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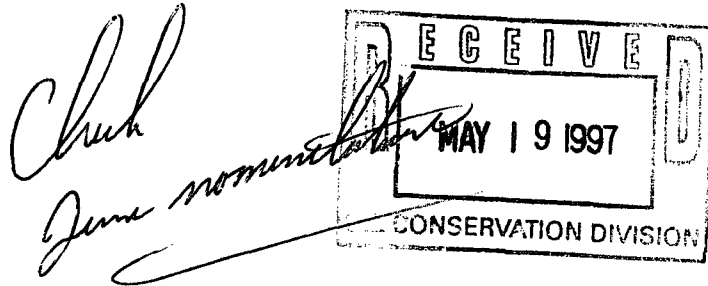
6/9/97

## MACK ENERGY CORPORATION

Post Office Box 960  
Artesia, New Mexico 88211-0960  
(505) 748-1288 / FAX (505) 746-2362

May 15, 1997

Oil Conservation Division  
Attn: Mike Stogner  
2040 South Pacheco  
Santa Fe, NM 87505



Dear Mr. Stogner:

Mack Energy Corporation respectfully requests an administrative approval without notice and hearing of the following unorthodox well location pursuant to Order R-7808 of the New Mexico Oil Conservation Division.

Because of our desire to drill this well in a timely manner, we also request your approval be expedited. The well location and legal description is as follows:

Berry A Federal #8  
2080 FSL & 1525 FEL  
Sec. 21-T17S-R30E  
Eddy County, New Mexico

*Undesignated*

The well will be completed in the Paddock formation in the ~~Grayburg~~ Paddock Pool.

Attached to this application are the following exhibits.

- A.) Well location and acreage dedication plat (form C-102) filed with the Artesia office of the Oil Conservation Division (Exhibit A).
- B.) A plat showing the proposed unorthodox locations, the respective proration units, and the offsetting proration units (Exhibit B).
- C.) A map showing the reason for the unorthodox location, the original location would have fallen under the existing power lines (Exhibit C).

By copy of this letter including the exhibits to all parties, we are notifying them by certified mail return-receipt requested of the unorthodox location.

*7-1-97 - Call Matt Brewer - Mack Energy owns Paddock Formation rights in this area - including offsets.*

*Oil Conservation Division  
May 15, 1997  
Page 2*

*Thank you for your assistance in this matter. If you have any questions, please feel free to call.*

*Sincerely,*

*MACK ENERGY CORPORATION*

A handwritten signature in cursive script that reads "Matt J. Brewer".

*Matt J. Brewer  
Engineer*

*/MB*

*Enclosures*

*cc: **CERTIFIED MAIL:***

*Southwest Royalties  
407 N Big Spring, Ste 300  
P.O. Drawer 11390  
Midland, TX 79702-8390*

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

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

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

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	Pool Name
	28509	Grayburg Jackson 7RVS-QN-GB-SA
Property Code	Property Name	Well Number
006051	BERRY A Federal	8
OGRID No.	Operator Name	Elevation
013837	MACK ENERGY CORPORATION	3645

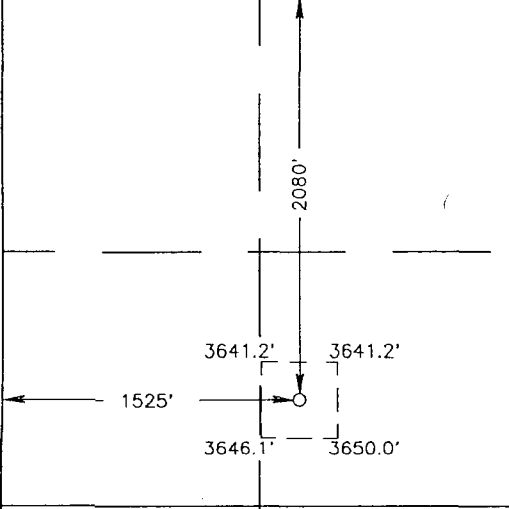
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	21	17 S	30 E		2080	NORTH	1525	WEST	EDDY

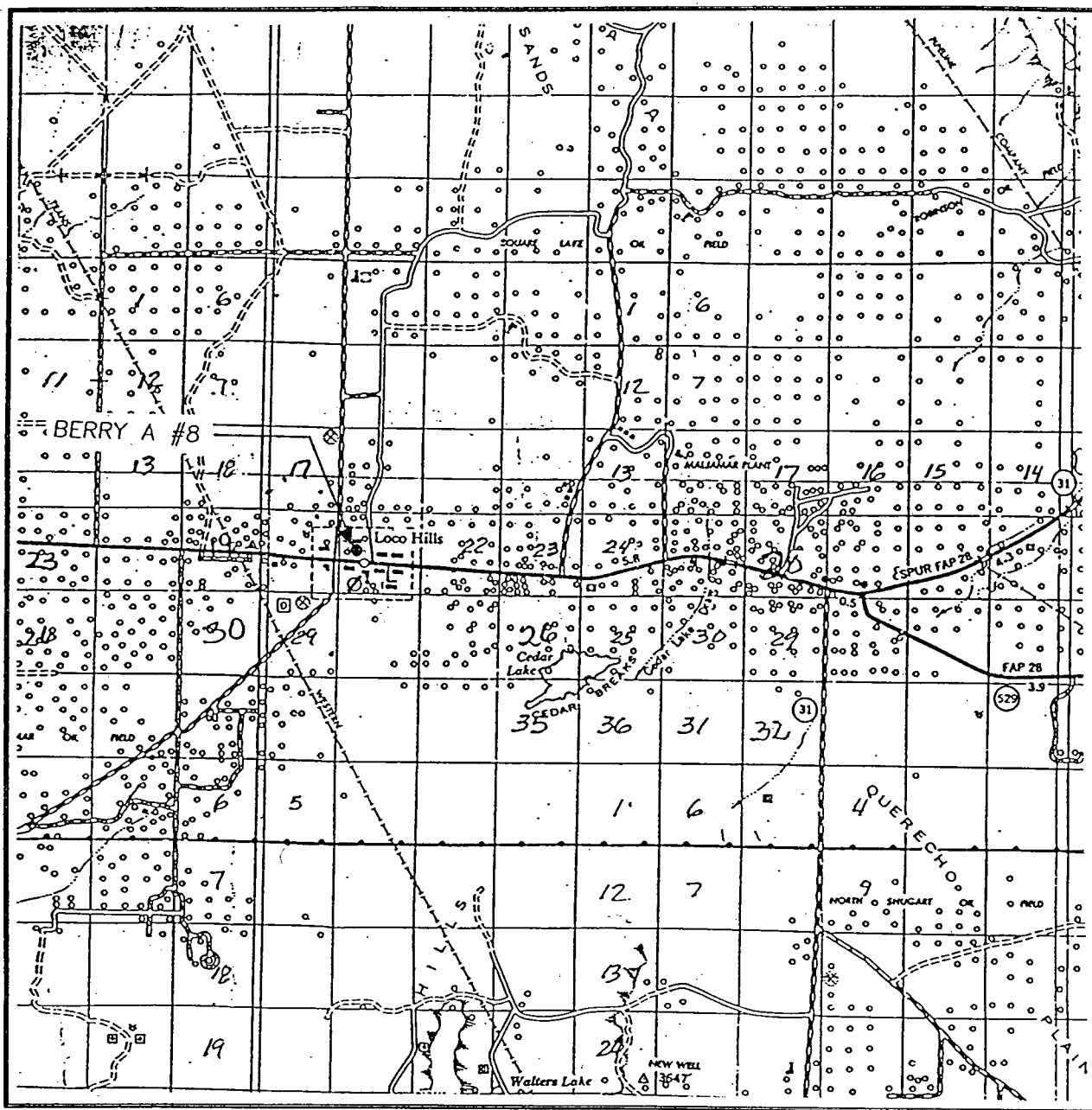
Bottom Hole Location If Different From Surface

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

	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Crissa D. Carter</u> Signature</p> <p>Crissa D. Carter Printed Name</p> <p>Production Clerk Title</p> <p><u>3-26-97</u> Date</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>JAN. 2, 1997</p> <p>Date Surveyed</p> <p>Signature of Professional Surveyor</p> <p>Professional Surveyor</p> <p>NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 1-06-97</p> <p>Certificate No. JOHN W. WEST 676 RONALD G. EIDSON 3239 GARY W. JOHNSON 12641</p>

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 21 TWP. 17-S RGE. 30-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 2080' FNL & 1525' FWL

ELEVATION 3645

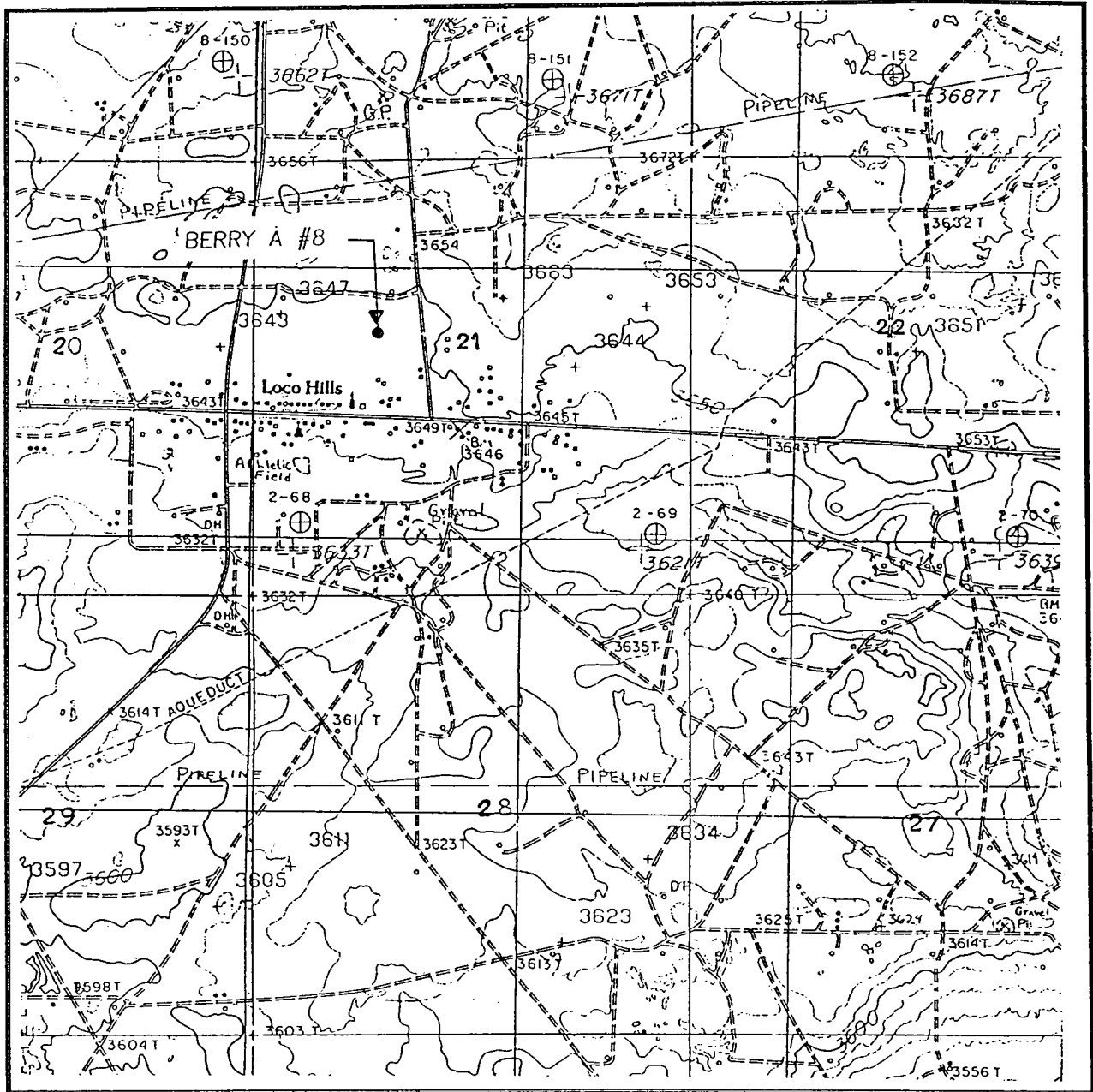
OPERATOR MACK ENERGY CORPORATION

LEASE BERRY A

**JOHN WEST ENGINEERING**  
**HOBBS, NEW MEXICO**

**(505) 393-3117**

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
LOCO HILLS - 10'

SEC. 21 TWP. 17-S RGE. 30-E

SURVEY \_\_\_\_\_ N.M.P.M. \_\_\_\_\_

COUNTY \_\_\_\_\_ EDDY \_\_\_\_\_

DESCRIPTION 2080' FNL & 1525' FWL

ELEVATION \_\_\_\_\_ 3645 \_\_\_\_\_

OPERATOR MACK ENERGY CORPORATION

LEASE \_\_\_\_\_ BERRY A \_\_\_\_\_

U.S.G.S. TOPOGRAPHIC MAP

LOCO HILLS, N.M. \_\_\_\_\_

**JOHN WEST ENGINEERING**  
**HOBBS, NEW MEXICO**  
**(505) 393-3117**



# EXHIBIT B

BERRY A FEDERAL #8  
Sec. 21, T17S, R30E  
2080 FNL & 1525 FWL

## IN RED

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**EXHIBIT B**  
FEDERAL #8  
17S, R30E  
& 1525 FWL

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		"Fed"	Armer Oil Gen'l. Amer. HBP

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PHILLIPS (OPER)

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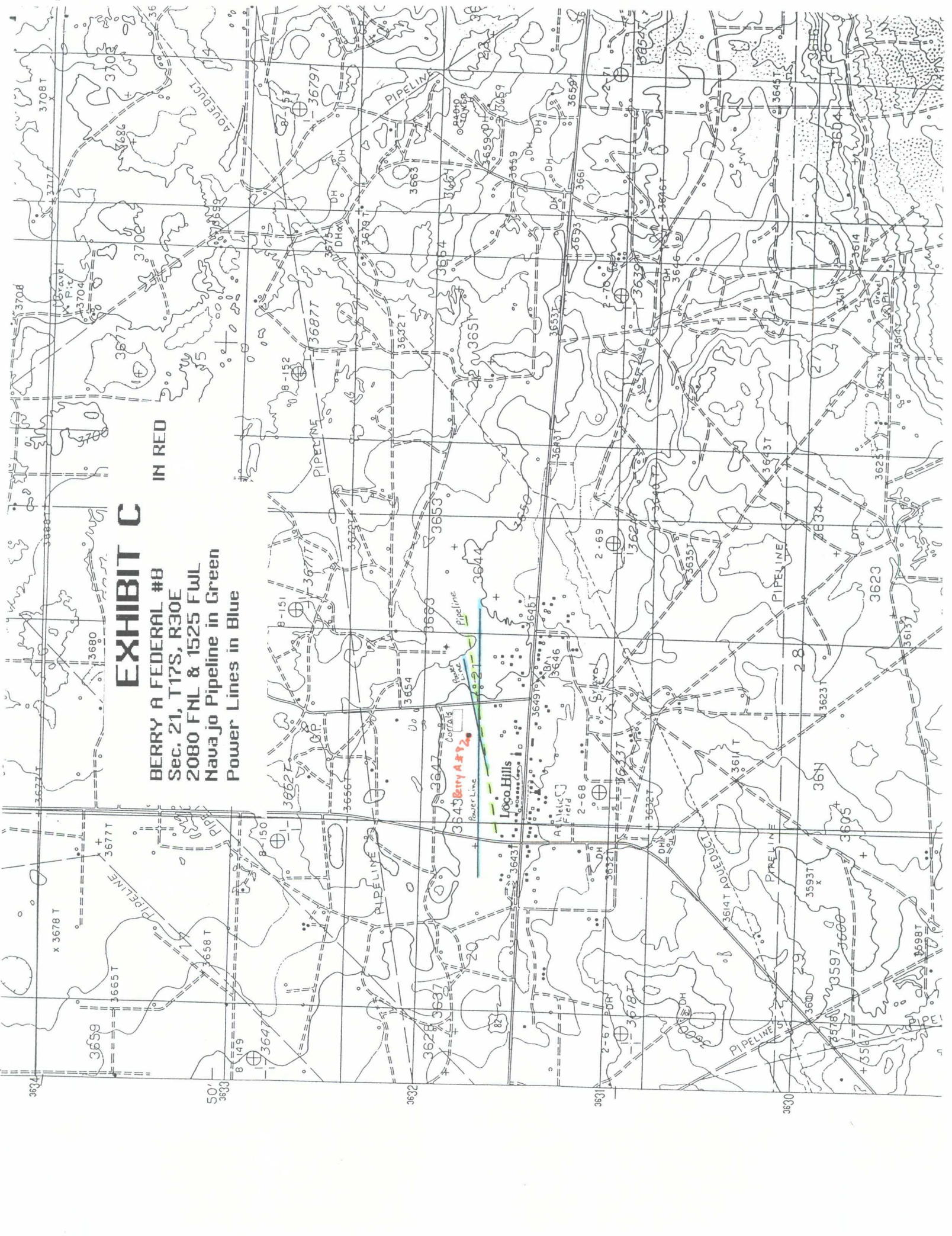
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# EXHIBIT C

IN RED

BERRY A FEDERAL #B  
Sec. 21, T17S, R30E  
2080 FNL & 1525 FWL  
Nava jo Pipeline in Green  
Power Lines in Blue



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

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

**NOMENCLATURE**  
CASE NO. 10903  
ORDER NO. R-10067

**APPLICATION OF MARBOB ENERGY CORPORATION FOR ABOLISHMENT OF  
THE GRAYBURG-PADDOCK POOL AND EXTENSION OF THE VERTICAL LIMITS  
OF THE GRAYBURG-JACKSON POOL, EDDY COUNTY, NEW MEXICO**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This cause came on for hearing at 8:15 a.m. on February 3, 1994, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 22nd day of February, 1994, 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, Marbob Energy Corporation (Marbob), seeks an order abolishing the Grayburg-Paddock Pool located in the SE/4 of Section 18, Township 17 South, Range 30 East, and extending the vertical limits of the Grayburg-Jackson Pool to include the Glorieta Yeso (Paddock) formation under the Unit Area which is located in portions of Township 17 South, Ranges 29 and 30 East, NMPM, Eddy County, New Mexico.
- (3) Division Cases Nos. 10903 and 10904 were consolidated at the time of the hearing for the purpose of testimony. The following findings concerning Case No. 10903 are based on exhibits and documents submitted by the applicant and the testimony of the applicant's witnesses.



(4) Marbob is the operator of the Burch-Keely Unit, Grayburg-Jackson Pool, Eddy County, New Mexico which is comprised of 5149.44 acres, more or less, of federal lands which was statutorily unitized pursuant to Oil Conservation Division Order No. R-7900-A dated October 28, 1993. The Unit Area includes only a part of the Grayburg-Jackson Pool. The Unit Area is described in Exhibit "A" attached hereto. A portion of the unit is currently being waterflooded. A planned expansion would extend flood operations to all the unit.

(5) The "Unitized Formation" in the Burch Keely Unit comprises the interval from the top of the Seven Rivers formation to the base of the San Andres formation (which also corresponds with the vertical limits of the Grayburg-Jackson Pool) or to a true vertical depth of 5000 feet, whichever is lesser.

(6) The Grayburg-Paddock Pool was created by Order No. R-1042, dated August 29, 1957. The pool area is entirely within the boundaries of the Burch-Keely Unit. The Paddock formation is also known as the Glorieta Yeso. Only two wells ever produced from the Grayburg-Paddock Pool. Each recovered approximately 5000 barrels of oil and have now been plugged back to the Grayburg-Jackson pool. Four other wells within the Burch-Keely Unit have tested the Paddock formation with indications of production. Maps and cross-sections suggest that the Paddock may be productive all across the Burch-Keely Unit.

(7) Based on estimated recoveries from the Paddock, wells to develop only the Paddock would not be economically feasible. However, the cost of deepening Grayburg-Jackson wells to the Paddock formation could be justified providing the formations could be produced together as a single pool.

(8) If allowed to add the Paddock to the Grayburg-Jackson Pool vertical interval, the operator would keep the wells pumped off to prevent cross flow. The Paddock formation would not be flooded but produced water from the Paddock would be used for the Grayburg-Jackson waterflood. Compatibility tests indicate only minor scaling problems.

(9) The Bureau of Land Management is in agreement with this application and would modify the Unit Agreement to extend the unitized interval to include the Paddock formation.

(10) The top 500 feet of the Paddock formation is the interval which Marbob plans to develop.

(11) Offset operators and other interested persons were notified of this application but none appeared at the hearing to oppose it.

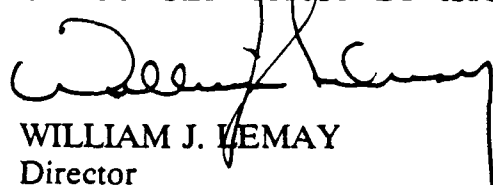
(12) Granting this application will permit Marbob to recover Paddock formation hydrocarbons which might otherwise remain in place.

IT IS THEREFORE ORDERED THAT:

- (1) The Grayburg-Paddock Pool is hereby abolished.
- (2) Within the designated Burch-Keely Unit Area, as described in Exhibit "A" attached hereto, the vertical limits of the Grayburg-Jackson Pool are hereby amended to include that interval from the top of the Seven Rivers formation to 500 feet below the top of the Paddock formation, with the geologic markers for the tops of the Seven Rivers and Paddock formations being found to occur at 1365 feet and 4210 feet, respectively, in the Western Drilling Company, Grayburg Deep Unit Well No. 3 (renamed Marbob, Burch-Keely Unit "A" Well No. 27) located 660 feet from the South line and 660 feet from the East line of Section 18, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico, as recorded on the Schlumberger Electric Log dated April 17 and June 20, 1956.
- (3) The pool name within said Burch-Keely Unit Area is hereby changed from the Grayburg-Jackson Pool to the Grayburg-Jackson-Paddock Pool.
- (4) 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

  
WILLIAM J. LEMAY  
Director

S E A L

**EXHIBIT "A"**  
**CASE NO. 10903**  
**ORDER NO. R-10067**

**Marbob Energy Corporation**  
**Burch-Keely Unit Area**  
**Grayburg-Jackson-Paddock Pool**

**Eddy County, New Mexico**

---

**TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM**

Section 12:	SE/4 SE/4
Section 13:	All
Sections 23 through 26:	All

**TOWNSHIP 17 SOUTH, RANGE 30 EAST, NMPM**

Sections 18 and 19:	All
Section 30:	All

STATE OF NEW MEXICO  
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

NOMENCLATURE  
CASE NO. 10903  
ORDER NO. R-10067-A

APPLICATION OF MARBOB ENERGY CORPORATION  
FOR ABOLISHMENT OF THE GRAYBURG-PADDOCK  
POOL AND EXTENSION OF THE VERTICAL LIMITS  
OF THE GRAYBURG-JACKSON POOL, EDDY COUNTY,  
NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE DIVISION:

It appearing to the Division that Order No. R-10067 dated February 22, 1994 does not correctly state the intended order of the Division,

IT IS THEREFORE ORDERED THAT:

(1) Decretory Paragraph No. (3) on page 3 of said Order No. R-10067 is hereby deleted.

(2) Exhibit "A" attached to said Order No. R-10067 is hereby amended to delete the words "-Paddock Pool".

(3) The corrections set forth in this order be entered nunc pro tunc as of February 22, 1994.

DONE at Santa Fe, New Mexico, on this 1st day of March, 1994.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY, Director

S E A L



County Eddy Pool Loco Hills-Paddock

TOWNSHIP 17 South Range 30 East NMPM

6	5	4	3	2	1	
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18	17 McIntyre Foul DK #10	16	15	14	13	
19	20	21 Berry Foul "A" #8	22	23	24	
30	29	28	27	26	25	
31	32	33	34	35	36	

Description NW 1/4 Sec. 20 (R-10822, 6-17-47)

CMD : ONGARD 07/02/97 09:26:15  
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -EMFX

OGRID Idn : 13837 API Well No: 30 15 29565 APD Status(A/C/P): A  
Opr Name, Addr: MACK ENERGY CORP Aprvl/Cncl Date : 04-28-1997  
PO BOX 960  
ARTESIA,NM 88211-0960

Prop Idn: 6051 BERRY A FEDERAL Well No: 8

	U/L	Sec	Township	Range	Lot	Idn	North/South	East/West
	---	---	-----	-----	-----	-----	-----	-----
Surface Locn :	F	21	17S	30E			FTG 2080 F N	FTG 1525 F W
OCD U/L :	F		API County :	15				

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) : R  
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 3645

State Lease No: Multiple Comp (Y/N) : N  
Prpsd Depth : 5500 Prpsd Frmtn : SAN ANDRES

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

OGRID Idn : 13837 API Well No: 30 15 29565 APD Status(A/C/P): A  
Opr Name, Addr: MACK ENERGY CORP Aprvl/Cncl Date : 04-28-1997  
PO BOX 960  
ARTESIA,NM 88211-0960

Prop Idn: 6051 BERRY A FEDERAL Well No: 8

	U/L	Sec	Township	Range	Lot	Idn	North/South	East/West
	---	---	-----	-----	-----	-----	-----	-----
Surface Locn :	F	21	17S	30E			FTG 2080 F N	FTG 1525 F W
OCD U/L :	F		API County :	15				

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) : R  
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 3645

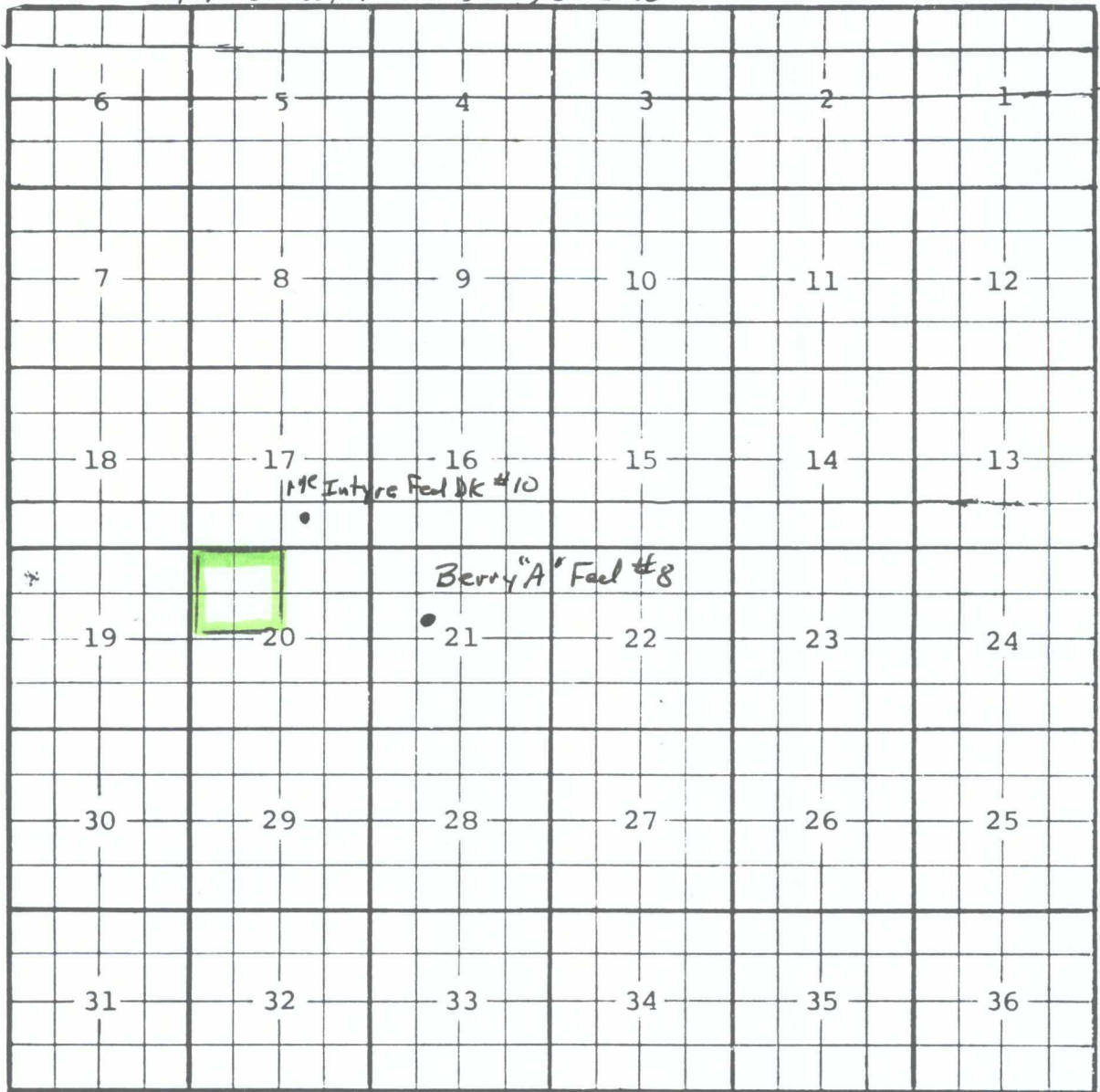
State Lease No: Multiple Comp (Y/N) : N  
Prpsd Depth : 5500 Prpsd Frmtn : SAN ANDRES

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

County Eddy Pool Loco Hills-Paddock

TOWNSHIP 17 South Range 30 East NMPPM



Description: NW 1/4 Sec. 20 (R-10822, 6-17-97)