

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

Conoco Inc

10 Desta Dr. Ste 100W, Midland, Tx. 79705-4500

Jicarilla K

#13 E

Section 11, T-25-N, R-5-W, L

Rio Arriba

Lease

Well No

Unit L17 Sec 1wp Rge

County

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	a (Current)	a	a
Oil Zones - Artificial Lift	562		950
Gas & Oil - Flowing	b (Original)	b	b
All Gas Zones	1322		2809
Estimated Or Measured Original			
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 last production	Date Rates	Date Rates	Date Rates
Note: For new zones with no production history, Applicant shall be required to attach production estimates and supporting data.			
• If Producing, date and oil/gas/water rates of recent test (within 90 days)	Date Rates	Date Rates	Date Rates
	Anticipated 1st Yr average 126 MCFD, 3.5 BOPD		Anticipated 1st Yr Average 221 MCFD, 3.3 BOPD
8. Fixed Percentage Allocation Formula - % of 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.

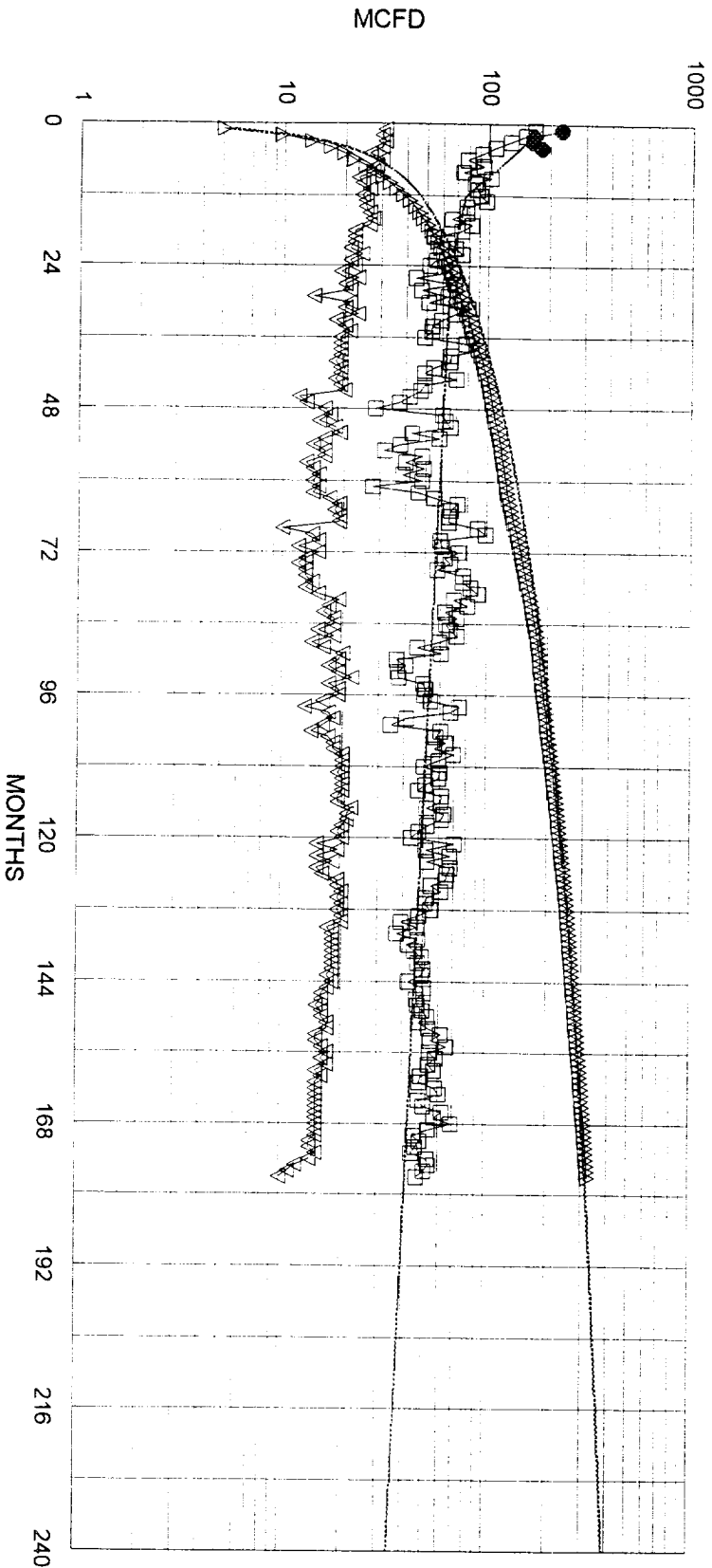
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

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

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

RECEIVED  
APR 27 1998  
OIL CONSERVATION DIV  
BELL 3

**NORMALIZED MESAVERDE 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

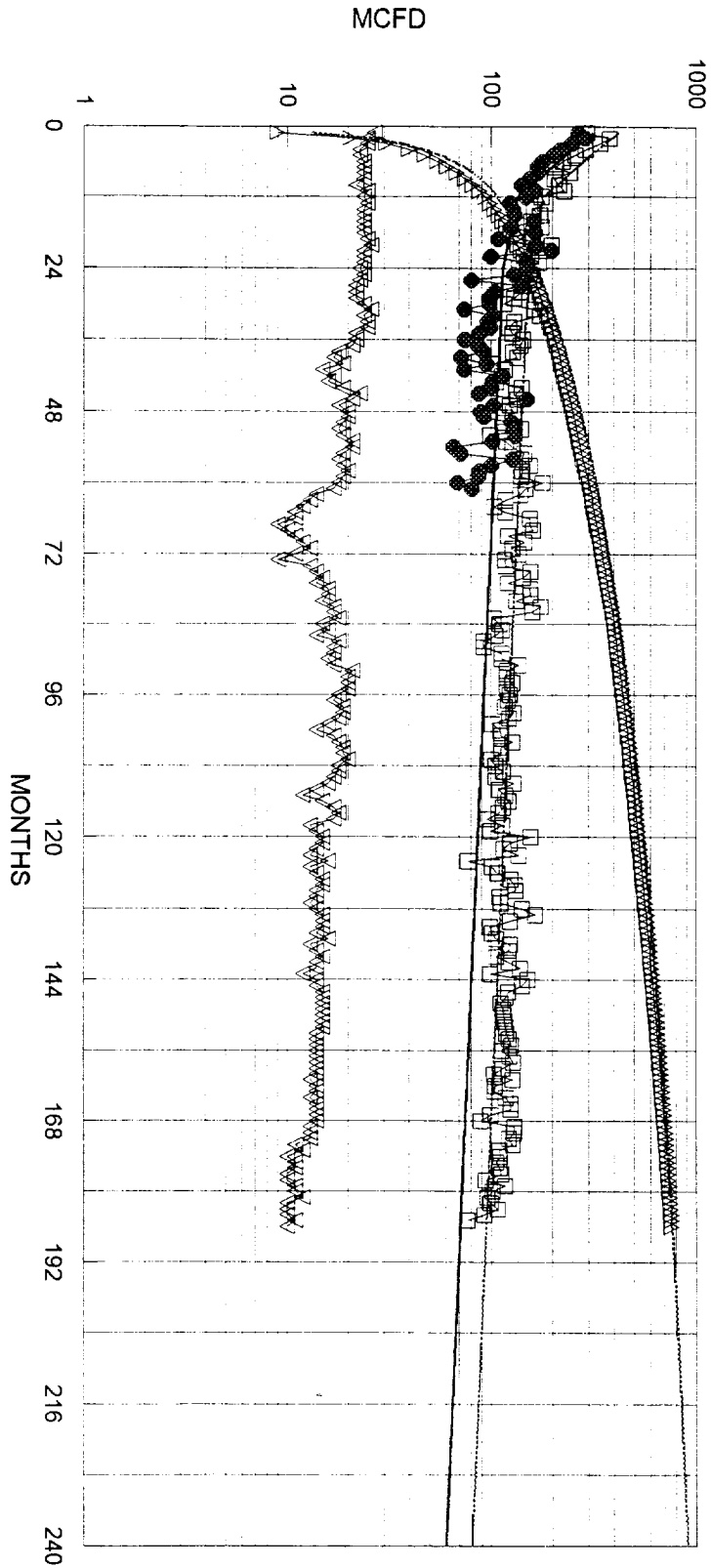
192 MCFD IP  
60% DECLINE, 1ST 12 MONTHS  
15% DECLINE, NEXT 12 MONTHS  
3.5% FINAL DECLINE

NEW RECOMPLETIONS IN 1997:

JICARILLA K 10	1D-25N-5W	JICARILLA K 15	11-25N-5W
JICARILLA K 10E	1K-25N-5W	JICARILLA K 15E	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)



NORMALIZED AVG PER WELL:

1531 MMCF EUR  
913 MMCF IN 20 YRS  
20 MCFD E.L.  
0.0149 bbl/mcf oil yield

RISKED AVG:

25% RISK (EXPECTED NEW COMPLETION AVERAGE)

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

1097 MMCF EUR  
684 MMCF IN 20 YR  
20 MCFD E.L.  
0.0149 bbl/mcf oil yield

338 MCFD IP  
60.0% DECLINE, 1ST 12 MONTHS  
15.0% DECLINE, NEXT 12 MONTHS  
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). Furthermore, 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

(Other instructions on  
reverse side)

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

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.	
15. 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	
17. NO. OF ACRES ASSIGNED TO THIS WELL 319.5			12. COUNTY OR PARISH Rio Arriba	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.			13. STATE NM	
19. PROPOSED DEPTH 7772'			20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6766' GR			22. APPROX. DATE WORK WILL START* 3/31/98	

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 NMOC 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

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.

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

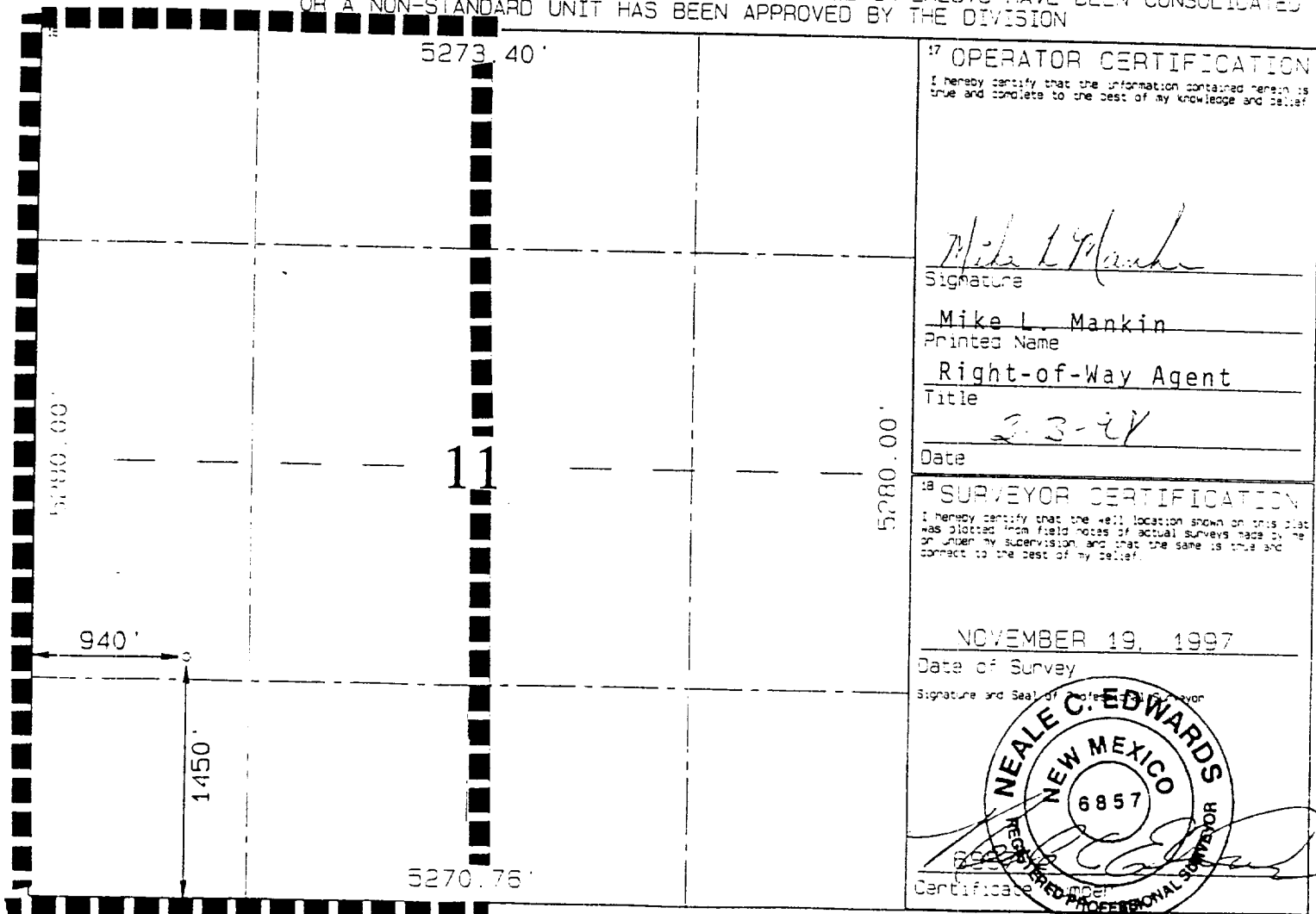
Approved February 21, 1997  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ 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
COGRIID No		Operator Name			Elevation
005073		CONOCO, INC.			6766
10 Surface Location					
Lot No	Section	Township	Range	Lot Ion	Feet from the North/South line
1	11	25N	5W		1450
				Feet from the East/West line	County
				940	West ARIZONA
11 Bottom Hole Location If Different From Surface					
Lot No	Section	Township	Range	Lot Ion	Feet from the North/South line
Dedicated Acres		Joint or Infill	Consolidation Code	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

2-3-97  
Date

18 SURVEYOR CERTIFICATION  
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 19, 1997

Date of Survey  
Signature and Seal of 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.