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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

274

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

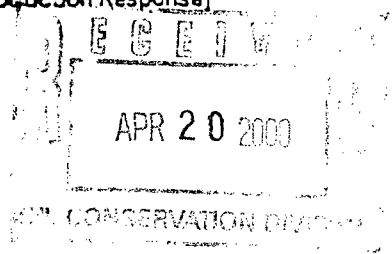
- [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
[DD-Directional Drilling] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [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 - Directional Drilling
☐ NSL ☐ NSP ☐ DD ☐ 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



[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] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, U, ORRJ) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity

GARY BRINK
Print or Type Name

Signature

Production Dept.
Title

4/17/00
Date



April 17, 2000

Ms. Lori Wrotenbery
NMOCD
2040 South Pacheco
Santa Fe, New Mexico 87505

RE: Administrative Approval to Downhole Commingle
Energen Resources Corporation
Johnston Shear #1A
1735' FSL, 1105' FEL, Sec. 3, T26N, R3W, N.M.P.M.
Rio Arriba County, New Mexico
API # 30-039-26262

Dear Ms. Wrotenbery:

Energen Resources Corporation requests Administrative Approval to add the Blanco Mesaverde and downhole commingle it with the WC:26N3W3I Gallup Pool in the subject well.

This well was drilled to the Gallup to test the productivity of the Gallup in this area. Open Hole Log results showed marginal development in the Gallup and production results confirmed the log analysis. The Mesaverde Zone appears productive on the log and has similar characteristics to our direct offset wells. It is felt that completing the Mesaverde in this wellbore would improve the economic life of the well by utilizing the Mesaverde flowstream to lift the Gallup fluids and prevent premature abandonment of the Gallup pool.

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

1. For C107A – Application for Downhole Commingle
2. C102 – Location plat showing each spacing unit and dedicated acreage
3. Production type curves for both the Mesaverde and Gallup-Dakota
4. Offset operator plat
5. Well location plat
6. Proposed allocation method

In accordance with New Mexico Oil Conservation Division Rule 303C, all offset operators are being notified of this application by certified mail. As an offset operator, if you have no objection to this application, you do not have to respond to this notification.

If additional information is needed, please contact me.

Sincerely,

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

Gary W. Brink
Production Superintendent

GWB/mp

cc: NMOCD – Aztec, BLM – Albuquerque, Offset Operators
JOHNSTON SHEAR 1A 4-00.doc

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
DISTRICT II
811 S. First St., Artesia, NM 88210-2835
DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107-A
New 3-12-96

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 875054-6429

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Operator Energen Resources Corporation Address 2198 Bloomfield Highway, Farmington, New Mexico 87401
Lease Johnston Shear Well No. 1A Unit Ltr. - Sec - Twp - Rge I Sec. 3 T26N R3W County Rio Arriba, NM
OGRID NO. 162928 Property Code 22023 API NO. 30-039-26262 Spacing Unit Lease Types: (check 1 or more)
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	Blanco MV 72319		WC:26N3W3I Gallup 96951
2. Top and Bottom of Pay Section (Perforations)	5330-6130		6833-7552
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Not Completed		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current)	a.	a. 1314 Calc.
	b. (Original) 2050 Est.	b.	b. 2388 Mea.
6. Oil Gravity (^o API) or Gas BTU Content)	1219 Est.		1284 BTU
7. Producing or Shut-In?	Not Completed		Producing
Production Marginal? (yes or no)	No		Yes
* If Shut-In, give 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 * If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates:	Date: Rates:	Date: Rates:
	Date: Not Completed Rates:	Date: Rates:	Date: Rates: 3/56/1
8. Fixed Percentage Allocation Formula - % for each zone	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
Have all offset operators been given written notice of the proposed downhole commingling? ☒ 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 all offset operators.
* 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 Gary W. Brink TITLE Prod. Superintendent DATE 4/17/00

TYPE OR PRINT NAME Gary W. Brink TELEPHONE NO. (505) 325-6800

District I
PO Box 1950, Hobbs, NM 88241-1950

State of New Mexico
Energy, Minerals & Natural Resources Department

Form G-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

District II
PO Drawer 00, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number' 30-039-26262	'Pool Code' 72319 - 96951	'Pool Name' Blanco Mesavence - WC26N3W3E; Gallup (G)
'Property Code' 22023	'Property Name' JOHNSTON SHEAR	'Well Number' 1A
'OGRID No.' 162928	'Operator Name' ENERGEN RESOURCES CORPORATION	'Elevation' 7005'

¹⁰ Surface Location

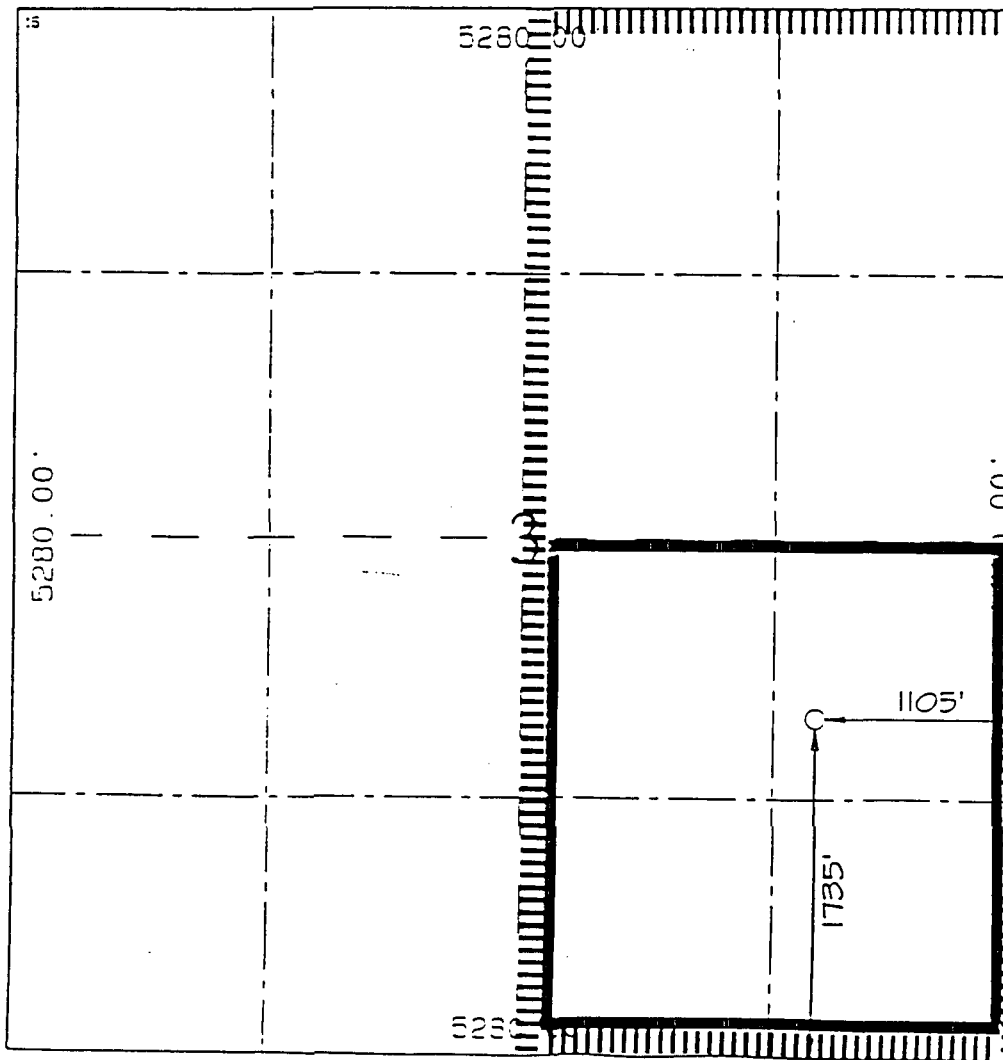
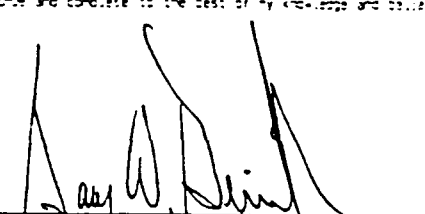
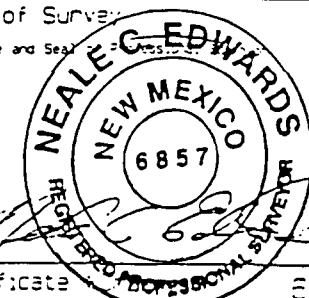
UL or lot no. I	Section 3	Township 26N	Range 3W	Lot 10n	Feet from line 1735	North/South line SOUTH	Feet from line 1105	East/West line EAST	County RIO ARriba
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 10n	Feet from line	North/South line	Feet from line	East/West line	County
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¹² Dedicated Acres 320/160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION.

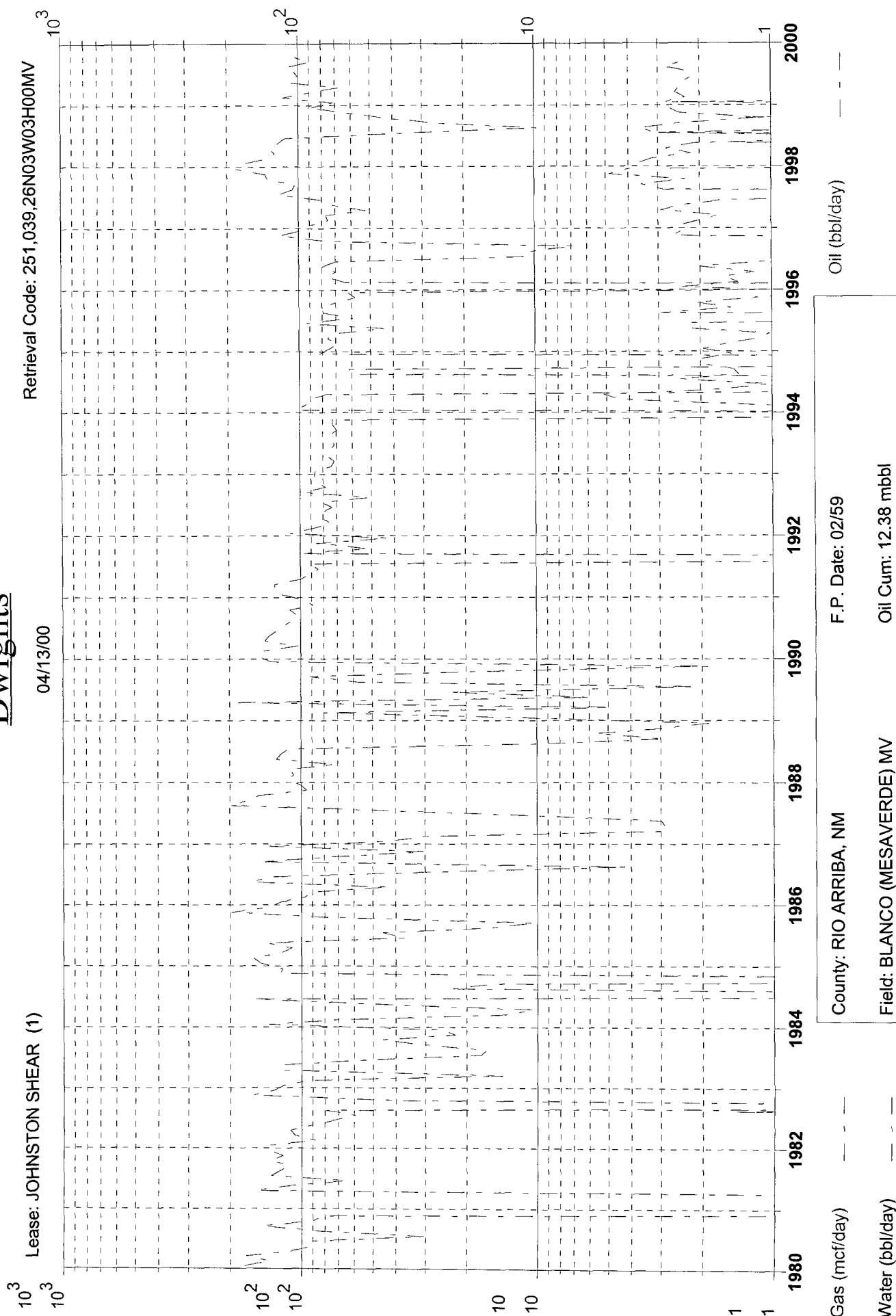
¹⁵ 5280.00'		¹⁶ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Gary Brink Printed Name Production Superintendent Title 10/4/99 Date
		¹⁷ SURVEYOR CERTIFICATION I hereby certify that the well location 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. JULY 14, 1999 Date of Survey Signature and Seal  Certificate 6857

Dwights

Lease: JOHNSTON SHEAR (1)

04/13/00

Retrieval Code: 251,039,26N03W03H00MV



Gas (mcf/day)

Water (bbl/day)

Oil (bbl/day)

County: RIO ARRIBA, NM

F.P. Date: 02/59

Field: BLANCO (MESAVERDE) MV

Oil Cum: 12.38 mbbl

Reservoir: MESAVERDE

Gas Cum: 2050 mmcf

Operator: TAURUS EXPL USA INC

Location: 3H 26N 3W

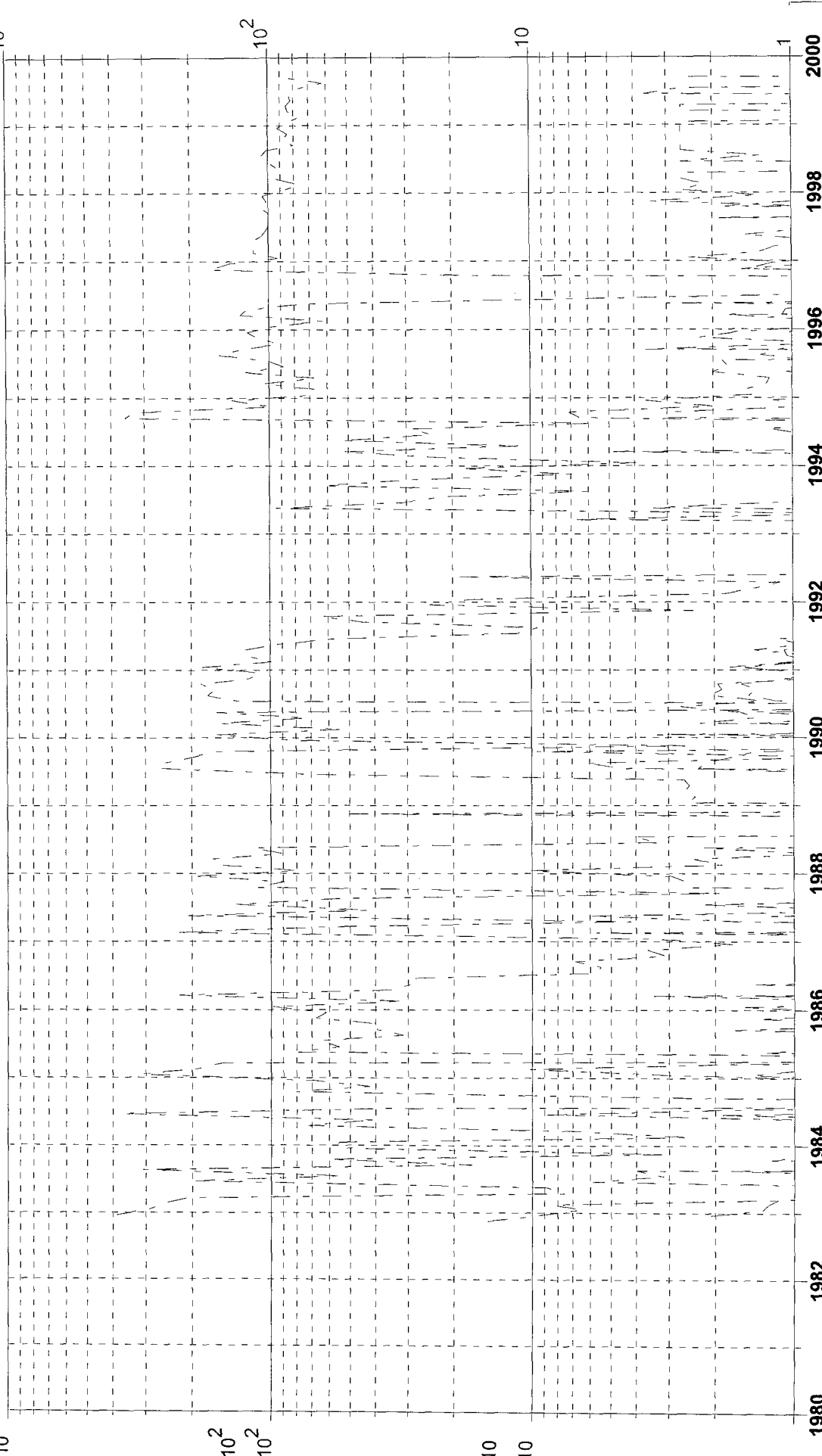
Dwights

Lease: JICARILLA 115 E (14A)

Retrieval Code: 251,039,26N03W10100MV

04/13/00

10³
10³
10²
10²
10
10
1
1



Gas (mcf/day)

Water (bbl/day)

Oil (bbl/day)

County: RIO ARRIBA, NM

F.P. Date: 11/82

Field: BLANCO (MESAVERDE) MV

Oil Cum: 8477 bbl

Reservoir: MESAVERDE

Gas Cum: 486.2 mmcf

Operator: TAURUS EXPL USA INC

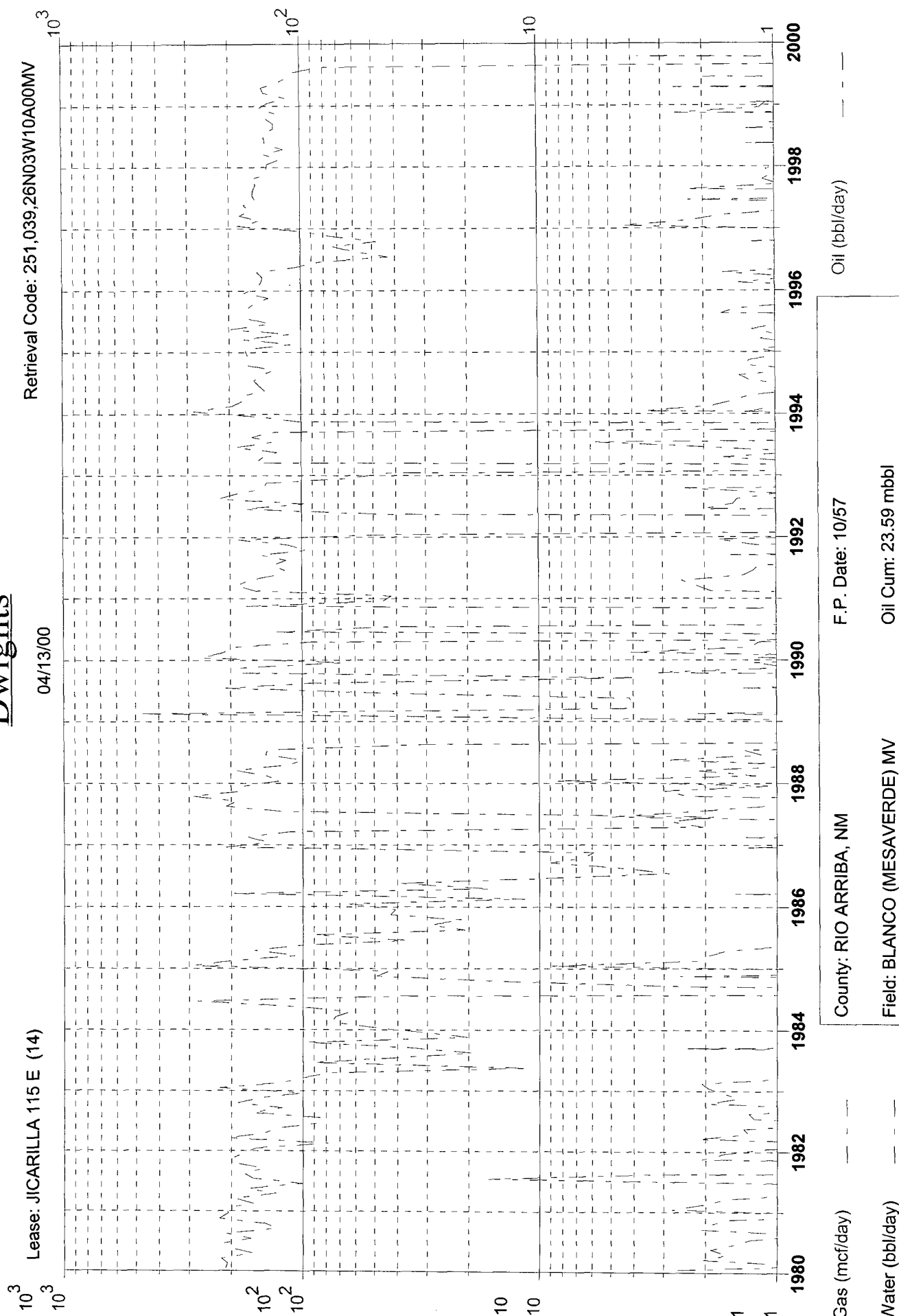
Location: 101 26N 3W

Dwights

Lease: JICARILLA 115 E (14)

04/13/00

Retrieval Code: 251,039,26N03W10A00MV

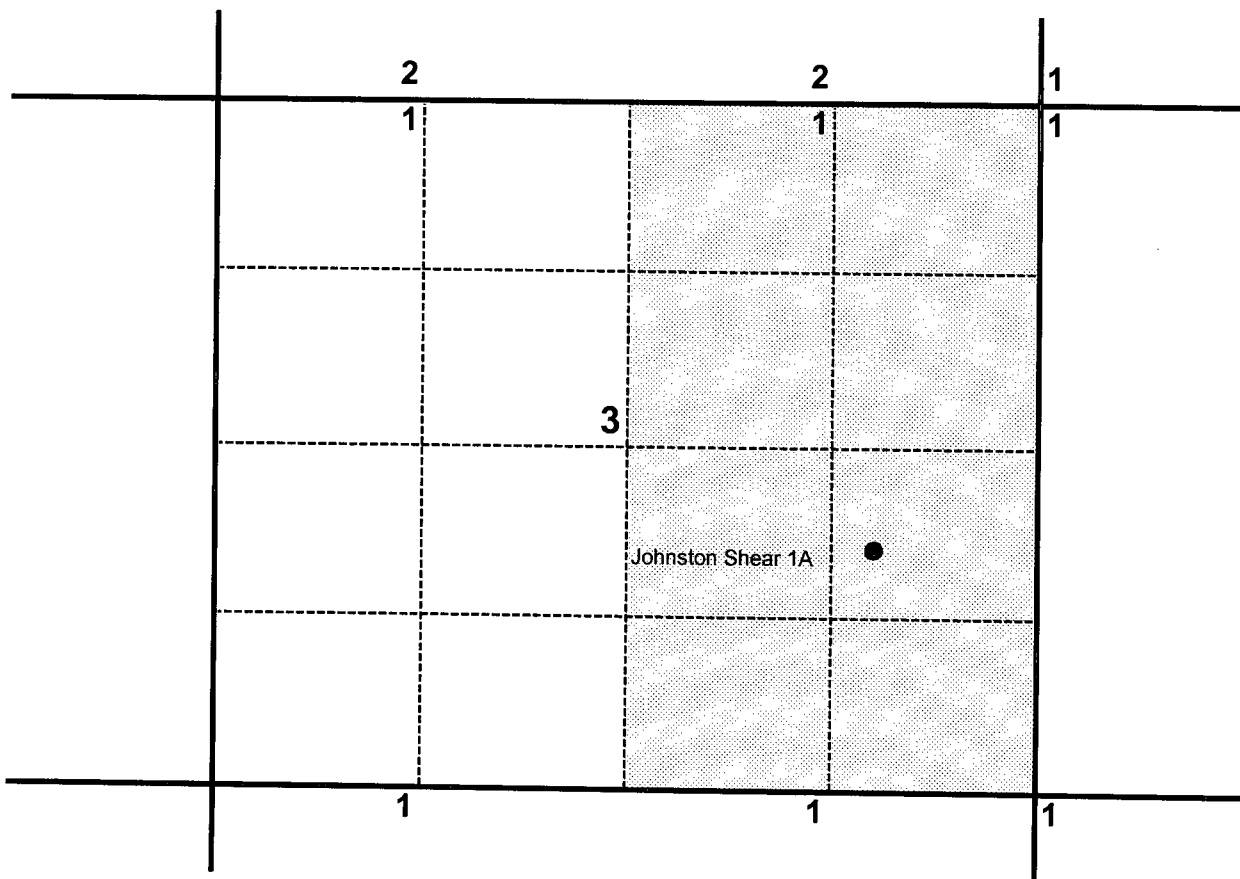


County: RIO ARRIBA, NM	F.P. Date: 10/57
Field: BLANCO (MESAVERDE) MV	Oil Cum: 23.59 mbbl
Reservoir: MESAVERDE	Gas Cum: 2538 mmcf
Operator: TAURUS EXPL USA INC	Location: 10A 26N 3W

Energen Resources Corp.

Johnston Shear 1A
Offset Operator / Ownership Plat
Blanco Mesa Verde/ Wildcat Gallup
Downhole Commingling

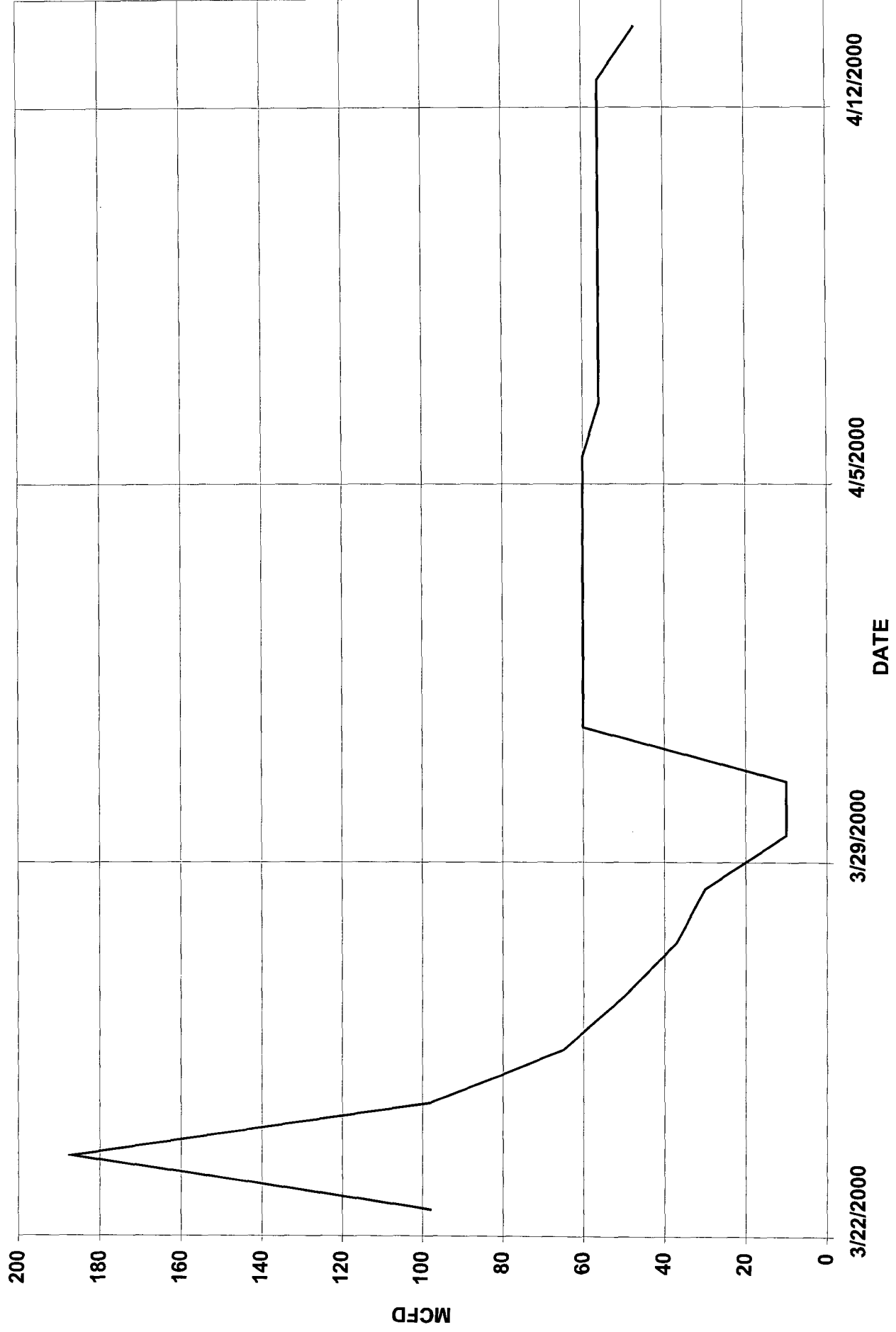
Township 26 N, Range 3 W

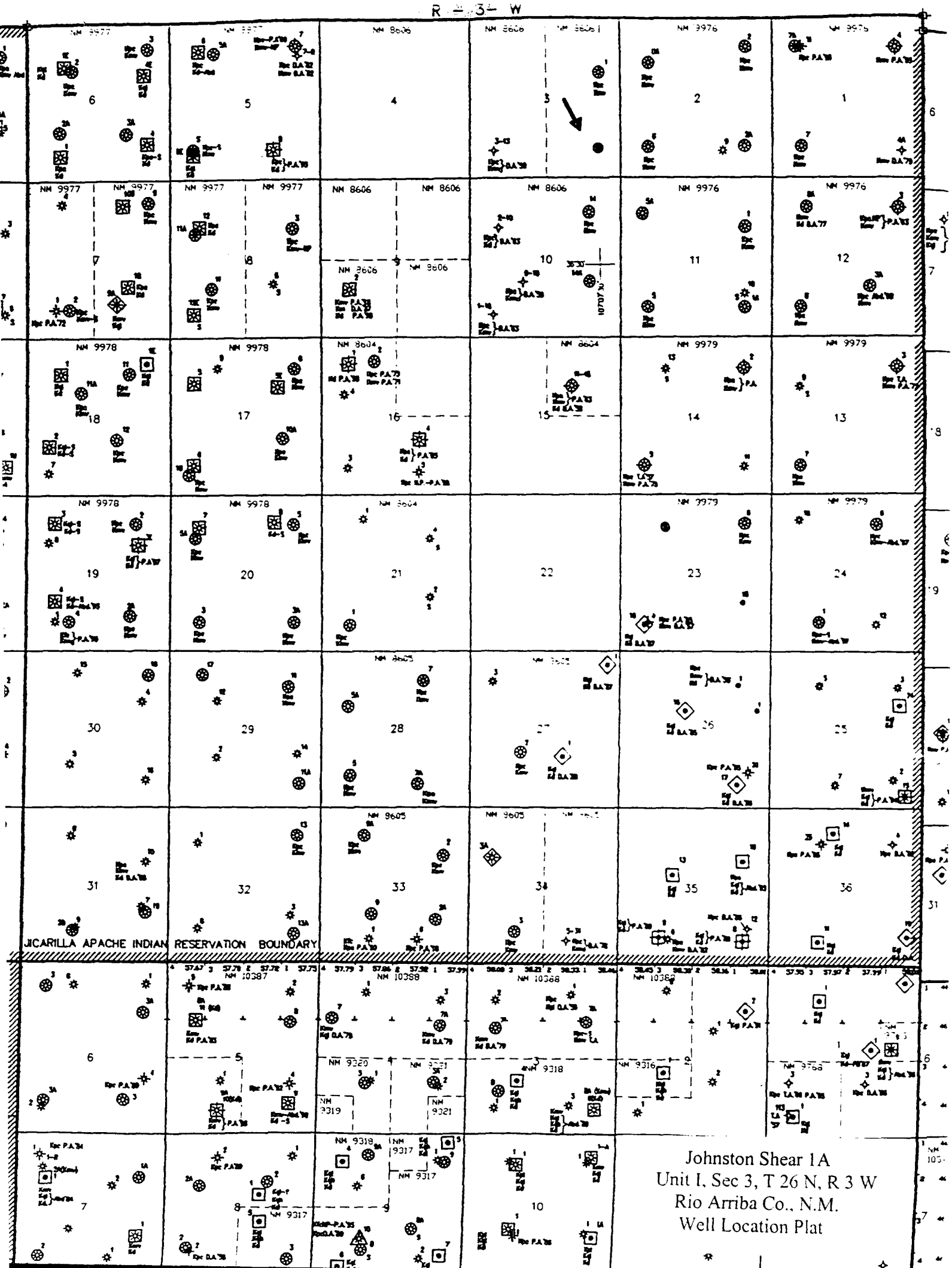


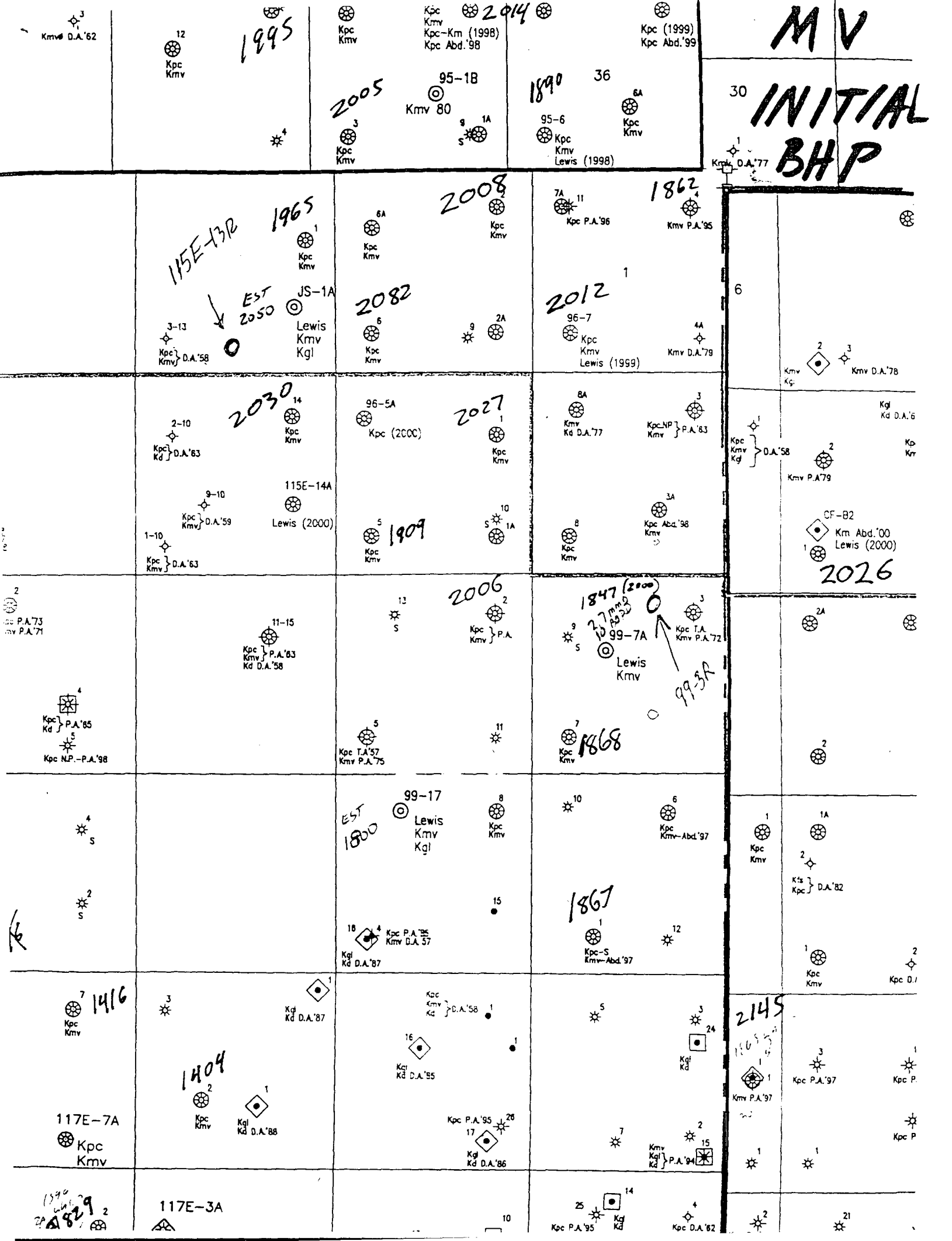
- 1) Energen Resources
- 2) Williams Production Co.
P.O. Box 3102
Tulsa, OK. 74101

JOHNSTON SHEAR 1A

DAILY GAS PRODUCTION PLOT







Johnston Shear 1A

Proposed Allocation Method

Produce total well stream for 30 days following Mesa Verde pay add
Pay add projected to add 250 MCFD from Mesa Verde

Total Stream = X
Gallup/Dakota flow rate = 56 MCFD

GL/DK Allocation = $56 / X$ as a percentage

MV allocation = $(X - 56) / X$ as a percentage

MV Oil Allocation = Total stream - 3 BOPD to Gallup/Dakota as a percentage of total Production

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