

12-5-05 DATE IN	12/21/05 SUSPENSE	Jones ENGINEER	12-6-05 LOGGED IN	SWD TYPE	1018	PSEM0534034970 APP NO.
--------------------	----------------------	-------------------	----------------------	-------------	------	---------------------------

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☒ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Scott McGraw
 Print or Type Name

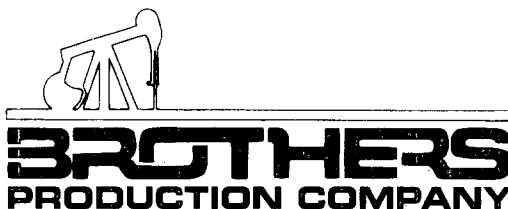
Signature

Production Manager
 Title

Date

Scott@brothersproduction.com
 e-mail Address

30-025-05283
 RECEIVED
 DEC 5 - 2005
 OIL CONSERVATION
 DIVISION



303 W. Wall, Suite 1600
Midland, Texas 79701
(432) 682-2516
Fax (432) 686-8318

Mailing Address
P.O. Box 7515
Midland, Texas 79708

September 30, 2005

RECEIVED
DEC 5 - 2005
OIL CONSERVATION
DIVISION

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

Re: Application for Authorization to Inject
J. M. Denton Well #9
Lea County, New Mexico

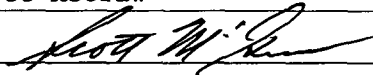
Brothers Production Company, Inc. request administrative approval to convert the Denton #9 well located in Sec 11, 15S, 37E to water disposal into the Pennsylvanian Zone at 9500 feet. The Denton Field salt water disposal system operated by Americo Energy currently has 4 wells disposing into the Pennsylvanian Zone. The system is overloaded and experiencing significant down time. We need these wells to reduce the overloading of the water system.

In support of this application, please find the enclosed Form C-108 and various documents required by the form. A copy of this application is being sent to the district office in Hobbs. Notification has been made to the land owner, offset operators and published in the Hobbs newspaper.

Sincerely,

Scott McGraw
Operations Manager

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Brothers Production Company, Inc.
ADDRESS: P.O. Box 7515, Midland, TX 79708
CONTACT PARTY: Scott McGraw PHONE: 432-682-2516
- 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 X 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 geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- 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 sources 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: Scott McGraw TITLE: Production Engineer
SIGNATURE:  DATE: 9-7-05
E-MAIL ADDRESS: scott@brothersproduction.com
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

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

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

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

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

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

INJECTION WELL DATA SHEET

OPERATOR: Brothers Production Company, Inc.WELL NAME & NUMBER: J. M. Denton #9WELL LOCATION: 1980 FSL 990 FWL
FOOTAGE LOCATIONUNIT LETTER LSECTION 11 TOWNSHIP 15S RANGE 37EWELBORE SCHEMATICWELL CONSTRUCTION DATA
Surface Casing

Hole Size: 17 1/2 Casing Size: 13 3/8
Cemented with: 350 sx. or ft³
Top of Cement: Surface Method Determined: CIRC

Intermediate Casing

Hole Size: 12" Casing Size: 9 5/8
Cemented with: 1800 sx. or ft³
Top of Cement: Surface Method Determined: CIRC

Production Casing

Hole Size: 8 3/4 Casing Size: 5 1/2
Cemented with: 1587 sx. or 987 ft³
Top of Cement: 5035' thru D $\bar{V}$ Tool @ 8943
Method Determined: Calc

Total Depth: 12697'Injection Interval9700 feet to 10150

(Perforated or Open Hole; indicate which)

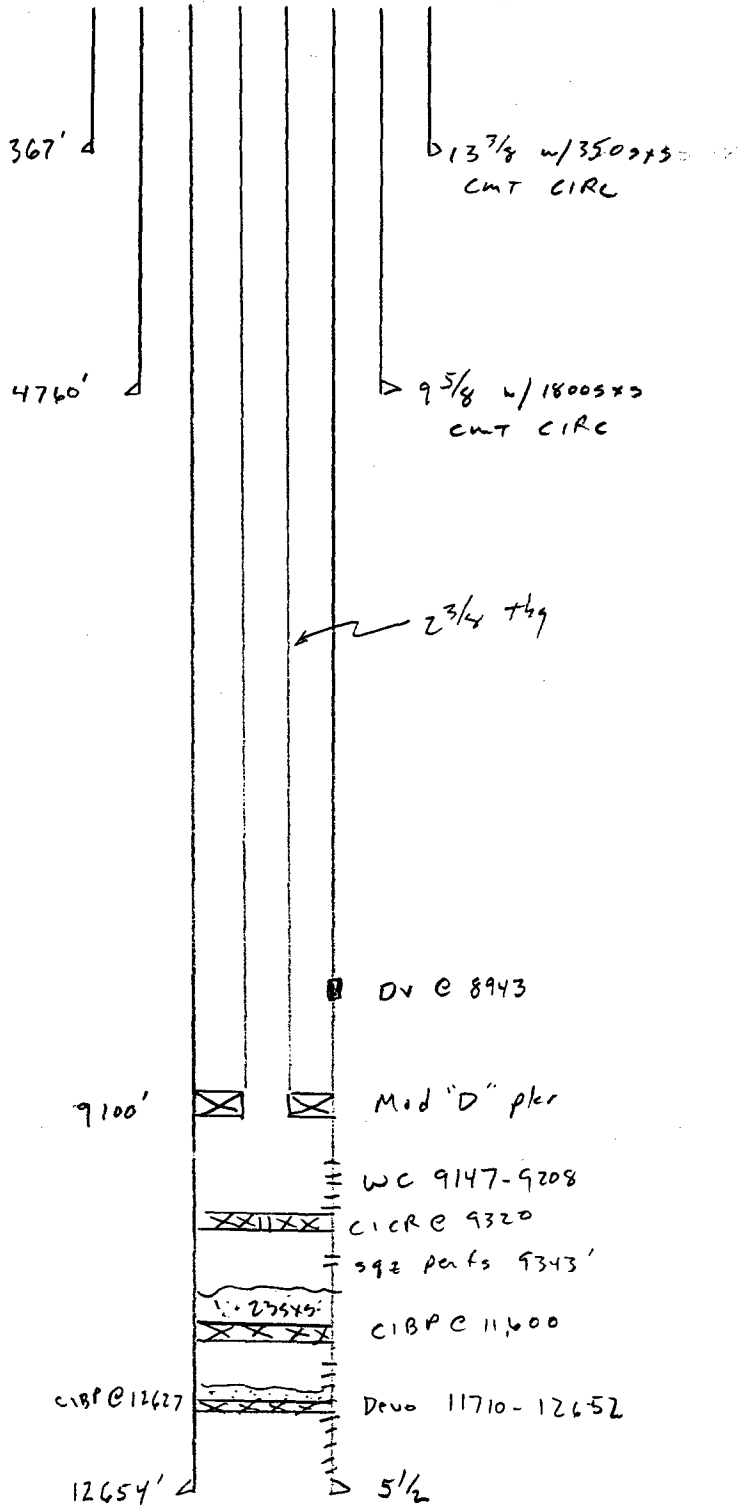
INJECTION WELL DATA SHEETTubing Size: 2 3/8 Lining Material: TK-99 TuboscopeType of Packer: Baker Lok Set CoatedPacker Setting Depth: 9600

Other Type of Tubing/Casing Seal (if applicable): _____

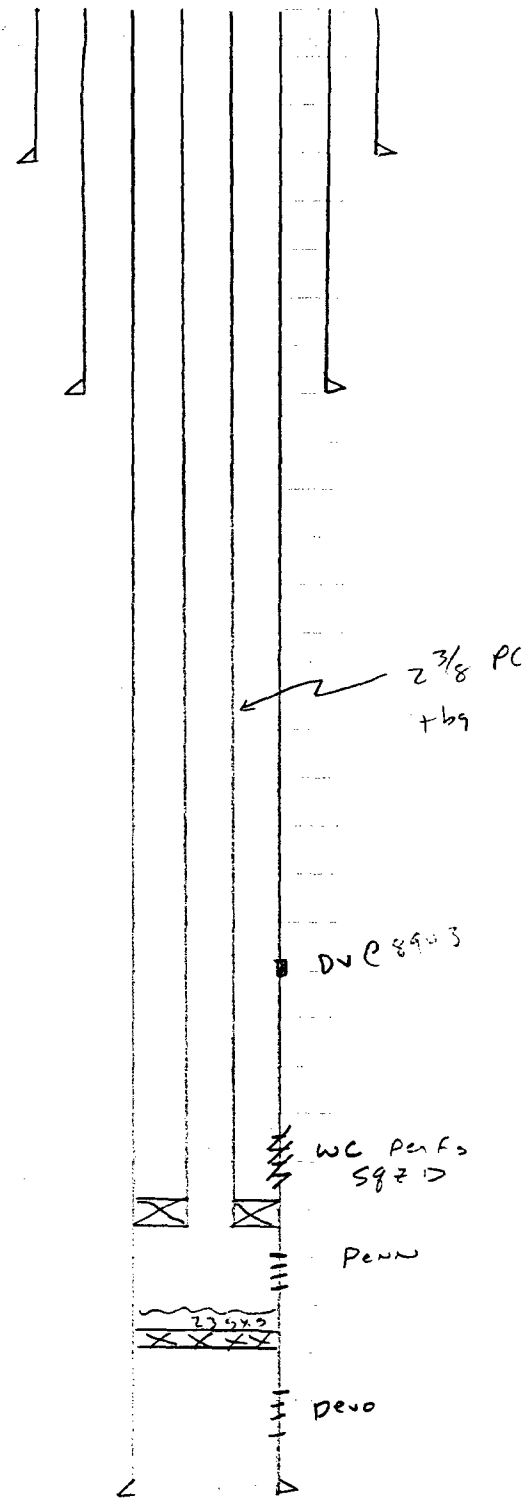
Additional Data1. Is this a new well drilled for injection? _____ Yes ☒ No ☐If no, for what purpose was the well originally drilled? Devonian oil producer2. Name of the Injection Formation: Penn3. Name of Field or Pool (if applicable): Denton4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. 12530'-614', 12640'-52',CIBP @ 12627 + cmt, perf 11710'-12176', CIBP + 23' @ 11600', 9147'-9308' Open5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Wolfcamp above Devonian below

BROTHERS PRODUCTION CO., INC.
J.M. DENTON # 9
1980 FSL 990 FNL sec 11

BEFORE



AFTER



VII Proposed Operation Data:

- (1) Average daily injection rates – 8000 BWPD
Maximum daily injection rates – 10,000 BWPD
- (2) Type of injection system – closed system
- (3) Average injection pressure – 1000 psig
Maximum injection pressure – 2000 psig
- (4) Injection water will be Devonian (11,000') and Wolfcamp (9100')
produced water. Water analysis are enclosed.
- (5) There are no water analysis of the Pennsylvania Zone as it is a lost
circulation zone.

VIII Geological Data:

Geological Name: Pennsylvanian

Lithological Detail: Limestone/Dolomite

Formation Top: 9500'

Thickness: 1135'

Geological Name of Drinking Water Zone Ogallalah @ 50-100'

IX Stimulation Program:

The proposed injection interval will be acidized with 15% NEFE as
necessary.

X Well Logs:

Copies of current well logs are on file with Oil Conservation Division.

XI Chemical Analysis of Fresh Water

Enclosed

XII Alternative Statement of Open Faults:

Upon examination of the available geologic and engineering data, no
evidence of open faults or any other hydraulic connection between the
disposal zone and any fresh water source was found. Water has been

disposed of in this zone in this field for 47 years with no damage to the fresh water.

XIII Proof of Notice sent to the following:

Surface Owner: Mr. Darr Angell
P.O. Box 190
Lovington, NM 88260

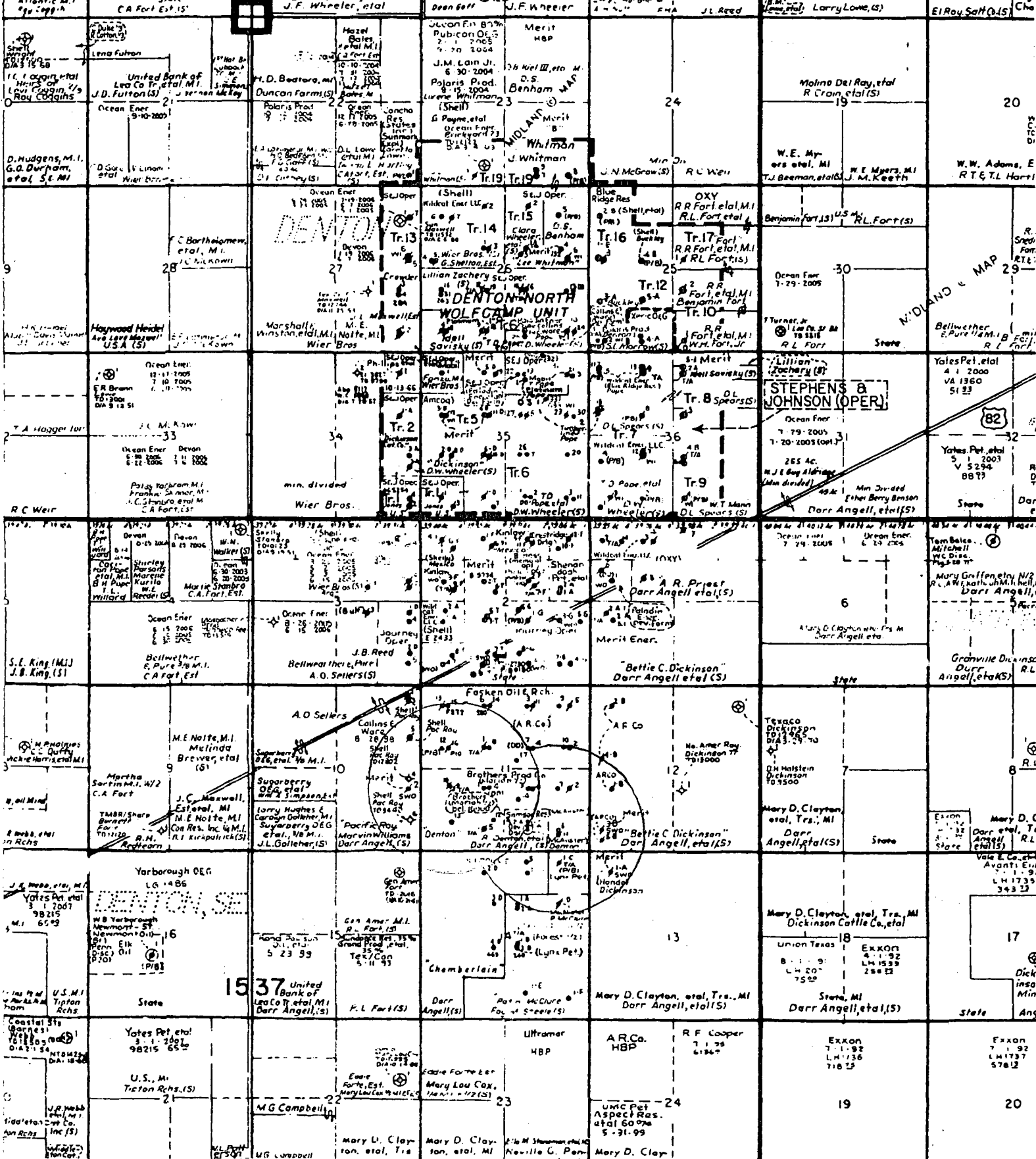
Offset Operators: Fasken Oil & Ranch
303 W. Wall Street, Suite 1900
Midland, TX 79701

Journey Operating
1201 Louisiana, Suite 1040
Houston, TX 77002

Americo Energy Resources
P.O. Box 19163
Houston, TX 77224

PRAIRIEVIEW

14 37



AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a
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 1

weeks.

Beginning with the issue dated

August 30 2005

and ending with the issue dated

August 30 2005

Kathi Bearden

Publisher

Sworn and subscribed to before

me this 30th day of

August 2005

Notary Public.

My Commission expires
February 07, 2009

(Seal)



OFFICIAL SEAL
DORA MONTZ
NOTARY PUBLIC
STATE OF NEW MEXICO

My Commission Expires: _____

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

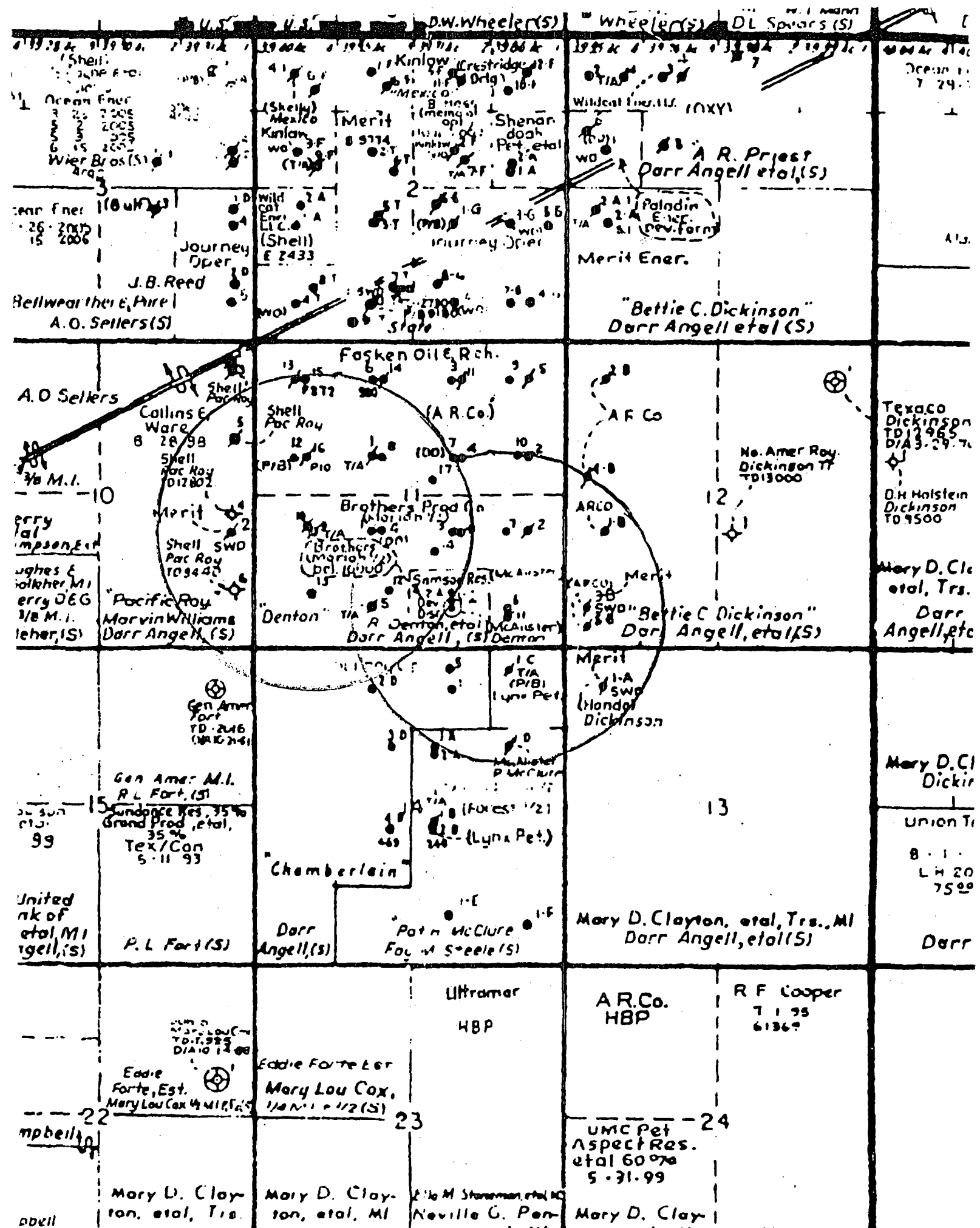
LEGAL NOTICE
August 30, 2005

Notice is hereby given of the application of Brothers Pro-
duction Company, Inc, P.O. Box 7515, Midland, TX 79708,
432-682-2516, to the Oil Conservation Division, New Mexi-
co Energy, Minerals and Natural Resources Department, for
administrative approval and authority to inject salt water into
the J. M. Denton #9 located 1980' FSL & 990' FWL, Sec 11-
15S-37E, Lea County, New Mexico. The injection formation
is in the Pennsylvania Formation located between the inter-
vals of 9700' to 10,150' with the expectant max injection
rate of 10,000 BWPD and the expectant press rate of 2000
psi. Interested parties must file objections or request for a
hearing with the Oil Conservation Division, 1220 South St.
Francis Drive, Santa Fe, New Mexico 87505, within 15
days.
#21765

67101113000

67532949

BROTHERS PRODUCTIN COMPANY
PO BOX 7515
MIDLAND, TX 79708

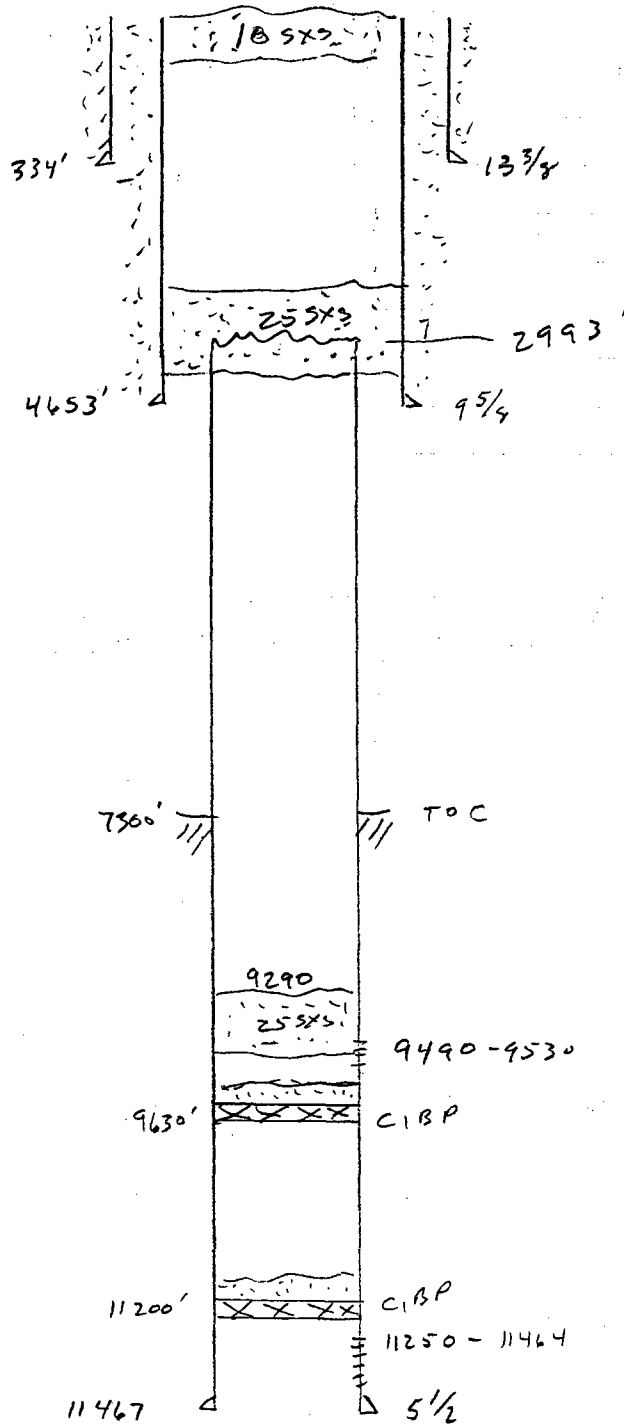


Lease	Well	API	ULSTR	OPERATOR	TYPE	ORG. TD	DATE DRILLED	SURFACE DEPTH	TOC	SIZE	INTER. DEPTH	TOC	SIZE	PROD. DEPTH	T
DENTON	3	3002505277	11J 15S 37E	BPCI	OIL	12117	1950	371	SURF	9 5/8	4750	2450	5 1/2	12117	4
DENTON	4	3002505278	11K 15S 37E	BPCI	TA'D	12195	1951	382	SURF	9 5/8	4741	1655	5 1/2	12192	4
DENTON	5	3002505279	11N 15S 37E	BPCI	TA'D	12404	1951	376	SURF	9 5/8	4791	1518	5 1/2	12402	SI
DENTON	7	3002505281	11I 15S 37E	BPCI	OIL	12715	12/28/1951	369	SURF	9 5/8	4747	600	5 1/2	12700	4
DENTON	13			BPCI	TA'D	12679	1954	379	SURF	9 5/8	4744	970	5 1/2	12677	1
DENTON	14	3002533285	11J 15S 37E	BPCI	OIL	12900	2/18/1996	390	SURF	9 5/8	4783	SURF	5 1/2	12900	4
DENTON	1	3002525495	11O 15S 37E	BPCI	OIL	12206	3/26/1977	381	SURF	8 5/8	4685	65	5 1/2	12206	7
L.R.CHAMBERLIN	1	3002505310	14B 15S37E	JOURNEY OP.	OIL	11500	10/12/1949	340	SURF	9 5/8	4600	2350	7	11500	8
MCCLURE	D-1	3002505320	14H 15S 37E	MCLESTER FUEL	P & A*	12800	3/6/1952	350	SURF	9 5/8	4700	780	5 1/2	12800	9
DENTON	3	3002505306	12M 15S 37E	AMERICO	SWD	10093	2/3/1953	406	SURF	9 5/8	4784	SURF	7	4579-9427	4
DENTON	1	3002505309	13D 15S 37E	AMERICO	SWD	11304	7/28/1949	348	SURF	9 5/8	5001	3000 SX	7	11304	8
MCCLURE	C-1	3002505318	14A 15S 37E	LYNX PETR	P & A*	12748	3/12/1951	355	SURF	9 5/8	4740	530	5 1/2	12748	8
PACIFIC ROY	5	3002505271	10H 15S 37E	POLARIS PROD	P & A*	12340	2/20/1954	346	SURF	9 5/8	4749	SURF	7	10987	9
DENTON	2	3002505270	10I 15S 37E	AMERICO	SWD	12799	9/28/1953	332	SURF	9 5/8	4777	SURF	7	9974	8
DENTON	A-1	3002505273	11O 15S 37E	MCLESTER FUEL	P & A*	11467	3/14/1949	334	SURF	9 5/8	4653	SURF	5 1/2	11467	7
DENTON	1	3002505288	11F 15S 37E	FASKEN	OIL	12623	9/23/1950	338	SURF	8 5/8	4736	SURF	5 1/2	12621	S
DENTON	2	3002505289	11H 15S 37E	FASKEN	OIL	12775	5/28/1951	316	SURF	8 5/8	4641	SURF	5 1/2	12762	11
DENTON	7	3002505294	11G 15S 37E	FASKEN	OIL	12700	11/5/1951	352	SURF	8 5/8	4647	SURF	5 1/2	12685	10
DENTON	12	3002505299	11E 15S 37E	FASKEN	OIL	12780	12/30/1951	347	SURF	8 5/8	4650	SURF	5 1/2	12773	13
DENTON	13	3002505300	11D 15S 37E	FASKEN	OIL	12750	6/4/1952	351	SURF	8 5/8	4652	934'	5 1/2	12746	4
DENTON	17	3002525331	11G 15S 37E	FASKEN	OIL	13048	10/4/1976	360	SURF	8 5/8	4696	SURF	5 1/2	13045	15

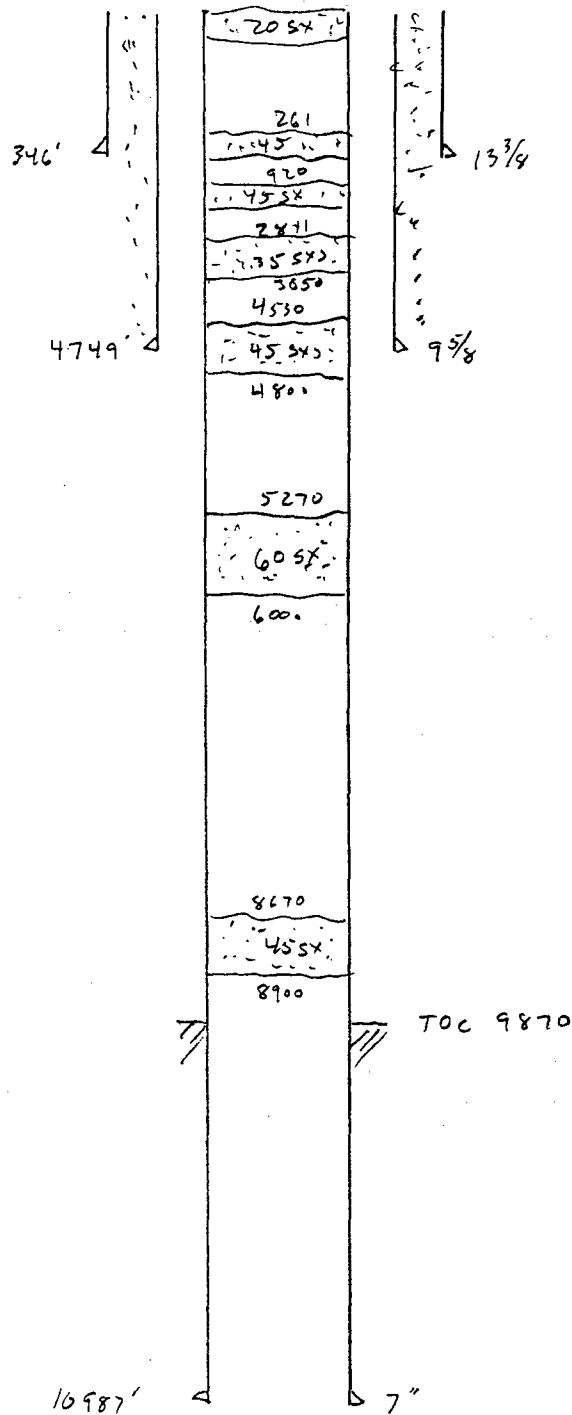
* wellbore diagrams enclosed

4 1/2 X 6 1/2 IN. TUBING
1 1/2 X 2 1/2 IN. TUBING

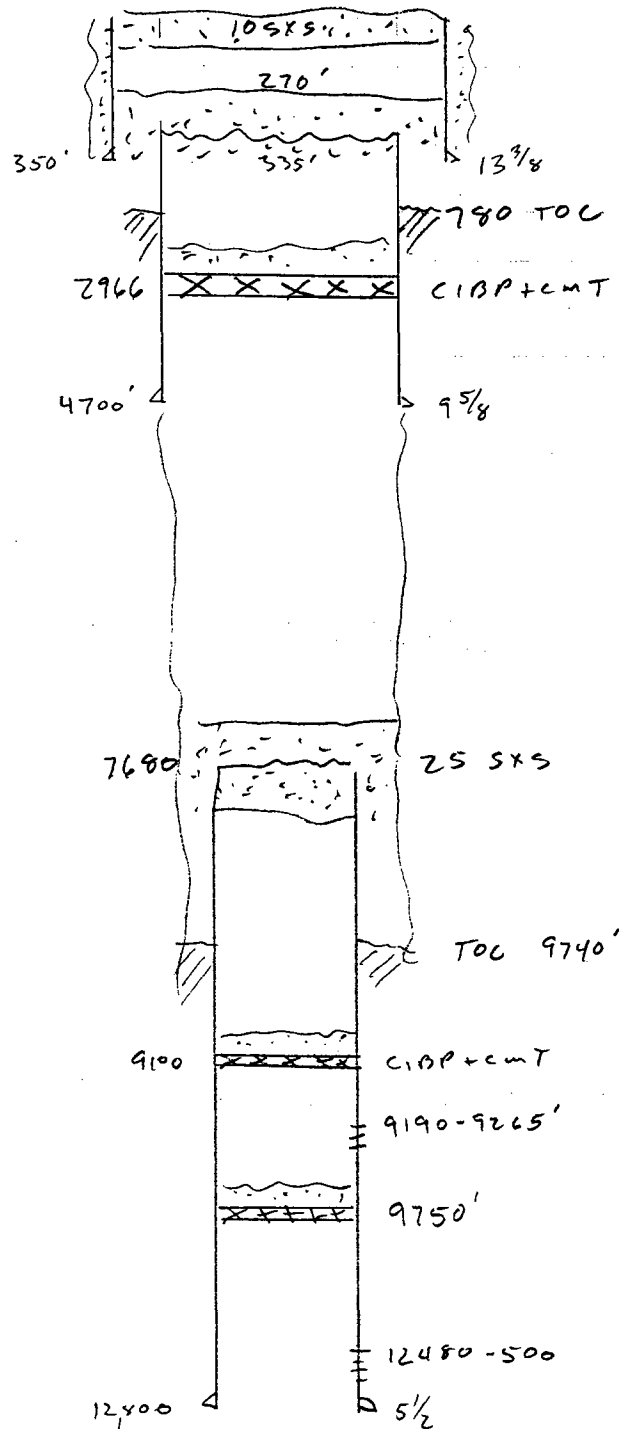
M. A. Lester Fuel Co
J. M. Denton A #1
600 FSL ; 1980 FEL Sec 11



Polaris Production Co.
 Pacific Royalty No 5
 1650 FNL 330 FEL Sec 10

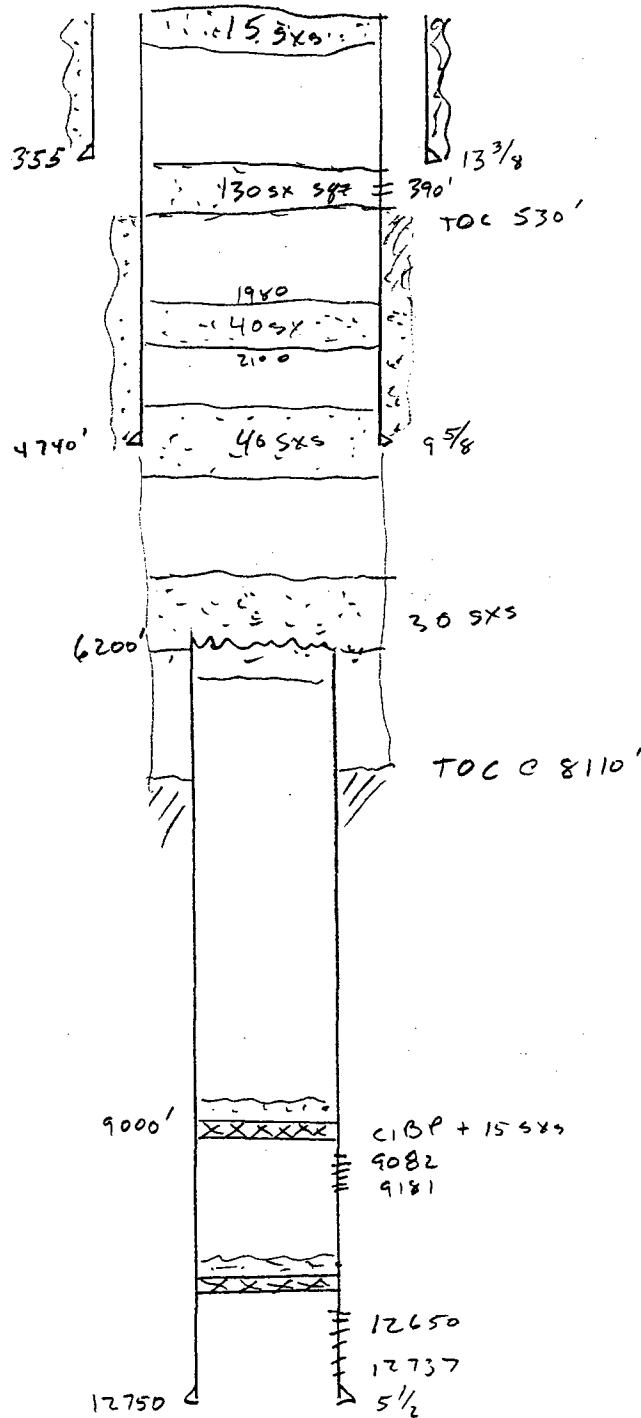


M & A / ester Fuel Co
M & Clure "D" #1
1650 FNL 990 FEL Sec 14



Lynx Petroleum
Pat McClure "C" #1

330' FNL 190 FEL Sec 14



WATER ANALYSIS REPORT

SAMPLE

Oil Co.: **BROTHERS PRODUCTION**
 Lease: **J.M. DENTON**
 Well No.: **3**
 Location: **WELLHEAD**
 Attention: *Desorian*

Date Sampled: **8/26/05**
 Date Analyzed: **29-August-2005**
 Lab ID Number: **Aug29056.000001E-03- 1**
 Salesperson: **M. HUGHES**
 Requested By:
 File Name: **C:\ANALYSES\DATA\Aug29056.000001E-03**

ANALYSIS

1. Ph **7.600**
2. Specific Gravity 60/60 F. **1.058**
3. CACO3 Saturation Index **@ 80F**
@140F

0.988
1.906

Dissolved Gasses

MG/L. EQ. WT. *MEQ/L

4. Hydrogen Sulfide **17**
5. Carbon Dioxide **0**
6. Dissolved Oxygen **Not Determined**

Cations

- | | | | | | |
|--------------|--------|--------------|---------------|----------|-----------------|
| 7. Calcium | (Ca++) | | 2,605 | / 20.1 = | 129.60 |
| 8. Magnesium | (Mg++) | | 705 | / 12.2 = | 57.79 |
| 9. Sodium | (Na+) | (Calculated) | 25,794 | / 23.0 = | 1,121.48 |
| 10. Barium | (Ba++) | | 8 | / 68.7 = | 0.12 |

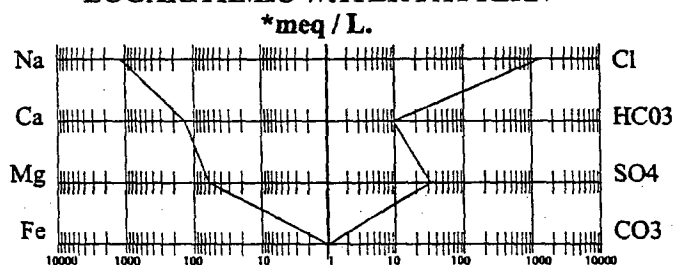
Anions

- | | | | | | |
|--------------------------------------|---------|--|---------------|--------------|-----------------|
| 11. Hydroxyl | (OH+) | | 0 | / 17.0 = | 0.00 |
| 12. Carbonate | (CO3=) | | 0 | / 30.0 = | 0.00 |
| 13. Bicarbonate | (HCO3-) | | 561 | / 61.1 = | 9.18 |
| 14. Sulfate | (SO4=) | | 1,525 | / 48.8 = | 31.25 |
| 15. Chloride | (Cl-) | | 44,990 | / 35.5 = | 1,267.32 |
| 16. Total Dissolved Solids | | | 76,188 | | |
| 17. Total Iron | (Fe) | | 1 | / 18.2 = | 0.03 |
| 18. Total Hardness as CaCO3 | | | 9,408 | | |
| 19. Resistivity @ 75 F. (Calculated) | | | 0.129 | Ohm · meters | |

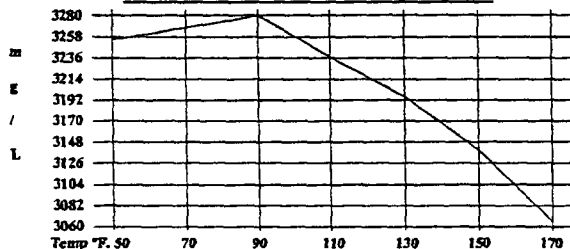
PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	*meq/L	= mg/L.
Ca(HCO3)2	81.04		9.18	744
CaSO4	68.07		31.13	2,119
CaCl2	55.50		89.29	4,955
Mg(HCO3)2	73.17		0.00	0
MgSO4	60.19		0.00	0
MgCl2	47.62		57.79	2,752
NaHCO3	84.00		0.00	0
NaSO4	71.03		0.00	0
NaCl	58.46		1,120.25	65,490

LOGARITHMIC WATER PATTERN



Calcium Sulfate Solubility Profile



WATER ANALYSIS REPORT

SAMPLE

Oil Co. : **BROTHERS PRODUCTION**
 Lease : **J.M. DENTON**
 Well No.: **8**
 Location: **WELLHEAD**
 Attention:

Date Sampled : **8/26/05**
 Date Analyzed: **29-August-2005**
 Lab ID Number: **Aug2905.005- 1**
 Salesperson : **M. HUGHES**
 Requested By :
 File Name : **C:\ANALYSES\DATA\Aug2905.005**

ANALYSIS

1. Ph **7.200**
2. Specific Gravity 60/60 F. **1.053**
3. CACO3 Saturation Index **@ 80F 0.716**
@140F 1.636

Dissolved Gasses

- | | <u>MG/L.</u> | <u>EQ. WT.</u> | <u>*MEQ/L</u> |
|---------------------|----------------|----------------|---------------|
| 4. Hydrogen Sulfide | 174 | | |
| 5. Carbon Dioxide | 10 | | |
| 6. Dissolved Oxygen | Not Determined | | |

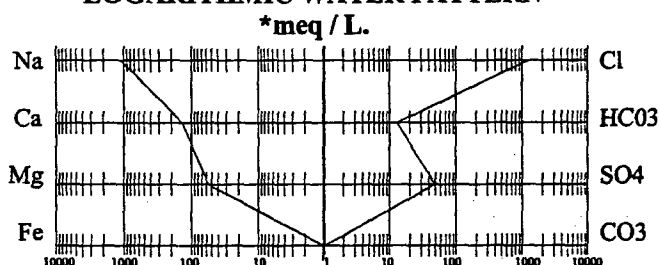
Cations

- | | | | | |
|--------------|--------------------|--------|----------|----------|
| 7. Calcium | (Ca++) | 2,605 | / 20.1 = | 129.60 |
| 8. Magnesium | (Mg++) | 656 | / 12.2 = | 53.77 |
| 9. Sodium | (Na+) (Calculated) | 24,359 | / 23.0 = | 1,059.09 |
| 10. Barium | (Ba++) | 8 | / 68.7 = | 0.12 |

Anions

- | | | | | |
|--------------------------------------|---------|--------------------|----------|----------|
| 11. Hydroxyl | (OH+) | 0 | / 17.0 = | 0.00 |
| 12. Carbonate | (CO3=) | 0 | / 30.0 = | 0.00 |
| 13. Bicarbonate | (HCO3-) | 757 | / 61.1 = | 12.39 |
| 14. Sulfate | (SO4=) | 2,242 | / 48.8 = | 45.94 |
| 15. Chloride | (Cl-) | 41,991 | / 35.5 = | 1,182.85 |
| 16. Total Dissolved Solids | | 72,618 | | |
| 17. Total Iron | (Fe) | 1 | / 18.2 = | 0.05 |
| 18. Total Hardness as CaCO3 | | 9,208 | | |
| 19. Resistivity @ 75 F. (Calculated) | | 0.136 Ohm · meters | | |

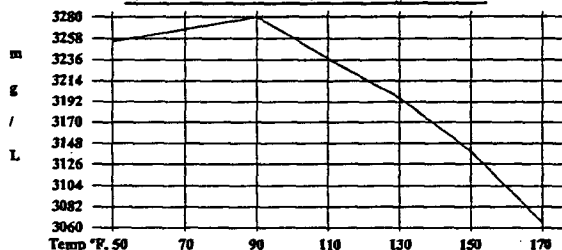
LOGARITHMIC WATER PATTERN



PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	*meq/L	= mg/L.
Ca(HCO3)2	81.04		12.39	1,004
CaSO4	68.07		45.83	3,119
CaCl2	55.50		71.39	3,962
Mg(HCO3)2	73.17		0.00	0
MgSO4	60.19		0.00	0
MgCl2	47.62		53.77	2,561
NaHCO3	84.00		0.00	0
NaSO4	71.03		0.00	0
NaCl	58.46		1,057.69	61,832

Calcium Sulfate Solubility Profile



Scott McGraw



ARDINAL LABORATORIES

2111 BEECHWOOD • ABILENE, TX 79603

101 E. MARLAND • NOBBS, NM 88240

ANALYTICAL RESULTS FOR
FASKIN OIL & RANCH, LTD.
ATTN: MARK JACOBS
303 W. WALL ST. SUITE 1800
MIDLAND, TX 79701
FAX TO: (432) 687-1570

Receiving Date: 08/31/05
Reporting Date: 09/02/05
Project Number: DENTON LEASE
Project Name: DENTON FRESH WATER SAMPLES 1 & 2
Project Location: DENTON FIELD 1/4 MILE E. OF WELL #5

Sampling Date: 08/30/05
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (u S/cm)	T-Alkalinity (mgCaCO ₃ /L)
ANALYSIS DATE:		09/01/05	09/01/05	09/01/05	09/01/05	09/01/05	09/01/05
H10134-1	PRESSURE POINT S. OF HOUSE	40	84	23	3.00	972	184
Quality Control 3		NR	48	54	5.24	1391	NR
True Value QC		NR	50	50	5.00	1413	NR
% Recovery		NR	92.0	108.0	105.0	88.4	NR
Relative Percent Difference		NR	1.0	1.8	5.8	4.9	NR
METHODS:		SM3500-Ca-D	3500-Mg E		8049	120.1	310.1

		Cl ⁻ (mg/L)	SO ₄ (mg/L)	CO ₃ (mg/L)	HCO ₃ (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		09/01/05	09/01/05	09/01/05	09/01/05	09/01/05	09/02/05
H10134-1	PRESSURE POINT S. OF HOUSE	100	58	0	238	7.24	616
Quality Control		1000	48.52	NR	885	7.06	NR
True Value QC		1000	50.00	NR	1000	7.00	NR
% Recovery		100	97.0	NR	88.5	101	NR
Relative Percent Difference		2.0	4.8	NR	0.9	0	1.1
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	180.1

Amy Hill
Chemist

9/2/05
Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. Cardinal shall not be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profit incurred by client, its subsidiaries, affiliates or subcontractors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a
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 1
_____ weeks.

Beginning with the issue dated
August 30 2005
and ending with the issue dated

August 30 2005

Kathi Bearden

Publisher

Sworn and subscribed to before

me this 30th day of

August 2005

Notary Public.

My Commission expires
February 07, 2009

(Seal)



OFFICIAL SEAL
DORA MONTZ
NOTARY PUBLIC
STATE OF NEW MEXICO

My Commission Expires: _____

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

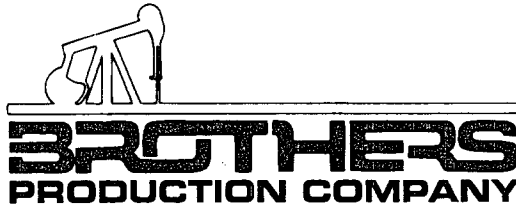
LEGAL NOTICE
August 30, 2005

Notice is hereby given of the application of Brothers Pro-
duction Company, Inc, P.O. Box 7515, Midland, TX 79708,
432-682-2516, to the Oil Conservation Division, New Mexi-
co Energy, Minerals and Natural Resources Department, for
administrative approval and authority to inject salt water into
the J. M. Denton #9 located 1980' FSL & 990' FWL, Sec 11-
15S-37E, Lea County, New Mexico. The injection formation
is in the Pennsylvania Formation located between the inter-
vals of 9700' to 10,150' with the expectant max injection
rate of 10,000 BWPD and the expectant press rate of 2000
psi. Interested parties must file objections or request for a
hearing with the Oil Conservation Division, 1220 South St.
Francis Drive, Santa Fe, New Mexico 87505, within 15
days.
#21765

67101113000

67532949

BROTHERS PRODUCTIN COMPANY
PO BOX 7515
MIDLAND, TX 79708



303 W. Wall, Suite 1600
Midland, Texas 79701
(432) 682-2516
Fax (432) 686-8318

Mailing Address
P.O. Box 7515
Midland, Texas 79708

September 14, 2005

Americo Energy Resources
P.O. Box 19163
Houston, Texas 77224

Re: Proposed – J. M. Denton Wells #6 and #9
Salt Water Disposal Wells
Located in Section 11, T15S, R37E
Lea County, New Mexico

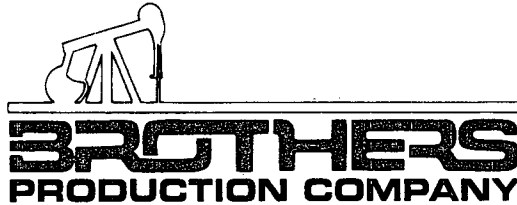
Dear Sir or Madam:

Brothers Production Company, Inc. is making application to the New Mexico Oil Conservation Division for Administrative approval to convert the J. M. Denton #6 (660' FSL & 990' FEL) and J. M. Denton #9 (1980' FSL & 990' FWL) wells located in Section 11, Township 15 South, Range 37 East, Lea County, New Mexico to Disposal Service, for the purpose of disposing of field produced water from the Devonian and Wolfcamp formations into the Pennsylvania Interval from 9600'-10150'.

As an offset operator, you are being notified of this application in compliance with NMOCD regulations. Attached please find a copy of completed form C-108 with attachments, which we have filed with the NMOCD.

Sincerely,

Scott McGraw
Production Manager



303 W. Wall, Suite 1600
Midland, Texas 79701
(432) 682-2516
Fax (432) 686-8318

Mailing Address
P.O. Box 7515
Midland, Texas 79708

September 14, 2005

Mr. Darr Angell
P.O. Box 190
Lovington, New Mexico 88260

Re: Proposed – J. M. Denton Wells #6 and #9
Salt Water Disposal Wells
Located in Section 11, T15S, R37E
Lea County, New Mexico

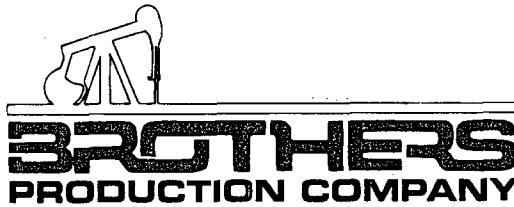
Dear Mr. Angell:

Brothers Production Company, Inc. is making application to the New Mexico Oil Conservation Division for Administrative approval to convert the J. M. Denton #6 (660' FSL & 990' FEL) and J. M. Denton #9 (1980' FSL & 990' FWL) wells located in Section 11, Township 15 South, Range 37 East, Lea County, New Mexico to Disposal Service, for the purpose of disposing of field produced water from the Devonian and Wolfcamp formations into the Pennsylvania Interval from 9600'-10150'.

As the surface owner, you are being notified of this application in compliance with NMOCD regulations. Attached please find a copy of completed form C-108 with attachments, which we have filed with the NMOCD.

Sincerely,

Scott McGraw
Production Manager



303 W. Wall, Suite 1600
Midland, Texas 79701
(432) 682-2516
Fax (432) 686-8318

Mailing Address
P.O. Box 7515
Midland, Texas 79708

September 14, 2005

Journey Operating
1201 Louisiana, Suite 1040
Houston, Texas 77002

Re: Proposed – J. M. Denton Wells #6 and #9
Salt Water Disposal Wells
Located in Section 11, T15S, R37E
Lea County, New Mexico

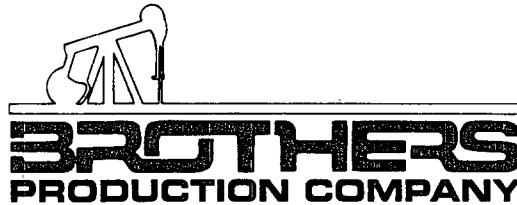
Dear Sir or Madam:

Brothers Production Company, Inc. is making application to the New Mexico Oil Conservation Division for Administrative approval to convert the J. M. Denton #6 (660' FSL & 990' FEL) and J. M. Denton #9 (1980' FSL & 990' FWL) wells located in Section 11, Township 15 South, Range 37 East, Lea County, New Mexico to Disposal Service, for the purpose of disposing of field produced water from the Devonian and Wolfcamp formations into the Pennsylvania Interval from 9600'-10150'.

As an offset operator, you are being notified of this application in compliance with NMOCD regulations. Attached please find a copy of completed form C-108 with attachments, which we have filed with the NMOCD.

Sincerely,

Scott McGraw
Production Manager



303 W. Wall, Suite 1600
Midland, Texas 79701
(432) 682-2516
Fax (432) 686-8318

Mailing Address
P.O. Box 7515
Midland, Texas 79708

September 14, 2005

Fasken Oil & Ranch, Ltd.
303 W. Wall Street, Suite 1900
Midland, Texas 79701

Re: Proposed – J. M. Denton Wells #6 and #9
Salt Water Disposal Wells
Located in Section 11, T15S, R37E
Lea County, New Mexico

Dear Sir or Madam:

Brothers Production Company, Inc. is making application to the New Mexico Oil Conservation Division for Administrative approval to convert the J. M. Denton #6 (660' FSL & 990' FEL) and J. M. Denton #9 (1980' FSL & 990' FWL) wells located in Section 11, Township 15 South, Range 37 East, Lea County, New Mexico to Disposal Service, for the purpose of disposing of field produced water from the Devonian and Wolfcamp formations into the Pennsylvania Interval from 9600'-10150'.

As an offset operator, you are being notified of this application in compliance with NMOCD regulations. Attached please find a copy of completed form C-108 with attachments, which we have filed with the NMOCD.

Sincerely,

Scott McGraw
Production Manager

SENDER: COMPLETE THIS SECTION

■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.

■ Print your name and address on the reverse so that we can return the card to you.

■ Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Fasken Oil & Ranch, Ltd.
303 W. Wall St., Ste. 1900
Midland, TX 79701

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly)

B. Date of Delivery

C. Signature

☐ Agent
☒ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Copy from service label) 7000 0520 0024 4321 1980
PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

SENDER: COMPLETE THIS SECTION

■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.

■ Print your name and address on the reverse so that we can return the card to you.

■ Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Darr Angell
P.O. Box 190
Lovington, NM 88260

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly)

B. Date of Delivery

C. Signature

☐ Agent
☒ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Copy from service label) 7000 0520 0024 4321 2017
PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

SENDER: COMPLETE THIS SECTION

■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.

■ Print your name and address on the reverse so that we can return the card to you.

■ Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Americo Energy Resources
P.O. Box 19163
Houston, TX 77224

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly)

B. Date of Delivery

C. Signature

☐ Agent
☒ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Copy from service label) 7000 0520 0024 4321 2000
PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

SENDER: COMPLETE THIS SECTION

■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.

■ Print your name and address on the reverse so that we can return the card to you.

■ Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Journey Operating
201 Louisiana, Suite 1040
Houston, TX 77002

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly)

B. Date of Delivery

C. Signature

☐ Agent
☒ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Copy from service label) 7000 0520 0024 4321 2017
PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

12/2/05

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

Oil Conservation Division
1220 S Francis Dr
Santa Fe, NM 87505

RE: Proposed;
MC _____
DHC _____
NSL _____
NSP _____
SWD X _____
WFX _____
PMX _____

RECEIVED
DEC 12 2005
OIL CONSERVATION
DIVISION

Gentlemen:

I have examined the application for the:

Brothers Production Co JM Denton #Q-L-11-15s-37e-30-025-05283
JM Denton #6-P-11-15s-37e-30-025-05280
Operator Lease & Well No. Unit-S-T-R API #

And my recommendations are as follows:

OK

Yours very truly,

Chris Williams
Chris Williams
Supervisor, District I