Amoco Exploration & Production
501 Westlake Park Blvd.
Post Office Box 3092
Houston, TX 77079

December 14, 1999

Ms. Lori Wrotenbery, 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
Hughes No. 1E
Unit C Section 21-T29N-R8W
Blanco Mesaverde and Basin Dakota 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. All working, overriding and royalty interests are identical in both zones, therefore, no notification of this application is required to be submitted via certified mail. By copy of this application, Amoco is notifying all offset operators in the formations captioned above.

We respectfully request that in the absence of a valid objection from any of the offset operators this application for downhole commingling be approved within 20 days after the receipt of the application as all ownership is common in the zones to be commingled, waste will not occur, and correlative rights will not be violated.

Should you have questions regarding this application, do not hesitate to call me at 281-366-4491.

Sincerely,

Mary Corley
Enclosures

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

James Dean

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

Well File

OFFSET OPERATORS
Hughes 1E

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

Conoco Inc.
10 Desta Drive, Suite 100 West
Midland, TX 79705-4515

PRODUCTION ALLOCATION RECOMMENDATION
Hughes 1E

Production is proposed to be allocated based on the subtraction method using the future projection of projection for production from the Dakota. That production shall serve as a base for production subtracted from total production for the commingled well. The balance of the production will be attributed to the Blanco Mesaverde. Attached is the future production decline estimate for the Dakota.

WORKING, OVERRIDING, and ROYALTY INTEREST OWNERS NOTIFICATION
Hughes 1E

All of the working, overriding, and royalty interest are identical in both proposed commingled zones.

DATE IN	SUSPENSE	ENGINEER	LOGGED	TYPE
12/15/99	1/4/00	DC	MV	DHC

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

8571

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] and [C]

[B] Commingling - Storage - Measurement
X DHC _ CTB _ PLC _ PC _ OLS _ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
_ WFX _ PMX _ SWD _ IPI _ EOR _ PPR

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or _ Does Not Apply

[A] __ Working, Royalty or Overriding Royalty Interest Owners

[B] X Offset Operators, Leaseholders or Surface Owner

[C] _ Application is One Which Requires Published Legal Notice

[D] X 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 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.

Mary Corley	Mary Corley	Sr. Business Analyst	12/14/1999
Print or Type Name	Signature	Title	Date

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

DISTRICT II
811 South 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 87505-6429

APPLICATION FOR DOWNHOLE COMMINGLING

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

APPROVAL PROCESS:
x_ Administrative __ Hearing

EXISTING WELLBORE
_x_ YES __ NO

Amoco Production Company		PO Box 3092 Houston, TX 77253-3092	
Operator		Address	
Hughes	**1E**	**C 21-29N-08W**	**San Juan**
Lease	Well No.	Unit Ltr. - Sec Twp - Rge	County

OGRID NO. **000778** Property Code **000698** API NO. **30-045-25457** Spacing Unit Lease Types: (check 1 or more) Federal **X** , 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)	**4698' - 5475' EST**		**7358' - 7579'**
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) **489 psig (est)**	a.	a. **797 psig**
	b. (Original) **2401 psig (est)**	b.	b. **3281 psig**
6. Oil Gravity (° API) or Gas BTU Content	**1281 BTU**		**1128 BTU**
7. Producing or Shut-In?	**New zone**		**Producing**
Production Marginal? (yes or no)	YES		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)	Date: Rates:	Date: Rates:	Date: 8/1/1999 Rates: **121 MCFD, .03 BCPD, 0 BWPD**
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? _X_ 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? _X_ Yes ___ No

11. Will cross-flow occur? ___ Yes _X_ 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. _X_ Yes ___ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? _X_ Yes ___ No

13. Will the value of production be decreased by commingling? ___ Yes _X_ 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 Untied States Bureau of Land Management has been notified in writing of this application. ___ Yes _X_ No NO FEDERAL OR STATE LANDS

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. 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 Mary Corley TITLE **Sr. Business Analyst** DATE **12/14/1999**

TYPE OR PRINT NAME **Mary Corley** TELEPHONE NO. (**281**) **366-4491**

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
311 South First,, Artesia, NM 88210
DISTRICTIII
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
2040 South Pacheco, Sante 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	Pool Code	Pool Name
30-045-25457	72319 & 71599	Blanco Mesaverde & Basin Dakota

Property Code	Property Name	Well Number
000698	Hughes	1E

OGRID No.	Operator Name	Elevation
000778	AMOCO PRODUCTION COMPANY	6452' GR

Surface Location

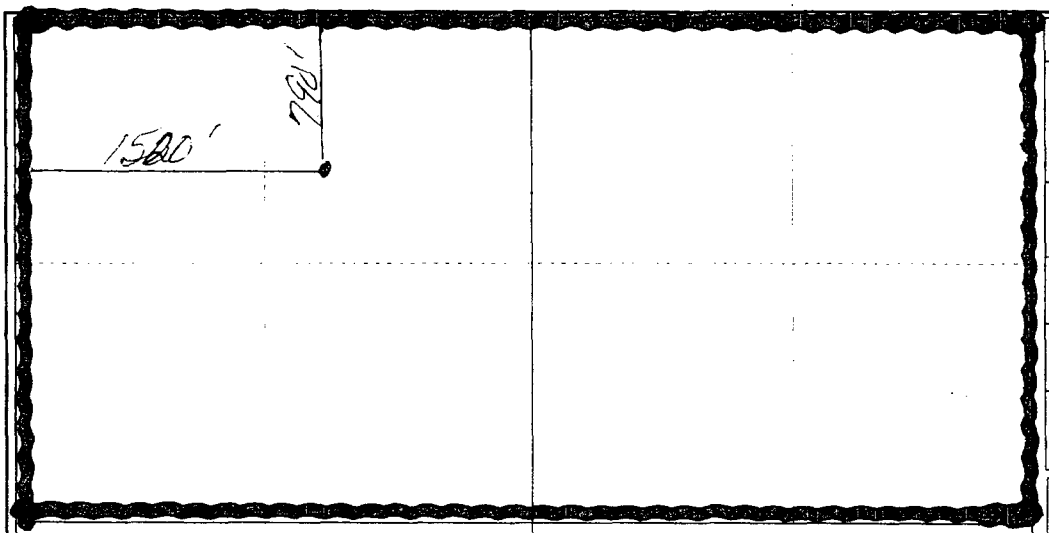
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West Line	County
UNIT C	21	29N	8W		790	NORTH	1520	WEST	San Juan

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:	Joint or Infill	Consolidation Code	Order No.
320			

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

Signature: Mary Corley

Printed Name: MARY CORLEY

Position: Sr. Business Analyst

Date: 12/13/1999

SURVEY CERTIFICATION

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 of Survey: 05/28/1982

Signature & Seal of Professional Surveyor: Fred B. Kerr, Jr.

Certificate No.: 3950

Hughes 1E
Pressure Data

DK	0.08	PC	0.04
MV	0.07	FT	0.04
		CK	0.04

WELL NAME: **Hughes 1E**
FORMATION: DK
SURFACE PRESS: 200
PERFS TOP: 7358
BOTTOM: 7579

(7358 + 7579)/ 2 = 7469 Mid Perf
7468.5 x 0.08 = 597
597.48 + 200 = 797 **Bottom Hole Pressure**

Initial Bottom Hole Pressure= 3281 est.

WELL NAME: **Hughes B 5A**
FORMATION: MV
SURFACE PRESS: 146
PERFS TOP: 4688
BOTTOM: 5611

(4688 + 5611)/ 2 = 5150 Mid Perf
5149.5 x 0.07 = 360
360.47 + 146 = 506 **Bottom Hole Pressure**

Initial Bottom Hole Pressure= 2430 est.

WELL NAME: **Hughes B 6**
FORMATION: MV
SURFACE PRESS: 115
PERFS TOP: 4680
BOTTOM: 5480

(4680 + 5480)/ 2 = 5080 Mid Perf
5080 x 0.07 = 356
355.6 + 115 = 471 **Bottom Hole Pressure**

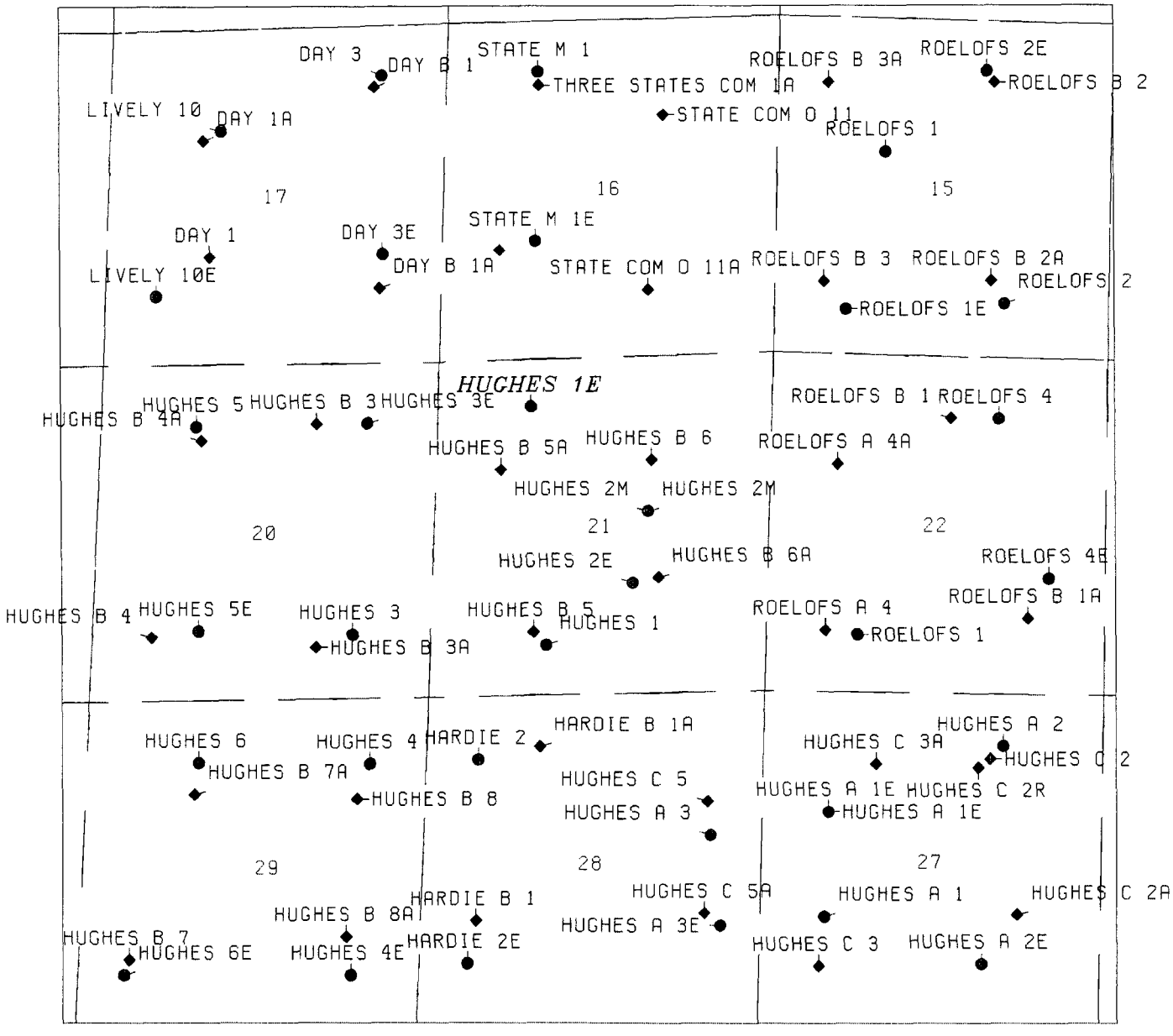
Initial Bottom Hole Pressure= 2372 est.

WELL NAME: Hughes 1E
FORMATION: MV

Initial Bottom Hole Pressure: (2430 + 2372) / 2 ≅ 2401
Bottom Hole Pressure: (506 + 471) / 2 ≅ 489 est.

Hughes B 5A + Hughes B 6 BBLS (1135 + 0) / 2 ≅ 568 est. annual production
Hughes B 5A + Hughes B 6 MCF (58785 + 22632) / 2 ≅ 40709 est. annual production

ALLOCATION: SUBTRACTION METHOD



● DAKOTA

◆ MESAVERDE

AMOCO PRODUCTION COMPANY
HOUSTON, TX

WESTERN GAS BUSINESS UNIT
SAN JUAN BASIN
T-29-N R-8-W SEC. 21
HUGHES #1E

SCALE 1"=2500'	DRAWN M. J. RITZ	DATE 30-NOV-1999
DRAWING		

Hughes 1E
Future Production Decline Estimate

Month	Gas Volume
Jan-2000	120
Feb-2000	119
Mar-2000	118
Apr-2000	117
May-2000	116
Jun-2000	115
Jul-2000	114
Aug-2000	113
Sep-2000	112
Oct-2000	111
Nov-2000	110
Dec-2000	109
Jan-2001	108
Feb-2001	107
Mar-2001	106
Apr-2001	105
May-2001	104
Jun-2001	103
Jul-2001	102
Aug-2001	101
Sep-2001	100
Oct-2001	99
Nov-2001	98
Dec-2001	97
Jan-2002	97
Feb-2002	96
Mar-2002	95
Apr-2002	94
May-2002	93
Jun-2002	92
Jul-2002	91
Aug-2002	91
Sep-2002	90
Oct-2002	89
Nov-2002	88
Dec-2002	87

Month	Gas Volume
Jan-2003	87
Feb-2003	86
Mar-2003	85
Apr-2003	84
May-2003	84
Jun-2003	83
Jul-2003	82
Aug-2003	81
Sep-2003	81
Oct-2003	80
Nov-2003	79
Dec-2003	78
Jan-2004	78
Feb-2004	77
Mar-2004	76
Apr-2004	76
May-2004	75
Jun-2004	74
Jul-2004	74
Aug-2004	73
Sep-2004	72
Oct-2004	72
Nov-2004	71
Dec-2004	70
Jan-2005	70
Feb-2005	69
Mar-2005	69
Apr-2005	68
May-2005	67
Jun-2005	67
Jul-2005	66
Aug-2005	65
Sep-2005	65
Oct-2005	64
Nov-2005	64
Dec-2005	63

Month	Gas Volume
Jan-2006	63
Feb-2006	62
Mar-2006	61
Apr-2006	61
May-2006	60
Jun-2006	60
Jul-2006	59
Aug-2006	59
Sep-2006	58
Oct-2006	58
Nov-2006	57
Dec-2006	57
Jan-2007	56
Feb-2007	56
Mar-2007	55
Apr-2007	55
May-2007	54
Jun-2007	54
Jul-2007	53
Aug-2007	53
Sep-2007	52
Oct-2007	52
Nov-2007	51
Dec-2007	51
Jan-2008	50
Feb-2008	50
Mar-2008	49
Apr-2008	49
May-2008	49
Jun-2008	48
Jul-2008	48
Aug-2008	47
Sep-2008	47
Oct-2008	46
Nov-2008	46
Dec-2008	46

Month	Gas Volume
Jan-2009	45
Feb-2009	45
Mar-2009	44
Apr-2009	44
May-2009	44
Jun-2009	43
Jul-2009	43
Aug-2009	42
Sep-2009	42
Oct-2009	42
Nov-2009	41
Dec-2009	41
Jan-2010	41
Feb-2010	40
Mar-2010	40
Apr-2010	39
May-2010	39
Jun-2010	39
Jul-2010	38
Aug-2010	38
Sep-2010	38
Oct-2010	37
Nov-2010	37
Dec-2010	37
Jan-2011	36
Feb-2011	36
Mar-2011	36
Apr-2011	35
May-2011	35
Jun-2011	35
Jul-2011	34
Aug-2011	34
Sep-2011	34
Oct-2011	34
Nov-2011	33
Dec-2011	33

Hughes 1E
Future Production Decline Estimate

Month	Gas Volume
Jan-2012	33
Feb-2012	32
Mar-2012	32
Apr-2012	32
May-2012	31
Jun-2012	31
Jul-2012	31
Aug-2012	31
Sep-2012	30
Oct-2012	30
Nov-2012	30
Dec-2012	30
Jan-2013	29
Feb-2013	29
Mar-2013	29
Apr-2013	29
May-2013	28
Jun-2013	28
Jul-2013	28
Aug-2013	27
Sep-2013	27
Oct-2013	27
Nov-2013	27
Dec-2013	27
Jan-2014	26
Feb-2014	26
Mar-2014	26
Apr-2014	26
May-2014	25
Jun-2014	25
Jul-2014	25
Aug-2014	25
Sep-2014	24
Oct-2014	24
Nov-2014	24
Dec-2014	24

Month	Gas Volume
Jan-2015	24
Feb-2015	23
Mar-2015	23
Apr-2015	23
May-2015	23
Jun-2015	23
Jul-2015	22
Aug-2015	22
Sep-2015	22
Oct-2015	22
Nov-2015	22
Dec-2015	21
Jan-2016	21
Feb-2016	21
Mar-2016	21
Apr-2016	21
May-2016	20
Jun-2016	20
Jul-2016	20
Aug-2016	20
Sep-2016	20
Oct-2016	19
Nov-2016	19
Dec-2016	19
Jan-2017	19
Feb-2017	19
Mar-2017	19
Apr-2017	18
May-2017	18
Jun-2017	18
Jul-2017	18
Aug-2017	18
Sep-2017	18
Oct-2017	17
Nov-2017	17
Dec-2017	17

Month	Gas Volume
Jan-2018	17
Feb-2018	17
Mar-2018	17
Apr-2018	17
May-2018	16
Jun-2018	16
Jul-2018	16
Aug-2018	16
Sep-2018	16
Oct-2018	16
Nov-2018	16
Dec-2018	15
Jan-2019	15
Feb-2019	15
Mar-2019	15
Apr-2019	15
May-2019	15
Jun-2019	15
Jul-2019	14
Aug-2019	14
Sep-2019	14
Oct-2019	14
Nov-2019	14
Dec-2019	14
Jan-2020	14
Feb-2020	14
Mar-2020	13
Apr-2020	13
May-2020	13
Jun-2020	13
Jul-2020	13
Aug-2020	13
Sep-2020	13
Oct-2020	13
Nov-2020	13
Dec-2020	12

Month	Gas Volume
Jan-2021	12
Feb-2021	12
Mar-2021	12
Apr-2021	12
May-2021	12
Jun-2021	12
Jul-2021	12
Aug-2021	12
Sep-2021	11
Oct-2021	11
Nov-2021	11
Dec-2021	11
Jan-2022	11
Feb-2022	11
Mar-2022	11
Apr-2022	11
May-2022	11
Jun-2022	11
Jul-2022	10
Aug-2022	10
Sep-2022	10
Oct-2022	10
Nov-2022	10
Dec-2022	10
Jan-2023	10
Feb-2023	10
Mar-2023	10
Apr-2023	10
May-2023	10
Jun-2023	9
Jul-2023	9
Aug-2023	9
Sep-2023	9
Oct-2023	9
Nov-2023	9
Dec-2023	9

Hughes 1E
Future Production Decline Estimate

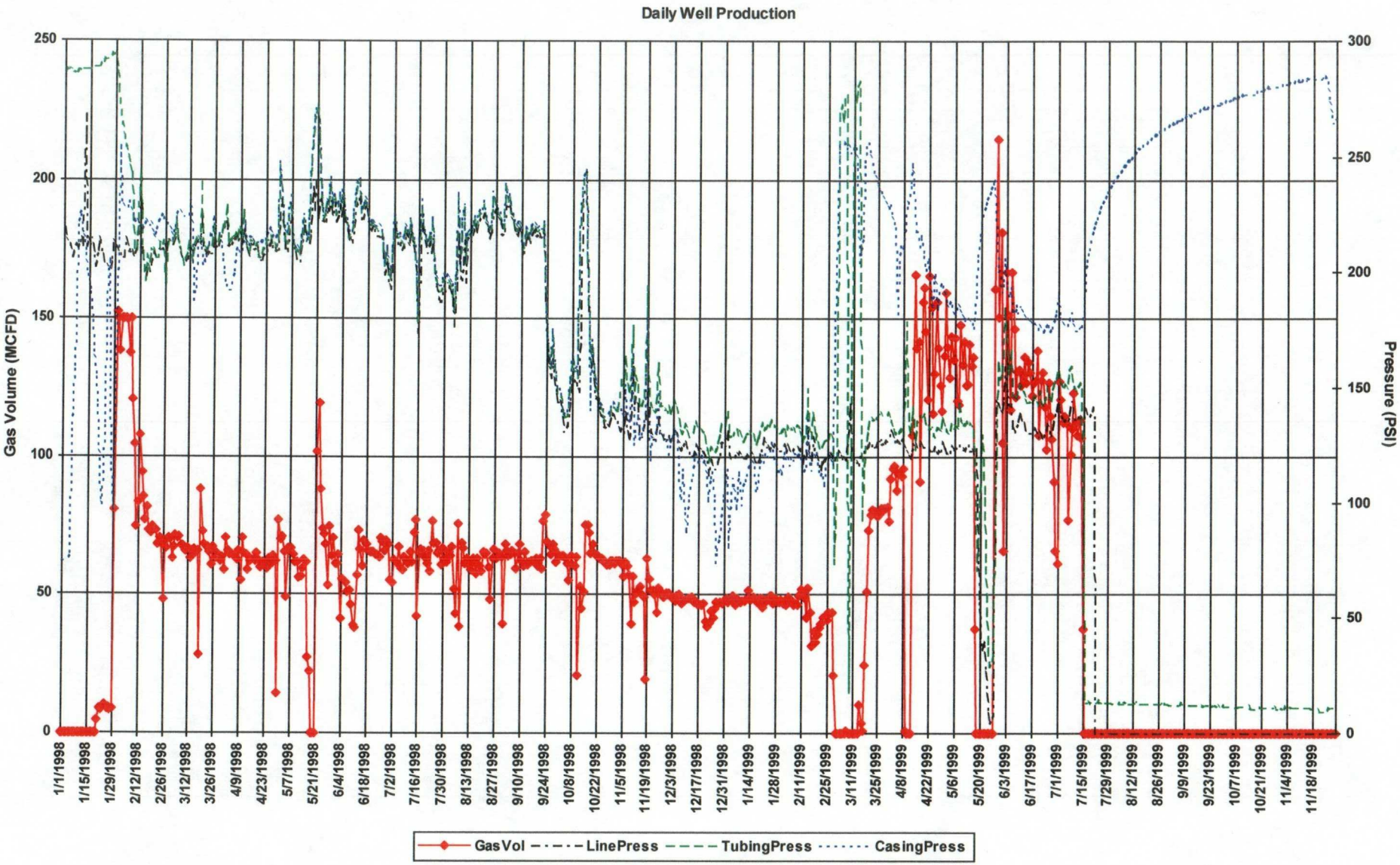
Month	Gas Volume
Jan-2024	9
Feb-2024	9
Mar-2024	9
Apr-2024	9
May-2024	9
Jun-2024	8
Jul-2024	8
Aug-2024	8
Sep-2024	8
Oct-2024	8
Nov-2024	8
Dec-2024	8
Jan-2025	8
Feb-2025	8
Mar-2025	8
Apr-2025	8
May-2025	8
Jun-2025	8
Jul-2025	8
Aug-2025	7
Sep-2025	7
Oct-2025	7
Nov-2025	7
Dec-2025	7
Jan-2026	7
Feb-2026	7
Mar-2026	7
Apr-2026	7
May-2026	7
Jun-2026	7
Jul-2026	7
Aug-2026	7
Sep-2026	7
Oct-2026	7
Nov-2026	7
Dec-2026	6

Month	Gas Volume
Jan-2027	6
Feb-2027	6
Mar-2027	6
Apr-2027	6
May-2027	6
Jun-2027	6
Jul-2027	6
Aug-2027	6
Sep-2027	6
Oct-2027	6
Nov-2027	6
Dec-2027	6
Jan-2028	6
Feb-2028	6
Mar-2028	6
Apr-2028	6
May-2028	6
Jun-2028	5
Jul-2028	5
Aug-2028	5
Sep-2028	5
Oct-2028	5
Nov-2028	5
Dec-2028	5
Jan-2029	5
Feb-2029	5
Mar-2029	5
Apr-2029	5
May-2029	5
Jun-2029	5
Jul-2029	5
Aug-2029	5
Sep-2029	5
Oct-2029	5
Nov-2029	5
Dec-2029	5

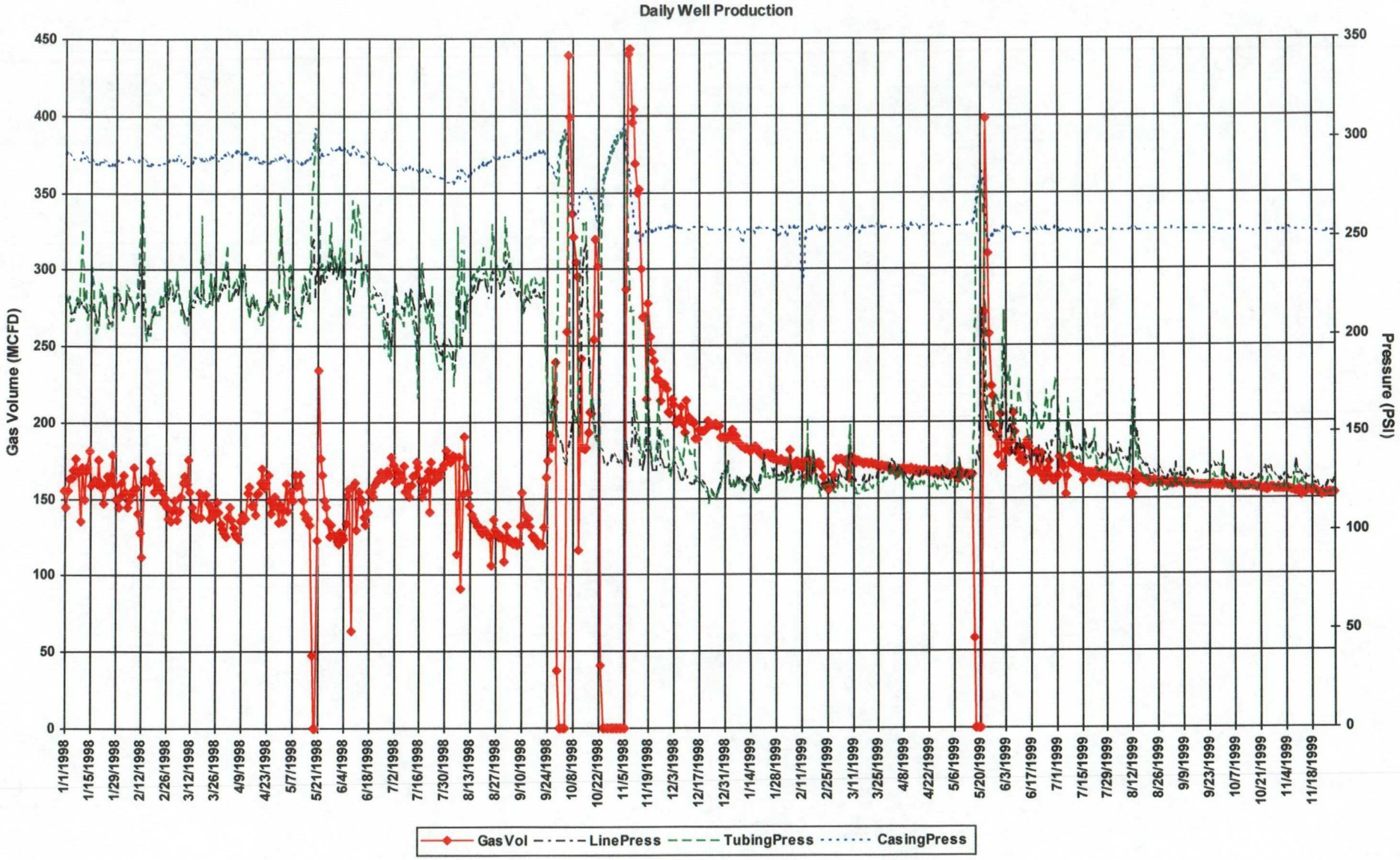
Month	Gas Volume
Jan-2030	5
Feb-2030	5
Mar-2030	5
Apr-2030	5
May-2030	4
Jun-2030	4
Jul-2030	4
Aug-2030	4
Sep-2030	4
Oct-2030	4
Nov-2030	4
Dec-2030	4
Jan-2031	4
Feb-2031	4
Mar-2031	4
Apr-2031	4
May-2031	4
Jun-2031	4
Jul-2031	4
Aug-2031	4
Sep-2031	4
Oct-2031	4
Nov-2031	4
Dec-2031	4
Jan-2032	4
Feb-2032	4
Mar-2032	4
Apr-2032	4
May-2032	4
Jun-2032	4
Jul-2032	4
Aug-2032	3
Sep-2032	3
Oct-2032	3
Nov-2032	3
Dec-2032	3

Month	Gas Volume
Jan-2033	3
Feb-2033	3
Mar-2033	3
Apr-2033	3
May-2033	3
Jun-2033	3
Jul-2033	3
Aug-2033	3
Sep-2033	3
Oct-2033	3
Nov-2033	3
Dec-2033	3
Jan-2034	3
Feb-2034	3
Mar-2034	3
Apr-2034	3
May-2034	3
Jun-2034	3
Jul-2034	3
Aug-2034	3
Sep-2034	3
Oct-2034	3
Nov-2034	3
Dec-2034	3
Jan-2035	3
Feb-2035	3
Mar-2035	3
Apr-2035	3
May-2035	3
Jun-2035	3
Jul-2035	3
Aug-2035	3
Sep-2035	3
Oct-2035	2
Nov-2035	2
Dec-2035	2

Wellname: **HUGHES B 006-MV** Flacwell: **97862501** API: **300450804400** Amoco - OIDB/Synergy Data



Wellname: **HUGHES B 005A-MV** Flacwell: **97991901** API: **300452683700** Amoco - OIDB/Synergy Data



Wellname: **HUGHES 001E-DK** Flacwell: **97979301** API: **300452545700** Amoco - OIDB/Synergy Data