

DATE: <u>12/1/99</u>	SUSPENSE: <u>12/21/99</u>	ENGINEER: <u>DC</u>	LOGGED: <u>KV</u>	TYPE: <u>DHC</u>
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

2547

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]

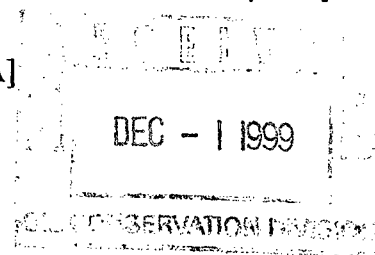
[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Directional Drilling
☐ NSL ☐ NSP ☐ DD ☐ SD

Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement
☒ 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] ☒ 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 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.

Print or Type Name	<u>Mary Corley</u>	Sr. Business Analyst	11/30/1999
	<u>Mary Corley</u>	Title	Date



Amoco Exploration & Production

501 Westlake Park Blvd.
Post Office Box 3092
Houston, TX 77079

November 309, 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
Roelofs No. 3
Unit G Section 9-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**

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

James Dean

Well File

OFFSET OPERATORS

Roelofs No. 3

**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

Roelofs No. 3

Production is proposed to be allocated based on the subtraction method using the future projection of production 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

Roelofs No. 3

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

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

OIL CONSERVATION DIVISION

APPROVAL PROCESS:

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

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

X_ Administrative ___ Hearing

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

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE
___X___ YES ___ NO

Amoco Production Company

PO Box 3092 Houston, TX 77253-3092

Operator	3	Address	G Sec. 9 T29N R8W	San Juan
Lease	Well No.	Unit Ltr. - Sec Twp - Rge	County	

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 000778 Property Code 000990 API NO. 30-045-23292 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)	4770' - 5475' EST		7442' - 7676'
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) 558 PSIG (est) b. (Original) 1009 PSIG (est)	a. b.	a. 1000 PSIG b. 3324 PSIG (est.)
6. Oil Gravity (° API) or Gas BTU Content	1261 BTU		1110 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:	10/31/1999 106 MCFD 0 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 United 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 11/30/1999
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

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 30-045-223292	Pool Code 72319 & 71599	Pool Name Blanco Mesaverde & Basin Dakota
Property Code 00990	Property Name Roelofs	Well Number 3
OGRID No. 000778	Operator Name AMOCO PRODUCTION COMPANY	Elevation 6463' 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 G	9	29N	8W		2400	NORTH	1560	EAST	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: 320	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 hereby certify that the information contained herein is true and complete to the best of my knowledge and belief
	Signature <i>Mary Corley</i> Printed Name Mary Corley
	Position Sr. Business Analyst Date 11/29/1999
	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.
	10/01/1978
	Date of Survey
	Signature & Seal of Professional Surveyor Fred B. Kerr, Jr.
	Certificate No. 3950

Roelofs No. 3 Future Production Decline Estimate

Month	Gas Volume
Jan-2024	60
Feb-2024	59
Mar-2024	59
Apr-2024	59
May-2024	59
Jun-2024	59
Jul-2024	59
Aug-2024	59
Sep-2024	59
Oct-2024	58
Nov-2024	58
Dec-2024	58
Jan-2025	58
Feb-2025	58
Mar-2025	58
Apr-2025	58
May-2025	58
Jun-2025	58
Jul-2025	57
Aug-2025	57
Sep-2025	57
Oct-2025	57
Nov-2025	57
Dec-2025	57
Jan-2026	57
Feb-2026	57
Mar-2026	57
Apr-2026	56
May-2026	56
Jun-2026	56
Jul-2026	56
Aug-2026	56
Sep-2026	56
Oct-2026	56
Nov-2026	56
Dec-2026	56

Month	Gas Volume
Jan-2027	55
Feb-2027	55
Mar-2027	55
Apr-2027	55
May-2027	55
Jun-2027	55
Jul-2027	55
Aug-2027	55
Sep-2027	55
Oct-2027	54
Nov-2027	54
Dec-2027	54
Jan-2028	54
Feb-2028	54
Mar-2028	54
Apr-2028	54
May-2028	54
Jun-2028	54
Jul-2028	53
Aug-2028	53
Sep-2028	53
Oct-2028	53
Nov-2028	53
Dec-2028	53
Jan-2029	53
Feb-2029	53
Mar-2029	53
Apr-2029	52
May-2029	52
Jun-2029	52
Jul-2029	52
Aug-2029	52
Sep-2029	52
Oct-2029	52
Nov-2029	52
Dec-2029	52

Month	Gas Volume
Jan-2030	52
Feb-2030	51
Mar-2030	51
Apr-2030	51
May-2030	51
Jun-2030	51
Jul-2030	51
Aug-2030	51
Sep-2030	51
Oct-2030	51
Nov-2030	51
Dec-2030	50
Jan-2031	50
Feb-2031	50
Mar-2031	50
Apr-2031	50
May-2031	50
Jun-2031	50
Jul-2031	50
Aug-2031	50
Sep-2031	50
Oct-2031	49
Nov-2031	49
Dec-2031	49
Jan-2032	49
Feb-2032	49
Mar-2032	49
Apr-2032	49
May-2032	49
Jun-2032	49
Jul-2032	49
Aug-2032	48
Sep-2032	48
Oct-2032	48
Nov-2032	48
Dec-2032	48

Month	Gas Volume
Jan-2033	48
Feb-2033	48
Mar-2033	48
Apr-2033	48
May-2033	48
Jun-2033	47
Jul-2033	47
Aug-2033	47
Sep-2033	47
Oct-2033	47
Nov-2033	47
Dec-2033	47
Jan-2034	47
Feb-2034	47
Mar-2034	47
Apr-2034	47
May-2034	46
Jun-2034	46
Jul-2034	46
Aug-2034	46
Sep-2034	46
Oct-2034	46
Nov-2034	46
Dec-2034	46
Jan-2035	46
Feb-2035	46
Mar-2035	46
Apr-2035	45
May-2035	45
Jun-2035	45
Jul-2035	45
Aug-2035	45
Sep-2035	45
Oct-2035	45
Nov-2035	45
Dec-2035	45

Roelofs No. 3 Future Production Decline Estimate

Month	Gas Volume
Jan-2012	79
Feb-2012	79
Mar-2012	79
Apr-2012	79
May-2012	79
Jun-2012	79
Jul-2012	79
Aug-2012	78
Sep-2012	78
Oct-2012	78
Nov-2012	78
Dec-2012	78
Jan-2013	78
Feb-2013	77
Mar-2013	77
Apr-2013	77
May-2013	77
Jun-2013	77
Jul-2013	77
Aug-2013	76
Sep-2013	76
Oct-2013	76
Nov-2013	76
Dec-2013	76
Jan-2014	76
Feb-2014	76
Mar-2014	75
Apr-2014	75
May-2014	75
Jun-2014	75
Jul-2014	75
Aug-2014	75
Sep-2014	75
Oct-2014	74
Nov-2014	74
Dec-2014	74

Month	Gas Volume
Jan-2015	74
Feb-2015	74
Mar-2015	74
Apr-2015	73
May-2015	73
Jun-2015	73
Jul-2015	73
Aug-2015	73
Sep-2015	73
Oct-2015	73
Nov-2015	72
Dec-2015	72
Jan-2016	72
Feb-2016	72
Mar-2016	72
Apr-2016	72
May-2016	72
Jun-2016	71
Jul-2016	71
Aug-2016	71
Sep-2016	71
Oct-2016	71
Nov-2016	71
Dec-2016	71
Jan-2017	70
Feb-2017	70
Mar-2017	70
Apr-2017	70
May-2017	70
Jun-2017	70
Jul-2017	70
Aug-2017	69
Sep-2017	69
Oct-2017	69
Nov-2017	69
Dec-2017	69

Month	Gas Volume
Jan-2018	69
Feb-2018	69
Mar-2018	69
Apr-2018	68
May-2018	68
Jun-2018	68
Jul-2018	68
Aug-2018	68
Sep-2018	68
Oct-2018	68
Nov-2018	67
Dec-2018	67
Jan-2019	67
Feb-2019	67
Mar-2019	67
Apr-2019	67
May-2019	67
Jun-2019	66
Jul-2019	66
Aug-2019	66
Sep-2019	66
Oct-2019	66
Nov-2019	66
Dec-2019	66
Jan-2020	66
Feb-2020	65
Mar-2020	65
Apr-2020	65
May-2020	65
Jun-2020	65
Jul-2020	65
Aug-2020	65
Sep-2020	65
Oct-2020	64
Nov-2020	64
Dec-2020	64

Month	Gas Volume
Jan-2021	64
Feb-2021	64
Mar-2021	64
Apr-2021	64
May-2021	63
Jun-2021	63
Jul-2021	63
Aug-2021	63
Sep-2021	63
Oct-2021	63
Nov-2021	63
Dec-2021	63
Jan-2022	62
Feb-2022	62
Mar-2022	62
Apr-2022	62
May-2022	62
Jun-2022	62
Jul-2022	62
Aug-2022	62
Sep-2022	61
Oct-2022	61
Nov-2022	61
Dec-2022	61
Jan-2023	61
Feb-2023	61
Mar-2023	61
Apr-2023	61
May-2023	61
Jun-2023	60
Jul-2023	60
Aug-2023	60
Sep-2023	60
Oct-2023	60
Nov-2023	60
Dec-2023	60

Roelofs No. 3 Future Production Decline Estimate

Month	Gas Volume
Jan-2000	106
Feb-2000	106
Mar-2000	106
Apr-2000	105
May-2000	105
Jun-2000	105
Jul-2000	105
Aug-2000	105
Sep-2000	104
Oct-2000	104
Nov-2000	104
Dec-2000	104
Jan-2001	103
Feb-2001	103
Mar-2001	103
Apr-2001	103
May-2001	103
Jun-2001	102
Jul-2001	102
Aug-2001	102
Sep-2001	102
Oct-2001	102
Nov-2001	101
Dec-2001	101
Jan-2002	101
Feb-2002	101
Mar-2002	101
Apr-2002	100
May-2002	100
Jun-2002	100
Jul-2002	100
Aug-2002	100
Sep-2002	99
Oct-2002	99
Nov-2002	99
Dec-2002	99

Month	Gas Volume
Jan-2003	99
Feb-2003	98
Mar-2003	98
Apr-2003	98
May-2003	98
Jun-2003	98
Jul-2003	97
Aug-2003	97
Sep-2003	97
Oct-2003	97
Nov-2003	97
Dec-2003	96
Jan-2004	96
Feb-2004	96
Mar-2004	96
Apr-2004	96
May-2004	96
Jun-2004	95
Jul-2004	95
Aug-2004	95
Sep-2004	95
Oct-2004	95
Nov-2004	94
Dec-2004	94
Jan-2005	94
Feb-2005	94
Mar-2005	94
Apr-2005	93
May-2005	93
Jun-2005	93
Jul-2005	93
Aug-2005	93
Sep-2005	93
Oct-2005	92
Nov-2005	92
Dec-2005	92

Month	Gas Volume
Jan-2006	92
Feb-2006	92
Mar-2006	91
Apr-2006	91
May-2006	91
Jun-2006	91
Jul-2006	91
Aug-2006	90
Sep-2006	90
Oct-2006	90
Nov-2006	90
Dec-2006	90
Jan-2007	90
Feb-2007	89
Mar-2007	89
Apr-2007	89
May-2007	89
Jun-2007	89
Jul-2007	89
Aug-2007	88
Sep-2007	88
Oct-2007	88
Nov-2007	88
Dec-2007	88
Jan-2008	87
Feb-2008	87
Mar-2008	87
Apr-2008	87
May-2008	87
Jun-2008	87
Jul-2008	86
Aug-2008	86
Sep-2008	86
Oct-2008	86
Nov-2008	86
Dec-2008	86

Month	Gas Volume
Jan-2009	85
Feb-2009	85
Mar-2009	85
Apr-2009	85
May-2009	85
Jun-2009	85
Jul-2009	84
Aug-2009	84
Sep-2009	84
Oct-2009	84
Nov-2009	84
Dec-2009	84
Jan-2010	83
Feb-2010	83
Mar-2010	83
Apr-2010	83
May-2010	83
Jun-2010	83
Jul-2010	82
Aug-2010	82
Sep-2010	82
Oct-2010	82
Nov-2010	82
Dec-2010	82
Jan-2011	81
Feb-2011	81
Mar-2011	81
Apr-2011	81
May-2011	81
Jun-2011	81
Jul-2011	80
Aug-2011	80
Sep-2011	80
Oct-2011	80
Nov-2011	80
Dec-2011	80

Roelofs # 3 Pressure Data

DK	0.08	PC	0.04
MV	0.07	FT	0.04
		CK	0.04

WELL NAME: Roelofs # 3

FORMATION: DK

SURFACE PRESS: 395

PERFS TOP: 7442

BOTTOM: 7676

$$(7442 + 7676) / 2 = 7559 \text{ Mid Perf}$$

$$7559 \times 0.08 = 605$$

$$604.72 + 395 = 1000 \text{ Bottom Hole Pressure}$$

Initial Bottom Hole Pressure= 1110

WELL NAME: Roelofs A # 3A

FORMATION: MV

SURFACE PRESS: 193

PERFS TOP: 4767

BOTTOM: 5700

$$(4767 + 5700) / 2 = 5234 \text{ Mid Perf}$$

$$5233.5 \times 0.07 = 366$$

$$366.35 + 193 = 559 \text{ Bottom Hole Pressure}$$

Initial Bottom Hole Pressure= 1241

WELL NAME: Roelofs A # 3

FORMATION: MV

SURFACE PRESS: 204

PERFS TOP: 4696

BOTTOM: 5376

$$(4696 + 5376) / 2 = 5036 \text{ Mid Perf}$$

$$5036 \times 0.07 = 353$$

$$352.52 + 204 = 557 \text{ Bottom Hole Pressure}$$

Initial Bottom Hole Pressure= 1281

WELL NAME: Roelofs # 3

FORMATION: MV

$$\text{Initial Bottom Hole Pressure: } (1241 + 1281) / 2 = 1261$$

$$\text{Bottom Hole Pressure: } (559 + 557) / 2 = 558 \text{ est.}$$

$$\text{Roelofs A 3A + Roelofs A 3 BBLs } (571 + 0) / 2 = 286 \text{ est. annual production}$$

$$\text{Roelofs A 3A + Roelofs A 3 MCF } (65257 + 30246) / 2 = 47752 \text{ est. annual production}$$

ALLOCATION: SUBTRACTION METHOD

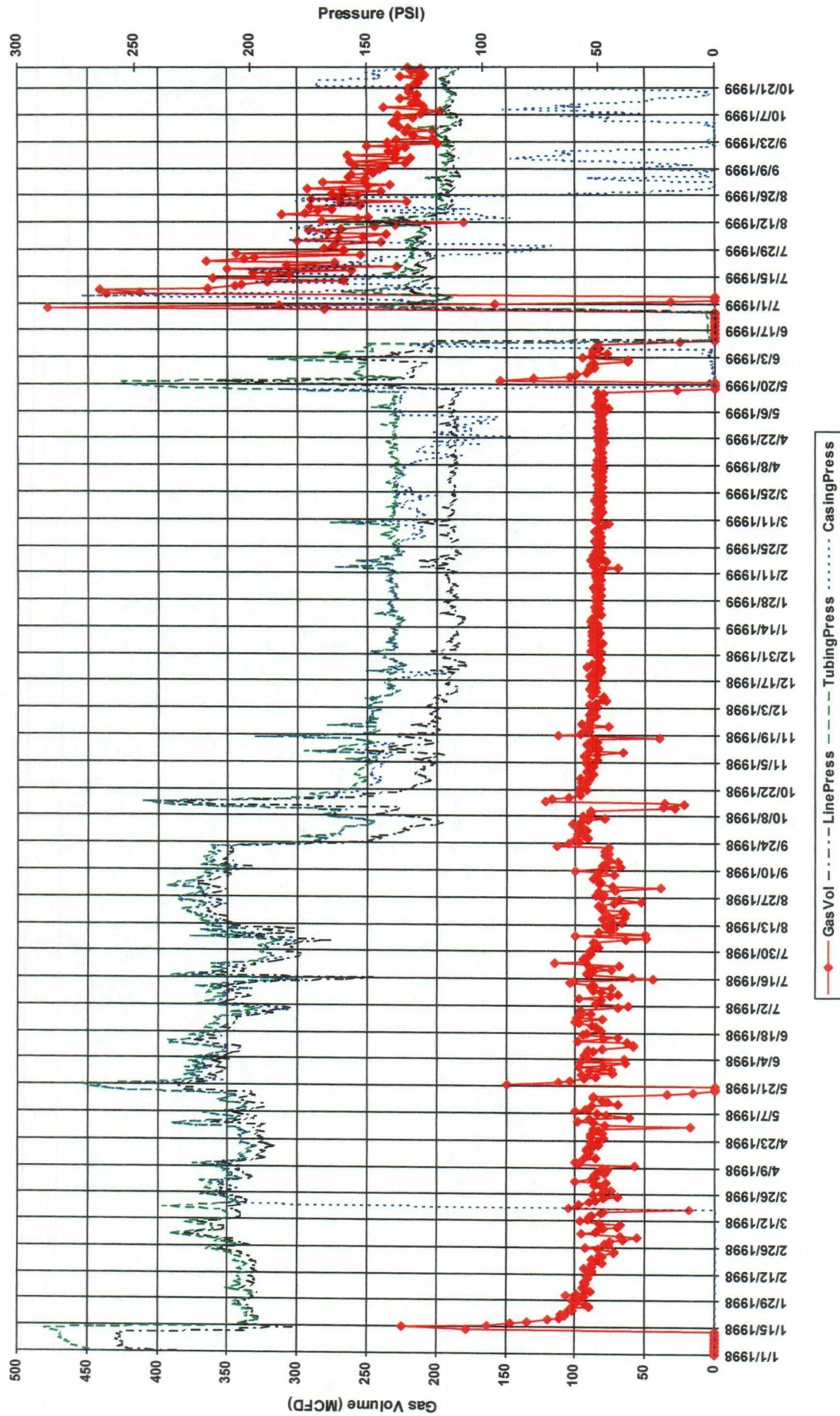
Wellname: ROELOFS A 003-MV

Flacwell: 97865001

API: 300450858100

Amoco - OIDB/Synergy Data

Daily Well Production



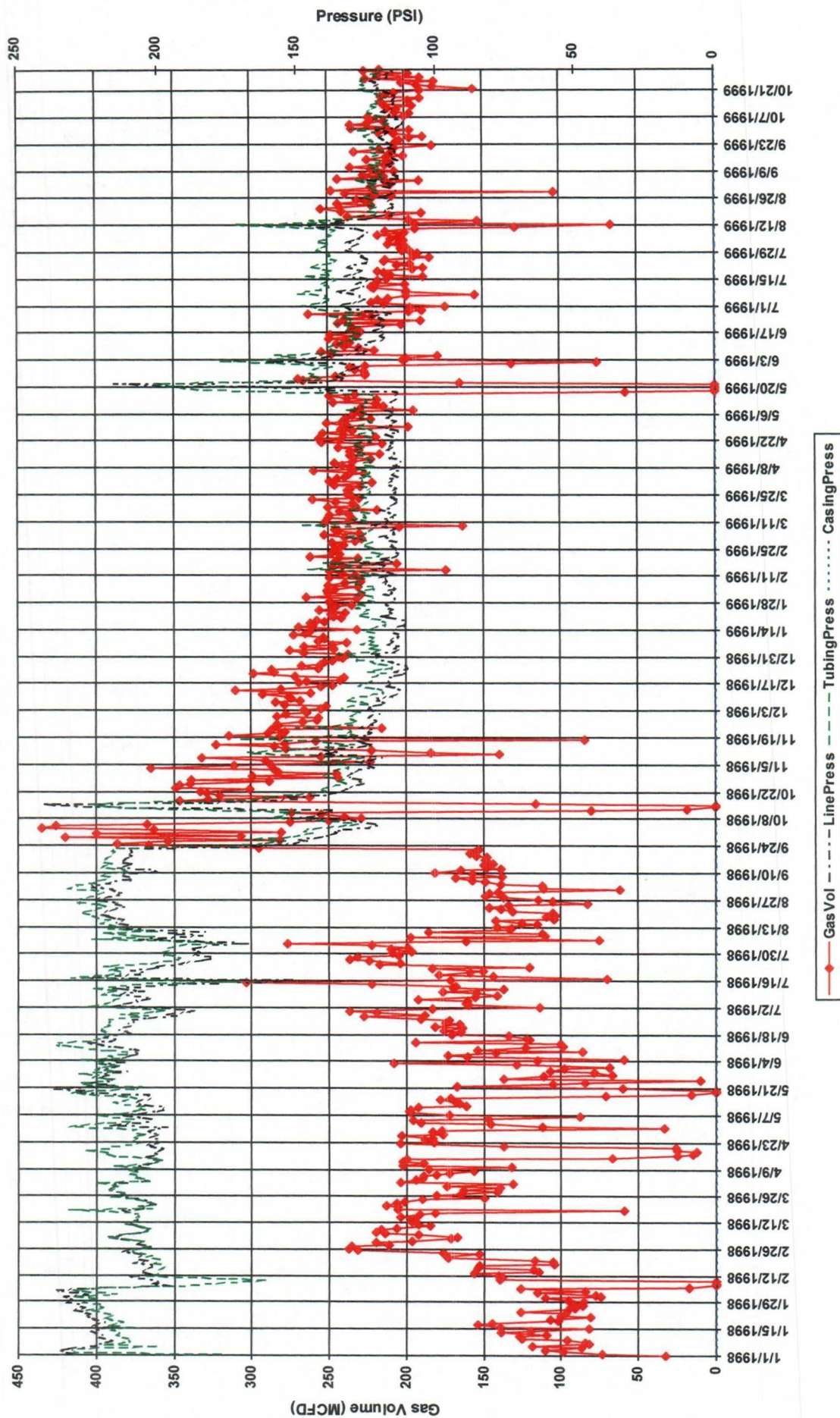
Amoco - OIDB/Synergy Data

API: 300452236000

Flacwell: 97932502

Wellname: ROELOFS A 003A-MV

Daily Well Production



Wellname: ROELOFS 003-DK

Flacwell: 97949201

API: 300452329200

Amoco - OIDB/Synergy Data

Daily Well Production

