

| | | | | | |
|--------------------|----------|---------------------|----------------------|----------------------|---------------------------|
| 4/29/08 DATE IN | SUSPENSE | W Jones ENGINEER | 1/29/08 LOGGED IN | DHC TYPE 39927 | PKUR0802953616 APP NO. |
|--------------------|----------|---------------------|----------------------|----------------------|---------------------------|

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

RECEIVED
 2008 JUN 29 PM 1 37

[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.

Justin M. Stalworthy

Print or Type Name

Signature

Title

Date

DISTRICT ENG 1-23-08

1stalworth@energen.com
e-mail Address

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

| | | | | | |
|-------------------|---------------|------------------------------------|-------------|---------|-----------|
| Lease | Well No. | Unit Letter-Section-Township-Range | | | County |
| 162928 | 21896 | 30-039-27082 | | | X |
| OGRID No. | Property Code | API No. | Lease Type: | Federal | State Fee |

| DATA ELEMENT | UPPER ZONE | INTERMEDIATE ZONE | LOWER ZONE |
|--|---|---|---|
| Pool Name | Gavilan Chalk <i>Gas</i> | N/A | Blanco Mesa Verde |
| Pool Code | 96307 | N/A | 72319 |
| Top and Bottom of Pay Section (Perforated or Open-Hole Interval) | 4300' to 4335' | N/A | 5850' to 6028' |
| 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 | Shut-in | 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: 12/2002 Rates: 0 BOPD/40 MCFPD/0 BWPD | Date: N/A Rates: N/A | Date: 03/2004 Rates: 1 BOPD/ 35 MCFPD/0.5 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 Gas 0 % 53 % | Oil N/A Gas N/A % % | Oil Gas 100 % 47 % |

E-MAIL ADDRESS jstolwor@energen.com

January 23, 2008

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
Cheney Federal #2B
1850' FSL, 1850' FWL, Section 17, T26N, R2W, NMPM
Rio Arriba County, New Mexico

Dear Mr. Fesmire:

Energen Resources Corporation requests administrative approval to downhole commingle the Gavilan-Chacra 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.

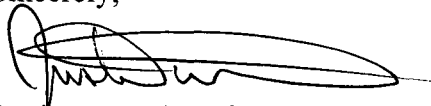
To comply with New Mexico Oil Conservation Rules, Energen Resources Corporation is submitting the following data for your approval of the proposed commingling.

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 CH & MV.
5. Allocation method

In accordance to New Mexico Oil Conservation Division Rule 303C, Energen Resources will notify all Offset operators.

If additional information is needed, please contact me at 505-324-4143.

Sincerely,



Justin M. Stolworthy
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 October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|---|---|--|
| ¹ API Number 30-039-27082 | ² Pool Code 72319 | ³ Pool Name Blanco Mesaverde |
| ⁴ Property Code 21896 | ⁵ Property Name Cheney Federal | ⁶ Well Number 2B |
| ⁷ OGRID No. 162928 | ⁸ Operator Name Energen Resources Corporation | ⁹ Elevation 7264' |

¹⁰ Surface Location

| | | | | | | | | | |
|--------------------|---------------|-----------------|-------------|---------|-----------------------|---------------------------|-----------------------|------------------------|----------------------|
| UL or lot no. K | Section 17 | Township 26N | Range 2W | Lot Idn | Feet from the 1850 | North/South line South | Feet from the 1850 | 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 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.

| | |
|--|---|
| <div><div>16</div><div><div>1850'</div><div>1850'</div><div>17</div></div></div> | <div><div>¹⁷ OPERATOR CERTIFICATION</div><div><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></div><div><div>Signature</div><div>1/23/08</div><div>Date</div></div><div><div>Justin M. Stolworthy</div><div>Printed Name</div></div></div> |
| | <div><div>¹⁸ SURVEYOR CERTIFICATION</div><div><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></div><div><div>07/25/2002</div><div>Date of Survey</div></div><div><div>Signature and Seal of Professional Surveyor:</div><div>15269</div><div>Certificate Number</div></div></div> |

District I
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State of New Mexico
Energy, Minerals & Natural Resources Department
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1220 South St. Francis Dr.
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Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|---|---|--|
| ¹ API Number 30-039-27082 | ² Pool Code 96307 | ³ Pool Name Gavilan Charca |
| ⁴ Property Code 21896 | ⁵ Property Name Cheney Federal | ⁶ Well Number 2B |
| ⁷ OGRID No. 162928 | ⁸ Operator Name Energen Resources Corporation | ⁹ Elevation 7264' |

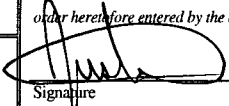
¹⁰ Surface Location

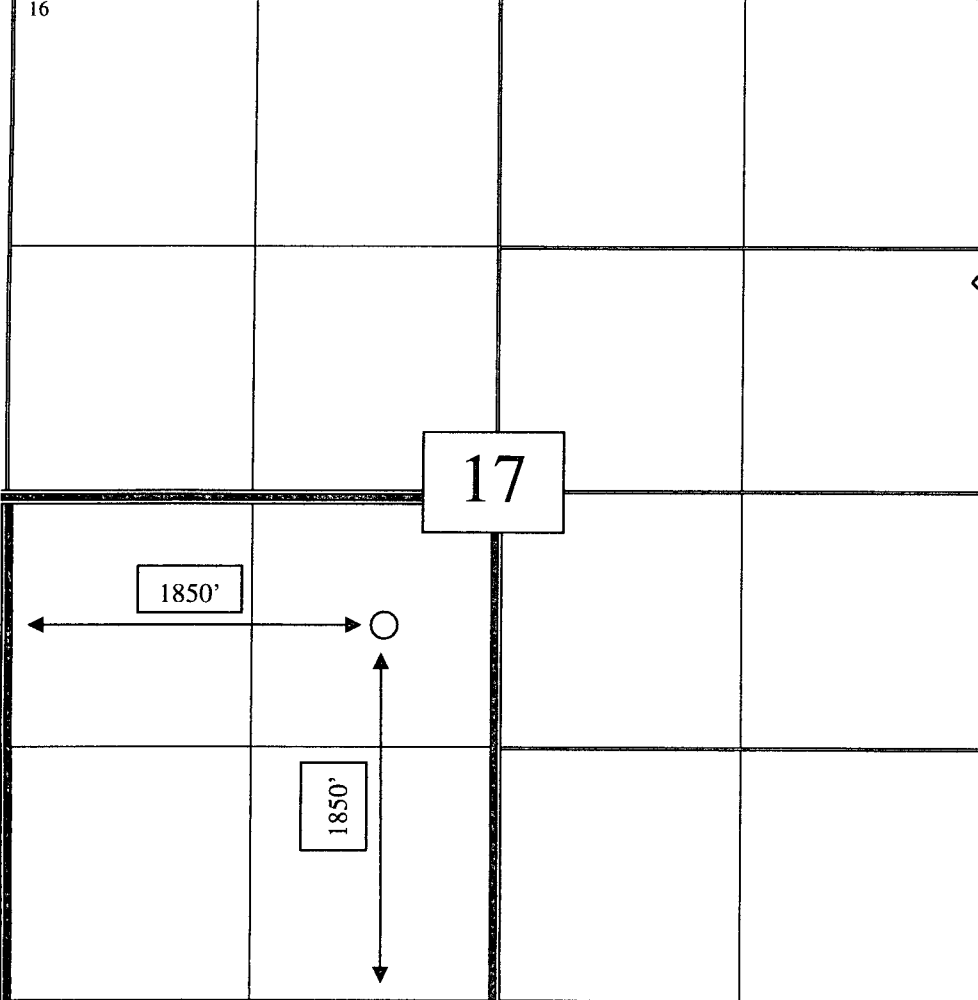
| | | | | | | | | | |
|--------------------|---------------|-----------------|-------------|---------|-----------------------|---------------------------|-----------------------|------------------------|----------------------|
| UL or lot no. K | Section 17 | Township 26N | Range 2W | Lot Idn | Feet from the 1850 | North/South line South | Feet from the 1850 | 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.

| | | | | |
|----|--|----|--|--|
| 16 | | | | ¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>  Signature 1/23/08 Date Justin M. Stolworthy Printed Name |
| | | | | |
| | | 17 | | |
| | | | | 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> 07/25/2002 Date of Survey Signature and Seal of Professional Surveyor: 15269 Certificate Number |
| | | | | |



Energen Resources Completion Schedule - Procedure for Cheney Federal #2B

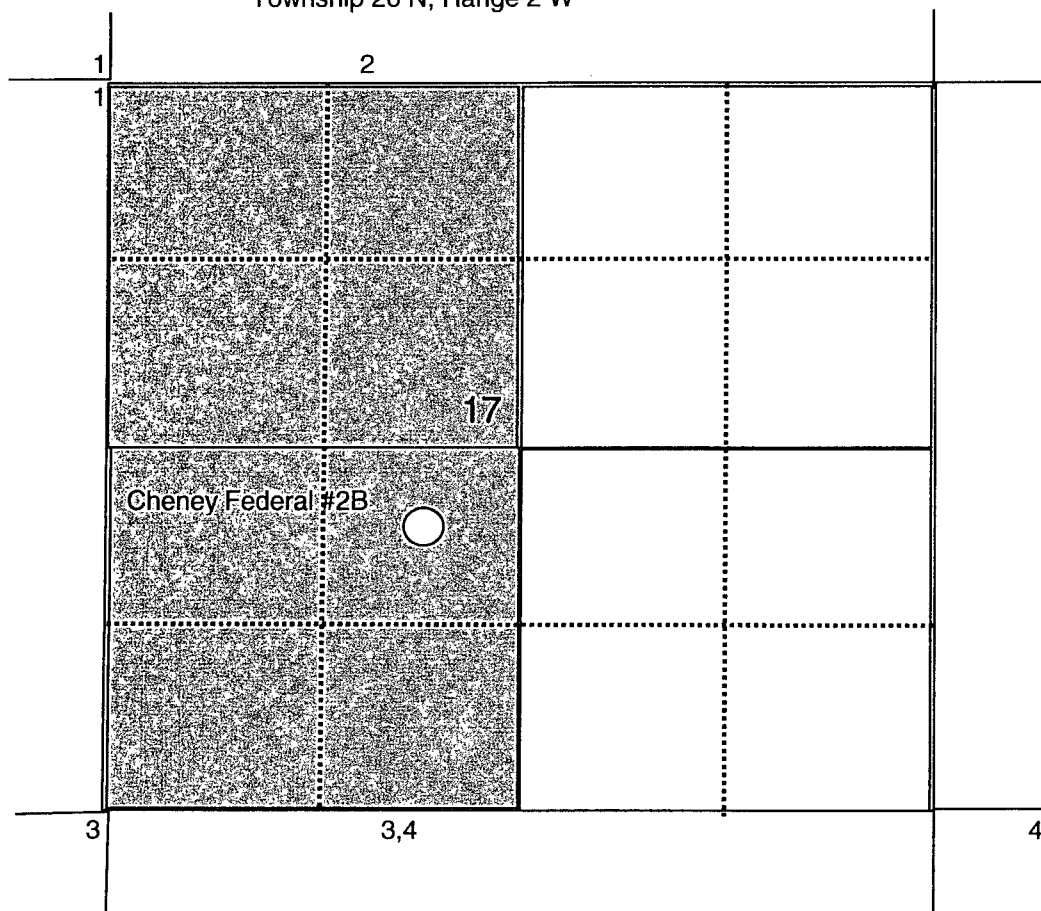
NOTE: See “Pertinent Data Sheet for wellbore information”, “Perforation schedule for shooting interval.”, and “Halliburton Frac Procedure.”

1. MIRU WSU NUBOP.
2. POOH production tubing.
3. MIRU WL.
4. TIH W/ BP and set right below CH formation. Load the casing with clean 2% KCL W/ Biocide. Pressure Test Casing to desired specifications (80% yield press). Note: A packer may be required to isolate the wellhead from pressure. NU Frac Head/Valve assembly.
5. TIH & perforate the CH formation per the selected interval:

| | | | |
|------|----|------|----------|
| 4325 | to | 4355 | 30 perfs |
|------|----|------|----------|
6. Pump the Breakdown schedule per the attached Halliburton procedure.
7. Fracture the CH per the attached Halliburton procedure. Note: The Max treating pressure will be 80% yield press.
8. TIH w/ work string and clean out to BP.
9. TIH with bit and scraper and drill out CIBP and push to PBTD. POOH w/ Drill-out assembly – TIH w/ Production tubing BHA per Production Foreman Specification.
10. NDBOP. NUWH. RDMO WSU.

Energen Resources Corp.
Cheney Federal #2B
Offset Operator/ Ownership Plat
Gavilan Chacra/ Blanco Mesa Verde
Downhole Commingling

Township 26 N, Range 2 W



- 1) Energen Resources
- 2) Elm Ridge Exploration
- 3) Merrion Oil & Gas
- 4) Mcelvain TH Oil & Gas

Notification list of Working, Royalty, and overriding royalty interests

1) Royalty

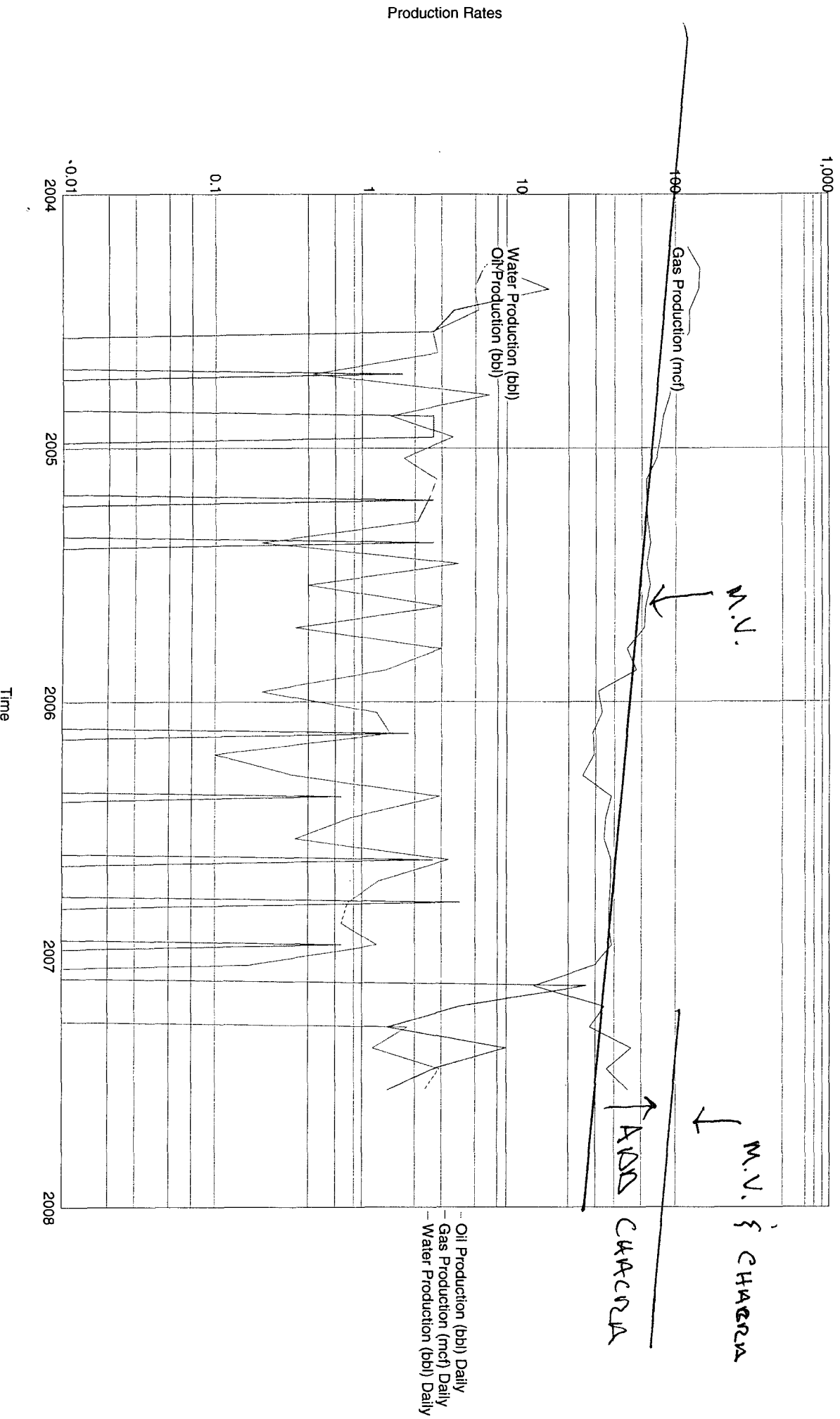
BLM
Paul Slayton
Hanson McBride Petroleum
Randy M Marr

Notification list of Offset Operators

- 1) Elm Ridge Exploration
- 2) McElvain, TH Oil & Gas
- 3) Merrion Oil & Gas Corp.

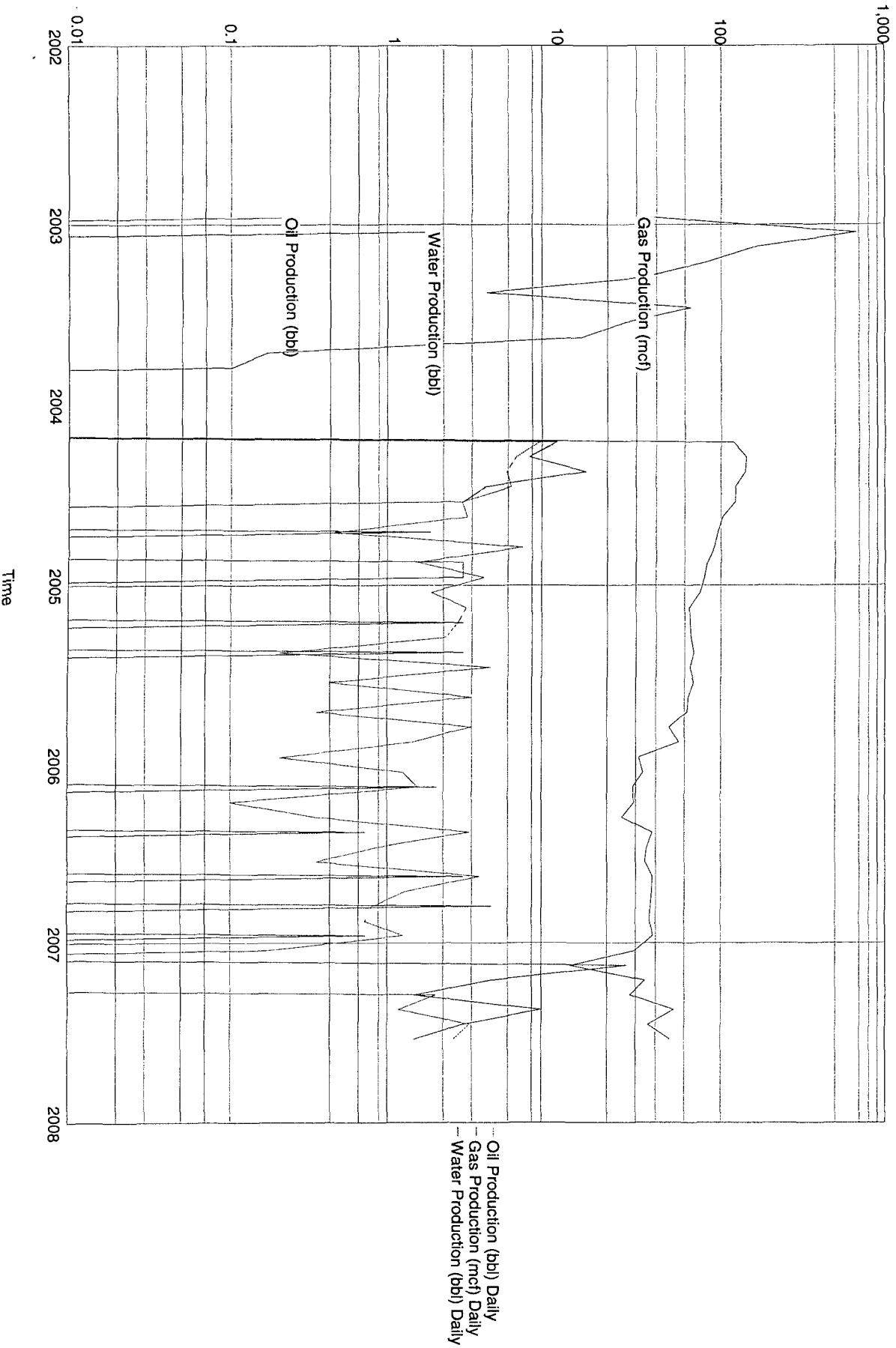
Lease Name: CHENEY FEDERAL
County, State: RIO ARBA, NM
Operator: ENERGEN RESOURCES CORPORATION
Field: BLANCO
Reservoir: MESAVERDE
Location: 17 26N 2W SW NE SW

CHENEY FEDERAL - BLANCO 2B MESAVERDE



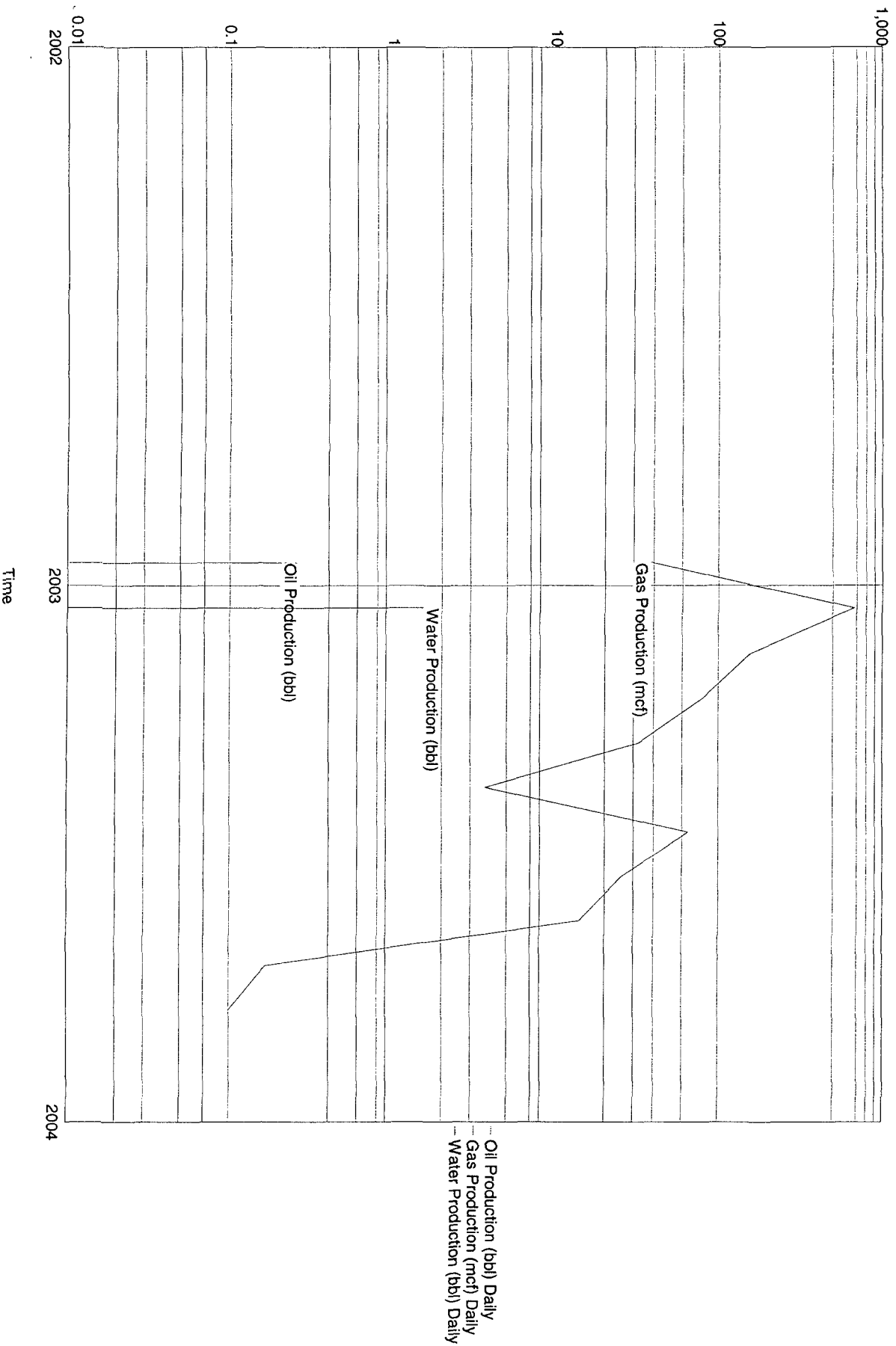
Lease Name: CHENEY FEDERAL
County, State: RIO ARBA, NM
Operator: ENERGEN RESOURCES CORPORATION
Field: MULTIPLE
Reservoir: MULTIPLE
Location:

CHENEY FEDERAL - MULTIPLE MULTIPLE

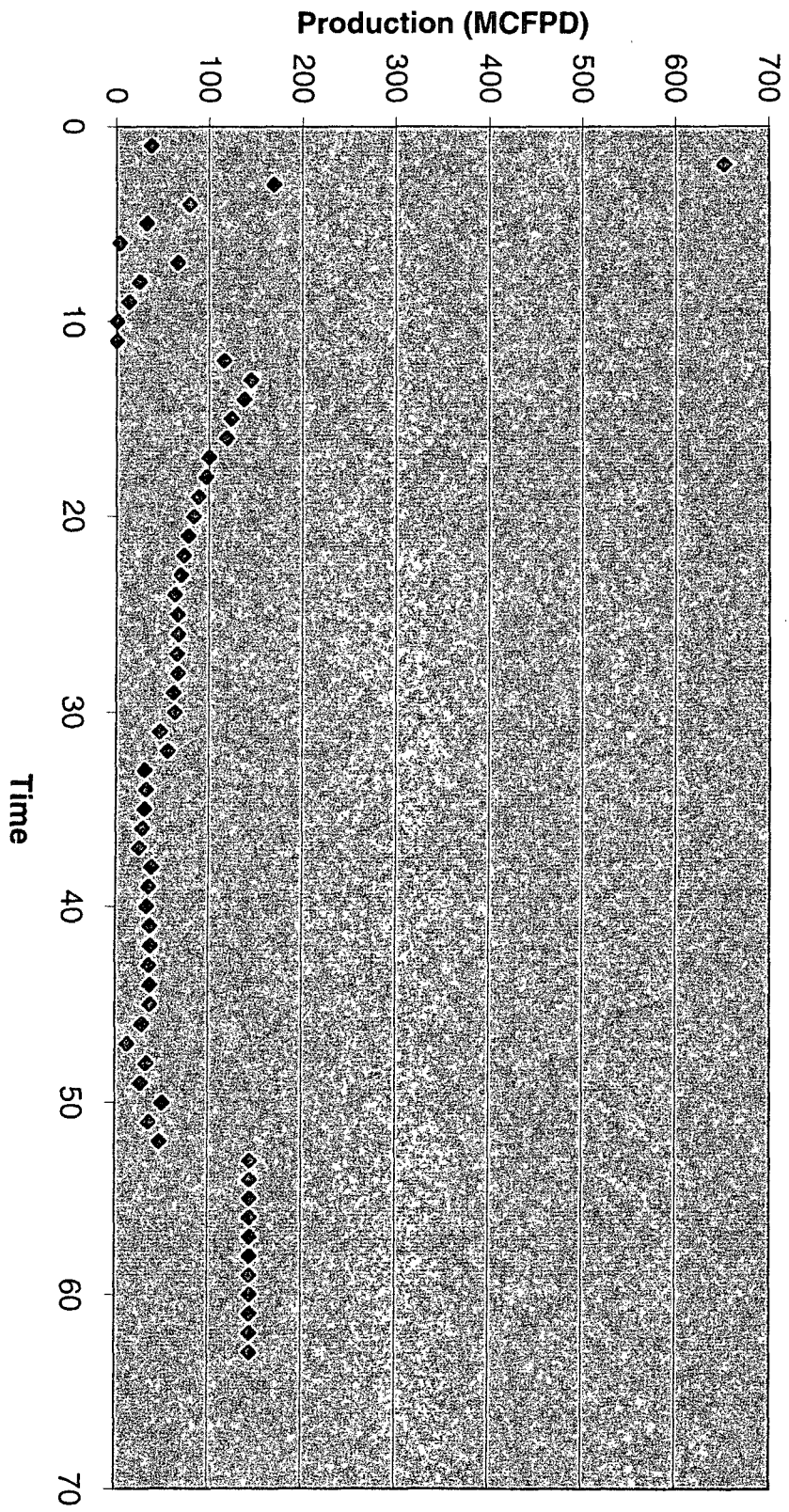


Lease Name: CHENEY FEDERAL
County, State: RIO ARBA, NM
Operator: ENERGEN RESOURCES CORPORATION
Field: GAVILAN
Reservoir: GAVILAN CHACRA
Location: 17 26N 2W SW NE SW

CHENEY FEDERAL - GAVILAN 2B CHACRA



Cheney Federal #2B



◆ Series1