

DATE IN 3/10/04	SUSPENSE 3/23/04	ENGINEER WVS	LOGGED IN LR	TYPE DHC	APP NO. PLR0406348106
-----------------	------------------	--------------	--------------	----------	-----------------------

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]**

RECEIVED

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

MAR 03 2004

OIL CONSERVATION
DIVISION

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 _____

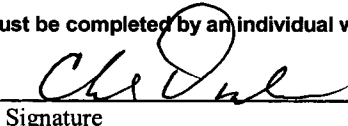
[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

- [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.

Charlie Donahue  District Engineer 3-2-04
 Print or Type Name Signature Title Date
 cdonahue@energy.com
 e-mail Address



March 1, 2004

Ms. Lori Wrotenbery
NMOCD
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

RE: Administrative Approval to Down-hole Commingle
Energen Resources Corporation
Carson #5
470' FNL, 1665' FEL, Sec. 30, T30N, R4W, N.M.P.M.
Rio Arriba County, New Mexico
API # 30-039-26133

Dear Ms. Wrotenbery,

Energen Resources Corporation requests Administrative Approval to add the East Blanco Pictured Cliffs and down-hole commingle it with the Blanco Mesaverde in the subject well. The well is currently producing as a single Mesa Verde completion. Open hole logs show additional potential exists in the Pictured Cliffs formation similar to offset producing wells. It is felt that down-hole commingling is the most economical way to produce the Pictured Cliffs reserves in this proration unit.

To comply with New Mexico Oil Conservation rules, Energen Resources Corporation is submitting the following data for your approval of the proposed commingle.

1. Form C107A – Application for Down-hole Commingle
2. C102 – Location plat showing each spacing unit and dedicated acreage
3. Production curves for the Mesaverde and Pictured Cliffs
4. Proposed production allocation method
5. Pressure data

In accordance to New Mexico Oil Conservation Division Rule 303C, the working, royalty and overriding royalty interests are common in this wellbore, so no notification is necessary. The BLM has been notified of the intent to down-hole commingle this well.

If additional information is needed, please contact me.

Sincerely

A handwritten signature in cursive script, appearing to read "Charlie Donahue".

Charlie Donahue
District Engineer

CD/vd

cc: NMOCD - Aztec, BLM - Albuquerque

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

APPLICATION FOR DOWNHOLE COMMINGLING

Energen Resources

2198 Bloomfield Highway, Farmington, NM 87401

Operator Address
Carson 5 B-30-30N-4W Rio Arriba

Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 162928 Property Code 21185 API No. 30-039-26133 Lease Type: X Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	East Blanco Pictured Cliffs		Blanco Mesaverde
Pool Code	72400		72319
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	4195-4400'		5191-6687'
Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
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)	529 Est.		366 Calc.
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1020 Est.		1036
Producing, Shut-In or New Zone	New Zone		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: n/a Rates: 0/500/0 (Initial Est)	Date: Rates:	Date: 2/27/2004 Rates: 0/115/1
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas % %	Oil Gas % %	Oil Gas % %

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 Charlie Donahue TITLE District Engineer DATE March 1, 2004

TYPE OR PRINT NAME Charlie Donahue TELEPHONE NO. (505) 325-6800

E-MAIL ADDRESS cdonahue@energen.com

District I
190 Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 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 30-039-26133		2 Pool Code 72400/72319		3 Pool Name East Blanco Pictured Cliffs/Blanco Mesaverde	
4 Property Code 21185		5 Property Name CARSON			6 Well Number 5
7 OGRID No. 162928		8 Operator Name ENERGEN RESOURCES, INC.			9 Elevation 7428'

10 Surface Location


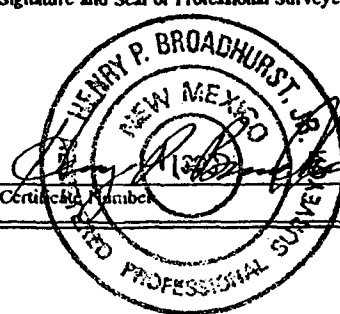
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	30	30N	4W		470'	NORTH	1665'	EAST	RIO ARriba

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 160/320	13 Joint or Infill	14 Consolidation Code	15 Order No.
-------------------------------	--------------------	-----------------------	--------------

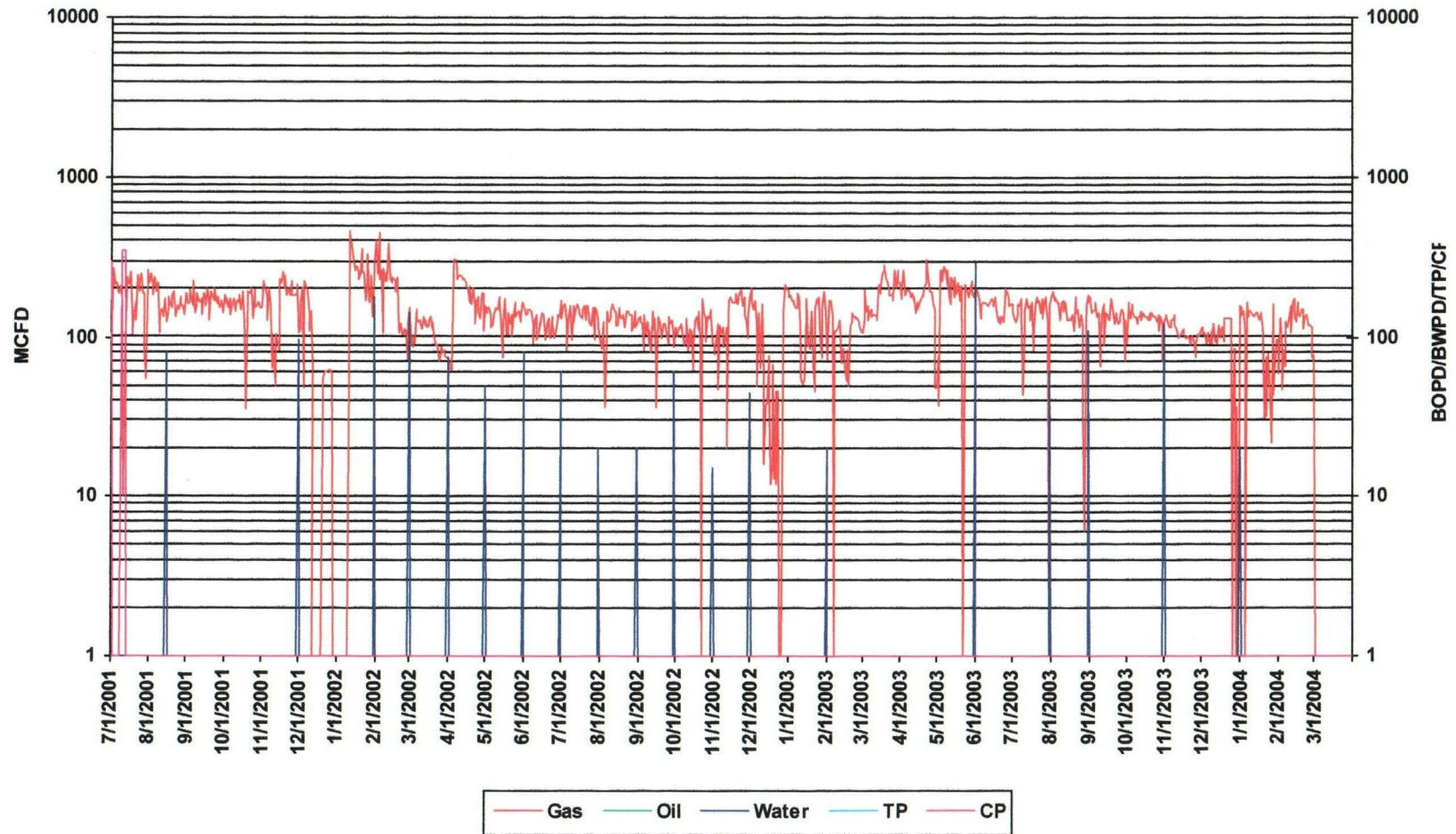
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16 West 5200.80'		Section 30	470'	1665'	4453.68'	5280.00'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief	
								
	Signature Charlie Donahue Printed Name District Engineer Title 02-16-04 Date							
	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. 02/11/99 Date of Survey Signature and Seal of Professional Surveyor: 							
North West					4458.30'	590.00N		

Facility Daily Production

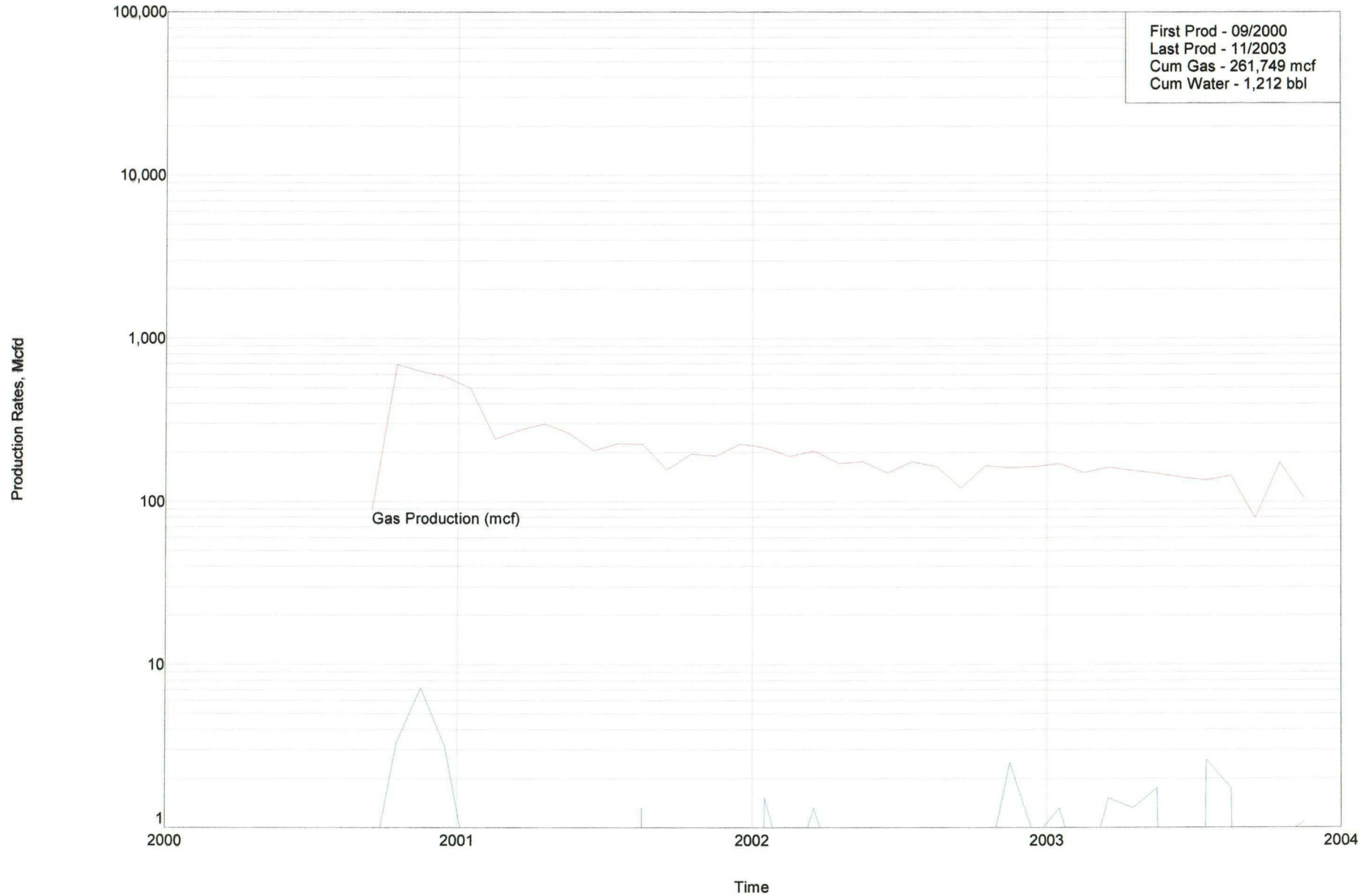
Lease: **CARSON 5** *Mesa Verde (NE 1/4 Section 30, T30N, R4W)*

Date Period: 7/1/2001 --- 3/31/2004



Lease Name: SAN JUAN 30 4 UNIT
County, State: RIO ARBA, NM
Operator: ENERGEN RESOURCES CORPORATION
Field: BLANCO EAST
Reservoir: PICTURED CLIFFS
Location: 19 30N 4W NW SE SE

SAN JUAN 30 4 UNIT #42A

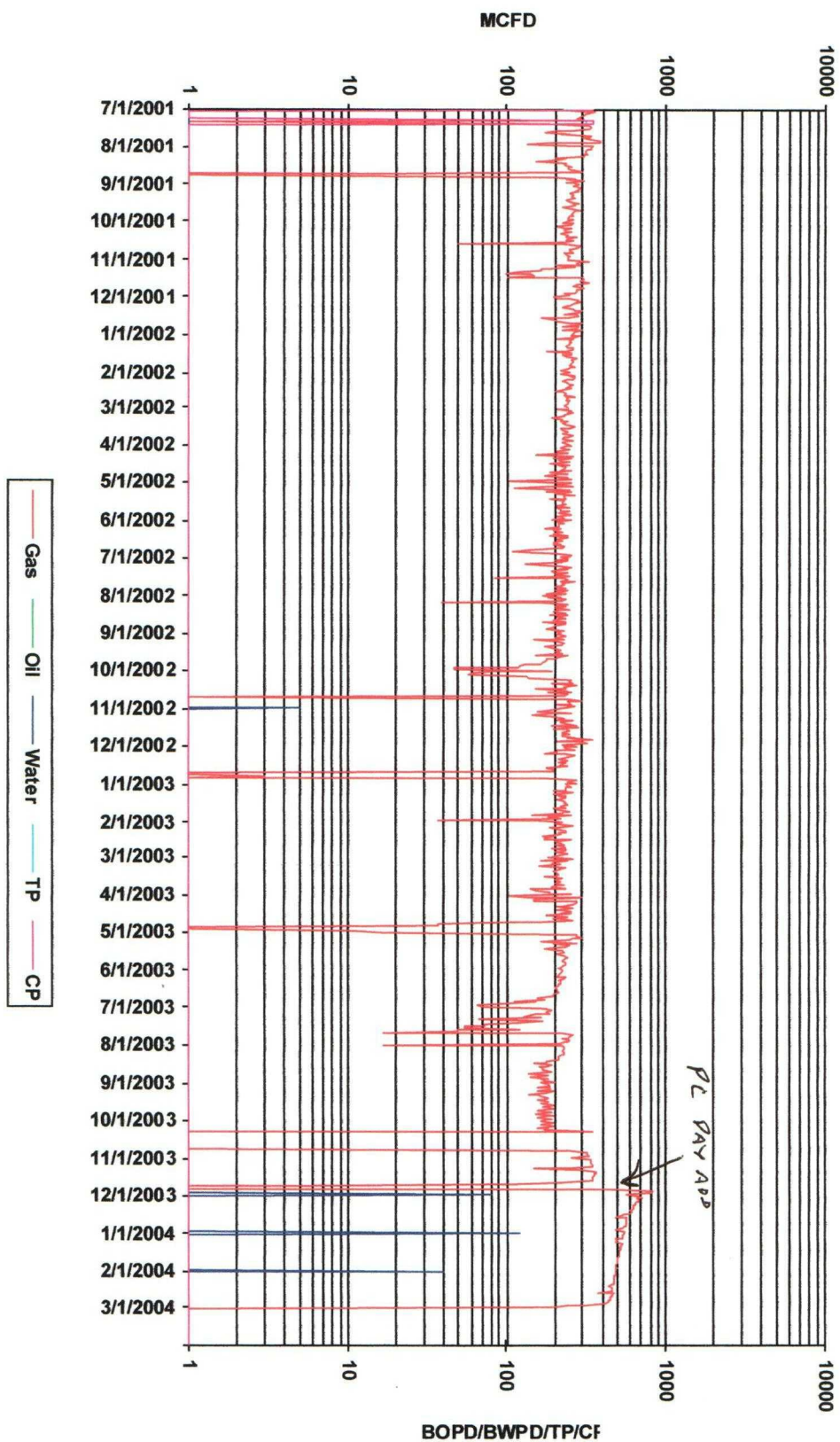


Lease: CARSON 4M

(SW/4 Sec 29 - T30N - R4W)

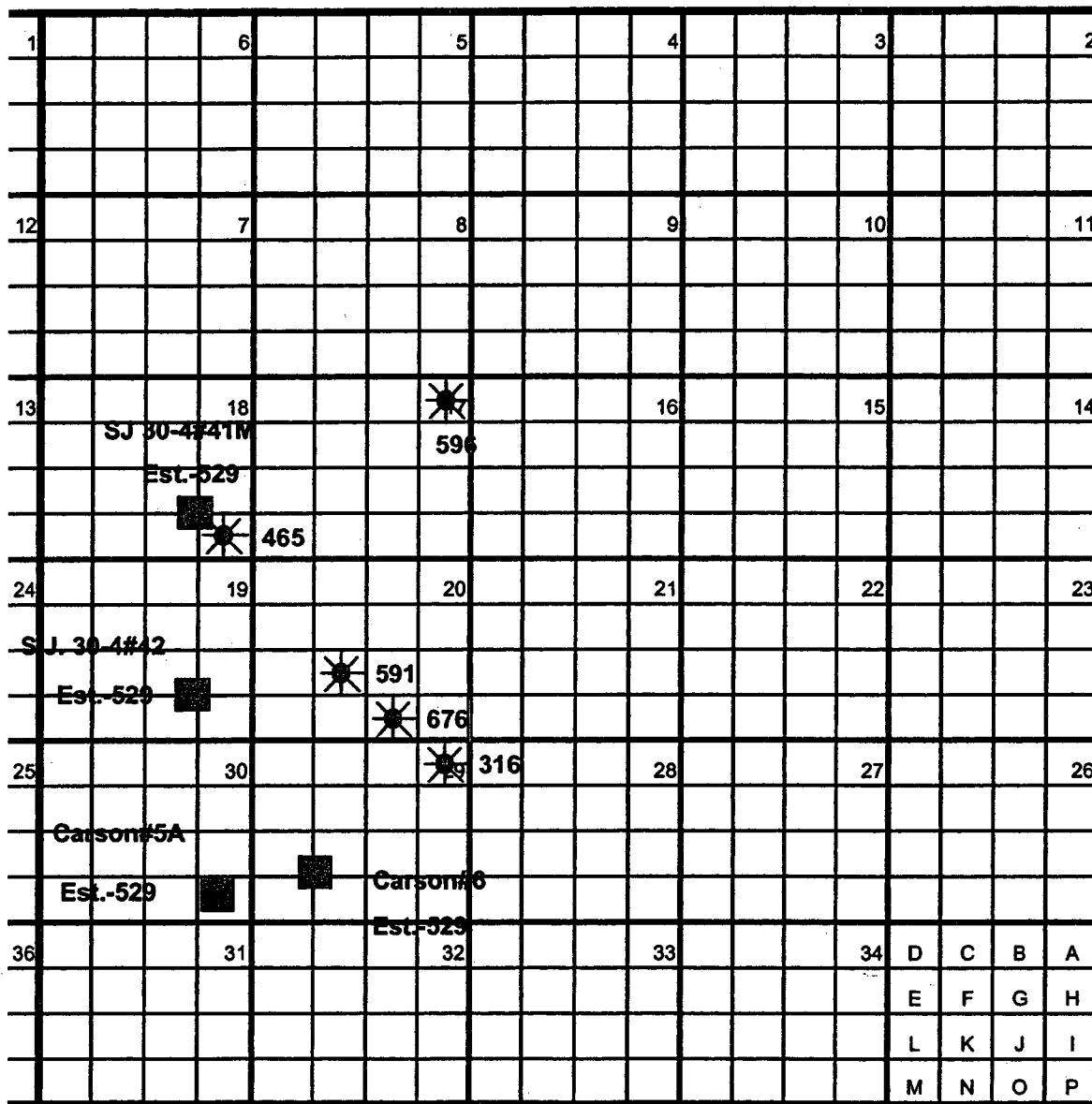
Date Period: 7/1/2001 --- 3/31/2004

Facility Daily Production



Pictured Cliffs Current Shut-In Bottom Hole Pressure

R4W



PC Payadds



PC Well

Current BHP, psia

**Carson #5
NE/4 Section 30, T30N, R4W**

Proposed Allocation Method

Produce total well stream for 60 days following the Pictured Cliffs pay add as follows. Use the subtraction method to allocate production as follows:

Total Stream = X

Mesaverde Flow Rate – 115 MCFD

Mesaverde Allocation = $115 / X$ as a percentage

Pictured Cliffs Allocation = $(X-115) / X$ as a percentage

Rates will be reported to NMOCD-Aztec for final allocation percentage determination