

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no
- II. Operator: Conoco Inc.
Address: 10 Desta Drive West, Midland, Texas 79705
Contact party: Jerry W. Hoover Phone: (915) 686-6548
- 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 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. (If well logs have been filed with the 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 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: Jerry W. Hoover Title Regulatory Coordinator

Signature: *Jerry W. Hoover* Date: September 7, 1990

* 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. _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

*Exhibits 1 through 14
complete set*

EXHIBIT 1

BEFORE EXAMINER MORROW OIL CONSERVATION DIVISION
EXHIBIT NO. <u>1</u>
CASE NOS <u>10106, 10107</u>
Submitted by <u>Conoco Inc.</u>
Hearing Date <u>10/3/90</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) 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.

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.

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION AT

Form No. 1
Superintendent of
Oil and Gas

All distances must be from the corner boundaries of the Section

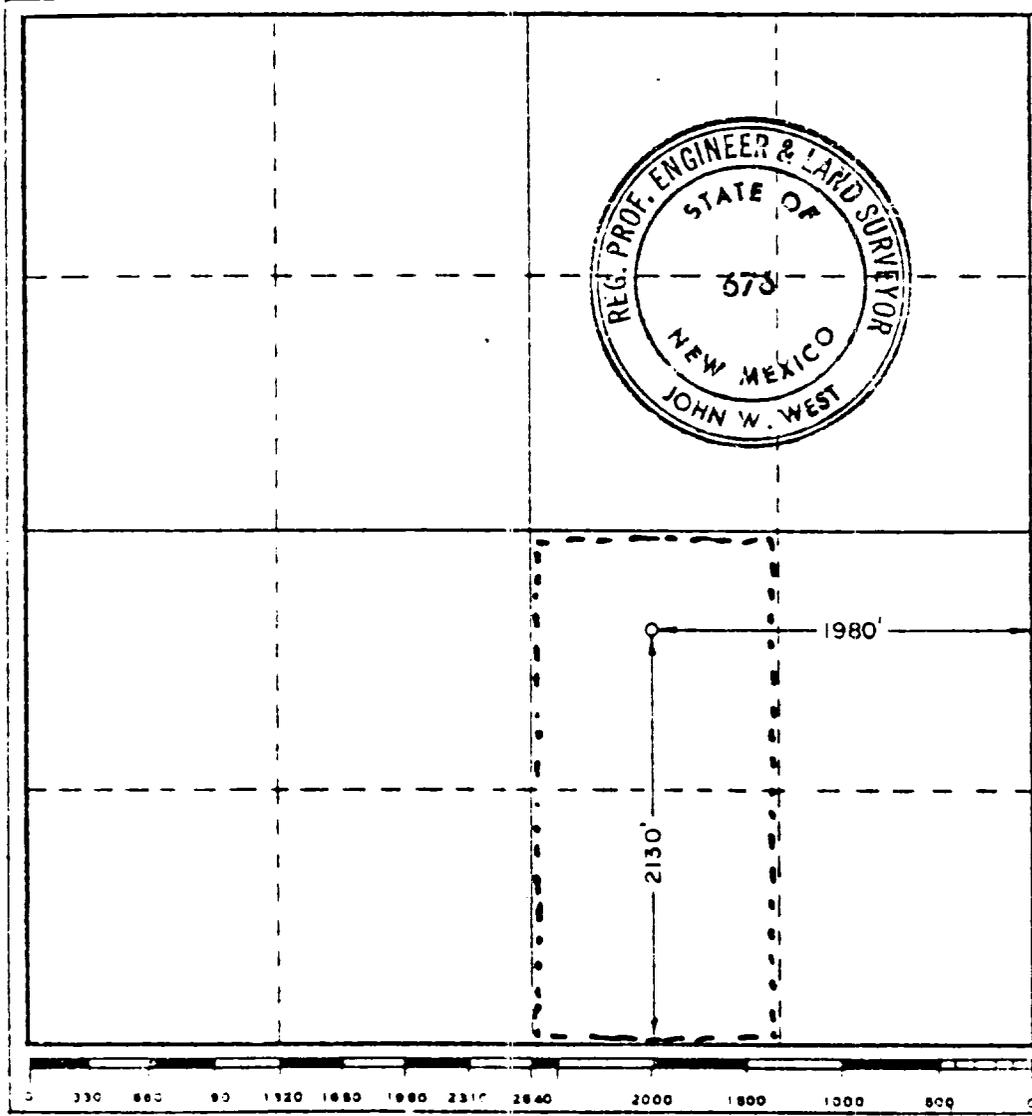
Continental Oil Company		SEMU Penn		95
J	23	20 South	37 East	Lea
2130	South	1980	East	
3523	PENN	CASS PENN	80	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated (Use reverse side of this form if necessary) _____

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 interests, has been approved by the Commission.



CERTIFICATION

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

Name: Alvin Douglas
 Position: SR. ANALYST
 For: CONTINENTAL OIL CO.
 Date: 11-11-74

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: November 8, 1974

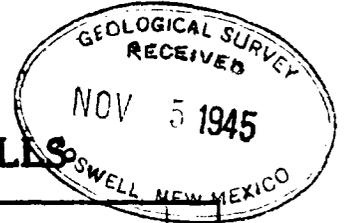
Registered Professional Engineer and Land Surveyor
John W. West
 License No. 676

EXHIBIT 2-A

BEFORE EXAMINER MORROW
 OIL CONSERVATION DIVISION
 EXHIBIT NO. 2-A
 CASE NOS. 10106, 10107
 Submitted by Conoco Inc.
 Hearing Date 10/3/90

(SUBMIT IN TRIPLICATE)
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Las Cruces
Lease No. 031620-B
Unit S.E.M.U.



SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

S.E.M.U. Skaggs B-23 #4

October 30, 1945

Well No. 4 is located 660 ft. from NS line and 1980 ft. from E line of sec. 23

SE/4 Sec. 23 20-S 37-E N.M.P.M.
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Skaggs Deep Lea New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is _____ ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

It is proposed to drill a well to approximately 7800' using rotary tools unless oil or gas is encountered at a lesser depth. All casing strings will be cemented or mudded in accordance with approved methods of the U.S.G.S. and all requirements of the U.S.G.S. will be complied with.

The casing program for this well is as follows:

13 3/8" casing will be set at approximately 350' and will be cemented to the surface.

9 5/8" casing will be set at approximately 3100' and will be cemented with 425 sacks cement.

7" casing will be set at approximately 7700' and will be cemented with 600 sacks cement.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations are commenced.

Company Continental Oil Company

Address Box CC

Hobbs, New Mexico

GEOLOGICAL SURVEY
RECEIVED
NOV 2 1945
By [Signature]
Artesia, New Mexico
Title Dist. Supt.

EXHIBIT 2-B

BEFORE EXAMINER MORROW
OIL CONSERVATION DIVISION
EXHIBIT NO. 2-B
CASE NOS 10106, 10107
Submitted by Conoco Inc.
Hearing Date 10/3/90

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
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

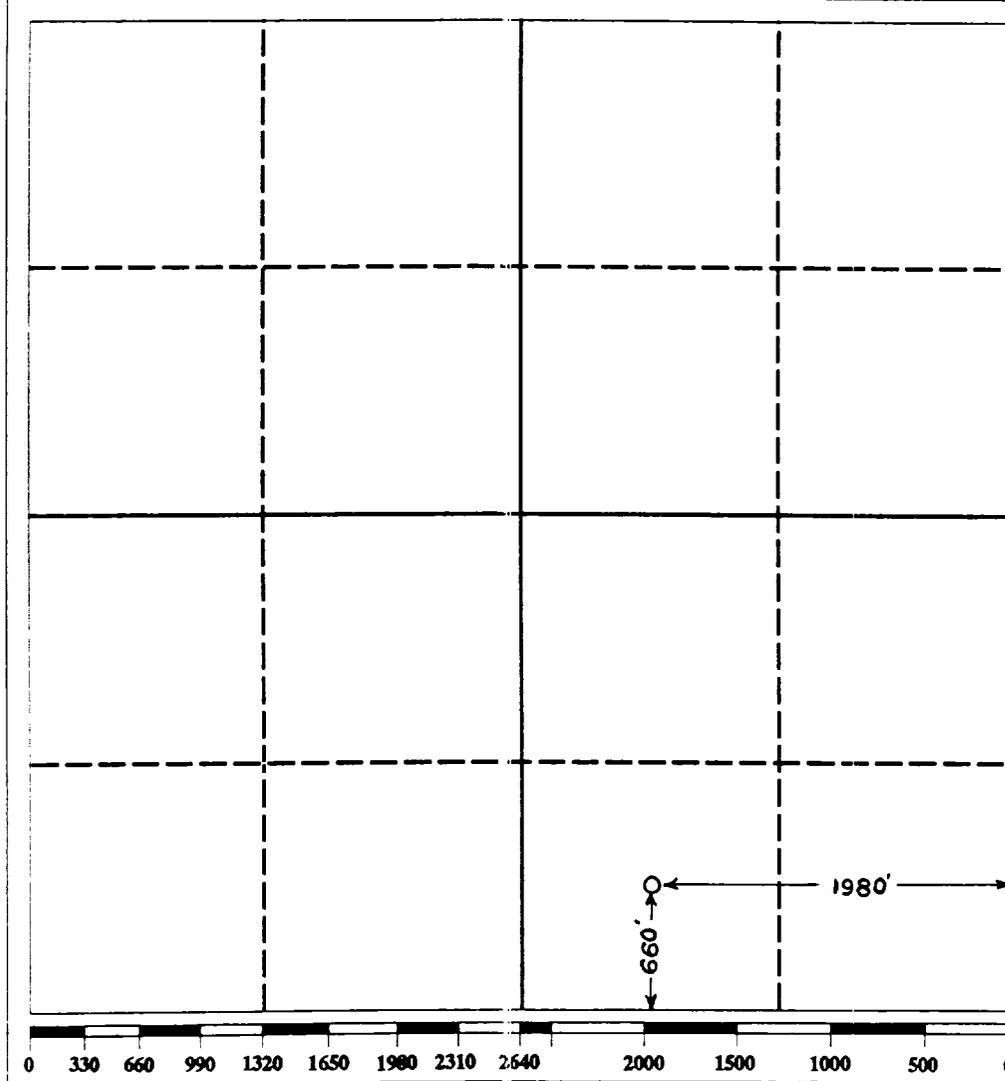
Operator Conoco Inc.			Lease SEMU		Well No. 9
Unit Letter O	Section 23	Township 20-S	Range 37-E	County Lea	
Actual Footage Location of Well: 660 feet from the south line and 1980 feet from the east line					
Ground level Elev. DF 3531	Producing Formation Drinkard	Pool Weir Drinkard		Dedicated Acreage: 40 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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.?

Yes No If answer is "yes" type of consolidation _____

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

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.



OPERATOR CERTIFICATION

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

Signature: *Jerry W. Hoover*

Printed Name: Jerry W. Hoover

Position: Regulatory Coordinator

Company: Conoco Inc.

Date: 9/4/90

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: _____

Signature & Seal of Professional Surveyor: _____

Certificate No.: _____

EXHIBIT 2-C

BEFORE EXAMINER MORROW
OIL CONSERVATION DIVISION

EXHIBIT NO. 2-C

CASE NOS. 10106, 10107

Submitted by Conoco Inc.

Hearing Date 10/3/90

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
E. B. JOHNNY WALKER
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

P. O. BOX 871
SANTA FE

May 7, 1963

RECEIVED

MAY 17 1963

Continental Oil Compsny
P. O. Box 1377
Roswell, New Mexico

EUNICE DIST. OFFICE

Gentlemen:

Enclosed herewith please find Administrative Order No. SWD-37 for your SEMU Drinkard Well No. 9 located in Unit O of Section 23, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico.

Very truly yours,

A. L. PORTER, Jr.,
Secretary-Director

ALP/JEK/og

cc: Oil Conservation Commission - Hobbs
Oil & Gas Engineering Committee - Hobbs

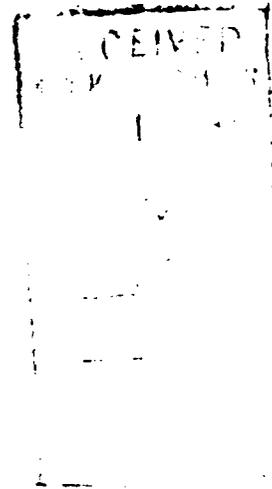


EXHIBIT 3

BEFORE EXAMINER MORROW OIL CONSERVATION DIVISION
EXHIBIT NO. <u>3</u>
CASE NOS <u>10106, 10107</u>
Submitted by <u>Conoco Inc.</u>
Hearing Date <u>10/3/90</u>

SUBJECT: SALT WATER DISPOSAL WELL

**THE APPLICATION OF CONTINENTAL OIL
COMPANY FOR A SALT WATER DISPOSAL
WELL.**

ORDER NO. SWD-37

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION COMMISSION

Under the provisions of Rule 701 (c) Continental Oil Company made application to the New Mexico Oil Conservation Commission on April 22, 1963, for permission to complete for salt water disposal its SEMU Drinkard Well No. 9 located in Unit O of Section 23, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico.

The Secretary-Director finds:

- (1) That application has been duly filed under the provisions of Rule 701 (c) of the Commission Rules and Regulations;
- (2) That satisfactory information has been provided that all offset operators, surface owners and the New Mexico State Engineer Office have been duly notified; and
- (3) That the applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 (c) will be met.
- (4) That no objections have been received within the waiting period as prescribed by said rule.

IT IS THEREFORE ORDERED:

That the applicant herein, Continental Oil Company, is hereby authorized to complete its SEMU Drinkard Well No. 9 located in Unit O of Section 23, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to permit the injection of salt water for disposal purposes into the San Andres formation at approximately 4547 feet to approximately 4700 feet through tubing with a packer set at 4500 feet.

IT IS FURTHER ORDERED:

That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after notice and hearing, the Commission may terminate the authority hereby granted in the interests of conservation. That applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1119 of the Commission Rules and Regulations.

Approved at Santa Fe, New Mexico, on this 7th day of May, 1963.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


A. L. PORTER, Jr.,

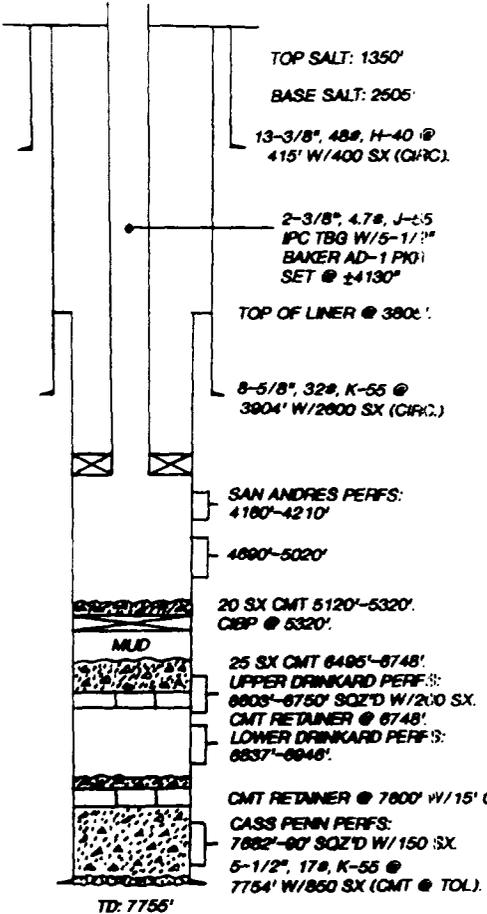
Proposed Well Schematic

INJECTION WELL DATA SHEET

CONOCO, INC. OPERATOR	SEMU Drinkard-Weir LEASE	
95 WELL NO.	2130' FSL & 1980' FEL FOOTAGE LOCATION	23 20S 37E SECTION TOWNSHIP RANGE

Schematic

Tubular Data



Surface Casing
 Size 13-3/8 " Cemented with 400 sx.
 TOC Surface feet determined by circ.
 Hole size 17-1/2"

Intermediate Casing
 Size 8-5/8 " Cemented with 2600 sx.
 TOC Surface feet determined by circ.
 Hole size 12-1/4"

Long String
 Size 5-1/2 " Cemented with 850 sx.
 TOC 3805 feet determined by TOL
 Hole size 7-7/8"
 Total depth 7754'

Injection interval
4160 feet to 5020 feet
 (perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with plastic coating set in a
 (material)
Baker AD-1 packer at 4130' feet
 (brand and model)
 (or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres
2. Name of Field or Pool (if applicable) Skaggs Grayburg
3. Is this a new well drilled for injection? Yes No
 If no, for what purpose was the well originally drilled? Drill and complete as a Cass Penn oil producer.
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plugs) used) Yes. Cass Penn perfs: 7682' - 90'. Squeezed w/150 sx cmt. Upper Drinkard perfs: 6603' - 6750'. Squeezed w/200 sx cmt. Lower Drinkard perfs: 6837' - 6946'.
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Yates - 2644', Seven Rivers - 2902', Penrose - 3550', Grayburg - 3700', Glorieta - 5173', Blinbrv - 5792', Tubb - 6311', Drinkard - 6625', Abo - 6953', Pennsylvanian - 7662'

BAH:mjm
 INJDATA

EXHIBIT 4-A

BEFORE EXAMINER MORROW
 OIL CONSERVATION DIVISION

EXHIBIT NO. 4-A

CASE NOS 10106, 10107

Submitted by Conoco Inc.

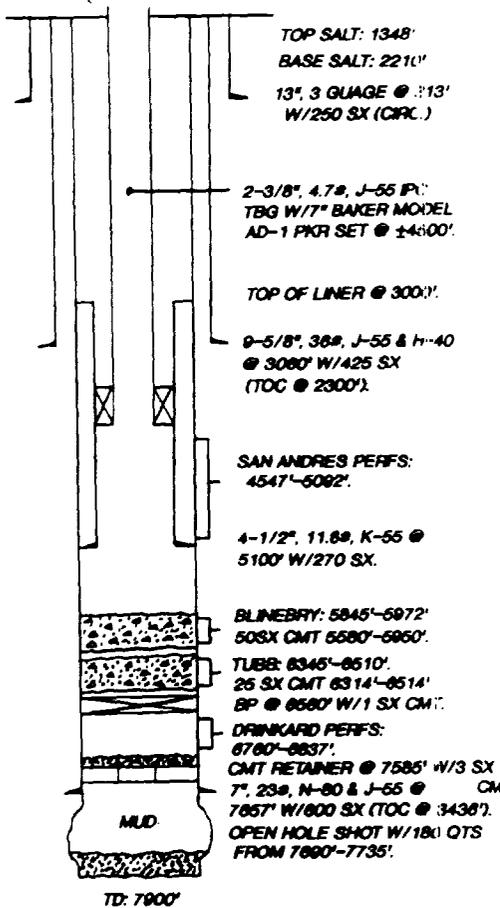
Hearing Date 10/3/90

Proposed Well Schematic

INJECTION WELL DATA SHEET

Conoco, Inc.	SEMU Pennsylvanian
OPERATOR	LEASE
9	(60' FSL & 1980' FEL
WELL NO.	FOOTAGE LOCATION
23	20S
SECTION	TOWNSHIP
37E	RANGE

Schematic



Tubular Data

Surface Casing
 Size 13 " Cemented with 250 sx.
 TOC Surface feet determined by circ
 Hole size 15-1/2"

Intermediate Casing
 Size 9-5/8" " Cemented with 425 sx.
 TOC 2300 feet determined by temp. survey
 Hole size 12-1/4"

Long String
 Size 7 " Cemented with 600 sx.
 TOC 3436 feet determined by temp. survey
 Hole size 8-3/4"
 Total depth 7900'

Injection interval
4547 feet to 5092 feet
 (perforated or open-hole, indicate which)

Install Liner
 Size 4-1/2 " Cemented with 270 sx.
 TOC 3000 feet determined by circ

Tubing size 2-3/8" lined with plastic coating set in a
 (material)
Baker AD-1 packer at 4500 feet
 (brand and model)
 (or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres
2. Name of Field or Pool (if applicable) Skaggs Grayburg
3. Is this a new well drilled for injection? Yes No
 If no, for what purpose was the well originally drilled? Drill
and equip Strawn.
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plugs) used) Yes. Drinkard Perfs: 6760'-6837', BP @ 6560'. Tubb Perfs: 6345'-6510'. 25 sx cmt plug across Tubb. Blinebry Perfs: 5845'-5972'. 50 sx cmt plug across Blinebry.
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Yates - 2641', Seven Rivers - 2895', Queen - 3435', Penrose - 3545', Grayburg - 3705', San Andres - 4015', Blinebry - 5730', Tubb - 6321', Drinkard - 6635', Abo - 6935', Strawn - 7685'.

BAH:mjm
 INJDATA

EXHIBIT 4-B

BEFORE EXAMINER MORROW
 OIL CONSERVATION DIVISION

EXHIBIT NO. 4-B

CASE NOS 10106, 10107

Submitted by Conoco Inc.

Hearing Date 10/13/90