

BETTIS, BOYLE & STOVALL
P. O. BOX 1240
GRAHAM, TX 76450
FAX 817-549-7405 OR PHONE 817-549-0780

OIL CONSERVATION DIVISION
RECEIVED

November 5, 1991

NOV 5 1991 8 53

Oil Conservation Division
P. O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87501

Attn: Mr. David Catanach

Re: Application for Authorization
To Inject
Corral Draw #2
Sec. 22-T25S-R29E
Eddy Co., NM

Dear Mr. Catanach,

Enclosed please find our application for authorization to convert the Corral Draw #2 well to a saltwater disposal well. The Corral Draw #2 was drilled by Mobil in 1974. After producing and testing two deeper zones the Bell Canyon zone 3180-3333' was tested non-commercial (water) in 1986. Since that time the well has been TA'd. In 1987 Bettis, Boyle and Stovall bought the lease from Mobil.

In June, 1990, Bettis, Boyle & Stovall tested the 7-5/8" casing to satisfy BLM requirements of proof of casing integrity. The casing was tested to 515 psi with no leakoff in 25 minutes.

At this time Bettis, Boyle and Stovall requests authority to convert the well to a disposal well to dispose of Cherry Canyon Delaware water being produced from our Pickett Draw #2 well in Section 10, T25S, R29E. Attached to our application please find pertinent well data on the well, a map showing the well location and other wells in the area, an analysis of water to be disposed, and proof of mailing to offset operators as well as proof of publication of this application.

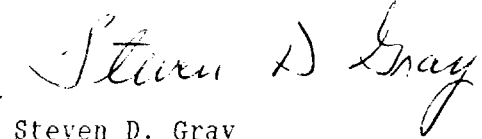
A review of the area shows there are no wells within one-half mile of the proposed disposal well. A search of the area also revealed no fresh water wells, therefore no fresh water analysis of the area was made.

A geologic study of the area indicates the base of the salt and anhydrite at +3100'. Several wells have tested the Bell Canyon in the surrounding area but no commercial production has been established in the Bell Canyon or any shallower formation. The nearest deeper production is from the Cherry Canyon around 5200' which produces in several surrounding wells but none of which are closer than one mile away.

We would appreciate your consideration for administrative approval of our application as soon as possible. Please advise if you need additional information.

Yours truly,

BETTIS, BOYLE AND STOVALL

A handwritten signature in cursive script that reads "Steven D. Gray". The signature is written in dark ink and is positioned above the printed name and title.

Steven D. Gray
Petroleum Engineer

SDG:vu

Encls.

cc: Offset Operators

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Bettis, Boyle & Stovall
Address: P. O. Box 1240 Graham, TX 76450
Contact party: Steve Gray Phone: 817-549-0780
- 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: STEVEN D GRAY Title: PETROLEUM ENGINEER
Signature: Steven D. Gray Date: 11-5-91
- * 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

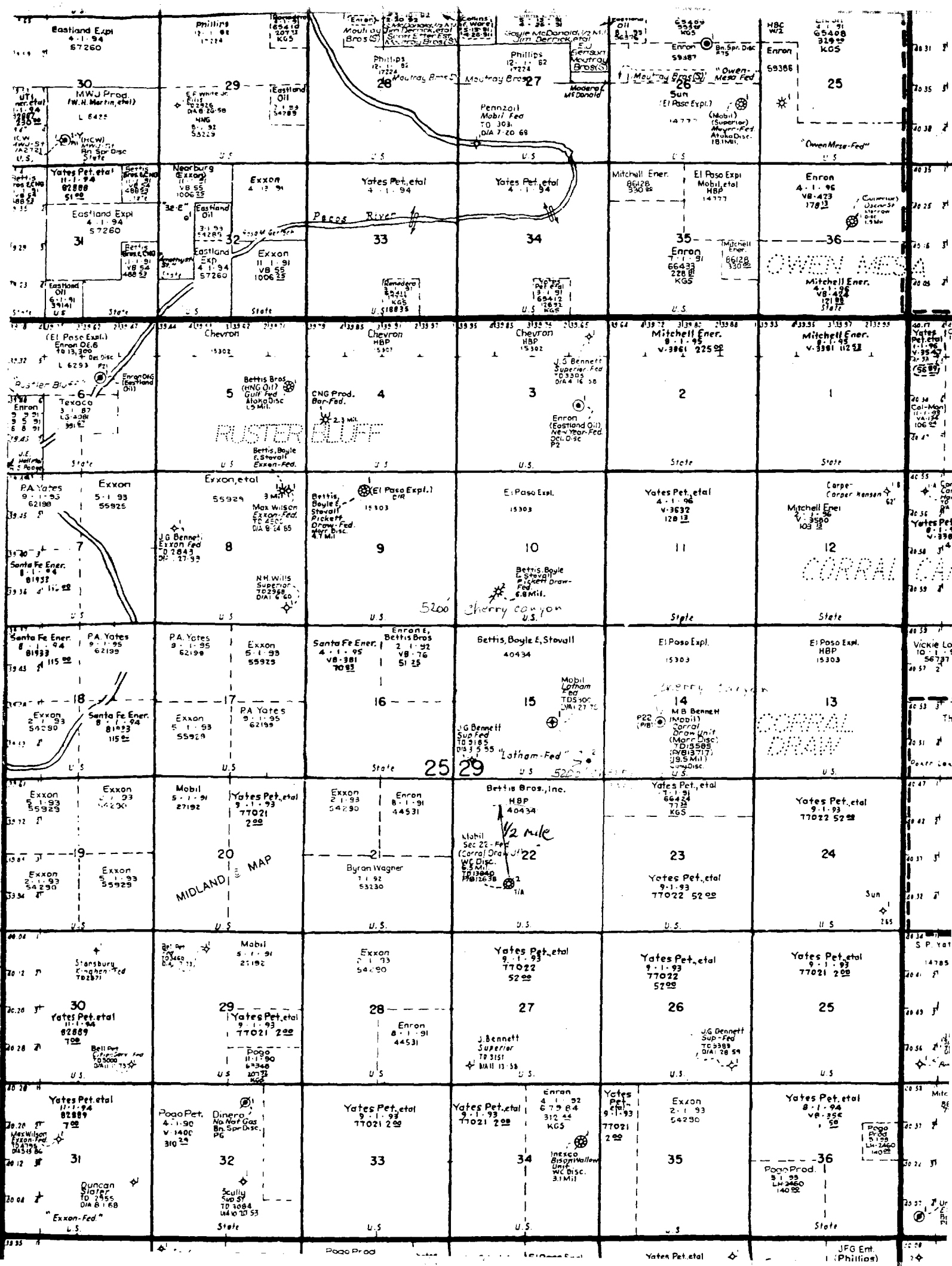
All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

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.

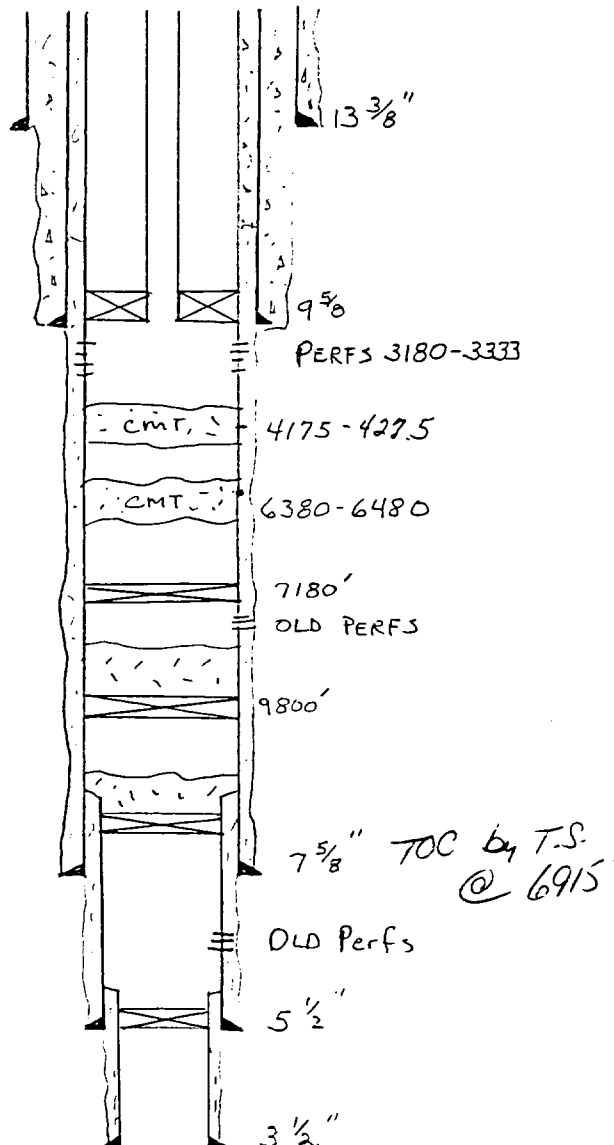
NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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.



BETTIS, BOYLE & STOVALL

CORRAL DRAW UNIT #2
1580' FSL & 1980' FWL
SECTION 22, T25S, R29E
EDDY CO., N.M.



SURFACE CASING

13-3/8" @ 350'

CMT'D W/ 400 SX CIRC
TO SURFACE

INTERMEDIATE CASING

9-5/8" @ 3097'

CMT'D W/ 1800 SX CIRC
TO SURFACE

PRODUCTION CASING

7-5/8" @ 10,982'

CMT'D W/ 925 SX

SQUEEZE HOLES @ 7850'

CMT'D W/ 925 SX

SQUEEZE HOLES @ 6430'

CMT'D W/ 900 SX

SQUEEZE HOLES @ 4225'

CMT'D W/ 825 SX

LINERS

5-1/2" @ 10,700-13,128'

CMT'D W/ 400 SX

3-1/2" @ 13,000-13,480'

CMT'D W/ 80 SX

OLD PERFS

WOLFCAMP 11,560-582'

BONE SPRINGS 7236-

7604'

CORRAL DRAW #2

Injection Well Application (continued)

Tubing to be used - 2-3/8" J55 tubing internally coated with Salta (PVC) lining set at 3100'.

Baker 7-5/8" AD-1 Tension Packer at 3100'.

1. Injection Formation - Bell Canyon (Delaware)
2. Name of Field - West Corral Canyon
3. Proposed injection zone is perforated from 3313-3333', 3230-3242', 3180-3189'
4. This is not a new well drilled for injection
5. This well was tested in deeper intervals in the Wolfcamp and Bone Spring. Several cast iron and cement plugs were placed according to well records (see wellbore sketch.)

CORRAL DRAW #2
SWD Application
Sec. 21, T25S, R29E
Eddy Co., NM

Offset Operators

M. Brad Bennett, Inc.
Box 2062
Midland, TX 79702

Yates Petroleum Corporation
105 S. 4th Street
Artesia, NM 88210

Bettis Brothers, Inc.
500 W. Texas, Ste. 830
Midland, TX 79701

Enron Oil & Gas Co.
Box 2267
Midland, TX 79702

Meridian
21 Desta Drive
Midland, TX 79705

Santa Fe Energy Operating Partners, L.P
500 W. Illinois
Midland, TX 79701

Delaware Ranch
% Draper Brantley Jr.
706 Riverside Drive
Carlsbad, NM 88220

Byran Wagner
5518 Prytania
New Orleans, LA 70115

Exxon
Box 1600
Midland, TX 79702

P 804 543 442



Certified Mail Receipt
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Yates Petroleum Corp.
105 S. 4th St.
Artesia, NM 88210

PS Form 3800, June 1990

Postage	\$ 52
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$ 2.52
Postmark or Date	NOV 5 1991 USPS

P 804 543 441



Certified Mail Receipt
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to	Gethis Bros. Inc.
Street & No	500 W. TEXAS, Ste. 830
PO, State & ZIP Code	Midland, TX 79701
Postage	\$ 52
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$ 2.52
Postmark or Date	NOV 5 1991 USPS

PS Form 3800, June 1990

P 804 543 444



Certified Mail Receipt
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Exxon
Box 1600
Midland, TX 79702

PS Form 3800, June 1990

Postage	\$ 52
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$ 2.52
Postmark or Date	NOV 5 1991 USPS

P 804 543 440



Certified Mail Receipt
No Insurance Coverage Provided

Enron Oil & Gas Co.
Box 2267
Midland, TX 79702

PS Form 3800, June 1990

PO, State & ZIP Code	
Postage	\$ 52
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$ 2.52
Postmark or Date	NOV 5 1991 USPS

P 804 543 437



Certified Mail Receipt
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Delaware Ranch
% Draper Brantley Jr.
706 Riverside Drive
Carlsbad, NM 88220

PS Form 3800, June 1990

Postage	\$ 52
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$ 2.52
Postmark or Date	NOV 5 1991 USPS

P 804 543 438



Certified Mail Receipt
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Santa Fe Energy
500 W. Illinois
Midland, TX 79701

PS Form 3800, June 1990

Postage	\$ 52
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$ 2.52
Postmark or Date	NOV 5 1991 USPS

P 804 543 439



Certified Mail Receipt
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Meridian
21 Desta Drive
Midland, TX 79705

P 804 543 443



Certified Mail Receipt
No Insurance Coverage Provided

M. Brad Bennett, Inc.
Box 2062
Midland, TX 79702

PO, State & ZIP Code

P 804 543 436



Certified Mail Receipt
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Byran Wagner
5518 Prytania
New Orleans, LA 70115

TO

BB&S

Date

10/20/91

This report is the property of Halliburton Services and neither it nor any part thereof nor its contents shall be disclosed or distributed outside the company without the express written approval of Halliburton management. It shall remain the property of Halliburton Services and shall be returned to the company upon request.

Submitted by

Date Rec.

10/19/91

Well No.

Pickett Draw #2

Depth

5200

Formation

Cherry Canyon

Field

County

Source

Resistivity

0.055 @ 70

Specific Gravity ..

1.1520 @ 70

pH

6.6

Calcium

18000

Magnesium

10908

Chlorides

138000

Sulfates

500

Bicarbonates

92

Soluble Iron

0

Remarks:

E. O. Carlson
Respectfully Submitted

Analyst:

Eric Jacobson

HALLIBURTON SERVICES

NOTICE:

This report is for information only and the content is limited to the sample described. Halliburton makes no warranty, expressed or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable.

COMPANY	MOBIL OIL CORPORATION	SCHL. FR	3078
WELL	CORRAL DRAW UNIT #2	SCHL. TD	3100
FIELD	CORRAL DRAW	DRILL. TD	3100
COUNTY	EDDY	Elev.	KB 3078
STATE	NEW MEXICO	DF	-
		GI	3062

DETAIL LOG			
CALIPER DIAM. IN INCHES		5" 100'	
6	16		
GAMMA RAY API UNITS		INTERVAL TRANSIT TIME	MACROSECONDS PER FOOT T. 3 R. 2
0	100	107	77
100	200	167	137

