



RELEASE 11-1-93 DHK

Midland Division
Exploration Production

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

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. 14, 840' FNL & 1850' FWL, Unit C
Sec. 1, 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 60 MCFGPD and 12 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%	17%	0%
Blanco Mesaverde	100%	83%	100%

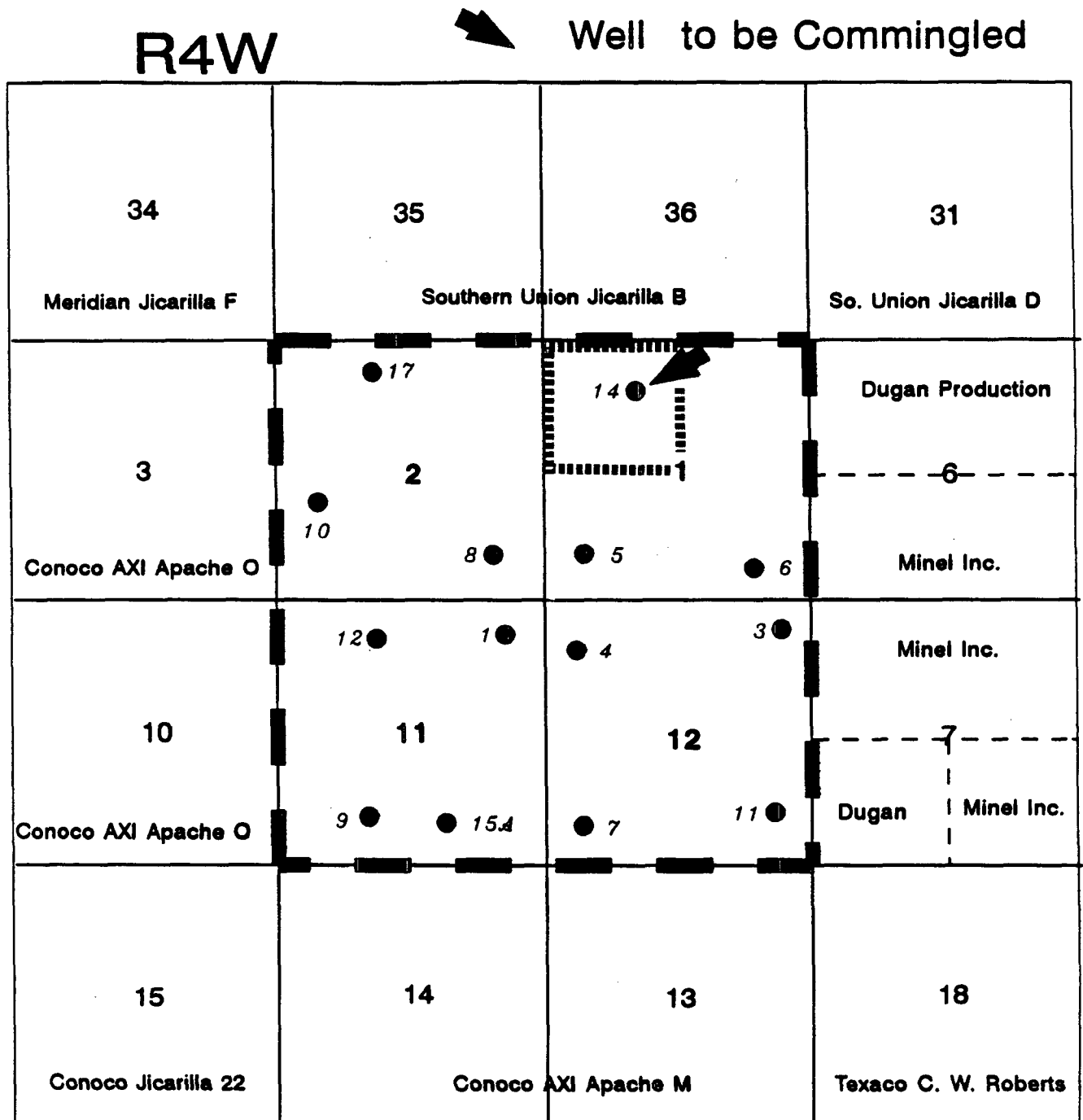
9. Copies of this application were sent by certified mail to each offset operator and to the Jicarilla Agency, who holds the minerals interest on this lease, as identified on EXHIBIT I.

Very truly yours,



Jerry W. Hoover
Sr. Conservation Coordinator

AXI Apache N Lease Pictured Cliffs Wells



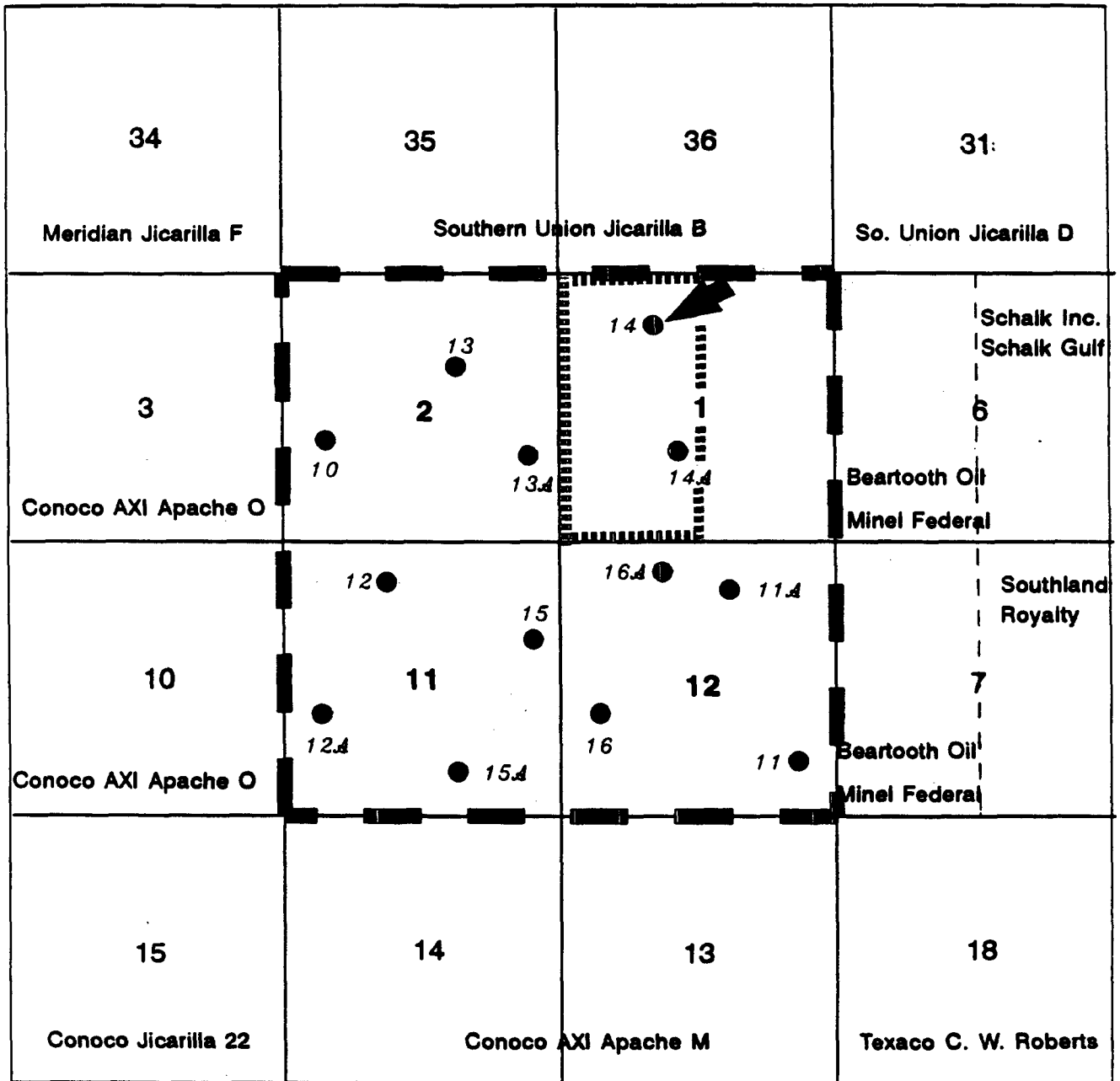
T25N

AXI Apache N Lease Mesaverde Wells

R4W



Well to be Commingled



T25N

EXHIBIT B

Operator
Conoco Inc.

Pool
Blanco Mesaverde
Blanco Pictured Cliffs South

County
Rio Arriba

Address
10 Desta Drive, Suite 100W, Midland, TX 79705

TYPE OF TEST - (A)

Scheduled ☐

Completion ☐

Special ☒

LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBDG. PRESS.	DAILY ALLOW. ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT/BSL.	
		U	S	T						R	WATER BSL.	GRAV. OIL		OIL BSL.
AXI Apache N (Mesaverde)	14	C	1	25N	4W	5/5/93	--		24	0	--	1	60	60000
	14	C	1	25N	4W	5/5/93	--		24	0	--	0	12	--

EXHIBIT C

ACTIONS:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which 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.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

C : Rule 301, Rule 1116 & appropriate pool rules.)

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

Signature Jerry W. Hoover
 Jerry W. Hoover
 Sr. Conservation Coordinator
 Printed name and title

Oct. 7, 1993 (915) 686-6548
 Date Telephone No.

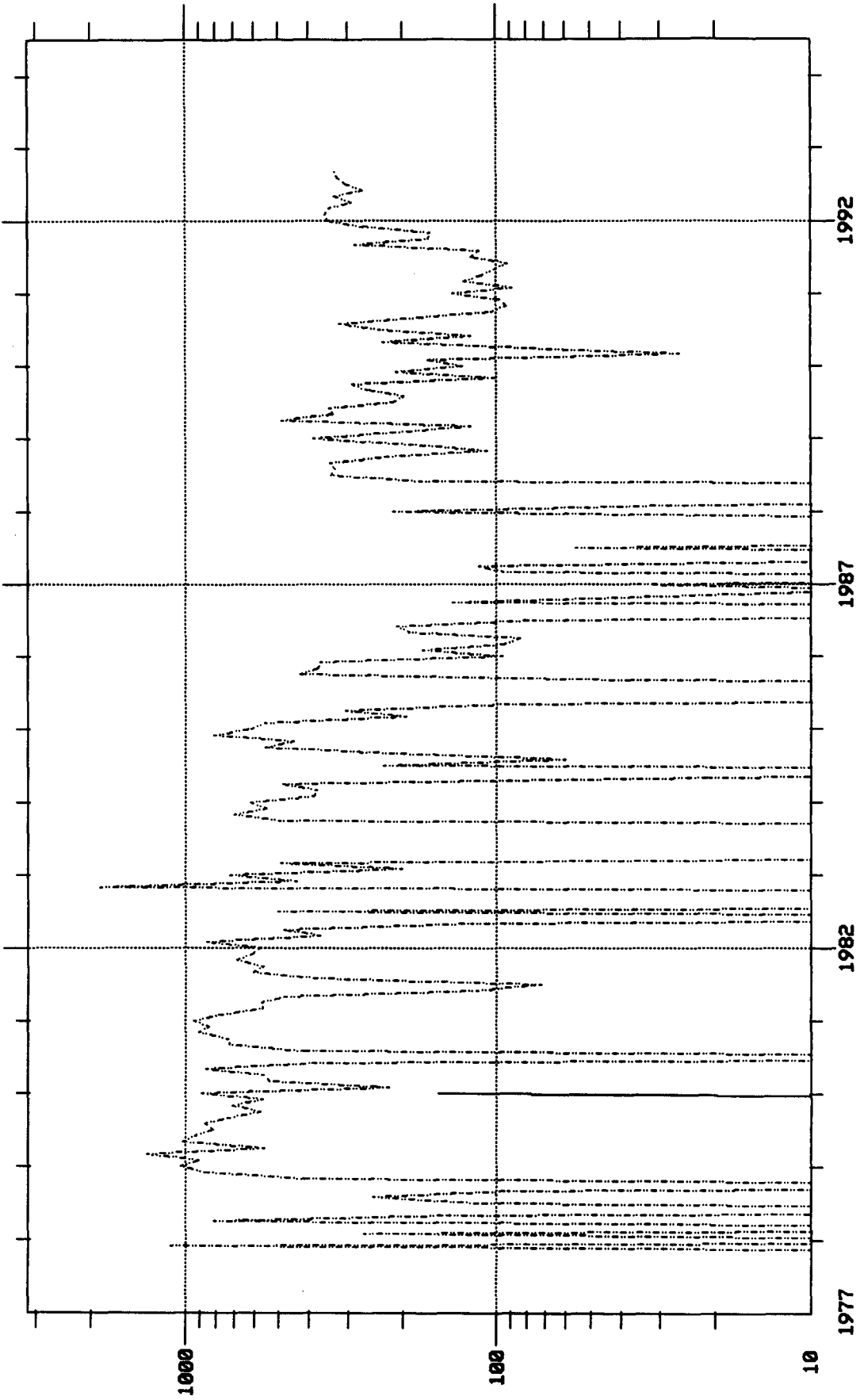
Calculated
Oil
Gas
Water

Production
Oil
Gas
Water

TEMP
Production Rate vs Time
Bbl/Mo or Mcf/Mo vs Months
AXI APACHE N14: CONOCO INCORPORATED: Occ #2
For the Period 12/1977 to 09/1992

AXI Apache N No. 14

Pictured Cliffs



Reported Oil Production = 154 Bbls
Reported Gas Production = 58083 Mcf
Reported Water Production = 0 Bbls

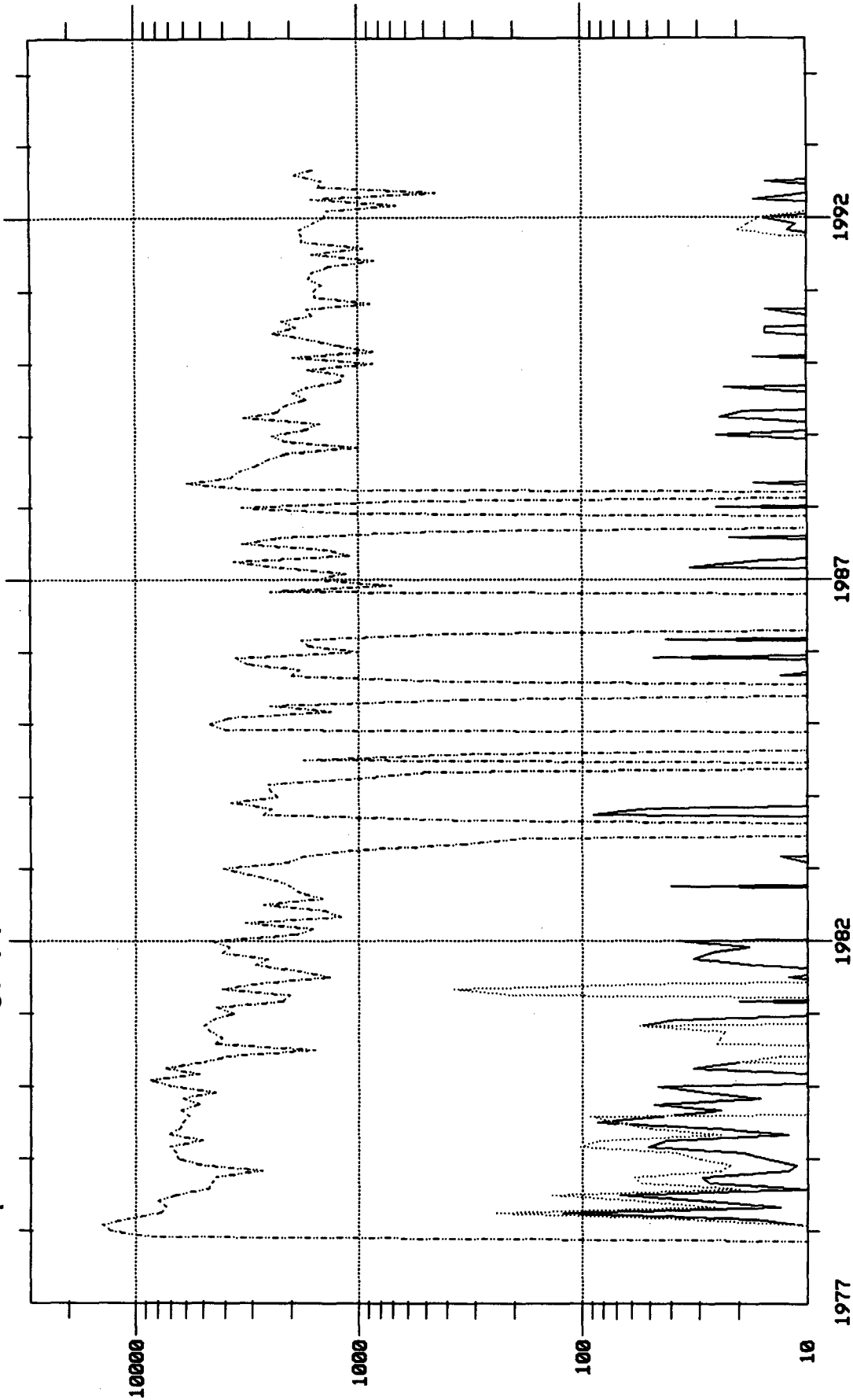
Calculated
Oil
Gas
Water

TEMP
Production Rate vs Time
Bbl/Mo or Mcf/Mo vs Months
AXI APACHE N:14:CONOCO INCORPORATED
For the Period 12/1977 to 09/1992

Production
Oil
Gas
Water

AXI Apache N No. 14

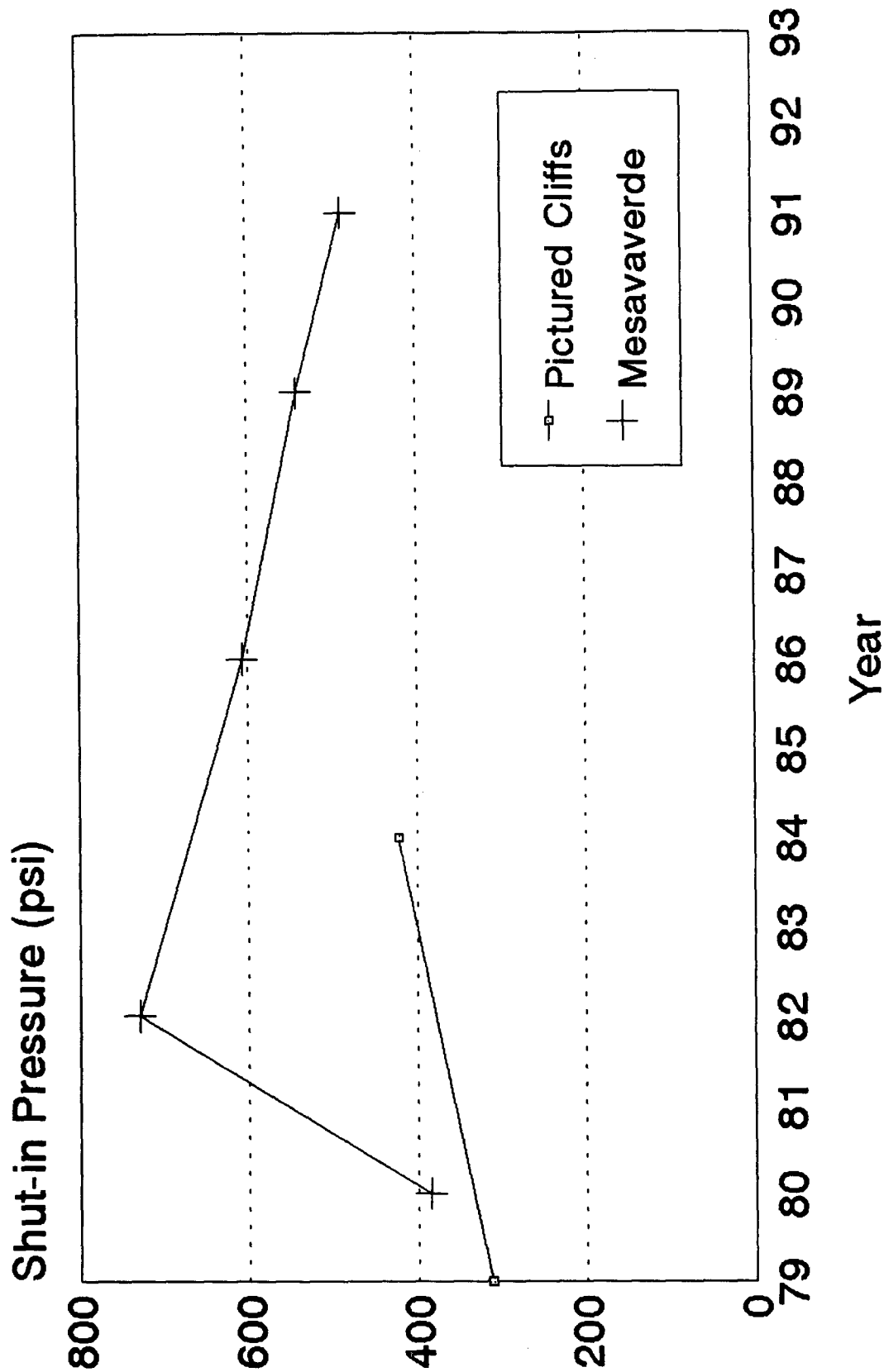
Mesa Verde



Reported Oil Production = 2107 Bbls
Reported Gas Production = 480709 Mcf
Reported Water Production = 2046 Bbls

AXI Apache N #14

Shut-in Pressures



PICTURED CLIFFS

GAS COMPANY OF NEW MEXICO REPORT OF BTU TEST RESULTS

TO: CONOCO, INC.

REF: AXI APACHE N 4
2807
NORTHWEST NEW MEXICO

DATE OF THIS TEST: 11/26/92
DATE OF LAST TEST: 4/22/92
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
NITROGEN	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
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TOTAL	100.010	3.8160

EXHIBIT G

MESAVERDE

GAS COMPANY OF NEW MEXICO REPORT OF BTU TEST RESULTS

TO: CONOCO, INC.

REF: AXI APACHE N 12
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
NITROGEN	0.780	0.0000
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
ISOPENTANE	0.390	0.1240
N-PENTANE	0.270	0.0980
HEXANE +	1.970	0.8050
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TOTAL	100.000	5.7810

EXHIBIT H

AXI APACHE "N" LEASE
OFFSET OPERATORS & MINERALS OWNER

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

Southern Union Exploration Co.
324 Highway U.S. 64
Farmington, NM 87401

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

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

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

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

Minel Incorporated
309 Washington S.E.
Albuquerque, NM 87108

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



STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

Date: 10-19-93

Attn: Ben Stone

Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088

RE: Proposed MC _____
Proposed NSL _____
Proposed WFX _____
Proposed NSP _____

Proposed DHC X _____
Proposed SWD _____
Proposed PMX _____
Proposed DD _____

Gentlemen:

I have examined the application received on 10-12-93

for the CONOCO AXI APACHE N#14
OPERATOR LEASE & WELL NO.

C-1-25N-04W and my recommendations are as follows:
UL-S-T-R

Yours truly,

Ernie Bush