CONOCO) KELESSE /1.1.93 DHG

Midland Division **Exploration Production**

10 Desta Drive, Julie 5 Midland, TX 79705-4500 (415) 686-5400 Conoco Inc. 10 Desta Drive, Suite 100W

October 8, 1993

State of New Mexico Energy & Minerals Department Oil Conservation Division P.O. Box 2088 Santa Fe. NM 87504-2088

Application to Downhole Commingle the Mesaverde and Pictured Cliffs Gas Producing Zones in the AXI Apache N No. 15A, 990' FNL & 1650' FWL, Unit O Sec. 11, T-25N, R-4W, Rio Arriba County, New Mexico

Gentlemen:

It is proposed to downhole commingle the Mesaverde and Pictured Cliffs gas zones in this well to maintain economic operation and to maximize the efficient and effective recovery of gas at this location. Economic evaluation of the continued operation of this well as a dual completion has shown that it can only be economically maintained if it can be downhole commingled and operated as a single completion.

The Mesaverde and Pictured Cliffs producing rates have declined to marginal levels of 80 MCFGPD and 50 MCFGPD respectively. Elimination of excess operational equipment and operating expense associated with dual operation would contribute to the maximization of the producing lives and recoveries from each pool. Downhole commingling would permit the elimination of one tubing string, one separator and one tank now required for the operation of this dual completion and would eliminate maintenance costs of maintaining isolation of the two completions.

The following attachments are submitted in support of this application:

- 1. EXHIBIT A is a plat (a) showing all Pictured Cliffs wells on the lease, (b) identifying the subject well, and (c) outlining the current Pictured Cliffs proration unit.
- 2. EXHIBIT B is a plat (a) showing all Mesaverde wells on the lease, (b) identifying the subject well, and (c) outlining the current Mesaverde proration unit.
- 3. EXHIBIT C is a GOR test form (C-116) with the most recent tests for each completion.
- 4. EXHIBIT D and E are current decline curves for Pictured Cliffs and Mesaverde.
- 5. EXHIBIT F is a plot of shut-in tubing pressures for both zones.
- 6. WI, RI, and ORRI ownerships are identical for both formations.
- 7. EXHIBITS G & H are Pictured Cliffs and Mesaverde gas analyses.

8. Allocation percentages based on the C-116 tests included in this application are suggested as follows:

	Oil	Gas	Water
Blanco Pictured Cliffs, South	0%	38%	0%
Blanco Mesaverde	100%	62%	100%

9. Copies of this application were sent by certified mail to each offset operator and to the Jicarilla Agency, who holds the minerals interest on this lease, as identified on EXHIBIT I.

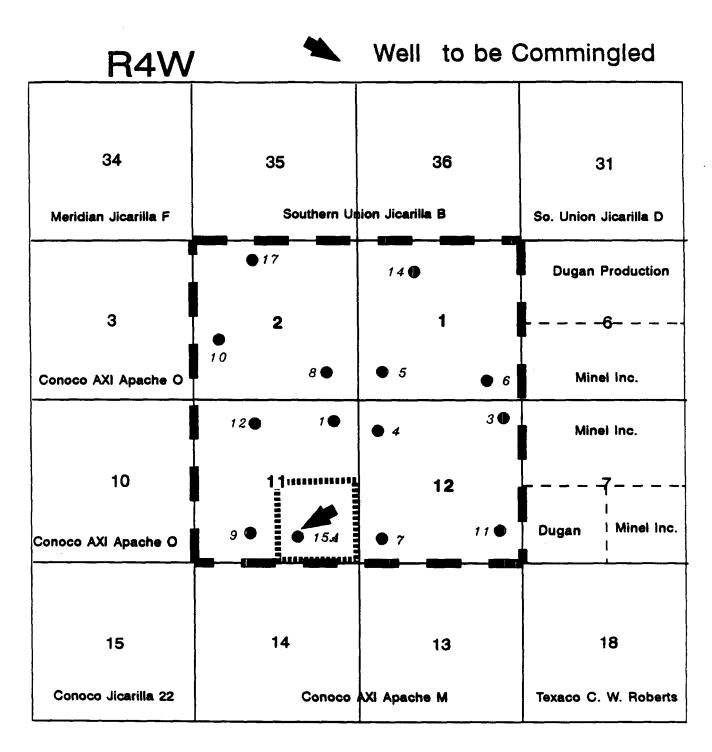
Very truly yours,

Verry W. Hoover

Sr. Conservation Coordinator

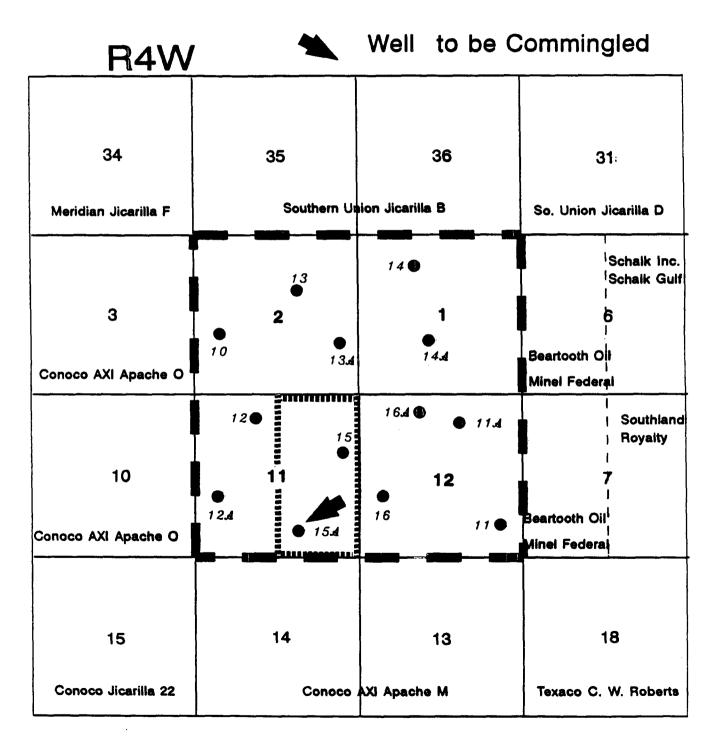
T25N

AXI Apache N Lease Pictured Cliffs Wells



T25N

AXI Apache N Lease Mesaverde Wells



Revised 1/1/89 Form C-116

Energy, Minerals and Natural Resources Department State of New Mexico

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

1000 Rio Brazos Rd., Aztec, NM 87410

P.O. Drawer DD, Artesia, NM 88210

DISTRICT II

DISTRICT III

P.O. Box 1980, Hobbs, NM 88240

Submit 2 copies to Appropriate

District Office.

DISTRICT

GAS - OIL RATIO TEST

Operator					-	Pod Blanco Mesa	Bla	Blanco Mesaverde	saver			2	County	Bio Arriba	ğ	
Conoco Inc.						Blance	o Pi	Blanco Pictured Clitts	CLit	ts South	밁	_			2	
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LEASE NAME	3]		1	Œ	TEST			PRESS.	ABLE	10.50	BELS.	5	886.8	EC.	CU.FT/BBL.
AXI Apache N	15A	0	11	L 25N	M 4 M	5/5/93	93	l I	1		24	1/2	1	1/2	80	160000
(Mesaverde)		-														
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complete to the best of my knowledge and belief. uring gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in that well can be assigned increased allowables when authorized by the Division.

ctions:

as volumes must be reported in MCP measured at a pressure base of 15,025 psis and a temperature of 60° P. eport casing pressure in lieu of tubing pressure for any well producing through casing. ic gravity base will be 0.60.

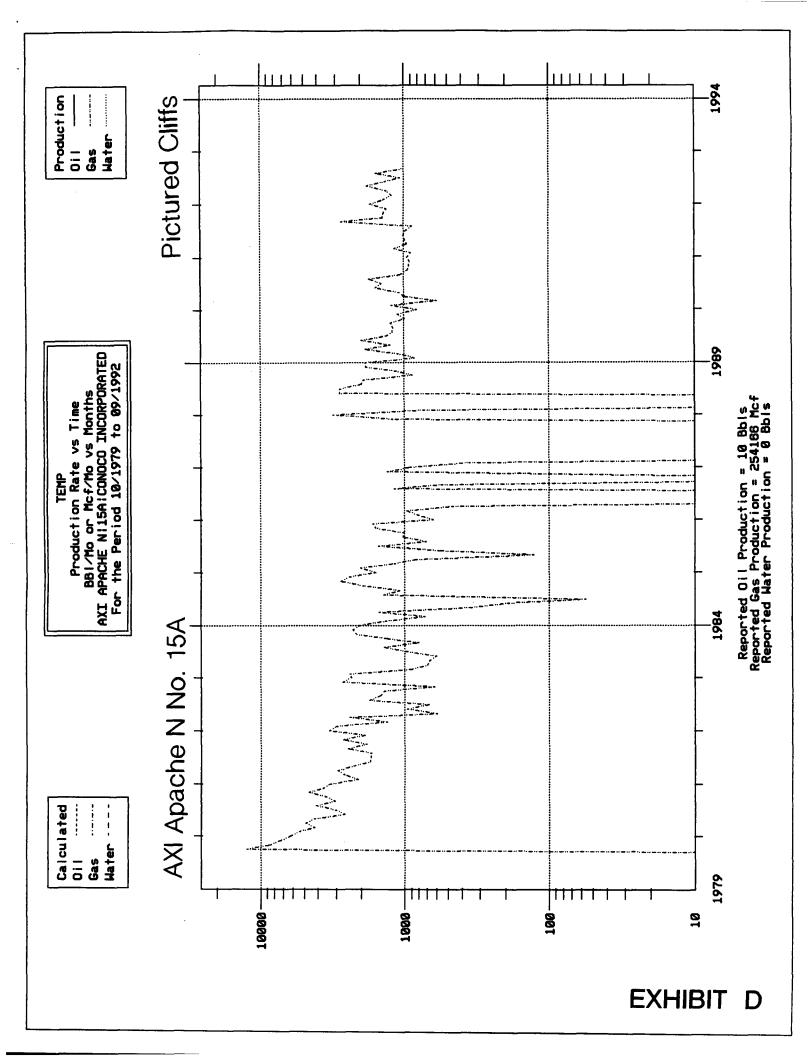
Rule 301, Rule 1116 & appropriate pool rules.)

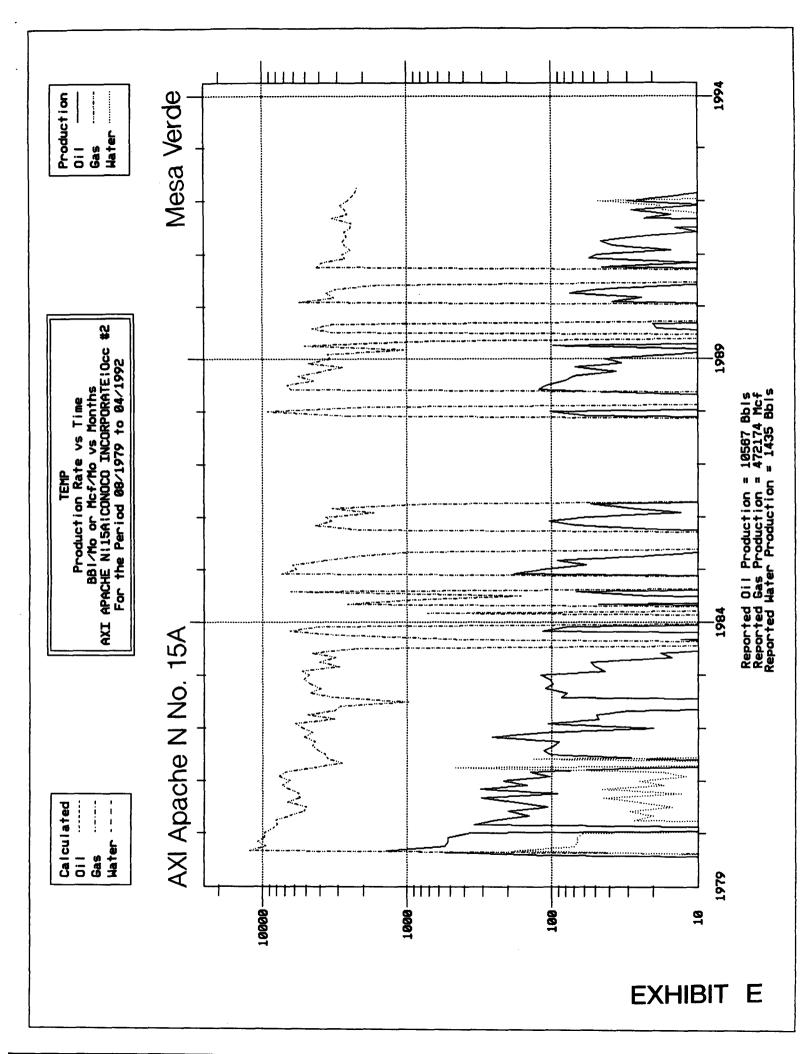
(915) 686-6548 Sy. Conservation Coordinator Prined name and title Oct. 7, 1993

D SE

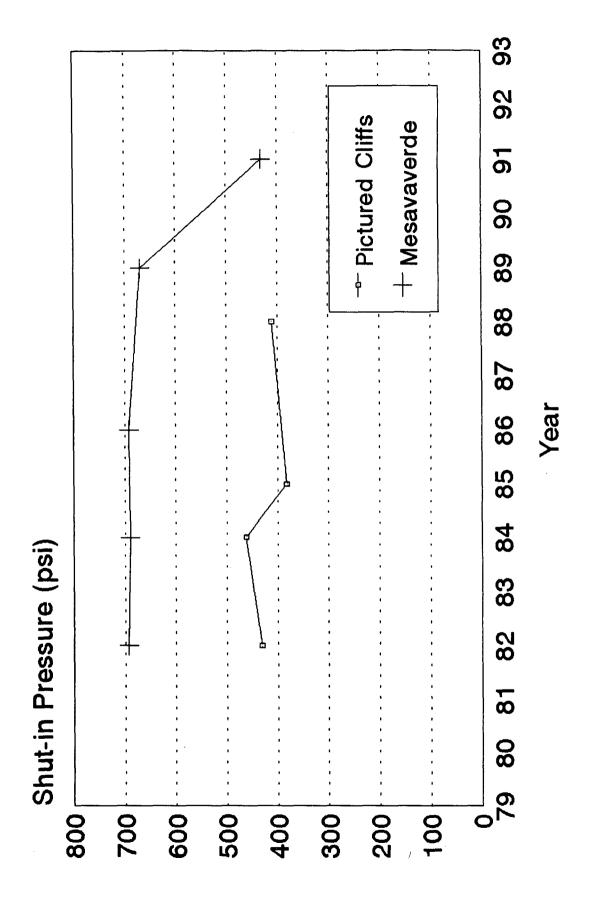
Jerry W. Hoover

Telephone No.





AXI Apache N #15A Shut-in Pressures



PICTURED CLIFFS

GAS COMPANY OF NEW MEXICO REPORT OF BTU TEST RESULTS

TO:

CONOCO, INC.

REF:

AXI APACHE N

2807

NORTHWEST NEW MEXICO

DATE OF THIS TEST:

DATE OF LAST TEST:

4/22/92

11/26/92

TEST FREQUENCY:

NOT SPECIFIED

RESULTS: SPECIFIC GRAVITY:

0. 6883

BTU/CF @ 14.73/60F/DRY: 1204.6

	MOL %	G. P. M.
CARBON DIOXIDE	0. 190	0. 0000
NITROCEN	0. 820	0. 0000
METHANE	85. 960	0. 0000
ETHANE	6. 620	1.7650
PROPANE	3. 240	0. 8920
ISOBUTANE	0. 600	0. 1950
N-BUTANE	0. 710	0. 2230
ISOPENTANE	0. 270	0. 0980
N-PENTANE	0. 200	0. 0730
HEXANE +	1. 400	0. 5700
TOTAL	100. 010	3. 8160

MESAVERDE

GAS COMPANY OF NEW MEXICO REPORT OF BTU TEST RESULTS

TO: CONOCO, INC.

REF: AXI APACHE N 12

TOTAL

3256

NORTHWEST NEW MEXICO

DATE OF THIS TEST: 11/26/92 DATE OF LAST TEST: 5/25/92

TEST FREQUENCY: NOT SPECIFIED

RESULTS: SPECIFIC GRAVITY: 0.7518 BTU/CF @ 14.73/60F/DRY: 1296.6

> MOL % G. P. M. CARBON DIOXIDE 0. 510 0.0000 0.0000 0. 780 NITROCEN METHANE 78.760 0.0000 ETHANE 10.890 2.9060 PROPANE 4. 560 1. 2530 ISOBUTANE 0.780 0. 2540 N-BUTANE 1.090 0.3410 0. 1240 ISOPENTANE 0.390 N-PENTANE 0.270 0.0980 HEXANE + 1. 970 0. 8050 100.000 5. 7810

AXI APACHE "N" LEASE

OFFSET OPERATORS & MINERALS OWNER

Beartooth Oil & Gas P.O. Box 2585 Billings, MT 59103

Dugan Production P.O. Box 420 Farmington, NM 87499

Meridian Oil Inc. P.O. Box 4289 Farmington, NM 87499-4289

Minel Incorporated 309 Washington S.E. Albuquerque, NM 87108 Southern Union Exploration Co. 324 Highway U.S. 64
Farmington, NM 87401

Southland Royalty Company c/o Meridian Oil Inc. P.O. Box 4289 Farmington, NM 87499-4289

Texaco Inc. Western E&P Region P.O. Box 2100

Jicarilla Agency P.O. Box 167 Dulce, NM 87528



STATE OF NEW MEXICO

ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENTVISION

OIL CONSERVATION DIVISION AZTEC DISTRICT OFFICE

'93 OCT 21 AM 9 08
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

Date: 10-19-93 Why: Ken Hone
Oil Conservation Division P.O. Box 2088 Santa Fe, NM 87504-2088
RE: Proposed MC Proposed DHC Proposed SWD Proposed WFX Proposed DD
Gentlemen:
I have examined the application received on 10-12-93
for the CONOCO AXIAPACHE'N' # 15 A OPERATOR LEASE & WELL NO.
O-1/-25N-04W and my recommendations are as follows:
SPPROVE
Yours truly,
S - 6 0