

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COPY TO O. C. C.

SUBMIT IN TRIP
(Other instructions
reverse side)

TE
TO

Form approved.
Budget Bureau No. 42 R1424.
5. LEASE DESIGNATION AND SERIAL NO.

NM-801

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Williams

9. WELL NO.

8

10. FIELD AND POOL, OR WILDCAT

Maljamar Gb/SA

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

34, 17-S, 33-E

12. COUNTY OR PARISH

Lea

13. STATE

NM

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

Phillips Petroleum Company

3. ADDRESS OF OPERATOR

Room 401, 4001 Penbrook St., Odessa, TX 79762

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface

2310' FN and 330' FE (Unit H)

14. PERMIT NO.

DHC-309

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

4138.3' GR

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANS

(Other)

Downhole commingle

XX

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Prep to downhole commingle the Maljamar-Grayburg, and Corbin Queen Zones per NMOCD
Order No. DHC-309.

RECEIVED
APR 1980
U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED

W. J. Mueller

TITLE

Sr. Engineering Spec.

DATE

4-1-80

(This space for Federal or State office use)

TITLE

DATE

APPROVAL, IF ANY:

APPROVED

APR 2 1980

ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

McLennore

BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

POST OFFICE BOX 2034
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

March 5, 1980

Phillips Petroleum Company
4001 Penbrook
Odessa, Texas 79762

Attention: G. R. Smith

Administrative Order No. DHC-309
Williams Well No. 8, Unit H,
Section 34, Township 17 South,
Range 33 East, NMPM, Lea County,
New Mexico, Corbin Pool and Maljamar
Grayburg-San Andres Pool

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 equipment 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 down-hole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above.

In accordance with the provisions of Rule 303-C, total commingled oil production from the subject well shall not exceed 20 barrels per day, and total water production from the well shall not exceed 40 barrels per day. The maximum amount of gas which may be produced daily from the well shall be determined by multiplying 2000 by top unit allowable for the Maljamar Grayburg-San Andres Pool.

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

Upper Pool: Oil 38%, Gas 100%
Lower Pool: Oil 62%, Gas 0

-2-

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,



JOE D. RAMEY

Division Director

JDR/CU/og

cc: Oil Conservation Division
Box 1890
Hobbs, New Mexico



PHILLIPS PETROLEUM COMPANY
ODESSA, TEXAS 79762
4001 PENBROOK

NATURAL RESOURCES GROUP
Exploration and Production

February 5, 1980

Application for Exception to Rule
303-C--Eilliams Well No. 8, Maljamar
(Grayburg-San Andres) and Corbin
(Queen) Zones, Lea County, New Mexico

New Mexico Department of
Energy and Minerals
Oil Conservation Division (2)
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. Joe D. Ramey,
Director

Gentlemen:

Phillips Petroleum Company requests administrative approval to permit downhole commingling of production from the Maljamar (Grayburg-San Andres) and the Corbin (Queen) zones in the Eilliams Well No. 8, located in Unit II, Section 34, T-17-S, R-33-E, Lea County, New Mexico.

The well is currently a single completion in the Corbin (Queen), and the Maljamar (Grayburg-San Andres) is shut off under a retrievable bridge plug. The well was drilled in February, 1980, and is not now or never has been dually completed.

In support of this request and in accordance with Rule 303-C, the following exhibits and facts are submitted:

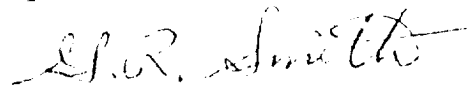
1. The attached plat shows the Eilliams Well No. 8 location.
2. A complete resume of the well's completion history.
3. Comparison economics of commingled production versus individual zone production.
4. A data sheet with information about the two completion zones.
5. Form C-116's showing current oil, water, and gas tests of each zone.
6. A schematic diagram showing the present completion and the proposed commingled completion.

Application for Exception to Rule 303-C--
Williams Well No. 8
February 5, 1980
Page: 2

7. The ownership of the two zones to be commingled is common in all respects.
8. Copies of this application have been furnished to the attached list of offset operators.

Regards,

PHILLIPS PETROLEUM COMPANY



G. R. Smith
Reservoir Engineering Director

REW:skm
Attachments

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

Attachments

OFFSET OPERATORS
To
Phillips Petroleum Company
Williams Well No. 8

Union Oil Company of California
Attn: R. S. Cooke
P. O. Box 3100
Midland, Texas 79702

Harvey E. Yates Company, Inc.
West Building
Midland, Texas 79701

Target Production Company
2400 S. Main
Lovington, New Mexico 88260

Energy Reserves Group, Inc.
Attn: R. L. Zimmermann
1509 W. Wall
Midland, Texas 79701

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form 1-12
Supersedes 6-128
Effective 1-1-75

All distances must be from the outer boundaries of the Section

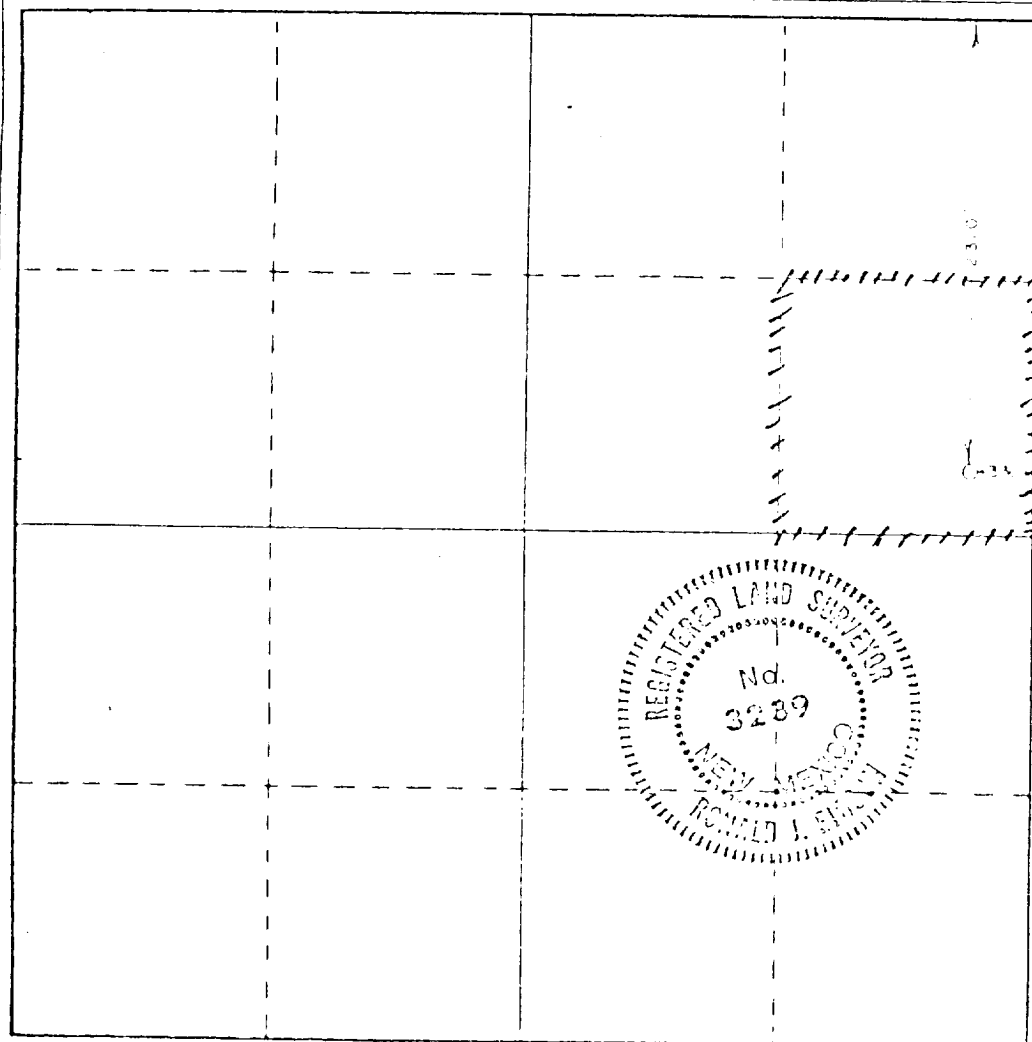
Operator Phillips Petroleum Co.		Lease Williams		Acreage 8	
Tract Letter E	Section 34	Township 17 South	Range 33 East	County Lea	
Actual Well Location of Well:					
2310		feet from the North line and		330 feet from the East line	
Ground Level Elev. 4138.3	Producing Formation San Andres & Queen		Pool McJannet & Corbin	Dedication Acreage 40	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name
Ralph Rorer *Ralph Rorer*
Position
Senior Reservoir Engineer
For my
Phillips Petroleum Company
Date
December 7, 1978

I hereby certify that the well location shown on this plat 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
December 1, 1978

Registered Professional Engineer and or Land Surveyor

Ronald J. Eidson

Certificate No. John W. West 676
Ronald J. Eidson 3239

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

ELLIAMS-8 WELL HISTORY

March 12, 1979

The well was drilled to a total depth of 4800' originally completed in the Maljamar (Grayburg-San Andres) from 4629-4709' with 44 perforated holes. That zone was treated with 7,500 gallons of 28% NE HCl and 4,500 gallons of 3% HCl in three stages. Production tests determined this zone to be uneconomical.

April 12, 1979

The perforations 4629-4709' were squeezed with 50 sacks of API Class C cement and held to 1000 psi. The zone 4552-4596' was perforated with 72 holes. The zone 4552-4596' was fracture-treated with 25,000 gallons of refined oil and 45,000 pounds of 10/20 mesh sand in three equal stages. Production tests determined this zone to be uneconomical.

June 12, 1979

The perforations 4552-4596' were squeezed with 100 sacks of API Class C cement and held to 2000 psi. The Grayburg was perforated from 4472-4482' with 20 holes. That zone was then acidized with 250 gallons of super hydrofluoric acid and subsequently fractured with 10,000 gallons of refined oil and 16,500 pounds of 10/20 mesh sand. The static potential from that zone was taken July 6, 1979, and tested 12 barrels of oil per day, 0 barrels of water per day, and a GOR of 426.

August 30, 1979

A retrievable bridge plug was set in the casing at 3950', sealing off the Grayburg perforations. The Corbin (Queen) was perforated from 3854-3870' with 32 holes. The perforations were treated with 250 gallons of super hydrofluoric acid and fractured with 12,000 gallons of refined oil and 21,000 pounds

of 10/20 mesh sand in two stages. The state potential for the Queen Zone was taken September 28, 1979, and tested 17 barrels of oil per day, 7 barrels of water per day, and no gas.

Subsequent 20-30 day retests on both zones showed the Grayburg-San Andres produced 5 BO, 10 BW, with a GOR of 1600. The Queen produced 8 BO, 4 BW, and no gas. Commingled production should be allocated 50 percent to the Grayburg-San Andres and 50 percent to the Queen.

The possibility of a dual completion is unfavorable due to the small size (4-1/2" OD) of the production casing. The following computation indicates the increased value of commingling the production between the Queen and the Grayburg-San Andres reservoirs. It consists of a comparison of the present values of incoming cash flows for two cases:

Case 1: Commingled Production of Queen and Grayburg-San Andres.

Case 2: Individual Production of Queen then Grayburg-San Andres.

Using a present value of 10% interest, the forecasts show an increase in value of \$78,285 for Case 1 over Case 2. Case 2 approximates dual completion economics since each zone would have individual lifting costs.

Case 1: Commingled Production of Queen and Grayburg.

Assume the life of the commingled reservoirs is 13 years. Cumulative production would be 36,282 BO at an initial rate of 20 BOPD.

YEAR	PRODUCTION SCHEDULE		DISCOUNTED CASH FLOW @ 10%
	OIL (BBLS)	GAS (MCF)	
1	6618	3309	\$187,562
2	5523	2762	147,197
3	4611	2306	115,447
4	3869	1935	91,432
5	3212	1606	77,530
6	2701	1351	65,564
7	2227	1114	54,174
8	1862	931	45,212
9	1570	785	37,986
10	1314	657	31,684
11	1095	548	26,348
12	913	457	20,974
13	767	384	16,821
Total	36282 Bbl	18145 Mcf	\$917,931

Case 2: Individual Production of Queen then Grayburg.

Assume the life of each reservoir is 10 years if they are produced independently. Cumulative production from each reservoir is 17,500 BO at an initial production rate of 10 BOPD. Assume the Corbin (Queen) is produced to depletion, then the Maljamar (Grayburg-San Andres) is produced to depletion.

YEAR	PRODUCTION SCHEDULE		DISCOUNTED CASH FLOW @ 10%
	OIL (BBLS)	GAS (MCF)	
1	3314	1657	\$ 93,923
2	2305	1403	74,758
3	2374	1187	59,438
4	2009	1005	47,477
5	1700	850	41,034
6	1439	720	34,931
7	1218	609	29,629
8	1031	516	25,035
9	872	436	21,098
10	738	369	17,795
11	3314	1657	79,741
12	2305	1403	64,435
13	2374	1187	52,063
14	2009	1005	42,028
15	1700	850	33,952
16	1439	720	27,439
17	1218	609	22,165
18	1031	516	17,918
19	872	436	14,457
20	738	369	11,677
Total	35000 Bbl	17504 Mcf	\$810,993

EXHIBIT "A"
DATA SHEET

PHILLIPS PETROLEUM COMPANY
4001 PENBROOK STREET
ODESSA, TEXAS ~~79762~~

APPLICATION FOR EXCEPTION TO RULE 303(a) OF NEW MEXICO OIL CONSERVATION
COMMISSION'S RULES & REGULATIONS ALLOWING DOWNHOLE COMMINGLING OF DUALY
COMPLETED OIL WELLS BY ADMINISTRATIVE PROCEDURE (ORDER NO. R-3845)

1. Lease Name: Williams
2. Well No.: 8
3. Well Location: Unit H, 2310 feet from North line, 330
feet from East line of Section 34, Township 17-S Range 33-E,
Lea County, New Mexico
4. Upper Zone: Corbin (Queen)
5. Completion Interval: 3854-3870
6. Lower Zone: Maljamar (Grayburg-San Andres)
7. Completion Interval: 4472-4482
8. Dual Completion Authorized by Commission Order No. Not Dually completed
Lower Zone SI under RBP
9. Current Productivity Test Summary (Form C-116 attached)

	Corbin Queen (Upper Zone)	Maljamar Gb-SA (Lower Zone)
Producing Method	Pump	Shut-in
Oil Bbls/day	8	5
Gas Mcf/day	TSTM	8
Water Bbls/day	4	10
GOR	0	1600
GOR Limit	2000	2000

10. Bottom-hole Pressure of Upper Zone: Not Available
11. Bottom-hole Pressure of Lower Zone: Not Available
12. Fluid Characteristics of Each Zone: Both zones produce a compatible
intermediate crude. Expect no problems from untreatable precipitates
resulting from commingled formation water.

By: R. E. Williams

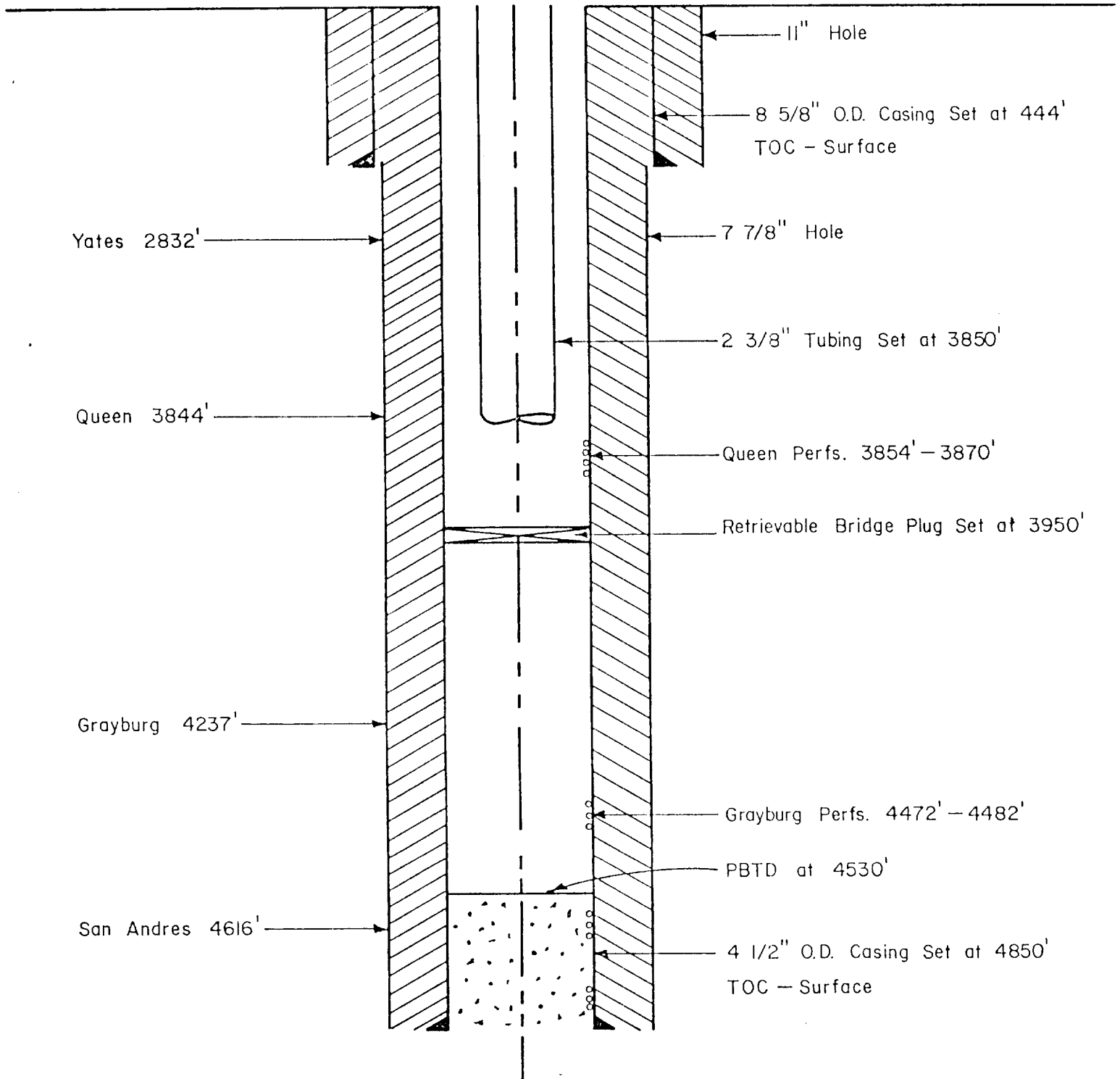
Date: January 4, 1980

PHILLIPS PETROLEUM COMPANY
EILLIAMS WELL NO. 8

APPLICATION FOR EXCEPTION
TO RULE 303 (a)

WELLBORE SKETCH

(Commingle Sketch Will Exclude Bridge Plug)



Phillips Petroleum Company

Maljamar Gb-SA

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4001 Penbrook St., Odessa, Texas 79762

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1. The Commission has been informed that the Government of the Republic of the Philippines has agreed to accept the Commission's findings and recommendations in the case of the late President Ferdinand E. Marcos, and to take the necessary steps to implement them.

Date: 8-23-79

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Will citizens get one copy of their record in the printed version of the report or the online version? Community health reports will be available online and appropriate print copies.

Richard. Brown R. J. Roper

2000