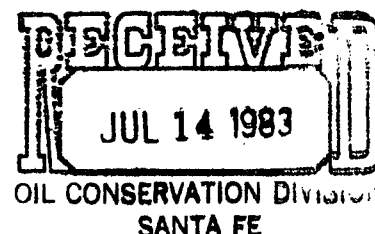


Shell Oil Company



P.O. Box 991
Houston, Texas 77001

July 7, 1983



State of New Mexico
Energy and Minerals Department
Oil Conservation Commission
P. O. Box 2088
Santa Fe, NM 87501

Gentlemen:

SUBJECT: EXPANSION OF PRESSURE MAINTENANCE PROJECT
SHELL - NORTH HOBBS (GRAYBURG/SAN ANDRES) UNIT
HOBBS (GRAYBURG/SAN ANDRES) POOL
LEA COUNTY, NEW MEXICO

Shell Oil Company respectfully requests administrative approval of expansion of the subject pressure maintenance project. Administrative Order No. R-6199 granted November 30, 1979, authorized Shell Oil Company to conduct the North Hobbs (Grayburg/San Andres) Unit pressure maintenance project within the subject pool. We propose to directionally drill the following wells for injection service.

<u>WELL NO.</u>	<u>SURFACE LOCATION</u>	<u>BOTTOMHOLE LOCATION</u>
32-142	610' FSL & 1210' FWL	25' FSL & 1320' FWL
32-342	475' FSL & 1437' FEL Both in Section 32, T-18-S, R-38-E	25' FSL & 1320' FEL
33-342	125' FSL & 2730' FWL	25' FSL & 2640' FWL
33-422	2181' FNL & 498' FEL	25' FEL & 2640' FNL
33-432	1842' FSL & 1029' FEL All in Section 33, T-18-S, R-38-E Lea County, New Mexico.	1345' FSL & 1320' FEL

The following data is submitted in support of this request:

1. Plat of Unit with proposed injectors and their project area.
2. "Typical" diagrammatic sketch for the proposed well, injection tubing, packer, pressure control elements, and identifying the proposed San Andres injection interval.

3. The name of the injection formation is San Andres with injection to be into an approximate well interval 4040 feet to 4250 feet. The maximum anticipated injection pressure will be no more than 0.2 psi per foot, with an anticipated initial daily volume of 250 barrels of water per day per well, increasing to a maximum of 1500 barrels of water per day per well.
4. The source of water will be re-injected produced water.
5. The wells will be cased through the completion interval and selectively perforated in the San Andres zones II, IIIU and IIIL intervals and acidized with approximately 200 gals of 15% NE acid per perforation.
6. Certified copy of Public Notice by newspaper.
7. List of offset operator and surface owners.
8. All entities in Item Seven have been notified by certified mail.

If additional information is required, please advise.

Yours very truly,



A. J. Fore
Supervisor Regulatory and Permitting
Mid-Continent Division

DMU:dmu

cc: State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 1980
Hobbs, NM 88240

State of New Mexico
Office of Land Commissioner
P. O. Box 1148
Santa Fe, NM 87501

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☒ Pressure Maintenance ☐ Disposal
Application qualifies for administrative approval? ☒ yes

II. Operator: SHELL OIL COMPANY

Address: P. O. BOX 991, HOUSTON, TX 77001

Contact party: A. J. FORE

Phone: (713) 850-3787 DIVISION

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 R-6199 (11-30-79)

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:

- 250 1500
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; 800
 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.) (WILL BE FURNISHED UPON COMPLETION)

* 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: A. J. FORE

Title SUPERVISOR REG. & PERMITTING

Signature: A. J. Fore

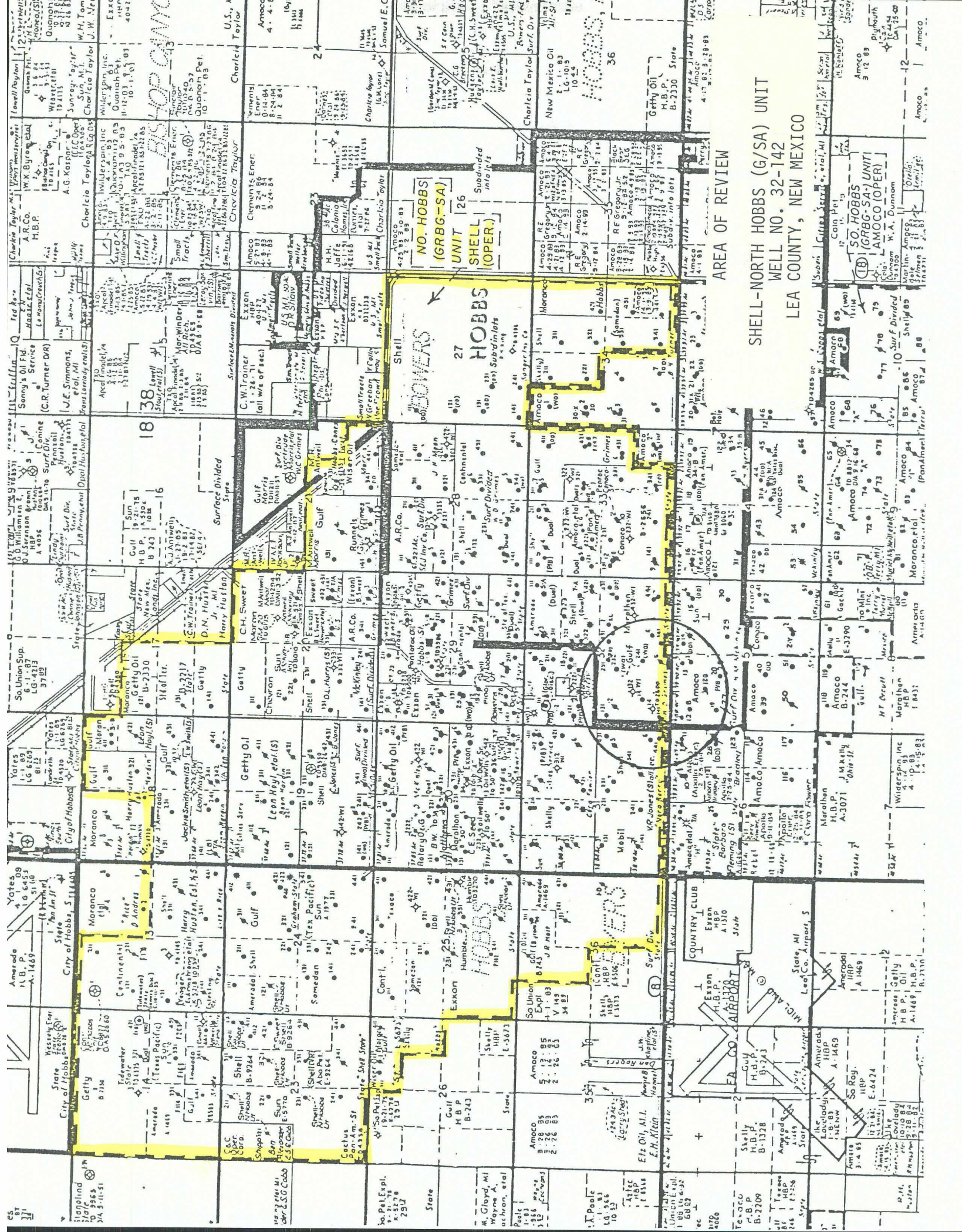
Date: JULY 7, 1983

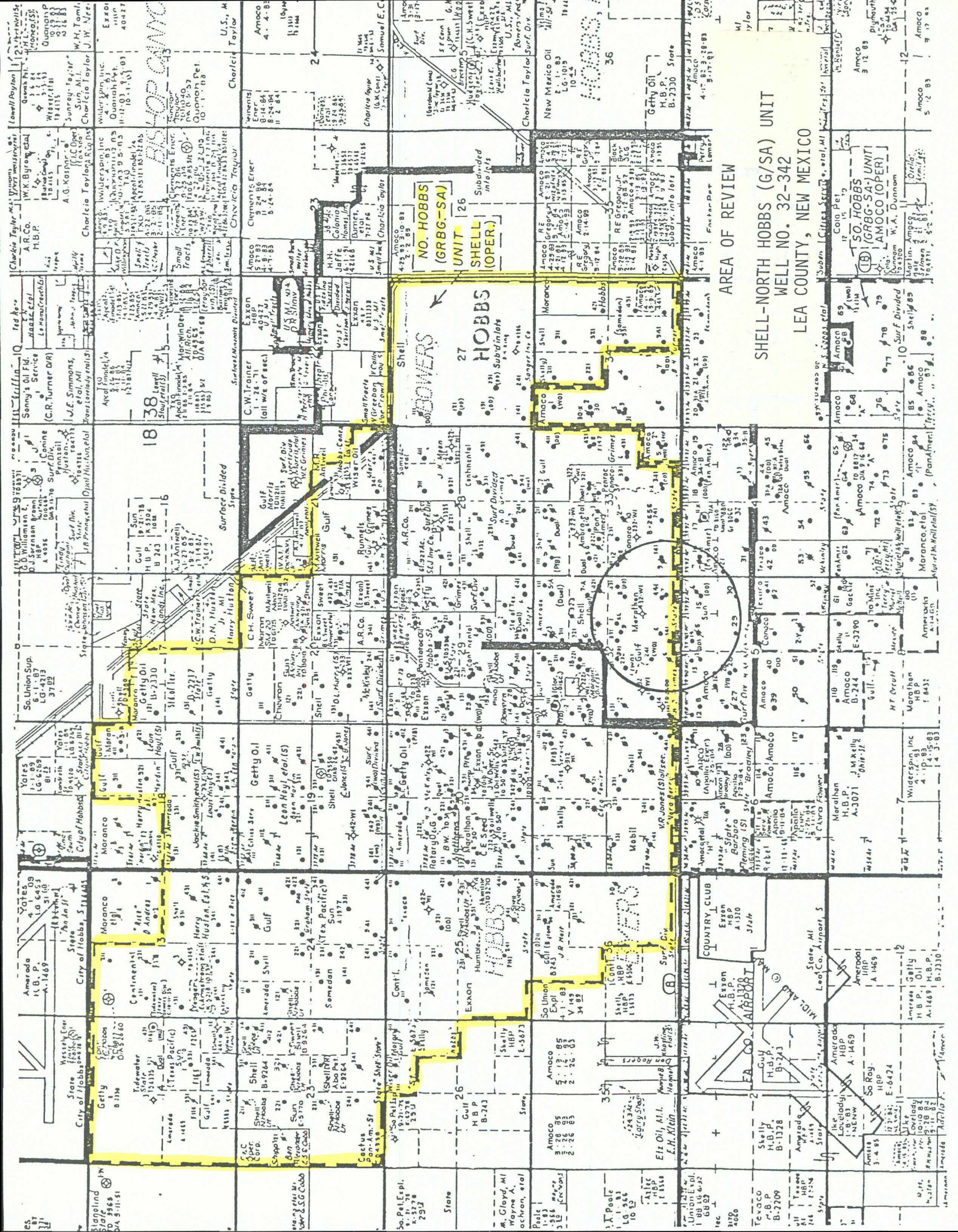
* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

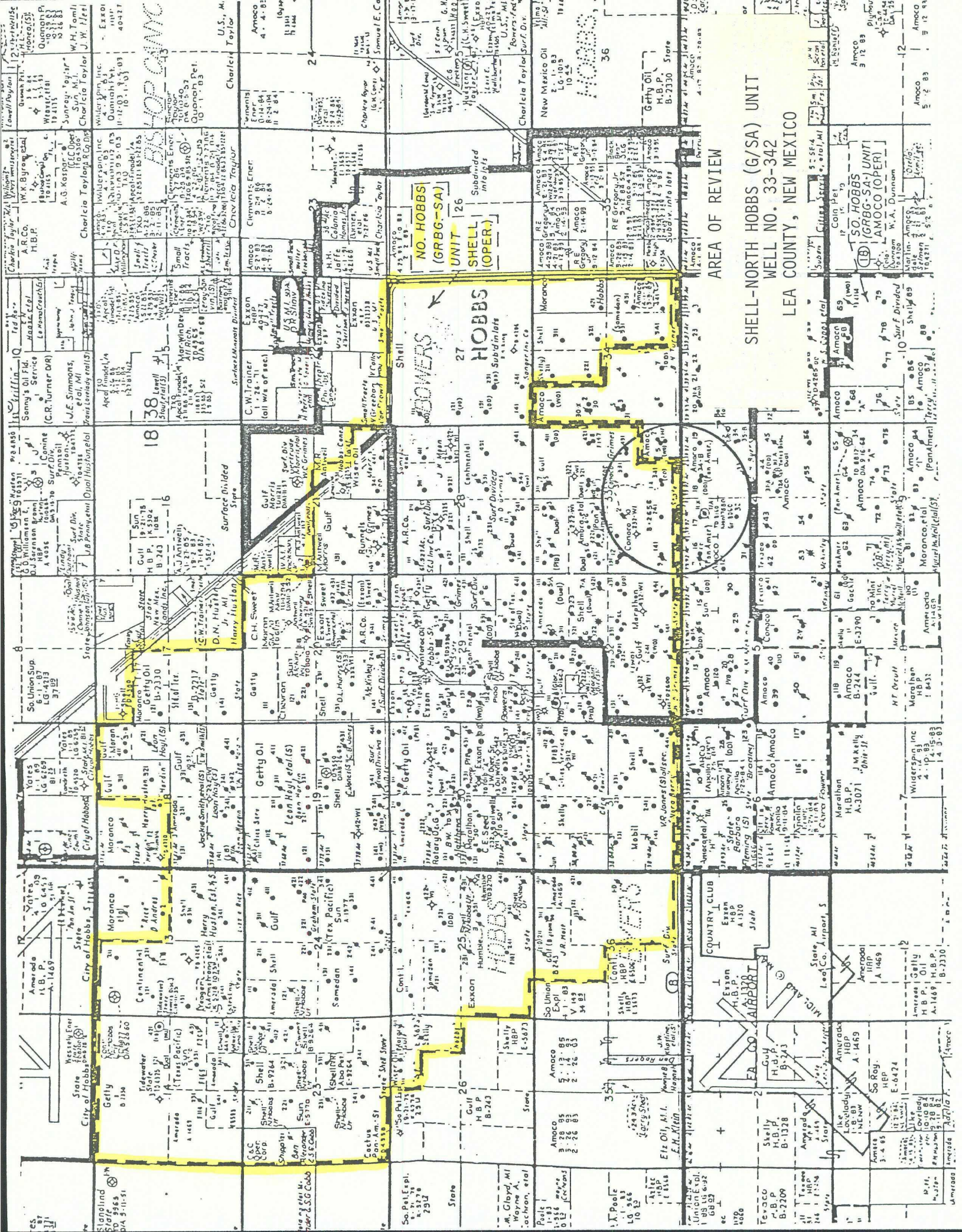
HEARING OCTOBER 3, 1979

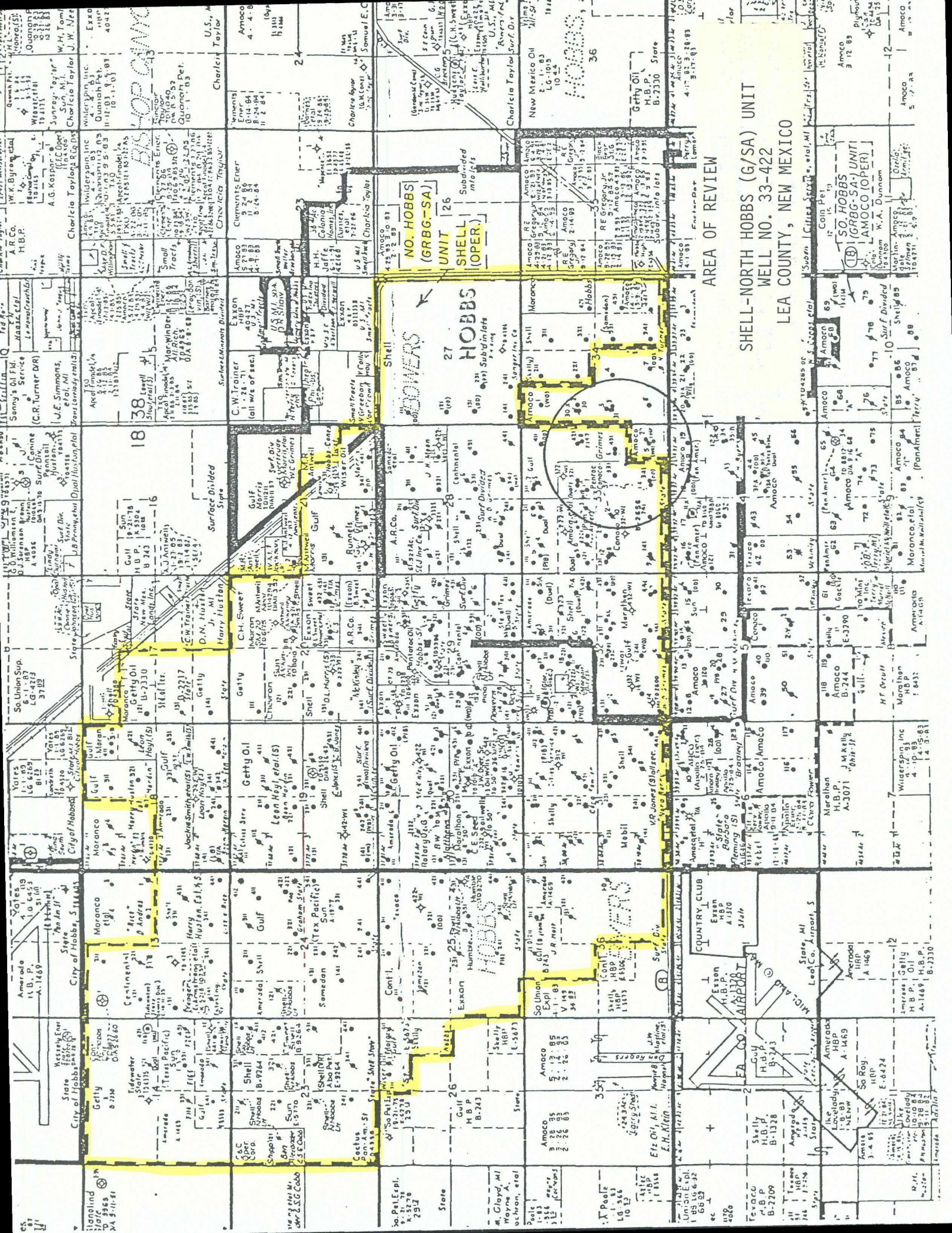
CASE NO. 6653, ORDER NO. R-6199

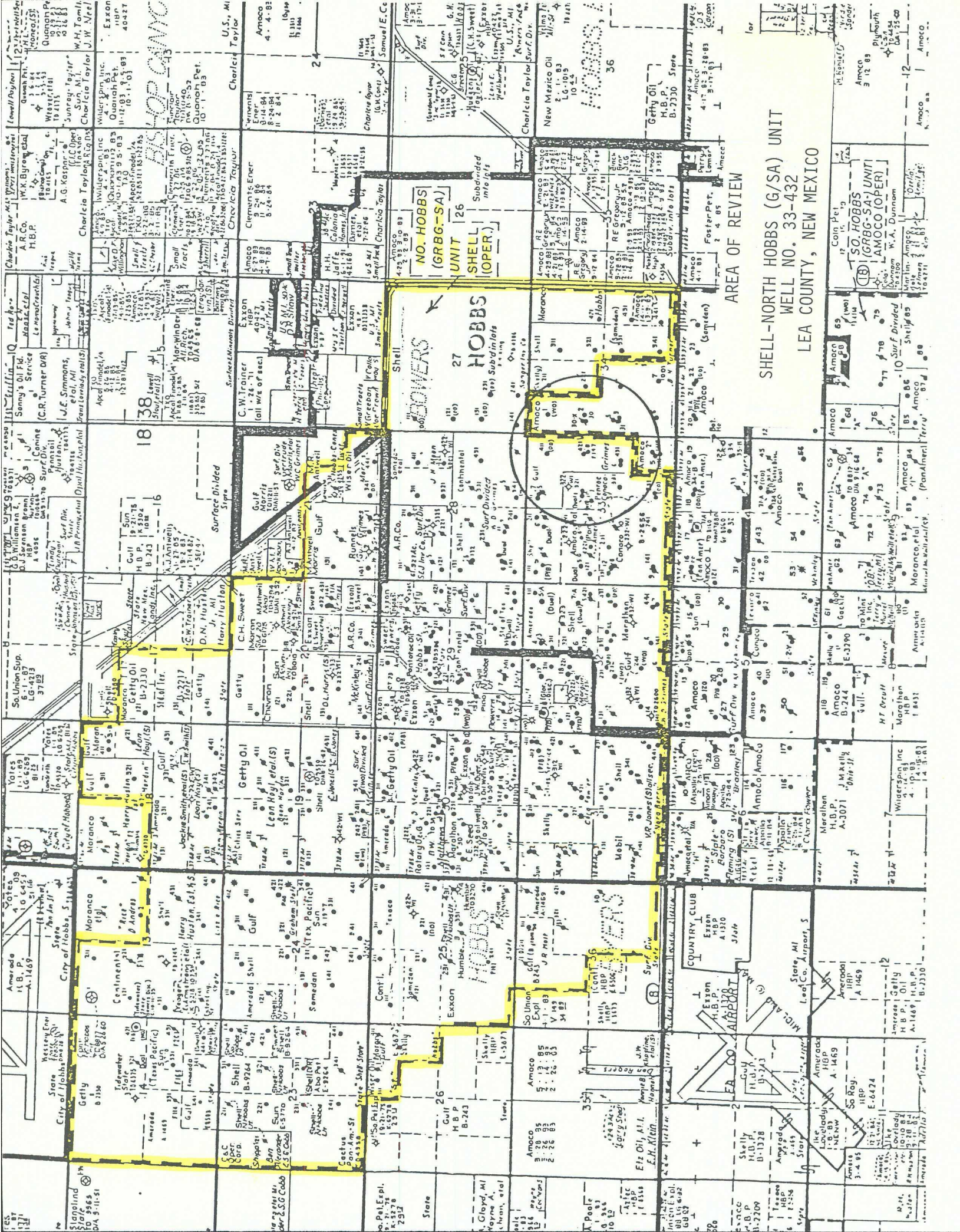
DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.











SHELL-NORTH HOBBS (G/SA) UNIT
WELL NO. 33-432
LEA COUNTY, NEW MEXICO

AREA OF REVIEW

NO. HOBBS
(GRBG-SA)
UNIT 126
SHELL
(OPER.)
Subdivided
into lots

HOBBS
Subdivided
into lots

NO. HOBBS
(GRBG-SA)
UNIT 126
SHELL
(OPER.)
Subdivided
into lots

HOBBS
Subdivided
into lots

NO. HOBBS
(GRBG-SA)
UNIT 126
SHELL
(OPER.)
Subdivided
into lots

HOBBS
Subdivided
into lots

NO. HOBBS
(GRBG-SA)
UNIT 126
SHELL
(OPER.)
Subdivided
into lots

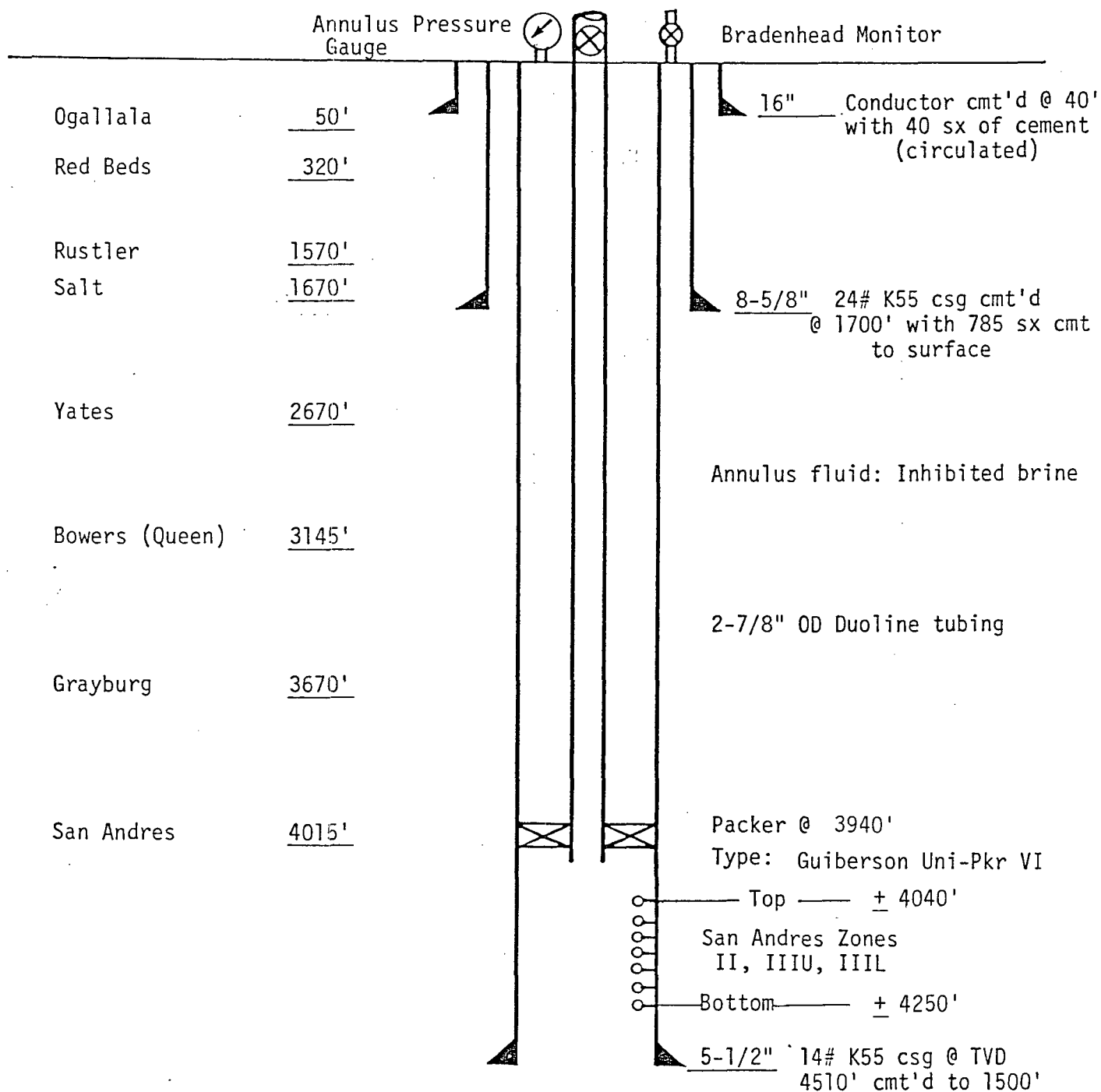
HOBBS
Subdivided
into lots

NO. HOBBS
(GRBG-SA)
UNIT 126
SHELL
(OPER.)
Subdivided
into lots

HOBBS
Subdivided
into lots

SHELL OIL COMPANY
 NORTH HOBBS (GRAYBURG/SAN ANDRES) UNIT
 N.M.O.C.D. ORDER NO. R-6199
 SECTIONS 32 & 33, T-18-S, R-38-E
 HOBBS (GRAYBURG/SAN ANDRES) POOL, LEA COUNTY, NEW MEXICO

PROPOSED COMPLETION



Well is deviated with a KOP at 1700'±

WELL DATA SHEET

A.

(1) Lease Name: North Hobbs (G/SA) Unit

Location:

<u>WELL NO.</u>	<u>SURFACE LOCATION</u>	<u>BOTTOMHOLE LOCATION</u>
32-142	610' FSL & 1210' FWL	25' FSL & 1320' FWL
32-342	475' FSL & 1437' FEL Both in Section 32, T-18-S, R-38-E	25' FSL & 1320' FEL
33-342	125' FSL & 2730' FWL	25' FSL & 2640' FWL
33-422	2181' FNL & 498' FEL	25' FEL & 2640' FNL
33-432	1842' FSL & 1029' FEL All in Section 33, T-18-S, R-38-E	1345' FSL & 1320' FEL

(2) Proposed Casing And Cement Program

<u>HOLE SIZE</u>	<u>CASING</u>	<u>WEIGHT/FOOT</u>	<u>SETTING DEPTH</u>	<u>SX OF CMT</u>	<u>EST. TOP</u>
20"	16"	65#	40'	40 sx	SURFACE
12-1/4"	8-5/8"	24#	1700'	785 sx	SURFACE
7-7/8"	5-1/2"	14#	4510'	2000 sx	1500'

(3) 2-7/8" OD Duoline tubing set at approximately 3960'.

(4) Guiberson Uni-Pkr VI set @ 100' above top perforation.
Proposed Injection Interval: 4040' to 4250'.

B.

(1) The name of the injection formation is San Andres, Hobbs (Grayburg/San Andres) Pool.

(2) The injection interval will be perforated.

(3) All five wells will be drilled for injection.

(4) N/A.

(5) Next higher oil zone - Queen @ 3145'±.
Next lower oil zone - Drinkard @ 6600'±.

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, _____

ROBERT L. SUMMERS

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not in a supplement thereof for a period

of _____

ONE _____ weeks.

Beginning with the issue dated

JUNE 7, 1983

and ending with the issue dated

JUNE 7, 1983

Robert L. Summers
Publisher.

Sworn and subscribed to before

me this 7TH day of

JUNE, 1983

Lyette Maegele
Notary Public.

My Commission expires _____

March 29, 1986

(Seal)

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

LEGAL NOTICE

JUNE 7, 1983

NOTICE is hereby given of the application of Shell Oil Company, Attention: A. J. Fore, Supervisor Regulatory and Permitting, P. O. Box 991, Houston, Texas 77001 (713) 870-3787, to the Oil Conservation Division, New Mexico Energy & Minerals Department, for approval of the following injections wells for the purpose of pressure maintenance and enhanced recovery.

Well Nos.: No. 32-142 No. 33-342; No. 32-342 No. 33-422 No. 33-432.

Lease/Unit Name: North Hobbs (Grayburg/San Andres) Unit.

Location: Section 32, T-18-S, R-38-E; No. 32-142, No. 32-342. Section 33, T-18-S, R-38-E; No. 33-342, No. 33-422, No. 33-432. NMPM, Lea County, New Mexico

The injection formation is San Andres at a depth of approximately 4040 feet below the surface of the ground. Expected maximum injection rate is 1500 barrels per day, and expected maximum injection pressure is 800 psi. Interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501, within fifteen (15) days.

SHELL - NORTH HOBBS (G/SA) UNIT

SURFACE OWNERS

WELL NO. 32-142

MOOSE LODGE #2084
2920 W. MARLAND
HOBBS, NM 88240

WELL NO. 32-342

FIRST INTERSTATE BANK OF LEA COUNTY, FORMERLY
NEW MEXICO BANK AND TRUST CO., TRUSTEE FOR
CYNTHIA GRIMES GREBE, CECIL GRIMES MADDOX
AND AGENT FOR GRIMES HEIRS
P. O. BOX 400
HOBBS, NM 88240

WELL NO. 33-342

COMMISSIONER OF PUBLIC LANDS
P. O. BOX 1148
SANTA FE, NM 87501

WELL NOS. 33-422 &
33-432

GULF OIL EXPLORATION & PRODUCTION COMPNAY
ATTENTION: MR. ROBERT ANDERSON
P. O. BOX 670
HOBBS, NM 88240

OFFSET OPERATOR

AMOCO PRODUCTION COMPANY
ATTN: MR. MIKE DAVIS
P. O. BOX 3092
HOUSTON, TX 77253

P26 8682736
RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

SENT TO		MOOSE LODGE #2084	
STREET AND NO.		2920 W. MARLAND	
P.O., STATE AND ZIP CODE		HOBBS, NM 88240	
POSTAGE		\$	
CONSULT POSTMASTER FOR FEES	OPTIONAL SERVICES	CERTIFIED FEE	c
		SPECIAL DELIVERY	c
		RESTRICTED DELIVERY	c
	RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	c
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	c
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	c
		SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	c
TOTAL POSTAGE AND FEES		\$	
POSTMARK OR DATE		D. M. UPSON WCK 4435 JULY 7, 1983	

PS Form 3800, Apr. 1976

CERTIFIED
 P26 8682736
MAIL

P26 8682737
RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

SENT TO		1st Inter. Bank of Lea Co., GRIMES HEIRS	
STREET AND NO.		P. O. BOX 400	
P.O., STATE AND ZIP CODE		HOBBS, NM 88240	
POSTAGE		\$	
CONSULT POSTMASTER FOR FEES	OPTIONAL SERVICES	CERTIFIED FEE	c
		SPECIAL DELIVERY	c
		RESTRICTED DELIVERY	c
	RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	c
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	c
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	c
		SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	c
TOTAL POSTAGE AND FEES		\$	
POSTMARK OR DATE		D. M. UPSON WCK 4435 JULY 7, 1983	

PS Form 3800, Apr. 1976

CERTIFIED
 P26 8682737
MAIL

P26 8682738
RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

SENT TO		STATE OF NEW MEXICO OFFICE OF LAND COMM.	
STREET AND NO.		P. O. BOX 1148	
P.O., STATE AND ZIP CODE		SANTA FE, NM 87501	
POSTAGE		\$	
CONSULT POSTMASTER FOR FEES	OPTIONAL SERVICES	CERTIFIED FEE	c
		SPECIAL DELIVERY	c
		RESTRICTED DELIVERY	c
	RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	c
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	c
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	c
		SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	c
TOTAL POSTAGE AND FEES		\$	
POSTMARK OR DATE		D. M. UPSON WCK 4435 JULY 7, 1983	

PS Form 3800, Apr. 1976

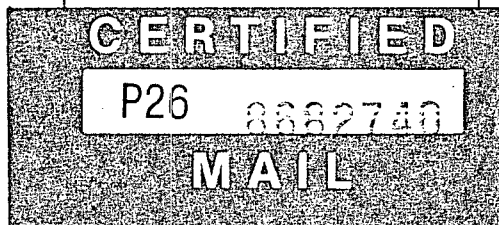
CERTIFIED
 P26 8682738
MAIL

P26 8682740
RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

SENT TO		AMOCO PROD. COMPANY	
ATTN:		MR. MIKE DAVIS	
STREET AND NO.		P. O. BOX 3092	
P.O., STATE AND ZIP CODE		HOUSTON, TX 77253	
POSTAGE		\$	
CONSULT POSTMASTER FOR FEES	OPTIONAL SERVICES	CERTIFIED FEE	¢
		SPECIAL DELIVERY	¢
		RESTRICTED DELIVERY	¢
	RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	¢
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
		SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES		\$	
POSTMARK OR DATE		D. M. UPSON WCK 4435 JULY 7, 1983	

PS Form 3800, Apr. 1976



P26 8682739
RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

SENT TO		GULF OIL EXPL & PROD.	
ATTN:		ROBERT ANDERSON	
STREET AND NO.		P. O. BOX 670	
P.O., STATE AND ZIP CODE		HOBBS, NM 88240	
POSTAGE		\$	
CONSULT POSTMASTER FOR FEES	OPTIONAL SERVICES	CERTIFIED FEE	¢
		SPECIAL DELIVERY	¢
		RESTRICTED DELIVERY	¢
	RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	¢
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
		SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES		\$	
POSTMARK OR DATE		D. M. UPSON WCK 4435 JULY 7, 1983	

PS Form 3800, Apr. 1976

