

DISTRICT I
1835 N. French Dr., Hobbs, NM 88240
DISTRICT II
811 South First St., Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410
DISTRICT IV
2040 S. Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION
2040 S. Pacheco
Santa Fe, New Mexico 87505-6429
APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107-A
Revised August 1999

APPROVAL PROCESS:

Administrative ☐ Hearing ☐

EXISTING WELLBORE

☐ YES ☐ NO

Operator **Conoco Inc.** Address **P.O. Box 2197 DU 3066 Houston, TX 77252-2197**
Well No. **249** Unit Ltr. - Sec - Twp - Rge **H, SEC 30, T-28N, R-7W** County **RIO ARRIBA**
Lease **SAN JUAN 28-7 UNIT**

OGRID NO. **005073** Property Code **016608** API NO. **30-039-21636** 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	BASIN FRUITLAND COAL 71629		OTERA CHACRA 82329
2. Top and Bottom of Pay Section (Perforations)	2317-2506		
3. Type of production (Oil or Gas)	GAS		GAS
4. Method of Production (Flowing or Artificial Lift)	FLOWING	TO FLOW	
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 432 b. (Original) 1,167	a. NOV 22 1999 b. OIL COAL. DIV.	a. 1,000 b. 1,251
6. Oil Gravity (EAPI) or Gas BTU Content	1,159		1,148
7. Producing or Shut-In?	PRODUCING		TO BE COMPLETED
Production Marginal? (yes or no)	NO		
* 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	Date: APPROX. CURRENT Rates: RATE: 114 MCFD	Date: Rates:	Date: EST. IP: 245 MCFD Rates:
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)			
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	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

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 other? ☒ 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 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 Deborah Moore TITLE Regulatory Analyst DATE 9/20/99

TYPE OR PRINT NAME Deborah Moore TELEPHONE NO. (281) 293-1005

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State of New Mexico
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-21636	² Pool Code 82329	³ Pool Name Otero Chacra
⁴ Property Code 016608	⁵ Property Name San Juan 28-7 Unit	⁶ Well Number 249
⁷ OGRID No. 005073	⁸ Operator Name Conoco Inc.	⁹ Elevation 5939

¹⁰ Surface Location

UL or lot no. H	Section 30	Township 28N	Range 7W	Lot Idn	Feet from the 1610'	North/South line North	Feet from the 830'	East/West line East	County Rio Arriba
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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 320	¹³ Joint or Infill Y	¹⁴ Consolidation Code U	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

16 DECEIVED NOV 22 1999 OIL CON. DIV. S.F. 078500-A Sec 30 Fee S.F. 078500-A	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature <u>Deborah Moore</u> Printed Name Deborah Moore Title Regulatory Analyst Date 09/20/99	
	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. Date of Survey Signature and Seal of Professional Surveyer:	

Certificate Number

MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

All distances must be from the outer boundaries of the Section.

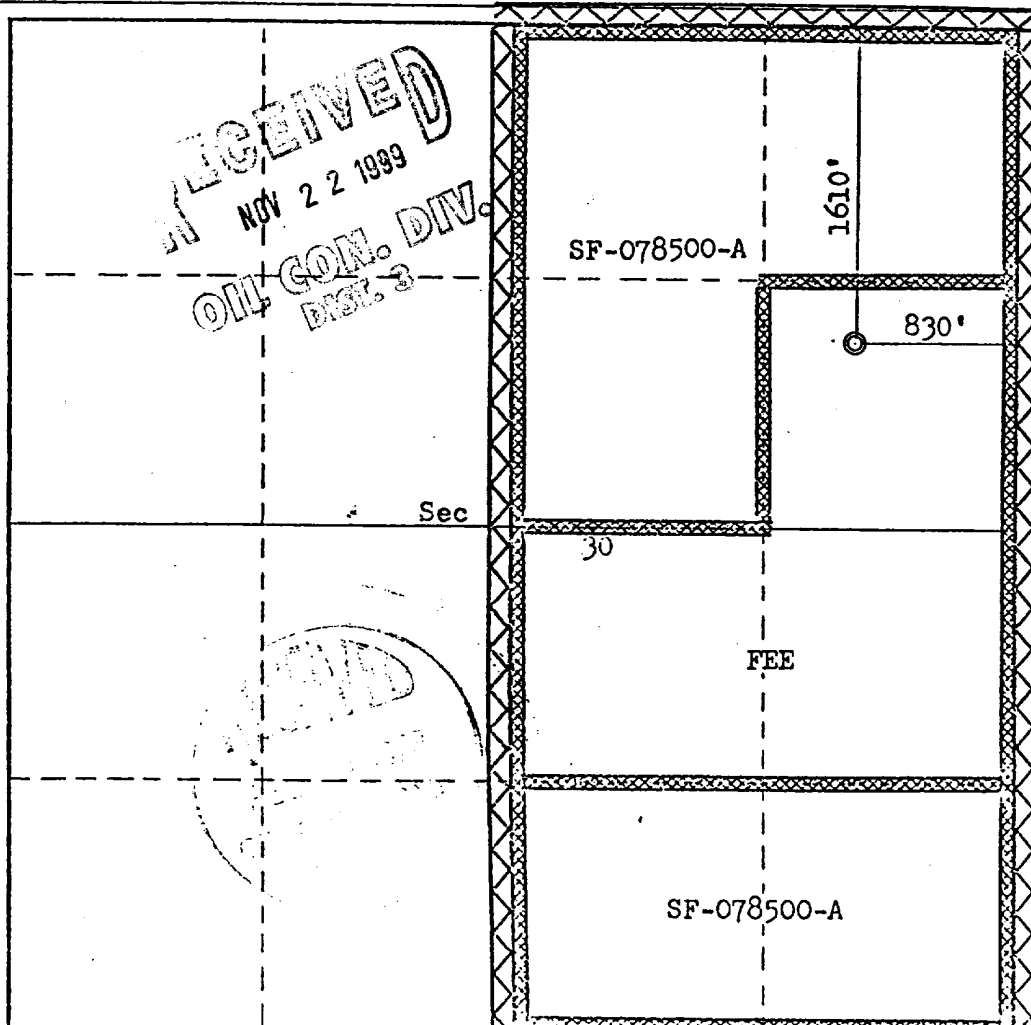
Operator El Paso Natural Gas Company			Lease San Juan 28-7 Unit (FEE)		Well No. 249
Unit Letter H	Section 30	Township 28N	Range 7W	County Rio Arriba	
Actual Footage Location of Well: 1610 feet from the North line and 830 feet from the East line					
Ground Level Elev. 5953	Producing Formation Dakota		Pool Basin Dakota	Dedicated Acreage: 320.00 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 ☐ No If answer is "yes," type of consolidation Unitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

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.

D. G. Lucas
Name
Drilling Clerk
Position
El Paso Natural Gas Co.
Company
January 31, 1978
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: *November 26, 1977*
November 26, 1977
Registered Professional Engineer
and/or Land Surveyor
Fred B. Kerr Jr.
Fred B. Kerr Jr.
Certificate No.

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 87240
District II
811 South First, Artesia, NM 87210
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1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised March 25, 1999

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

WELL API NO. 30-039-21636
5. Indicate Type of Lease STATE ☐ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name: San Juan 28-7
8. Well No. 249
9. Pool name or Wildcat Basin FC, Otero Cl

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☐ Gas Well ☒ Other	
2. Name of Operator Conoco, Inc.	8. Well No. 249
3. Address of Operator PO Box 2197 DU 3066 Houston, TX 77252-2197	9. Pool name or Wildcat Basin FC, Otero Cl
4. Well Location Unit Letter <u>H</u> : <u>1610</u> feet from the <u>North</u> line and <u>830</u> feet from the <u>East</u> line Section <u>30</u> Township <u>28N</u> Range <u>7W</u> NMPM <u>Rio Arriba</u> County 10. Elevation (Show whether DR, RKB, RT, GR, etc.) 5939'	

11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐	REMEDIAL WORK ☐ ALTERING CASING ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐	CASING TEST AND CEMENT JOB ☐
OTHER: DHC ☐	OTHER: ☐

12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

This well will be recompleted to the Otera Chacra using the attached procedure.

The Basin Fruitland Coal and Otera Chacra will be downhole commingled.

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

SIGNATURE Deborah Moore TITLE Regulatory Analyst DATE 11/17/99

Type or print name Deborah Moore Telephone No. 281 293-1005
(This space for State use)

APPROVED BY _____ TITLE _____ DATE _____
Conditions of approval, if any:

**San Juan 28-7 Unit, Well #249
Recomplete to Chacra
DHC with Fruitland Coal Formation
July 21, 1999**

Well Data

Surface casing: 9.625", 32.3#, H-40, 6 jts. set @ 205', cmt circ to surface.

Intermediate Casing: 7.0" OD, 6.46" ID, 20#, K-55, 90 jts., set @ 2794', TOC @ 1325' by TS.

Production Casing: 4.5" OD, 4.05" ID, 10.5#, K-55, 132 jts., from 2630' set @ 7021', TOC @ 2400' by TS.

Tubing size: 1.9016" OD, 1.50" ID, 81 joints landed at @ 2717'.

Perforations : FC perms from 2317' – 2506'. Proposed Chacra Perfs from 3476' – 3496', & 3606' – 3620'.

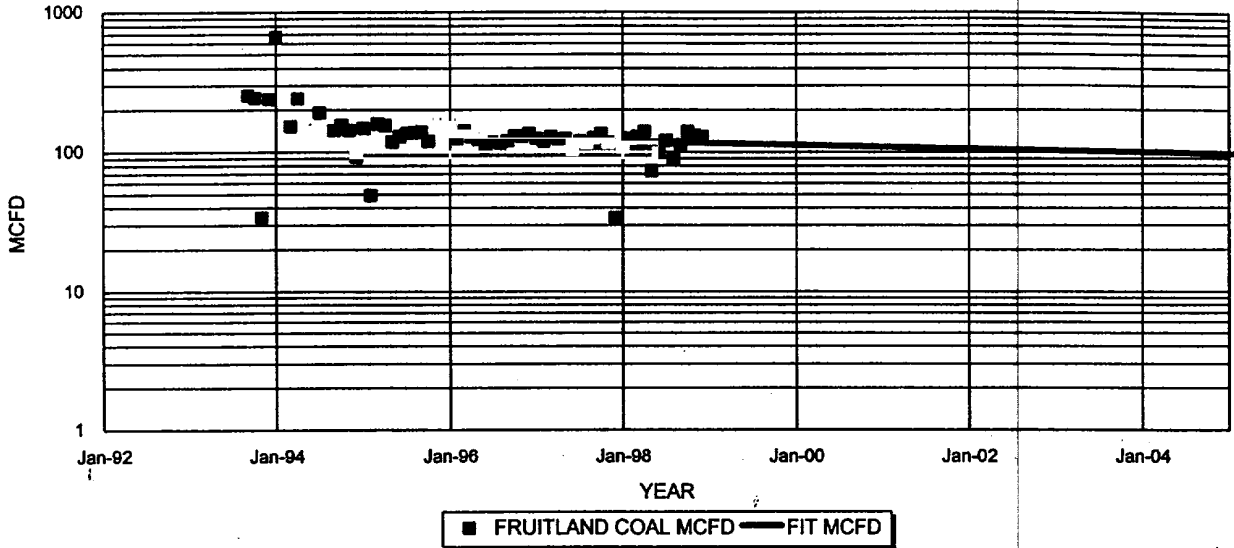
Plug & fish (3' piece of perf gun bull plug) currently over proposed CH interval.

Completion details and well history contained in Wellview files and schematics

Procedure

- 1) Move in workover rig, hold safety meeting, note prevailing wind direction at location, designate muster point, review procedure, identify potential hazards, isolate lines and facilities, blow down lines, lock out tag out, spot equipment, rig up, WORK SAFELY!
- 2) Kill tubing, tag for fill, clean out to fish (2622' – 2625'), with air or foam and pull out of hole laying down, tubing is 1.9016" OD, 3.64#, 81 joints landed @ 2517'.
- 3) Rig up slickline and RIH with lead impression block to determine orientation of fish in 4.5" casing (listed as perf gun bull plug 3' long).
- 4) Fish with slick line or work string and POOH.
- 5) RIH with 3.875" bit and six 2.875" drill collars, on 2.375" work string and drill out cement retainer @ 2625' and cement plug 2630' – 3112'. Circulate mud out of hole that is below cement plug and clean out to top of next cement plug @ 4050'.
- 6) POOH work string laying down.
- 7) Rig up wireline and perforate Chacra with casing gun, 1 SPF, 3620' – 3606', and 3496' – 3476'. POOH wireline and rig down.
- 8) Pick up and RIH with treating packer and 2.875" frac string. Spot acid across perforation and set packer @ 3400'. Rig up BJ and balloff breakdown as per BJ's procedure. Unseat packer and knock balls off perfs.
- 9) Set packer and rig up BJ to frac down 2.875 frac string as per BJ's procedure.
- 10) Flow back, clean up, and test Chacra. Get stabilized 4 hr test and submit to Regulatory & Marc Shannon for developing DHC application/allocations (REFER TO DHC PERMIT STIPULATIONS!!!).
- 11) POOH 2.875" frac string laying down.
- 12) Pick up and RIH with 2.375" OD, 4.7#, production tubing with SN and mule shoe on bottom, tag for fill and clean out to 4050'. Blow well dry, land tubing at top Chacra perf @ 3476'. Drop rabbit in singles to check for tight spots, be careful not to over torque, run drift with sand line before rigging down, swab in if necessary.
- 13) RD BOP's, RU tree, Rig down move off, connect lines, notify operator to put on plunger lift production.

**SJ 28-7 #249 FRUITLAND COAL PRODUCTION
SECTION 30H-28N-07W, RIO ARriba COUNTY, NEW MEXICO**



FRUITLAND COAL PRODUCTION		1ST PROD: 05/93	FRUITLAND COAL PROJECTED DATA	
OIL CUM:	0.02	MBO	Oct.99 Q1:	114
GAS CUM:	257.9	MMCF	DECLINE RATE:	3.0%
OIL YIELD:	0.0001	BBL/MCF		
				MCFD (EXPONENTIAL)

PRODUCTION FORECAST FOR SUBTRACTION METHOD COMMINGLE ALLOCATION

YEAR	MID-YEAR AVG. MCFD	MID-YEAR AVG. BOPD
2000	111	0
2001	108	0
2002	105	0
2003	101	0
2004	98	0
2005	95	0
2006	93	0
2007	90	0
2008	87	0
2009	85	0
2010	82	0
2011	80	0
2012	77	0
2013	75	0
2014	73	0
2015	70	0
2016	68	0
2017	66	0
2018	64	0
2019	62	0
2020	60	0
2021	59	0
2022	57	0
2023	55	0
2024	54	0
2025	52	0
2026	50	0
2027	49	0

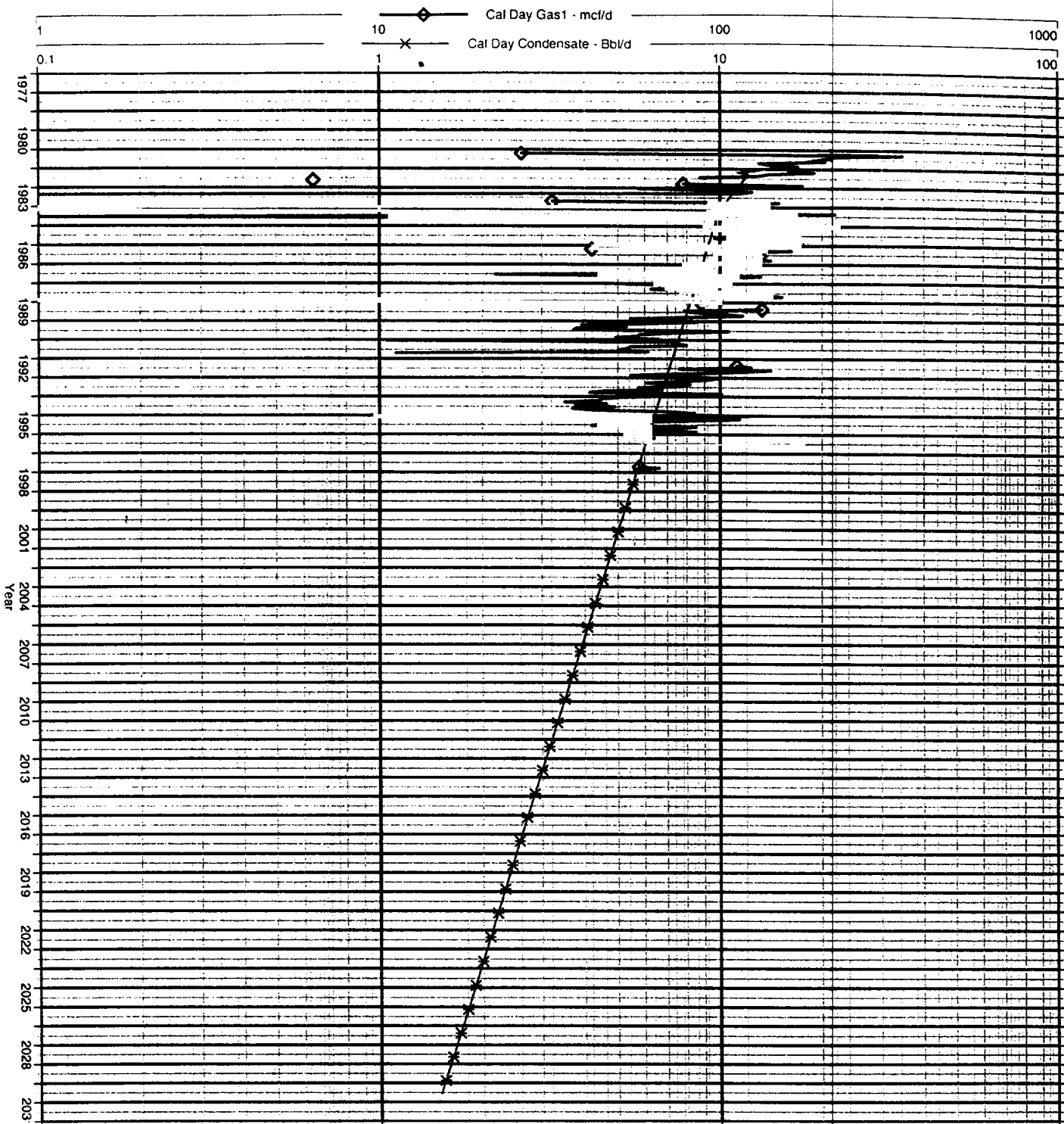
Operator: AMOCO PRODUCTION CO
Field: WILDCAT (CHACRA)
Zone: CHACRA
Type: Gas
Group: Russell

Cal Day Gas FC 1 (Rate-Time)
qt: 245,985 mcf/d, Mar, 1981
qf: 15 mcf/d, Jul, 2030
d(Exp): 50 CTD: 478,297 MMSCF
RR: 372,644 MMSCF Tot: 850,941 MMSCF

RR: 372,644 MMSCF Tot: 850,941 MMSCF

Production Cums
Oil: 0 MSTB
Gas: 478,297 MMSCF
Water: 0 MSTB
Cond: 0 MSTB

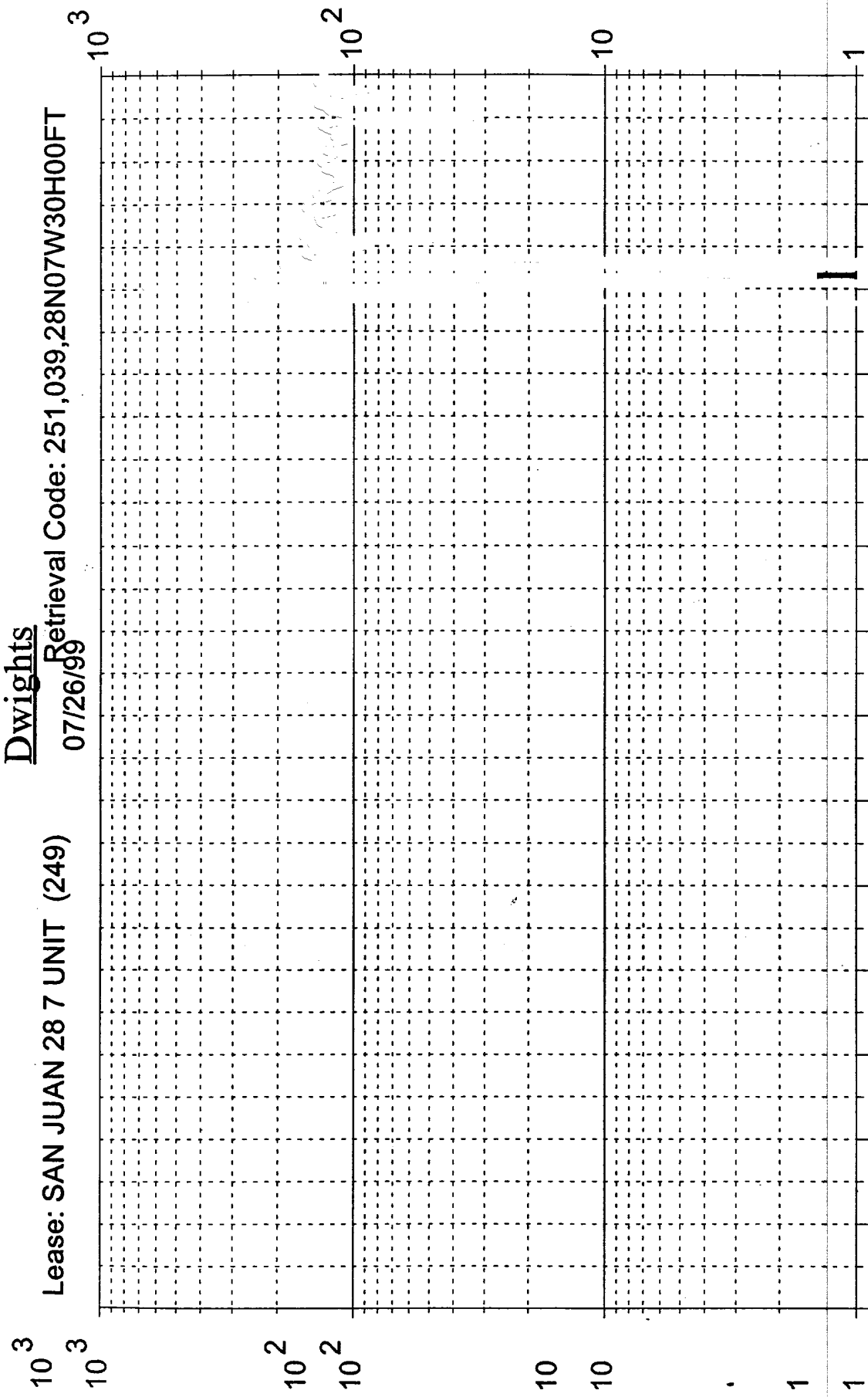
Cum: 478,297 MMSCF
—*— Cal Day Gas FC 1 - mcf/d
qt: 245,985 mcf/d, Mar, 1981
qf: 15 mcf/d, Jul, 2030
d(Exp): 50
RR: 372,644 MMSCF
EUR: 850,941 MMSCF
—*— Cal Day Condensate - Bbl/d
Cum: 0 MSTB



Dwights

Lease: SAN JUAN 28 7 UNIT (249)

Retrieval Code: 251,039,28N07W30H00FT
07/26/99



Operator: CONOCO INC	F.P. Date: 05/93
Location: 30H 28N 7W	Oil Cum: 20 bbl
Field: BASIN (FRUITLAND COA Gas Cum: 265.1 mmcf	
Upper Perf: 2317 ft	L.P. Date: 02/99

Oil (bbl/day) Gas (mcf/day)
Water (bbl/day)