



MAIN OFFICE 800
1964 APR 19 11 50
STATE OF NEW MEXICO

STATE ENGINEER OFFICE
SANTA FE

S. E. REYNOLDS
STATE ENGINEER

April 16, 1964

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

Case 3034

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

Dear Mr. Porter:

Reference is made to the application of Shell Oil Company which seeks approval of a water flood project in the Langlie Mattix Pool in Sections 14 and 23, T. 24 S., R. 37 E. Attached to the application is a diagrammatic sketch of typical injection well which shows that injection will be down plastic coated tubing under a packer and the annular space between the tubing and the casing will be filled with inhibited water. This office offers no objection to the granting of the subject application, provided the packer on the lower end of the tubing is set well below the cement surrounding the casing and further provided that the plastic coating of the tubing is inside the tubing.

Very truly yours,

S. E. Reynolds
State Engineer

FEI/ma
cc-Shell Oil Co.
Seth, Montgomery, Federici &
Andrews

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

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

File

May 8, 1964

Mr. Richard S. Morris
Seth, Montgomery, Federici & Andrews
Attorneys at Law
Post Office Box 2307
Santa Fe, New Mexico

Dear Mr. Morris:

Enclosed herewith is Commission Order No. R-2698, entered in Case No. 3034, approving the Shell Oil Company Langlie Mattix Waterflood Project.

According to our calculations, when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 714 barrels per day. This does not include the Shell Humble Knight Well No. 9 in Unit H of Section 23. If this well is restored to production, the above maximum would be increased by 42.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe Office of the Commission and the appropriate district proration office.

In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both of the aforementioned Commission offices by letter of any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

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Your cooperation in keeping the Commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

cc: Oil Conservation Commission
Hobbs, New Mexico

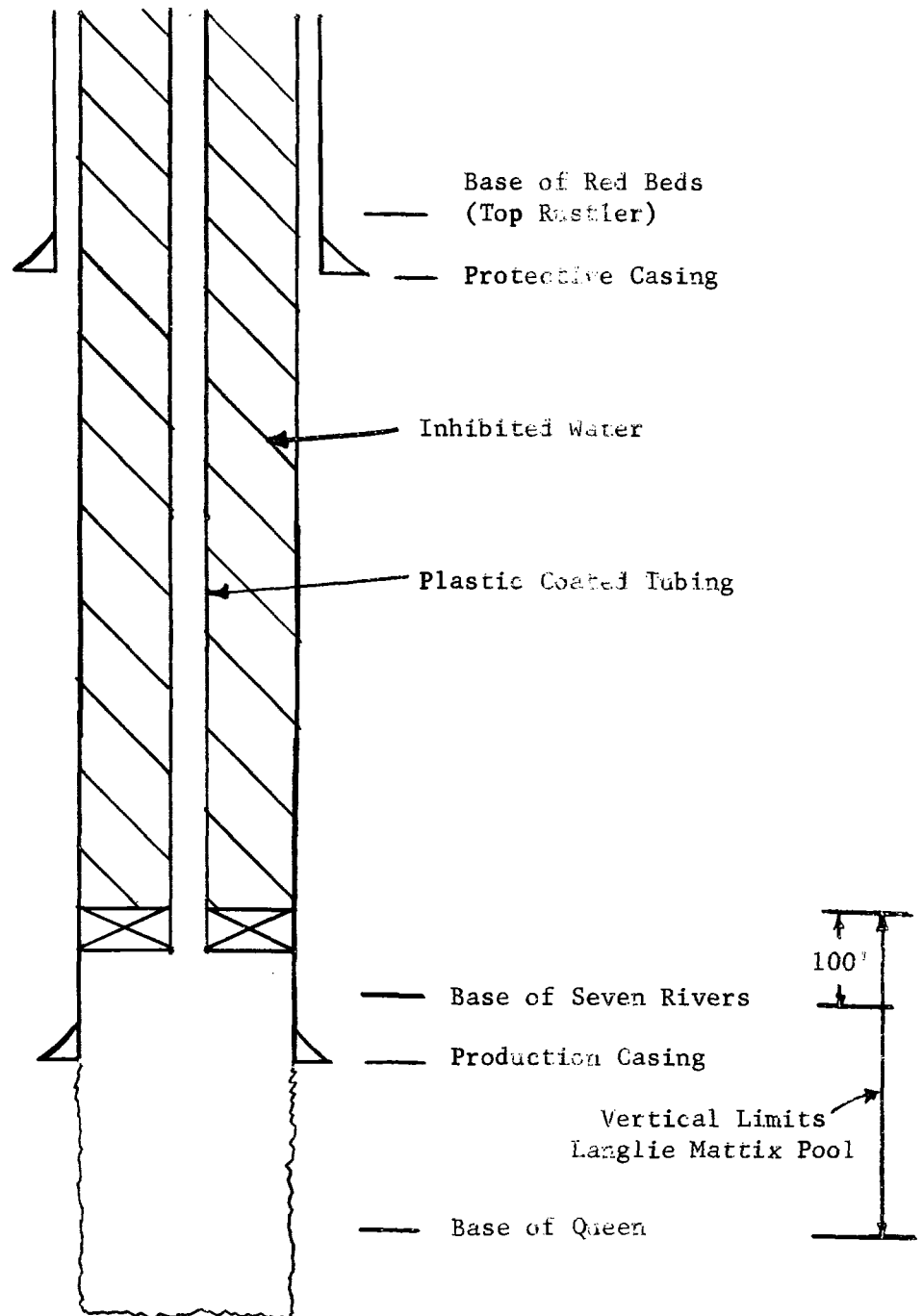
3034

SHELL OIL COMPANY
PROPOSED WATERFLOOD IN THE LANGLE MATIUX FIELD
INJECTION WELL DETAIL

Injection Well	Location Unit-S-T-R	Distance Feet	Casing Detail(1)				TD	PRTD(3)	Vertical Limit(4)	
			Size In.	Depth Ft.	Cmt. Sr.	Est. Cmt. Top(2)			Top (100' above 7 Rivers Base)	Bottom (Base of the Queen)
Shell Gulf Little 2	E-23-24-37	1980 FNL 660 FWL	12 1/2 8 5/8 7	152 1350 3344	50 100 150	480 1244	3517	3400	3043	3400
Shell Gulf Little 3	C-23-24-37	660 FNL 1980 FWL	8 5/8 7	1120 3341	100 150	250 1241	3550	3550	3130	3490
Shell Humble Knight 1	M-14-24-37	660 FSL 660 FWL	15 1/2 8 5/8 7	123 1365 3361	50 100 150	495 1261	3517	3517	3107	3457
Shell Humble Knight 3	G-23-24-37	1980 FNL 1980 FWL	8 5/8 7	1460 3328	100 150	590 1228	3615	3615	3175	3555
Shell Humble Knight 6	O-23-24-37	660 FSL 1980 FWL	8 5/8 7	1140 3250	100 150	270 1150	3502	3502	3118	3483
Shell Humble Knight 8	I-23-24-37	1650 FSL 990 FWL	7 5 1/2	1350 3256	100 100	0 2056	3560	3480	3224	3584
Shell Humble Knight 10	O-14-24-37	330 FSL 2310 FWL	8 5/8 4 1/2	635 3258	225 100	Circ. 2558	3482	3482	3263	3628
Shell JAE Knight 6	K-14-24-37	1980 FSL 1990 FWL	8 5/8 7	1365 3363	100 150	495 1263	3600	3563	3243	3603
Shell Plains Knight 1	K-23-24-37	1980 FSL 1980 FWL	8 5/8 7	1200 3230	100 150	330 1130	3586	3586	3087	3445

- (1) The base of the Red Reds in this area is between 900 and 1000 feet.
- (2) Based on gauge hole.
- (3) Five injection wells are open below the base of the Queen into the Grayburg. The Grayburg, however, is not productive and has no field designation in this area.
- (4) ES and/or Radioactive logs are available on only 3 injection wells. Vertical limits on other wells are estimated from nearby wells and driller's sample description.

SHELL OIL COMPANY
 PROPOSED WATERFLOOD
 LANGLIE MATTIX FIELD
 LEA COUNTY, NEW MEXICO
 DIAGRAMMATIC SKETCH OF TYPICAL INJECTION WELL



SHELL OIL COMPANY
PROPOSED WATERFLOOD IN THE LANGLE MATTHEX FIELD
INJECTION WELL DETAIL

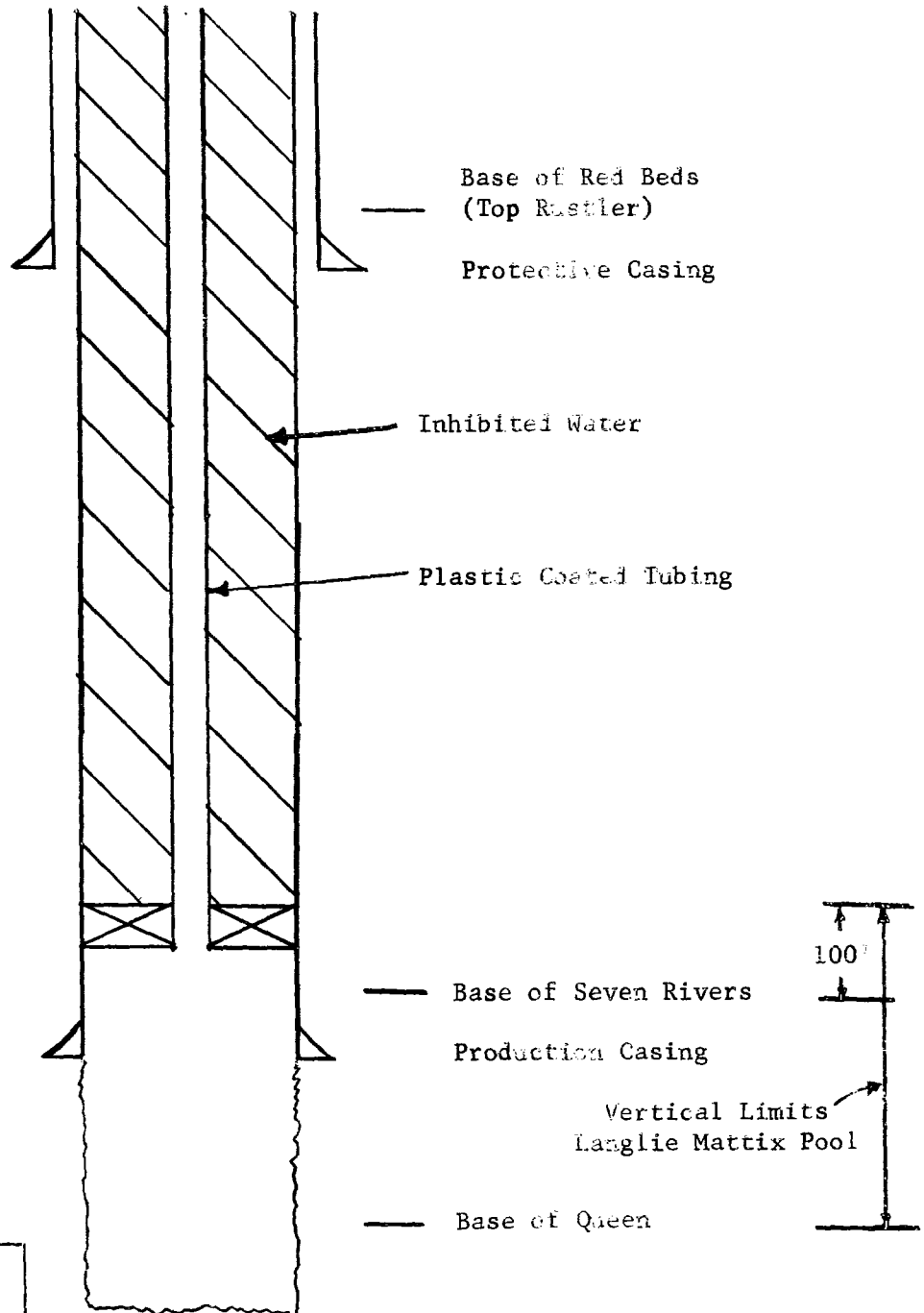
Injection Well	Location Unit--S-T-R	Distance Feet	Casing Detail(1)				TD	PBTD(3)	Vertical Limit(4)	
			Size In.	Depth Ft.	Cmt. Sk.	Est. Cmt. Top(2)			Top (100' above 7 Rivers Base)	Bottom (Base of the Queen)
Shell Gulf Lillie 2	E-23-24-37	1980 FNL 660 FWL	12 1/2 8 5/8	152 1350	50 100	480 1244	3517	3400	3043	3400
Shell Gulf Lillie 3	C-23-24-37	660 FNL 1980 FWL	8 5/8 7	1120 3341	100 150	250 1241	3550	3550	3130*	3490*
Shell Humble Knight 1	M-14-24-37	660 FSL 660 FWL	15 1/2 8 5/8	123 1365	50 100	495 1261	3517	3517	3107	3457
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 The Grayburg, however, is not productive and has no field designation in this area.
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BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 6
CASE NO. 3034

Case # 3034
17th St. W.

SHELL OIL COMPANY
 PROPOSED WATERFLOOD
 LANGLEIE MATTIX FIELD
 LEA COUNTY, NEW MEXICO
 DIAGRAMMATIC SKETCH OF TYPICAL INJECTION WELL



BEFORE EXAMINER UTZ
 OIL CONSERVATION COMMISSION
 A. EXHIBIT NO. 45
 CASE NO. 3034

Exhibit V
 Case # 3034

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CASE No. 3034

Order No. R-2598

(5) That the subject application should be approved and the project should be governed by the provisions of Rule 701 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Shell Oil Company, is hereby authorized to institute a waterflood project in the Langlie-Mattix Pool by the injection of water into the Queen formation through the following-described nine wells in Township 24 South, Range 37 East, NMPM, Lea County, New Mexico:

Well	Unit	Section
Shell-JAE Knight Well No. 6	K	14
Shell-Humble Knight Well No. 1	M	14
Shell-Humble Knight Well No. 10	O	14
Shell-Gulf Lillie Well No. 3	C	23
Shell-Gulf Lillie Well No. 2	E	23
Shell-Humble Knight Well No. 3	G	23
Shell-Humble Knight Well No. 2	I	23
Shell-Plains Knight Well No. 1	K	23
Shell-Humble Knight Well No. 6	O	23

PROVIDED HOWEVER, That any of the aforesaid wells which is completed below the base of the Queen formation shall be plugged back to the base of the Queen formation upon conversion to water injection.

(2) That the subject waterflood project shall be governed by the provisions of Rule 701 of the Commission Rules and Regulations, including the allowable provisions thereof, and including the provisions with respect to expansion of the waterflood project.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1119 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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CASE No. 3024

Order No. R-2598

DONE at Santa Fe, New Mexico, on the day and year herein-
above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Jack M Campbell

JACK M. CAMPBELL, Chairman

E. S. Walker
E. S. WALKER, Member

A. L. PORTER, Jr., Member & Secretary

