

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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

ADMINISTRATIVE ORDER
NFL 120

INFILL DRILLING FINDINGS AND WELL-SPACING WAIVER
MADE PURSUANT TO SECTION 271.305(b) OF THE
FEDERAL ENERGY REGULATORY COMMISSION REGULATIONS,
NATURAL GAS POLICY ACT OF 1978 AND OIL CONSERVATION DIVISION
ORDER NO. R-6013

I.

Operator Chaveroo Operating Company Inc. Well Name and No. LSA Well No. 2

Location: Unit G Sec. 30 Twp. 17 S Rng. 36 East Cty. Lea

II.

THE DIVISION FINDS:

(1) That Section 271.305(b) of the Federal Energy Regulatory Commission Interim Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find, prior to the commencement of drilling, that the well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by any existing well within that unit, and must grant a waiver of existing well-spacing requirements.

(2) That by Order No. R-6013, dated June 7, 1979, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.

(3) That the well for which a finding is sought is to be completed in the South Double "A" Abo Pool, and the standard spacing unit in said pool is 40 acres.

(4) That a 40-acre proration unit comprising the SW/4 NE/4 of Sec. 30, Twp. 17 S, Rng. 36 East, is currently dedicated to the applicant's State LSA Well No. 1 located in Unit G of said section.

(5) That this proration unit is (X) standard () nonstandard; if nonstandard, said unit was previously approved by Order No. n/a.

(6) That said proration unit is not being effectively and efficiently drained by the existing well(s) on the unit.

(7) That the drilling and completion of the well for which a finding is sought should result in the production of an additional 300,000 MCF of gas from the proration unit which would not otherwise be recovered.

(8) That all the requirements of Order No. R-6013 have been complied with, and that the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.

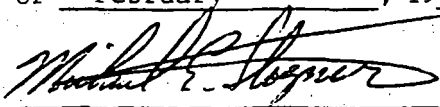
(9) That in order to permit effective and efficient drainage of said proration unit, the subject application should be approved as an exception to the standard well spacing requirements for the pool.

IT IS THEREFORE ORDERED:

(1) That the applicant is hereby authorized to drill the well described in Section I above as an infill well on the existing proration unit described in Section II(4) above. The authorization for infill drilling granted by this order is an exception to applicable well spacing requirements and is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.

(2) That 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 this 4th day of February, 19 86.


DIVISION DIRECTOR

EXAMINER ☒

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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

ADMINISTRATIVE ORDER
NFL 120

Received 12/21/95
Release Immediately
By H. Stogner

INFILL DRILLING FINDINGS AND WELL-SPACING WAIVER
MADE PURSUANT TO SECTION 271.305(b) OF THE
FEDERAL ENERGY REGULATORY COMMISSION REGULATIONS,
NATURAL GAS POLICY ACT OF 1978 AND OIL CONSERVATION DIVISION
ORDER NO. R-6013

I. Chaveroo Operating Company, Inc.

Operator ~~Chaveroo~~ Well Name and No. LSA Well No. 2
Location: Unit 6 Sec. 30 Twp. 17 South Rng. 36 East Cty. Lea

II.

THE DIVISION FINDS:

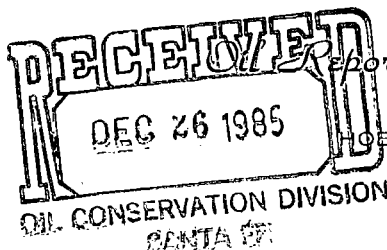
- (1) That Section 271.305(b) of the Federal Energy Regulatory Commission Interim Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find, prior to the commencement of drilling, that the well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by any existing well within that unit, and must grant a waiver of existing well-spacing requirements.
- (2) That by Order No. R-6013, dated June 7, 1979, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.
- (3) That the well for which a finding is sought is to be completed in the South Double "A" A60 Pool, and the standard spacing unit in said pool is 40 acres.
- (4) That a 40-acre proration unit comprising the S^W 1/4 NE 1/4 of Sec. 30, Twp. 17 South, Rng. 36 East, is currently dedicated to the applicant's State LSA Well No. 1 located in Unit 6 of said section.
- (5) That this proration unit is (☒) standard () nonstandard; if nonstandard, said unit was previously approved by Order No. NA.
- (6) That said proration unit is not being effectively and efficiently drained by the existing well(s) on the unit.
- (7) That the drilling and completion of the well for which a finding is sought should result in the production of an additional 300,000 MCF of gas from the proration unit which would not otherwise be recovered.
- (8) That all the requirements of Order No. R-6013 have been complied with, and that the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.
- (9) That in order to permit effective and efficient drainage of said proration unit, the subject application should be approved as an exception to the standard well spacing requirements for the pool.

IT IS THEREFORE ORDERED:

- (1) That the applicant is hereby authorized to drill the well described in Section I above as an infill well on the existing proration unit described in Section II(4) above. The authorization for infill drilling granted by this order is an exception to applicable well spacing requirements and is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.
- (2) That 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 this _____ day of _____, 19_____.

DIVISION DIRECTOR _____ EXAMINER _____



Reports and Gas Services, Inc.

P. O. BOX ~~XXX~~ 755

HOBBS, NEW MEXICO 88240

PHONE NUMBERS
393-2727 - 393-2017

Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Application is hereby made on behalf of Chaveroo Operating Company, Inc. for an infill well under the provisions of Order R-6013-A as follows:

Well Name: LSA No. 2
Location: 1980' FNL & 2310' FEL of Section 30, T17S, R36E
Pool: South Double A Abo
Spud Date: 5/28/85
Completion Date: September 14, 1985
Perforations: Lower Abo 9168 to 9230
Mechanical Problems: None
Proration Unit: SW/4 NE/4 Section 30, being 40 acres
Current Rate of Production: 289 barrels oil, 185 MCF gas, 960 barrels water, per day

Existing Well on Proration Unit:

Well Name: LSA No. 1
Location: 1980' FNL & 1980' FEL of Section 30, T17S, R36E
Spud Date: 12/8/63
Completion Date: 2/14/64
Perforations: Upper Abo 8824 to 8942
Mechanical Problems: None
Current Rate of Production: 18 barrels oil, 23 MCF gas, no water, per day

Reason Well is Necessary to Drain Proration Unit:

The LSA No. 1 was originally drilled to a total depth of 9327 feet and completed in the lower Abo from perforations 9148 to 9211 feet. The results of DST #2 (see Exhibit A) would indicate that good production should have been obtained from this depth. Although the well was potentialed 2/14/64 for 190 barrels of oil per day, the decline was rapid with a total of 3995 barrels of oil and 16,424 barrels of water reported through July 1964. Perforations 9148 to 9211 were squeezed in August 1964 (see Exhibit B) and the well was recompleted through perforations 9157 to 9161. A total of 1192 barrels of oil was produced from these perforations before the well was recompleted to the upper Abo in June 1965 through perforations 8824 to 8942. The production is shown as a decline curve included as Exhibit C.

When BTA Oil Producers completed their Abo-D 7903 JV-P No. 1 on 11/26/83 from perforations 9116 to 9207 with a potential of 360 barrels of oil per day, it became evident that the DST in the LSA No. 1 was indeed a reliable test. This well is a direct west offset, being 990' due west from the LSA No. 1. There is no logical explanation as to why the LSA No. 1 was not able to obtain commercial production from the lower Abo in 1964.

There is nothing filed of record to indicate how or what material was used to plug back the LSA No. 1 from 9172 to 9124 in June 1965, although pencil notes found in the operator's well file would indicate that a retainer was set. To attempt a recompletion back to the lower Abo would thus require drilling out two retainers in the 22-year old well bore. Swab test and production records from 1964 would indicate that the 4 to 6 feet of lower Abo pay had been watered out.

Exhibit D, a decline curve of LSA No. 1 from January 1977 to November 1985, reveals that there has been very little decline in production during this period, with production stabilized at an average of 18 barrels of oil per day for the last 22 months. It was not mechanically feasible to risk 18 barrels water-free production per day in an attempt to return the LSA No. 1 back to the lower Abo. However, some action was necessary to protect the lease from drainage. The only alternative was to drill a new well between the LSA No. 1 and the BTA well. The need for action became more evident when Pioneer Production Corporation completed the State "30" No. 1 for 55 barrels of oil per day from perforations 8592 to 9213 on May 22, 1984. This well is a southwest diagonal offset, being 1400' southwest of the LSA No. 1.

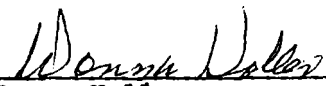
Estimated Increased Recovery:

The BTA Oil Producers Abo-D 7903 JV-P No. 1 has produced a total of 177,057 barrels of oil and 106,867 MCF gas from November 26, 1983 through August 1985. The Abo-D 7903 JV-P No. 2 was completed December 30, 1984 through perforations 9126 through 9206 and has produced 63,927 barrels oil and 43,400 MCF gas through August 1985. The Chaveroo LSA No. 2 has produced 22,118 barrels oil and 13,265 MCF gas from September 14, 1985. The Pioneer State "30" No. 1 has produced 48,280 barrels oil and 45,667 MCF gas from May 22, 1984 through August 1985. As shown on the structure map (Exhibit E), these are the only four wells producing from the lower Abo formation from which a decline pattern could be ascertained and none have produced for a sufficient period to establish such a pattern. If we assume a flat decline rate as experienced by the LSA No. 1 in the upper Abo and use the current productivity of the LSA No. 2 then the ultimate recovery could be estimated as high as 1,500,000 barrels oil and 905,000 MCF gas. If we assume a rapid decline after the initial flush production we can estimate a conservative recovery of 500,000 barrels oil and 300,000 MCF gas.

All operators shown on Exhibit H have been notified by certified mail that this application has been filed.

Yours very truly,

OIL REPORTS & GAS SERVICES, INC.


Donna Holler

DH/sn

INDEX OF EXHIBITS

Application for Infill Well
Chaveroo Operating Company, Inc.
LSA No. 2

- Exhibit A DST No. 2, LSA No. 1, run in 1964, lower Abo 9145 to 9222
- Exhibit B Detail of recompletion from San Andres - lower Abo dual to lower Abo perms 9157 to 9161
- Exhibit C Decline curve, LSA No. 1, February 1964 thru December 1973
- Exhibit D Decline Curve, LSA No. 1, January 1977 thru November 1985
- Exhibit E Structure map and isopach map
- Exhibit F Copy of Form C-101, LSA No. 2, approved May 10, 1985
- Exhibit G Copy of surveyor's plat (Form C-102) as filed with Form C-101
- Exhibit H Location plat showing wells of interest and offset operators
- Exhibit I Copy of Certified Mail Receipt

NUMBER OF COPIES RECEIVED	
DISTRIBUTION	
TO THE DISTRICT OFFICE	
TO THE FIELD OFFICE	
TO THE STATE OFFICE	
TO THE FEDERAL OFFICE	
TO THE COUNTY OFFICE	
TO THE TOWNSHIP OFFICE	
TO THE RANGE OFFICE	
TO THE WELL OFFICE	
TO THE OIL OFFICE	
TO THE GAS OFFICE	

NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103
(Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company Lone Star Producing Company		Address Box 4815, Midland, Texas 79702				
State Atlantic State	Well No. 1	Unit Letter G	Section 30	Township T-17-S	Range R-36-E	
Work Performed January 26, 1964	Pool Undesignated			County Lea		

THIS IS A REPORT OF: (Check appropriate block)

Beginning Drilling Operations ☐ Casing Test and Cement Job ☒ Other (Explain):
Plugging ☐ Remedial Work **D.S.T. #2**

Detailed account of work done, nature and quantity of materials used, and results obtained.

Made D.S.T. #2 from 9,145' to 9,222'. Length of test 1 hour. Gas to surface in 5 minutes. Mud and oil to surface in 22 minutes. Flowing clean oil to surface in 28 minutes. Closed surface choke to a 1/4". Instant flowing pressure 275#. Flowed oil for 1 hour. Maximum surface flowing pressure 475#. Reversed out 9,222' clean oil, no water. Corrected gravity of oil 36. 1 hour I.S.I.P. 3424#, I.F.P. 1943#, F.F.P. 2852#, 90 minute F.S.I.P. 3212#, hydrostatic pressure in hole 4296#, out of hole 4277#.

Reported by E. C. Watson	Position Sr. Prod. Foreman	Company Lone Star Producing Company
------------------------------------	--------------------------------------	---

FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

ORIGINAL WELL DATA

Well No.	FD	PBTD	Producing interval	Completion Date
Diameter	Tubing Depth	Oil String Diameter	Oil String Depth	
Producing Interval(s)				
Hole Interval		Producing Formation(s)		

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION

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

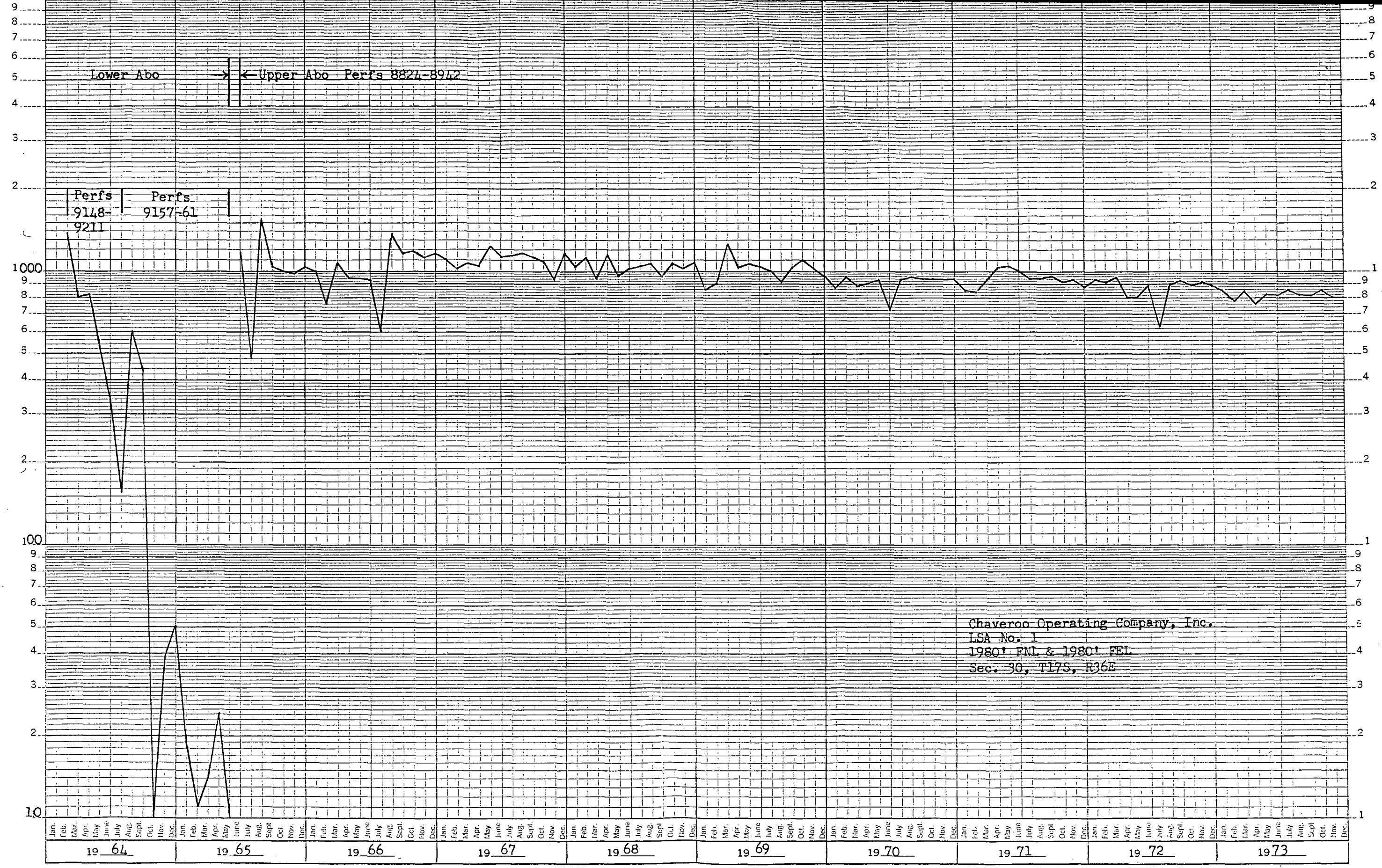
Reported by <i>[Signature]</i>	Name <i>[Signature]</i>
	Position District Production Superintendent
	Company Lone Star Producing Company

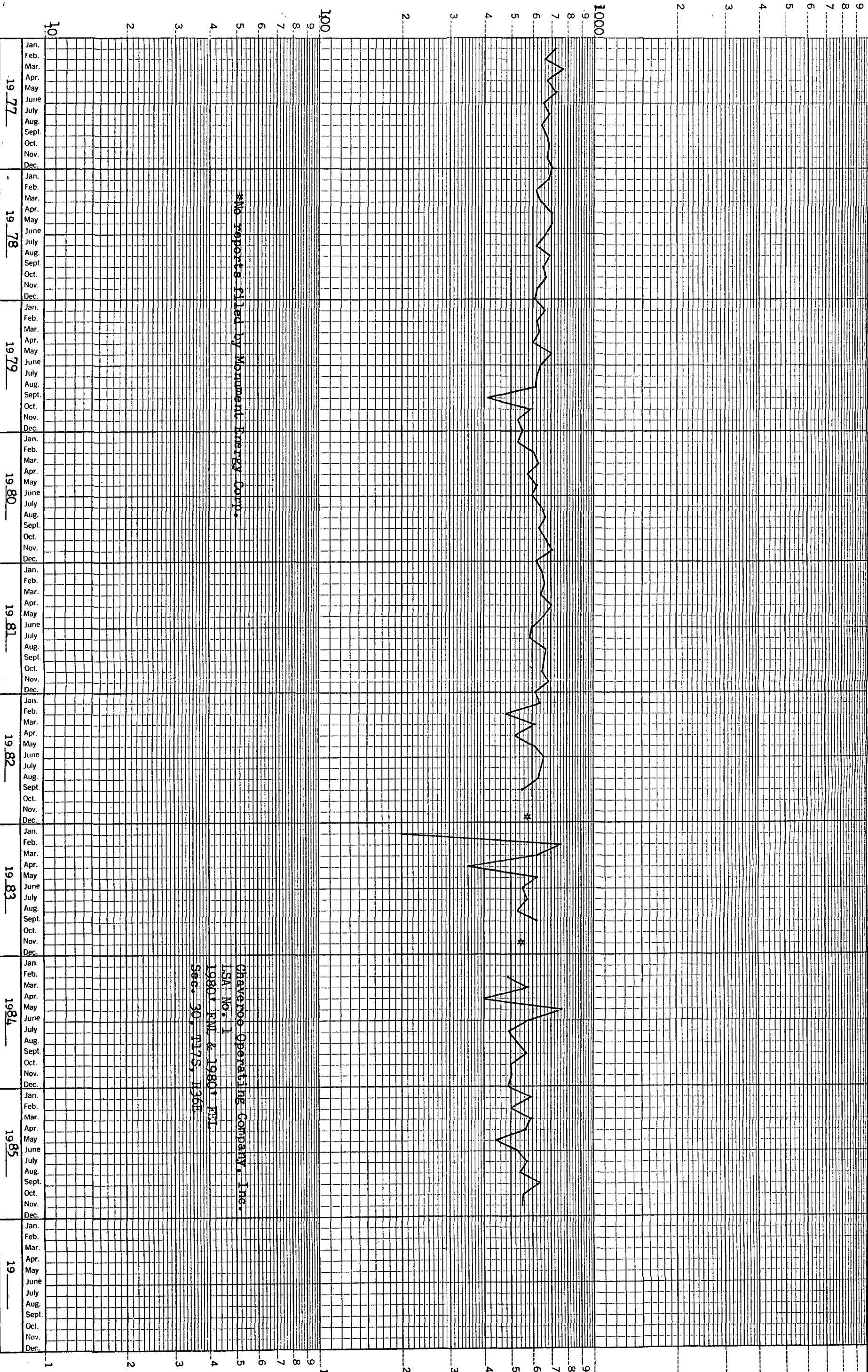
EXHIBIT A

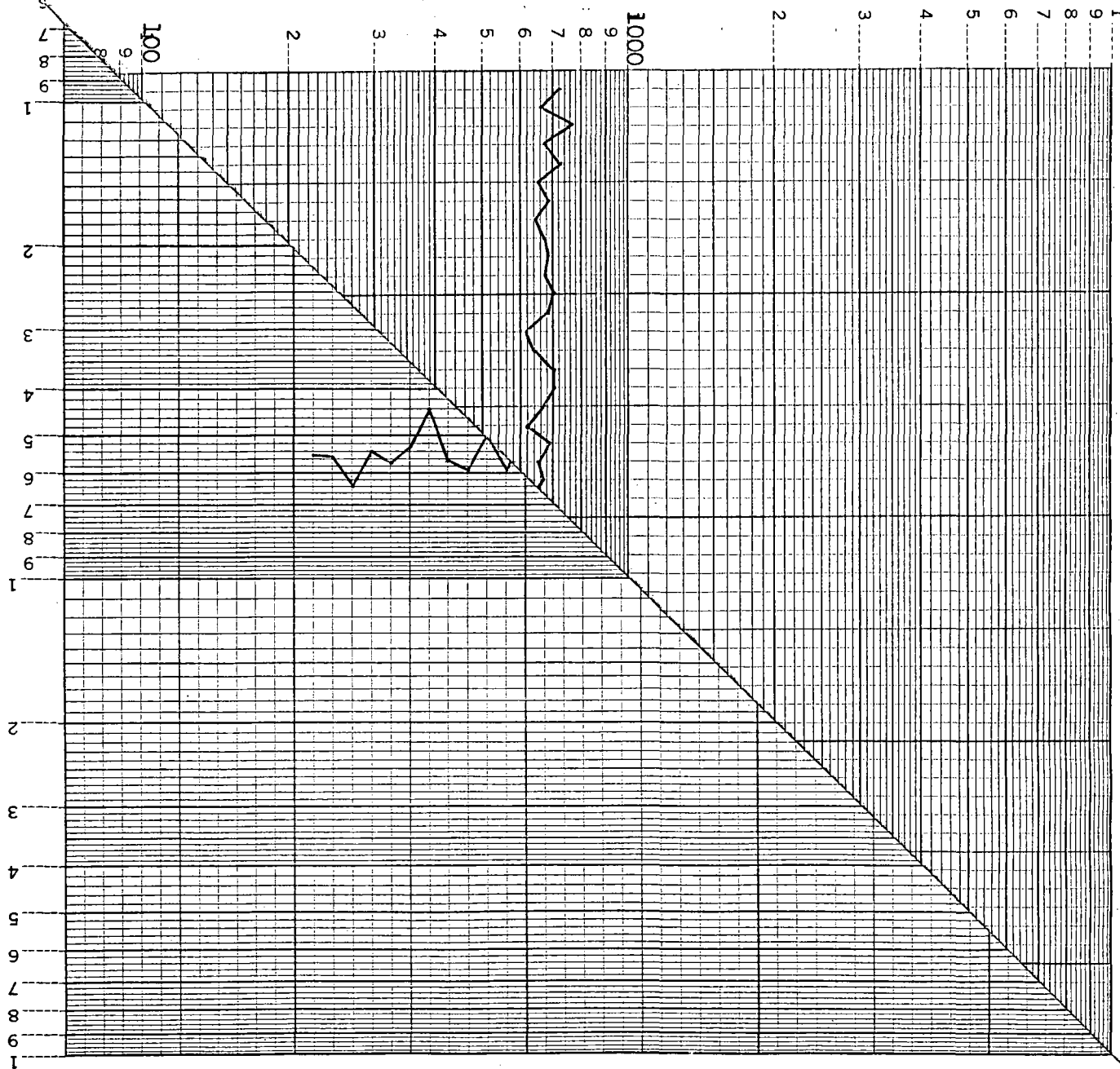
Lone Star Producing Company - Atlantic State No. 1 Well, Unit 1, Section 30, T-17-S, R-36-E, Lea County, New Mexico, South Double A-Abo Field:

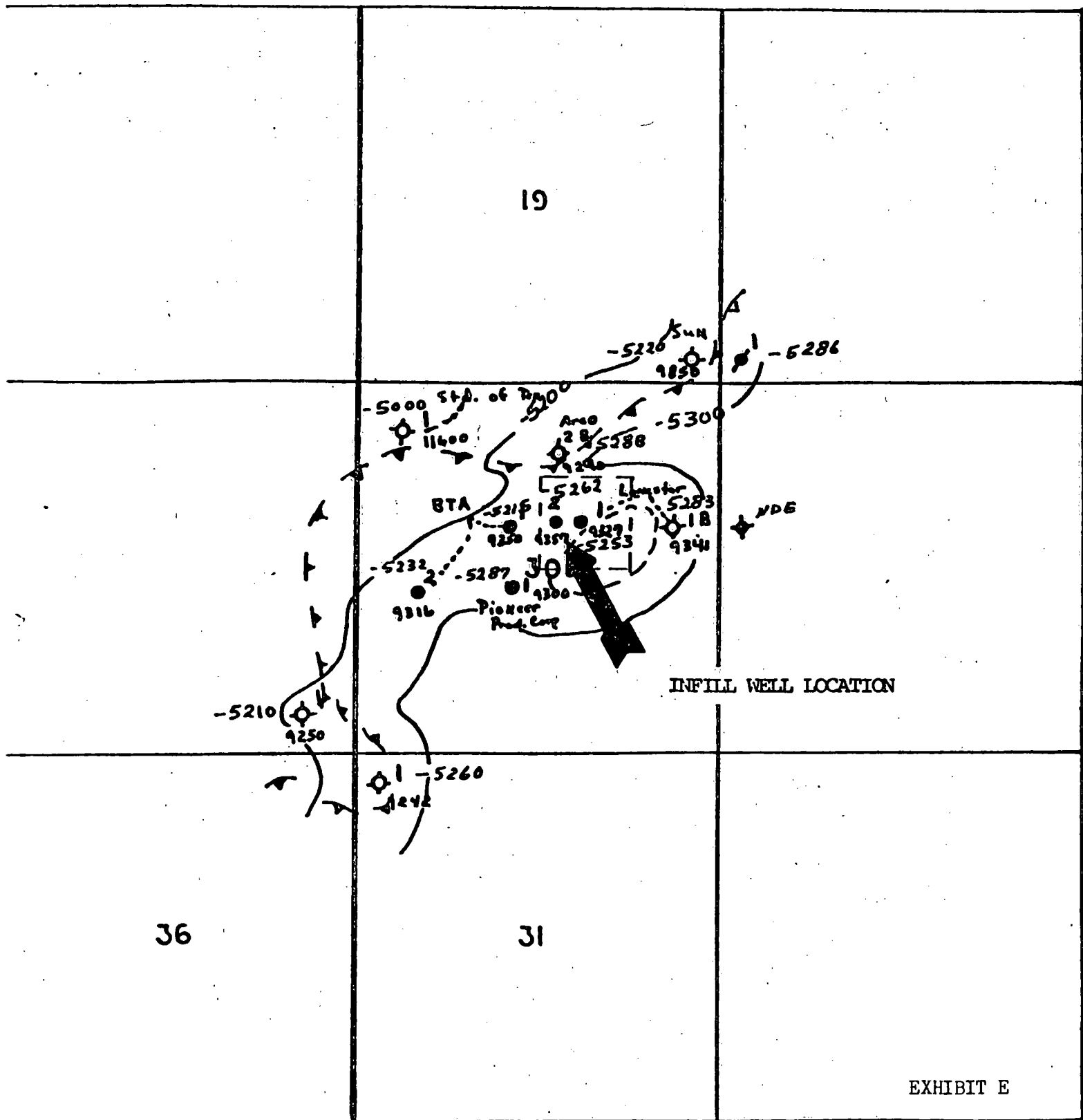
HOBBS OFFICE O.C.C.
AUG 26 10 51 AM '64

- 7-28-64 Squeezed perforations 5,060' to 5,098' with 142 sacks Lone Star Incer with 8/10 of 1% HA-9 plus 5# salt per sack added to 4000#.
- 7-29-64 Drilled out to 5,100' and tested squeeze job on perforations 5,060' to 5,098' with 2000# pressure for 30 minutes. No pressure loss.
- 8-1-64 Squeezed perforations 9,148' to 9,211' with 128 sacks Lone Star Incer with 8/10 of 1% HA-9 added to 2200#.
- 8-2-64 Drilled cement from 9,050' to 9,198'. Perforated from 9,190' to 9,197' (7 holes). Checked drilled out T.D. at 9,200' by Ram Guns, 2' deep to driller.
- 8-3-64 Ran 2-3/8" O.D. 4.70# J-55 tubing and Guiberson packer. Set tubing at 9,194.83'. Swabbed salt water with trace of gas, no oil.
- 8-4-64 Swabbed 12 barrels salt water per hour, no oil, slight trace of gas.
- 8-5 & 6-64 Squeezed perforations 9,190' to 9,197' with 230 sacks cement (3 jobs).
- 8-6-64 Tested squeeze on perforations 9,190' to 9,197' with 4000#. No pressure loss.
- 8-7-64 Drilled cement from 9,120' to 9,172'. Perforated from 9,157' to 9,161' (4 holes). Checked drilled out T.D. to 9,174' by Ram Guns, 2' deep to driller.
- 8-8-64 Ran 2-3/8" O.D. 4.70# J-55 tubing and Guiberson packer. Set tubing at 9,161.41', Guiberson packer at 8,963.72'. Treated perforations 9,157' to 9,161' with 500 gallons mud acid. Swabbed estimate of 50 barrels acid and load water in 3 hours.
- 8-9-64 Swabbed 12 hours getting estimate of 121 barrels salt water and 27.05 barrels oil.
- 8-10-64 Swabbed 7 hours getting 54.38 barrels oil and 40 barrels water.
- 8-11-64 Pulled tubing and packer.
- 8-12-64 Ran 2-3/8" O.D. 4.70# E.U.E. J-55 tubing, McGaffey Taylor anchor and Page tubing drain for completion. Bottom of tubing 9,166.11'.
- 8-13-64 Ran rods and pump to 9,157'.
- 8-14 & 15-64 Pumped load water with show of oil.
- 8-16-64 Pumped 105 barrels load water, 32.40 barrels oil.
- 8-17-64 Pumped 91.80 barrels oil and 35 barrels load water.
- 8-18-64 Pumped 91.80 barrels oil and 40 barrels water.
- 8-19-64 Pumped 97.20 barrels oil and estimated 21 barrels water.
- 8-20-64 Pumped 64.80 barrels oil and estimated 24 barrels water.
- 8-21-64 Pumped 48.60 barrels oil and 34 barrels water, water estimated.
- 8-22-64 Pumped 37.80 barrels oil and estimated 34 barrels water.
- 8-23-64 Pumped 21.60 barrels oil and estimated 34 barrels water.
- 8-24-64 Pumped 21.60 barrels oil and estimated 34 barrels water.









1 2 3
X 1000 Ft.

DOUBLE-A-ABO, SOUTH FIELD
STRUCTURE MAP
TOP LOWER ABO
CI= 100 Feet

CHAVEROO OPER. CO.
LSA LEASE
T 17 S R 36 E
LEA CO., NEW MEX.

EXHIBIT E

COPIES RECEIVED		
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NTA FE		
FILE		
S.G.S.		
LAND OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

30-025-29202

Form C-101
Revised 1-1-65

Second Amendment

5A. Indicate Type of Lease	
STATE <input checked="" type="checkbox"/>	FEE <input type="checkbox"/>
5. State Oil & Gas Lease No.	
B-8428	
7. Unit Agreement Name	
8. Farm or Lease Name	
LSA	
9. Well No.	
2	
10. Field and Pool, or Wildcat	
South Double A Abo	
12. County	
Lea	
19. Proposed Depth	19A. Formation
9320	Abo
20. Rotary or C.T.	
Rotary	
21A. Kind & Status Plug. Bond	21B. Drilling Contractor
Blanket	Contract Not Let
22. Approx. Date Work will start.	
Upon Approval	

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work																									
DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>																									
1b. Type of Well																									
OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>																								
2. Name of Operator																									
Chaveroo Operating Company, Inc.																									
3. Address of Operator																									
c/o Oil Reports & Gas Services, Inc., P. O. Box 755, Hobbs, NM 88241																									
4. Location of Well																									
UNIT LETTER G	LOCATED 1980																								
FEET FROM THE North																									
2310	FEET FROM THE East																								
LINE OF SEC. 30	TWP. 17S																								
RGE. 36E	NMPM																								
5. Elevations (Show whether DF, RT, etc.)																									
3381.2 GR																									
6. Proposed Casing and Cement Program																									
<table border="1"> <thead> <tr> <th>SIZE OF HOLE</th> <th>SIZE OF CASING</th> <th>WEIGHT PER FOOT</th> <th>SETTING DEPTH</th> <th>SACKS OF CEMENT</th> <th>EST. TOP</th> </tr> </thead> <tbody> <tr> <td>16</td> <td>13 3/8</td> <td>54.5#</td> <td>400</td> <td>400</td> <td>Circulated</td> </tr> <tr> <td>11</td> <td>8 5/8</td> <td>24# & 32#</td> <td>3500</td> <td>1500</td> <td>Circulated</td> </tr> <tr> <td>7 7/8</td> <td>5 1/2</td> <td>17#</td> <td>9320</td> <td>1400</td> <td>1370</td> </tr> </tbody> </table>		SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP	16	13 3/8	54.5#	400	400	Circulated	11	8 5/8	24# & 32#	3500	1500	Circulated	7 7/8	5 1/2	17#	9320	1400	1370
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP																				
16	13 3/8	54.5#	400	400	Circulated																				
11	8 5/8	24# & 32#	3500	1500	Circulated																				
7 7/8	5 1/2	17#	9320	1400	1370																				

Completion to be conventional perforation & treatment

Type blowout preventer sketch attached

Filed to move location back to original point

Permit Expires 6 Months From Approval
Date Unless Drilling Underway.

ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTION 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 W. Anne Halka Title Agent Date 5/9/85

(This space for State Use)

ORIGINAL SIGNED BY JERRY SEXTON

MAY 10 1985

APPROVED BY DISTRICT I SUPERVISOR TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

EXHIBIT F

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator CHAVEROO OPERATING CO., INC.		Lease STATE LSA		Well No. 2
Section Letter G	Section 30	Township 17S	Range 36E	County LEA

Actual Footage Location of Well:

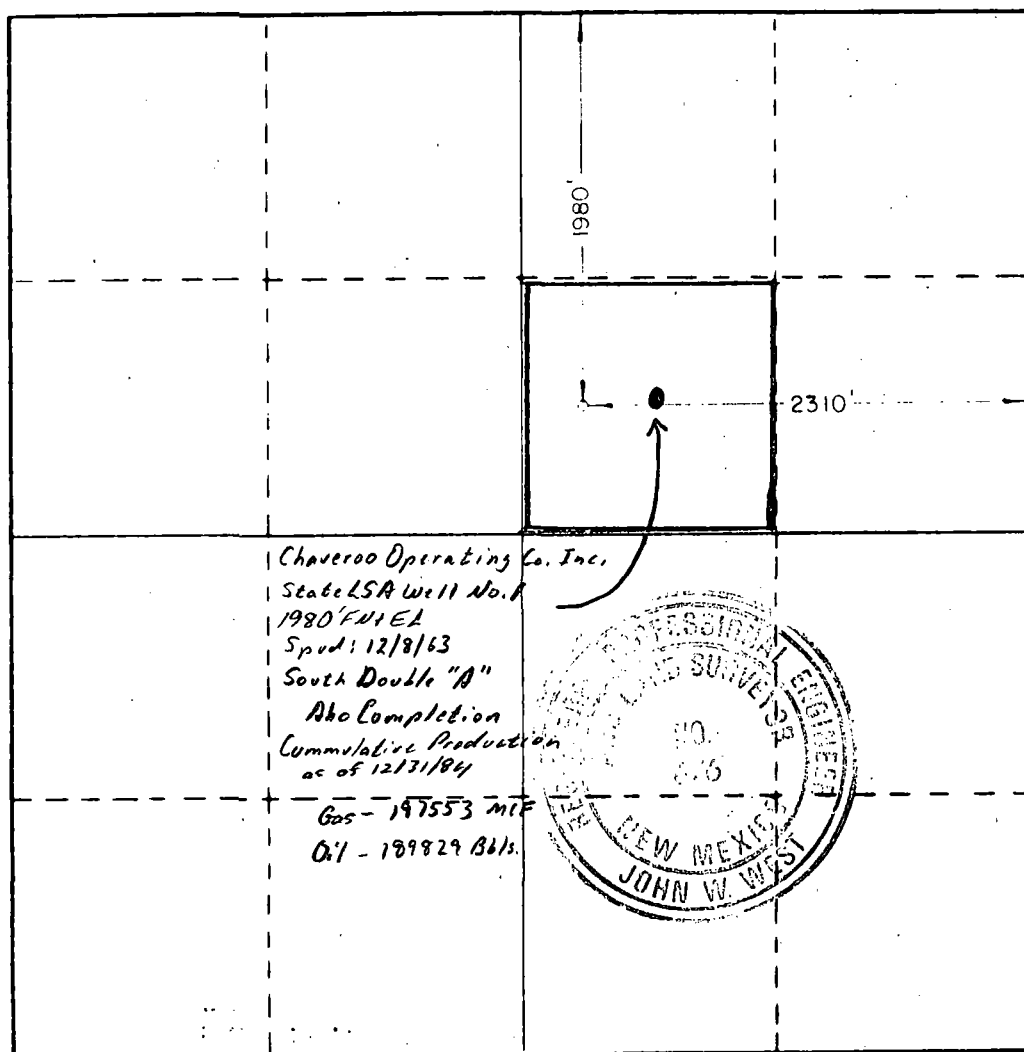
1980 feet from the NORTH line and 2310 feet from the EAST line	
Ground Level Elev. 3381.2	Producing Formation Abo
Pool South Double A	Dedicated Acreage: 40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

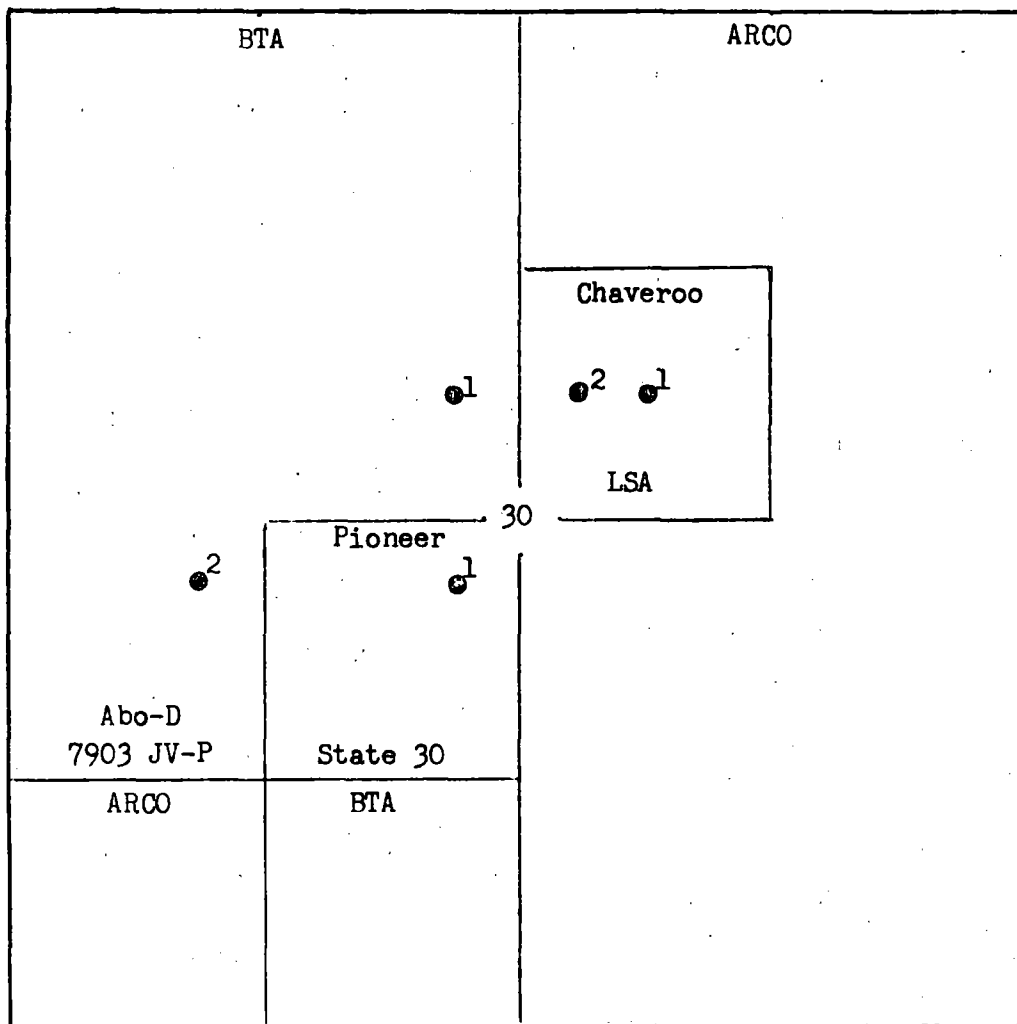
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name
John W. West
Position
Agent
Company
Chaveroo Operating Co. Inc.
Date
3/27/85

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
3/26/85
Registered Professional Engineer and/or Land Surveyor
John W. West
Certificate No. **JOHN W. WEST, 676**
RONALD J. EIDSON, 3239

R 36 E



Offset Operators

ARCO Oil & Gas Company
P. O. Box 1610
Midland, Texas 79702

BTA Oil Producers
104 South Pecos
Midland, Texas 79701

Pioneer Production Corporation
P. O. Box 2542
Amarillo, Texas 79189

EXHIBIT H

P 243 010 610
RECEIPT FOR CERTIFIED MAIL

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

SENT TO		ARCO Oil & Gas Company	
STREET AND NO.		P. O. Box 1610	
P.O. STATE AND ZIP CODE		Midland, Texas 79702	
POSTAGE		\$2.27	
CONSULT POSTMASTER FOR FEES	OPTIONAL SERVICES	CERTIFIED FEE	75¢
		SPECIAL DELIVERY	¢
	RETURN RECEIPT SERVICE	RESTRICTED DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED	70¢
		SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES		\$1.67	
POSTMARK OR DATE		APR 1976	

PS Form 3800, Apr. 1976

P 243 010 611
RECEIPT FOR CERTIFIED MAIL

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

SENT TO		BTA Oil Producers	
STREET AND NO.		104 South Pecos	
P.O. STATE AND ZIP CODE		Midland, Texas 79701	
POSTAGE		\$2.27	
CONSULT POSTMASTER FOR FEES	OPTIONAL SERVICES	CERTIFIED FEE	75¢
		SPECIAL DELIVERY	¢
	RETURN RECEIPT SERVICE	RESTRICTED DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED	70¢
		SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES		\$1.67	
POSTMARK OR DATE		APR 1976	

PS Form 3800, Apr. 1976

P 243 010 613
RECEIPT FOR CERTIFIED MAIL

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

SENT TO		Pioneer Production Corp.	
STREET AND NO.		P. O. Box 2542	
P.O. STATE AND ZIP CODE		Amarillo, Texas 79189	
POSTAGE		\$2.27	
CONSULT POSTMASTER FOR FEES	OPTIONAL SERVICES	CERTIFIED FEE	75¢
		SPECIAL DELIVERY	¢
	RETURN RECEIPT SERVICE	RESTRICTED DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED	70¢
		SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES		\$1.67	
POSTMARK OR DATE		APR 1976	

PS Form 3800, Apr. 1976

EXHIBIT I

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator CHAVEROO OPERATING CO., INC.			Lease STATE LSA		Well No. 2
Section 30	Township 17S	Range 36E	County LEA		

1. The Location of Well:

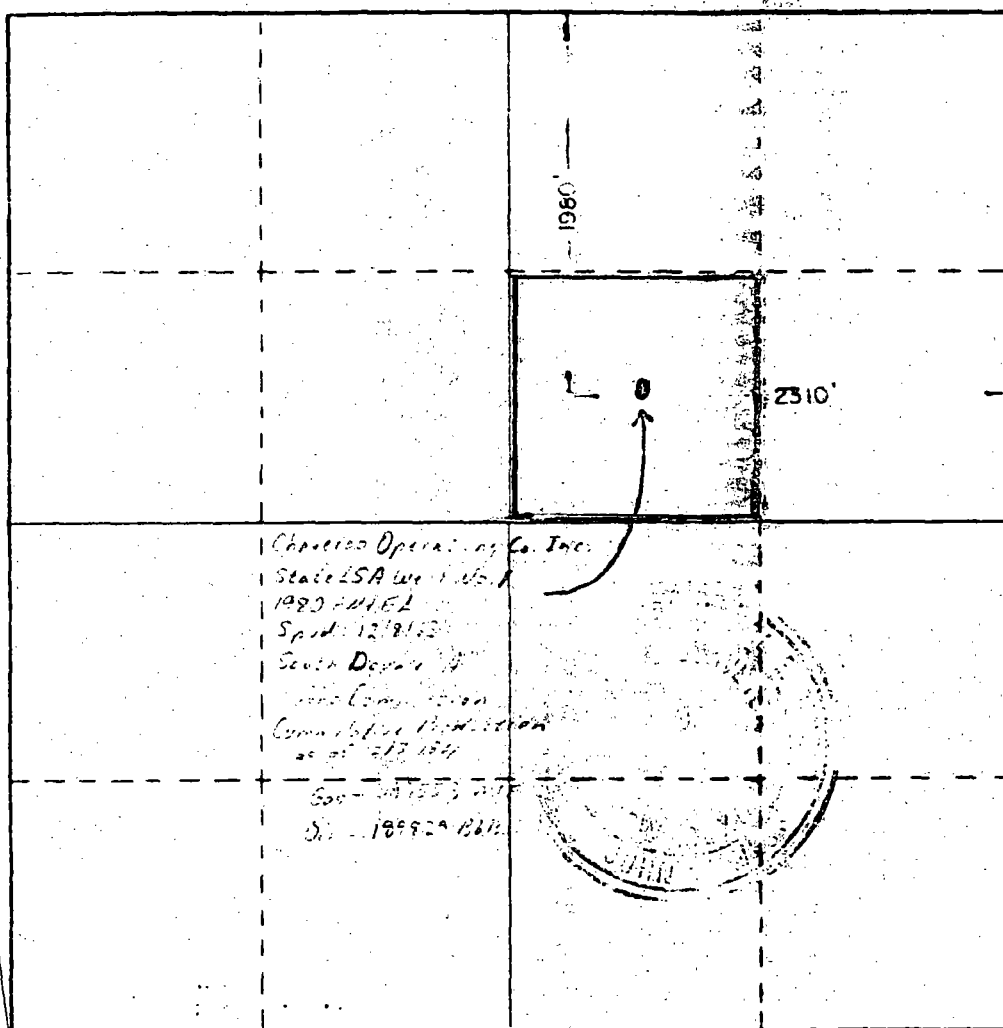
feet from the NORTH line and 2310	feet from the EAST line
Producing Formation Abo	Pool South Double A
Dedicated Acreage: 40	Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

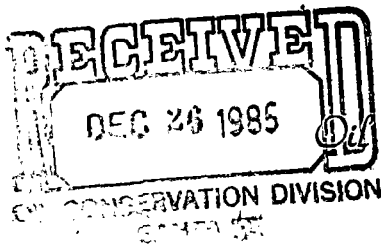
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name Donna Walker
 Position Agent
 Company Chaveroo Operating Co. Inc.
 Date 3/27/85

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed 3/26/85
 Registered Professional Engineer and/or Land Surveyor [Signature]
 Certificate No JOHN W. WEST, 676
RONALD J. EIDSON, 3239

EXHIBIT G



Oil Reports and Gas Services, Inc.

P. O. BOX ~~288~~ 755

HOBBS, NEW MEXICO 88240

PHONE NUMBERS
393-2727 - 393-2017

Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Application is hereby made on behalf of Chaveroo Operating Company, Inc. for an infill well under the provisions of Order R-6013-A as follows:

Well Name: LSA No. 2
Location: 1980' FNL & 2310' FEL of Section 30, T17S, R36E
Pool: South Double A Abo
Spud Date: 5/28/85
Completion Date: September 14, 1985
Perforations: Lower Abo 9168 to 9230
Mechanical Problems: None
Proration Unit: SW/4 NE/4 Section 30, being 40 acres
Current Rate of Production: 289 barrels oil, 185 MCF gas, 960 barrels water, per day

Existing Well on Proration Unit:

Well Name: LSA No. 1
Location: 1980' FNL & 1980' FEL of Section 30, T17S, R36E
Spud Date: 12/8/63
Completion Date: 2/14/64
Perforations: Upper Abo 8824 to 8942
Mechanical Problems: None
Current Rate of Production: 18 barrels oil, 23 MCF gas, no water, per day

Reason Well is Necessary to Drain Proration Unit:

The LSA No. 1 was originally drilled to a total depth of 9327 feet and completed in the lower Abo from perforations 9148 to 9211 feet. The results of DST #2 (see Exhibit A) would indicate that good production should have been obtained from this depth. Although the well was potentialed 2/14/64 for 190 barrels of oil per day, the decline was rapid with a total of 3995 barrels of oil and 16,424 barrels of water reported through July 1964. Perforations 9148 to 9211 were squeezed in August 1964 (see Exhibit B) and the well was recompleted through perforations 9157 to 9161. A total of 1192 barrels of oil was produced from these perforations before the well was recompleted to the upper Abo in June 1965 through perforations 8824 to 8942. The production is shown as a decline curve included as Exhibit C.

When BTA Oil Producers completed their Abo-D 7903 JV-P No. 1 on 11/26/83 from perforations 9116 to 9207 with a potential of 360 barrels of oil per day, it became evident that the DST in the LSA No. 1 was indeed a reliable test. This well is a direct west offset, being 990' due west from the LSA No. 1. There is no logical explanation as to why the LSA No. 1 was not able to obtain commercial production from the lower Abo in 1964.

Oil Conservation Division
December 23, 1985
Page 2

There is nothing filed of record to indicate how or what material was used to plug back the LSA No. 1 from 9172 to 9124 in June 1965, although pencil notes found in the operator's well file would indicate that a retainer was set. To attempt a recompletion back to the lower Abo would thus require drilling out two retainers in the 22-year old well bore. Swab test and production records from 1964 would indicate that the 4 to 6 feet of lower Abo pay had been watered out.

Exhibit D, a decline curve of LSA No. 1 from January 1977 to November 1985, reveals that there has been very little decline in production during this period, with production stabilized at an average of 18 barrels of oil per day for the last 22 months. It was not mechanically feasible to risk 18 barrels water-free production per day in an attempt to return the LSA No. 1 back to the lower Abo. However, some action was necessary to protect the lease from drainage. The only alternative was to drill a new well between the LSA No. 1 and the BTA well. The need for action became more evident when Pioneer Production Corporation completed the State "30" No. 1 for 55 barrels of oil per day from perforations 8592 to 9213 on May 22, 1984. This well is a southwest diagonal offset, being 1400' southwest of the LSA No. 1.

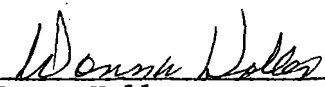
Estimated Increased Recovery:

The BTA Oil Producers Abo-D 7903 JV-P No. 1 has produced a total of 177,057 barrels of oil and 106,867 MCF gas from November 26, 1983 through August 1985. The Abo-D 7903 JV-P No. 2 was completed December 30, 1984 through perforations 9126 through 9206 and has produced 63,927 barrels oil and 43,400 MCF gas through August 1985. The Chaveroo LSA No. 2 has produced 22,118 barrels oil and 13,265 MCF gas from September 14, 1985. The Pioneer State "30" No. 1 has produced 48,280 barrels oil and 45,667 MCF gas from May 22, 1984 through August 1985. As shown on the structure map (Exhibit E), these are the only four wells producing from the lower Abo formation from which a decline pattern could be ascertained and none have produced for a sufficient period to establish such a pattern. If we assume a flat decline rate as experienced by the LSA No. 1 in the upper Abo and use the current productivity of the LSA No. 2 then the ultimate recovery could be estimated as high as 1,500,000 barrels oil and 905,000 MCF gas. If we assume a rapid decline after the initial flush production we can estimate a conservative recovery of 500,000 barrels oil and 300,000 MCF gas.

All operators shown on Exhibit H have been notified by certified mail that this application has been filed.

Yours very truly,

OIL REPORTS & GAS SERVICES, INC.


Donna Holler

DH/sn

INDEX OF EXHIBITS

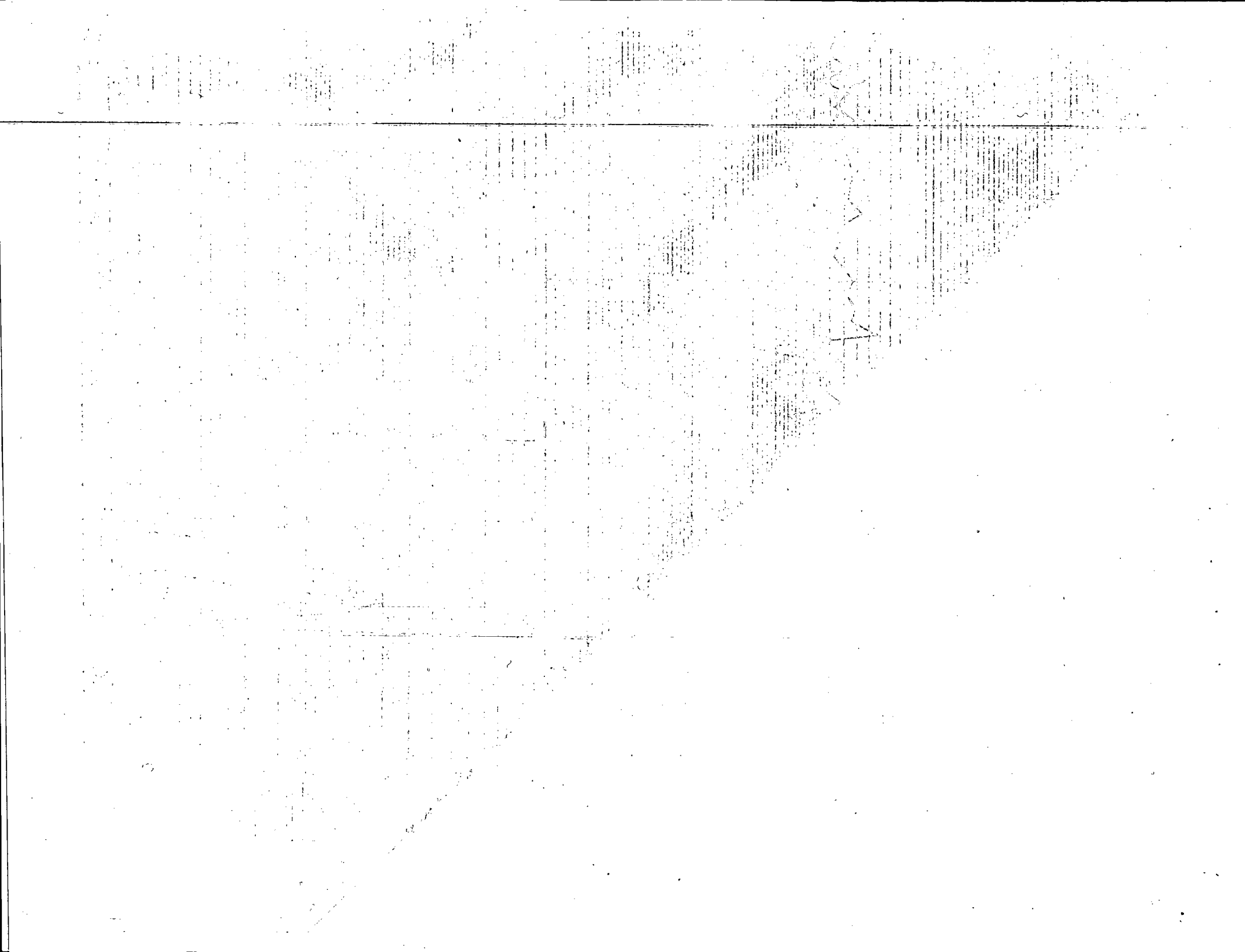
Application for Infill Well
Chaveroo Operating Company, Inc.
LSA No. 2

- Exhibit A DST No. 2, LSA No. 1, run in 1964, lower Abo 9145 to 9222
- Exhibit B Detail of recompletion from San Andres - lower Abo dual to lower Abo perfs 9157 to 9161
- Exhibit C Decline curve, LSA No. 1, February 1964 thru December 1973
- Exhibit D Decline Curve, LSA No. 1, January 1977 thru November 1985
- Exhibit E Structure map and isopach map
- Exhibit F Copy of Form C-101, LSA No. 2, approved May 10, 1985
- Exhibit G Copy of surveyor's plat (Form C-102) as filed with Form C-101
- Exhibit H Location plat showing wells of interest and offset operators
- Exhibit I Copy of Certified Mail Receipt

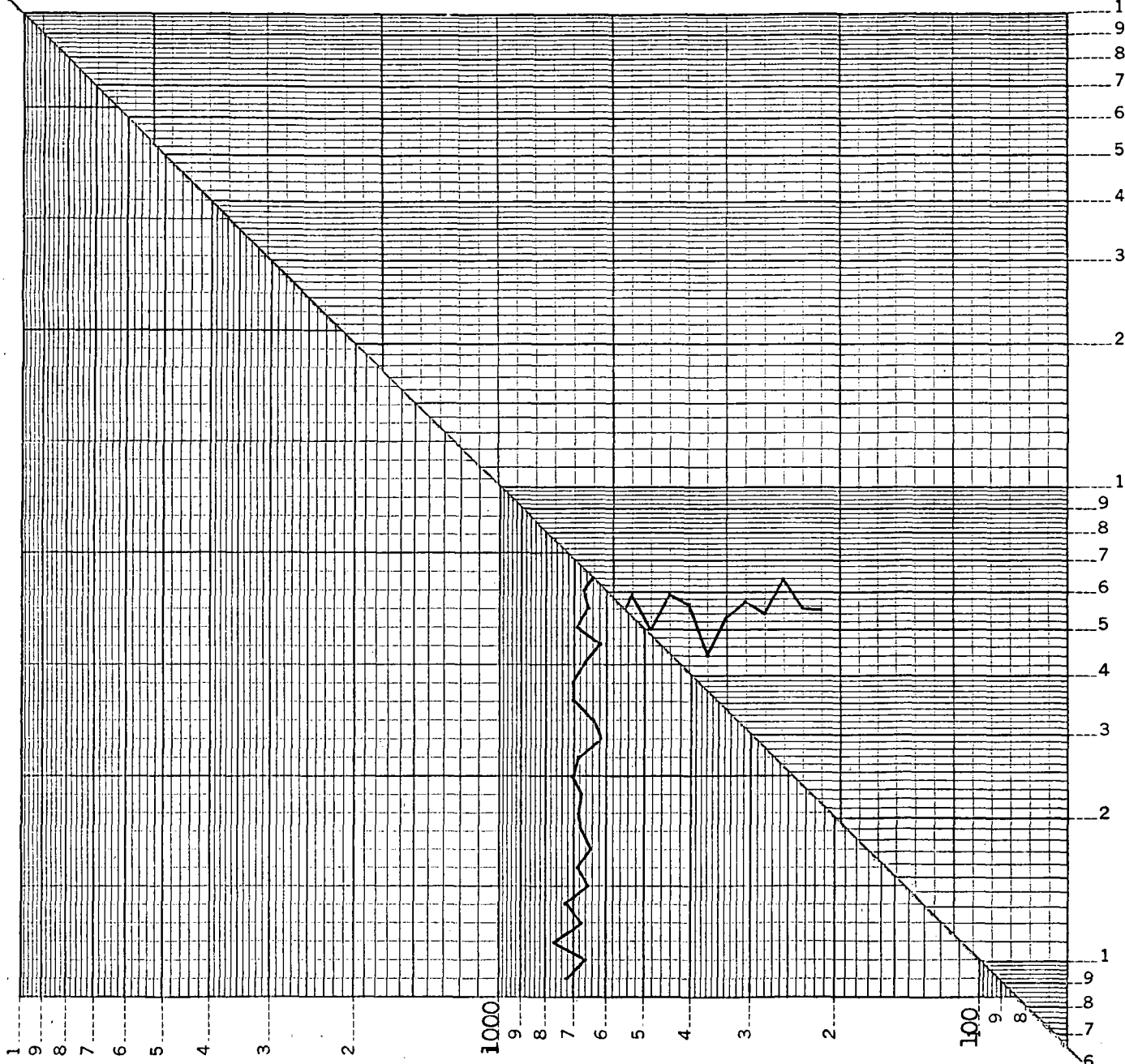
Lone Star Producing Company - Atlantic State No. 1 Well, Unit C, Section 30, T-17-S,
R-36-E, Lea County, New Mexico, South Double A-Abe Field;

HOOBS OFFICE O.C.C.

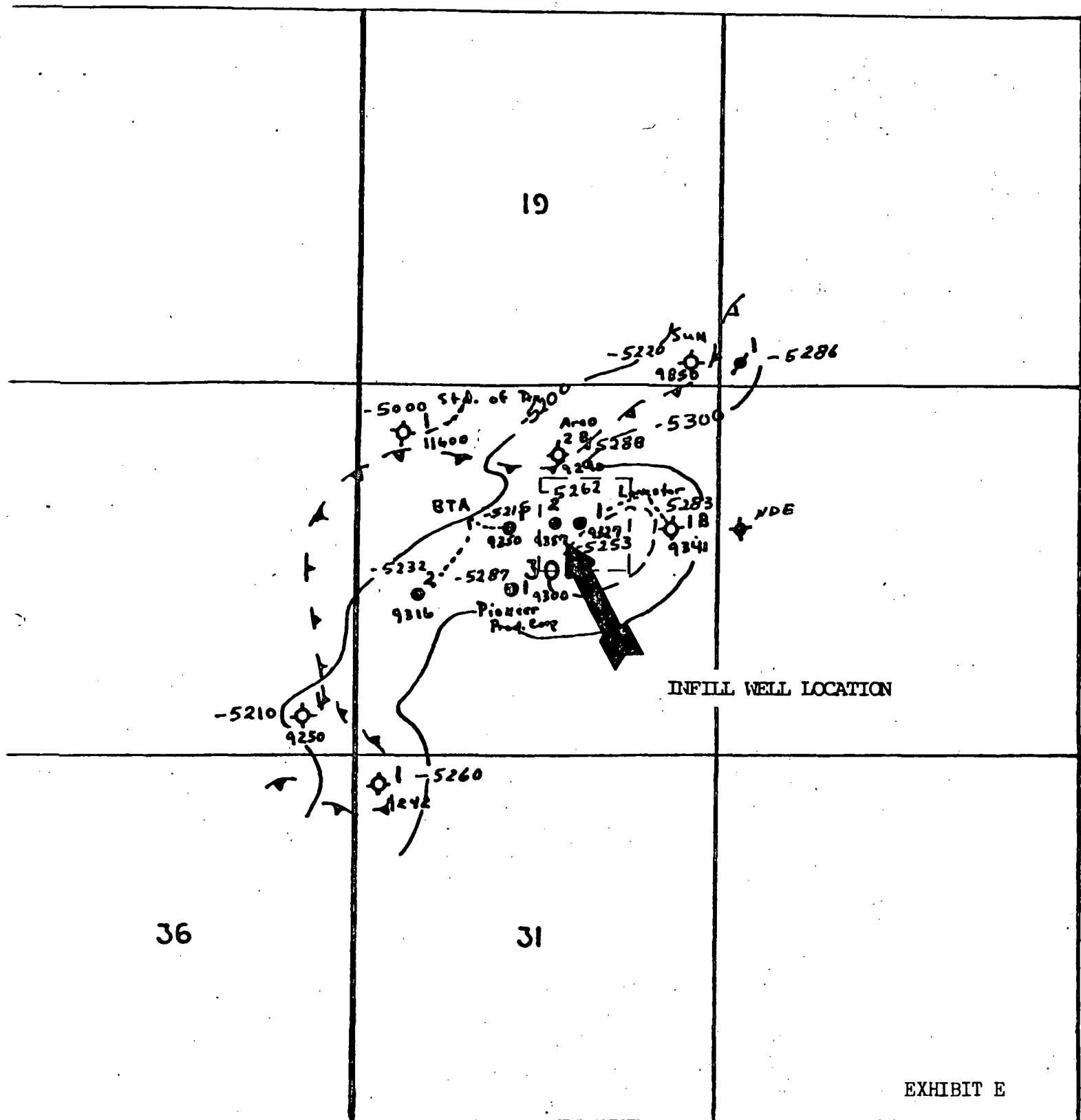
- 7-28-64 Squeezed perforations 5,060' to 5,098' with 142 sacks Lone Star Incoer with 8/10 of 1% HA-9 plus 5# salt per sack added to 4000#.
- 7-29-64 Drilled out to 5,100' and tested squeeze job on perforations 5,060' to 5,098' with 2000# pressure for 30 minutes. No pressure loss.
- 8-1-64 Squeezed perforations 9,148' to 9,211' with 128 sacks Lone Star Incoer with 8/10 of 1% HA-9 added to 2200#.
- 8-2-64 Drilled cement from 9,050' to 9,198'. Perforated from 9,190' to 9,197' (7 holes). Checked drilled out T.D. at 9,200' by Ram Guns, 2' deep to driller.
- 8-3-64 Ran 2-3/8" O.D. 4.70# J-55 tubing and Guiberson packer. Set tubing at 9,194.83'. Swabbed salt water with trace of gas, no oil.
- 8-4-64 Swabbed 12 barrels salt water per hour, no oil, slight trace of gas.
- 8-5 & 6-64 Squeezed perforations 9,190' to 9,197' with 230 sacks cement (3 jobs).
- 8-6-64 Tested squeeze on perforations 9,190' to 9,197' with 4000#. No pressure loss.
- 8-7-64 Drilled cement from 9,120' to 9,172'. Perforated from 9,157' to 9,161' (4 holes). Checked drilled out T.D. to 9,174' by Ram Guns, 2' deep to driller.
- 8-8-64 Ran 2-3/8" O.D. 4.70# J-55 tubing and Guiberson packer. Set tubing at 9,161.41', Guiberson packer at 8,963.72'. Treated perforations 9,157' to 9,161' with 500 gallons mud acid. Swabbed estimate of 50 barrels acid and load water in 3 hours.
- 8-9-64 Swabbed 12 hours getting estimate of 121 barrels salt water and 27.05 barrels oil.
- 8-10-64 Swabbed 7 hours getting 54.38 barrels oil and 40 barrels water.
- 8-11-64 Pulled tubing and packer.
- 8-12-64 Ran 2-3/8" O.D. 4.70# E.U.E. J-55 tubing, McGaffey Taylor anchor and Page tubing drain for completion. Bottom of tubing 9,166.11'.
- 8-13-64 Ran rods and pump to 9,157'.
- 8-14 & 15-64 Pumped load water with show of oil.
- 8-16-64 Pumped 105 barrels load water, 32.40 barrels oil.
- 8-17-64 Pumped 91.80 barrels oil and 35 barrels load water.
- 8-18-64 Pumped 91.80 barrels oil and 40 barrels water.
- 8-19-64 Pumped 97.20 barrels oil and estimated 21 barrels water.
- 8-20-64 Pumped 64.80 barrels oil and estimated 24 barrels water.
- 8-21-64 Pumped 48.60 barrels oil and 34 barrels water, water estimated.
- 8-22-64 Pumped 37.80 barrels oil and estimated 34 barrels water.
- 8-23-64 Pumped 21.60 barrels oil and estimated 34 barrels water.
- 8-24-64 Pumped 21.60 barrels oil and estimated 34 barrels water.



47 6743



W. H. D.



0 1 2 3
X 1000 Ft.

--- LIMIT OF EFF. POROSITY

DOUBLE-A-ABO, SOUTH FIELD

STRUCTURE MAP

TOP LOWER ABO

CI= 100 Feet

CHAVEROO OPER. CO.

LSA LEASE

T 17 S R 36 E

LEA CO., NEW MEX.

EXHIBIT E

COPIES RECEIVED		
DISTRIBUTION		
NTA FE		
ILE		
S.G.S.		
LAND OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

30-025-29202

Form C-101
Revised 1-1-65

Second Amendment

5A. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>	
5. State Oil & Gas Lease No. B-8428	
7. Unit Agreement Name	
8. Farm or Lease Name LSA	
9. Well No. 2	
10. Field and Pool, or Wildcat South Double A Abo	
12. County Lea	
19. Proposed Depth 9320	19A. Formation Abo
20. Rotary or C.T. Rotary	
21A. Kind & Status Plug, Bond Blanket	21B. Drilling Contractor Contract Not Let
22. Approx. Date Work will start Upon Approval	

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>	
b. Type of Well OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	
c. Name of Operator Chaveroo Operating Company, Inc.	
d. Address of Operator c/o Oil Reports & Gas Services, Inc., P. O. Box 755, Hobbs, NM 88241	
e. Location of Well UNIT LETTER G LOCATED 1980 FEET FROM THE North LINE 2310 FEET FROM THE East LINE OF SEC. 30 TWP. 17S RGE. 36E NMPM	
f. Elevations (Show whether DE, RT, etc.) 3381.2 GR	

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
16	13 3/8	54.5#	400	400	Circulated
11	8 5/8	24# & 32#	3500	1500	Circulated
7 7/8	5 1/2	17#	9320	1400	1370

Completion to be conventional perforation & treatment

Type blowout preventer sketch attached

Filed to move location back to original point

Permit Expires 6 Months From Approval
Date Unless Drilling Underway.

ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTION 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 W. S. Halka Title Agent Date 5/9/85

(This space for State Use)

ORIGINAL SIGNED BY JERRY SEXTON

APPROVED BY DISTRICT 1 SUPERVISOR TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

MAY 10 1985

EXHIBIT F

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

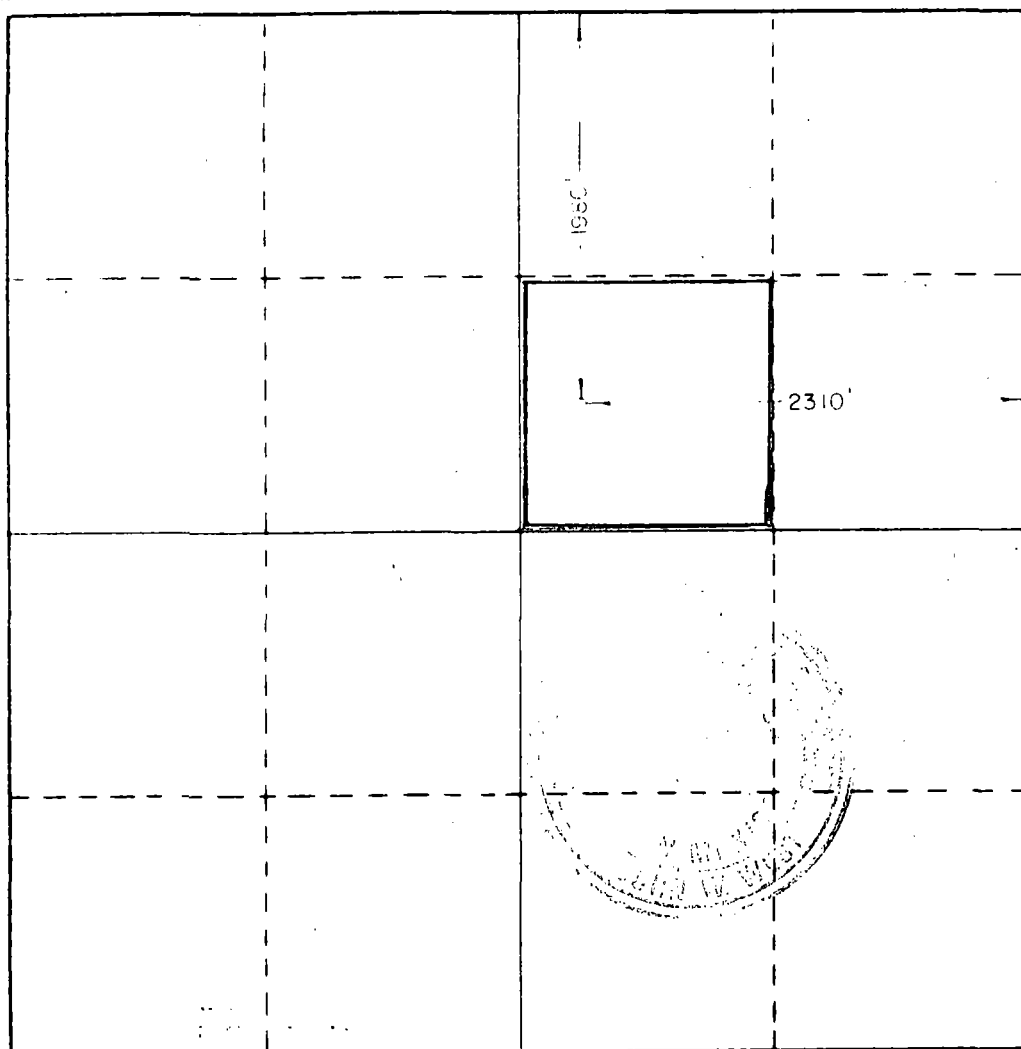
Operator CHAVEROO OPERATING CO., INC.		Lease STATE LSA		Well No. 2	
Section Letter G	Section 30	Township 17S	Range 36E	County LEA	
Actual Footage Location of Well: 1980 feet from the NORTH line and 2310 feet from the EAST line					
Ground Level Elev. 3381.2	Producing Formation Abo		Pool South Double A		Dedicated Acreage: 40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

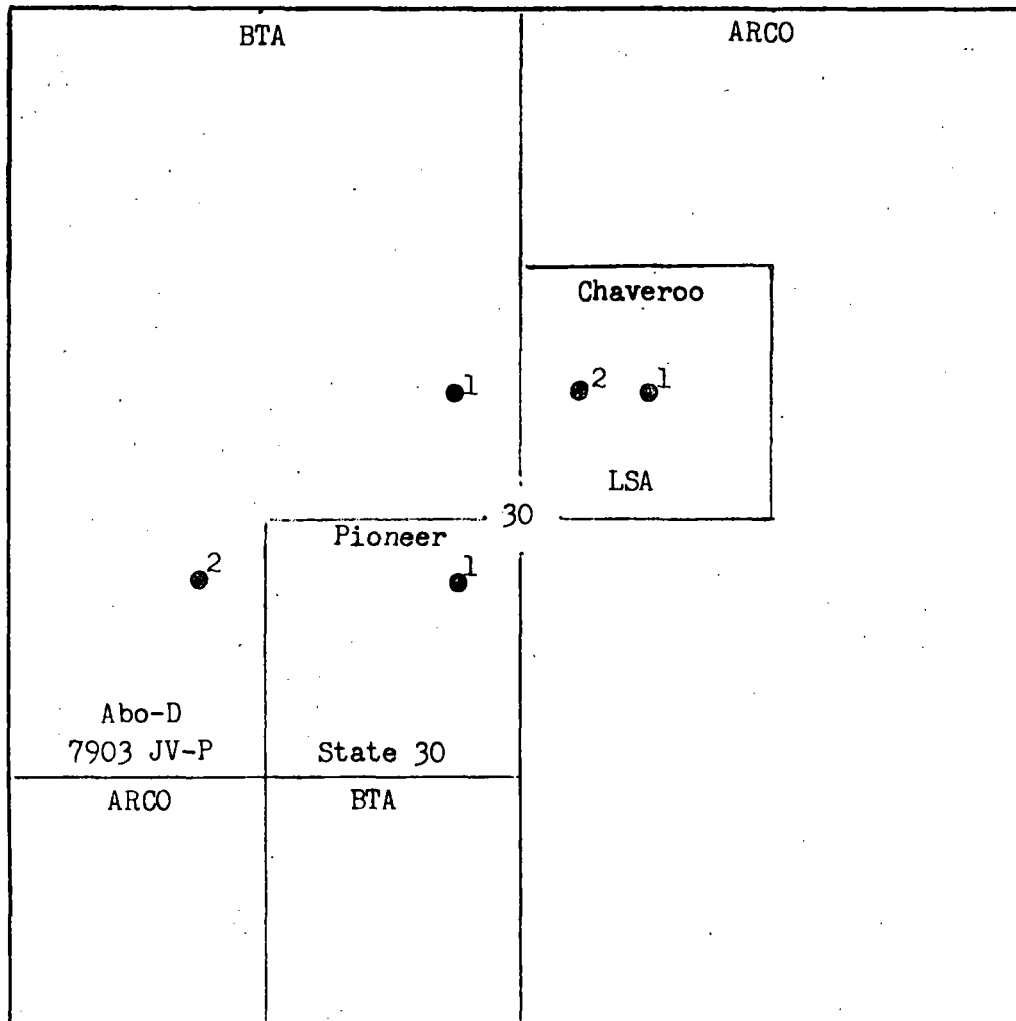
Name
Norman Holter
Position
Agent
Company
Chaveroo Operating Co. Inc.
Date
3/27/85

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
3/26/85
Registered Professional Engineer and/or Land Surveyor
John W. West
Certificate No. **JOHN W. WEST, 676**
RONALD J. EIDSON, 3239

EXHIBIT G

R 36 E



T
17
S

Offset Operators

ARCO Oil & Gas Company
P. O. Box 1610
Midland, Texas 79702

BTA Oil Producers
104 South Pecos
Midland, Texas 79701

Pioneer Production Corporation
P. O. Box 2542
Amarillo, Texas 79189

EXHIBIT H

P 243 010 610
RECEIPT FOR CERTIFIED MAIL

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

SENT TO		ARCO Oil & Gas Company	
STREET AND NO.		P. O. Box 1610	
P.O., STATE AND ZIP CODE		Midland, Texas 79702	
POSTAGE		\$ 2.27	
CONSULT POSTMASTER FOR FEES	OPTIONAL SERVICES	CERTIFIED FEE	75¢
		SPECIAL DELIVERY	¢
	RETURN RECEIPT SERVICE	RESTRICTED DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED	70¢
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES		1.67	
POSTMARK OR DATE		APR 10 1976	

PS Form 3800, Apr. 1976

P 243 010 611
RECEIPT FOR CERTIFIED MAIL

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

SENT TO		BTA Oil Producers	
STREET AND NO.		104 South Pecos	
P.O., STATE AND ZIP CODE		Midland, Texas 79701	
POSTAGE		\$ 2.27	
CONSULT POSTMASTER FOR FEES	OPTIONAL SERVICES	CERTIFIED FEE	75¢
		SPECIAL DELIVERY	¢
	RETURN RECEIPT SERVICE	RESTRICTED DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED	70¢
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES		1.67	
POSTMARK OR DATE		APR 10 1976	

PS Form 3800, Apr. 1976

P 243 010 613
RECEIPT FOR CERTIFIED MAIL

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

SENT TO		Pioneer Production Corp.	
STREET AND NO.		P. O. Box 2542	
P.O., STATE AND ZIP CODE		Amarillo, Texas 79189	
POSTAGE		\$ 2.27	
CONSULT POSTMASTER FOR FEES	OPTIONAL SERVICES	CERTIFIED FEE	75¢
		SPECIAL DELIVERY	¢
	RETURN RECEIPT SERVICE	RESTRICTED DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED	70¢
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES		1.67	
POSTMARK OR DATE		APR 10 1976	

PS Form 3800, Apr. 1976

EXHIBIT I