

DATE 2/24/03	SUSPENSE NA	ENGINEER WVS	LOGGED IN KV	TYPE DHC	APPROVAL PKR10305629995
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] **[NSP-Non-Standard Proration Unit]** **[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 - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [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

- [D] Other: Specify _____

[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] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

 Darrin Steed
 Print or Type Name

 Darrin Steed
 Signature

 Regulatory Supervisor
 Title

 2/20/03
 Date

 Darrin_Steed@XTOEnergy.com
 e-mail Address



February 17, 2003

Mr. William Jones
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Request for Exception to Rule 303-C - Downhole Commingling

Jicarilla Apache #11
Unit Letter "M", Section 28, Township 26-N, Range 5-W
South Blanco Pictured Cliffs (72439), Otero Chacra (82329) &
Blanco Mesaverde (72319)
Rio Arriba County, New Mexico

Dear Mr. Jones:

XTO Energy Inc. requests administrative approval for an exception to Rule 303-C to permit the downhole commingling of production in the aforementioned well from the South Blanco Pictured Cliffs, Otero Chacra & Blanco Mesaverde pools in Rio Arriba County, New Mexico.

All three pools represent marginal production. The well was drilled and completed as a dual producer in the Basin Dakota and South Blanco Pictured Cliffs pools in early 1967. In August 2000, a 4-1/2" casing string was ran inside the 7-5/8" casing to isolate the Pictured Cliffs perforations. The Mesaverde and Chacra were then perforated, stimulated and tested. In September 2000, the Dakota perforations were abandoned after an unsuccessful attempt to retrieve the packer. As per MC-1759 this well is now producing from the Pictured Cliffs up the casing – casing annulus and the Chacra, Mesaverde (DHC #2717) up the tubing.

The ownership (WI, NRI and ORRI) of these pools are identical in this wellbore. Downhole commingling in this manner will offer an economic method of production while protecting against reservoir damage, waste of reserves and violation of correlative rights.

The allocation method was determined by analyzing the previous six months production data. Estimated bottomhole pressures were calculated from stabilized shut-in pressures and gradients from offset completions.

Enclosed is pertinent data to support this application as outlined in Rule 303-C. If additional information is required, please contact me at (505)324-1090.

Sincerely,

A handwritten signature in black ink, appearing to be 'Trenis', followed by a horizontal line.

Trenis Sondresen
Operations Engineer

Enclosure

cc: GLM
Wellfile

District I
1625 N. French Drive, Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Rio Brazos Road, Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised May 15, 2000

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

APPLICATION TYPE
X Single Well
____ Establish Pre-Approved Pools
EXISTING WELLBORE
X Yes ____ No

APPLICATION FOR DOWNHOLE COMMINGLING

XTO Energy Inc. 2700 Farmington Ave., Bldg K, Ste 1, Farmington, NM 87401
Operator Address

Jicarilla Apache 11 M 28 T-26-N R-5-W Rio Arriba
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 167067 Property Code API No. 30-039-08149 Lease Type: X Federal ____ State ____ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	South Blanco Pictured Cliffs ✓	Otero Chacra ✓	Blanco Mesaverde ✓
Pool Code	72439	82329	72319
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2,848' – 2,882' (Perforated)	3,714' – 3,739' (Perforated)	4,808' – 5,126' (Perforated)
Method of Production (Flowing or Artificial Lift)	Flowing	Plunger Lift	Plunger Lift
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	129 psi (est)	386 psi (est)	426 psi (est)
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1275 BTU	1295 BTU	1295 BTU
Producing, Shut-In or New Zone	Producing	Producing	Producing
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: 07/2002 – 12/2002 Rates: 804 MCFPM 0 BOPM 0 BWPM	Date: 07/2002 – 12/2002 Rates: 2661 MCFPM 0 BOPM 23 BWPM	Date: 07/2002 – 12/2002 Rates: 2091 MCFPM 33 BOPM 18 BWPM
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Wtr Gas 0 % 0 % 14 %	Oil Wtr Gas 0 % 56 % 48 %	Oil Wtr Gas 100 % 44 % 38 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes X No ____
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes ____ No ____

Are all produced fluids from all commingled zones compatible with each other? Yes X No ____

Will commingling decrease the value of production? Yes ____ No X

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes X No ____

NMOCD Reference Case No. applicable to this well: _____

- 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 working, royalty and overriding royalty interests for uncommon interest cases.
 - Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

SIGNATURE Darrin Steed TITLE Regulatory Supervisor DATE 2/20/03
TYPE OR PRINT NAME Darrin Steed TELEPHONE NO. (505) 324-1090

erator
Copy to - Syl: er
Veri: k to Sullivan

Form C-102
Supersedes C-128
Effective 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACERAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Operator MARATHON OIL COMPANY		Lease JICARILLA APACHE		Well No. 11	
Init Letter M	Section 28	Township 26 North	Range 5 West	County Rio Arriba	
Actual Footage Location of Well: 1040 feet from the South line and 800 feet from the West line					
Ground Level Elev. 6465	Producing Formation PICTURED CLIFFS		Pool SOUTH BLANCO PICTURED CLIFFS	Dedicated Acreage: 160 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty),
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

() Yes (X) No If answer is "yes," type of consolidation _____

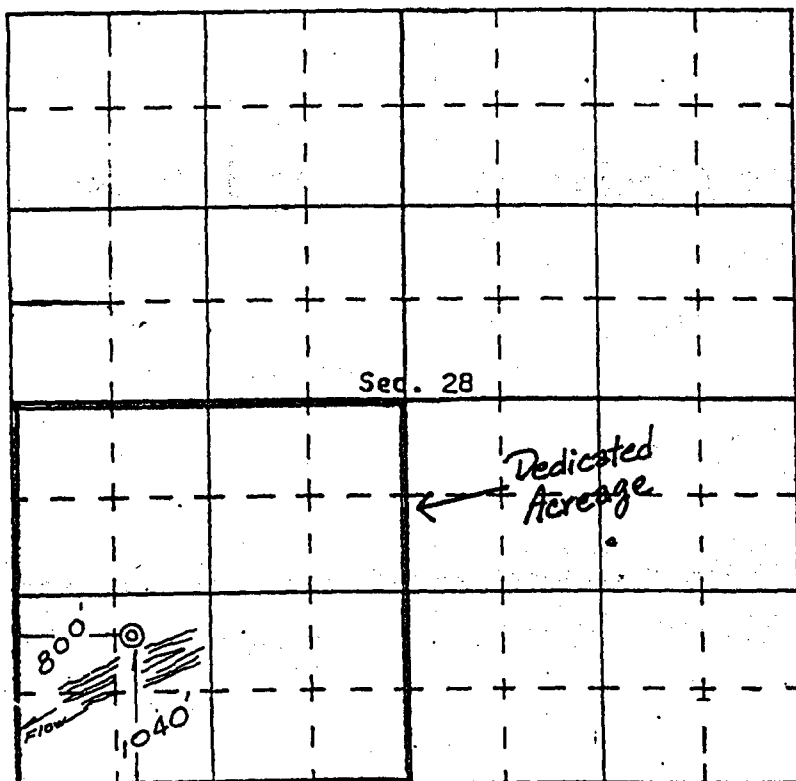
If answer is "no," list the owners and tract descriptions which have actually consolidated. (Use reverse side of this form if necessary.) **MARATHON OIL COMPANY - TRACT 251**

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non standard unit, eliminating such interests, has been approved by the Commission.

CERTIFICATION

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

P. J. Patterson
Name
AREA ENGINEER
Position
MARATHON OIL Co.
Company
APR. 4, 1967
Date



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 knowledge and belief.

Date Surveyed: December 15, 1966
Registered Professional Engineer
and/or Land Surveyor

E. J. C. ...
Certificate No. 3602

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 S. 1st Street, Artesia, NM 88210-2834
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-08149		² Pool Code		³ Pool Name Otero Chacra	
⁴ Property Code 6414		⁵ Property Name Jicarilla Apache			⁶ Well Number 11
⁷ OGRID No. 14021		⁸ Operator Name Marathon Oil Company			⁹ Elevation 6478' (KB)

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
M	28	26N	5W		1040	South	800	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 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

	<p><i>Dedicated Acreage</i></p>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Tim L. Chase</i></p> <p>Signature Tim L. Chase</p> <p>Printed Name Advanced Engineer Technician</p> <p>Title March 31, 2000</p> <p>Date</p>	
		<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyer:</p> <p>Certificate Number</p>	

District I
Box 1980, Hobbs, NM 88241-1980
District II
11 S. 1st Street, Artesia, NM 88210-2834
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-08149	² Pool Code	³ Pool Name Blanco Mesa Verde
⁴ Property Code 6414	⁵ Property Name Jicarilla Apache	⁶ Well Number 11
⁷ OGRID No. 14021	⁸ Operator Name Marathon Oil Company	⁹ Elevation 6478' (KB)

¹⁰ Surface Location									
UL or lot no. M	Section 28	Township 26N	Range 5W	Lot. Idn	Feet from the 1040	North/South Line South	Feet from the 800	East/West line West	County 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 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

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>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i> Signature Tim L. Chase Printed Name Advanced Engineer Technician Title March 31, 2000 Date
	¹⁸ SURVEYOR CERTIFICATION <i>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.</i> Date of Survey Signature and Seal of Professional Surveyer: Certificate Number

XTO Energy Inc.

EUR: 852 mme
35 mbo

BASE
100731

JICARILLA APACHE
MARATHON
BASIN (DAKOTA)
RIO ARRIBA, NEW MEXICO
28 26N 5W

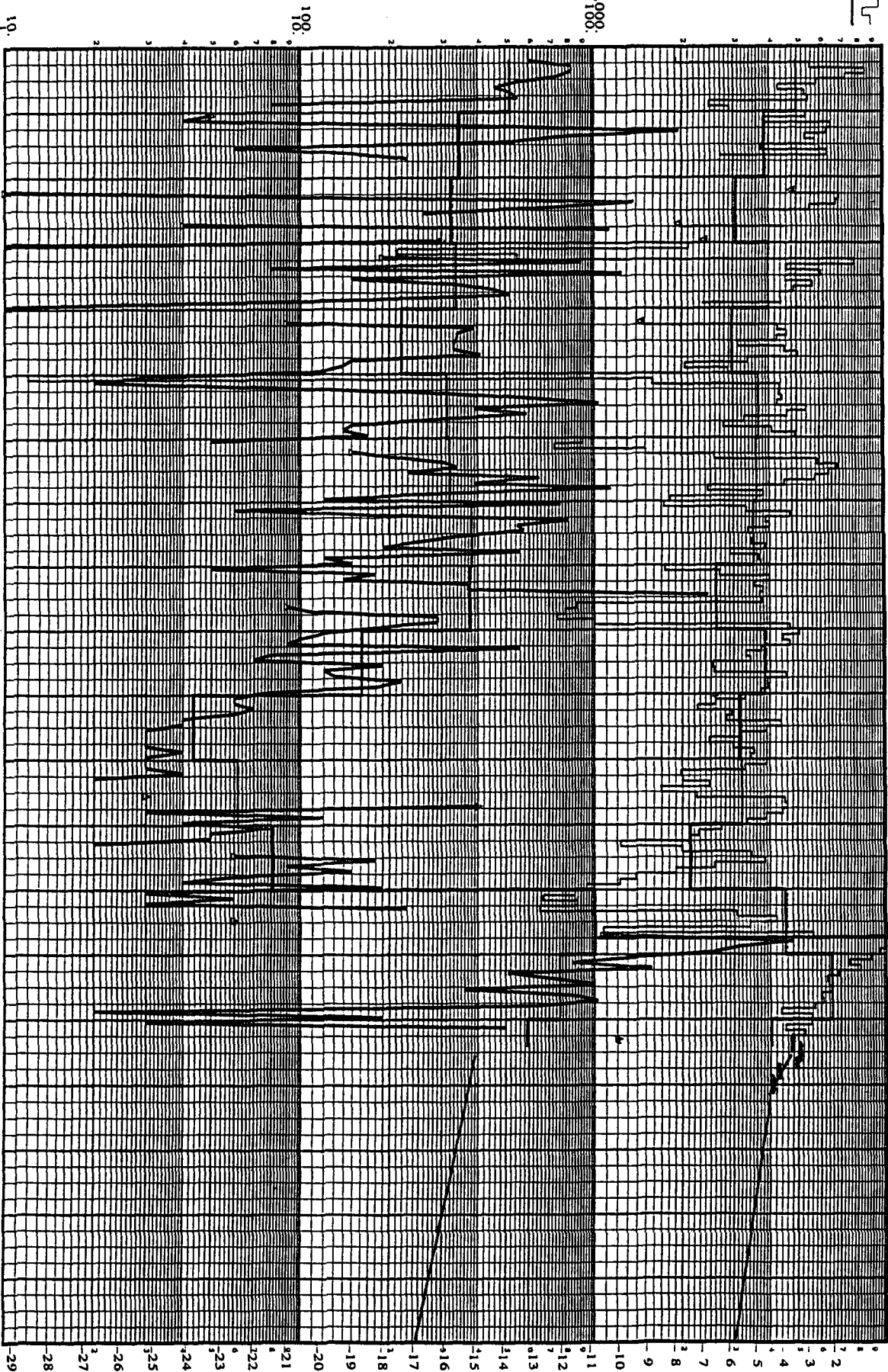
SAN JUAN

CTOC - 7/02

BASIN
DAKOTA

← → OTERO CANGRA
BLANCO MESAVARDE

GAS (mcf/mo)
OIL (bbl/mo)



EUR: 849 mcf
0 mbo

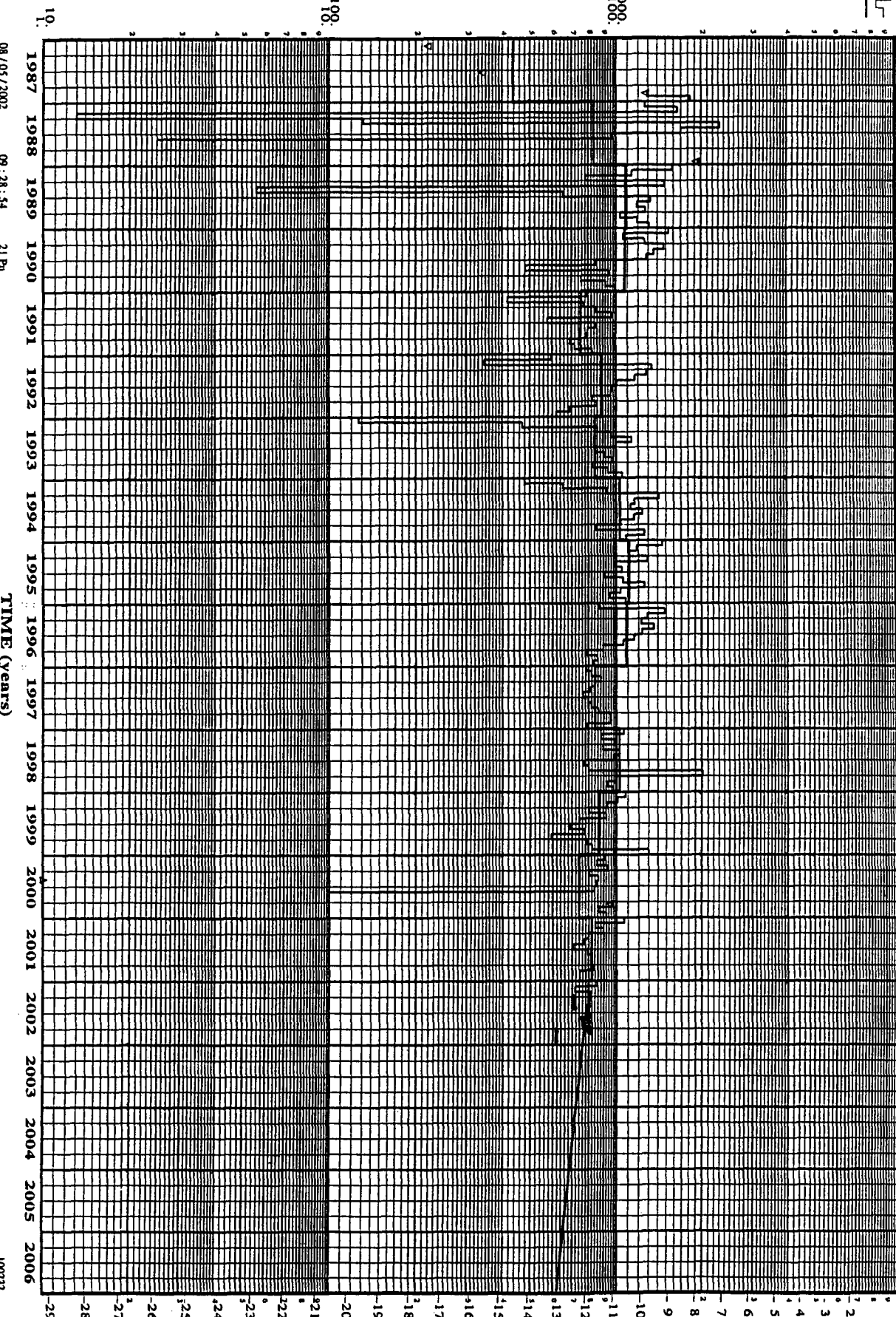
BASE
100732

JICARILLA APACHE
MARATHON
BLANCO S (PICTURED CLIFFS)
RIO ARRIBA, NEW MEXICO
28 26N 5W

SAN JUAN

CTOC - 7/02

GAS (mcf/mo)
OIL (bbl/mo)



Jicarilla #11
Unit M, Sec 28, T-26-N, R-5-W

Date	Picture Cliffs			Chacra			Mesaverde		
	Oil (BOPM)	Gas (MCFPM)	Wtr (BWPM)	Oil (BOPM)	Gas (MCFPM)	Wtr (BWPM)	Oil (BOPM)	Gas (MCFPM)	Wtr (BWPM)
July, 2002	--	707	--	--	2661	0	18	2090	0
August, 2002	--	815	--	--	2955	0	20	2321	0
September, 2002	--	830	--	--	2878	22	30	2262	18
October, 2002	--	844	--	--	2757	20	52	2167	15
November, 2002	--	808	--	--	2393	28	0	1880	22
December, 2002	--	822	--	--	2324	65	78	1826	50
6 month Average	--	804	--	--	2661	23	33	2091	18
Allocation %	--	14%	--	--	48%	56%	100%	38%	44%

Proposed Allocations:

	Gas %	Oil %	Water %
Pictured Cliffs	14%	0%	0%
Chacra	48%	0%	56%
Mesaverde	38%	100%	44%

Estimated Bottomhole Pressure Calculations

1. Pictured Cliffs: Perforations 2,848' - 2,882'

11/5/2001: SICP 98 psig, gradient .0056 psi/ft

$$\text{BHP} = 98 \text{ psig} + 14.7 + (2,848 * 0.0056)$$

$$\text{BHP} = 129 \text{ psi}$$

2. Chacra: Perforations 3,714' - 3,739'

11/5/2001: SICP 339 psig, gradient .0087 psi/ft

$$\text{BHP} = 339 \text{ psig} + 14.7 + (3,714 * 0.0087)$$

$$\text{BHP} = 386 \text{ psi}$$

3. Mesaverde: Perforations 4,808' - 5,126'

11/5/2001: SICP 339 psig, gradient .015 psi/ft

$$\text{BHP} = 339 \text{ psi} + 14.7 + (4,808 * 0.015)$$

$$\text{BHP} = 426 \text{ psi}$$