



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONY ANAYA
GOVERNOR

April 24, 1986

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Mr. William F. Carr
Campbell & Black
Attorneys at Law
Post Office Box 2208
Santa Fe, New Mexico 87501

Re: CASE NO. 8875
ORDER NO. R-3212

Applicant:

ARCO Oil and Gas Company

Dear Sir:

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

Sincerely,

B. L. Hunt

R. L. STAMETS
Director

RLS / fd

Copy of order also sent to:

Hobbs OCD	x
Artesia OCD	x
Aztec OCD	

Other _____

CAMPBELL & BLACK, P.A.
LAWYERS

JACK M. CAMPBELL
BRUCE D. BLACK
MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
J. SCOTT HALL
PETER N. IVES
JOHN H. BEMIS

GUADALUPE PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
TELECOPIER: (505) 983-6043

April 4, 1986

HAND DELIVERED

RECEIVED

APR 4 1986

Ms. Florene Davidson
Oil Conservation Division
New Mexico Department of
Energy and Minerals
State Land Office Building
Santa Fe, New Mexico 87501

OIL CONSERVATION DIVISION

Case 8875

Re: Application of Arco Oil & Gas Company for Triple
Downhole Commingling of the Blinebry, Drinkard and
Wantz Abo Pools, Lea County, New Mexico.

Dear Florene:

Pursuant to our telephone conversation of this date, I am enclosing three additional copies of Mr. Lowder's letter of March 14, 1986 to Dick Stamets concerning the above-referenced matter. Please treat this letter as Arco's application in the above-referenced case which has been scheduled for hearing on April 16, 1986.

Your attention to this matter is appreciated.

Very truly yours,



William F. Carr

WFC/cv
enclosure

ARCO Oil and Gas Company
Permian District
Post Office Box 1610
Midland, Texas 79702



March 14, 1986

Mr. Richard L. Stamets
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

RECEIVED

APR 4 1986

OIL CONSERVATION DIVISION

Dear Mr. Stamets:

Application for Triple Downhole Commingling of the
Blinebry, Drinkard and Wantz Abo Pools
S. J. Sarkeys Well No. 3
Unit I, Section 23, T21S, R37E
Lea County, New Mexico

Case 8875

ARCO Oil and Gas Company respectfully requests that a hearing be scheduled in order to obtain approval to triple downhole commingle the Blinebry, Drinkard and Wantz Abo pools in the S. J. Sarkeys Well No. 3. The subject well is located in Section 23, T-21-S, R-37-E of Lea County, New Mexico.

The S. J. Sarkeys Well No. 3 was initially completed in the Wantz Abo in February, 1954. The Wantz Abo was abandoned in July, 1964 and the well was converted to a dual completion in the Blinebry and Drinkard pools. The Blinebry and Drinkard were downhole commingled in October, 1980 as per NMOCDC Order No. DHC-290. In November, 1985, a workover on the S. J. Sarkeys No. 3 was performed to: 1) test the Wantz Abo zone; and 2) add perforations to the Blinebry and Drinkard zones. The Wantz Abo was tested in order to gain information that will be used in this application requesting approval to triple downhole commingle the Blinebry, Drinkard and Wantz Abo pools. The Wantz Abo is now temporarily abandoned with the use of a retrievable bridge plug. The S. J. Sarkeys No. 3 is currently a downhole commingled Blinebry/Drinkard producer.

The triple downhole commingling of the Blinebry, Drinkard and Wantz Abo is necessary to permit efficient, economical production from all three zones. No crossflow between zones is expected. Ownership of the zones to be commingled is common, including working interest and royalty. We believe that this request is justified in the interest of conservation and to protect correlative rights.

Attached is the information requested by OCD Rule 303-C for downhole commingling applications. Thank you for your consideration.

Yours very truly,

Jack T. Lowder
Senior Operations/Analytical Engineer

JTL:lu

S. J. Sarkeys Well No. 3
Triple Downhole Commingling

INFORMATION FOR DOWNHOLE COMMINGLING

a) Operator: ARCO Oil and Gas Company
P.O. Box 1610
Midland, Texas 79702

b) Lease, Well, Location and Pools:

S. J. Sarkeys Well No. 3
2310' FSL and 330' FEL
Section 23, T21S, R37E
Lea County, New Mexico

Commingled Pools: Blinebry, Drinkard and Wantz Abo

c) Acreage Dedication and Offset Ownership:
(See Attachments)

d) 24-Hour Productivity Tests
(See Attached Form C-116)

e) Decline Curves and Completion History:
(See Attachments)

f) Bottom Hole Pressures:

Based on 72-hour bottom hole pressure surveys performed on the S. J. Sarkeys No. 3 in January and February, 1986, the bottom-hole pressures of the Blinebry, Drinkard and Wantz Abo are as follows:

<u>Formation</u>	<u>Sub-Sea Depth</u>	<u>Bottom-Hole Pressure (psia)</u>
Blinebry	-2430	456
Drinkard	-3071	641
Wantz Abo	-3613	1080

g) Fluid Incompatibility:

No fluid incompatibility has been observed in ARCO's S. J. Sarkeys Well No. 4, a south offset, which has been triple downhole commingled in the Wantz Abo, Drinkard and Blinebry since November, 1984.

h) Value of Commingled Fluids:

The S. J. Sarkeys lease is classified as stripper on a surface basis due to the presence of several producing zones. Reentering the Wantz Abo and triple downhole commingling the Wantz Abo, Drinkard and Blinebry will not endanger this stripper classification. The combined oil streams will have the same value as the separated oil streams.

i) Allocation of Production:

Wantz Abo Oil	32%
Drinkard Oil	12%
Blinebry Oil	56%
	<u>100%</u>
Wantz Abo Gas	22%
Drinkard Gas	7%
Blinebry Gas	71%
	<u>100%</u>

Blinebry is currently producing 32 BOPD and 211 MCFGD. Drinkard is currently producing 6 BOPD and 21 MCFGD. Wantz Abo produced 18 BOPD and 64 MCFGD before it was temporarily abandoned.

j) All offset operators have been notified by registered mail of the proposed triple commingling and given a copy of this application.

ARCO Oil and Gas Company
Permian District
Post Office Box 1610
Midland, Texas 79702
Telephone 915 684 0100



February 19, 1986

OFFSET OPERATORS
S. J. SARKEYS LEASE

Gentlemen:

Notification of Intent to Triple Downhole Commingle the
Wantz Abo, Drinkard and Blinebry
S. J. Sarkeys Well No. 3
2310' FSL and 330' FEL
Section 23, T-21-S, R-37-E
Lea County, New Mexico

In accordance with the New Mexico Oil Conservation Division, we are notifying all offset operators of our intentions to triple downhole commingle production from the Blinebry, Drinkard, and Wantz Abo in the subject well. This letter serves as a proper notification.

Yours very truly,

Jack T. Lowder
Senior Engineer

JTL:tis

S. J. SARKEYS LEASE

OFFSET OPERATORS

Chevron U.S.A., Inc.
P. O. Box 670
Hobbs, New Mexico 88240

Mobil Producing Texas and New Mexico, Inc.
P. O. Box 633
Midland, Texas 79702

Shell Oil Company
600 N. Marienfeld, Suite 310
Midland, Texas 79701

Texaco, Inc.
P. O. Box 728
Hobbs, New Mexico 88240

The Eastland Oil Company
One Marienfeld Place, Suite 560
Midland, Texas 79702

Sun Exploration and Production Co.
P. O. Box 1861
Midland, Texas 79702

Acoma Oil Corporation
Executive Plaza Building
210 W. 6th
Suite 1200
Fort Worth, Texas 76102

Russell E. Leeser
1390 Ridge Rd.
Littleton, Colorado 80120

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

TONEY ANAYA
GOVERNOR

February 17, 1986

50 YEARS



1935 - 1985

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

ARCO Oil & Gas Company
P.O. Box 1610
Midland, TX 79702

Attn: Mr. Jack T. Lowder

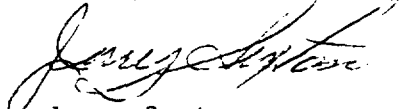
SUBJECT: S.J. Sarkey No. 3-I, Sec. 23, T21S, R37E
Revised Production Allocation DHC-290

Dear Mr. Lowder:

Your recommendation for a revision in the percentage allocation of Blinbry and Drinkard production as authorized by DHC-290 is acceptable as outlined in your February 14, 1986 letter.

Very truly yours,

OIL CONSERVATION DIVISION


Jerry Sexton
Supervisor, District I

ed

ARCO Oil and Gas Company
Permian District
Post Office Box 1610
Midland, Texas 79702
Telephone 915 684 0100



February 14, 1986

Mr. J. T. Sexton
Supervisor and Oil & Gas Inspector
Oil Conservation Division
P.O. Box 1980
Hobbs, New Mexico 88240

RE: S. J. Sarkeys No. 3
Recommendation for Revised Production Allocation
Unit I - Section 23-T21S-R37E
Lea County, New Mexico

Dear Mr. Sexton:

A workover on the ARCO-operated S. J. Sarkeys No. 3 has recently been completed to: 1) test the Wantz Abo zone; and 2) add perforations and acidize the Blinebry and Drinkard zones. The Wantz Abo was tested in order to gain information that will be used in an application requesting approval to triple downhole commingle the Blinebry, Drinkard and Wantz Abo. The Wantz Abo is now temporarily abandoned with the use of a retrievable bridge plug. The S. J. Sarkeys No. 3 is currently a downhole commingled Blinebry/Drinkard producer. Downhole commingling of the Blinebry and Drinkard zones in the S. J. Sarkeys No. 3 was approved by NMOCD Order No. DHC-290, and the Blinebry and Drinkard have been downhole commingled since November, 1980. Since perforations were added to both the Blinebry and the Drinkard, and since both zones were acidized, I recommend that we assign revised allocation factors to the downhole commingled Blinebry and Drinkard production.

After adding perforations and acidizing the Drinkard, the zone was swab tested for 28-3/4 hours and recovered 8 B0 and 61 BW. After adding perforations and acidizing the Blinebry, the Blinebry was swab tested for 28 hours and recovered 38 B0 and 122 BW. By normalizing the swab test data for the Blinebry and Drinkard to a 24 hour period, the production from each zone can be allocated as follows:

	Oil		Water	
	<u>BOPD</u>	<u>%</u>	<u>BOPD</u>	<u>%</u>
Blinebry	32.6	83	104.6	67
Drinkard	6.7	17	50.9	33
	<u>39.3</u>	<u>100</u>	<u>155.5</u>	<u>100</u>

Mr. J. T. Sexton
February 14, 1985
Page Two

Under NMOCD Order No. DHC-290, 80% of the oil and 91% of the gas was allocated to the Blinebry, and 20% of the oil and 9% of the gas was allocated to the Drinkard. Due to adding perforations and acidizing both the Blinebry and the Drinkard, I recommend that we adopt the following allocation factors for the S. J. Sarkeys No. 3:

	<u>Oil</u>	<u>Gas</u>	<u>Water</u>
Blinebry	83	91	67
Drinkard	17	9	33
	<u>100</u>	<u>100</u>	<u>100</u>

If you have any questions or comments, please call me at (915) 684-0157. A copy of NMOCD Order No. DHC-290 is attached. Thank you for your consideration.

Very truly yours,

Jack T. Lowder

Jack T. Lowder
Senior Engineer

JTL:tis
Attachments

cc: Ms. Kathryn Dickens - Hobbs
Mr. Kenneth Gosnell - MIO 310



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

September 7, 1979

Arco Oil and Gas Company
P. O. Box 1610
Midland, Texas 79702

Attention: J. L. Tweed

Administrative Order No. DHC-290
S. J. Sarkeys Well No. 3
Unit I, Section 23, Township
21 South, Range 37 East, NMPM,
Lea County, New Mexico, Blinebry
Oil and Gas and Drinkard Pools

Gentlemen:

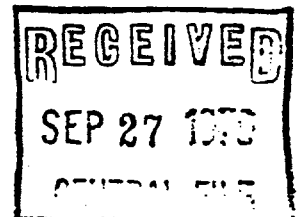
Reference is made to your recent application for an exception to Rule 303-A of the Division Rules and Regulations for the subject dually completed well to permit the removal of the down-hole separation and to commingle the production from both pools in the well-bore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303-C, and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and Division Order No. MC-1477-A, which authorized the dual completion and required separation of the zones, is hereby placed in abeyance.

In accordance with the provisions of Rule 303-C, total commingled oil production from the subject well shall not exceed 40 barrels per day and total water production from the well shall not exceed 80 barrels per day. The maximum amount of gas which may be produced daily from the well shall be determined by multiplying 4000 by top unit allowable for the Blinebry Oil and Gas Pool.

Assignment of allowable to the well and allocation of production from the well shall be on the following basis:

Upper Pool: 80%, Gas 91%
Lower Pool: 20%, Gas 9%

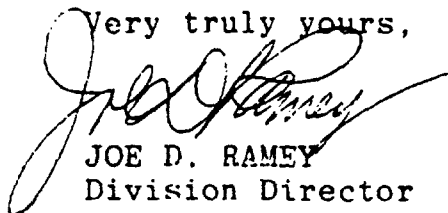


-2-

DHC-290

Pursuant to Rule 303-C 5, the commingling authority granted by this order may be rescinded by the Division Director if, in his opinion, conservation is not being best served by such commingling.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Joe D. Ramey", is written over the typed name and title.

JOE D. RAMEY
Division Director

JDP/CU/og

cc: Oil Conservation Division
Box 1980
Hobbs, New Mexico

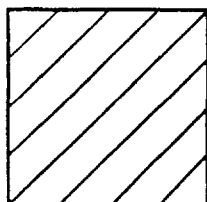
[illegible]

General Purpose Worksheet

Subject	Page No.	Of
File	By	Date

Texaco	ARCO	Mobil	Chevron
		Williamson	
D.A. Williamson	Roy Barton	Nancy Stephens	
Shell	ARCO	Mobil	
Eastland		Stephens Estate	
S. J. Sarkeys	S. J. Sarkeys	R.E. Leeser	
		Nancy	
Texaco	Acoma	Chevron	Kirby
	S. J. Sarkeys	Sun	
	Harper		
S. J. Sarkeys	S. J. Sarkeys	Sarkeys	Gulf Sarkeys

T-21-S



Dedicated Acreage

Blinebry : 40 acres
 Drinkard: 40 acres
 Wantz Abo: 40 acres

GAS-OIL RATIO TESTS

ARCO Oil and Gas Company		Pool		County																							
of Atlantic Richfield Company		Blinberry Drinkard Comm.		Lea																							
O. Box 1710, Hobbs, New Mexico 88240		TYPE OF TEST - (X)		Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>																							
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW. ABLE	DURATION OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT./BBL														
		U	S	T						R	WATER BBLs.	GRAV. OIL		OIL BBLs.	GAS M.C.F.												
Sarkeys	3	I	23	21	37	02/17/86	P	-	44	9	24	29	40.3	38	232	6105											
																	Corrected Oil Allocation	Allowable Increase	Oil	83% Fly O&G 17% Irkd 100%	=	32 BOPD	6 BOPD	38 BOPD	211 MCFD	21 MCFD	232 MCFD

No well will be assigned an allowable greater than the amount of oil produced on the official test.
During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.
Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.
Report casing pressure in lieu of tubing pressure for any well producing through casing.
Well original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 331 and appropriate pool rules.

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

[Signature]
(Signature)
Services Supv.
7/24/86

GAS-OIL RATIO TESTS

LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW. ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			Special	
		U	S	T	R						WATER BBLs.	GRAV. OIL	OIL BBLs.	GAS M.C.F.	GAS - OIL RATIO CU.FT/BBL
Sarkeys	3	I	23	21	37	01/11/86	P	22	33	24	2	40.3	18	64	3555
FILED FOR INFORMATION ONLY															

Operator ARCO Oil and Gas Company
V of Atlantic Richfield Company
County Lea
Pool Wantz Abo
TYPE OF TEST - (X) Scheduled ☐ Completion ☒ Special ☒

O. Box 1710, Hobbs, New Mexico 88240

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 301 and appropriate pool rules.

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

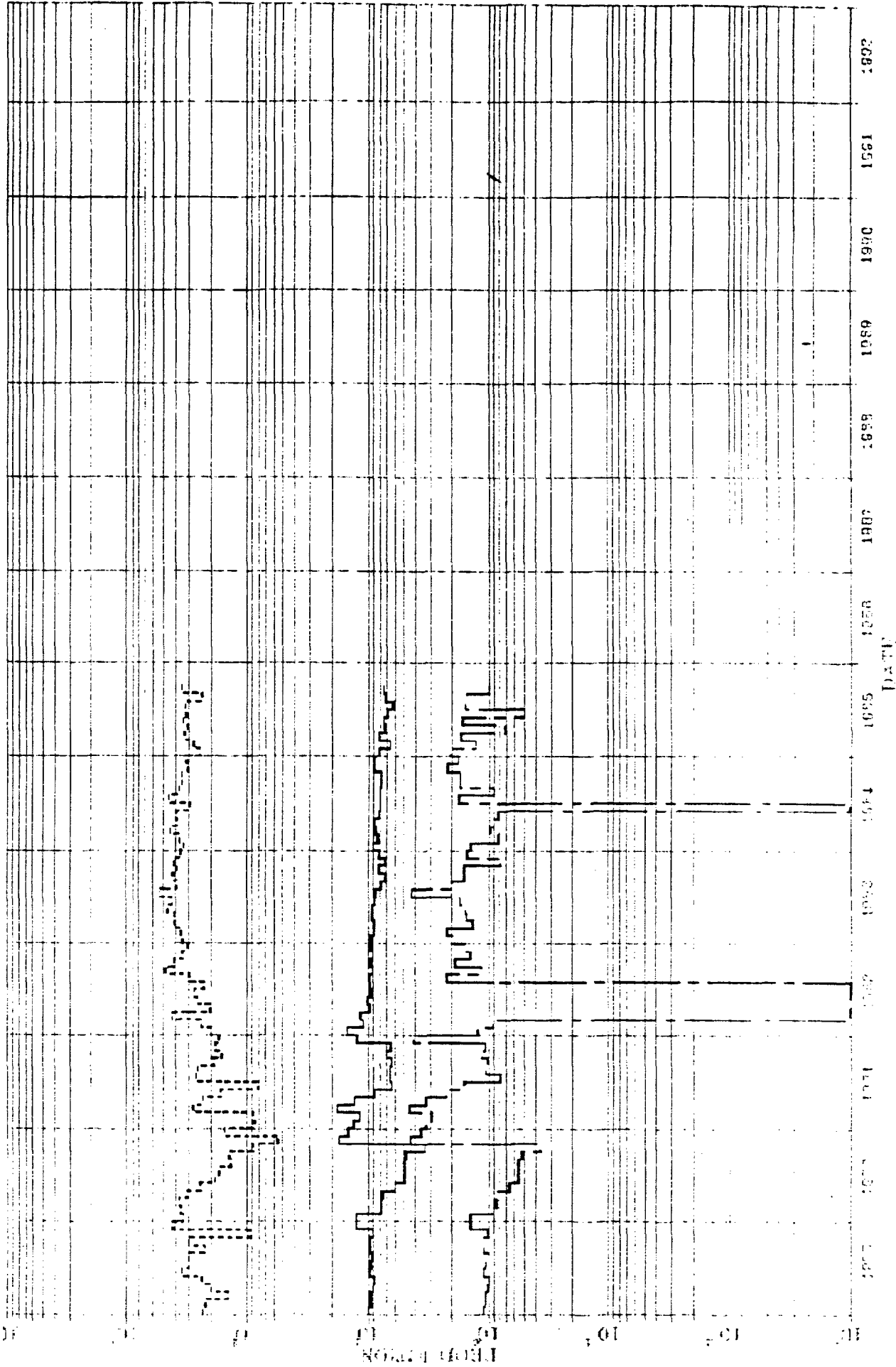
[Signature]
(Signature)
Services Supv.

2/13/86

(Title)

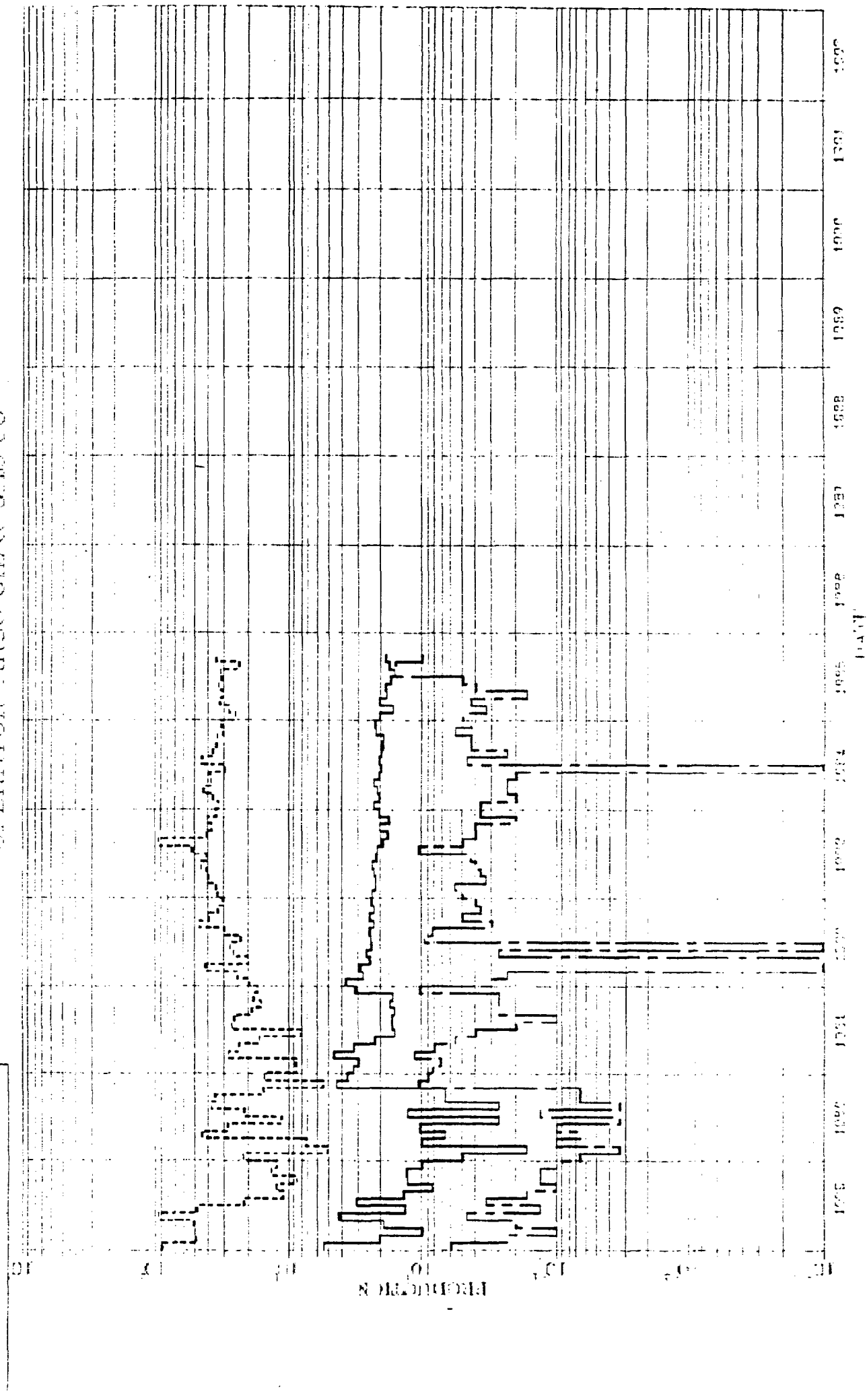
STATE NEW MEXICO COUNTY LEA
 TULSA DENVER OIL AND GAS
 LEASE S I SARKEYS WELL# 0000003
 OPERATOR ARCO OIL & GAS CO

OIL PRODUCTION STB/D
 GAS PRODUCTION MCF/D
 WATER PRODUCTION STB/D



STATE NEW MEXICO COUNTY LEA
 FIELD DECKARD
 LEASE S J SARKKEYS WELL# 0000005
 OPERATOR ARCO OIL & GAS CO

OIL PRODUCTION STBO/D
 GAS PRODUCTION MCF/D
 WATER PRODUCTION STBW/D



Called in by Bill Carr
3/25/86

April 16, 1986

ARCO Oil & Gas Company
blowhole Commingling
Blinberry, Brinkard, and
Wanty-Also

S. J. Darkeys # 3-I
Section 23, T 21S, R 37E

Lea County