

12 June 07	SUSPENSE	WOTJ	14 June 07	DHC 3904	PLP 071627889
		ENGINEER	LOGGED IN	TYPE	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

- [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 Stalworthy
 Print or Type Name

[Signature]
 Signature

DISTRICT ENGINEER
 Title

 Date

jstalwor@ENERGEN.COM
 e-mail Address

District I
1625 N. French Drive, Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
Well
1000 Rio Brazos Road, Artec, 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.

APPLICATION TYPE
 X Single

Santa Fe, New Mexico 87505

 Establish Pre-Approved Pools
EXISTING WELLBORE
 X Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

Energen Resources

2198 Bloomfield Highway, Farmington, New Mexico 87401

Operator
Jicarilla 99

18

Address
F Section 14, T26N, R3W N.M.P.M

Rio Arriaba

Lease
162928

Well No.
21941

Unit Letter-Section-Township-Range
30-039-27412

County

OGRID No. Property Code API No. Lease Type: X Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Gavilan Pictured Cliffs	N/A	Blanco Mesa Verde
Pool Code	77360	N/A	72319
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3695' to 3750'	N/A	5788' to 5906'
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	New Zone	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: 07/2003 Rates: 0 BOPD/40 MCFPD/0.5 BWPD	Date: N/A Rates: N/A	Date: 07/2003 Rates: 0.5 BOPD/110 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 30 % 30 %	Oil N/A Gas N/A % %	Oil Gas 70 % 70 %

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: Case No. 12857 R-11848

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 Justin M. Stolworthy TITLE District Engineer DATE 6-11-07
TYPE OR PRINT NAME Justin M. Stolworthy TELEPHONE NO. (505) 325-6800
E-MAIL ADDRESS jstolwor@energen.com

JUN 13 2007

June 7, 2007

Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

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
Jicarilla 99 #18
1965' FNL, 1980' FWL, Section 14, T26N, R3W, NMPM
Rio Arriba County, New Mexico

Dear Mr. Fesmire:

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

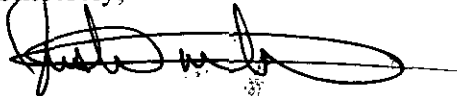
To comply with New Mexico Oil Conservation Rules, Energen Resources Corporation is submitting the following data for your approval of the proposed commingling.

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 completed in both the PC & MV.
5. Allocation method

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

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

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
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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 30-039-27412	² Pool Code 77360/72319	³ Pool Name Gavilan Pictured Cliffs/Blanco Mesa Verde
⁴ Property Code 21941	⁵ Property Name Jicarilla 99	⁶ Well Number 18
⁷ OGRID No. 162982	⁸ Operator Name Energen Resources Corporation	⁹ Elevation 7182' GL

¹⁰ Surface Location

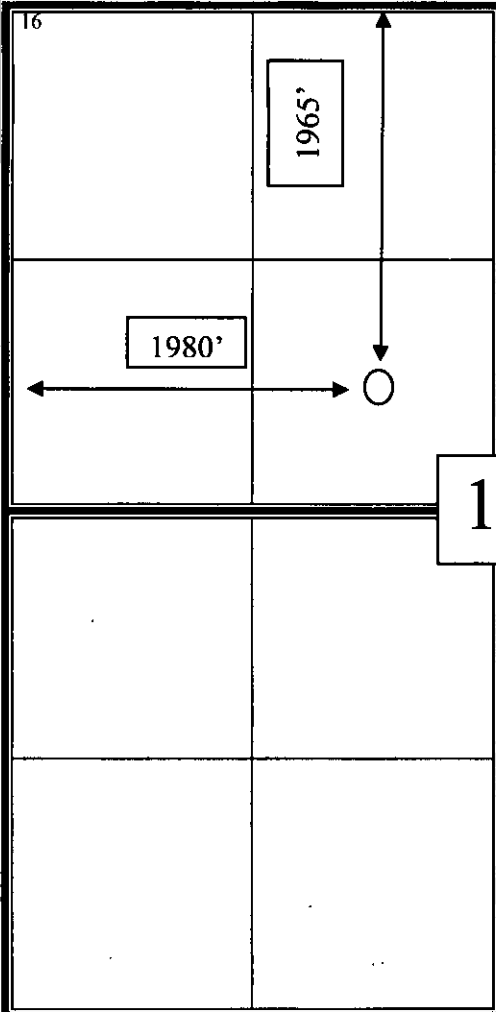

UL or lot no. F	Section 14	Township 26N	Range 3W	Lot Idn	Feet from the 1965	North/South line North	Feet from the 1980	East/West line West	County Rio Arriba
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¹¹ Bottom Hole Location If Different From Surface

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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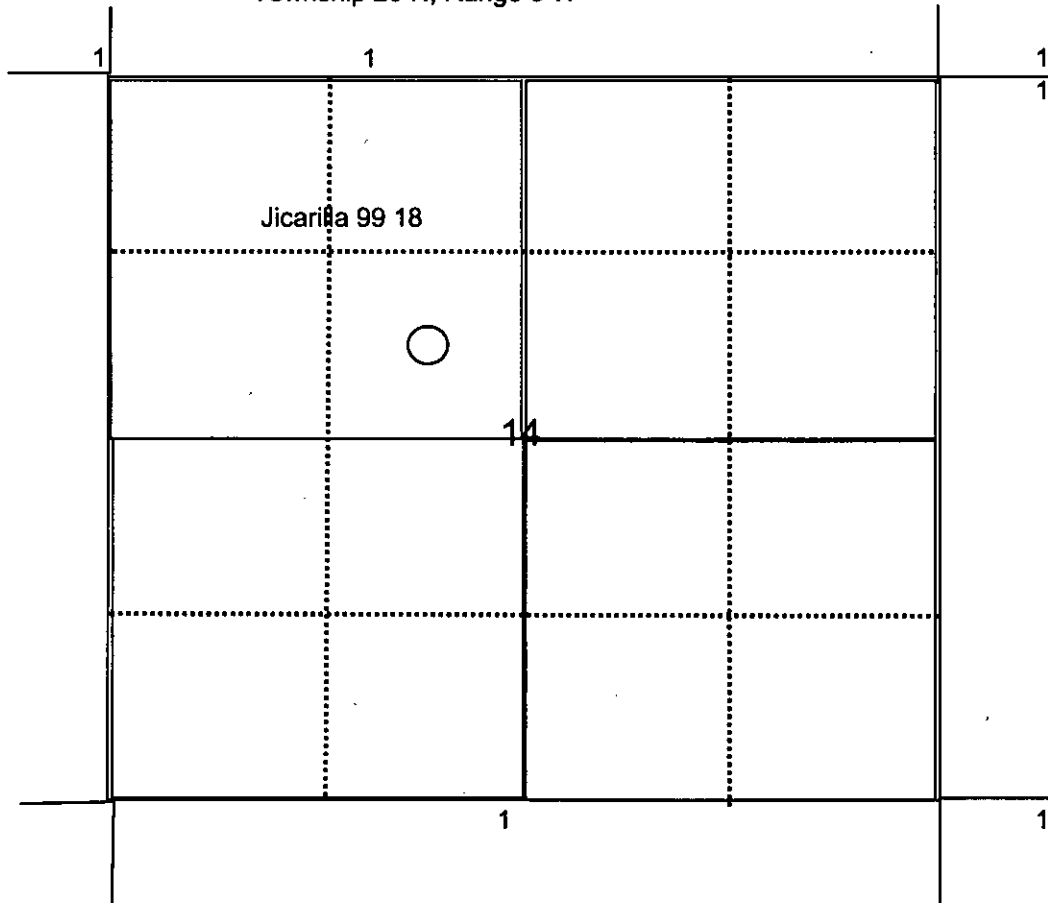
¹² Dedicated Acres 160/320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<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>Justin M. Stolworthy Printed Name</p> <p>District Engineer jstolwor@energen.com Title and E-mail Address</p> <p>6-11-07 Date</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>On File</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor: Jason C. Edwards</p> <p>NM 15269 Certificate Number</p>

Energen Resources Corp.
Jicarilla 99 #18
Offset Operator/ Ownership Plat
Gavilan Pictured Cliffs/ Blanco Mesa Verde
Downhole Commingling

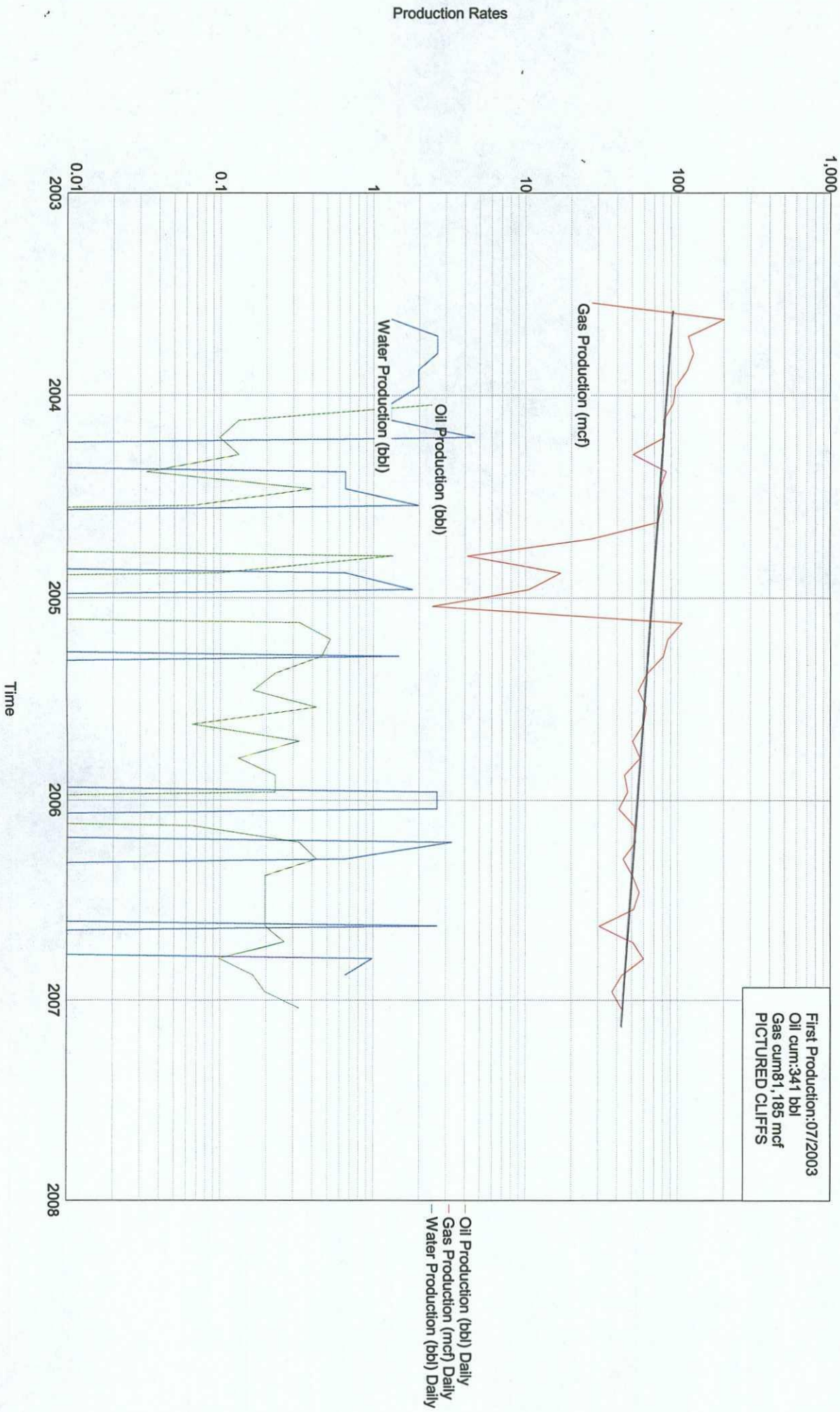
Township 26 N, Range 3 W



1) Energen Resources operates all offset wells

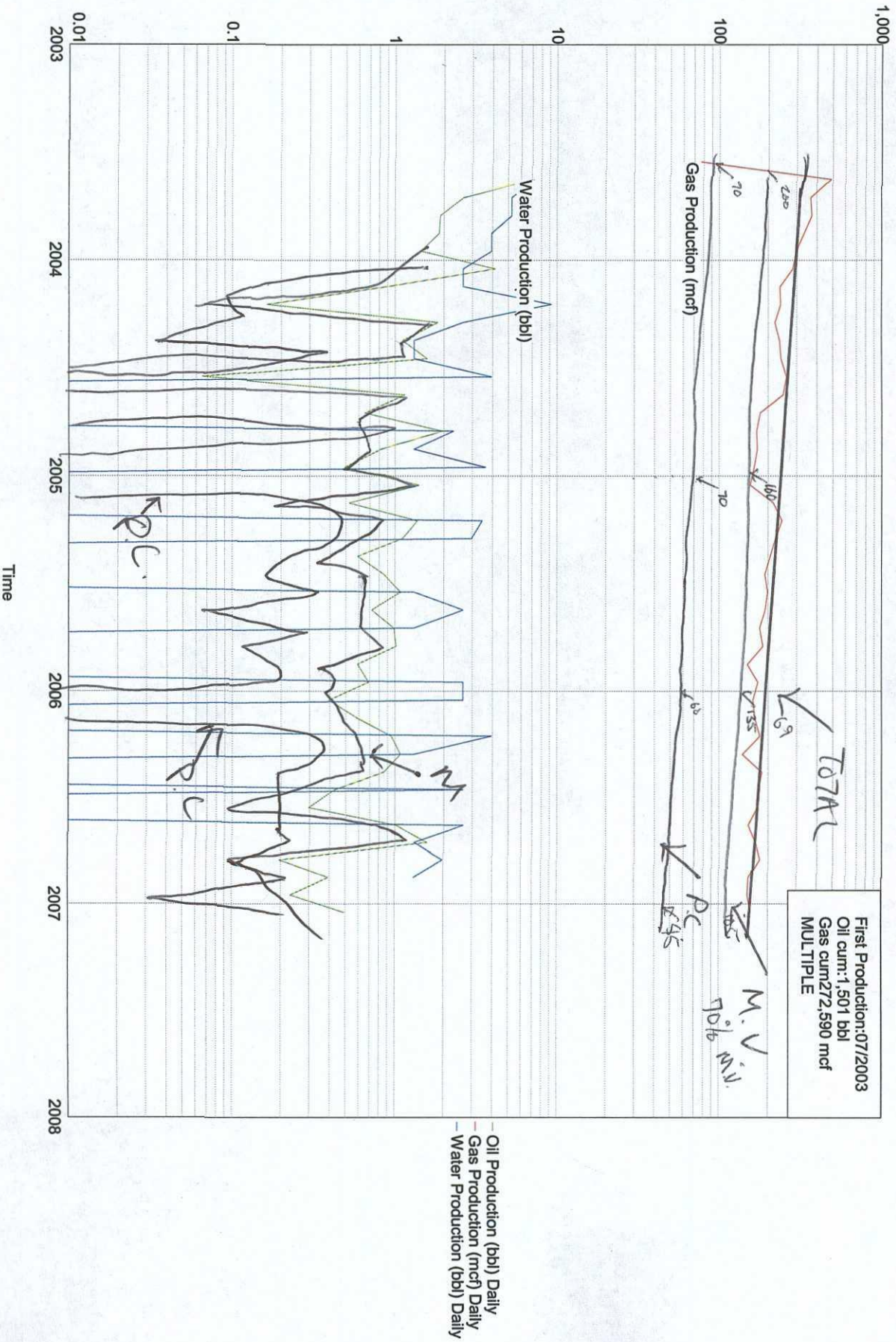
Lease Name: JICARILLA 99
County, State: RIO ARBA, NM
Operator: ENERGEN RESOURCES CORPORATION
Field: GAVILAN
Reservoir: PICTURED CLIFFS
Location: 14 26N 3W N2 SE NW

JICARILLA 99 - GAVILAN 18 PICTURED CLIFFS



Lease Name: JICARILLA 99
 County, State: RIO ARBA, NM
 Operator: ENERGEN RESOURCES CORPORATION
 Field: MULTIPLE
 Reservoir: MULTIPLE
 Location:

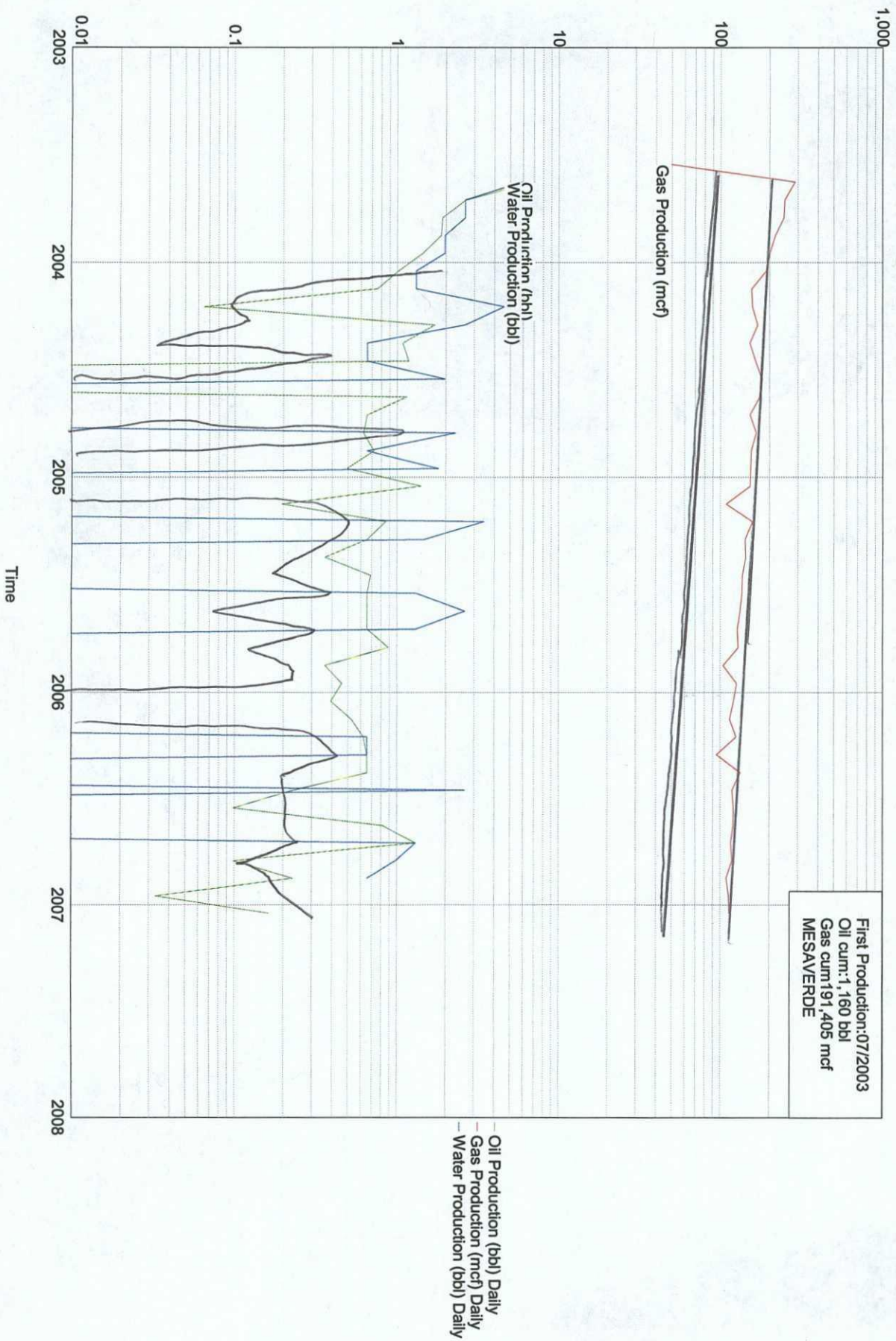
JICARILLA 99 - MULTIPLE MULTIPLE



Lease Name: JICARILLA 99
County, State: RIO ARBA, NM
Operator: ENERGEN RESOURCES CORPORATION
Field: BLANCO
Reservoir: MESAVERDE
Location: 14 26N 3W N2 SE NW

JICARILLA 99 - BLANCO 18 MESAVERDE

Production Rates



June 7, 2007

Procedure outline for Jicarilla 99 #18

- A. Check location prior to rig-up for anchors and note any hazards which may impede rig-up.
- B. See Pertinent Data Sheet for wellbore information.
- 1. MIRU WSU. Blow the well down. Line up kill pump. Kill the well w/ 2% KCL as needed.

Note: BOP will have to be NU on an offset spool since this well is a dual completion – Pipe Rams will need to be for 2 3/8"X 1 1/2". Also an X-over will be needed for the TIW valve for 2 3/8" and 1 1/2" IJ.

- 2. MIRU SL unit and set a plug in the 2 3/8" Tubing sting 500' from surface and NDWH. NUBOP if pressure warrants. (**Note:** IJ will require slip grip elevators)
- 3. POOH with 1 1/2" IJ and lay it down.
- 4. MIRU SL and pull the plug out of the 2 3/8" tubing, if needed. POOH with 2 3/8" tubing and Baker type "R" packer @ 4512'.

Note: Fill may have to be cleaned out of the well with air – cleanout to PBTD of 6241'.

- 5. TIH with 2 3/8" tubing w/ a notched collar SN and land EOT at 5923'.
- 6. NDBOP. NUWH. RDMO WSU.
- 7. Turn well over to production.