

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 87505-6429Form C-107-A
New 3-12-96

APPROVAL PROCESS :

☒ Administrative
☐ Hearing

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

☒ YES ☐ NO

Burlington Resources Oil and Gas

PO Box 4289, Farmington, NM 87499

Operator	Address		
Huerfano Unit	#108	E-1-26N-10W	San Juan
Lease	Well No.	Unit Ltr. - Sec - Twp - Rge	County
Spacing Unit Lease Types: (check 1 or more)			
OGRID NO. 14538	Property Code 7139	API NO. 30-045-06064	Federal ☒ State ☐ Fee ☐

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Angels Peak Gallup - 2170		Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	5899'-6178'		6757'-6887'
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. 415 psi (see attachment) (Original) b. 1395 psi (see attachment)		a. 664 psi (see attachment) b. 2388 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1263		BTU 1260
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	Yes		Yes
* If Shut-In 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 * If Producing, give data and oil/gas/water water of recent test (within 60 days)	Date: N/A Rates: Date: 11/99 Rates: 14 mcf/d 0.23 bopd		Date: N/A Rates: Date: 11/99 Rates: 72.0 mcf/d 0.53 bopd
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Gas - 73.7% Condensate - 81.1%		Gas - 26.3% Condensate - 16.9%

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 ☐ No11. 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 ☐ No13. 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

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 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 L. Tom Loveland TITLE Engineer I DATE 1-18-00

TYPE OR PRINT NAME L. Tom Loveland TELEPHONE NO. (505) 326-9700

Well Location and Acreage Dedication Plat

Section A.

Date October 9, 1959

Operator El Paso Natural Gas Company Lease HUERFANO, Ut. SF077961
 Well No. 108 (GD) Unit Letter E Section 1 Township 26N Range 10W NMPM
 Located 1650 Feet From North Line 1040 Feet From West Line
 County San Juan G. L. Elevation 6625 Dedicated Acreage 319.61 & 319.61 Acres
 Name of Producing Formation Gallup & Dakota Pool Angel Peak Gallup Ext. & Wildcat

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? Dakota
 Yes No X
2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes X No . If answer is "yes", Type of Consolidation.

Unit Agreement

3. If the answer to question two is "no", list all the owners and their respective interests below:

OwnerLand Description

Section B.

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

El Paso Natural Gas Company
 (Operator)

(Representative)

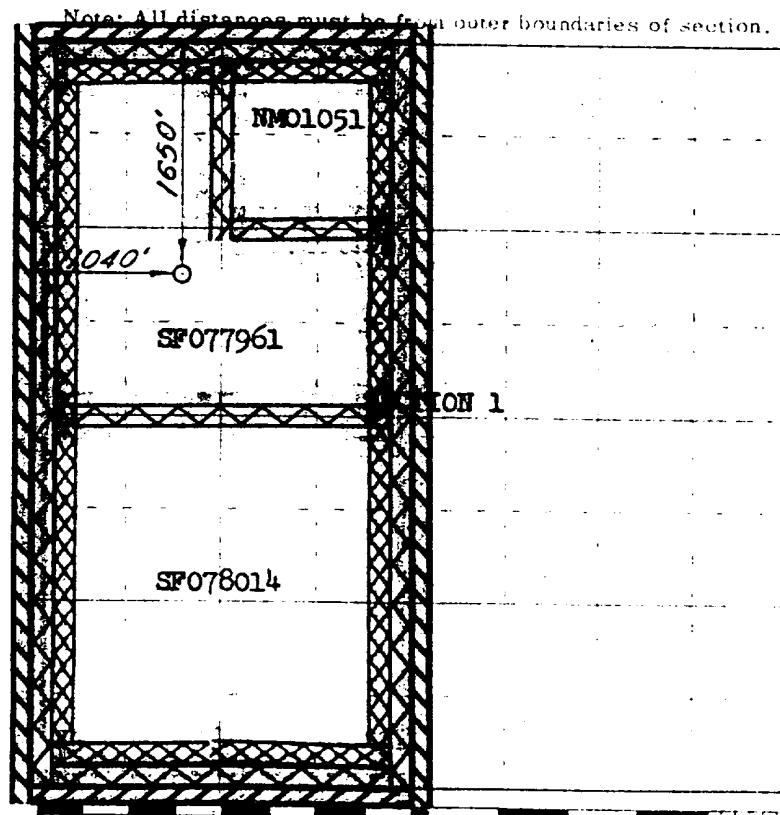
Box 990

(Address)

Farmington, New Mexico

NOTE: THIS PLAT RE-ISSUED TO SHOW
 80 ACRE GALLUP DEDICATION.
 10 20 59

NOTE: THIS PLAT RE-ISSUED TO SHOW
 CORRECTED GALLUP DEDICATION.
 10 4 60



Scale 4 inches equal 1 mile

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

(Seal)

Farmington, New Mexico

Date Surveyed May 14, 1959

David O. Kilmer
 Registered Professional Engineer and/or Land Surveyor

HUERFANO UNIT 108 5305301 (12729670006.0963) Data: Jan. 1970-Nov. 1999

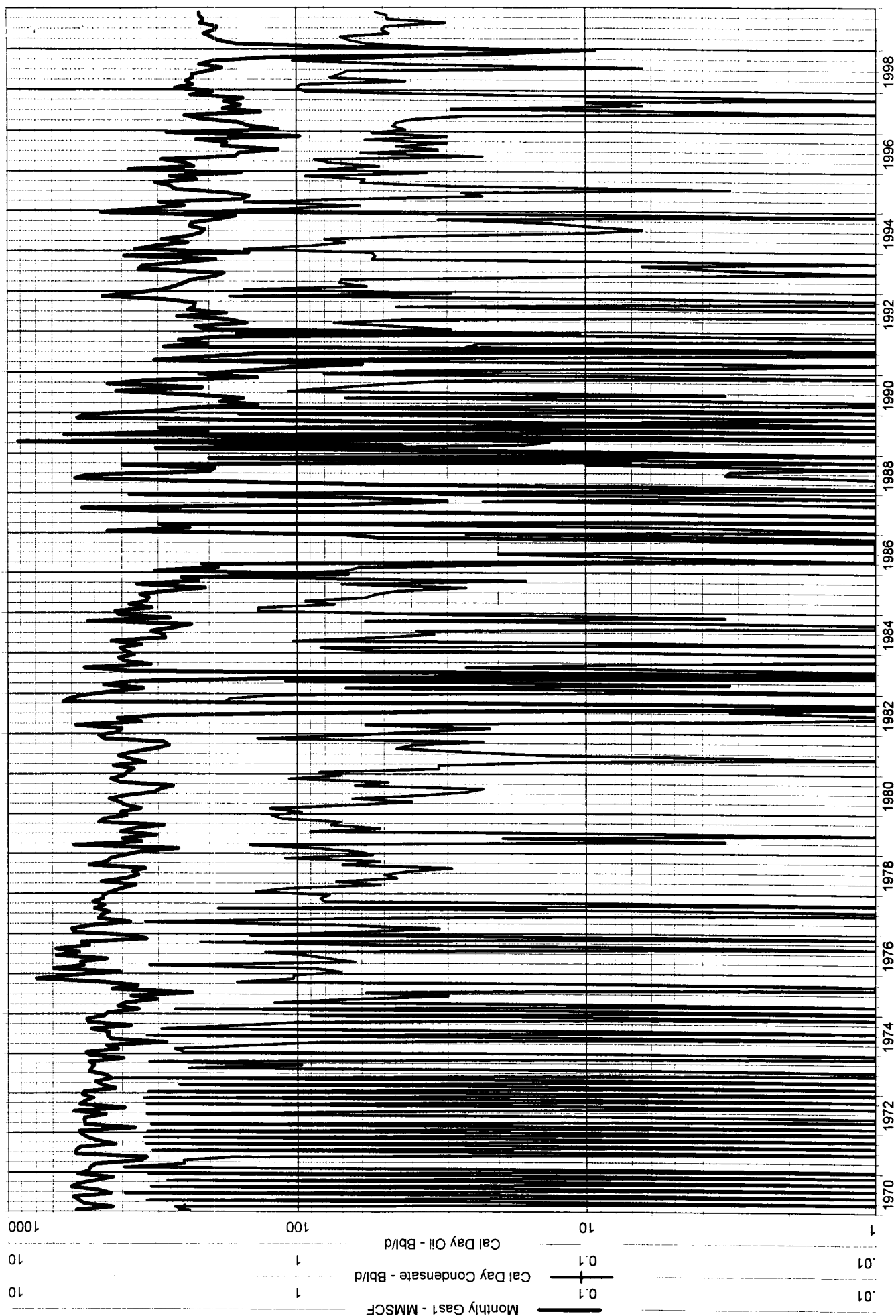
Operator: BURLINGTON RESOURCES OIL GAS CO

Field: BASIN DAKOTA (PRORATED GAS)

Zone:

Type: Gas

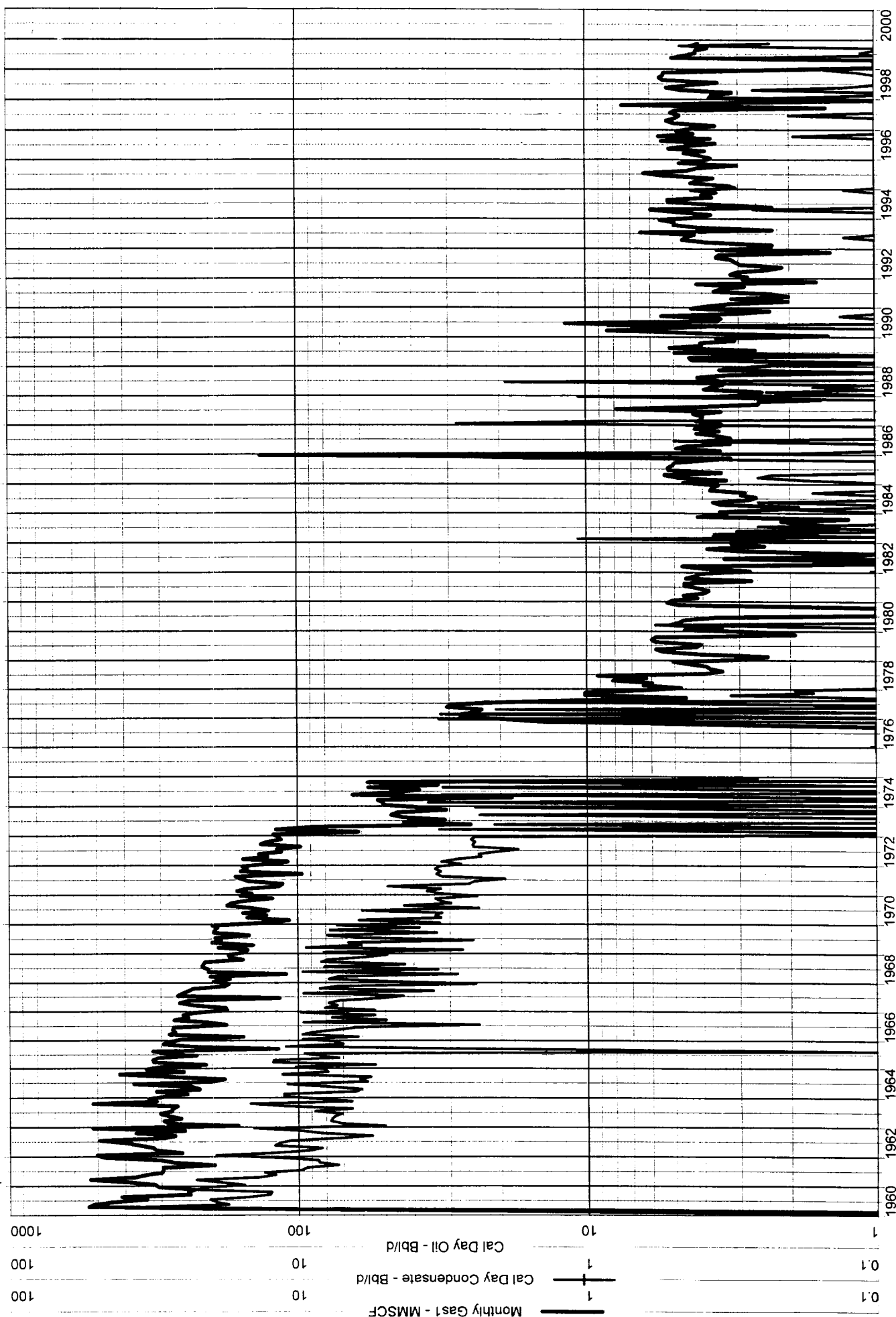
Group: None



Operator: BURLINGTON RESOURCES OIL GAS CO
Field: ANGELS PEAK GALLUP (ASSOCIATED

Type: Gas

Group: None



Huerfano Unit #108
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method

Version 1.0 1/14/98

Gallup		Dakota	
<u>GP-Current</u>		<u>DK-Current</u>	
GAS GRAVITY	0	GAS GRAVITY	0.736
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0	%N2	0.76
%CO2	0	%CO2	0.96
%H2S	0	%H2S	0
DIAMETER (IN)	0	DIAMETER (IN)	2.375
DEPTH (FT)	0	DEPTH (FT)	6822
SURFACE TEMPERATURE (DEG F)	0	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	0	BOTTOMHOLE TEMPERATURE (DEG F)	143
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	0	SURFACE PRESSURE (PSIA)	551
BOTTOMHOLE PRESSURE (PSIA)	#DIV/0!	BOTTOMHOLE PRESSURE (PSIA)	664.4
<u>GP-Original</u>		<u>DK-Original</u>	
GAS GRAVITY	0.738	GAS GRAVITY	0.736
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.76	%N2	0.76
%CO2	0.96	%CO2	0.96
%H2S	0	%H2S	0
DIAMETER (IN)	7	DIAMETER (IN)	2.375
DEPTH (FT)	6039	DEPTH (FT)	6822
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	133	BOTTOMHOLE TEMPERATURE (DEG F)	143
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1154	SURFACE PRESSURE (PSIA)	1902
BOTTOMHOLE PRESSURE (PSIA)	1395.3	BOTTOMHOLE PRESSURE (PSIA)	2387.9

Huerfano Unit 108
5305301/5305302
Gallup/Dakota

GALLUP

PRESSURE DATA		
Date	Gas Cum	Press
01/21/1960	0	1154
01/05/2000	3503515	415

VOLUMES			
Prod Month	Days On	Gas	Oil
		Production	Production
12/31/98	31	287.57	4.641
1/31/99	31	59.14	1.16
2/28/99	28	44.66	1.161
3/31/99	31	0	1.161
4/30/99	30	92.88	0
5/31/99	31	504.23	10.437
6/30/99	30	454.63	0.001
7/31/99	31	418.43	3.479
8/31/99	31	419.92	1.161
9/30/99	30	381.1	2.32
10/31/99	31	435.6	14.697
11/30/99	30	409.54	6.985

13.7 mcf/d 0.23 bopd

DAKOTA

PRESSURE DATA		
Date	Gas Cum	SIWHP
11/13/1959	0	1902
04/04/1994	1855921	551

VOLUMES			
Prod Month	Days On	Gas	Oil
		Production	Production
12/31/98	31	122.32	2.876
1/31/99	31	633.09	10.849
2/28/99	28	1608.2	15.946
3/31/99	31	1852.67	20.334
4/30/99	30	1952.55	21.063
5/31/99	31	2078.15	14.769
6/30/99	30	1901.57	15.19
7/31/99	28	1863.07	15.23
8/31/99	31	2135.01	9.415
9/30/99	30	2078.03	14.521
10/31/99	31	2144.82	14.967
11/30/99	30	2151.56	15.938

71.7 mcf/d 0.53 bopd

Huerfano Unit #108 - Current Gallup BHP Determination

- A fluid level was obtained with an Echometer on 1/5/00 at 5425' for the Gallup.
- The lease operator reported that the Gallup produces minimal water. Because this is a quantity that is not measured, it was assumed that all of the liquid in the wellbore was condensate (water cut = 0%).
- The well had been SI less than 1 hour when the fluid level was obtained.

Casing Pressure =	213	psig	Condensate Gravity =	55	API
Fluid Depth =	5425	ft	Cond Spec Gravity =	0.759	
Top Perf Depth =	5899	ft	Cond Density =	47.344	lb/ft ³
Bottom Perf Depth =	6178	ft	Cond Press Grad =	0.329	psi/ft
Mid-Perf Depth =	6038.5	ft	Bottomhole Press =	415	psig

Huerfano Unit #108 Production Allocation

Gas

*Gallup Remaining Reserves:	1,263.030 Mmcf	73.71%
*Dakota Remaining Reserves:	450.448 Mmcf	26.3%
Total:	1,713.48	100.0%

Oil

*Gallup Remaining Reserves:	12,541.9 Bbls	81.1%
*Dakota Remaining Reserves:	2,918.9 Bbls	18.9%
Total:	15,461	100.0%

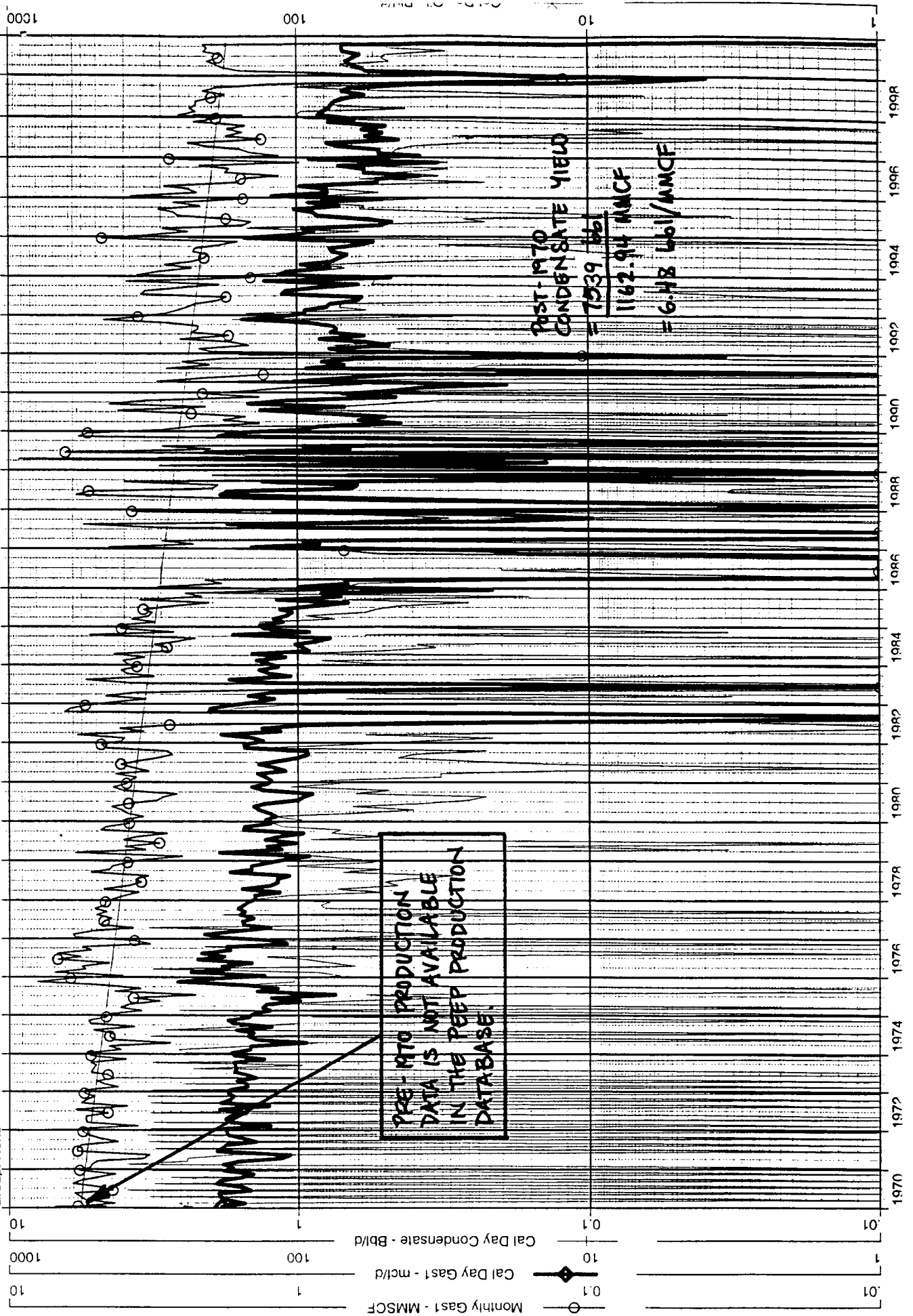
*Because the Gallup experienced an abrupt drop in production in 1973 due to liquid loading, the cumulative production from each zone cannot be used to determine the production allocation. Similarly, the pre-1973 cumulative production cannot be used to determine the allocation because the Dakota has produced at a much higher rate than the Gallup since 1973, and does not have as much remaining potential as it did in 1973. Current remaining gas reserves estimates were used to calculate the above allocation. The allocation for condensate was calculated using the pre-1973 condensate yield for the Gallup (pre-liquid loading) and the post-1970 condensate yield for the Dakota.

HUERFANO UNIT 108 5305301 (12729670006.0963) Data: Jan. 1970-Dec. 1999

Operator: BURLINGTON RESOURCES OIL GAS CO
 Field: BASIN DAKOTA (PRORATED GAS)
 Zone:
 Type: Gas
 Group: None

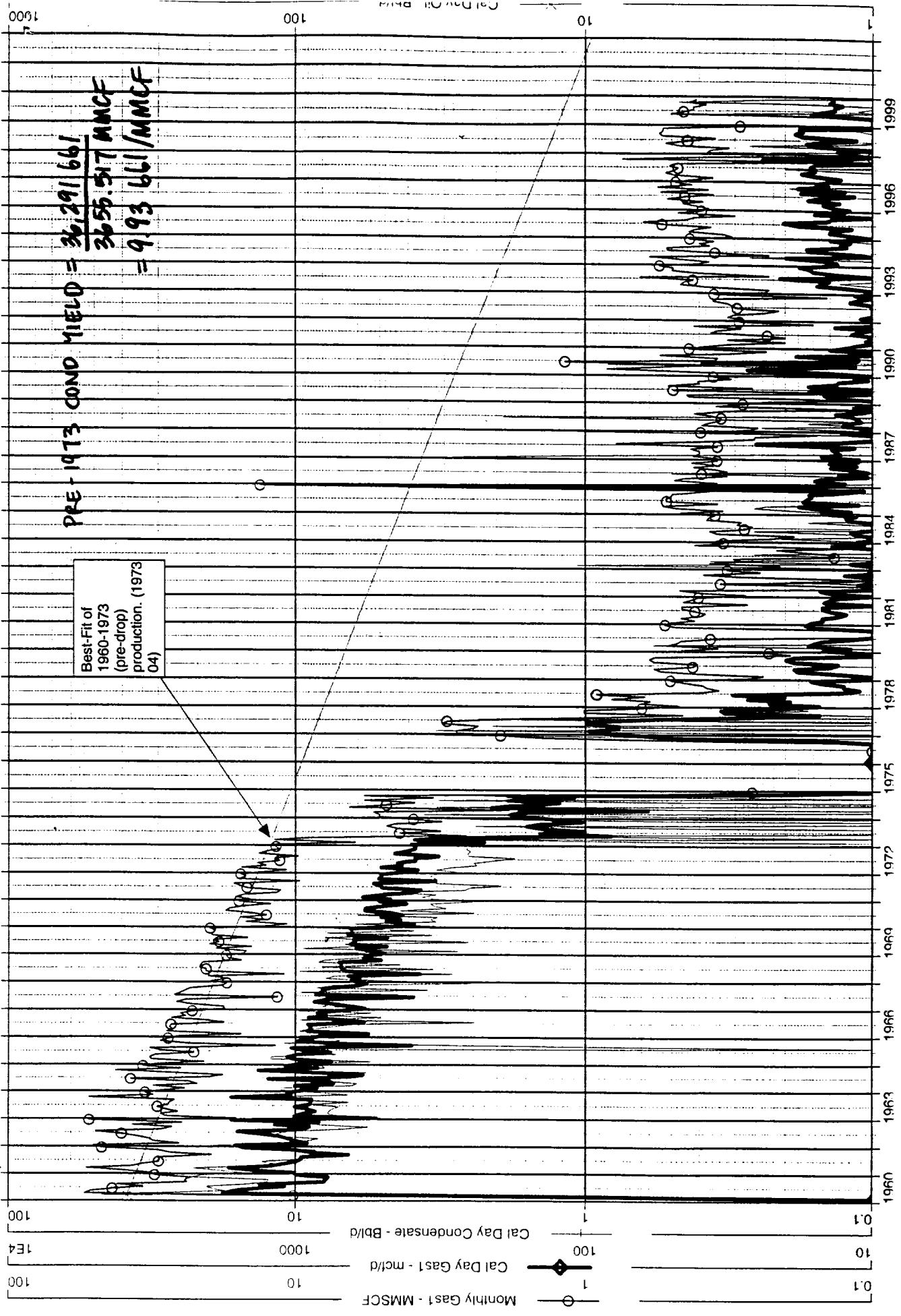
98PDP Gas1 (Rate-Time)
 qi: 1.90282 MMSCF, Jan, 1998
 qf: 0.296103 MMSCF, Jul, 2045
 di(Exp): 3.839 CTD: 1162.94 MMSCF
 RR: 450.448 MMSCF Tot: 1613.39 MMSCF

Production Cums
 Oil: 0 MSTB
 Gas: 1162.94 MMSCF
 Water: 0.149125 MSTB
 Cond: 7.5389 MSTB



HUERFANO UNIT 108 5305302 (70944002845.5923) Data: Jan. 1960-Dec. 1999

Operator: BURLINGTON RESOURCES OIL GAS CO
Field: ANGELS PEAK GALLUP (ASSOCIATED)
Zone:
Type: Gas
Group: None
Monthly Gas1 FC 2 (Rate-Time)
qi: 39.0297 MMSCF, Jan, 1960
qi: 0.349381 MMSCF, May, 2013
di(Exp): 8.45968 CTD: 3910.84 MMSCF
RR: 1263.03 MMSCF Tot: 5173.87 MMSCF
Production Cums
Oil: 0 MSTB
Gas: 3910.84 MMSCF
Water: 0.192711 MSTB
Cond: 38.0666 MSTB



JOHN P WINDLE PERS REP FOR THE
JANE LOLAX
ANNE ZACHAREK ESTATE
HELEN G PIENKOWSKI
JOSEPHINE ADAMS WESTEFELD
SIDNEY E LICHT & MARTIN C
GUY A WEILL
NELLY WIHL
GROSS OIL DELAWARE CORP
MARIANNE WEILL LESTER
EMILY BARTON
RICHARD LORE ADMINISTRATOR CTA
MARGARET JENSIS DECD
NANCI L FOX
JUDY WINDLE
SIDNEY H DUNKEN
SUSAN REID GALT
EDWARD GRAPEL
LAWRENCE L LAVALLE
KATHLEEN COLWILL
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DEBORAH JANE KELLY SLAUGHTER
MARGARET DORIS MCCONNELL
SINGER BROS
JOHN LEE TURNER
BEVERLY D WHITEHEAD
JIM L SHARP
HENRIETTA E SCHULTZ TRUSTEE
THORNTON HARDIE III TRUSTEE
CORINNE MIRIAM KELLY CALDER
LAURA PATRICIA LODEWICK
JOHN WIDNEY LODEWICK
HUBERT D JOHNSON & ANNE M
HUBERT D JOHNSON & ANNE M
SHOSS LEVINE TRUSTS 8146 8148
SHOSS LEVINE TRUSTS 8149 8150
GEORGE GALERSTEIN TRUSTEE
CAROLYN BEAMON TILLEY
ROSE MARION BERG
DENNA ELY
JFP INTERESTS A GENERAL PTSHP
ANNA CELIA HOWELL HILTON
DANIEL D DUDEN & TRUST ACCOUNT
ROBERT W DUDEN & TRUST ACCOUNT
G R FASKEN
FRANK ANDREW FASKEN
EDWIN ROY KELLY
KELLY MINERALS INTERESTS JV
JON BRUSS TRUST
HEDBERG FAMILY LTD PARTNERSHIP
MARY ROBERTSON JEFFS EXEC
MARY ROBERTSON JEFFS FOR LIFE
PATTI JO WOOD
VIRGINIA M SIMMONS
MELCONE CORPORATION
JERRY J ANDREW

JANE C GORDEN
MARY MILLICENT KELLY WEAR
SUSAN BEAMON PORTER
ADELE ALCORN READ
ROSALINE WEISS IND EXEC
JAMES ROBERT BEAMON TRUSTEE
BETTY T JOHNSTON LYLE E CARBAUGH
JAMES ROBERT BEAMON
BETTY T JOHNSTON/LYLE E
PATTIE ANN BEAMON LUNDELL EST
ROBERT WALTER LUNDELL
CATHRYN BEAMON
RODMAN E GRISCOM II
F STEPHEN KELLY III
CLAUDIA MARCIA LUNDELL GILMER
ROBERT E BEAMON III
MABELLE BRAMHALL TRUSTEE
THOMAS H YATES JR
PRIME ENERGY CORPORATION
PEGGY ALCORN KIPP
LEE AYCOCK IND EXECUTRIX
WALKER & KATHRYN DUFFIE
KATHRYN A DUFFIE
JULIA B LILLY INDVDLY AND
SOUTHERN NATL BANK OF HOUSTON
UNITED PIPE SUPPLY CO
V A JOHNSTON FAMILY TRUST
JOHNNIE PETTIE JR
HUFFAKER GREEN AND HUFFAKER
ANNE SIMMONS IND ADMINISTRATOR
GEORGIA PETTIE
BETTIANNE H BOWEN TRUSTEE
WILLIAM J GREEN
THE FASKEN FOUNDATION
BALWICK LTD PARTNERSHIP
RACHEL LYMAN
MICHAEL FITZGERALD AND
MONTEZ JOHNSON TRUSTEE
BARRON PROPERTIES LTD
JOHN DICKEY
BRIAN DICKEY
KATHRYN D ASHBY
DIANNA DICKEY
JAMES B WOODARD
WHITE STAR ENERGY INC
SILVERADO OIL & GAS CORP
R H FEUILLE
BEN HOWELL LANGFORD
EMILY D GRAMBLING
JOHN A GRAMBLING
EMILIE M HARDIE ROYALTY TRUST
JANE HARDIE TRUSTEE
ELIZABETH H LUND TRUSTEE
JULIE LEVINE MULLEN
CYNTHIA VOGL
HENRY B KRAUSE
JUDITH ANN HERINGER
LAURA DICHTER

UW FOSTER MORRELL DECD 11-1065
EDNA E MORRELL LIV TR 11-1073
MINERALS MANAGEMENT SERVICE
NORWEST BANK TRUSTEE
CELESTE FASKEN & NORWEST BANK
DONEVA J HUNTINGTON
ELLIOTT-HALL COMPANY
MADELEINE MOORE
GERALD FITZGERALD JR TRUSTEE
CHESTER E THOMPSON JR
JO ANN SCHMIDT ESTATE
JAMES R PAYNE & JEAN PAYNE
PETER BRUSS TRUST
MAUREEN G WRIGHT TRUSTEE
MCCONNELL LTD CO
LANGDON D HARRISON
JULIE ANN ANTWEIL TRUST
CHERYL L POTENZIANI
POTENZIANI FAMILY PTSP
TAMANACO OIL CORP
DONNA S RIDDLE SUCC TRUSTEE
DONALD A PAULEK
BOLACK MINERALS COMPANY
ALBERT R GREER
CHARLES A & NANCIE A GREER TTE
BENSON MONTIN GREER
LEWIS C & BOBBIE D TOWNSEND
KEITH TOWNSEND LIVING TRUST
KENNETH TOWNSEND LIVING TRUST
NEW MEXICO GEOLOGICAL SOCIETY
JAMES LISLE HINKLE
ELLIOTT INDUSTRIES
ROBERT M WILLIAMS
J BURTON VETETO
ANNA LOU HOME TRUSTEE
JUNE ELAINE MACDONALD
SUNLAND REFINING CORP
DIANNE CLEES & HOMER N CLEES
TERESA HOME
CHARLES E HINKLE
DAVID WILLIAM WALTERS TRUSTEE
SHARON BEAMON BURNS
EVKO DEVELOPMENT COMPANY
JULIA EVETTS SIMPSON TRSTEE
KENNETH ROBERT SCHMIDT
WILLIAM DENNIS SCHMIDT
ROBERT KLINGER SUCC TRUSTEE
ANN HOME EMMERSON TR
DOROTHY J BREWSTER
SIDNEY E LICHT
MURRAY LANGFELDER
WM M WESTERMAN PERSONAL REP
AMOCO PRODUCTION COMPANY
ROBERTA JUNE DENOON THOMAS EX
FIRST NATL BK & WILFRED B
ELLIOTT D DULANEY
JANE E WILLERS
OFFICE OF THE COMPTROLLER

W BENTON HARRISON III
ENERGEN RESOURCES MAQ INC
DAVID A BERNOUDY
CORINNE ROY KELLY INDVDLY
DEOBRAH K SLAUGHTER TRUSTEE
ZZZ KELLY & TRUST LLC
ALICE JANE WEBB
FREDERICK EUGENE TURNER
FREDERICK EUGENE TURNER
LA PLATA GATHERING SYSTEM INC
ELIZABETH JEANNE TURNER
ELIZABETH JEANNE T CALLOWAY
ELIZABETH T CALLOWAY
J GLENN TURNER JR
J GLENN TURNER JR
DAVID G MCLANE
WILLIAM G WEBB
WILLIAM G WEBB
ROSE MARION BERG DENNA ELY,
EVELYN SMITH
CROSS TIMBERS OIL COMPANY
NATIONSBANK NA
NATIONSBANK NA
NATIONSBANK NA
NATIONSBANK NA
CYRENE L INMAN
BANK OF AMERICA NA TRUSTEE
MCCONNELL TRUST
NATIONSBANK NA
NATIONSBANK NA
NATIONSBANK NA
NATIONSBANK
NATIONSBANK
SHELIA MARIE LEVINE TRUST
SAN JUAN 1990-A LP
ATNA/SJ 1993-A
MAP 1998-A LP
ROGERS-GIBBARD TRUST
LINDA JEANNE LUNDELL LINDSEY
LINDA JEANNE LUNDELL LINDSEY
ROGER B NIELSEN
LEE ETTA HEDBERG
DORIS F FAMBRO
TOM L HAIL TR
BALLARD EXPLORATION CO INC
ROBERT BEAMON
ELLIS RUDY LTD
LOWE PARTNERS LP
CHASE BANK OF TEXAS NA
CHASE BANK OF TEXAS NA TRUSTEE
CHASE BANK OF TEXAS NA TRUSTEE
CHASE BANK OF TEXAS NA TRSTEE
CHASE BANK OF TEXAS NA TRUSTEE
CHASE BANK OF TEXAS NA TRSTEE
GLOBAL NATURAL RESOURCES
CONOCO INC
MATAGORDA OIL COMPANY
RANDALL T JOHNSON TRUSTEE