

3/31/99	4/20/99	DC	RN	DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

2310

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

MAR 31 1999

[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, RI, ORRI) 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

Title

Production Superintendent

Date

3/26/99



March 26, 1999

Ms. Lori Wrotenberry
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

RE: Administrative Approval to Downhole Commingle
Energen Resources Corporation
McCord 10E
1864' FNL, 1447' FWL, Sec. 33, T30N, R13W, N.M.P.M.
San Juan County, New Mexico

Dear Ms. Wrotenberry:

Energen Resources Corporation requests administrative approval for downhole commingling the Wildcat Gallup and Basin Dakota pools in the subject well. The well is currently producing as a Gallup/Dakota dual completion. The Dakota zone has experienced liquid loading problems and it is felt downhole commingling will eliminate excessive operational expenditures to keep the zone unloaded with the aid of a plunger lift system.

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 Commingling
2. C-102 - Location plat showing each spacing unit and dedicated acreage
3. Production curve for the Dakota
4. Offset operator plat
5. Well location plat
6. Proposed allocation method

In accordance to 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/mt

cc: NMOCD - Aztec, Offset operators, BLM-Farmington
F:\MONICA\PRODUCTOCD\MCCORD 10E 3-99.DOCX

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 S. 1st Street, Artesia, NM 88210-2834
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-25845	² Pool Code 96655/71599	³ Pool Name Wildcat Gallup/Basin Dakota
⁴ Property Code 21366	⁵ Property Name McCord	⁶ Well Number
⁷ OGRID No. 162928	⁸ Operator Name ENERGEN RESOURCES CORPORATION	⁹ Elevation 5726 GL

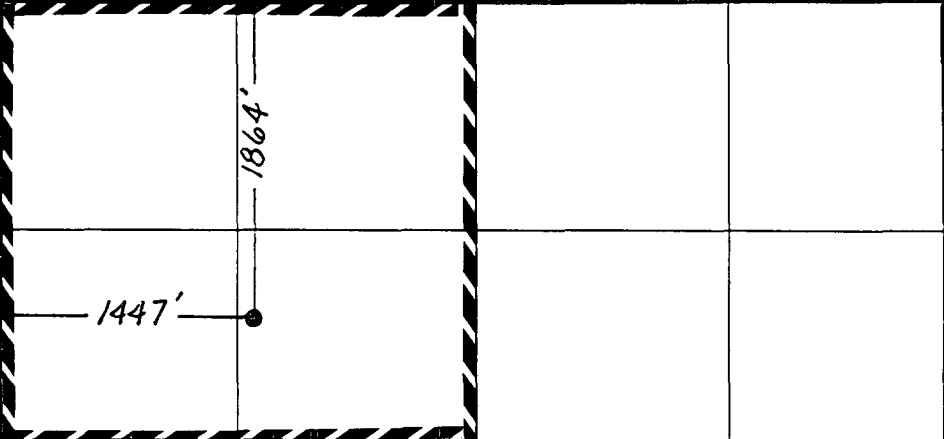

¹⁰ Surface Location

UL or lot no. F	Section 33	Township 30N	Range 13W	Lot. Idn	Feet from the 1864	North/South Line N	Feet from the 1447	East/West line W	County San Juan
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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
¹² Dedicated Acres 160/320	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

	<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 Gary W. Brink Printed Name Production Superintendent Title 3/26/99 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>_____ Date of Survey Signature and Seal of Professional Surveyer: Reissue of Original Survey By Michael Daly 5992 Certificate Number</p>

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

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 875054-6429Form C-107-A
New 3-12-96

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

ENERGEN RESOURCES CORPORATION 2198 Bloomfield Highway, Farmington, NM 87401
Operator Address
McCord 10E F Sec. 33 30N 13W San Juan
Lease Well No. Unit Ltr. - Sec - Twp - Rge County
OGRID NO. 162928 Property Code 21336 API NO. 30-045-25845 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	WC Gallup 96655		Basin Dakota 71599
2. Top and Bottom of Pay Section (Perforations)	5293 - 5826'		6151 - 6336'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 719 calc. b. (Original) 1064 calc.	a. b.	a. 646 calc. b. 2221 calc.
6. Oil Gravity (^o API) or Gas BTU Content)	1232 BTU *	* Standlind Gas Com B1	1277 BTU
7. Producing or Shut-In?	Shut-In	* Sec. 9, T32N, R12W	Producing
Production Marginal? (yes or no)	Yes		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	Date: Rates:	Date: Rates:	Date: Rates:
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates:	Date: Rates:	Date: 3/11/99 Rates: .5/80/.2
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 in 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 3/26/99

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

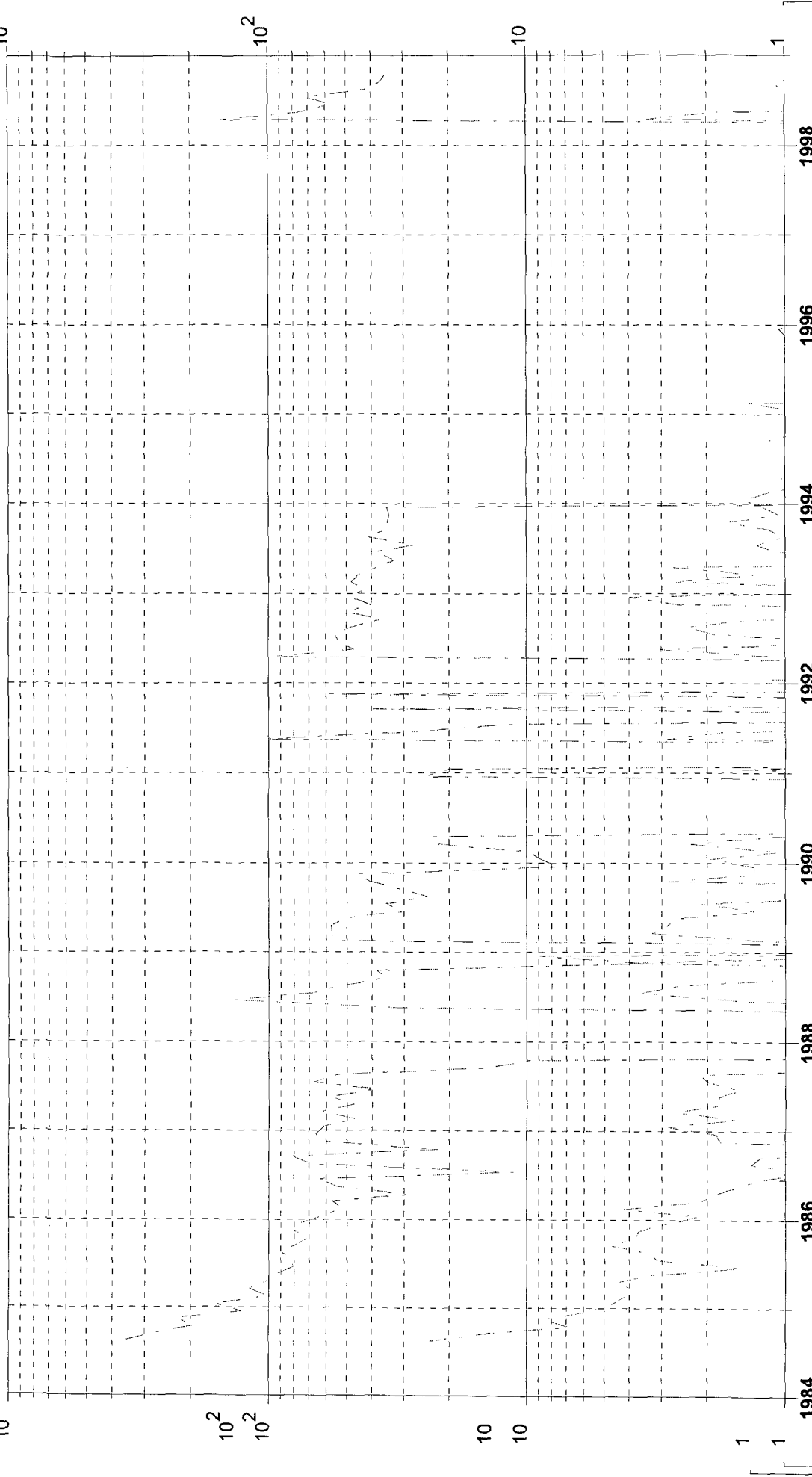
Dwights

Lease: MCCORD (10E)

Retrieval Code: 251,045,30N13W33F00DK

03/19/99

10³ 10³ 10² 10² 10 10 1 1



Gas (mcf/day)

Water (bbl/day)

Oil (bbl/day)

F.P. Date: 08/84

Oil Cum: 7548 bbl

Gas Cum: 181.3 mmcf

Location: 33F 30N 13W

County: SAN JUAN, NM

Field: BASIN (DAKOTA) DK

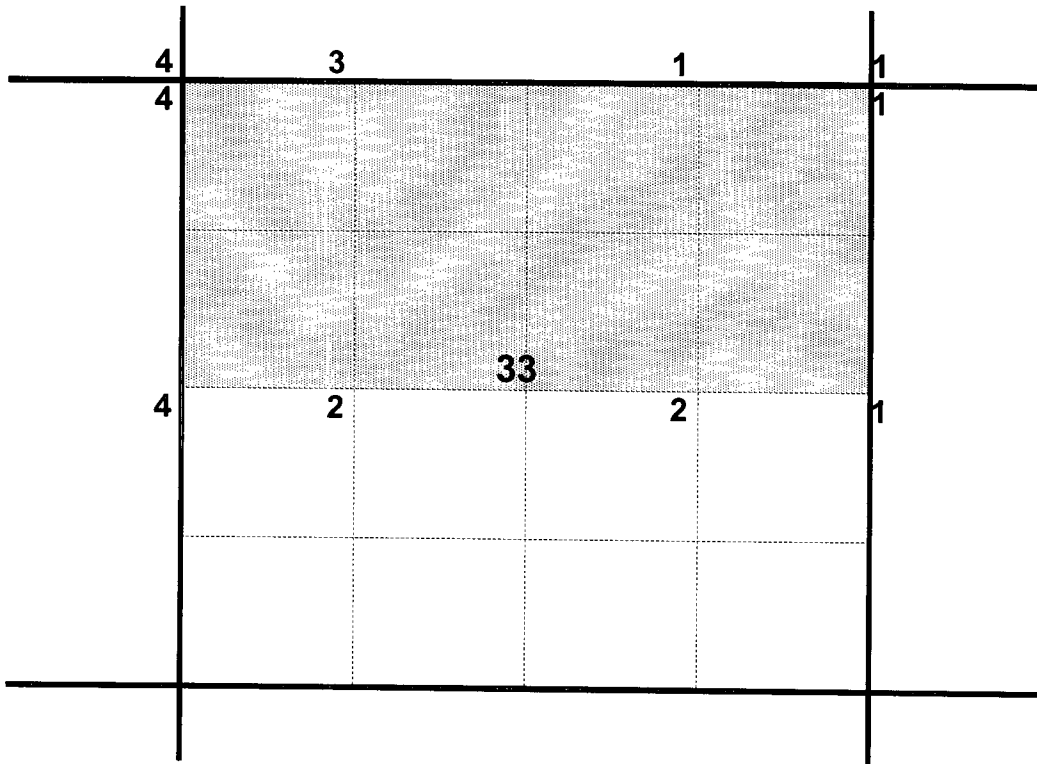
Reservoir: DAKOTA

Operator: ENERGEN RESOURCES

Energen Resources Corp.

McCord 10E
Offset Operator / Ownership Plat
Wildcat Gallup/ Basin Dakota
Downhole Commingling

Township 30 N, Range 13 W



- 1) Energen Resources Corporation
- 2) Burlington Resources
P.O. Box 4289
Farmington, N.M. 87499-4289
- 3) Dugan Production Corp.
P.O. Box 420
Farmington, N.M. 87499
- 4) Amoco Production Corp.
P.O. Box 800
Denver, Co 80201

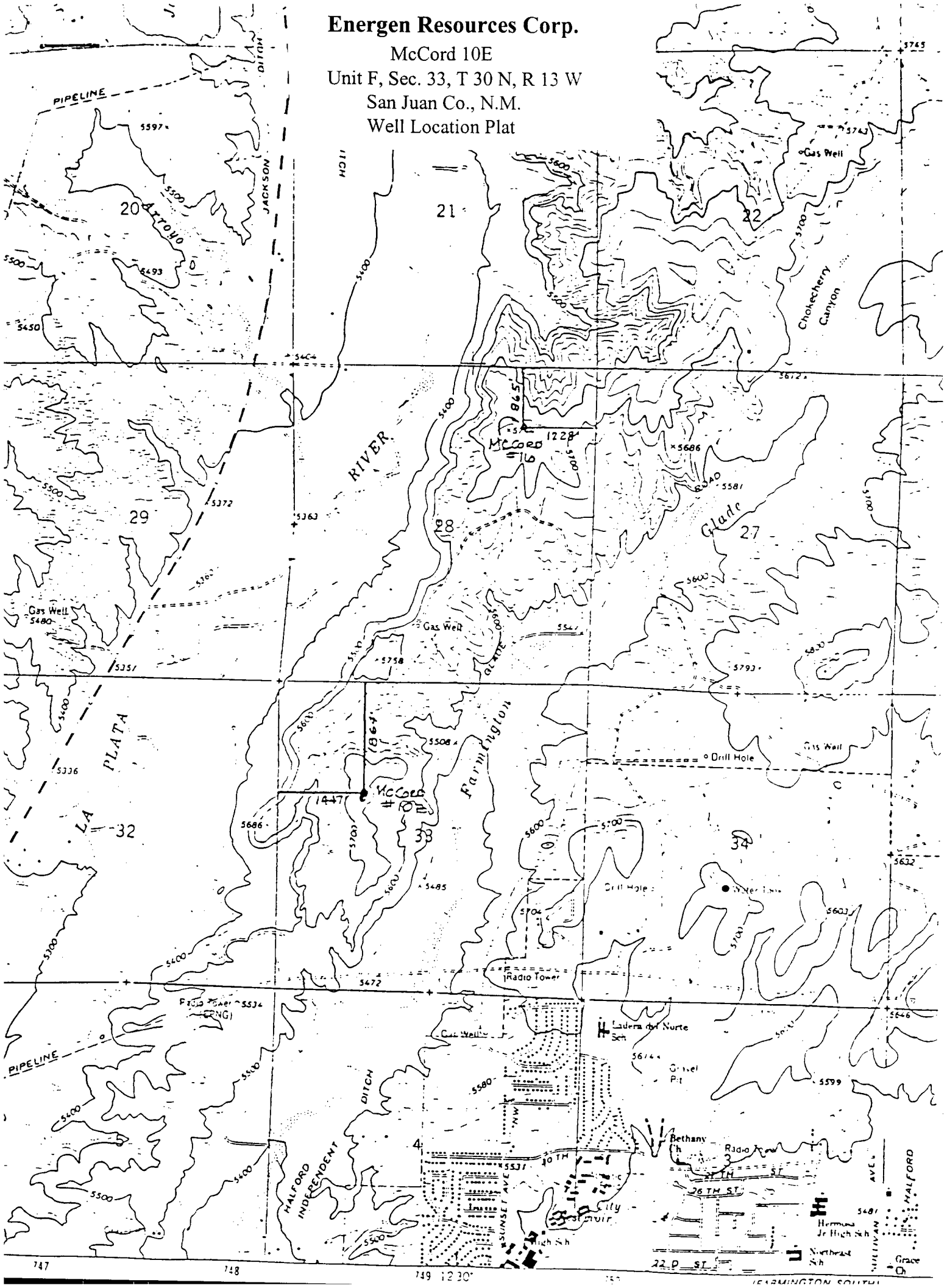
Energen Resources Corp.

McCord 10E

Unit F, Sec. 33, T 30 N, R 13 W

San Juan Co., N.M.

Well Location Plat



Proposed Allocation Method

McCord 10E

Wildcat Gallup/ Basin Dakota

The wildcat Gallup was pump tested in May 1984 for 5 days and produced no oil and no water. The well was flow tested against 137 PSIG of back-pressure and flowed 62 MCFD. The rods and tubing were removed and the Gallup was never tied into the pipeline. No commercial production was ever obtained from this zone.

The Dakota in May 1984 was initially tested at 4450 MCFD with 13 BOPD and 1 BWPD. Currently due to the downhole configuration, the Dakota will flow about 7 days before it loads up with fluid and dies.

Since it is not economic to Plug and Abandon the Gallup, it is recommended the allocation of production be based on initial potential tests as follows:

	<u>Gas</u>	<u>Oil</u>
Wildcat Gallup	1%	0%
Basin Dakota	99%	100%

This allocation would contribute a minor amount to the Gallup zone and prevent waste.