

ZAPATA PETROLEUM CORPORATION
MONTHLY PRODUCTION
PHILLIPS STATE "B" LEASE
MALJAMAR FIELD
LEA COUNTY, NEW MEXICO

BETTER EXAMINER UTZ	
CITY OF ALBUQUERQUE, NEW MEXICO	
APPROVED	EXHIBIT NO. <u>2</u>
CASE NO. <u>2532</u>	

<u>1958</u>		<u>1960</u>	
Jan.	423	Jan.	11,803
Feb.	2,234	Feb.	10,900
Mar.	6,225	Mar.	10,446
Apr.	7,090	Apr.	9,742
May	8,994	May	9,242
June	10,026	June	8,688
July	12,710	July	8,630
Aug.	15,124	Aug.	8,205
Sept.	16,355	Sept.	7,156
Oct.	16,238	Oct.	7,608
Nov.	15,288	Nov.	6,886
Dec.	15,527	Dec.	6,594

<u>1959</u>		<u>1961</u>	
Jan.	16,172	Jan.	7,261
Feb.	14,975	Feb.	6,213
Mar.	15,808	Mar.	6,286
Apr.	15,583	Apr.	5,692
May	14,584	May	5,768
June	13,461	June	5,648
July	14,112	July	5,193
Aug.	14,091	Aug.	5,940
Sept.	11,979	Sept.	5,339
Oct.	14,184	Oct.	5,239
Nov.	12,185	Nov.	5,221
Dec.	12,508	Dec.	5,016

<u>1962</u>	
Jan.	5,052
Feb.	4,345
Mar.	5,351

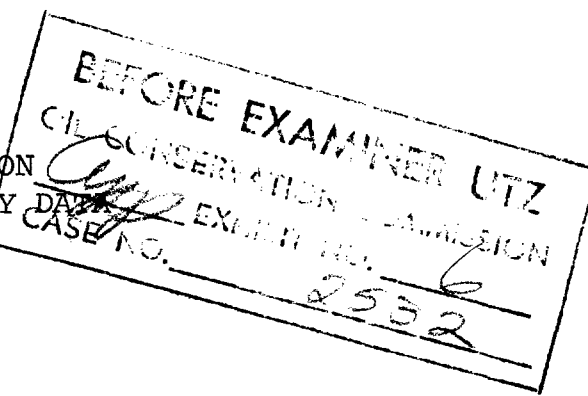
Cumulative 4-1-62 - 485,904

ZAPATA PETROLEUM CORPORATION
WELL TESTS
PHILLIPS STATE "B" LEASE
MALJAMAR FIELD
LEA COUNTY, NEW MEXICO

DEPT. OF EXAMINER UTZ COUNTY OF LEA EXAMINER NO. <u>4</u> CASE NO. <u>2532</u>

<u>Well No.</u>	<u>Date of Test</u>	<u>Producing Method</u>	<u>Oil Bbl/day</u>	<u>Water Bbl/day</u>	<u>GOR Ft³/bbl</u>
1	3-7	Pump	2.28	0	1945
2	3-8	Pump	14.82	0	3390
3	3-9	Pump	5.13	0	4440
4	3-14	Pump	10.96	0	3140
5	3-15	Pump	9.74	0	3390
6	3-16	Pump	10.26	0	3200
7	3-17	Pump	10.26	0	2750
8	3-10	Pump	7.98	0	3840
9	3-13	Pump	10.20	0	3650
10	3-18	Pump	14.82	0	3020
11	3-19	Pump	14.82	0	3020
12	3-20	Flow	24.20	0	1950
13	3-22	Pump	10.26	0	4370
14	3-23	Pump	6.56	0	6400
15	(Shut-in)				

ZAPATA PETROLEUM CORPORATION
ESTIMATED RESERVOIR AND RECOVERY DATA
PHILLIPS STATE "B" LEASE
MALJAMAR FIELD
LEA COUNTY, NEW MEXICO



Grayburg - San Andres

	<u>Barrels Per Acre-Foot</u>
Total pore space for 11.5% porosity	892.2
Connate water saturation (35%)	312.3
Original oil saturation (65%)	579.9
Formation volume factor (1.2)	
Original STO in place	483.2
Primary oil produced to 4-1-62	29.7
Remaining primary oil	15.2
Waterflood oil reserves	47.1
Residual oil after waterflooding (42.8% of pore space)	391.2

Primary Reserves

Area	505 acres
Average net pay	32 ft.
Primary acre-feet	16,200
Cumulative to 4-1-62	485,904 BO
Remaining primary reserves	273,804 BO
Ultimate primary reserves	759,708 BO

Waterflood Reserves

Area	538 acres
Average net pay	30 ft.
Waterflood acre-feet	16,140
Waterflood recovery per acre-foot	47.1
Ultimate waterflood reserves	759,194 BO

UTZ
EXAMINER
EXHIBIT NO. 2
CASE NO. 2532

WELL COMPLETION DATA

Zapata Petroleum Corporation
Phillips - State "B" Lease
Maljamar Field Lea County, New Mexico

Well No.	Completion Date	Total Depth	Plugged Back T.D.	Casing		Method	Completion Interval Feet	Well Treatment At Completion	Initial Potential		
				Size Inches	Depth Feet				Oil B/D	Water Bbls.	GOR Cu. Ft./Bbl.
1	1-21-58	4360	4328	5 1/2	4359	Perforations	4034-4048 4076-4094 4157-4167 4228-4240	20,000 gals. 7 1/2% acid w/10,000# sand	49.4	3.6	
2	1016-58	4416	4384	5 1/2	4412	Perforations	4324-4348 4054-4067 4120-4140 4154-4180 4194-4200 4211-4228 4248-4260	3,000 gals. 15% LST NE acid treated w/30,000 gals. 15% acid w/15,000# sand	55.2	3.9	
3	1-13-58	4421	4391	5 1/2	4420	Perforations	4080-4092 4113-4128 4144-4154 4168-4173 4180-4190 4247-4252	25,000 gals. 7 1/2% acid 2/12,500# sand	44.3	1.2	
4	5-3-58	4586	4562	5 1/2	4585	Perforations	4166-4174 4203-4209 4261-4269 4294-4316 4487-4503	30,000 gals. acid 2/15,000# sand	142.3	2.5	
5	6-15-58	4458	4430	5 1/2	4457	Perforations	4080-4090 4118-4130 4172-4180 4204-4232 4378-4408	28,000 gals. acid w/15,000# sand	88.2	4.1	

WELL COMPLETION DATA

Well No.	Completion Date	Total Depth Feet	Plugged Back	Casing		Completion		Well Treatment At Completion	Initial Potential	
				Size Inches	Depth Feet	Method	Interval Feet		Oil B/D	Water Bbls. Cu. Ft./GOR
6	2-26-58	4410	4389	5 1/2	4409	Perforations	4098-4104 4134-4140 4157-4166 4169-4181 4322-4350	25,000 gals. 7 1/2% acid w/12,500# sand	406.8	8.3
7	2-11-58	4390	4355	5 1/2	4390	Perforations	4108-4116 4181-4191 4202-4220 4230-4250 4320-4350	3,000 gals. 15% acid	65.8	4.2
8	4-15-58	4340		5 1/2	4259	Open Hole	4259-4340	10,000 gals. 15% acid w/5,000# sand	148	3
9	3-16-58	4375	4340	5 1/2	4374	Perforations	4120-4130 4146-4154 4170-4178 4296-4330	25,000 gals. acid w/12,500# sand	152.5	4.6
10		4410	4380	5 1/2	4409	Perforations	4020-4030 4056-4062 4082-4108 4290-4312 4366-4371	25,000 gals. acid 2/12,500# sand	118	4
11	7-4-58	4390	4362	5 1/2	4390	Perforations	4018-4036 4058-4074 4156-4160 4178-4184 4192-4197 4220-4235 4288-4298 4312-4336	35,000 gals. acid w/17,500# sand	41.2	1.1 2,480

WELL COMPLETION DATA

Well No.	Completion Date	Total Depth Feet	Plugged Back T. D.	Casing		Completion		Well Treatment At Completion	Initial Potential	
				Size Inches	Depth Feet	Method	Interval Feet		Oil B/D	Water Bbls. Cu. Ft./Bbl. GOR
12	8-23-58	4390	4356	5 1/2			4054-4060 4108-4118 4143-4150 4154-4163 4172-4176 4187-4197 4203-4214 4218-4235 4302-4319	37,000 gals. acid w/18,500# sand		
13	5-29-58	4619	4345	5 1/2	4500	Perforations	3984-3990 4058-4067 4082-4097 4122-4136 4148-4157	23,500 gals. acid w/11,750# sand	84.2	3.3
14	7-18-58	4325	4298	5 1/2	4325	Perforations	3962-3976 4040-4048 4086-4096 4148-4166 4170-4180 4219-4229 4238-4266	26,000 gals. acid w/13,000# sand	56.2	4.3
15	8-4-58	4291	4291	5 1/2	4228	Perforations	4044-4062 4066-4084 4094-4112 4144-4152 4160-4164 4228-4291	30,000 gals. acid w/15,000# sand	41.3	2.7
						Open Hole				

CONSERVATION COMMISSION

EXHIBIT NO. 2532
DIST. NO. 2532

CASING RECORD

Proposed Injection Wells Phillips State "B" Lease

Maljamar Field - Lea County, New Mexico

Well No.	Location Unit S-T-R	Total Depth	Date Completed	Perforated Intervals	SURFACE CASING					PRODUCTION CASING					
					Size	Weight	Grade	Depth	Cement Sx.	Size	Weight	Grade	Depth	Cement Sx.	Top Cement
3	H 19-17-33	4421	1-26-58	4080-4092 4113-4128 4144-4154 4168-4173 4180-4190 4247-4252	8-5/8"	24#	J-55	338	175 Circ.	5½	15.5	J-55	4420	150	3625
5	B 19-17-33	4458	6-20-58	4080-4090 4118-4130 4172-4180 4204-4232 4378-4408	8-5/8"	24#	J-55	365	175 Circ.	5½	15.5	J-55	4457	150	3630

TREAT-RITE WATER LABORATORIES, INC.

WATER CONSULTANTS SINCE 1938

BACTERIAL AND CHEMICAL ANALYSIS

P. O. BOX 848

PHONE WI 3-4781

MONAHANS, TEXAS

To: Mr. Bert Murphy
3017 Lubbock Avenue
Fort Worth 9, Texas

Laboratory No. BM6596
Samples received 6-2-59
Results reported 6-12-59

Company: Waterflood Associates, Inc.
County: Lea & Eddy, N.M.
Field: 3 inch line from the Caprock to city of Loco Hills
Lease: Caprock Water Company at Loco Hills

Source of sample and date taken:

- #1. Water - taken from truck loading storage at Loco Hills at end of
3 inch line. 6-2-59

#1

Iron bacteriaNot detected

Sulfur bacteria 65

Sulfate-reducing bacteriaNot detected

Other aerobes 53*

Other anaerobesNot detected

Fungi (& aciduric bacteria). 9

AlgaeNot detected

Protozoa.Not detected

Total count 127

pH. 7.5

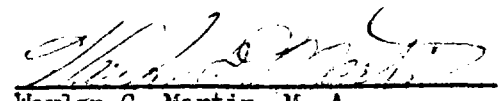
Temperature 75

Chlorine residual none

Note: All numerical results are reported as the number of cells per cubic centimeter of the sample as determined by plate counts; except iron, algae, and protozoa, which are determined microscopically.

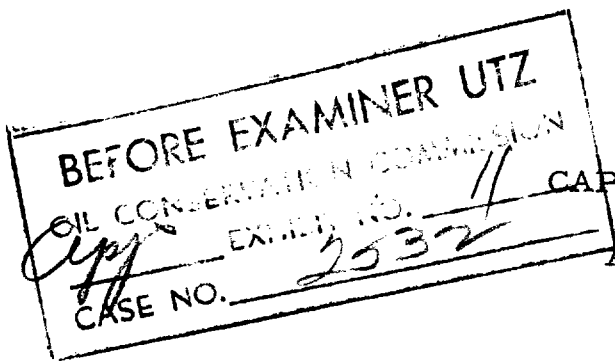
*Organisms which show potential slime-forming characteristics on culture media.

Remarks: The above results are considered substantial confirmation that bacterial activity will give no interference with the conclusions drawn on Chemical Analysis Number M6596. To the best of my recollection you wanted one bacterial, however, for research purposes we made counts on the other samples which showed to be essentially identical to the above.


Waylan C. Martin, M. A.

Analysis by _____
Bruce Hughes, M. A.

cc: Hal Porter, Artesia, N.M.



CAPROCK WATER COMPANY
P. O. Box 607
Artesia, New Mexico

April 19, 1962

Zapata Petroleum Corporation
P. O. Box 3195
Midland, Texas

Re: Injection water - Your project
located in Section 19, T-17-S,
R-33-E, Lea County, New Mexico.

Gentlemen:

In accordance with our conversation, we wish to inform you that we are agreeable to furnishing injection water for the subject project under our standard water sales contract. We can have this water available for you within six weeks after the execution of the agreement.

Yours very truly,

CAPROCK WATER COMPANY

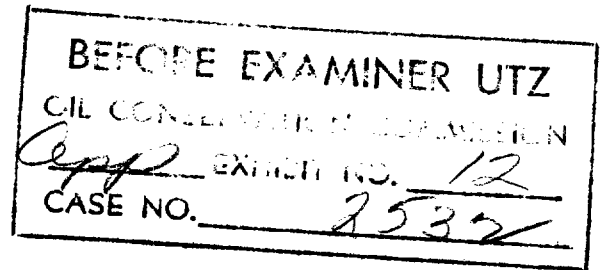
By:

H. N. Morgan
Harold N. Morgan

BHM:dk

MURPHY H. BAXTER
507 MIDLAND NATIONAL BANK BUILDING
MIDLAND, TEXAS

April 24, 1962



New Mexico Oil Conservation Commission
Santa Fe, New Mexico

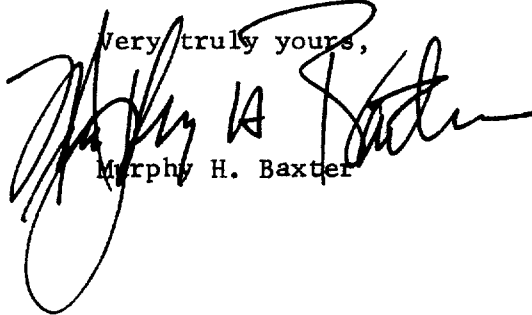
RE: New Mexico Oil Conservation
Commission Case No. 2532.

Gentlemen:

As owner and operator of oil and gas leases described as the E/2 and SW/4 of Section 18, Township 17, Range 33, Maljamar Field, Lea County, New Mexico, I would like to advise that I am familiar with the above referred to case in which Zapata Petroleum Corporation requests to expand its pilot waterflood project authorized by your Order R-2157.

I would further like to advise that I have no objection to the Commission's approving this request.

Very truly yours,



Murphy H. Baxter

MHB:wm

ZAPATA PETROLEUM CORPORATION
CASING RECORD
PROPOSED INJECTION WELLS
PHILLIPS STATE B LEASE
MALJAMAR FIELD
LEA COUNTY, NEW MEXICO

WELL NO.	KDB ELEV.	TOTAL DEPTH	HOLE SIZE	PERFORATED INTERVALS	SURFACE CASING			PRODUCTION CASING		
					SIZE	DEPTH	SXS.CEMENT	SIZE	DEPTH	SXS.CEMENT
3	4166'	4421'	7-7/8"	4080-4092'	8-5/8"	348'	175 & cir.	5-1/2"	4420'	150
				4113-4128'						
				4144-4154'						
				4168-4173'						
				4180-4190'						
				4247-4252'						
5	4163'	4458'	7-7/8"	4080-4090'	8-5/8"	354'	175 & cir.	5-1/2"	4457'	150
				4118-4130'						
				4172-4180'						
				4204-4232'						
				4378-4408'						

48-16-
22532



2532

STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

April 23, 1962

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, N. M.

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Santa Fe, New Mexico

Dear Mr. Porter:

Mr. Kenneth R. Huddleston of Zapata Petroleum Corporation, Midland, Texas has replied to my inquiries concerning their application which was submitted to you under date of April 10, 1962 which seeks permission to convert their Phillips State "B"-3, Unit H and Phillips State "B"-5, Unit B to water injection wells. Copies of the correspondence among Mr. Huddleston, his attorney and me are enclosed for your information.

In view of Mr. Huddleston's statement....."The water will be injected down tubing and beneath packers. There will never be any pressure on the casing at any time." It appears that no threat of contamination to any fresh water which may exist in this area will occur. Therefore, this office offers no objection to the granting of this application.

Yours truly,

S. E. Reynolds
State Engineer

FEI/ma

cc-F. H. Hennighausen
Kenneth R. Huddleston
John F. Russell

By: *Frank E. Irby*
Frank E. Irby
Chief
Water Rights Division

April 12, 1962

Mr. John F. Russell
Attorney at Law
P. O. Drawer 640
Roswell, New Mexico

Dear Mr. Russell:

Reference is made to the application of Zapata Petroleum Corporation which seeks to convert two oil wells to water injection wells for the purpose of secondary recovery in the Majamar Field, a copy of which you submitted to this office on April 9, 1962.

Before reaching an opinion concerning this matter, it will be necessary for me to have the following information:

1. Does the applicant plan to inject through the existing casing, or will the injection be through tubing under packer?

(a) If the injection is to be through tubing under a packer, the following questions need not be answered.

2. What is the age and condition of the casing?

3. At what pressure and rate will injection be made?

4. Will the system be closed?

5. Will water be recycled?

6. Will treatment be necessary?

7. Is the casing set and cemented into the salt section in each case and if so, to what depth in the salt?

I bring up these points at this time in order that your client may be prepared to answer them at the hearing, or if convenient, answer them prior to the hearing.

FRI/ma

ILLEGIBLE

Very truly yours,

S. E. Reynolds
State Engineer

By:
Frank E. Irby, Chief,
Water Rights Division.

C
O
P
Y

ZAPATA PETROLEUM CORPORATION
BOX 3195
PHONE MUTUAL 2-7316
MIDLAND, TEXAS

April 21, 1962

Irby

1962 APR 23 AM 8:21
STATE ENGINEER OFFICE
SANTA FE, N.M.

Mr. Frank E. Irby, Chief
Water Rights Division
State Engineer Office
State Capitol
Santa Fe, New Mexico

Dear Mr. Irby:

In reply to your letter to Mr. John F. Russell, Attorney at Law, regarding Zapata's application to convert two oil wells to water injection wells for secondary recovery in the Maljamar Field, the water will be injected down tubing and beneath packers. There will never be pressure on the casing at any time.

All the casing and tubing used on this lease was purchased new in 1958.

If there is any additional information you will need regarding this application, please let us know.

Yours very truly,

Kenneth R. Huddleston
Kenneth R. Huddleston

KRH:FMCB

cc: Mr. John F. Russell
Campbell & Russell
P. O. Drawer 640
Roswell, New Mexico

Irby

LAW OFFICES OF
CAMPBELL & RUSSELL

JACK M. CAMPBELL
JOHN F. RUSSELL

4 P. WHITE BUILDING
ROSWELL, NEW MEXICO

REC'D APR 20 3 11 PM TELEPHONE
MAIN 2 4641
MAIN 2 4642

April 19, 1962

Mr. Ken Huddleston
Zapata Petroleum Corporation
Post Office Box 3195
Midland, Texas

ILLEGIBLE

Dear Mr. Huddleston:

I was in error yesterday when I stated the letter from the
State Engineer's Office had been mailed to you.

I enclose the letter from Mr. Irby and suggest that the
answers to his questions be sent to him direct.

Very truly yours,

CAMPBELL & RUSSELL

John F. Russell
John F. Russell

JFR:sah

Encl.

cc: Mr. Frank Irby

C
O
P
Y

JACK M. CAMPBELL
JOHN F. RUSSELL

LAW OFFICE OF
CAMPBELL & RUSSELL
P. O. DRAWER 10
ROSWELL, NEW MEXICO

April 9, 1940

PAID
APR 10 1940

Mr. Frank Irby
Chief, Water Rights Division
State Engineer Office
P. O. Box 1079
Santa Fe, New Mexico

ILLEGIBLE

Dear Mr. Irby:

We transmit herewith an application of Zapata
Petroleum Corporation with the accompanying exhibits.

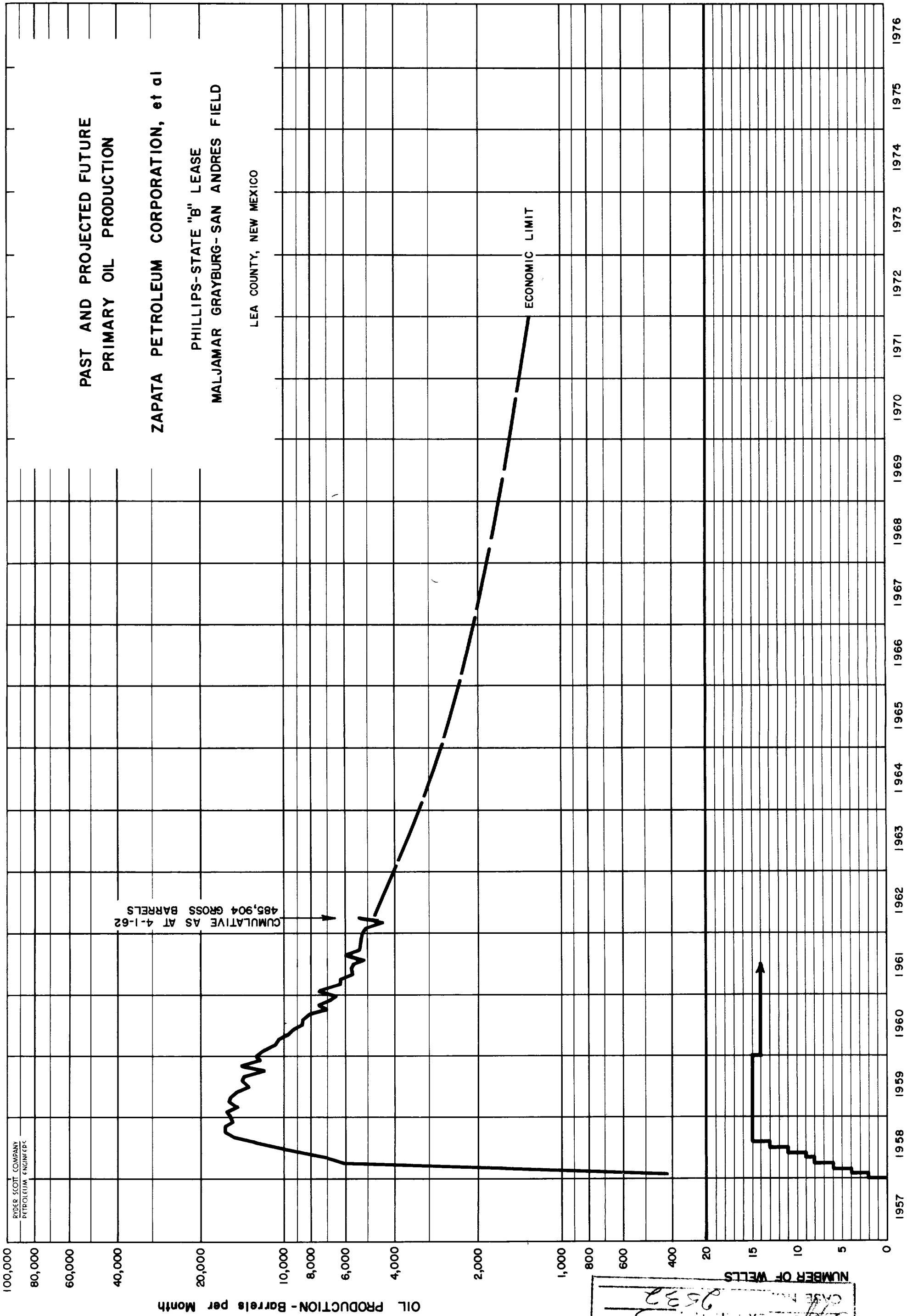
Very truly yours,

CAMPBELL & RUSSELL

F. Russell

JFR:np

Enclosures



FILED IN 1976
CASE NO. 9532
5

RYDER SCOTT COMPANY
PETROLEUM ENGINEERS