

Entered January 31, 1978
JWR

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 6103
Order No. R-4717-A

APPLICATION OF GETTY OIL COMPANY FOR A
WATERFLOOD PROJECT EXPANSION AND DUAL
COMPLETIONS, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on December 14, 1977, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 31st day of January, 1978, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That Commission Order No. R-4717 entered on January 25, 1974, authorized a pilot waterflood project in the Skelly Unit Area, Fren-Seven Rivers Pool, Eddy County, New Mexico.

(3) That said project was designated the Skelly Unit Fren-Seven Rivers Waterflood Project.

(4) That the applicant, Getty Oil Company, seeks the expansion of said waterflood project by the injection of water into the Seven Rivers formation through 32 additional wells in said project as set out on Exhibit A attached to this order.

(5) That 28 of said additional injection wells as identified on Exhibit A of this order are to be completed as dual completions with injection into both the Fren-Seven Rivers and Grayburg Jackson Pools, most of said wells having been authorized previously as single completion Grayburg Jackson injection wells.

(6) That injection into each of the singly completed wells should be through internally coated tubing set in a packer to be located within approximately 100 feet of the casing shoe.

(7) That injection into each of the dually completed wells should be through internally coated tubing with the long string of tubing set in a packer to be located as close as practicable to the lowermost injection interval and the short string of tubing set in a packer to be located within approximately 100 feet of the uppermost perforation.

(8) That the casing-tubing annulus in each injection well should be filled with an inert fluid, and that a pressure gauge or approved leak detection device should be attached to the annulus or the annulus should be left open in order to determine leakage in the casing, tubing, or packer.

(9) That the injection wells or system should be equipped with a pressure limiting switch or other acceptable device which will limit the surface injection pressure to no more than 1300 pounds unless the Secretary-Director of the Commission should administratively authorize a higher pressure.

(10) That there are 42 wells, as set out on Exhibit B to this order, which are located within or immediately adjacent to the boundaries of said Skelly Unit Area which may or may not be completed or plugged in such a manner that will assure that they will not serve as channels for injected water to migrate from the San Andres formation to other formations or to the surface.

(11) That to prevent migration of injected water from the Seven Rivers formation, formation injection pressure at wells within one half mile of any well identified on said Exhibit B should be limited to hydrostatic pressure until such time as the wells on said Exhibit B have been repaired or it shall otherwise be demonstrated to the satisfaction of the Secretary-Director of the Commission that the same will not serve as avenues for escape of such waters.

(12) That the wells within the project should be equipped to facilitate periodic testing of the annular space between strings of production and surface casing.

(13) That the operator should take all other steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, producing, or plugged and abandoned wells.

(14) That approval of the subject application should result in the recovery of additional volumes of oil from the Skelly Unit Area, thereby preventing waste.

(15) That the applicant should secure Commission approval for injection into the Grayburg Jackson Waterflood Project for any well herein authorized as a dual completion injection well which has not heretofore been approved as a Grayburg Jackson injection well.

(16) That the application should be approved.

IT IS THEREFORE ORDERED:

(1) That the applicant, Getty Oil Company, is hereby authorized to expand its Skelly Unit Fren-Seven Rivers Waterflood Project by the injection of water into the Seven Rivers formation through 4 singly completed and 28 dually completed injection wells, as set out on Exhibit A to this order, Fren-Seven Rivers Pool, Eddy County, New Mexico.

(2) That injection into each of said singly completed wells shall be through internally coated tubing installed in a packer set within approximately 100 feet of the casing shoe.

(3) That injection into each of said dually completed wells shall be through two strings of internally coated tubing with the long string to be installed in a packer set as close as practicable to the lowermost injection interval (Grayburg Jackson) and with the short string installed in a packer set within approximately 100 feet of the uppermost perforation.

(4) That the casing-tubing annulus in each injection well shall be filled with an inert fluid and a pressure gauge or approved leak detection device shall be attached to the annulus or the annulus allowed to remain open in order to determine leakage in the casing, tubing, or packer.

(5) That the injection wells or system shall be equipped with a pressure limiting switch or other acceptable device which will limit the surface injection pressure to no more than 1300 pounds.

(6) That the Secretary-Director of the Commission may administratively authorize a pressure limitation in excess of that set out in Order No. (5) above upon a showing by the operator that such higher pressure will not result in fracturing of the confining strata.

(7) That the applicant shall not inject water into the Seven Rivers formation through any well located within one half mile of any of the 42 wells identified on Exhibit B attached hereto and by reference made a part hereof, at a pressure greater than hydrostatic until such well has been repaired or it has been shown to the satisfaction of the Secretary-Director of the Commission that such well will not serve as an avenue of escape for waters injection into the Seven Rivers formation and he has authorized a higher than hydrostatic pressure.

(8) That the wells within the project area shall be equipped with risers or in another acceptable manner such as to facilitate the periodic testing of the bradenhead for pressure or fluid production.

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(9) That the operator shall immediately notify the supervisor of the Commission district office at Artesia of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from or around any producing well, the leakage of water or oil from or around any plugged and abandoned well within the project area, or any other evidence of fluid migration from the injection zone, and shall take such timely steps as may be necessary or required to correct such failure or leakage.


(10) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1115 of the Commission Rules and Regulations.

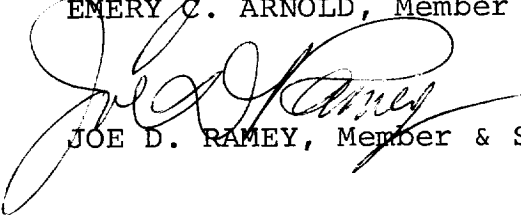
(11) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman


EMERY C. ARNOLD, Member


JOE D. RAMEY, Member & Secretary

S E A L

jr/

GETTY OIL COMPANY SKELLY UNIT
Additional Authorized Injection Wells

All in Township 17 South, Range 31 East, NMPM

SINGLE COMPLETIONS

<u>Skelly Unit Well No.</u>	<u>Unit</u>	<u>Section</u>
4	B	21
6	D	21
8	G	21
14	L	21

DUAL COMPLETIONS

<u>Skelly Unit Well No.</u>	<u>Unit</u>	<u>Section</u>
3	D	22
22	J	14
24	L	14
26	J	15
30	N	15
32	P	15
34	N	14
36	P	14
38	B	23
40	D	23
42	B	22
44	F	22
46	H	22
48	F	23
50	H	23
52	J	22
56	N	22
58	P	22
71	J	23
73	L	23
79	N	23
83	D	26
85	B	27
87	D	27
91	D	28
93	F	28
96	F	27
100	L	28

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Exhibit "A"

<u>Operator</u>	<u>Lease</u>	<u>Well No.</u>	<u>Ut.</u>	<u>Sec.</u>	<u>Twp.</u>	<u>Rge.</u>
Atlantic Rich. Company	Turner "B"	1	P	17	17	31
		7	O	17	17	31
		9	A	20	17	31
		10	G	20	17	31
		11	H	20	17	31
		30	P	17	17	31
		47	B	29	17	31
		49	G	29	17	31
		51	I	20	17	31
		55	H	29	17	31
		59	A	29	17	31
		61	J	29	17	31
		62	I	29	17	31
		63	O	29	17	31
		68	P	29	17	31
		69	B	29	17	31
		78	J	20	17	31
	West "B"	20	O	10	17	31
Murchison & Closuit	Foster Federal State "A" State "A" State "B"	1	I	17	17	31
		1	K	16	17	31
		2	L	16	17	31
		1	J	16	17	31
		2	O	16	17	31
		3	P	16	17	31
William A. & Edward R. Hudson	Puckett "A"	9	F	24	17	31
		10	E	24	17	31
		13	D	24	17	31
		14	M	13	17	31
		20	F	24	17	31
		27	K	24	17	31
	Puckett "B"	8	C	25	17	31
Getty Oil Co.	State "AZ" Skelly Unit	1	M	16	17	31
		23	K	14	17	31
		29	M	15	17	31
		31	O	15	17	31
		35	O	14	17	31
		45	G	22	17	31
		55	M	22	17	31
		72	K	23	17	31
		78	M	23	17	31
		106	C	15	17	31
		116	L	22	17	31

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Exhibit "B"