



Southern

Rockies

Business

Unit

September 20, 1996

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

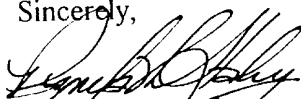
RECEIVED
SEP 23 1996
OIL CON. DIV.
DIST. 3

Application for Exception to Rule 303-A
Downhole Commingling
Hughes A #1E Well
Unit E Section 27-T29N-R8W
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.

Should there be questions concerning this matter, please contact me at (303) 830-5344.

Sincerely,


Pamela W. Staley

Enclosures

cc: Stan Kolodzie
Pat Archuleta
Wellfile
Proration File

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

Duane Spencer
Bureau of Land Management
1235 La Plata Hwy.
Farmington, NM 87401

DISTRICT I
P.O. Box 1980, Hobbs NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107-A
New 3-12-96

DISTRICT II
811 South First St., Artesia, NM 88210-2835

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

DISTRICT III
1000 Rio Brazos Rd. Aztec, NM 87410-1693

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE
☒ YES ☐ NO

Amoco Production Company

P.O. Box 800 Denver, CO 80201

Operator
HUGHES A

1E

Address
E-27-29N-8W

San Juan

Lease

Well No.

Unit Ltr. - Sec Twp - Rge

County

OGRID NO. 000778 Property Code 000701 API NO. 3004525459 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	BLANCO MESAVERDE 72319		BASIN DAKOTA 71599
2. Top and Bottom of Pay Section (Perforations)	4654' - 5434' PROPOSED		7308' - 7534'
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	(Current) a. 598 PSI (Original) b. 1259 PSI	a. b.	a. 1151 PSI b. 2568 PSI
6. Oil Gravity (° API) or Gas BTU Content	1190 BTU		1234 BTU
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: Rates:	Date: Rates:	Date: Rates:
• If Producing, give date and oil/gas/water rates of recent test (within 60 days)	ESTIMATED Date: Rates: 500 MCFD 5 BCPD 1 BWPD	Date: Rates:	8/96 Date: Rates: 18 MCFD 0.2 BCPD 0.2 BWPD
8. Fixed Percentage Allocation Formula -% for each zone	Oil: 96 % Gas %	Oil: % Gas %	Oil: 4 % 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?
If not, have all working, overriding, and royalty interests been notified by certified mail?
Have all offset operators been given written notice of the proposed downhole commingling?
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)
15. If this well is on, or communized 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 SF-078049
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. SEE ATTACHED
 - 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 PAMELA W. STALEY

TITLE REGULATORY AFFAIRS ENGR DATE 9/15/96

TYPE OR PRINT NAME PAMELA W. STALEY

TELEPHONE NO. (303) 830-5344

District I
PO Box 1980, Hobbs, NM 88241-1980

District II

811 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 & 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 3004525459		2 Pool Code 72319		3 Pool Name Blanco Mesaverde	
4 Property Code 000701		5 Property Name Hughes A			6 Well Number 1E
7 OGRID No. 000778		8 Operator Name Amoco Production Company			9 Elevation 320

10 Surface Location

UL or lot no. E	Section 27	Township 29N	Range 8W	Lot Idn	Feet from the 1810	North/South line North	Feet from the 1080	East/West line West	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 320.00		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

16 	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> Signature: <u>Pat Archuleta</u> Printed Name: <u>Pat Archuleta</u> Title: <u>Clerk</u> Date: <u>July 31, 1996</u>			
	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> Date of Survey: <u>May 27, 1982</u> Signature and Seal of Professional Surveyor: 3950 Certificate Number			

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form O-102
Revised 10-1-78

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

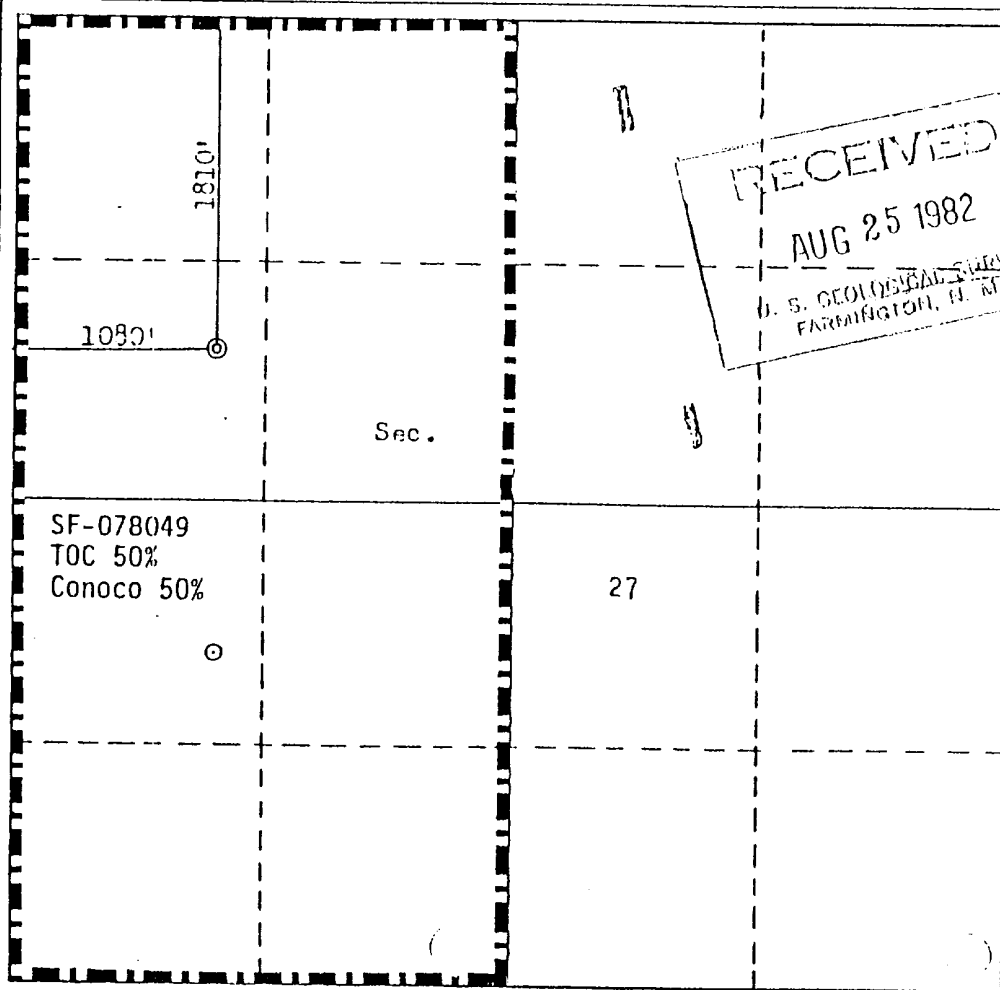
Operator TENNECO OIL COMPANY			Lease HUGHES "A"		Well No. 1E
Unit Letter E	Section 27	Township 29N	Range 8W	County San Juan	
Actual Footage Location of Well: 1810 feet from the North line and 1080 feet from the West line					
Ground Level Elev. 6435	Producing Formation Dakota		Pool Basin Dakota		Dedicated 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 Commission.



CERTIFICATION

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

Name
Ken Russell

Position
Sr. Production Analyst

Company
Tenneco Oil E & P

Date
July 20, 1982

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 22, 1982

Registered Professional Engineer
and/or Land Surveyor

Fred B. Kerr Jr.

Certificate No.

3950

ALLOCATION METHOD

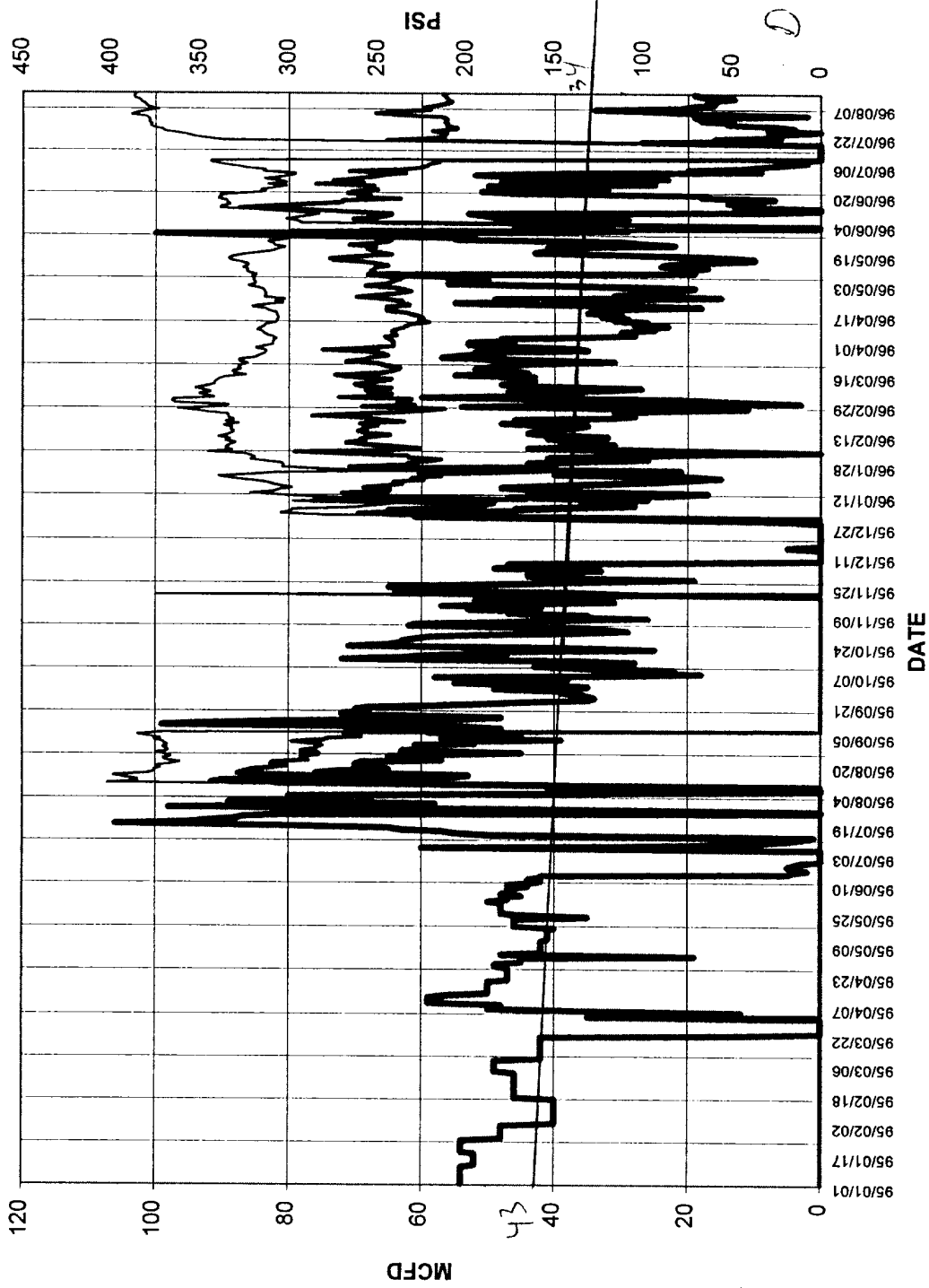
Hughes A #1E Well

The Hughes A #1E well has been producing for some time as a Dakota well. We propose to allocate based on the subtraction method using the attached future decline rate curve and tabular data for gas production for the Dakota and the remaining amount of gas produced to be attributed to the Mesaverde. Estimates for initial producing rate for the Mesaverde were determined from a recent completion we did in the Michener LS #3A (curve attached). The condensate production is recommended to be allocated as indicated on the C-107A by percentage allocation attributing 96% of liquid production to the Mesaverde and 4% of liquid production to the Dakota.

Chart 1

Well: HUGHES A 001E-DK

(97979501)



Hughes A 1E - Commingling Application				
Extrapolated Profile of Dakota for Future Production				
Most Stable period - used for extrapolation = 1/1/96 thru 6/1/96				
Exponential D = 0.1380 per year				
Estimated economic limit = 25 MCFD				
Month	Rate			
May-96	34.0			
Jun-96	33.3			
Jul-96	32.7			
Aug-96	32.0			
Sep-96	31.4			
Oct-96	30.8			
Nov-96	30.2			
Dec-96	29.6			
Jan-97	29.0			
Feb-97	28.4			
Mar-97	27.9			
Apr-97	27.3			
May-97	26.8			
Jun-97	26.3			
Jul-97	25.8			
Aug-97	25.3			
Sep-97	24.8			
Oct-97	24.3			
Nov-97	23.8			
Dec-97	23.3			
Jan-98	22.9			
Feb-98	22.4			
Mar-98	22.0			
Apr-98	21.5			
May-98	21.1			
Jun-98	20.7			
Jul-98	20.3			
Aug-98	19.9			
Sep-98	19.5			
Oct-98	19.1			
Nov-98	18.8			
Dec-98	18.4			
Jan-99	18.0			
Feb-99	17.7			
Mar-99	17.3			
Apr-99	17.0			
May-99	16.6			
Jun-99	16.3			
Jul-99	16.0			
Aug-99	15.7			
Sep-99	15.4			

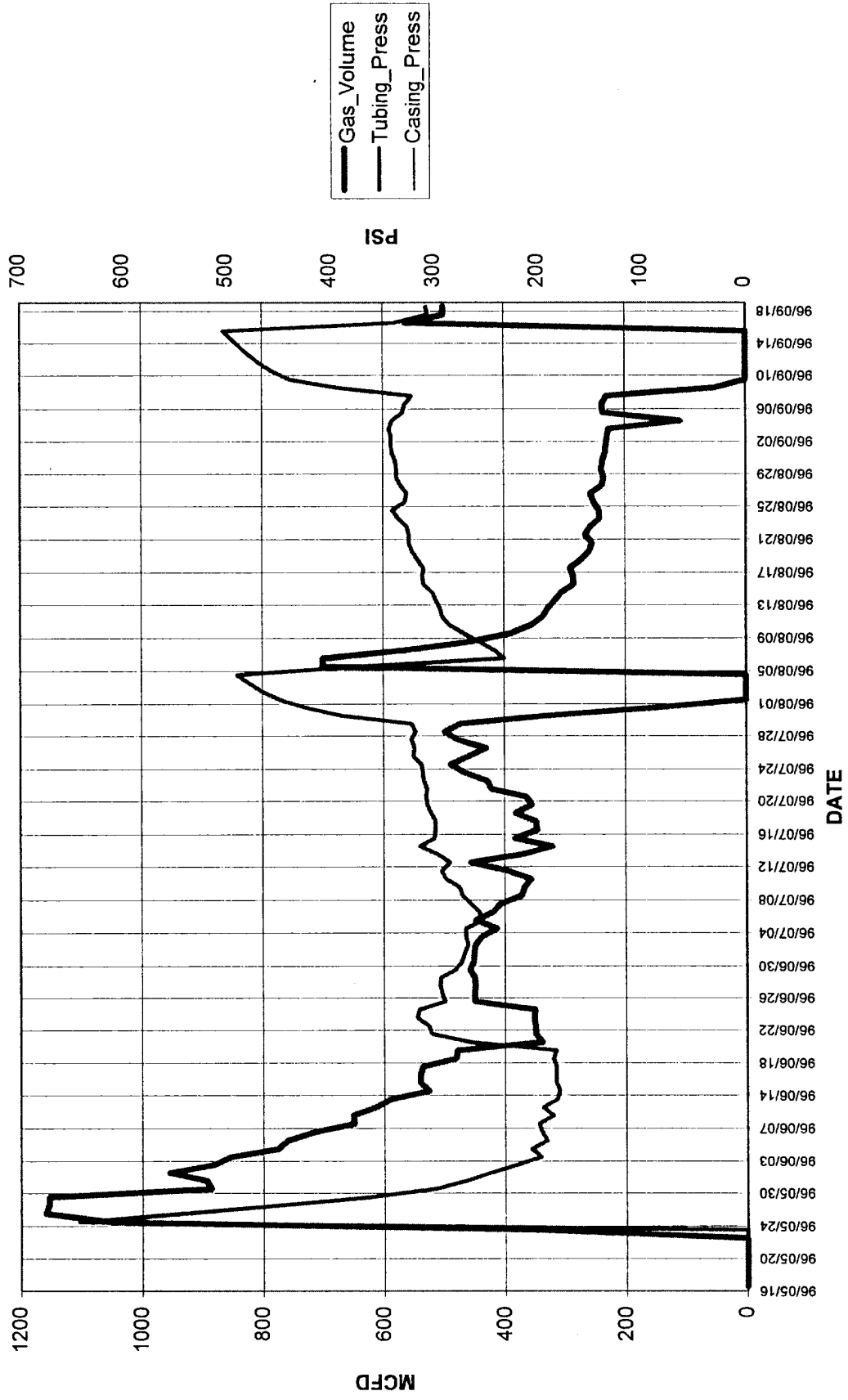
Oct-99		15.1				
Nov-99		14.8				
Dec-99		14.5				
Jan-00		14.2				
Feb-00		13.9				
Mar-00		13.7				
Apr-00		13.4				
May-00		13.1				
Jun-00		12.9				
Jul-00		12.6				
Aug-00		12.4				
Sep-00		12.1				
Oct-00		11.9				
Nov-00		11.7				
Dec-00		11.4				
Jan-01		11.2				
Feb-01		11.0				
Mar-01		10.8				
Apr-01		10.6				
May-01		10.3				
Jun-01		10.1				
Jul-01		9.9				
Aug-01		9.7				
Sep-01		9.6				
Oct-01		9.4				
Nov-01		9.2				
Dec-01		9.0				
Jan-02		8.8				
Feb-02		8.7				
Mar-02		8.5				
Apr-02		8.3				
May-02		8.2				
Jun-02		8.0				
Jul-02		7.8				
Aug-02		7.7				
Sep-02		7.5				
Oct-02		7.4				
Nov-02		7.2				
Dec-02		7.1				
Jan-03		7.0				
Feb-03		6.8				
Mar-03		6.7				
Apr-03		6.6				
May-03		6.4				
Jun-03		6.3				
Jul-03		6.2				
Aug-03		6.1				
Sep-03		5.9				
Oct-03		5.8				

Nov-03	5.7				
Dec-03	5.6				
Jan-04	5.5				
Feb-04	5.4				
Mar-04	5.3				
Apr-04	5.2				
May-04	5.1				
Jun-04	5.0				
Jul-04	4.9				
Aug-04	4.8				
Sep-04	4.7				
Oct-04	4.6				
Nov-04	4.5				
Dec-04	4.4				
Jan-05	4.3				
Feb-05	4.2				
Mar-05	4.2				
Apr-05	4.1				
May-05	4.0				
Jun-05	3.9				
Jul-05	3.8				
Aug-05	3.8				
Sep-05	3.7				
Oct-05	3.6				
Nov-05	3.5				
Dec-05	3.5				
Jan-06	3.4				
Feb-06	3.3				
Mar-06	3.3				
Apr-06	3.2				
May-06	3.1				
Jun-06	3.1				
Jul-06	3.0				
Aug-06	3.0				
Sep-06	2.9				
Oct-06	2.8				
Nov-06	2.8				
Dec-06	2.7				
Jan-07	2.7				
Feb-07	2.6				
Mar-07	2.6				
Apr-07	2.5				
May-07	2.5				
Jun-07	2.4				
Jul-07	2.4				
Aug-07	2.3				
Sep-07	2.3				
Oct-07	2.2				
Nov-07	2.2				

Dec-07		2.2				
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Chart1

Well: MICHENER LS 003A-MV (71635801)



OFFSET OPERATORS
Hughes A #1E Well

Conoco, Inc.
10 Desta Drive West
Midland, Texas 79705

Meridian Oil, Inc.
P.O. Box 4289
Farmington, NM 87499