

DATE IN 5/11/05	SUSPENSE	ENGINEER Jones	LOGGED IN 10-1105	TYPE DHC 440-A	APP NO. Dsem0573151041
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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.

Nancy Oltmanns

Print or Type Name

Nancy Oltmanns
 Signature

Regulatory Specialist

Title

5/10/05

Date

Nancy.oltmanns@cdxgas.com
 e-mail Address



CDX Gas, LLC
4801 N. Butler Avenue, Suite 2000
Farmington, NM 87401
Main: 505-326-3003
Fax: 505-325-4007

May 9, 2005

Mr. William Jones
New Mexico Oil Conservation Division
Engineering Bureau
1220 So. St. Francis Drive
P.O. Box 6429
Santa Fe, New Mexico 87505

RE: Application for Exception to Rule 303-A
Downhole Commingling
Jicarilla A #8
API No. 30-039-08163
Basin Dakota, Blanco Mesaverde, and Tapicito Gallup Pools
2,365' FNL, 790' FEL, Unit H Sec 17-T26N-R5W
Rio Arriba County, New Mexico

Dear Mr. Jones;

CDX RIO, LLC hereby request administrative approval to downhole commingle production from the Basin Dakota and Tapicito Gallup Pools with production from the Blanco Mesaverde Pools in the Jicarilla A #8.

The Jicarilla A #8 was originally completed as a dual producer in the Dakota and Gallup formations. In July, 1984, the well was downhole commingled the Dakota and Gallup.

The Mesaverde is marginal in the area and not substantial enough to justify drilling a new well, however, commingling with existing production through an existing wellbore can capture the reserves. Adding the Mesaverde production will have no detrimental effects and the fluids have no abnormal components that would prohibit commingling or promote the creation of emulsions or scale.

As an analogy, the northwest offset well Jicarilla A #2 (NE Sec 18, T26N, R5W) is approximately 1.25 miles away and currently commingled down hole in the Dakota, Mesaverde, and Gallup. This well has been down hole commingled and producing since 2002 with no production problems or loss of value.

All royalty owners in the affected spacing units have identical interests in all production horizons, therefore notification by certified mail is not required.

When the Mesaverde is completed it will be isolated and tested thru tubing. The subtraction method, combined with the existing allocation of the Dakota and Gallup, will be used to determine the new allocation for the commingled production. The existing Dakota, Gallup allocations are:

Gallup	Oil 71%	Gas 71%
Dakota	Oil 29%	Gas 29%

Current production from the well is 140 Mcfd and 1 bopd. Estimated production from the Mesaverde is 80 Mcfd and 0.4 bopd. New allocations will then be:

Mesaverde	Oil 36%	Gas 36%
Gallup	Oil 45%	Gas 45%
Dakota	Oil 19%	Gas 19%

Attached to aid in your review are plats showing the location of the well and offset wells in the same formation, a recent production plot for the commingled zones and historical plots for the Gallup and Dakota production, and form C-102 showing the location and spacing units.

This spacing unit is located on an Indian lease (Jicarilla Contract 110). A copy of this application package will be sent to the BLM / Jicarilla Tribe requesting their consent.

Should have any question concerning this application please contact the undersigned at (505) 326-3003.

Sincerely



David C. Smith
Production Engineer
CDX GAS, LLC
505-326-3003 ext 2804
dave.smith@cdxgas.com

cc Mr. Steve Wells, BLM
Rich Corcoran, CDX Land
R. Johnston, CDX Op Mgr.
Fred Vigil, Jicarilla Oil & Gas Admin.
ConocoPhillips, Land

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 June 10, 2003

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

APPLICATION TYPE
☒ Single Well
☐ Establish Pre-Approved Pools
EXISTING WELLBORE
☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

CDX RIO, LLC 4801 North Butler Ave., Suite 2000, Farmington, NM 87401
Operator Address

JICARILLA CONTRACT A #8 H-17-T26N-R5W RIO ARRIBA
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No 222374 Property Code 33454 API No. 30-039-08163 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	BLANCO MESAVERDE	TAPACITO GALLUP ASOC	BASIN DAKOTA
Pool Code	72319 ✓	58090 ✓	71599 ✓
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	4,775 – 5,440	6,814 – 6,818	7,312 – 7,541
Method of Production (Flowing or Artificial Lift)	Plunger Lift	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)	750 psi (estimated)	540 psi (estimated)	540 psi (estimated)
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1200 BTU	1270 BTU	1210 BTU
Producing, Shut-In or New Zone	NEW ZONE	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: 80 mcf (estimated) Rates: .4 bopd (est) 2 bwpd (est)	Date: 5/9/05 100 mcf Rates: .7 bopd 0 bwpd	Date: 5/9/05 40 mcf Rates: .3 bopd 1 bwpd
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil 36% Gas 36%	Oil 45% Gas 45%	Oil 19% Gas 19%

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ 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 ☒ No ☐
Will commingling decrease the value of production? Yes ☐ No ☒
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 ☒ No ☐
NMOCD Reference Case No. applicable to this well: _____

Attachments:

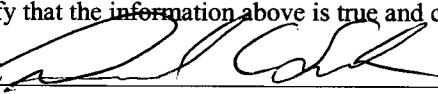
- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation 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  TITLE Production Engineer DATE 5/9/05
TYPE OR PRINT NAME David C. Smith TELEPHONE NO. (505) 326-3003
E-MAIL ADDRESS dave.smith@cdxgas.com

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-08163	² Pool Code 71599 / 58090 / 72319	³ Pool Name BASIN DAKOTA & TAPACITO GALLUP & BLANCO MESAVERDE
⁴ Property Code 33454	⁵ Property Name JICARILLA 'A'	⁶ Well Number 8
⁷ OGRID No. 222374	⁸ Operator Name CDX RIO, LLC	⁹ Elevation 6615 GR

¹⁰ Surface Location

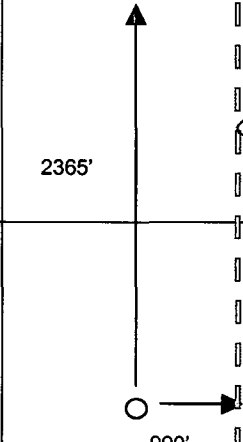
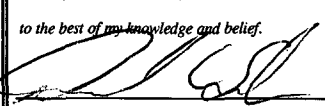
UL or lot no. H	Section 17	Township 26N	Range 5W	Lot Idn	Feet from the 2365	North/South line NORTH	Feet from the 790	East/West line EAST	County RIO ARriba
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres	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>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></p> <p>Signature </p> <p>Printed Name David Smith</p> <p>Title and E-mail Address Production Engineer, dave.smith@cdxgas.com</p> <p>Date 5/9/05</p>
	<p>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></p> <p>June 28, 1966</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p>ON FILE</p> <p>Certificate Number 2463</p>

NEW MEXICO OIL CONSERVATION COMMISSION

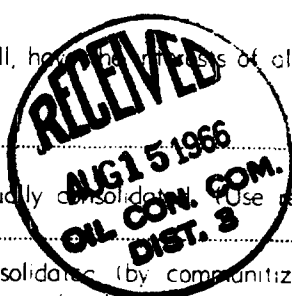
WELL LOCATION AND ACERAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Operator TENNECO OIL COMPANY			Lease JICARILLA "A"		Well No. 8
Unit Letter H	Section 17	Township 26 North	Range 5 West	County Rio Arriba ✓	
Actual Footage Location of Well:					
2365	feet from the North	line and	790	feet from the East	line
Ground Level Elev. 6604' ungraded ✓	Producing Formation Basin Dakota		Pool Basin Dakota ✓	Dedicated Acreage: E/2	
				320 ✓	Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 _____
- If answer is "no," list the owners and tract descriptions which have actually consolidated. (Use reverse side of this form if necessary) _____
- No allowable well 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.



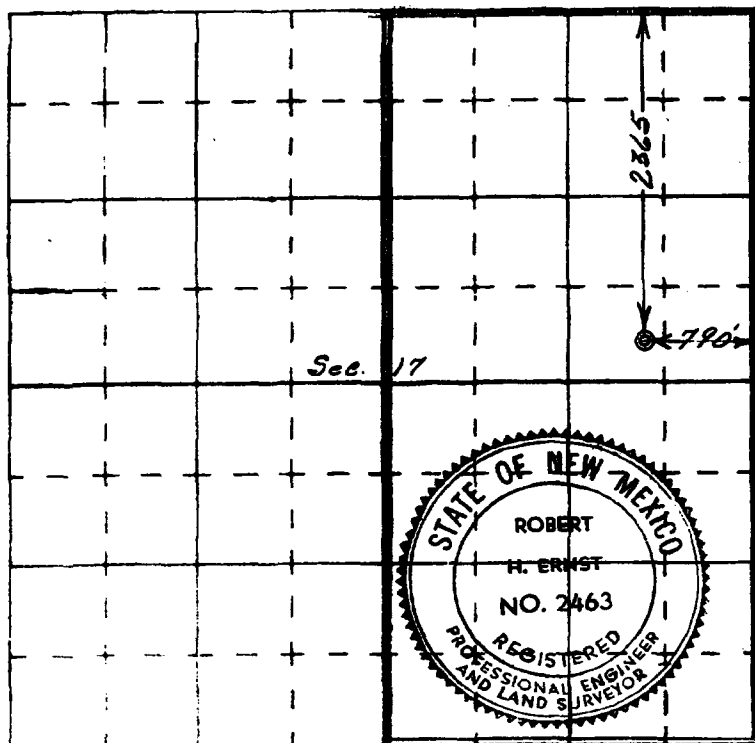
CERTIFICATION

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

Harold C. Nichols
 Name
Harold C. Nichols
 Position
Senior Production Clerk
 Company
Tenneco Oil Company
 Date
August 10, 1966

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.

28 June 1966
 Date Surveyed
Robert H. Ernst
 Registered Professional Engineer
 and/or Land Surveyor
Robert H. Ernst
New Mexico PE & LS 2463
 Certificate No. _____



**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

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

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

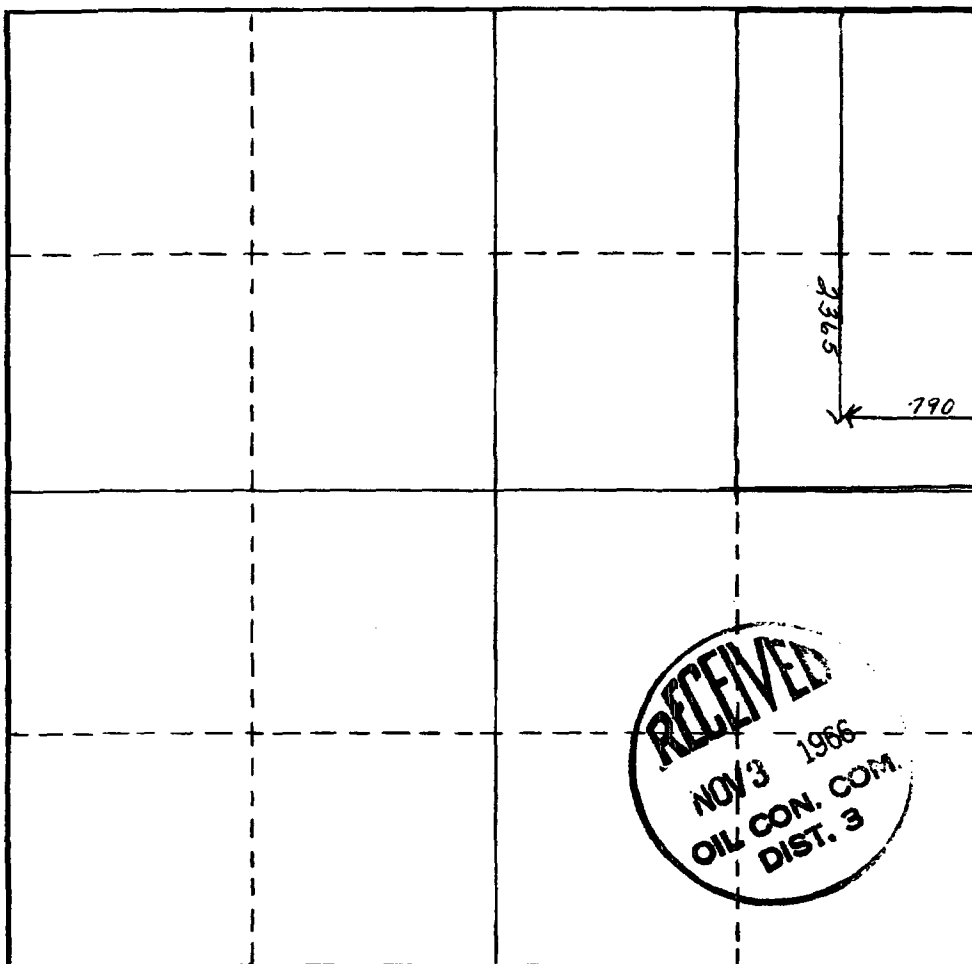
Operator Tenneco Oil Company			Lease Jicarilla "A"		Well No. 8
Unit Letter H	Section 17	Township 26-N	Range 5-W	County Rio Arriba	
Actual Footage Location of Well:					
2365 feet from the North line and		790 feet from the East line			
Ground Level Elev: 6604 GR	Producing Formation South Blanco Tocito	Pool South Blanco Tocito Gallup	Dedicated Acreage: E/2 NE/24 80 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 _____

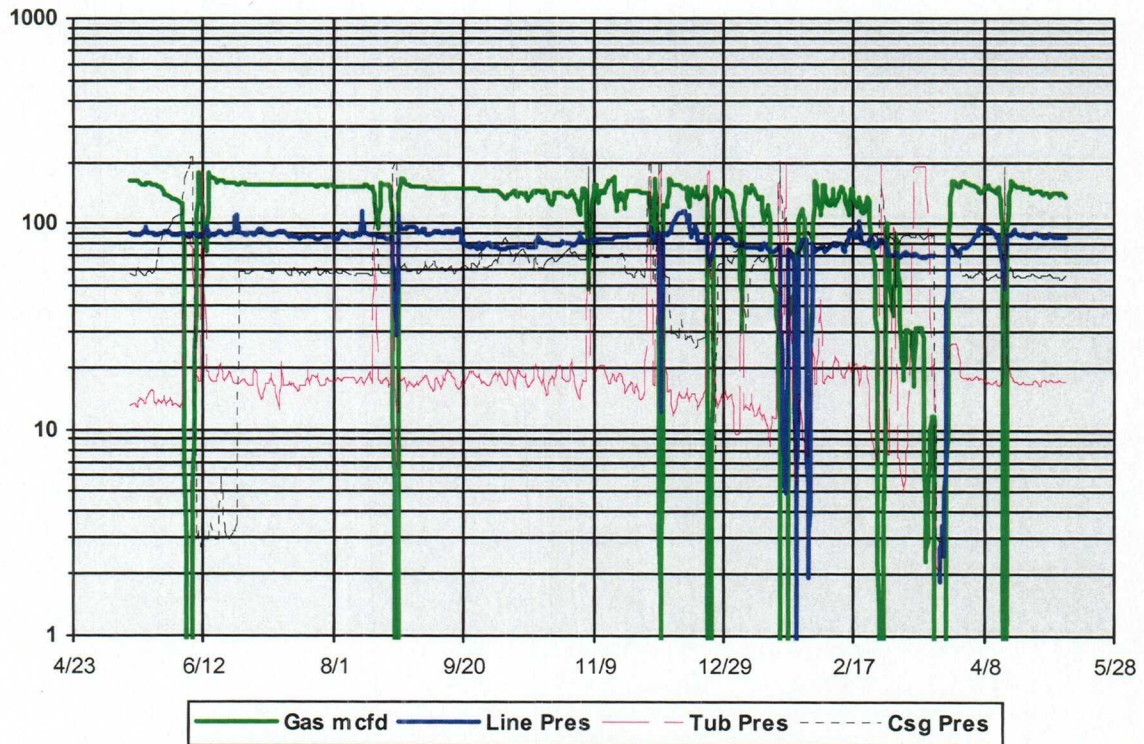
If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

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.



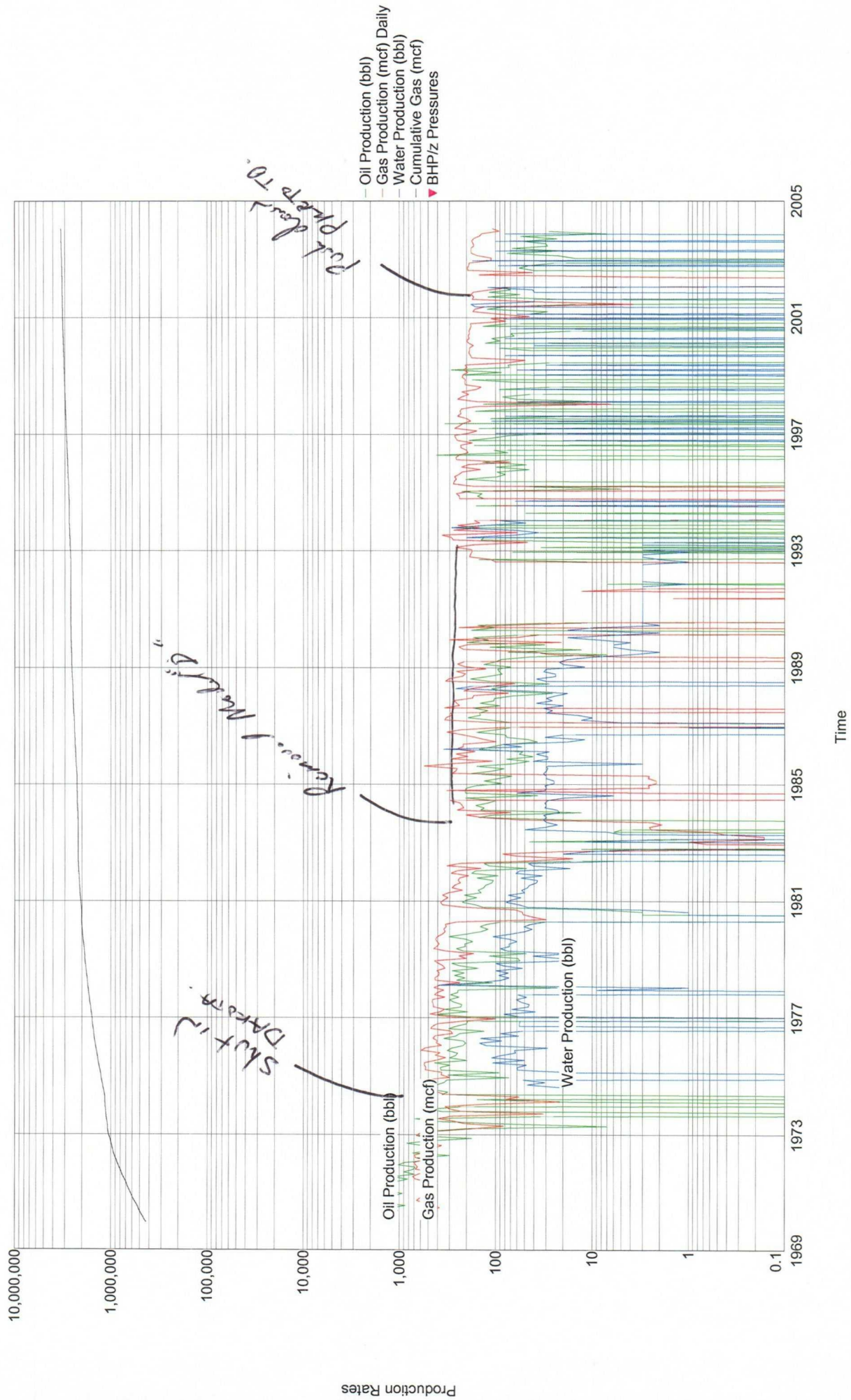
CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
Name	Harold C. Nichols
Position	Senior Production Clerk
Company	Tenneco Oil Company
Date	November 1, 1966
I hereby certify that the well location shown on this plat was 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	
Registered Professional Engineer and/or Land Surveyor	
Certificate No.	

'JICARILLA A 008-DG API: 30-039-08163' (5/14/04 - 5/9/05)



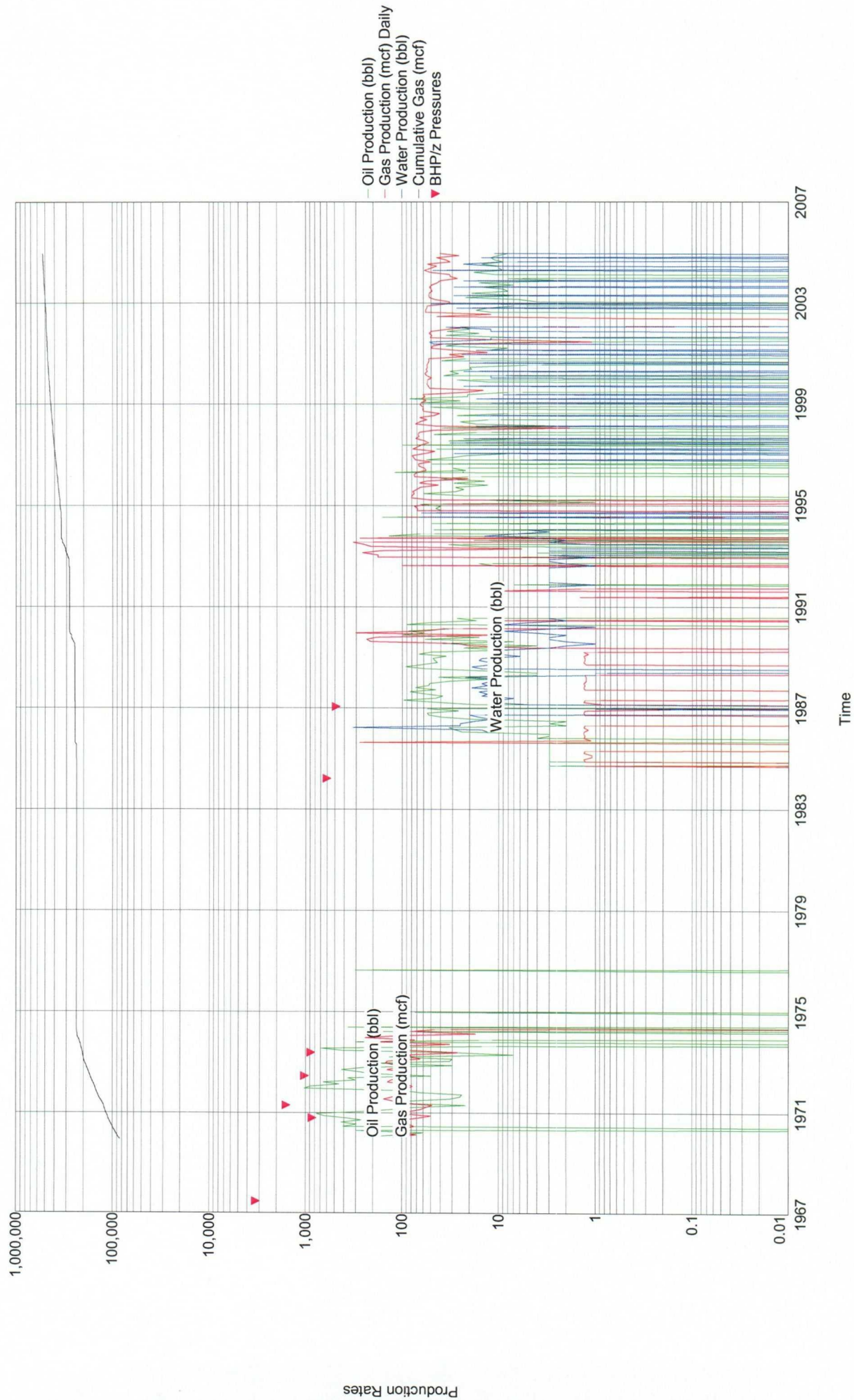
Lease Name: JICARILLA A
County, State: RIO ARBA, NM
Operator: CDX RIO LIMITED LIABILITY CORPORATIO
Field: MULTIPLE
Reservoir: MULTIPLE
Location:

JICARILLA A - (MULTIPLE) **A-8**



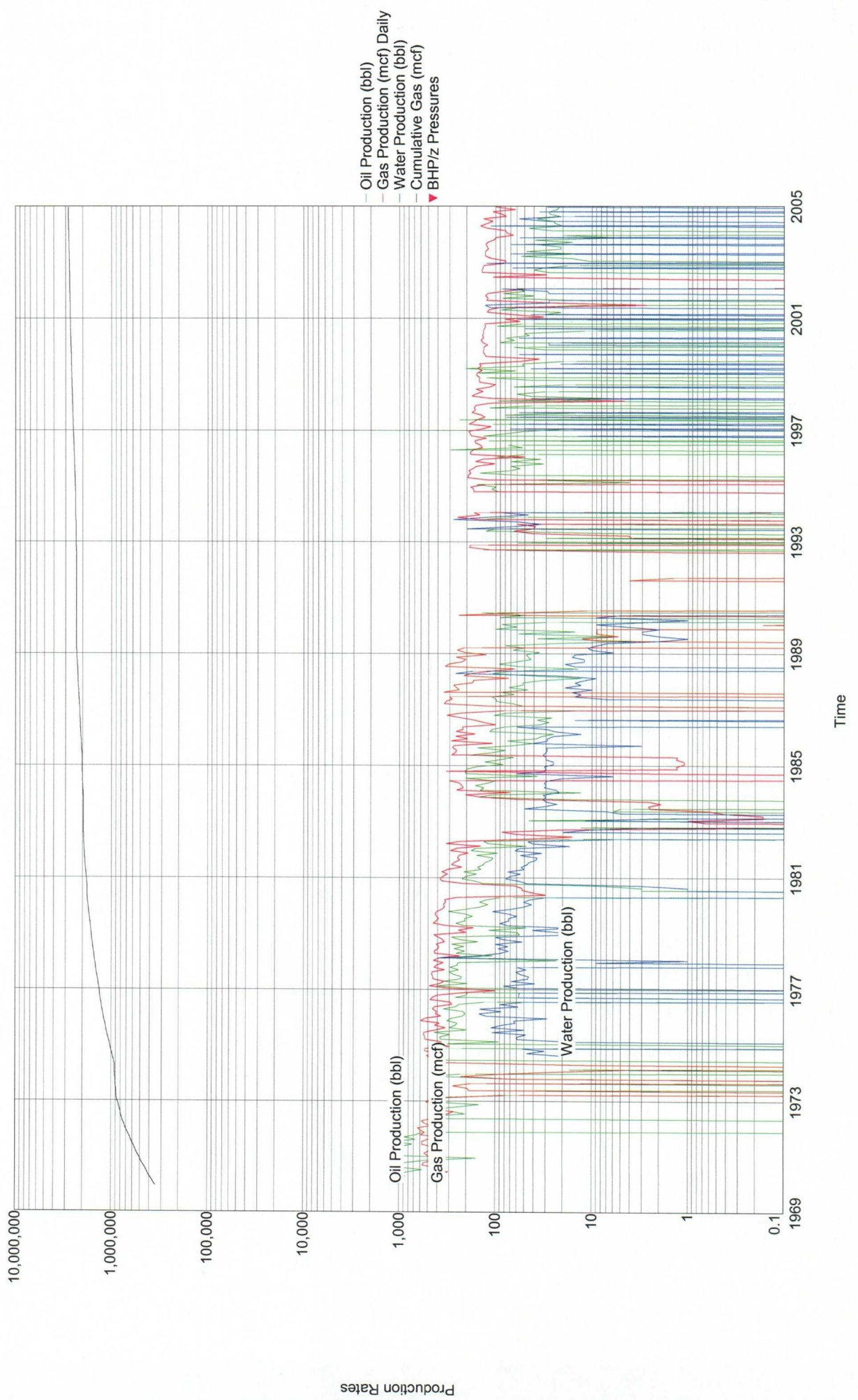
Lease Name: JICARILLA A
County, State: RIO ARBA, NM
Operator: CDX RIO LIMITED LIABILITY CORPORATIO
Field: BASIN
Reservoir: DAKOTA
Location: 17 26N 5W SW SE NE

JICARILLA A - 8 (DAKOTA)



Lease Name: JICARILLA A
County, State: RIO ARBA, NM
Operator: CDX RIO LIMITED LIABILITY CORPORATIO
Field: TAPACITO
Reservoir: GALLUP
Location: 17 26N 5W SW SE NE

JICARILLA A - 8 (GALLUP)



PI/Dwights PLUS on CD Map Report

Acc Wells



PI/Dwights PLUS on CD Map Report

DAKOTA

30	29	28
31	32	33
6	5	4
3 3E 1 7 2 7E 1E 8 1 18 2E 4E 3 4 19 3E	3 3E 3R 7 8 7E 7 8E 5 5E 6E 5 6 20 5E 6	6 5E 5 9 6E 7E 7 2E 16 2 5E 4 5 5 21 4E 6
30	29	28
31	32	33
6	5	4

PI/Dwights PLUS on CD Map Report

GALLUP

30	29	28
31	32	33
6	5	4
7	3E ●	9
2	8	7
18 2E ☀	17 ☀	9 ☀
3 ☀	5	16 ●
19 ☀	20 ●	4 ☀
30	29	28
31	32	33
6	5	4

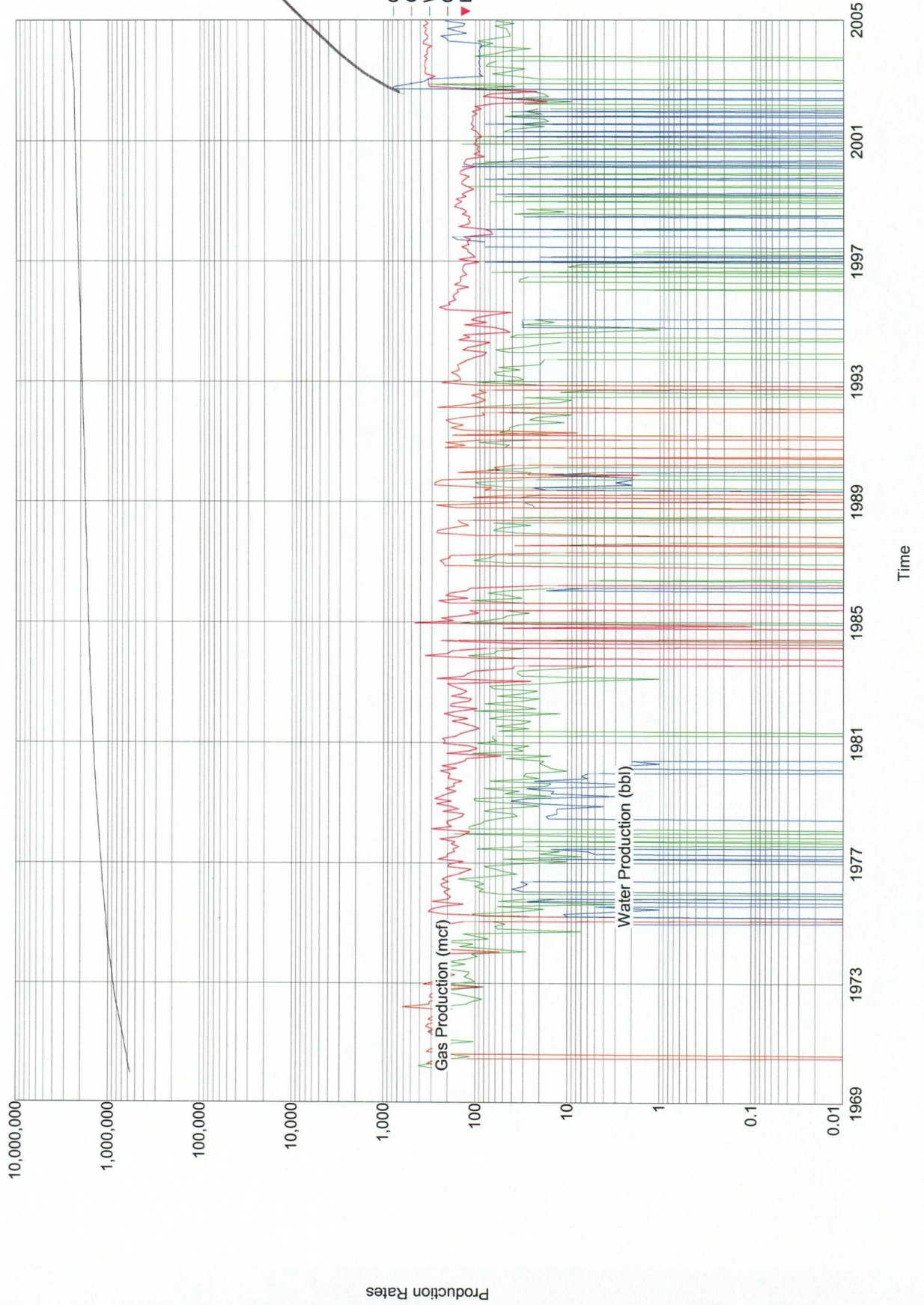
PI/Dwights PLUS on CD Map Report

MESAVERDE

30	29	28
31	32	33
6	5	4
1A 5 3E 1 7 5A 2	4A 3R 4 3E 7 7A 7E	6B 6 8A 9A 8
1 18	17 8E	16
19	9 5E 20 5 21	
30	29	28
31	32	33
6	5	4

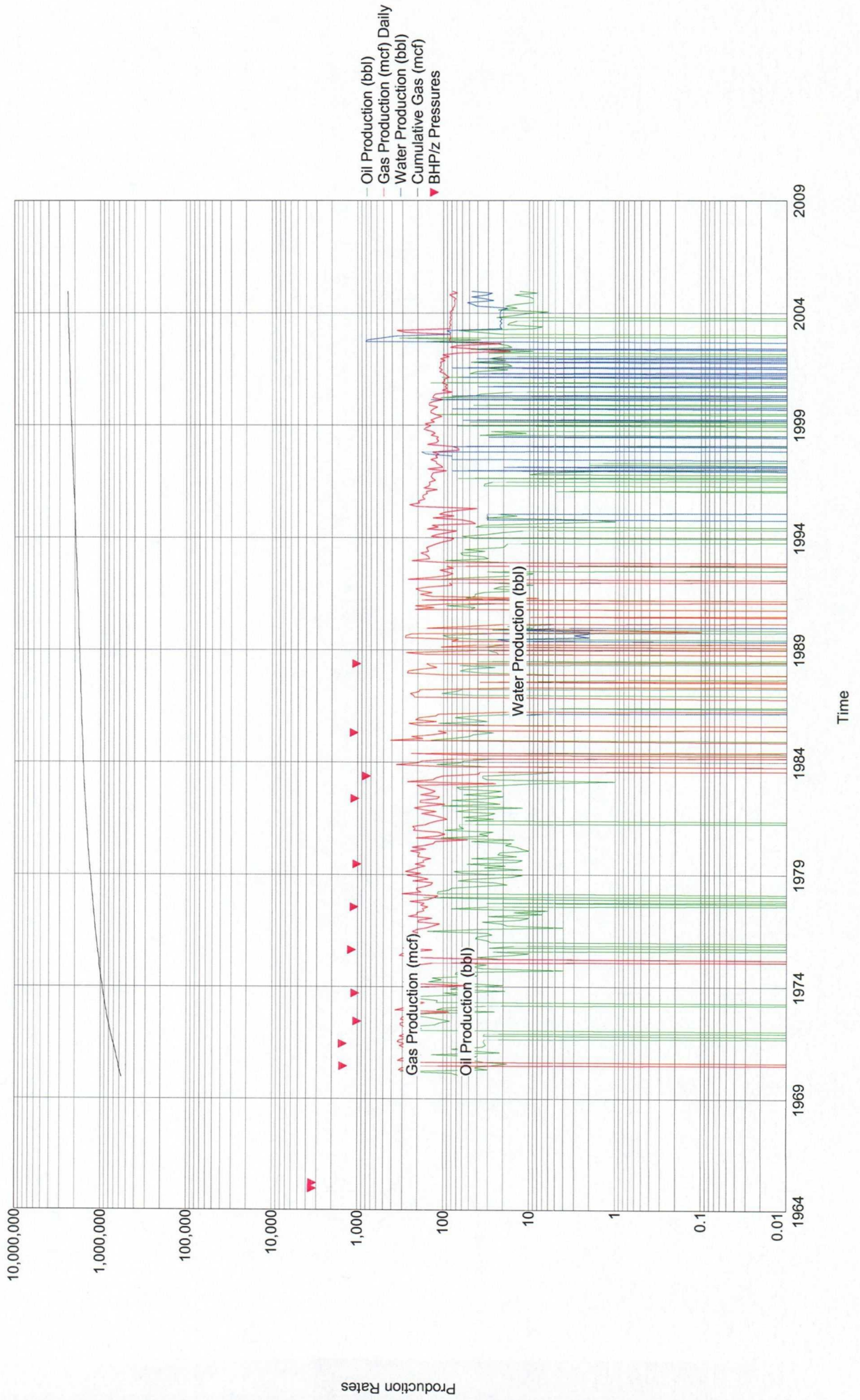
Lease Name: JICARILLA A
County, State: RIO ARBA, NM
Operator: MULTIPLE
Field: MULTIPLE
Reservoir: MULTIPLE
Location:

JICARILLA A - (MULTIPLE) A-2



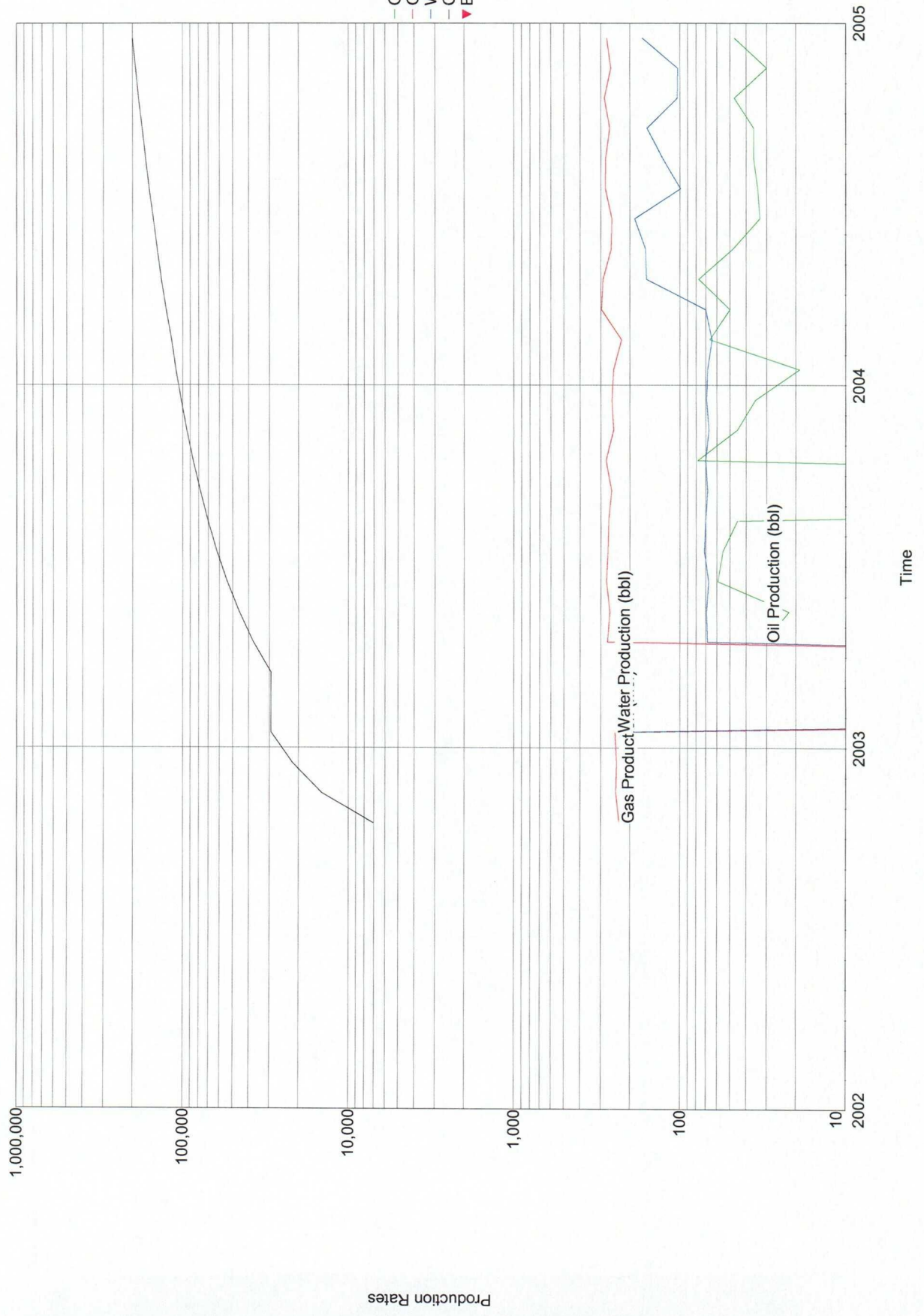
Lease Name: JICARILLA A
County, State: RIO ARBA, NM
Operator: CDX RIO LIMITED LIABILITY CORPORATIO
Field: BASIN
Reservoir: DAKOTA
Location: 18 26N 5W SE NW NE

JICARILLA A - 2 (DAKOTA)



Lease Name: JICARILLA A
County, State: RIO ARBA, NM
Operator: CDX RIO LIMITED LIABILITY CORPORATIO
Field: BLANCO
Reservoir: MESAVERDE
Location: 18 26N 5W SE NW NE

JICARILLA A - 2 (MESAVERDE)



Lease Name: JICARILLA A
County, State: RIO ARBA, NM
Operator: BP AMERICA PRODUCTION COMPANY
Field: TAPACITO
Reservoir: GALLUP
Location: 18 26N 5W SE NW NE

JICARILLA A - 2 (GALLUP)

