

CASE 5070: Application of AMOCO  
PRODUCTION FOR APPROVAL OF THE  
BUBBLING SPRING UNIT AGREEMENT.

CASE No.

5070

Application,

Transcripts,

Small Exhibits

ETC.

Key Buell —

Bubbling Spring Unit

3078 ac

Feb & Dec

20 S 26 E Eddy.

Amoco Prod. Co.

EXHIBIT "B"  
BUBBLING SPRING UNIT AREA  
EDDY COUNTY, NEW MEXICO

Revised Effective October 2

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
1	T. 20 S. - R. 26 E. Sec. 23 S/2	320.00	LC-070032-B 1-1-74	All-U.S.A.	Gulf Oil Corporation	Pauline A. Galt 1/10 X \$750/Acre PP out of 5%  George D. Riggs 9/20 X \$750/Acre PP out of 5%  Neil H. Wills 9/20 X \$750/Acre PP out of 5%	Surface to 8900' Gulf Oil Corporation Amoco Production Company  Yates Petroleum Corporation  From 8900' to Base Penn Gulf Oil Corporation Amoco Production Company  Below Base Penn Formation Gulf Oil Corporation
2.	T. 20 S. - R. 26 E. Sec. 22: N/2 NE/4, SW/4 NE/4	120.00	LC-071847 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Amoco Production Co. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1% First Natl. Bank of Roswell, New Mexico Tr. 1% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Yates Petroleum Corp.  From 8900' to Base Penn. Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co.  Below Base Penn Formation Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co.



EXHIBIT "B"  
BUBBLING SPRING UNIT AREA  
EDDY COUNTY, NEW MEXICO

Revised Effective October 29, 1973

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
320.00	LC-070032-B 1-1-74	All-U.S.A.	Gulf Oil Corporation	Pauline A. Galt 1/10 X \$750/Acre PP out of 5%  George D. Riggs 9/20 X \$750/Acre PP out of 5%  Neil H. Wills 9/20 X \$750/Acre PP out of 5%	Surface to 8900' Gulf Oil Corporation 74.03350% Amoco Production Company 25.00000%  Yates Petroleum Corporation 0.96650%  From 8900' to Base Penn Gulf Oil Corporation 50.00000% Amoco Production Company 50.00000%  Below Base Penn Formation Gulf Oil Corporation 100.00000%
120.00	LC-071847 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Amoco Production Co. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1% First Natl. Bank of Roswell, New Mexico Tr. 1% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Amoco Production Company 25.00000% Phillips Petroleum 14.28571% Yates Petroleum Corp. 1.10457%  From 8900' to Base Penn. Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Amoco Production Company 50.00000% Phillips Petroleum Co. 14.28571%  Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Amoco Production Company 75.00000% Phillips Petroleum Co. 7.14286%

EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENT
3	T. 20 S. - R. 26 E. Sec. 22: SE/4 NE/4	40.00	LC-071847-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1% First Natl. Bank of Roswell, New Mexico, Tr. 1% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co. Yates Petroleum Corp.  From 8900' to Base Penn Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co.  Below Base Penn Formation Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co.
4	T. 20 S. - R. 26 E. Sec. 21: E/2 SE/4 Sec. 28: S/2 NE/4, SE/4 SE/4, NE/4 NE/4	240.00	NM-03215 H.B.P.	All-U.S.A.	Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Amoco Production Co. 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Co. 1.10457%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1% First Natl. Bank of Roswell, New Mexico Tr. 1% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co. Yates Petroleum Corp.  From 8900' to Base Penn Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co.  Below Base Penn Formation Cities Service Oil Co.

DDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
0.00	LC-071847-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1% First Natl. Bank of Roswell, New Mexico, Tr. 1% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Amoco Production Company 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%  From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Amoco Production Company 50.00000% Phillips Petroleum Co. 14.28571%  Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Amoco Production Company 75.00000% Phillips Petroleum Co. 7.14286%
0.00	NM-03215 H.B.P.	All-U.S.A.	Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Amoco Production Co. 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Co. 1.10457%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1% First Natl. Bank of Roswell, New Mexico Tr. 1% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Amoco Production Company 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%  From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Amoco Production Company 50.00000% Phillips Petroleum Co. 14.28571%  Below Base Penn Formation Cities Service Oil Co. 3.57143%

## EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
4 Contd.							Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co.
5	T. 20 S. - R. 26 E. Sec. 21: NW/4 SE/4 Sec. 27: E/2 NW/4 Sec. 28: N/2 SE/4, SW/4 SE/4	240.00	NM-03215-A H.B.P.	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1% First Natl. Bank of Roswell, New Mexico, Tr. 1% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co. Yates Petroleum Corp.  From 8900' to Base Penn Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co.  Below Base Penn Formation Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co.
6	T. 20 S. - R. 26 E. Sec. 22: SW/4 Sec. 27: NW/4 NW/4	200.00	NM-03217 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Amoco Production Co. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1% First Natl. Bank of Roswell, New Mexico,	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co. Yates Petroleum Corp.  From 8900' to Base Penn Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co.

6, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
240.00 SW/4	NM-03215-A H.B.P.	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1% First Natl. Bank of Roswell, New Mexico, Tr. 1% Tracy Clark & Robert Boling 1/4 of 1%	Gulf Oil Corporation 14.28571% Amoco Production Company 75.00000% Phillips Petroleum Co. 7.14286%
					Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Amoco Production Company 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%
200.00	NM-03217 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Amoco Production Co. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1% First Natl. Bank of Roswell, New Mexico, Tr. 1%	From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Amoco Production Company 50.00000% Phillips Petroleum Co. 14.28571%
					Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Amoco Production Company 75.00000% Phillips Petroleum Co. 7.14286%
200.00	NM-03217 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Amoco Production Co. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1% First Natl. Bank of Roswell, New Mexico, Tr. 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Amoco Production Company 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%
					From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Amoco Production Company 50.00000% Phillips Petroleum Co. 14.28571%

EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
6 Contd.						Tr. 1% Tracy Clark & Robert Boling 1/4 of 1%	Below Base Penn Formation Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co.
7	T. 20 S. - R. 26 E. Sec. 22: NW/4, SE/4	320.00	NM-03217-A 1-1-74	ALL-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1% First Natl Bank of Roswell, New Mexico, Tr. 1% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co. Yates Petroleum Corp. From 8900' to Base Penn Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co. Below Base Penn Formation Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co.
8	T. 20 S. - R. 26 E. Sec. 21: W/2 NE/4	80.00	NM-03365 1-1-74	ALL-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Amoco Production Co. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co. Yates Petroleum Co. From 8900' to Base Penn Cities Service Oil Co. Gulf Oil Corporation

NG, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
				Tr. 1% Tracy Clark & Robert Boling 1/4 of 1%	Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Amoco Production Company 75.00000% Phillips Petroleum Co. 7.14286%
74 320.00	NM-03217-A 1-1-74	ALL-U.S.A.	Cities Service Oil Co 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1% First Natl Bank of Roswell, New Mexico, Tr. 1% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Amoco Production Company 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%  From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Amoco Production Company 50.00000% Phillips Petroleum Co. 14.28571%  Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Amoco Production Company 75.00000% Phillips Petroleum Co. 7.14286%
80.00	NM-03365 1-1-74	ALL-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Amoco Production Co. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Amoco Production Company 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Co. 1.10457%  From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143%

EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
8 Contd.						First Natl. Bank of Roswell, New Mexico, Tr. 1% Tracy Clark & Robert Boling 1/4 of 1%	Amoco Production Company Phillips Petroleum Co.  Below Base Penn Format Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co.
9	T. 20 S. - 26 E. Sec. 21: E/2 NE/4	80.00	NM-03365-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, Jimmie Marie Joy, Tr., Billie L. Kruse, Tr. \$750/Acre PP out of 5% Edna E. Morrell 1% First Natl. Bank of Roswell, New Mexico Tr. 1% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co. Yates Petroleum Corp.  From 8900' to Base Penn Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co.  Below Base Penn Format Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Phillips Petroleum Co.
10	T. 20 S. - R. 26 E. Sec. 27: All of NE/4 SW/4 East of Pecos River	5.20	NM-038124 1-1-74	All-U.S.A.	Cities Service Oil Co.	Peter O. Nyce, Jr. 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Yates Petroleum Corp.



G, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
80.00	NM-03365-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	First Natl. Bank of Roswell, New Mexico, Tr. 1%	Amoco Production Company Phillips Petroleum Co. 50.00000% 14.28571%
				Tracy Clark & Robert Boling 1/4 of 1%	Below Base Penn Formation Cities Service Oil Co. 3.57143%
					Gulf Oil Corporation 14.28571%
					Amoco Production Company 75.00000%
					Phillips Petroleum Co. 7.14286%
				Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg)	Surface to 8900' Cities Service Oil Co. 3.57143%
				Reischman, Tom	Gulf Oil Corporation 56.03829%
				Ingram, Jimmie	Amoco Production Company 25.00000%
				Marie Joy, Tr.,	Phillips Petroleum Co. 14.28571%
				Billie L. Kruse, Tr.	Yates Petroleum Corp. 1.10457%
5.20	NM-038124 1-1-74	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	\$750/Acre PP out of 5%	From 8900' to Base Penn Cities Service Oil Co. 7.14286%
				Edna E. Morrell 1%	Gulf Oil Corporation 28.57143%
				First Natl. Bank of Roswell, New Mexico Tr. 1%	Amoco Production Company 50.00000%
				Tracy Clark & Robert Boling 1/4 of 1%	Phillips Petroleum Co. 14.28571%
					Below Base Penn Formation Cities Service Oil Co. 3.57143%
					Gulf Oil Corporation 14.28571%
					Amoco Production Company 75.00000%
					Phillips Petroleum Co. 7.14286%
				Peter O. Nyce, Jr. 1%	Surface to 8900' Cities Service Oil Co. 25.00000%
					Gulf Oil Corporation 48.06700%
					Amoco Production Company 25.00000%
					Yates Petroleum Corp. 1.93300%

EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTER AND OWNERSHIP PERCENTAGE
10 Contd.							Below 8900' Cities Service Oil Co. Amoco Production Company
11	T. 20 S. - R. 26 E. Sec. 27: N/2 SE/4 East of Pecos River	21.00	NM-038124-A 1-1-74	All-U.S.A	Amoco Production Co.	Peter Q. Nyce, Jr. 1%	Surface to 8900' Gulf Oil Corporation Amoco Production Company Yates Petroleum Corp.
12	T. 20 S. - R. 26 E. Sec. 27: E/2 NE/4	80.00	NM-0283953A 1-1-74	All-U.S.A.	Gulf Oil Corporation	David M. Evans 5%	Below 8900' Amoco Production Company  Surface to 8900' Gulf Oil Corporation Amoco Production Company Yates Petroleum Corp.
13	T. 20 S. - R. 26 E. Sec. 26: E/2, NW/4, E/2 SW/4 Sec. 35: E/2, E/2 W/2 Save and except an un- surveyed 76.33 acre tract lying along the West side of SE/4 SW/4 of Sec. 26 and E/2 W/2 Sec. 35.	963.67	NM-0338758 H.B.P.	All-U.S.A.	Gulf Oil Corporation	Pauline A. Galt \$500/Acre PP out of 1/2 of 1%-George D. Riggs \$500/Acre PP out of 2.25%- Neil H. Willis \$500/Acre PP out of 2.25%	From 8900' to Base Penn Gulf Oil Corporation Amoco Production Company  Below Base Penn Formatio Gulf Oil Corporation  Surface to 8900' Gulf Oil Corporation Amoco Production Company Yates Petroleum Corp.  From 8900' to Base Penn Gulf Oil Corporation Amoco Production Company  Below Base Penn Formatio Gulf Oil Corporation

NG, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
21.00 ecos	NM-038124-A 1-1-74	All-U.S.A	Amoco Production Co.	Peter Q. Nyce, Jr. 1%	Below 8900' Cities Service Oil Co. 50.00000% Amoco Production Company 50.00000%
					Surface to 8900' Gulf Oil Corporation 48.06700% Amoco Production Company 50.00000% Yates Petroleum Corp. 1.93300%
					Below 8900' Amoco Production Company 100.00000%
80.00	NM-0283953A 1-1-74	All-U.S.A.	Gulf Oil Corporation	David M. Evans 5%	Surface to 8900' Gulf Oil Corporation 74.03350% Amoco Production Company 25.00000% Yates Petroleum Corp. 0.96650%
					From 8900' to Base Penn Gulf Oil Corporation 50.00000% Amoco Production Company 50.00000%
					Below Base Penn Formation Gulf Oil Corporation 100.00000%
963.67	NM-0338758 H.B.P.	All-U.S.A.	Gulf Oil Corporation	Pauline A. Galt \$500/Acre PP out of 1/2 of 1%-George D. Riggs \$500/Acre PP out of 2.25%- Neil H. Wills \$500/Acre PP out of 2.25%	Surface to 8900' Gulf Oil Corporation 74.03350% Amoco Production Company 25.00000% Yates Petroleum Corp. 0.96650%
					From 8900' to Base Penn Gulf Oil Corporation 50.00000% Amoco Production Company 50.00000%
					Below Base Penn Formation Gulf Oil Corporation 100.00000%

EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
14	T. 20 S. - R. 26 E. Sec. 27: W/2 NE/4	80.00	NM-0426336 1-1-74	All-U.S.A.	Amoco Production Co.	F. J. Bradshaw 3%	Surface to 8900' Gulf Oil Corporation Amoco Production Company Yates Petroleum Corp.  Below 8900' Amoco Production Company
15	T. 20 S. - R. 26 E. Sec. 27: SW/4 NW/4, NW/4 SW/4 lying East of Pecos River Sec. 28: NW/4 NE/4 lying East of Pecos River	14.00	BLM-A-026872 1-1-74	All-U.S.A.	Cities Service Oil Co. Peter Q. Nyce, Jr.	1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company Yates Petroleum Corp.  From 8900' to Base Penn Cities Service Oil Co. Gulf Oil Corporation Amoco Production Company  Below Base Penn Formation Cities Service Oil Co. Amoco Production Company
16	T. 20 S. - R. 26 E. Sec. 21: All SW/4 SE/4 lying East of Pecos River	28.00	BLM-A-026872-A 1-1-74	All-U.S.A.	Amoco Production Co.	Peter Q. Nyce, Jr. 1%	Surface to 8900' Gulf Oil Corporation Amoco Production Company Yates Petroleum Corp.  From 8900' to Base Penn Gulf Oil Corporation Amoco Production Company  Below Base Penn Amoco Production Company

EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
80.00	NM-0426336 1-1-74	All-U.S.A.	Amoco Production Co.	F. J. Bradshaw 3%	<u>Surface to 8900'</u> Gulf Oil Corporation 48.06700% Amoco Production Company 50.00000% Yates Petroleum Corp. 1.93300%  <u>Below 8900'</u> Amoco Production Company 100.00000%
14.00	BLM-A-026872 1-1-74	All-U.S.A.	Cities Service Oil Co.	Peter Q.Nyce, Jr. 1%	<u>Surface to 8900'</u> Cities Service Oil Co. 12.50000% Gulf Oil Corporation 61.05024% Amoco Production Company 25.00000% Yates Petroleum Corp. 1.44976%  <u>From 8900' to Base Penn</u> Cities Service Oil Co. 25.00000% Gulf Oil Corporation 25.00000% Amoco Production Company 50.00000%  <u>Below Base Penn Formation</u> Cities Service Oil Co. 50.00000% Amoco Production Company 50.00000%
28.00	BLM-A-026872-A 1-1-74	All-U.S.A.	Amoco Production Co.	Peter Q.Nyce, Jr. 1%	<u>Surface to 8900'</u> Gulf Oil Corporation 61.05025% Amoco Production Company 37.50000% Yates Petroleum Corp. 1.44975%  <u>From 8900' to Base Penn</u> Gulf Oil Corporation 25.00000% Amoco Production Company 75.00000%  <u>Below Base Penn</u> Amoco Production Company 100.00000%

s River

EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
17	T. 20 S. - R. 26 E. Sec. 26: NW/4 SW/4 lying East of Pecos River	37.25	BLM-A-032236-B H.B.P.	A11-U.S.A.	Gulf Oil Corporation	Elk Oil Company 2%	Gulf Oil Corporation
17 Tracts		Federal Lands	2,869.12 Acres		93.21% of Unit Area		
18	T. 20 S. - R. 26 E. Sec. 27: Fairchild Farm Tr. 785,786, 787,788,789,790, being all of N/2 S/2 SAVE & EXCEPT that acreage lying & being on the left or east bank of the Pecos River & SAVE & EXCEPT Fairchild Farm Tr. 784 conveyed to W.M.Trutt by Tax Deed recorded in VOL.D6, Pg.31, Deed Record, Eddy Co., N.M., & being approx. the North 16 acres of NW/4 SW/4	115.5	Fee Lease 4-17-78	12.5% T. D. Hardesty	Gulf Oil Corporation	None	Gulf Oil Corporation
19	T. 20 S. - R. 26 E. Sec. 27: Fairchild Farm Tr.784,being approx. the North 16 acres of NW/4 SW/4	16.00	Fee Lease 5-24-78	18.75%-W.M. Trutt	Gulf Oil Corporation	None	Gulf Oil Corporation

ING, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE	
37.25	BLM-A-032236-B H.B.P.	All-U.S.A.	Gulf Oil Corporation	Elk Oil Company 2%	Gulf Oil Corporation	100.0000%
Federal Lands		2,869.12 Acres	93.21% of Unit Area			
115.5	Fee Lease 4-17-78	12.5% T. D. Hardesty	Gulf Oil Corporation	None	Gulf Oil Corporation	100.00000%
16.00	Fee Lease 5-24-78	18.75%-W.M. Truitt	Gulf Oil Corporation	None	Gulf Oil Corporation	100.00000%

EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
20	T. 20 S. - R. 26 E. Sec. 26: NW/4 SW/4 SAVE & EXCEPT all that part of each of the above described tracts lying & being on the left or east bank of the Pecos River	2.75	Fee Lease H.B.P.	C. L. Thacker 12.5%	Amoco Production Co.	None	Surface to 8900' Gulf Oil Corporation Amoco Production Company Yates Petroleum Corp  Below 8900' Amoco Production Company
21	T. 20 S. - R. 26 E. Sec. 21: SW/4 SE/4 being a part of the Fairchild Farm Tr. 781 Sec. 27: SW/4 NW/4 Sec. 28: NW/4 NE/4 being Fairchild Farm Trs. 782, 783 & a part of 781, SAVE & EXCEPT all that part of each of the above described tracts lying & being on the left or east bank of the Pecos River	74.75	Fee Lease 9-26-77	C. C. Foster 12.5%	Tesoro Petroleum Corp. William R. Larsen	3%	Tesoro Petroleum Corp.

4 Tracts

Fee Lands

209 Acres

6.79% of Unit Area

RECAPITULATION

FEDERAL LANDS	2,869.12 ACRES	93.21000% UNIT AREA
FEE LANDS	<u>209.00</u> ACRES	<u>6.79000%</u> UNIT AREA
TOTAL LANDS	3,078.12 ACRES	100.00000% UNIT AREA



G, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
2.75	Fee Lease H.B.P.	C. L. Thacker 12.5%	Amoco Production Co.	None	<u>Surface to 8900'</u> Gulf Oil Corporation 48.06700% Amoco Production Company 50.00000% Yates Petroleum Corp 1.93300%
					<u>Below 8900'</u> Amoco Production Company 100.00000%
74.75	Fee Lease 9-26-77	C. C. Foster 12.5%	Tesoro Petroleum Corp. William R. Larsen 3%		Tesoro Petroleum Corp. 100.00000%

Fee Lands

209 Acres

6.79% of Unit Area

RECAPITULATION

FEDERAL LANDS	2,869.12 ACRES	93.21000% UNIT AREA
FEE LANDS	<u>209.00 ACRES</u>	<u>6.79000% UNIT AREA</u>
TOTAL LANDS	3,078.12 ACRES	100.00000% UNIT AREA

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
CONFERENCE ROOM, STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO  
October 3, 1973

EXAMINER HEARING

IN THE MATTER OF:	)	Case No. 5070
	)	
Application of Amoco Production	)	
Company for a unit agreement,	)	
Eddy County, New Mexico.	)	

BEFORE: RICHARD L. STAMETS,  
Examiner.

TRANSCRIPT OF HEARING

1 MR. STAMETS: Call next case 5070.

2 MR. DERRYBERRY: Case 5070, Application of  
3 Amoco Production Company for a unit agreement, Eddy County,  
4 New Mexico. Applicant, in the above-styled cause, seeks  
5 approval of the Bubbling Spring Unit Area comprising 3078 acres,  
6 more or less, of Federal and Fee lands in Township 20 South,  
7 Range 26 East, Eddy County, New Mexico.

8 MR. STAMETS: Call for appearances in this case.

9 MR. BUELL: For Amoco Production Company,  
10 Guy Buell; and we have two witnesses, Mr. Examiner.

11 MR. STAMETS: Are there any other appearances  
12 in this case? If the witnesses will stand and be sworn.

13 MR. BUELL: Mr. Examiner, some of our geological  
14 exhibits are quite large, and I think it would be better to put  
15 them on the wall so you and your counselor can both see them.  
16 Our first witness is Mr. Anderson.

17 \*\*\*\*\*

18 JACK ANDERSON,

19 was called as a witness, and after being duly sworn, testified  
20 as follows:

21 DIRECT EXAMINATION

22 BY MR. BUELL:

23 Q Mr. Anderson, would you state your complete name, by whom  
24 you are employed and in what capacity and in what location, please,  
25 sir?

1 A My name is Jack D. Anderson, employed by Amoco Production  
2 Company in Houston, Texas, as a Land Man.

3 Q All right, sir. And in your capacity with Amoco, have you  
4 participated in the negotiations that have resulted in the formation  
5 of the Bubbling Spring Unit?

6 A Yes, sir.

7 Q All right, sir. In connection with your testimony, would you  
8 direct your attention first to what has been identified as Amoco's  
9 Exhibit 1 and please explain that Exhibit for the record?

10 A This is an Exhibit which is attached to the Unit Agreement which  
11 outlines the acreage to be placed within the Bubbling Spring Unit.  
12 On our Exhibit, you will notice that a portion of the acreage is  
13 covered in green which represents the fee acreage located within  
14 the unit boundary. The balance of the acreage is Federal acreage.

15 Q No State acreage in this particular unit?

16 A That's correct.

17 Q How many acres are in this unit?

18 A 3,078.12 acres.

19 Q Would you describe the area of the unit for the record, please?

20 A All of the acreage is located in Township 20 South, Range 26 East.  
21 It's the south half of Section 23, all of Section 22, the east half  
22 of Section 21, the east half of Section 28, the north half of Section 27,  
23 and also the north half of the south half of Section 27, the east half  
24 of Section 26, the northwest quarter of Section 26, the north half  
25 of the southwest quarter of Section 26, the southeast quarter of the

1 southwest quarter of Section 26. In Section 35, it's the east half  
2 and the east half of the west half.

3 Q All right. Now, Mr. Anderson, this appears to be a rather  
4 irregular shaped unit. Will the reason for that be covered in our  
5 geological testimony?

6 A Yes. I might briefly just state that this particular area was in  
7 a unit prior to this. It was the Adams Bend Unit which Amoco  
8 Production formed. We drilled a well in the north half of Section 23,  
9 and it was dry. Then Gulf Oil formed a unit which they called  
10 a Springs Unit encompassing the same acreage.

11 The reason for the irregular description is that the  
12 south part of the section or the south part of this area is in the  
13 Spring Unit participating area. The balance of the acreage has  
14 been eliminated from the Spring Unit. That's why it's so irregular.

15 Q So the odd shape in the northeast corner is due to a dry hole drilled  
16 in that acreage?

17 A Yes.

18 Q And the odd shape on the southwest portion is due to a parking  
19 area that you explained?

20 A Yes.

21 Q Who are the working interest owners in this area?

22 A Amoco, Phillips, Gulf, Cities Service, and Tosorro.

23 Q What is the status of Sign-up or Commitment to the unit with  
24 regard to the working interest owners?

25 A We have received Tosorro's commitment, actually an executed

1 instrument. The other working interest owners have been  
2 contacted several times and have all agreed to the formation  
3 of this unit. The papers are in their offices now being executed.  
4 We have had no turn-downs on it.

5 Q So you would anticipate that in very short order we will have  
6 all the working interest owners committed?

7 A Yes, sir.

8 Q Is there any particular time contingency we are concerned with  
9 in this particular unit, Mr. Anderson?

10 A Yes. When the acreage was eliminated or the Springs Unit, I should  
11 say, was contracted, this acreage was eliminated and has an  
12 expiration date of January 1, 1974. That's the majority of the  
13 acreage in our outline.

14 The acreage in the unit has been extended beyond the  
15 primary term as a result of having been in a producing unit. So  
16 our understanding is that these Federal leases are now  
17 completion-type leases and that we will have to have production  
18 established prior to January 1, 1974. For this reason, we feel  
19 we must start work by November 1 of this year.

20 Q In other words, just commencing operations will not keep the  
21 operation together? We have got to drill and complete a well  
22 capable of production by January 1, 1974?

23 A Yes, sir.

24 Q Let's talk about the royalty owners for a minute. Of course, we  
25 have the Federal Government as a royalty owner. What is the

- 1 status of the Federal Government with regard to this unit?
- 2 A We have requested preliminary approval. It's been processed
- 3 through the USGS office in Roswell to their Denver office. We
- 4 were in contact with them this morning by phone and advised
- 5 that they have designated this as a logical area and put the
- 6 correspondence in the mail October 1. We have not received
- 7 it, but it's in the mail.
- 8 Q Is that what you Land Men sometimes refer to as preliminary
- 9 approval?
- 10 A Yes, sir.
- 11 Q All right, sir. What about the royalty owners under the fee
- 12 tract? What is their status with regard to sign-up?
- 13 A We have had, let's see, there were four royalty owners under
- 14 the fee tracts. We have received a ratification from one of
- 15 those parties. The other three, we have not heard from.
- 16 Q But none of them have refused to execute the Unit Agreement?
- 17 A That's correct.
- 18 Q All right, sir. Are there any overriding royalty owners under
- 19 any of this acreage?
- 20 A Yes. There are 20 overriding royalty owners.
- 21 Q State for the record what the status of that interest commitment
- 22 is.
- 23 A We have received ratifications from ten of them. It would be
- 24 50 percent, and we have received no rejections.
- 25 Q Would you also anticipate based on your past experience with

1 exploratory units in this area that you stand a good chance of  
2 getting commitments from the remainder of the overriding  
3 royalty interest owners?

4 A Yes. Looking back on the other unit that we formed, I believe  
5 that all of them executed. If not, it was a very, very small  
6 percent that did not.

7 Q All right, sir. Have you indicated on your Exhibit 1 the  
8 approximate location of the initial test well for this unit?

9 A Yes, sir.

10 Q How have you located that, with that red arrow?

11 A Yes.

12 Q Would you give the footage location of that?

13 A 1980 feet from the north and west lines of Section 26, Township 20  
14 South, Range 26 East.

15 Q All right, sir. Would you turn your attention now, Mr. Anderson,  
16 to what has been identified as Amoco's Exhibit 2? What is that  
17 exhibit?

18 A This is the Unit Agreement prepared in accordance with the  
19 1968 reprint. It's a form suggested by the Federal Government  
20 to be used in the forming of exploratory units.

21 Q So I guess you could refer to that almost as a standard Federal  
22 form?

23 A Yes, sir.

24 Q Have there been any changes in this agreement since we mailed  
25 the Oil Commission a copy some several weeks ago?



1 A No, sir. I don't believe there has been any changes.

2 Q All right, sir. Do you have anything else you'd care to add  
3 in connection with your phase of this hearing, Mr. Anderson?

4 A No, sir.

5 MR. BUELL: That is all we have by way of  
6 direct examination of Mr. Anderson at this time, Mr. Examiner.

7

8

CROSS-EXAMINATION

9

BY MR. STAMETS:

10 Q Mr. Anderson, these questions may not be properly directed to  
11 you, and if not, I'd be happy to ask your next witness. Do you  
12 know what acreage will be dedicated to the proposed well?

13 A I believe with the location that's spotted, I don't think that we  
14 have made the decision; but I would think it would be the north  
15 half of Section 26.

16 Q Are you aware that there could be acreage dedication problems  
17 if you would attempt to dedicate less than 320 acres to a well  
18 to be drilled to the Pennsylvanian? For instance, in the southwest  
19 quarter of Section 26 and the southwest half of 27.

20 A Yes, sir. We do.

21 Q This might take a communitization with non-unit acreage?

22 A Yes, sir. That acreage, of course, is in the Springs Unit. That's  
23 what we are referring to.

24 MR. STAMETS: All right, fine. That's all the  
25 questions I have of this witness.

1 MR. BUELL: All right, sir. We'd like to call  
2 next Mr. Gaizutis, G-a-i-z-u-t-i-s. Did I get it right?

3 THE WITNESS: Yes, sir.

4 \*\*\*\*\*

5 K. J. GAIZUTIS ,

6 was called as a witness, and after being duly sworn, testified  
7 as follows:

8 DIRECT EXAMINATION

9 BY MR. BUELL:

10 Q Would you state your complete name for the record, please,  
11 by whom you are employed and in what capacity and in what  
12 location?

13 A My name is K. J. Gaizutis. I'm a geologist with Amoco  
14 Production Company in Houston, Texas; and I've been with  
15 them for five and a half years.

16 Q Mr. Gaizutis, your qualifications as a geologist are a matter  
17 of public record in that you have testified before this Commission  
18 before?

19 A Yes.

20 Q But you might briefly just state the depth of your experience  
21 in this particular area of Southeast New Mexico.

22 A I've been involved in this particular area for approximately  
23 two years and was involved in the sandstone place in the Gulf  
24 zone prior to that.

25 Q All right, sir. Now, with regard to your testimony let me direct

1 your attention first to what has been identified as Amoco's  
2 Exhibit 3. What is that exhibit, Mr. Gaizutis?

3 A That is a structure map on top of the middle Morrow or the  
4 upper clastic sand. It is also an isopachous map constructed  
5 and colored in orange that has overlaid the structure map.  
6 The isopach refers to the middle Morrow horizon which we  
7 will refer to in the Sections.

8 Our designation is based on delineating the Morrow  
9 into three sections, the upper section being primarily a carbonate  
10 and the two lower zones being primarily clastic. This is what  
11 would be considered the uppermost clastic section in the Morrow.

12 Q So we can orient the Examiner, are there any producing pools  
13 shown on the area that you have included in your Exhibit 3?

14 A Yes. Let me just briefly state that this is approximately  
15 northwest of the City of Carlsbad for reference. To the south,  
16 we have Catclaw Draw and Golden Eagle, I believe. I don't know  
17 if they have been shown. Since the two fields have merged, I don't  
18 know for sure what the designation of the over-all pool is now.

19 I refer to it as Catclaw Draw. To the north and west  
20 of our proposed unit, we have McMillan Morrow; and immediately  
21 to the south of our unit is the Springs Unit wells out of the Cisco  
22 Canyon.

23 Q All right, sir. Have you designated our proposed unit area on  
24 Exhibit 3?

25 A The outline of the area is placed with flourescent tape, the orange

1       flourescent tape.

2   Q   All right, sir. Mr. Anderson previously touched on this in  
3       his testimony, but I wish you would emphasize again the reason  
4       for the shape of this unit.

5   A   Well, to the immediate east of our proposed unit we have two  
6       dry holes that penetrated the Morrow section, the Skelly well  
7       in Section 25 of 20, 26, and the Richfield McMillan well in  
8       Section 36.

9   Q   All right, sir. Why do we have the little notch on the northeast  
10      corner?

11  A   We have the Pan American Adams Bend dry hole.

12  Q   All right, sir. Can we see on this Exhibit the outline of the  
13      older unit that Mr. Anderson referred to?

14  A   Yes, sir. The older unit is, well, I guess it's a stamped outline.

15  Q   In blue?

16  A   In blue, yes.

17  Q   Of course, where your original tape overlays that, that portion  
18      also was in the original old unit?

19  A   Right, and cannot be seen because it's under the tape.

20  Q   All right, sir. Do you have any other remarks you'd like to make  
21      about Exhibit 3 before we move on to your cross-section?

22  A   Well, let me just briefly touch on the geologic importance of  
23      this. For one, the structural map, the contour lines are 100-foot  
24      intervals in blue and indicate a structural nose coming approximately  
25      through our area of interest and extending down into the Catclaw

1 Draw field to the south.

2 I have isopached the middle Morrow clastic section  
3 and have shown it as a type example of what we are expecting  
4 in the area. We show an isopach central contour line going  
5 from 70 to 40 feet. However, I want to make note that the  
6 Skelly well in Section 25 had 130 feet of Morrow sand.

7 Immediately to the north, the Pan American well, the  
8 Adams Bend, had 35 feet. This is to highlight the stratigraphic  
9 variation in the area, and this is what we will be referring to  
10 as the pinch-out that we hope to catch production along here.  
11 I think we can refer to the Section AB which I believe is Exhibit--

12 Q I believe that's Exhibit 4.

13 A 4. The AB cross-section is a stratigraphic section which is  
14 hung on the top of the Morrow sand, the same horizon that is  
15 used for mapping, for structural configuration of the area.

16 In it, we can see that the Middle Morrow Section which  
17 is delineated by lettering, as well as the orange coloration,  
18 changes dramatically from a very thick massive sand. Sample  
19 logs describe it as a conglomeratic very coarse sand zone to  
20 a very thin -type sand at the Adams Bend.

21 We are going a distance of about a mile. We have  
22 approximately three little zones of ten feet, ten feet and five feet  
23 in this middle section. So there is an abrupt change between  
24 the Skelly No. D and the Pan American Adams Bend. At the same  
25 time, let me point out the structural values that are indicated

1 immediately under the line connecting the top of the Middle Morrow.

2 The Adams Bend is at minus 6736, and the Skelly well  
3 is at 6903, since we have around 200 feet of structural advantage  
4 in the updip pinch-out position we were interpreting as a pinch-out.  
5 The other objective in the Morrow which we have not highlighted  
6 on our Exhibit map that showed the structure and the isopachous  
7 is also depicted in this cross-section.

8 The Skelly well did not penetrate the basin sand or  
9 what we call our lower Morrow sand, but it was penetrated in  
10 the Kelly Lake McMillan well. In it, we had a good 80 feet of  
11 section, also, apparently quite coarse-grained from sample  
12 descriptions.

13 It was not encountered in the Skelly well, but in our  
14 well, the Adams Bend well, it was also very thin and about 10 feet  
15 of sand. Both of the, or I should say, that zone and a small zone  
16 above it were wire-line tested in 1958 and recovered a slight  
17 amount of gas and a slight amount of water. We feel now that  
18 the water that it recovered was not formation water and that the  
19 Skelly well that was drilled in 1970 has in fact pointed out the  
20 stratigraphic implications in the area.

21 Our feeling is that this should therefore be a productive  
22 area and possibly continue the McMillan and Morrow projection  
23 which is also out of the middle sand which is delineated on the  
24 first Exhibit with the orange coloration, should connect that on  
25 production in Catclaw Draw that occurs in the middle Morrow sand.

1 In addition, we have the basin sand or lower Morrow  
2 sand conjective also present. I have not isopached it because  
3 of its random character in this area. The middle Morrow tends  
4 to have some continuity and some implicit trendology to it. This  
5 is a net clean sand that we are referring to.

6 Q Let me ask you this, Mr. Gaizutis. I'm referring now to the  
7 Skelly well on the middle log on the cross-section. Why in your  
8 opinion was this well not productive when it does have such a  
9 massive sand interval?

10 A Well, it encountered quite a bit of water on DST's. On the  
11 upper DST that tested 10,225 to 300, it recovered 240 feet of  
12 gas-cut mud plus on the lower, I'm sorry, on the lower one it  
13 recovered 2,000 feet of salt water.

14 So we feel that even though the lower one recovered  
15 salt water, the producing pressures are quite high. 3967 pounds,  
16 that is quite a good reservoir. We are looking at shows of gas  
17 wet in this well as well as in the McMillan well where it recovered  
18 1700 feet of heavily oil-cut mud and 3500 feet of salt water.

19 We are looking at downdip wells that are wet with a show  
20 of gas and an updip well that is tight and obviously does not have  
21 the porosity that was required to make a producer. Our location  
22 is a projection along this section at a position where we feel we  
23 will catch a productive porous interval.

24 Q In other words, you think you will have porosity and also be high  
25 enough to be above the water that the Skelly well we have been

1 discussing encountered?

2 A Yes.

3 Q All right, sir. Do you have any other comments on Exhibit 4  
4 before we pass on to Exhibit 5?

5 A No, sir.

6 Q All right, sir. Would you briefly describe what has been  
7 identified as Amoco's Exhibit 5?

8 A Exhibit 5 is a cross-section A-A' which is spotted on the  
9 Exhibit 3 Structure Map, and has been identified as A -A'  
10 and shown by red lines. The purpose of this cross-section is  
11 to show again our Adams Bend well that was tight which is on  
12 this cross-section to the extreme left-hand side and to show the  
13 production in McMillan field.

14 The production in McMillan field as you can see is  
15 out of a thicker sequence of sand as we have seen in the Skelly  
16 well and completed in the Cities Service CJ #1 for five million  
17 and completed in the Sohio 1-19 for 33.2 million.

18 Again, let me point out on this cross-section the  
19 structural values that are indicated on top of the middle Morrow  
20 sand section, here again implying to us that we have around 200 feet  
21 of structural advantage as we go from the Cities Service well to  
22 the east to the Adams Bend well to the west that is just north of  
23 our unit.

24 So that wells to the south and to the east, we are dropping  
25 off structurally some 200 feet. In this case, we are dropping off



1 to production. To the south, we are dropping off to water, so  
2 that we feel part of the answers here, of course, are stratigraphic  
3 variability; but it may also be lack of adequate testing in the  
4 Skelly well; but we feel that in any event we are going updip to  
5 production to the north and east and updip to a wet test to the  
6 southeast.

7 Q All right, sir. Do you have any other comments on Exhibit 5?

8 A No, that's about it.

9 Q All right, sir. Let's put Exhibit 6 up on the wall and I'll ask  
10 you to very briefly comment on it since it more or less is a  
11 cumulative of the work you have shown.

12 A Exhibit 6 is a cross-section C-C' and it's included for completeness  
13 in the area showing the southern boundaries, showing the Morrow  
14 control to the south of our proposed interest. As you can see,  
15 none of the wells in the Springs Unit drill deep enough to encounter  
16 the Morrow section. So our control lies, I'm sorry, one well  
17 did drill deep enough.

18 Most of the control is outside of the Springs Unit on the  
19 south. The reason to show this is that our control to the west of  
20 the Unit is the Humble Willow Draw well that tested a small zone  
21 and recovered 470 mcf of gas and was not tested further. Apparently  
22 from our log calculations, it was tight.

23 This has so served as a reference to the west why we  
24 have excluded the acreage in this direction from our unit and to  
25 show the reasoning for the isopach variability, too, in that direction.

1 Q In your opinion, are the prospects good for middle Morrow or  
2 lower Morrow production within our proposed Bubbling Springs  
3 Unit?

4 A Yes, I believe they are excellent.

5 Q Do you have anything else you would care to add at this time?

6 A No. I think that we are looking at an area between two fields  
7 that in the past have developed, enlarged the Catclaw Draw field  
8 in the south and in the last two years extended to where it's  
9 connected to individual producing wells; and I think we will see  
10 the same thing happen to the north.

11 I think it's imperative that we do have a well drilled  
12 in there to test this hypothesis and to adequately provide reserves  
13 in the area.

14 MR. BUELL: May it please the Examiner, that  
15 concludes our direct presentation. I would like to formally  
16 offer Amoco's Exhibits 1 through 6.

17 MR. STAMETS: Without objection, these exhibits  
18 will be admitted into evidence. Are there questions of the  
19 witness?

20 CROSS-EXAMINATION

21 BY MR. STAMETS:

22 Q Mr. Gaizutis, looking at your Exhibit 3 here, it would appear  
23 that the unit is designed to take into account both the structure  
24 and stratigraphy to try and take into the unit everything that  
25 would be reasonably productive of gas from the middle Morrow here?

dearnley, meier & associates

209 SIMMS BLDG. P.O. BOX 1092 PHONE 243-6491 • ALBUQUERQUE, NEW MEXICO 87103  
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 A Yes.

2 MR. STAMETS: Are there any other questions of  
3 this witness? He may be excused. Is there anything further?

4 MR. BUELL: No, sir, Mr. Examiner.

5 MR. STAMETS: Are there any other appearances  
6 in this case? The case will be taken under advisement. We will  
7 take about ten minutes for coffee or fifteen maybe.

8 (Whereupon, the hearing was recessed for fifteen  
9 minutes.)

10 \*\*\*\*\*

11 C E R T I F I C A T E

12 I, JANET RUSSELL, a Court Reporter, in and for the  
13 County of Bernalillo, State of New Mexico, do hereby certify  
14 that the foregoing and attached Transcript of Hearing before the  
15 New Mexico Oil Conservation Commission was reported by me;  
16 and that the same is a true and correct record of the said  
17 proceedings to the best of my knowledge, skill and ability.

18  
19   
20 COURT REPORTER  
21  
22  
23  
24  
25

INDEXWITNESS.JACK ANDERSONPage

Direct Examination by Mr. Buell

3

Cross-Examination by Mr. Stamets

9

WITNESS,K. J. GAIZUTIS

Direct Examination by Mr. Buell

10

Cross-Examination by Mr. Stamets

18

EXHIBITSApplicant'sOfferedAdmitted

Exhibit 1

Acreage outline

18

18

Exhibit 2

Unit Agreement form

18

18

Exhibit 3

Structure map

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18

Exhibit 4

Map

18

18

Exhibit 5

Map

18

18

Exhibit 6

Map

18

18

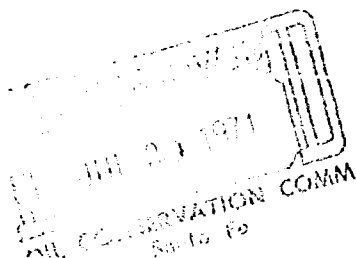
I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 5276  
heard by me on October 3, 1973.  
Richard H. Stamets, Examiner  
New Mexico Oil Conservation Commission



**Amoco Production Company**

500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

July 16, 1974



Re: EA 47,155  
Bubbling Spring Unit  
Eddy County, New Mexico

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, NM 87501

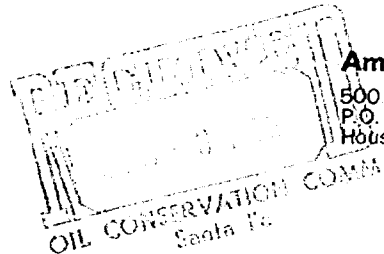
Gentlemen:

Please refer to your Case No. 5070, Order No. R-4643, wherein you approved the Bubbling Spring Unit. We wish to advise that the Bubbling Spring Unit Well No. 1 was drilled to a total depth of 10,400 feet and was plugged and abandoned on January 28, 1974. Amoco Production Company and the other Working Interest Owners elected not to drill any additional tests within the Unit Area and requested that the USGS terminate the unit agreement. For your files, we attached a letter dated July 5, 1974, from the USGS wherein the Bubbling Spring Unit was terminated effective July 1, 1974.

Yours truly,

Jack D. Anderson

JDA/mct  
2/4012



**Amoco Production Company**

500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

5070

November 29, 1973

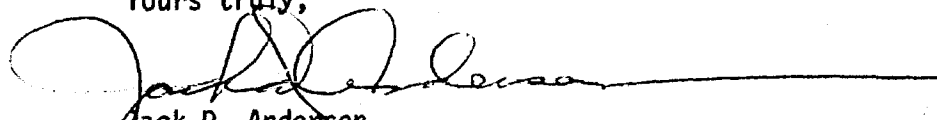
Re: EA 47,155  
Bubbling Spring Unit  
Eddy County, New Mexico

New Mexico Oil and Gas Conservation Commission  
P. O. Box 3088  
Santa Fe, New Mexico 87501

Gentlemen:

For your files we enclose one copy of Exhibit "B" to the Bubbling Spring Unit, which was revised effective October 29, 1973. By your Order No. R-4643, you approved the Bubbling Spring Unit effective October 11, 1973.

Yours truly,

  
Jack D. Anderson  
Land Department

JDA/mct  
4/991

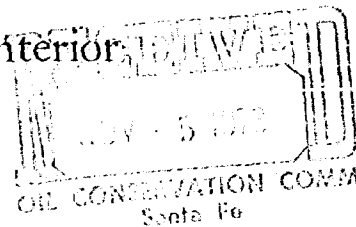
Enclosure



United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201



October 31, 1973

Amoco Production Company  
Attention: Mr. C. N. Menninger  
P. O. Box 3092  
Houston, Texas 77001

Gentlemen:

The Bubbling Spring unit agreement, Eddy County, New Mexico, was approved on October 31, 1973. The agreement has been designated No. 14-08-0001-13805 and is effective as of the date of approval.

Enclosed are two copies of the approved agreement. We request that you furnish the New Mexico Oil Conservation Commission and any other interested principals with appropriate evidence of this approval.

Sincerely yours,

(ORIG. SGD.) CAL

CARL C. TRAYWICK  
Acting Area Oil and Gas Supervisor

cc:  
Area Geologist (ltr. only)  
N.M.O.C.C., Santa Fe (ltr. only) ✓  
Artesia (w/cy approved agr.)

REShook:lh



50/0

**Amoco Production Company**

500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

November 2, 1973

Re: EA 47155  
Bubbling Spring Unit  
Eddy County, New Mexico

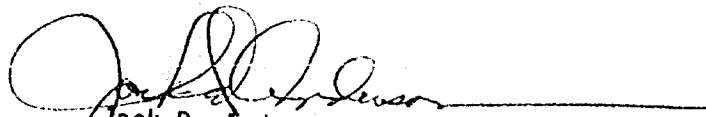
The Oil Conservation Commission  
State of New Mexico  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Gentlemen:

By your Order No. R-4643, you approved the Bubbling Spring Unit Agreement on October 11, 1973. Enclosed for your file is one copy of the Unit Agreement executed by Amoco Production Company as Unit Operator, and we also enclose ratifications by all of the other working interest owners. Also enclosed is copy of letter dated October 31, 1973, from the U.S. Geological Survey to Amoco whereby the USGS approved the Unit Agreement effective October 31, 1973.

Thank you very much for your cooperation in the formation of this exploratory unit.

Yours truly,

  
Jack D. Anderson  
Land Department

JDA/r1  
5/827  
Enclosures



### CERTIFICATION--DETERMINATION

Pursuant to the authority vested in the Secretary of Interior, under the act approved February 25, 1920, 41 Stat. 437, as amended, 30 U. S. C. secs. 181, et seq., and delegated to the Area Oil and Gas Supervisors of the Geological Survey, I do hereby:

A. Approve the attached agreement for the development and operation of the Bubbling Spring Unit Area, State of New Mexico.

B. Certify and determine that the unit plan of development and operation contemplated in the attached agreement is necessary and advisable in the public interest for the purpose of more properly conserving the natural resources.

C. Certify and determine that the drilling, producing, rental, minimum royalty, and royalty requirements of all Federal leases committed to said agreement are hereby established, altered, changed, or revoked to conform with the terms and conditions of this agreement.

Dated \_\_\_\_\_.

\_\_\_\_\_  
Area Oil and Gas Supervisor  
United States Geological Survey

Contract Number \_\_\_\_\_

UNIT AGREEMENT FOR THE DEVELOPMENT  
AND OPERATION OF THE BUBBLING SPRING UNIT AREA  
COUNTY OF EDDY, STATE OF NEW MEXICO

INDEX

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Exhibit "A" (Map)

Exhibit "B" (Description of interests subject to agreement)

1 UNIT AGREEMENT  
2 FOR THE DEVELOPMENT AND OPERATION  
3 OF THE  
4 BUBBLING SPRING UNIT AREA  
5 COUNTY OF EDDY  
6 STATE OF NEW MEXICO  
7 NO. \_\_\_\_\_

8 THIS AGREEMENT, entered into as of the 1st day of  
9 August, 19 73, by and between the parties subscribing,  
10 ratifying, or consenting hereto, and herein referred to as the "parties  
11 hereto,"

12 WITNESSETH:

13 WHEREAS the parties hereto are the owners of working, royalty,  
14 or other oil and gas interests in the unit area subject to this agree-  
15 ment; and

16 WHEREAS the Mineral Leasing Act of February 25, 1920, 41 Stat.  
17 437, as amended, 30 U.S.C. Secs. 181 et seq., authorizes Federal lessees  
18 and their representatives to unite with each other, or jointly or separately  
19 with others, in collectively adopting and operating a cooperative or unit  
20 plan of development or operation of any oil or gas pool, field, or like  
21 area, or any part thereof for the purpose of more properly conserving  
22 the natural resources thereof whenever determined and certified by the  
23 Secretary of the Interior to be necessary or advisable in the public  
24 interest; and

25 WHEREAS the Oil Conservation Commission of the State of New  
26 Mexico is authorized by an Act of the Legislature (Chapter 72, Laws of  
27 1935, as amended by Chapter 193, Laws of 1937; Chapter 166, Laws of  
28 1941; and Chapter 168, Laws of 1949) to approve this agreement and the  
29 conservation provisions hereof; and

30 WHEREAS the parties hereto hold sufficient interests in the  
31 Bubbling Spring Unit Area covering the land hereinafter described  
32 to give reasonably effective control of operations therein; and

1           WHEREAS, it is the purpose of the parties hereto to conserve  
2           natural resources, prevent waste, and secure other benefits obtainable  
3           through development and operation of the area subject to this agreement  
4           under the terms, conditions, and limitations herein set forth;

5           NOW, THEREFORE, in consideration of the premises and the promises  
6           herein contained, the parties hereto commit to this agreement their  
7           respective interests in the below-defined unit area, and agree severally  
8           among themselves as follows:

9           1.       ENABLING ACT AND REGULATIONS. The Mineral Leasing Act of  
10          February 25, 1920, as amended, supra, and all valid pertinent regulations,  
11          including operating and unit plan regulations, heretofore issued thereunder  
12          or valid, pertinent, and reasonable regulations hereafter issued thereunder  
13          are accepted and made a part of this agreement as to Federal lands, pro-  
14          vided such regulations are not inconsistent with the terms of this agree-  
15          ment; and as to non-Federal lands, the oil and gas operating regulations  
16          in effect as of the effective date hereof governing drilling and producing  
17          operations, not inconsistent with the terms hereof or the laws of the  
18          State in which the non-Federal land is located, are hereby accepted and  
19          made a part of this agreement.

20          2.       UNIT AREA. The area specified on the map attached hereto  
21          marked Exhibit "A" is hereby designated and recognized as constituting  
22          the unit area, containing 3,078.12 acres, more or less.

23          Exhibit "A" shows, in addition to the boundary of the unit  
24          area, the boundaries and identity of tracts and leases in said area to  
25          the extent known to the Unit Operator. Exhibit "B" attached hereto is  
26          a schedule showing to the extent known to the Unit Operator the acreage,  
27          percentage, and kind of ownership of oil and gas interests in all land  
28          in the unit area. However, nothing herein or in said schedule or map  
29          shall be construed as a representation by any party hereto as to the  
30          ownership of any interest other than such interest or interests as are  
31          shown in said map or schedule as owned by such party. Exhibits "A"

1 and "B" shall be revised by the Unit Operator whenever changes in the  
2 unit area render such revision necessary, or when requested by the Oil  
3 and Gas Supervisor, hereinafter referred to as "Supervisor" and not less  
4 than five copies of the revised exhibits shall be filed with the  
5 Supervisor and one copy with the New Mexico Oil Conservation Commission,  
6 hereinafter referred to as "State Commission".

7 The above-described unit area shall when practicable be expanded  
8 to include therein any additional lands or shall be contracted to exclude  
9 lands whenever such expansion or contraction is deemed to be necessary  
10 or advisable to conform with the purposes of this agreement. Such expan-  
11 sion or contraction shall be effected in the following manner:

12 (a) Unit Operator, on its own motion or on demand of the  
13 Director of the Geological Survey, hereinafter referred  
14 to as "Director", after preliminary concurrence by the  
15 Director, shall prepare a notice of proposed expansion  
16 or contraction describing the contemplated changes in  
17 the boundaries of the unit area, the reasons therefor,  
18 and the proposed effective date thereof, preferably the  
19 first day of a month subsequent to the date of notice.

20 (b) Said notice shall be delivered to the Supervisor, and the  
21 State Commission and copies thereof mailed to the last known  
22 address of each working interest owner, lessee, and lessor  
23 whose interests are affected, advising that 30 days will be  
24 allowed for submission to the Unit Operator of any objections.

25 (c) Upon expiration of the 30-day period provided in the preceding  
26 item (b) hereof, Unit Operator shall file with the Supervisor  
27 and the State Commission evidence of mailing of the notice of  
28 expansion or contraction and a copy of any objections thereto  
29 which have been filed with the Unit Operator, together with an  
30 application in sufficient number, for approval of such  
31 expansion or contraction and with appropriate joinders.

32 (d) After due consideration of all pertinent information, the

1 expansion or contraction shall, upon approval by the Supervisor,  
2 become effective as of the date prescribed in the notice thereof.

3 (e) All legal subdivisions of lands (i.e., 40 acres by Government  
4 survey or its nearest lot or tract equivalent; in instances of  
5 irregular surveys unusually large lots or tracts shall be con-  
6 sidered in multiples of 40 acres or the nearest aliquot equiva-  
7 lent thereof), no parts of which are entitled to be in a  
8 participating area on or before the fifth anniversary of the  
9 effective date of the first initial participating area esta-  
10 blished under this unit agreement, shall be eliminated auto-  
11 matically from this agreement, effective as of said fifth  
12 anniversary, and such lands shall no longer be a part of  
13 the unit area and shall no longer be subject to this agree-  
14 ment, unless diligent drilling operations are in progress  
15 on unitized lands not entitled to participation on said  
16 fifth anniversary, in which event all such lands shall  
17 remain subject hereto for so long as such drilling operations  
18 are continued diligently, with not more than 90 days' time  
19 elapsing between the completion of one such well and the com-  
20 mencement of the next such well. All legal subdivisions of  
21 lands not entitled to be in a participating area within 10  
22 years after the effective date of the first initial partici-  
23 pating area approved under this agreement shall be auto-  
24 matically eliminated from this agreement as of said tenth  
25 anniversary. All lands proved productive by diligent drilling  
26 operations after the aforesaid 5-year period shall become  
27 participating in the same manner as during said 5-year  
28 period. However, when such diligent drilling operations  
29 cease, all nonparticipating lands shall be automatically  
30 eliminated effective as of the 91st day thereafter. The unit  
31 operator shall within 90 days after the effective date of  
32 any elimination hereunder, describe the area so eliminated

1 to the satisfaction of the Supervisor and promptly notify  
2 all parties in interest.

3 If conditions warrant extension of the 10-year period  
4 specified in this subsection 2(e), a single extension of not  
5 to exceed 2 years may be accomplished by consent of the  
6 owners of 90% of the working interests in the current non-  
7 participating unitized lands and the owners of 60% of the  
8 basic royalty interests (exclusive of the basic royalty  
9 interests of the United States) in nonparticipating unitized  
10 lands with approval of the Director, provided such extension  
11 application is submitted to the Director not later than 60  
12 days prior to the expiration of said 10-year period.

13 Any expansion of the unit area pursuant to this section  
14 which embraces lands theretofore eliminated pursuant to  
15 this subsection 2(e) shall not be considered automatic  
16 commitment or recommitment of such lands.

17 3. UNITIZED LAND AND UNITIZED SUBSTANCES. All land committed to  
18 this agreement shall constitute land referred to herein as "unitized land"  
19 or "land subject to this agreement." All oil and gas in any and all  
20 formations of the unitized land are unitized under the terms of this agree-  
21 ment and herein are called "unitized substances."

22 4. UNIT OPERATOR. Amoco Production Company is  
23 hereby designated as Unit Operator and by signature hereto as Unit Operator  
24 agrees and consents to accept the duties and obligations of Unit Operator  
25 for the discovery, development, and production of unitized substances as  
26 herein provided. Whenever reference is made herein to the Unit Operator,  
27 such reference means the Unit Operator acting in that capacity and not  
28 as an owner of interest in unitized substances, and the term "working

1 interest owner" when used herein shall include or refer to Unit Operator  
2 as the owner of a working interest when such an interest is owned by it.

3 5. RESIGNATION OR REMOVAL OF UNIT OPERATOR. Unit Operator shall  
4 have the right to resign at any time prior to the establishment of a  
5 participating area or areas hereunder, but such resignation shall not  
6 become effective so as to release Unit Operator from the duties and  
7 obligations of Unit Operator and terminate Unit Operator's rights as such  
8 for a period of 6 months after notice of intention to resign has been  
9 served by Unit Operator on all working interest owners and the Supervisor,  
10 and until all wells then drilled hereunder are placed in a satisfactory  
11 condition for suspension or abandonment whichever is required by the  
12 Supervisor, unless a new Unit Operator shall have been selected and  
13 approved and shall have taken over and assumed the duties and obliga-  
14 tions of Unit Operator prior to the expiration of said period.

15 Unit Operator shall have the right to resign in like manner  
16 and subject to like limitations as above provided at any time a partici-  
17 pating area established hereunder is in existence, but, in all instances  
18 of resignation or removal, until a successor unit operator is selected  
19 and approved as hereinafter provided, the working interest owners shall  
20 be jointly responsible for performance of the duties of unit operator,  
21 and shall not later than 30 days before such resignation or removal  
22 becomes effective appoint a common agent to represent them in any  
23 action to be taken hereunder.

24 The resignation of Unit Operator shall not release Unit Operator  
25 from any liability for any default by it hereunder occurring prior to  
26 the effective date of its resignation.

27 The Unit Operator may, upon default or failure in the perform-  
28 ance of its duties or obligations hereunder, be subject to removal by  
29 the same percentage vote of the owners of working interests as herein  
30 provided for the selection of a new Unit Operator. Such removal shall  
31 be effective upon notice thereof to the Supervisor.



1           The resignation or removal of Unit Operator under this  
2 agreement shall not terminate its right, title, or interest as the owner  
3 of a working interest or other interest in unitized substances, but upon  
4 the resignation or removal of Unit Operator becoming effective, such  
5 Unit Operator shall deliver possession of all wells, equipment, materials,  
6 and appurtenances used in conducting the unit operations to the new duly  
7 qualified successor Unit Operator or to the common agent, if no such  
8 new Unit Operator is elected, to be used for the purpose of conducting  
9 unit operations hereunder. Nothing herein shall be construed as authorizing  
10 removal of any material, equipment and appurtenances needed for the preserva-  
11 tion of any wells.

12           6.       SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall  
13 tender his or its resignation as Unit Operator or shall be removed as  
14 hereinabove provided, or a change of Unit Operator is negotiated by  
15 working interest owners, the owners of the working interests in the par-  
16 ticipating area or areas according to their respective acreage interests  
17 in such participating area or areas, or, until a participating area  
18 shall have been established, the owners of the working interest according  
19 to their respective acreage interests in all unitized land, shall by  
20 majority vote select a successor Unit Operator: Provided, That, if a  
21 majority but less than 75 percent of the working interests qualified to  
22 vote are owned by one party to this agreement, a concurring vote of one  
23 or more additional working interest owners shall be required to select  
24 a new operator. Such selection shall not become effective until:

25                   (a) A Unit Operator so selected shall accept in writing the  
26                   duties and responsibilities of Unit Operator, and

27                   (b) The selection shall have been approved by the Supervisor.

28           If no successor Unit Operator is selected and qualified as  
29 herein provided, the Director at his election may declare this unit  
30 agreement terminated.

1           7.       ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT. If the  
2       Unit Operator is not the sole owner of working interests, costs and  
3       expenses incurred by Unit Operator in conducting unit operations here-  
4       under shall be paid and apportioned among and borne by the owners of  
5       working interests, all in accordance with the agreement or agreements  
6       entered into by and between the Unit Operator and the owners of  
7       working interests, whether one or more, separately or collectively. Any  
8       agreement or agreements entered into between the working interest owners  
9       and the Unit Operator as provided in this section, whether one or more,  
10      are herein referred to as the "unit operating agreement." Such unit  
11      operating agreement shall also provide the manner in which the working  
12      interest owners shall be entitled to receive their respective proportionate  
13      and allocated share of the benefits accruing hereto in conformity with  
14      their underlying operating agreements, leases, or other independent con-  
15      tracts, and such other rights and obligations as between Unit Operator  
16      and the working interest owners as may be agreed upon by Unit Operator and  
17      the working interest owners; however, no such unit operating agreement  
18      shall be deemed either to modify any of the terms and conditions of  
19      this unit agreement or to relieve the Unit Operator of any right or  
20      obligation established under this unit agreement, and in case of any  
21      inconsistency or conflict between this unit agreement and the unit  
22      operating agreement, this unit agreement shall govern. Three true  
23      copies of any unit operating agreement executed pursuant to this section  
24      should be filed with the Supervisor, prior to approval of this unit  
25      agreement.

26           8.       RIGHTS AND OBLIGATIONS OF UNIT OPERATOR. Except as otherwise  
27      specifically provided herein, the exclusive right, privilege, and duty  
28      of exercising any and all rights of the parties hereto which are neces-  
29      sary or convenient for prospecting for, producing, storing, allocating,  
30      and distributing the unitized substances are hereby delegated to and shall

1 be exercised by the Unit Operator as herein provided. Acceptable evidence  
2 of title to said rights shall be deposited with said Unit Operator and,  
3 together with this agreement, shall constitute and define the rights,  
4 privileges, and obligations of Unit Operator. Nothing herein, however,  
5 shall be construed to transfer title to any land or to any lease or  
6 operating agreement, it being understood that under this agreement the  
7 Unit Operator, in its capacity as Unit Operator, shall exercise the rights  
8 of possession and use vested in the parties hereto only for the purposes  
9 herein specified.

10 9. DRILLING TO DISCOVERY. Within 6 months after the effective  
11 date hereof, the Unit Operator shall begin to drill an adequate test  
12 well at a location approved by the Supervisor, if on Federal land, unless  
13 on such effective date a well is being drilled conformably with the terms  
14 hereof, and thereafter continue such drilling diligently until all of the  
15 formations of Pennsylvanian Age have been tested or until at a  
16 lesser depth unitized substances shall be discovered which can be pro-  
17 duced in paying quantities (to wit: quantities sufficient to repay the  
18 costs of drilling, completing, and producing operations, with a reasonable  
19 profit) or the Unit Operator shall at any time establish to the satis-  
20 faction of the Supervisor, if on Federal land, that further drilling of  
21 said well would be unwarranted or impracticable, provided, however, that  
22 Unit Operator shall not in any event be required to drill said well to a  
23 depth in excess of 10,400 feet. Until the discovery of a deposit of  
24 unitized substances capable of being produced in paying quantities, the  
25 Unit Operator shall continue drilling diligently one well at a time,  
26 allowing not more than 6 months between the completion of one well and the  
27 beginning of the next well, until a well capable of producing unitized  
28 substances in paying quantities is completed to the satisfaction of said  
29 Supervisor, if it be on Federal land, or until it is reasonably proved  
30 that the unitized land is incapable of producing unitized substances in  
31 paying quantities in the formations drilled hereunder. Nothing in this

1 section shall be deemed to limit the right of the Unit Operator to resign  
2 as provided in Section 5, hereof, or as requiring Unit Operator to com-  
3 mence or continue any drilling during the period pending such resignation  
4 becoming effective in order to comply with the requirements of this  
5 section. The Supervisor may modify the drilling requirements of this  
6 section by granting reasonable extensions of time when, in his opinion,  
7 such action is warranted.

8 Upon failure to commence any well provided for in this section  
9 within the time allowed, including any extension of time granted by the  
10 Supervisor, this agreement will automatically terminate; upon failure to  
11 continue drilling diligently any well commenced hereunder, the Supervisor  
12 may, after 15-days' notice to the Unit Operator, declare this unit agree-  
13 ment terminated.

14 10. PLAN OF FURTHER DEVELOPMENT AND OPERATION. Within 6 months  
15 after completion of a well capable of producing unitized substances in  
16 paying quantities, the Unit Operator shall submit for the approval of  
17 the Supervisor an acceptable plan of development and operation for the  
18 unitized land which, when approved by the Supervisor, shall constitute  
19 the further drilling and operating obligations of the Unit Operator  
20 under this agreement for the period specified therein. Thereafter, from  
21 time to time before the expiration of any existing plan, the Unit Operator  
22 shall submit for the approval of the Supervisor a plan for an additional  
23 specified period for the development and operation of the unitized land.

24 Any plan submitted pursuant to this section shall provide for  
25 the exploration of the unitized area and for the diligent drilling  
26 necessary for determination of the area or areas thereof capable of  
27 producing unitized substances in paying quantities in each and every  
28 productive formation and shall be as complete and adequate as the Super-  
29 visor may determine to be necessary for timely development and proper  
30 conservation of the oil and gas resources of the unitized area and  
31 shall;

- 1 (a) specify the number and locations of any wells to be drilled  
2 and the proposed order and time for such drilling; and  
3 (b) to the extent practicable specify the operating practices  
4 regarded as necessary and advisable for proper conservation  
5 of natural resources.

6 Separate plans may be submitted for separate productive zones, subject  
7 to the approval of the Supervisor.

8 Plans shall be modified or supplemented when necessary to  
9 meet changed conditions or to protect the interests of all parties to  
10 this agreement. Reasonable diligence shall be exercised in complying  
11 with the obligations of the approved plan of development. The Super-  
12 visor is authorized to grant a reasonable extension of the 6-month  
13 period herein prescribed for submission of an initial plan of develop-  
14 ment where such action is justified because of unusual conditions or  
15 circumstances. After completion hereunder of a well capable of producing  
16 any unitized substance in paying quantities, no further wells, except  
17 such as may be necessary to afford protection against operations not  
18 under this agreement and such as may be specifically approved by the  
19 Supervisor, shall be drilled except in accordance with a plan of develop-  
20 ment approved as herein provided.

21 11. PARTICIPATION AFTER DISCOVERY. Upon completion of a well  
22 capable of producing unitized substances in paying quantities or as soon  
23 thereafter as required by the Supervisor, the Unit Operator shall submit  
24 for approval by the Supervisor a schedule, based on subdivisions of the  
25 public-land survey or aliquot parts thereof, of all land then regarded  
26 as reasonably proved to be productive in paying quantities; all lands in  
27 said schedule on approval of the Supervisor to constitute a participating  
28 area, effective as of the date of completion of such well or the effective  
29 date of this unit agreement, whichever is later. The acreages of both  
30 Federal and non-Federal lands shall be based upon appropriate computations  
31 from the courses and distances shown on the last approved public-land

1 survey as of the effective date of each initial participating area.  
2 Said schedule shall also set forth the percentage of unitized substances  
3 to be allocated as herein provided to each tract in the participating  
4 area so established, and shall govern the allocation of production com-  
5 mencing with the effective date of the participating area. A separate  
6 participating area shall be established for each separate pool or deposit  
7 of unitized substances or for any group thereof which is produced as a  
8 single pool or zone, and any two/or more participating areas so established  
9 may be combined into one, on approval of the Supervisor. When production  
10 from two or more participating areas, so established, is subsequently  
11 found to be from a common pool or deposit said participating areas shall  
12 be combined into one effective as of such appropriate date as may be  
13 approved or prescribed by the Supervisor. The participating area or  
14 areas so established shall be revised from time to time, subject to  
15 like approval, to include additional land then regarded as reasonably  
16 proved to be productive in paying quantities or necessary for unit  
17 operations, or to exclude land then regarded as reasonably proved not  
18 to be productive in paying quantities and the schedule of allocation  
19 percentages shall be revised accordingly. The effective date of any  
20 revision shall be the first of the month in which is obtained the knowledge  
21 or information on which such revision is predicated, provided, however,  
22 that a more appropriate effective date may be used if justified by the  
23 Unit Operator and approved by the Supervisor. No land shall be excluded  
24 from a participating area on account of depletion of the unitized substances,  
25 except that any participating area established under the provisions of  
26 the unit agreement shall terminate automatically whenever all completions  
27 in the formation on which the participating area is based are abandoned.

28 It is the intent of this section that a participating area shall  
29 represent the area known or reasonably estimated to be productive in paying  
30 quantities; but, regardless of any revision of the participating area,  
31 nothing herein contained shall be construed as requiring any retroactive

1 adjustment for production obtained prior to the effective date of the  
2 revision of the participating area.

3 In the absence of agreement at any time between the Unit Operator  
4 and the Supervisor as to the proper definition or redefinition of a partici-  
5 pating area, or until a participating area has, or areas have, been  
6 established as provided herein, the portion of all payments affected thereby  
7 shall be impounded in a manner mutually acceptable to the owners of working  
8 interests and the Supervisor. Royalties due the United States shall be  
9 determined by the Supervisor and the amount thereof shall be deposited,  
10 as directed by the Supervisor, to be held as unearned money until a  
11 participating area is finally approved and then applied as earned or  
12 returned in accordance with a determination of the sum due as Federal  
13 royalty on the basis of such approved participating area.

14 Whenever it is determined, subject to the approval of the  
15 Supervisor, that a well drilled under this agreement is not capable  
16 of production in paying quantities and inclusion of the land on which  
17 it is situated in a participating area is unwarranted, production from  
18 such well shall, for the purposes of settlement among all parties other  
19 than working interest owners, be allocated to the land on which the  
20 well is located unless such land is already within the participating  
21 area established for the pool or deposit from which such production is  
22 obtained. Settlement for working interest benefits from such a well  
23 shall be made as provided in the unit operating agreement.

24 12. ALLOCATION OF PRODUCTION. All unitized substances produced  
25 from each participating area established under this agreement, except any  
26 part thereof used in conformity with good operating practices within the  
27 unitized area for drilling, operating, camp and other production or  
28 development purposes, for repressuring or recycling in accordance with  
29 a plan of development approved by the Supervisor, or unavoidably lost,  
30 shall be deemed to be produced equally on an acreage basis from the  
31 several tracts of unitized land of the participating area established

1 for such production and, for the purpose of determining any benefits  
2 accruing under this agreement, each such tract of unitized land shall  
3 have allocated to it such percentage of said production as the number of  
4 acres of such tract included in said participating area bears to the  
5 total acres of unitized land in said participating area, except that  
6 allocation of production hereunder for purposes other than for settlement  
7 of the royalty, overriding royalty, or payment out of production obliga-  
8 tions of the respective working interest owners, shall be on the basis  
9 prescribed in the unit operating agreement whether in conformity with  
10 the basis of allocation herein set forth or otherwise. It is hereby  
11 agreed that production of unitized substances from a participating  
12 area shall be allocated as provided herein regardless of whether any  
13 wells are drilled on any particular part or tract of said participating  
14 area. If any gas produced from one participating area is used for repres-  
15 suring or recycling purposes in another participating area, the first  
16 gas withdrawn from such last-mentioned participating area for sale during  
17 the life of this agreement shall be considered to be the gas so transferred  
18 until an amount equal to that transferred shall be so produced for sale  
19 and such gas shall be allocated to the participating area from which  
20 initially produced as such area was last defined at the time of such  
21 final production.

22 13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND OR FORMATIONS.  
23 Any party hereto owning or controlling the working interest in any unitized  
24 land having thereon a regular well location may with the approval of the  
25 Supervisor, at such party's sole risk, costs, and expense, drill a well  
26 to test any formation for which a participating area has not been established  
27 or to test any formation for which a participating area has been established  
28 if such location is not within said participating area, unless within 90  
29 days of receipt of notice from said party of his intention to drill the  
30 well the Unit Operator elects and commences to drill such a well in like  
31 manner as other wells are drilled by the Unit Operator under this agreement.



1           If any well drilled as aforesaid by a working interest owner  
2 results in production such that the land upon which it is situated may  
3 properly be included in a participating area, such participating area  
4 shall be established or enlarged as provided in this agreement and the  
5 well shall thereafter be operated by the Unit Operator in accordance  
6 with the terms of this agreement and the unit operating agreement.

7           If any well drilled as aforesaid by a working interest owner  
8 obtains production in quantities insufficient to justify the inclusion of  
9 the land upon which such well is situated in a participating area, such  
10 well may be operated and produced by the party drilling the same subject  
11 to the conservation requirements of this agreement. The royalties in  
12 amount or value of production from any such well shall be paid as specified  
13 in the underlying lease and agreements affected.

14       14.     ROYALTY SETTLEMENT. The United States and any State and any  
15 royalty owner who, is entitled to take in kind a share of the substances  
16 now unitized hereunder shall hereafter be entitled to the right to take  
17 in kind its share of the unitized substances, and Unit Operator, or the  
18 working interest owner in case of the operation of a well by a working  
19 interest owner as herein provided for in special cases, shall make  
20 deliveries of such royalty share taken in kind in conformity with the  
21 applicable contracts, laws, and regulations. Settlement for royalty  
22 interest not taken in kind shall be made by working interest owners  
23 responsible therefor under existing contracts, laws and regulations, or  
24 by the Unit Operator on or before the last day of each month for unitized  
25 substances produced during the preceding calendar month; provided, however,  
26 that nothing herein contained shall operate to relieve the lessees of  
27 any land from their respective lease obligations for the payment of any  
28 royalties due under their leases.

29           If gas obtained from lands not subject to this agreement is  
30 introduced into any participating area hereunder, for use in repres-  
31 suring, stimulation of production, or increasing ultimate recovery, in

1 conformity with a plan of operations approved by the Supervisor, a like  
2 amount of gas, after settlement as herein provided for any gas transferred  
3 from any other participating area and with appropriate deduction for loss  
4 from any cause, may be withdrawn from the formation into which the gas  
5 is introduced, royalty free as to dry gas, but not as to any products  
6 which may be extracted therefrom; provided that such withdrawal shall be  
7 at such time as may be provided in the approved plan of operations or as  
8 may otherwise be consented to by the Supervisor as conforming to good  
9 petroleum engineering practice; and provided further, that such right of  
10 withdrawal shall terminate on the termination of this unit agreement.

11 Royalty due the United States shall be computed as provided in  
12 the operating regulations and paid in value or delivered in kind as to  
13 all unitized substances on the basis of the amounts thereof allocated to  
14 unitized Federal land as provided herein at the rates specified in the  
15 respective Federal leases, or at such lower rate or rates as may be  
16 authorized by law or regulation; provided, that for leases on which the  
17 royalty rate depends on the daily average production per well, said  
18 average production shall be determined in accordance with the operating  
19 regulations as though each participating area were a single consolidated  
20 lease.

21 Royalty due as to non-Federal lands under the respective leases  
22 shall be computed and paid on the basis of all unitized substances  
23 allocated to such lands hereunder.

24 15. RENTAL SETTLEMENT. Rental or minimum royalties due on leases  
25 committed hereto shall be paid by working interest owners responsible  
26 therefor under existing contracts, laws, and regulations, provided that  
27 nothing herein contained shall operate to relieve the lessees of any  
28 land from their respective lease obligations for the payment of any  
29 rental or minimum royalty due under their leases. Rental or minimum  
30 royalty for lands of the United States subject to this agreement shall  
31 be paid at the rate specified in the respective leases from the United

1 States unless such rental or minimum royalty is waived, suspended, or  
2 reduced by law or by approval of the Secretary or his duly authorized  
3 representative.

4 With respect to any lease on non-Federal land containing pro-  
5 visions which would terminate such lease unless drilling operations are  
6 commenced upon the land covered thereby within the time therein specified  
7 or rentals are paid for the privilege of deferring such drilling opera-  
8 tions, the rentals required thereby shall, notwithstanding any other  
9 provision of this agreement, be deemed to accrue and become payable  
10 during the term thereof as extended by this agreement and until the  
11 required drilling operations are commenced upon the land covered thereby  
12 or until some portion of such land is included within a participating  
13 area.

14 16. CONSERVATION. Operations hereunder and production of unitized  
15 substances shall be conducted to provide for the most economical and  
16 efficient recovery of said substances without waste, as defined by or  
17 pursuant to State or Federal law or regulation.

18 17. DRAINAGE. The Unit Operator shall take such measures as the  
19 Supervisor deems appropriate and adequate to prevent drainage of unitized  
20 substances from unitized land by wells on land not subject to this agree-  
21 ment.

22 18. LEASES AND CONTRACTS CONFORMED AND EXTENDED. The terms, con-  
23 ditions, and provisions of all leases, subleases, and other contracts  
24 relating to exploration, drilling, development, or operation for oil or  
25 gas on lands committed to this agreement are hereby expressly modified  
26 and amended to the extent necessary to make the same conform to the  
27 provisions hereof, but otherwise to remain in full force and effect; and  
28 the parties hereto hereby consent that the Secretary as to Federal leases

1 shall and by his approval hereof, or by the approval hereof by his duly  
2 authorized representative, does hereby establish, alter, change, or revoke  
3 the drilling, producing, rental, minimum royalty, and royalty require-  
4 ments of Federal leases committed hereto and the regulations in respect  
5 thereto to conform said requirements to the provisions of this agreement,  
6 and, without limiting the generality of the foregoing, all leases, sub-  
7 leases, and contracts are particularly modified in accordance with the  
8 following:

- 9 (a) The development and operation of lands subject to this  
10 agreement under the terms hereof shall be deemed full  
11 performance of all obligations for development and opera-  
12 tion with respect to each and every separately owned tract  
13 subject to this agreement, regardless of whether there is  
14 any development of any particular tract of the unit area.
- 15 (b) Drilling and producing operations performed hereunder upon  
16 any tract of unitized lands will be accepted and deemed  
17 to be performed upon and for the benefit of each and every  
18 tract of unitized land, and no lease shall be deemed to  
19 expire by reason of failure to drill or produce wells  
20 situated on the land therein embraced.
- 21 (c) Suspension of drilling or producing operations on all  
22 unitized lands pursuant to direction or consent of the  
23 Secretary or his duly authorized representative shall be  
24 deemed to constitute such suspension pursuant to such  
25 direction or consent as to each and every tract of  
26 unitized land. A suspension of drilling or producing  
27 operations limited to specified lands shall be applicable  
28 only to such lands.
- 29 (d) Each lease, sublease or contract relating to the exploration,  
30 drilling, development or operation for oil or gas of lands  
31 other than those of the United States committed to this  
32 agreement, which, by its terms might expire prior to the

1 termination of this agreement, is hereby extended beyond  
2 any such terms so provided therein so that it shall be  
3 continued in full force and effect for and during the  
4 term of this agreement.

5 (e) Any Federal lease for a fixed term of twenty (20) years  
6 or any renewal thereof or any part of such lease which  
7 is made subject to this agreement shall continue in force  
8 beyond the term provided therein until the termination  
9 hereof. Any other Federal lease committed hereto shall  
10 continue in force beyond the term so provided therein or  
11 by law as to the land committed so long as such lease  
12 remains subject hereto, provided that production  
13 is had in paying quantities under this unit agreement  
14 prior to the expiration date of the term of such lease,  
15 or in the event actual drilling operations are commenced  
16 on unitized land, in accordance with the provisions of  
17 this agreement, prior to the end of the primary term of  
18 such lease and are being diligently prosecuted at that  
19 time, such lease shall be extended for two years and so  
20 long thereafter as oil or gas is produced in paying  
21 quantities in accordance with the provisions of the Mineral  
22 Leasing Act Revision of 1960.

23 (f) Each sublease or contract relating to the operation and  
24 development of unitized substances from lands of the United  
25 States committed to this agreement, which by its terms  
26 would expire prior to the time at which the underlying  
27 lease, as extended by the immediately preceding paragraph,  
28 will expire, is hereby extended beyond any such term so  
29 provided therein so that it shall be continued in full  
30 force and effect for and during the term of the underlying  
31 lease as such term is herein extended.

1 (g) The segregation of any Federal lease committed to this  
2 agreement is governed by the following provision in the  
3 fourth paragraph of Sec. 17(j) of the Mineral Leasing Act,  
4 as amended by the Act of September 2, 1960 (74 Stat. 781-784):  
5 "Any [Federal] lease heretofore or hereafter committed to  
6 any such [unit] plan embracing lands that are in part  
7 within and in part outside of the area covered by any  
8 such plan shall be segregated into separate leases as to  
9 the lands committed and the lands not committed as of the  
10 effective date of unitization: Provided, however, That  
11 any such lease as to the nonunitized portion shall continue  
12 in force and effect for the term thereof but for not  
13 less than two years from the date of such segregation and  
14 so long thereafter as oil or gas is produced in paying  
15 quantities."

16 (h) Any lease, other than a Federal lease, having only a  
17 portion of its lands committed hereto shall be segregated  
18 as to the portion committed and the portion not committed,  
19 and the provisions of such lease shall apply separately to  
20 such segregated portions commencing as of the effective  
21 date hereof. In the event any such lease provides for a  
22 lump-sum rental payment, such payment shall be prorated  
23 between the portions so segregated in proportion to the  
24 acreage of the respective tracts.

25 19. COVENANTS RUN WITH LAND. The covenants herein shall be con-  
26 strued to be covenants running with the land with respect to the interest  
27 of the parties hereto and their successors in interest until this agree-  
28 ment terminates, and any grant, transfer, or conveyance, of interest in

1 land or leases subject hereto shall be and hereby is conditioned upon  
2 the assumption of all privileges and obligations hereunder by the grantee,  
3 transferee, or other successor in interest. No assignment or transfer  
4 of any working interest, royalty, or other interest subject hereto shall  
5 be binding upon Unit Operator until the first day of the calendar month  
6 after Unit Operator is furnished with the original, photostatic, or  
7 certified copy of the instrument of transfer.

8 20. EFFECTIVE DATE AND TERM. This agreement shall become effective  
9 upon approval by the Secretary or his duly authorized representative and  
10 shall terminate five (5) years from said effective date unless:

- 11 (a) such date of expiration is extended by the Director, or  
12 (b) it is reasonably determined prior to the expiration of  
13 the fixed term or any extension thereof that the unitized  
14 land is incapable of production of unitized substances in  
15 paying quantities in the formations tested hereunder and  
16 after notice of intention to terminate the agreement on  
17 such ground is given by the Unit Operator to all parties  
18 in interest at their last known addresses, the agreement  
19 is terminated with the approval of the Supervisor, or  
20 (c) a valuable discovery of unitized substances has been made  
21 or accepted on unitized land during said initial term or any  
22 extension thereof, in which event the agreement shall remain  
23 in effect for such term and so long as unitized substances  
24 can be produced in quantities sufficient to pay for the cost  
25 of producing same from wells on unitized land within any  
26 participating area established hereunder and, should pro-  
27 duction cease, so long thereafter as diligent operations are  
28 in progress for the restoration of production or discovery  
29 of new production and so long thereafter as unitized  
30 substances so discovered can be produced as aforesaid, or  
31 (d) it is terminated as heretofore provided in this agreement.

1 This agreement may be terminated at any time by not less than 75 percentum,  
2 on an acreage basis, of the working interest owners signatory hereto, with  
3 the approval of the Supervisor; notice of any such approval to be given  
4 by the Unit Operator to all parties hereto.

5 21. RATE OF PROSPECTING, DEVELOPMENT, AND PRODUCTION. The Director  
6 is hereby vested with authority to alter or modify from time to time in  
7 his discretion the quantity and rate of production under this agreement  
8 when such quantity and rate is not fixed pursuant to Federal or State  
9 law or does not conform to any state-wide voluntary conservation or alloca-  
10 tion program, which is established, recognized, and generally adhered to  
11 by the majority of operators in such State, such authority being hereby  
12 limited to alteration or modification in the public interest, the purpose  
13 thereof and the public interest to be served thereby to be stated in the  
14 order of alteration or modification. Without regard to the foregoing,  
15 the Director is also hereby vested with authority to alter or modify  
16 from time to time in his discretion the rate of prospecting and develop-  
17 ment and the quantity and rate of production under this agreement when such  
18 alteration or modification is in the interest of attaining the conserva-  
19 tion objectives stated in this agreement and is not in violation of  
20 any applicable Federal or State law.

21 Powers in this section vested in the Director shall only be  
22 exercised after notice to Unit Operator and opportunity for hearing to be  
23 held not less than 15 days from notice.

24 22. APPEARANCES. Unit Operator shall, after notice to other parties  
25 affected, have the right to appear for and on behalf of any and all interests  
26 affected hereby before the Department of the Interior and to appeal from  
27 orders issued under the regulations of said Department or to apply for  
28 relief from any of said regulations or in any proceedings relative to  
29 operations before the Department of the Interior or any other legally  
30 constituted authority; provided, however, that any other interested party



1 shall also have the right at his own expense to be heard in any such pro-  
2 ceeding.

3 23. NOTICES. All notices, demands or statements required hereunder  
4 to be given or rendered to the parties hereto shall be deemed fully given  
5 if given in writing and personally delivered to the party or sent by  
6 postpaid registered or certified mail, addressed to such party or parties  
7 at their respective addresses set forth in connection with the signatures  
8 hereto or to the ratification or consent hereof or to such other address  
9 as any such party may have furnished in writing to party sending the  
10 notice, demand or statement.

11 24. NO WAIVER OF CERTAIN RIGHTS. Nothing in this agreement contained  
12 shall be construed as a waiver by any party hereto of the right to assert  
13 any legal or constitutional right or defense as to the validity or invalidity  
14 of any law of the State wherein said unitized lands are located, or of the  
15 United States, or regulations issued thereunder in any way affecting such  
16 party, or as a waiver by any such party of any right beyond his or its  
17 authority to waive.

18 25. UNAVOIDABLE DELAY. All obligations under this agreement requiring  
19 the Unit Operator to commence or continue drilling or to operate on or  
20 produce unitized substances from any of the lands covered by this agree-  
21 ment shall be suspended while the Unit Operator, despite the exercise of  
22 due care and diligence, is prevented from complying with such obligations,  
23 in whole or in part, by strikes, acts of God, Federal, State, or municipal  
24 law or agencies, unavoidable accidents, uncontrollable delays in trans-  
25 portation, inability to obtain necessary materials in open market, or other  
26 matters beyond the reasonable control of the Unit Operator whether similar  
27 to matters herein enumerated or not. No unit obligation which is suspended  
28 under this section shall become due less than thirty (30) days after it

1 has been determined that the suspension is no longer applicable. Deter-  
2 mination of creditable "Unavoidable Delay" time shall be made by the unit  
3 operator subject to approval of the Supervisor.

4 26. NONDISCRIMINATION. In connection with the performance of work  
5 under this agreement, the operator agrees to comply with all the provisions  
6 of section 202 (1) to (7) inclusive of Executive Order 11246 (30 F.R. 12319),  
7 which are hereby incorporated by reference in this agreement.

8 27. LOSS OF TITLE. In the event title to any tract of unitized  
9 land shall fail and the true owner cannot be induced to join in this  
10 unit agreement, such tract shall be automatically regarded as not committed  
11 hereto and there shall be such readjustment of future costs and benefits  
12 as may be required on account of the loss of such title. In the event of  
13 a dispute as to title as to any royalty, working interest, or other  
14 interests subject thereto, payment or delivery on account thereof may be  
15 withheld without liability for interest until the dispute is finally  
16 settled; provided, that, as to Federal land or leases, no payments of  
17 funds due the United States should be withheld, but such funds shall be  
18 deposited as directed by the Supervisor to be held as unearned money  
19 pending final settlement of the title dispute, and then applied as earned  
20 or returned in accordance with such final settlement.

21 Unit Operator as such is relieved from any responsibility for  
22 any defect or failure of any title hereunder.

23 28. NON-JOINDER AND SUBSEQUENT JOINDER. If the owner of any sub-  
24 stantial interest in a tract within the unit area fails or refuses to  
25 subscribe or consent to this agreement, the owner of the working interest  
26 in that tract may withdraw said tract from this agreement by written  
27 notice delivered to the Supervisor and the Unit Operator prior to the  
28 approval of this agreement by the Supervisor. Any oil or gas interests  
29 in lands within the unit area not committed hereto prior to submission

1 of this agreement for final approval may thereafter be committed hereto  
2 by the owner or owners thereof subscribing or consenting to this agreement,  
3 and, if the interest is a working interest, by the owner of such interest  
4 also subscribing to the unit operating agreement. After operations are  
5 commenced hereunder, the right of subsequent joinder, as provided in this  
6 section, by a working interest owner is subject to such requirements or  
7 approvals, if any, pertaining to such joinder, as may be provided for in  
8 the unit operating agreement. After final approval hereof, joinder by a  
9 non-working interest owner must be consented to in writing by the working  
10 interest owner committed hereto and responsible for the payment of any  
11 benefits that may accrue hereunder in behalf of such non-working interest.  
12 A non-working interest may not be committed to this unit agreement unless  
13 the corresponding working interest is committed hereto. Joinder to  
14 the unit agreement by a working-interest owner, at any time, must be  
15 accompanied by appropriate joinder to the unit operating agreement, if  
16 more than one committed working-interest owner is involved, in order for  
17 the interest to be regarded as committed to this unit agreement. Except  
18 as may otherwise herein be provided, subsequent joinders to this agree-  
19 ment shall be effective as of the first day of the month following  
20 the filing with the Supervisor of duly executed counterparts of all or  
21 any papers necessary to establish effective commitment of any tract to this  
22 agreement unless objection to such joinder is duly made within 60 days  
23 by the Supervisor.

24 29. COUNTERPARTS. This agreement may be executed in any number of  
25 counterparts no one of which needs to be executed by all parties or may  
26 be ratified or consented to by separate instrument in writing specifically  
27 referring hereto and shall be binding upon all those parties who have  
28 executed such a counterpart, ratification, or consent hereto with the  
29 same force and effect as if all such parties had signed the same docu-  
30 ment and regardless of whether or not it is executed by all other parties  
31 owning or claiming an interest in the lands within the above-described  
32 unit area.

1           30.       SURRENDER. Nothing in this agreement shall prohibit the  
2       exercise by any working interest owner of the right to surrender vested  
3       in such party by any lease, sublease, or operating agreement as to all  
4       or any part of the lands covered thereby, provided that each party who  
5       will or might acquire such working interest by such surrender or by  
6       forfeiture as hereafter set forth, is bound by the terms of this agree-  
7       ment.

8           If as a result of any such surrender the working interest rights  
9       as to such lands become vested in any party other than the fee owner of  
10      the unitized substances, said party may forfeit such rights and further  
11      benefits from operation hereunder as to said land to the party next in  
12      the chain of title who shall be and become the owner of such working  
13      interest.

14          If as the result of any such surrender or forfeiture working  
15      interest rights become vested in the fee owner of the unitized substances,  
16      such owner may:

- 17           (1) Accept those working interest rights subject to this  
18              agreement and the unit operating agreement; or  
19           (2) Lease the portion of such land as is included in a  
20              participating area established hereunder subject to this  
21              agreement and the unit operating agreement.  
22           (3) Provide for the independent operation of any part of such  
23              land that are not then included within a participating  
24              area established hereunder.

25          If the fee owner of the unitized substances does not accept  
26      the working interest rights subject to this agreement and the unit  
27      operating agreement or lease such lands as above provided within six (6)  
28      months after the surrendered or forfeited working interest rights become  
29      vested in the fee owner, the benefits and obligations of operations  
30      accruing to such lands under this agreement and the unit operating  
31      agreement shall be shared by the remaining owners of unitized working  
32      interests in accordance with their respective working interest ownerships,

1 and such owners of working interests shall compensate the fee owner of  
2 unitized substances in such lands by paying sums equal to the rentals,  
3 minimum royalties, and royalties applicable to such lands under the  
4 lease in effect when the lands were unitized.

5 An appropriate accounting and settlement shall be made for all  
6 benefits accruing to or payments and expenditures made or incurred on  
7 behalf of such surrendered or forfeited working interest subsequent to  
8 the date of surrender or forfeiture, and payment of any monies found to  
9 be owing by such an accounting shall be made as between the parties  
10 within thirty (30) days. In the event no unit operating agreement is in  
11 existence and a mutually acceptable agreement between the proper parties  
12 thereto cannot be consummated, the Supervisor may prescribe such reasonable  
13 and equitable agreement as he deems warranted under the circumstances.

14 The exercise of any right vested in a working interest owner to  
15 reassign such working interest to the party from whom obtained shall be  
16 subject to the same conditions as set forth in this section in regard to  
17 the exercise of a right to surrender.

18 31. TAXES. The working interest owners shall render and pay for their  
19 account and the account of the royalty owners all valid taxes on or  
20 measured by the unitized substances in and under or that may be produced,  
21 gathered and sold from the land subject to this contract after the effec-  
22 tive date of this agreement, or upon the proceeds or net proceeds derived  
23 therefrom. The working interest owners on each tract shall and may  
24 charge the proper proportion of said taxes to the royalty owners having  
25 interests in said tract, and may currently retain and deduct sufficient  
26 of the unitized substances or derivative products, or net proceeds thereof  
27 from the allocated share of each royalty owner to secure reimbursement  
28 for the taxes so paid. No such taxes shall be charged to the United  
29 States or the State of New Mexico or to any lessor who has a  
30 contract with his lessee which requires the lessee to pay such taxes.

1 32. NO PARTNERSHIP. It is expressly agreed that the re-  
2 lation of the parties hereto is that of independent contractors  
3 and nothing in this agreement contained, expressed or implied,  
4 nor any operations conducted hereunder, shall create or be deemed  
5 to have created a partnership or association between the parties  
6 hereto or any of them.

7 33. SURFACE MANAGEMENT STIPULATION. Nothing in this agree-  
8 ment shall modify any special Federal-lease stipulations relating  
9 to surface management, attached to and made a part of Oil and Gas  
10 Leases covering lands within the Unit Area.

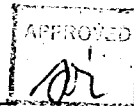
11 34. RECLAMATION LANDS. Nothing in this agreement shall  
12 modify the special, Federal-lease stipulations applicable to  
13 lands under the jurisdiction of the Bureau of Reclamation.

14 IN WITNESS WHEREOF, the parties hereto have caused  
15 this agreement to be executed as of the date first above written.  
16  
17

18 UNIT OPERATOR AND WORKING INTEREST  
19 OWNER

20 Amoco Production Company

21 By *W. H. Hennigh*  
Attorney-in-Fact



22 Address: P. O. Box 3092  
23 Houston, Texas 77001

24 WORKING INTEREST OWNERS

25 Gulf Oil Corporation  
26 P. O. Drawer 1150  
27 Midland, Texas 79701

28 Phillips Petroleum Company  
29 Exploration Office  
30 Phillips Building  
31 Odessa, Texas 79760

32 Cities Service Oil Company  
33 800 Vaughn Building  
34 Midland, Texas 79701

35 Tesoro Petroleum Corporation  
36 8520 Crownhill  
37 San Antonio, Texas 78209

38 Yates Petroleum Corporation  
39 Yates Building  
40 Artesia, New Mexico 88201

STATE OF TEXAS

I

COUNTY OF HARRIS

I

The foregoing instrument was acknowledged before me this 20<sup>th</sup>  
day of September, 1973, by C. N. MENNINGER,  
as Attorney-in-Fact on behalf of AMOCO PRODUCTION COMPANY.

My Commission Expires:

6-1-75

Irene Haldas  
Notary Public in and for  
Harris County, Texas

IRENE HALDAS  
Notary Public in and for Harris County, Texas

EXHIBIT "B"  
BUBBLING SPRING  
EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
1	T. 20 S. - R. 26 E. Sec. 23: S/2	320.00	LC-070032-B 1-1-74	All-U.S.A.	Gulf Oil Corporation	Pauline A. Galt \$750/Acre PP out of 5%	Surface to 8900' Gulf Oil Corporation Pan American Petroleum  Yates Petroleum Corporation  From 8900' to Base Gulf Oil Corporation Pan American Petroleum  Below Base Penn Formation Gulf Oil Corporation
2	T. 20 S. - R. 26 E. Sec. 22: N/2 NE/4, SW/4 NE/4	120.00	LC-071847 1-1-74	All-U.S.A.	Cities Service Oil Co. Childress Royalty 7.14286% Co., E.E. Nearburg, Gulf Oil Corporation Anna A. (Nearburg) 28.57143% Reischman, Tom Pan American Petroleum Corporation Ingram, E.H. Ward- Corp. 50.00000% Tr. \$750/Acre PP Phillips Petroleum Co. out of 5% 14.28571% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Yates Petroleum Corporation  From 8900' to Base Cities Service Oil Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum  Below Base Penn Formation Cities Service Oil Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum	



EXHIBIT "8"  
BUBBLING SPRING  
EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
E. 320.00	LC-070032-B 1-1-74	All-U.S.A.	Gulf Oil Corporation	Pauline A. Galt \$750/Acre PP out of 5%	Surface to 8900' Gulf Oil Corporation 74.03350% Pan American Petroleum Corporation 25.00000% Yates Petroleum Corporation 0.96650% From 8900' to Base Penn Gulf Oil Corporation 50.00000% Pan American Petroleum Corporation 50.00000% Below Base Penn Formation Gulf Oil Corporation 100.00000%
E. 4, 74 120.00	LC-071847 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corp. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000% Phillips Petroleum 14.28571% Yates Petroleum Corp. 1.10457% From 8900' to Base Penn. Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571% Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%

## EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
3	T. 20 S. - R. 26 E. Sec. 22: SE/4 NE/4	40.00	LC-071847-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward-Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co. Yates Petroleum Corp.  From 8900' to Base Penn Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co.  Below Base Penn Format Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co.
4	T. 20 S. - R. 26 E. Sec. 21: E/2 SE/4 Sec. 28: S/2 NE/4, SE/4 SE/4, NE/4 NE/4	240.00	NM-03215 H.B.P.	All-U.S.A.	Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829%  Pan American Petroleum Corp. 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom  Ingram, E.H. Ward-Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co. Yates Petroleum Corp.  From 8900' to Base Penn Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co. Below Base Penn Format Cities Service Oil Co.

SPRING, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE	
E. E/4	40.00	LC-071847-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%  From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571%  Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%
E. SE/4 E/4 NE/4	240.00	NM-03215 H.B.P.	All-U.S.A.	Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829%  Pan American Petroleum Corp. 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg). Reischman, Tom  Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000%  Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%  From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571% Below Base Penn Formation Cities Service Oil Co. 3.57143%

## EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
4 Contd.							Gulf Oil Corporation Pan American Petroleum Phillips Petroleum Co.
5	T. 20 S. - R. 26 E. Sec. 21: NW/4 SE/4 Sec. 27: E/2 NW/4 Sec. 28: N/2 SE/4, SW/4 SE/4	240.00	NM-03215-A H.B.P.	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward-Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum Phillips Petroleum Co. Yates Petroleum Corp. From 8900' to Base P Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum Phillips Petroleum Co. Below Base Penn Form Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum Phillips Petroleum Co.
6	T. 20 S. - R. 26 E. Sec. 22: SW/4 Sec. 27: NW/4 NW/4	200.00	NM-03217 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corp. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward-Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum Phillips Petroleum Co. Yates Petroleum Corp. From 8900' to Base P Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum Phillips Petroleum Co.

SPRING, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
240.00  SW/4	NM-03215-A H.B.P.	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%
					Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%
200.00	NM-03217 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corp. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571%
					Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%
					Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%
					From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571%

## EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
6 Contd.							Below Base Penn Form Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co.
7	T. 20 S. - R. 26 E. Sec. 22: NW/4, SE/4	320.00	NM-03217-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward-Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co. Yates Petroleum Corp.  From 8900' to Base P Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co.  Below Base Penn Form Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co.
8	T. 20 S. - R. 26 E. Sec. 21: W/2 NE/4	80.00	NM-03365 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corp. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward-Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co. Yates Petroleum Co.  From 8900' to Base P Cities Service Oil Co. Gulf Oil Corporation

PRING, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
E. 74	320.00	NM-03217-A 1-1-74	All-U.S.A.  Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14285%
					Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%
E.	80.00	NM-03365 1-1-74	All-U.S.A.  Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corp. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571%
					Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%
E.	80.00	NM-03365 1-1-74	All-U.S.A.  Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corp. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Co. 1.10457%
					From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143%

EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
8							Pan American Petroleum
Contd.							Phillips Petroleum Co.
							Below Base Penn Form
							Cities Service Oil Co.
							Gulf Oil Corporation
							Pan American Petroleum
							Phillips Petroleum Co.
9	T. 20 S. - R. 26 E. Sec. 21: E/2 NE/4	80.00	NM-03365-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50,00000% Phillips Petroleum Co. 50,00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward-Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co. Yates Petroleum Corp.  From 8900' to Base P Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co.  Below Base Penn Form Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co.
10	T. 20 S. - R. 26 E. Sec. 27: All of NE/4 SW/4 5.20 East of Pecos River		NM-038124 1-1-74	All-U.S.A.	Cities Service Oil Co.	Peter O. Nyce, Jr. & Christine P. Nyce 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Yates Petroleum Corp.



NG, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
					Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571% Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%
80.00	NM-03365-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50,00000% Phillips Petroleum Co. 50,00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward-Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457% From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571% Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%
74 SW/4 5.20 ecos	NM-038124 1-1-74	All-U.S.A.	Cities Service Oil Co.	Peter O. Nyce, Jr. & Christine P. Nyce 1%	Surface to 8900' Cities Service Oil Co. 25.00000% Gulf Oil Corporation 48.06700% Pan American Petroleum Corporation 25.00000% Yates Petroleum Corp. 1.93300%

## EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
10 Contd.							Below 8900' Cities Service Oil Co Pan American Petroleum
11	T. 20 S. - R. 26 E. Sec. 27: N/2 SE/4 East of Pecos River	21.00	NM-038124-A 1-1-74	All-U.S.A.	Pan American Petroleum Corporation	Peter Q. Nyce, Jr. & Christine P. Nyce 1%	Surface to 8900' Gulf Oil Corporation Pan American Petroleum  Yates Petroleum Corp Below 8900' Pan American Petroleum
12	T. 20 S. - R. 26 E. Sec. 27: E/2 NE/4	80.00	NM-0283953A 1-1-74	All-U.S.A.	Gulf Oil Corporation	David M. Evans 5%	Surface to 8900' Gulf Oil Corporation Pan American Petroleum  Yates Petroleum Corp  From 8900' to Base P Gulf Oil Corporation Pan American Petroleum
13	T. 20 S. - R. 26 E. Sec. 26: E/2, NW/4, E/2 SW/4 Sec. 35: E/2, E/2 W/2 Save and except an un- surveyed 76.33 acre tract lying along the West side of SE/4 SW/4 of Sec. 26 and E/2 W/2 Sec. 35.	963.67	NM-0338758 H.B.P.	All-U.S.A.	Gulf Oil Corporation	Pauline A. Galt \$500/Acre PP out of 1/2 of 1%-George D. Riggs \$500/Acre PP out of 2.25%-Neil H. Wills \$500/Acre PP out of 2.25%	Below Base Penn Form Gulf Oil Corporation  Surface to 8900' Gulf Oil Corporation Pan American Petroleum  Yates Petroleum Corp  From 8900' to Base P Gulf Oil Corporation Pan American Petroleum

ING, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
					Below 8900' Cities Service Oil Co. 50.00000% Pan American Petroleum Corporation 50.00000%
East River 21.00	NM-038124-A 1-1-74	All-U.S.A.	Pan American Petroleum Corporation	Peter Q.Nyce,Jr.& Christine P.Nyce 1%	Surface to 8900' Gulf Oil Corporation 48.06700% Pan American Petroleum Corporation 50.00000% Yates Petroleum Corp. 1.93300% Below 8900' Pan American Petroleum Corporation 100.00000%
80.00	NM-0283953A 1-1-74	All-U.S.A.	Gulf Oil Corporation	David M. Evans 5%	Surface to 8900' Gulf Oil Corporation 74.03350% Pan American Petroleum Corporation 25.00000% Yates Petroleum Corp. 0.96650% From 8900' to Base Penn Gulf Oil Corporation 50.00000% Pan American Petroleum Corporation 50.00000%
E/2 963.67	NM-0338758 H.B.P.	All-U.S.A.	Gulf Oil Corporation	Pauline A. Galt \$500/Acre PP out of 1/2 of 1%-George D.Riggs \$500/Acre PP out of 2.25%-Neil H. Wills \$500/Acre PP out of 2.25%	Below Base Penn Formation Gulf Oil Corporation 100.00000% Surface to 8900' Gulf Oil Corporation 74.03350% Pan American Petroleum Corporation 25.00000% Yates Petroleum Corp. 0.96650% From 8900' to Base Penn Gulf Oil Corporation 50.00000% Pan American Petroleum Corporation 50.00000%

## EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
13 Contd.							Below Base Penn Form Gulf Oil Corporation
14	T. 20 S. - R. 26 E. Sec. 27: W/2 NE/4	80.00	NM-0426336 1-1-74	All-U.S.A.	Pan American Petroleum Corporation	F. J. Bradshaw 3%	Surface to 8900' Gulf Oil Corporation Pan American Petroleum Yates Petroleum Corp Below 8900' Pan American Petroleum
15	T. 20 S. - R. 26 E. Sec. 27: SW/4 NW/4, NW/4 SW/4 lying East of Pecos River Sec. 28: NW/4 NE/4 lying East of Pecos River	14.00	BLM-A-026872 1-1-74	All-U.S.A.	Cities Service Oil Co.	Peter O. Nyce, Jr. & Christine P. Nyce 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum Yates Petroleum Corp From 8900' to Base P Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum Below Base Penn Form Cities Service Oil Co. Pan American Petroleum
16	T. 20 S. - R. 26 E. Sec. 21: All SW/4 SE/4 lying East of Pecos River	28.00	BLM-A-026872-A 1-1-74	All-U.S.A.	Pan American Petroleum Corporation	Peter O. Nyce, Jr. & Christine P. Nyce 1%	Surface to 8900' Gulf Oil Corporation Pan American Petroleum Yates Petroleum Corp From 8900' to Base P Gulf Oil Corporation

NG, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
<hr/>					
80.00	NM-0426336 1-1-74	All-U.S.A.	Pan American Petroleum Corporation	F. J. Bradshaw 3%	Below Base Penn Formation Gulf Oil Corporation 100.00000%
					Surface to 8900' Gulf Oil Corporation 48.06700%
					Pan American Petroleum Corporation 50.00000%
					Yates Petroleum Corp. 1.93300%
14.00	BLM-A-026872 1-1-74	All-U.S.A.	Cities Service Oil Co.	Peter O. Nyce, Jr. & Christine P. Nyce 1%	Below 8900' Pan American Petroleum Corporation 100.00000%
					Surface to 8900' Cities Service Oil Co. 12.50000%
					Gulf Oil Corporation 61.05024%
					Pan American Petroleum Corporation 25.00000%
E/4 of r	BLM-A-026872-A 1-1-74	All-U.S.A.	Pan American Petroleum Corporation	Peter O. Nyce, Jr. & Christine P. Nyce 1%	Yates Petroleum Corp. 1.44976%
					From 8900' to Base Penn Cities Service Oil Co. 25.00000%
					Gulf Oil Corporation 25.00000%
					Pan American Petroleum Corporation 50.00000%
E/4 of r	BLM-A-026872-A 1-1-74	All-U.S.A.	Pan American Petroleum Corporation	Peter O. Nyce, Jr. & Christine P. Nyce 1%	Below Base Penn Formation Cities Service Oil Co. 50.00000%
					Pan American Petroleum Corporation 50.00000%
					Surface to 8900' Gulf Oil Corporation 61.05025%
					Pan American Petroleum Corporation 37.50000%
E/4 of r	BLM-A-026872-A 1-1-74	All-U.S.A.	Pan American Petroleum Corporation	Peter O. Nyce, Jr. & Christine P. Nyce 1%	Yates Petroleum Corp. 1.44975%
					From 8900' to Base Penn Gulf Oil Corporation 25.00000%

## EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
16 Contd.							Pan American Petroleum  Below Base Penn Pan American Petroleum
17	T. 20 S. - R. 26 E. Sec. 26: NW/4 SW/4 lying East of Pecos River	37.25	BLM-A-032236-B H.B.P.	All-U.S.A.	Gulf Oil Corporation	Elk Oil Co.	2% Gulf Oil Corporation
17 Tracts		Federal Lands	2,869.12 Acres		93.21% of Unit Area		
18	T. 20 S. - R. 26 E. Sec. 27: Fairchild Farm 115.5 Trs. 785,786,787,788, 789,790, being all of N/2 S/2 & SE/4 SE/4 SAVE & EXCEPT that acreage lying & being on the left or east bank of the Pecos River & SAVE & EXCEPT Fairchild Farm Tr.784 conveyed to W.M. Truitt by Tax Deed recorded in Vol.D6, Pg.31, Deed Record, Eddy Co., N.M., & being approx. the North 16 acres of NW/4 SW/4		Fee Lease	12.5% T. D. Hardesty	Gulf Oil Corporation	None	Gulf Oil Corporation
19	T. 20 S. - R. 26 E. Sec. 27: Fairchild Farm 16.00 Tr.784, being approx. the North 16 acres of NW/4 SW/4		Fee Lease	18.75%-W.M. Truitt	Gulf Oil Corporation	None	Gulf Oil Corporation

ING, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
					Pan American Petroleum Corporation 75.00000%
					Below Base Penn Pan American Petroleum Corporation 100.00000%
37.25	BLM-A-032236-B H.B.P.	All-U.S.A.	Gulf Oil Corporation	Elk Oil Co. 2%	Gulf Oil Corporation 100.00000%
Federal Lands		2,869.12 Acres		93.21% of Unit Area	
88, of N/2 VE & e he of child ed to Deed ,Pg.31, o.,N.M., North N/4	Fee Lease	12.5% T. D. Hardesty	Gulf Oil Corporation	None	Gulf Oil Corporation 100.00000%
88, of N/2 VE & e he of child ed to Deed ,Pg.31, o.,N.M., North N/4	Fee Lease	18.75%-W.M. Truitt	Gulf Oil Corporation	None	Gulf Oil Corporation 100.00000%

## EXHIBIT "B" - GUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENT.
20	T. 20 S. - R. 26 E. Sec. 26: NW/4 SW/4 SAVE & EXCEPT all that part of each of the above described tracts lying & being on the left or east bank of the Pecos River	2.75	Fee Lease H.B.P.	C.L. Thacker	Pan American Petroleum Corporation	None	Surface to 8900' Gulf Oil Corporation Pan American Petroleum  Yates Petroleum Corp.  Below 8900' Pan American Petroleum
21	T. 20 S. - R. 26 E. Sec. 21: SW/4 SE/4 being a part of the Fairchild Farm Tr. 781 Sec. 27: SW/4 NW/4 Sec. 28: NW/4 NE/4 being Fairchild Farm Trs. 782, 783 & a part of 781, SAVE & EXCEPT all that part of each of the above described tracts lying & being on the left or east bank of the Pecos River	74.75	Fee Lease	All-C.C. Foster	Tesoro Petroleum Corp	William R. Lawson 3%	Tesoro Petroleum Corp

4 Tracts

Fee Lands

209 Acres

6.79% of Unit Area

RECAPITULATION

FEDERAL LANDS	2,869.12	ACRES	93.21000%	UNIT AREA
FEE LANDS	209.00	ACRES	6.79000%	UNIT AREA
TOTAL LANDS	3,078.12	ACRES	100.00000%	UNIT AREA



ING, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
2.75	Fee Lease H.B.P.	C.L. Thacker	Pan American Petroleum Corporation	None	Surface to 8900' Gulf Oil Corporation 48.06700% Pan American Petroleum Corporation 50.00000% Yates Petroleum Corp. 1.93300%  Below 8900' Pan American Petroleum Corporation 100.00000%
74.75	Fee Lease	All-C.C. Foster	Tesoro Petroleum Corp	William R. Lawson 3%	Tesoro Petroleum Corp. 100.00000%
Fee Lands 209 Acres 6.79% of Unit Area					

RECAPITULATION				
FEDERAL LANDS	2,869.12	ACRES	93.21000%	UNIT AREA
FEE LANDS	209.00	ACRES	6.79000%	UNIT AREA
TOTAL LANDS	3,078.12	ACRES	100.00000%	UNIT AREA



# United States Department of the Interior

## GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico 88201

October 31, 1973

Amoco Production Company  
Attention: Mr. C. N. Menninger  
P. O. Box 3092  
Houston, Texas 77001

Gentlemen:

The Bubbling Spring unit agreement, Eddy County, New Mexico, was approved on October 31, 1973. The agreement has been designated No. 14-08-0001-13805 and is effective as of the date of approval.

Enclosed are two copies of the approved agreement. We request that you furnish the New Mexico Oil Conservation Commission and any other interested principals with appropriate evidence of this approval.

Sincerely yours,

*Carl C. Traywick*

CARL C. TRAYWICK  
Acting Area Oil and Gas Supervisor

RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
BUBBLING SPRING UNIT AREA  
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Bubbling Spring Unit Area, County of Eddy, State of New Mexico", dated August 1, 1973, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Bubbling Spring Unit Area, County of Eddy, State of New Mexico", dated August 1, 1973, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Bubbling Spring Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner of working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

CITIES SERVICE OIL COMPANY

Wiley C. Hill  
Wiley C. Hill Attorney-In-Fact

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1973, by \_\_\_\_\_.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for

\_\_\_\_\_  
County,

STATE OF Oklahoma

COUNTY OF TULSA

The foregoing instrument was acknowledged before me this 25th day of October, 1973, by Wiley C. Hill,  
Attorney-In-Fact of CITIES SERVICE OIL COMPANY.

My Commission expires:

MY COMMISSION EXPIRES OCTOBER 20, 1975

Nora Lippert  
Notary Public in and for

TULSA County,

RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
BUBBLING SPRING UNIT AREA  
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Bubbling Spring Unit Area, County of Eddy, State of New Mexico", dated August 1, 1973, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Bubbling Spring Unit Area, County of Eddy, State of New Mexico", dated August 1, 1973, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Bubbling Spring Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner of working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

PHILLIPS PETROLEUM COMPANY

FRED FORWARD, Attorney-in-Fact

STATE OF TEXAS

COUNTY OF ECTOR

The foregoing instrument was acknowledged before me this 26th day of October, 1973, by FRED FORWARD, Attorney-in-Fact of PHILLIPS PETROLEUM COMPANY.

My Commission expires:

June 1, 1975

June H. Dolman (June H. Dolman)  
Notary Public in and for

Ector County,

Texas

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1973, by \_\_\_\_\_ of \_\_\_\_\_.

My Commission expires:

Notary Public in and for

County,

RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
BUBBLING SPRING UNIT AREA  
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Bubbling Spring Unit Area, County of Eddy, State of New Mexico", dated August 1, 1973, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Bubbling Spring Unit Area, County of Eddy, State of New Mexico", dated August 1, 1973, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Bubbling Spring Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner of working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

ATTEST:

m. B. Mowley  
Assistant Secretary

GULF OIL CORPORATION

W. B. Hopkins  
Attorney in Fact

Notary	<u>Chas. M. Brown</u>
Exp.	<u>11-2</u>
Prod.	

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1973, by \_\_\_\_\_.

My Commission expires:

\_\_\_\_\_  
Notary Public in and for

\_\_\_\_\_  
County,

STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me this 29 day of October, 1973, by Attorney in Fact of GULF OIL CORPORATION.

My Commission expires:

6-1-75

Emily Jones  
Notary Public in and for

Midland County,

J. H. Jones

RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
BUBBLING SPRING UNIT AREA  
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Bubbling Spring Unit Area, County of Eddy, State of New Mexico", dated August 1, 1973, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Bubbling Spring Unit Area, County of Eddy, State of New Mexico", dated August 1, 1973, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Bubbling Spring Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner of working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

ATTEST:

Donald J. Shultz  
Assistant Secretary

TESORO PETROLEUM CORPORATION  
By: Charles R. Roberts  
Vice President

STATE OF TEXAS |

COUNTY OF BEXAR |

The foregoing instrument was acknowledged before me this 25th day of September, 1973, by Charles R. Roberts Vice President of TESORO PETROLEUM CORPORATION.

My Commission expires:

June 1, 1975

Deann S. Smith  
Notary Public in and for

Bexar County,

Texas.

STATE OF \_\_\_\_\_ |

COUNTY OF \_\_\_\_\_ |

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1973, by \_\_\_\_\_ of \_\_\_\_\_.

My Commission expires:

\_\_\_\_\_

Notary Public in and for

\_\_\_\_\_  
County,

RATIFICATION AND JOINDER OF AGREEMENTS ENTITLED  
"UNIT AGREEMENT" AND "UNIT OPERATING AGREEMENT"  
BUBBLING SPRING UNIT AREA  
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

THAT, WHEREAS, the undersigned owner (whether one or more) of royalty, overriding royalty, or production payment interests hereby acknowledges receipt of a true copy of the "Unit Agreement for the Development and Operation of the Bubbling Spring Unit Area, County of Eddy, State of New Mexico", dated August 1, 1973, hereinafter referred to as the "Unit Agreement", and the undersigned owner (whether one or more) of working interests hereby acknowledges receipt of a true copy of said Unit Agreement and a true copy of the "Unit Operating Agreement, Bubbling Spring Unit Area, County of Eddy, State of New Mexico", dated August 1, 1973, hereinafter referred to as the "Unit Operating Agreement"; and

WHEREAS, Exhibits "A" and "B" attached to said Unit Agreement identify the tracts which may become a part of the Bubbling Spring Unit Area; and

WHEREAS, the undersigned represents that it is the owner of a royalty, overriding royalty or production payment interest, or of a working interest, or both, in one or more of the tracts identified by said Exhibits.

NOW, THEREFORE, the undersigned owner of royalty, overriding royalty or production payment interests only desires to and does hereby ratify, confirm and become a party to said Unit Agreement, and the undersigned owner of working interests only, or the owner of both working interests and royalty, overriding royalty or production payment interests desires to and does hereby ratify, confirm and become a party to said Unit Agreement and said Unit Operating Agreement with respect to all of its interests in all of the tracts identified by said exhibits.

IN WITNESS WHEREOF, each of the undersigned parties has executed this instrument on the date set forth in its acknowledgement.

ATTEST:

YATES PETROLEUM CORPORATION

Assistant Secretary

By

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1973, by \_\_\_\_\_

My Commission expires:

Notary Public in and for

County.

STATE OF New Mexico

COUNTY OF Eddy

The foregoing instrument was acknowledged before me this OCT 15 1973, 1973, by J. P. Yates,  
President of YATES PETROLEUM CORPORATION.

My Commission expires:

Nov 17 1976

Notary Public in and for

Eddy County.

New Mexico

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE PETITION  
FILED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE NO. 5070  
Order No. R-4643

APPLICATION OF AMOCO PRODUCTION COMPANY  
FOR APPROVAL OF THE BUBBLING SPRING  
UNIT AGREEMENT, EDDY COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on  
October 3, 1973, at Santa Fe, New Mexico, before Examiner  
Richard L. Stanets.

NOW, on this 11th day of October, 1973, the Commission,  
a quorum being present, having considered the testimony, the  
record, and the recommendations of the Examiner, and being  
fully advised in the premises,

FINDS:

(1) That due public notice having been given as required  
by law, the Commission has jurisdiction of this cause and the  
subject matter thereof.

(2) That the applicant, Amoco Production Company, seeks  
approval of the Bubbling Spring Unit Agreement covering 3078.12  
acres, more or less, of Federal and Fee lands described as  
follows:

EDDY COUNTY, NEW MEXICO  
TOWNSHIP 20 SOUTH, RANGE 26 EAST, NMPM  
Section 21: E/2  
Section 22: All  
Section 23: S/2  
Section 26: N/2, SE/4, E/2 SW/4 and  
NW/4 SW/4  
Section 27: N/2 and N/2 S/2  
Section 28: E/2  
Section 35: E/2 and E/2 W/2

(3) That approval of the proposed unit agreement should  
promote the prevention of waste and the protection of correlative  
rights within the unit area.



-2-  
Case No. 5970  
Order No. R-4643

IT IS THEREFORE ORDERED:

(1) That the Bubbling Spring Unit Agreement is hereby approved.

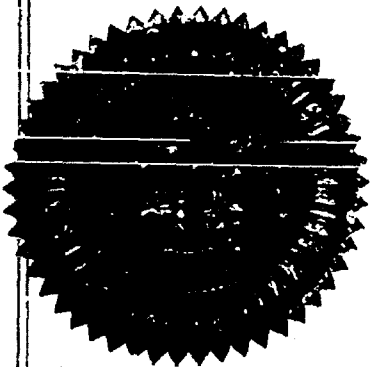
(2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.

(3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(4) That this order shall become effective upon the approval of said unit agreement by the Director of the United States Geological Survey; that this order shall terminate ipso facto upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*[Signature]*  
Y. R. TRUJILLO, Chairman

*[Signature]*  
ALEX J. ARMIJO, Member

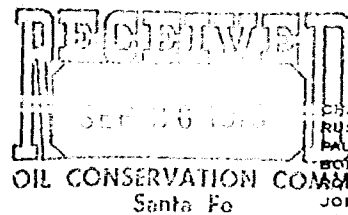
*[Signature]*  
R. L. PORTER, Jr., Member & Secretary

S E A L

dr/

ATWOOD, MALONE, MANN & COOTER  
LAWYERS

JEFF D. ATWOOD (1883-1960)



CHARLES F. MALONE  
RUSSELL D. MANN  
PAUL A. COOTER  
BOB F. TURNER  
ROBERT A. JOHNSON  
JOHN W. BASSETT  
ROBERT E. SABIN  
RUFUS E. THOMPSON

P.O. DRAWER 700  
SECURITY NATIONAL BANK BUILDING  
ROSWELL, NEW MEXICO 88201  
[505] 622-6221

September 25, 1973

Mr. A. L. Porter, Jr.  
Oil Conservation Commission  
State Land Office Building  
Santa Fe, New Mexico 87501

RE: No. 5070  
Examiner Hearing for October 3, 1973

Dear Mr. Porter:

Would you please file the enclosed Entry of Appearance in the captioned case. The presentation will be handled by Guy Buell of Amoco Production Company's Houston office.

Appreciating your courtesy, and with our kind regards, I am,

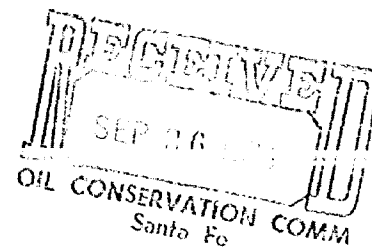
Very truly yours,

A handwritten signature in dark ink, appearing to read "Paul Cooter", written over a horizontal line.

Paul Cooter

PC:sas  
cc: Guy Buell, Esquire

BEFORE THE OIL CONSERVATION COMMISSION  
STATE OF NEW MEXICO



IN THE MATTER OF THE APPLICATION )  
OF AMOCO PRODUCTION COMPANY FOR )  
APPROVAL OF THE BUBBLING SPRING )  
UNIT AREA, IN EDDY COUNTY, NEW )  
MEXICO. ) No. 5070

ENTRY OF APPEARANCE

The undersigned Atwood, Malone, Mann & Cooter of Roswell,  
New Mexico, hereby enter their appearance herein for Amoco Produc-  
tion Company, with Guy Buell, Esquire, of Houston, Texas.

ATWOOD, MALONE, MANN & COOTER

A handwritten signature in dark ink, appearing to read "Guy Buell", written over a horizontal line.

BY  
P. O. Drawer 700  
Roswell, New Mexico 88201

Attorneys for Amoco Production Company

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 3, 1973

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- ALLOWABLE: (1) Consideration of the allowable production of gas for November, 1973, from seventeen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico;
- (2) Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for November, 1973.

CASE 5044: (Continued from the August 9, 1973, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Sycor Newton, Peru Milling Company, R. E. Deming and Aetna Life and Casualty Company and all other interested parties to appear and show cause why the State L 6350 Well No. 1 located in Unit M of Section 10, Township 23 South, Range 11 West, Luna County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5069: Application of Sun Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Annie Christmas Well No. 1 located in Unit N of Section 1, Township 22 South, Range 37 East, Lea County, New Mexico, to produce gas from an undesignated Abo gas pool and oil from the Wantz-Granite Wash Pool through parallel strings of tubing.

CASE 5070: Application of Amoco Production Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Bubbling Spring Unit Area comprising 3078 acres, more or less, of Federal and Fee lands in Township 20 South, Range 26 East, Eddy County, New Mexico.

CASE 5071: Application of Texas West Oil & Gas Corporation for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its State "2" Well No. 2 located in Unit K of Section 2, Township 24 South, Range 34 East, Antelope Ridge Field Area, Lea County, New Mexico, to produce gas from the Atoka and Morrow formations through parallel strings of tubing.

CASE 5072: Application of Northern Minerals, Inc. for a waterflood project, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks

(Case 5072 continued from Page 1)

authority to institute a pilot waterflood project by the injection of water into the Hospah sand of the Gallup formation in the open-hole interval from 734 feet to 744 feet in its Santa Fe Pacific Well No. 6-Y located 2013 feet from the North line and 2003 feet from the East line of Section 29, Township 16 North, Range 6 West, undesignated Gallup Pool, McKinley County, New Mexico.

CASE 5055: (Continued and Readvertised)

Application of Merrion & Bayless for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Gallup, Greenhorn, and Dakota oil and gas production within the wellbore of the Canada Mesa Well No. 3 located in Unit A of Section 14, Township 24 North, Range 6 West, Devils Fork Field, Rio Arriba County, New Mexico.

CASE 5073: Application of Belco Petroleum Corporation for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 320-acre non-standard gas proration unit comprising the E/2 SW/4 and SE/4 of Section 30 and the N/2 NE/4 of Section 31, all in Township 20 South, Range 33 East, South Salt Lake Field, Lea County, New Mexico, to be dedicated to a well to be drilled either in the center of Unit O of said Section 30, or at an unorthodox location in the center of Unit P of said Section 30.

dearnley, meier & associates

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1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
CONFERENCE ROOM, STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO  
October 3, 1973

EXAMINER HEARING

IN THE MATTER OF:

Case No. 5070

Application of Amoco Production  
Company for a unit agreement,  
Eddy County, New Mexico.

BEFORE:

RICHARD L. STAMETS,  
Examiner.

TRANSCRIPT OF HEARING

1 MR. STAMETS: Call next case 5070.

2 MR. DERRYBERRY: Case 5070, Application of  
3 Amoco Production Company for a unit agreement, Eddy County,  
4 New Mexico. Applicant, in the above-styled cause, seeks  
5 approval of the Bubbling Spring Unit Area comprising 3078 acres,  
6 more or less, of Federal and Fee lands in Township 20 South,  
7 Range 26 East, Eddy County, New Mexico.

8 MR. STAMETS: Call for appearances in this case.

9 MR. BUELL: For Amoco Production Company,  
10 Guy Buell; and we have two witnesses, Mr. Examiner.

11 MR. STAMETS: Are there any other appearances  
12 in this case? If the witnesses will stand and be sworn.

13 MR. BUELL: Mr. Examiner, some of our geological  
14 exhibits are quite large, and I think it would be better to put  
15 them on the wall so you and your counselor can both see them.  
16 Our first witness is Mr. Anderson.

17 \*\*\*\*\*

18 JACK ANDERSON,  
19 was called as a witness, and after being duly sworn, testified  
20 as follows:

21 DIRECT EXAMINATION

22 BY MR. BUELL:

23 Q Mr. Anderson, would you state your complete name, by whom  
24 you are employed and in what capacity and in what location, please,  
25 sir?

- 1 A My name is Jack D. Anderson, employed by Amoco Production  
2 Company in Houston, Texas, as a Land Man.
- 3 Q All right, sir. And in your capacity with Amoco, have you  
4 participated in the negotiations that have resulted in the formation  
5 of the Bubbling Spring Unit?
- 6 A Yes, sir.
- 7 Q All right, sir. In connection with your testimony, would you  
8 direct your attention first to what has been identified as Amoco's  
9 Exhibit 1 and please explain that Exhibit for the record?
- 10 A This is an Exhibit which is attached to the Unit Agreement which  
11 outlines the acreage to be placed within the Bubbling Spring Unit.  
12 On our Exhibit, you will notice that a portion of the acreage is  
13 covered in green which represents the fee acreage located within  
14 the unit boundary. The balance of the acreage is Federal acreage.
- 15 Q No State acreage in this particular unit?
- 16 A That's correct.
- 17 Q How many acres are in this unit?
- 18 A 3,078.12 acres.
- 19 Q Would you describe the area of the unit for the record, please?
- 20 A All of the acreage is located in Township 20 South, Range 26 East.  
21 It's the south half of Section 23, all of Section 22, the east half  
22 of Section 21, the east half of Section 28, the north half of Section 27,  
23 and also the north half of the south half of Section 27, the east half  
24 of Section 26, the northwest quarter of Section 26, the north half  
25 of the southwest quarter of Section 26, the southeast quarter of the



1 southwest quarter of Section 26. In Section 35, it's the east half  
2 and the east half of the west half.

3 Q All right. Now, Mr. Anderson, this appears to be a rather  
4 irregular shaped unit. Will the reason for that be covered in our  
5 geological testimony?

6 A Yes. I might briefly just state that this particular area was in  
7 a unit prior to this. It was the Adams Bend Unit which Amoco  
8 Production formed. We drilled a well in the north half of Section 23,  
9 and it was dry. Then Gulf Oil formed a unit which they called  
10 a Springs Unit encompassing the same acreage.

11 The reason for the irregular description is that the  
12 south part of the section or the south part of this area is in the  
13 Spring Unit participating area. The balance of the acreage has  
14 been eliminated from the Spring Unit. That's why it's so irregular.

15 Q So the odd shape in the northeast corner is due to a dry hole drilled  
16 in that acreage?

17 A Yes.

18 Q And the odd shape on the southwest portion is due to a parking  
19 area that you explained?

20 A Yes.

21 Q Who are the working interest owners in this area?

22 A Amoco, Phillips, Gulf, Cities Service, and Tosorro.

23 Q What is the status of Sign-up or Commitment to the unit with  
24 regard to the working interest owners?

25 A We have received Tosorro's commitment, actually an executed

1 instrument. The other working interest owners have been  
2 contacted several times and have all agreed to the formation  
3 of this unit. The papers are in their offices now being executed.  
4 We have had no turn-downs on it.

5 Q So you would anticipate that in very short order we will have  
6 all the working interest owners committed?

7 A Yes, sir.

8 Q Is there any particular time contingency we are concerned with  
9 in this particular unit, Mr. Anderson?

10 A Yes. When the acreage was eliminated or the Springs Unit, I should  
11 say, was contracted, this acreage was eliminated and has an  
12 expiration date of January 1, 1974. That's the majority of the  
13 acreage in our outline.

14 The acreage in the unit has been extended beyond the  
15 primary term as a result of having been in a producing unit. So  
16 our understanding is that these Federal leases are now  
17 completion-type leases and that we will have to have production  
18 established prior to January 1, 1974. For this reason, we feel  
19 we must start work by November 1 of this year.

20 Q In other words, just commencing operations will not keep the  
21 operation together? We have got to drill and complete a well  
22 capable of production by January 1, 1974?

23 A Yes, sir.

24 Q Let's talk about the royalty owners for a minute. Of course, we  
25 have the Federal Government as a royalty owner. What is the

1 status of the Federal Government with regard to this unit?

2 A We have requested preliminary approval. It's been processed  
3 through the USGS office in Roswell to their Denver office. We  
4 were in contact with them this morning by phone and advised  
5 that they have designated this as a logical area and put the  
6 correspondence in the mail October 1. We have not received  
7 it, but it's in the mail.

8 Q Is that what you Land Men sometimes refer to as preliminary  
9 approval?

10 A Yes, sir.

11 Q All right, sir. What about the royalty owners under the fee  
12 tract? What is their status with regard to sign-up?

13 A We have had, let's see, there were four royalty owners under  
14 the fee tracts. We have received a ratification from one of  
15 those parties. The other three, we have not heard from.

16 Q But none of them have refused to execute the Unit Agreement?

17 A That's correct.

18 Q All right, sir. Are there any overriding royalty owners under  
19 any of this acreage?

20 A Yes. There are 20 overriding royalty owners.

21 Q State for the record what the status of that interest commitment  
22 is.

23 A We have received ratifications from ten of them. It would be  
24 50 percent, and we have received no rejections.

25 Q ~~Would you also anticipate based on your past experience with~~

1 exploratory units in this area that you stand a good chance of  
2 getting commitments from the remainder of the overriding  
3 royalty interest owners?

4 A Yes. Looking back on the other unit that we formed, I believe  
5 that all of them executed. If not, it was a very, very small  
6 percent that did not.

7 Q All right, sir. Have you indicated on your Exhibit 1 the  
8 approximate location of the initial test well for this unit?

9 A Yes, sir.

10 Q How have you located that, with that red arrow?

11 A Yes.

12 Q Would you give the footage location of that?

13 A 1980 feet from the north and west lines of Section 26, Township 20  
14 South, Range 26 East.

15 Q All right, sir. Would you turn your attention now, Mr. Anderson,  
16 to what has been identified as Amoco's Exhibit 2? What is that  
17 exhibit?

18 A This is the Unit Agreement prepared in accordance with the  
19 1968 reprint. It's a form suggested by the Federal Government  
20 to be used in the forming of exploratory units.

21 Q So I guess you could refer to that almost as a standard Federal  
22 form?

23 A Yes, sir.

24 Q Have there been any changes in this agreement since we mailed  
25 the Oil Commission a copy some several weeks ago?

1 A No, sir. I don't believe there has been any changes.

2 Q All right, sir. Do you have anything else you'd care to add  
3 in connection with your phase of this hearing, Mr. Anderson?

4 A No, sir.

5 MR. BUELL: That is all we have by way of  
6 direct examination of Mr. Anderson at this time, Mr. Examiner.

7

8 CROSS-EXAMINATION

9 BY MR. STAMETS:

10 Q Mr. Anderson, these questions may not be properly directed to  
11 you, and if not, I'd be happy to ask your next witness. Do you  
12 know what acreage will be dedicated to the proposed well?

13 A I believe with the location that's spotted, I don't think that we  
14 have made the decision; but I would think it would be the north  
15 half of Section 26.

16 Q Are you aware that there could be acreage dedication problems  
17 if you would attempt to dedicate less than 320 acres to a well  
18 to be drilled to the Pennsylvanian? For instance, in the southwest  
19 quarter of Section 26 and the southwest half of 27.

20 A Yes, sir. We do.

21 Q This might take a communitization with non-unit acreage?

22 A Yes, sir. That acreage, of course, is in the Springs Unit. That's  
23 what we are referring to.

24 MR. STAMETS: All right, fine. That's all the  
25 questions I have of this witness.

1 MR. BUELL: All right, sir. We'd like to call  
2 next Mr. Gaizutis, G-a-i-z-u-t-i-s. Did I get it right?

3 THE WITNESS: Yes, sir.

4 \*\*\*\*\*

5 K. J. GAIZUTIS,

6 was called as a witness, and after being duly sworn, testified  
7 as follows:

8 DIRECT EXAMINATION

9 BY MR. BUELL:

10 Q Would you state your complete name for the record, please,  
11 by whom you are employed and in what capacity and in what  
12 location?

13 A My name is K. J. Gaizutis. I'm a geologist with Amoco  
14 Production Company in Houston, Texas; and I've been with  
15 them for five and a half years.

16 Q Mr. Gaizutis, your qualifications as a geologist are a matter  
17 of public record in that you have testified before this Commission  
18 before?

19 A Yes.

20 Q But you might briefly just state the depth of your experience  
21 in this particular area of Southeast New Mexico.

22 A I've been involved in this particular area for approximately  
23 two years and was involved in the sandstone place in the Gulf  
24 zone prior to that.

25 Q All right, sir. Now, with regard to your testimony let me direct

1 your attention first to what has been identified as Amoco's  
2 Exhibit 3. What is that exhibit, Mr. Gaizutis?

3 A That is a structure map on top of the middle Morrow or the  
4 upper clastic sand. It is also an isopachous map constructed  
5 and colored in orange that has overlaid the structure map.  
6 The isopach refers to the middle Morrow horizon which we  
7 will refer to in the Sections.

8 Our designation is based on delineating the Morrow  
9 into three sections, the upper section being primarily a carbonate  
10 and the two lower zones being primarily clastic. This is what  
11 would be considered the uppermost clastic section in the Morrow.

12 Q So we can orient the Examiner, are there any producing pools  
13 shown on the area that you have included in your Exhibit 3?

14 A Yes. Let me just briefly state that this is approximately  
15 northwest of the City of Carlsbad for reference. To the south,  
16 we have Catclaw Draw and Golden Eagle, I believe. I don't know  
17 if they have been shown. Since the two fields have merged, I don't  
18 know for sure what the designation of the over-all pool is now.

19 I refer to it as Catclaw Draw. To the north and west  
20 of our proposed unit, we have McMillan Morrow; and immediately  
21 to the south of our unit is the Springs Unit wells out of the Cisco  
22 Canyon.

23 Q All right, sir. Have you designated our proposed unit area on  
24 Exhibit 3?

25 A The outline of the area is placed with flourescent tape, the orange

- 1        flourescent tape.
- 2    Q    All right, sir. Mr. Anderson previously touched on this in
- 3        his testimony, but I wish you would emphasize again the reason
- 4        for the shape of this unit.
- 5    A    Well, to the immediate east of our proposed unit we have two
- 6        dry holes that penetrated the Morrow section, the Skelly well
- 7        in Section 25 of 20, 26, and the Richfield McMillan well in
- 8        Section 36.
- 9    Q    All right, sir. Why do we have the little notch on the northeast
- 10       corner?
- 11   A    We have the Pan American Adams Bend dry hole.
- 12   Q    All right, sir. Can we see on this Exhibit the outline of the
- 13       older unit that Mr. Anderson referred to?
- 14   A    Yes, sir. The older unit is, well, I guess it's a stamped outline.
- 15   Q    In blue?
- 16   A    In blue, yes.
- 17   Q    Of course, where your original tape overlays that, that portion
- 18       also was in the original old unit?
- 19   A    Right, and cannot be seen because it's under the tape.
- 20   Q    All right, sir. Do you have any other remarks you'd like to make
- 21       about Exhibit 3 before we move on to your cross-section?
- 22   A    Well, let me just briefly touch on the geologic importance of
- 23       this. For one, the structural map, the contour lines are 100-foot
- 24       intervals in blue and indicate a structural nose coming approximately
- 25       through our area of interest and extending down into the Catelaw



1 Draw field to the south.

2 I have isopached the middle Morrow clastic section  
3 and have shown it as a type example of what we are expecting  
4 in the area. We show an isopach central contour line going  
5 from 70 to 40 feet. However, I want to make note that the  
6 Skelly well in Section 25 had 130 feet of Morrow sand.

7 Immediately to the north, the Pan American well, the  
8 Adams Bend, had 35 feet. This is to highlight the stratigraphic  
9 variation in the area, and this is what we will be referring to  
10 as the pinch-out that we hope to catch production along here.  
11 I think we can refer to the Section AB which I believe is Exhibit--  
12 Q I believe that's Exhibit 4.

13 A 4. The AB cross-section is a stratigraphic section which is  
14 hung on the top of the Morrow sand, the same horizon that is  
15 used for mapping, for structural configuration of the area.

16 In it, we can see that the Middle Morrow Section which  
17 is delineated by lettering, as well as the orange coloration,  
18 changes dramatically from a very thick massive sand. Sample  
19 logs describe it as a conglomeratic very coarse sand zone to  
20 a very thin -type sand at the Adams Bend.

21 We are going a distance of about a mile. We have  
22 approximately three little zones of ten feet, ten feet and five feet  
23 in this middle section. So there is an abrupt change between  
24 the Skelly No. D and the Pan American Adams Bend. At the same  
25 time, let me point out the structural values that are indicated

1 immediately under the line connecting the top of the Middle Morrow.

2 The Adams Bend is at minus 6736, and the Skelly well  
3 is at 6903, since we have around 200 feet of structural advantage  
4 in the updip pinch-out position we were interpreting as a pinch-out.  
5 The other objective in the Morrow which we have not highlighted  
6 on our Exhibit map that showed the structure and the isopachous  
7 is also depicted in this cross-section.

8 The Skelly well did not penetrate the basin sand or  
9 what we call our lower Morrow sand, but it was penetrated in  
10 the Kelly Lake McMillan well. In it, we had a good 80 feet of  
11 section, also, apparently quite coarse-grained from sample  
12 descriptions.

13 It was not encountered in the Skelly well, but in our  
14 well, the Adams Bend well, it was also very thin and about 10 feet  
15 of sand. Both of the, or I should say, that zone and a small zone  
16 above it were wire-line tested in 1958 and recovered a slight  
17 amount of gas and a slight amount of water. We feel now that  
18 the water that it recovered was not formation water and that the  
19 Skelly well that was drilled in 1970 has in fact pointed out the  
20 stratigraphic implications in the area.

21 Our feeling is that this should therefore be a productive  
22 area and possibly continue the McMillan and Morrow projection  
23 which is also out of the middle sand which is delineated on the  
24 first Exhibit with the orange coloration, should connect that on  
25 production in Catclaw Draw that occurs in the middle Morrow sand.

1 In addition, we have the basin sand or lower Morrow  
2 sand conjective also present. I have not isopached it because  
3 of its random character in this area. The middle Morrow tends  
4 to have some continuity and some implicit trendology to it. This  
5 is a net clean sand that we are referring to.

6 Q Let me ask you this, Mr. Gaizutis. I'm referring now to the  
7 Skelly well on the middle log on the cross-section. Why in your  
8 opinion was this well not productive when it does have such a  
9 massive sand interval?

10 A Well, it encountered quite a bit of water on DST's. On the  
11 upper DST that tested 10,225 to 300, it recovered 240 feet of  
12 gas-cut mud plus on the lower, I'm sorry, on the lower one it  
13 recovered 2,000 feet of salt water.

14 So we feel that even though the lower one recovered  
15 salt water, the producing pressures are quite high. 3967 pounds,  
16 that is quite a good reservoir. We are looking at shows of gas  
17 wet in this well as well as in the McMillan well where it recovered  
18 1700 feet of heavily oil-cut mud and 3500 feet of salt water.

19 We are looking at downdip wells that are wet with a show  
20 of gas and an updip well that is tight and obviously does not have  
21 the porosity that was required to make a producer. Our location  
22 is a projection along this section at a position where we feel we  
23 will catch a productive porous interval.

24 Q In other words, you think you will have porosity and also be high  
25 enough to be above the water that the Skelly well we have been

1 discussing encountered?

2 A Yes.

3 Q All right, sir. Do you have any other comments on Exhibit 4  
4 before we pass on to Exhibit 5?

5 A No, sir.

6 Q All right, sir. Would you briefly describe what has been  
7 identified as Amoco's Exhibit 5?

8 A Exhibit 5 is a cross-section A-A' which is spotted on the  
9 Exhibit 3 Structure Map, and has been identified as A-A'  
10 and shown by red lines. The purpose of this cross-section is  
11 to show again our Adams Bend well that was tight which is on  
12 this cross-section to the extreme left-hand side and to show the  
13 production in McMillan field.

14 The production in McMillan field as you can see is  
15 out of a thicker sequence of sand as we have seen in the Skelly  
16 well and completed in the Cities Service CJ #1 for five million  
17 and completed in the Sohio 1-19 for 33.2 million.

18 Again, let me point out on this cross-section the  
19 structural values that are indicated on top of the middle Morrow  
20 sand section, here again implying to us that we have around 200 feet  
21 of structural advantage as we go from the Cities Service well to  
22 the east to the Adams Bend well to the west that is just north of  
23 our unit.

24 So that wells to the south and to the east, we are dropping  
25 off structurally some 200 feet. In this case, we are dropping off

1 to production. To the south, we are dropping off to water, so  
2 that we feel part of the answers here, of course, are stratigraphic  
3 variability; but it may also be lack of adequate testing in the  
4 Skelly well; but we feel that in any event we are going updip to  
5 production to the north and east and updip to a wet test to the  
6 southeast.

7 Q All right, sir. Do you have any other comments on Exhibit 5?

8 A No, that's about it.

9 Q All right, sir. Let's put Exhibit 6 up on the wall and I'll ask  
10 you to very briefly comment on it since it more or less is a  
11 cumulative of the work you have shown.

12 A Exhibit 6 is a cross-section C-C' and it's included for completeness  
13 in the area showing the southern boundaries, showing the Morrow  
14 control to the south of our proposed interest. As you can see,  
15 none of the wells in the Springs Unit drill deep enough to encounter  
16 the Morrow section. So our control lies, I'm sorry, one well  
17 did drill deep enough.

18 Most of the control is outside of the Springs Unit on the  
19 south. The reason to show this is that our control to the west of  
20 the Unit is the Humble Willow Draw well that tested a small zone  
21 and recovered 470 mcf of gas and was not tested further. Apparently  
22 from our log calculations, it was tight.

23 This has so served as a reference to the west why we  
24 have excluded the acreage in this direction from our unit and to  
25 show the reasoning for the isopach variability, too, in that direction.

1 Q In your opinion, are the prospects good for middle Morrow or  
2 lower Morrow production within our proposed Bubbling Springs  
3 Unit?

4 A Yes, I believe they are excellent.

5 Q Do you have anything else you would care to add at this time?

6 A No. I think that we are looking at an area between two fields  
7 that in the past have developed, enlarged the Catclaw Draw field  
8 in the south and in the last two years extended to where it's  
9 connected to individual producing wells; and I think we will see  
10 the same thing happen to the north.

11 I think it's imperative that we do have a well drilled  
12 in there to test this hypothesis and to adequately provide reserves  
13 in the area.

14 MR. BUELL: May it please the Examiner, that  
15 concludes our direct presentation. I would like to formally  
16 offer Amoco's Exhibits 1 through 6.

17 MR. STAMETS: Without objection, these exhibits  
18 will be admitted into evidence. Are there questions of the  
19 witness?

20 CROSS-EXAMINATION

21 BY MR. STAMETS:

22 Q Mr. Galzutis, looking at your Exhibit 3 here, it would appear  
23 that the unit is designed to take into account both the structure  
24 and stratigraphy to try and take into the unit everything that  
25 ~~would be reasonably productive of gas from the middle Morrow here?~~

1 A Yes.

2 MR. STAMETS: Are there any other questions of  
3 this witness? He may be excused. Is there anything further?  
4

5 MR. BUELL: No, sir, Mr. Examiner.

6 MR. STAMETS: Are there any other appearances  
7 in this case? The case will be taken under advisement. We will  
8 take about ten minutes for coffee or fifteen maybe.

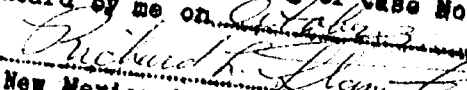
9 (Whereupon, the hearing was recessed for fifteen  
10 minutes.)

11 \*\*\*\*\*

12 C E R T I F I C A T E

13 I, JANET RUSSELL, a Court Reporter, in and for the  
14 County of Bernalillo, State of New Mexico, do hereby certify  
15 that the foregoing and attached Transcript of Hearing before the  
16 New Mexico Oil Conservation Commission was reported by me;  
17 and that the same is a true and correct record of the said  
18 proceedings to the best of my knowledge, skill and ability.

19  
20   
21 COURT REPORTER

22 I do hereby certify that the foregoing is  
23 a complete record of the proceedings in  
24 the Examiner hearing of Case No. 5070  
25 heard by me on October 3, 1973  
, Examiner  
New Mexico Oil Conservation Commission

I N D E XWITNESS,JACK ANDERSONPage

Direct Examination by Mr. Buell

3

Cross-Examination by Mr. Stamets

9

WITNESS,K. J. GAIZUTIS

Direct Examination by Mr. Buell

10

Cross-Examination by Mr. Stamets

18

E X H I B I T SApplicant'sOfferedAdmitted

Exhibit 1

Acreage outline

18

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Exhibit 2

Unit Agreement form

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Exhibit 3

Structure map

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18

Exhibit 4

Map

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Exhibit 5

Map

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Exhibit 6

Map

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18





# OIL CONSERVATION COMMISSION

**STATE OF NEW MEXICO**  
**P. O. BOX 2088 - SANTA FE**  
**87501**

October 15, 1973

**I. R. TRUJILLO**  
**CHAIRMAN**  
**LAND COMMISSIONER**  
**ALEX J. ARMIJO**  
**MEMBER**  
**STATE GEOLOGIST**  
**A. L. PORTER, JR.**  
**SECRETARY - DIRECTOR**

Mr. Guy Buell  
Amoco Production Company  
Post Office Box 3092  
Houston, Texas 77001

Re: CASE NO. 5070  
ORDER NO. R-4643  
Applicant:  
**Amoco Production Co.**

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC	<u>X</u>
Artesia OCC	<u>X</u>
Aztec OCC	

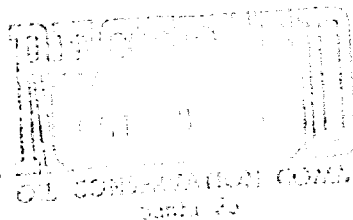
Unit Division

Other \_\_\_\_\_



## United States Department of the Interior

GEOLOGICAL SURVEY



OCT 1 1973

Amoco Production Company  
Attention: Mr. C. N. Menninger  
P. O. Box 3092  
Houston, Texas 77001

Gentlemen:

Your application of August 31, filed with the Area Oil and Gas Supervisor, Roswell, New Mexico, on September 7, requests the designation of the Bubbling Spring unit area embracing 3,078.12 acres, more or less, Eddy County, New Mexico, as logically subject to exploration and development under the unitization provisions of the Mineral Leasing Act as amended.

Pursuant to unit plan regulations of December 20, 1950, 30 CFR 226.3 (1968 reprint), the land requested as outlined on your plat marked "Exhibit A, Bubbling Spring Unit Agreement, Eddy County, New Mexico," is hereby designated as a logical unit area.

The unit agreement submitted for the area designated should provide for the drilling of the initial exploratory well to test all of the formations of Pennsylvanian age or to a depth of 10,400 feet. As proposed by your application, the form of agreement for unproved areas (1968 reprint) should be used and modified to apply to fee lands and Federal lands under the jurisdiction of the Bureau of Reclamation.

In the absence of any other type of land requiring special provisions or any objections not now apparent, a duly executed agreement identical to the 1968 reprint, modified only as outlined above, will be approved if submitted in approvable status within a reasonable period of time. However, the right is reserved to deny approval of any executed agreement which, in our opinion, does not have full commitment of sufficient lands to afford effective control of operations in the unit area.

When the executed agreement is transmitted to the Supervisor for approval, include the latest status of all acreage. The format of the sample exhibits attached to the 1968 reprint of the standard form should be followed closely in the preparation of exhibits A and B.

Sincerely yours,

ORIG, SGD. G. H. HORN

Conservation Manager, Central Region  
For the Director

cc:  
BLM, Santa Fe (w/cy of Ex. A)  
N.M.O.C.C., Santa Fe✓  
Roswell (2)  
Denver Chron. File  
Cons. Div. Chron. File  
CD Reading File

REShook:lh:9-14-73

**SERIALS:**

Las Cruces 070032-B  
071847  
071847-A  
New Mexico 03215  
03215-A  
03217  
03217-A  
03365  
03365-A

New Mexico 038124  
038124-A  
0283953-A  
0338758  
0426336  
BLM-A-026872  
026872-A  
032236-B



J. C. Burton  
Division Engineer



*Case 5070*

**Amoco Production Company**

500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

September 7, 1973

File: JHP-986.51NM-4740

Re: Bubbling Spring Unit  
Eddy County, New Mexico

Mr. A. L. Porter, Jr. (3)  
New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Dear Sir:

Please docket a hearing at the earliest possible date to consider Amoco Production Company's application for approval of the Bubbling Spring Unit. The Unit area comprises 3,078 acres, more or less, of Federal and fee lands all located in T20S, R26E, Eddy County, New Mexico. A copy of the proposed Unit Agreement is attached.

Very truly yours,

*J. C. Burton*

CTB:as

Attachment



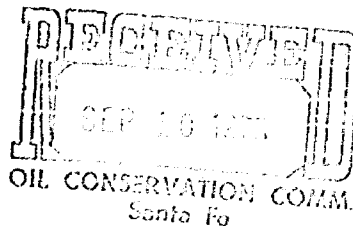
*Case 5070*

**Amoco Production Company**

500 Jefferson Building  
P.O. Box 3092  
Houston, Texas 77001

J. C. Burton  
Division Engineer

September 7, 1973



File: JHP-986.51NM-4740

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Eddy County, New Mexico

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New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

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Very truly yours,

*J. C. Burton*

GTB:as

Attachment

DOCKET MAILED

Date 9-21-73

CERTIFICATION--DETERMINATION

Pursuant to the authority vested in the Secretary of Interior,  
under the act approved February 25, 1920, 41 Stat. 437, as amended,  
30 U. S. C. secs. 181, et seq., and delegated to the Area Oil and  
Gas Supervisors of the Geological Survey, I do hereby:

A. Approve the attached agreement for the development  
and operation of the Bubbling Spring Unit Area, State of New Mexico.

B. Certify and determine that the unit plan of development  
and operation contemplated in the attached agreement is necessary  
and advisable in the public interest for the purpose of more properly  
conserving the natural resources.

C. Certify and determine that the drilling, producing,  
rental, minimum royalty, and royalty requirements of all Federal  
leases committed to said agreement are hereby established, altered,  
changed, or revoked to conform with the terms and conditions of this  
agreement.

Dated \_\_\_\_\_.

Area Oil and Gas Supervisor  
United States Geological Survey

Contract Number \_\_\_\_\_

BEFORE EXAMINER STARTS
OIL CONSERVATION DETERMINATION
UNIT NO. 2
SECTION 5070
Surveyed by Amoco
Handling Date 10-3-73

UNIT AGREEMENT FOR THE DEVELOPMENT  
AND OPERATION OF THE BUBBLING SPRING UNIT AREA  
COUNTY OF EDDY, STATE OF NEW MEXICO

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Exhibit "A" (Map)

Exhibit "B" (Description of interests subject to agreement)

1 UNIT AGREEMENT  
2 FOR THE DEVELOPMENT AND OPERATION  
3 OF THE  
4 BUBBLING SPRING UNIT AREA  
5 COUNTY OF EDDY  
6 STATE OF NEW MEXICO  
7 NO. \_\_\_\_\_

8 THIS AGREEMENT, entered into as of the 1st day of  
9 August, 19 73, by and between the parties subscribing,  
10 ratifying, or consenting hereto, and herein referred to as the "parties  
11 hereto,"

12 WITNESSETH:

13 WHEREAS the parties hereto are the owners of working, royalty,  
14 or other oil and gas interests in the unit area subject to this agree-  
15 ment; and

16 WHEREAS the Mineral Leasing Act of February 25, 1920, 41 Stat.  
17 437, as amended, 30 U.S.C. Secs. 181 et seq., authorizes Federal lessees  
18 and their representatives to unite with each other, or jointly or separately  
19 with others, in collectively adopting and operating a cooperative or unit  
20 plan of development or operation of any oil or gas pool, field, or like  
21 area, or any part thereof for the purpose of more properly conserving  
22 the natural resources thereof whenever determined and certified by the  
23 Secretary of the Interior to be necessary or advisable in the public  
24 interest; and

25 WHEREAS the Oil Conservation Commission of the State of New  
26 Mexico is authorized by an Act of the Legislature (Chapter 72, Laws of  
27 1935, as amended by Chapter 193, Laws of 1937; Chapter 166, Laws of  
28 1941; and Chapter 168, Laws of 1949) to approve this agreement and the  
29 conservation provisions hereof; and

30 WHEREAS the parties hereto hold sufficient interests in the  
31 Bubbling Spring Unit Area covering the land hereinafter described  
32 to give reasonably effective control of operations therein; and



1           WHEREAS, it is the purpose of the parties hereto to conserve  
2           natural resources, prevent waste, and secure other benefits obtainable  
3           through development and operation of the area subject to this agreement  
4           under the terms, conditions, and limitations herein set forth;

5           NOW, THEREFORE, in consideration of the premises and the promises  
6           herein contained, the parties hereto commit to this agreement their  
7           respective interests in the below-defined unit area, and agree severally  
8           among themselves as follows:

9           1.       ENABLING ACT AND REGULATIONS. The Mineral Leasing Act of  
10          February 25, 1920, as amended, supra, and all valid pertinent regulations,  
11          including operating and unit plan regulations, heretofore issued thereunder  
12          or valid, pertinent, and reasonable regulations hereafter issued thereunder  
13          are accepted and made a part of this agreement as to Federal lands, pro-  
14          vided such regulations are not inconsistent with the terms of this agree-  
15          ment; and as to non-Federal lands, the oil and gas operating regulations  
16          in effect as of the effective date hereof governing drilling and producing  
17          operations, not inconsistent with the terms hereof or the laws of the  
18          State in which the non-Federal land is located, are hereby accepted and  
19          made a part of this agreement.

20          2.       UNIT AREA. The area specified on the map attached hereto  
21          marked Exhibit "A" is hereby designated and recognized as constituting  
22          the unit area, containing 3,078.12 acres, more or less.

23                 Exhibit "A" shows, in addition to the boundary of the unit  
24          area, the boundaries and identity of tracts and leases in said area to  
25          the extent known to the Unit Operator. Exhibit "B" attached hereto is  
26          a schedule showing to the extent known to the Unit Operator the acreage,  
27          percentage, and kind of ownership of oil and gas interests in all land  
28          in the unit area. However, nothing herein or in said schedule or map  
29          shall be construed as a representation by any party hereto as to the  
30          ownership of any interest other than such interest or interests as are  
31          shown in said map or schedule as owned by such party. Exhibits "A"

1 and "B" shall be revised by the Unit Operator whenever changes in the  
2 unit area render such revision necessary, or when requested by the Oil  
3 and Gas Supervisor, hereinafter referred to as "Supervisor" and not less  
4 than five copies of the revised exhibits shall be filed with the  
5 Supervisor and one copy with the New Mexico Oil Conservation Commission,  
6 hereinafter referred to as "State Commission".

7 The above-described unit area shall when practicable be expanded  
8 to include therein any additional lands or shall be contracted to exclude  
9 lands whenever such expansion or contraction is deemed to be necessary  
10 or advisable to conform with the purposes of this agreement. Such expan-  
11 sion or contraction shall be effected in the following manner:

- 12 (a) Unit Operator, on its own motion or on demand of the  
13 Director of the Geological Survey, hereinafter referred  
14 to as "Director", after preliminary concurrence by the  
15 Director, shall prepare a notice of proposed expansion  
16 or contraction describing the contemplated changes in  
17 the boundaries of the unit area, the reasons therefor,  
18 and the proposed effective date thereof, preferably the  
19 first day of a month subsequent to the date of notice.
- 20 (b) Said notice shall be delivered to the Supervisor, and the  
21 State Commission and copies thereof mailed to the last known  
22 address of each working interest owner, lessee, and lessor  
23 whose interests are affected, advising that 30 days will be  
24 allowed for submission to the Unit Operator of any objections.
- 25 (c) Upon expiration of the 30-day period provided in the preceding  
26 item (b) hereof, Unit Operator shall file with the Supervisor  
27 and the State Commission evidence of mailing of the notice of  
28 expansion or contraction and a copy of any objections thereto  
29 which have been filed with the Unit Operator, together with an  
30 application in sufficient number, for approval of such  
31 expansion or contraction and with appropriate joinders.
- 32 (d) After due consideration of all pertinent information, the

1 expansion or contraction shall, upon approval by the Supervisor,  
2 become effective as of the date prescribed in the notice thereof.  
3 (e) All legal subdivisions of lands (i.e., 40 acres by Government  
4 survey or its nearest lot or tract equivalent; in instances of  
5 irregular surveys unusually large lots or tracts shall be con-  
6 sidered in multiples of 40 acres or the nearest aliquot equiva-  
7 lent thereof), no parts of which are entitled to be in a  
8 participating area on or before the fifth anniversary of the  
9 effective date of the first initial participating area esta-  
10 blished under this unit agreement, shall be eliminated auto-  
11 matically from this agreement, effective as of said fifth  
12 anniversary, and such lands shall no longer be a part of  
13 the unit area and shall no longer be subject to this agree-  
14 ment, unless diligent drilling operations are in progress  
15 on unitized lands not entitled to participation on said  
16 fifth anniversary, in which event all such lands shall  
17 remain subject hereto for so long as such drilling operations  
18 are continued diligently, with not more than 90 days' time  
19 elapsing between the completion of one such well and the com-  
20 mencement of the next such well. All legal subdivisions of  
21 lands not entitled to be in a participating area within 10  
22 years after the effective date of the first initial partici-  
23 pating area approved under this agreement shall be auto-  
24 matically eliminated from this agreement as of said tenth  
25 anniversary. All lands proved productive by diligent drilling  
26 operations after the aforesaid 5-year period shall become  
27 participating in the same manner as during said 5-year  
28 period. However, when such diligent drilling operations  
29 cease, all nonparticipating lands shall be automatically  
30 eliminated effective as of the 91st day thereafter. The unit  
31 operator shall within 90 days after the effective date of  
32 any elimination hereunder, describe the area so eliminated

1 to the satisfaction of the Supervisor and promptly notify  
2 all parties in interest.

3 If conditions warrant extension of the 10-year period  
4 specified in this subsection 2(e), a single extension of not  
5 to exceed 2 years may be accomplished by consent of the  
6 owners of 90% of the working interests in the current non-  
7 participating unitized lands and the owners of 60% of the  
8 basic royalty interests (exclusive of the basic royalty  
9 interests of the United States) in nonparticipating unitized  
10 lands with approval of the Director, provided such extension  
11 application is submitted to the Director not later than 60  
12 days prior to the expiration of said 10-year period.

13 Any expansion of the unit area pursuant to this section  
14 which embraces lands theretofore eliminated pursuant to  
15 this subsection 2(e) shall not be considered automatic  
16 commitment or recommitment of such lands.

17 3. UNITIZED LAND AND UNITIZED SUBSTANCES. All land committed to  
18 this agreement shall constitute land referred to herein as "unitized land"  
19 or "land subject to this agreement." All oil and gas in any and all  
20 formations of the unitized land are unitized under the terms of this agree-  
21 ment and herein are called "unitized substances."

22 4. UNIT OPERATOR. Amoco Production Company is  
23 hereby designated as Unit Operator and by signature hereto as Unit Operator  
24 agrees and consents to accept the duties and obligations of Unit Operator  
25 for the discovery, development, and production of unitized substances as  
26 herein provided. Whenever reference is made herein to the Unit Operator,  
27 such reference means the Unit Operator acting in that capacity and not  
28 as an owner of interest in unitized substances, and the term "working

1 interest owner" when used herein shall include or refer to Unit Operator  
2 as the owner of a working interest when such an interest is owned by it.

3 5. RESIGNATION OR REMOVAL OF UNIT OPERATOR. Unit Operator shall  
4 have the right to resign at any time prior to the establishment of a  
5 participating area or areas hereunder, but such resignation shall not  
6 become effective so as to release Unit Operator from the duties and  
7 obligations of Unit Operator and terminate Unit Operator's rights as such  
8 for a period of 6 months after notice of intention to resign has been  
9 served by Unit Operator on all working interest owners and the Supervisor,  
10 and until all wells then drilled hereunder are placed in a satisfactory  
11 condition for suspension or abandonment whichever is required by the  
12 Supervisor, unless a new Unit Operator shall have been selected and  
13 approved and shall have taken over and assumed the duties and obliga-  
14 tions of Unit Operator prior to the expiration of said period.

15 Unit Operator shall have the right to resign in like manner  
16 and subject to like limitations as above provided at any time a partici-  
17 pating area established hereunder is in existence, but, in all instances  
18 of resignation or removal, until a successor unit operator is selected  
19 and approved as hereinafter provided, the working interest owners shall  
20 be jointly responsible for performance of the duties of unit operator,  
21 and shall not later than 30 days before such resignation or removal  
22 becomes effective appoint a common agent to represent them in any  
23 action to be taken hereunder.

24 The resignation of Unit Operator shall not release Unit Operator  
25 from any liability for any default by it hereunder occurring prior to  
26 the effective date of its resignation.

27 The Unit Operator may, upon default or failure in the perform-  
28 ance of its duties or obligations hereunder, be subject to removal by  
29 the same percentage vote of the owners of working interests as herein  
30 provided for the selection of a new Unit Operator. Such removal shall  
31 be effective upon notice thereof to the Supervisor.

1           The resignation or removal of Unit Operator under this  
2           agreement shall not terminate its right, title, or interest as the owner  
3           of a working interest or other interest in unitized substances, but upon  
4           the resignation or removal of Unit Operator becoming effective, such  
5           Unit Operator shall deliver possession of all wells, equipment, materials,  
6           and appurtenances used in conducting the unit operations to the new duly  
7           qualified successor Unit Operator or to the common agent, if no such  
8           new Unit Operator is elected, to be used for the purpose of conducting  
9           unit operations hereunder. Nothing herein shall be construed as authorizing  
10          removal of any material, equipment and appurtenances needed for the preserva-  
11          tion of any wells.

12          6.       SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall  
13          tender his or its resignation as Unit Operator or shall be removed as  
14          hereinabove provided, or a change of Unit Operator is negotiated by  
15          working interest owners, the owners of the working interests in the par-  
16          ticipating area or areas according to their respective acreage interests  
17          in such participating area or areas, or, until a participating area  
18          shall have been established, the owners of the working interest according  
19          to their respective acreage interests in all unitized land, shall by  
20          majority vote select a successor Unit Operator: Provided, That, if a  
21          majority but less than 75 percent of the working interests qualified to  
22          vote are owned by one party to this agreement, a concurring vote of one  
23          or more additional working interest owners shall be required to select  
24          a new operator. Such selection shall not become effective until:

25               (a) A Unit Operator so selected shall accept in writing the  
26               duties and responsibilities of Unit Operator, and

27               (b) The selection shall have been approved by the Supervisor.

28          If no successor Unit Operator is selected and qualified as  
29          herein provided, the Director at his election may declare this unit  
30          agreement terminated.

1           7.       ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT. If the  
2       Unit Operator is not the sole owner of working interests, costs and  
3       expenses incurred by Unit Operator in conducting unit operations here-  
4       under shall be paid and apportioned among and borne by the owners of  
5       working interests, all in accordance with the agreement or agreements  
6       entered into by and between the Unit Operator and the owners of  
7       working interests, whether one or more, separately or collectively. Any  
8       agreement or agreements entered into between the working interest owners  
9       and the Unit Operator as provided in this section, whether one or more,  
10      are herein referred to as the "unit operating agreement." Such unit  
11      operating agreement shall also provide the manner in which the working  
12      interest owners shall be entitled to receive their respective proportionate  
13      and allocated share of the benefits accruing hereto in conformity with  
14      their underlying operating agreements, leases, or other independent con-  
15      tracts, and such other rights and obligations as between Unit Operator  
16      and the working interest owners as may be agreed upon by Unit Operator and  
17      the working interest owners; however, no such unit operating agreement  
18      shall be deemed either to modify any of the terms and conditions of  
19      this unit agreement or to relieve the Unit Operator of any right or  
20      obligation established under this unit agreement, and in case of any  
21      inconsistency or conflict between this unit agreement and the unit  
22      operating agreement, this unit agreement shall govern. Three true  
23      copies of any unit operating agreement executed pursuant to this section  
24      should be filed with the Supervisor, prior to approval of this unit  
25      agreement.

26           8.       RIGHTS AND OBLIGATIONS OF UNIT OPERATOR. Except as otherwise  
27      specifically provided herein, the exclusive right, privilege, and duty  
28      of exercising any and all rights of the parties hereto which are neces-  
29      sary or convenient for prospecting for, producing, storing, allocating,  
30      and distributing the unitized substances are hereby delegated to and shall

1 be exercised by the Unit Operator as herein provided. Acceptable evidence  
2 of title to said rights shall be deposited with said Unit Operator and,  
3 together with this agreement, shall constitute and define the rights,  
4 privileges, and obligations of Unit Operator. Nothing herein, however,  
5 shall be construed to transfer title to any land or to any lease or  
6 operating agreement, it being understood that under this agreement the  
7 Unit Operator, in its capacity as Unit Operator, shall exercise the rights  
8 of possession and use vested in the parties hereto only for the purposes  
9 herein specified.

10 9. DRILLING TO DISCOVERY. Within 6 months after the effective  
11 date hereof, the Unit Operator shall begin to drill an adequate test  
12 well at a location approved by the Supervisor, if on Federal land, unless  
13 on such effective date a well is being drilled conformably with the terms  
14 hereof, and thereafter continue such drilling diligently until all of the  
15 formations of Pennsylvanian Age have been tested or until at a  
16 lesser depth unitized substances shall be discovered which can be pro-  
17 duced in paying quantities (to wit: quantities sufficient to repay the  
18 costs of drilling, completing, and producing operations, with a reasonable  
19 profit) or the Unit Operator shall at any time establish to the satis-  
20 faction of the Supervisor, if on Federal land, that further drilling of  
21 said well would be unwarranted or impracticable, provided, however, that  
22 Unit Operator shall not in any event be required to drill said well to a  
23 depth in excess of 10,400 feet. Until the discovery of a deposit of  
24 unitized substances capable of being produced in paying quantities, the  
25 Unit Operator shall continue drilling diligently one well at a time,  
26 allowing not more than 6 months between the completion of one well and the  
27 beginning of the next well, until a well capable of producing unitized  
28 substances in paying quantities is completed to the satisfaction of said  
29 Supervisor, if it be on Federal land, or until it is reasonably proved  
30 that the unitized land is incapable of producing unitized substances in  
31 paying quantities in the formations drilled hereunder. Nothing in this



1 section shall be deemed to limit the right of the Unit Operator to resign  
2 as provided in Section 5, hereof, or as requiring Unit Operator to com-  
3 mence or continue any drilling during the period pending such resignation  
4 becoming effective in order to comply with the requirements of this  
5 section. The Supervisor may modify the drilling requirements of this  
6 section by granting reasonable extensions of time when, in his opinion,  
7 such action is warranted.

8 Upon failure to commence any well provided for in this section  
9 within the time allowed, including any extension of time granted by the  
10 Supervisor, this agreement will automatically terminate; upon failure to  
11 continue drilling diligently any well commenced hereunder, the Supervisor  
12 may, after 15-days' notice to the Unit Operator, declare this unit agree-  
13 ment terminated.

14 10. PLAN OF FURTHER DEVELOPMENT AND OPERATION. Within 6 months  
15 after completion of a well capable of producing unitized substances in  
16 paying quantities, the Unit Operator shall submit for the approval of  
17 the Supervisor an acceptable plan of development and operation for the  
18 unitized land which, when approved by the Supervisor, shall constitute  
19 the further drilling and operating obligations of the Unit Operator  
20 under this agreement for the period specified therein. Thereafter, from  
21 time to time before the expiration of any existing plan, the Unit Operator  
22 shall submit for the approval of the Supervisor a plan for an additional  
23 specified period for the development and operation of the unitized land.

24 Any plan submitted pursuant to this section shall provide for  
25 the exploration of the unitized area and for the diligent drilling  
26 necessary for determination of the area or areas thereof capable of  
27 producing unitized substances in paying quantities in each and every  
28 productive formation and shall be as complete and adequate as the Super-  
29 visor may determine to be necessary for timely development and proper  
30 conservation of the oil and gas resources of the unitized area and  
31 shall;

- 1 (a) specify the number and locations of any wells to be drilled  
2 and the proposed order and time for such drilling; and  
3 (b) to the extent practicable specify the operating practices  
4 regarded as necessary and advisable for proper conservation  
5 of natural resources.

6 Separate plans may be submitted for separate productive zones, subject  
7 to the approval of the Supervisor.

8 Plans shall be modified or supplemented when necessary to  
9 meet changed conditions or to protect the interests of all parties to  
10 this agreement. Reasonable diligence shall be exercised in complying  
11 with the obligations of the approved plan of development. The Super-  
12 visor is authorized to grant a reasonable extension of the 6-month  
13 period herein prescribed for submission of an initial plan of develop-  
14 ment where such action is justified because of unusual conditions or  
15 circumstances. After completion hereunder of a well capable of producing  
16 any unitized substance in paying quantities, no further wells, except  
17 such as may be necessary to afford protection against operations not  
18 under this agreement and such as may be specifically approved by the  
19 Supervisor, shall be drilled except in accordance with a plan of develop-  
20 ment approved as herein provided.

21 11. PARTICIPATION AFTER DISCOVERY. Upon completion of a well  
22 capable of producing unitized substances in paying quantities or as soon  
23 thereafter as required by the Supervisor, the Unit Operator shall submit  
24 for approval by the Supervisor a schedule, based on subdivisions of the  
25 public-land survey or aliquot parts thereof, of all land then regarded  
26 as reasonably proved to be productive in paying quantities; all lands in  
27 said schedule on approval of the Supervisor to constitute a participating  
28 area, effective as of the date of completion of such well or the effective  
29 date of this unit agreement, whichever is later. The acreages of both  
30 Federal and non-Federal lands shall be based upon appropriate computations  
31 from the courses and distances shown on the last approved public-land

1 survey as of the effective date of each initial participating area.  
2 Said schedule shall also set forth the percentage of unitized substances  
3 to be allocated as herein provided to each tract in the participating  
4 area so established, and shall govern the allocation of production com-  
5 mencing with the effective date of the participating area. A separate  
6 participating area shall be established for each separate pool or deposit  
7 of unitized substances or for any group thereof which is produced as a  
8 single pool or zone, and any two/or more participating areas so established  
9 may be combined into one, on approval of the Supervisor. When production  
10 from two or more participating areas, so established, is subsequently  
11 found to be from a common pool or deposit said participating areas shall  
12 be combined into one effective as of such appropriate date as may be  
13 approved or prescribed by the Supervisor. The participating area or  
14 areas so established shall be revised from time to time, subject to  
15 like approval, to include additional land then regarded as reasonably  
16 proved to be productive in paying quantities or necessary for unit  
17 operations, or to exclude land then regarded as reasonably proved not  
18 to be productive in paying quantities and the schedule of allocation  
19 percentages shall be revised accordingly. The effective date of any  
20 revision shall be the first of the month in which is obtained the knowledge  
21 or information on which such revision is predicated, provided, however,  
22 that a more appropriate effective date may be used if justified by the  
23 Unit Operator and approved by the Supervisor. No land shall be excluded  
24 from a participating area on account of depletion of the unitized substances,  
25 except that any participating area established under the provisions of  
26 this unit agreement shall terminate automatically whenever all completions  
27 in the formation on which the participating area is based are abandoned.

28 It is the intent of this section that a participating area shall  
29 represent the area known or reasonably estimated to be productive in paying  
30 quantities; but, regardless of any revision of the participating area,  
31 nothing herein contained shall be construed as requiring any retroactive

1 adjustment for production obtained prior to the effective date of the  
2 revision of the participating area.

3 In the absence of agreement at any time between the Unit Operator  
4 and the Supervisor as to the proper definition or redefinition of a partici-  
5 pating area, or until a participating area has, or areas have, been  
6 established as provided herein, the portion of all payments affected thereby  
7 shall be impounded in a manner mutually acceptable to the owners of working  
8 interests and the Supervisor. Royalties due the United States shall be  
9 determined by the Supervisor and the amount thereof shall be deposited,  
10 as directed by the Supervisor, to be held as unearned money until a  
11 participating area is finally approved and then applied as earned or  
12 returned in accordance with a determination of the sum due as Federal  
13 royalty on the basis of such approved participating area.

14 Whenever it is determined, subject to the approval of the  
15 Supervisor, that a well drilled under this agreement is not capable  
16 of production in paying quantities and inclusion of the land on which  
17 it is situated in a participating area is unwarranted, production from  
18 such well shall, for the purposes of settlement among all parties other  
19 than working interest owners, be allocated to the land on which the  
20 well is located unless such land is already within the participating  
21 area established for the pool or deposit from which such production is  
22 obtained. Settlement for working interest benefits from such a well  
23 shall be made as provided in the unit operating agreement.

24 12. ALLOCATION OF PRODUCTION. All unitized substances produced  
25 from each participating area established under this agreement, except any  
26 part thereof used in conformity with good operating practices within the  
27 unitized area for drilling, operating, camp and other production or  
28 development purposes, for repressuring or recycling in accordance with  
29 a plan of development approved by the Supervisor, or unavoidably lost,  
30 shall be deemed to be produced equally on an acreage basis from the  
31 several tracts of unitized land of the participating area established

1 for such production and, for the purpose of determining any benefits  
2 accruing under this agreement, each such tract of unitized land shall  
3 have allocated to it such percentage of said production as the number of  
4 acres of such tract included in said participating area bears to the  
5 total acres of unitized land in said participating area, except that  
6 allocation of production hereunder for purposes other than for settlement  
7 of the royalty, overriding royalty, or payment out of production obliga-  
8 tions of the respective working interest owners, shall be on the basis  
9 prescribed in the unit operating agreement whether in conformity with  
10 the basis of allocation herein set forth or otherwise. It is hereby  
11 agreed that production of unitized substances from a participating  
12 area shall be allocated as provided herein regardless of whether any  
13 wells are drilled on any particular part or tract of said participating  
14 area. If any gas produced from one participating area is used for repres-  
15 suring or recycling purposes in another participating area, the first  
16 gas withdrawn from such last-mentioned participating area for sale during  
17 the life of this agreement shall be considered to be the gas so transferred  
18 until an amount equal to that transferred shall be so produced for sale  
19 and such gas shall be allocated to the participating area from which  
20 initially produced as such area was last defined at the time of such  
21 final production.

22 13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND OR FORMATIONS.  
23 Any party hereto owning or controlling the working interest in any unitized  
24 land having thereon a regular well location may with the approval of the  
25 Supervisor, at such party's sole risk, costs, and expense, drill a well  
26 to test any formation for which a participating area has not been established  
27 or to test any formation for which a participating area has been established  
28 if such location is not within said participating area, unless within 90  
29 days of receipt of notice from said party of his intention to drill the  
30 well the Unit Operator elects and commences to drill such a well in like  
31 manner as other wells are drilled by the Unit Operator under this agreement.

1           If any well drilled as aforesaid by a working interest owner  
2 results in production such that the land upon which it is situated may  
3 properly be included in a participating area, such participating area  
4 shall be established or enlarged as provided in this agreement and the  
5 well shall thereafter be operated by the Unit Operator in accordance  
6 with the terms of this agreement and the unit operating agreement.

7           If any well drilled as aforesaid by a working interest owner  
8 obtains production in quantities insufficient to justify the inclusion of  
9 the land upon which such well is situated in a participating area, such  
10 well may be operated and produced by the party drilling the same subject  
11 to the conservation requirements of this agreement. The royalties in  
12 amount or value of production from any such well shall be paid as specified  
13 in the underlying lease and agreements affected.

14       14.   ROYALTY SETTLEMENT. The United States and any State and any  
15 royalty owner who, is entitled to take in kind a share of the substances  
16 now unitized hereunder shall hereafter be entitled to the right to take  
17 in kind its share of the unitized substances, and Unit Operator, or the  
18 working interest owner in case of the operation of a well by a working  
19 interest owner as herein provided for in special cases, shall make  
20 deliveries of such royalty share taken in kind in conformity with the  
21 applicable contracts, laws, and regulations. Settlement for royalty  
22 interest not taken in kind shall be made by working interest owners  
23 responsible therefor under existing contracts, laws and regulations, or  
24 by the Unit Operator on or before the last day of each month for unitized  
25 substances produced during the preceding calendar month; provided, however,  
26 that nothing herein contained shall operate to relieve the lessees of  
27 any land from their respective lease obligations for the payment of any  
28 royalties due under their leases.

29           If gas obtained from lands not subject to this agreement is  
30 introduced into any participating area hereunder, for use in repres-  
31 suring, stimulation of production, or increasing ultimate recovery, in

1 conformity with a plan of operations approved by the Supervisor, a like  
2 amount of gas, after settlement as herein provided for any gas transferred  
3 from any other participating area and with appropriate deduction for loss  
4 from any cause, may be withdrawn from the formation into which the gas  
5 is introduced, royalty free as to dry gas, but not as to any products  
6 which may be extracted therefrom; provided that such withdrawal shall be  
7 at such time as may be provided in the approved plan of operations or as  
8 may otherwise be consented to by the Supervisor as conforming to good  
9 petroleum engineering practice; and provided further, that such right of  
10 withdrawal shall terminate on the termination of this unit agreement.

11 Royalty due the United States shall be computed as provided in  
12 the operating regulations and paid in value or delivered in kind as to  
13 all unitized substances on the basis of the amounts thereof allocated to  
14 unitized Federal land as provided herein at the rates specified in the  
15 respective Federal leases, or at such lower rate or rates as may be  
16 authorized by law or regulation; provided, that for leases on which the  
17 royalty rate depends on the daily average production per well, said  
18 average production shall be determined in accordance with the operating  
19 regulations as though each participating area were a single consolidated  
20 lease.

21 Royalty due as to non-Federal lands under the respective leases  
22 shall be computed and paid on the basis of all unitized substances  
23 allocated to such lands hereunder.

24 15. RENTAL SETTLEMENT. Rental or minimum royalties due on leases  
25 committed hereto shall be paid by working interest owners responsible  
26 therefor under existing contracts, laws, and regulations, provided that  
27 nothing herein contained shall operate to relieve the lessees of any  
28 land from their respective lease obligations for the payment of any  
29 rental or minimum royalty due under their leases. Rental or minimum  
30 royalty for lands of the United States subject to this agreement shall  
31 be paid at the rate specified in the respective leases from the United

States unless such rental or minimum royalty is waived, suspended, or reduced by law or by approval of the Secretary or his duly authorized representative.

With respect to any lease on non-Federal land containing provisions which would terminate such lease unless drilling operations are commenced upon the land covered thereby within the time therein specified or rentals are paid for the privilege of deferring such drilling operations, the rentals required thereby shall, notwithstanding any other provision of this agreement, be deemed to accrue and become payable during the term thereof as extended by this agreement and until the required drilling operations are commenced upon the land covered thereby or until some portion of such land is included within a participating area.

16. CONSERVATION. Operations hereunder and production of unitized substances shall be conducted to provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to State or Federal law or regulation.

17. DRAINAGE. The Unit Operator shall take such measures as the Supervisor deems appropriate and adequate to prevent drainage of unitized substances from unitized land by wells on land not subject to this agreement.

18. LEASES AND CONTRACTS CONFORMED AND EXTENDED. The terms, conditions, and provisions of all leases, subleases, and other contracts relating to exploration, drilling, development, or operation for oil or gas on lands committed to this agreement are hereby expressly modified and amended to the extent necessary to make the same conform to the provisions hereof, but otherwise to remain in full force and effect; and the parties hereto hereby consent that the Secretary as to Federal leases



1 shall and by his approval hereof, or by the approval hereof by his duly  
2 authorized representative, does hereby establish, alter, change, or revoke  
3 the drilling, producing, rental, minimum royalty, and royalty require-  
4 ments of Federal leases committed hereto and the regulations in respect  
5 thereto to conform said requirements to the provisions of this agreement,  
6 and, without limiting the generality of the foregoing, all leases, sub-  
7 leases, and contracts are particularly modified in accordance with the  
8 following:

9 (a) The development and operation of lands subject to this  
10 agreement under the terms hereof shall be deemed full  
11 performance of all obligations for development and opera-  
12 tion with respect to each and every separately owned tract  
13 subject to this agreement, regardless of whether there is  
14 any development of any particular tract of the unit area.

15 (b) Drilling and producing operations performed hereunder upon  
16 any tract of unitized lands will be accepted and deemed  
17 to be performed upon and for the benefit of each and every  
18 tract of unitized land, and no lease shall be deemed to  
19 expire by reason of failure to drill or produce wells  
20 situated on the land therein embraced.

21 (c) Suspension of drilling or producing operations on all  
22 unitized lands pursuant to direction or consent of the  
23 Secretary or his duly authorized representative shall be  
24 deemed to constitute such suspension pursuant to such  
25 direction or consent as to each and every tract of  
26 unitized land. A suspension of drilling or producing  
27 operations limited to specified lands shall be applicable  
28 only to such lands.

29 (d) Each lease, sublease or contract relating to the exploration,  
30 drilling, development or operation for oil or gas of lands  
31 other than those of the United States committed to this  
32 agreement, which, by its terms might expire prior to the

1 termination of this agreement, is hereby extended beyond  
2 any such terms so provided therein so that it shall be  
3 continued in full force and effect for and during the  
4 term of this agreement.

5 (e) Any Federal lease for a fixed term of twenty (20) years  
6 or any renewal thereof or any part of such lease which  
7 is made subject to this agreement shall continue in force  
8 beyond the term provided therein until the termination  
9 hereof. Any other Federal lease committed hereto shall  
10 continue in force beyond the term so provided therein or  
11 by law as to the land committed so long as such lease  
12 remains subject hereto, provided that production  
13 is had in paying quantities under this unit agreement  
14 prior to the expiration date of the term of such lease,  
15 or in the event actual drilling operations are commenced  
16 on unitized land, in accordance with the provisions of  
17 this agreement, prior to the end of the primary term of  
18 such lease and are being diligently prosecuted at that  
19 time, such lease shall be extended for two years and so  
20 long thereafter as oil or gas is produced in paying  
21 quantities in accordance with the provisions of the Mineral  
22 Leasing Act Revision of 1960.

23 (f) Each sublease or contract relating to the operation and  
24 development of unitized substances from lands of the United  
25 States committed to this agreement, which by its terms  
26 would expire prior to the time at which the underlying  
27 lease, as extended by the immediately preceding paragraph,  
28 will expire, is hereby extended beyond any such term so  
29 provided therein so that it shall be continued in full  
30 force and effect for and during the term of the underlying  
31 lease as such term is herein extended.

1 (g) The segregation of any Federal lease committed to this  
2 agreement is governed by the following provision in the  
3 fourth paragraph of Sec. 17(j) of the Mineral Leasing Act,  
4 as amended by the Act of September 2, 1960 (74 Stat. 781-784):  
5 "Any [Federal] lease heretofore or hereafter committed to  
6 any such [unit] plan embracing lands that are in part  
7 within and in part outside of the area covered by any  
8 such plan shall be segregated into separate leases as to  
9 the lands committed and the lands not committed as of the  
10 effective date of unitization: Provided, however, That  
11 any such lease as to the nonunitized portion shall continue  
12 in force and effect for the term thereof but for not  
13 less than two years from the date of such segregation and  
14 so long thereafter as oil or gas is produced in paying  
15 quantities."

16 (h) Any lease, other than a Federal lease, having only a  
17 portion of its lands committed hereto shall be segregated  
18 as to the portion committed and the portion not committed,  
19 and the provisions of such lease shall apply separately to  
20 such segregated portions commencing as of the effective  
21 date hereof. In the event any such lease provides for a  
22 lump-sum rental payment, such payment shall be prorated  
23 between the portions so segregated in proportion to the  
24 acreage of the respective tracts.

25 19. COVENANTS RUN WITH LAND. The covenants herein shall be con-  
26 strued to be covenants running with the land with respect to the interest  
27 of the parties hereto and their successors in interest until this agree-  
28 ment terminates, and any grant, transfer, or conveyance, of interest in

1 land or leases subject hereto shall be and hereby is conditioned upon  
2 the assumption of all privileges and obligations hereunder by the grantee,  
3 transferee, or other successor in interest. No assignment or transfer  
4 of any working interest, royalty, or other interest subject hereto shall  
5 be binding upon Unit Operator until the first day of the calendar month  
6 after Unit Operator is furnished with the original, photostatic, or  
7 certified copy of the instrument of transfer.

8 20. EFFECTIVE DATE AND TERM. This agreement shall become effective  
9 upon approval by the Secretary or his duly authorized representative and  
10 shall terminate five (5) years from said effective date unless:

- 11 (a) such date of expiration is extended by the Director, or  
12 (b) it is reasonably determined prior to the expiration of  
13 the fixed term or any extension thereof that the unitized  
14 land is incapable of production of unitized substances in  
15 paying quantities in the formations tested hereunder and  
16 after notice of intention to terminate the agreement on  
17 such ground is given by the Unit Operator to all parties  
18 in interest at their last known addresses, the agreement  
19 is terminated with the approval of the Supervisor, or  
20 (c) a valuable discovery of unitized substances has been made  
21 or accepted on unitized land during said initial term or any  
22 extension thereof, in which event the agreement shall remain  
23 in effect for such term and so long as unitized substances  
24 can be produced in quantities sufficient to pay for the cost  
25 of producing same from wells on unitized land within any  
26 participating area established hereunder and, should pro-  
27 duction cease, so long thereafter as diligent operations are  
28 in progress for the restoration of production or discovery  
29 of new production and so long thereafter as unitized  
30 substances so discovered can be produced as aforesaid, or  
31 (d) it is terminated as heretofore provided in this agreement.

1 This agreement may be terminated at any time by not less than 75 percentum,  
2 on an acreage basis, of the working interest owners signatory hereto, with  
3 the approval of the Supervisor; notice of any such approval to be given  
4 by the Unit Operator to all parties hereto.

5 21. RATE OF PROSPECTING, DEVELOPMENT, AND PRODUCTION. The Director  
6 is hereby vested with authority to alter or modify from time to time in  
7 his discretion the quantity and rate of production under this agreement  
8 when such quantity and rate is not fixed pursuant to Federal or State  
9 law or does not conform to any state-wide voluntary conservation or alloca-  
10 tion program, which is established, recognized, and generally adhered to  
11 by the majority of operators in such State, such authority being hereby  
12 limited to alteration or modification in the public interest, the purpose  
13 thereof and the public interest to be served thereby to be stated in the  
14 order of alteration or modification. Without regard to the foregoing,  
15 the Director is also hereby vested with authority to alter or modify  
16 from time to time in his discretion the rate of prospecting and develop-  
17 ment and the quantity and rate of production under this agreement when such  
18 alteration or modification is in the interest of attaining the conserva-  
19 tion objectives stated in this agreement and is not in violation of  
20 any applicable Federal or State law.

21 Powers in this section vested in the Director shall only be  
22 exercised after notice to Unit Operator and opportunity for hearing to be  
23 held not less than 15 days from notice.

24 22. APPEARANCES. Unit Operator shall, after notice to other parties  
25 affected, have the right to appear for and on behalf of any and all interests  
26 affected hereby before the Department of the Interior and to appeal from  
27 orders issued under the regulations of said Department or to apply for  
28 relief from any of said regulations or in any proceedings relative to  
29 operations before the Department of the Interior or any other legally  
30 constituted authority; provided, however, that any other interested party

1 shall also have the right at his own expense to be heard in any such pro-  
2 ceeding.

3 23. NOTICES. All notices, demands or statements required hereunder  
4 to be given or rendered to the parties hereto shall be deemed fully given  
5 if given in writing and personally delivered to the party or sent by  
6 postpaid registered or certified mail, addressed to such party or parties  
7 at their respective addresses set forth in connection with the signatures  
8 hereto or to the ratification or consent hereof or to such other address  
9 as any such party may have furnished in writing to party sending the  
10 notice, demand or statement.

11 24. NO WAIVER OF CERTAIN RIGHTS. Nothing in this agreement contained  
12 shall be construed as a waiver by any party hereto of the right to assert  
13 any legal or constitutional right or defense as to the validity or invalidity  
14 of any law of the State wherein said unitized lands are located, or of the  
15 United States, or regulations issued thereunder in any way affecting such  
16 party, or as a waiver by any such party of any right beyond his or its  
17 authority to waive.

18 25. UNAVOIDABLE DELAY. All obligations under this agreement requiring  
19 the Unit Operator to commence or continue drilling or to operate on or  
20 produce unitized substances from any of the lands covered by this agree-  
21 ment shall be suspended while the Unit Operator, despite the exercise of  
22 due care and diligence, is prevented from complying with such obligations,  
23 in whole or in part, by strikes, acts of God, Federal, State, or municipal  
24 law or agencies, unavoidable accidents, uncontrollable delays in trans-  
25 portation, inability to obtain necessary materials in open market, or other  
26 matters beyond the reasonable control of the Unit Operator whether similar  
27 to matters herein enumerated or not. No unit obligation which is suspended  
28 under this section shall become due less than thirty (30) days after it

1 has been determined that the suspension is no longer applicable. Deter-  
2 mination of creditable "Unavoidable Delay" time shall be made by the unit  
3 operator subject to approval of the Supervisor.

4 26. NONDISCRIMINATION. In connection with the performance of work  
5 under this agreement, the operator agrees to comply with all the provisions  
6 of section 202 (1) to (7) inclusive of Executive Order 11246 (30 F.R. 12319),  
7 which are hereby incorporated by reference in this agreement.

8 27. LOSS OF TITLE. In the event title to any tract of unitized  
9 land shall fail and the true owner cannot be induced to join in this  
10 unit agreement, such tract shall be automatically regarded as not committed  
11 hereto and there shall be such readjustment of future costs and benefits  
12 as may be required on account of the loss of such title. In the event of  
13 a dispute as to title as to any royalty, working interest, or other  
14 interests subject thereto, payment or delivery on account thereof may be  
15 withheld without liability for interest until the dispute is finally  
16 settled; provided, that, as to Federal land or leases, no payments of  
17 funds due the United States should be withheld, but such funds shall be  
18 deposited as directed by the Supervisor to be held as unearned money  
19 pending final settlement of the title dispute, and then applied as earned  
20 or returned in accordance with such final settlement.

21 Unit Operator as such is relieved from any responsibility for  
22 any defect or failure of any title hereunder.

23 28. NON-JOINDER AND SUBSEQUENT JOINDER. If the owner of any sub-  
24 stantial interest in a tract within the unit area fails or refuses to  
25 subscribe or consent to this agreement, the owner of the working interest  
26 in that tract may withdraw said tract from this agreement by written  
27 notice delivered to the Supervisor and the Unit Operator prior to the  
28 approval of this agreement by the Supervisor. Any oil or gas interests  
29 in lands within the unit area not committed hereto prior to submission

1 of this agreement for final approval may thereafter be committed hereto  
2 by the owner or owners thereof subscribing or consenting to this agreement,  
3 and, if the interest is a working interest, by the owner of such interest  
4 also subscribing to the unit operating agreement. After operations are  
5 commenced hereunder, the right of subsequent joinder, as provided in this  
6 section, by a working interest owner is subject to such requirements or  
7 approvals, if any, pertaining to such joinder, as may be provided for in  
8 the unit operating agreement. After final approval hereof, joinder by a  
9 non-working interest owner must be consented to in writing by the working  
10 interest owner committed hereto and responsible for the payment of any  
11 benefits that may accrue hereunder in behalf of such non-working interest.  
12 A non-working interest may not be committed to this unit agreement unless  
13 the corresponding working interest is committed hereto. Joinder to  
14 the unit agreement by a working-interest owner, at any time, must be  
15 accompanied by appropriate joinder to the unit operating agreement, if  
16 more than one committed working-interest owner is involved, in order for  
17 the interest to be regarded as committed to this unit agreement. Except  
18 as may otherwise herein be provided, subsequent joinders to this agree-  
19 ment shall be effective as of the first day of the month following  
20 the filing with the Supervisor of duly executed counterparts of all or  
21 any papers necessary to establish effective commitment of any tract to this  
22 agreement unless objection to such joinder is duly made within 60 days  
23 by the Supervisor.

24 29. COUNTERPARTS. This agreement may be executed in any number of  
25 counterparts no one of which needs to be executed by all parties or may  
26 be ratified or consented to by separate instrument in writing specifically  
27 referring hereto and shall be binding upon all those parties who have  
28 executed such a counterpart, ratification, or consent hereto with the  
29 same force and effect as if all such parties had signed the same docu-  
30 ment and regardless of whether or not it is executed by all other parties  
31 owning or claiming an interest in the lands within the above-described  
32 unit area.



1           30.       SURRENDER. Nothing in this agreement shall prohibit the  
2       exercise by any working interest owner of the right to surrender vested  
3       in such party by any lease, sublease, or operating agreement as to all  
4       or any part of the lands covered thereby, provided that each party who  
5       will or might acquire such working interest by such surrender or by  
6       forfeiture as hereafter set forth, is bound by the terms of this agree-  
7       ment.

8           If as a result of any such surrender the working interest rights  
9       as to such lands become vested in any party other than the fee owner of  
10      the unitized substances, said party may forfeit such rights and further  
11      benefits from operation hereunder as to said land to the party next in  
12      the chain of title who shall be and become the owner of such working  
13      interest.

14          If as the result of any such surrender or forfeiture working  
15      interest rights become vested in the fee owner of the unitized substances,  
16      such owner may:

- 17           (1) Accept those working interest rights subject to this  
18              agreement and the unit operating agreement; or  
19           (2) Lease the portion of such land as is included in a  
20              participating area established hereunder subject to this  
21              agreement and the unit operating agreement.  
22           (3) Provide for the independent operation of any part of such  
23              land that are not then included within a participating  
24              area established hereunder.

25          If the fee owner of the unitized substances does not accept  
26      the working interest rights subject to this agreement and the unit  
27      operating agreement or lease such lands as above provided within six (6)  
28      months after the surrendered or forfeited working interest rights become  
29      vested in the fee owner, the benefits and obligations of operations  
30      accruing to such lands under this agreement and the unit operating  
31      agreement shall be shared by the remaining owners of unitized working  
32      interests in accordance with their respective working interest ownerships,

1 and such owners of working interests shall compensate the fee owner of  
2 unitized substances in such lands by paying sums equal to the rentals,  
3 minimum royalties, and royalties applicable to such lands under the  
4 lease in effect when the lands were unitized.

5 An appropriate accounting and settlement shall be made for all  
6 benefits accruing to or payments and expenditures made or incurred on  
7 behalf of such surrendered or forfeited working interest subsequent to  
8 the date of surrender or forfeiture, and payment of any monies found to  
9 be owing by such an accounting shall be made as between the parties  
10 within thirty (30) days. In the event no unit operating agreement is in  
11 existence and a mutually acceptable agreement between the proper parties  
12 thereto cannot be consummated, the Supervisor may prescribe such reasonable  
13 and equitable agreement as he deems warranted under the circumstances.

14 The exercise of any right vested in a working interest owner to  
15 reassign such working interest to the party from whom obtained shall be  
16 subject to the same conditions as set forth in this section in regard to  
17 the exercise of a right to surrender.

18 31. TAXES. The working interest owners shall render and pay for their  
19 account and the account of the royalty owners all valid taxes on or  
20 measured by the unitized substances in and under or that may be produced,  
21 gathered and sold from the land subject to this contract after the effec-  
22 tive date of this agreement, or upon the proceeds or net proceeds derived  
23 therefrom. The working interest owners on each tract shall and may  
24 charge the proper proportion of said taxes to the royalty owners having  
25 interests in said tract, and may currently retain and deduct sufficient  
26 of the unitized substances or derivative products, or net proceeds thereof  
27 from the allocated share of each royalty owner to secure reimbursement  
28 for the taxes so paid. No such taxes shall be charged to the United  
29 States or the State of New Mexico or to any lessor who has a  
30 contract with his lessee which requires the lessee to pay such taxes.

1           32.       NO PARTNERSHIP. It is expressly agreed that the re-  
2       lation of the parties hereto is that of independent contractors  
3       and nothing in this agreement contained, expressed or implied,  
4       nor any operations conducted hereunder, shall create or be deemed  
5       to have created a partnership or association between the parties  
6       hereto or any of them.

7           33.       SURFACE MANAGEMENT STIPULATION. Nothing in this agree-  
8       ment shall modify any special Federal-lease stipulations relating  
9       to surface management, attached to and made a part of Oil and Gas  
10       Leases covering lands within the Unit Area.

11          34.       RECLAMATION LANDS. Nothing in this agreement shall  
12       modify the special, Federal-lease stipulations applicable to  
13       lands under the jurisdiction of the Bureau of Reclamation.

14               IN WITNESS WHEREOF, the parties hereto have caused  
15       this agreement to be executed as of the date first above written.

16

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19

UNIT OPERATOR AND WORKING INTEREST  
OWNER

20

Amoco Production Company

21

By \_\_\_\_\_  
Attorney-in-Fact

22

Address: P. O. Box 3092  
Houston, Texas 77001

23

24

WORKING INTEREST OWNERS

25

Gulf Oil Corporation  
P. O. Drawer 1150  
Midland, Texas 79701

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28

Phillips Petroleum Company  
Exploration Office  
Phillips Building  
Odessa, Texas 79760

29

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32

Cities Service Oil Company  
800 Vaughn Building  
Midland, Texas 79701

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Tesoro Petroleum Corporation  
8520 Crownhill  
San Antonio, Texas 78209

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Yates Petroleum Corporation  
Yates Building  
Artesia, New Mexico 88201

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STATE OF TEXAS  
COUNTY OF HARRIS

The foregoing instrument was acknowledged before me this \_\_\_\_\_  
day of \_\_\_\_\_, 19\_\_\_\_, by \_\_\_\_\_,  
as Attorney-in-Fact on behalf of AMOCO PRODUCTION COMPANY.

My Commission Expires:

\_\_\_\_\_  
Notary Public in and for  
Harris County, Texas

EXHIBIT "B"  
BUBBLING SPRING  
EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
1	T. 20 S. - R. 26 E. Sec. 23: S/2	320.00	LC-070032-B 1-1-74	All-U.S.A.	Gulf Oil Corporation	Pauline A. Galt \$750/Acre PP out of 5%	Surface to 8900' Gulf Oil Corporation Pan American Petroleum  Yates Petroleum Corp  From 8900' to Base Gulf Oil Corporation Pan American Petroleum  Below Base Penn Form Gulf Oil Corporation
2	T. 20 S. - R. 26 E. Sec. 22: N/2 NE/4, SW/4 NE/4	120.00	LC-071847 1-1-74	All-U.S.A.	Cities Service Oil Co. Childress Royalty 7.14286% Co., E.E. Nearburg, Gulf Oil Corporation Anna A. (Nearburg) 28.57143% Reischman, Tom Pan American Petroleum Ingram, E.H. Ward- Corp. 50.00000% Tr. \$750/Acre PP Phillips Petroleum Co. out of 5% 14.28571% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil C Gulf Oil Corporation Pan American Petrole  Phillips Petroleum Yates Petroleum Corp  From 8900' to Base P Cities Service Oil C Gulf Oil Corporation Pan American Petrole  Phillips Petroleum C  Below Base Penn Form Cities Service Oil C Gulf Oil Corporation Pan American Petrole  Phillips Petroleum C	

EXHIBIT "B"  
BUBBLING SPRING  
EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
320.00	LC-070032-B 1-1-74	All-U.S.A.	Gulf Oil Corporation	Pauline A. Galt \$750/Acre PP out of 5%	Surface to 8900' Gulf Oil Corporation 74.03350% Pan American Petroleum Corporation 25.00000% Yates Petroleum Corporation 0.96650% From 8900' to Base Penn Gulf Oil Corporation 50.00000% Pan American Petroleum Corporation 50.00000% Below Base Penn Formation Gulf Oil Corporation 100.00000%
120.00	LC-071847 1-1-74	All-U.S.A.	Cities Service Oil Co. Childress Royalty 7.14286% Co., E.E. Nearburg, Gulf Oil Corporation Anna A. (Nearburg) 28.57143% Reischman, Tom Pan American Petroleum Ingram, E.H. Ward- Corp. 50.00000% Tr. \$750/Acre PP Phillips Petroleum Co. out of 5% 14.28571% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000% Phillips Petroleum 14.28571% Yates Petroleum Corp. 1.10457% From 8900' to Base Penn. Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571% Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%	

## EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
3	T. 20 S. - R. 26 E. Sec. 22: SE/4 NE/4	40.00	LC-071847-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Gulf Oil Corporation Pan American Petroleum Phillips Petroleum Yates Petroleum Co. From 8900' to Base Cities Service Oil Gulf Oil Corporation Pan American Petroleum Phillips Petroleum Below Base Penn For Cities Service Oil Gulf Oil Corporation Pan American Petroleum Phillips Petroleum
4	T. 20 S. - R. 26 E. Sec. 21: E/2 SE/4 Sec. 28: S/2 NE/4, SE/4 SE/4, NE/4 NE/4	240.00	NM-03215 H.B.P.	All-U.S.A.	Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829%  Pan American Petroleum Corp. 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom  Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Gulf Oil Corporation Pan American Petroleum Phillips Petroleum Yates Petroleum Co. From 8900' to Base Cities Service Oil Gulf Oil Corporation Pan American Petroleum Phillips Petroleum Below Base Penn For Cities Service Oil

PRING, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE	
E. E/4	40.00	LC-071847-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%  From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571%  Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%
E. SE/4 NE/4	240.00	NM-03215 H.B.P.	All-U.S.A.	Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829%  Pan American Petroleum Corp. 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg). Reischman, Tom  Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000%  Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%  From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571% Below Base Penn Formation Cities Service Oil Co. 3.57143%



## EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
4 Contd.							Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co.
5	T. 20 S. - R. 26 E. Sec. 21: NW/4 SE/4 Sec. 27: E/2 NW/4 Sec. 28: N/2 SE/4, SW/4 SE/4	240.00	NM-03215-A H.B.P.	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward-Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co. Yates Petroleum Corp.  From 8900' to Base Penn Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co.  Below Base Penn Form Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co.
6	T. 20 S. - R. 26 E. Sec. 22: SW/4 Sec. 27: NW/4 NW/4	200.00	NM-03217 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corp. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward-Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co. Yates Petroleum Corp.  From 8900' to Base Penn Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum  Phillips Petroleum Co.

PRING, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
240.00 SW/4	NM-03215-A H.B.P.	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%
					Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%
200.00	NM-03217 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corp. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571%
					Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%
200.00	NM-03217 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corp. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%
					From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571%

## EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
6 Contd.							Below Base Penn Form Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum Phillips Petroleum Co.
7	T. 20 S. - R. 26 E. Sec. 22: NW/4, SE/4	320.00	NM-03217-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward-Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum Phillips Petroleum Co. Yates Petroleum Corp. From 8900' to Base Penn Form Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum Phillips Petroleum Co.
8	T. 20 S. - R. 26 E. Sec. 21: W/2 NE/4	80.00	NM-03365 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corp. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward-Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum Phillips Petroleum Co. Yates Petroleum Co. From 8900' to Base Penn Form Cities Service Oil Co. Gulf Oil Corporation

# DDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
320.00	NM-03217-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50.00000% Phillips Petroleum Co. 50.00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%
					Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%
80.00	NM-03365 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corp. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571%
					Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%
80.00	NM-03365 1-1-74	All-U.S.A.	Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corp. 50.00000% Phillips Petroleum Co. 14.28571%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Co. 1.10457%
					From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143%

## EXHIBIT "B" - BUBCLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTER AND OWNERSHIP PERCENTAGE
8							Pan American Petrol
Contd.							Phillips Petroleum
							Below Base Penn For
							Cities Service Oil
							Gulf Oil Corporatio
							Pan American Petrol
							Phillips Petroleum
9	T. 20 S. - R. 26 E. Sec. 21: E/2 NE/4	80.00	NM-03365-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50,00000% Phillips Petroleum Co. 50,00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward-Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Surface to 8900' Cities Service Oil Gulf Oil Corporation Pan American Petrol  Phillips Petroleum Yates Petroleum Cor  From 8900' to Base Cities Service Oil Gulf Oil Corporation Pan American Petrol  Phillips Petroleum  Below Base Penn For Cities Service Oil Gulf Oil Corporation Pan American Petrol  Phillips Petroleum
10	T. 20 S. - R. 26 E. Sec. 27: All of NE/4 SW/4 5.20 East of Pecos River		NM-038124 1-1-74	All-U.S.A.	Cities Service Oil Co.	Peter O. Nyce, Jr. & Christine P. Nyce 1%	Surface to 8900' Cities Service Oil Gulf Oil Corporation Pan American Petrol  Yates Petroleum Co

RING, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
80.00	NM-03365-A 1-1-74	All-U.S.A.	Cities Service Oil Co. 50,00000% Phillips Petroleum Co. 50,00000%	Childress Royalty Co., E.E. Nearburg, Anna A. (Nearburg) Reischman, Tom Ingram, E.H. Ward- Tr. \$750/Acre PP out of 5% Foster Morrell 2% Tracy Clark & Robert Boling 1/4 of 1%	Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571%
					Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%
4 SW/4 5.20 COS	NM-038124 1-1-74	All-U.S.A.	Cities Service Oil Co.	Peter O. Nyce, Jr. & Christine P. Nyce 1%	Surface to 8900' Cities Service Oil Co. 3.57143% Gulf Oil Corporation 56.03829% Pan American Petroleum Corporation 25.00000% Phillips Petroleum Co. 14.28571% Yates Petroleum Corp. 1.10457%
					From 8900' to Base Penn Cities Service Oil Co. 7.14286% Gulf Oil Corporation 28.57143% Pan American Petroleum Corporation 50.00000% Phillips Petroleum Co. 14.28571%
					Below Base Penn Formation Cities Service Oil Co. 3.57143% Gulf Oil Corporation 14.28571% Pan American Petroleum Corporation 75.00000% Phillips Petroleum Co. 7.14286%
					Surface to 8900' Cities Service Oil Co. 25.00000% Gulf Oil Corporation 48.06700% Pan American Petroleum Corporation 25.00000% Yates Petroleum Corp. 1.93300%

## EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
10 Contd.							Below 8900' Cities Service Oil Co Pan American Petroleum
11	T. 20 S. - R. 26 E. Sec. 27: N/2 SE/4 East of Pecos River	21.00	NM-038124-A 1-1-74	All-U.S.A.	Pan American Petroleum Corporation	Peter Q. Nyce, Jr. & Christine P. Nyce 1%	Surface to 8900' Gulf Oil Corporation Pan American Petroleum  Yates Petroleum Corp. Below 8900' Pan American Petroleum
12	T. 20 S. - R. 26 E. Sec. 27: E/2 NE/4	80.00	NM-0283953A 1-1-74	All-U.S.A.	Gulf Oil Corporation	David H. Evans 5%	Surface to 8900' Gulf Oil Corporation Pan American Petroleum  Yates Petroleum Corp.  From 8900' to Base Penn Gulf Oil Corporation Pan American Petroleum
13	T. 20 S. - R. 26 E. Sec. 26: E/2, NW/4, E/2 963.67 SW/4 Sec. 35: E/2, E/2 W/2 Save and except an un- surveyed 76.33 acre tract lying along the West side of SE/4 SW/4 of Sec. 26 and E/2 W/2 Sec. 35.		NM-0338758 H.B.P.	All-U.S.A.	Gulf Oil Corporation	Pauline A. Galt \$500/Acre PP out of 1/2 of 1%-George D. Riggs \$500/Acre PP out of 2.25%-Neil H. Wills \$500/Acre PP out of 2.25%	Below Base Penn Forma Gulf Oil Corporation  Surface to 8900' Gulf Oil Corporation Pan American Petroleum  Yates Petroleum Corp.  From 8900' to Base Penn Gulf Oil Corporation Pan American Petroleum

EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
					Below 8900' Cities Service Oil Co. 50.00000% Pan American Petroleum Corporation 50.00000%
21.00	NM-038124-A 1-1-74	All-U.S.A.	Pan American Petroleum Corporation	Peter Q. Nyce, Jr. & Christine P. Nyce 1%	Surface to 8900' Gulf Oil Corporation 48.06700% Pan American Petroleum Corporation 50.00000% Yates Petroleum Corp. 1.93300% Below 8900' Pan American Petroleum Corporation 100.00000%
80.00	NM-0283953A 1-1-74	All-U.S.A.	Gulf Oil Corporation	David M. Evans 5%	Surface to 8900' Gulf Oil Corporation 74.03350% Pan American Petroleum Corporation 25.00000% Yates Petroleum Corp. 0.96650% From 8900' to Base Penn Gulf Oil Corporation 50.00000% Pan American Petroleum Corporation 50.00000%
2 963.67	NM-0338758 H.B.P.	All-U.S.A.	Gulf Oil Corporation	Pauline A. Galt \$500/Acre PP out of 1/2 of 1%-George D. Riggs \$500/Acre PP out of 2.25%-Neil H. Wills \$500/Acre PP out of 2.25%	Below Base Penn Formation Gulf Oil Corporation 100.00000% Surface to 8900' Gulf Oil Corporation 74.03350% Pan American Petroleum Corporation 25.00000% Yates Petroleum Corp. 0.96650% From 8900' to Base Penn Gulf Oil Corporation 50.00000% Pan American Petroleum Corporation 50.00000%



## EXHIBIT "B" - GUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
13 Contd.							Below Base Penn Format Gulf Oil Corporation
14	T. 20 S. - R. 26 E. Sec. 27: W/2 NE/4	80.00	NM-0426336 1-1-74	All-U.S.A.	Pan American Petroleum Corporation	F. J. Bradshaw 3%	Surface to 8900' Gulf Oil Corporation Pan American Petroleum Yates Petroleum Corp. Below 8900' Pan American Petroleum
15	T. 20 S. - R. 26 E. Sec. 27: SW/4 NW/4, NW/4 SW/4 lying East of Pecos River Sec. 28: NW/4 NE/4 lying East of Pecos River	14.00	BLM-A-026872 1-1-74	All-U.S.A.	Cities Service Oil Co.	Peter O. Nyce, Jr. & Christine P. Nyce 1%	Surface to 8900' Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum Yates Petroleum Corp. From 8900' to Base Pe Cities Service Oil Co. Gulf Oil Corporation Pan American Petroleum Below Base Penn Forma Cities Service Oil Co. Pan American Petroleum
16	T. 20 S. - R. 26 E. Sec. 21: All SW/4 SE/4 lying East of Pecos River	28.00	BLM-A-026872-A 1-1-74	All-U.S.A.	Pan American Petroleum Corporation	Peter O. Nyce, Jr. & Christine P. Nyce 1%	Surface to 8900' Gulf Oil Corporation Pan American Petroleum Yates Petroleum Corp. From 8900' to Base Pe Gulf Oil Corporation

ING, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
80.00	NM-0426336 1-1-74	All-U.S.A.	Pan American Petroleum Corporation	F. J. Bradshaw 3%	Below Base Penn Formation Gulf Oil Corporation 100.00000%
					Surface to 8900' Gulf Oil Corporation 48.06700% Pan American Petroleum Corporation 50.00000% Yates Petroleum Corp. 1.93300%
					Below 8900' Pan American Petroleum Corporation 100.00000%
14.00	BLM-A-026872 1-1-74	All-U.S.A.	Cities Service Oil Co.	Peter O. Nyce, Jr. & Christine P. Nyce 1%	Surface to 8900' Cities Service Oil Co. 12.50000% Gulf Oil Corporation 61.05024% Pan American Petroleum Corporation 25.00000% Yates Petroleum Corp. 1.44976%
					From 8900' to Base Penn Cities Service Oil Co. 25.00000% Gulf Oil Corporation 25.00000% Pan American Petroleum Corporation 50.00000%
					Below Base Penn Formation Cities Service Oil Co. 50.00000% Pan American Petroleum Corporation 50.00000%
E/4 of 28.00	BLM-A-026872-A 1-1-74	All-U.S.A.	Pan American Petroleum Corporation	Peter O. Nyce, Jr. & Christine P. Nyce 1%	Surface to 8900' Gulf Oil Corporation 61.05025% Pan American Petroleum Corporation 37.50000% Yates Petroleum Corp. 1.44975%
					From 8900' to Base Penn Gulf Oil Corporation 25.00000%

EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
16 Contd.							Pan American Petroleum  Below Base Penn Pan American Petroleum
17	T. 20 S. - R. 26 E. Sec. 26: NW/4 SW/4 lying East of Pecos River	37.25	BLM-A-032236-B H.B.P.	All-U.S.A.	Gulf Oil Corporation	Elk Oil Co.	2% Gulf Oil Corporation
17 Tracts		Federal Lands	2,869.12 Acres		93.21% of Unit Area		
18	T. 20 S. - R. 26 E. Sec. 27: Fairchild Farm 115.5 Trs. 785,786,787,788, 789,790,being all of N/2 S/2 & SE/4 SE/4 SAVE & EXCEPT that acreage lying & being on the left or east bank of the Pecos River & SAVE & EXCEPT Fairchild Farm Tr.784 conveyed to W.M.Trutt by Tax Deed recorded in Vol.06,Pg.31, Deed Record,Eddy Co.,N.M., & being approx.the North 16 acres of NW/4 SW/4		Fee Lease	12.5% T. D. Hardesty	Gulf Oil Corporation	None	Gulf Oil Corporation
19	T. 20 S. - R. 26 E. Sec. 27: Fairchild Farm 16.00 Tr.784, being approx. the North 16 acres of NW/4 SW/4		Fee Lease	18.75%-W.M. Trutt	Gulf Oil Corporation	None	Gulf Oil Corporation

ING, EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
					Pan American Petroleum Corporation 75.00000%
					Below Base Penn Pan American Petroleum Corporation 100.00000%
37.25	BLM-A-032236-B H.B.P.	All-U.S.A.	Gulf Oil Corporation	Elk Oil Co. 2%	Gulf Oil Corporation 100.00000%
Federal Lands		2,869.12 Acres	93.21% of Unit Area		
Farm 115.5 8, f N/2 E & c f child d to eed Pg.31, N.M., North /4	Fee Lease	12.5% T. D. Hardesty	Gulf Oil Corporation	None	Gulf Oil Corporation 100.00000%
Farm 16.00 x. of	Fee Lease	18.75%-W.H. Truitt	Gulf Oil Corporation	None	Gulf Oil Corporation 100.00000%

EXHIBIT "B" - BUBBLING SPRING, EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
20	T. 20 S. - R. 26 E. Sec. 26: NW/4 SW/4 SAVE & EXCEPT all that part of each of the above described tracts lying & being on the left or east bank of the Pecos River	2.75	Fee Lease H.B.P.	C.L. Thacker	Pan American Petroleum Corporation	None	Surface to 8900' Gulf Oil Corporation Pan American Petroleum  Yates Petroleum Corp.  Below 8900' Pan American Petroleum
21	T. 20 S. - R. 26 E. Sec. 21: SW/4 SE/4 being a part of the Fairchild Farm Tr. 781 Sec. 27: SW/4 NW/4 Sec. 28: NW/4 NE/4 being Fairchild Farm Trs. 782, 783 & a part of 781, SAVE & EXCEPT all that part of each of the above described tracts lying & being on the left or east bank of the Pecos River	74.75	Fee Lease	All-C.C. Foster	Tesoro Petroleum Corp	William R. Lawson 3%	Tesoro Petroleum Corp.

4 Tracts	Fee Lands	209 Acres	6.79% of Unit Area
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RECAPITULATION			
FEDERAL LANDS	2,869.12	ACRES	93.21000% UNIT AREA
FEE LANDS	209.00	ACRES	6.79000% UNIT AREA
TOTAL LANDS	3,078.12	ACRES	100.00000% UNIT AREA

EDDY COUNTY, NEW MEXICO

NUMBER OF ACRES	SERIAL NO. AND EXPIRATION DATE OF LEASE	BASIC ROYALTY AND OWNERSHIP PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND OWNERSHIP PERCENTAGE	WORKING INTEREST AND OWNERSHIP PERCENTAGE
2.75	Fee Lease H.B.P.	C.L. Thacker	Pan American Petroleum Corporation	None	Surface to 8900' Gulf Oil Corporation 48.06700% Pan American Petroleum Corporation 50.00000% Yates Petroleum Corp. 1.93300% Below 8900' Pan American Petroleum Corporation 100.00000%
74.75	Fee Lease	All-C.C. Foster	Tesoro Petroleum Corp	William R. Lawson 3%	Tesoro Petroleum Corp. 100.00000%

Fee Lands 209 Acres 6.79% of Unit Area

RECAPITULATION

FEDERAL LANDS	2,869.12	ACRES	93.21000%	UNIT AREA
FEE LANDS	209.00	ACRES	6.79000%	UNIT AREA
TOTAL LANDS	3,078.12	ACRES	100.00000%	UNIT AREA

DRAFT

dr/

Expedite  
BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE No. 5070

Order No. R-4643

APPLICATION OF AMOCO PRODUCTION COMPANY  
FOR APPROVAL OF THE BUBBLING SPRING  
UNIT AGREEMENT, EDDY, COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on  
October 3, 1963, at Santa Fe, New Mexico, before Examiner  
Richard L. Stamets.

NOW, on this \_\_\_\_\_ day of October, 1963, the Commission,  
a quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

(1) That due public notice having been given as required by  
law, the Commission has jurisdiction of this cause and the subject  
matter thereof.

(2) That the applicant, Amoco Production Company,  
seeks approval of the Bubbling Spring Unit Agreement  
covering 3078.12 acres, more or less, of ~~State~~ Federal lands  
and Fee  
described as follows:

EDDY COUNTY, NEW MEXICO  
TOWNSHIP 20 S, RANGE 26 E, NMPM

Section 21: E/2

Section 22: 1/4

Section 23: S/2

Section 26: N/2, SE/4, E/2 SW/4 and  
NW/4 SW/4

Section 27: N/2 and N/2 S/2

Section 28: E/2

Section 35: E/2 and E/2 W/2

(3) That approval of the proposed unit agreement should promote the prevention of waste and the protection of correlative rights within the unit area.

IT IS THEREFORE ORDERED:

(1) That the Bubbling Spring Unit Agreement is hereby approved.

(2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.

(3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(4) That this order shall become effective upon the approval of said unit agreement by the ~~Commission of Public Lands for the State of New Mexico and~~ the Director of the United States Geological Survey; that this order shall terminate ipso facto upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.