

Form C-107A
Revised June 10, 2003

APPLICATION TYPE
X Single

 Establish Pre-Approved Pools
EXISTING WELLBORE
 X Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

2198 Bloomfield Highway, Farmington, New Mexico 87401

Address VAC-3101
D Section 20, T30N, R4W N.M.P.M. Rio Arriba

| Lease | Well No. | Unit Letter-Section-Township-Range | County |
|-----------|---------------|------------------------------------|-------------------|
| 162928 | 21994 | 30-039-26320 | X |
| OGRID No. | Property Code | API No. | Lease Type: |
| | | | Federal State Fee |

| DATA ELEMENT | UPPER ZONE | INTERMEDIATE ZONE | LOWER ZONE |
|---|---|-------------------------|--|
| Pool Name | East Blanco Pictured Cliffs | N/A | Blanco Mesa Verde |
| Pool Code | 72400 | N/A | 72319 |
| Top and Bottom of Pay Section (Perforated or Open-Hole Interval) | 4,204' to 4,442' | N/A | 6,306' to 6,800' |
| Method of Production (Flowing or Artificial Lift) | Artificial Lift - Plunger | N/A | Artificial Lift - Plunger |
| 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) | N/A within 150% | N/A | N/A within 150% |
| Oil Gravity or Gas BTU (Degree API or Gas BTU) | 1,027 BTU | N/A | 1,056 BTU |
| Producing, Shut-In or New Zone | Producing | N/A | 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: 6/12/2005 Rates: 0 BOPD/182 MCFPD/1.5 BWPD | Date: N/A Rates: N/A | Date: 6/12/2005 Rates: 0 BOPD/ 293 MCFPD/1.5 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 0 % Gas 50 % | Oil 0 % Gas 50 % | Oil 100 % Gas 50 % |

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 ☒ 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 [Signature] TITLE District Engineer DATE 6/14/2005

TYPE OR PRINT NAME Patricio W. Sanchez TELEPHONE NO. (505) 325-6800

E-MAIL ADDRESS psanchez@energen.com



June 14, 2005

Mr. Mark E. Fesmire, P.E. - Director
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Administrative Approval to Downhole Commingle
Energen Resources Corporation
San Juan 30-4 Unit #44
1,095' FNL, 75' FWL, Section 20, T30N, R4W, NMPM
Rio Arriba County, New Mexico

Dear Mr. Fesmire:

Energen Resources Corporation requests administrative approval to downhole commingle the East Blanco Pictured Cliffs (PC) and Blanco Mesa Verde (MV) pools in the subject well. Due to the liquid loading problems commingling with plunger lift is the most economical method to recover gas from both zones in the subject well. We have successfully applied this method along with plunger lift in similar wells that have experienced liquid loading problems and it is felt this method would improve the overall producing efficiency of the well.

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

1. C-107A - Application for Downhole Commingling
2. C-102 - Location plat showing each spacing unit and dedicated acreage
3. Offset Operator Ownership Plat
4. Production curves from the current well dually completed in the PC& MV.
5. Allocation method

In accordance with New Mexico Oil Conservation Division Rule 303C, Energen Resources operates all offset proration units.

If additional information is needed, please contact me at 505-325-6800.

Sincerely,

A handwritten signature in black ink, appearing to read "Patricio W. Sanchez", written over a horizontal line.

Patricio W. Sanchez
District Engineer

xc:

NMOCD – Aztec District Office
BLM- FFO notified via Federal Sundry Notice 3160-5 and sent NMOCD form C-107A

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 30-039-26320 | ² Pool Code 72400/72319 | ³ Pool Name East Blanco Pictured Cliffs/Blanco Mesa Verde |
| ⁴ Property Code 21994 | ⁵ Property Name San Juan Unit | ⁶ Well Number 44 |
| ⁷ OGRID No. 162928 | ⁸ Operator Name Energen Resources Corporation | ⁹ Elevation 7,460' |

¹⁰ Surface Location

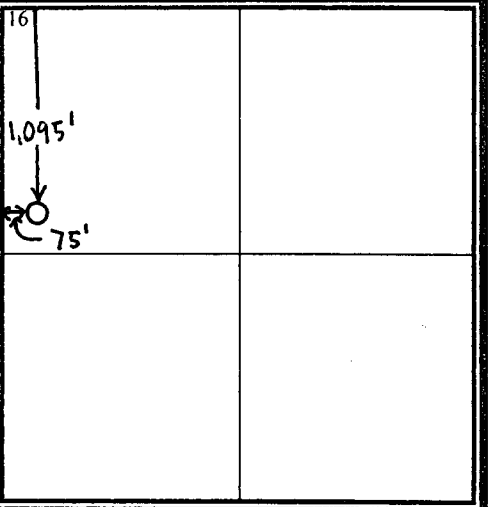
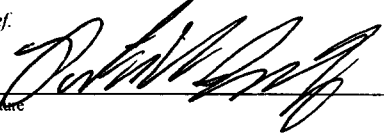
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| D | 20 | 30N | 4W | | 1095 | North | 75 | 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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

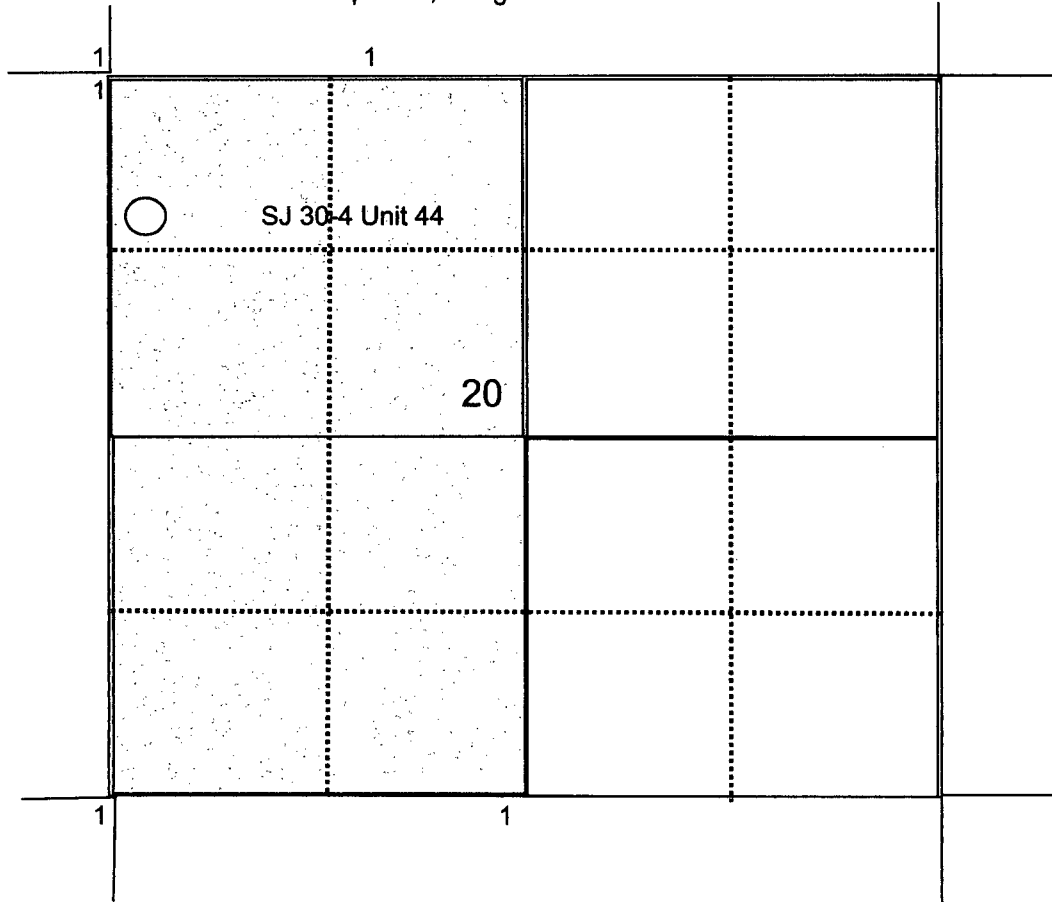
| | | | |
|--|-------------------------------|----------------------------------|-------------------------|
| ¹² Dedicated Acres 160/320 | ¹³ Joint or Infill | ¹⁴ Consolidation Code | ¹⁵ Order No. |
|--|-------------------------------|----------------------------------|-------------------------|

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

| | | | | |
|---|--|--|--|---|
|  | | | | 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 Patricio W. Sanchez Printed Name District Engineer psanchez@energen.com Title and E-mail Address June 14, 2005 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> November 18, 1999 Date of Survey Signature and Seal of Professional Surveyor: Neale C. Edwards NM 6857 Certificate Number |
| | | | | |

Energen Resources Corp.
San Juan 30-4 Unit 44
Offset Operator/ Ownership Plat
East Blanco Pictured Cliffs/ Blanco Mesa Verde
Downhole Commingling

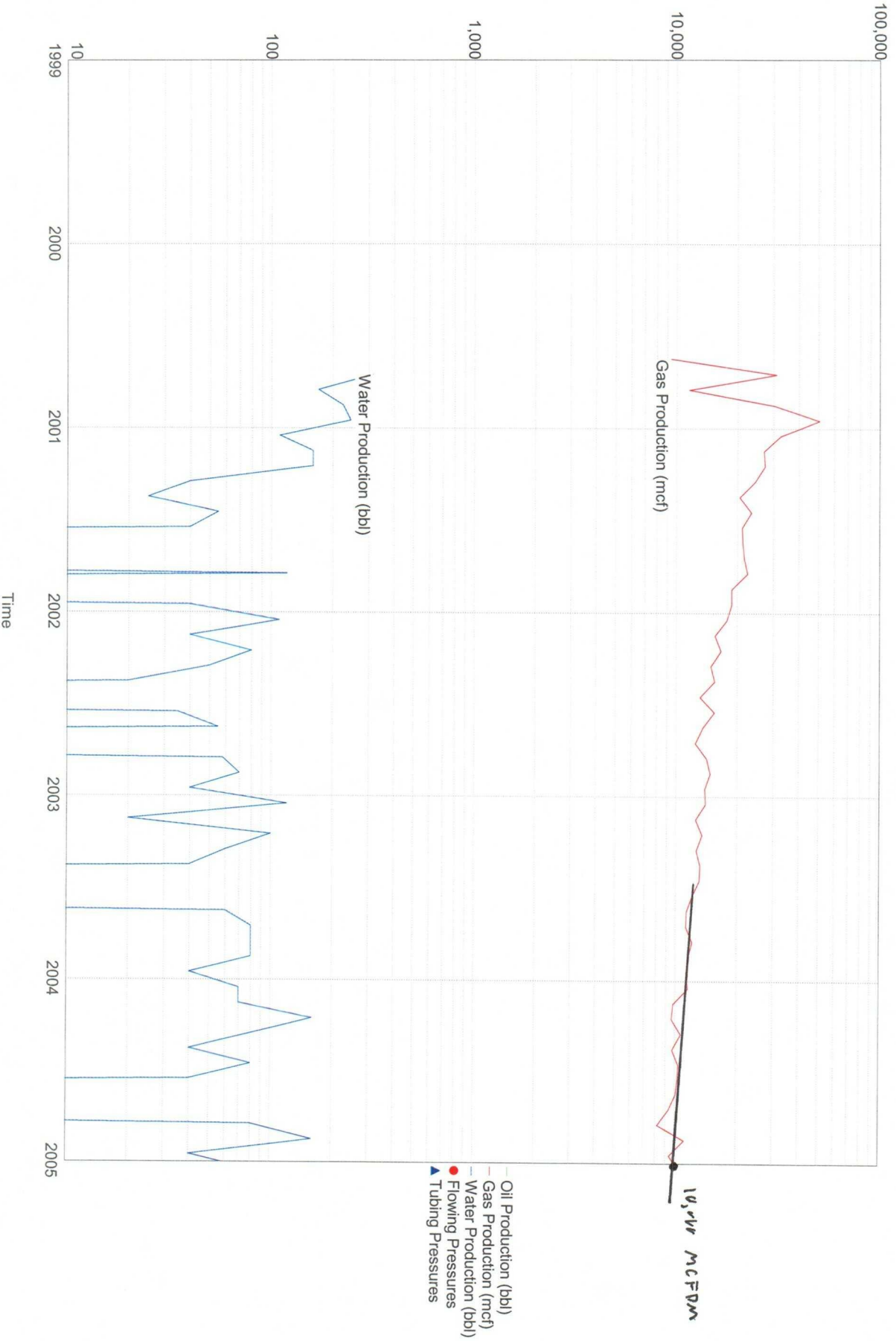
Township 30 N, Range 3 W



1) Energen Resources

Lease Name: SAN JUAN 30 4 UNIT
County, State: RIO ARBA, NM
Operator: ENERGEN RESOURCES CORPORATION
Field: MULTIPLE
Reservoir: MULTIPLE
Location:

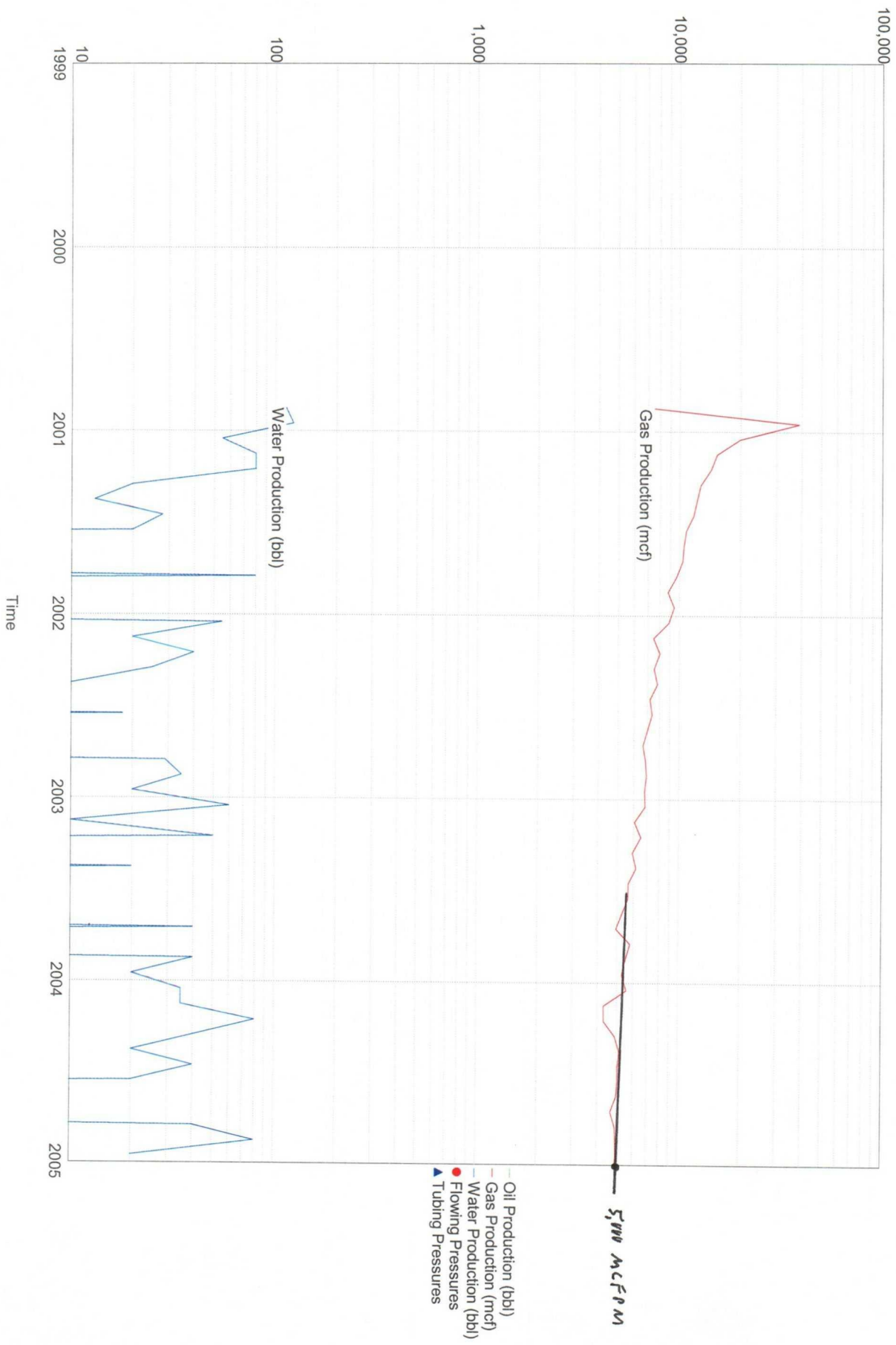
SAN JUAN 30 4 UNIT - MULTIPLE *pc/mv* - *Commingled*



Lease Name: SAN JUAN 30 4 UNIT
 County, State: RIO ARBA, NM
 Operator: ENERGEN RESOURCES CORPORATION
 Field: BLANCO EAST
 Reservoir: PICTURED CLIFFS
 Location: 20 30N 4W SW NW NW

SAN JUAN 30 4 UNIT - BLANCO EAST - PC

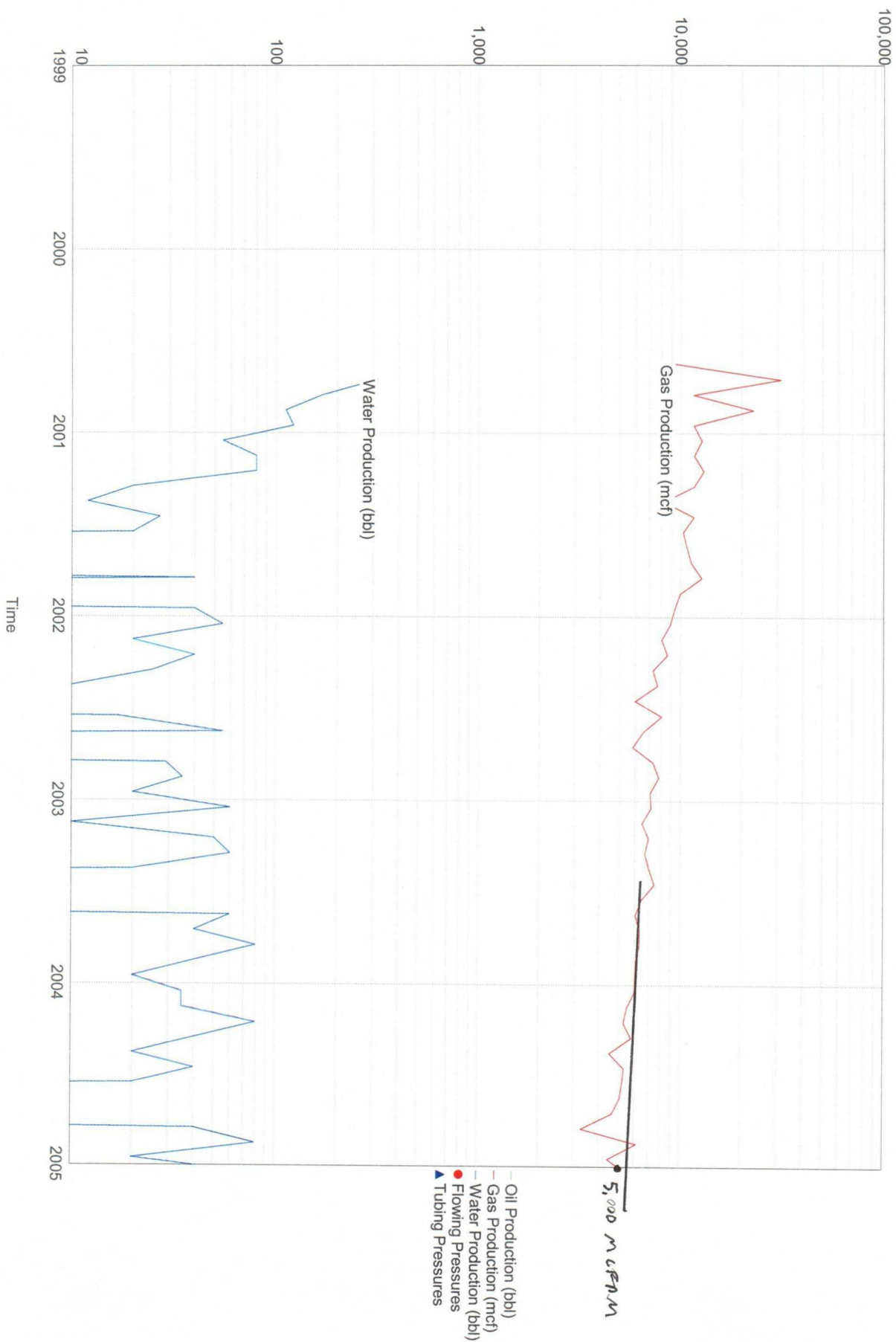
Production Rates



Lease Name: SAN JUAN 30 4 UNIT
 County, State: RIO ARBA, NM
 Operator: ENERGEN RESOURCES CORPORATION
 Field: BLANCO
 Reservoir: LEWIS-MESAVERDE
 Location: 20 30N 4W SW NW NW

SAN JUAN 30 4 UNIT - BLANCO - MW

Production Rates



Recommended Allocation Method

1. MIRU and POOH with tubing strings and packer.
2. Clean out casing to PBTD.
3. TIH w/ 2-3/8" production tubing to Mesa Verde Mid-perforations or there about.
4. Swab well in and place on plunger lift.
5. Based on historical production allocation for gas is 50% Pictured Cliffs and 50% Mesa Verde. Oil will be allocated 100% to Mesa Verde should the well begin to make oil based on area knowledge.

Note: gas production has stabilized and shows a 50/50 contribution in terms of gas rate – see enclosed production graphs.

6-17-05 SUSPENSE ENGINEER Jones 6-20-05 LOGGED IN TYPE DHC 3484 APP NO. psem0517133794

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505



RECEIVED
JUN 17 2005
OIL CONSERVATION
DIVISION

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.

Patricio W. Sanchez
Print or Type Name

Signature

Title

Date

psanchez@energy.com
e-mail Address