

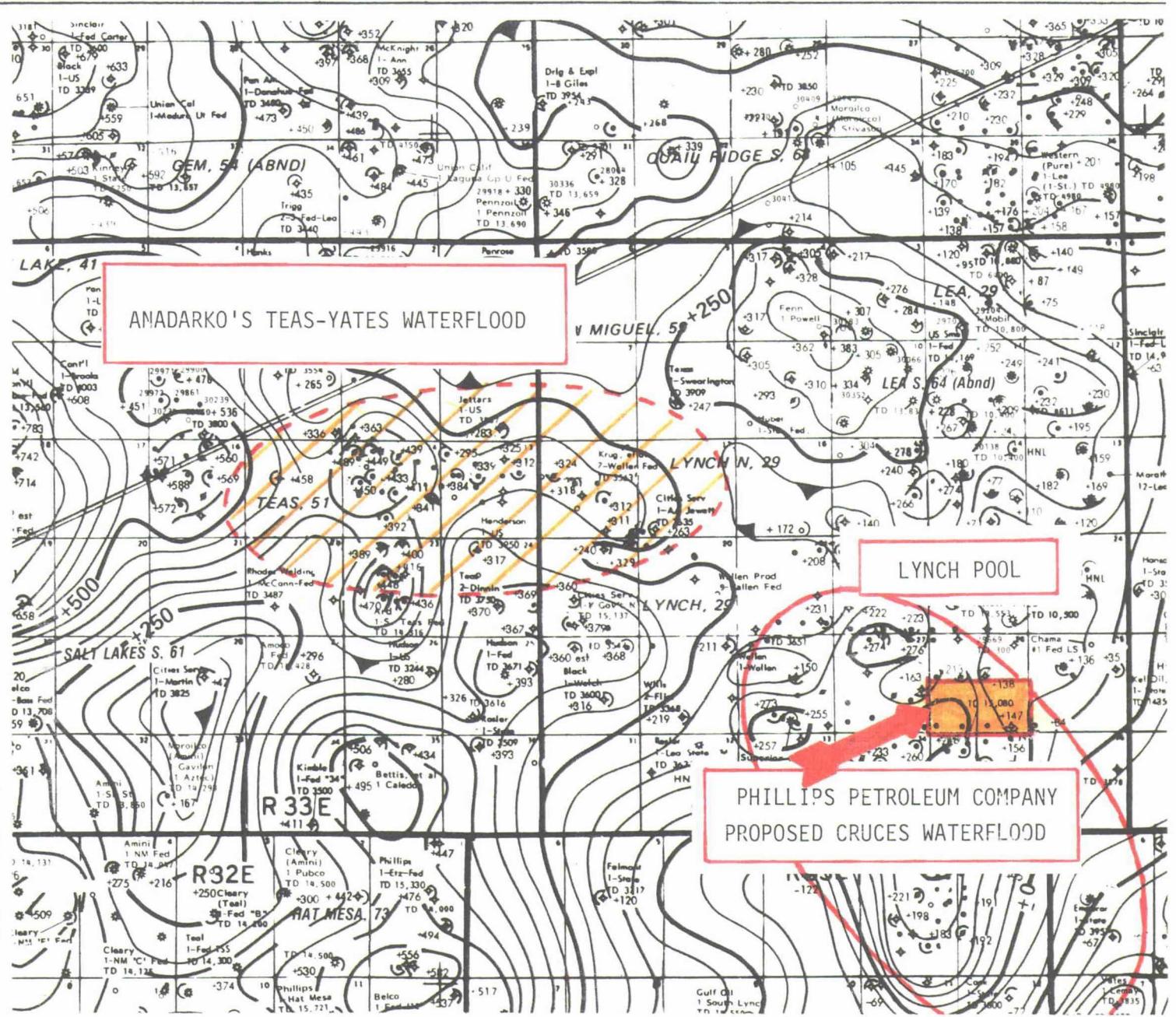
**AREA OF REVIEW
DETAIL MAP**

1/2 mile radius of investigation

Phillips Petroleum Company

Cruces Well No. 3
330' FSL and 1655' FWL
Section 26, T20S, R34E
Lea County, New Mexico

BEFORE EXAMINER <i>Catnach</i>
OIL CONSERVATION DIVISION
PHILLIPS PETROLEUM COMPANY
EXHIBIT NO. <i>9708</i>
CASE NO. <i>9708</i>



PHILLIPS PETROLEUM COMPANY

(injector) **Cruces Well No. 3**

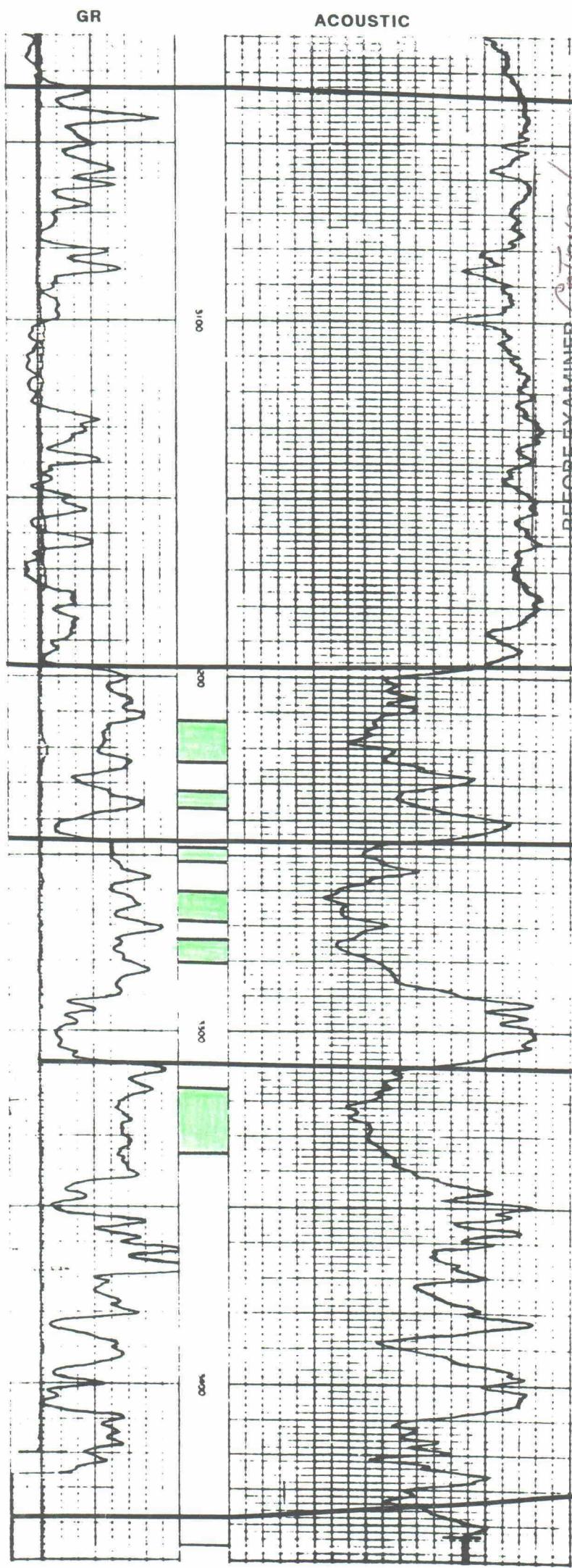
330' FSL and 1655' FWL

Section 26, T20S, R34E

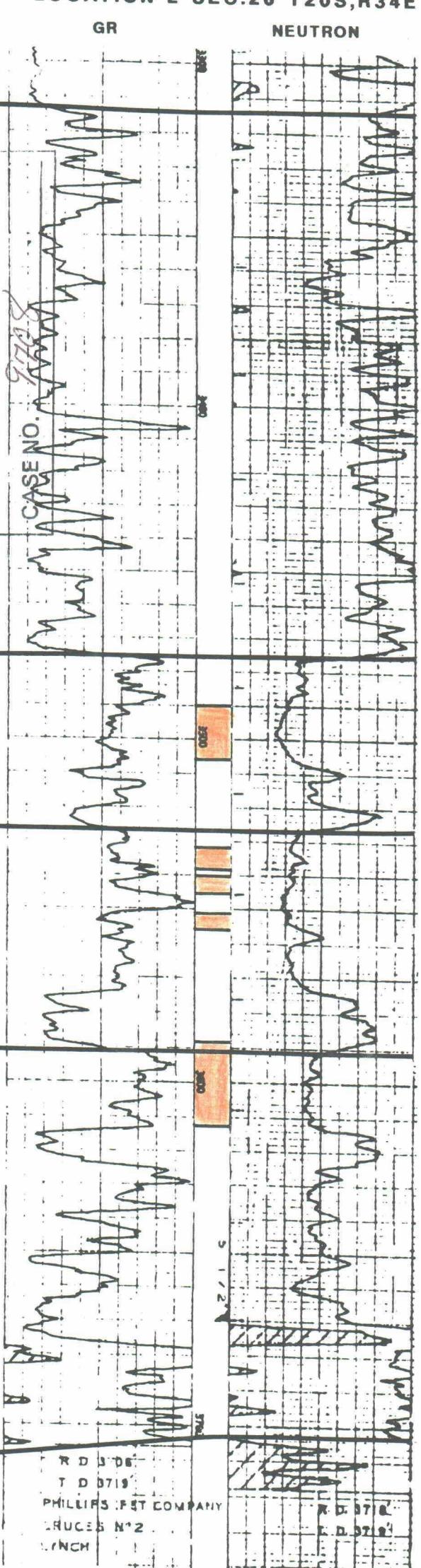
Lea County, New Mexico

BEFORE EXAMINER *C. Tannach*
OIL CONSERVATION DIVISION
PHILLIPS PETROLEUM COMPANY
EXHIBIT NO. 2
CASE NO. 9708

TEAS YATES FIELD
ANADARKO PROD.CO.
#2 TEAS YATES UNIT
LOCATION J SEC.14 T20S,R33E



LYNCH YATES FIELD
PHILLIPS PETROLEUM CO.
#2 CRUCES
LOCATION L SEC.26 T20S,R34E



TANSILL

BEFORE EXAMINER *Editorials*
OIL CONSERVATION DIVISION
PHILLIPS PETROLEUM COMPANY
EXHIBIT NO. 3

YATES
UPPER

MIDDLE

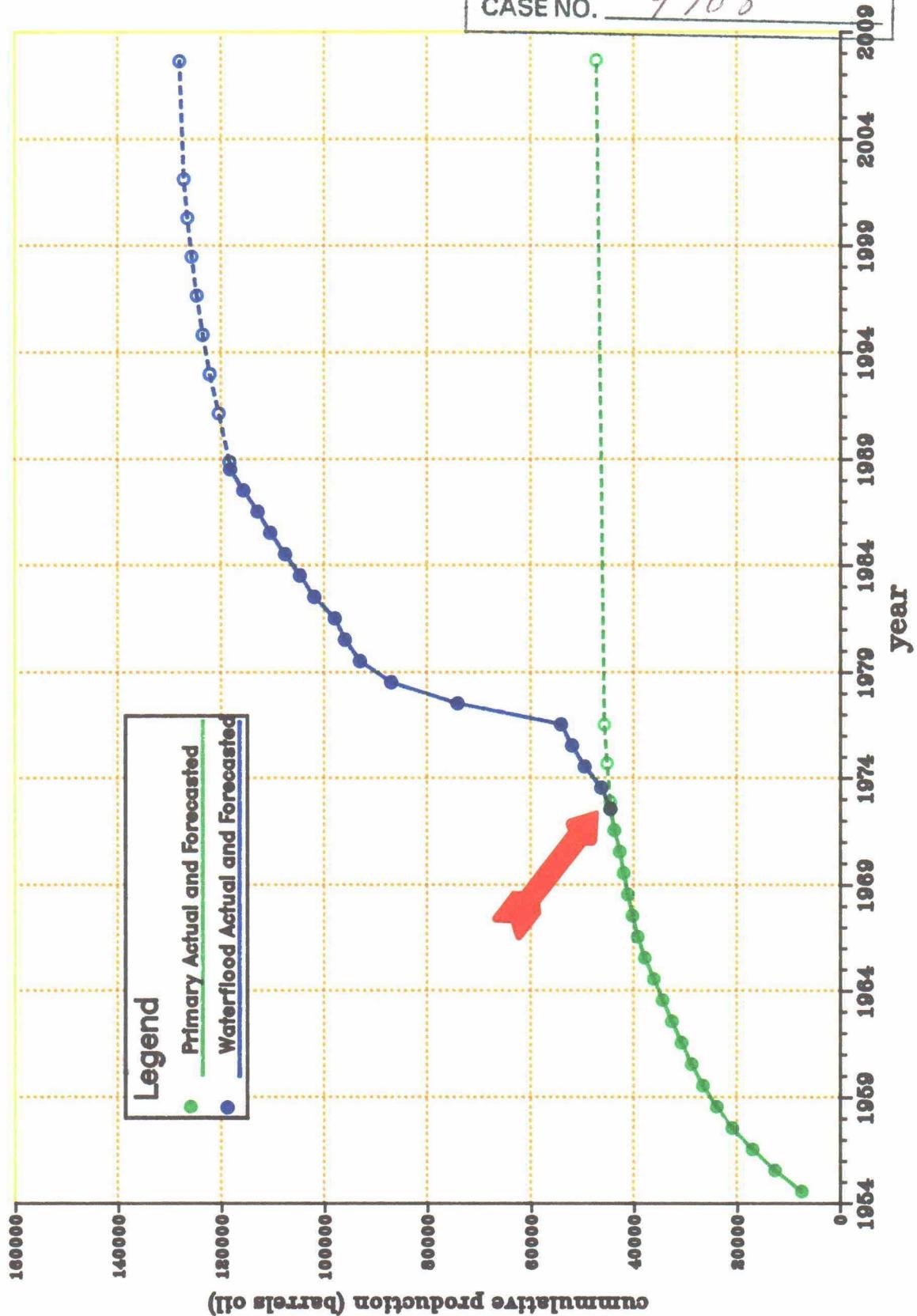
LOWER

SEVEN
RIVERS

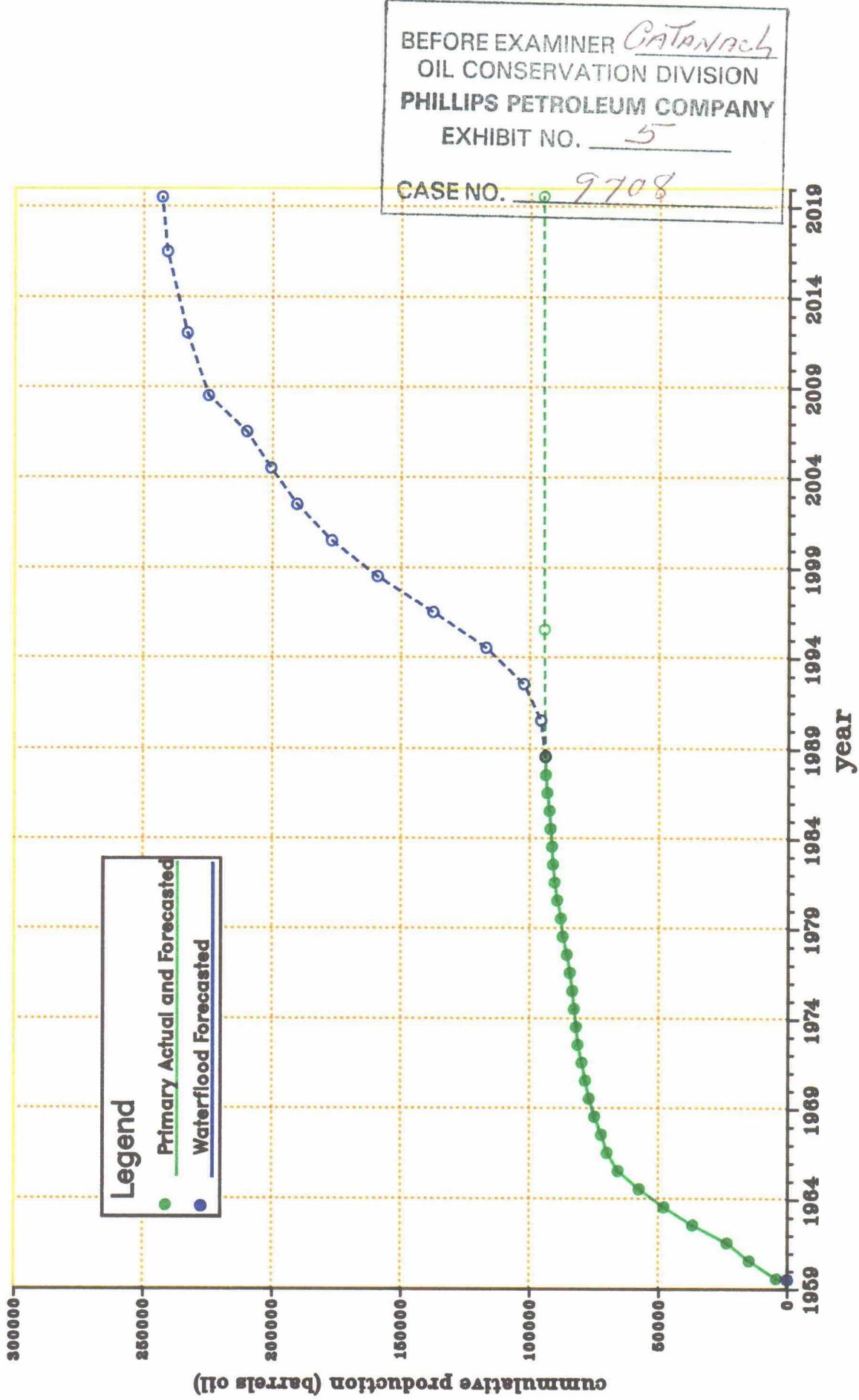
TEAS-YATES WATERFLOOD RESPONSE
Anadarko Tract 10 Well #2, 14-20S-33E

BEFORE EXAMINER *Catanch*
OIL CONSERVATION DIVISION
PHILLIPS PETROLEUM COMPANY
EXHIBIT NO. 4

CASE NO. 9708



**LYNCH-YATES PRODUCTION
Phillips Petroleum Cruces Well #4, 26-20S-34E**



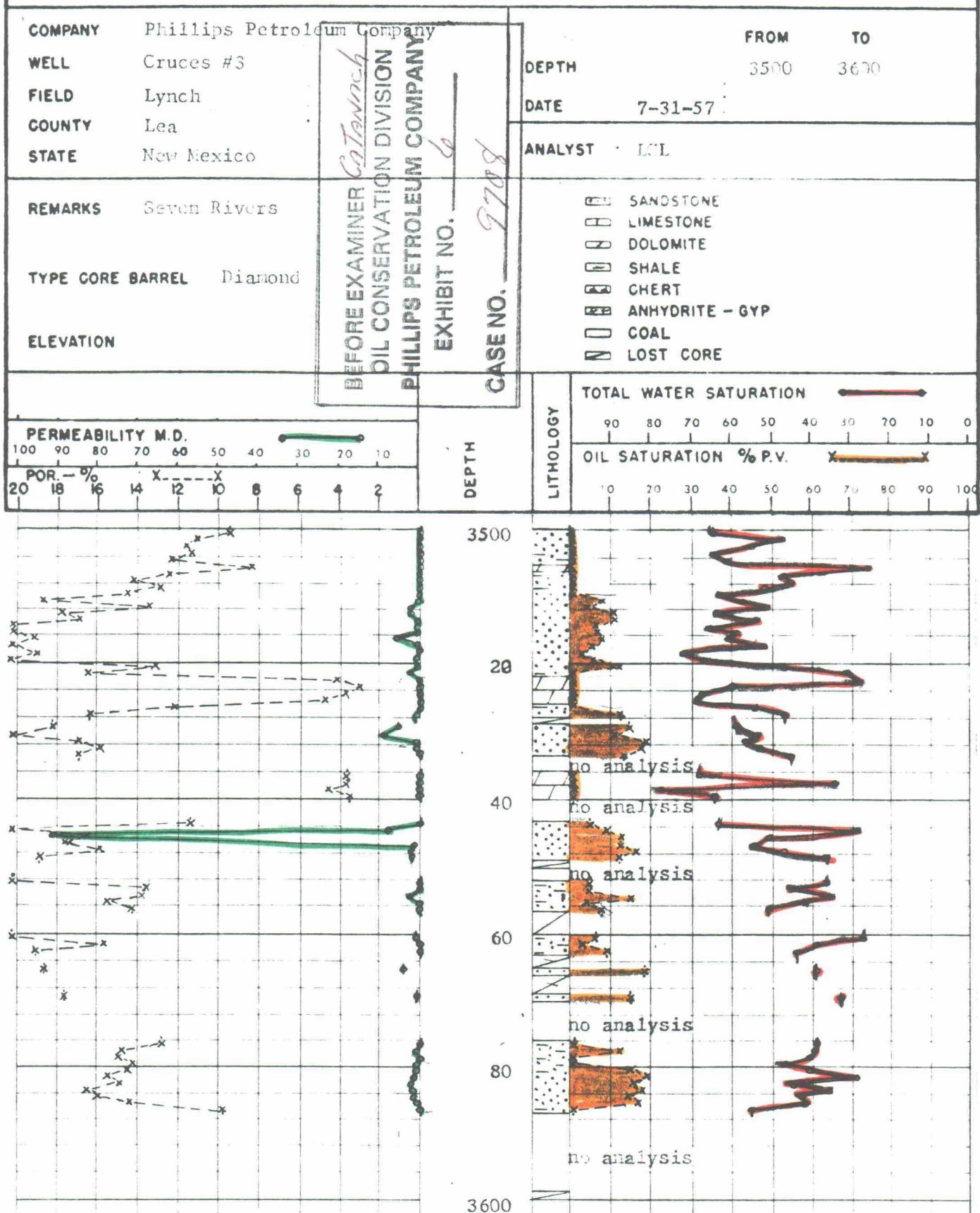
ROTARY ENGINEERS LABORATORIES

CORE ANALYSIS

MIDLAND, TEXAS

WATER ANALYSIS

COREGRAPH



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 3000
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

BEFORE EXAMINER *CATANAS*
OIL CONSERVATION DIVISION
PHILLIPS PETROLEUM COMPANY

FORM C-108
REVISED 7-1-81

EXHIBIT NO. 7

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: Secondary Recovery Pressure Maintenance General Storage
 Application qualifies for administrative approval yes no

II. Operator: PHILLIPS PETROLEUM COMPANY

Address: 4001 PENBROOK, ODESSA, TEXAS 79762

Contact party: L. M. SANDERS

CASE NO. 9708

Phone: (915) 367-1488

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? yes no
 If yes, give the Division order number authorizing the project _____.

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: W. J. Mullin Title Resv. Engr. Supr.

Signature: R. Beauford Date: 27 June 89

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.
 - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Application for Authorization to Inject

PHILLIPS PETROLEUM COMPANY
CRUCES WELL NO. 3

III. WELL DATA

(See Attachment No. 1)

A.	1. Name and Location	Cruces Well Number 3 330' FSL and 1655' FWL Section 26, T-20-S, R-34-E Lea County, New Mexico
	2. Casing	
	Surface:	8 5/8" OD, 24#, J-55 set at 176' (12 1/4" hole). Cemented with 125 sacks; circulated cement to surface.
	Production:	5 1/2" OD, 14#. J-55 set at 3693' (7 7/8" hole). Cemented with 465 sacks; circulated cement to surface.
	Open Hole:	4 1/2" hole from 3693' to 3730'
	3. Tubing:	2 3/8" OD, 4.7#, J-55 set at 3410' (internally plastic coated)
	4. Packer:	Baker Lok-Set Retrievable Packer with Baker Model "FL" On/Off Tool set at 3410'.
B.	1. Injection Formation:	Lynch Yates 7R
	2. Perforated Interval:	3509' - 3629'
	3. Original Intent:	Well was drilled as an oil producer.
	4. Depth Details:	
	Perforations:	3509' - 3519' 3526' - 3536' 3540' - 3550' 3556' - 3566' 3574' - 3583' 3601' - 3629'
	CIBP:	3665'
	5. Productive Zones	
	Lower:	Bone Springs at 9100' (1 1/4 miles northeast)
	Higher:	none

2

APPLICATION for AUTHORIZATION to INJECT

PHILLIPS PETROLEUM COMPANY
CRUCES WELL NUMBER 3

VI. WELLS WITHIN THE AREA OF INTEREST
(radius of investigation = +1/2 mile)

Operator	Well Name	Location	Date Spudded (orig. intent)	Original TD Present TD	Size (in)	Depth (ft)	Casing (sr)	Size (in)	Depth (ft)	Production Casing	Producing Cement (sx)	Perforations (zone)
PHILLIPS PETR. COMPANY	Cruces #1	330' FSL & 330' FNL Section 26-20S-34E Lea County, NM	19 March 1957 (oil)	3705'	8 5/8	171	125	5 1/2	3644	450	3470' - 3600' (surf:circ)	and 3644' - 3705' (OH) Lynch-Yates-7R
	Cruces #2	1651' FSL & 330' FNL Section 26-20S-34E Lea County, NM	24 May 1957 (oil)	3718'	8 5/8	157	150	5 1/2	3667	500	3490' - 3614' (surf:circ)	Lynch-Yates-7R
	Cruces #4	330' FSL & 2316' FEL Section 26-20S-34E Lea County, NM	15 July 1959 (oil)	3739'	8 5/8	193	160	4 1/2	3750	622	3536' - 3592' (surf:circ)	P & A'd (Attachment No. 3)
	Cruces #5	330' FSL & 992' FEL Section 26-20S-34E Lea County, NM	7 Nov 1959 (oil)	3760'	8 5/8	162	115	4 1/2	3760	328	3512' - 3638' (surf:circ)	P & A'd Lynch-Yates-7R (Attachment No. 3)
	Cruces #6	1650' FSL & 1650' FNL Section 26-20S-34E Lea County, NM	8 May 1960 (oil)	3700'	8 5/8	188	125	4 1/2	3700	360	3512' - 3638' (surf:circ)	P & A'd Lynch-Yates-7R (Attachment No. 3)
ARCO	Fleigner A DE Federal #3	1650' FSL & 990' FEL Section 27-20S-34E Lea County, NM	23 Jan 1957 (oil)	3688'	13 3/8	62	50	5 1/2	3640	1500	3512' - 3638' (surf:calc)	P & A'd (Attachment No. 4)
	Fletcher A Federal #1	990' FNL & 990' FNL Section 35-20S-34E Lea County, NM	16 Sept 1956 (oil)	3725'				5 1/2	3680	1550	3512' - 3638' (surf:calc)	P & A'd Lynch-Yates-7R (Attachment No. 5)
BERRY, DAN C.	W H Mather Federal #3	2310' FNL & 1650' FNL Section 35-20S-34E Lea County, NM	5 Oct 1952 (oil)	3736'	13 3/8	95	125	5 1/2	3682	800	3682' - 3736' (OH) (surf:circ)	Salt Water Disposal 3786' - 3806' 4 1/2" line 3497 - 3850 ≤ 5 SX

Calculation Detail

cat yld = 1.3 ft3/sx

excess = 50%

3

PHILLIPS PETROLEUM COMPANY
CRUCES WELL NUMBER 3

VI. WELLS WITHIN THE AREA OF INTEREST
(radius of investigation = +1/2 mile)

Operator	Well Name	Location	Date Spudded (orig. intent)	Present TD (oil)	Size (in)	Depth (ft)	Cement (sx)	Size (in)	Depth (ft)	Production Casing (TOC:method)	Cement (sx)	Producing Perforations (zone)	
BURK ROYALTY	Hanson B #1	2310' FNL & 467' FML Section 26-20S-34E Lea County, NM	23 August 1959	3767'	8 5/8	190	125	4 1/2	3767	* (1000':calc)	605	3645' - 3660' Lynch-Yates-7R	
	Hanson B #2	2310' FNL & 1650' FML Section 26-20S-34E Lea County, NM	17 Nov 1959	3744'	8 5/8	190	125	5 1/2	3744	* (1400':calc)	605	3627' - 3642' Lynch-Yates-7R	
	Hanson B #3	2310' FNL & 2310' FEL Section 26-20S-34E Lea County, NM	2 Dec 1959	3829'	8 5/8	185	150	(no information available in Hobbs office)	Dry Hole (no attachment)	(no information available in Hobbs office)	(no information available in Hobbs office)	- Check	
	Neal #1	467' FML & 2315' FEL Section 35-20S-34E Lea County, NM	5 April 1959	3752'	8 5/8	180	150	5 1/2	3743	* (2300':calc)	300	3630' - 3735' Lynch-Yates-7R	
	Neal #2	1650' FML & 2316' FEL Section 35-20S-34E Lea County, NM	15 July 1959	3819'	8 5/8	188	100	4 1/2	3818	* (2300':calc)	300	3710' - 3728' Lynch-Yates-7R	
	Neal #3	330' FML & 993' FEL Section 35-20S-34E Lea County, NM	9 June 1959	3805'	8 5/8	190	100	5 1/2	3805	* (2800':calc)	200	Salt Water Disposal 3703' - 3714'	
	ENGAR, ARLEN L.	Federal C #1	660' FNL & 1980' FML Section 35-20S-34E Lea County, NM	16 Aug 1970	15080'	13 3/8	866	800	9 5/8	5600	1900	T & A'd Lynch-Yates-7R 3577' - 3708'	
	HONDO	Fletcher A DE Federal #2	330' FSL & 330' FEL Section 27-20S-34E Lea County, NM	12 Nov 1956	3750'				5 1/2	3648	* (surf:calc)	1650	3648' - 3705' Lynch-Yates-7R
		Hudson, William A. & Edward	Federal #1	2310' FNL & 990' FML Section 35-20S-34E Lea County, NM	1 Jan 1953	3734'			5 1/2	3680	(surf:circ)	700	3680' - 3724' (OH) Lynch-Yates-7R
	TEXACO	Lynch #4	1980' FNL & 660' FEL Section 34-20S-34E Lea County, NM	17 Sept 1934 (dry)	3797'	12 1/2	477		8 1/4	1636	75	Dry Hole (no attachment)	- Check Well within 1/2 mile of current filter off set or out of line

* Calculation Detail
cat yld = 1.3 ft3/sx
excess = 502
checked
located
off set or out of
line

Well within
1/2 mile
of current filter
off set or out of
line

(no information avail-
able in Hobbs office)

4

Application for Authorization to Inject

PHILLIPS PETROLEUM COMPANY
CRUCES WELL NO. 3

VII. PROPOSED INJECTION OPERATIONS

1. Rates: average - 200 bwpd
maximum - 1000 bwpd
2. System: closed
3. Pressures: average - 500 psi
maximum - 702 psi
4. Fluid: Produced water analyses from the Phillips Petroleum Cruces Tank Battery (Lynch Yates 7R Formation); see Attachment No. 6

VIII. GEOLOGICAL DATA

- A. Injection Zone: The injection zone will be within the Yates Formation, a 170' thick sequence of fine-grained porous sandstones interbedded with tight dolomites (at 3493' to 3666' in this well). Porosity in the sand ranges from 8 to 20% and permeabilities may be as high as 90md but are commonly below 2 md.
- B. Fresh Water Sources: Ogallala base at 63'

IX. PROPOSED STIMULATION PROGRAM

The Yates injection perforations will be isolated into Upper, Middle or Lower Yates. Each set will be treated with 1500 gallons of 20% NEFE HCl.

X. LOGGING DATA

Well logs were submitted after the well's completion in 1959; the well name has not changed since that time.

XI. FRESH WATER ANALYSES

Fresh Water Well Locations -- see Attachment No. 7

Fresh Water Analyses -- see Attachment Nos. 8, 9 and 10

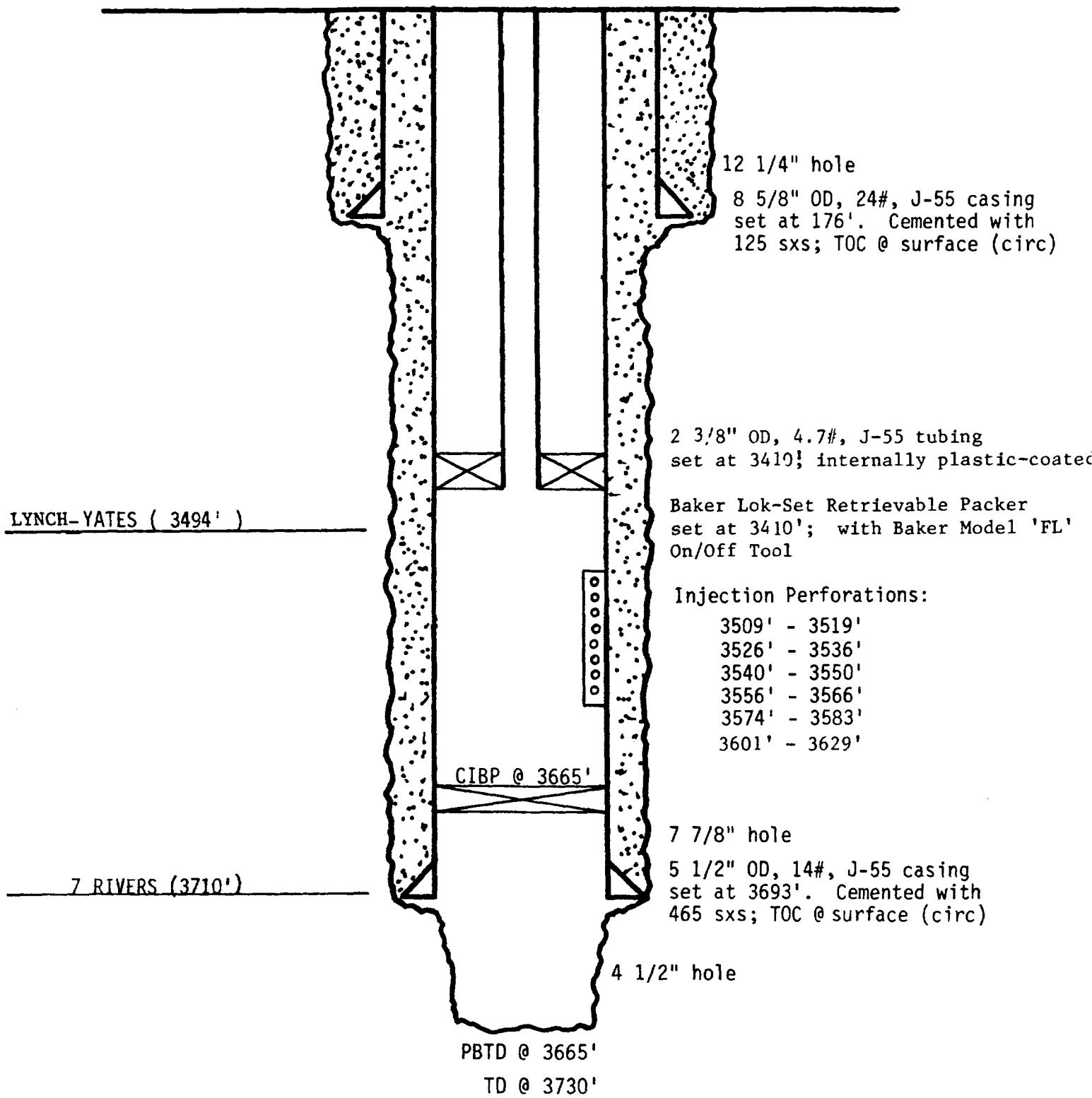
5

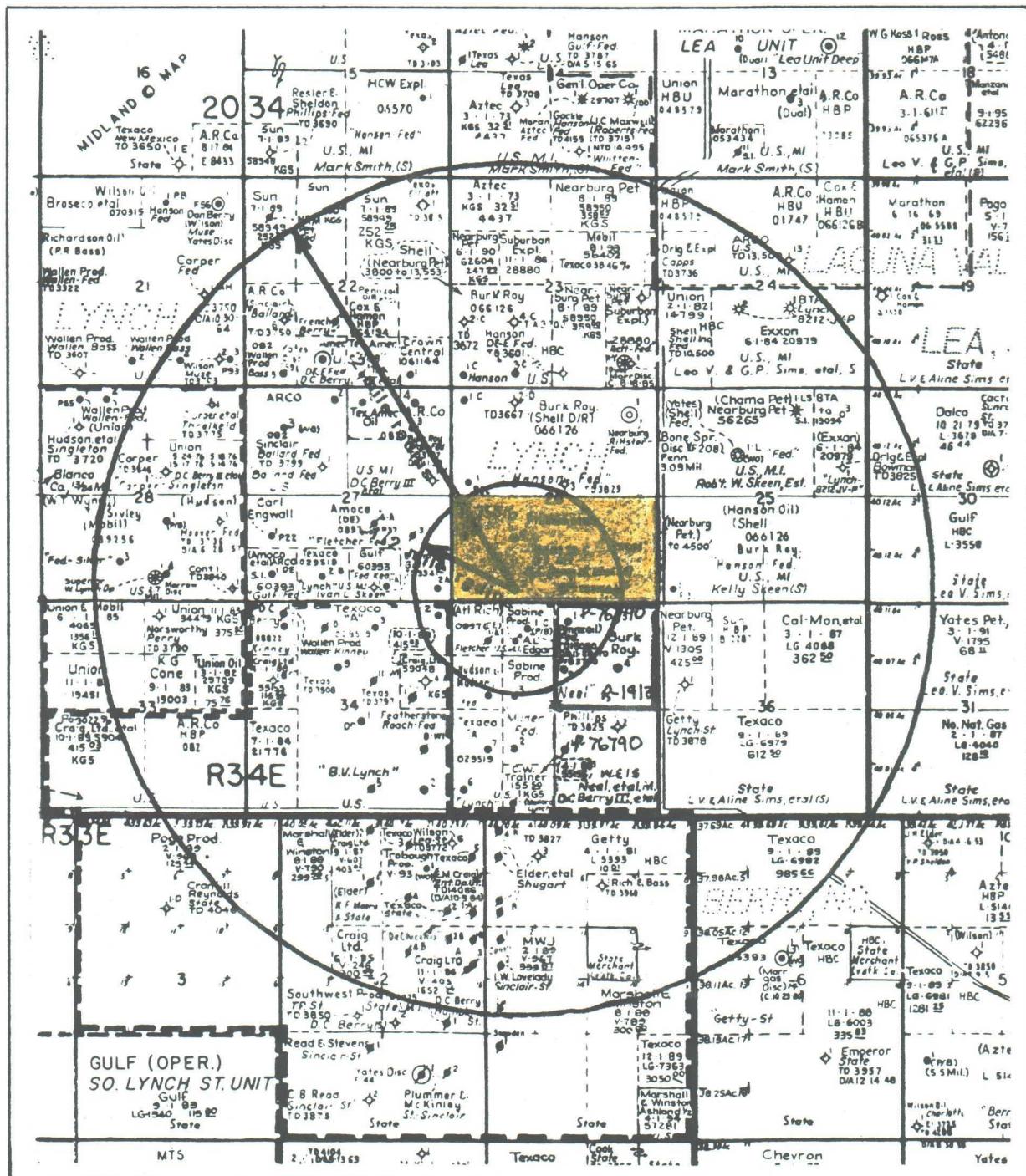
Proposed Wellbore Schematic

PHILLIPS PETROLEUM COMPANY

ATTACHMENT NO. 1

Cruces Well No. 3
330' FSL and 1655' FWL
Section 26, T20S, R34E
Lea County, New Mexico



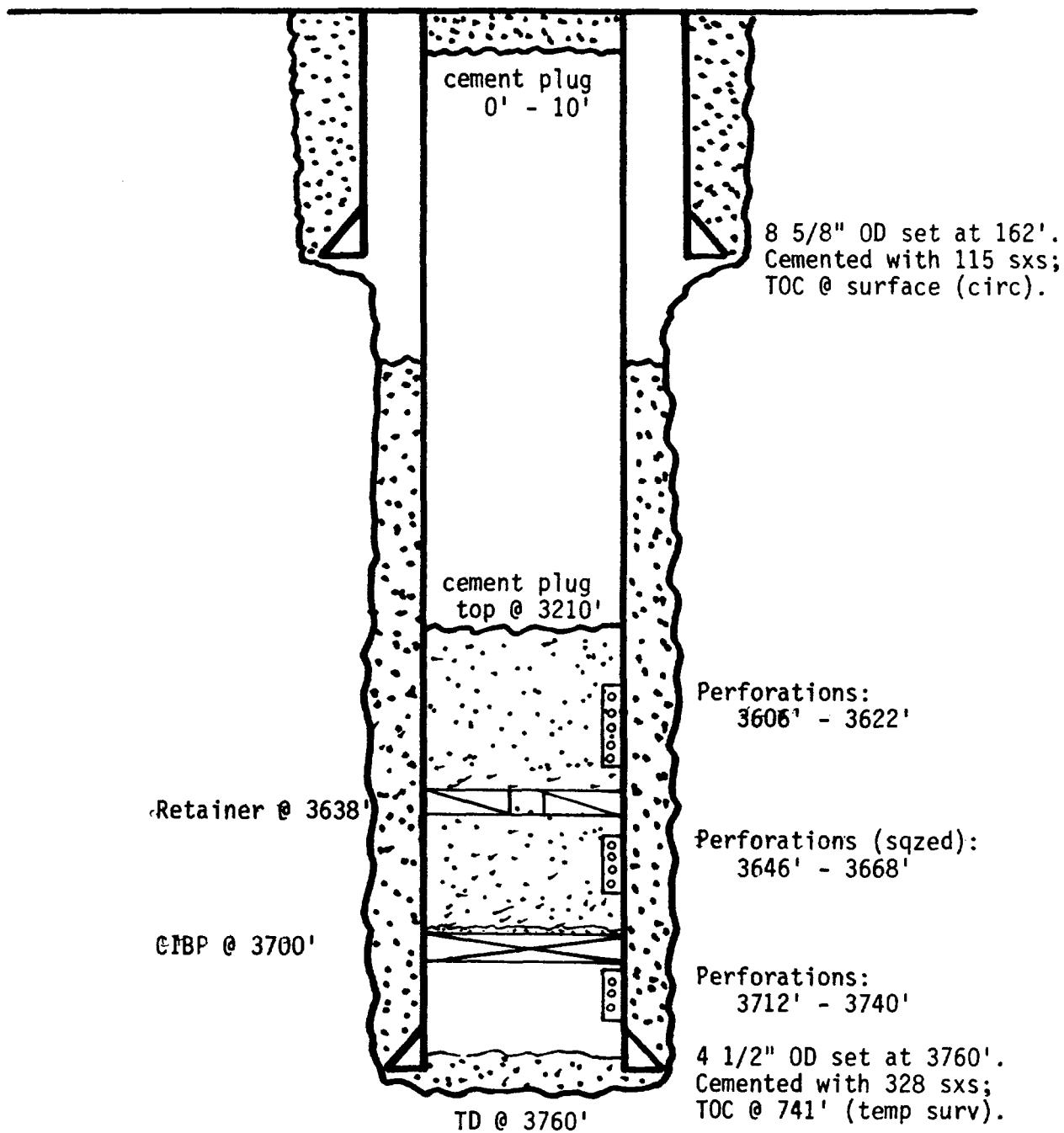


PHILLIPS PETROLEUM COMPANY
 Cruces Well No. 3
 330' FSL and 1655' FWL
 Section 26, T20S, R34E
 Lea County, New Mexico

ATTACHMENT NO. 3 (P & A'd)

PHILLIPS PETROLEUM COMPANY

Cruces Well No. 5
330' FSL & 993' FEL
Section 26, T20S, R34E
Lea County, New Mexico

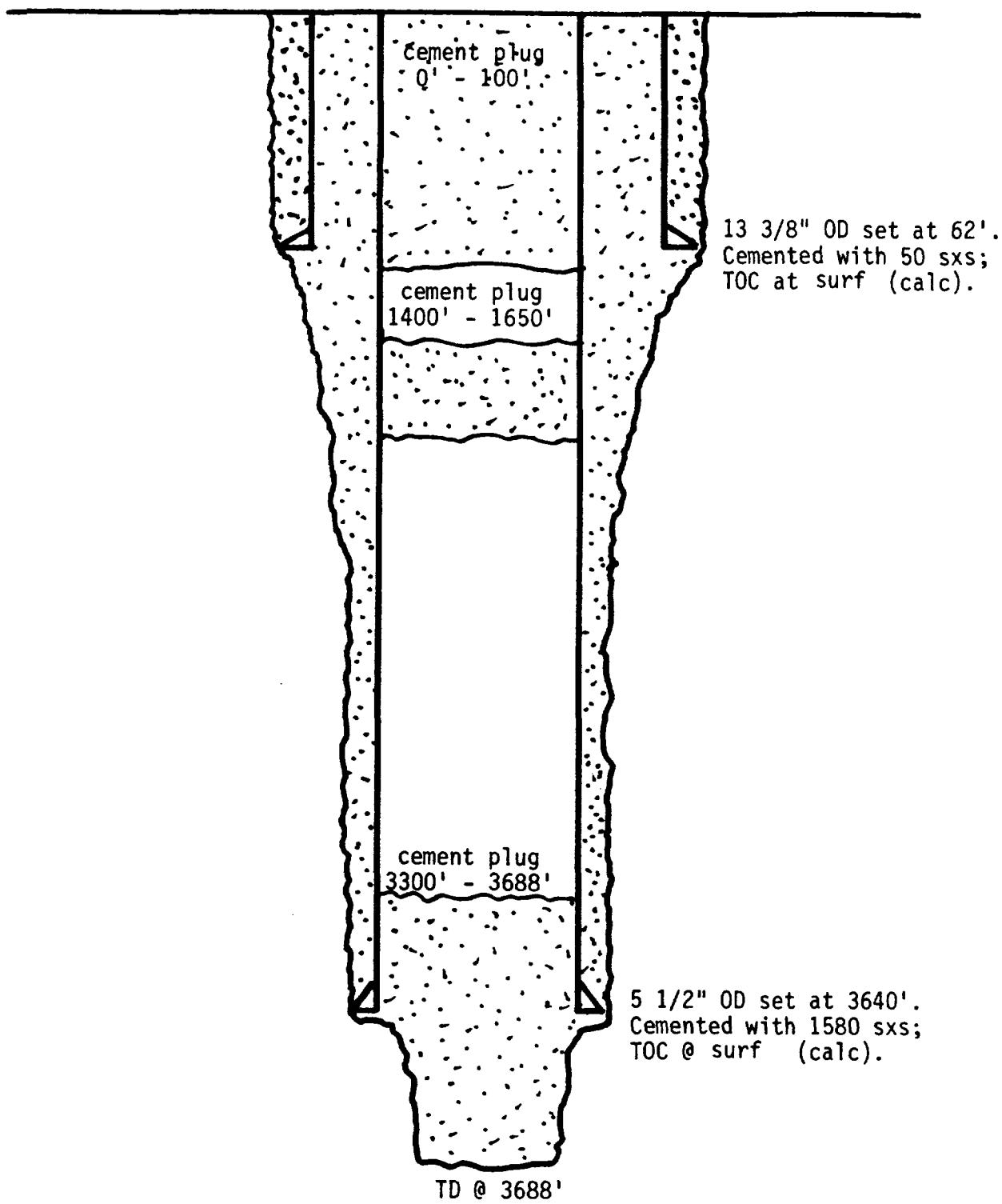


8

ATTACHMENT NO. 4 (P & A'd)

ARCO

Fletcher A DE Federal Well No. 3
1650' FSL & 990' FEL
Section 27, T20S, R34E
Lea County, New Mexico

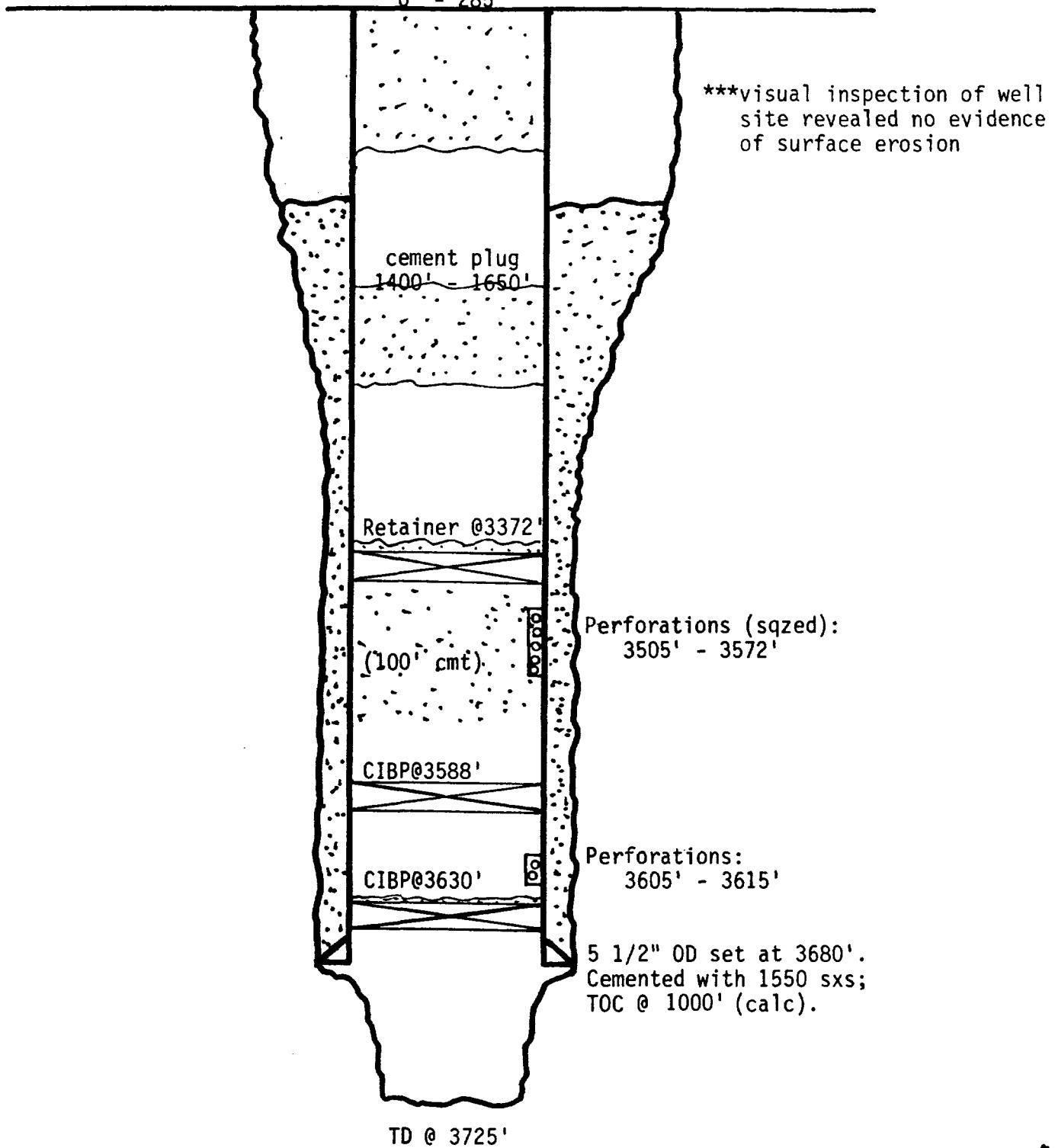


ATTACHMENT NO. 5 (P & A'd)

ARCO

Fletcher A Federal Well No. 1
990' FNL & 990' FWL
Section 35, T20S, R34E
Lea County, New Mexico

cement plug
0' - 285'



10

Unicem International
 107 NORTH LEECH P.O. Box 1499
 Hobbs, New Mexico 88240

Company : PHILLIPS PETROLEUM COMPANY
 Date : 07-18-1989
 Location: CRUCES HEATER TREATER (on 07-18-1989)

	<u>Sample 1</u>
Specific Gravity:	1.033
Total Dissolved Solids:	46669
pH:	7.72
IONIC STRENGTH:	0.855

MMMMMM

CATIONS:

		<u>me/liter</u>	<u>mg/liter</u>
Calcium	(Ca ⁺²)	22.8	456
Magnesium	(Mg ⁺²)	46.4	564
Sodium	(Na ⁺¹)	719	16500
Iron (total)	(Fe ⁺²)	0.029	0.800
Barium	(Ba ⁺²)	0.007	0.500

ANIONS:

		<u>me/liter</u>	<u>mg/liter</u>
Bicarbonate	(HCO ₃ ⁻¹)	16.8	1020
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	60.4	2900
Chloride	(Cl ⁻¹)	711	25200

MMMMMM

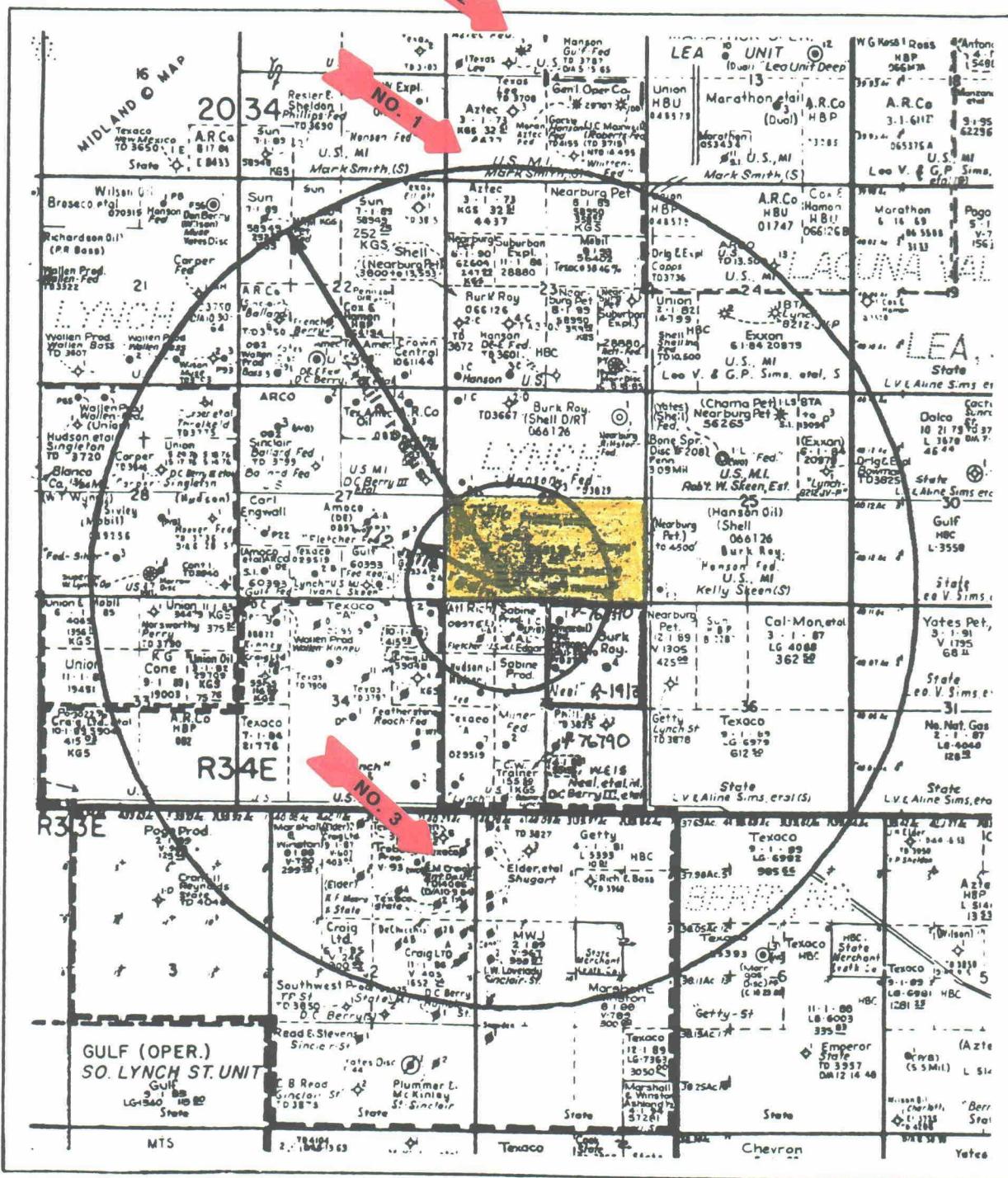
SCALING INDEX (positive value indicates scale)

<u>Temperature</u>	<u>Calcium</u>	
	<u>Carbonate</u>	<u>Sulfate</u>
86°F 30°C	0.68	-41

I

ATTACHMENT NO. 6

//



FRESH WATER ANALYSES

PHILLIPS PETROLEUM COMPANY

Cruces Well No. 3
330' FSL and 1655' FWL
Section 26, T20S, R34E
Lea County, New Mexico

ATTACHMENT NO. 7

12

Unichem International
 707 North Leech P.O. Box 1499
 Hobbs, New Mexico 88240

Company : PHILLIPS PETROLEUM
 Date : 06-16-1989
 Location: Fresh H₂O - Windmill 1 (on 6-15-89)

	<u>Sample 1</u>
Specific Gravity:	1.003
Total Dissolved Solids:	3722
pH:	8.81
IONIC STRENGTH:	0.071

<u>CATIONS:</u>		<u>me/liter</u>	<u>mg/liter</u>
Calcium (Ca ⁺²)		2.70	54.0
Magnesium (Mg ⁺²)		1.70	20.7
Sodium (Na ⁺¹)		52.4	1210
Iron (total) (Fe ⁺²)		0.021	0.600

<u>ANIONS:</u>		<u>me/liter</u>	<u>mg/liter</u>
Bicarbonate (HCO ₃ ⁻¹)		5.20	317
Carbonate (CO ₃ ⁻²)		0	0
Hydroxide (OH ⁻¹)		0	0
Sulfate (SO ₄ ⁻²)		23.4	1130
Chloride (Cl ⁻¹)		28.2	1000

SCALING INDEX (positive value indicates scale)

<u>Temperature</u>	<u>86°F</u>	<u>30°C</u>	<u>Calcium</u>	<u>Calcium</u>
			<u>Carbonate</u>	<u>Sulfate</u>
			1.3	-12

ATTACHMENT NO. 8

Unichem International

707 North Leech P.O. Box 1499

Hobbs, New Mexico 88240

Company : PHILLIPS PETROLEUM

Date : 06-16-1989

Location: Fresh H2O - Windmill 2 (on 6-15-89)

	<u>Sample 1</u>
Specific Gravity:	1.002
Total Dissolved Solids:	2887
pH:	8.45
IONIC STRENGTH:	0.054

CATIONS:

		<u>me/liter</u>	<u>mg/liter</u>
Calcium	(Ca ⁺²)	2.80	56.0
Magnesium	(Mg ⁺²)	1.80	21.9
Sodium	(Na ⁺¹)	39.4	905
Iron (total)	(Fe ⁺²)	0.136	3.80

ANIONS:

		<u>me/liter</u>	<u>mg/liter</u>
Bicarbonate	(HCO ₃ ⁻¹)	5.80	354
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	15.6	750
Chloride	(Cl ⁻¹)	22.6	800

SCALING INDEX (positive value indicates scale)

<u>Temperature</u>		<u>Calcium</u>	<u>Calcium</u>
		<u>Carbonate</u>	<u>Sulfate</u>
86°F	30°C	1.1	-12

ATTACHMENT NO. 9

14

Unichem International

707 North Leech P.O. Box 1499

Hobbs, New Mexico 88240

Company : PHILLIPS PETROLEUM

Date : 06-16-1989

Location: Fresh H₂O - Windmill #3 (on 6-15-89)Sample 1

Specific Gravity:	1.002
Total Dissolved Solids:	2304
pH:	8.47
IONIC STRENGTH:	0.054

CATIONS:

		<u>me/liter</u>	<u>mg/liter</u>
Calcium	(Ca ⁺²)	17.3	347
Magnesium	(Mg ⁺²)	8.67	105
Sodium	(Na ⁺¹)	14.2	326
Iron (total)	(Fe ⁺²)	0.032	0.900
Barium	(Ba ⁺²)	0.025	1.70

ANIONS:

Bicarbonate	(HCO ₃ ⁻¹)	3.40	207
Carbonate	(CO ₃ ⁻²)	0	0
Hydroxide	(OH ⁻¹)	0	0
Sulfate	(SO ₄ ⁻²)	1.22	58.8
Chloride	(Cl ⁻¹)	35.5	1260

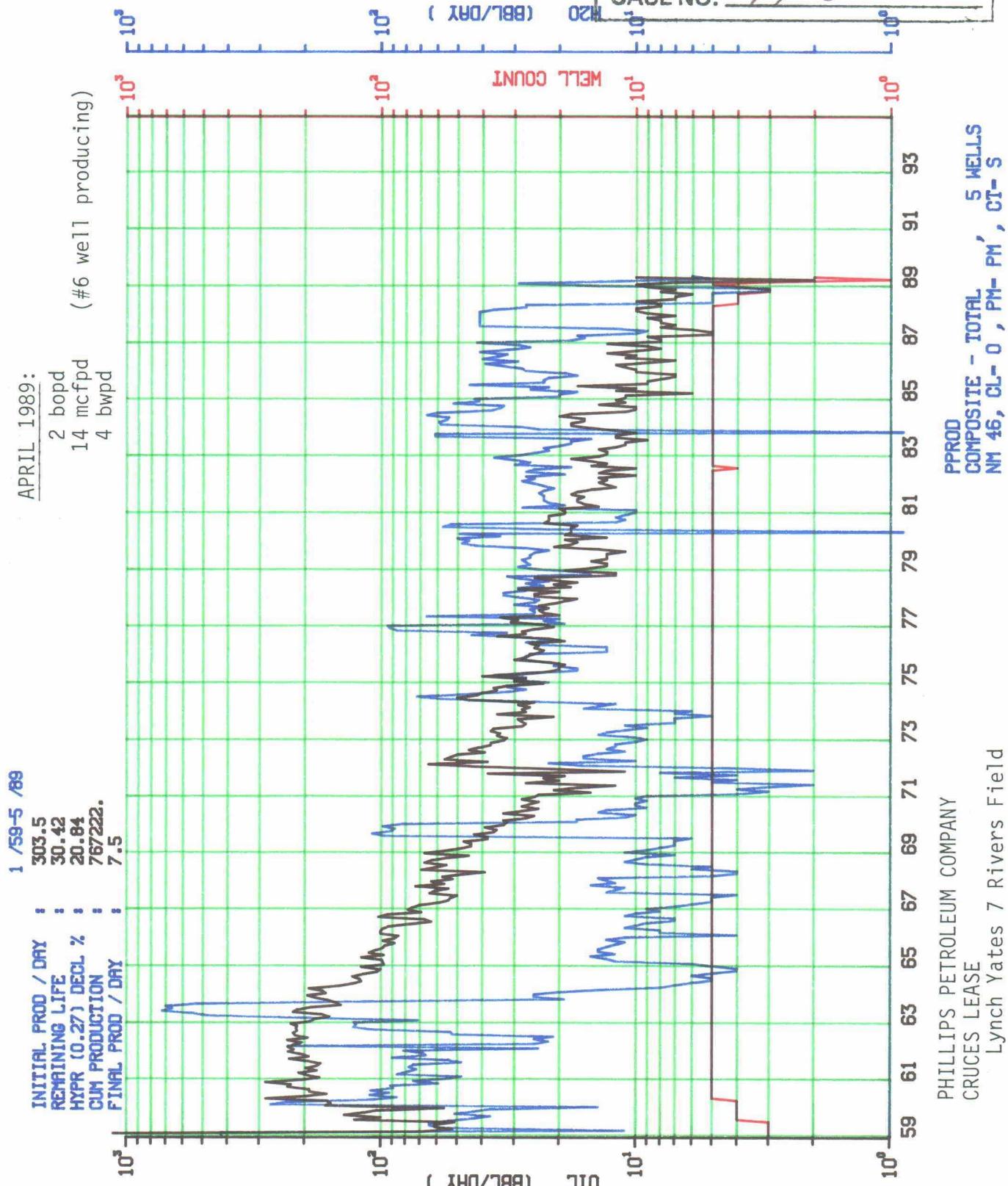
SCALING INDEX (positive value indicates scale)

<u>Temperature</u>		<u>Calcium</u>	<u>Calcium</u>
		<u>Carbonate</u>	<u>Sulfate</u>
86°F	30°C	1.6	-12

ATTACHMENT NO. 10

15

BEFORE EXAMINER *Catnach*
 OIL CONSERVATION DIVISION
 PHILLIPS PETROLEUM COMPANY
 EXHIBIT NO. 8
 CASE NO. 9708



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION
OF PHILLIPS PETROLEUM COMPANY FOR
SALT WATER DISPOSAL, LEA COUNTY,
NEW MEXICO

CASE NO. 9708

CERTIFICATE OF MAILING

AND

COMPLIANCE WITH ORDER R-8054

In accordance with Division Rule 1207 (Order R-8054) I hereby certify that on June 29, 1989 I caused to be mailed by certified mail, return-receipt requested, notice of this hearing and a copy of the application for the above referenced case along with the cover letter, at least twenty days prior to the hearing set for July 26, 1989, to the parties shown in the Application as evidenced by the attached copy of the return receipt cards.

Original signed by
W. THOMAS KELLAHIN

W. Thomas Kellahin

SUBSCRIBED AND SWORN TO before me this 25th day of July, 1989.

Ronuya Stoner
Notary Public

My Commission Expires:

March 3, 1993

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KELLAHIN, KELLAHIN and AUBREY

Mr. William J. LeMay
Oil Conservation Division
June 29, 1989
Page 2

cc: Bill Mueller - Phillips

Oil Conservation Division - Lea County
Post Office Box 1980
Hobbs, New Mexico 88240

Certified Mail-Return Receipt Requested

Arco Oil and Gas Company
Post Office Box 1610
Midland, Texas 79702

Dan C. Berry
Post Office Box 755
Hobbs, New Mexico 88241

Daniel C. Berry, III
Post Office Box 160
Eunice, New Mexico 88231

Ronald Philip Berry
Post Office Box 1551
Lovington, New Mexico 88260

Burk Royalty Company
Post Office Box BRC
Wichita Falls, Texas 76307

Arlen L. Edgar
414 West Texas
Suite 208
Midland, Texas 79701

Hondo
Post Office Box 2819
Dallas, Texas 75221

William A. and Edward R. Hudson
616 Texas Street
Fort Worth, Texas 76102-4612

Olsen Energy, Inc.
16414 San Pedro, Suite 470
San Antonio, Texas 78232

Texaco Inc.
Post Office Box 2511
Houston, Texas 77252

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional service(s) requested.

1. Show to whom delivered, date and addressee's address. 2. Restricted Delivery (Extra charge)

3. Article Addressed to:

William A & Edward R Hudson 616 Texas Street Fort Worth, TX 76102-4612	4. Article Number P 155 279 131
Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature — Address <i>Same</i>	
6. Signature — Agent <i>Same</i>	
7. Date of Delivery JUL 5 1988	

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional service(s) requested.

1. Show to whom delivered, date and addressee's address. 2. Restricted Delivery (Extra charge)

3. Article Addressed to:

WTK/Phillips/Cruces #3 WTK/Phillips/Cruces #3	4. Article Number P 155 279 127
Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Article Addressed to: Ronald P. Berry P.O. Box 1551 Lovington, NM 88260	
6. Signature — Address <i>Ronald P. Berry</i>	
7. Date of Delivery	

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional service(s) requested.

1. Show to whom delivered, date and addressee's address. 2. Restricted Delivery (Extra charge)

3. Article Addressed to:

WTK/Phillips/Cruces #3 WTK/Phillips/Cruces #3	4. Article Number P 155 279 127
Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Article Addressed to: Texaco Inc. P.O. Box 2511 Houston, TX 77252	
6. Signature — Address <i>Texaco Inc.</i>	
7. Date of Delivery	

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address.

(Extra charge)

3. Article Addressed to:	Dan C. Berry P.O. Box 755 Hobbs, NM 88241	4. Article Number P 155 279 125
Type of Service:	<input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail	<input type="checkbox"/> Insured <input type="checkbox"/> COD <input type="checkbox"/> Return Receipt for Merchandise
Always obtain signature of addressee or agent and DATE DELIVERED.		
5. Signature — Address	<i>Not Paid</i>	
6. Signature — Agent		
7. Date of Delivery	7-5-99	

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address.

(Extra charge)

3. Article Addressed to:	Burk Royalto Company P. O. BOX BRC Wichita Falls, TX 76307	4. Article Number P 155 279 128
Type of Service:	<input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail	<input type="checkbox"/> Insured <input type="checkbox"/> COD <input type="checkbox"/> Return Receipt for Merchandise
Always obtain signature of addressee or agent and DATE DELIVERED.		
5. Addressee's Address (ONLY if requested and fee paid)		
6. Addressee's Address (ONLY if requested and fee paid)		
7. Date of Delivery	FREE NOT PAID	

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address.

(Extra charge)

3. Article Addressed to:	WTK / Phillips/Cruces #3	4. Article Number P 155 279 130
Type of Service:	<input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail	<input type="checkbox"/> Insured <input type="checkbox"/> COD <input type="checkbox"/> Return Receipt for Merchandise
Always obtain signature of addressee or agent and DATE DELIVERED.		
5. Addressee's Address (ONLY if requested and fee paid)	<i>WTK Phillips/Cruces #3</i>	
6. Addressee's Address (ONLY if requested and fee paid)		
7. Date of Delivery	JUL 03 1989	

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address.

(Extra charge)

3. Article Addressed to:	Hondo P.O. Box 2819 Dallas, Texas 75221	4. Article Number P 155 279 130
Type of Service:	<input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail	<input type="checkbox"/> Insured <input type="checkbox"/> COD <input type="checkbox"/> Return Receipt for Merchandise
Always obtain signature of addressee or agent and DATE DELIVERED.		
5. Addressee's Address (ONLY if requested and fee paid)	<i>Hondo</i>	
6. Addressee's Address (ONLY if requested and fee paid)		
7. Date of Delivery	Skins	

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for rates and check boxes for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. 2. Restricted Delivery (Extra charge)

3. Article Addressed to:

4. Article Number P 155 279 124	Type of Service: <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail
Arco Oil and Gas Co P.O. Box 1610 Midland, Texas 79702	<input type="checkbox"/> Insured <input type="checkbox"/> COD <input type="checkbox"/> Return Receipt for Merchandise
WTK/Phillips/Cruces #3	<input type="checkbox"/> Express Mail Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Address X	6. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X	7. Date of Delivery JUL - 7 1989

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for rates and check boxes for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. 2. Restricted Delivery (Extra charge)

3. Article Addressed to:

4. Article Number P 155 279 126	Type of Service: <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail
Daniel C. Berry, III P.O. Box 160 Eunice, NM 88231	<input type="checkbox"/> Insured <input type="checkbox"/> COD <input type="checkbox"/> Return Receipt for Merchandise
WTK/Phillips/Cruces #3	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Address X	6. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X	7. Date of Delivery JUL - 7 1989

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT