

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
- Engineering Bureau -

1941

**ADMINISTRATIVE APPLICATION COVERSHEET**

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

- [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
- [DD-Directional Drilling] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

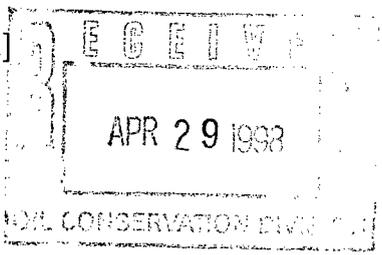
[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Directional Drilling  
 NSL    NSP    DD    SD

Check One Only for [B] and [C]

- [B] Commingling - Storage - Measurement  
 DHC    CTB    PLC    PC    OLS    OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX    PMX    SWD    IPI    EOR    PPR



[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or  Does Not Apply

- [A]  Working, Royalty or Overriding Royalty Interest Owners
- [B]  Offset Operators, Leaseholders or Surface Owner
- [C]  Application is One Which Requires Published Legal Notice
- [D]  Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E]  For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F]  Waivers are Attached

[3] **INFORMATION / DATA SUBMITTED IS COMPLETE** - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Kay Maddox                      Kay Maddox                      Regulatory Agent                      4/24/98  
 Print or Type Name                      Signature                      Title                      Date

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

State of New Mexico  
 Energy, Minerals and Natural Resources Department

Form C-107-A  
 New 3-12-96

DISTRICT II  
 811 South I First St. Artesia NM 88210 2835

OIL CONSERVATION DIVISION

2040 S. Pacheco  
 Santa Fe, New Mexico 87505-6429

APPROVAL PROCESS:

Administrative  Hearing

DISTRICT III  
 1000 Rio Brazos Rd. Aztec, NM 87410 1693

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

YES  NO

Operator Conoco Inc. Address 10 Desta Dr. Ste 100W, Midland, Tx. 79705-4500

Lease Jicarilla E Well No #9M Unit Ltr Sec Twp Rge Section 16, T-26-N, R-4-W, G County Rio Arriba

OGRID NO. 005073 Property Code \_\_\_\_\_ API NO. \_\_\_\_\_ Spacing Unit Lease Types: (check 1 or more)  
 Federal  , State  (and/or) Fee

The following facts are submitted in support of downhole commingling:	Upper Zone	intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Blanco Mesaverde 72319		Basin Dakota 71599
2. TOP and Bottom of Pay Section (Perforations)	5570-6038'		7625-7854'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	To Flow		To Flow
5. Bottomhole Pressure	a (Current)	a.	a.
Oil Zones - Artificial Lift: Estimated Current	554		1092
Gas & Oil - Flowing: Measured Current	b(Original)	b.	b.
All Gas Zones: Estimated Or Measured Original	1457		2635
6. Oil Gravity (°API) or Gas BT Content	1280		1332
7. Producing or Shut-In?	To be Completed		To be Completed
Production Marginal? (yes or no)	Yes (expected)		Yes (expected)
• If Shut-In give date and oil/gas/water rates of last production  <small>Note For new zones with no production history applicant should be required to attach production estimates and supporting data</small>  • If Producing, date and oil/gas/water rates of recent test (within 60 days)	Date Rates	Date Rates	Date Rates
	Anticipated 1st Yr average 183 MCFD, 1.4 BOPD	Date Rates	Anticipated 1st Yr Average 268 MCFD, 4.5 BOPD
8. Fixed Percentage Allocation Formula - % for each zone	oil: % Gas %	oil: % Gas %	oil: % Gas %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.
10. Are all working, overriding, and royalty interests identical in all commingled zones?  Yes  No  
 If not, have all working, overriding, and royalty interests been notified by certified mail?  Yes  No  
 Have all offset operators been given written notice of the proposed downhole commingling?  Yes  No
11. Will cross-flow occur?  Yes  No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable.  Yes  No (If No, attach explanation)
12. Are all produced fluids from all commingled zones compatible with each others  Yes  No
13. Will the value of production be decreased by commingling?  Yes  No (If Yes, attach explanation)
14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application.  Yes  No
15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). \_\_\_\_\_
16. ATTACHMENTS
- \* C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
  - \* Production curve for each zone for at least one year. (If not available, attach explanation.)
  - \* For zones with no production history, estimated production rates and supporting data.
  - \* Data to support allocation method or formula.
  - \* Notification list of all offset operators.
  - \* Notification list of working, overriding and royalty interests for uncommon interest cases.
  - \* Any additional statements, data, or documents required to support commingling.

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

SIGNATURE Kay Maddox TITLE Regulatory Agent DATE 4/24/98

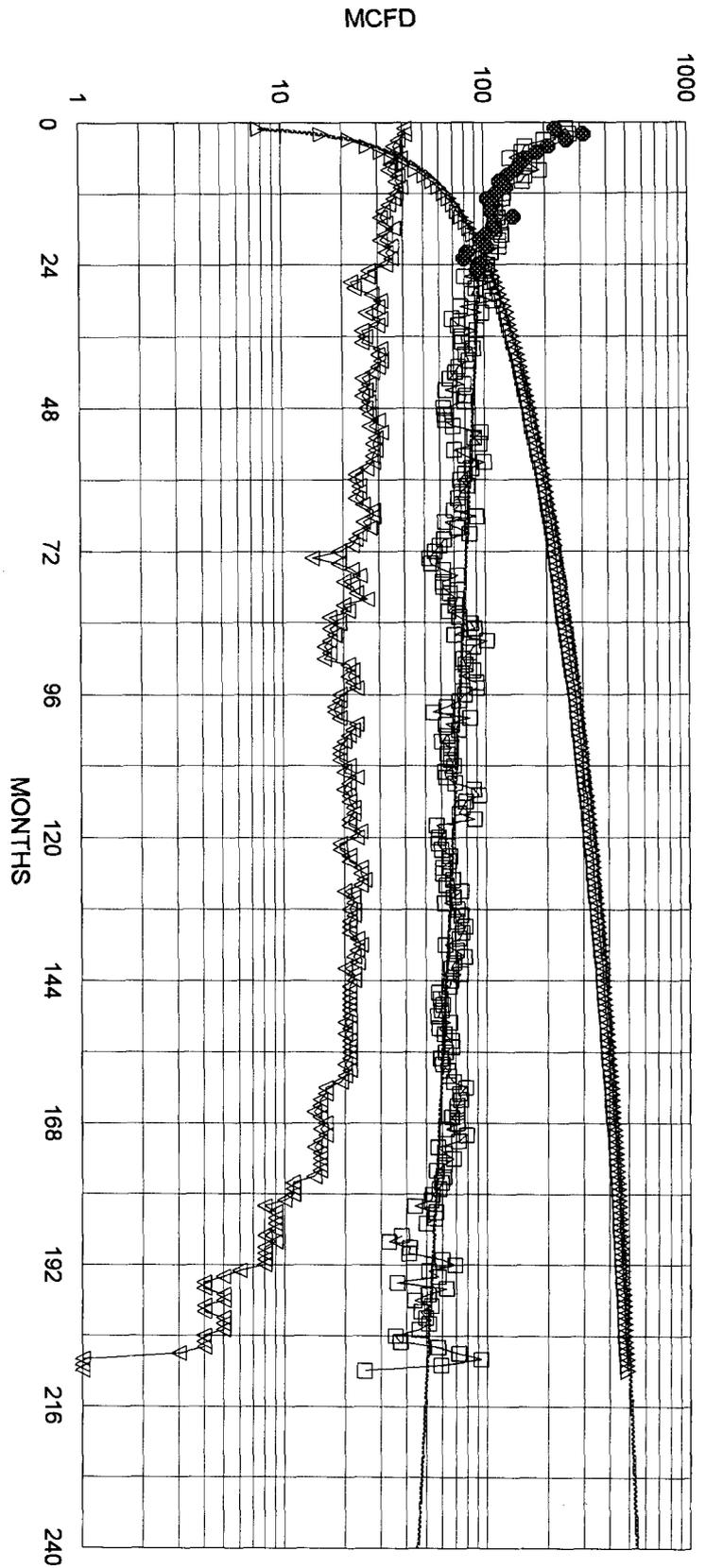
TYPE OR PRINT NAME Kay Maddox TELEPHONE NO. (915) 686-5798

**APPLICATION FOR DOWNHOLE COMMINGLING**

Jicarilla E 9M, Unit Letter G, Section 16-T26N-R4W  
Rio Arriba County, New Mexico

As shown in the attached production plot for offsets to the Jicarilla E 9M, estimated ultimate recoveries and initial production rates from infill wells to the Dakota and Mesaverde formations are clearly marginal in this area. Mesaverde estimated recoveries in particular do not justify drilling stand alone wells (549 MMCF recovery in 20 years, 777 MMCF ultimate recovery). Futhermore, production plots from each zone indicate a similar decline profile and a fixed allocation formula can be utilized. Upon completion, both zones will be tested and stabilized flow rates will be used to allocate production from each zone. This procedure is common practice in Conoco's 28-7 Unit and reference is made to Order R-10476-B as it applies to downhole commingling of marginal zones and the allocation of production between such zones.

**NORMALIZED MESAVERPE PRODUCTION  
41 WELLS SINCE 1980: TOWNSHIP 26N RANGE 4W**



— FIT MCFD      □ NORMALIZED MCFD      ▽ NORM CUM MMCF  
 ▴ WELLS ON PRODUCTION      - - - FIT CUM MMCF      ◆ 7 RECENT CONOCO WELLS

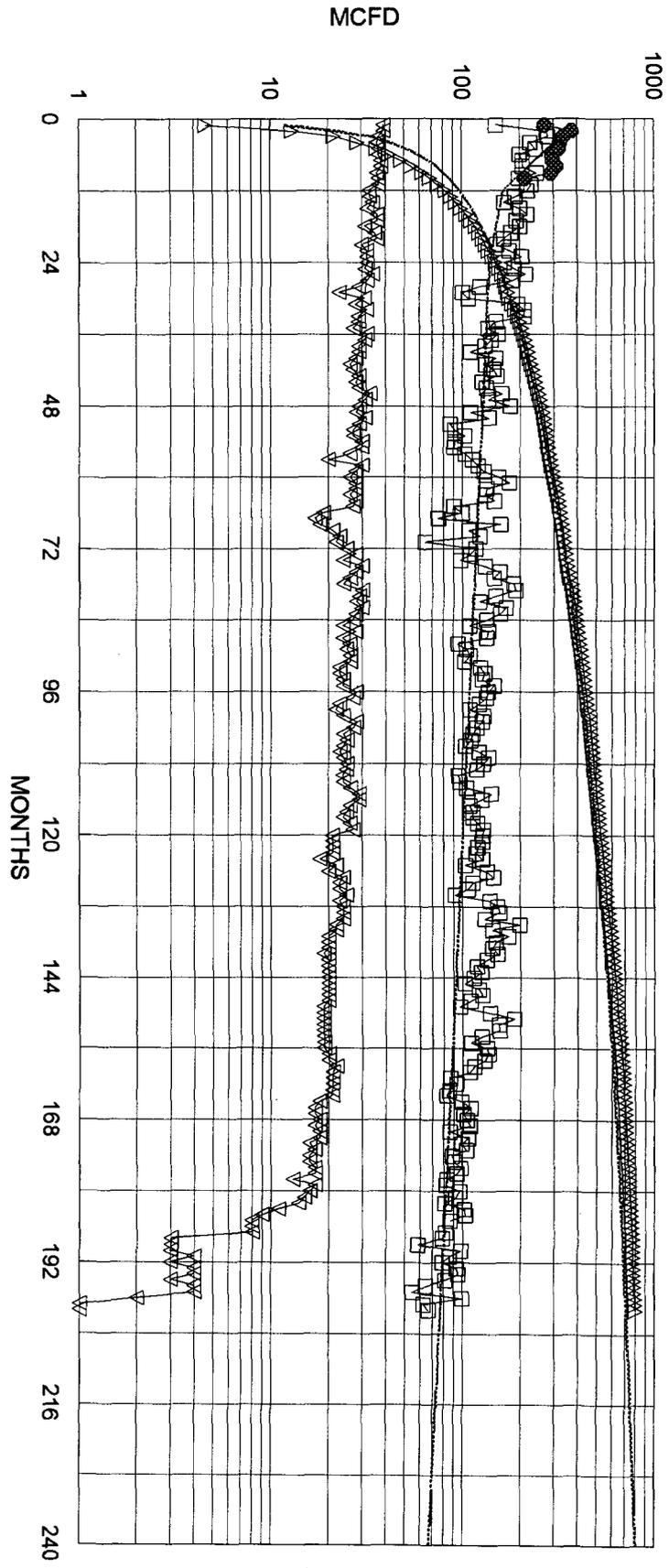
**NORMALIZED AVG & EXPECTED AVG. NEW COMPLETION RATES:**

777 MMCF EUR  
 549 MMCF IN 20 YR  
 20 MCFD E.L.  
 0.0077 bbl/mcf oil yield

280 MCFD IP  
 60% DECLINE, 1ST 12 MONTHS  
 15% DECLINE, NEXT 12 MONTHS  
 4.0% FINAL DECLINE

RECENT WELLS IN 26N 04W (1993 AND NEWER)					
JICARILLA A	13	13E-26N-4W	JICARILLA E	10E	22B-26N-4W
JICARILLA E	7E	15B-26N-4W	JICARILLA A	10	23C-26N-4W
JICARILLA E	8M	15K-26-4W	JICARILLA B	9A	28D-26N-4W
JICARILLA E	9	16B-26N-4W			

**NORMALIZED DAKOTA PRODUCTION**  
**39 WELLS SINCE 1980: 26N-4W (MERIT JICARILLA A,B,&E OFFSETS)**



— FIT MCFD      □ NORMALIZED MCFD      ▲ NORM CUM MCF  
 ▣ WELLS ON PRODUCTION      - - - FIT CUM MCF      ◆ JICARILLA E 7E & 8M

<b>NORMALIZED AVG AND EXPECTED NEW COMPLETION AVG:</b>		<b>RECENT WELLS (1993 AND NEWER):</b>	
1221 MMCF EUR	410 MCFD IP	JICARILLA E 7E	15K-26N-4W
804 MMCF IN 20 YRS	60% DECLINE, 1ST 12 MONTHS	JICARILLA E 8M	15B-26N-4W
20 MCFD E.L.	15% DECLINE, NEXT 12 MONTHS		
0.0167 bbl/mcf oil yield	4% FINAL DECLINE		

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO CONT 104
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME JICARILLA
2. NAME OF OPERATOR Conoco Inc.		7. UNIT AGREEMENT NAME
3. ADDRESS AND TELEPHONE NO 10 Desta Dr. Ste 430E, Midland, Tx. 79705-4500 915-686-5794		8. FARM OR LEASE NAME WELL NO JICARILLA E #9M
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements *) At surface 1675' FNL & 1845' FEL At proposed prod. zone 1675' FNL & 1845' FEL		9. API WELL NO
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*		10. FIELD AND POOL, OR WILDCAT Blanco MV/Basin Dakota
5. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if Any)	16. NO OF ACRES IN LEASE	11. SEC. T., R., M., OR BLK. AND SURVEY OR AREA Sec. 16, T26N, R4W
8. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	17. NO. OF ACRES ASSIGNED TO THIS WELL 320	12. COUNTY OR PARISH Rio Arriba
21. ELEVATIONS (Show whether DF, RT, GR, etc) 6764' GR	19. PROPOSED DEPTH 8159'	13. STATE NM
	20. ROTARY OR CABLE TOOLS Rotary	22. APPROX. DATE WORK WILL START* 4/15/98

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, 9-5/8"	36#	300'	160 sxs, circ.
8-3/4"	K-55, 7"	23#	3883'	485 sxs, circ.
6-1/4"	K-55, 4-1/2"	10.5#	7859'	400 sxs, toc @ 3700'

It is proposed to drill vertical wellbore to be downhole commingled in the Blanco Mesaverde and Basin Dakota Pools following the acquisition of sufficient production test data for allocation purposes. A downhole commingling application will be filed with the BLM and NMOCD prior to commingling. A NOS was filed 10/31/97. This well will drilled and equipped according to the following attachments:

1. Well Location & Acreage Dedication Plat (C-102) and other associated plats.
2. Proposed Well Plan Outline.
3. Cementing Plan.
4. Blowout Preventer Hookup.
5. Surface Use Plan with Production Facility Layout.
6. Pipeline survey plat.

This application includes ROW's for the wellpad and access road.

IN ABOVE SPACE DESCRIBE PROPOSED 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. Mike L. Mankin  
SIGNED [Signature] TITLE Right-of-Way Agent DATE March 4, 1998

(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

District I  
 1990 Hobbs, NM 88341-1980

District II  
 1990 Crown DD, Artesia, NM 88211-0719

District III  
 1990 Rio Brazos Rd., Aztec, NM 87410

District IV  
 PO Box 2088, Santa Fe, NM 87504-2088

OIL CONSERVATION DIVISION  
 PO Box 2088  
 Santa Fe, NM 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number		2 Pool Code		3 Pool Name	
		72319 / 71599		Blanco Mesaverde/Basin Dakota	
4 Property Code		5 Property Name			6 Well Number
18022		JICARILLA E			9M
7 OGRID No.		8 Operator Name			9 Elevation
005073		CONOCO, INC.			6754'

10 Surface Location

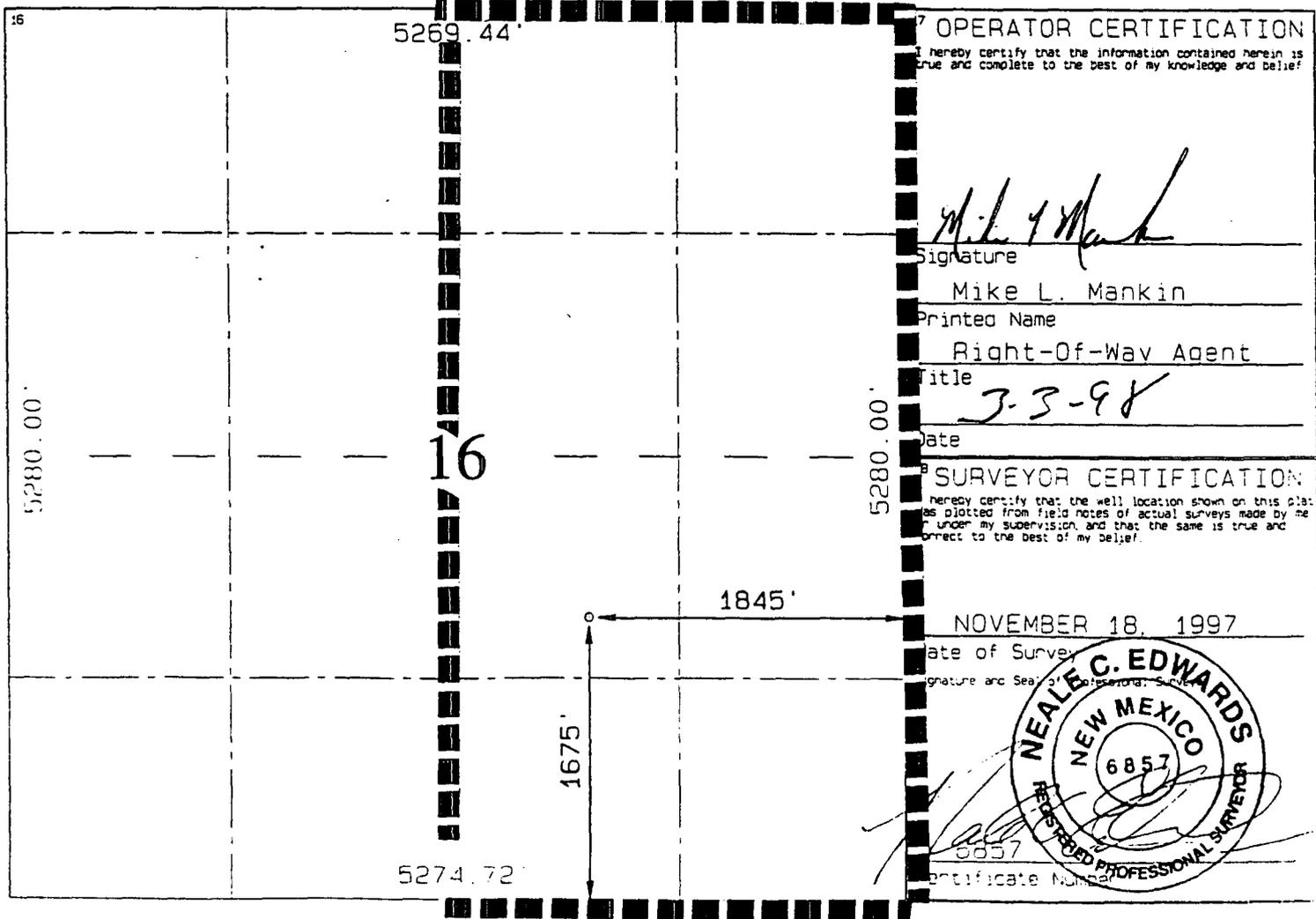
UL or lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County
J	16	26N	4W		1675	South	1845	East	RIO ARRIBA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
320			

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



Jicarilla E # 9M  
Section 16, T-26-N, R-54W,  
Rio Arriba County, TX

RE: Application C-107A to Downhole Commingle

**Notification of Offset Operators:**

Burlington Resources  
PO Box 4289  
Farmington, NM 87499

Amoco  
PO Box 800  
Denver, CO 80201

Chateau Oil & Gas  
2515 McKinney Ave STE 840  
Dallas, TX 75201

A copy of the C-107A has been sent to the above listed parties