

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 \_\_\_\_\_

30-039-29389

[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**

AUG 25 2005

**OIL CONSERVATION  
DIVISION**

August 22, 2005

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  
Bunny Tracks No. 1  
Section 14, T24N, R2W 30-039-29389  
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 Bunny Tracks No. 1 was drilled in July 2005. 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 northwest quarter of Section 14. Exhibit 2 is the C-102 plat for the Basin Fruitland Pool with a 320 acre spacing unit in the north half of Section 14. Exhibit 3 is the C-102 plat for the Gavilan Pictured Cliffs Pool with a 160 acre spacing unit in the northwest 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. Based on the offset production, we could project that the Pictured Cliffs will produce about 20 MCFD.

The Fruitland Sand is a wildcat pool in this area and we do not have production data to predict its performance. Offset open hole log information indicates that the interval may be productive, so we propose to test it at some point. Our conservative estimate is about 20 MCFD, but we can not accurately predict the Fruitland Sand production. The Fruitland Sand will be completed at later date, so we will use production history from the other zones to allocate production.

The Fruitland Coal offset appears to have produced a small amount of water and no gas. It was plugged back from a Gallup/Dakota producer drilled in 1984. We believe that the coal was damaged by mud drilling, and possibly lost circulation in the Fruitland interval. We used LCM in the drilling mud and did not lose circulation during the drilling, so we do not anticipate severe formation damage. We estimate that the Fruitland Coal could produce about 80 MCFD.

Allocation based on production tests will be impossible because there is no shale break between the Fruitland Coal and the Pictured Cliffs. Therefore, we propose to use volumetrics to allocate production between the PC and the coal. The Fruitland Coal zone has a total thickness of 49'. The Pictured Cliffs is about 10' thick. Assuming both zones drain 160 acres, the Pictured Cliffs would produce 20% of the gas from the wellbore and the Fruitland Coal would produce 80%. These constant percentages will be used to allocate the gas production. We will assume that all the water is coming from the Fruitland Coal, and any oil that is produced is from the Pictured Cliffs.

#### 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

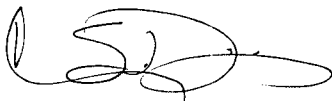
The ownership of the three zones is identical, so no notification is necessary.

#### 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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.*

5. Lease Serial No.	NM-106650
6. If Indian, Allottee or Tribe Name	
7. If Unit or CA/Agreement, Name and/or No.	
8. Well Name and No.	Bunny Tracks No. 1
9. API Well No.	30-039-29389
10. Field and Pool, or Exploratory Area	Basin Fruitland/Gavilan PC
11. County or Parish, State	Rio Arriba County, New Mexico

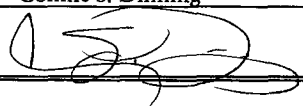
<b>SUBMIT IN TRIPLICATE – Other Instructions on reverse side.</b>	
1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other _____	
2. Name of Operator Merrion Oil & Gas Corporation	
3a. Address 610 Reilly Avenue, Farmington, NM 87401	3b. Phone No. (include area code) 505.324.5300
4b. Location of Well (Footage, Sec. T., R., M., or Survey Description) 1855' fnl & 670' fwl Sec 14, T24N, R2W	

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Report	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	DHC
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Merrion Oil and Gas proposes to downhole commingle the Basin Fruitland and the Gavilan Pictured Cliffs in the subject wellbore. The NMOCD downhole commingling application is attached.

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Connie S. Dinning	Title Production Engineer
Signature 	Date August 23, 2005

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by ----- Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Title ----- Office	Date -----
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District I  
1625 N. French Drive, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised June 10, 2003

District II  
1301 W. Grand Avenue, Artesia, NM 88210

District III  
1000 Rio Brazos Road, Aztec, NM 87410

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

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

APPLICATION TYPE  
☒ Single Well  
☐ Establish Pre-Approved Pools  
EXISTING WELLBORE  
Yes ☐ No ☒

APPLICATION FOR DOWNHOLE COMMINGLING

Merrion Oil & Gas 610 Reilly Ave., Farmington, NM 87401  
Operator Address

Bunny Tracks 1 E-14-24N-2W Rio Arriba  
Lease Well No. Unit Letter-Section-Township-Range County

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

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Wildcat 24N2W23 Fruitland Sand	Basin Fruitland (Pre-approved w/ Gavilan PC)	<del>Gavilan Pictured Cliffs</del> SOUTH BLANCO (Pre-Approved w/ Basin PC) GA
Pool Code		71629	77360
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3275' - 3300'	3300' - 3348'	3348' - 3368'
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)	858 psi Estimated from 0.26 gradient	870 psi Estimated from 0.26 gradient	876 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 0 % Gas 17% 10%	Oil 0 % Gas 42%	Oil 100 % Gas 41%

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ 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 ☒ No ☐

Will commingling decrease the value of production? Yes ☐ No ☒

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:

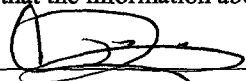
- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation 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  TITLE Production Engineer DATE 7/9/04

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

E-MAIL ADDRESS cdinning@merrion.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 WC24N2W24; Fruitland Sand
Property Code	Property Name BUNNY TRACKS	Well Number 1
OGRID No. 014634	Operator Name MERRION OIL & GAS	Elevation 7304'

Surface Location									
UL or Lot	Sec.	Twp.	Rge.	Lot Ltn.	Feet from	North/South	Feet from	East/West	County
E	14	24 N.	2 W.	SW NW	1855'	NORTH	670'	WEST	RIO ARriba

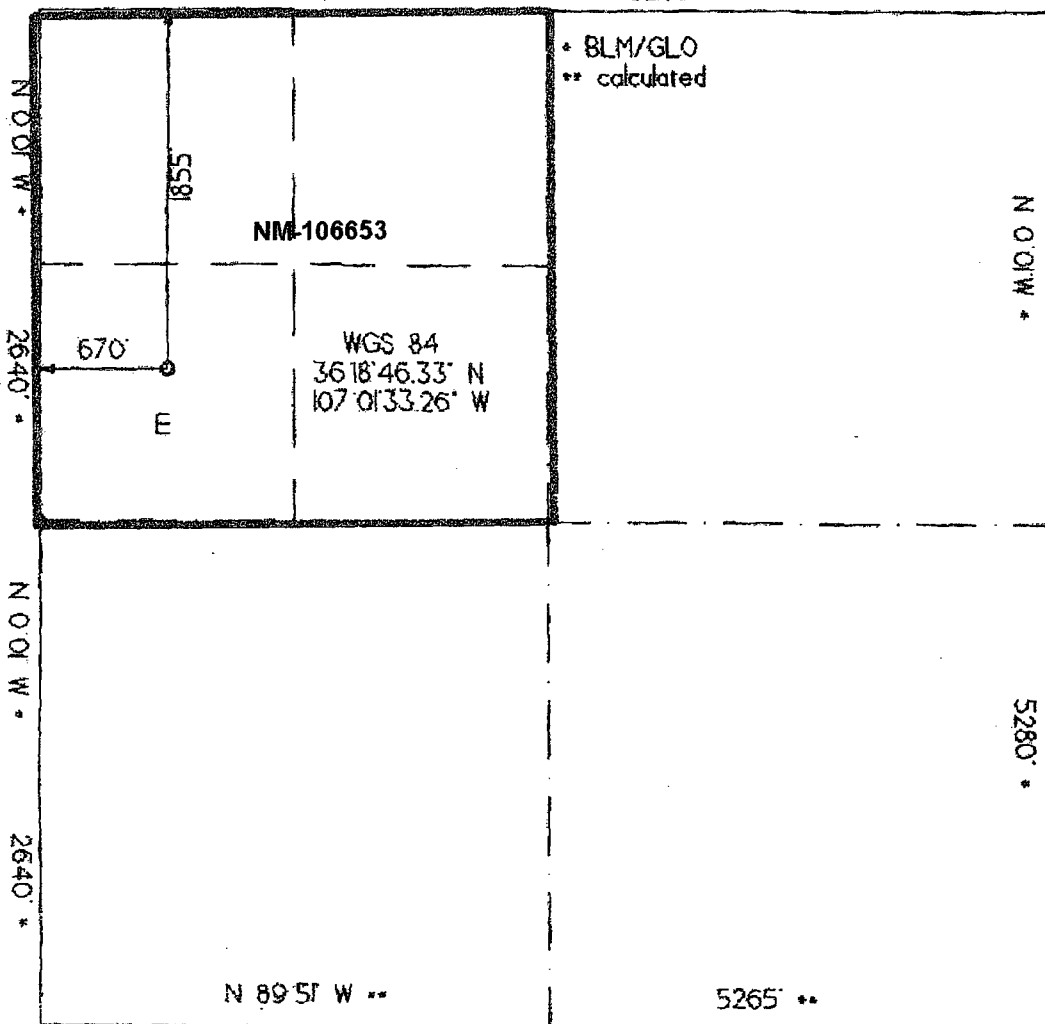
Bottom Hole Location if Different From Surface									
UL or Lot	Sec.	Twp.	Rge.	Lot Ltn.	Feet from	North/South	Feet from	East/West	County

Dedication 160	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

N 89 51' W \*\*

5265' \*\*



## 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

May 25, 2004

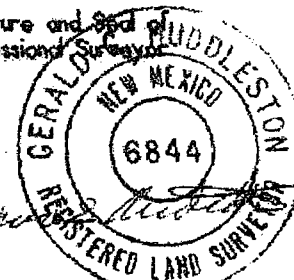
## SURVEYOR CERTIFICATION

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

5/19/04

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

Form C - 102

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number	Pool Code 71629	Pool Name Basin Fruitland
Property Code	Property Name BUNNY TRACKS	Well Number 1
OGRID No. 014634	Operator Name MERRION OIL & GAS	Elevation 7304'

## Surface Location

UL or Lot	Sec.	Twp.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County
E	14	24 N.	2 W.	SW NW	1855'	NORTH	670'	WEST	RIO ARRIBA

## Bottom Hole Location if Different From Surface

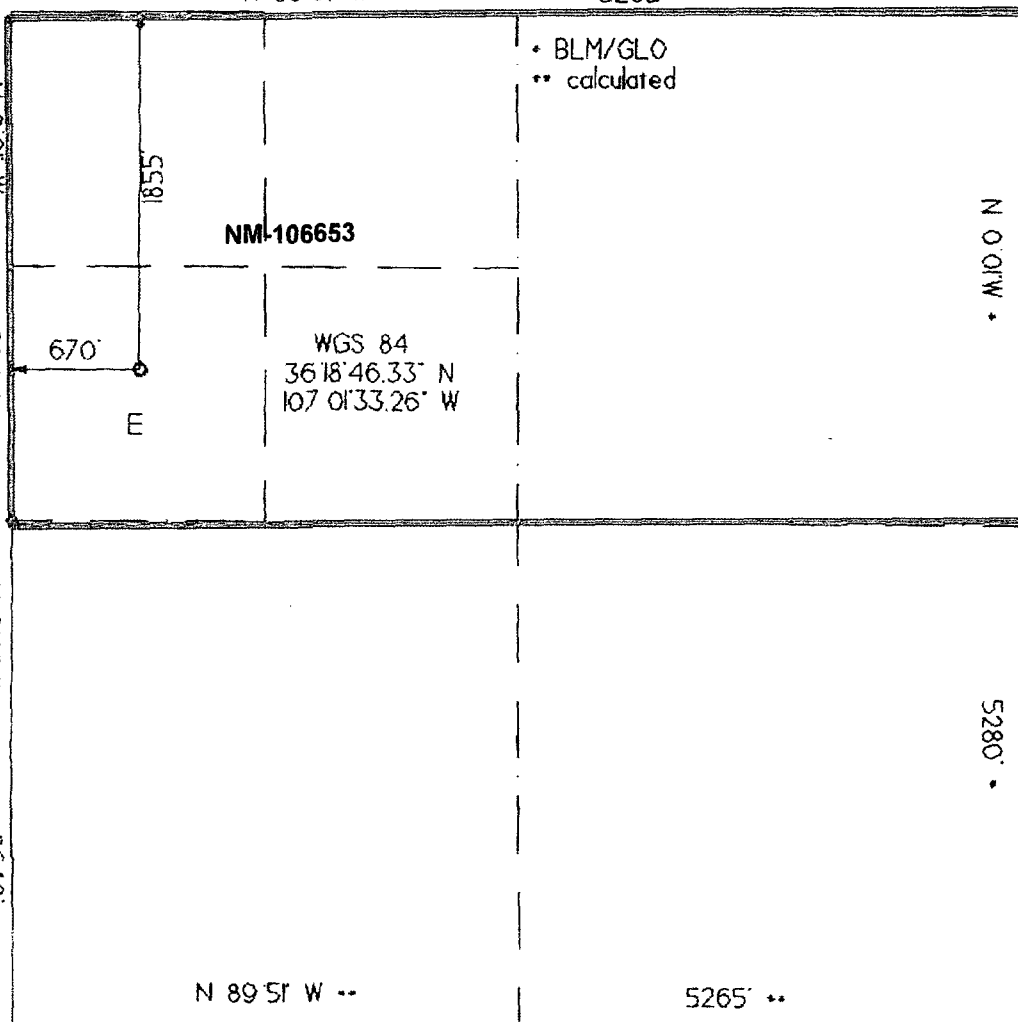
UL or Lot	Sec.	Twp.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County

Dedication 320	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

N 89 51' W \*\*

5265' \*\*



## 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

May 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

5/19/04

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

Form C - 102

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number	Pool Code 77360	Pool Name Gavilan Pictured Cliffs
Property Code	Property Name BUNNY TRACKS	Well Number 1
OGRID No. 014634	Operator Name MERRION OIL & GAS	Elevation 7304'

## Surface Location

UL or Lot	Sec.	Twp.	Rge.	Lot Lch.	Feet from >	North/South	Feet from >	East/West	County
E	14	24 N.	2 W.	SW NW	1855'	NORTH	670'	WEST	RIO ARriba

## Bottom Hole Location If Different From Surface

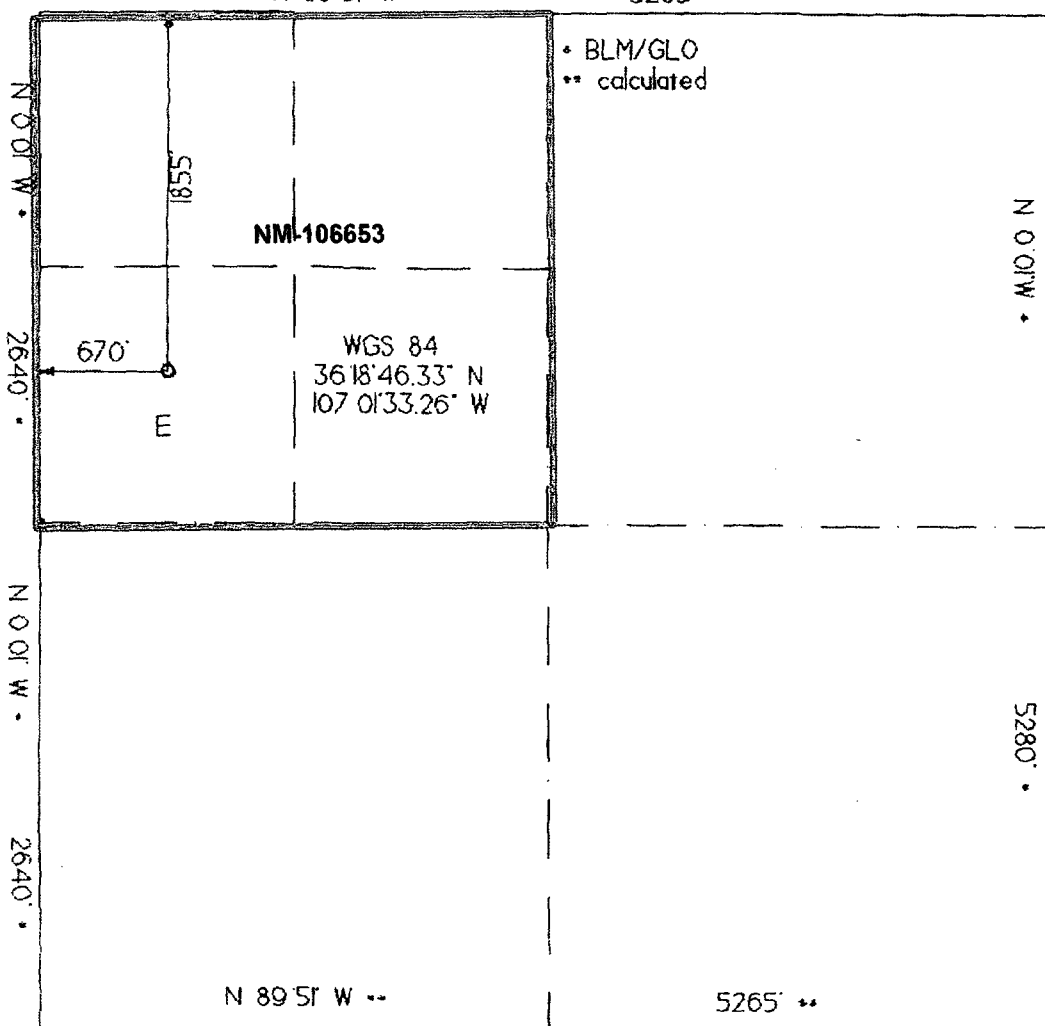
UL or Lot	Sec.	Twp.	Rge.	Lot Lch.	Feet from >	North/South	Feet from >	East/West	County

Dedication 160	Joint ?	Consolidation	Order No.
-------------------	---------	---------------	-----------

NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

N 89 51' W \*\*

5265' \*\*



## 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

May 25, 2004

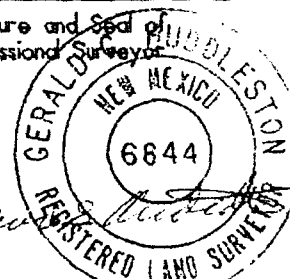
## SURVEYOR CERTIFICATION

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.

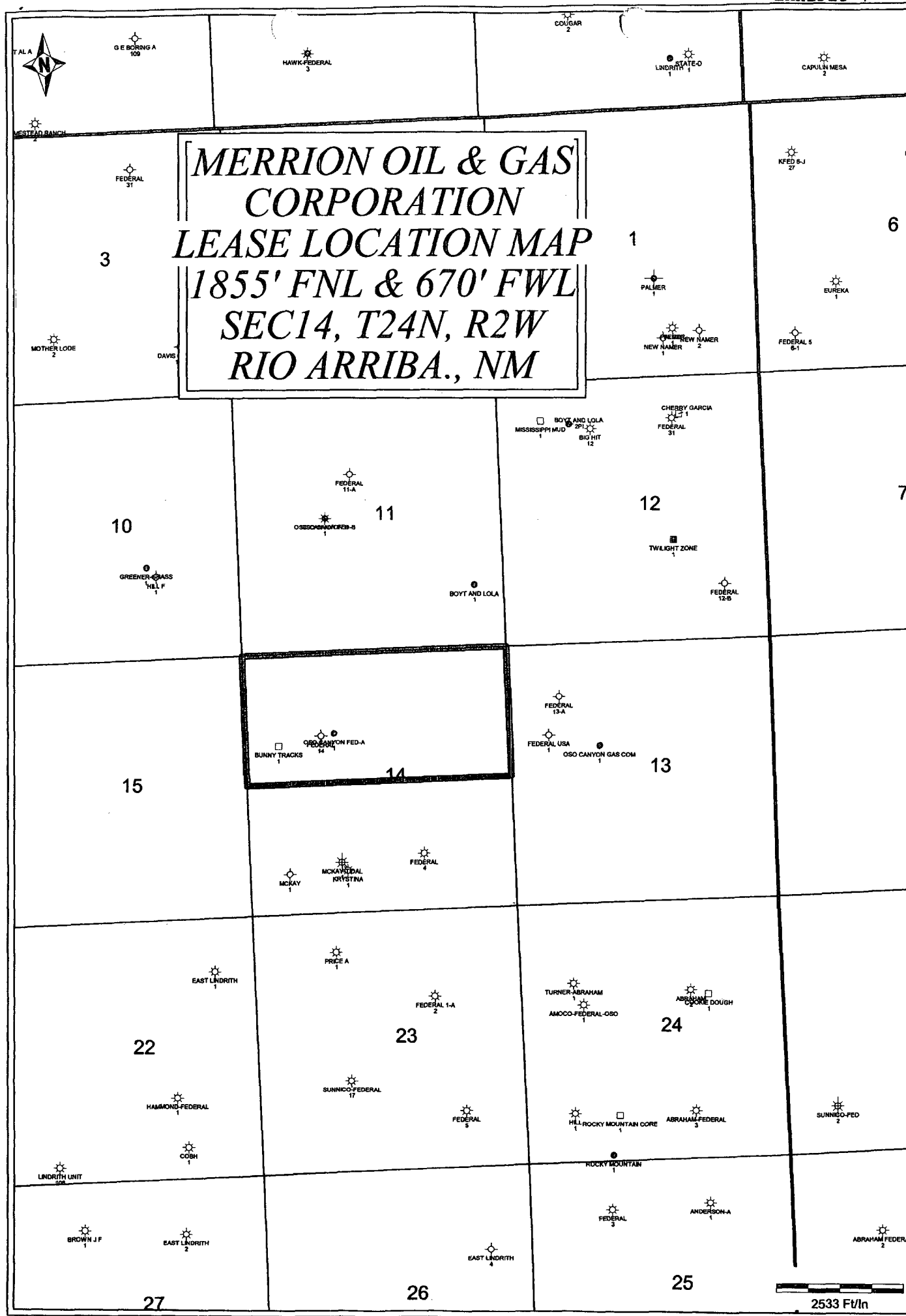
Date of Survey

5/19/04

Signature and Seal of Professional Surveyor



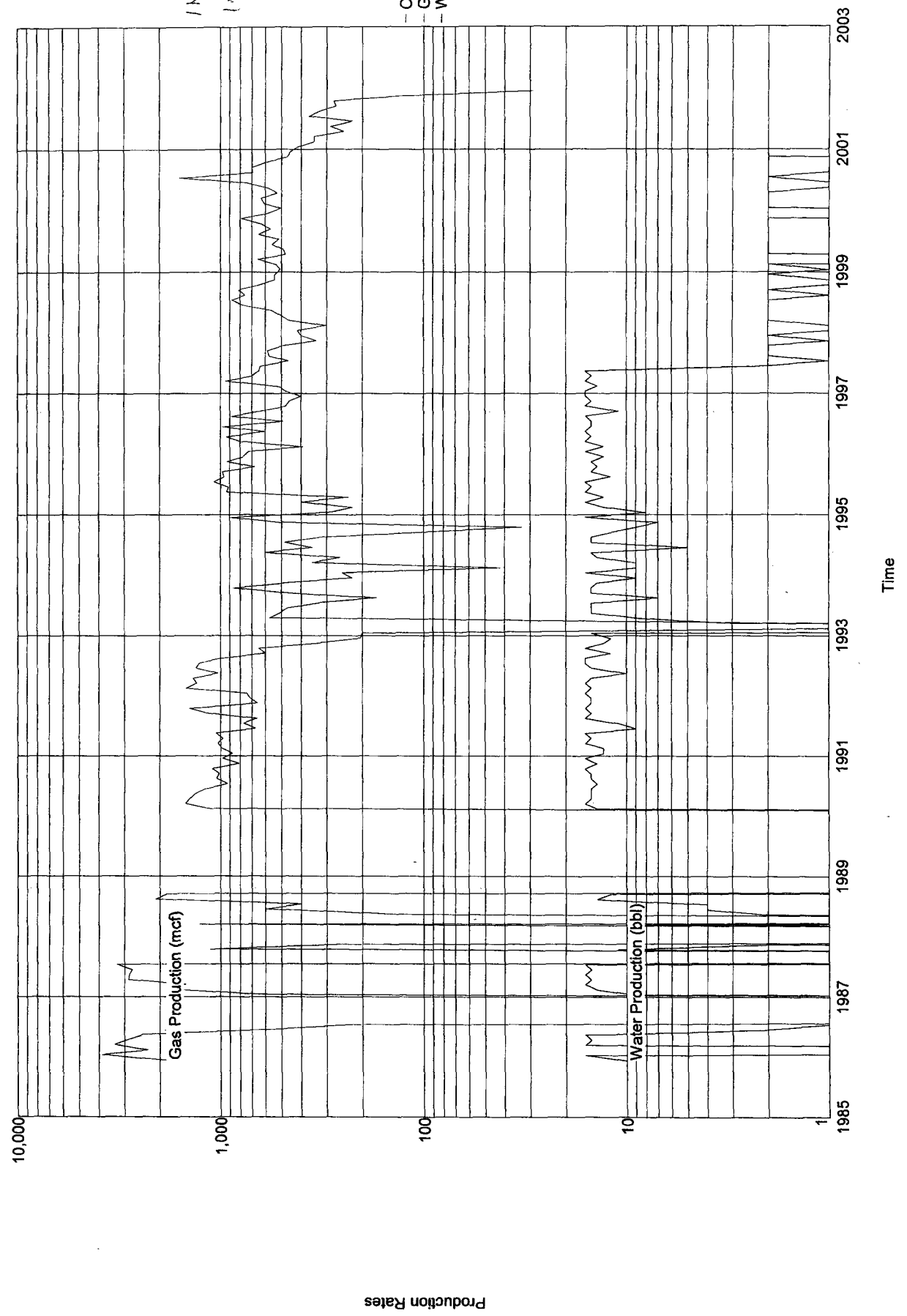




BUNNY TRACKS

Lease Name: COBH  
County, State: RIO ARBA, NM  
Operator: DUGAN PRODUCTION CORPORATION  
Field: BLANCO SOUTH  
Reservoir: PICTURED CLIFFS  
Location: 22 24N 2W NE SW SE

COBH - BLANCO SOUTH

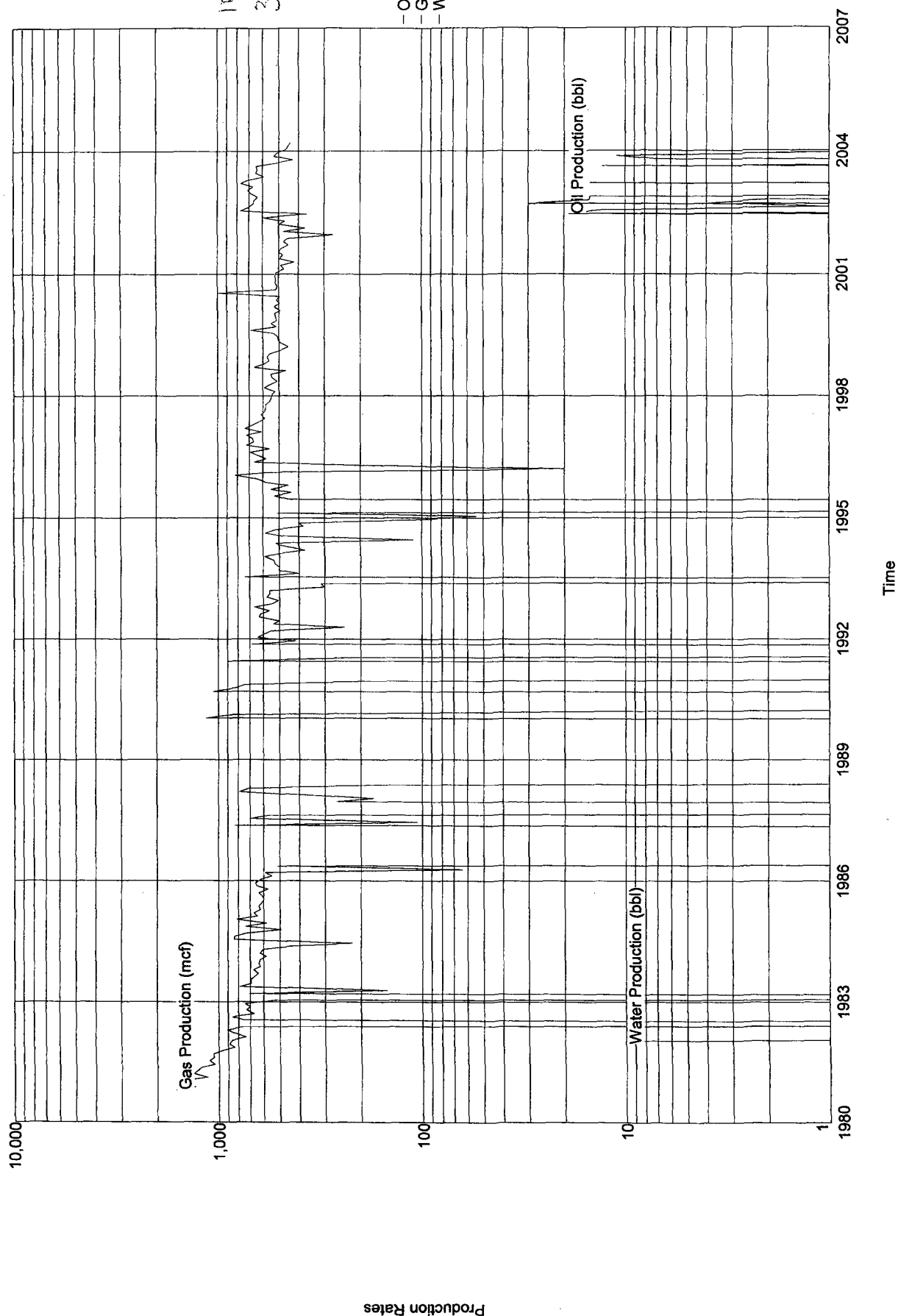


INITIAL  
100 MCF/D

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

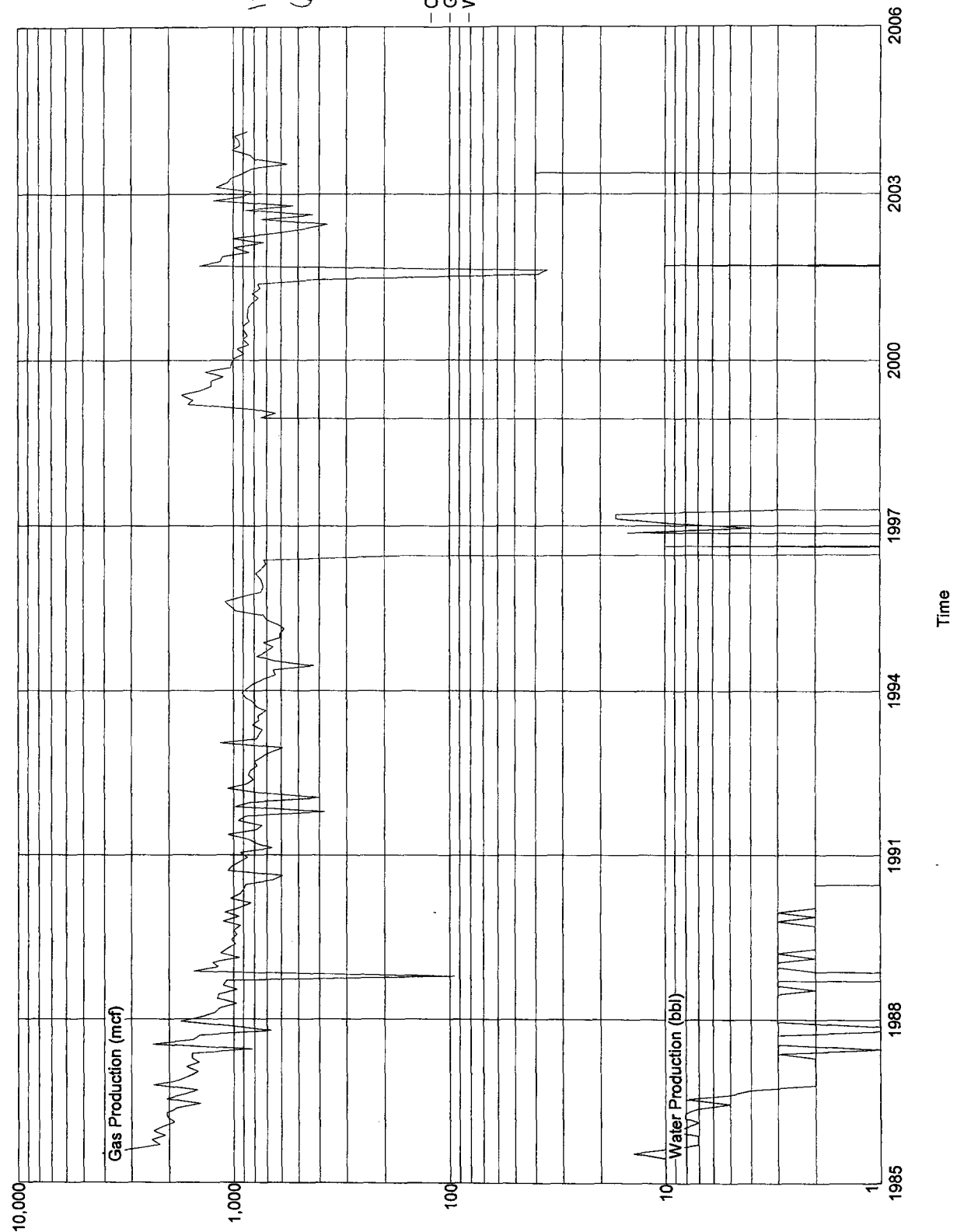
Lease Name: EAST LINDRITH /  
 County, State: RIO ARBA, NM  
 Operator: ELM RIDGE RESOURCES INCORPORATED  
 Field: BLANCO SOUTH  
 Reservoir: PICTURED CLIFFS  
 Location: 22 24N 2W SW NE NE

EAST LINDRITH - BLANCO SOUTH



Lease Name: LINDRITH UNIT NP 108  
 County, State: RIO ARBA, NM  
 Operator: ENERGEN RESOURCES CORPORATION  
 Field: BLANCO SOUTH  
 Reservoir: PICTURED CLIFFS  
 Location: 22 24N 2W NE SW SW

LINDRITH UNIT NP - BLANCO SOUTH



Production Rates

Lease Name: KRYSTINA (

County, State: RIO ARBA, NM

Operator: ELM RIDGE RESOURCES INCORPORATED

Field: BASIN

Reservoir: FRUITLAND COAL

Location: 14 24N 2W SW NE SW

DAV67A

45

(2) FRUITLAND CORP 2001

KRYSTINA - BASIN FRUITLAND COAL

NO INFO RG; COMP 67/52-1

NO GAS 5

### Production Rates

Water Production (bbl)

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

2003

2004

2005

Time