissioner of Public Lands for the State of New Mexico subject to the approval of statutory unitization by the Division.

(8) The horizontal limits of Expansion Area B are reasonably defined by development and have a reasonable geologic relationship to the proposed unitized formations.

(9) In compliance with Section 4 of the Eunice Monument South Unit Agreement, the applicant has provided notice of the proposed expansion to all interest owners in Unit Area A as well as Expansion Area B, and has given said interest owners the opportunity to file written objections to the expansion, the boundaries, the basis for admission, the tract participation assigned to each tract, the effective date of the expansion, or any other matters concerning the unit.

(10) No interest owner in Unit Area A or Expansion Area B has objected to the proposed expansion.

(11) The proposed expansion does not change any percentage of allocation of either production or cost as established in the original order for any separately owned tract within Unit Area A, which is treated as a single tract for the purpose of this order.

(12) No interested party appeared and objected to the horizontal limits of Expansion Area B.

(13) The applicant has further proposed that the vertical limits of Expansion Area B coincide with the vertical limits of Unit Area A which extend from an upper limit described as 100 feet below mean sea level or at the top of the Grayburg formation, whichever is higher, to a lower limit at the base of the San Andres formation; the geologic markers having been previously found to occur at 3,666 feet and 5,283 feet, respectively, in Continental Oil Company's Meyer B-4 Well No. 23 located 660 feet from the South line and 1980 feet from the East line of Section 4, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico, as recorded on the Welx Acoustic Velocity Log taken on October 30, 1962, said log being measured from a Kelly drive bushing elevation of 3,595 feet above sea level.

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(14) The establishment of said vertical limits within Expansion Area B requires the amendment of the vertical limits of the Eumont Gas Pool and the Eunice Monument Grayburg-San Andres Pool. Said proposed amendment is the subject of companion Case No. 10061.

(15) No interested party appeared in opposition to the proposed vertical limits of Expansion Area B.

(16) Expansion Area B contains some eleven separate tracts owned by six different working interest owners.

(17) As of the date of the hearing, over 90 percent of the working and royalty interest owners of Expansion Area B were effectively committed to the unit or have balloted to join the unit.

(18) Chevron proposes to institute a waterflood project for the secondary recovery of oil and associated gas, condensate, and all associated liquefiable hydrocarbons within and to be produced from Expansion Area B, as presented in companion Case No. 10060.

(19) A technical committee was formed to evaluate aspects of unitization, operation, and conductance of secondary recovery operations through a stand alone unit or by expansion of the Eunice Monument South Unit. The committee has concluded that:

- a) the most economical and efficient method of accomplishing waterflood operations within Expansion Area B was to incorporate it into the Eunice Monument South Unit via unit expansion;
- b) based upon response to waterflooding in similar reservoirs, 48 percent of ultimate primary or 13.5 million barrels of additional (secondary) oil would be recovered by the institution of the proposed waterflood project within Expansion Area B.

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(20) The unitized management, operation, and further development of Expansion Area B, as proposed, is reasonable and necessary to effectively and efficiently carry on secondary recovery operations and will substantially increase the ultimate recovery of oil and gas from the unitized formations.

(21) The proposed unitized method of operation as applied to Expansion Area B is feasible and will result with reasonable probability in the increased recovery of substantially more oil from the unitized portion of the pool than would otherwise be recovered without unitization.

(22) The estimated additional costs of the proposed unitized operations within Expansion Area B will not exceed the estimated value of the additional oil and gas plus a reasonable profit.

(23) The applicant, the designated operator of Expansion Area B pursuant to the Unit Agreement and Unit Operating Agreement, has made a good faith effort to secure voluntary unitization within Expansion Area B.

(24) The participation formula for development of Expansion Area B will be the same as the formula utilized for the existing Unit Area A.

(25) The Division has previously found that the proposed participation formula will allocate unit production on a fair, reasonable, and equitable basis; however, the Division has further found that at such time as 64.2 million barrels of secondary oil have been produced from Unit Area A, the participation formula should be reviewed to determine if it will continue to allocate secondary or tertiary oil on a fair, reasonable, and equitable basis.

(26) At the time that the participation formula is reviewed, as described above, the applicant should also appear and demonstrate that the participation formula utilized in Expansion Area B continues to allocate proceeds from Expansion Area B in a fair and equitable manner or, in the alternative, present a new allocation formula prepared on the basis of new and/or enhanced reservoir data which may be obtained during the interim period, which new formula better allocates said proceeds.

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(27) The working interest owners of Unit Area A and the working interest owners of Expansion Area B have agreed that at least until such time as the aforementioned 64.2 million barrels of oil are recovered, Unit Area A and Expansion Area B will be operated separately, but each shall be operated under the terms and conditions of the Unit and Unit Operating Agreement, including any modifications thereof contained within the Addendum to the Ratification and Joinder for Expansion Area B.

(28) Unless changed by vote of the working interest owners and subsequent approval by the Division, all costs and expenses attributed to Expansion Area B should be paid by the working interest owners of Expansion Area B, and all production and revenues attributed to Expansion Area B should be distributed to the owners in said area in accordance with the tract participation and ownership established for Expansion Area B.

(29) According to applicant's evidence and testimony, existing injection facilities within Unit Area A will be utilized to carry out waterflood operations within Expansion Area B, and agreed upon share capital costs, operation, and maintenance of such injection facilities will be paid by the owners of Expansion Area B to those owners in Unit Area A.

(30) Chevron proposed a wellbore assessment method in the Unit Operating Agreement as an incentive to encourage the working interest owners in Expansion Area B to contribute the maximum number of existing useable wellbores to the unit.

(31) This assessment method, though not common, is used in other unit agreements.

(32) A wellbore useable for production or injection in the unitized interval must be made available for any proration unit within Expansion Area B which is to participate in the proposed waterflood operation, when such proration unit has or has had a well producing from the unitized interval.

(33) It is not unreasonable to penalize the owners of proration units upon which there is no such wellbore and upon which the unit operator must drill a well.

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(34) The proposed method of wellbore assessment is fair and reasonable.

(35) Unitization and the adoption of the proposed unitized method of operation will benefit the working interest owners and royalty interest owners of the oil and gas rights within Expansion Area B.

(36) The Eunice Monument South Unit Agreement and Unit Operating Agreement, as applied to Expansion Area B provide for unitization and unit operation of Expansion Area B upon terms and conditions that are fair, reasonable and equitable and which include:

- a) an allocation to the separately owned tracts in the unit area of all oil and gas that is produced from the unit area and which is saved, being the production that is not used in the conduct of unit operations or not unavoidably lost;
- b) a provision for the credits and charges to be made in the adjustment among the owners in the unit area for their respective investments in wells, tanks, pumps, machinery, materials and equipment contributed to the unit operations;
- c) a provision governing how the costs of unit operations, including capital investments, shall be determined and charged to the separately owned tracts and how said costs shall be paid, including a provision providing when, how, and by whom, the unit production allocated to an owner who does not pay his share of the costs of unit operations shall be charged to such owners, of the interest of such owners, and how his interest may be sold and the proceeds applied to the payment of his costs;

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- d) a provision for carrying any working interest owner on a limited, carried or net-profits basis, payable out of production, upon such terms and conditions which are just and reasonable, and which allow an appropriate charge for interest for such service payable out of production, upon such terms and conditions determined by the Division to be just and reasonable, and allowing an appropriate charge for interest for such service payable out of such owner's share of production, providing that any nonconsenting working interest owner being so carried shall be deemed to have relinquished to the unit operator all of his operating rights and working interests in and to the unit until his share of the costs, service charge and interest are repaid to the unit operator;
- e) a provision designating the unit operator and providing for the supervision and conduct of the unit operations, including the selection, removal or substitution of an operator from among the working interest owners to conduct the unit operations;
- f) a provision for a voting procedure for the decision of matters to be decided by the working interest owners in respect to which each working interest owner shall have a voting interest equal to his unit participation: and,
- g) the time when the unit operations shall commence and the manner in which, and the circumstances under which, the operations shall terminate and for the settlement of accounts upon such termination.

(37) The statutory unitization of the Eunice Monument South Unit Expansion Area B is in conformity with the above findings, and will prevent waste and protect the correlative rights of all owners of interest within the proposed unit area, and should be approved.

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IT IS THEREFORE ORDERED THAT:

(1) The Eunice Monument South Unit Area, previously approved and defined by Division Order No. R-7765, as amended, is hereby expanded, pursuant to the "Statutory Unitization Act", Section 70-7-1 through 70-7-21, NMSA-1978, to include some 3,000 acres, more or less, within the Eunice Monument Grayburg-San Andres Pool and comprised of the following described acreage in Lea County, New Mexico:

TOWNSHIP 20 SOUTH, RANGE 36 EAST, NMPM

Section 10: E/2 E/2  
 Section 11: W/2, W/2 NE/4, SE/4  
 Section 13: W/2, S/2 SE/4  
 Section 14: All  
 Section 15: NE/4 NE/4  
 Section 23: All  
 Section 24: N/2, SW/4, W/2 SE/4

*2/16  
 EMM*

(2) The acreage described above is hereby designated the Eunice Monument South Unit Expansion Area B (hereinafter referred to as Expansion Area B) and the initial unit area defined by Division Order No. R-7765, as amended, is hereby designated the Eunice Monument South Unit Area A (hereinafter referred to as Unit Area A).

(3) The vertical limits of Expansion Area B shall extend from an upper limit described as 100 feet below mean sea level or at the top of the Grayburg formation, whichever is higher, to a lower limit at the base of the San Andres formation; the geologic markers having been previously found to occur at 3,666 feet and 5,283 feet, respectively, in Continental Oil Company's Meyer B-4 Well No. 23 located 660 feet from the South line and 1980 feet from the East line of Section 4, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico, as recorded on the Welex Acoustic Velocity Log taken on October 30, 1962, said log being measured from a Kelly drive bushing elevation of 3,595 feet above sea level.

CASE NO. 10059  
Order No. R-7765-B  
Page -10-

(4) The applicant is hereby authorized to institute a waterflood project for the secondary recovery of oil and associated gas, condensate, and all associated liquefiable hydrocarbons within Expansion Area B, pursuant to the provisions set forth in Division Order No. R-7766-A.

(5) The Eunice Monument South Unit Agreement and the Eunice Monument South Unit Operating Agreement, as they pertain to Expansion Area B, presented as evidence in this case, are hereby incorporated by reference into this order.

(6) The Eunice Monument South Unit Agreement and Unit Operating Agreement, as they pertain to Expansion Area B provide for unitization and unit operation of Expansion Area B upon terms and conditions that are fair, reasonable and equitable and include:

- a) an allocation to the separately owned tracts in the unit area of all oil and gas that is produced from the unit area and which is saved, being the production that is not used in the conduct of unit operations or not unavoidably lost;
- b) a provision for the credits and charges to be made in the adjustment among the owners in the unit area for their respective investments in wells, tanks, pumps, machinery, materials and equipment contributed to the unit operations;
- c) a provision governing how the costs of unit operations, including capital investments, shall be determined and charged to the separately owned tracts and how said costs shall be paid, including a provision providing when, how, and by whom, the unit production allocated to an owner who does not pay his share of the costs of unit operations shall be charged to such owners, of the interest of such owners, and how his interest may be sold and the proceeds applied to the payment of his costs;

CASE NO. 10059  
Order No. R-7765-B  
Page -11-

- d) a provision for carrying any working interest owner on a limited, carried or net-profits basis, payable out of production, upon such terms and conditions which are just and reasonable, and which allow an appropriate charge for interest for such service payable out of production, upon such terms and conditions determined by the Division to be just and reasonable, and allowing an appropriate charge for interest for such service payable out of such owner's share of production, providing that any nonconsenting working interest owner being so carried shall be deemed to have relinquished to the unit operator all of his operating rights and working interests in and to the unit until his share of the costs, service charge and interest are repaid to the unit operator;
- e) a provision designating the unit operator and providing for the supervision and conduct of the unit operations, including the selection, removal or substitution of an operator from among the working interest owners to conduct the unit operations;
- f) a provision for a voting procedure for the decision of matters to be decided by the working interest owners in respect to which each working interest owner shall have a voting interest equal to his unit participation; and,
- e) the time when the unit operations shall commence and the manner in which, and the circumstances under which, the operations shall terminate and for the settlement of accounts upon such termination.

(7) This order shall not become effective unless and until seventy-five percent of the working interest and seventy-five percent of the royalty interest owners in Expansion Area B have approved the plan for unit operations as required by Section 70-7-8, NMSA, 1978 Compilation.

CASE NO. 10059  
Order No. R-7765-B  
Page -12-

(8) If the persons owning the required percentage of interest in Expansion Area B as set out in Section 70-7-8, NMSA, 1978 Compilation, do not approve the plan for unit operations within a period of six months from the date of entry of this order, this order shall cease to be of further force and effect and shall be revoked by the Division, unless the Division shall extend the time for ratification for good cause shown.

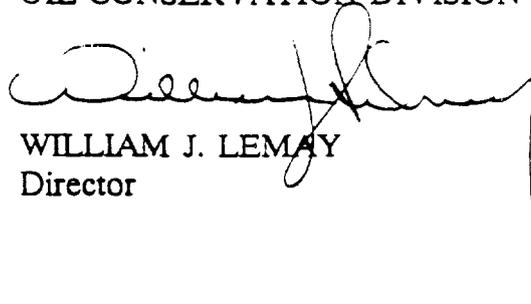
(9) When the persons owning the required percentage of interest in the Expansion Area B have approved the plan for unit operations, the interests of all persons in the Expansion Area B are unitized whether or not such persons have approved the plan of unitization in writing.

(10) Prior to distribution of the proceeds from secondary and tertiary production in excess of 64.2 million barrels from Unit Area A, the operator shall appear at a hearing and demonstrate that the formula approved by this order for Expansion Area B continues to allocate the proceeds from Expansion Area B production in a fair and equitable manner or, in the alternative, present for approval a new formula prepared on the basis of new and/or enhanced reservoir data which may be obtained during the interim period, which new formula better allocates said proceeds.

(11) Jurisdiction of this cause is 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



WILLIAM J. LEMAY  
Director

S E A L

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. 10060  
Order No. R-7766-A

APPLICATION OF CHEVRON U.S.A. INC.  
FOR THE EXPANSION OF THE EUNICE  
MONUMENT SOUTH UNIT WATERFLOOD  
PROJECT AREA AND TO AMEND DIVISION  
ORDER NO. R-7766, LEA COUNTY, NEW  
MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on August 22, 1990, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 19th day of October, 1990, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) Division Case Nos. 10059, 10060 and 10061 were consolidated at the time of the hearing for the purpose of testimony.

CASE NO. 10060  
Order No. R-7766-A  
Page -2-

(3) The applicant, Chevron U.S.A. Inc., seeks to expand its Eunice Monument South Unit Waterflood Project Area, as defined and authorized by Division Order No. R-7766, dated December 27, 1984, to include that area comprising its Eunice Monument South Unit Expansion Area B (being the subject of companion Case No. 10059), as fully described in Exhibit "A" attached hereto, by the injection of water into the unitized interval which includes the formations which extend from an upper limit of 100 feet below mean sea level or at the top of the Grayburg formation, whichever is higher, to a lower limit being the base of the San Andres formation, all within the Eunice Monument Grayburg-San Andres Pool, Lea County, New Mexico, through 35 existing wells and 3 wells to be drilled as injectors as shown on Exhibit "B" attached hereto.

(4) The applicant proposes to commence waterflood operations within Expansion Area B utilizing an 80-acre five spot injection pattern using the well numbering system and proposed unit injection wells as identified on Exhibit "B" attached hereto.

(5) The producing formations in the proposed expansion area are in an advanced state of depletion and the area is suitable for waterflooding.

(6) The proposed waterflood expansion should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(7) There are three wells within or adjacent to Expansion Area B which may not have been completed or plugged in a manner which will assure that their wellbores will not serve as a conduit for movement of injected fluid out of the injection interval.

(8) Prior to commencing injection operations within one-half mile of the three wells described above and shown on Exhibit "C" attached hereto, the applicant should cement and/or replug said wells in a manner which will ensure that said wells will not serve as a conduit for movement of injected fluid out of the injection interval and in a manner satisfactory to the supervisor of the Division's Hobbs district office.

CASE NO. 10060  
Order No. R-7766-A  
Page -3-

(9) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(10) Injection into the proposed injection wells should be accomplished through 2 3/8-inch internally plastic-lined tubing installed in a packer set approximately within 100 feet of the uppermost injection perforation or casing shoe; the casing-tubing annulus in each well should be filled with an inert fluid and a gauge or approved leak detection device should be attached to the annulus in order to determine leakage in the casing, tubing or packer.

(11) The injection wells or injection pressurization system should be equipped with a pressure control device or acceptable substitute which will limit the surface injection pressure to no more than 0.2 psi per foot of depth from the surface to the top injection perforation.

(12) The Division Director should have the authority to administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in migration of waters from the Eunice Monument Grayburg-San Andres Pool.

(13) Prior to commencing injection operations into the proposed injection wells, the casing in each well should be pressure tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

(14) The operator should give advance notification to the supervisor of the Hobbs district office of the Division of the date and time of the installation of injection equipment, of the mechanical integrity pressure tests, and of the conductance of any remedial cement or plugging operations in order that the same may be witnessed.

(15) The project should be designated the Eunice Monument South Unit Expansion Area B Waterflood Project.

(16) The application should be approved and the project should be governed by the provisions of Rules 701 through 708 of the Oil Conservation Division Rules and Regulations.

CASE NO. 10060  
Order No. R-7766-A  
Page -4-

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Chevron U.S.A. Inc., is hereby authorized to expand its Eunice Monument South Unit Waterflood Project Area, as defined and authorized by Division Order No. R-7766, dated December 27, 1984, to include that area comprising its Eunice Monument South Unit Expansion Area B, as fully described in Exhibit "A" attached hereto, by the injection of water into the unitized interval which includes the formations which extend from an upper limit of 100 feet below mean sea level or at the top of the Grayburg formation, whichever is higher, to a lower limit being the base of the San Andres formation, all within the Eunice Monument Grayburg-San Andres Pool, Lea County, New Mexico, through 35 existing wells and 3 wells to be drilled as injectors as shown on Exhibit "B" attached hereto.

(2) The project is hereby designated the Eunice Monument South Unit Expansion Area B Waterflood Project.

(3) Prior to commencing injection operations within one-half mile of the three wells described on Exhibit "C" attached hereto, the applicant shall cement and/or replug said wells in a manner which will ensure that said wells will not serve as a conduit for movement of injected fluid out of the injection interval and in a manner satisfactory to the supervisor of the Division's Hobbs district office.

(4) The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(5) Injection into the proposed injection wells shall be accomplished through 2 3/8-inch internally plastic-lined tubing installed in a packer set approximately within 100 feet of the uppermost injection perforation or casing shoe; the casing-tubing annulus in each well 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.

CASE NO. 10060  
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(6) The injection wells or injection pressurization system shall be equipped with a pressure control device or acceptable substitute which will limit the surface injection pressure to no more than 0.2 psi per foot of depth from the surface to the top injection perforation.

(7) The Division Director shall have the authority to administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in migration of waters from the Eunice Monument Grayburg-San Andres Pool.

(8) Prior to commencing injection operations into the proposed injection wells, the casing in each well shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

(9) The operator shall give advance notification to the supervisor of the Hobbs district office of the Division of the date and time of the installation of injection equipment, of the mechanical integrity pressure tests, and of the conductance of any remedial cement or plugging operations in order that the same may be witnessed.

(10) The operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing, casing, or packer in any injection well, the leakage of water or oil from or around any producing well, or the leakage of water or oil from or around any plugged and abandoned well within the project area and shall take such steps as may be timely and necessary to correct such failure or leakage.

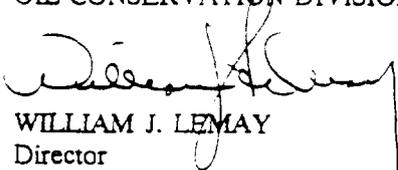
(11) The applicant shall conduct injection operations in accordance with Division Rule Nos. 701 through 708 and shall submit monthly progress reports in accordance with Division Rule Nos. 706 and 1115.

(12) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

CASE NO. 10060  
Order No. R-7766-A  
Page -6-

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

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY  
Director

S E A L

CASE NO. 10060  
Order No. R-7766-A  
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CASE NO. 10060  
DIVISION ORDER NO. R-7766-A  
EXHIBIT "A"  
EUNICE MONUMENT SOUTH UNIT EXPANSION AREA B

TOWNSHIP 20 SOUTH, RANGE 36 EAST, NMPM

Section 10: E/2 E/2  
Section 11: W/2 NE/4, W/2, SE/4  
Section 13: W/2, S/2 SE/4  
Section 14: All  
Section 15: NE/4 NE/4  
Section 23: All  
Section 24: N/2, SW/4, W/2 SE/4

ALL IN LEA COUNTY, NEW MEXICO

EXISTING WELLS

PREVIOUS OPERATOR	PREVIOUS WELL NAME AND NUMBER	UNIT WELL DESIGNATION	WELL LOCATION
<b>SECTION 14</b>			
Conoco Inc.	Sanderson "A" No. 7	EMSU No. 870	660' FNL. & 660' FEL (Unit A)
Conoco Inc.	Sanderson "A" No. 11	EMSU No. 872	330' FNL. & 2310' FWL (Unit C)
Conoco Inc.	Sanderson "B14" No. 4	EMSU No. 875	1650' FNL. & 990' FWL (Unit E)
Conoco Inc.	Sanderson "A" No. 13	EMSU No. 877	1650' FNL. & 1650' FEL (Unit G)
Conoco Inc.	Sanderson "A" No. 10	EMSU No. 883	1980' FSL & 660' FEL (Unit I)
Conoco Inc.	Sanderson "B14" No. 2	EMSU No. 885	2310' FSL & 2310' FWL (Unit K)
Conoco Inc.	Sanderson "B14" No. 1	EMSU No. 889	990' FSL & 1650' FEL (Unit O)
<b>SECTION 15</b>			
Conoco Inc.	Sanderson "B-1" No. 8	EMSU No. 874	330' FNL & 330' FEL (Unit A)
<b>SECTION 23</b>			
Conoco Inc.	Reed "B" No. 1	EMSU No. 899	330' FNL & 330' FEL (Unit A)
Amerada Hess	H. W. Andrews No. 7	EMSU No. 901	660' FNL & 2310' FWL (Unit C)
Amerada Hess	H. W. Andrews No. 10	EMSU No. 903	1980' FNL. & 660' FWL (Unit E)
Conoco Inc.	Reed "B" No. 8	EMSU No. 905	1980' FNL. & 1650' FEL (Unit G)
Conoco Inc.	Reed "B" No. 5	EMSU No. 914	1980' FSL & 330' FEL (Unit I)
Amerada Hess	H. W. Andrews No. 9	EMSU No. 916	1980' FSL & 1980' FWL (Unit K)
Conoco Inc.	Reed "B" No. 9	EMSU No. 918	660' FSL & 660' FWL (Unit M)
Conoco Inc.	Reed "B" No. 6	EMSU No. 920	990' FSL & 1650' FEL (Unit O)

EXHIBIT "B"  
CASE NO. 10060  
ORDER NO. R-7766-A  
EUNICE MONUMENT SOUTH UNIT EXPANSION AREA B  
UNIT INJECTION WELLS

EXISTING WELLS			
PREVIOUS OPERATOR	PREVIOUS WELL NAME AND NUMBER	UNIT WELL DESIGNATION	WELL LOCATION
<b>SECTION 10</b>			
Conoco Inc.	Sanderson "B-1" No. 1	EMSU No. 853	660' FNL. & 330' FEL (Unit A)
Conoco Inc.	Sanderson "B-1" No. 3	EMSU No. 862	2310' FSL. & 330' FEL. (Unit I)
<b>SECTION 11</b>			
ARCO Oil and Gas	William P. Byrd No. 1	EMSU No. 851	330' FNL & 2310' FWL (Unit C)
ARCO Oil and Gas	Byrd Gas Com No. 5	EMSU No. 855	1650' FNL & 330' FWL (Unit E)
ARCO Oil and Gas	Mary J. Byrd No. 3	EMSU No. 857	2310' FNL & 2310' FEL (Unit G)
Conoco Inc.	Sanderson "A" No. 1	EMSU No. 858	1980' FSL & 660' FEL (Unit I)
ARCO Oil and Gas	William P. Byrd No. 3	EMSU No. 860	1650' FSL & 2310' FWL (Unit K)
Conoco Inc.	Sanderson "A" No. 6	EMSU No. 864	990' FSL & 990' FWL (Unit M)
Conoco Inc.	Sanderson "A" No. 4	EMSU No. 866	990' FSL & 1650' FEL (Unit O)
<b>SECTION 13</b>			
Shell Western	State "E" No. 1	EMSU No. 868	660' FNL & 1980' FWL (Unit C)
Shell Western	State "E" No. 4	EMSU No. 879	1980' FNL & 680' FWL (Unit E)
Chevron USA, Inc.	Graham State NCT-H No. 2	EMSU No. 891	660' FSL & 660' FWL (Unit M)
Chevron USA, Inc.	R. R. Bell NCT-G No. 2	EMSU No. 893	660' FSL. & 1980' FEL. (Unit O)

EXISTING WELLS			
PREVIOUS OPERATOR	PREVIOUS WELL NAME AND NUMBER	UNIT WELL DESIGNATION	WELL LOCATION
SECTION 24			
Amoco Production Company	Gillully "A" Federal No. 2	EMSU No. 895	660' FNL & 660' FEL (Unit A)
Amoco Production Company	Gillully "A" Federal No. 9	EMSU No. 897	660' FNL & 1980' FWL (Unit C)
Amoco Production Company	Gillully "A" Federal No. 14	EMSU No. 907	1980' FNL & 660' FWL (Unit E)
Amoco Production Company	Gillully "A" Federal No. 11	EMSU No. 909	1980' FNL & 1980' FEL (Unit G)
Conoco Inc.	Reed "B" No. 12	EMSU No. 912	1980' FSL & 1980' FWL (Unit K)
Conoco Inc.	Reed "B" No. 13	EMSU No. 922	660' FSL & 990' FWL (Unit M)
INJECTION WELLS TO BE DRILLED			
UNIT WELL DESIGNATION		TENTATIVE WELL LOCATION	
SECTION 13			
EMSU No. 881		1935' FSL & 705' FWL (Unit L)	
SECTION 14			
EMSU No. 887		660' FSL & 660' FWL (Unit M)	
SECTION 24			
EMSU No. 924		705' FSL & 2025' FEL (Unit O)	

(All in Township 20 South, Range 36 East, NMPM, Lea County, New Mexico.)

CASE NO. 10060  
Order No. R-7766-A  
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CASE NO. 10060  
DIVISION ORDER NO. R-7766-A  
EXHIBIT "C"

<u>OPERATOR</u>	<u>WELL &amp; LOCATION</u>
Warnor, Inc.	Federal "D" No. 8 1980'FNL & 1980'FWL (Unit F) Section 26, T-20 South, R-36 East
Elliot Oil Co.	Schafer State No. 1 660'FNL & 1650'FEL (Unit B) Section 26 T-20 South, R-36 East
Chevron USA	Graham State NCT-H 660'FSL & 660'FWL No. 2 (Unit M) Section 13 T-20 South, R-36 East

ALL IN LEA COUNTY, NEW MEXICO

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:

NOMENCLATURE  
CASE NO. 10061  
Order No. R-7767-A

APPLICATION OF CHEVRON U.S.A. INC.  
FOR POOL EXTENSION AND CONTRACTION,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on August 22, 1990, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 19<sup>th</sup> day of October, 1990, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) Division Case Nos. 10059, 10060 and 10061 were consolidated at the time of the hearing for the purpose of testimony.
- (3) The applicant, Chevron U.S.A. Inc., is the operator of the Eunice Monument South Unit Expansion Area B with horizontal limits encompassing that acreage described on Exhibit "A" attached hereto.

## NOMENCLATURE

CASE NO. 10061

Order No. R-7767-A

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(4) The applicant seeks the vertical extension of the upper limits of the Eunice Monument Grayburg-San Andres Pool to include either the top of the Grayburg formation or to a subsea datum of minus 100 feet, whichever is higher, and the concomitant amendment of the vertical limits of the Eumont Gas Pool by contracting its lower limits to either the base of the Queen formation or to a subsea datum of minus 100 feet, whichever is higher, underlying said area.

(5) The proposed amendment of pool vertical limits is necessary to permit the applicant to successfully carry out secondary recovery operations within the full oil column underlying said unit.

(6) No party appeared and objected to the proposed amendment of said vertical limits.

(7) Granting this application will serve to prevent waste and will not violate correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) Within the area designated as the Eunice Monument South Unit Expansion Area B, as described on Exhibit "A" attached hereto, the vertical limits of the Eumont Gas Pool are hereby amended to be from the top of the Yates formation to a lower limit described as the base of the Queen formation or 100 feet below mean sea level, whichever is higher; the geologic markers having been previously found to occur at 2,747 feet and 3,666 feet, respectively, in Continental Oil Company's Meyer B-4 Well No. 23 located 660 feet from the South line and 1980 feet from the East line of Section 4, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico, as recorded on the Welex Acoustic Velocity Log taken on October 30, 1962, said log being measured from a Kelly drive bushing elevation of 3,595 feet above sea level.

(2) Within the area designated as the Eunice Monument South Unit Expansion Area B, as described on Exhibit "A" attached hereto, the vertical limits of the Eunice Monument Grayburg-San Andres Pool are hereby amended to be from an upper limit described as 100 feet below mean sea

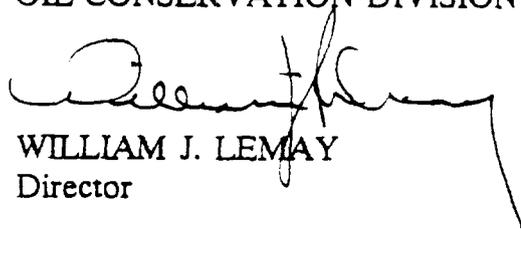
NOMENCLATURE  
CASE NO. 10061  
Order No. R-7767-A  
Page -3-

level or at the top of the Grayburg formation, whichever is higher, to a lower limit at the base of the San Andres formation; the geologic markers having been previously found to occur at 3,666 feet and 5,283 feet, respectively, in Continental Oil Company's Meyer B-4 Well No. 23 located 660 feet from the South line and 1980 feet from the East line of Section 4, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico, as recorded on the Welex Acoustic Velocity Log taken on October 30, 1962, said log being measured from a kelly drive bushing elevation of 3,595 feet above sea level.

(3) Jurisdiction of this cause is 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



WILLIAM J. LEMAY  
Director

S E A L



**Chevron** U.S.A. Inc.  
P.O. Box 1150, Midland, TX 79702

January 4, 1991

PROPOSED REPLACEMENT INJECTION WELL  
EUNICE MONUMENT OIL POOL  
EUNICE MONUMENT SOUTH UNIT B  
WELL NUMBER 855  
LEA COUNTY, NEW MEXICO

New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87503

Attention: Mr. David Catanach

Gentlemen:

As you requested in your phone conversation with Jimmy Dolan of our office on December 10, 1990 regarding the subject application of December 4, 1990, attached are copies of proof of notice to offset operators and the surface landowner, and an Affidavit of Publication in a local area newspaper.

If you have any questions regarding this matter, or require further information, please contact Steve McDonald at (915) 687-7321.

Sincerely,

*Alan W. Bohling*  
Alan W. Bohling  
Proration Engineer

dmb  
Attachments

cc: NMOCD - Hobbs

OFFSET OPERATORS TO  
EUNICE MONUMENT SOUTH UNIT 'B'  
PROPOSED WELL # 855

SE/4-SE/4 Sec. 3, T20S, R36E	Conoco Inc. 10 Desta Drive Midland, TX 79705
SW/2 Sec. 2, T20S, R36E	Amerada-Hess P. O. Box 840 Seminole, TX 79360
SW/4-SE/4 Sec. 2, T20S, R36E	Amerada-Hess P. O. Box 840 Seminole, TX 79360
E/2-NE/4 Sec. 11, T20S, R36E	ARCO P. O. Box 1610 Midland, TX 79702
NW/4-SE/4 Sec. 11, T20S, R36E	Conoco Inc. 10 Desta Drive Midland, TX 79705
N/2-SW/4 Sec. 11, T20S, R36E	ARCO P. O. Box 1610 Midland, TX 79702
NE/4-SE/4 Sec. 10, T20S, R36E	Conoco, Inc. 10 Desta Drive Midland, TX 79705
SW/4-NE/4 Sec. 10, T20S, R36E	Two States Oil Co. 4925 Greenville Avenue Dallas, TX 75206
N/2 Sec. 10, T20S, R36E	Conoco, Inc. 10 Desta Drive Midland, TX 79705

SURFACE OWNER

E/2 Sec. 11, T20S, R36E	Edward H. Klein Estate P. O. Box 1503 Hobbs, NM 88240
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**AFFIDAVIT OF PUBLICATION**

State of New Mexico,  
County of Lea.

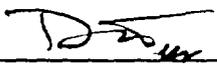
I, DON TEER

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period

of \_\_\_\_\_

ONE weeks.  
Beginning with the issue dated

DECEMBER 17, 19 90  
and ending with the issue dated

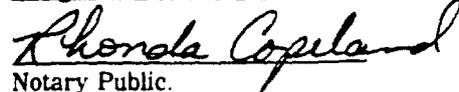
DECEMBER 17, 19 90  


Business Manager.

Sworn and subscribed to before

me this 20 day of

December, 19 90

  
Notary Public.

My Commission expires \_\_\_\_\_

JULY 24, 19 91  
(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

**LEGAL NOTICE  
December 17, 1990**

CHEVRON USA intends to drill an injection well, EMSUB #855, in the Eunice Monument South Unit Area B specifically located at 1450' FNL, 870' FWL, T20S, R36E, Unit E, Lea County, New Mexico for the purpose of injecting water for secondary recovery of oil and gas in the unitized interval of the Eunice Monument Grayburg-San

Andres Pool. Water will be injected into the unitized interval 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, at an expected maximum rate of 2000 barrels per day and an expected maximum pressure of 730 pounds per square inch. Persons wishing to contact

Chevron USA should direct their inquiries to the New Mexico District Engineer, P.O. Box 1150, Midland, Texas 79702, phone (915) 687-7758 or (915) 687-7321.

Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1.  Show to whom delivered, date, and addressee's address. (Extra charge) 2.  Restricted Delivery (Extra charge)

3. Article Addressed to:  ARCO P.O. Box 1610 MIDLAND, TX 79702	4. Article Number <b>50571</b>
Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
Always obtain signature of addressee or agent and <b>DATE DELIVERED.</b>	
5. Signature - Addressee <b>X</b>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent <b>X</b>	
7. Date of Delivery <b>DEC 14 1990</b>	

PS Form 3811, Apr. 1989

\*U.S.G.P.O. 1989-238-815

DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1.  Show to whom delivered, date, and addressee's address. (Extra charge) 2.  Restricted Delivery (Extra charge)

3. Article Addressed to:  CONOCO 10 DESTA DR. MIDLAND, TX 79705	4. Article Number <b>50570</b>
Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
Always obtain signature of addressee or agent and <b>DATE DELIVERED.</b>	
5. Signature - Addressee <b>X</b>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent <b>X</b> <i>Anita Gonzalez</i>	
7. Date of Delivery <b>12/18</b>	

PS Form 3811, Apr. 1989

\*U.S.G.P.O. 1989-238-815

DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1.  Show to whom delivered, date, and addressee's address. (Extra charge) 2.  Restricted Delivery (Extra charge)

3. Article Addressed to:  EDWARD H. KLEIN EST P.O. Box 1503 HOBBS, NM 88240	4. Article Number <b>50572</b>
Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
Always obtain signature of addressee or agent and <b>DATE DELIVERED.</b>	
5. Signature - Addressee <b>X</b> <i>Edward H. Klein</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent <b>X</b>	
7. Date of Delivery <b>12-15-90</b>	

PS Form 3811, Apr. 1989

\*U.S.G.P.O. 1989-238-815

DOMESTIC RETURN RECEIPT

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1.  Show to whom delivered, date, and addressee's address. (Extra charge)      2.  Restricted Delivery (Extra charge)

3. Article Addressed to: AMERADA HESS Corp P.O. Box 840 SEMINOLE, TX 75360	4. Article Number 70295
5. Signature - Addressee X <i>[Signature]</i>	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input checked="" type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
6. Signature - Agent X	Always obtain signature of addressee or agent and DATE DELIVERED.
7. Date of Delivery 12-17-90	8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Apr. 1989

\*U.S.G.P.O. 1989-238-815

DOMESTIC RETURN RECEIPT

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1.  Show to whom delivered, date, and addressee's address. (Extra charge)      2.  Restricted Delivery (Extra charge)

3. Article Addressed to: Two STATES OIL Co. 4925 GREENVILLE AVE DALLAS, TX 75206	4. Article Number 70295
5. Signature - Addressee X <i>[Signature]</i>	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input checked="" type="checkbox"/> Return Receipt for Merchandise
6. Signature - Agent X	Always obtain signature of addressee or agent and DATE DELIVERED.
7. Date of Delivery 12-26-90	8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Apr. 1989

\*U.S.G.P.O. 1989-238-815

DOMESTIC RETURN RECEIPT

## Memorandum GO-144

To DAVID CATANACH NM-OCD 2/1 1991  
From STEVE McDONALD CHEVRON  
Subject: EMSUB #855 Our File:

Your File:

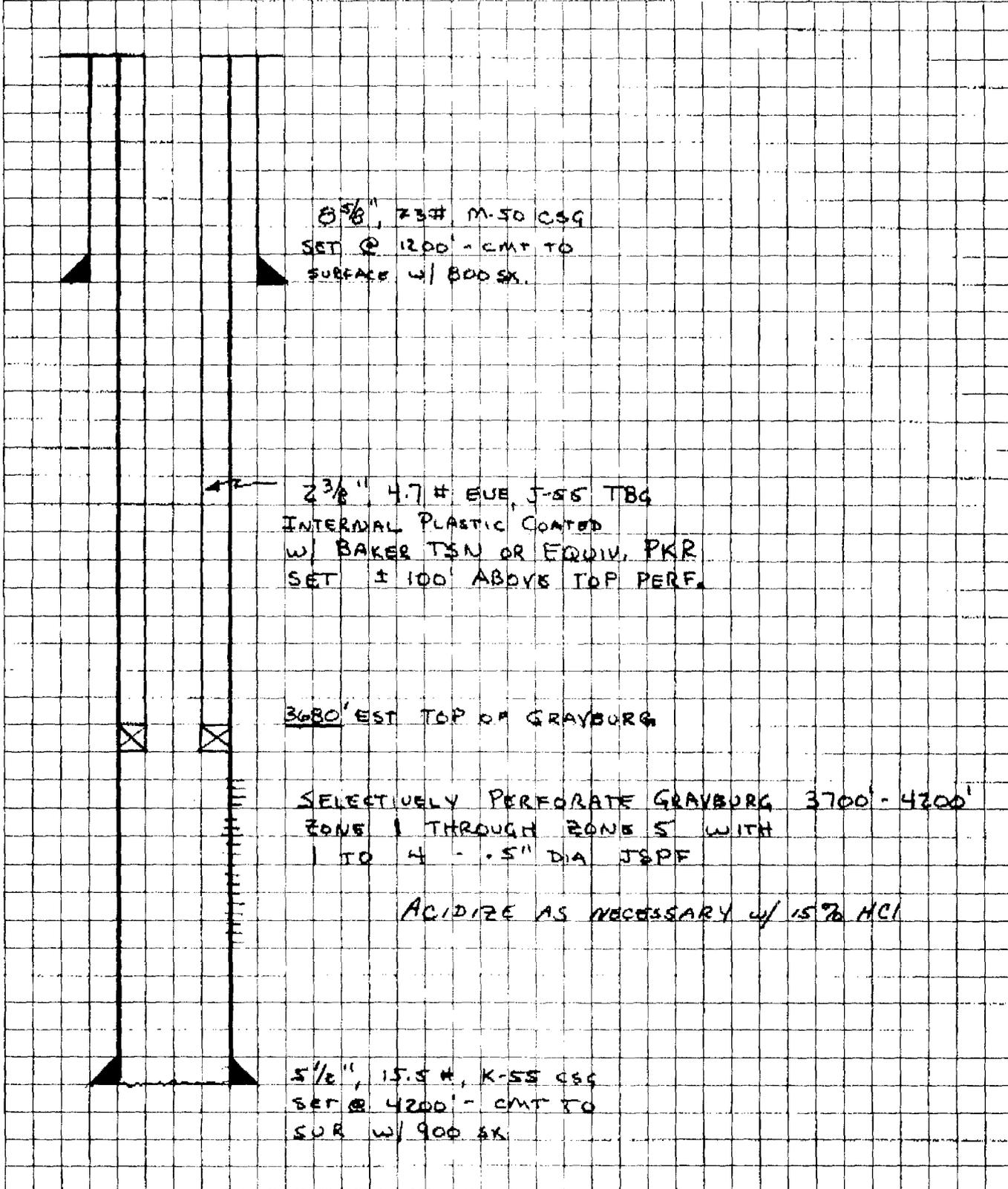
PER YOUR TELEPHONE CONVERSATION WITH AL BOHLING  
TODAY HERE IS THE WELLSBORE SCHEMATIC  
FOR EMSUB #855.

WE WILL NOT BE ABLE TO DETERMINE EXACT  
PERFORATION INTERVALS UNTIL THE CORE AND  
LOGS HAVE BEEN ANALYZED, HENCE THE  
LARGE INTERVAL INDICATED FOR SELECTIVE  
PERFORATIONS. IF YOU NEED ANYTHING  
FURTHER, PLEASE CALL AL OR ME  
AT 915.687-7321.

Steve McDonald

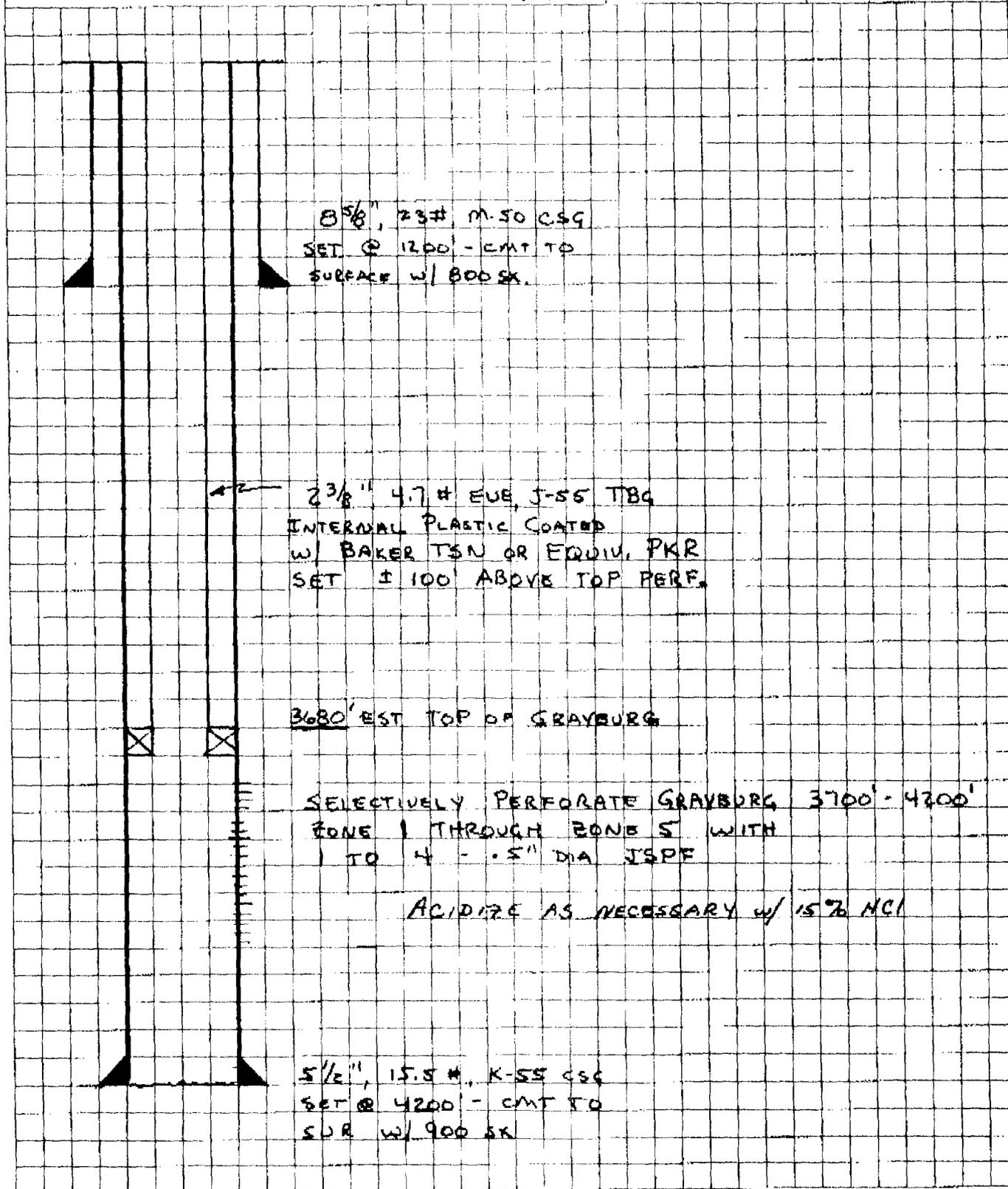
# Calculation Sheet

Title	EMSUB # 855 WI - PROPOSED	Location	UNIT 'B' SEC 11, T20S, R36E	Department	LEA. CO NEW MEXICO
Prepared by	S. R. McDONALD	Date	11 / 12 / 90	Project Number	
				Page No.	1 of 1



# Calculation Sheet

Title	EMSUB # 855 WI-PROPOSED	Location	UNIT 8 SEC 11, T20S, R36E	Department	LEA. CO NEW MEXICO
Prepared by	S. R. McDONALD	Date	11 / 12 / 90	Project Number	Page No. 1 of 1





STATE OF NEW MEXICO  
**ENERGY AND MINERALS DEPARTMENT**  
 OIL CONSERVATION DIVISION  
 HOBBS DISTRICT OFFICE

11.3101  
 91 JAN 27 AM 9 48

GARREY CARRUTHERS  
 GOVERNOR

POST OFFICE BOX 1980  
 HOBBS, NEW MEXICO 88241-1980  
 (505) 393-6161

OIL CONSERVATION DIVISION  
 P. O. BOX 2088  
 SANTA FE, NEW MEXICO 87501

RE: Proposed:

- MC \_\_\_\_\_
- DHC \_\_\_\_\_
- NSL \_\_\_\_\_
- NSP \_\_\_\_\_
- SWD \_\_\_\_\_
- WFX  \_\_\_\_\_
- PMX \_\_\_\_\_

Gentlemen:

I have examined the application for the:

*Operator* \_\_\_\_\_ Lease & Well No. \_\_\_\_\_ Unit \_\_\_\_\_ S-T-R \_\_\_\_\_ #855-2-20-36

and my recommendations are as follows:

*OK*

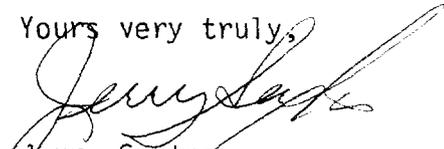
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Yours very truly,  
  
 Jerry Sexton  
 Supervisor, District I

/ed