

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

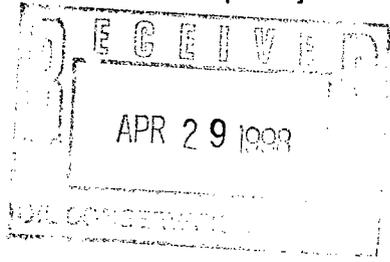
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ADMINISTRATIVE APPLICATION COVERSHEET

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 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 K Well No #13 E Unit Ltr Sec Twp Rge Section 11, T-25-N, R-5-W, L County Rio Arriba

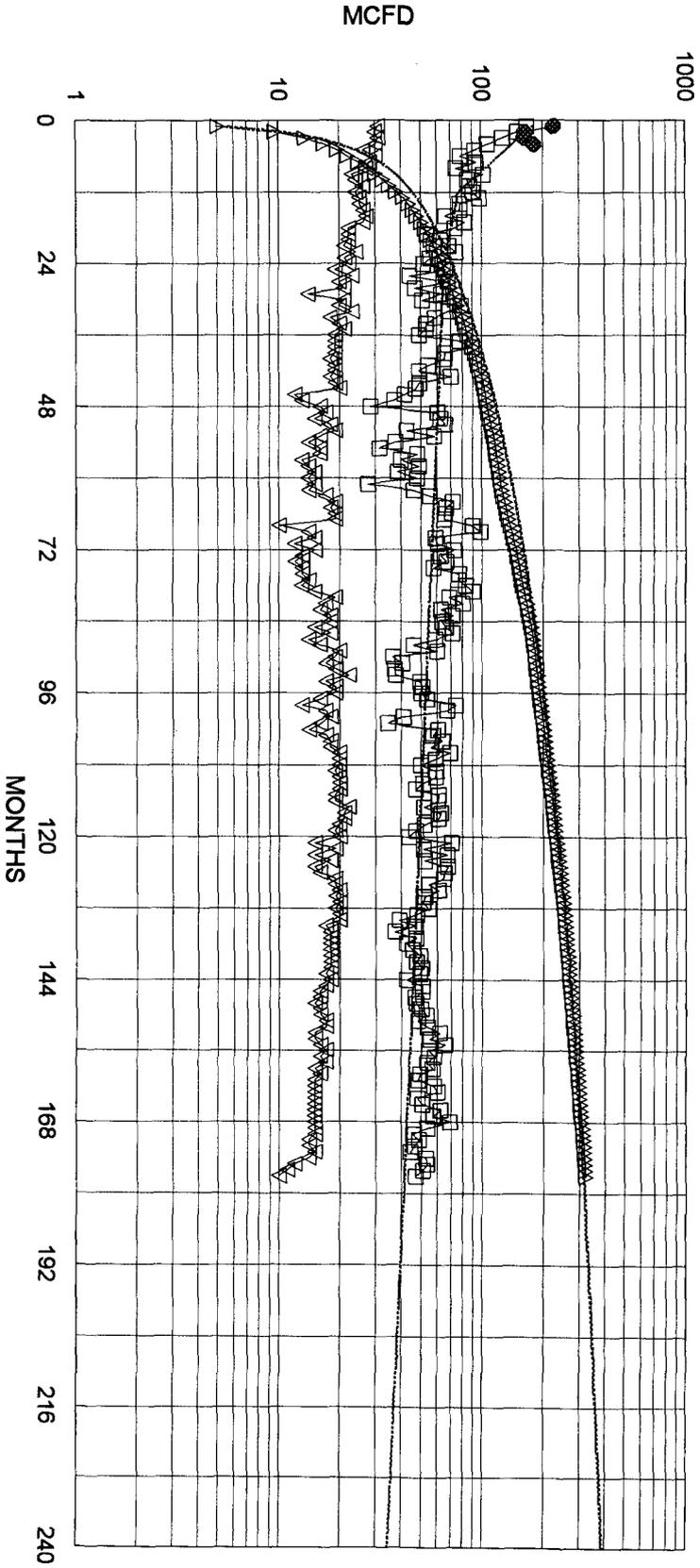
OGRID NO. 005073 Property Code 18023 API NO. _____ Spacing Unit Lease Types: (check 1 or more)
Federal , State (and/or) Fee

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)	5247-5608'		7242-7472'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	To Flow		To Flow
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a (Current) 562	a.	a. 950
	b(Original) 1322	b.	b. 2809
6. Oil Gravity (°API) or Gas BT Content	1260		1248
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 lsst production Note For new zones with no production history applicant shad be required to attach production estimates and supporting data • If Producing, date and oil/gas/water rates of recent test (within 60 days)	Date Rates	Date Rates	Date Rates
	Anticipated 1st Yr average 126 MCFD, 3.5 BOPD	Date Rates	Anticipated 1st Yr Average 221 MCFD, 3.3 BOPD
8. Fixed Percentage Allocation Formula -% or 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

NORMALIZED MESAVEVERDE PRODUCTION
 31 WELLS SINCE 1980: OFFSET TO JICARILLA K LEASE: SE 26N 5W AND NE 25N 05W



NORMALIZED AVERAGE PER WELL & EXPECTED NEW WELL AVG.

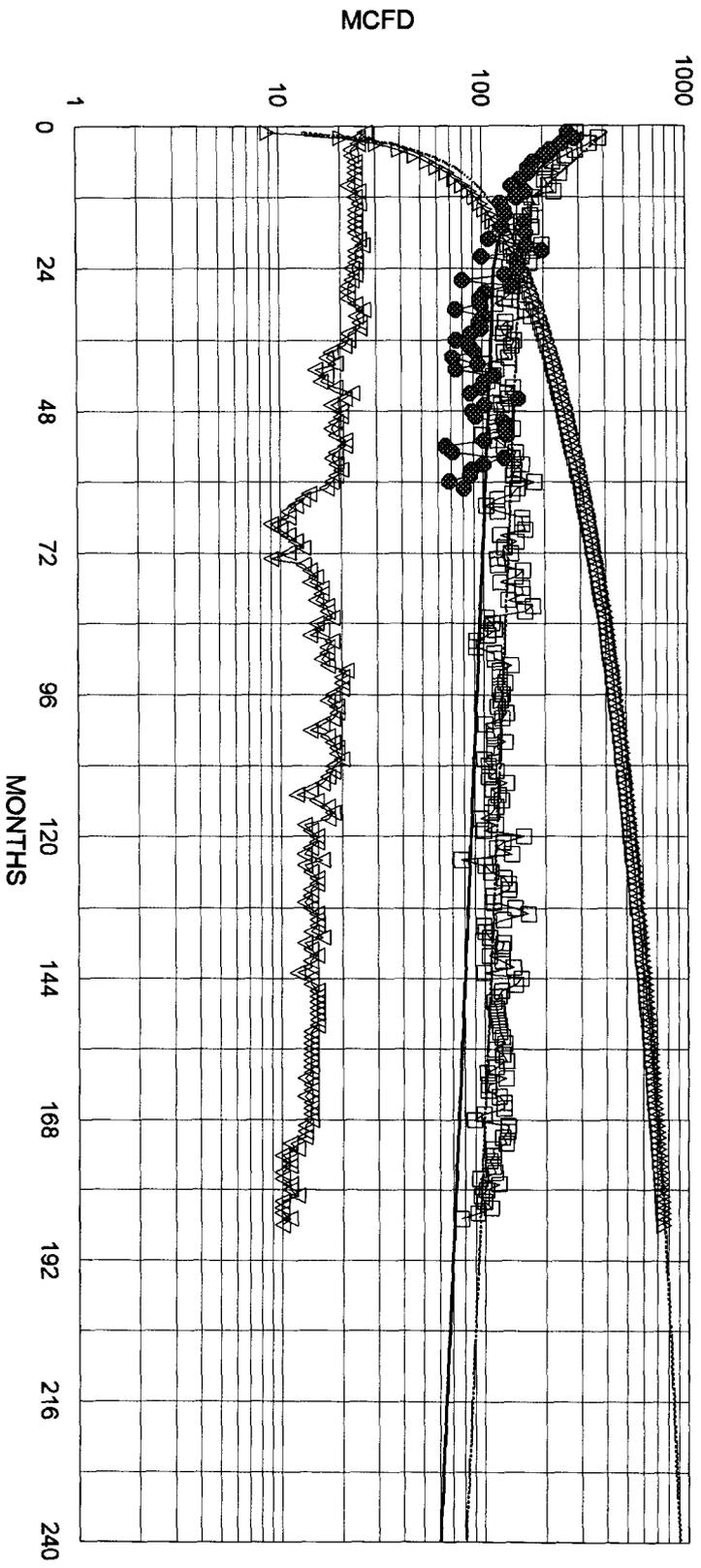
536 MMCF EUR
 389 MMCF IN 20 YRS
 20 MCFD E.L.
 0.0278 bbl/mcf oil yield

192 MCFD IP
 60% DECLINE, 1ST 12 MONTHS
 15% DECLINE, NEXT 12 MONTHS
 3.5% FINAL DECLINE

NEW RECOMPLETIONS IN 1997:

JICARILLA K 10	1D-25N-5W	JICARILLA K 15	1I-25N-5W
JICARILLA K 10E	1K-25N-5W	JICARILLA K 16E	1A-25N-5W
JICARILLA K 11	2E-25N-5W		
JICARILLA K 11E	2B 25N-5W		

NORMALIZED DAKOTA PRODUCTION
27 WELLS SINCE 1980; 16 SECTIONS SURROUNDING JIC. K LEASE (SEC 1,2,11,&12; 25N-05W)



— FIT MCFD □ NORMALIZED MCFD ▽ WELLS ON PRODUCTION
 FIT CUM MMCF — RISKED MCFD ◆ 4 WELLS SINCE 1992

NORMALIZED AVG PER WELL:
 1531 MMCF EUR
 913 MMCF IN 20 YRS
 20 MCFD E.L.
 0.0149 bbl/mcf oil yield

450 MCFD IP
 60% DECLINE, 1ST 12 MONTHS
 15% DECLINE, NEXT 12 MONTHS
 3.5% FINAL DECLINE

RISKED AVG: 25% RISK (EXPECTED NEW COMPLETION AVERAGE)
 1097 MMCF EUR 338 MCFD IP
 684 MMCF IN 20 YR 60.0% DECLINE, 1ST 12 MONTHS
 20 MCFD E.L. 15.0% DECLINE, NEXT 12 MONTHS
 0.0149 bbl/mcf oil yield 3.5% FINAL DECLINE

APPLICATION FOR DOWNHOLE COMMINGLING

Jicarilla K 13E, Unit Letter L, Section 11-T25N-R5W
Rio Arriba County, New Mexico

As shown in the attached production plot for offsets to the Jicarilla K 13E, 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 (389 MMCF recovery in 20 years, 536 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.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO CONT 145	
2. NAME OF OPERATOR Conoco Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME JICARILLA	
3. ADDRESS AND TELEPHONE NO 10 Desta Dr. Ste 430E, Midland, Tx. 79705-4500		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements *) At surface 1450' FSL & 940' FWL At proposed prod. zone 1450' FSL & 940' FWL		8. FARM OR LEASE NAME WELL NO JICARILLA K #13E	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*		9. API WELL NO	
5. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if Any)		10. FIELD AND POOL, OR WILDCAT Blanco MV/Basin Dakota	
16. NO OF ACRES IN LEASE		11. SEC. T., R., M., OR BLK. AND SURVEY OR AREA Sec 11, T25N, R5W	
8. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		12. COUNTY OR PARISH Rio Arriba	
19. PROPOSED DEPTH 7772'		13. STATE NM	
21. ELEVATIONS (Show whether DF, RT, GR, etc) 6766' GR		17. NO. OF ACRES ASSIGNED TO THIS WELL 319.5	
22. APPROX. DATE WORK WILL START* 3/31/98		20. ROTARY OR CABLE TOOLS Rotary	

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	K-55, 8-5/8"	24#	300'	130 sxs, circ.
7-7/8"	K-55, 5-1/2"	15.5#	7472'	1085 sxs, circ.

It is proposed to drill a 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. An NOS was filed 10/31/97. The well will be drilled and equipped according to the following additional 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 well pad 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. SIGNED Mike L. Mankin TITLE Right of Way Agent DATE 3/9/98

(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

Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Free Lease - 3 Copies

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number		*Pool Code	*Pool Name
		72319/71599	Blanco Mesaverde/Basin Dakota
*Property Code	*Property Name		*Well Number
18023	JICARILLA K		13E
*GRID No.	*Operator Name		*Elevation
005073	CONOCO, INC.		6766'

¹⁰ Surface Location

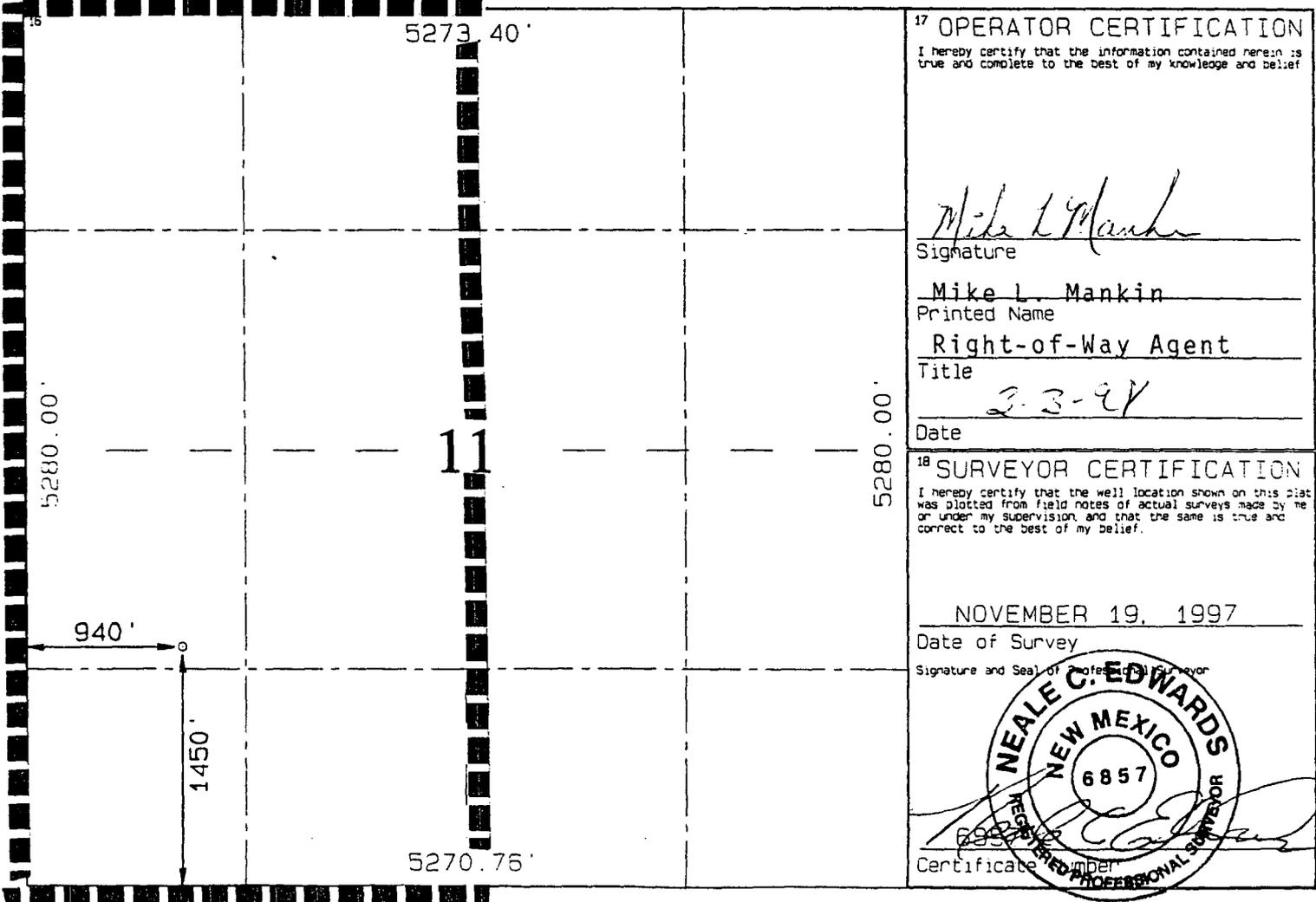
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	11	25N	5W		1450	South	940	West	RIO ARRIBA

¹¹ 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

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
319.5			

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



¹⁷ OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Mike L. Mankin
Signature

Mike L. Mankin
Printed Name

Right-of-Way Agent
Title

3-3-97
Date

¹⁸ SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was platted 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 19, 1997
Date of Survey

Signature and Seal of Registered Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

Certificate Number

Jicarilla K # 13E
Section 11, T-25-N, R-5-W, L
Rio Arriba, New Mexico

RE: Downhole Commingle C107A Application

Notification of Offset Operators:

Amoco, Inc.
PO Box 800
Denver, CO 80201

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