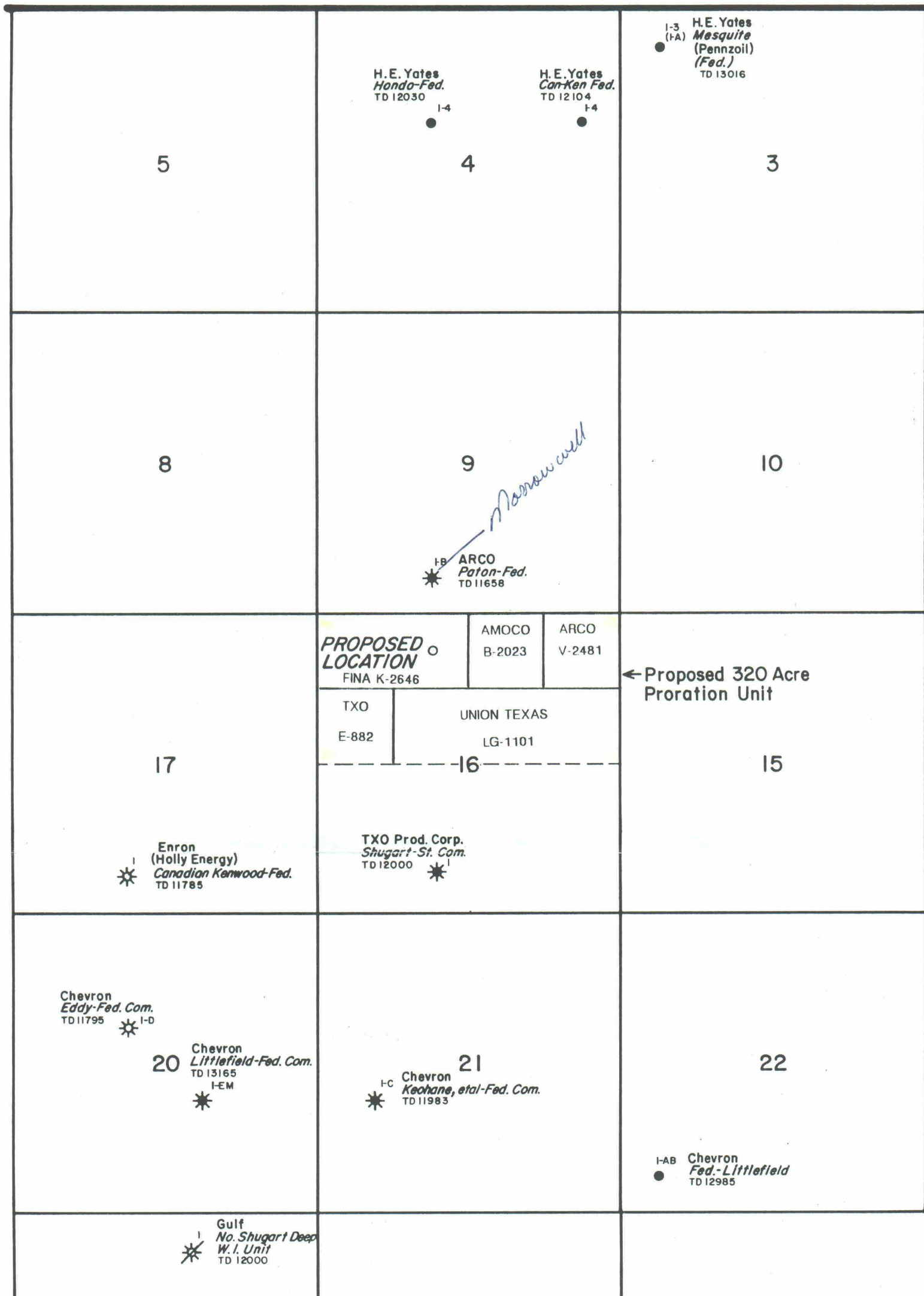


R 31 E



T
18
S

Note: Only the wells that penetrated the Atoka fm. are shown on this map.

TXO Production Corp.

COMPULSORY POOLING HEARING FOR
 TXO PROD. NO. 1 SHUGART-STATE COM. "A"
 EDDY COUNTY, NEW MEXICO

CASE #9861

PROPOSED LOCATION: 660' FNL & 1980' FWL OF SECTION 16, T-18-S, R-31-S

PROPOSED DEPTH: 12,000'

Geol.: G. Brown Scale: 1" = 2000'

BEFORE EXAMINER CATANACH
 OIL CONSERVATION DIVISION

TXO EXHIBIT NO. 1

CASE NO. 9861

*Exhibits 1 through 14
Complete Set*

CASE 9861
 COMPULSORY POOLING HEARING
 TXO SHUGART STATE COM. "A" #1 WELL
 N/2 of SECTION 16, T-18-S, R-31-E, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO

I. Proposed Location: 660' FNL and 1980' FWL of Section 16

II. Proposed Depth: 12,000' or to a depth sufficient to test the Morrow formation

III. Nature and Percentage of Ownership:

| <u>Working Interest Owner</u> | <u>Ownership (%) in N/2 - 320 Acres</u> | <u>Nature of Ownership</u> |
|-----------------------------------|---|--------------------------------|
| TXO Production Corp. | 39.84375% | State Lease - HBP |
| Union Texas Petroleum Corp. | 21.87500% | State Lease - HBP |
| Amoco Production Company | 12.50000% | State Lease - HBP |
| Geodyne Resources, Inc. | 7.03125% | State Lease - HBP |
| Fina Oil & Chemical Company | 6.25000% | State Lease - HBP |
| Atlantic Richfield Company | 12.50000% | State Lease - Exp. 12/1/92 |
| TOTAL | 100.00000% | |

IV. Party to be Pooled: Atlantic Richfield Company
 P. O. Box 1610
 Midland, Texas 79702

V. Formations to be Pooled:

All mineral interests within the Pennsylvanian formation underlying the N/2 of Section 16, Township 18 South, Range 31 East, forming a 320-acre gas spacing and proration unit for all formations and/or pools developed on 320-acre spacing, which presently includes but is not necessarily limited to the Undesignated North Shugart-Morrow Gas Pool and the North Shugart-Atoka Gas Pool.

| | |
|---------------------------|----------------------|
| BEFORE EXAMINER CATANACH | |
| OIL CONSERVATION DIVISION | |
| TXO | EXHIBIT NO. <u>2</u> |
| CASE NO. <u>9861</u> | |

TXO PRODUCTION CORP.
900 WILCO BUILDING
MIDLAND, TEXAS 79701
915/682-7992

May 22, 1989

Atlantic Richfield Company
P. O. Box 1610
Midland, Texas 79702

Attn: Tim Derigo

HAND DELIVERED

RE: FORM OF OPERATING AGREEMENT
Shugart State Com. "A" #1
E/2 of Section 16, T-18-S, R-31-E,
N.M.P.M., Eddy County, New Mexico

Dear Mr. Derigo:

Pursuant to our recent conversation, enclosed herewith you will find the form of Operating Agreement proposed by TXO Production Corp. regarding the referenced well.

The Shugart State Com. "A" #1 well was proposed to ARCO Exploration Company by that certain letter dated May 19, 1989. All references to ARCO Exploration Company in said letter should be substituted with Atlantic Richfield Company.

Please let me know if you have any comments or questions.

Sincerely,

Richard H. Coats
Landman

RHC/lc

Enclosure

| | |
|---------------------------|----------------------|
| BEFORE EXAMINER CATANACH | |
| OIL CONSERVATION DIVISION | |
| <u>TXO</u> | EXHIBIT NO. <u>3</u> |
| CASE NO. | <u>9861</u> |

TXO PRODUCTION CORP.
900 WILCO BUILDING
MIDLAND, TEXAS 79701
915/682-7992

May 19, 1989

HAND DELIVERED

ARCO Exploration Co.
P. O. Box 1610
Midland, TX 79702

Attn: Tim Derigo

Re: Well Proposal
E/2 of Section 16,
T-18-S, R-31-E
N.M.P.M., Eddy
County, New Mexico

Gentlemen:

TXO Production Corp. ("TXO") is hereby proposing to drill the Shugart State Com "A" #1 well at an unorthodox location of 660' FNL and 1980' FEL of Section 16, T-18-S, R-31-E, N.M.P.M., Eddy County, New Mexico. Said well will be drilled to a depth of approximately 12,000 feet or a depth sufficient to test the Morrow formation, whichever is the lesser.

Based on an investigation of the State Land Office records, ARCO Exploration Company ("ARCO") owns all of the leasehold rights in the NE/4 NE/4 of Section 16 by virtue of State of New Mexico Lease V-2481. The proposed proration unit for said well shall be the E/2 of Section 16 which would give ARCO a .1250000 working interest. An Authority for Expenditure is attached hereto for your review and execution in the event ARCO elects to participate. Additionally, the proposed form of Operating Agreement will be sent to you for review in the near future.

In the event ARCO elects not to participate in the well proposed herein, TXO hereby requests a farmout of the State of New Mexico Lease V-2481, subject to the following general terms and conditions:

1. Prior to October 1, 1989, TXO shall use its best efforts to commence or cause to be commenced the Shugart State Com "A" #1 at the location described herein, then continue the drilling thereof down to a depth of approximately 12,000 feet or to a depth sufficient to test the Morrow formation, whichever is the lesser.
2. In the event said well is completed as a producer, TXO would earn an assignment covering all of ARCO's leasehold interest from surface to the stratigraphic equivalent of 100' below total depth drilled.

ARCO Exploration Co.

May 19, 1989

Page Two

3. In the acreage earned by TXO, ARCO would reserve an overriding royalty equal to the difference between 25% and the sum of lease burdens of record to the extent that TXO shall be delivered a 75% net revenue interest. At payout of the test well, ARCO shall have the option to convert its reserved overriding royalty to a 25% working interest. Subsequent operations shall be conducted pursuant to the terms and conditions of a mutually acceptable JOA. All interests presented herein shall be subject to proportionate reduction.

A prompt response to this request would be greatly appreciated. Please let me know if you have any questions or if you would like to discuss this proposal in greater detail.

Sincerely,

Richard H. Coats
Landman

RHC/sf

TXO

PRODUCTION CORP.

415 WEST WALL, SUITE 900
MIDLAND, TEXAS 79701-4468
(915) 682-7992

December 5, 1989

BEFORE EXAMINER CATANACH

OIL CONSERVATION DIVISION

TXO EXHIBIT NO. 4

CASE NO. 9861

Atlantic Richfield Company
P. O. Box 1610
Midland, Texas 79702

Attn: Tim Derigo

HAND DELIVERED

RE: WELL PROPOSAL
Shugart State Com. "A" #1 Well
N/2 of Section 16, T-18-S, R-31-E,
N.M.P.M., Eddy County, New Mexico

Gentlemen:

On May 19, 1989, TXO Production Corp. ("TXO") proposed to Atlantic Richfield Company ("ARCO") to drill the Shugart State Com. "A" #1 well at an unorthodox location of 660' FNL and 1980' FEL of Section 16, T-18-S, R-31-E, N.M.P.M., Eddy County, New Mexico. This well was to have been drilled to a depth of approximately 12,000' to test the Morrow formation, however, ARCO objected to the unorthodox location. The Communitization Agreement for the existing Shugart State Com. #1 well located in the SE/4 SW/4 of Section 16 was subsequently amended from the W/2 of Section 16 to the S/2 of Section 16, T-18-S, R-31-E, N.M.P.M., Eddy County, New Mexico.

TXO is now hereby proposing to ARCO to drill the Shugart State Com. "A" #1 well at an orthodox location of 660' FNL and 1980' FWL of Section 16, T-18-S, R-31-E, N.M.P.M., Eddy County, New Mexico. Said well will be drilled to a depth of approximately 12,000' or to a depth sufficient to test the Morrow formation, whichever is the lesser.

ARCO owns all of the leasehold rights in the NE/4 NE/4 of Section 16 by virtue of State of New Mexico Lease V-2481. The proposed proration unit for said well shall be the N/2 of Section 16 which would give ARCO a .1250000 working interest. An Authority for Expenditure ("AFE") and two (2) copies of an Operating Agreement are enclosed herewith for your review and execution in the event ARCO elects to participate in said well. Also enclosed you will find three (3) copies of a Communitization Agreement which has been executed in counterpart by the parties therein. Two (2) copies of this agreement should be executed and returned to my attention for further handling.

In the event ARCO elects not to participate in the well proposed herein, TXO hereby requests a farmout of the State of New Mexico Lease V-2481, subject to the following general terms and conditions:

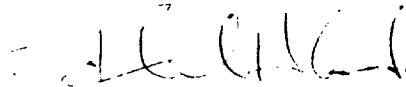
Atlantic Richfield Company
December 5, 1989
Page Two

1. Prior to March 1, 1990, TXO shall use its best efforts to commence or cause to be commenced the Shugart State Com. "A" #1 at the location described herein, then continue the drilling thereof down to a depth of approximately 12,000 feet or to a depth sufficient to test the Morrow formation, whichever is the lesser.
2. In the event said well is completed as a producer, TXO would earn an assignment covering all of ARCO's leasehold interest from surface to the stratigraphic equivalent of 100' below total depth drilled.
3. In the acreage earned by TXO, ARCO would reserve an overriding royalty equal to the difference between 25% and the sum of lease burdens of record to the extent that TXO shall be delivered a 75% net revenue interest. At payout of the test well, ARCO shall have the option to convert its reserved overriding royalty to a 25% working interest. Subsequent operations shall be conducted pursuant to the terms and conditions of a mutually acceptable JOA. All interests presented herein shall be subject to proportionate reduction.

A prompt response to this request would be greatly appreciated. Please let me know if you have any questions or if you would like to discuss this proposal in greater detail.

Sincerely,

TXO PRODUCTION CORP.



Richard H. Coats
Landman

RHC/lc

Enclosures

AUTHORITY FOR EXPENDITURE
DRILLING WELL — TXO AND OUTSIDE OPERATED

Date November 1, 1989

DISTRICT West Texas WELL NAME Shugart State Com "A" WELL NO. 1
 OPERATED BY TXO Production Corp. LOCATION 660' FNL & 1980' FWL Sec. 6 DEPTH 12,000'
 FIELD Shugart North (Morrow) COUNTY Eddy STATE New Mexico
 PREPARED BY Tim Goudeau SUBMITTED BY Tim Goudeau DALLAS DISTRICT

| EXPENDITURE DESCRIPTION | QUANTITY | DESCRIPTION | EST. COST |
|------------------------------------|----------|--|-----------|
| DRILLING | 1600' | 13-3/8", 48#, H-40, ST&C | 16,500 |
| Surface & Intermediate Casing | 4500' | 8-5/8", 24# & 28#, K-55&S-80, ST&C | 70,000 |
| Casinghead | | | 11,800 |
| Location Work | | Stake, loc./roads, damages, pit liner | 26,900 |
| Footage/Turnkey Drilling | 11,800' | \$17/foot | 204,000 |
| Daywork Drilling | 3 days | \$3900/day | 11,700 |
| Rig Support | | | 6,000 |
| Bits | | | |
| Supervision | 46 days | \$500/day | 23,000 |
| Drilling Overhead | 46 days | \$255/day | 11,700 |
| Mud & Chemicals | | Mud | 30,000 |
| Cementing Services & Supplies | | Cmt surf./intermed./casing crew | 14,600 |
| Testing & Logging | | Mud logger, OH logs, temp svys. | 23,100 |
| Rentals | | Rotating head, fasline, generator/fuel | 5,200 |
| Other IDC | | Welder, P&A cmt, fence pits, FL, trkg, etc. | 11,700 |
| Other Equipment | | | |
| Legal | | | 2,000 |
| Non-Operated Intangible Drilling | | | |
| TOTAL DRILLING | | | 468,200 |
| COMPLETION | | | |
| Production Casing | 11,800' | 4-1/2", 11.6#, N-80&S-95, Butt/LT&C | 102,700 |
| Tubing | 11,700' | 2-3/8", 4.7#, N-80, EUE | 50,200 |
| Wellhead Equipment | | | 12,000 |
| Subsurface Equipment | | Packer, SN & subs | 3,600 |
| Supervision | 10 days | \$500/day | 5,000 |
| Mud & Chemicals | | KCL wtr. | 2,000 |
| Testing, Logging & Perforating | | Perf, log, temp svy., 4-pt test | 11,300 |
| Stimulation | | Acidize | 4,000 |
| Completion Overhead | 10 days | \$255/day | 2,600 |
| Rentals | | BOP, test tank | 1,400 |
| Service Rig | 10 days | \$1200/day | 12,000 |
| Cementing Services & Supplies | | Cmt prod string, csg crew | 12,300 |
| Other Completion IDC | | Welder, FL, misc trkg, misc. labor | 4,300 |
| Non-Operated Intangible Completion | | | |
| TOTAL COMPLETION | | | 223,400 |
| PRODUCTION EQUIPMENT | | | |
| Pumping Unit/Submersible Pump | | | |
| Engine & Motor | | | |
| Rods | | | |
| Flow Lines | | Flowline, vlvs, fitting, nipples, etc. | 11,000 |
| Meters | | Meter hsg, run, trkg, installation | 6,000 |
| Installation/Overhead | | | 16,600 |
| Storage | | 2-oil/2-wtr tanks, pads, wkwys, trkg. | 15,500 |
| Separation & Treating | | Stack pack, pads, trkg. | 8,400 |
| Other Equipment | | Labor, chemical pump, anchors, fences, circ pump | 7,600 |
| TOTAL PRODUCTION EQUIPMENT | | | 65,100 |
| | | TOTAL | 756,700 |

| | | | |
|--|---|----------------------|---|
| OWNER'S NAME AND ADDRESS (New Addresses Only) | BILLING INTEREST (7 Decimals) | DATE APPROVED | APPROVED: (this space for approval only) |
| Atlantic Richfield Company P. O. Box 1610 Midland, Texas 79702 | .125000 | | ATLANTIC RICHFIELD COMPANY |
| | | | BY: _____ |
| | | | ITS: _____ |

Company No. _____ AFE Type No. _____
 AFE No. _____ Property No. _____
 Acq. Name/Code: _____

| | | <u>Drilling Rate/Mo.</u> | <u>Producing Rate/Mo.</u> |
|--|---------|--------------------------|---------------------------|
| Earnst & Young | Average | \$6,134.00 | \$566.00 |
| <u>1989</u> <i>Not yet published</i> | Medium | \$5,000.00 | \$450.00 |
| Burton Flat Federal #1 | | \$6,000.00 | \$600.00 |
| Shugart State Com. #1 (Under May 1978 JOA) | | \$3,940.40 | \$666.68 |
| Shugart State Com. "A" #1 (Under May 1978 JOA) | | \$3,940.40 | \$666.68 |
| Shugart State Com. "A" #1 (Under November 1989 JOA) | | \$5,960.00 | \$595.00 |

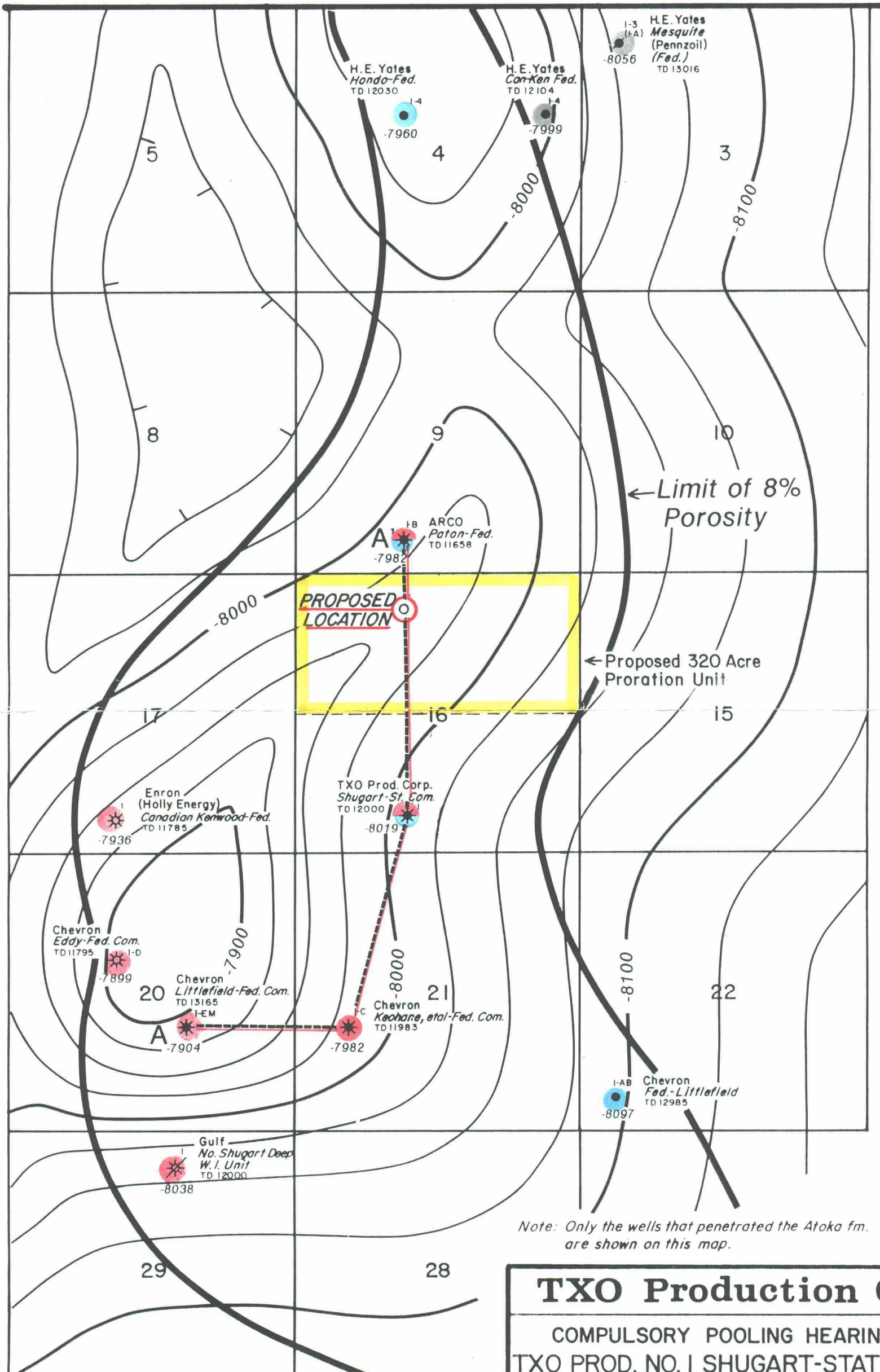
$$1980 \times 199.01\% = \$3,940.40$$

$$335 \times 199.01\% = \$666.68$$

| | |
|---------------------------|----------------------|
| BEFORE EXAMINER CATANACH | |
| OIL CONSERVATION DIVISION | |
| <u>TXO</u> | EXHIBIT NO. <u>5</u> |
| CASE NO. <u>9861</u> | |

R 31 E

T 18 S



Note: Only the wells that penetrated the Atoka fm. are shown on this map.



BEFORE EXAMINER CATANACH

OIL CONSERVATION DIVISION

EXHIBIT NO. 7

CASE NO. 9861

- HYDROCARBON
- WATER
- TIGHT

TXO Production Corp.

COMPULSORY POOLING HEARING FOR TXO PROD. NO. 1 SHUGART-STATE COM. "A" EDDY COUNTY, NEW MEXICO

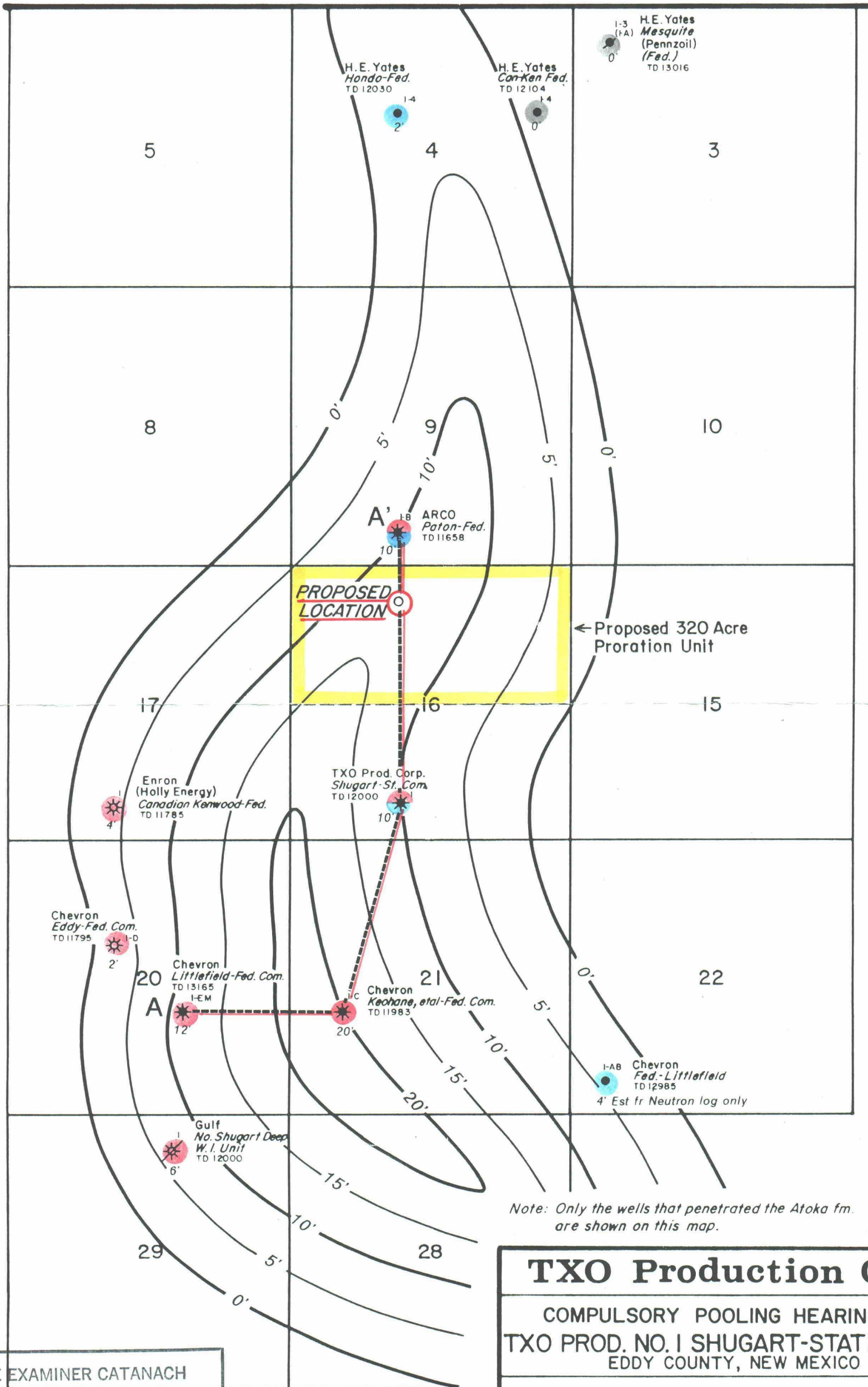
STRUCTURE MAP
TOP OF MIDDLE MORROW SAND

C.I.=25'

Geol.: G. Brown

Scale: 1"=2000'

R 31 E



T
18
S

Note: Only the wells that penetrated the Atoka fm. are shown on this map.



BEFORE EXAMINER CATANACH

OIL CONSERVATION DIVISION

TXO EXHIBIT NO. 8

CASE NO. 9861

- HYDROCARBON
- WATER
- TIGHT

TXO Production Corp.

COMPULSORY POOLING HEARING FOR
TXO PROD. NO. 1 SHUGART-STATE COM. "A"
EDDY COUNTY, NEW MEXICO

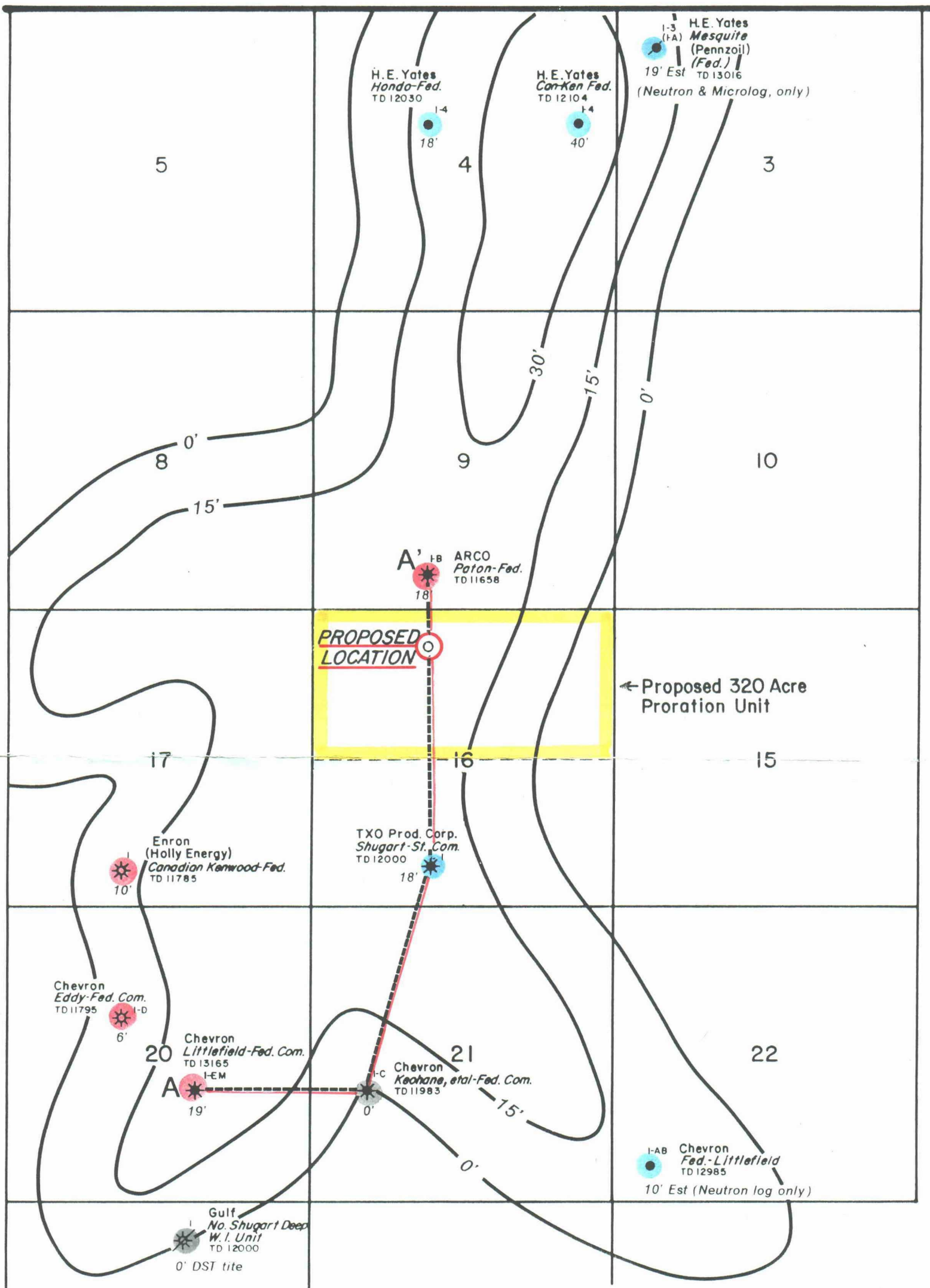
ISOPACH MAP
NET MIDDLE MORROW SAND
POROSITY ≥ 8%
C.I.=5'

Geol.: G. Brown

Scale: 1" = 2000'

R 31 E

T 18 S



Note: Only the wells that penetrated the Atoka fm. are shown on this map.



BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION

TXO EXHIBIT NO. 9

CASE NO. 9861

- HYDROCARBON
- WATER
- TIGHT

TXO Production Corp.

COMPULSORY POOLING HEARING FOR
TXO PROD. NO. I SHUGART-STATE COM. "A"
EDDY COUNTY, NEW MEXICO

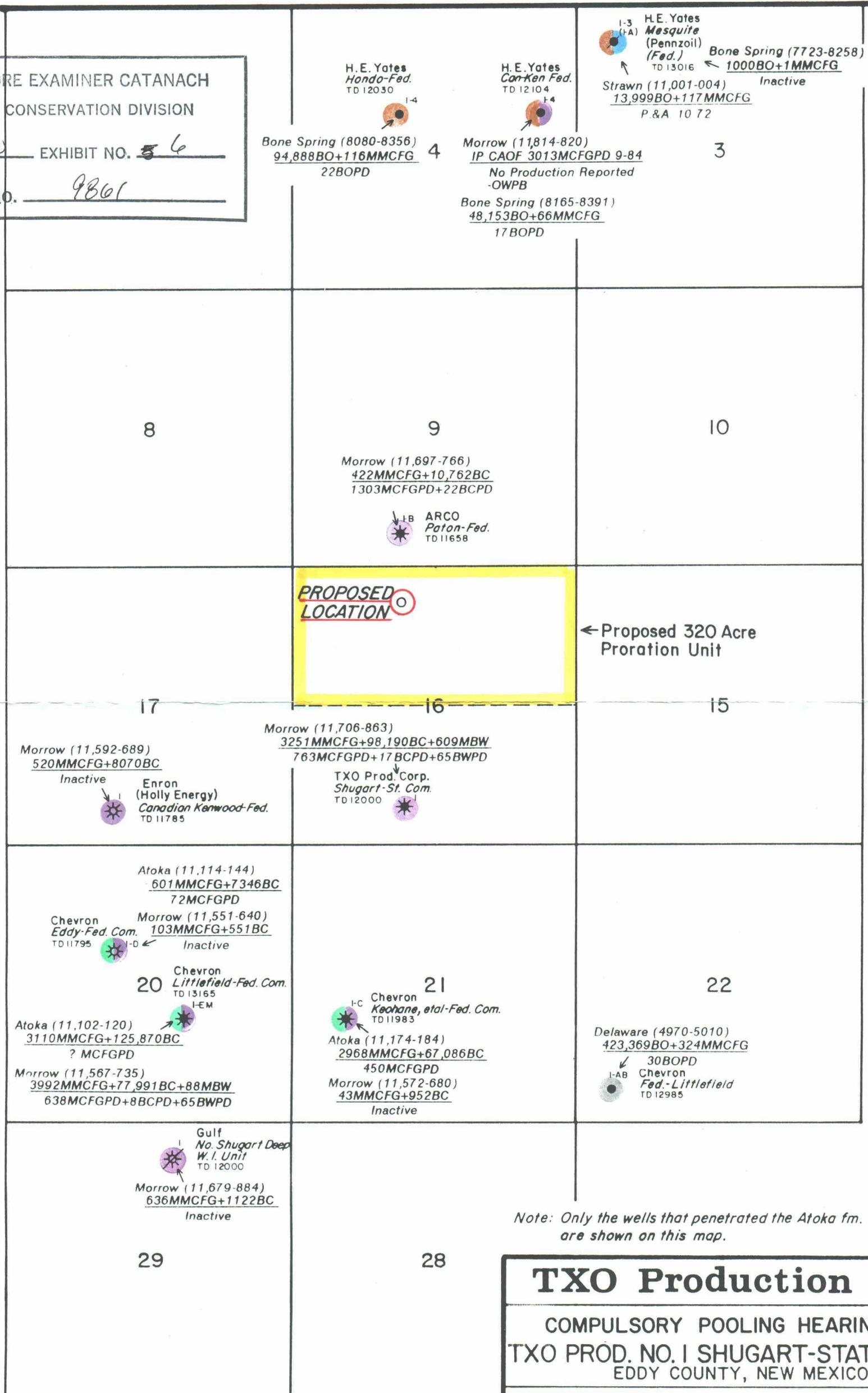
ISOPACH MAP
NET LOWER MORROW SAND
POROSITY ≥ 8%
C.I. = 15'

Geol.: G. Brown Scale: 1" = 2000'

R 3 I E

T
18
S

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
Tke EXHIBIT NO. 56
CASE NO. 9861



1-3 H.E. Yates
1-A Mesquite
(Pennzoil)
(Fed.) TD 13016 Bone Spring (7723-8258)
1000BO+1MMCFG
Strawn (11,001-004) Inactive
13,999BO+117MMCFG
P.&A. 10 72

H.E. Yates
Hondo-Fed.
TD 12030
Bone Spring (8080-8356)
94,888BO+116MMCFG
22BOPD

H.E. Yates
Car-Ken Fed.
TD 12104
Morrow (11,814-820)
IP CAOF 3013MCFGPD 9-84
No Production Reported
-OWPB
Bone Spring (8165-8391)
48,153BO+66MMCFG
17BOPD

**PROPOSED
LOCATION**

← Proposed 320 Acre
Proration Unit

Morrow (11,592-689)
520MMCFG+8070BC
Inactive
Enron
(Holly Energy)
Canadian Kenwood-Fed.
TD 11785

Morrow (11,706-863)
3251MMCFG+98,190BC+609MBW
763MCFGPD+17BCPD+65BWPD
TXO Prod. Corp.
Shugart-St. Com.
TD 12000

Atoka (11,114-144)
601MMCFG+7346BC
72MCFGPD
Chevron
Eddy-Fed. Com.
TD 11795
Morrow (11,551-640)
103MMCFG+551BC
Inactive
Chevron
Littlefield-Fed. Com.
TD 13165
Atoka (11,102-120)
3110MMCFG+125,870BC
? MCFGPD
Morrow (11,567-735)
3992MMCFG+77,991BC+88MBW
638MCFGPD+8BCPD+65BWPD

Chevron
Keohane, etal-Fed. Com.
TD 11983
Atoka (11,174-184)
2968MMCFG+67,086BC
450MCFGPD
Morrow (11,572-680)
43MMCFG+952BC
Inactive

Delaware (4970-5010)
423,369BO+324MMCFG
30BOPD
Chevron
Fed.-Littlefield
TD 12985

Gulf
No. Shugart Deep
W. I. Unit
TD 12000
Morrow (11,679-884)
636MMCFG+1122BC
Inactive

Note: Only the wells that penetrated the Atoka fm.
are shown on this map.



- DELAWARE PRODUCER
- BONE SPRING PRODUCER
- STRAWN PRODUCER
- ATOKA PRODUCER
- MORROW PRODUCER

Producing Formation (Interval)
Cumulative Production to 10-1-89
Avg. Daily Production for 9-89

TXO Production Corp.
COMPULSORY POOLING HEARING FOR
TXO PROD. NO. 1 SHUGART-STATE COM. "A"
EDDY COUNTY, NEW MEXICO

PRODUCTION MAP

Geol.: G. Brown

Scale: 1" = 2000'