

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



June 12, 1984

Mr. Joe D. Ramey, Director
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Ramey:

Application for Downhole Commingling of the
Justis Blinebry and Justis Montoya Pools
State Y Well No. 6
Unit H, Section 25, T25S, R37E
Lea County, New Mexico

ARCO Oil and Gas Company respectfully requests administrative approval under the provisions of Rule 303-C to downhole commingle the Justis Blinebry and Justis Montoya pools in the State Y Well No. 6. This well is located in Section 25, T-25-S, R-37-E of Lea County, New Mexico.

The State Y No. 6 was completed in February, 1959 as a dual oil well producing from the Ellenburger and Montoya zones. The Ellenburger was abandoned in December, 1960 at depletion. Cumulative production from the Ellenburger was 23 MBO. The Blinebry was then put on production as a flowing oil well at 85 BOPD and 28 BWPD with a GOR of 1047. In July, 1961, both the Montoya and Blinebry were placed on artificial lift. Currently, the Blinebry is flowing 28 MCFGPD up the casing/tubing annulus. Artificial lift was suspended in the Blinebry in January, 1984 when the fluid rate declined to 0 BOPD and 0 BWPD due to normal depletion. The Montoya currently makes 12 BOPD, 49 BWPD and 1 MCFGPD while being pumped under a packer. The combined water rate of 49 BWPD falls within the commingled limit of 70 BWPD from both zones. The oil rate of 12 BOPD is also within the commingled limit of 40 BOPD.

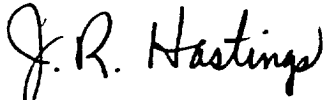
ARCO Oil and Gas Company has considered plugging and abandoning the Blinebry due to uneconomical rates. However, recent workover attempts have indicated that an extensive cementing program will be required to adequately squeeze numerous casing holes between the two zones. The remaining Montoya production is not sufficient to economically justify the remedial work needed to isolate the zones. Hence, downhole commingling will provide a feasible alternative to abandoning both intervals and is necessary to permit efficient, economical production from both zones.

Mr. Joe D. Ramey
June 12, 1984
Page 2

Ownership of the zones to be commingled is common, including working interest and royalty. We believe that this request to commingle the Justis Blinbry and Justis Montoya is justified in the interest of conservation and to protect correlative rights.

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

Yours very truly,



J. R. Hastings
District Engineer

JRH:JTL:sc
Atts.

cc: New Mexico Oil Conservation Division
P. O. Box 1980
Hobbs, New Mexico 88240

RECEIVED
JUN 15 1984
O.C.D.
HOBBES OFFICE

State Y No. 6

Information for Downhole Commingling

- (a) Operator: ARCO Oil and Gas Company
P. O. Box 1610
Midland, Texas 79702
- (b) Lease, Well, Location and Pools:
State Y No. 6
1650' FNL & 660' FEL
Section 25, T-25-S, R-37-E
Lea County, New Mexico
Justis Blinebry and Justis Montoya Pools
- (c) Acreage Dedication and Offset Ownership:
(See Attachments)
- (d) 24-hour Productivity Test
(See Attached Form C-116)
- (e) Decline Curve and Completion Resume
(See Attachments)
- (f) Bottom Hole Pressures: (See item k for additional information)
Blinebry: 267#
Montoya: 319#
- (g) Fluid Compatibility:
No incompatibility suspected. See Martin Water
Water Laboratories, Inc. attachment.
- (h) Effect of Downhole Commingling on Fluid Value:
Fluid values will not change. Blinebry and Montoya
oil, water and gas are already commingled at the
battery.
- (i) Allocation of Production - based on last production ratios:

	Oil	Gas	Water
Montoya	100%	3%	100%
Blinebry	--	97%	--

(j) Notification of Offset Operators:

All offset operators have been notified by certified mail of this downhole commingling application.

- (k) Bottom hole pressures were based on 72-hour static fluid level surveys of the subject well and a nearby producer performed during the last week of May, 1984. The bottom hole pressures of the Justis Blinebry and the Justis Montoya are as follows:

<u>Formation</u>	<u>ARCO Well Tested</u>	<u>Direction & Distance From State Y #6</u>	<u>Sub-Sea Depth</u>	<u>BHP (psig)</u>
Blinebry	State Y #6	--	-2218	267
Montoya	State Y #9	Northwest 738'	-3776	319

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



CERTIFIED
RETURN RECEIPT
REQUESTED

June 12, 1984

OFFSET OPERATORS
STATE Y LEASE

Gentlemen:

Notification of Intent to Downhole Commingle
the Justis Blinebry and Justis Montoya Pools
State Y No. 6
1650' FNL & 660' FEL
Section 25, T-25-S, R-37-E
Lea County, New Mexico

In accordance with New Mexico Oil Conservation Division regulations, you are hereby notified of ARCO Oil and Gas Company's application to downhole commingle production from the Justis Blinebry and Justis Montoya pools in the State Y No. 6 well.

Yours very truly,

A handwritten signature in cursive script that reads "J. R. Hastings".

J. R. Hastings
District Engineer

JRH:JTL:sc

OFFSET OPERATORS

STATE Y LEASE

Amerada Hess Corporation
2207 Industrial
Midland, Tx. 79701

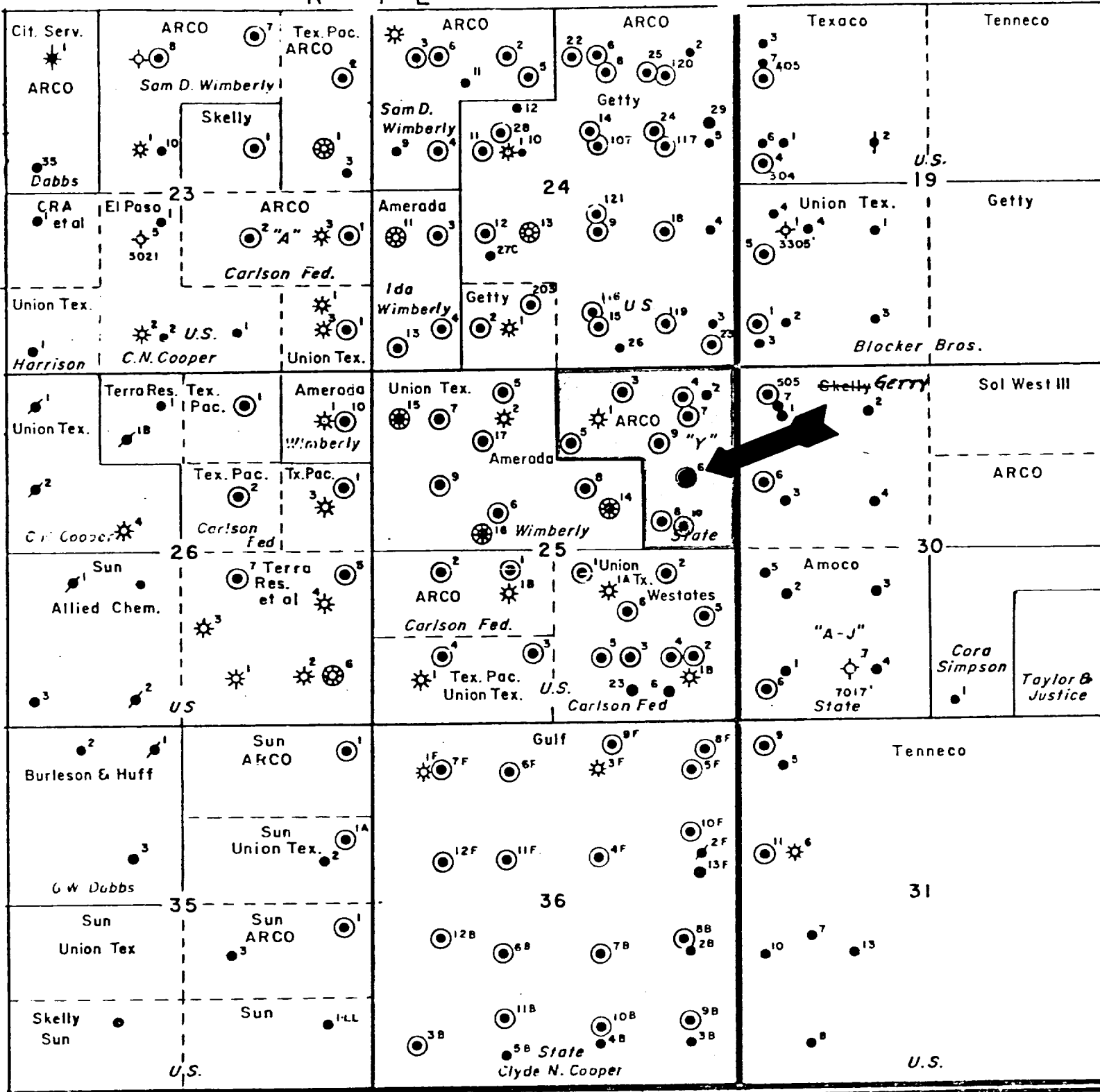
Amoco Producing & Exploration Co.
4044 Penbrook
Odessa, Tx. 79762

Getty Oil Company
Box 1231
Midland, Tx. 79702

Union Texas Petroleum Corporation
Box 2120 One Riverway
Houston, Tx. 77252

R 7 E

R 38 E



Dedicated Acreage

Justis Blinbry 40 acres

Justis Montoya 40 acres

ARCO Oil and Gas Company

Permian District Midland, Texas

LEA COUNTY, NEW MEXICO

SCALE 1" = 2000'

By D. BRUCKER	Drawn By	Date 5-80
Date 7-16-83	Revised By	Date
For WEST AREA ENGR.	Draw No	

NEW MEXICO OIL CONSERVATION COMMISSION
Well Location and Acreage Dedication Plat

Date: February 9, 1959

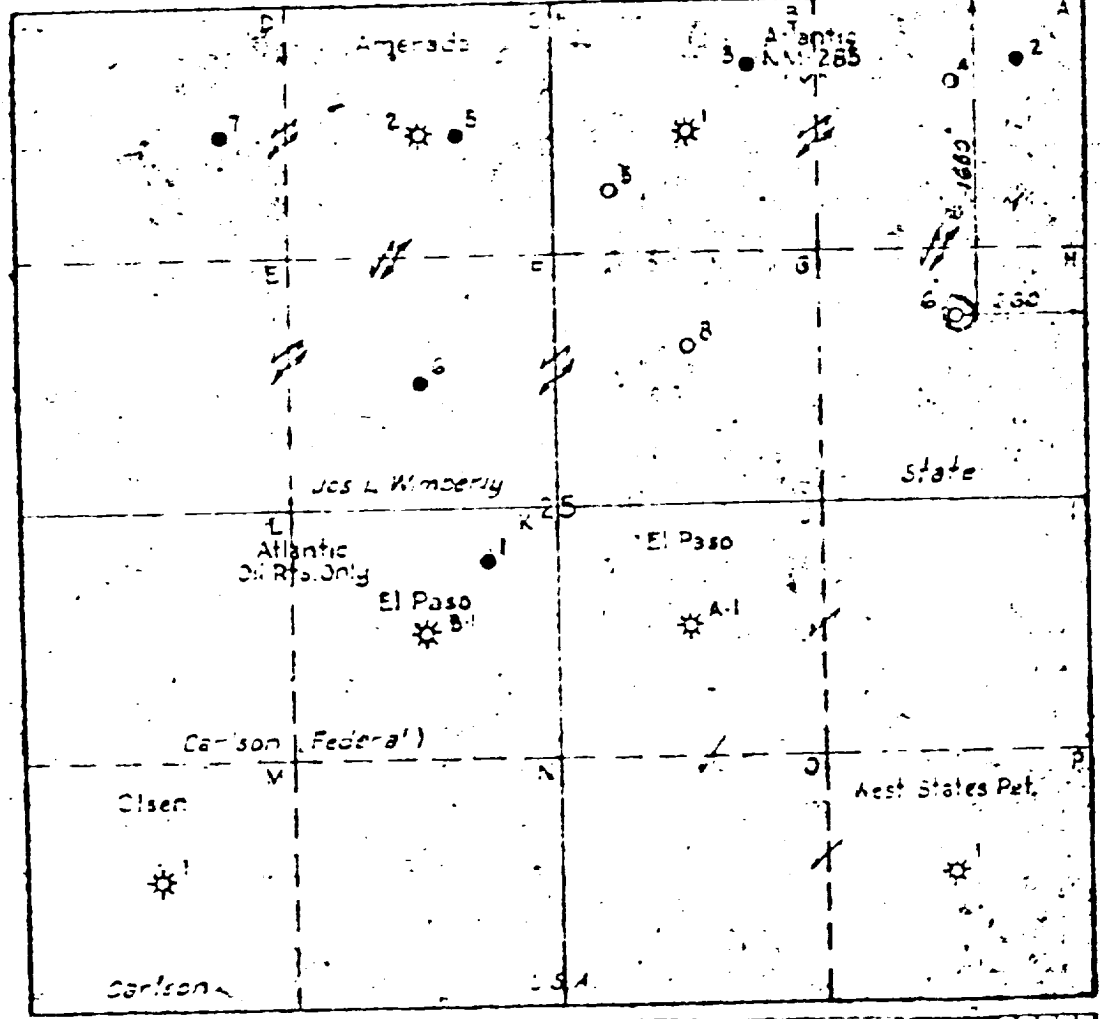
Section A.

Operator The Atlantic Refining Company Lease State "A"
Well No. 6 Unit Letter J Section 25 Township 25 South Range 37 East NMPM
Dated 1650 Feet From the North Line, Feet From the East Line
County Lea G. L. Elevation Dedicated Acreage 39.99 Acres
Name of Producing Formation Montoya & Ellenburger Pool Justis

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

<u>Owner</u>	<u>Land Description</u>

Section B



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

The Atlantic Refining Company
(Operator)
W. J. Stewart
(Representative)
P. O. Box 2215, Dallas, Texas
Address

This is to certify that the well location shown on the plat in Section B was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed February 5, 1959
Carl W. Hulse
C. W. Hulse, 1st Lt. Chief Surveyor
The Atlantic Refining Company

LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW. ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT/BBL
		U	S	T						WATER BLS.	GRAV. OIL BLS.	GAS M.C.F.	
State "y"	6	H	25	25S 37E	2/24/84	P	13	24	88	36.1	9	1	111
This test filed as production test for proposed application to down hole commingle with the Justis Blinberry Zone.													

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

(Signature)

Engrg. Tech. Spec.
(Title)

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.

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			GAS - OIL RATIO CU.FT/BBL	
		U	S	T						R	WATER BOLS.	GRAY. OIL		OIL BOLS.
State "y"	6	H	25	25S	37E	2/26/84	F 64/64	25#	1	24	0	0	13	-
This test filed as production test for proposed application to Down hole commingle with the Justis Montoya Zone.														

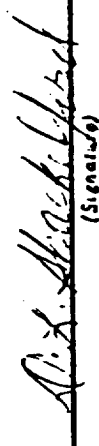
I hereby certify that the above information is true and complete to the best of my knowledge and belief.

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 well 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.

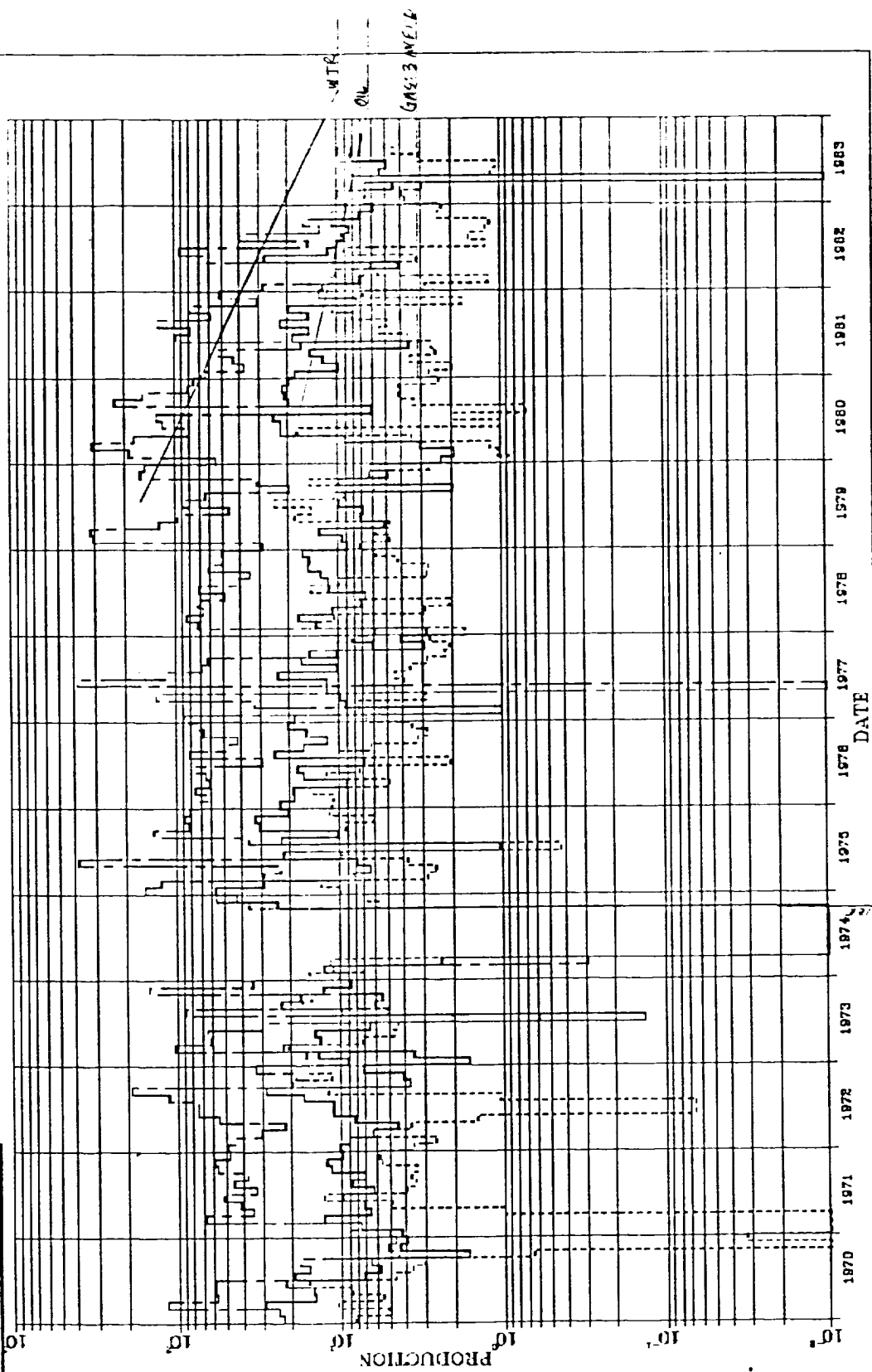
Report casing pressure in lieu of tubing pressure for any well producing through casing.

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.


 (Signature)
 Engrg. Tech. Spec.
 5/18/84

STATE: NEW MEXICO COUNTY: LEA MO
FIELD: JUSTIS MONTOYA
LEASE: STATE Y WELL# 000006
OPERATOR: ARCO OIL & GAS CO

Oil PRODUCTION, STB/D
Gas PRODUCTION, MCF/D
Water PRODUCTION, STB/D

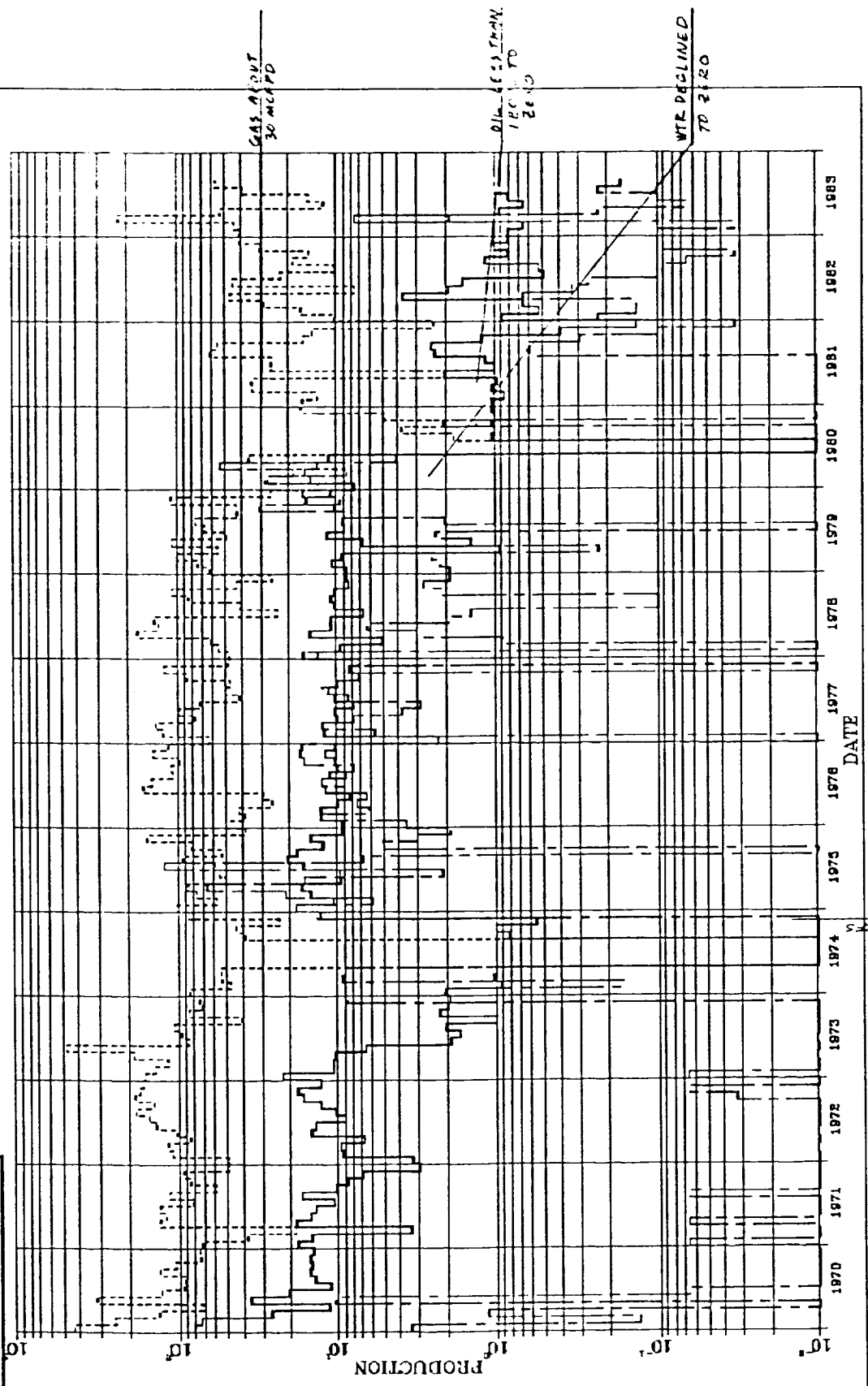


1974

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JUN 15 1984
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STATE: NEW MEXICO COUNTY: LEA BL
 FIELD: JUSTIS BLINEBRY
 LEASE: STATE Y WELL# 000006
 OPERATOR: ARCO OIL & GAS CO

OIL PRODUCTION, STBO/D
 GAS PRODUCTION, MCF/D
 WATER PRODUCTION, STEW/D



NO PERKS FROM

Depth	Conditions		Lease & well			Date					
	Present	Proposed	State Y No. 6								
			Field	County	State						
			Justis	Lea	New Mexico						
			Proposed operation:								
			Downhole Commingle Blinebry and Montoya								
			Datum		Casing and Liner Detail						
			(GL)	(CHF)	(KB)	Size	Weight	BTM	TOP	Cement	TOC
			Elev.	3077 (GL)		13-3/8	48	550		350 sx	circ.
			TD	8280		9-5/8	36, 29	3335		950 sx	
5000			PBTD	7016		7-5/8, 7	23, 29	8280		623 sx	3700'
			Year Drd.	1959							
			Background and proposed procedure (use additional sheets if needed)								
			Spudded @ 1 AM 2-23-59 4-14-59 Perf ELL 8235-52', MONT 6915-74' (both 4 SPF) 4-15-59 Acidize ELL w/500 gal 7-1/2% MA 4-17-59 Acidize MONT w/1000 gal 7-1/2%MC 4-20-59 Acidize MONT w/5000 gal 15% reg. acid 4-22-59 Acidize MONT w/15,000 gal UNISOL IP ELL (LT) 4-16-59 F 144 BOPD + 0 BW, GOR = 1600 IP MONT (UT) 4-25-59 F 222 BOPD + 30 BW, GOR = 489 > Dual Completion 10-16-59 ELL - Install pumping unit 12-5-60 Plug ELL, CIBP @ 7025, 2 sx cmt on top, TOC 7016' 12-5-60 Perf BLBY, 2 SPF, 5297-302', 5322-9', 5347-52', 5366-72', 5384-98', 5412-22', 5452-66' Acidize 5412-66 w/5208 gal 15% LSTE acid Acidize all BLBY w/6792 gal 15% LSTE acid 12-15-60 IP BLBY F 85 BOPD + 28 BW, GOR = 1047 (MONT still flowing) 5-61 Replaced corroded tbg in MONT string 7-61 BLBY & MONT - Install pumping equipment - both zones 6-17-65 BLBY - Frac, 1000 gal 15% LSTNE Acid + 30,000 gal LO + 35,000# sd 6-21-65 MONT - Acidize w/1500 gal 7-1/2% HCL & 300 gal MA 2-16-68 MONT - Acidize w/5000 gal 15% HCL LSTNE Acid 8-68 MONT - Treat zone for scale removal and inhibition 9-10-68 MONT - Acidize w/2000 gal 15% HCL w/LSTNE 11-4-74 BLBY - Add perfs (1 SPF) 5030, -38,-43,-47,-54,-60,-84, -89, 5101, -06,-10,-13,-35,-40,-48,-58,-72,-81,-90 5213,-18,-24,-32,-61,-80,5526,-34,-40,-53,-54, 5560 11-5-74 BLBY - 5030-280, Acidize w/1500 gal 15% HCL-LSTNE Acid 11-6-74 BLBY - 5030-5560, Frac w/45,500 gal + 75,000# sd 11-12-74 MONT - Acidize w/1000 gal 15% HCL-LSTNE Acid 12-13-83 Csg Insp. Log bad pipe 5480-6876 (intent was to P&A Blby) Casing like "swiss cheese". 12-16-83 MONT - Acidize w/4000 gal NEFE (& scale treatment) 3-31-84 BLBY - Test, F 0 BOPD + 0 BW + 28 MCFG								
				Proposed by	Prepared by	Engineering	Production	Drilling	Operations		
			Initial								
			Date								

BLBY
5030-560
(1974)
5297-466
(1960)

EKR PKR
415 D
6850'

MONT
6915-74

PBD

CIBP
2 sx cmt
TOC 7016

RESULT OF WATER ANALYSES

TO: Mr. George Ricks LABORATORY NO. 484419
P.O. Box 1710, Hobbs, NM SAMPLE RECEIVED 4-30-84
 RESULTS REPORTED 5-7-84

COMPANY ARCO Oil & Gas Company LEASE State "Y"
 FIELD OR POOL Justis
 SECTION 25 BLOCK _____ SURVEY T-25S COUNTY Lea STATE NM
R-37E

SOURCE OF SAMPLE AND DATE TAKEN:
 NO. 1 Produced water - taken from State "Y" #6 (wellhead).

NO. 2 _____

REMARKS: Montoya - 6,915' - 6,971'

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	me/l	NO. 2	me/l
Specific Gravity at 60° F.	1.0558			
pH When Received	6.88			
Carbonate as CO ₃	0	0.0		
Bicarbonate as HCO ₃	976			
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	12,500			
Calcium as Ca	4,160	208.0		
Magnesium as Mg	510	42.0		
Sodium and/or Potassium	25,795	1,121.6		
Sulfate as SO ₄	2,583	53.7		
Chloride as Cl	46,162	1,301.8		
Iron as Fe	0.47	0.0		
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	80,187			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
XYXYX Sulfide - Total	800			
Resistivity, ohms/m at 77° F.	0.111			
Suspended Oil				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks In an effort to establish compatibility between the above and Blinetry water, we were unable to come up with any records that you have of Blinetry in this area. We therefore must utilize records from our catalog to establish the most probable compatibility between the two waters. With this qualification, we did not identify any evidence of incompatibility between this Montoya water and our area records of Blinetry.