

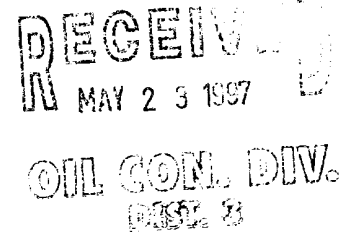


Amoco Production Company
San Juan Business Unit

1670 Broadway
Post Office Box 800
Denver, Colorado 80201
303-830-4040

May 21, 1997

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
2040 S. Pacheco Street
P. O. Box 6429
Santa Fe, NM 87505



**Application for Exception to Rule 303-A- Downhole Commingling and for
Unorthodox Location
Likins Gas Com A ~~#~~ 3E
Unit J Section 34-T30N-R9W
Basin Dakota and Blanco Mesaverde Pools
San Juan County, New Mexico**

Enclosed please find an administrative application form (C-107-A) and attachments for downhole commingling for the captioned well. By copy of this application by certified mail, return receipt requested, Amoco is notifying all offset operators in the formations captioned above as well as all affected interest owners if the ownership of those formations is not common. The Division Director may approve the proposed downhole commingling in the absence of a valid objection from any offset operator or any interest owner in those instances where ownership is not common in the zones to be commingled within 20 days after the receipt of the application if, in his opinion, waste will not result thereby, and correlative rights will not be violated.

In addition we also request administrative approval for an unorthodox well location for this well in the Blanco Mesaverde Pool. Amoco plans to recomple this well from the Dakota formation to the Blanco Mesaverde. This well is at an orthodox location for the Dakota and was approved at that location under NMOCD Administrative Order # NSL-1049 for topographic reasons. As this is a recompletion and involves the same wellbore, we request approval for an unorthodox location for the Blanco Mesaverde Pool for the same topographic reasons. A copy of the original request, approval and topographic map are attached. Also attached are copies of the C-102's for both formations as well as a 9-section plat showing offset operators. The same offset operators are being noticed relative to the request for unorthodox location as those being noticed for downhole commingling.

Should you have questions regarding this application, do not hesitate to call me at (303) 830-5344.

Sincerely,


Pamela W. Staley

Enclosures

cc: Mark Rothenberg
Pat Archuleta
Wellfile
Proration File

Frank Chavez, Supervisor
NMOCD District III
1000 Rio Brazos Road
Aztec, NM 87410

Amoco Production Company		P.O. Box 800 Denver, CO 80201	
Operator	Address	County	
LIKINS GAS COM A	J-34-30N-9W	San Juan	
Lease	Well No.	Unit Ltr. - Sec Twp - Rge	
	3E		

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 000778 Property Code 000795 API NO. 3004523569 Federal State (and/or) Fee X

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	BLANCO MESAVERDE 72319		BASIN DAKOTA 71599
2. Top and Bottom of Pay Section (Perforations)	4000' - 4750' PROPOSED		6734' - 6964'
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) 584 PSI b. (Original) 1200 PSI	a. b.	a. 750 PSI b. 1200 PSI
6. Oil Gravity (° API) or Gas BTU Content	1150 BTU / 49 DEG API		1100 BTU / 59 DEG API
7. Producing or Shut-In?	NEW		PRODUCING
Production Marginal? (yes or no)	NO		YES
• If Shut-In, give data 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: EST Rates: 500 MCFD 1 BCPD 1 BWPD	Date: Rates:	Date: Rates:
• If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates:	Date: Rates:	4/12-5/12/97 Date: 91 MCFD Rates: 1 BCPD 1 BWPD
8. Fixed Percentage Allocation Formula -% for each zone	Oil: 50 % Gas 85 %	Oil: % Gas %	Oil: 50 % Gas 15 %

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 DECLARATION OF UNITIZATION DTD 6/2/52 RECD V182 P86
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  TITLE REGULATORY AFFAIRS ENGR DATE 5/21/97

TYPE OR PRINT NAME PAMELA W. STALEY TELEPHONE NO. (303) 830-5344

OFFSET OPERATORS
Likins Gas Com A #3E

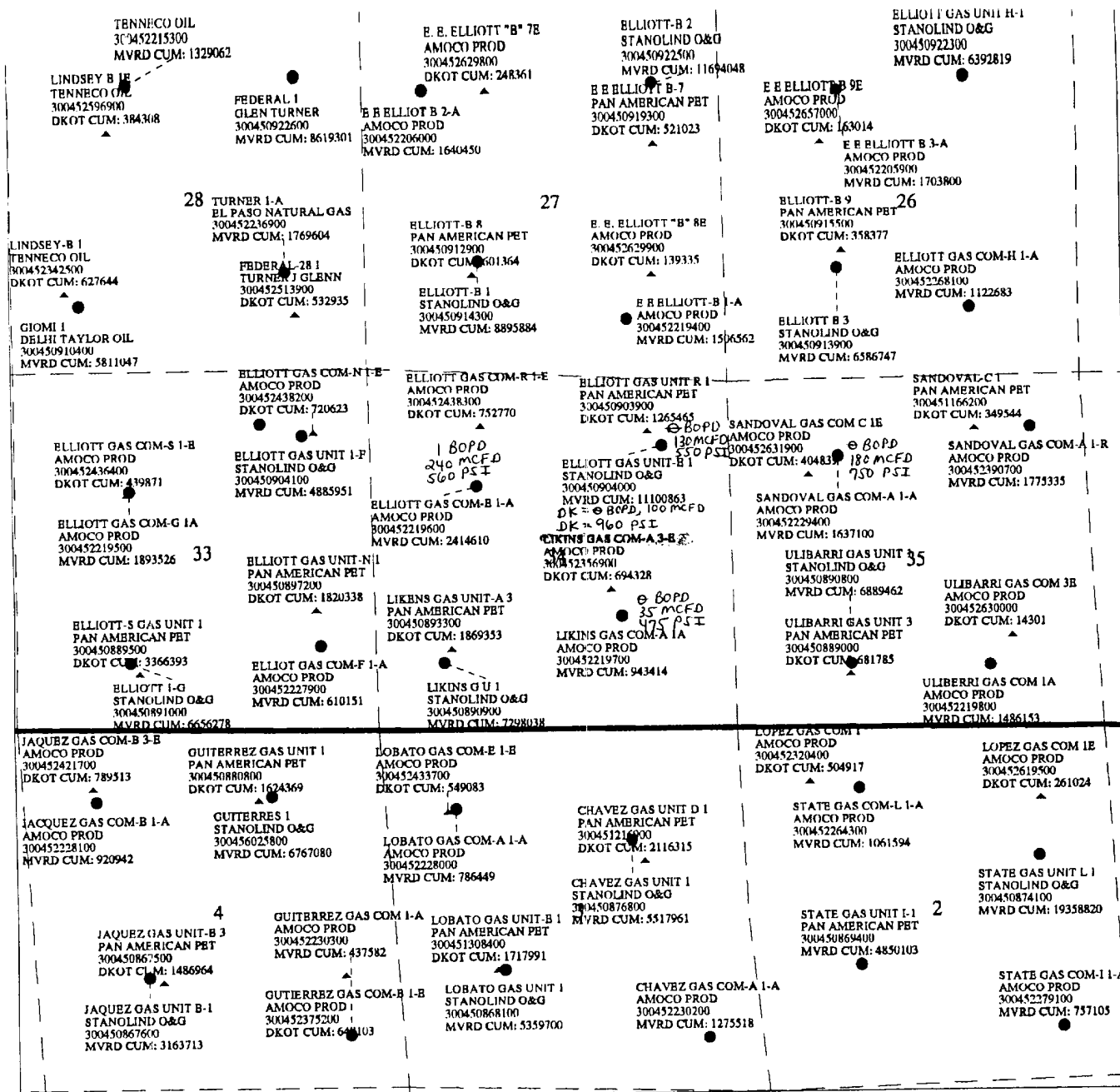
Burlington Resources Oil and Gas Co.
P.O. Box 4289
Farmington, NM 87499

Production Allocation Recommendation
Likins Gas Com A #3E

Production is proposed to be allocated based on a percentage allocation. The production for the Mesaverde is based on the attached analysis of offset production as well as reservoir simulation (curve attached)

Gas:	DK	91	15%
	MV	500	85%

Oil and Water:			
	DK	1 BPD Each product	50%
	MV	1 BPD Each Product	50%



Avg. mv rate = 146 mcf/d, Φ bopd
Avg. mv pressure = 584 psi

R9W

AMOCO PRODUCTION COMPANY

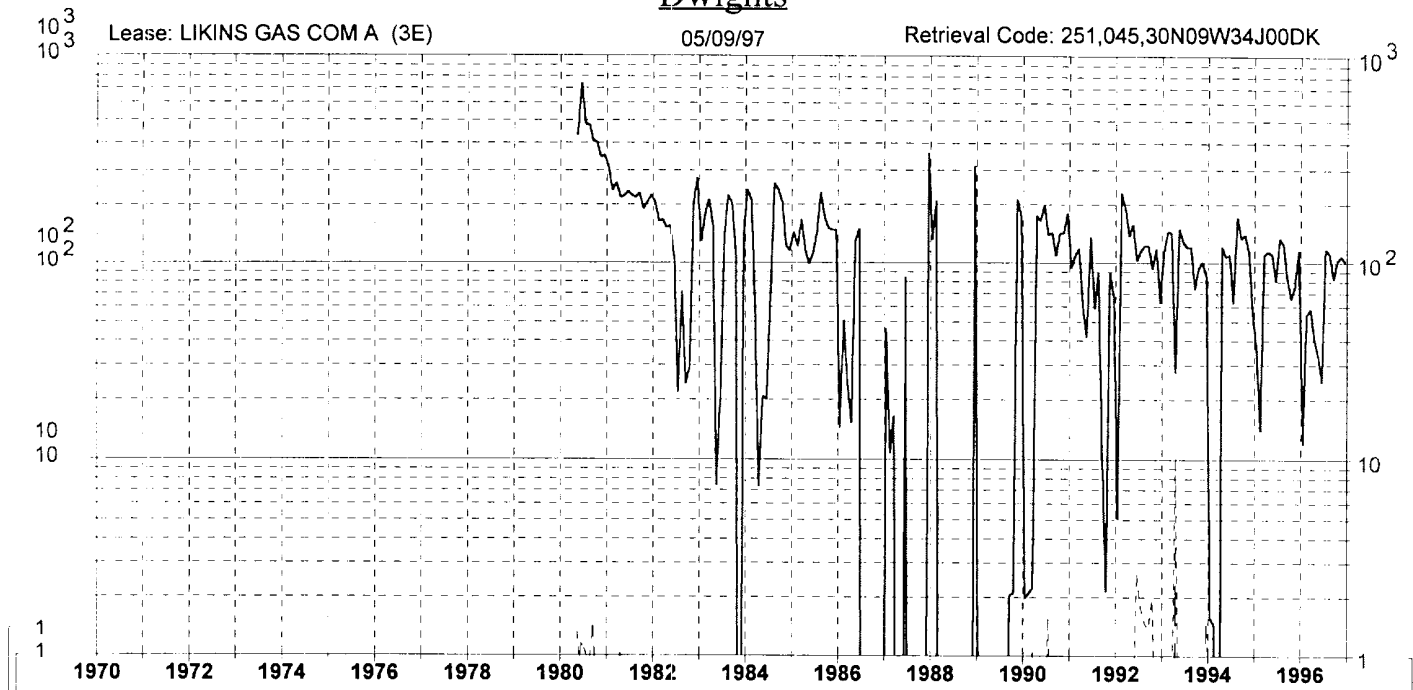
Type of Map:	CUM PRODUCTION	
Section:	Likins Gas Com A 3E	Commingling info.
Block(s)/Grid(s):		
Area/Country:	SAN JUAN BASIN, NEW MEXICO	License:
Interpreter(s):	Date: April 03, 1987	
Scale:	1:12,000	Contour Interval:
Remarks:	PORTION MAP WITH CUMULATIVE PRODUCTION Lobato and Mesquite Wells Mine Section Plat. Sec. 34-1200-899	
File No.:	Draft by: B.A. Rachowski	

Dwights

Lease: LIKINS GAS COM A (3E)

05/09/97

Retrieval Code: 251,045,30N09W34J00DK



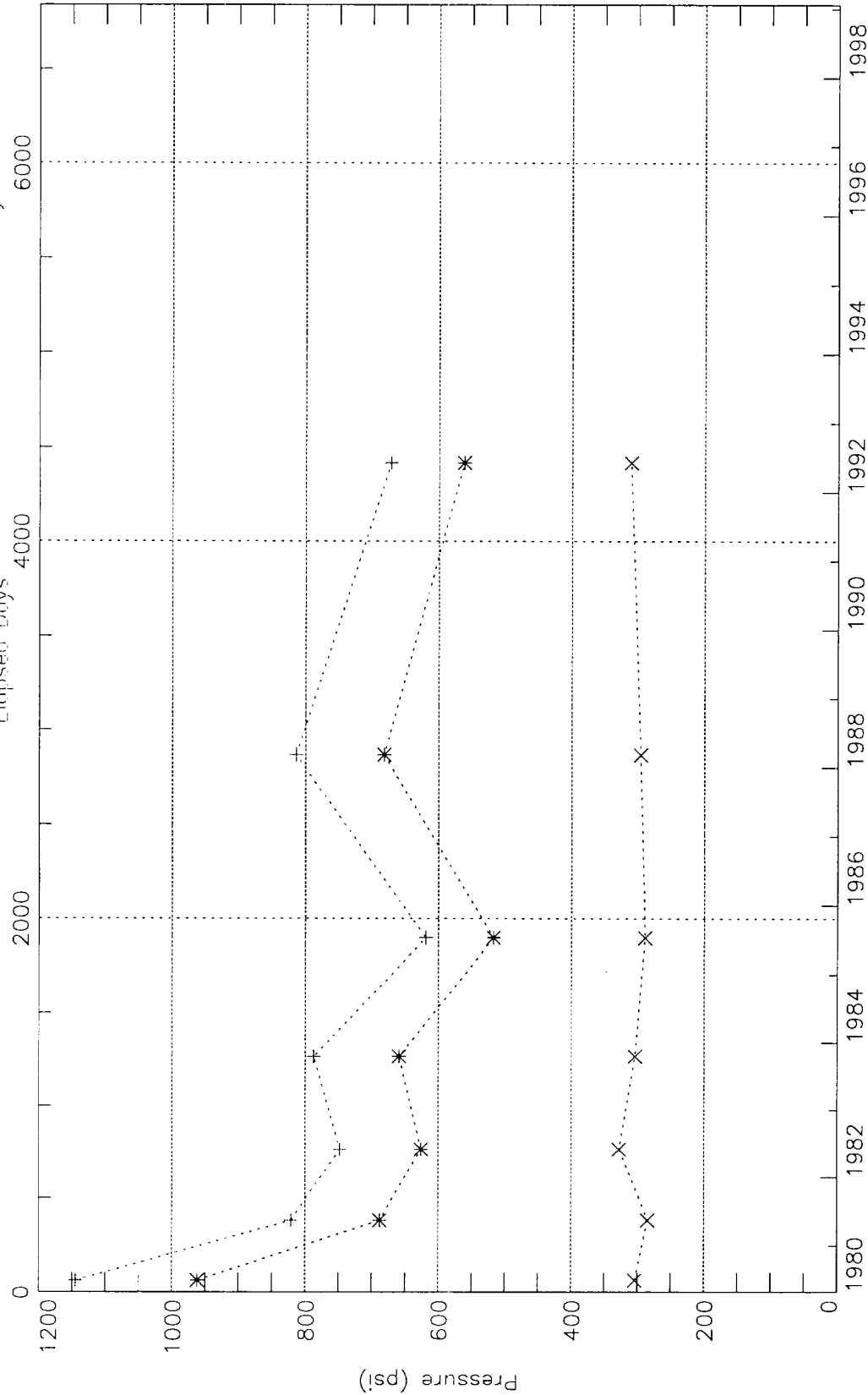
County: SAN JUAN, NM
Field: BASIN (DAKOTA) DK
Reservoir: DAKOTA
Operator: AMOCO PRODUCTION CO

F.P. Date: 05/80
Oil Cum: 1272 bbl
Gas Cum: 694.3 mmcf
Location: 34J 30N 9W

User: zr0r06
Owner: 2DMHF

Single Well Gas3D

Description 1
Fri May 9 14:52:36 1997

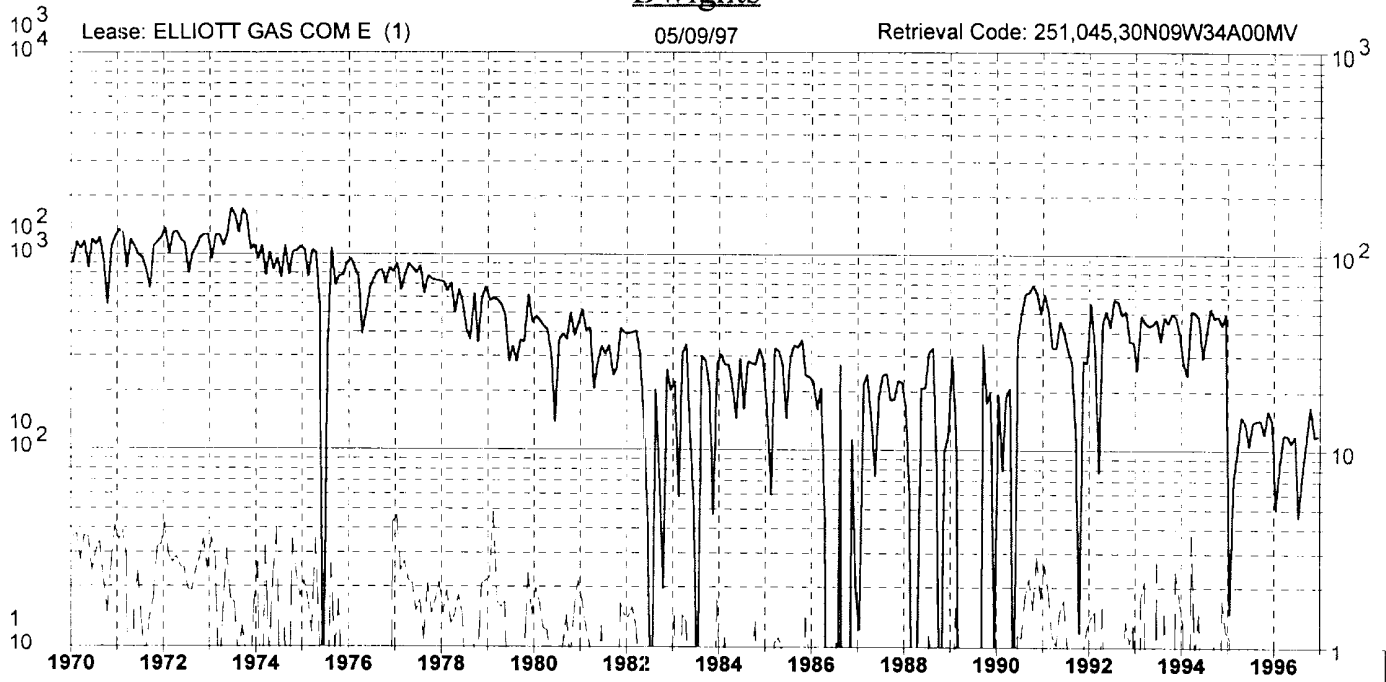


WH_SIP (*)
BHP (+)
WH_FTP (x)

Date (Years)

Well ID: 300452356900 602DKOT
Well Name: LIKINS GAS COM /A/ E003J34
Operator: AMOCO PRODUCTION COMPANY

Dwights

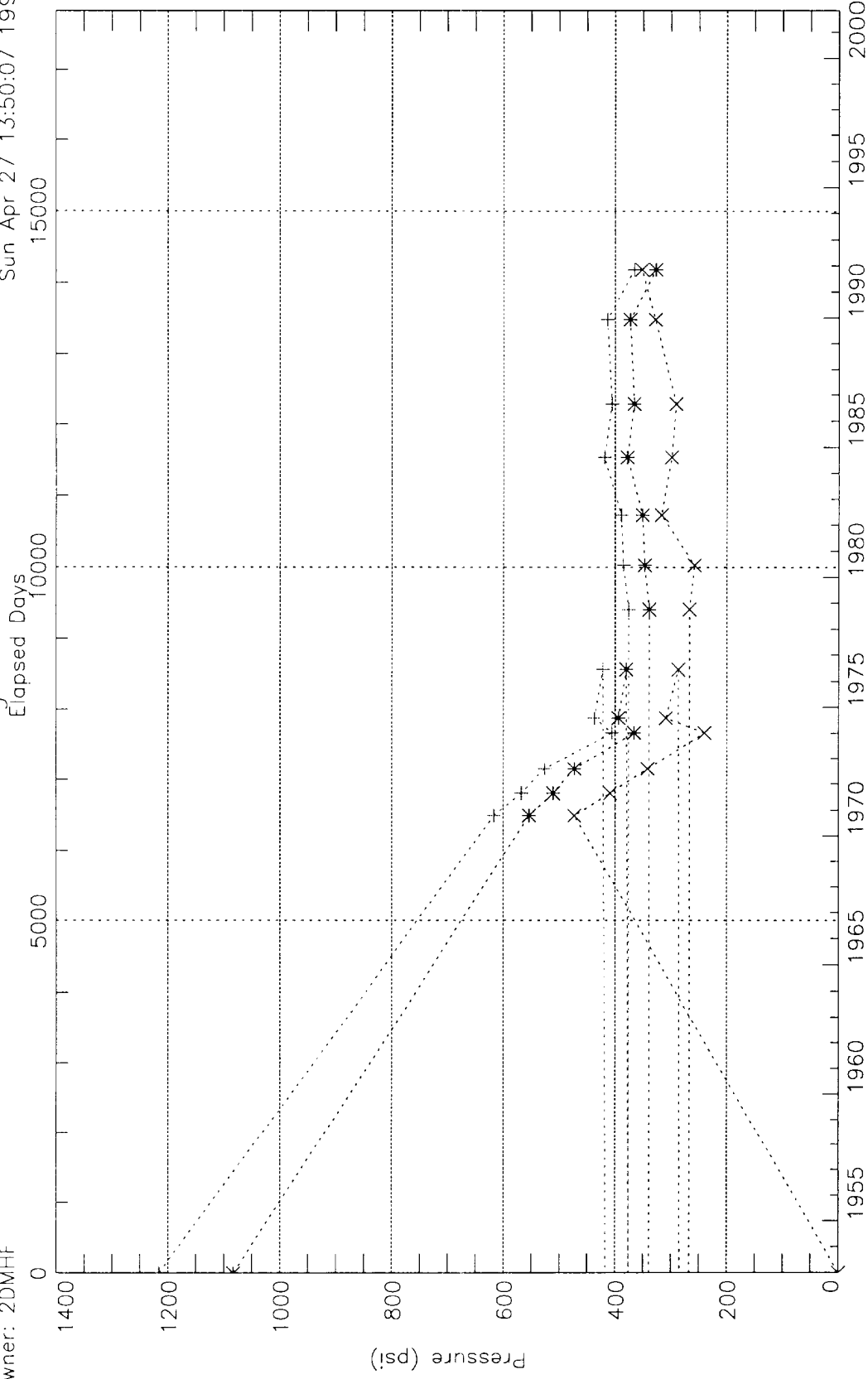


County: SAN JUAN, NM	F.P. Date: 02/53
Field: BLANCO (MESAVERDE) MV	Oil Cum: 28.04 mbbl
Reservoir: MESAVERDE	Gas Cum: 11.10 bcf
Operator: AMOCO PRODUCTION CO	Location: 34A 30N 9W

User: zr0r06
Owner: 2DMHF

Single Well Gas3D

Description 1
Sun Apr 27 13:50:07 1997



Date (Years)

WH_SIP (*)
BHP (+)
WH_FTP (x)

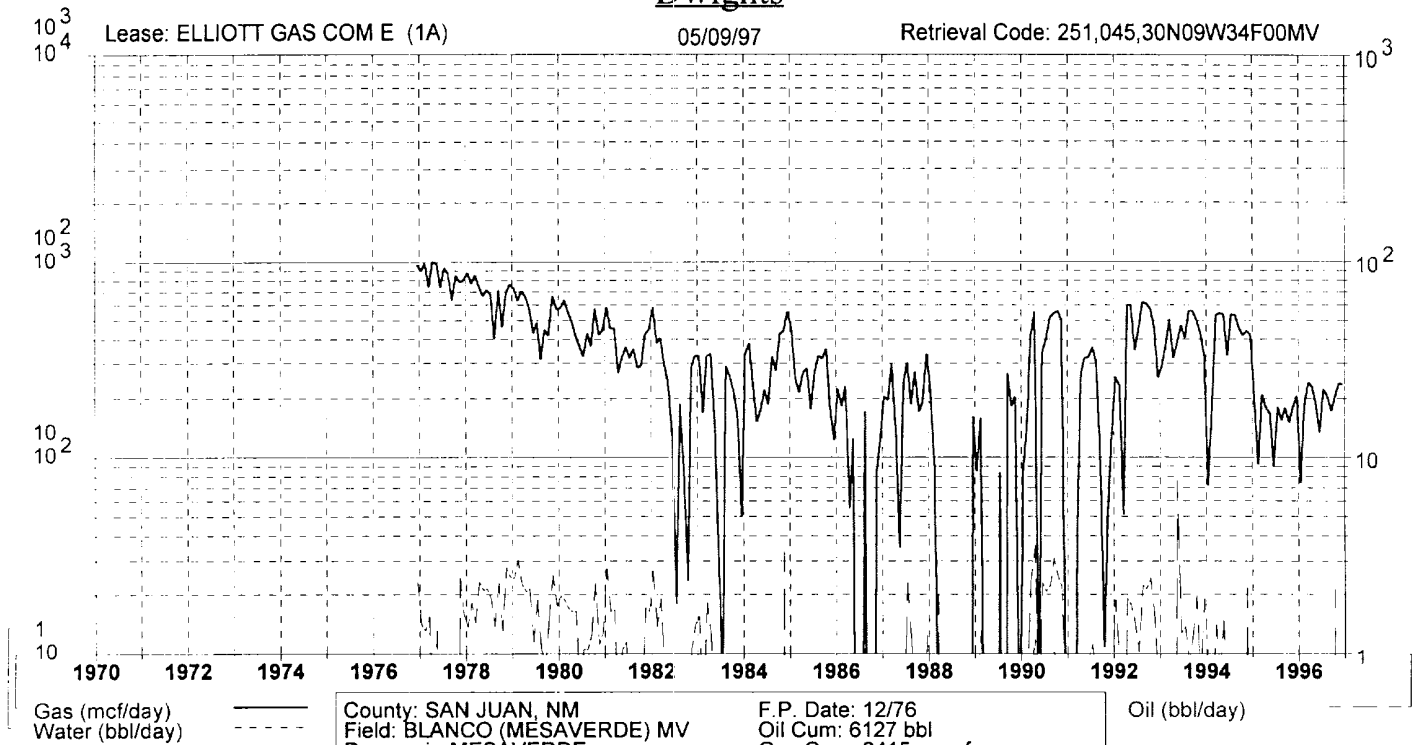
Well ID: 300450904000 604MVRD
Well Name: ELLIOTT GAS COM /E/ 001A34
Operator: AMOCO PROD

Dwights

Lease: ELLIOTT GAS COM E (1A)

05/09/97

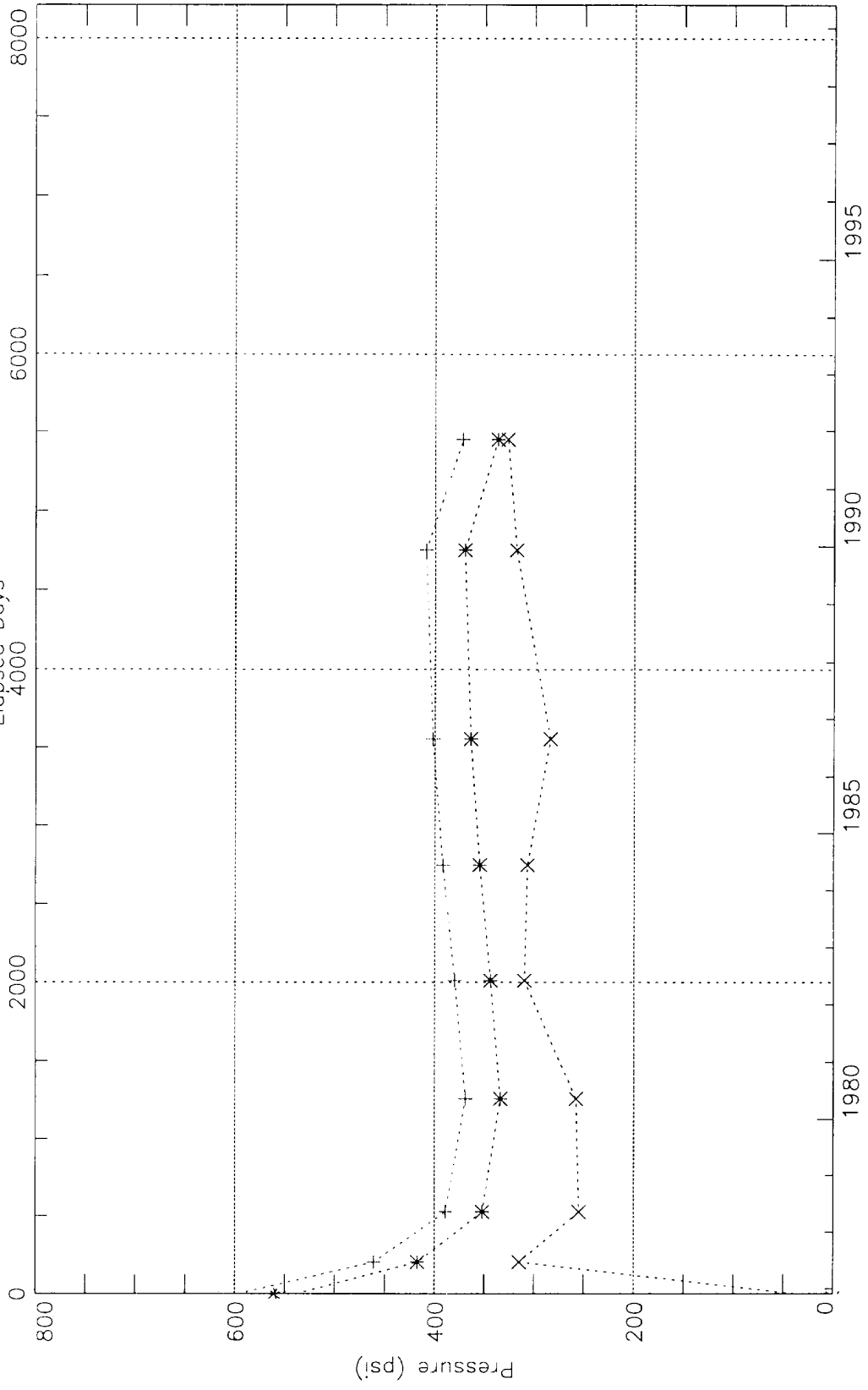
Retrieval Code: 251,045,30N09W34F00MV



User: zr06
Owner: 2DMHF

Single Well Gas3D

Description 1
Sun Apr 27 13:53:56 1997



WH_SIP (*)
BHP (+)
WH_FTP (x)

Date (Years)

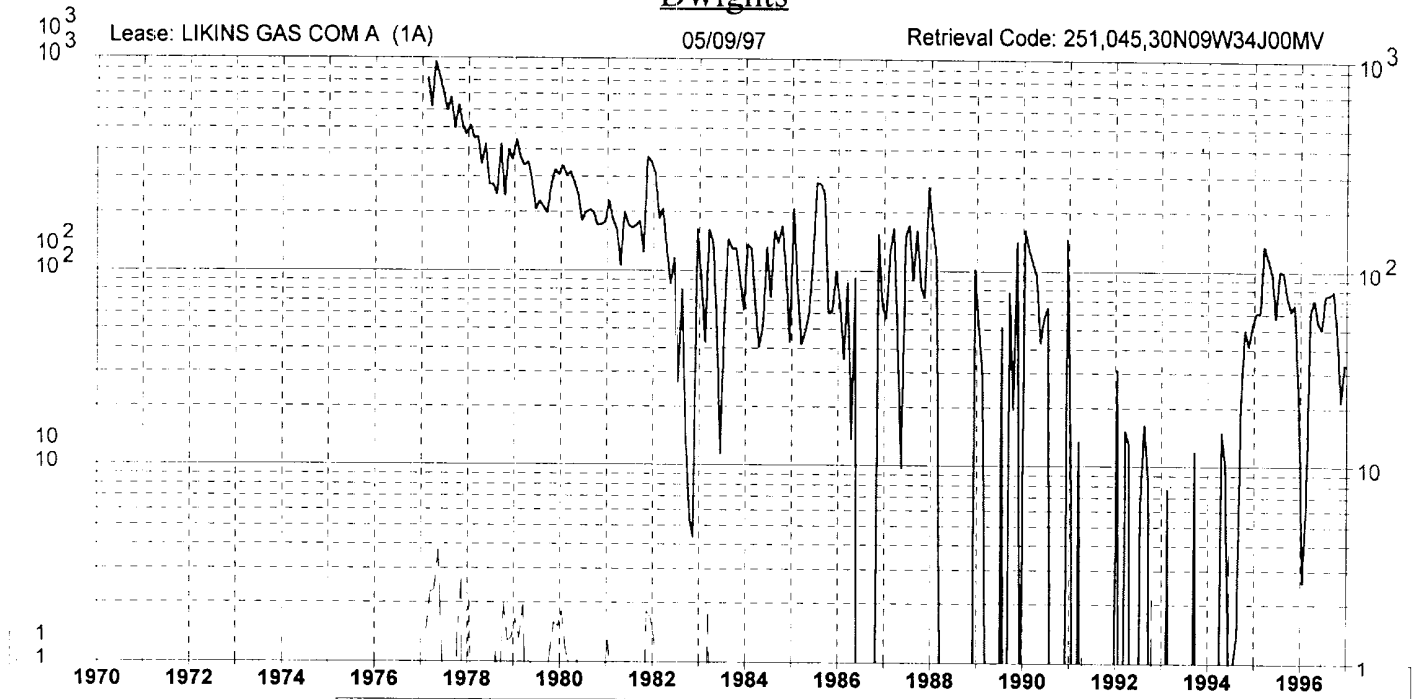
Well ID: 300452219600 604MVRD
Well Name: ELLIOTT GAS COM /E/ A001F34
Operator: AMOCO PRODUCTION COMPANY

Dwights

Lease: LIKINS GAS COM A (1A)

05/09/97

Retrieval Code: 251,045,30N09W34J00MV



Gas (mcf/day)
Water (bbl/day)

County: SAN JUAN, NM
Field: BLANCO (MESAVERDE) MV
Reservoir: MESAVERDE
Operator: AMOCO PRODUCTION CO

F.P. Date: 02/77
Oil Cum: 2476 bbl
Gas Cum: 944.1 mmcf
Location: 34J 30N 9W

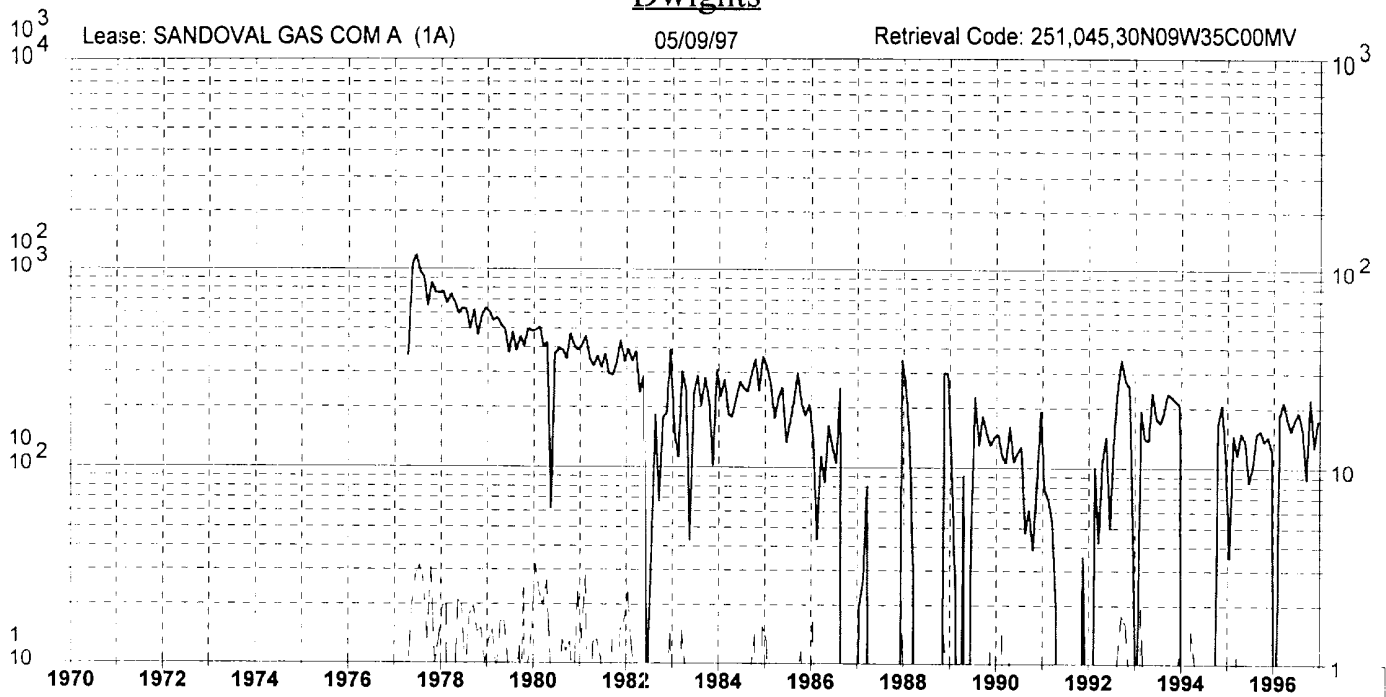
Oil (bbl/day)

Dwights

Lease: SANDOVAL GAS COM A (1A)

05/09/97

Retrieval Code: 251,045,30N09W35C00MV



Gas (mcf/day)
Water (bbl/day)

County: SAN JUAN, NM
Field: BLANCO (MESAVERDE) MV
Reservoir: MESAVERDE
Operator: AMOCO PRODUCTION CO

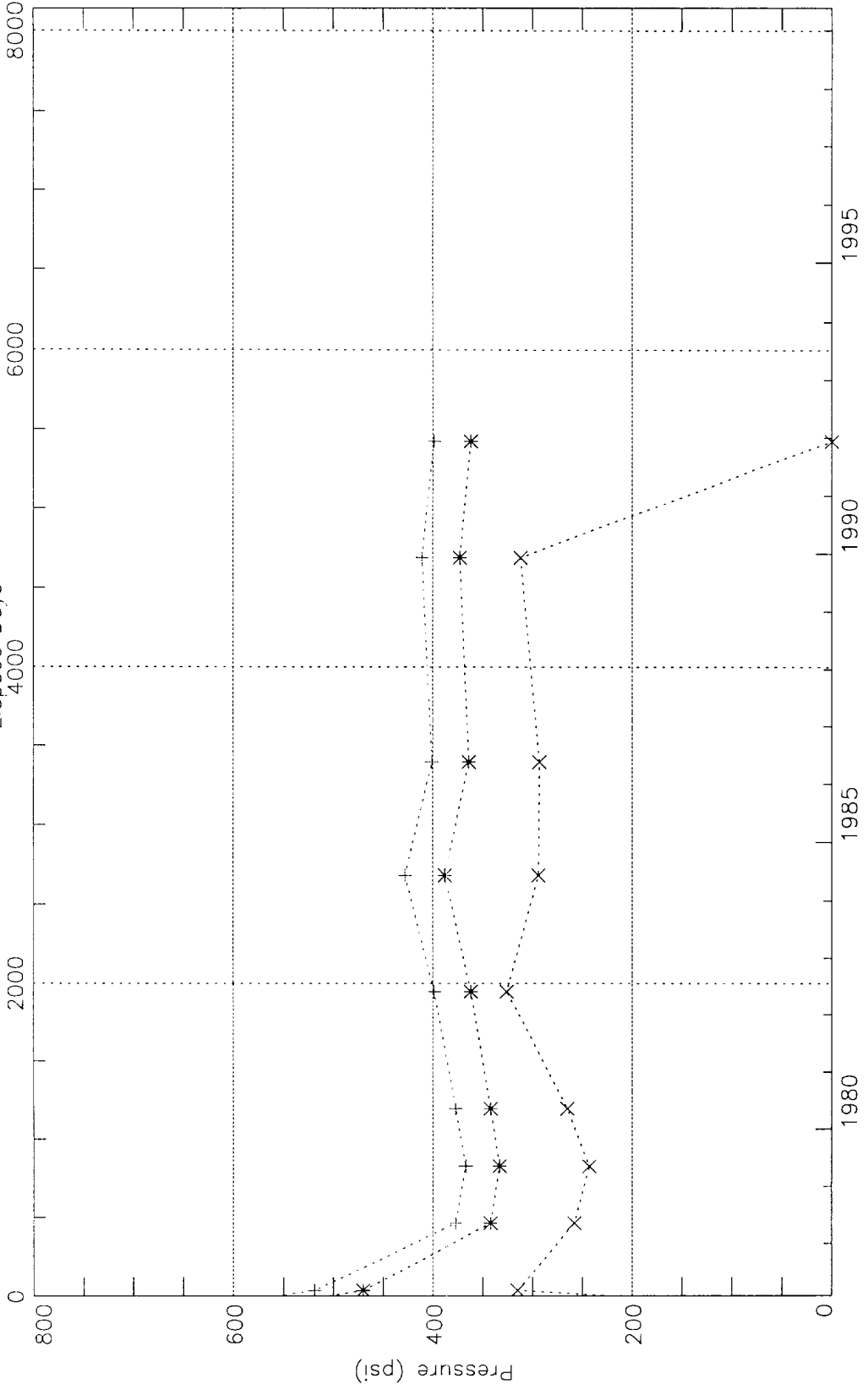
F.P. Date: 04/77
Oil Cum: 4966 bbl
Gas Cum: 1637 mmcf
Location: 35C 30N 9W

Oil (bbl/day)

User: zr06
Owner: 2DMHF

Single Well Gas3D

Description 1
Sun Apr 27 13:44:27 1997



WH_SIP (*)
BHP (+)
WH_FTP (x)

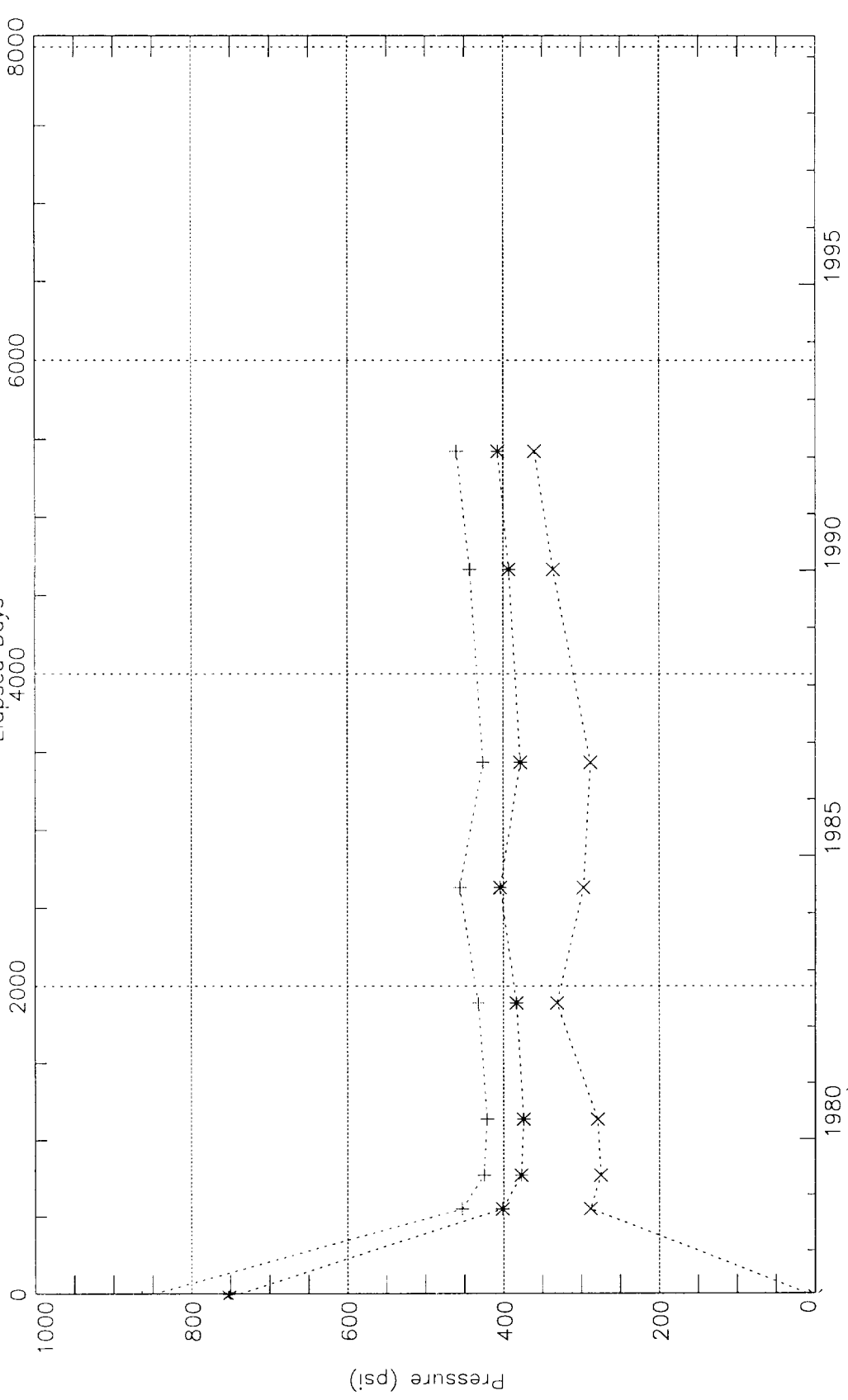
Date (Years)

Well ID: 300452219700 604MVRD
Well Name: LIKINS GAS COM /A/ A001J34
Operator: AMOCO PRODUCTION COMPANY

User: zr06
Owner: 2DMHF

Single Well Gas3D

Description 1
Sun Apr 27 13:54:39 1997



WH_SIP (*)
BHP (+)
WH_FTP (x)

Well ID: 300452229400 604MVRD
Well Name: SANDOVAL GAS COM /A/ A001C35
Operator: AMOCO PRODUCTION COMPANY

Well Production Summary Report

Well: LIKINS GC A 003E-DK

Report Date: 5/12/97

Flac: 97585701

Foreman: EL PASO CONVENTIONAL

Meter: 93033

Pumper: GTRUNK O

PipeLine: 604605

Kind: GAS WELLS EXCEPT CO2

Date	MCF	Gas Nomin.	Down Time	Tubing Press	Casing Press	Line Press	ADP Temp	Flow Mtr Prod.	OIDB Date
Apr 12, 97 FLOWING	89	125	0.0			202	23	46	4/13/97 07:40:00
Apr 13, 97 FLOWING	91	125	0.0			200	24	47	4/14/97 10:02:00
Apr 14, 97 FLOWING	90	125	0.0			201	23	50	4/15/97 06:45:00
Apr 15, 97 FLOWING	91	125	0.0			206	23	54	4/16/97 06:46:00
Apr 16, 97 FLOWING	92	125	0.0			201	23	56	4/18/97 17:54:00
Apr 17, 97 FLOWING	91	125	0.0			202	22	58	4/18/97 17:55:00
Apr 18, 97 FLOWING	92	125	0.0			202	23	57	4/19/97 17:54:00
Apr 19, 97 FLOWING	92	125	0.0			201	23	58	4/20/97 08:03:00
Apr 20, 97 FLOWING	92	125	0.0			201	23	57	4/21/97 10:53:00
Apr 21, 97 FLOWING	92	125	0.0			202	23	59	4/22/97 08:12:00
Apr 22, 97 FLOWING	90	125	0.0			209	23	58	4/23/97 07:39:00
Apr 23, 97 FLOWING	92	125	0.0			204	23	49	4/24/97 07:10:00
Apr 24, 97 FLOWING	92	125	0.0			201	24	46	4/25/97 08:47:00
Apr 25, 97 FLOWING	92	125	0.0			199	24	51	4/26/97 06:56:00
Apr 26, 97 FLOWING	92	125	0.0			202	23	56	4/27/97 08:03:00
Apr 27, 97 FLOWING	89	125	0.0			211	22	58	4/28/97 09:25:00
Apr 28, 97 FLOWING	90	125	0.0			208	23	60	4/29/97 06:59:00
Apr 29, 97 FLOWING	92	125	0.0			201	23	55	4/30/97 07:03:00
Apr 30, 97 FLOWING	92	125	0.0			199	23	57	5/1/97 08:47:00
May 01, 97 FLOWING	91	125	0.0			204	24	52	5/2/97 18:03:00
May 02, 97 FLOWING	92	125	0.0			199	24	53	5/3/97 06:58:00
May 03, 97 FLOWING	90	125	0.0			206	23	59	5/4/97 08:06:00
May 04, 97 FLOWING	89	125	0.0			209	22	63	5/5/97 07:02:00
May 05, 97 FLOWING	91	125	0.0			204	22	63	5/7/97 18:09:00
May 06, 97 FLOWING	92	125	0.0			203	20	68	5/7/97 18:10:00
May 07, 97 FLOWING	90	125	0.0			203	21	65	5/8/97 07:02:00
May 08, 97 FLOWING	93	125	0.0			199	22	64	5/9/97 08:02:00
May 09, 97 FLOWING	91	125	0.0			200	20	62	5/11/97 08:12:00
May 10, 97 FLOWING	92	125	0.0			200	20	63	5/12/97 07:13:00
May 11, 97 FLOWING	92	125	0.0			200	21	66	5/12/97 07:15:00

Total:	2,736	3,750	0.0			203	23	57	0
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U.S.G.S.	
LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

WF

5a. Indicate Type of Lease State ☐ Fee ☒
5. State Oil & Gas Lease No.
7. Unit Agreement Name
8. Farm or Lease Name Litina Gas Com "A"
9. Well No. JE
10. Field and Pool, or Wildcat Basin Dakota
12. County San Juan

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☐ GAS WELL ☒ OTHER ☐
2. Name of Operator AMOCO PRODUCTION COMPANY
3. Address of Operator 301 Airport Drive Farmington, NM 87401
4. Location of Well UNIT LETTER J 2040 FEET FROM THE South LINE AND 1790 FEET FROM THE East LINE, SECTION 34 TOWNSHIP 30N RANGE 9W NMPM.
15. Elevation (Show whether DF, RT, GR, etc.) 5716', CL

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐
PULL OR ALTER CASING ☐	OTHER ☒ Unorthodox Location

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐	ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOB ☐	OTHER ☐

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Amoco Production Company has staked the above referenced well in a non-standard location, 2040' FSL x 1790' FEL, Section 34, T30N, R9W, San Juan County, New Mexico. The staking of this well at a non-standard location is due to the rugged terrain of the area, existing pipelines, buildings, houses in the area, existing wells and facilities and a child's grave. The move is toward Amoco acreage. A plat and topographic map are attached.

The APD of this non-standard location has been filed and approved with the NMCCC, Astec on May 29, 1979.

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

SIGNED Original Signed By B. E. FACKRELL TITLE Dist. Engineer DATE 6/18/79

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

June 14, 1979

Secretary - Director
New Mexico Oil Conservation Commission
Box 2088
Santa Fe, NM 82501

File: RWS-345-400.0 x 986.510

Gentlemen:

Application For Unorthodox Location
Likins Gas Com "A" No. 3E
2040' FSL & 1790' FEL, Section 34, T30N, R9W
Basin Dakota Field
San Juan County, New Mexico

Amoco Production Company hereby requests administrative approval of a non-standard location for the Likins Gas Com "A" No. 3E to be drilled 2040' FSL and 1790' FEL Section 24, T30N, R9W in the Basin Dakota Field. We request approval of our application due to the rugged terrain of the area, existing pipelines, buildings and houses in the area, existing wells and facilities and a child's grave. The offset acreage belongs to Amoco Production Company as indicated on the attached map. The map notes the proposed drillsite, operators and Basin Dakota wells in the immediate vicinity. A topograph map is also attached.

Sincerely,

Original Signed By

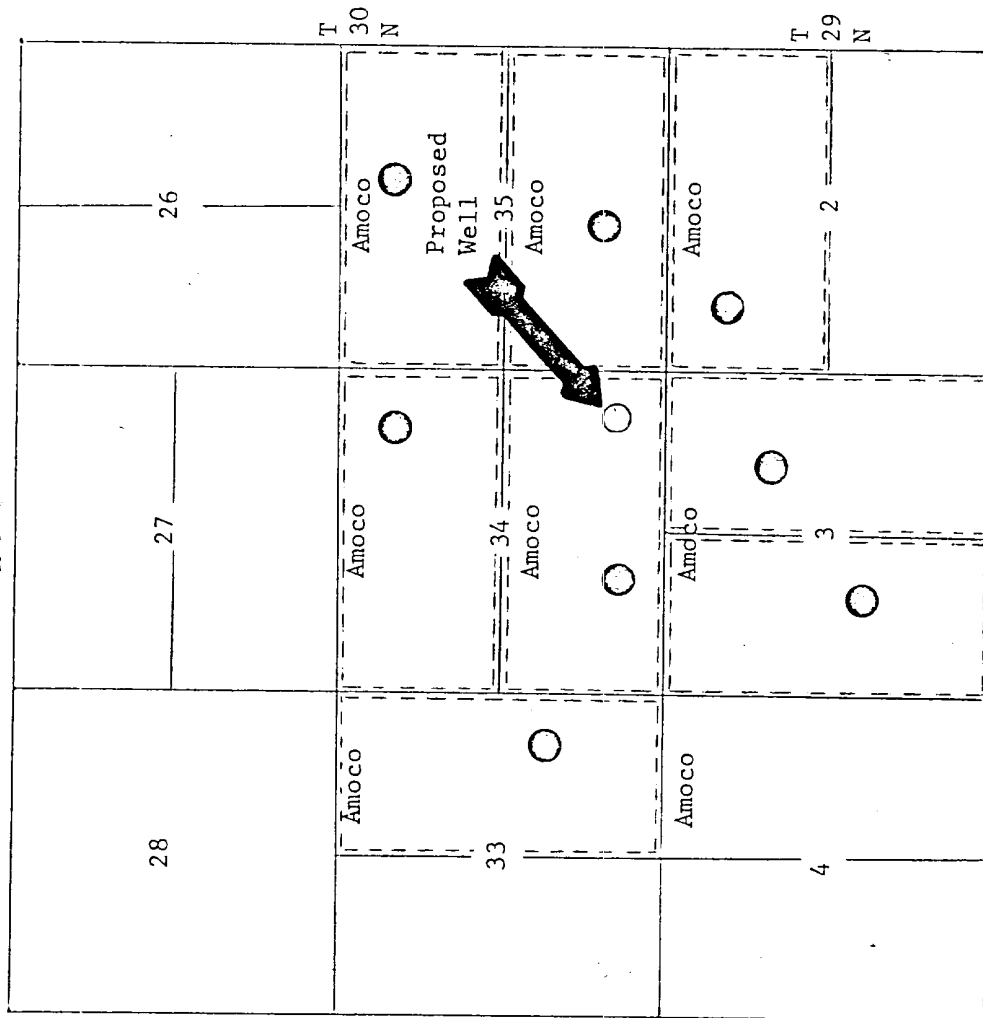
R. W. SCHROEDER

TME/pp TME

cc A. R. Kendrick, Supervisor
District No. 3
New Mexico Oil Conservation Commission
1000 Rio Brazos Road
Aztec, NM 87410

bcc G. J. Ross - Denyer

R-9-W



Boundaries of Basin Dakota Spacing Units
 Proposed Location - Likins Gas Com "A" No. 3E
 Offset Basin Dakota Wells

Amoco Production Company
 Application for Unorthodox
 Location - Basin Dakota Field
 San Juan County, New Mexico
 June 18, 1979

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

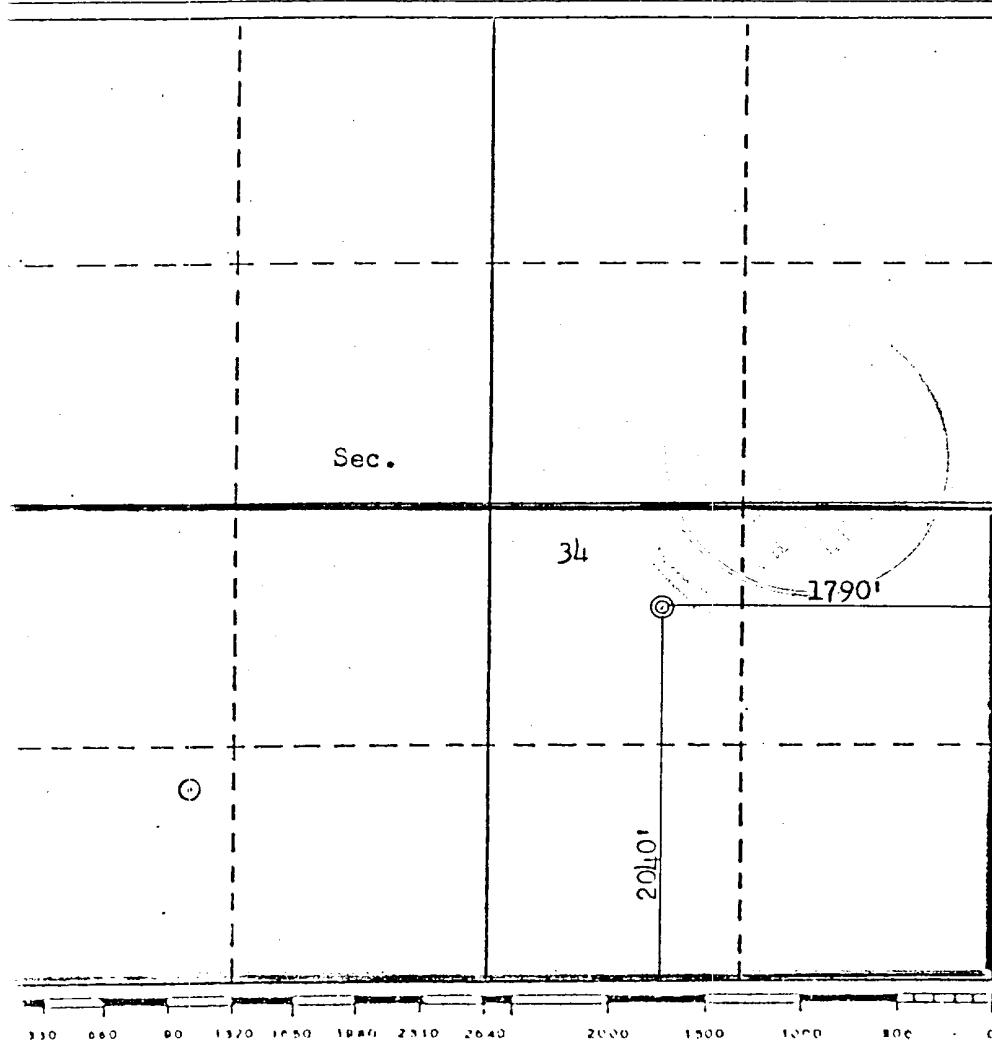
Operator AMOCO PRODUCTION COMPANY			Lease LIKINS GAS COM "A"		Well No. 3E
Well Letter J	Section 34	Township 30N	Range 9W	County San Juan	
Actual Footage Location of Well:					
2040 feet from the South line and		1790 feet from the East line			
Ground Level Elev. 5716	Producing Formation Dakota	Pool Basin Dakota		Dedicated Acreage: 320	Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



CERTIFICATION

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

B. E. Fackrell

Name

B. E. FACKRELL

Position

DISTRICT ENGINEER

Company

AMOCO PRODUCTION COMPANY

Date

MAY 10, 1979

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 knowledge and belief.

Date Surveyed

May 7, 1979

Registered Professional Engineer
and/or Land Surveyor

Fred P. Kerr, Jr.

Certificate No. 3950
KERR, JR.

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

311 South First, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco
 Santa Fe, New Mexico 87505

Form C-102**Revised October 18, 1994**

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 3004523569	Pool Code 72319	Pool Name Blanco Mesaverde
Property Code 000795	Property Name Likins Gas Com A	Well Number 3E
OGRID No. 000778	Operator Name AMOCO PRODUCTION COMPANY	Elevation 5716

Surface Location

UL or lot no. UNIT J	Section 34	Township 30N	Range 9W	Lot. Idn	Feet from the 2040	North/South Line SOUTH	Feet from the 1790	East/West Line EAST	County San Juan
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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
Dedicated Acreage: 312.36		Joint or Infill	Consolidation Code		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**

	OPERATOR CERTIFICATION	
	<i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i>	
	Signature 	
	Printed Name Pat Archuleta	
	Position Staff Assistant	
	Date 5/06/97	
	SURVEY 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 knowledge and belief.</i>	
	Date of Survey 05/11/1997	
	Signature & Seal of Professional Surveyor Fred B. Kerr, Jr.	
Certificate No. 3950		