OIL CONSERVATION DIVISION

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☒ no

II. Operator: Amstar Energy Corporation

Address: 8416 Wayne Avenue Lubbock, Texas 79424

Contact party: Gilbert Quintana Phone: 505 852-4481

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 N/A.

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: Gilbert Quintana Title Regulatory Consultant

Signature: Gilbert P Quintana Date: June 26, 1986

* 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. Logs submitted to Hobbs District office at time of drilling.

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

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.

BEFORE EXAMINER CATANACH

OIL CONSERVATION DIVISION

AMSTAR EXHIBIT NO. 1

CASE NO. 8934

AMSTAR ENERGY CORPORATION
APPLICATION FOR SALTWATER DISPOSAL WELL

Part I

The reason for this application is a request for authorization to inject produced water for purposes of disposal into formations that shall not adversely affect fresh water sources or oil and gas producing formations. The subject disposal well is expected to be a commercial operation. This application does not qualify for administative approval.

Part II

Operator: Amstar Energy Corporation
Address: 8416 Wayne Avenue
Lubbock, Texas 79424

Tommy Hinson and Gerald Bonner, Operators

Contact Party: Gilbert P. Quintana, Regulatory Consultant
Telephone: 505-852-4481

Part III

Proposed Injection Well Data: Please refer to Amstar Exhibits No. 2 and No. 3 entitled, "Wellbore Schematic Current Status" and "Proposed Injection Well Schematic", respectively. Both schematics have included answers to Portion A and Portion B of Part III of OCD Form C-108.

Part IV

This is a new application and is not an expansion of an existing project. There is no Division Order associated with this application.

Part V

Well's area of review: Amstar Exhibit No. 4 entitled, "Area Review Map" shows all wells and leases within two miles of the proposed well. Two, one, and one half mile radius' have been drawn around the proposed well. The one-half mile circle identifies the wells "Area of Review".

Part VI

This portion requires a tabulation of all wells within the "Area of Review" which have penetrated the proposed injection interval. Amstar Exhibit No. 4, "Area of Review Map" shows there are **no wells** within the review area of the proposed well.

Part VII

Data on the proposed operation of the saltwater disposal well:

1. Proposed Injection Rates: Average: 1 BPM
   Maximum: 4.5 BPM

   Proposed Injection Volumes: Average: 1,450 BPD
   Maximum: 2,000 BPD

2. The system shall be an open system. This is meant in the sense that it will be available as a commercial system to those parties that have been contracted to dispose of produced water into the subject well. Physically, the system shall be closed to the atmosphere and shall consist of an injection valve connection with an appropriate meter for measurement of rates and volumes of produced water to be disposed of.

3 Proposed Injection Pressures: Average: Vacuum Injection
   Maximum: 2,172 psi

   This is based on the OCD's standard 0.2 psi/ft depth to the uppermost injection perforation limitation. The subject well's uppermost perforation is at 10,860 feet. It should be noted that the well is expected to take water under "vacuum" conditions.

4. The sources of injection waters will be produced waters from the general area in which the well is located. Injected waters should include Bonespring, Wolfcamp, and Morrow. Compatibility of the disposal waters with the injected waters is expected because the waters originated from the same formations in the general area.

5. Chlorides for the Wolfcamp and Morrow formations in this area are 58,000-120,000 ppm and 33,000 ppm, respectively. This is based on the U.S.G.S. Basin Report 75-579, entitled "Water Quality of Oil & Gas Wells in the Permian"

Part VIII

Geologic data on injection zones:

Wolfcamp Formation: The Wolfcamp formation top in the subject well is 10,847 ft (-6,859 ft subsea) and is approximately 728 ft thick. It consists of thin bedded dolomitic shale & sandstone, underlain by a carbonate bank of low porosity of 2-3%, grading into arg. dolomite and dolomite shales.

Penn Formation: The Penn formation top occurs at 11,862 ft (-7,874 ft subsea) and is approximately 318 ft thick. The Penn sequence consists of shales and thin intel-bedded dolomite and clay, grading to thin argillaceous limestone.

Strawn Formation: The Strawn formation top occurs at 12,180 ft (-8,192 ft subsea) and is approximately 302 ft thick. It consists of Arenaceous limestone and shale at the top grading to a massive limestone at the base with porosity of 2-3%.

Atoka Formation: The Atoka formation top occurs at 12,482 ft (-8,494 ft subsea) and is approximately 538 ft thick. It consists of thin bedded shales and limestone with some dolomitic shalestone at the top. The mid-Atoka is characterized by a massive shale grading into a massive carbonate. Its porosity is from 2-3%.

Morrow Formation: The Morrow formation top occurs at 12,844 ft (-8,856 ft subsea) and is approximately 504 ft thick. It consists of limstone, sand, and thin shales interbedded.

Devonian Formation: The Devonian formation top should occur at approximately 14,500 ft (-10,512 ft subsea) and is approximately 300 ft thick.

Fresh Water Sources:

Ogallala Formation: The Ogallala formation is the only source of potable water in the area. The base of the formation can be found at 180 ft as confirmed by Jim Wright of the N.M. State Engineers Office in Roswell.

Santa Rosa Formation: The Santa Rosa formation in this area is not potable as it is salt bearing. Also confirmed by Jim Wright.

Part IX

No stimulation programs have been planned at this time, but should it be necessary 15% HCL with the appropriate volumes for the area to be treated will be used.

Part X

All logs and test data have been previously submitted to the OCD.

Part XI

There are two fresh water wells within a mile of the proposed well:
(Note Anstar Exhibit No. 4 for the well locations)

Fresh Water Well No. 1: This is a domestic well and is located in the SW/4SE/4 NE/4, Sec. 35, T18S,R34E. It is completed in the Ogallala. The State Engineers Office has no other information on the well except that the well tested 21 ppm chlorides in July 1984.

Fresh Water Well No. 2: This well was drilled by Mesa Petroleum as a drilling fluid water supply well. It is located in the NW/4 NW/4, Sec. 35, T18S, R34E. It is completed in the Ogallala to a TD of 180 ft. Perforated at 119-180 ft with the top of water at 130 ft. It is cased with 6 5/8 in casing to TD.

There are two other fresh water wells in the area, but not within a mile of the proposed well. They are denoted on the map as Fresh Water Well No. 3 and No. 4. Information is available on this if requested.

Part XII

Affirmative Statement:

I hereby affirm that I 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.

Gilbert P. Quintana

Gilbert P. Quintana, Regulatory Consultant

Note Amstar Exhibit No. 6, "Geologic Contour Map" of the Strawn formation.

Part XIII

Note Amstar Exhibit No. 7 and No. 8 entitled, " Area of Review Offset Operators" and "Proof of Notice" respectively.

Part XIV

Note Amstar Exhibit No. 1, OCD Form C-108 for Certification.

BEFORE EXAMINER CATANACH

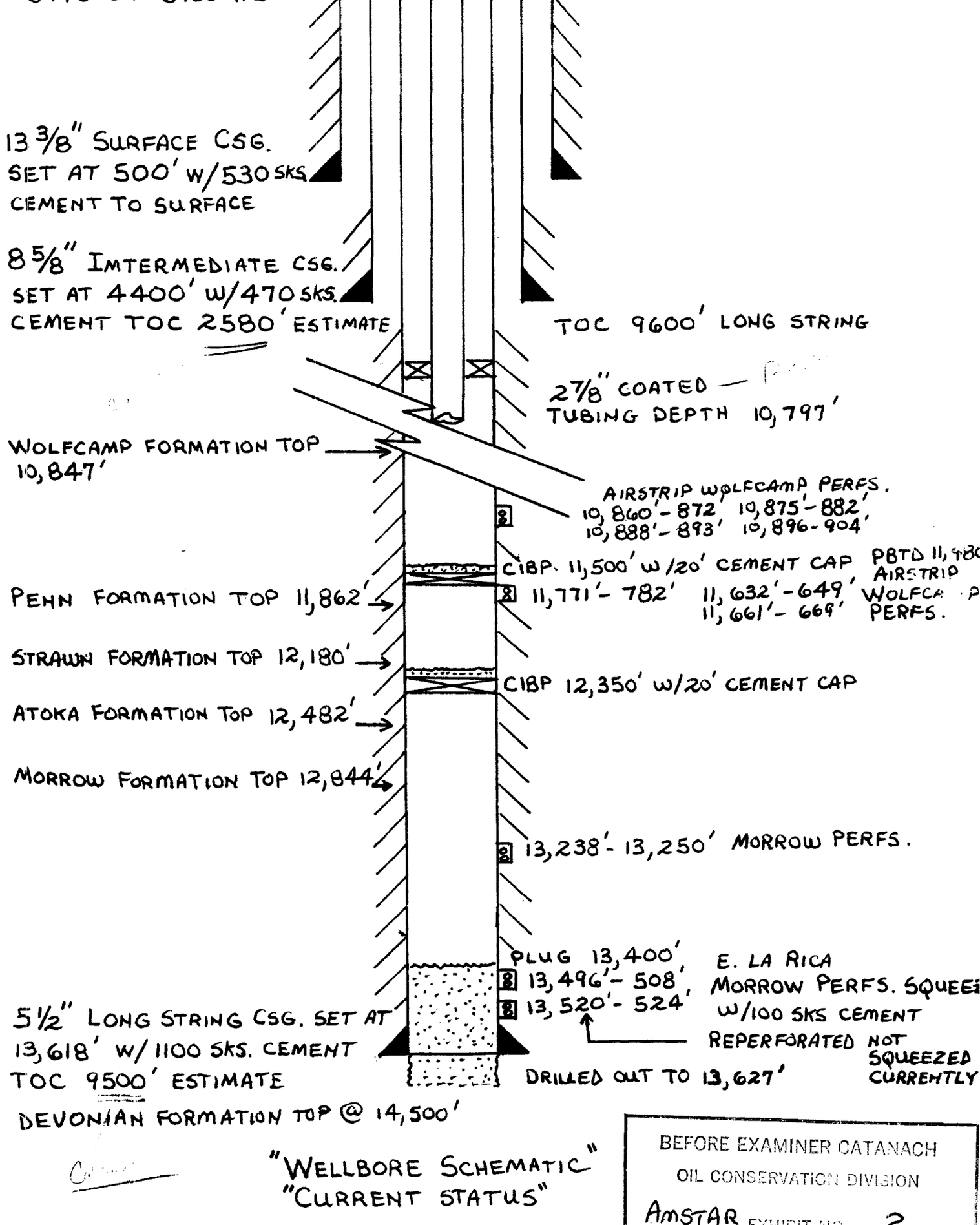
OIL CONSERVATION DIVISION

AMSTAR EXHIBIT NO. 1

CASE NO. 8934

AMSTAR ENERGY CORPORATION

NEW MEXICO "A" STATE WELL NO. 1
660' FSL & 2080' FEL OF SECTION 35
TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM, LEA CO., N.M.

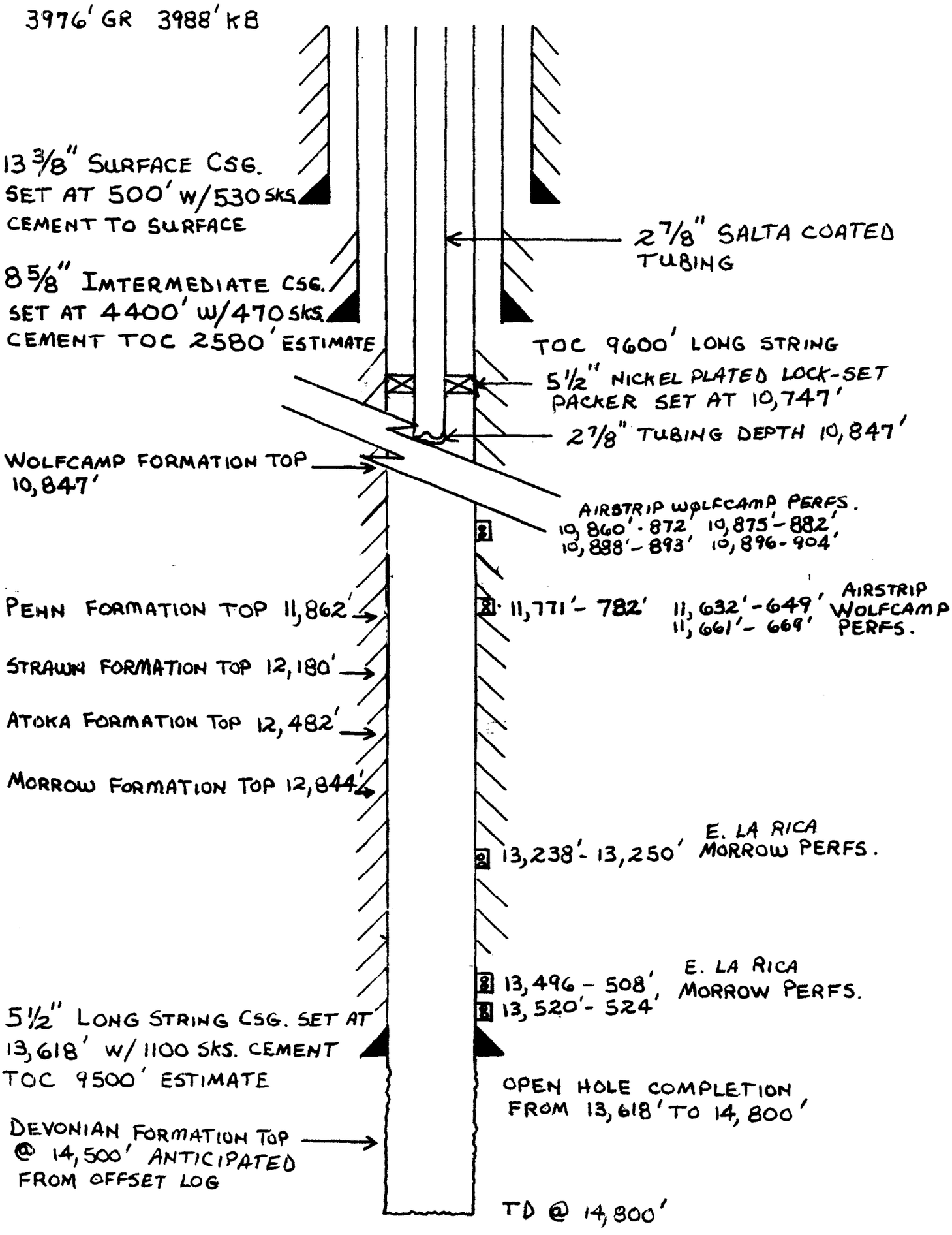


"WELLBORE SCHEMATIC"
"CURRENT STATUS"

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
AMSTAR EXHIBIT NO. 2
CASE NO. 8934

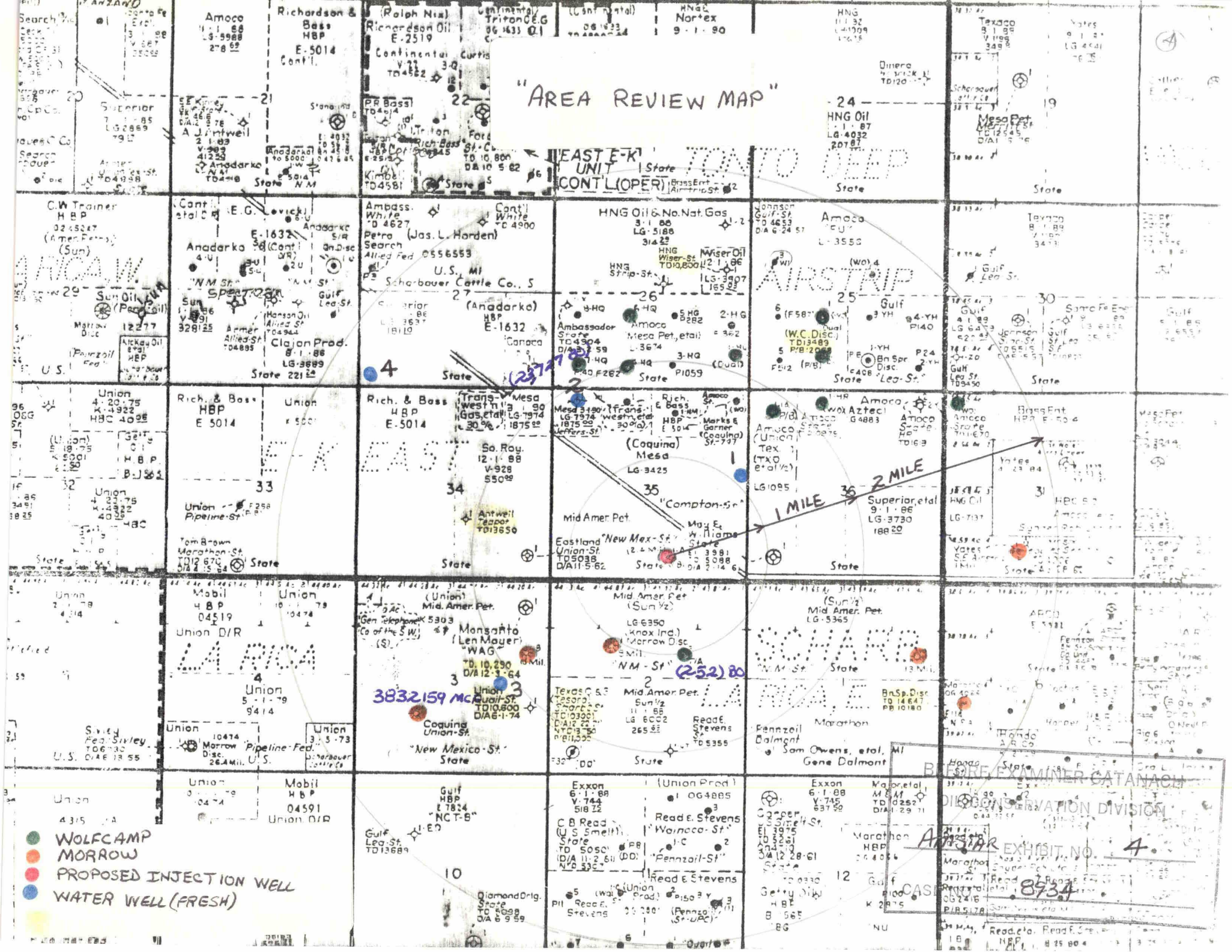
AMSTAR ENERGY CORPORATION

NEW MEXICO "A" STATE WELL NO. 1
660' FSL & 2080' FEL OF SECTION 35
TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM, LEA CO., N.M.

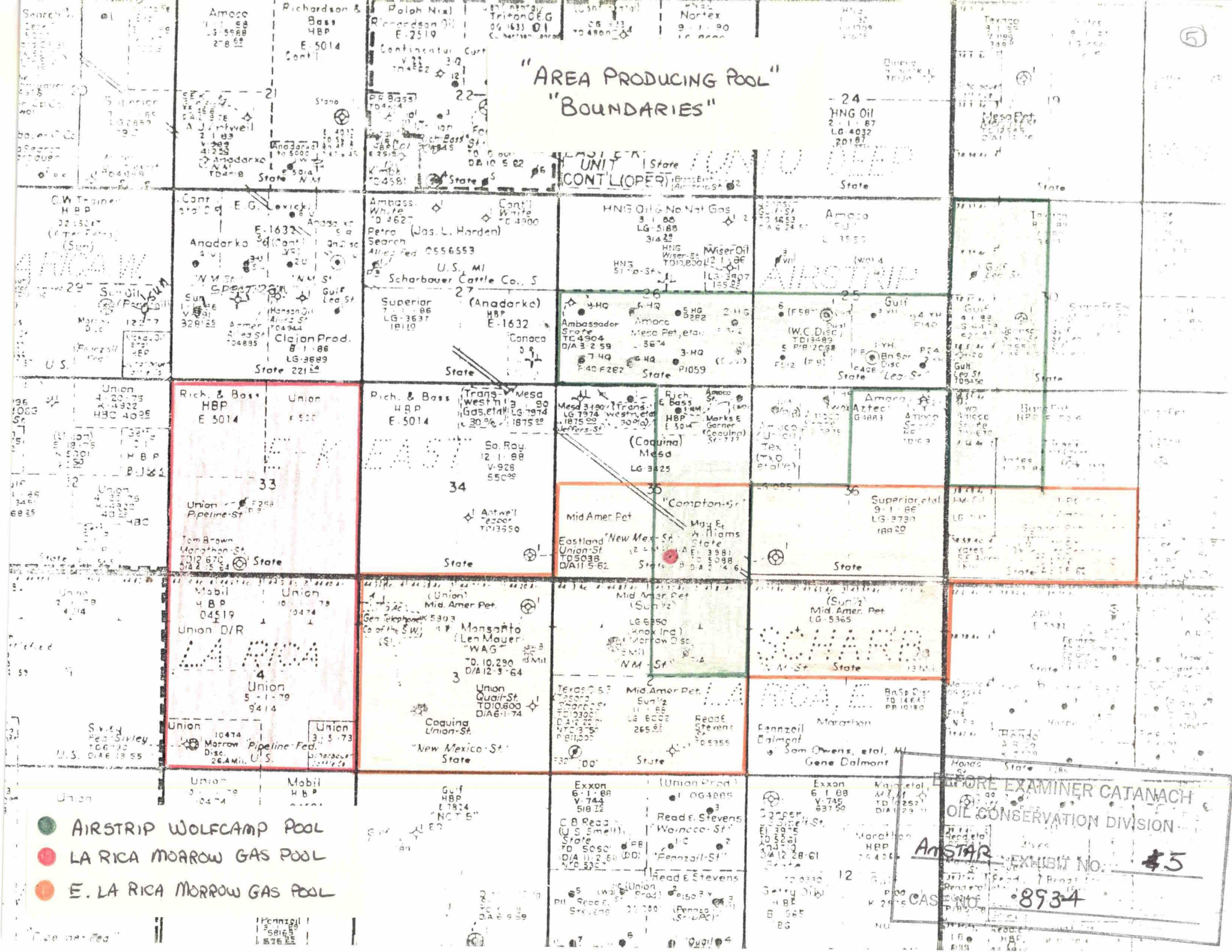


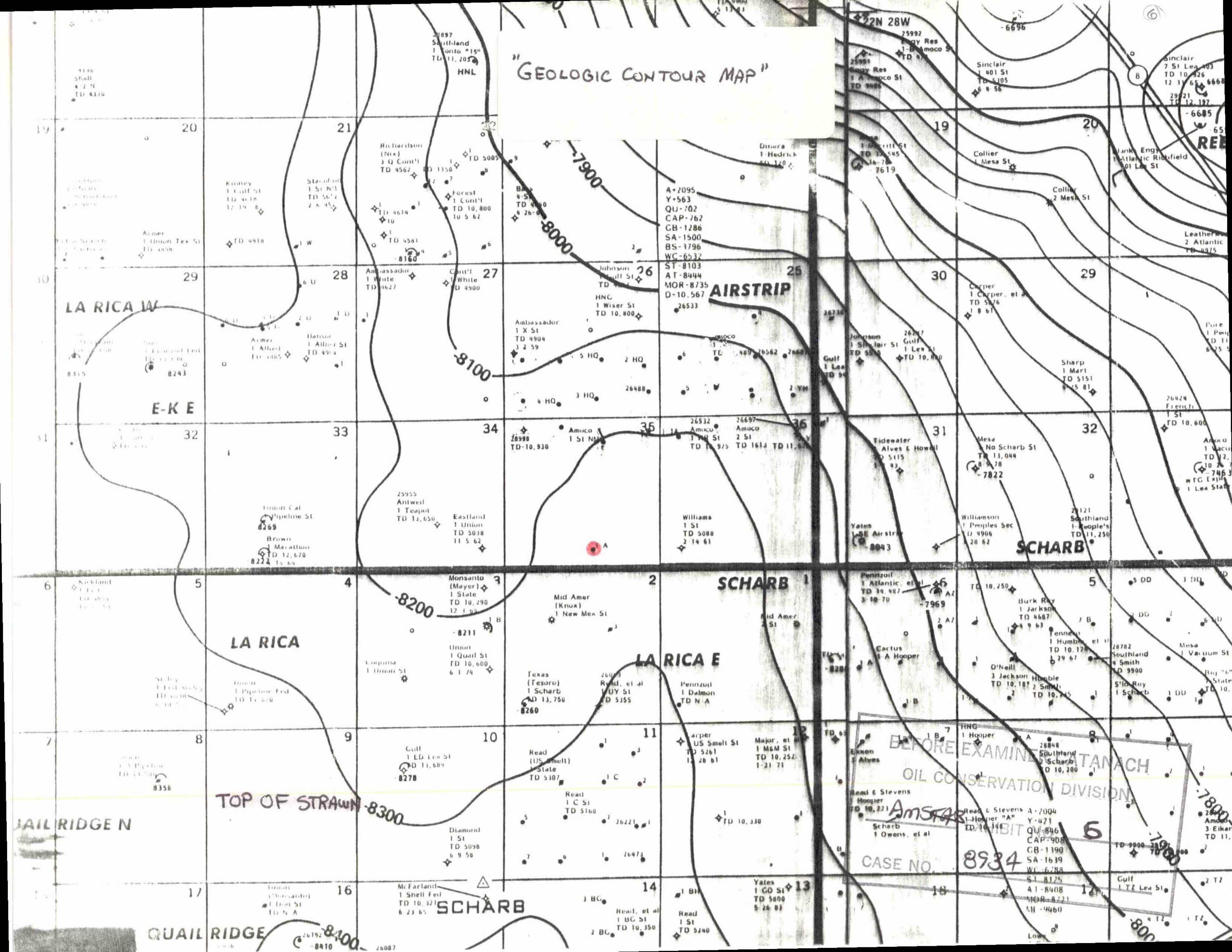
"PROPOSED INJECTION"
"WELL SCHEMATIC"

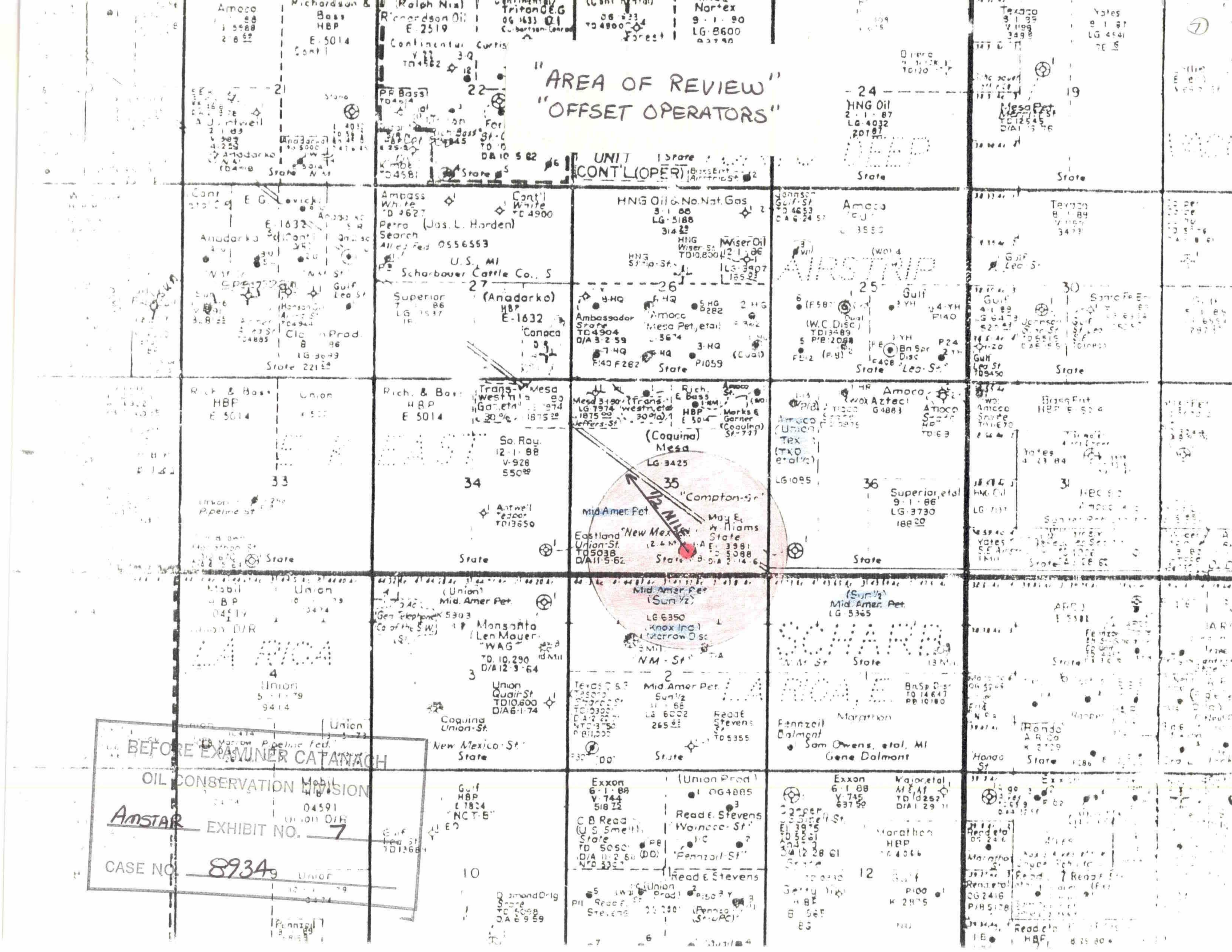
BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
AMSTAR EXHIBIT NO. 3
CASE NO. 8934

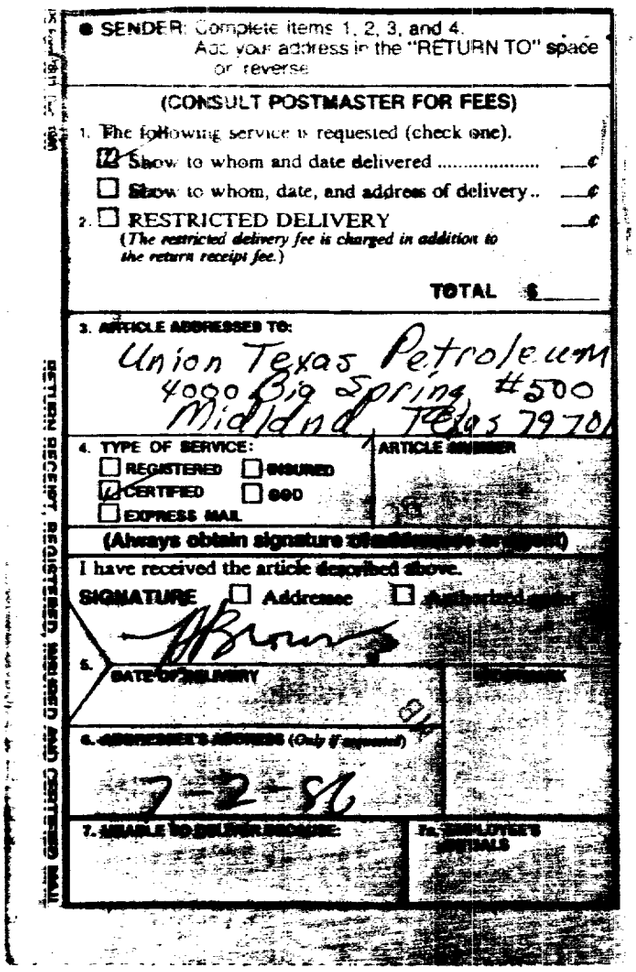


BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
AMSTAR EXHIBIT NO. 4
CASE NO. 8734


"AREA PRODUCING POOL"
"BOUNDARIES"
AIRSTRIP WOLFCAMP POOL
LA RICA MORROW GAS POOL
E. LA RICA MORROW GAS POOL
BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
AMSTAR EXHIBIT NO. #3
CASE NO. 8934


"GEOLOGIC CONTOUR MAP"
TOP OF STRAWN
-7900
-8000
-8100
-8200
-8300
-8400
AIRSTRIP
SCHARB
LA RICA W
LA RICA
LA RICA E
E-K E
QUAIL RIDGE
RIDGE N
22N 28W
BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
Amstar EXHIBIT NO. 6
CASE NO. 8934


"AREA OF REVIEW"
"OFFSET OPERATORS"
UNIT CONT'L (OPER)
1/2 MILE
"Compton-St"
Mid Amer Pet
Eastland "New Mex" Union-St. TD5038 D/A 11-5-62
May E. Williams State
LG-3425
(Coquina) Mesa
HNG Oil & No. Nat. Gas
Wiser Oil
Ambassador State TD4904 D/A 3-2-59
Amoco Mesa Pet, etal
Superior, etal 9-1-86 LG-3730
(Sun 1/2) Mid Amer Pet LG-5365
(Sun 1/2) Mid. Amer. Pet LG 6350 Knox Ind. Morrow Disc
Mid Amer Pet. Sun 1/2
Monsanto (Len Mayer) "WAG" TD 10,290 D/A 12-3-64
Union Quail-St TD10,600 D/A 6-1-74
Coquina Union-St.
New Mexico-St. State
Pennzoil Dalmont
Sam Owens, etal, MI Gene Dalmont
Read & Stevens
Exxon
Marathon
Gulf
HNG Oil 2-1-87 LG-4032
Yates
Texaco
Amoco
Mesa Pet
Trans-western Gas, etal
Rich. & Bass HBP E-5014
So. Roy. 12-1-88 V-928
Antweil
Superior
(Anadarko) HBP E-1632
U.S. MI Scharbauer Cattle Co.
Petro Search Allied Fed 0556553
Ambass White
Cont'l White TC 4900
Richardson Oil E-2519
Continental
Triton O&G
Nortex 9-1-90 LG-8600
Amoco
(W.C. Disc.)
AIRSTRIP
LA RICA
State
19
21
22
24
25
26
27
30
31
33
34
35
36
2
3
4
10
12
BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
AMSTAR EXHIBIT NO. 7
CASE NO. 8934



● SENDER: Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
☑ Show to whom and date delivered ..... ¢
☐ Show to whom, date, and address of delivery .. ¢
2. ☐ RESTRICTED DELIVERY ¢
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL $

3. ARTICLE ADDRESSED TO:
Union Texas Petroleum
4000 Big Spring #500
Midland, Texas 7970[illegible]

4. TYPE OF SERVICE:
☐ REGISTERED ☐ INSURED
☑ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☐ Authorized agent

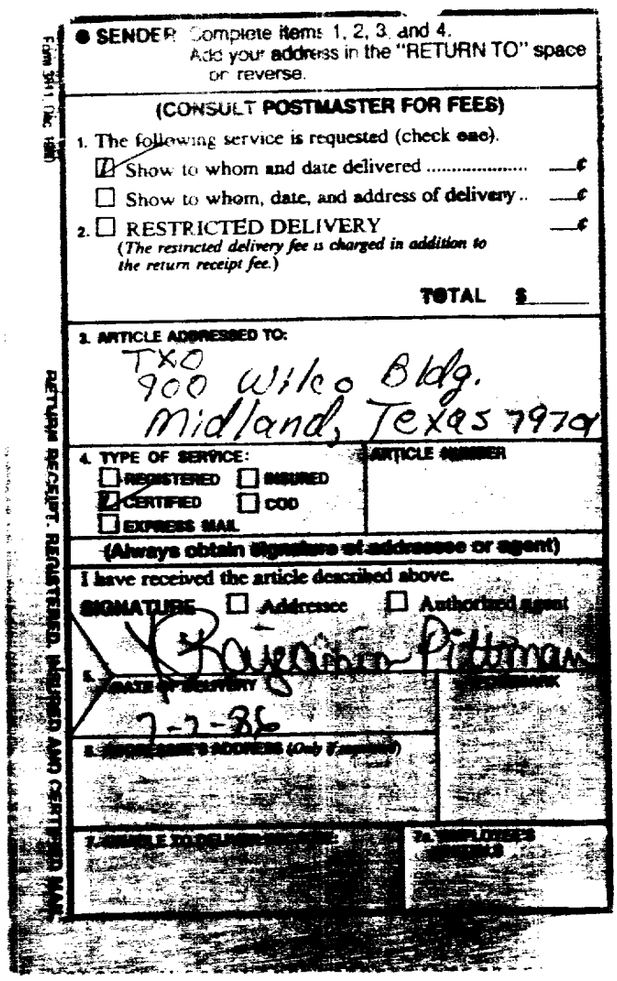
5. DATE OF DELIVERY
7-2-86

6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE:

7a. EMPLOYEE'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL



● SENDER: Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
☑ Show to whom and date delivered ..... ¢
☐ Show to whom, date, and address of delivery .. ¢
2. ☐ RESTRICTED DELIVERY ¢
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL $

3. ARTICLE ADDRESSED TO:
TXO
900 Wilco Bldg.
Midland, Texas 7970[illegible]

4. TYPE OF SERVICE:
☐ REGISTERED ☐ INSURED
☑ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☐ Authorized agent
[illegible] Pittman

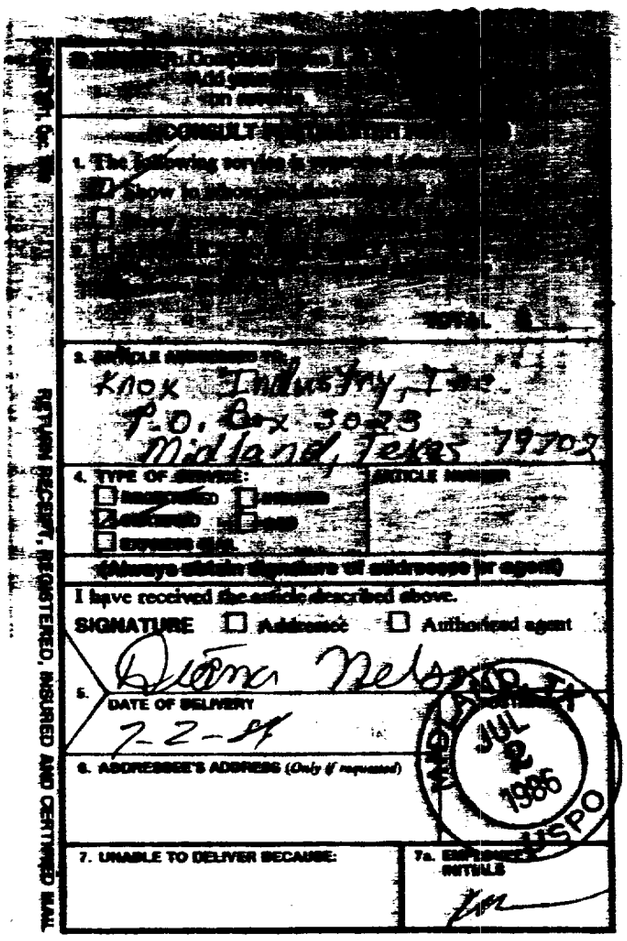
5. DATE OF DELIVERY
7-2-86

6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE:

7a. EMPLOYEE'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL



● SENDER: Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
☑ Show to whom and date delivered ..... ¢
☐ Show to whom, date, and address of delivery .. ¢
2. ☐ RESTRICTED DELIVERY ¢
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL $

3. ARTICLE ADDRESSED TO:
Knox Industry, Inc.
P.O. Box 3023
Midland, Texas 79702

4. TYPE OF SERVICE:
☐ REGISTERED ☐ INSURED
☑ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☐ Authorized agent
Deana Nelson

5. DATE OF DELIVERY
7-2-86

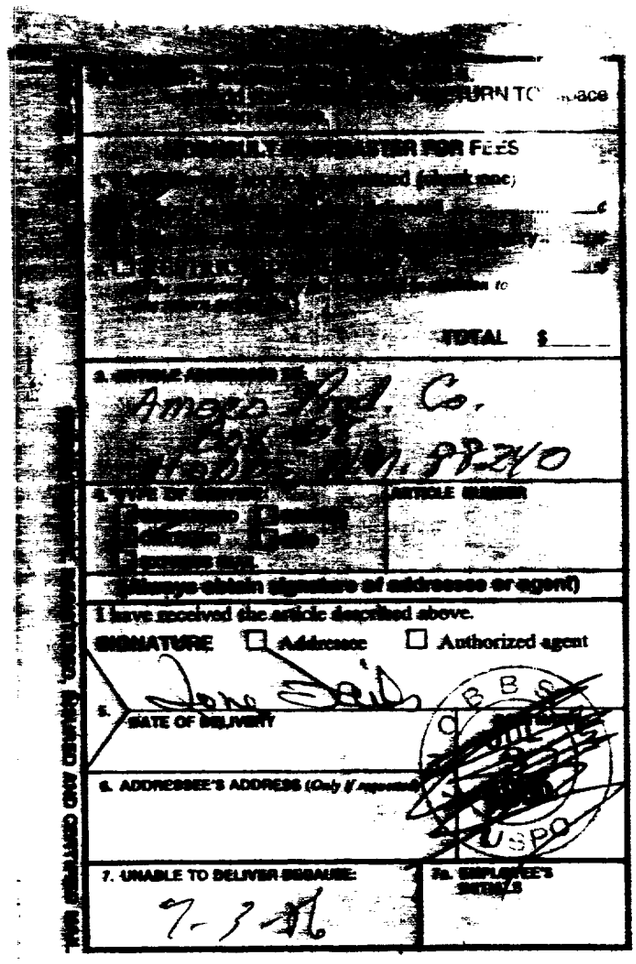
6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE:

7a. EMPLOYEE'S INITIALS

MIDLAND TEXAS JUL 2 1986 USPO

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL



● SENDER: Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

TOTAL $

3. ARTICLE ADDRESSED TO:
Amoco Prod. Co.
[illegible] 87240

4. TYPE OF SERVICE:
☐ REGISTERED ☐ INSURED
☐ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☐ Authorized agent

5. DATE OF DELIVERY

6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE:
7-3-86

7a. EMPLOYEE'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

"PROOF OF NOTICE"

AMSTAR

8

8934

PS Form 3811, Dec. 1980

● **SENDER:** Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
   - ☑ Show to whom and date delivered ..... ¢
   - ☐ Show to whom, date, and address of delivery.. ¢
2. ☐ RESTRICTED DELIVERY ¢
   (The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL $

3. ARTICLE ADDRESSED TO:
Sun Expl. & Prod. Co.
Box 1861
Midland Texas 79702

4. TYPE OF SERVICE:
☐ REGISTERED ☐ INSURED
☑ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☑ Authorized agent

5. DATE OF DELIVERY

6. ADDRESSEE'S ADDRESS (Only if requested)
Sun Exp.
Midland Tx

7. UNABLE TO DELIVER BECAUSE:

7a. EMPLOYEE'S INITIALS

MIDLAND, TX JUL 2 1986 US

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

PS Form 3811, Dec. 1980

● **SENDER:** Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
   - ☑ Show to whom and date delivered ..... ¢
   - ☐ Show to whom, date, and address of delivery.. ¢
2. ☐ RESTRICTED DELIVERY ¢
   (The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL $

3. ARTICLE ADDRESSED TO:
State Land Office
P.O. Box 1148
Santa Fe, N.M. 87504-1148

4. TYPE OF SERVICE:
☐ REGISTERED ☐ INSURED
☑ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☐ Authorized agent

5. DATE OF DELIVERY

6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE:

7a. EMPLOYEE'S INITIALS

SANTA FE, NM JUL 1 1986

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

3. ARTICLE ADDRESSED TO:
NMOCD
P.O. Box 1980
Hobbs NM 88240

4. TYPE OF SERVICE:
☐ REGISTERED ☐ INSURED
☐ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☐ Authorized agent

5. DATE OF DELIVERY

POSTMARK

6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE:
7-7-86

7a. EMPLOYEE'S INITIALS

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☒ no

II. Operator: Amstar Energy Corporation

Address: 8416 Wayne Avenue Lubbock, Texas 79424

Contact party: Gilbert Quintana Phone: 505 852-4481

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: N/A

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: Gilbert Quintana Title Regulatory Consultant

Signature: Gilbert P. Quintana Date: June 26, 1986

* 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. Logs submitted to Hobbs District office at time of drilling.

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

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.

AMSTAR ENERGY CORPORATION
APPLICATION FOR SALTWATER DISPOSAL WELL

Part I

The reason for this application is a request for authorization to inject produced water for purposes of disposal into formations that shall not adversely affect fresh water sources or oil and gas producing formations. The subject disposal well is expected to be a commercial operation. This application does not qualify for administative approval.

Part II

Operator: Amstar Energy Corporation
Address: 8415 Wayne Avenue
Lubbock, Texas 79424

Tommy Hinson and Gerald Bonner, Operators

Contact Party: Gilbert P. Quintana, Regulatory Consultant
Telephone: 505-852-4481

Part III

Proposed Injection Well Data: Please refer to Amstar Exhibits No. 2 and No. 3 entitled, "Wellbore Schematic Current Status" and "Proposed Injection Well Schematic", respectively. Both schematics have included answers to Portion A and Portion B of Part III of OCD Form C-108.

Part IV

This is a new application and is not an expansion of an existing project. There is no Division Order associated with this application.

Part V

Well's area of review: Amstar Exhibit No. 4 entitled, "Area Review Map" shows all wells and leases within two miles of the proposed well. Two, one, and one half mile radius' have been drawn around the proposed well. The one-half mile circle identifies the wells "Area of Review".

Part VI

This portion requires a tabulation of all wells within the "Area of Review" which have penetrated the proposed injection interval. Amstar Exhibit No. 4, "Area of Review Map" shows there are **no wells** within the review area of the proposed well.

Part VII

Data on the proposed operation of the saltwater disposal well:

1. Proposed Injection Rates: Average: 1 BPM
Maximum: 4.5 BPM

Proposed Injection Volumes: Average: 1,450 BPD
Maximum: 2,000 BPD

2. The system shall be an open system. This is meant in the sense that it will be available as a commercial system to those parties that have been contracted to dispose of produced water into the subject well. Physically, the system shall be closed to the atmosphere and shall consist of an injection valve connection with an appropriate meter for measurement of rates and volumes of produced water to be disposed of.

3 Proposed Injection Pressures: Average: Vacuum Injection
Maximum: 2,172 psi
This is based on the OCD's standard 0.2 psi/ft depth to the uppermost injection perforation limitation. The subject well's uppermost perforation is at 10,860 feet. It should be noted that the well is expected to take water under "vacuum" conditions.

4. The sources of injection waters will be produced waters from the general area in which the well is located. Injected waters should include Bonespring, Wolfcamp, and Morrow. Compatibility of the disposal waters with the injected waters is expected because the waters originated from the same formations in the general area.

5. Chlorides for the Wolfcamp and Morrow formations in this area are 58,000-120,000 ppm and 33,000 ppm, respectively. This is based on the U.S.G.S. Basin Report 75-579, entitled "Water Quality of Oil & Gas Wells in the Permian"

Part VIII

Geologic data on injection zones:

Wolfcamp Formation: The Wolfcamp formation top in the subject well is 10,847 ft (-6,859 ft subsea) and is approximately 728 ft thick. It consists of thin bedded dolomitic shale & sandstone, underlain by a carbonate bank of low porosity of 2-3%, grading into arg. dolomite and dolomite shales.

Penn Formation: The Penn formation top occurs at 11,862 ft (-7,874 ft subsea) and is approximately 318 ft thick. The Penn sequence consists of shales and thin intel-bedded dolomite and clay, grading to thin argillaceous limestone.

Strawn Formation: The Strawn formation top occurs at 12,138 ft (-8,191 ft subsea) and is approximately 300 ft thick. It consists of Arenaceous limestone and shale at the top grading to a massive limestone at the base with porosity of 2-3%.

Atoka Formation: The Atoka formation top occurs at 12,482 ft (-8,494 ft subsea) and is approximately 538 ft thick. It consists of thin bedded shales and limestone with some dolomitic shalestone at the top. The mid-Atoka is characterized by a massive shale grading into a massive carbonate. Its porosity is from 2-3%.

Morrow Formation: The Morrow formation top occurs at 12,844 ft (-8,856 ft subsea) and is approximately 504 ft thick. It consists of limstone, sand, and thin shales interbedded.

Devonian Formation: The Devonian formation top should occur at approximately 14,500 ft (-10,512 ft subsea) and is approximately 300 ft thick.

Fresh Water Sources:

Ogallala Formation: The Ogallala formation is the only source of potable water in the area. The base of the formation can be found at 180 ft as confirmed by Jim Wright of the N.M. State Engineers Office in Roswell.

Santa Rosa Formation: The Santa Rosa formation in this area is not potable as it is salt bearing. Also confirmed by Jim Wright.

Part IX

No stimulation programs have been planned at this time, but should it be necessary 15% HCL with the appropriate volumes for the area to be treated will be used.

Part X

All logs and test data have been previously submitted to the OCD.

Part XI

There are two fresh water wells within a mile of the proposed well:
(Note Amstar Exhibit No. 4 for the well locations)

Fresh Water Well No. 1: This is a domestic well and is located in the SW/4SE/4 NE/4, Sec. 35, T18S,R34E. It is completed in the Ogallala. The State Engineers Office has no other information on the well except that the well tested 21 ppm chlorides in July 1984.

Fresh Water Well No. 2: This well was drilled by Mesa Petroleum as a drilling fluid water supply well. It is located in the NW/4 NW/4, Sec. 35, T18S, R34E. It is completed in the Ogallala to a TD of 180 ft. Perforated at 119-180 ft with the top of water at 130 ft. It is cased with 6 5/8 in casing to TD.

There are two other fresh water wells in the area, but not within a mile of the proposed well. They are denoted on the map as Fresh Water Well No. 3 and No. 4. Information is available on this if requested.

Part XII

Affirmative Statement:

I hereby affirm that I 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.

Gilbert P. Quintana

Gilbert P. Quintana, Regulatory Consultant

Note Amstar Exhibit . 6, "Geologic Contour Map" of the Strawn formation.

Part XIII

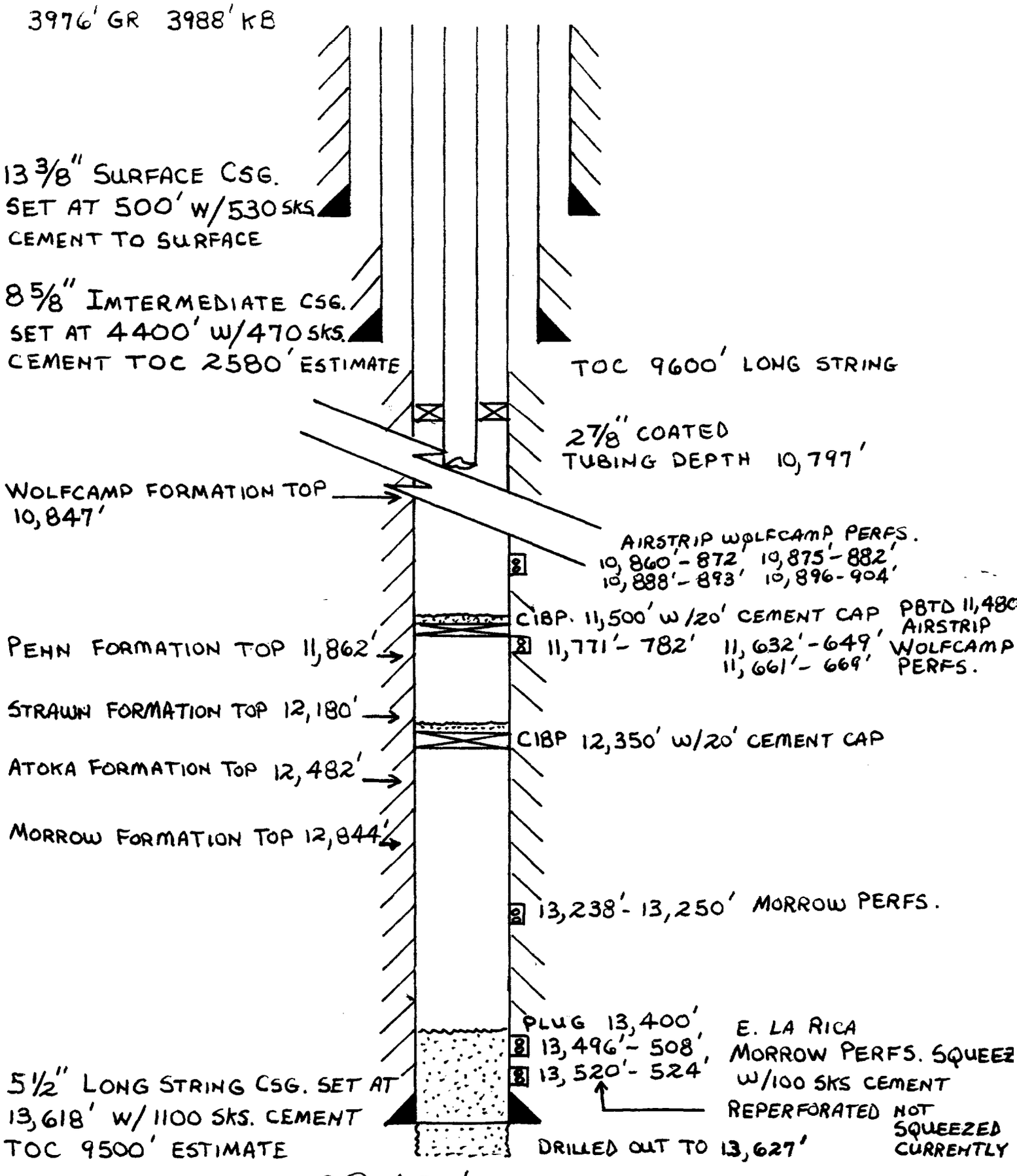
Note Amstar Exhibit No. 7 and No. 8 entitled, " Area of Review Offset Operators" and "Proof of Notice" respectively.

Part XIV

Note Amstar Exhibit No. 1, OCD Form C-108 for Certification.

AMSTAR ENERGY CORPORATION

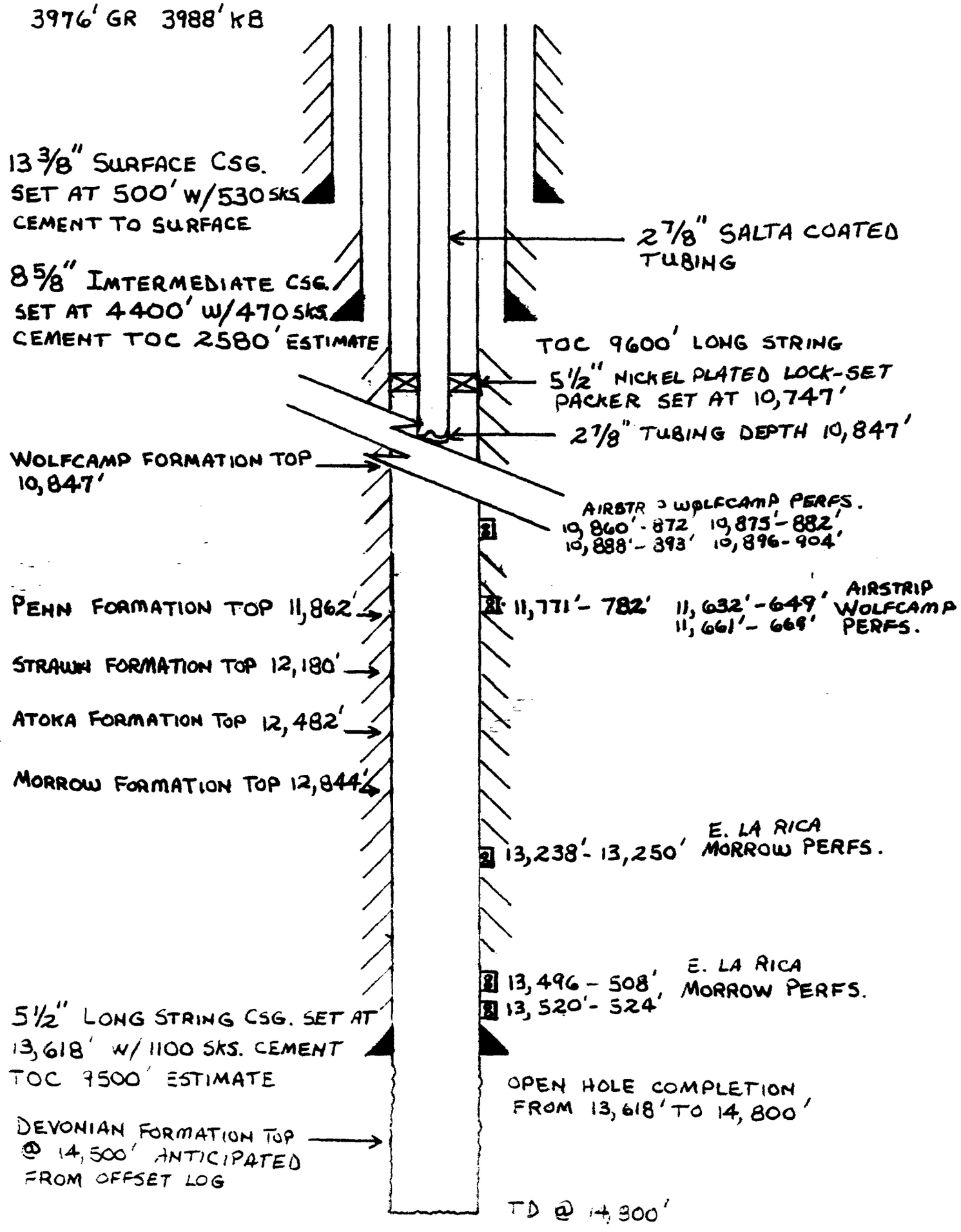
NEW MEXICO "A" STATE WELL NO. 1
660' FSL & 2080' FEL OF SECTION 35
TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM, LEA CO., N.M.



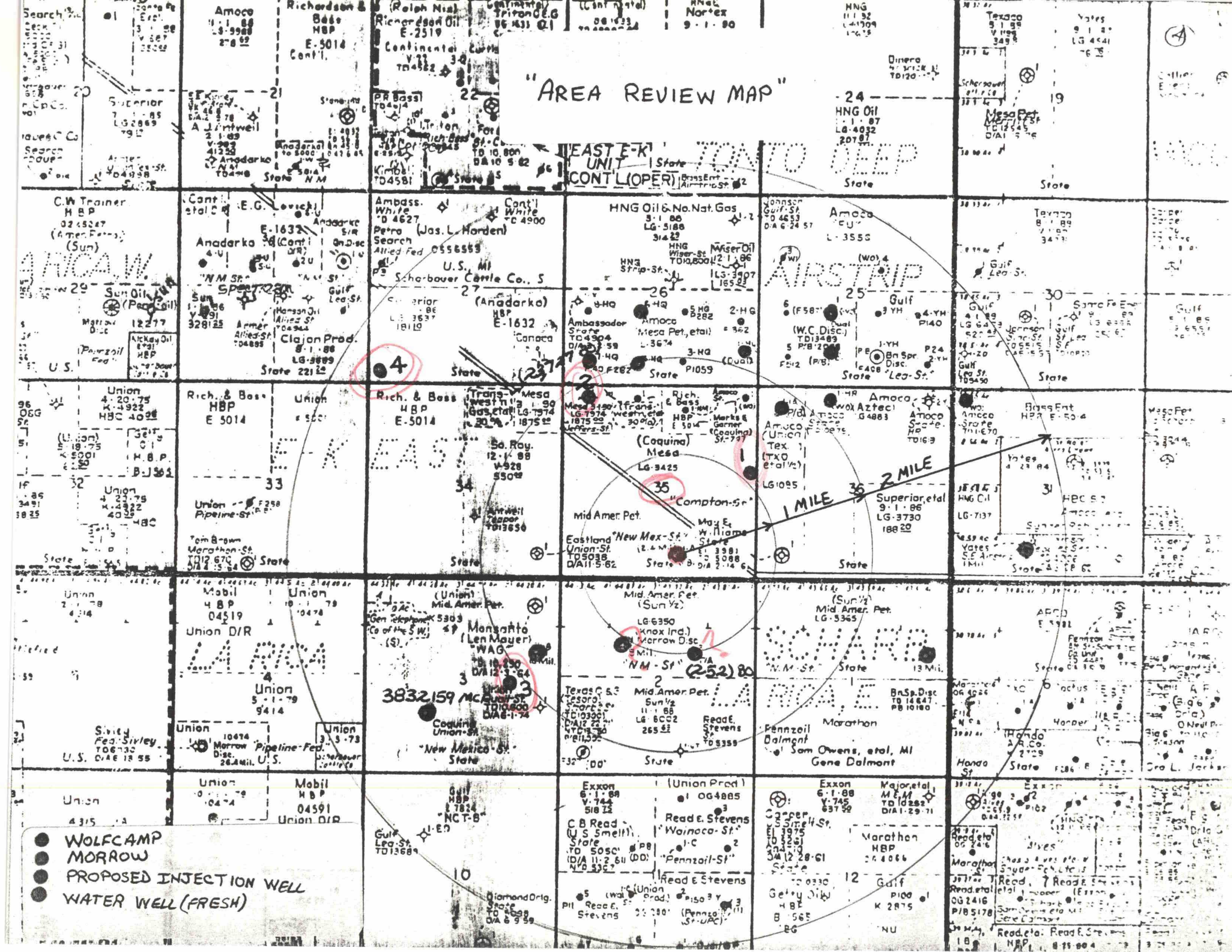
"WELLBORE SCHEMATIC"
"CURRENT STATUS"

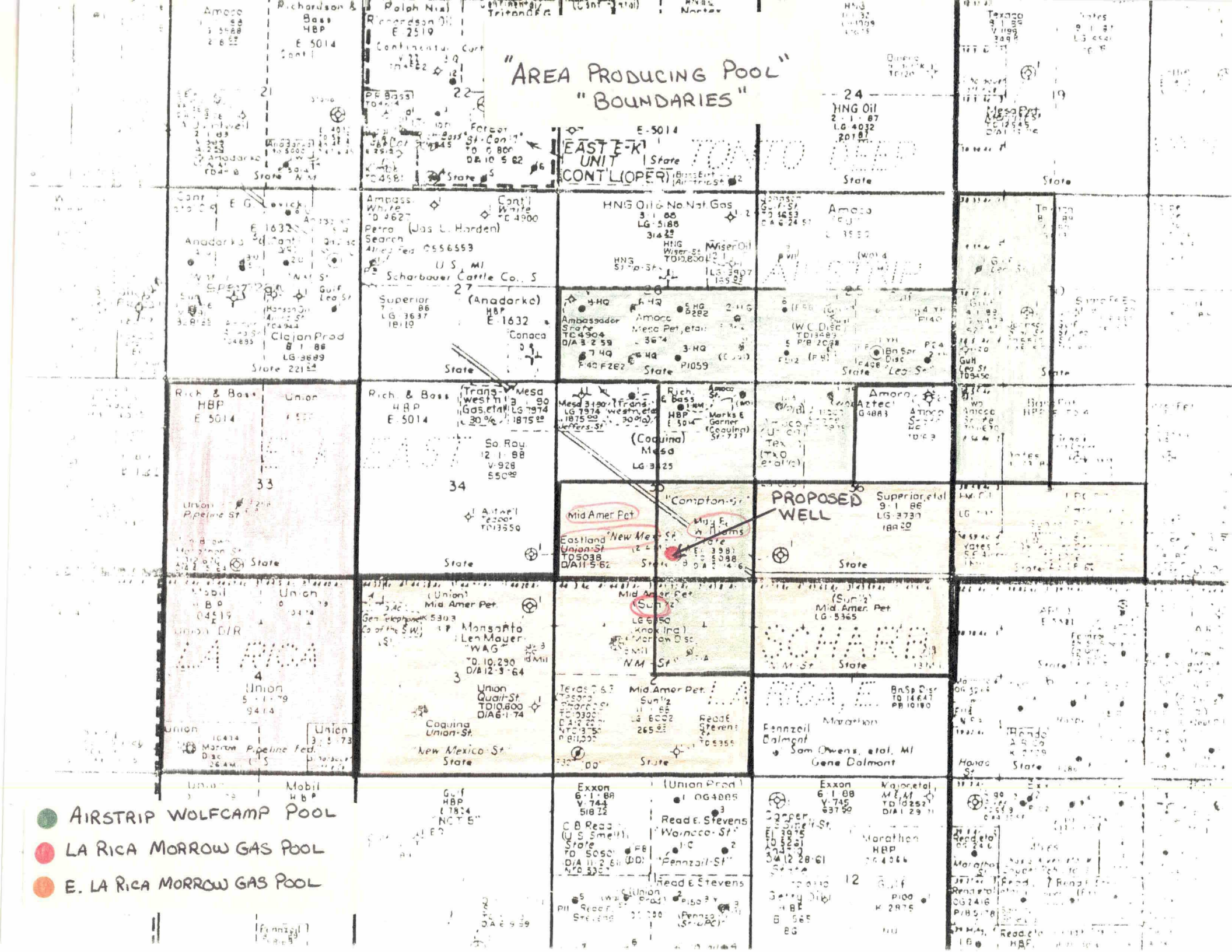
AMSTAR ENERGY CORPORATION

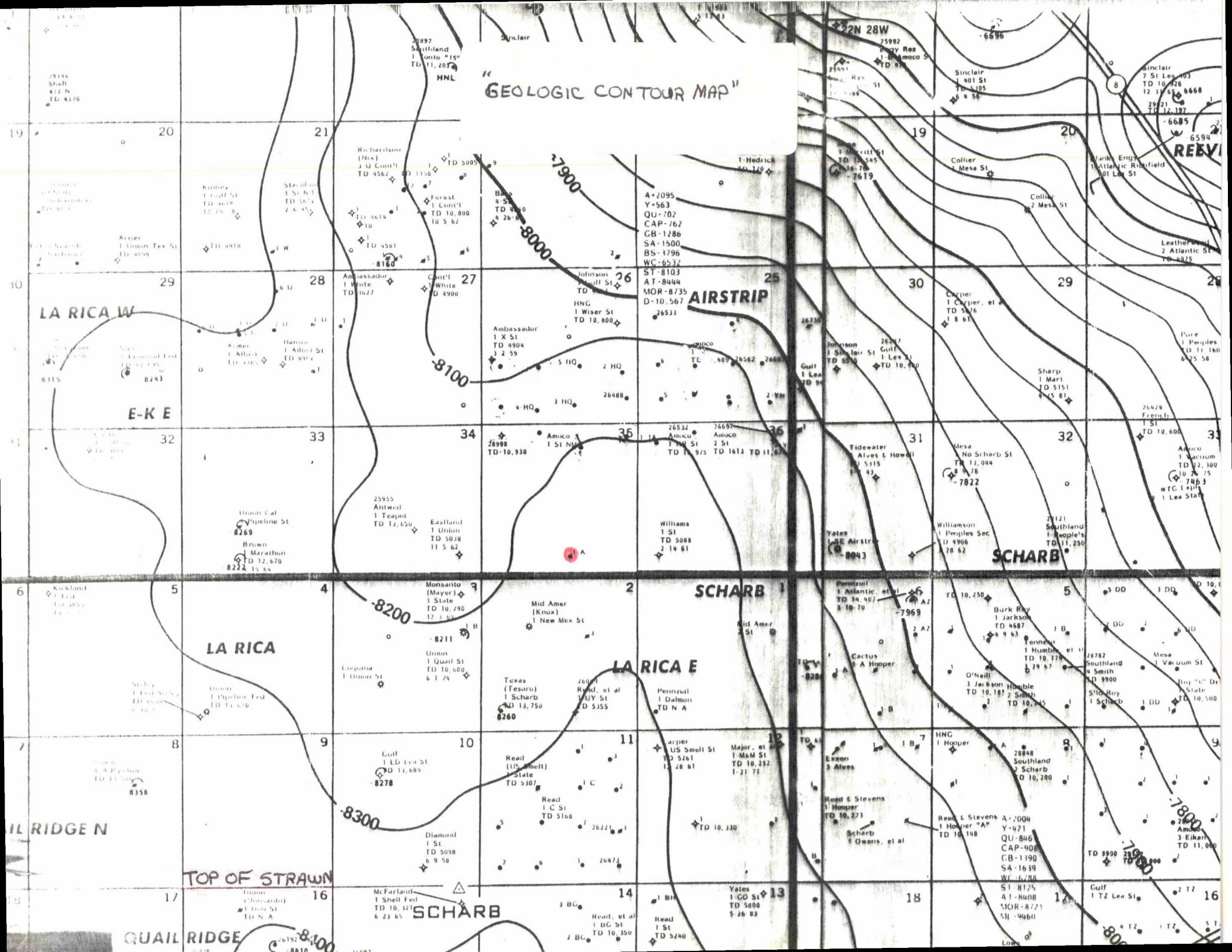
NEW MEXICO "A" STATE WELL NO. 1
660' FSL & 2080' FEL OF SECTION 35
TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM, LEA CO., N.M.

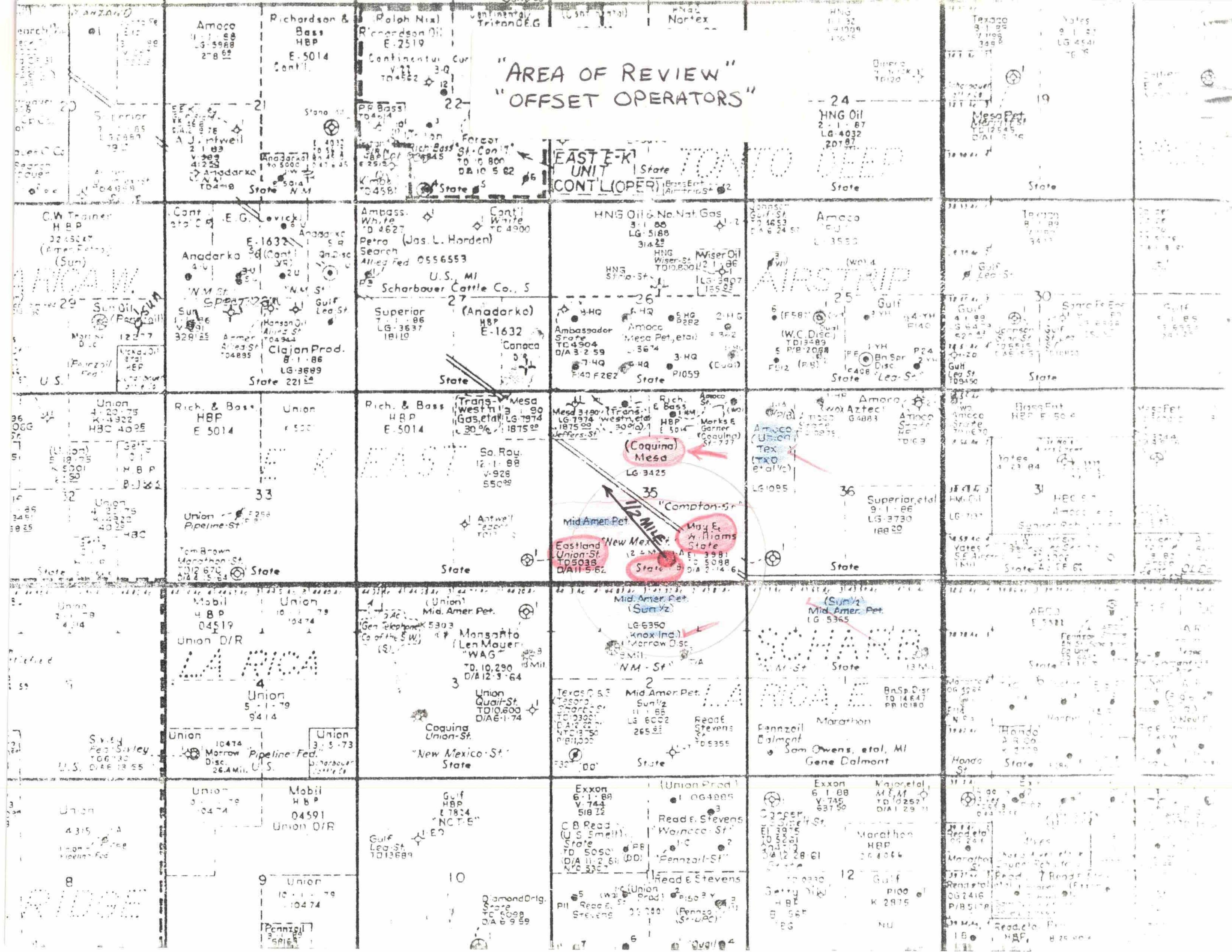


"PROPOSED INJECTION WELL SCHEMATIC"


"AREA REVIEW MAP"
EAST E-K UNIT CONT'L (OPER)
1 MILE
2 MILE
WOLFCAMP
MORROW
PROPOSED INJECTION WELL
WATER WELL (FRESH)


"AREA PRODUCING POOL"
"BOUNDARIES"
EAST E-K UNIT CONT'L (OPER)
E-5014
PROPOSED WELL
AIRSTRIP WOLFCAMP POOL
LA RICA MORROW GAS POOL
E. LA RICA MORROW GAS POOL


"GEOLOGIC CONTOUR MAP"
LA RICA W
E-K E
LA RICA
LA RICA E
AIRSTRIP
SCHARB
IL RIDGE N
QUAIL RIDGE
TOP OF STRAWN
-7900
-8000
-8100
-8200
-8300
A+2095
Y+563
QU-702
CAP-762
GB-1286
SA-1500
BS-1796
WC-6532
ST-8103
AT-8444
MOR-8735
D-10,567
Y+2004
Y-421
QU-846
CAP-908
GB-1390
SA-1639
ST-8125
AT-8408
MOR-8771



"AREA OF REVIEW"
"OFFSET OPERATORS"
EAST E-K UNIT CONT'L (OPER)
1/2 MILE
Coquina Mesa
LG-3425
"Compton-St"
May E. Williams State
Eastland Union-St. TD5038 D/A11-5-62
Mid Amer Pet.
"New Mex"
Mid. Amer. Pet. (Sun 1/2)
LG-6350 Knox Ind. Morrow Disc.
N.M.-St
Amoco (Union) Tex (TXO et al 1/2)
HNG Oil & No. Nat. Gas
Ambassador State TC4904
Amoco Mesa Pet, et al
Superior, et al 9-1-86 LG-3730
HNG Oil 2-1-87 LG-4032
Richardson & Bass HBP E-5014 Cont'l.
Amoco
Rich. & Bass HBP E 5014
Union
Mobil HBP 04519 Union D/R
Union Pipeline-St
Union Quail-St. TD10,600 D/A6-1-74
Coquina Union-St.
"New Mexico-St" State
Monsanto (Len Mayer) "WAG" TD. 10,290 D/A 12-3-64
Mid Amer Pet. Sun 1/2 LG 6002
Read & Stevens
Pennzoil Dalmont
Sam Owens, et al, MI Gene Dalmont
Marathon
Exxon
Gulf HBP "NCT-E"
Mobil HBP 04591 Union D/R
Anadarko
Superior 7-1-86 LG-3637
Scharbauer Cattle Co.
U.S., MI
Clajon Prod. 8-1-86 LG-3689
Sun Oil
C.W. Trainer HBP
So. Roy. 12-1-88 V-928
Antweil
Tom Brown Marathon-St.
State
LA RICA
SCHARB
AIRSTRIP
TONTO DEEP

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

● SEND to: Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one)
☑ Show to whom and date delivered ..... ¢
☐ Show to whom, date, and address of delivery .. ¢
2. ☐ RESTRICTED DELIVERY ¢
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL $

3. ARTICLE ADDRESSED TO:
Union Texas Petroleum
4000 N. Big Spring #500
Midland, Texas 79701

4. TYPE OF SERVICE:
☐ REGISTERED ☐ INSURED
☑ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☐ Authorized agent
[signature]

5. DATE OF DELIVERY
7-2-86

POSTMARK

6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE:

7a. EMPLOYEE'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

● SEND to: Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one)
☑ Show to whom and date delivered ..... ¢
☐ Show to whom, date, and address of delivery ¢
2. ☐ RESTRICTED DELIVERY ¢
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL $

3. ARTICLE ADDRESSED TO:
TXO
900 Wilco Bldg.
Midland, Texas 79701

4. TYPE OF SERVICE:
☐ REGISTERED ☐ INSURED
☑ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☐ Authorized agent
Rayanne Pittman

5. DATE OF DELIVERY
7-2-86

POSTMARK

6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE:

7a. EMPLOYEE'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

● SEND to: Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one)
☑ Show to whom and date delivered ..... ¢
☐ Show to whom, date, and address of delivery ¢
2. ☐ RESTRICTED DELIVERY ¢
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL $

3. ARTICLE ADDRESSED TO:
Knox Industry, Inc.
P.O. Box 3023
Midland, Texas 79702

4. TYPE OF SERVICE:
☐ REGISTERED ☐ INSURED
☑ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☐ Authorized agent
Diana Nelson

5. DATE OF DELIVERY
7-2-86

6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE:

7a. EMPLOYEE'S INITIALS

JUL 1986 USPO

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

● SEND to: Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one)
☑ Show to whom and date delivered ..... ¢
☐ Show to whom, date, and address of delivery ¢
2. ☐ RESTRICTED DELIVERY ¢
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL $

3. ARTICLE ADDRESSED TO:
Amoco Prod. Co.
Box 68
Hobbs, N.M. 88240

4. TYPE OF SERVICE:
☐ REGISTERED ☐ INSURED
☑ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☐ Authorized agent
[signature]

5. DATE OF DELIVERY

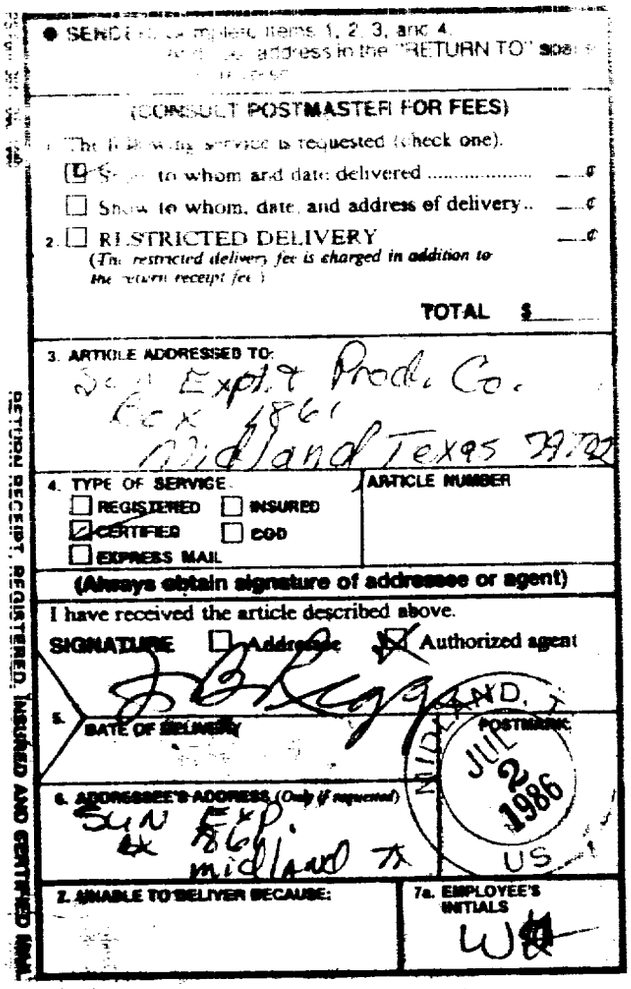
6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE:
7-3-86

7a. EMPLOYEE'S INITIALS

JUL 1986 USPO

PROOF OF SERVICE



● SEND[illegible] complete items 1, 2, 3, and 4.
[illegible] address in the "RETURN TO" space on the reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
☒ Show to whom and date delivered ..... ¢
☐ Show to whom, date, and address of delivery .. ¢
2. ☐ RESTRICTED DELIVERY ¢
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL $

3. ARTICLE ADDRESSED TO:
Sun Exp. & Prod. Co.
Box 4861
Midland Texas 79702

4. TYPE OF SERVICE:
☐ REGISTERED ☐ INSURED
☒ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☒ Authorized agent

5. DATE OF DELIVERY

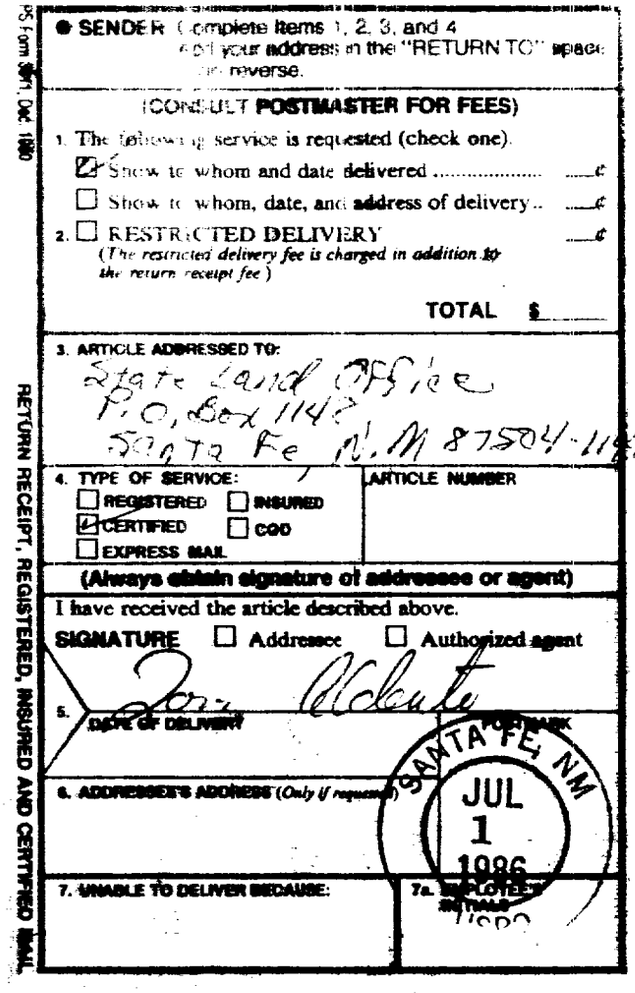
POSTMARK: MIDLAND, TX JUL 2 1986 US

6. ADDRESSEE'S ADDRESS (Only if requested)
Sun Exp.
Box 4861
Midland Tx

7. UNABLE TO DELIVER BECAUSE:

7a. EMPLOYEE'S INITIALS
WH

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL



PS Form 3811, Dec. 1980

● SENDER Complete items 1, 2, 3, and 4
Add your address in the "RETURN TO" space on the reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
☒ Show to whom and date delivered ..... ¢
☐ Show to whom, date, and address of delivery .. ¢
2. ☐ RESTRICTED DELIVERY ¢
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL $

3. ARTICLE ADDRESSED TO:
State Land Office
P.O. Box 1148
Santa Fe, N.M. 87504-1148

4. TYPE OF SERVICE:
☐ REGISTERED ☐ INSURED
☒ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☐ Authorized agent

5. DATE OF DELIVERY

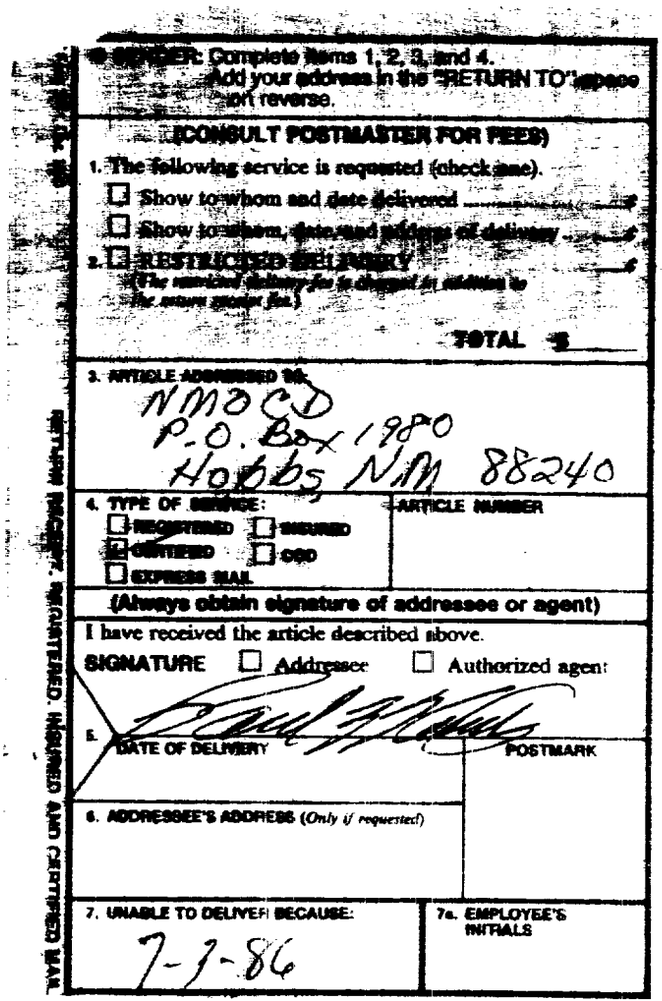
POSTMARK: SANTA FE, NM JUL 1 1986

6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE:

7a. EMPLOYEE'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL



● SENDER: Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
☐ Show to whom and date delivered ..... ¢
☐ Show to whom, date, and address of delivery .. ¢
2. ☐ RESTRICTED DELIVERY ¢
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL $

3. ARTICLE ADDRESSED TO:
NMOCD
P.O. Box 1980
Hobbs NM 88240

4. TYPE OF SERVICE:
☐ REGISTERED ☐ INSURED
☒ CERTIFIED ☐ COD
☐ EXPRESS MAIL

ARTICLE NUMBER

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐ Addressee ☐ Authorized agent

5. DATE OF DELIVERY

POSTMARK

6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE:
7-1-86

7a. EMPLOYEE'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

Memo

From

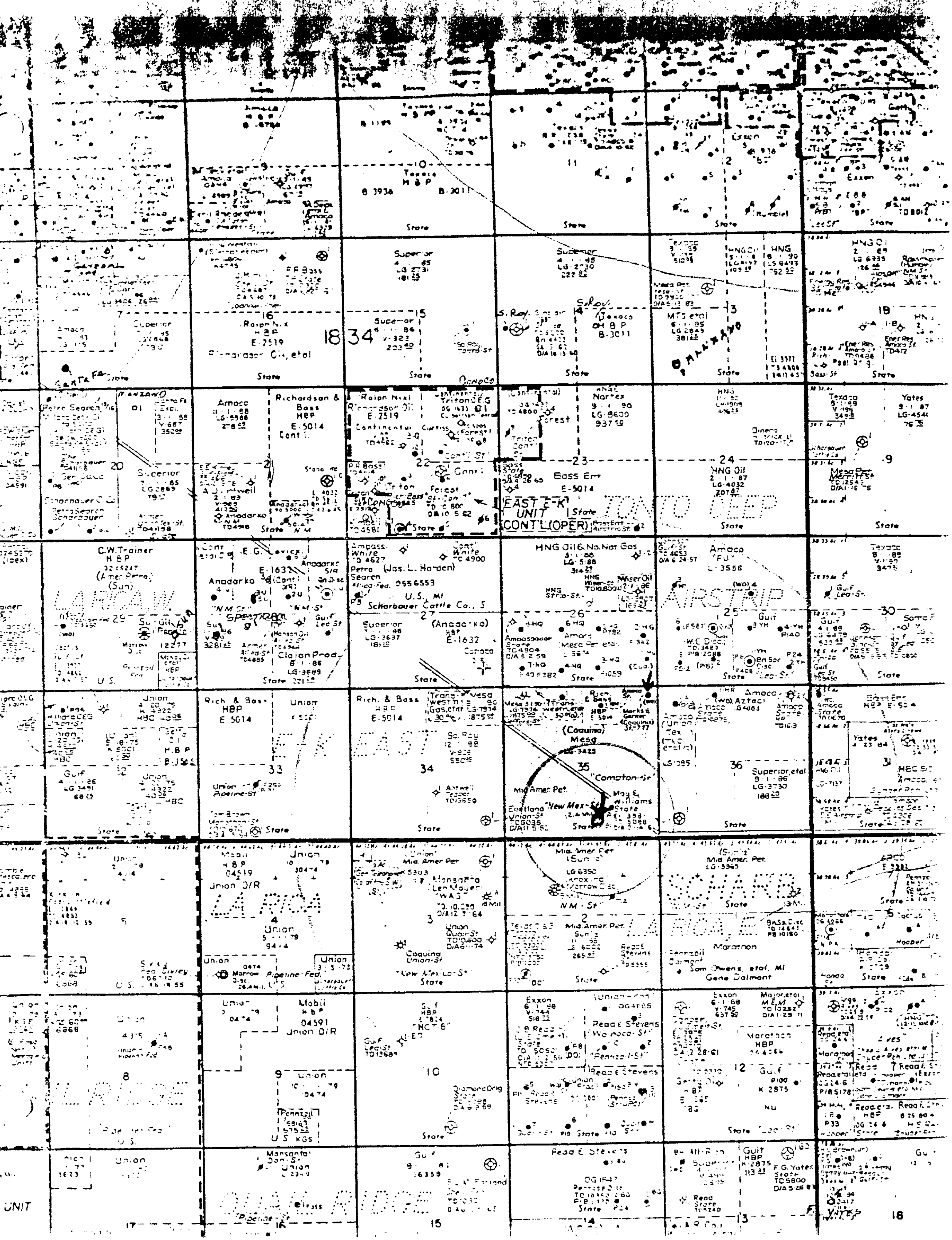
DAVID CATANACH
Petroleum Engineer

To Amstar Energy Corp.

SWD well
660 FSL
2080 FEL Se. 35, T-18S, R-34E
Lea County, New Mexico.
Top Wolfcamp - down through Morrow.
~~[illegible] [illegible]~~
~~[illegible] - [illegible]~~
N.M. "A" State No. 1
9600 - 13,637
Bone Springs through Morrow

(called in by Gilbert P. Quintana w/ the Public Service Commission 11:30 AM)

Oil Conservation Division
PO Box 2088, Santa Fe, New Mexico 87501



Texaco
H B P
B 3936
B-3011
State
Superior
LG-2730
Superior
Exxon
Humble
HNG Oil
7
16
15
14
13
18
Amoco
Superior
Raion Nix
H B P
E-2519
Richardson Oil, etal
18 34
Superior
Santa Fe
Texaco
OH B P
B-3011
MTS etal
Petro Search
20
21
22
23
24
Amoco
Richardson & Bass
HBP
E-5014
Cont'l
Superior
Continental
Forest
Bass Ent
E-5014
EAST E-K UNIT
CONT'L (OPER)
TONTO DEEP
Nortex
LG-8600
HNG Oil
LG-4032
Texaco
Yates
Scharbauer
Anadarko
C.W. Trainer
H B P
(Sun)
LA RICA W.
29
28
27
26
25
30
E.G. Levick
E-1632
Anadarko
Amoco
L-3556
Petro Search
(Jas. L. Harden)
U.S. MI
Scharbauer Cattle Co.
HNG Oil & No. Nat. Gas
AIRSTRIP
Superior
(Anadarko)
HBP
E-1632
Clajon Prod.
Amoco
Gulf
Union
Rich. & Bass
HBP
E 5014
32
33
34
35
36
31
E-K EAST
(Coquina)
Mesa
"Compton-St"
Mid Amer. Pet.
May & Williams
State
"New Mex-St"
Superior, etal
LG-3730
Yates
Gulf
U.S.
Mobil
H B P
04519
Union O/R
LA RICA
Union
Mid Amer. Pet.
Monsanto
Len Mayer
NM-St
SCHARB
LA RICA E.
Coquina
Union-St
New Mexico-St
Marathon
Sam Owens, etal, MI
Gene Dalmont
5
4
3
2
1
Exxon
Reod & Stevens
Gulf
K 2875
Marathon
HBP
8
9
10
11
12
Union
Mobil
04591
Union O/R
Diamond Drlg
U.S. KGS
Read & Stevens
Monsanto
Gulf
F.G. Yates
State
TC 5800
UNIT
17
16
15
14
13
18
YATES

SANTA FE, NEW MEXICO 87501

Case 8934

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Operator: Mid-America Petroleum, Inc.

Address: P. O. Box 2515, Midland, TX 79702

Reason(s) for filing (Check proper box)

- New Well [ ]
- Recompletion [X]
- Change in Ownership [ ]
- Change in Transporter of: Oil [ ] Dry Gas [ ] Casinghead Gas [ ] Condensate [ ]
- Other (Please explain)

If change of ownership give name and address of previous owner

THIS WELL HAS BEEN PLACED IN THE POOL DESIGNATED BELOW. IF YOU DO NOT CONCUR NOTIFY THIS OFFICE. (7-1-83)

DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
New Mexico "A" State	1	~~Airpost~~ Strip Wolfcamp R-7193	State, Federal or Fee State	LG 3425

Location

Unit Letter 0 : 660 Feet From The South Line and 2080 Feet From The East

Line of Section 35 Township 18-S Range 34-E , NMPM, Lea County

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [X] or Condensate [ ]	Address (Give address to which approved copy of this form is to be sent)
The Permian Corporation	P. O. Box 1183, Houston, TX 77001
Name of Authorized Transporter of Casinghead Gas [X] or Dry Gas [ ]	Address (Give address to which approved copy of this form is to be sent)
Warren Petroleum Company	P. O. Box 1589, Tulsa, OK 74102

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	0	35	18S	34E	yes	10-12-82

If this production is commingled with that from any other lease or pool, give commingling order number:

COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
	X					X		

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
7-24-82	9-21-82	13,618	11,480

Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth
3976 GR 3988 KB	Wolfcamp	10,850	10,797

Perforations	Depth Casing Shoe
10,862-872 - 10,875-882 - 10,888-893 - 10,896-904 - 10,906-910	

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
17-1/2"	13-3/8"	520	500
11"	8-5/8"	4400	220 Lite & 250 Cl. C
7-7/8"	5-1/2"	13,618	1100 Cl. H.

TEST DATA AND REQUEST FOR ALLOWABLE

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
8-21-82	9-24-82	Pump	
Length of Test	**Tubing Pressure**	**Casing Pressure**	**Choke Size**
24 hrs.	-	Packer	NA
Actual Prod. During Test	**Oil - Bbls.**	**Water - Bbls.**	**Gas - MCF**
	40	-0-	

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pitot, back pr.)	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**

CERTIFICATE OF COMPLIANCE

OIL CONSERVATION DIVISION

NEW MEXICO

OIL CONSERVATION DIVISION

P. O. BOX 1980

HOBBS, NEW MEXICO

88240

Date December 17, 1982

NOTICE OF LLANO'S GAS DISCONNECTION:

OPERATOR: Mid-America Petroleum, Inc.

LEASE: New Mexico State "A"

WELL NUMBER AND UNIT: 1 O

LOCATION: 35 - 18S - 34E

POOL: East La Rica Morrow

DATE WELL DISCONNECTED: December 8, 1982 10:00 A.M.

LLANO'S STATION NUMBER: 320

LLANO, INC.
TRANSPORTER

O.K. Klaar

REPRESENTATIVE
AL KLAAR

VICE PRESIDENT-ENGINEERING
TITLE

xc: Oil Conservation Division, Box 2088, Santa Fe, New Mexico 87501

Month of Test	Bbls. Condensate/MMCF	Gravity of Condensate

ENERGY AND MINERALS DEPARTMENT — SANTA FE, NEW MEXICO

Mid-American Petroleum, Inc. (Address) P. O. Box 2515, Midland, Texas (Zip) 79702 (Date) September 1985 Page 1 of 1

NAME (Underline) Lease Name / POOL UNIT SEC TWP RNG	WELL STATUS	INJECTION VOLUME	INJECTION PRESS.	TOTAL LIQUIDS PRODUCED MONTHLY OIL ALLOWABLE	TOTAL LIQUIDS PRODUCED ACTUAL BARRELS PRODUCED	TOTAL LIQUIDS PRODUCED BARRELS OF WATER PRODUCED	GAS PRODUCED (MCF)	DAYS PROD.	DISPOSITION OF GAS SOLD	DISPOSITION OF GAS TRANSPORTER	DISPOSITION OF GAS OTHER	DISPOSITION OF GAS CODE	DISPOSITION OF OIL OIL ON HAND AT BEG. OF MONTH	DISPOSITION OF OIL BARRELS TO TRANSPORTER	DISPOSITION OF OIL TRANSPORTER	DISPOSITION OF OIL OTHER	DISPOSITION OF OIL CODE	DISPOSITION OF OIL OIL ON HAND AT END OF MONTH
(*) - Include State Land Lease Number or Federal Lease Number																		
TRIP WOLFCAMP																		
State #3																		
2 19S 34E	T	WELL IS TEMPORARILY ABANDONED																
A State #1																		
35 18S 34E	T	WELL IS TEMPORARILY ABANDONED																
IND GROUP 10																		
X																		
12 23S 34 E	T	WELL IS TEMPORARILY ABANDONED																
ECTION																		
CA MORROW, EAST (Gas)																		
M. State #1									48	WAR		U						
2 19S 34E	F				79	0	12225	26	11735	LL	442		118	0	PER			197
M. State #2																		
1 19S 34E	D	WELL IS TEMPORARILY ABANDONED																
State B										WAR		U						
3 19S 34E	F	Shut In								NG								

DISTRIBUTION
ORIGINAL TO OCC SANTA FE
ONE COPY TO OCC DIST. OFFICE
ONE COPY TO TRANSPORTER(S)

Form C-115
Revised 10-1-78

STATUS CODE
F.....FLOWING
P.....PUMPING
G.....GAS LIFT
S.....SHUT IN
T.....TEMP ABANDONED
I.....INJECTION
D.....DISCONTINUED

"OTHER" GAS DISPOSITION CODE
X.....USED OFF LEASE (Discontinued)
B.....USED FOR DRILLING (Discontinued)
G.....GAS LIFT
L.....LOST (MCF ESTIMATED)
E.....EXPLANATION ATTACHED
R.....REPRESSURING OR PRESSURE MAINTENANCE
V.....VENTED

"OTHER" OIL DISPOSITION CODE
C.....CIRCULATING OIL
L.....LOST
S.....SEDIMENTATION (BS&W)
E.....EXPLANATION ATTACHED

I HEREBY CERTIFY THAT THE INFORMATION GIVEN IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE

Sondra G. Lawbaugh
(Name)

Sondra G. Lawbaugh, Prod. Clerk
(Title)

FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

State | Fee

5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM C-101) FOR SUCH PROPOSALS.)

7. Unit Agreement Name

1. OIL WELL ☐ GAS WELL ☒ OTHER-

2. Name of Operator
Mid-America Petroleum, Inc.

8. Farm or Lease Name
New Mexico "A" Stat

3. Address of Operator
P. O. Box 2515, Midland, TX 79702

9. Well No.
1

4. Location of Well
UNIT LETTER 0 , 660 FEET FROM THE South LINE AND 2080 FEET FROM THE East LINE, SECTION 35 TOWNSHIP 18S RANGE 34E NMPM.

10. Field and Pool, or Wildcat
East La Rica

15. Elevation (Show whether DF, RT, GR, etc.)
3976' GR 3988 KB

12. County
Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONM
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER Squeeze perfs & reperforate	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any work) SEE RULE 1103.

1. RIH milled over permanent packer and pulled same.
2. Squeezed perfs 13,496-508; 13,520-524 with 100 sx Class "H" cement, 1/2 BPM 6500 p
3. RIH w/bit tagged top of cement @ 12,895', drilled out cement to 13,627'.
4. Reperforated Morrow Sand 13,520-524 with 2 JSPF and acidized with 500 gals 7-1/2% HCL. Swabbed and tested with no results.
5. RIH and set CIBP @ 12,350' and capped w/20' cement.
6. Perforated Wolfcamp formation 11,771-11,782 1 JSPF (12 holes). Acidized w/500 ga HCL, swabbed and tested. No shows.
7. RIH and set RBP @ 11,700'. Perforated Wolfcamp 11,632-649; 11,661-669 1 JSPF. Acidized perfs w/7500 gals 15% MSL acid. Flowed and swabbed with no shows.
8. Recovered RBP, set CIBP 11,500', capped with 20' cement. PBTD 11,480'.
9. RIH and perforated Upper Wolfcamp 10,860-10872; 10,875-882; 10,888-893; 10,896-90 10,906-10,910. Acidized with 1500 gals 15% HCL. Presently flowing and testing.

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

SIGNED E. L. Robinson TITLE Engineer DATE 8-31-82

APPROVED BY ORIGINAL SIGNED BY JERRY SEXTON DISTRICT I SUPV. TITLE DATE SEP 3

CONDITIONS OF APPROVAL, IF ANY:

Testing Method (pitot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

CERTIFICATE OF COMPLIANCE

OIL CONSERVATION DIVISION
SEP 2 1982

Change in Ownership ☐ Casinghead Gas ☐ Condensate ☐

If change of ownership give name and address of previous owner _____

DESCRIPTION OF WELL AND LEASE

P-7009 4-1-82

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease (State, Federal or Fee)	Lease No.
New Mexico "A" State	1	East La Rica Morrow	State	LG 3425

Location

Unit Letter O ; 660 Feet From The South Line and 2080 Feet From The East

Line of Section 35 Township 18S Range 34E , NMPM, Lea County

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☐ or Condensate ☒	Address (Give address to which approved copy of this form is to be sent)
The Permian Corporation	P. O. Box 1183, Houston, TX 77001
Name of Authorized Transporter of Casinghead Gas ☐ or Dry Gas ☒	**Address (Give address to which approved copy of this form is to be sent)**
Lano Inc.	P. O. Box 1320, Hobbs, New Mexico 88240

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	O	35	18S	34E	No	Within 45 days

If this production is commingled with that from any other lease or pool, give commingling order number: _____

COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
		X	X					

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
8-13-81	2-15-82	13,618	13,400
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
3976' GR 3988 KB	Morrow	13,238	13,050
Perforations			**Depth Casing Shoe**
13,238 - 13,250 (13 holes)			NA

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
17-1/2"	13-3/8	520	500
11"	8-5/8"	4400	220 Lite + 250 Cl C
7-7/8"	5-1/2"	13,618'	1100 Cl H

TEST DATA AND REQUEST FOR ALLOWABLE (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	**Tubing Pressure**	**Casing Pressure**	**Choke Size**
Actual Prod. During Test	**Oil-Bbls.**	**Water-Bbls.**	**Gas-MCF**

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
2880	4 Hrs.	52.8	49.9
Testing Method (pitot, back pr.)	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**
back pressure	2050	packer	6/64-8/64-6/64

CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Barbara Mayer
(Signature)

Engineering Assistant
(Title)

March 3, 1982

OIL CONSERVATION DIVISION

APPROVED APR 17 1982, 19 ____

BY ORIGINAL SIGNED BY JERRY SEXTON

TITLE DISTRICT I SUPE

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of operator, well name or number, or transporter, or other such change of condition.

DISTRIBUTION
SANTA FE
FILE
U.S.G.S.
LAND OFFICE
OPERATOR

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease: State [X] Fee [ ]
5. State Oil & Gas Lease No.

TYPE OF WELL: OIL WELL [ ] GAS WELL [X] DRY [ ] OTHER

7. Unit Agreement Name

TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEPEN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] OTHER

8. Farm or Lease Name: New Mexico "A" State

Name of Operator: Mid-America Petroleum, Inc.

9. Well No.: 1

Address of Operator: P. O. Box 2515, Midland, TX 79702

10. Field and Pool, or Wildcat: East La Rica

Location of Well

UNIT LETTER 0 LOCATED 660 FEET FROM THE South LINE AND 2080 FEET FROM East LINE OF SEC. 35 TWP. 18S RGE. 34E NMPM

12. County: Lea

Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Casinghead
8-13-81	11-6-81	2-15-82	3976' GR 3988 KB	

Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By →	Rotary Tools	Cable Tools
13,618	13,400			Rotary	

Producing Interval(s), of this completion – Top, Bottom, Name: 13,238 - 13,250 Morrow

25. Was Directional Survey Made: No

Electric and Other Logs Run: DLL & CNL/FDC

27. Was Well Cored: No

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	520	17-1/2"	500 sx Cl C; Circ.	None
8-5/8"	24# & 32#	4400	11"	220 sx Lite + 250 sx Cl C	None
5-1/2"	17# & 20#	13,618'	7-7/8"	1100 sx Cl. H	None

LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
None				

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2-7/8	13,050	13,020

Perforation Record (Interval, size and number)

13,238 - 13,250 (13 holes)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
13,238-13,250	250 gals 7-1/2% Acid

PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping – Size and type pump)	Well Status (Prod. or Shut-in)
12-4-81	Flowing to clean up	Shut in

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil – Bbl.	Gas – MCF	Water – Bbl.	Gas – Oil Ratio
2-15-82	4	6/64 8/64 6/64	→	8.8	480	8.1	54,545

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil – Bbl.	Gas – MCF	Water – Bbl.	Oil Gravity – API (Corr.)
2050	Packer	→	52.8	2880	48.6	49.9

Disposition of Gas (Sold, used for fuel, vented, etc.): Vented

Test Witnessed By: Otis Engineering

35. List of Attachments: C-122

36. *I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.*

[signature] DATE 3-3-82

5502 WEST INDUSTRIAL STREET • MIDLAND, TEXAS 79703
PHONE: (915) 697-3166

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico				Northwestern New Mexico			
T. Anhy	1889	T. Canyon		T. Ojo Alamo		T. Penn. "B"	
T. Salt		T. Strawn	12,180	T. Kirtland-Fruitland		T. Penn. "C"	
B. Salt		T. Atoka	12,676	T. Pictured Cliffs		T. Penn. "D"	
T. Yates	3445	T. Miss		T. Cliff House		T. Leadville	
T. 7 Rivers		T. Devonian		T. Menefee		T. Madison	
T. Queen	4720	T. Silurian		T. Point Lookout		T. Elbert	
T. Grayburg	5298	T. Montoya		T. Mancos		T. McCracken	
T. San Andres		T. Simpson		T. Gallup		T. Ignacio Qtzte	
T. Glorieta		T. McKee		Base Greenhorn		T. Granite	
T. Paddock		T. Ellenburger		T. Dakota		T.	
T. Blinebry		T. Gr. Wash		T. Morrison		T.	
T. Tubb		T. Granite		T. Todilto		T.	
T. Drinkard		T. Delaware Sand		T. Entrada		T.	
T. Abo		T. Bone Springs	7,974	T. Wingate		T.	
T. Wolfcamp	10,847	T. Morrow Lime	12,844	T. Chinle		T.	
T. Penn.		T. Morrow Pay	13,227	T. Permian		T.	
T. Cisco (Bough C)		T.		T. Penn. "A"		T.	

OIL OR GAS SANDS OR ZONES

No. 1, from ..... to ..... No. 4, from ..... to .....

No. 2, from ..... to ..... No. 5, from ..... to .....

No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from ..... to ..... feet. .....

No. 2, from ..... to ..... feet. .....

No. 3, from ..... to ..... feet. .....

No. 4, from ..... to ..... feet. .....

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	339	339	Surface Rock	11460	12080	620	Lime & Shale
339	520	181	RB & Shale	12080	12212	132	Shale
520	1550	1030	Anhy. & Shale	12212	13114	902	Lime & Shale
1550	3122	1572	Anhydrite & Salt	13114	13203	89	Shale & Chert
3122	3440	318	Anhydrite	13202	13446	243	Lime & Shale
3440	4440	1000	Anhydrite & Lime	13446	13515	59	Shale
4440	6085	1645	Lime	13515	13618	103	Lime, Shale & Sand
6085	6492	407	Lime & Shale				
6492	8945	2453	Lime				
8945	9200	255	Lime & Chert				
9200	9621	421	Lime & Shale				
9621	9840	219	Lime & Chert				
9840	10181	341	Shale				
10181	10287	106	Dolomite & Lime				
10287	10401	114	Dolomite & Shale				
10401	10508	107	Lime, Dolomite & Shale				
10508	11312	804	Lime & Shale				
11312	11460	148	Lime, Shale & Chert				

RECEIVED
MAR - 4 1982
O.C.D.
HOBBS OFFICE

ENERGY AND MINERALS DEPARTMENT

NO. OF COPIES RECEIVED		
DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-78

5a. Indicate Type of Lease: State [X] Fee [ ]

5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM C-101) FOR SUCH PROPOSALS.)

OIL WELL [ ] GAS WELL [XX] OTHER-

7. Unit Agreement Name

1. Name of Operator
Mid-America Petroleum, Inc.

8. Farm or Lease Name
New Mexico "A" State

2. Address of Operator
P. O. Box 2515, Midland, TX 79702

9. Well No.
1

4. Location of Well
UNIT LETTER 0 , 660 FEET FROM THE South LINE AND 2080 FEET FROM THE East LINE, SECTION 35 TOWNSHIP 18S RANGE 34E NMPM.

10. Field and Pool, or Wildcat
East La Rica

15. Elevation (Show whether DF, RT, GR, etc.)
3976' GR

12. County
Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [ ]
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [ ]	
		OTHER Complete Well [ ]	
OTHER [ ]			

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

MIRU completion rig. Ran correlation logs. Spotted 500 gals. 7-1/2% acid across interval 13,496-13,524'. Perforated Morrow 13,496-13,508' and 13,520-13,524' w/2 shots per foot. Pump spot acid, swab and test. Set blanking plug. Spot 250 gals. 7-1/2% acid across interval 13,238-250'. Perf. 13,238'-250' w/2 shots per foot. RIH and set packer @ 13,020' Swab and test. Shut well in, now preparing to run four point potential test.

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

SIGNED C. I. Love TITLE C. I. Love DATE 2-24-82

APPROVED BY ORIGINAL SIGNED BY JERRY SEXTON DISTRICT I SUPR. TITLE DATE FEB 26 1982

CONDITIONS OF APPROVAL, IF ANY:

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

SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

5a. Indicate Type of Lease: State [X] Fee [ ]

5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL [ ] GAS WELL [X] OTHER:

7. Unit Agreement Name

2. Name of Operator: Mid-America Petroleum, Inc.

8. Farm or Lease Name: New Mexico "A" St.

3. Address of Operator: P. O. Box 2515, Midland, TX 79702

9. Well No.: 1

4. Location of Well: UNIT LETTER 0, 660 FEET FROM THE South LINE AND 2080 FEET FROM THE East LINE, SECTION 35 TOWNSHIP 18S RANGE 34E NMPM.

10. Field and Pool, or Wildcat

15. Elevation (Show whether DF, RT, GR, etc.): 3976 GR

12. County: Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [ ]
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [X]	
OTHER [ ]		OTHER	

17. Describe Proposed or Completed Operations (*Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work*) SEE RULE 1103.

Drilled out from under 8-5/8" casing with a 7-7/8" hole to TD of 13,620'. Ran logs. 338 jts of 5-1/2" csg, set @ 13,618'. Cemented w/1100 sx Class "H". PD @ 4:15 A.M. 11-10-81. Calculated top of cement 9500'.

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

SIGNED Charles J. Rowe TITLE Production Manager DATE 2-19-82

APPROVED BY ____ TITLE ____ DATE ____

CONDITIONS OF APPROVAL, IF ANY:

NO. OF COPIES RECEIVED		
DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

P O BOX 2088
SANTA FE, NEW MEXICO 87501

Revised 1-

5a. Indicate Type of Lease: State [X] Fee

5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL [ ] GAS WELL [X] OTHER-

7. Unit Agreement Name

2. Name of Operator
Mid-America Petroleum, Inc.

8. Farm or Lease Name
New Mexico "A" State

3. Address of Operator
P. O. Box 3023, Midland, Texas 79702

9. Well No.
1

4. Location of Well
UNIT LETTER O, 660 FEET FROM THE South LINE AND 2080 FEET FROM THE East LINE, SECTION 35 TOWNSHIP 18-S RANGE 34-E NMPM.

10. Field and Pool, or Wildcat
East La Rica

15. Elevation (Show whether DF, RT, GR, etc.)
3976' GR

12. County
Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [X]	
OTHER [ ]		OTHER Change name of Operator	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Drilled a 12-1/4" hole to 4400'. Ran 114 jts 8-5/8" (4402') 24# and 32# casing. Set at 4400'. Cemented with 2200 sx. lite cement and 250 sx Class "C" cement. Plug down @ 7:30 P.M. 8-24-81. Circulated 250 sx excess cement. Tested to 1500# for 30 minutes. Tested OK. Drilled out with a 7-7/8" bit.

This well is now being operated by Mid-America Petroleum, previously operated by Knox Industries, Inc., same address.

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

SIGNED Charles J. Love TITLE Production Manager DATE 8-31-81

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

P O BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-101
Revised 10-1-...

5a. Indicate Type of Lease: State [X] Fee [ ]

5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL [ ] GAS WELL [X] OTHER-

7. Unit Agreement Name

2. Name of Operator
Knox Industries, Inc.

8. Farm or Lease Name
New Mexico "A" State

3. Address of Operator
P. O. Box 3023, Midland, Texas 79702

9. Well No.
1

4. Location of Well
UNIT LETTER O, 660 FEET FROM THE South LINE AND 2080 FEET FROM THE East LINE, SECTION 35 TOWNSHIP 18-S RANGE 34-E NMPM.

10. Field and Pool, or Wildcat
East La Rica

15. Elevation (Show whether DF, RT, GR, etc.)
3976 GR

12. County
Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [X]	PLUG AND ABANDONMENT [ ]
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [X]	
OTHER [ ]		OTHER [ ]	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Spudded well 7:00 P.M. 8-13-81. Drilled 17-1/2" hole to 520'. Ran 13 joints of 13-3/8" 48# H-40 ST&C and set @ 520'. Cemented with 500 sx Class "C" cement with 2% CaCl. Circulated 50 sx excess. NU BOP's. Test BOP's and casing to 600#, held OK for 30 minutes. Drilled out with 12-1/4" bit.

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

SIGNED Charles J. Rowe TITLE Production Manager DATE 8-18-81

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

SANTA FE, NEW MEXICO 87501

5A. Indicate Type of Lease: STATE [X] FEE [ ]

5. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

AMENDED

Type of Work: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

7. Unit Agreement Name

Type of Well: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

8. Farm or Lease Name: New Mexico "A" State

Name of Operator: *Knox Industries, Inc.

9. Well No.: 1

Address of Operator: P. O. Box 3023, Midland, Texas 79702

10. Field and Pool, or Wildcat: Undesignated Morrow

Location of Well: UNIT LETTER O LOCATED 660 FEET FROM THE South LINE

2080 FEET FROM THE East LINE OF SEC. 35 TWP. 18-S RGE. 34-E NMPM

12. County: Lea

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
13,700	Morrow	Rotary

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
3976 GR	Blanket	Willbros Drlg. Co.	August 1, 1981

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
17-1/2"	13-3/8"	48	500	530	Surface
12-1/4"	8-5/8"	24 x 32	4400	750	2580
7-7/8"	5-1/2"	17	13,700	800	9700

Drill a 17-1/2" hole with fresh water to 500', run and set 13-3/8" casing, cement to surface. WOC 18 hrs. NUBOP. Test casing and BOP to 600 psi. Drill out and drill ahead in 12-1/4" hole with cut brine to 4400'. Run and set 8-5/8" casing at 4400'. Cement with 750 sx. WOC 18 hrs. NUBOP. Test casing and BOP's to 1500 psi. Drill ahead w/cut brine in 7-7/8" hole. Mud up at 11,000 ± to a 30 Vis, 9.5#, 12 to 20 W.L. product. Drill ahead to 13,700', drill stem testing significant shows as indicated from drilling time, samples, and mud log "kicks". Run open hole logs. Run 5-1/2" 17# casing to TD and cement w/800 sx. MORT to complete.

APPROVAL VALID FOR 180 DAYS
PERMIT EXPIRES 1/17/82
UNLESS DRILLING UNDERWAY

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

Signed Charles J. Love Title Production Manager Date July 10, 1981

(This space for State Use)

APPROVED BY [signature] TITLE SUPERVISOR DISTRICT I DATE JUL [illegible] 1981

CONDITIONS OF APPROVAL, IF ANY:

COUNTY LEA FIELD LaRica STATE NM

OPR MID-AMERICA PETROLEUM, INC. API 30-025-27497

NO 1 LEASE New Mexico "A" State MAP

Sec 35, T18S, R34E CO-ORD

660 FSL, 2080 FEL of Sec 5-1-57 NM

7 mi SW/Buckeye RE-SPD 7-24-82 RE-CMP 9-24-82

CSG

13 3/8-520-500 sx
8 5/8-4400-450 sx
5 1/2-13,618-1100 sx

WELL CLASS: INIT DX FIN DO LSE. CODE

FORMATION	DATUM	FORMATION	DATUM
TD 13,618 (MRRW)		PBD 11,480	

IP (Wolfcamp) Perfs 10,860-910 P 40 BOPD. Pot based on 24 hr test. GOR TSTM; gty (NR)

CONTR OPR ELEV 3676 GL sub-s

F.R.C. 5-7-83 OWWO
PD 11,480 WO
(Orig. Cmp. 2-15-82 thru (Morrow) Perfs 13,238-250, OTD 13,618, OPB 13,400)

5-2-83 TD 13,618; PBD 11,480; Complete
DO to 13,618
Sqzd old Morrow Perfs (13,496-524) 100 sx
DO to 13,618
Perf (Morrow) 13,520-524
Acid (13,520-524) 300 gals
Swbd, no results (13,520-524)
CIBP @ 12,330
Perf (Wolfcamp) 11,771-782
Acid (11,771-782) 500 gals
Swbd, no results (11,771-782)
Perf (Wolfcamp) 11,632-649, 11,661-669
Acid (11,632-669) 7500 gals

5-1-57 NM

5-3-82 Continued
Flwd 406 MCFGPD, chk (NR), 60 mins, TP 2050
Flwd 552 MCFGPD, chk (NR), 60 mins, TP 2050
LOG TOPS: Rustler 1889, Yates 3445,
Queen 4720, Grayburg 5298, Bone Spring 7974,
Wolfcamp 10,847, Strawn 12,180, Atoka 12,676,
Morrow 12,844
LOG RUN: CORL
BHT 180 deg @ 13,244
Rig Released 11-10-81

5-8-82 COMPLETION ISSUED

5-2-50 NM
IC 30-025-70378-81

NO 1 LEASE New Mexico "A" State

Sec 35, T18S, R34E

660 FSL, 2080 FEL of Sec

7 mi SW/Buckeye

COORD 5-2-50 NM

SPD 8-13-81 CMP 2-15-82

CSG

13 3/8-520-500 sx
8 5/8-4400-450 sx
5 1/2-13,618-1100 sx
2 7/8-13,020

WELL CLASS INIT D FIN DG LSE CODE

FORMATION	DATUM	FORMATION	DATUM

TD 13,618 (MRRW) PBD 13,400

IP (Morrow) Perfs 13,238-250 CAOF 2429 MCFGPD. GOR 24,500; gty (Gas) .6586; (Cond) 49.9; SIWHP 3805; SIBHP 3818

CONTR WillBros #5 OPRS ELEV 3676 GL sub-s 13

F.R. 7-20-81
PD 13,700 RT (Morrow)
(Formerly Aban Loc 7-20-81 Order [illegible] 0-02-2/[illegible].
located 660 FSL, 1980 FWL of Sec)

5-8-82 AMEND OPERATOR: Formerly reported as Knox Industries, Inc.

8-20-81 Drlg 3122
mw 10.4, vis 36

8-26-81 TD 4400; DOC

9-1-81 Drlg 6492 lm & sh

9-10-81 Drlg 9370

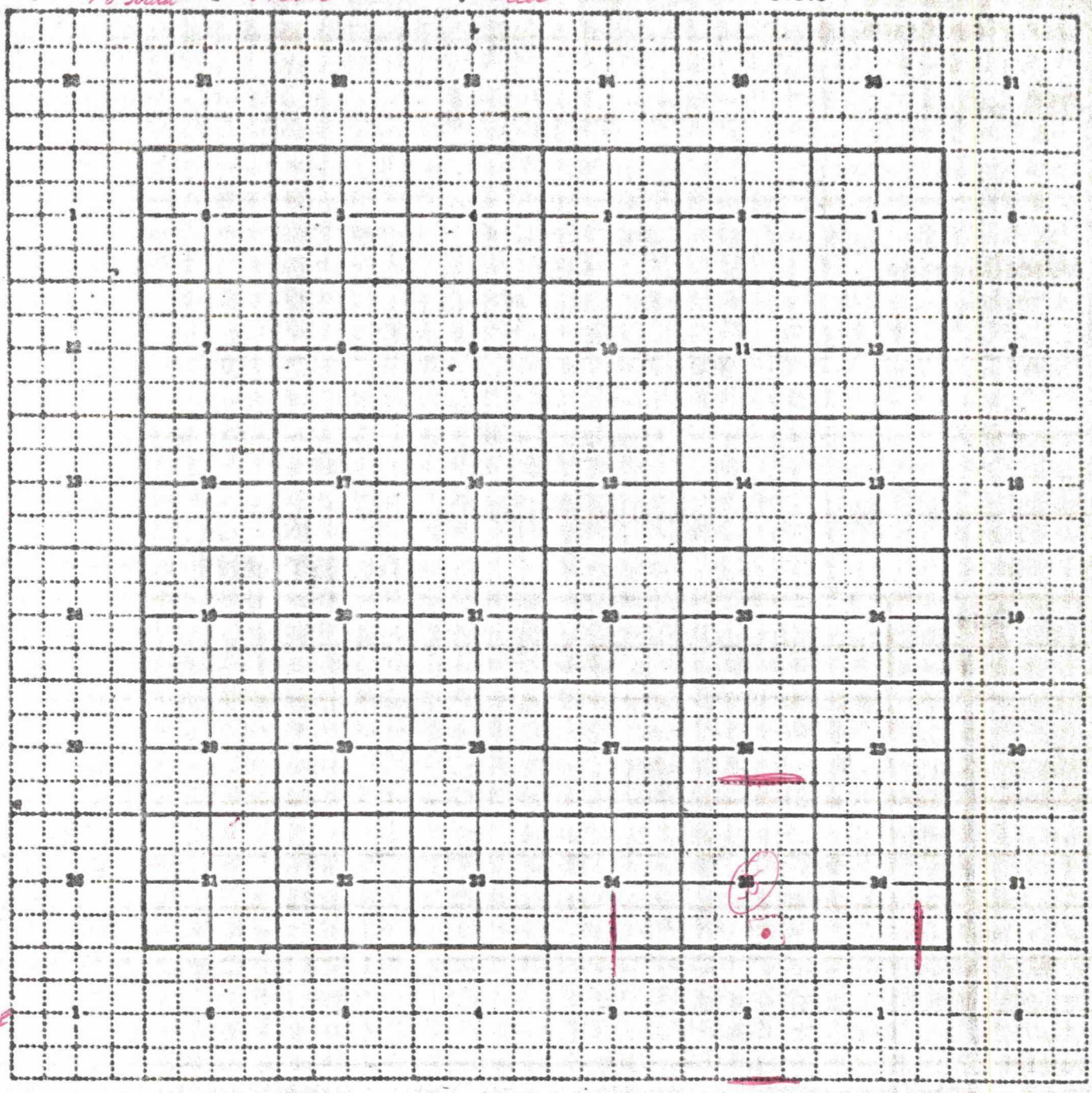
9-16-81 Drlg 9840
mw 10, vis 40

9-22-81 Drlg 10,508 lm & sh
mw 10, vis 37

10-1-81 Drlg 11,112

10-7-81 Drlg 11,668
mw 10.1, vis 40

Fee



19S-34E

Description of Lands

(And. Air Strip Bone Spring) (And. Schark Bone Spring)

Air Strip Wolfcamp

East La Rica Morrow

Total Acres

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 8934

Order No. R- 8278

APPLICATION OF AMSTAR ENERGY CORPORATION FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on August 6, 1986, at Santa Fe, New Mexico, before Examiners Michael E. Stogner, respectively.

NOW, on this _____ day of August, 1986, 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) The applicant, Amstar Energy Corporation, is the owner and operator of the Mid-American Petroleum Inc. New Mexico State "A" Well No. 1, located 660 feet from the South line and 2080 feet from the East line (Unit O) of Section 35, Township 18 South, Range 34 East, NMPM, Lea County, New Mexico.

(3) The applicant proposes to utilize said well to commercially dispose of produced salt water into the ~~Bone Spring~~, Wolfcamp, Cisco, Canyon, Strawn, Atoka, Morrow, and Devonian formations, with injection into the perforated and open hole interval from approximately ~~9600~~ 10,847 feet to 14,800 feet.

(4) The injection should be accomplished through 2 7/8-inch plastic-lined tubing installed in a packer set at approximately 10,747 feet; ~~that~~ the casing-tubing annulus should be filled with an inert fluid; and ~~that~~ a pressure gauge or approved leak detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(5) Prior to commencing injection operations, the casing in the subject 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.

(6)(5) The injection well or system should be equipped with a pressure limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 2169 psi.

(7) After commencing injection operations into the well, the applicant should be required to run an injection tracer survey in order to determine which formations are receiving the injected fluid.

(5)(8) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected waters from the ~~Bone Spring, Wolfcamp, Cisco, Canyon, Strawn, Atoka, Morrow and Devonian formations~~ injection interval.

(7) The operator should notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(4)(8) The operator should give advanced notification to the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment, ~~and of~~ the mechanical integrity pressure test in order that the same may be witnessed. and the injection tracer survey

(8) 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.

(9)(9) Approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Amstar Energy Corporation, is hereby authorized to utilize ~~the~~ the Mid-American Petroleum Inc. New Mexico State "A" Well No. 1, located ~~in~~ 660 feet from the South line and 2080 feet the the East line (Unit O) of Section 35, Township 18 South, Range 34 East, NMPM, Lea County, New Mexico, to dispose of produced salt water into the ~~Bone Spring~~, Wolfcamp, Cisco, Canyon, Strawn, Atoka, Morrow and Devonian formations, injection to be accomplished through 2 7/8-inch tubing installed in a packer set at approximately 10,747 feet, with injection into the perforated and open hole intervals from approximately ~~9600~~ 10,847 feet to 14,800 feet;

PROVIDED HOWEVER THAT, the tubing shall be plastic-lined; ~~that~~ the casing-tubing annulus shall be filled with an inert fluid; and ~~that~~ a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

PROVIDED FURTHER THAT, prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's district office at Hobbs.

(2) The injection well or system shall be equipped with a pressure limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 2169 psi.

(3) After commencing injection operations into the well, the applicant shall run an injection tracer survey in order to determine which formations are receiving the injected fluid.

(4) The applicant shall furnish copies of said tracer survey to both the Santa Fe and Hobbs Offices of the Division.

(5) (3) The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the ~~injected~~ disposed fluid from the ~~Bone Spring, Wolfcamp, Cisco, Canyon, Strawn, Atoka, Morrow and Devonian~~ injection formations.

(4) The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(6) ~~(4)~~ **The operator shall notify the supervisor of the Hobbs district office of the Division in advance of the date and time of the installation of disposal equipment, ~~and of~~ the mechanical integrity pressure test, in order that the same may be witnessed.** and the injection tracer survey

(5) The operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(8) ~~(6)~~ The applicant shall conduct disposal operations and submit monthly reports in accordance with Rules 702, 703, 704, 705, 706, 708, and 1120 of the Division Rules and Regulations.

(9) 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

R. L. STAMETS,
Director

S E A L