

DATE IN 7.12.04	SUSPENSE	ENGINEER Jones	LOGGED IN 7.14.04	TYPE DHC	APP NO. 3312
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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.

Print or Type Name

Signature

Title

Date

e-mail Address

RECEIVED

JUL 1 2 2004

OIL CONSERVATION
DIVISION

**MERRION**

OIL & GAS

July 8, 2004

Mr. William Jones
New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

**RE: Application for Administrative Approval
Downhole Commingling
Wildcat Fruitland Sand, Basin Fruitland and Gavilan Pictured Cliffs Pools
Chunky Monkey No. 1
Section 2, T24N, R2W
Rio Arriba County, New Mexico**

Dear Mr. Jones:

Merrion Oil & Gas (Merrion) requests administrative approval for downhole commingling of the Wildcat Fruitland Sand, Basin Fruitland and the Gavilan Pictured Cliffs in the subject wellbore. The following information is provided in support of this application.

I. History and Justification

The Chunky Monkey No. 1 APD was submitted for approval to the Rio Puerco BLM office in late May, and should be approved some time in the next month or so. Drilling will begin as soon as a rig is available.

There is Pictured Cliffs production in the area. A well was completed in the Fruitland Coal, however it is not commercially productive. The Fruitland Sand has not been tested (to our knowledge). We propose to commingle production from these three zones because we believe that no one zone would be economically productive. All three zones together could justify the drilling and operating cost of the well.

II. Proposed Spacing Units

Exhibit 1 is the C-102 plat for the Wildcat Fruitland Sand Pool with a 160 acre spacing unit in the southeast quarter of Section 2. Exhibit 2 is the C-102 plat for the Basin Fruitland Pool with a 320 acre spacing unit in the east half of Section 2. Exhibit 3 is the C-102 plat for the Gavilan Pictured Cliffs Pool with a 160 acre spacing unit in the southeast corner of section 2.

III. Allocation Methodology

Exhibit 4 is a map showing offset Pictured Cliffs wells and the Fruitland Coal well. Exhibits 5 through 8 show the production from three of the Pictured Cliffs offsets and one Fruitland Coal offset to the subject well. We project that the Pictured Cliffs will produce

about 50 MCFD. The Fruitland Sand is a wildcat pool in this area and we do not have production data to predict its performance. Open hole log information indicates that the interval may be productive, so we propose to test it. Our conservative estimate is about 20 MCFD, but we can not accurately predict the Fruitland Sand production.

The Fruitland Coal offset produced a maximum rate of 13 MCFD. It was plugged back from a Dakota producer drilled in 1986. We believe that the coal was damaged by mud drilling, and possibly lost circulation in the Fruitland interval. We plan to air drill through the Fruitland Coal to avoid formation damage. We estimate that the Fruitland Coal will produce about 50 MCFD. We have no production data to support this, however, we believe that commingling these three formations provides the best chance of success for each interval.

Merrion proposes to obtain stabilized production tests on each zone separately and use a fixed percentage to allocate future production between the three zones. If subsequent data indicate the need, additional testing may be done in the future to adjust the allocation percentages.

IV. Reservoir Fluid Compatibility

Water analyses are not available for wells in the immediate area. However, the waters of the Fruitland Sand, Coal and Pictured Cliffs have been generally determined to be compatible across the basin based on other similar applications to the NMOCD.

V. Cross Flow Between Zones

The reservoir pressure of all three zones is estimated to be about 850 psig. Therefore, crossflow is not anticipated to be a problem.

VI. Well Ownership Notification


The ownership of the three zones is identical, so no notification is necessary.

VII. Summary

Projected reserves for any one zone are not sufficient to justify drilling the well. Commingling the zones will maximize reserves and protect correlative rights. Therefore, we request your approval of this application.

If you have questions or need additional information, please call me at 505.324.5326.

Sincerely,



Connie S. Dinning
Production Engineer

Cc: Steve Hayden, Aztec NMOCD
BLM, Farmington Field Office

File: s/operate/drilling/lindrith/Cookie Dough Commingling Just.doc

District II

District III

District IV

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

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

Yes X No

APPLICATION FOR DOWNHOLE COMMINGLING

Chunky Monkey	1	O-2-24N-2W	Rio Arriba
Lease	Well No.	Unit Letter-Section-Township-Range	County

OGRID No. 014634 Property Code API No. Lease Type: X Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Wildcat 24N2W23 Fruitland Sand	Basin Fruitland (Pre-approved w/ Gavilan PC)	Gavilan Pictured Cliffs (Pre-Approved w/ Basin FC)
Pool Code		71629	77360
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3260' – 3290'	3290' – 3340'	3340' – 3360'
Method of Production (Flowing or Artificial Lift)	Artificial Lift	Artificial Lift	Artificial Lift
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)	855 psi Estimated from 0.26 gradient	868 psi Estimated from 0.26 gradient	874 psi Estimated from 0.26 gradient
Oil Gravity or Gas BTU (Degree API or Gas BTU)	±1100 BTU/SCF	±1000 BTU/SCF	±1100 BTU/SCF
Producing, Shut-In or New Zone	New Zone	New Zone	New Zone
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: Estimated from Offsets Rates: 20 MCFD	Date: Estimated from Offsets Rates: 50 MCFD	Date: Estimated from Offsets Rates: 50 MCFD
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 % 17 20%	Oil Gas 0 % 6 42%	Oil Gas 100 % 0 41%

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?

Yes X No _____
Yes X 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 TITLE Production Engineer DATE 7/7/04

TYPE OR PRINT NAME Connie Dinning TELEPHONE NO. (505) 324-5326

E-MAIL ADDRESS cdinning@merriion.bz

State of New Mexico
Energy, Minerals & Mining Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C - 102

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number	Pool Code	Pool Name WC24N2W2; Fruitland Sand
Property Code	Property Name CHUNKY MONKEY	Well Number 1
OGRD No. 014634	Operator Name MERRION OIL & GAS	Elevation 7254'

Surface Location

UL or Lot	Sec.	Twp.	Rge.	Lot Lch.	Feet from >	North/South	Feet from >	East/West	County
0	2	24 N.	2 W.	NWNE	875'	SOUTH	1855'	EAST	RIO ARriba

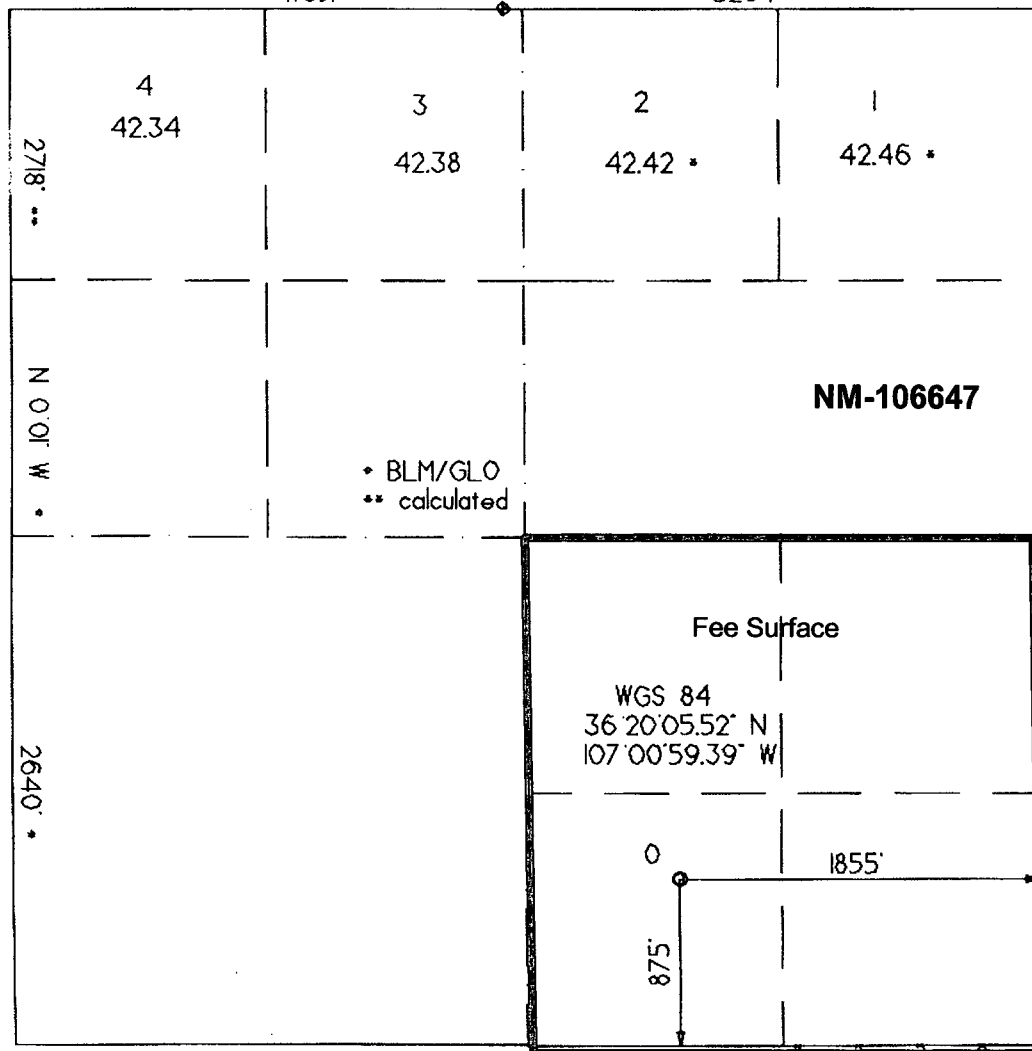
Bottom Hole Location If Different From Surface

UL or Lot	Sec.	Twp.	Rge.	Lot Lch.	Feet from >	North/South	Feet from >	East/West	County

Dedication 160 Ac	Joint ?	Consolidation	Order No.
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NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

West * 5284' **



N 02° E 2725'

2725'

N 03° E 2638'

2638'

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Printed Name

Connie Dinning

Title

Production Engineer

Date

June 25, 2004

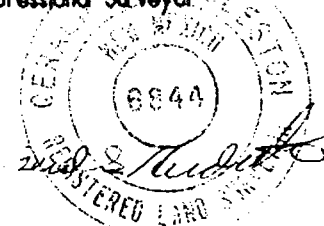
SURVEYOR CERTIFICATION

I hereby certify that the well location 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.

Date of Survey

6/18/04

Signature and Seal of Professional Surveyor



N 89° 57' W *

5284' *

State of New Mexico
Energy, Minerals & Mining Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number	Pool Code 71629	Pool Name Basin Fruitland
Property Code	Property Name CHUNKY MONKEY	Well Number 1
OGRD No. 014634	Operator Name MERRION OIL & GAS	Elevation 7254'

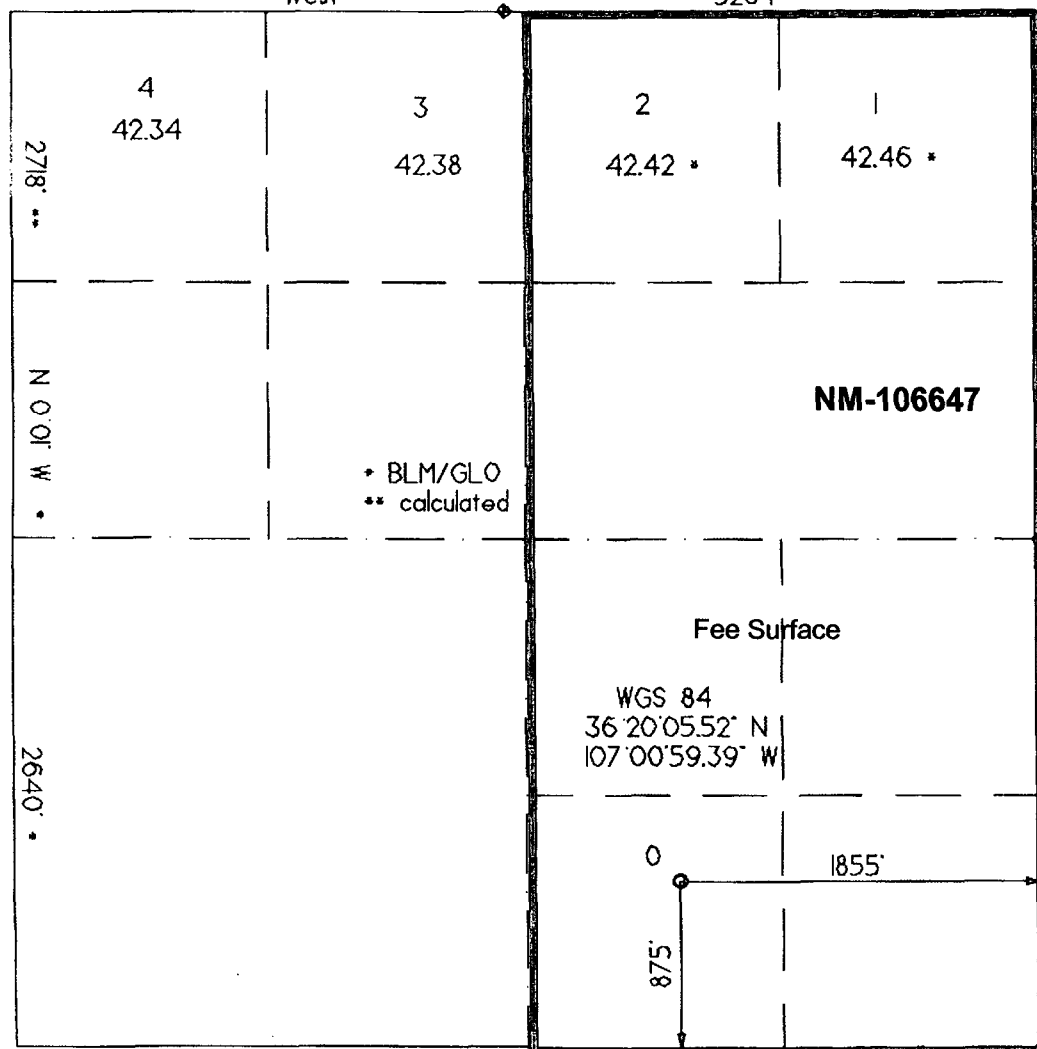
Surface Location									
UL or Lot	Sec.	Twp.	Rge.	Lot Ltr.	Feet from >	North/South	Feet from >	East/West	County
0	2	24 N.	2 W.	NWNE	875'	SOUTH	1855'	EAST	RIO ARRIBA

Bottom Hole Location If Different From Surface									
UL or Lot	Sec.	Twp.	Rge.	Lot Ltr.	Feet from >	North/South	Feet from >	East/West	County

Dedication 320 Ac	Joint ?	Consolidation	Order No.
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NO ALLOWABLE WELL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

West * 5284' **



OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Printed Name

Connie Dinning

Title

Production Engineer

Date

June 25, 2004

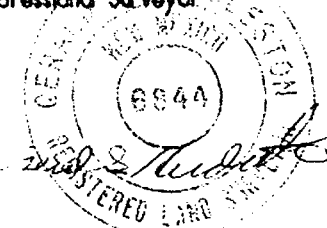
SURVEYOR CERTIFICATION

I hereby certify that the well location 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.

Date of Survey

6/18/04

Signature and Seal of Professional Surveyor



State of New Mexico
Energy, Minerals & Mining Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number	Pool Code 77360	Pool Name Gavilan Pictured Cliffs
Property Code	Property Name CHUNKY MONKEY	Well Number 1
OGRD No. 014634	Operator Name MERRION OIL & GAS	Elevation 7254'

Surface Location

U. or Lot	Sec.	Twp.	Rge.	Lot Ltr.	Feet from	North/South	Feet from	East/West	County
0	2	24 N.	2 W.	NWNE	875'	SOUTH	1855'	EAST	RIO ARriba

Bottom Hole Location If Different From Surface

UL or Lot	Sec	Twp	Rge	Lot Idh	Feet From	North/South	Feet From	East/West	County
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Dedication 160 Ac	Joint ?	Consolidation	Order No.
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NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

West * 5284**

4
42.34

3
42.38

2
42.42 *

1
42.46 *

27° 18' **

N 0° 00' W *

NM-106647

* BLM/GLO
** calculated

Fee Surface

WGS 84
36° 20' 05.52" N
107° 00' 59.39" W

0

1855'

875'

2640' *


N 89° 57' W *

5284' *

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature _____



Printed Name

Connie Dinning

The

Production Engineer

Date _____

June 25, 2004

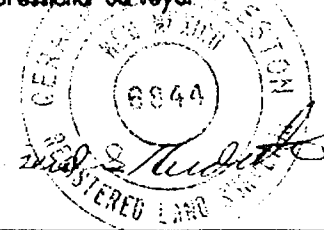
SURVEYOR CERTIFICATION

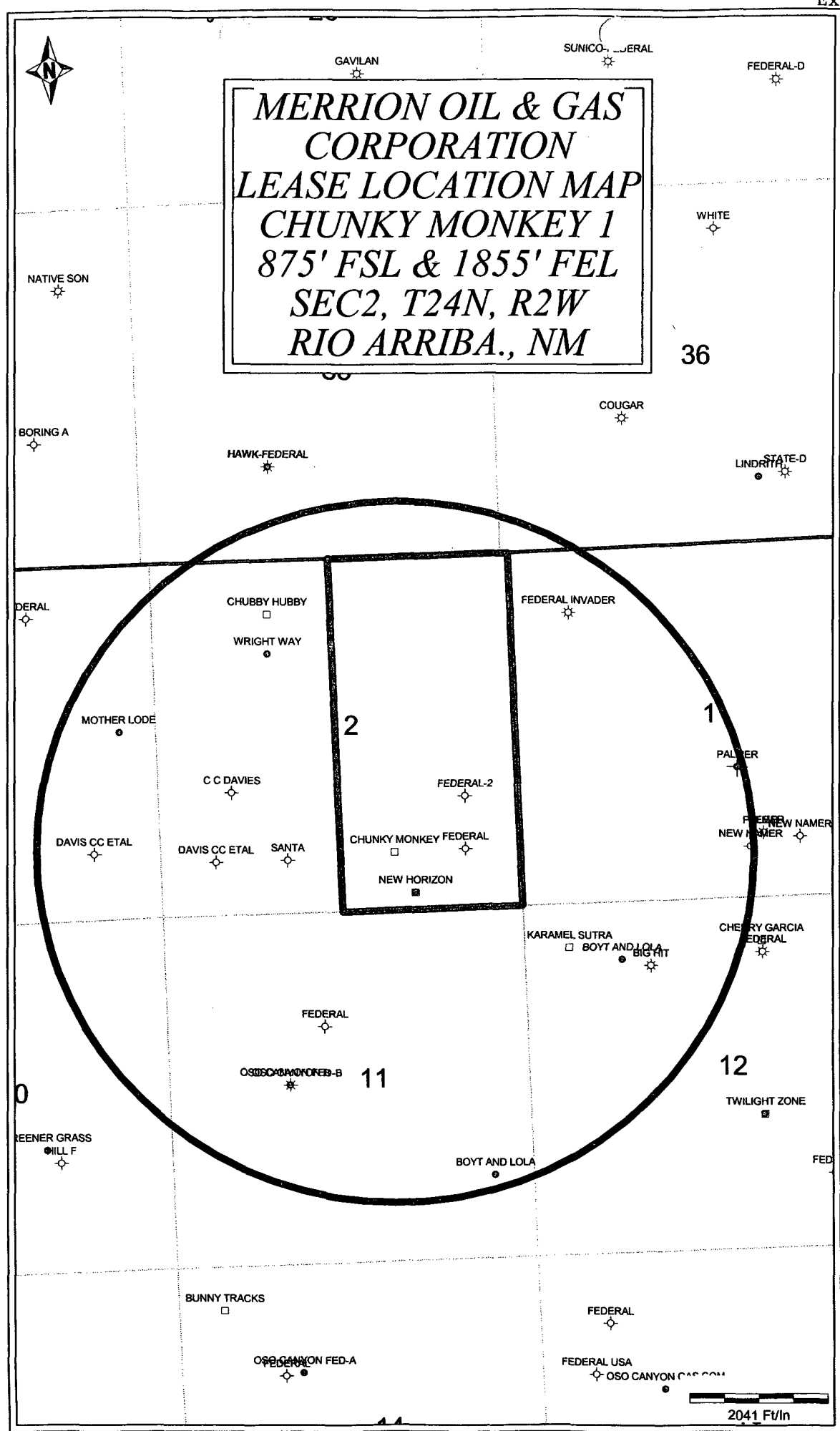
I hereby certify that the well location on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey

6/18/'04

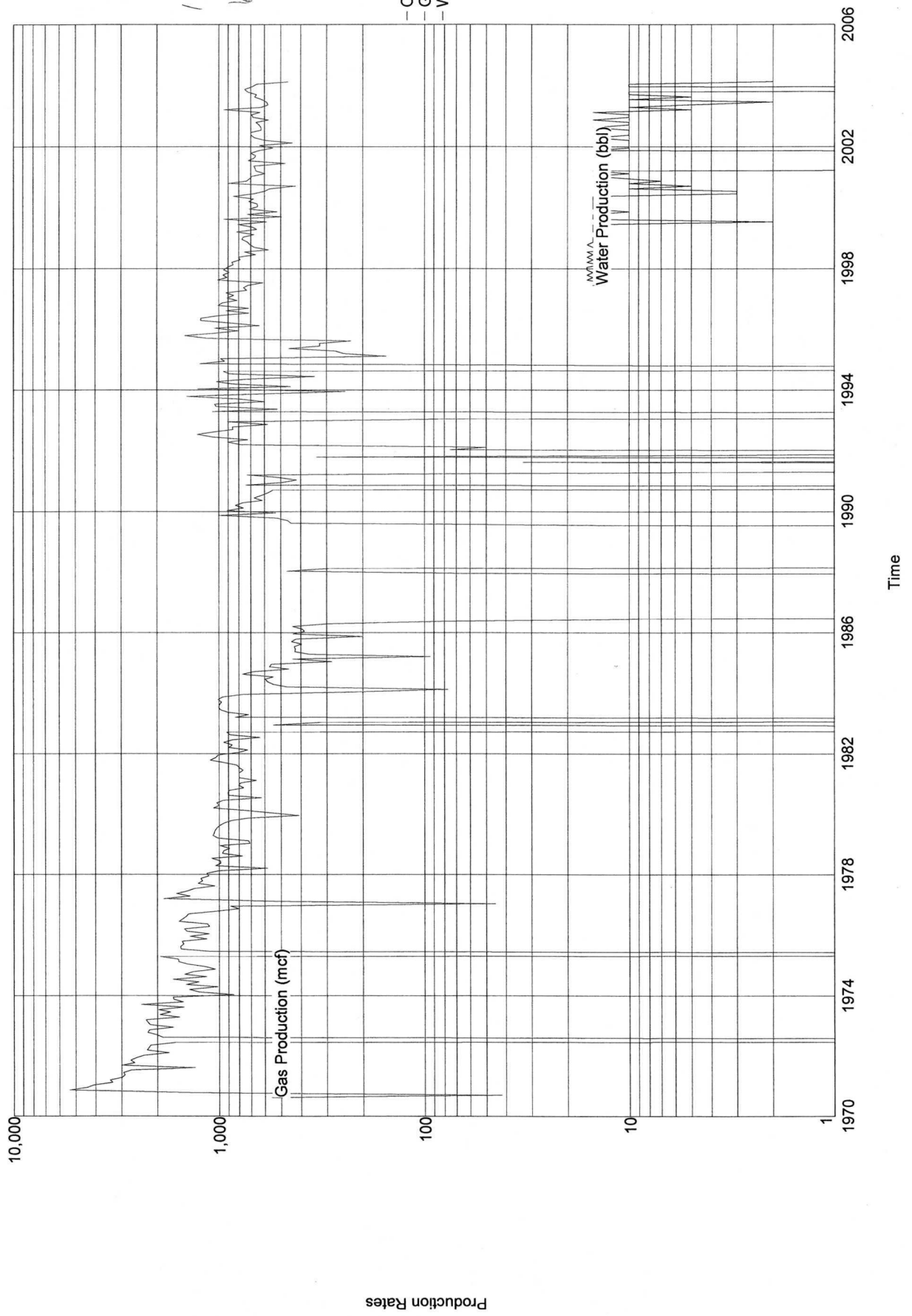
Signature and Seal of
Professional Surveyor





Lease Name: KILGORE |
 County, State: RIO ARBA, NM
 Operator: DUGAN PRODUCTION CORPORATION
 Field: GAVILAN
 Reservoir: PICTURED CLIFFS
 Location: 36 25N 2W SE SE

KILGORE - GAVILAN

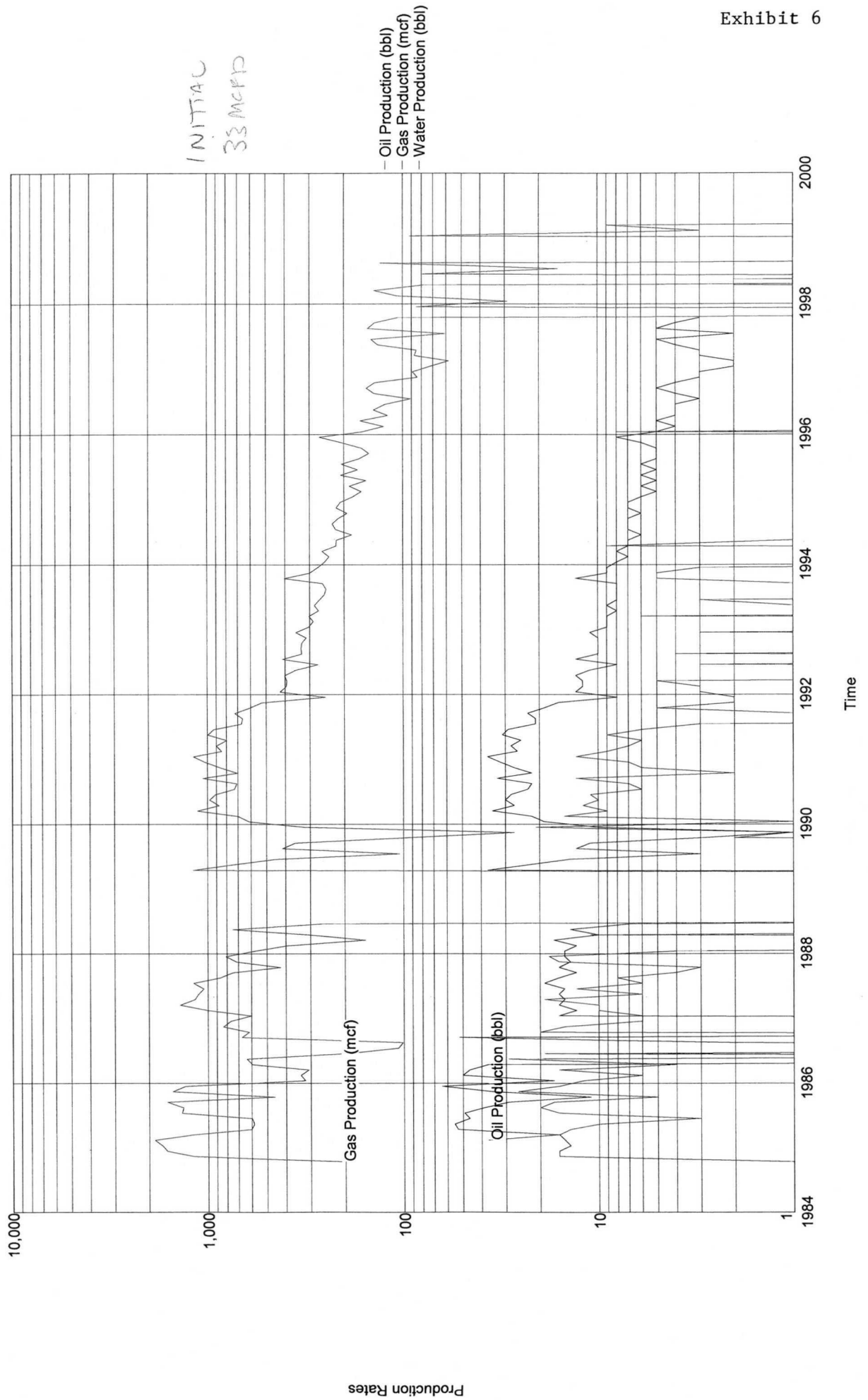


INITIAL
 67 HCFD

Oil Production (bbl)
 Gas Production (mcf)
 Water Production (bbl)

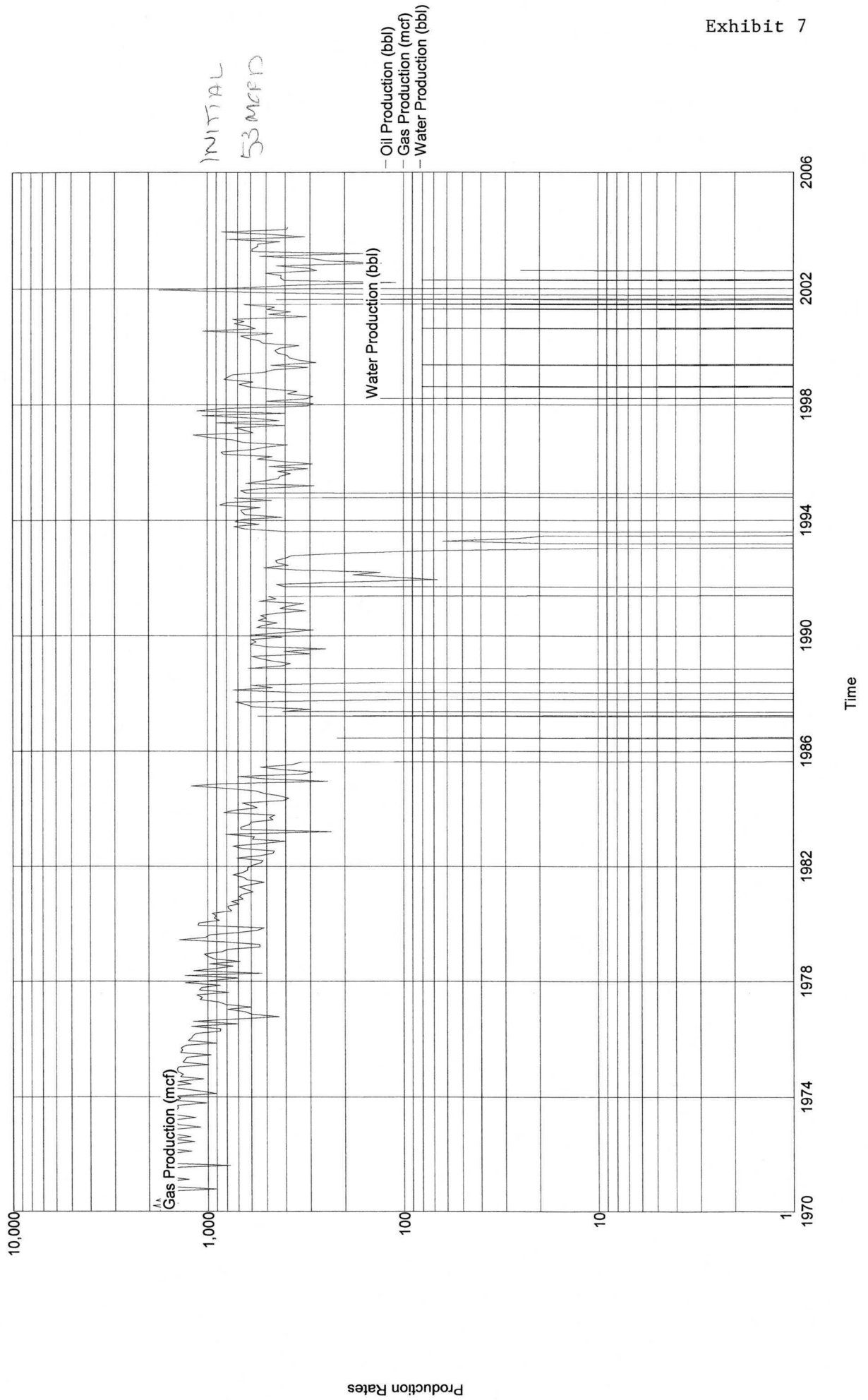
Lease Name: HAWK FEDERAL)
County, State: RIO ARBA, NM
Operator: ENERGEN RESOURCES CORPORATION
Field: GAVILAN
Reservoir: PICTURED CLIFFS
Location: 35 25N 2W SW NE NE

HAWK FEDERAL - GAVILAN



Lease Name: FEDERAL 14
County, State: RIO ARBA, NM
Operator: N M & O OPERATING COMPANY
Field: GAVILAN
Reservoir: PICTURED CLIFFS
Location: 36 25N 2W SW NW

FEDERAL - GAVILAN



CHUSSY HUSKY /
CHUNKY MONKEY I.

- ① OLD DAKOTA 1986
- ② COAL TEST 1998
- ③ RECOMP TO MV 2002

Lease Name: FEDERAL INVADER I
County, State: RIO ARBA, NM
Operator: N M & O OPERATING COMPANY
Field: BASIN
Reservoir: FRUITLAND COAL
Location: 1 24N 2W SE NW NW

FEDERAL INVADER - BASIN FRUITLAND COAL

