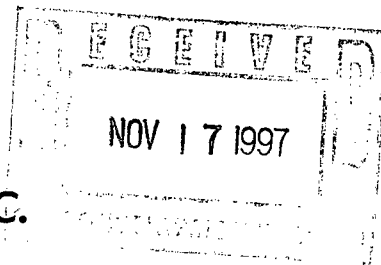


*Teague Paddock - Blinbry*



**Arch Petroleum Inc.**

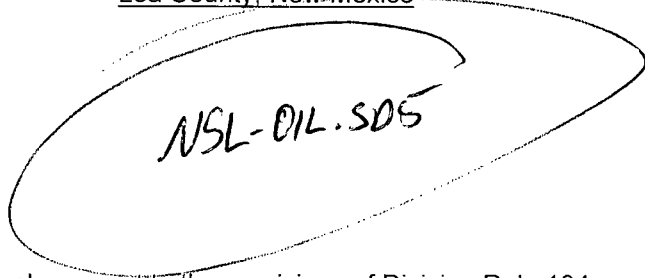
NSL 12/8/97



November 14, 1997

Application for Administrative Approval  
of Unorthodox Well Location  
C. E. Lamunyon Lease, Well #68  
Lea County, New Mexico

William J. LeMay, Director  
Oil Conservation Division  
Department of Energy Minerals & Natural Resources  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505



Dear Mr. LeMay;

Arch Petroleum Inc. Hereby seeks administrative approval pursuant to the provisions of Division Rule 104 F(2) adopted on January 18, 1996, of the unorthodox well location listed below.

The C. E. Lamunyon #68 is located 10' FNL and 330' FWL of Section 27, T23S, R37E, Unit D in Lea County, New Mexico. This well does encroach in immediately adjacent existing spacing units in the same pool. These adjacent spacing units are in the same lease and are operated by Arch in all cases. Therefore, there are no affected parties to whom notice is required. Exhibit E shows the location of all offsetting Operators.

Exhibit A is a lease Base Map showing the wells previously drilled pursuant to various OCD NSL order numbers. The results of the production on these wells are encouraging and we are currently monitoring the results for the ultimate recovery per well.

This unorthodox location in the Blinbry formation is necessary for geological reasons. Exhibit B is a porosity isopach map of the Blinbry. It shows the areal extent of the porosity development in the field. This development is made up of thin porosity stringers that are very discontinuous between wellbores. This discontinuity, coupled with the low average porosity of five to eight percent and low average permeability of 0.5 millidarcies causes low ultimate recoveries and inadequate drainage of the field based on current 40 acre locations.

Exhibit C is a Drainage Map showing the areas estimated to be drained by the existing wells in the Blinbry. The drainage areas shown were calculated and are listed on Exhibit D. The parameters used to make these calculations are also shown. On average, it is seen that the existing wells are expected to drain approximately 13 acres per well. It is therefore necessary to drill the subject well to avoid waste and efficiently recover the available reserves.

Your attention to this request is appreciated.

Sincerely,

Robin S. McCarley  
Technical Administrator

cc: Chris Williams, District Supervisor  
Oil Conservation Division - Hobbs

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)

FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL  
WELL ☐

GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☐

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Arch Petroleum Inc.

3. ADDRESS AND TELEPHONE NO.

10 Desta Drive, Suite 420E Midland, Texas 79705

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface Unit D, 10' FNL and 330' FWL

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

10.5 miles South of Eunice, New Mexico

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any)

10'

16. NO. OF ACRES IN LEASE

1520

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

579'

19. PROPOSED DEPTH

6000'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3290' GR

22. APPROX. DATE WORK WILL START\*

12/12/97

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4	K-55, 8-5/8"	24#	1025'	600 sx Class C" circulated
7-7/8	J-55, 5-1/2"	15.5#	6000'	1600 sx Class "C" circulated

Mud Program:

0-1075 FW/Spud Mud 88 - 9.0#/gal, Visc 32, pH 10

1075-5000' BW 10#/gal., Visc 28 pH 10

5000-6000' BW/Starch 10#/gal, Visc 30, pH 10

See attached BOP drawing for psi system

IN ABOVE SPACE DESCRIBE PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

*Robert S. McCauley*

TITLE Technical Administrator

DATE 11/14/97

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

DATE

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
P.O. Box 2088, Santa Fe, N.M. 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 58300	Pool Name Teague Blinebry
Property Code 014898	Property Name C.E. LAMUNYON	Well Number 68
OGRID No. 000962	Operator Name ARCH PETROLEUM, INC.	Elevation 3290

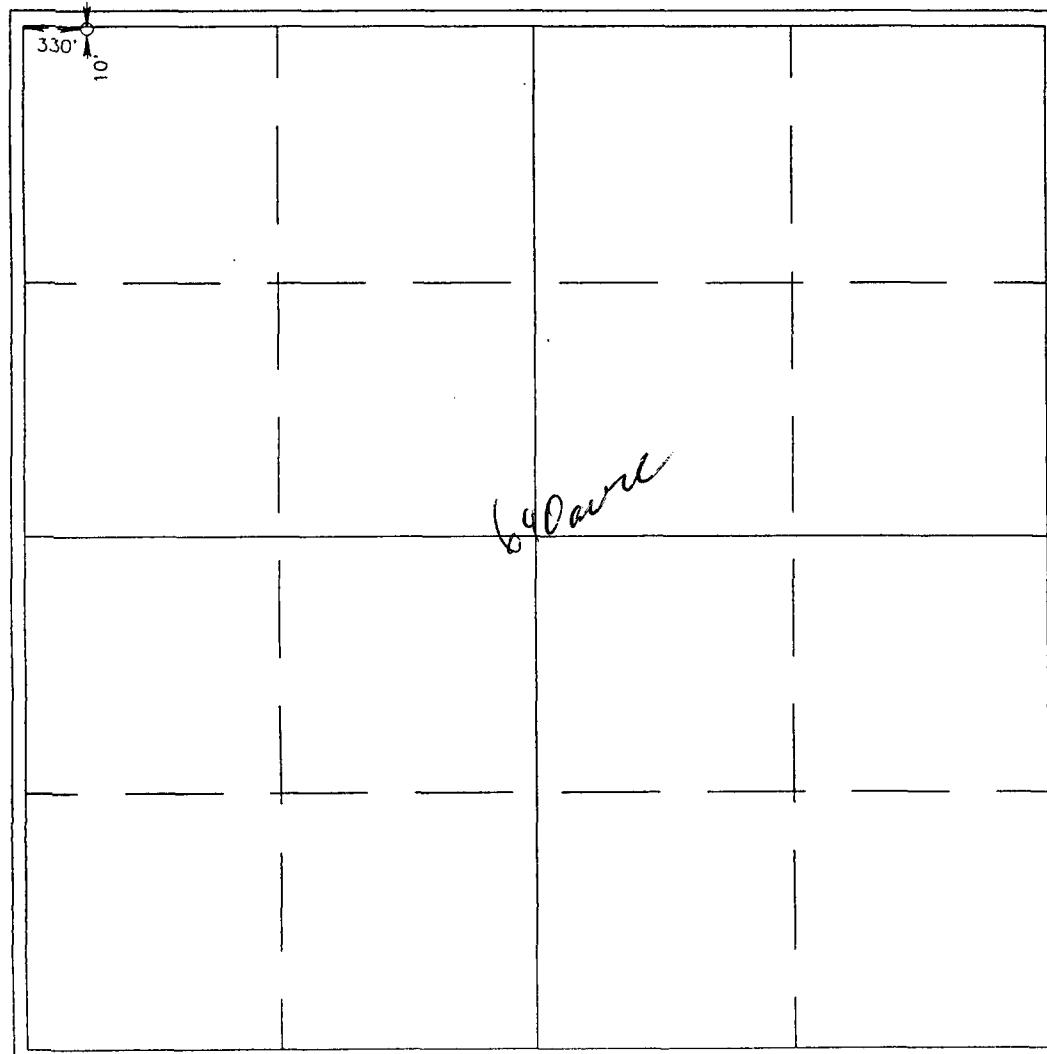
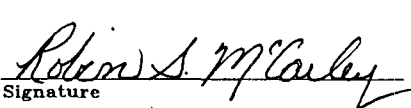
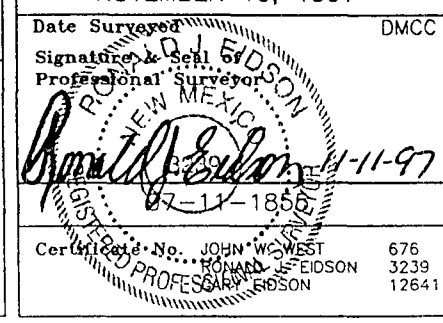
Surface Location

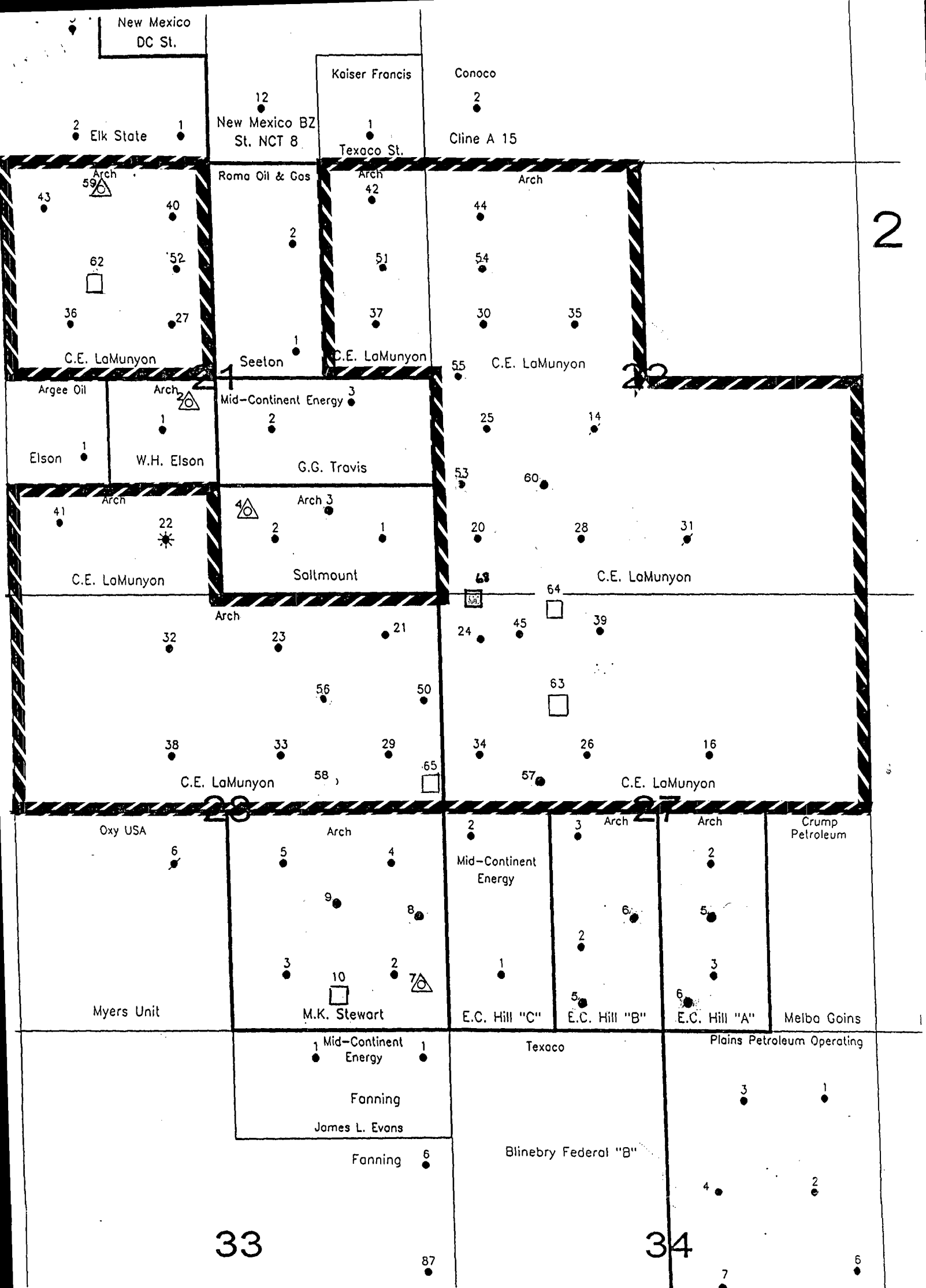
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	27	23 S	37 E		10	NORTH	330	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

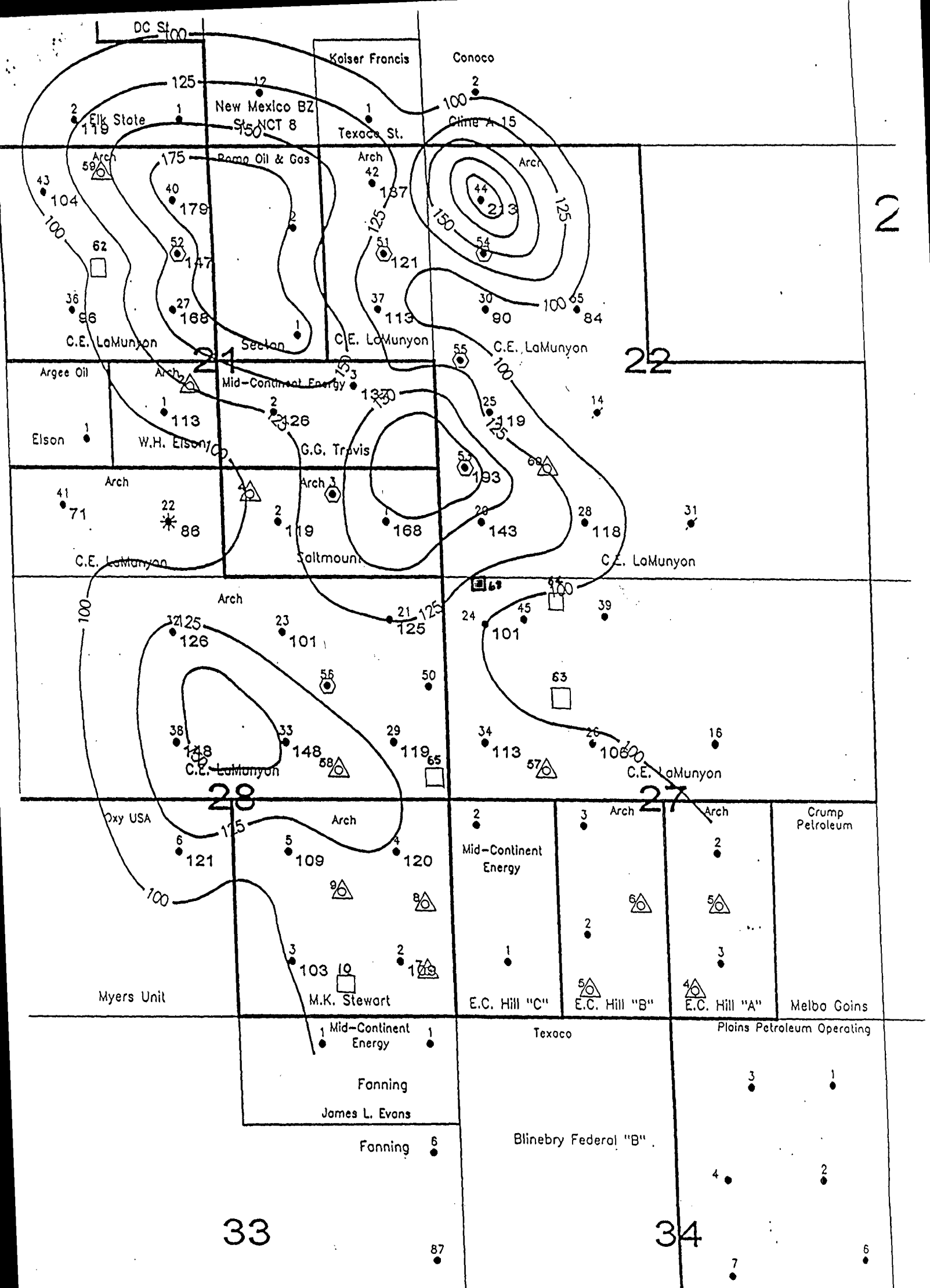
	<b>OPERATOR CERTIFICATION</b>  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.   Signature Robin S. McCarley Printed Name Technical Administrator Title 11/14/97 Date
	<b>SURVEYOR CERTIFICATION</b>  I hereby certify that the well location 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 belief.  NOVEMBER 10, 1997 Date Surveyed Signature & Seal of Professional Surveyor  Certified No. JOHN W. WEST 676 RONALD E. EDSON 3239 EDSON 12641



## LEGEND




Exhibit No. A

- Phase 3 Infill Wells
- △ Phase 2 Infill Wells
- Blinebry Producer



## LEGEND

Exhibit No. B

-  Phase 1 Infill Wells
-  Proposed Phase 2 Infill Wells
-  Blinebry Producer

**Lease - well****Net Pay Ft.****Drainage Acres Drainage Radius Ft.**










---

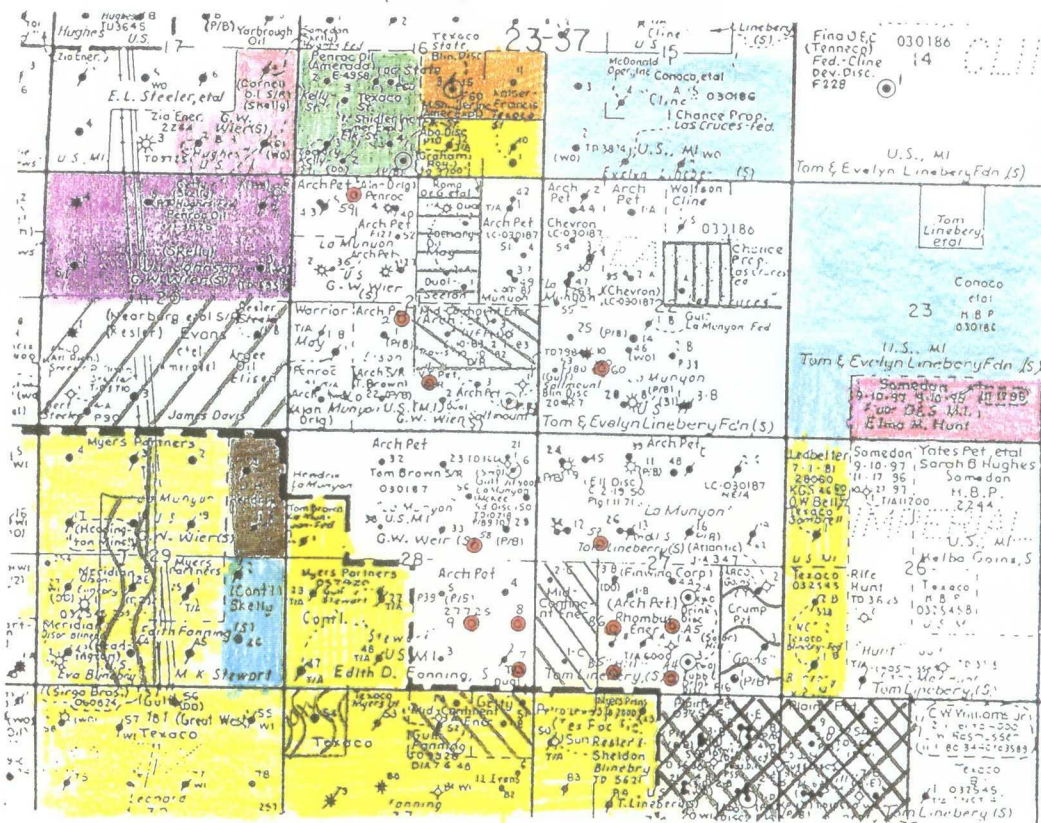
C. E. Lamunyon #51	121	4.10	239
C. E. Lamunyon #52	147	2.59	190
C. E. Lamunyon #53	193	4.57	252
C. E. Lamunyon #54	155	3.94	234
C. E. Lamunyon #55	193	1.21	130
C. E. Lamunyon #56	112	6.47	300
C. E. Lamunyon #57	139	6.85	308
C. E. Lamunyon #58	77	2.23	176
C. E. Lamunyon #60	100	11.97	407
C. E. Lamunyon #61	72	6.74	306
C. E. Lamunyon #62	145	2.6	192
C. E. Lamunyon #63	133	3.35	215
C. E. Lamunyon #64	113	6.5	301
C. E. Lamunyon #65	132	3.4	305






Sw	18%
Por	7.40%
Bol	1.26
RF	15%

**Exhibit No. D**

# MAP of Offset Operators

-  Conoco Inc.
  -  Apache Corp
  -  Mark L. Shidler
  -  TexACO Expl + Prod Inc.
  -  Samedan Oil Corp
  -  Penroc Oil Corp
  -  James L Evans
  -  Roma Oil + Gas Co.
  -  MidContinent Energy Inc.
- R 37 E



-  Mirage Energy Inc.
-  Crump Petroleum Corp
-  Plains Petroleum
-  John H. Hendrix Corp
-  OXY USA Inc

Midland Map Co.

Lease Map

Posted to 2-2-96

Lea, NM

Scale: 1" = 4000'



