State of New Mexico Energy Minerals and Natural Rasources Department

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

STRICT II

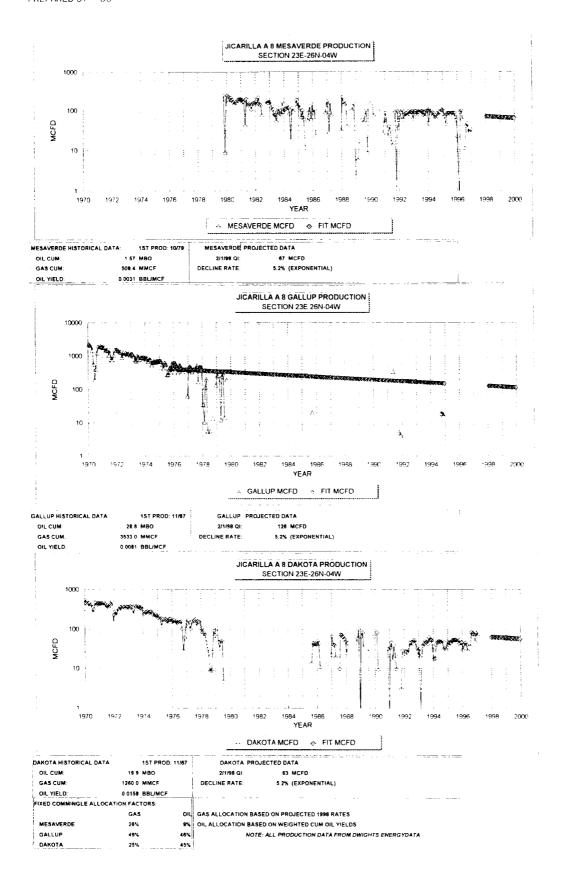
AFR 2 0 1 OIL CONSERVATION DIVISION

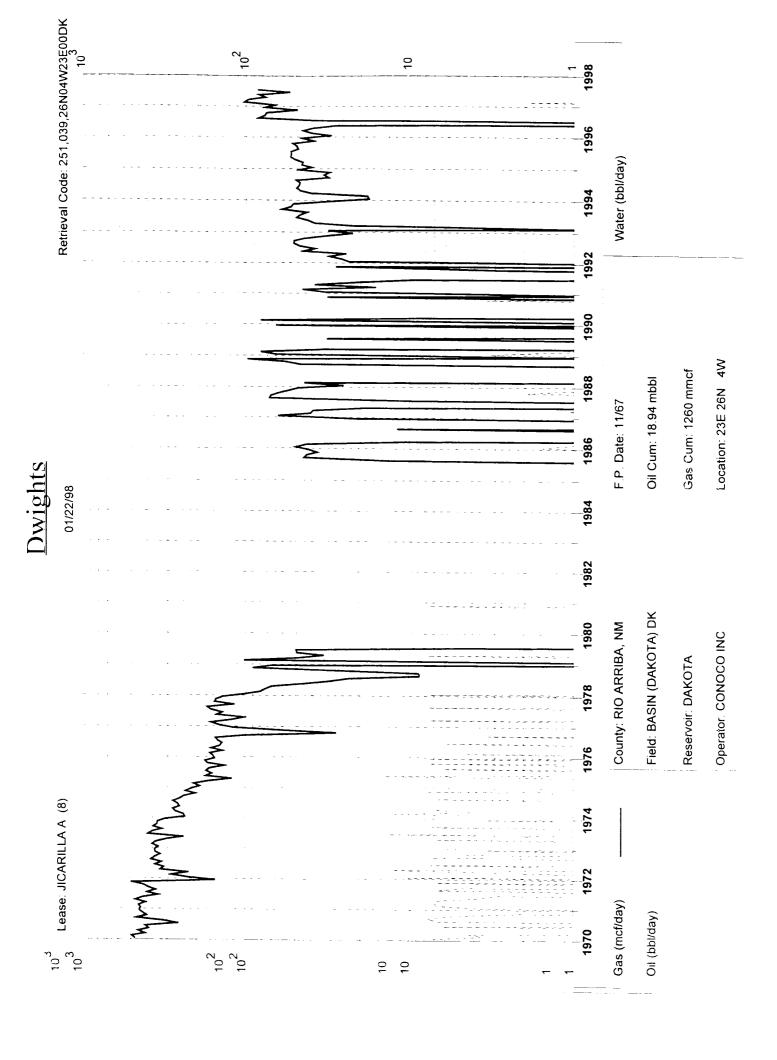
- APPROVAL PROCESS: \boxtimes

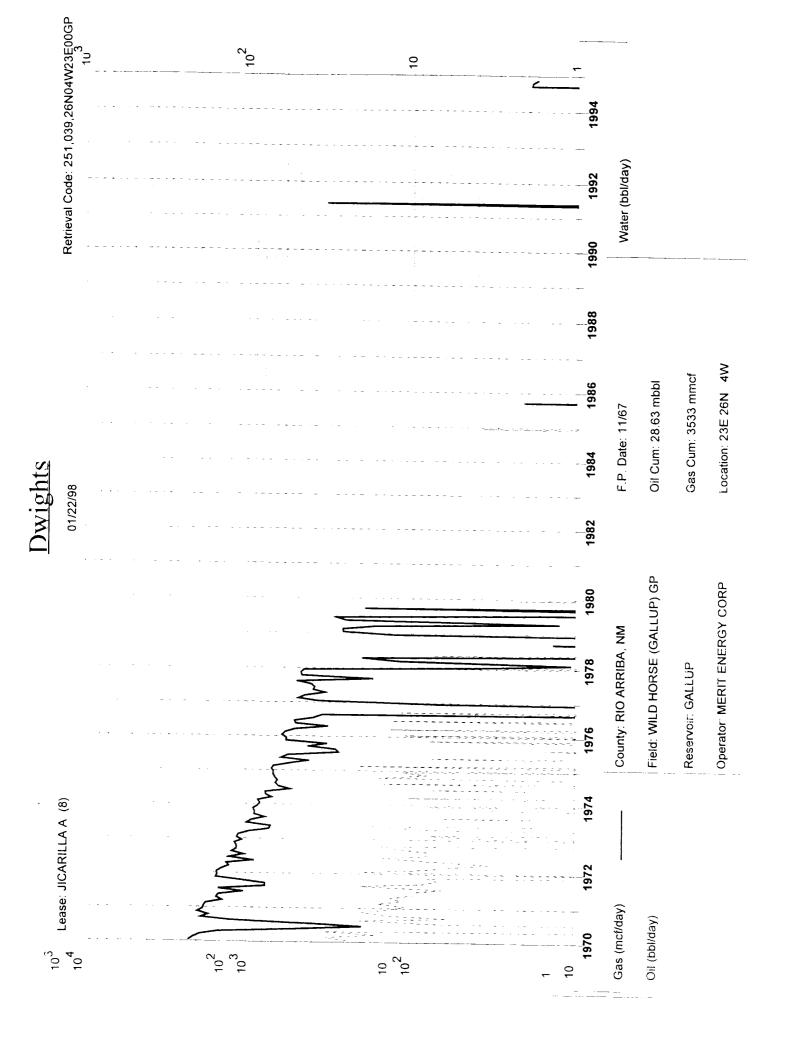
B11 South First St. Artesia NM 88210 2835 DISTRICT III 1000 Ric Brazos Rd. Aztec. NM 87410 1693. — APPLICATION FOR DOWNHOLE COMMINGLING

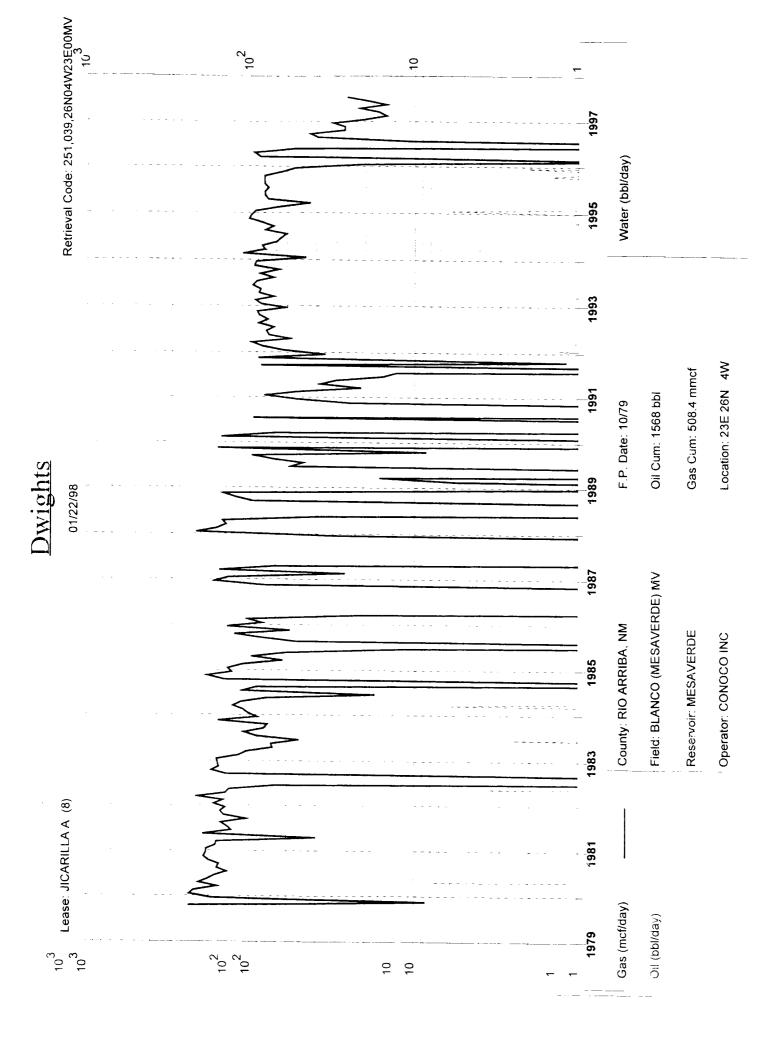
Administrat	ive 🗌	Hearing
EXISTING	S WEL	LBORE
\boxtimes	YES	☐ NO

Conoco Inc.	1C Addre	Desta Dr. Ste 100W, Midland	I, Tx. 79705-4500	
Jicarilla A	#8	Section 23, T-26-N, R-4-W,	E Rio Arriba	
OGRID NO. 005073 Property Cod		Spacing	Unit Lease Types (check 1 or more) . 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 71599	Wildhorse Gallup 87360	Basin Dakota 71599	
2 TOP and Bottom of Pay Section (Perforations)	5621-5807'	7214-7240'	7700-7872'	
3 Type of production (Oil or Gas)	Gas	Gas	Gas	
4 Method of Production {Flowing or Artificial Lilt}	Flowing	Flowing	Flowing	
5 Bottomhole Pressure Oil Zones - Artilicial Lift Estimated Current Gas & Oil - Flowing	a (Current) 590 psia	a. 324 psia	a. 806 psia	
Measured Current All Gas Zones Estimated Or Measured Original	b(Original)	2135	b. 2645	
6 Oil Gravity ("API) or Gas BT Content	1306	1413	1267	
7 Producing or Shut-In?	Producing	Producing	Producing	
Production Marginal? (yes or no) If Shut-In give date and oil/gas/water rates of lisst production Note For new zones with no production history applicant shad be required to attach production estimates and supporting data	Yes Date Rates	Yes Date Rates	Yes Date Rates	
If Producing, date and oil/gas/ water rates of recent test (within 60 days)	Est 2/98 Rates 67 MCFD, 0 BWPD, .2 BOPD	Est 2/98 Rates 128 MCFD, 2 BWPD, I BOPD	Est 2/98 Rates 63 MCFD, .25 BWPD, 1 BOPD	
8 Fixed Percentage Allocation Formula -% or each zone	l Gas 9 26 °°	46 °° 49	Gas 45 ° 25 °	
O. Are all working, overriding, an If not, have all working, overriding, and If not, have all working, overriding all offset operators been of the value of production be recovered. Are all produced fluids from all will the value of production be united. If this well is on, or community United States Bureau of Land of NMOCD Reference Cases for Its C	orting data and/or explaining in differential in a ding, and royalty interests bee given written notice of the propes. No If yes, are fluids cold, and will the allocation formulation for	nethod and providing rate project all commingled zones? In notified by certified mail? cosed downhole commingling? Impatible, will the formations not all a be reliable. X Yes No Yes Yes No (If Yes, either the Commissioner of Fd in writing of this application.	ections or other required data. $\frac{X}{X}$ Yes $\frac{X}{Y}$ No $\frac{X}{X}$ Yes $\frac{X}{Y}$ No $\frac{X}{X}$ Yes $\frac{X}{Y}$ No $\frac{X}{X}$ Yes $\frac{X}{Y}$ No $\frac{X}{X}$ Ho $\frac{X}{Y}$ Ho $\frac{X}{Y}$ So $\frac{X}{Y}$ No $\frac{X}{Y}$ So $\frac{X}{Y$	
hereby certify that the informatio	n above is true and complete		nd belief.	
PE OR PRINT NAME Kay Made		TELEPHONE NO.		









MEXICO OIL CONSERVATION COMMIS NO WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102 Supersedes C-128 Effective 1-1-55

All distances must be from the outer houndaries of the Section

percitor		All distances indicate of	rom the outer boundaries	of the Section	
	nergy Corpora	tion	Lease JICART	LLA "A"	Well No.
nit Letter	Section	Township	Range	County	
E	23	26 North	4 West	Rio Arrib	oa
ctual Footage Lo	cation of Well:				
1450		NORTH line and		feet from the WEST	line
round Level Elev 6863.0		ormation Dakota, de & Gallup	:Poo: Basin Dako & Wild Horse (ota, Blanco Mv.	320 W/2 Dakota & My
		<u>-</u>	· · · · · · · · · · · · · · · · · · ·		160 NW/4 Gallupicres
2. If more to interest a	han one lease is ind royalty).		, outline each and i	dentify the ownership	thereof (both as to working
If answer this form i	is "no," list the if necessary.)	unitization, force-pooling the second conservation is "yes;" type of the second content	consolidation C iptions which have interests have been	actually been consolic	dated. (Use reverse side of mmunitization, unitization, n approved by the Commis-
					CERTIFICATION
	lla Apache act #105	23		Rudy D Position Area S Company SUPRON Date March	ereify that the information concerning true and complete to the knowledge and belief. Motto Motto Motto ENERGY CORPORATION 22, 1979 ENGINEED Certify that the cold location this plat was platted from field actual surveys made by me or supervision, and the same
				Date Surve	yed flay 1967 Professional Engines d Surve
1				Certificate	No.
660 9	0 1320 1650 198	0 2310 2640 2000	1500 1000	500 0	

Conoco, Inc. 10 Desta Dr STE 100W Midland, TX 79705

RE: Jicarilla A #8 Downhole Commingle Application C-107A Section 23, T-26-N, R-4-W, E

Notification of Offset Operators:

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

Burlington Resources PO Box 4289 Farmington, NM 87499

State of New Mexico ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT Santa Fe, New Mexico 87505



OIL CONSERVATION DIVISION



ADMINISTRATIVE ORDER DHC-1095

Merit Energy Company 12222 Merit Drive, Suite 1500 Dallas, Texas 75251

Attention: Terry D. Gottberg

Authorization to downhole commingle Basin Dakota Pool and Blanco Mesaverde Pool production.

Dear Mr. Gottberg:

Reference is made to your recent application for an exception to Rule 303-A of the Division Rules and Regulations to permit downhole commingling in the wellbore, the production of the above mentioned pools in the following described wells:

Well Name	Number	Unit Letter	Section
Jicarilla "A"	8	E	23
Jicarilla "A"	9	С	14
Jicarilla "A"	10 E	G	23
Jicarilla "A"	13E	N	13
Jicarilla "A"	22Y	K	24
Jicarilla "B"	8A	D	25

All wells located in Township 26 North, Range 4 West, Rio Arriba County, New Mexico.

It appearing that the subject wells qualify for approval for such exception pursuant to the provisions of Rule 303-C, and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion and required separation of the two zones is hereby placed in abeyance.

In accordance with the provisions of Rule 303-C-4., total commingled oil production from the subject wells shall not exceed 30 barrels per day, and total water production shall not exceed 60 barrels per day.

VILLAGRA BUILDING - 488 Calbideo
Forestry and Resources Conservation Division
JP.O. Box 1948 67504-1848
827-5430

Park and Recreation Offician P.O. Box 1147 87504-1147 827-7465 2049 South Pachase

Office of the Secretary
827-5950

Administrative Services
827-5929

Energy Conservation & Management
827-9900

Mining and Minerals
827-9900

Oil Conservation
827-7131

214 953 1252 FIRGE 202

Administrative Order DHC-1095 Merit Energy Company February 21, 1995 Page 2

The maximum amount of gas which may be produced daily from the wells shall be determined by Division Rules and Regulations or by the gas allowable for each respective prorated pool as printed in the Division's San Juan Basin Gas Proration Schedule.

In accordance with the provisions of Rule 303-C, the supervisor of the Aztec District Office of the Oil Conservation Division shall determine the proper allocation of production from the subject wells following their completion.

FURTHER: The operator shall notify the Aztec District Office of the Division upon implementation of the commingling process.

Pursuant to Rule 303-C-5, the commingling authority granted by the order may be rescinded by the Division Director if, in his opinion, conservation is not being best served by such commingling.

Approved at Santa Fe, New Mexico on this 21st day of February, 1995.

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director

SEAL

WJL/BES

cc: Oil Conservation Division - Aztec

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ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

> CASE NO. 6341 Order No. R-5857

APPLICATION OF SUPRON ENERGY CORPORATION FOR DUAL COMPLETIONS AND DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on November 8, 1978, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 29th day of November, 1978, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Supron Energy Corporation, seeks the dual completion of its <u>Jicarilla "A" Well No. 8 located</u> in Unit E of Section 23; its <u>Jicarilla "E" Well No. 7 located</u> in Unit P of Section 15; and its <u>Jicarilla "E" Well No. 8</u> located in Unit C of Section 15, all in Township 26 North, Range 4 West, Rio Arriba County, New Mexico, to produce gas from the Mesaverde formation through tubing and to produce commingled Gallup and Dakota production through a separate string of tubing with separation of the Mesaverde zone from the commingled zones by means of a packer.
- (3) That the mechanics of the proposed dual completions are feasible and in accord with good conservation practices.



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-2-Case No. 6341 Order No. R-5857

- (4) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.
- (5) That the reservoir characteristics of the Gallup and Dakota formations in each of the subject wells are such that underground waste would not be caused by the proposed commingling provided that the wells are not shut in for an extended period.
- (6) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time any of the subject wells is shut in for 7 consecutive days.
- (7) That in order to allocate the commingled production to each of the commingled zones in the subject wells, applicant should conduct tests during completion operations, and should consult with the supervisor of the Division's Aztec office to arrive at an allocation formula.
- (8) That approval of the subject application will prevent waste and protect correlative rights.
- (9) That Division Orders Nos. MC-1777, MC-1803, and MC-1802, which authorized the dual completion of the subject wells, should be superseded.

IT IS THEREFORE ORDERED:

(1) That the applicant, Supron Energy Corporation, is hereby authorized to dually complete its Jicarilla "A" Well No. 8 located in Unit E of Section 23; its Jicarilla "E" Well No. 7 located in Unit P of Section 15; and its Jicarilla "E" Well No. 8 located in Unit C of Section 15, all in Township 26 North, Range 4 West, Rio Arriba County, New Mexico, to each produce gas from the Mesaverde formation through tubing and to produce commingled Gallup and Dakota production through a separate string of tubing with separation of the Mesaverde zone from the commingled zones to be achieved by means of a packer.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said wells in accordance with the provisions of Rule 112-A of the Division Rules and Regulations insofar as said rule is not inconsistent with this order;

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-3-Case No. 6341 Order No. R-5857

PROVIDED FURTHER, that the applicant shall take packer leakage tests upon completion and annually thereafter during the Annual Deliverability Test Period for the prorated gas wells in Northwest New Mexico.

- (2) That the applicant, during completion operations on the subject wells, shall conduct tests, and shall consult with the supervisor of the Division's Aztec office to determine a formula for allocation of production to each zone in each well.
- (3) That the operator of the subject wells shall immediately notify the Division's Aztec district office any time any such well has been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.
- (4) That Division Orders Nos. MC-1777, MC-1803, and MC-1802 are hereby superseded.
- (5) That 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 herein-

STATE OF NEW MEXICO OIL CONSERVATION RIVISION

JOE D. RAMEY,

SEAL

dr/



Midland Division Exploration Production

February 20, 1996

Conoco Inc. 10 Desta Drive, Suite 100W Midland, TX 79705-4500 (915) 686-5400

Mr. Ernie Busch Aztec District Office 1000 Rio Brazos Rd. Aztec, New Mexico 87410

Re:

Jicarilla "A" No. 8 Downhole Commingling Allocation Formula Approval Unit E, Section 23, Township 26 North, Range 4 West, Rio Arriba County Downhole Commingling Authorized by Administrative Order DHC-1095

Dear Mr. Busch:

Conoco recently purchased the subject well from Merit Energy Company. Downhole commingling approval had already been secured by Merit through Order DHC-1095, but apparently Merit had not yet contacted your office to secure approval of an allocation formula for the commingled well. Therefore, Conoco as the current operator is submitting the following production history and proposed fixed allocation formula for your approval.

EXHIBIT A: Blanco Mesaverde production history plot

EXHIBIT B: Basin Dakota production history plot

- EXHIBIT C: --- Production plots with projected exponential decline fit of data
 - -- Historical data for both zones (cums, current rates, decline rates)
 - 1/1/96 producing rates
 - --- Proposed fixed allocation factors based on 1/1/96 rates

Since decline analysis of both producing zones indicates that both are producing at a stabilized 4.5% exponential decline, it is proposed that the following fixed percentage formula be established for proper allocation of production from this commingled well:

	<u>GAS</u>	OIL
Blanco Mesaverde	65 %	26 %
Basin Dakota	35 %	74 %

If you have any further questions or requirements for your consideration of this proposal, please contact me at (915) 686-6548.

Very truly yours,

Jerry W. Hoover

Sr. Conservation Coordinator

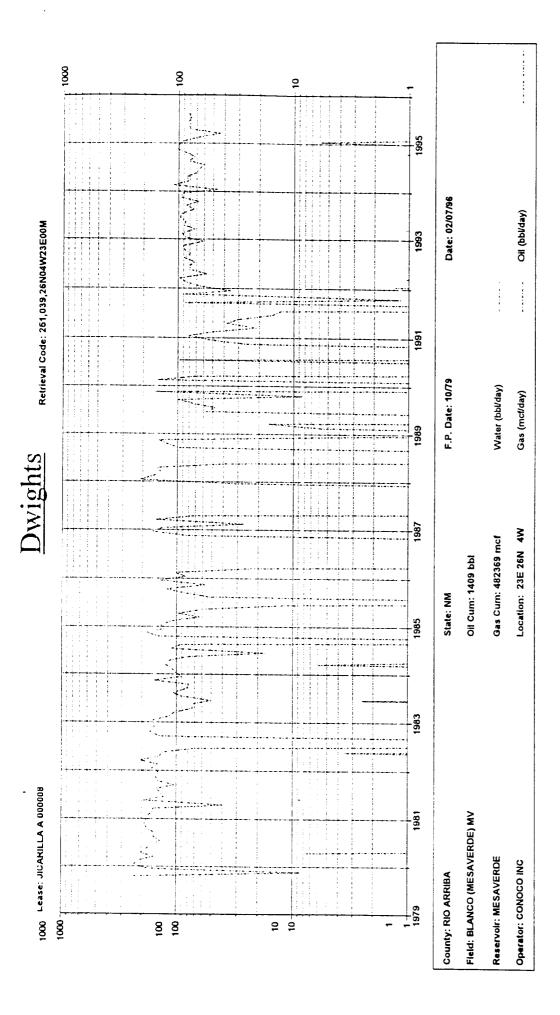
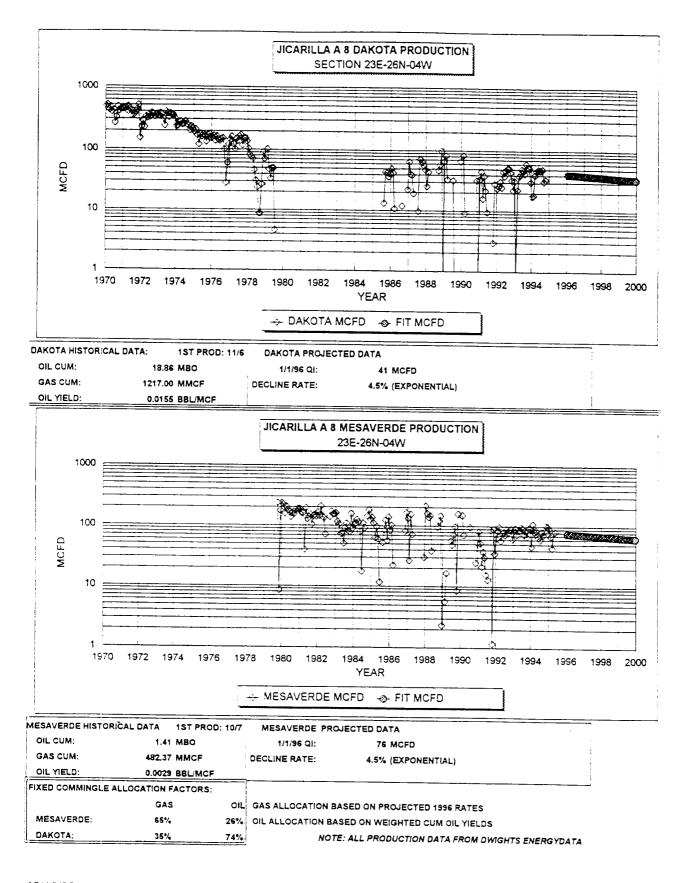


EXHIBIT 3



UNITED STATES SUBMIT IN DUPLICALE. DEPARTMENT OF THE INTERIOR

(See other in-

Form approved. Budget Bureau No. 42-R355.5.

	GEO	LOGICAL SU	JRVEY	reverse	Contract	ATION AND SERIAL NO.
WELL CO	MPLETION OR	RECOMPLE	TION PEDODT	ANDIOG		LOTTEE OR TRIBE NAME
1s. TYPE OF WEL			HON KEPOKI	AND LOG	Jicaril	la Apache
	WELL	WELL X	DRYOther	·	7. UNIT AGREEM	
b. TYPE OF COM	PLETION: WORK DEEP-	PLUG TO DI				· · · · · · · · · · · · · · · · · · ·
WELL X	OVER EN	BACK LT BE	Syn. Other	·	5. FARM OR LEA	SE NAME
2. NAME OF OPERAT		:			Jicar	Illa MAN 🚉
	Union Productio			•	9. WELL NO.	
	RATOR		oot a	4		3
P. U. BOX	808, Farmingto	n, New Mexi	.сक शस्त्र		Basin D	OU. OR WILDCAT
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143	50 ft. from the	North Line	e eep it. iro	m the west	OR AREA	OR BLOCK AND SURVEY
At top prod. int	erval reported below	Same as abo	we.			T-26N, R-1W
At total depth	Same as above	•	1		N.M.	
ar total acpa	Date as above	• -		·		· ·N ·
		14. P	ERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
.5. DATE SPUDDED	16. DATE T.D. REACHED				Rio Arrib	
5/19/67	6/7/67	II. DATE COMPL.	(Ready to prod.) 18. 6/22/67		REB. RT, GR, ETC.) * 19	
20. TOTAL DEPTH, MD	,	7.D. MD 4 === 1.00		6873 ft.		6863 ft.
			 IF MULTIPLE COMPL., HOW MANY* 	23. INTERV	DBY	CABLE TOOLS
7965 MD 8	VAL(S), OF THIS COMPLE	D & TVD	2		0-7965	
		TION—TOP, BUTTOM	, NAME (MD AND TVD)*	2		25. WAS DIRECTIONAL SURVEY MADE
7214-7240 ft	MD & TVD			<i>j</i> 2		
5. TYPE ELECTRIC A	ND OTHER LOGS RUN				· · · · · · · · · · · · · · · · · · ·	МО
	-Electrical, De	nsity Gamm	a Raw Cownellat	ion Comon	27.	WAS WELL CORED.
8.			·		t Bond	NO
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	ORD (Report all strings			***
10-3/4"	32.75	302 ft.	HOLE SIZE		TING RECORD	AMOUNT PULLED
7-5/8"	26.40	3750 ft.	15"	275 s		<u> </u>
5-1/2"	15.50 & 17.0#		9-7/8"		ı. ft.	
2.1/2	17.50 & 17.0#	1705 16.	6-3/4"	750 ct	1. ft.	
9.	LINED	RECORD				
SIZE				30.	TUBING RECORD	
	101 (30) 801103	MD) SACKS C	SCREEN (MD		DEPTH SET (MD)	PACKER SET (MD)
				1-1/2		Gallup
1. PERFORATION REC	ORD (Interval, size and n	iumber)		1-7/2		KD. 7620 ft.
	Gallup: 2/ft		32.		RACTURE, CEMENT SQ	
		. icit icto		ERVAL (MD)	AMOUNT AND KIND OF	
Dakota: 2/f	t. 7700-7724,	7816-7825.	7214-7		Acidized w/500	gal. 7% Mad Aci
782	8-7832, 7854-78	872	7700-7	970	acidized w/2500	gal. 15% Acid.
Hole Size	0.48"	- 1 -	1100-1		Sand Frac. w/80	1,000# sand,
3. •	<u> </u>		PRODUCTION		125,100 gal. 0.	.8% KCL water &
TE FIRST PRODUCTION	ON PRODUCTION M	ETHOD (Flowing,	as lift, pumping—size a	ind tupe of numn	2000# glass bea	CCS (Producing or
				, 2	shut-in)	
TE OF TEST			N. FOR QIL-BBL.	GAS-MCF.		it-in
/23/67			PERIOD	3148 B	Gallup	GAS-OIL RATIO
W. TOBING PRESS.	CASING PRESSURE CAL	CULATED OIL-	BBL. Gig. v	131	Dakota	
22h 160	924	HOUR BATE	27	0 .) G	arrin :	GRAVITY-API (CORR.)
DISPOSITION OF GA	Packer -	ited, etc.)		91 <u>D</u>	<u>kota</u>	
_	_	•			TEST WITNESSED	
5. LIST OF ATTACHM	ted INTS				Kenneth	E. Roddy
				-		
I hereby certify	that the foregoing and a	ttached information	a is complete and correct	ct as determined	from all amounts	
Girent	that the foregoing and a signed by		Tu-2771	and accordanced.	an available record	18
SIGNED GILBERT	U. NOLAND ID	TI	TLEITILITY	g Superinte	endent DATE	Sept. 25, 1967
	ert u. Noland,	Jr.			DAID	