PRODUCTION CT, LEA

COMPANY FOR A WATERFLOOD PROJECT, LEA COMPANY, NEW NEKICO

v

CASE NO. 2662 APPIICATION, Transcripts, Small Exhibits, ETC.

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2	STATE OF NEW MEXICO						
3	ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION						
4	STATE LAND OFFICE BLDG. Santa Fe, New Mexico						
5	1 September 1982 EXAMINER HEARING						
6	EXAMING						
7	IN THE MATTER OF:						
8	Application of Carter Production Com- CASE pany for a waterflood project, Lea 7662						
9	County, New Mexico.						
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13	BEFORE: Richard L. Stamets						
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15	TRANSCRIPT OF HEARING						
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17	APPEARANCES						
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<b>19</b>	For the Oil Conservation W. Perry Pearce, Esq. Division: Legal Counsel to the Divisi						
20	State Land Office Bldg. Santa Fe, New Mexico 87501						
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22	For the Applicant: Ernest L. Padilla, Esq.						
23	P. O. Box 2523 Santa Fe, New Mexico 87501						
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	ENERGY AND MINI OIL CONSERVA	NEW MEXICO ERALS DEPARTMENT ATION DIVISION OFFICE BLDG.	
	SANTA FE,	NEW MEXICO mber 1982	
	EXAMINE	R HEARING	
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IN THE MAD	TTER OF:		•
	Application of Car pany for a waterfl County, New Mexico		CASE 7662
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BEFORE:	Richard L. Stamets	5	-
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	APPI	EARANCES	
For the Oi Division	1 Conservation 1:	W. Perry Pearce, Legal Counsel to State Land Offic Santa Fe, New Me	the Division e Bldg.
For the Ap	oplicant:	Ernest L. Padilla, P. O. Box 2523 Santa Fe, New Mexi	

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i 3 2 MR. NUTTER: The hearing will please come 3 to order. We'll call next Case 7662. MR. PEARCE: That is the application of 5 6 Carter Foundation Production Company for a waterflood project 7 in Lea County, New Mexico. MR. PADILLA: Mr. Examiner, Ernest L. 9 Padilla on behalf of the applicant in this case. 10 I have one witness to be sworn. 11 12 (Witness sworn.) 13 14 JAMES W. LAW 15 being called as a witness and being duly sworn upon his oath, 16 testified as follows, to-wit: 17 18 DIRECT EXAMINATION BY MR. PADILLA: 19 20 Mr. Law, for the record would you please ۰Q. • • • • • • • state your name, by whom you're employed? 21 22 J. W. Law, International Engineering A. 23 Company, Incorporated. Mr. Law, what is your connection with the 24 Q. 25 applicant in this case, CArter Foundation Production Com pany

I have been retained as a petroleum en-2 gineer to give testimony today. 3 Mr. Law, what's your educational background n and work experience, and especially your work experience as 5 far as waterfloods are concerned? Very briefly, I graduated from Louisiana A. 7 State University in 1949 with a Bachelor of Science degree in petroleum engineering. I have been employed since that time, some 10 thirty years, in the industry, especiaally by the Superior 11 Oil Company in various locations. 12 Probably the most germane thing to this 13 case was the period of 1952 to 1956, when I was employed as 14 Senior Reservoir Engineer for Superior and was in charge of 15 all of their waterflood and secondary operations in the Illi-16 nois Basin, north Texas, south Louisiana. 17 18 I also have experience in supervising en-19 hanced recovery operations in New Mexico. 20 Mr. Law, are you familiar with the appli-Q 21 cation and purpose of the application? 22 A. Yes, sir, I am. What is the purpose of the application? 23 Q. The purpose of the application is to ex-24 A. 25 pand the Carter Foundation Company's waterflood project in

5 1 the Langlie Mattix Pool in cooperation with Getty's waterflood 2 3 in the same area. MR. PADILLA: Mr. Examiner, are the wit-5 ness' qualifications acceptable? MR. STAMETS: Yes, they are quite acceptable. 7 One thing, Mr. Padilla, have you noted the error in the unit R letter designation on the docket on Well No. 6? The docket shows that as unit letter D and I believe that that's unit 9 letter 0. 10 11 I'm not certain if that was advertised 12 that way, but in any event, I don't believe that that's a fatal flaw, and if the -- if it was advertised in error, I 13 14 believe we can accept that as an amendment to the application 15 and proceed without any problem. 16 MR. PADILLA: Mr. Examiner, we would so 17 amend the application to so reflect the correct unit letter. 18 MR. STAMETS: If it is necessary , it is 19 approved. 20 **Q**. Mr. Law, would you tell us what this ap-21 plication is for? 22 A. Yes, sir. This application specifically 23 applies to the Langlie Mattix Pool. It's for the conversion 24 of three wells in 24 South, 27 East, to water injection in 25 the Penrose formation.

6 Q Is this an expansion of a current water-2 flood? 3 A. Yes, sir, it is, the waterflood that was approved by Order Number R-3027 is to be expanded. 5 Q. Mr. Law, would you please refer to what has been marked as Exhibits One-A through D and tell us what 7 they are and what they contain? R A. Yes, sir. Exhibit One-A is a map of the Q Langlie Mattix Field area, Lea County, New Mexico. The map 10 outlines with the dotted line the Carter Federal Production 11 Company -- Carter Foundation, pardon me, Production Company 12 lease. It shows the location of the three proposed injection 13 wells and also the location of the injection wells into the 14 Penrose that these will be offsetting, as part of this coop-15 erative waterflood expansion. 16 Going on to Exhibits One-A, One-B, and Q. 17 One-C, would you tell us what they are? 18 Yes, sir. Let's see, I think they should A. 19 be One-B --20 0. One-B, C, and D. 21 A. Yes, sir. Exhibit One-B is a map showing 22 23 the one-half mile radius area of review surrounding the proposed G. H. Mattix Federal No. 2 Well, injection well, and 24 also it shows a two-mile radius circle with that well as the 25

7 1 2 center. 3 Exhibit Number One-C shows exactly the same thing in regard to the G. H. Mattix Federal No. 5 Well, 5 and One-D the same but in regard to the Mattix Federal No. 6 Well. 7 α What are the contents of what has been £ marked Exhibit Number Two? A Exhibit Number Two are the -- is a list 16 of the wells within the area of review, that is the one-half 11 mile radius, of these three wells. It shows the -- identifies 12 the well as to name, location, the type of well, whether in-13 jection or producer, the spud, completion date, total depth, 14 plugged back depth, the zone, and a brief record of the com-15 pletion of each well. 16 The second to the last page on that ex-0. 17 hibit, Mr. Law, is a supplement. Could you tell us what that 18 shows? 19 Yes, sir. This supplement contains a A. 20 listing of five wells with the same data that was inadvertently 21 admitted from the original exhibit. 22 0. And that original exhibit is the -- are 23 the first four pages, is that correct? 24 Yes, sir. A. 25 How about the last page on the exhibit, Q

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2	Mr. Law?
3	A The last page on the exhibit is a sche-
4	matic diagram of Gulf Oil Corporation's S. J. Carr No. 1 Well,
5	located in Section 3 of 24 South, 37 East, which was plugged
6	and abandoned in April of 1952, and this shows the, roughly,
7	the abandonment procedure and plugged, and where set, and
8	where the casing remaining casing is in the well.
9	MR. PADILLA: Mr. Examiner, for your bene-
10	fit, I think we're pretty much following the form C-108 of
11	the Oil Conservation Division and trying to present the in-
12	formation in that order.
13	MR. STAMETS: Let me ask one question
14	sort of out of order. What depth will the injection be?
15	A Roughly 37-3800 feet, Mr. Examiner. I
16	can give it to you precisely.
17	MR. STAMETS: That's close enough.
18	A. All right.
19	Q Going on to Exhibit Number Three, Mr. Law,
20	tell us what that is, and what it contains.
21	A All right. Exhibit Number Three is a
22	description of the proposed operation, which enumerates the
23	wells to be converted to water injection in the Penrose, and
24	specifies that they are in a position to match the injection
25	pattern that has already been established by Getty Oil Com-

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2	pany in the Myers Langlie Mattix Unit. The it is estimated
3	that the initial injection rate into each well will be between
4	200 and 350 barrels per day; that the initial injection pres-
5	sures will be quite low, zero to 50, gradually building up
6	after fill-up with a maximum pressure of approximately 1600
7	pounds, and finally, that the water source for these three
8	wells will consist primarily of produced salt water from sever-
9	al wells owned by the Carter Foundation in Sections 34 and 35
10	of 23 South, 37 East.
11	And if this quantity is not sufficient,
12	there is additional produced Santa Santa Rosa formation
13	brackish water from the Hill Federal No. 7 in Section 35 of
14	23, 37 East, to use as a supplement.
15	Q Mr. Law, you've said you've testified
16	that the maximum pressure will likely be about 1600 psi, and
17	of course, you're aware of the Oil Conservation Division poli-
18	cy of setting a limitation of no more than .2 psi per depth
19	of per foot of depth.
20	Can you explain how can you explain the
21	excess on 1600 psi?
22	A. The estimate of 1600, which is roughly
23	800 pounds above the guidelines established by the Conserva-
24	tion Division, was arrived at based on the history from the
25	Langlie Mattix Waterflood Pool, which, of course,

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2	as shown on the maps surrounds this particular expansion, and
3	where water is being injected into the same horizon, history
4	has shown that in order to get a reasonable amount of water
5	away pressures up to 2000 pounds will be required.
6	Now, a study of the injection pressures
7	from the Myers Langlie Mattix Pool, Waterflood project
8	Q Is that on adjoining acreage, Mr. Law?
9	A Yes, sir, directly offset on all on
10	all sides our acreage.
11	Q. Would you refer to what has been marked
12	Exhibit Three-A now and tell us what you have in that exhibit?
13	A Yes, sir. Exhibit Three-A consists of
14	three parts. One is an application by Getty Oil Company.
15	I can't make out the date on mine.
16	Q I believe that was April of 1978, Mr. Law,
17	is that right?
18	A. Oh, yes, right. The well, it's the
19	yes, sir.
20	This application is under the provisions
21	of Order No. R-4680 which was approved in November of 1973
22	and this is an expansion application by Getty, which lists
23	a number of injection wells to be added to the original in-
24	jection program, and in this in this application Getty
25	refers to the fact that injection pressures in excess of 1200

11 psi on the surface might be required and if so, additional 2 information would be furnished. 3 Q What's the maximum pressure that Getty Oil Company has reported in its waterflood? 5 A., The most recent report shows a maximum 6 pressure of 2000 pounds at the surface in several wells. 7 Q. Does that indicate that the formation has 8 been fractured? 0 10 A. No, sir, there is no way that the volumes 11 that are being injected, 2-to-300 barrels a day into these 12 individual wells, at 2000 pounds could be supported if the --13 if the zone had been fractured. The rates would be much 14 higher and the pressure would immediately go much lower. 15 In other words, there's no way you could 16 sustain 2000 pounds in a formation like this after you frac-17 tured it, without a terrifically high volume of injection, in 18 the thousands of barrels. 19 Q. It's the same injection interval, is that 20 correct? 21 Yes, sir. A. 22 Going on to what's been marked Exhibit 9. 23 Number Four, could you tell us what that is and what it con-24 tains? 25 Exhibit Number Four is a chemical analysis A.

12 1 of the Santa Rosa formation water from Carter Foundation's 2 3 Hill No. 7 Well in Lea County, New Mexico. This -- this chemical determination shows total sodium and potassium concentration of 900 parts per 5 6 million; 160 calcium; 140 magnesium; total chlorides of 800, 7 and rather high sulfate. 8 Is this potential injection water, Mr. Law? Q. 9 A. Yes, sir, this is supplemental water that 10 they may use. 11 Would this water be compatible with other Q. 12 produced water in the area and also with the injection inter-13 val, with the water in the injection interval? 14 A. Yes, sir. 15 To your knowledge? Q. 16 To the best of my knowledge. A. 17 Going on to what's been marked as Exhibit Q 18 Number Five, and tell us what that is. 19 Exhibit Number Five is a brief summary A. 20 of geological data which has been determined from the Penrose 21 sand of the Queen formation. It gives a very brief history 22 of the secondary recovery operation that Getty Oil Company, 23 which at the time was Skelly, initiated, and goes on to 24 enumerate of the eight Penrose wells in the area that have 25 been cored, the average permeability is roughly six milli-

1 13 2 darcies; porosity about 14 percent; and residual oil saturation 3 about 10 percent. The subject injection wells, the Mattix 4 5 Well No. 5 was cored from 3430 to 3633, with 58 feet of net 6 pay and an average porosity in this well was 7.3 percent. 7 Permeability was less than one. 8 Six was cored from 3450 to 3605 with 41 9 feet of net pay, average porosity 10.7, permeability again 10 of less than one millidarcy. 11 The average oil saturation in both of the 12 wells varies from a trace to 20.4 percent. 13 The operator reports recoveries from the 14 Mattix lease through 1981 range from -- averaged about 50,000 15 barrels per well. 16 Does that exhibit indicate, Mr. Law, where Ω 17 the fresh water sources may be located? 18 Yes, sir, the final paragraph of this ex-A. 19 hibit states that the produced drinking water, one well with-20 in a mile of the proposed injection wells is producing from 21 a depth of approximately 120 feet. It is in the southwest 22 part of Unit D, Section 35, 23, 37, and goes on to say that 23 the Carter Foundation has developed a Santa Rosa water supply 24 well at 681 feet but the water from this well is not consi-25 dered potable.

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2	Q Mr. Law, given the proposed injection
3	pressures, the proposed volumes of injection, would you give
4	an opinion as to whether there would be any communication be-
5	tween the fresh water source and the injection interval?
6	A. After a study of the casing and cementing
7	programs on the three proposed injection wells, it is my
8	opinion that vertical communication over that interval would
9	be virtually impossible.
10	Q. Going on to tell us about Exhibit Num-
11	ber Six, would you, Mr. Law?
12	A. Exhibit Number Six is a simulation
13	stimulation, I'm sorry, history on the G. H. Mattix No. 2
14	Well, which briefly states that this well is shot with 620
15	quarts cf nitroglycerin in 1951, and in 1957 the well was
16	fractured with 2000 gallons, using one to one-and-a-half
17	pounds of sand per gallon.
18	The No. 5 Well in 1961 was acidized and
19	later fractured with 30,000 gallons of one to one-half pound
20	sand per gallon.
21	The 6 Well was acidized and later frac-
22	tured with 37,500 gallons of lease crude and 56,000 pounds
23	of sand.
24	It is not anticipated that additional
25	stimulation will be used unless injection pressures prove to

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2	be excessive.
3	Q. Tell us about Exhibit Number Seven now,
4	Mr. Law, please.
5	A. Exhibit Number Seven is well test data
6	on the three wells which are proposed for conversion to in-
7	jection. The No. 2 and No. 6 Wells are currently shut-in.
8	The No. 5 Well is tested in February of 1982, a 24-hour test,
9	in which the well produced one barrel of water per day, 1.38
10	barrels of oil, and 3.4 Mcf of gas.
11	Q Are any logs available for this well that
12	you know of?
13	A. No, sir.
14	Q Tell us now about Exhibit Number Eight,
15	what it contains.
16	A. Exhibit Number Eight is a schematic diag-
17	ram showing the only fresh water well located within the
18	one mile radius of the proposed injection wells. This well
.19	is used for domestic water supply for the applying operator's
20	production company camp and the well is located in the south-
21	west portion of Unit E, Section 35, 23 South, 37 East, and
22	within the camp area.
23	This well is pumped from an approximate
24	depth of 120 feet.
25	Q What's the second page on that exhibit,

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2	Mr. Law?
3	A. The second page on this exhibit is a water
4	analysis report from said water well. I think the pertinent
5	factor is total chlorides of 200 parts per million and that's
6	about it.
7	Q Going on to Exhibit Number Nine, tell us
8	what that is.
9	A. Exhibit Number Nine is an affidavit of
10	publication wherein legal notice was published in the Hobbs
11	News Sun in Hobbs, New Mexico, on June 28th, 1982, wherein
12	the three proposed injection wells are named and the formation
13	and intervals to be injected into are designated and the an-
14	ticipated rate of injection is set forth.
15	Q Does that exhibit also show that the off-
ió	set operators and surface owner for the injection zone were
17	notified?
18	A. Yes, sir, it does.
19	Q. Who are the offset operators and the
20	surface owner?
21	A. The offset operators are Getty Oil Com-
22	pany, Pearson Siber Oil Company in Texas, Mr. Bill Grove of
23	Jal, New Mexico, Mr. Jimmy Dume of Dume Ranch, Jal, New
24	Mexico.
25	Q. Is he the surface owner, Mr. Law?

1 17 2 Yes, sir. A. 3 a And how was that notice given to all these 4 offset operators and the surface owner? 5 A By registered mail. 6 And does the last page contain proof of Q. 7 that? 8 A Yes, sir, the last page contains a receipt 9 for certified mail from these parties. 10 Q. Going on to Exhibit Number Ten, would you 11 explain what that is and what it contains? 12 A. Yes, sir. Exhibit Number Ten is injection 13 well data sheets for the three proposed injection wells. 14 This enumerates the wells, there's one sheet for each well. 15 It's the schematic diagram of the casing, mechanic, tubing, 16 packer, pay interval, casing shoe, also injection interval, 17 also enumerated is certain data concerning the grade, weight 18 of the pipe, and the cement job performed thereon. 19 Q. How about the last page on that exhibit, 20 Mr. Law? 21 A. The last page on that exhibit is an in-22 jection well data sheet. 23 Is that common to all the wells? Q 24 Yes, sir. A. 25 Okay, going on to Exhibit Number Eleven, Q.

1 18 tell us what that is and what it shows? 2 3 A. Exhibit Number Eleven is a recommendation from the Oil Conservation Division District I in Hobbs. What's that recommendation, Mr. Law? Q. The recommendation is that this proposed waterflood expansion is okayed. 7 Okay, how about Exhibit Number Twelve? a Exhibit Number Twelve is a letter to Mr. A. Roy Johnson of the Oil Conservation Division from the consulting 10 firm of Robert D. Fitting and ASsociates in Midland, Texas, 11 and this is an application to convert the three referenced 12 wells to injection. This is an application dated July 22nd, 13 1982. 14 15 Mr. Law, do you have anything further to 0. 16 add to your testimony here today? 17 Only that based on my experience in the A. 18 design and installation and operation of numerous waterfloods 19 over the years, I -- it appears to me that this is a perfectly 20 viable project and I see no mechanical or contamination prob-21 lems involved. 22 In your opinion, Mr. Law, would it be in Q. 23 the best interests of conservation, protection of correlative 24 rights, and prevention of waste be enhanced? 25 Yes, sir. A.

19 2 MR. PADILLA: Mr. Examiner, I have nothing 3 further, no further questions, and I would request that Exhibits One through Twelve be admitted, and I also would ask 5 that administrative notice be taken of Oil Conservation Division Orders Numbers R-3027 and -4680 be taken, and I have 7 nothing further. R MR. STAMETS: We will take notice of the 0 orders which you mentioned. And the exhibits as presented 10 are admitted into evidence. 11 12 CROSS EXAMINATION 13 BY MR. STAMETS: 14 Mr. Law, in Exhibit Twelve, Fittings' Q. 15 letter, he says, it is our belief that the enclosed plat 16 correctly reflects the location of all water wells and wind-17 mills in the area. 18 I would assume that that is the same map 19 that you have submitted here today as Exhibit One-A. 20 Yes, sir, that is correct. A. 21 Okay. Mr. Law, would the applicant have Q. 22 any problem with a pressure limitation on these wells based 23 on .2, with the opportunity to have that pressure increased 24 by the District Supervisor in Hobbs? 25 A. I see no problem with that, sir.

1 20 2 That would be a little bit of a variation Q. 3 from our standard operation, but since we already have wells 4 in the area injecting at relatively high pressures, I would 5 think the District Supervisor probably could better make that 6 determination than we could here in Santa Fe. 7 MR. STAMETS: Are there any other ques-8 tions of this witness? 9 I would point out that the Examiner has 10 not had a whole lot of time to look at the wells within the 11 area of review. It's possible we might question one there. 12 A quick review doesn't show anything. 13 MR. PADILLA: Mr. Examiner, Roy Johnson 14 of the Division has pointed out deficiency on the well data 15 sheet and we have supplemented that, so I think we have cor-16 rected that problem. 17 MR. STAMETS: The witness may be excused. 18 If there is nothing further, the case 19 will be taken under advisement. 20 21 (Hearing concluded.) 22 23 24 25

CERTIFICATE

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I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

- ally les. Boyd CSR

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I do hereby certity that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 7663 19 82 heard by me on , Examiner ami Oil Conservation Division



STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

BRUCE KING GOMENION LARRY KEHOE

September 30, 1982

POST OTYCE BOX SOBB STATE LAND OFFICE BUILDING SANTA PE, NEW MERICO 87501 SOB 887-3434

Mr. Ernest L. Padilla Attorney at Law P. O. Box 2523 Santa Fe, New Mexico 87502

ORDER NO.R-7082

Applicant:

Re: CASE NO.

Carter Foundation Production Company

7662

Dear Sir:

Rnclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Pours very truly, 1 JOE D. RAMEY Director

# JDR/fd

Copy of order also sent to:

Hobbs OCD <u>x</u> Artesia OCD <u>x</u> Aztec OCD \_\_\_\_\_

**Other** 

## STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 7662 Order No. R-7082

APPLICATION OF CARTER FOUNDATION PRODUCTION COMPANY FOR A WATERFLOOD PROJECT, LEA COUNTY, NEW MEXICO.

## ORDER OF THE DIVISION

## BY THE DIVISION:

This cause came on for hearing at 9 a.m. on September 1, 1982, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this \_\_\_\_\_\_ day of September, 1982, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Carter Foundation Company, seeks authority to expand its Bline-Cade Waterflood Project in the Langlie Mattix Pool, by the injection of water into the Queen formation through its Mattix Federal Wells Nos. 2, 5, 6 located in Units C, E, and O, respectively, in Section 3, Township 24 South; Range 37 East, NMPM, Lea County, New Mexico.

(3) That the proposed injection is not an expansion of said Bline-Cade project but is in fact a new project.

(4) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(5) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

-2-Case No. 7662 Order No. R-7082

(6) That the operator should take all 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, production, or plugged and abandoned wells.

(7) That the injection wells or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 900 psi, but the Division Director should have authority to increase said pressure limitation, should circumstances warrant.

(7) That the subject application should be approved and the project should be governed by the provisions of Rules 702 through 708 of the Division Rules and Regulations.

**IT IS THEREFORE ORDERED:** 

(1) That the applicant, Carter Foundation Production Company, is hereby authorized to institute a waterflood project on its Mattix Federal Lease, Langlie Mattix Pocl, by the injection of water into the Queen formation through its Mattix Federal Wells Nos. 2, 5, and 6, located in Units C, E, and O, respectively, in Section 3, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) That injection into each of said wells shall be through internally coated tubing, set in a packer which shall be located as near as practicable to the uppermost perforation or in the case of an open hole completion, the casing shoe; that the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

(3) That the operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(4) That the injection wells herein authorized and/or the injection pressurization system shall be so equipped as to limit injection pressure at the wellhead to no more than 900 psi, provided however, the Division Director may authorize a higher surface injection pressure upon satisfactory showing that such pressure will not result in fracturing of the confining strata.

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-3-Case No. 7662 Order No. R-7082

(5) That the subject waterflood project is hereby designated the Carter-Mattix Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(6) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

(7) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary

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



STATE OF NEW MEXICO OIL CONSERVATION DIVISION the JOE D. RAMEY, Director

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Tr.9\_ V. MAP **W.**[ . 13 CARTER FOUNDATION PRODUCTION COMPANY TIC G. H. MATTIX FEDERAL 42 Tr. I 77 SMALL CIRCLE - 1/2 MILE RADIUS **"AREA OF REVIEW"** LARGE CIRCLE - 2 MILE RADIUS T. SCALE: 1" = 4000' ----Parts on Yought منب 7a İ s leseca e.un Milita MSERY, ₩ Grie 1 23 . te cline X . 1125 Seven ! 6.83<sup>°</sup> 4 35 U.S. 5 Ć 2 cU.S. Ħ U.S. m L --7 No. We ŧ 10 ø **0**18 1 033 E. ž • H.B.P. 1 Configure 100.00 12.5 in sauce ---# ZO 23 11 esier] Έ i. \* e, for OLE M. Bert St .... A.1. • 1 e' 쒈 114 -----۰Y 'd" 8<sup>16</sup> 50 Ċ. • 1 (5) # 8. Artec 8-1-8 16-00 455 fn C • 20 ĀRICO ζŢ 1. Wh D. I, ÷ . -33 (Gelly 1.031 7 4 £. •, 6 ø H 0-1732 **#**5 ۵.6 i41 12 4 P. -j.4 A...... . 3 5 #3 10 4 1 E , e øŻ \*... 7 2 93 C.C. beg Ĺ 9 (2) -5 1 2002 12 SAVERS LANGLE MATTIX UNIT GETTY(OPER) J. Smith, 5 **.**81 <u>.</u> æ **0**' E.A 61 £ Cont. ord 6.47 ð د. Υ. ŀ 24 -13 ę. 18 A 1 Cont'l stal 8.1 È U.S. ad with <u>Cry</u>de . 1.1.5 111 1700-00 2.5204.94 HING A 1- TO IG. **\***, SHELLIDPEN ? E JACK AN LANGLIE MATTIX IT . Snit -1 72 1 ••• 69 1 • \$ E ŧ, 4 2016 mila Myc Zò . UNIT NO.I - 10 Ŧ ARC. EONT'L. '6 1 1 . . . دو<sup>10</sup> . . . .

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1.9 38%r# T-۷. MAP 100 CARTER FOUNDATION PRODUCTION COMPANY G. H. MATTIX FEDERAL #5 ٠. Tr.C SMALL CIRCLE - 1/2 MILE RADIUS "AREA OF REVIEW" LARGE CIRCLE - 2 MILE RADIUS SCALE: 1" = 4000" Contenan C. F 20.00 e ing a) al a -• NSERY, M CLINE 14 13 ť 0.7E -Ç 4.5., an 147 M Î f ..... N.8.P. ī. 23 ₽. ŝ • 1 1 Actus u. yu 9 2,4 n te the (s) Aztec IIIIII 18 Cd-7..... -12 gi Carler Gui M.B.P. 8-1732 14 124 £.,, ¢ ġľ, 4.Ta. म. \*.... 5 ø£ ×1 # 1 fig (..... 8-'n Confl. el Jago Fris All Sec. 7800 5 ¢, IZ SINTERS LANG IE JAATTIX UNIT L GETTYIOPER) U.S. MI J.J. Solid J.J. So • 2 \$ æ 6 ð ÷ Conti., stal 4 ę 24 Ē. -13 Cant's and 211 e U.S. 10 212 644 ..... \*\*\*\*\* **p**1 ANGLIE JACK 225 HELLOPE j •\_U ANC. . •\* LANGLE ł °, 19 15 24 1 3.... Negers. CONTL AND đ 23 at NO i. 8 ..... 뼒

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Well #162	We]  \$149	Well #152	Well #126	Well #123	Well #118	Myers-Langlie Mattix Unit Well #117	Operator, Lease & Well No. Getty Oil Company	• •
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3 1980'	4 1980'	3 1974' F	4	3 660' ]	34 660' ]	34 660' 1	Loci	
3 24-8 1980' FSL & 560' 1	4 24-8 1980' FNL & 660'	3 24-8 1974' FNL & 1984'	24-8 37-1 660' FN&EL'8	3 24-S 37-E 660' FNL & 1980' FEL	23-S FSL & 1980'	23-S PS&WL's	tion Township	WEL
37-E PWL	37-E Fel	37-E Fel	37-E EL'8	37-e Fel	37-E FWL	27-E	Range	LIM S7
Oil Producer	Oíl Producer	Water Injector (Inactive)	Water Injector	Oil Producer	Off Producer	Water U Injector Converted: 8-2:	Туре	WELLS WITHIN AREA OF
7-23-81	Unknown	10- 7-51	10-14-81	9-22-50	11- 8-50	Unknown 8-22-78	Date Spudded C	VI. REVIEW
2-23-82	0wn	11-26-51	12- 1-81	10-22-50	12- 9-50	1-21-41	te Completed	(1/2 MILE R.
3745'	3701'	3560'	3675'	3564'	3578'	3571' DD to 3700'	U G	RADIUS)
3697'		•.:	3642'			700'	Depth PBTD	,
Queen	Queen	Queen	Q ueen	Queen	Queen	Queen	Zone	
Perfs: 3460'-3619' Casing: 8-5/8"@501'/350 sx, 5-1/7"@3745'/1,100 sx Treatment: Acid/6,500 gals, Frac/33,000 gals & 60,000# sd	Open Hole: 3459'-3665' Casing: I2-1/2" @201'/150 sx 8-5/8"@1250'/300 sx, 7"@3459'/100 s:	Open Hole: 3328'-3560' Casing: 7" @ 3328'/800 sx Treatment: Shot/450 qts nitro	Perfs: 3387'-3637' Casing: 8-5/8"@501'/350 sx, 5-1/2" @ 3671'/1000 sx Tubing: 2-3/8" @ 3318' Treatment: Actd/2,000 gals, Frac 21,000 gals & 5,000# sd	Open Hole: 3321'-3564' Casing: 10-3/4"@254'/153 sx, 7" @ 3321'/800 sx Treatment: Shot/470 qts. nitro	Open Hole: 3308'-3578' Casing: 10-3/4"@285'/150 sx, 5-1/2"@3308'/400 sx Treatment: Shot/400 qts. nítro	Dearing Uate <u>Upen Hole:</u> 3435'-3571' <u>Casing:</u> 13-3/8"@336'/250 sx, <u>3-5/8"@2550'/500 sx</u> , 7"@3435'/100 ; 4-1/2" Liner 3029'-3700'/125 sx Perfs: 3439'-3564', acid/3,000 gz	CASE NO. Submitted Record of Completion	BEFORE EXAMINER STAMETS OIL CONSERVATION DIVISIO

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Eva E. Blinebry Federal Well #2		Well <b>\$191</b>	Well #188	Well #159	Well #185	Getty Oil Company Myers Langle-Mattix Unit Well #163	Operator, Lease & Well No.	
ο	by C	ø	טי	1	Ň	н	Unit S	
23~8 • FSL & 1995	24-S • FNL & 2080	10 24-S 37-E 660' FNL & 1980' FEL	3 24-S 37 660' FS&EL's	3 24-S 37-E 1980' FSL & 660' FEL	3 24-S 37 660' FS£WL's	4 24-S 37-E 1980' FSL & 660' FEL	Location Section Township Range	WE
37-E Oil Producer PEL	37-E Water • FWL Injector	-E Oil Producer EL	37-E Oil Producer	37-E Water FEL Injector (Inactive)	37-E Water Injector	-E Water EL Injector Converted:	ige Type	WELLS WITHIN AREA
4- 3-50	2-25-53	12- 6-52	8-16-78	2- 6-52	7-11-81	Unknown 11-20-78	Date Spudded C	A OF REVIEW
5-16-50	4-17-53	2-20-53	9-15-78	3-19-52	3-15-82	8-19-37	e Completed	/ (1/2 MILE
3536'	3582'	3643'	37 47'	3586'	3705'	3640' DD 3731'	Depth TD P	E RADIUS)
		<b>3635'</b>	3706'		3652'		h PBTD	
Queen	Queen	Queen	Queen	Queen	Queen	Queen	Zone	
Open Hole: 3309'-3536' Casing: 13-3/8" @ 311'/175 sx, 7 @ 3309'/850 sx	Open Hole: 3347'-3582' Casing: 6-5/8" @ 250'/125 sx, 5-1/2" @ 3347'/800 sx Treatment: Shot/250 qts nitro	Open Hole: 3334'-3635' Casing: 9-5/8" @ 252'/165 sx, 5-1/2" @ 3334'/800 sx Treatment: Shot/350 qts nitro	Perfs: 3504'-3602' Casing: 8-5/8" @ 507'/275 sx, 5-1/2" @ 3746'/800 sx Treatment: Acid/2,000 gals, Frac/19,000 gals & 24,000# sd	Open Hole: 3323'-3586' Casing: 10-3/4" @ 261'/150 sx, 7" @ 3323'/800 sx	Perfs: 3489'-3635' Casing: 8-5/8" @ 500'/350 sx, 5-1/2" @ 3703'/1150 sx Treatment: Acld/2,000 gals	Open Hole: 3466'-3640' Casing: 12-1/2"@18', 8-5/8"@1374'/ 400 sx, 5-1/2"@3466'/400 sx, Liner 3218'-3731'/125 sx Perfs: 3515'-3643', Acid/3,000 gals	Record of Completion	

VI.

Page 2.

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Carter Foundation Production Company G. H. Mattix Foderal Operatur, Lease & Well No. Well #2 Well #1 Well #5 Well #3 Well #4 Well #6 Location Unit Section Township Range H O D 0 t 3 24-S 37-E 658' FNL & 1964' FWL 3 24-S 37-E 656' FNL & 654' FWL 1980' FN&WL's 3 24-S 37-E 1981' FSL & 1988' FEL 3 24-S 37-E 660' FSL & 1982' FEL 3 24-S 37-E Oil Producer 11- 2-61 1969.5' FNL & 655.8' FWL 24-S 37-E Shut In Oil Producer **Oil Producer** Oil Producer 10-19-61 **Oil Producer** Oil Producer 11-17-61 Туре Spudded Completed 4- 3-35 1-22-52 1-13-51 Date 11-30-61 11- 1-61 11-15-61 7-17-35 2-21-51 3- 8-52 TD PBTD 3671' 3915' 3605' 3674' 3675' 3667' Depth 3651' 3760' Queen Queen Queen Queen Queen Queen Zone Open Hole: 3407'-3760' Casing: 8-1/4" @ 1294'/300 sx, 7" @ 3407'/400 sx Open Hole: 3310'-3674' Casing: 13-3/8" @ 323'/175 sx 7" @ 3310'/875 sx Open Hole: 3309'-3605' Casing: 13-3/8" @ 312'/175 sx, 7" @ 3309'/875 sx Perfs: 3496'-3614' Casing: 9-5/8" @ 308'/300 sx, 7" @ 3665'/900 sx Perfs: 3501'-3612' Casing: 9-5/8" @ 306'/300 sx, 7" @ 3675'/900 sx Treatment: Perfs: 3496'-3646' Casing: 9-5/8" @ 311'/300 sx, 7" @ 3670'/1000 sx Treatment: Acid/1250 gals, Frac/20,000 gals oil & 40,00C# sd Treatment: Shot/620 qts nitro Treatment: Acid/750 gals, Frac/30,000 gals 11 & 45,000# sd Treatment: Shot/820 qts nitro **Record of Completion** Shot/500 qts nitro

Treatment: Acid/1250 gals, Frac/37,500 gals oil & 56,250# sd VI.

# WELLS WITHIN AREA OF REVIEW (1/2 MILE RADIUS)

# Page 3.
Operator, Lease & Well No. Carter Foundation Production Company G. H. Mattix Federal Pearson-Sibert Oil Co. of Texas <u>n</u> Well #8 Well #7 Well #1 Mattix Federal Location Unit Section Township Range Z, ズ 3 24-S 1980' FS&WL's 5 10 24-S 660' FN&EL's 3 24-S 37-E 660' FSL & 1980' FWL WELLS WITHIN AREA OF REVIEW (1/2 MILE RADIUS) 37-E 37-E Oil Producer Oil Producer Oil Producer Туре Spudded Completed 10- 8-81 5-29-52 8- 1-81 Date 11-13-81 7- 2-52 9-21-81 3621' 3730' 3692' ΤD Depth PBID 3722' Queen Queen Queen Zone Perfs: 3475'-3626' Crising: 8-5/8" @ 565'/360 sx 5-1/2" @ 3692'/900 sx Tubing: 2-3/8" @ 3579' Treatment: Acid/5,000 gals, Frac/36,000 gals, 10/20 & 10/40 sd Perfs: Cesing: 5-1/2 0 Open Hole: 3435'-3621' Casing: 9-5/8" @ 326'/250 sx Tubing: Tubing: <u>Treatment:</u> Acid /6,000 gals, Frac/36,000 gals & 72,000# sd <u>5-1/2"</u> @ 3435'/400 sx Tubing: 2-3/8" @ 3612' 3474'-3638' 8-5/8" @ 507'/360 sx, 3722 /900 sx <u>3</u>: 2-3/8" @ 3638' **Record of Completion** 

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Page 4.

# SUPPLEMENT TO REQUIREMENT VI WELLS WITHIN AREA OF REVIEW (1/2 MILE RADIUS)

Well <b>9224</b>	Well #189	Well <b>#148</b>	Well #122	Getty Oil Company Well #85	Operator, Lease £ Well No.
ົ່ດ	K	G	A	~	Unit
10 24-S 1980' FN&EL's	2 24-S 660' FS&WL's	4 24-S 1980' FN&EL's	3 24-S 660' FN&EL's	34 23-S 37-E 1980' FSL & 1880' FWL	Location Section Township
37-E	37-Е (	37-E	<b>37-</b> E	37-E )' FWL	Range
Water Injector	Water Injector Converad:	Water Injector	Water Injector	Water Injector	Туре
Unknown	Unknown 10-15-78	11-28-81	8-12-50	6-14-61	Date Spudded C
OWN	4-12-53	1- 8-82	9-13-50	7- 3-61	Date Spudded Completed
3684'	3588' OTD 3725'	3750'	3568'	3572'	Depth TD PBTD
		3677'			BTD
Queen	Queen	Queen	Queen	Queen	Zone
Pay Interval: 3530'-36u2' Casing: 8-1/4" @ 510'/270 sx 5-1/2" @ 3311'/750 sx 4" Liner 3145'-3672'	Perfs: 3530'-3630' <u>Casing</u> : 8-5/8" @ 1010'/400 sx 5-1/2" @ 3400'/100 sx 4" Liner 3085'-3724' <u>Treatment</u> : Acid/3,000 gals.	Perfs: 3425'-3638' Casing: 8-5/8" @ 518'/350 sx 5-1/2" @ 3750'/2000 sx Treatment: Acid/800 gals.	Open Hole: 3415'-3564' & Casing: Unknown Treatment: Shot/470 qts. 3415'-3564'	Perfs: 3488'-3559' Casing: 8-5/8" @ 350'/200 sx, 5-1/2" @ 3572'/300 sx Treatment: Acid/250 gals; Frac/20,000 gals.	Record of Completion

GULFOIL CORP. VI. S-J. CARR NO. 1 UL L, Sec. 3-7245-R37E . . . . 13 SX CEMENT PIUS JURFACE - 25' · · · · Bridge Plug @ 25' • · · • . .... ••••• المعراجي 15% CSG. @ 1.48' NOT Commented \_\_\_\_\_\_ • • • • • • • • • • • ----------\_\_\_\_ 1034 CSG @ 1237: Cemented W/250 SXS Cement TOP Q. SURFACE ----------34 SX Coment Plug 2445-2520 . ... . . . . . . . . . Shot 7" CSG. OFF @ 2554 + PULLED 15' OF Cement ON TOP OF Retainer Comment Retainer @ 3466' Squeezed 20 SXS Below Ratainer 7" CSG. @ 3484' Cemented W/100 SXS. CALC. Cement TOP @ 2600' PBTO @ 3625' TD @3326'

http://www.

### **PROPOSED OPERATIONS**

The Carter Foundation Production Company proposes to use the subject G. H. Mattix Federal #2, #5 and #6 as cooperative water injection wells to match the injection pattern established by the Getty Oil Company, Myers Langlie Mattix Unit wells. The average initial daily rate should approximate 200 barrels to a maximum of 350 barrels per well per day.

The system will be closed and the average initial injection pressure is estimated from 0 to 50 psi with an after fillup approximate maximum injection pressure of 1600 psi.

The water source will be primarily of produced salt water from the multipay wells owned by Carter Foundation Production Company in Sections 34 and 35, T-23-S, R-37-E, and the subject lease. If the quantity is insufficient, produced Santa Rosa formation brakish water from our approved water supply well, the E. C. Hill Federal #7 in Section 35, T-23-S, R-37-E, will be used to supplement the supply.

BEFORE EXAMINER STAMETS OIL CONSE VATION DIVISION EXHIBIT NO. CASE NO.\_ Submitted by \_ Hearing Date\_

### VII.



Getty Oil Compariy

Central Exploration and Production Division

Oil Conservation Commission State Of New Mexico P.O. Box 1088 Santa Fe, New Mexico

Re: Myers Langlie Mattix Unit Expansion Langlie Mattix Pool Lea County, New Mexico

Gentlemen:

Under the provisions of Order No. R-4680, Getty Oil Company respectfully requests administrative approval to expand our Myers Langlie Mattix Unit waterflood project in the Langlie Mattix Pool. Lea County, New Mexico.

- Getty Oil Company seeks authority to expand its project by injection of water into the Langile Mattix through an additional twenty-nine (29) injection wells within the current Myers Langlie Mattix Unit boundary.
- (2) The expansion will require the conversion of seventeen (17) singly completed wells to water injection, those being:

Myers Langlie Mattix Unit		Loca	tion	
Well No.	Unit	Section	Township	Range
-				
5	<u> </u>	30	235	37E
22	K	28	235	37E
30	K	30	235	37 E
32	1	25	235	37E
75	E	32	235	37E
77	G	32	235	37E
84	Н	34	235	37E
87	I	33	235	37E
93	K	32	235	37E
111	0	32	235	37E
117	M	34	235	375
130	A	5	245	37F STAMETS
163	I	4	2451	CIEREONSE VATION DIVISION
167	I	5	245	CIB REONSE VALIOUS
181	M	. 4	245	37E EXHIBIT NO. 3H
189	М	2	245	
226	E	11	245	GYENO.
				Submitted by
			1	Onte

Hearing Date

(3) The expansion will require drilling twelve (12) injection wells on undeveloped tracts, those being:

Myers Langlie Mattix Unit	Location						
Well No.	Unit	Section	Township	Range			
1.5	~	• •	<b>0</b> D C				
_15	G	30	235	<u>37E</u>			
41	0	30	235	37E			
59	A	31	235	37E			
81	G	33	235	37E			
126	A	4	245	37E			
128	С	4	245	37 E			
148	G	4	245	37E			
165	K	4	245	37E			
183	0	4	245	37E			
185	M	3	245	37E			
2)4	3	7	245	37E			
2.2	G	77	245	37E			

() Getty Oil Company seeks permission to inject water into the above 29 wells at a pressure not to exceed 1200 psig surface.

The proposed expansion will completely develop the Myers Langlie Mattix Unit on 80 acre five spot waterflood patterns. We estimate that an additional 3,360,000 barrels of oil reserves will be recovered as a result of this expansion.

The following exhibits are included:

- (1) Exhibit I is a plat showing the location of the proposed injection wells and the location of all other wells within a radius of two miles from said proposed injection wells and the formation from which said wells are producing or have produced. The plat also indicates lessees within a two mile radius.
- (2) Exhibit II is a tabular summary of all wells located within one-half mile of the proposed injection wells which penetrate the injection zone. The tabulation shows: casing diameters and depths, cement volumes used, known or calculated cement tops, completion intervals, and total depths.
- (3) Exhibit III is a type log of the area from Myers Langlie Mattix Unit Well No. 32. Tops are marked and the proposed injection interval is indicated.
- (4) Exhibit IV is downhole sketches of the proposed injection wells. The sketches show: the diameter and setting depths of all casing strings, the quantities used and tops of cement, the perforated or open hole intervals, the tubing strings, and the type and location of packers.
- (5) Exhibit V is downhole sketches of all plugged and abandoned wells within one-half mile radius of the proposed injection wells which penetrated the injection zone. The sketches show the size and location of all plugs and the date of abandonment.

- (6) Exhibit VI is a current analysis of the water which will be injected. The injection water is purchased from Getty's Jal Water System. Source of the water is the Lapitan Reef. The produced water will be re-injected.
- (7) Exhibit VII is a list of the available surface instantaneous shut-in pressures after fracture treating Myers Langlie Mattix Unit wells. These pressures are based on a hydrostatic column of fresh water equal to a .433 psi/ft. gradient. As can be noted, these pressures vary. Much of this variation in probably due to pressure gauge differences. We therefore averaged all the pressures to account for the gauge differences and came up with an average of approximately 1200 psig. We believe water can be injected up to this surface pressure without causing formation fracturing.

In the future, if the formation fracturing pressure is determined to be in excess of 1200 psig, supportive information will be submitted.

A copy of this application has been sent to the following offset operators:

Amoco Production Company Drawer A Levelland, Texas 79336

Atlantic Richfield Company Bax 1710 Hobbs, New Mexico 88240

Tom Brown, Inc. Box 2608 Midland, Texas 79701

Carter Foundation Producing Company P.O. Box 900 Kermit, Texas 79745

Continental Oil Company Box 460 Hobbs, New Mexico 88240

El Paso Natural Gas Company 600 Bld. of the Southwest Midland, Texas 79701

Gulf Energy and Minerals - U.S. P.O. Box 670 Hobbs, New Mexico 88240

John H. Hendrix Corporation 525 Midland Tower Midland, Texas 79701

King, Warren & Dye Box 1505 Midland, Texas 79701 Pearson-Sibert Oil Company of Texas 901 W. Missouri Midland, Texas 79701

Petroleum Corporation of Texas Box 911 Breckenridge, Texas 76024

James L. Evens P.O. Box 900 Padre Island, Texas 78597

Imperial American Management Company 507 Midland Savings Bld. Midland, Texas 79701

> Very truly yours, ORIGINAL SIGNED GT DALE R. CRUGHLAN

Dalc R. Crockett Area Superintendent

ELB/cap

<u>Exhibit VII</u> List Of Available Instantaneous Shut-In Pressures After Fracture Treating Myers Langlie Mattix Unit Wells

# PRESSURE INFORMATION

Myers Langlie Mattix Unit Well No.	<u>Instantaneous Shut-In Pressure</u> <u>PSIG</u>
9	1000
10	1000
13	1800
14	1500
32	1250
33	1300
35	1150
• 47	1200
50	1200
55	1150
56	2000
58	1100
65	900
74	1150
77	700
78	1200
83	2400
84	1500
86	1200
87	1000
88	1200
89 93	1200
110	900
111	1000
119	800
121	1000
133	1600 1200
134	1150
141	1000
142	1300
152	1150
156	1100
159	1200
169	1100
170	1300
171	1000
177	1300
178	1250
191	1900
194	1100
199	1200
201	1000
	1200 PSIG Average

 
 SULPHEAST NEW PERILC INJECTICS

 OPERATOR
 PROJECT--LEASE
 WELL

 GGUPER JAL UNIT
 130 m

 CGOPER JAL UNIT
 140 m

SOUTHEAST NEW PEXILE INJECTICS + 5 1562 PAGE 40 . . . . PELS. INJECTED UL CUML. NJECTED G-INJ PRESS OPERALUR PROJECT -- LEASE WELL S ï K 4520 7225 11425 3660 14480 1880 5525 3675 5200 14040 510844 496706 316853 236712 835500424 835500424 8355004 210121 37252 777556 KKPBOFHGIEJ 49450558394 1050 1025 10750 1050 1050 1050 1050 1050 1050 20 D 235 37E 9795 513454 950 23S 23S 37E 372 P 17 11585 479432 510527 1250 CACAEEK1K1KMCMMUMDCACCACEGEG:GEL1K1K1K2K0MGMOMGACACAGEGEGEGEG:ALLIK 900550990055555009564322266666412343322218665412233556614655432228455 9000 11045 11180 11180 11180 11190 11190 10240 10240 10240 10240 10240 1025 620 1220 900 1080 560 830 1100 1445 250 1175 825 350 890 1200 1170 620 540 140 1180 625 1100 875 875 760 450 1160 1290 1375 1400 8334 1079 1428 14252 2733 0281 0281 0281 0281 0281 0281 0285 1962 4789 S ĩ 1400 1400 s i 1400 1325

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CASE NO	
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Hearing Date	

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SOUTHEAST NEW MEXICO INJE	WELL L S	T R	BBLS. INJECTED	CUML. INJECTED	AVG-INJ. PRESS
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# VII. (4)

# THE WESTERN COMPANY Bervice Laboratory West Highway 80

# Midiand, Texas

# Phone MU 3-2781 Day or Night

# WATER ANALYSIS

Uperator	Carter Foundation	Date Sampled	•
Well	H111 No. 7	Date Received	11-14-65
Field	Teague	Submitted by	Kermit District
Portaction	Sonta Rosa	Worked by	Bob Jones
Depth	661-681'	Other Description	
County	Lee, New Mexico		

CHEMICAL DETERMINATIONS
-------------------------

Density 1.005 @ 75°P.		рН	7.3	
Iron No Trace		Hydrogen Sulfide	None	
Sodium and Potassium900	ppm	Sicorbonate	366	ppm
Colcium 160		Sulfate	1,500	
Magnesium140		Phosphate		
Chloride 800	ppm	as Sodium Chloride		

hemarks:

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No & K 100	<b>s</b>  ++++		10 3 	o 2	0 1  ++++	o (	) 1( <del>       </del>	0 20  +++   +	30 4	10 50	C1 100
Ca 10	++++		+++++	****	****		<b> </b>	** * * * * * *		****	HCO, 10
Mg 10			11111	++++	****	<b> </b> ++++	1111	****	++ ++++	****	<b>SO</b> _ 10
	<b> </b> ++++		1111	1111	++++		<b>;;;;</b> ]	****	++	****	
	}++++	+++++	<del>     </del> /		H <u>+++</u>		<del>!!!!</del> !!	┋	++++++++		

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	CONSERVATION DIVISION
CAS	SE NO
Sut:	nille. Hy
Hea	ring Date

for Stiff type plot (in meq./i.)

# GEOLOGICAL DATA

The wells in this area of the Langlie Mattix Pool have encountered oil and gas zones within the Penrose Sand section of the Queen formation. In a 1968 secondary recovery study prepared by Skelly Oil Company (now Getty Oil Company), an east-west cross section depicts the producing zone changes. In this section the westerly wells produce from the Seven Rivers with gradational changes to the east to the Upper Queen and then to the Penrose Sand section of the Lower Queen.

This report also shows that of eight Penrose wells cored, the average permeability was 5.7 millidarcies with an average posority of 14.2% and a residual oil saturation of 10.1%.

Of the subject injectors, the G. H. Mattix #5 was cored from 3430' to 3633'. The overall pay section was 169' with 58' of net pay. The average porosity was 7.33% with an average permeability of 0.67 millidarcies. In addition, the G. H. Mattix #6 was cored from 3450' to 3605'. The overall pay section of this well was 120' with 41' of net pay. The average porosity was 10.71% with an average permeability of 0.97 millidarcies. The average oil saturation in both of the cored intervals was extremely low, varying from a trace to 20.4%. Volumetric recovery calculations of the oil in place and the recoverable oil are not considered a correct indication of the probable oil reserves. This conclusion is verified by the fact that the six older wells on the G. H. Mattix Lease through the year of 1981 had produced approximately 302,000 barrels or 50,330 barrels of oil per well. It must be assumed that either at the time the Carter Foundation Production Company cores were taken, the degree of reservoir depletion created the low oil saturations, or that fractures within the Penrose are an important part of the reservoir oil voidage. The lithology of the subject wells consists of interbedded sand in dolomite and sandy dolomite. The oil pay occurrence is both in the sand and dolomite facies.

The depth of the presently produced drinkable water well within a mile of these proposed injection wells is 120'. In the southwest part of Unit D, Section 35, T-23-S, R-37-E, the Carter Foundation Production Company has developed a Santa Rosa water supply well at a depth of 681'. The water produced from this well is not considered potable.

	BEFORE EXAMINER STAMETS OIL CONSE VATION DIVISION	
[	Submittee by	
	Hearing Date	7
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### VIII.

# PROPOSED STIMULATION

The G. H. Mattix #2 well was "shot" with 620 quarts of nitroglycerine in February of 1951. Subsequently, in June 1957 the well was fraced with 20,000 gallons/1-1/2# sand per gallon. The #5 well in November 1961 was acidized and later fraced with 30,000 gallons/1-1/2# sand per gallon. The #6 well in November 1961 was acidized and later fraced with 37,500 gallons of lease crude with 56,250# sand.

No additional stimulation is anticipated unless the injection pressures prove excessive.

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Γ	BEFORE EXCLOSER STAMETS
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	CASE NO.
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# WELL TEST DATA (Taken from Scheduled GOR Tests)

	_		Pro	duction	During	Test
Operator, Lease & Well No.	Date of <u>Test</u>	Length of Test, Hrs.	Water Bbls.	Ofi Bbls.	Gas MCF	GOR Cu.Ft./Bbl.
Carter Foundation Production G. H. Mattix Federal	Company				•	
(032339) Well #2 3-245-37E (Unit C)			_			
		Closed	In			
G. H. Mattix Federal						
(032339) Well #5 3-245-37E (Unit E)	2-10-82	24	1	1 20	• •	
······································	2 10 02	43	1	1.38	3.4	2463
G. H. Mattix Federal (032339) Well #6						
3-245-37E (Unit O)		Closed	In			

Closed In

CHEOREL & MELSIA SEIS CIE COLLE VATION DIVISION

.

EXHIBIT NO. 7

CASE NO.\_

Hearing Date\_

Submitted by \_\_\_\_

No well logs are available on these wells.

- - -

# LOCATION OF FRESH WATER WELL

Only one fresh water well is within a one-mile radius of one of the proposed injection wells. This well is used for domestic water for the Carter Foundation Production Company camp and is located in the southwest corner of Unit E, Section 35, T-23-S, R-37-E in the camp area. The well is pumped by a downhole centrifical pump at an approximate depth of 120<sup>4</sup>.

\*\*\*1

Carter Foundation Production Company "Camp" Water Well 3500' S 4950' 3500' W **Carter Foundation Production Company** G. H. Mattix Federal #2 Proposed Injection Well

BEFORE EXAMINER STAMETS OIL CONSENVATION DIVISION EXHIBIT NO. 54-5	-
CASE NO.	-
Submitted by	
Hearing Date	



913/381-2595 P. O. BOR 6394

# WATER ANALYSIS REPORT

XI.

OMPANY		CARTER FOUNDAS	ADDRESS	JAL, NEN NEXTCO			
ASE		H <sub>2</sub> O WEEL		7/1/82			
ANALYSE		<u> </u>	PPM Mg/L	E P M Moq./L	lonic PPM		
1.	241	7.35					
2.	H <sub>t</sub> S	Neg.			· ·		
3.	ω,	Pos.	•				
4.	Specific Gravity	1.0002					
5.	Phenol Alkalinity (CeCO3)		0.0				
6.	M.P. Alkalinity (C+CO3)		60.0				
7.	Bicarbonate (C+CO3)		60.0	1.2	HCO, 73.2		
8,	Chiorides (CI)		200.0	5.6	CL 200.0		
9.	Sulphates (SOJ)		425.0	8.9	SO, 425.0		
10.	Total Hardness (CoCO <sub>1</sub> )		375.G				
11.	Calcium (C=CO)	·	275.0	5.5	Co 110.0		
12.	Magnesium (C=CO <sub>2</sub> )		100.0	2.0	Mg 24.4		
13.	Socium (No)			8.2	Na 188.6		
14.	Barium (Ba)				Be 8.0		
15.	kon (Fe)	•			TRACE		
16.	Total Disolved Solids				1,029.2		

Loui Sta L

Chemicals for the Petroleum Industry

# AFFIDAVIT OF PUBLICATION

of the Hobbs News Sun, a	daily newspaper	published	at Hobbs,	New
Name			Title	
1. fale & Sum	men-	PUBLISH		
STATE OF NEW MEXICO	1			
	-			
COUNTY OF LEA	I			

Sworn and subscribed to before me this \_\_\_\_\_ day of \_\_\_\_\_ 1982.

My commission expires March 29\_, 19 \$6.

LEGAL NOTICE JUN L Q Gray lexice. Les Cours The injection into the Particular into nty, The injection interve the Penrise Queen mation at the foll depths: Well #2 3308 (Open Hole); Well #5 3914', (Perforations); Well #6 3498-3548' forations). The max ed injection rreis per Ichael 12.4 th at 1 0 ; anticipateo harreis per well ( ecti e obj R beer be Oll P. O. ervation Divi C Box 2008, Santa Fe, New Mexico \$7501 within 15 days.

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BEFORE EXAMINER STANETS	
CIL CONSE VAT. N DIVISION	4
Actual NO	-
CASE NO.	
Submitted by	
Hearing Date	

XIII.

# ROBERT D. FITTING & ASSOCIATES, INC. Interne Engineering & Subjuind Constants MIDLAND, TEXAS 79701

July 7, 1982

### **CERTIFIED - RETURN RECEIPT**

Getty Oil Company P. O. Box 1231 Midland, Texas 79702

> Re: Carter Foundation Production Company, G. H. Mattix Federal #2, #5 and #6, Section 3, T-24-S, R-37-E, Lea County, New Mexico

Gentlemen:

The Carter Foundation Production Company is in the process of making application to convert the above wells to water injection service. The New Mexico Oil Conservation Division requires that a copy of this application be furnished all offset operators. The enclosed application is being mailed this date to the New Mexico Oil Conservation Division in Santa Fe.

Should you have any questions concerning this application, you may contact us at the address shown above.

Yours very truly,

CARTER FOUNDATION PRODUCTION COMPANY

- A I By: Robert D. Fitting,

RDF:jd Encl -

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ROBERT D. FITTING & ASSOCIATES, INC. Studium Engineering & Sudgial Emedicati MIDLAND, TEXAS 79701

July 7, 1982

# CERTIFIED - RETURN RECEIPT

Pearson-Sibert Oil Co. of Texas 901 W. Missouri Midland, Texas 79701

> Re: Carter Foundation Production Company, G. H. Mattix Federal #2, #5 and #6, Section 3, T-24-S, R-37-E, Lea County, New Mexico

Gentlemen:

The Carter Foundation Production Company is in the process of making application to convert the above wells to water injection service. The New Mexico Oil Conservation Division requires that a copy of this application be furnished all offset operators. The enclosed application is being mailed this date to the New Mexico Oil Conservation Division in Santa Fe.

Should you have any questions concerning this application, you may contact us at the address shown above.

Yours very truly,

CARTER FOUNDATION PRODUCTION COMPANY

0.4 L **€**# By: Robert D. Fitting,

RDF:jd Encl -

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# ROBERT D. FITTING & ASSOCIATES, INC. Internet Engineering & Surging Consultant MIDLAND, TEXAB 79701

July 7, 1982

# CERTIFIED - RETURN RECEIPT

Mr. Bill Grobe P. O. Drawer "G" Jal, New Mexico 88252

> Re: Carter Foundation Production Company, G. H. Mattix Federal #2, #5 and #6, Section 3, T-24-S, R-37-E, Lea County, New Mexico

Dear Mr. Grobe:

The Carter Foundation Production Company is in the process of making application to convert the above wells to water injection service. The New Mexico Oil Conservation Division requires that a copy of this application be furnished you as surface owner under this lease. The enclosed application is being mailed this date to the New Mexico Oil Conservation Division in Santa Fe.

Should you have any questions concerning this application, . you may contact us at the address shown above.

Yours very truly,

CARTER FOUNDATION PRODUCTION COMPANY

HE JE By: E Robert D. Fitting,

RDF:jd Encl -

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farst 683-46+6

ROBERT D. FITTING & ASSOCIATES, INC. Johnson Engineering & Sontymin & Sontant

MIDLAND, TEXAS 79701

July 7, 1982

### CERTIFIED - RETURN RECEIPT

Mr. Jimmy Doom Doom Ranch Jal, New Mexico 88252

### Re: Carter Foundation Production Company, G. H. Mattix Federal #2, #5 and #6, Section 3, T-24-S, R-37-E, Lea County, New Mexico

Dear Mr. Doom:

ALST HIBBOUR AVI

The Carter Foundation Production Company is in the process of making application to convert the above wells to water injection service. The New Mexico Oil Conservation Division requires that a copy of this application be furnished you as surface owner under this lease. The enclosed application is being mailed this date to the New Mexico Oil Conservation Division in Santa Fe.

Should you have any questions concerning this application, you may contact us at the address shown above.

Yours very truly,

CARTER FOUNDATION PRODUCTION COMPANY

By: Tokt Dat Robert D. Fitting Agent

RDF:jd Encl -

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# P 265 320 208

# **RECEIPT FOR CERTIFIED MAIL**

NO INSURANCE COVERAGE PROVIDED-NOT FOR INVERNATIONAL MAIL

				(See Reverse)						
		in.		y Doom	,					
	STREET AND NO. Doom Ranch									
	۴f	a	ATE	NM 98252						
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		OPTIONAL SERVIC		SHORY TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢					
			RETURN RECEIPT	SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢					
2	ð		RETU	SHOR: TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢.					
6	TOT	AL I	POST	AGE AND FEES	s 2.40					
<b>V</b> DI	POS	TL.	ARK	ORĐATE						
PS Form 3800, Apr. 1976										
PS Fc										

# P 265 320 206

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED-NOT FOR INTERNATIONAL MAIL



### P 265 320 207 **RECEIPT FOR CERTIFIED MAIL** NO INSURANCE COVERAGE PROVIDED— NOT FCR INTERNATIONAL MAIL (Sog Reverse) SEN' TO **Bill Grobe** TREET AND NO. P. O. Drawer "G" P.O. STATE AND ZIP CODE Jal, NM 88252 \$ 1.05 POSTAGE 0.75. CERTIFIED FEE SPECIAL DELIVERY FEES RESTRICTED DELIVERY £ Ĩ SHOW TO WHOM AND TO ELIVERY TO WHOM AND A 0.60 CONSULT POSTMASTER RETURN RECENT OPTIONAL & SHOW TO WHOM AND DATE DELIVENED WITH RESTRICTED DELIVERY SHOW TO GHOM, DATE AGO ADDRESS OF BELIVERY WITH RESTRICTED DELIVERY 1976 TOTAL POSTAGE AND FEES 2 2.40 Ă POSTMARK OR DATE Form 3800, 7-7-82 S

# INJECTION WELL DATA SHEET

III.

# CARTER FOUNDATION PRODUCTION COMPANY G. H. MATTIX FEDERAL WELL NO. 2 658' FNL & 1964' FWL, SECTION 3, T-24S, R-37E, LEA COUNTY, NEW MEXICO



# III. INJECTION WELL DATA SHEET

# CARTER FOUNDATION PRODUCTION COMPANY G. H. MATTIX FEDERAL WELL NO. 5 1969.5' FNL 5 655.5' FWL, SECTION 3, T-245, R-37E, LEA COUNTY, NEW MEXICO



Total Depth - 3667'







BEFORE EXAMINER STAMETS OIL CONST WATEON DIVISION	
Submilled by	-
Hearing Date	•

III.

# INJECTION WELL DATA SHEET (Page 2)

- 1. The name of the injection zone is the Penrose Sand of the Queen formation.
- 2. The name of the field is the Langlie Mattix (Seven-Rivers Queen Grayburg).
- 3. These wells were not drilled for water injection service but were originally Langlie Mattix Pool oil wells. The G. H. Mattix Federal, Well No. 2 was completed on February 21, 1951; Well No. 5 was completed on November 15, 1961; and, Well No. 6 was completed on November 30, 1961. No records of the Permit to Drill dates are available.
- 4. These wells have never produced from any zone except the Penrose Sand from 3309' to 3646'.

5. The underlying oil and gas pools in this area are as follows:

Pool	Average Producing Depth	Township	Range
Teague Blinebry	5300'	23-S	37-E
Teague Abo	6700'	23-S	37-E
Teague Devonian	7300'	23-S	37-Е
Teague Simpson	9200'	23-S	37-E
Teague Ellenburger (Deplete	d) 9500'	2 <b>3</b> -S	37-Е

# OIL CONSERVATION DIVISION DISTRICT 1

C . With IIIL L 5 1982

DIL CONSERVATION DI VISSON SANTA FE P. O. BOX 2088 SANTA FE, NEW IEXICO 87501

DATE	July	9,	1982

RE :	Proposed	MC ·		
	Proposed	DHC		
	Proposed	NSL		
• •	Proposed	NSP		
	Proposed	SND	•	
	Proposed		X	·
	Proposed	PHIX_		

Gentlemen:

1 have examined the application for the:

Carter Foundation Pu	rod. Co.	G. H.	Mattix 👫	2-C, 75-E,	<b>#6-0</b>	3-24-37
Operator		Lease	and He	INO.	Unit, S	5 - T - R

and my recommendations are as follows:

. 0.K.----J.S. . • . . • • . ۰. . . . . •

Yours very truly,

/mc

BEFORE LA MERSEAMETS CIL CON A CAL IN DIVISION CASE NO. Submitted by Hearing Date\_

(eis) es3-48

#149

INC 26 BRZ ROBERT D. FITTING & ASSOCIATES Fileshan Engineering & Subject ∧L. ONUS SIN I NIDLAND, TEXAS 79701

July 22, 1982

7-30

well 150' SE OF Getty wellsee. 4 has not been produced in about 20 years

Mr. Roy Johnson Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501

> Re: Application to Convert to Injection Carter Foundation Production Company, G. H. Mattix Federal #2, #5 and #6, Lea County, New Mexico

Dear Mr. Johnson:

Mr. Carl Manske with the Carter Foundation Production Company has inspected the area surrounding the captioned wells for which we have made application to convert to injection.

It is our belief that the enclosed plat correctly reflects the location of all water wells and windmills in the area.

Please advise if additional information is required.

Yours very truly,

Robert D. Fitting

BEFORE EXA LARK FACETS OIL CONSE MARUN DIVISION \_\_\_\_ LA ISH NO. 12

RDF:jd Encl -

y & El Paso

CASE NO.

Submitted by \_\_

riearing Date

pockets Nos. 29-82 and 30-82 are tentatively set for September 15 and September 29, 1982. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: CONMISSION HEARING - THURSDAY - AUGUST 26, 1982

OIL CONSERVATION COURLESSION - 9 A.M. NONGRN HALL, STATE LAND OFFICE BUILDING SANTER FZ, NEW MEXICO

- CASE 7656: Application of Cities Service Company for determination of reasonable well costs, Les County, New Maxico. Applicant, in the above-styled cause, pursuant to the provisions of Section 70-2-17 C, MMSA, 1978 Comp., and Paragriph (5) of Division Order No. R-6781, seeks a determination of reasonable well costs for two wells drilled under the provisions of said Order No. R-6781 by Doyle Hartman on lands pooled by said order.
- <u>CLSE 7657</u>: Application of Harvey E. Yates Company for non-rescission of Order No. R-6873, Chaves County, Hew Maxico. Applicant, in the above-styled cause, seeks the non-rescission of Order No. R-6873, which order pooled certain lands to be dedicated to a proposed Orderician test well to be drilled thereon, being the W/2 of Section 18, Township 9 South, Hange 27 East. Said order provided that should the unit well not be irilled to completion, or abandonment, within 120 days after commencement thereof, operator shall appear and show cause why the pooling order should not be rescinded.
- CASE 7658: Application of Harrey E. Yates Company for a dual completion and downhole commingling, Chaves County, New Maxico. Application in the above-styled cause, seeks approval for the dual completion of its Seymour State #1 located in Section 18, Township 9 South, Range 27 East, in such a manner that Abo perforations from 4912 feet to 4929 feet would be commingled with Upper Atoka perforations from 5926 feet to 5952 feet and the aforesaid intervals dually completed with Lower Atoka perforations from 6008 feet to 6048 feet and produced through parallel strings of tubing.

Docket No. 28-82

### DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 1, 1982

OIL CONSERVATION DIVISION - 9 A.N., NORGAN BALL, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Mutter, Alternate Examiner:

CASE 7635: (Continued from August 18, 1982, Examiner Hearing)

In the matter of the hearing called by the Gil Conservation Division on its own motion to permit CO2-In-Action, Travelers Indemnity and all other interested parties to appear and show cause why the Trigg Well No. 3 located in Unit J, Section 25, Township 15 North, Range 28 East, San. Higuel County, should not be plugged and abandoned in accordance with a Division-approved plugging prooram.

CASE 7636: (Continued from August 18, 1982, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit  $CO_2$ -In-Action, Travelers Indemnity and all other interested parties to appear and show cause why the Amistad No. 1 located in Unit E of Section 18, and the Amistad No. 2 located in Unit D of Section 7, both in Township 19 North, Range 36 East, Union County, should not be plugged and abandoned in accordance with a Division-approved plugging program.

- CASE 7659: Application of Sun Exploration and Production Company for an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Pennsylvanian gas well drilled 660 fest from the North and West Lines of Section 21, Township 7 South, Range 26 East, the N/2 of said Section 21 to be dedicated to the well.
- CASE 7660: Application of Pauley Petroleum, Inc. for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from 3862 feet to 3874 feet in its State Well No. 1 located in Unit B of Section 16, Township 7 South, Range 33 East.
- CASE 7661: Application of George Sardella and Gary Plemans for an oil treating plant permit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority for the construction and operation of an oil treating plant for the purpose of treating and reclaiming sediment oil at a site in the NM/4 MM/4 of Section 33, Township 16 South, Range 33 East.

CASE 7630: (Continued from August 4, 1982, Examiner Hearing)

Application of Ralph Nix for an oil treating plant permit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority for the construction and operation of an oil treating plant for the purpose of treating and reclaiming sediment oil at a site in the SW/4 NE/4 of Section 18, Township 19 South, Range 26 East.

### Page 2 of 6 Examiner Hearing - SEPTEMBER 1, 1982

Docket No. 28-82

CASE 7662: Application of Carter Foundation Production Company for a waterflood project, Lea County, New Maxico. Applicant, in the above-style: cause, seeks authority to expand its Bline-Cade Waterflood Project by converting its Mattix Pederal Wells Nos. 2, 5, 6, located in Units C, E, and D, respectively, in Section 3, Tremship 24 South, Range 37 East, by the injection of water into the Queen formation.

CASE 7639: (Continued ficm August 18, 1982 Examiner Hearing)

Application of Acoma Oil Corporation for downhole commingling, Les County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Wantz Abo, Drinkard and Blinebry Pool production in the welloors of its S. J. Starkeys Lease Well No. 2, located in Unit B of Section 26, Township 21 South, Range 37 East.

<u>CASE 7663:</u> Application of Jugan Production Corporation for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Dakota formation underlying the S/2 of Section 18, Township 30 North, Range 14 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 7568: (Continued and Readvertised)

Application of Petroleum Corp. of Delaware for a dual completion, Eddy County, New Maxico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Superior Federal Well No. 6 located in Unit N of Section 6, Township 20 South, Range 29 East, East Burton Flat Field, to produce oil from the Strawn formation through the casing-tubing annulus and gas from the Morrow formation through tubing.

CASE 7651: (Continued from August 18, 1982, Examiner Hearing)

Application of Nortex Gas & Oil Company for the amendment of Order No. R-6903, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Division Order No. R-6903 to provide that non-consenting working interest owners shall have thirty days following final adjudication of title in which to pay their proportionate share of well costs.

- <u>CASE 7664</u>: Application of Yates Petroleum Corporation for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Little Cuevo Unit Area, comprising 13,407 acres, more or lezs, of State and Fee lands in Township 17 South, Range 18 East.
- CASE 7655: (Continued from August 18, 1982 Examiner Hearing)

Application of Yates Petrolsum Corporation for compulsory pooling, Chaves County, New Mexico. Applycant, in the above-styled cause, seeks an order pooling all mineral interests from the surface down through the Abo formation underlying the NM/4 of Section 20, Township 7 South, Range 26 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.

- <u>CASE 7665:</u> Application of Harvey E. Yates Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Missisaippian formation underlying the N/2 of Section 35, Township 13 South, Range 35 Hast, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASES 7666, 7667, 7668, and 7669: Application of Tates Petroleum Corporation for compulsory pooling, Chaves County, New Mexico. Applicant, in each of the four following cases, seeks an order pooling all mineral interests down through the Abo formation underlying the lands specified in each case, each to form a standard 160acre gas specing and protation unit to be dedicated to a well to be drilled at a standard location thereon. Also to be considered in each case will be the cost of drilling and completing said wells and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the wells and a charge for risk involved in drilling said wells:

CASE 7666: SW/4 Section 3;

CASE 7667: MM/4 Section 4;

CLSE 7668: WW/4 Section 14;

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All of the above being in Township 5 South, Range 24 East and CASE 7669: NW/4 Section 2, Township 9 South, Range 25 East

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Docket No. 28-82

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CASE 7670: Application of Yates Petroleum Corporation for compulsory pooling, Chaves County, New Maxico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Norrow formation underlying the N/2 of Section 26, Township 14 South, Range 27 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.

### CASE 7648: (Continued from August 18, 1982 Examiner Hearing)

Application of Rio Pecos Corporation for compulsory pooling, Eddy County, New Maxico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the top of the Wolfcamp to the base of the Pennsylvanian formation underlying the W/2 of Section 35, Township 18 South, Range 24 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.

- CASE 76421 Application of Doyle Hartman for compulsory pooling, Lea County, New Maxico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface through the Jalmat Pool, underlying a previously approved 120-acre non-standard proration unit comprising the S/2 NE/4 and NE/4 ME/4 of Section 20, Township 25 South, Range 37 East, to be dedicated to a well to be drilled at a previously approved unorthodox location. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- <u>CASE 7671</u>: Application of Taxas Eastern Developments, Inc. for an exception to Rule 307, San Juan County, New Maxico. Applicant, in the above-styled cause, seeks an exception to Rule 307 of the Division Rules and Regulations to permit it to draw a vacuum on the Shiprock Gallup Oil Pool reservoir through 16 wells in Sections 16 and 17, Township 29 North, Range 18 West. Applicant further seeks an administrative procedure whereby it could extend the proposed vacuum system to include additional wells in the same reservoir.
- CASE 7649: Application of Southern Union Exploration Company for retroactive exemption, San Juan and Rio Arriba Counties, New Mexico. Applicant, in the above-styled cause, seeks the retroactive exemption from Section 5 of the New Mexico Natural Gas Pricing Act of the following Basin Dakota infill wells: Jicarilla A No. 13-E in Unit H of Section 13 and Jicarilla A No. 10-E in Unit G of Section 23, both in Township 26 North, Range 4 West, and Jicarilla K No. 15-E in Unit A of Section 1, Township 25 North, Range 5 West, all in Rio Arriba County. Also the Hodges No. 15-E in Unit J of Section 27, Township 26 North, Range 3 West in San Juan County. Also the following Ballard-Pictured Cliffs replacement well in San Juan County: Newson No. 10-R in Unit H of Section 20, Township 26 North, Range 8 West. Each of the aforesaid wells was subject to the New Mexico Natural Gas Pricing Act until exempted from same by the Division on July 23, 1982, and applicant seeks the retroactive exemption of each of said wells to date of first delivery into the pipeline which ranges from December 24, 1980 to January 11, 1982.
- <u>CASE 7672:</u> In the ratter of the hearing called by the Oil Conservation Division on its own motion for an order creating, assigning discovery allowable, contracting, and extending certain pools in Chaves, Eddy, Lea, and Roosevelt Counties, New Mexico:
  - (a) CREATE a new pool in Eddy County, New Maxico, classified as an oil pool for Brushy Canyon production and designated as the Brushy Draw-Brushy Canyon Pool. Further, to assign approximately 25,410 barrels of discovery allowable to the discovery well, the J. C. Williamson UCBHBW Federal Well No. 1 located in Unit M of Section 25, Township 26 South, Range 29 East, NMPM. Said pool would comprise:

TOWNSHI: 26 SOUTH, RANGE 29 EAST, NMPM Section 25: SW/4

(b) CREATE a new pool in Lea County, New Mexico classified as an oil pool for San Andres production and designated as the Hobbs Channel-San Andres Pool. The discovery well is the Bass Enterprises Production Company Humble City Unit Well No. 1 located in Unit D of Section 36, Township 17 South, Range 37 East, HMPM. Said pool would comprise:

TONNEHIP 17 SOUTH, RANGE 37 EAST, MAPH Section 35: MM/4 Page 4 of 6 Examiner Hearing - September 1, 1982

Docket No. 28-82

(c) CREATE a new pool in Les County, New Mexico, classified as a gas pool for Morrow production and designated as the Humphreys Hill-Norrow Gas Pool. The discovery well is the Florida Errloration Company Reno Com Well No. 1 located in Unit D of Section 11, Township 25 South, Range 35 East, WAPN. Said pool would comprise:

> TONSERIP 25 SOUTH; RANGE 35 EAST, NMPM Section 11: N/2

(d) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Abo production and designated as the Justis-Abo Pool. The discovery well is the Santa Fe Energy Company Carlson B-25 Peceral Well No. 3 located in Unit 0 of Section 25, Township 25 South, Range 37 East, NNCH. Said pool would comprise:

> TOWNSHIP 25 SOUTH, RANGE 37 EAST, HNPM Section 25: SE/4

(e) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Upper Pennsylvanian production and designated as the McMillan-Upp ir Pennsylvanian Gas Pool. The discovery well is the Southland Royalty Company Pecos River Federal 20 Com Well No. 1 located in Unit J of Section 20, Township 19 South, Range 27 East, NMPM. Said pool would comprise:

> TOWNSHIP 19 SOUTH, RANGE 27 EAST, NMPM Section 20: E/2

(f) CREATE a new pool in Eddy County, New Maxico, classified as a gas pool for Strawn production and designated as the Mosley Canyon-Strawn Gas Pool. The discovery well is W. A. Moncrief, Jr., Jurnegan State Well No. 1 located in Unit C of Section 8, Township 24 South, Range 25 East, NMPM. Said pool would comprise:

> TOWNSHIP 24 SOUTH, RANGE 25 EAST, HAPM Section 8: N/2

(g) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Tubb production and designated as the West Nadine-Tubb Pool. The discovery well is the Tamarack Petroleum Company, Inc. Kornegay A Well No. 1 located in Unit P of Section 9, Township 20 South, Range 38 East, NNPM. Said pool would comprise:

> TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM Section 9: NM/4

(h) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the Pitchfork Ranch-Morrow Gas Pool. The discovery well is the HMG Oil Company Madera 32 State Com Well No. 1 located in Unit C of Section 32, Township 24 South, Range 34 East, MMPM. Said pool would comprise:

> TOWNSHIP 24 SOUTH, RNAGE 34 EAST, NMPM Section 32: N/2

(i) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Yeso production and designated as the Seven Rivers-Yeso Pool. The discovery well is Chama Petroleum Corporation Irami Federal Well No. 1 located in Unit N of Section 34, Township 19 South, Range 25 East, NMPM. Said pool would comprise:

> TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM Section 34: SW/4

(j) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Abo production and designated as the East Skaggs-Abo Pool. The discovery well is the Texaco Inc. C. H. Weir A Well No. 12 located in Unit G of Section 12, Township 20 South, Range 37 East, NMPM. Said pool would comprise:

> TOWNSHIP 20 SOUTH, RANGE 37 EAST, NOLPH Soction 12: NE/4

(k) CREATE a new pool in Lea County, New Maxico, classified as an oil pool for Tubb production and designated as the Teague-Tubb Pool. The discovery well is the Alpha Twenty-One Production Company Lea Well No. 2 located in Unit A of Section 17, Townshp 23 South, Range 37 East, NMPM. Said pool would comprise:

> TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM Section 17: NE/4

Docket No. 28-82

Page 5 of 6 Examiner Hearing -SEPTEMBER 1, 1962

(1) CREATE a new pool in Lee County, New Mexico, classified as an oil pool for Devonian production and designated as the Townsend-Devonian Pool. The discovery well is the Kimbark Dil and Gas Company New Mexico 1-4 State Com Well No. 1 located in Unit N of Section 4, Township 16 South, Range 35 East, HMPM. Said pool would comprise:

> TOMMERIP 16 SOUTH, RANGE 35 EAST, MOPH Section 4: Lots 11, 12, 13, and 14

 (m) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Bone Spring production and designated as the Welch-Bone Spring Pool. The discovery well is the Quanah Petroleum, Inc. Hay B Federal Com Well No. 1 located in Unit K of Section 9, Township 26 South, Range 27 East, NOPM. Said pool would comprise:

> TOWNSHIP 26 SOUTH, RANGE 27 EAST, HAPPH Section 9: SN/4

(n) CONTRACT the horizontal limits of the Buckeye-Abo Pool in Lea County, New Maxico, by the deletion of the following described area:

> TOMMISHIP 18 SOUTH, RANGE 35 EAST, NMPM Section 3: W/2 MM/4

(c) CONTRACT the horizontal limits of the Vacuum-Abo Reef Pool in Lea County, New Mexico, by the deletion of the following described area:

> TOMMSHIP 18 SOUTH, RANGE 35 EAST, NMPM Section 3: E/2 HM/4

(p) EXTEND the Antelope Sink-Upper Pennsylvanian Gas Pool in Eddy County, New Newico, to include therein:

> TOWNSHIP 19 SOOTH, RANGE 23 EAST, NMPH Section 13: N/2 Section 14: N/2

 (q) EXTERD the West Arkansas Junction-San Andres Pool in Lea County, New Mexico, to include therein:

> TOMMSHIP 18 SOUTH, RANGE 36 EAST, NHPH Section 20: NM/4

(r) EXTEND the Atoka-Yeso For 1 in Eddy County, New Merico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM Section 26: E/2

(s) EXTEND the Bilbrey-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 32 EAST, NMPM Section 5: NW/4 Section 6: E/2

(t) EXTEND the Bunker Hill-Penrose Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 31 EAST, NMPM Section 14: N/2 S/2 and NE/4

(u) EXTEND the Cemetery-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

> TOWNSHIP 20 SOUTH, RANGE 25 EAST, NMPP Section 3: S/2 Section 4: All

(v) EXTELD the Comanche Stateline Tansill-Yates-Seven Rivers-Queen Pool in Lea County, New Mexico, to include therein:

> TOWNSHIP 26 SOUTH, RANGE 36 LAST, NMPM Section 26: MM/4 Section 27: NE/4 and E/2 NW/4

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Docket No. 28-82

(w) EXTEND the South Espire-Morrow Gas Pool in Eddy County, New Maxico to include therein:

> TOARSHIP 17 SOUTH, RANGE 28 EAST, NROPH Section 35: 5/2 Section 36: W/2

(x) EXTEND the South Empire-Wolfcamp Pool in Eddy County, New Mexico, to include therein:

> TOMUSHIP 17 SOUTH, RANGE 28 EAST, HMPM Section 36: E/2 HE/4

> TONNISHIP 17 SOUTH, RANGE 29 EAST, NHPM Section 31: NW/4 and S/2 ME/4

(y) EXTEND the Forty Miner Ridge-Bone Spring Pool in Eddy County, New Maxico, to include therein:

> TOWNSHIP 23 SOUTH, RANGE 30 EAST, HEPH Section 16: SE/4

(z) EXTEND the Hardy-Tubb Pool in Lee County, New Mexico, to include therein:

TONNESHIP 21 SOUTH, RANGE 36 EAST, MMPN Section 2: Lots 11, 12, 13, 14, ard 5/2 Section 11: MW/4

(as) EXTERD the Northeast Lovington-Pennsylvanian Pool in Les County, New Maxico, to include therein:

TONNESHIP 16 SOUTH, BANGE 37 EAST, BAPH Section 20: 10/4

(bb) EXTEND the West Milnesand-Pennsylvanian Pool in Roosevelt County, New Maxico, to include therein:

TOMMESHIP 8 SOUTH, RANGE 34 EAST, MEPH Section 19: W/2

(cc) EXTEND the South Peterson-Pennsylvanian Associated Pool in Roosevelt County, New Mexico, to include therein:

> TOWNSHIP 5 C XOTH, HANGE 33 EAST, HMPM Section 30: SE/4 Section 31: H/2 NE/4

TONNISHIP 6 SOUTH, RANGE 33 EAST, NMPM: Section 15: S/2

(dd) EXTEND the Race Track-San Andres Pool in Chaves County, New Mexico, to include therein:

TOMMSHIP 10 SOTTH, RANGE 28 EAST, NMPH Section 18: ME/4 and 5/2 SE/4

(ee) EXTEND the Ross Draw-Wolfcamp Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 26 SOUTH, RANGE 30 EAST, NMPM Section 23: S/2 Section 26: N/2

(ff) EXTEND the West Sand Dunes-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOMNSHIP 23 SOUTH, RANGE 31 EAST, HAPPA Section 17: S/2 Section 20: All

(93) EXTEND the Saunders Permo-Opper Pennsylvanian Pool in Lea County, New Nexico, to include therein:

TOWNSLIP 14 SOUTH, RANGE 33 EAST, : MPM Section 21: NE/4

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ERNEST L. PADILLA ATTORNEY AND COUNSELOR AT LAW

P.O. Box 2523 Santa Fe, New Mexico 87501 (505) 988-7577

1662

August 11, 1982

AUG 11 1982

Cast

Mr. Joe Ramey Oil Conservation Division Post Office Box 2088 Santa Fe, N.M. 27501

> Re: Application of Carter Foundation Production Company for an Expansion of its Waterflood Project for Secondary Recovery, Lea County, New Mexico.

Dear Mr. Ramey:

Enclosed for filing with the Oil Conservation Division are three copies of the above-referenced Application. We would appreciate having the date for hearing set for September 1, 1982.

Thank you for your consideration of this request.

very truly rours, Jasilla mest L. Padilla

ELP:PFM Enclosures cc: Mr. Robert D. Fitting

#### BEFORE THE OIL CONSERVATION DIVISION

DEPARTMENT OF ENERGY AND MINER STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION ] OF CARTER FOUNDATION PRODUCTION ] COMPANY FOR AN EXPANSION OF ITS ] WATERFLOOD PROJECT FOR SECONDARY ] RECOVERY, LEA COUNTY, NEW MEXICO ]

NO.

SANTA IL

IN YUNT

# APPLICATION

Applicant, Carter Foundation Production Company, by its undersigned attorney, hereby makes application for an expansion of its waterflood project for secondary recovery and in support of its application states:

1. That by Order No. R-3027 application has previously been authorized to institute a waterflood project in the Langlie-Mattix Pool by injection of water into the Queen Formation.

2. That said Order No. R-3027 is attached hereto and incorporated herein by reference as Exhibit A.

3. That Applicant now proposes to use the H. G. Mattix Federal Wells Nos. 2, 5 and 6 in Section 3, Township 24 South, Range 37 East, as cooperative water injection wells through a closed system to match the injection pattern established by the Getty Oil Company, Myers Langlie Mattix Unit Wells on adjoining lands.

4. That the injection Zone shall be the Penrose Sand of the Queen Formation and that its water source shall be from lands operated by applicant. 5. That the proposed injection and expansion of said waterflood project will not pose a danger to fresh water sources in the area.

6. That approval of this application will be in the best interest of conservation, prevention of waste and protection of correlative rights.

WHEREFORE, the applicants request that this application be set for hearing before a duly appointed Examiner of the Oil Conservation Division on September 1, 1982, that notice be given as required by law and the rules of the Division, and that this application be approved.

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Respectfully submitted,

10, Padilla

Erhest L. Padilla Post Office Box 2523 Santa Fe, N.M. 87501 505-983-7577 Attorney for Applicant BEFORE THE OIL CONSERVATION COMMISS 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. 3362 Order No. R-3027

00811:1:0010919

AUG 11 1982

SALVIA 11

Ex A

APPLICATION OF CARTER FOUNDATION PRODUCTION COMPANY FOR A WATERFLOOD PROJECT, LEA COUNTY, NEW MEXICO.

### CRDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 5, 1966, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 13th day of January, 1966, 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 the applicant, Carter Foundation Production Company, seeks permission to institute a waterflood project in the Langlie-Mattix Pool by the injection of water into the Queen formation through five injection wells at unorthodox locations in Sections 34 and 35, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

-2-CASE No. 3362 Order No. R-3027

(5) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

#### IT IS THEREFORE ORDERED:

(1) That the applicant, Carter Foundation Production 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 wells at the followingdescribed unorthodox locations in Township 23 South, Range 37 East, NMPM, Lea County, New Mexico

Carter Foundation Production Company Blinebry Federal

Well No. 11, located 1300 feet from the South line and 1240 feet from the East line of Section 34;

Well No. 13, located 1300 feet from the South line and 1300 feet from the West line of Section 35;

Well No. 14, located 2660 feet from the North line and 20 feet from the East line of Section 34;

Well No. 15, located 1340 feet from the North line and 1200 feet from the West line of Section 35; and

Well No. 16, located 1340 feet from the North line and 1340 feet from the East line of Section 34.

(2) That the subject waterflood project is hereby designated the Carter Foundation Bline-Cade Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations. -3-CASE No. 3352 Order No. R-3027

(4) 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

JACK M. CAMPBELL, Chairman

GUYTON B. HAYS, Member

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

SEAL

esr/

BOI WEST MISSOU : AVE.

INFIL 28 1982 -----ROBERT D. FITTING & ASSOCIATE Statum Engineering & Subgrind Emerication MIDLAND, TEXAS 79701 July 22, 1982 #149 7-30 well 150' SE OF Getty well see. 4 has not been produced in about 20 years Cace 2662

Mr. Roy Johnson Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501

> Re: Application to Convert to Injection Carter Foundation Production Company, G. H. Mattix Federal #2, #5 and #6, Lea County, New Mexico

Dear Mr. Johnson:

Mr. Carl Manske with the Carter Foundation Production Company has inspected the area surrounding the captioned wells for which we have made application to convert to injection.

It is our belief that the enclosed plat correctly reflects the location of all water wells and windmills in the area.

Please advise if additional information is required.

Yours very truly,

Robert D. Fitting

has suit against Betty & El Paso



DIT The states A. 11

Jimmy Joe Doom Star Route Jal, New Mexico 88252 July 14, 1982

Called 7-20-82 - no ensurer 7-28-82 will Forward H20 declation & location of

How well that is within Yy mile of injection well -old Texaco well

WFX

CERTIFIED - RETURN RECEIPT

011 Conservation Division P. O. Box 2083 Santa Fe, New Mexico 87501

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Dear Sirs: It is my desire to protest the approval of the application of Carter Foundation Production Company to convert their G. H. Mattix Federal #2, #5 and #6, Section 3, T-24-S, R-37-E wells to water injection service. I am the surface somer of the northwest quarter of the above mentioned section.

It is my belief that the report prepared by Pobert D. Fitting & associates, Inc. is incorrect in its Exhibit XI. It is stated that there is only one fresh water well within one-mile radius of the propsed injection wells. This seems to be in error. I am not able to tell exactly where the wells are from the map and the identifying signs of the wells in question have been removed. It does not seem possible that they could be over o e mile from any of my fresh water wells on which I have water declarations with the Office of the State Engineer.

I would appreciate your consideration in this matter. Thank you.

Singerely, Jenny Jee Doom

CC: Carter Foundation Production Company 901 W. Missouri Midland, Texas 79701

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DIL CONSERVATION DIVERNELS P. O. BOX 2088 SANTA FE, NEW IEXICO 87501

DATE	July	9,	1982	

RE:	Proposed	MC ·		
	Proposed	DHC		
	Proposed	NSL_		
• •	Proposed	NSP		
	Proposed	SWD	,	
	Proposed	WFX	X	-
	Proposed	PHX_		

Gentlemen:

I have examined the application for the:

Carter Foundation Prud. Co.G. H. Mattix #2-C, #5-E, #6-03-24-37OperatorLease and Well No.Unit, S - T - R

and my recommendations are as follows:

• •

0.K.----J.S.

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Yours very truly, /mc

ENER	GY AND MINERALS DEPARTMENT	POST DIVICE BOR JUNE BRATE LAND DIVICE BUILDING	Revised 7-1-81
*		Bandia HE NEW MI MCD # 7501	TITEL
APPLIC	ATION FOR AUTHORIZATION TO INJECT		
- 1.	Purpose: DiSecondary Recover Application qualifies for ad	y Pressure Haintena ministrative approval?	nce E althe (a) 1982 stange
п.	Operator: Carter Foundation	Production Company	CIL CONSL.
	Address: <u>901 W. Missouri, M</u>	lidland, Texas 79701	SANIA FE
	Contact party: Robert D. Fit	ting	Phone: (915) 683-4616
	Well data: Complete the data r proposed for inject	equired on the reverse s ian. Additional sheets	ide of this form for each well may be attached if necessary.
IV.	Is this an expansion of an exis If yes, give the Division order		Droject <u>R-3027</u> .
۷.	Attach a map that identifies al injection well with a one-half well. This circle identifies t	mile radius circle drawn	around each proposed injection
• VĮ.	Attach a tobulation of data on penetrate the proposed injectio well's type, construction, date a schematic of any plugged well	n zone. Such data shall drilled, location, dept	h, record of completion, and
VII.	Attach jata on the proposed ope	ration, including:	
	<ol> <li>Whether the system is on</li> <li>Proposed average and made</li> <li>Sources and an appropriation is for displayed formation is for displayed by the receiving formation is for displayed by the set or within one mile</li> </ol>	pen or closed; ximum injection pressure ate analysis of injectio on if other than reinjec posal purposes into a zo of the proposed well, a mation water (may be mea	n fluid and compatibility with
¥¥III.	Attach appropriate geological d detail, geological name, thickn bottom of all underground sourc total dissolved solids concentr injustion zone as well as any s injection interval.	ess, and depth. Give th es of drinking water (aq ations of 10,000 mg/l or	uifers containing waters with less) overlying the proposed
IX.	Describe the proposed stimulation	on program, if any.	
н. X.	Attach appropriate logging and with the Division they need not		(If well logs have been filed
► XI.	Attach a chemical analysis of f available and producing) within location of wells and dates sam	one mile of any injecti	
<b>XII.</b>	Applicants for disposal wells m examined available geologic and or any other hydrologic connect source of drinking water.	engineering data and fi	nd no evidence of open faults
XIII.	Applicants must complete the "P	roof of Notice" section :	on the reverse side of this form.
XIV.	Certification		· · · · · · · · · · · · · · · · · · ·
	I hereby certify that the inform to the best of my knowledge and		is application is true and correct
	Name: Robert D. Fitting	Titl	Agent
	Signature:	Da	te:
subai	e information required under Sec tted, it need not be duplicated a me earlier submittal.	tions VI, VIII, X, and X. and resubmitted. Please	I above has been previously show the date and circumstance
-			
	IBUITON: Original and one copy ( ict office.	to Santa Fe with one copy	y to the appropriate Division
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#### FORM C-108 Side 2

#### ITT. 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 parker 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 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 anly 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 an 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 heen 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 SUBHITTED.

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

## INJECTION WELL DATA SHEET



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# INJECTION WELL DATA SHEET



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PBTD - 3651'

### INJECTION WELL DATA SHEET (Page 2)

- 1. The name of the injection zone is the Penrose Sand of the Queen formation.
- 2. The name of the field is the Langlie Mattix (Seven-Rivers Queen Grayburg).
- 3. These wells were not drilled for water injection service but were originally Langlie Mattix Pool oil wells. The G. H. Mattix Federal, Well No. 2 was completed on February 21, 1951; Well No. 5 was completed on November 15, 1961; and, Well No. 6 was completed on November 30, 1961. No records of the Permit to Drill dates are available.
- 4. These wells have never produced from any zone except the Penrose Sand from 3309' to 3646'.

Pocl	Average Producing Depth	Township	Range
Teague Blinebry	5300'	23-S	37-E
Teague Abo	6700'	23 <b>-</b> S	37 <b>-</b> E
Teague Devonian	7300'	23-S	37 <b>-</b> E
Teague Simpson	9200'	23-S	37-E
Teague Ellenburger (Deplete	d) 9500'	23 <b>-</b> 5	37-Е

5. The underlying oil and gas pools in this area are as follows:

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	G. H. MATTIX FEDERAL #2	
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1980 <sup>•</sup>	4 1980'	3 1974'	41	3 660'	34 660'	34 660'	Lo Section	
3 24-S 37-E 1980' FSL & 560' FWL	4 24-S 3 1980' FNL & 660' 1	3 24-S 37-E 1974' FNL & 1984' FEL	24-S 37-I 660' FN&EL's	3 24-S 37-E 660' FNL & 1980' FEL	34 23-S 37-E 660' FSL & 1980' FWL	34 23-S 660' FS&WL's	Location Section Township R	WELL
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2-23-82	own	1: •26-51	12- 1-81	10-22-50	12- 9-50	1-21-41	te Completed	(1/2 MILE R.
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Perfs: 3460'-3619' Casing: 8-5/8"9501'/350 sx, 5-1/2"9374571,100 sx Treatment: Acid/6,500 gals, Frac/33,000 gals & 60,000# sd	Open Hule: 3459'-3665' Casing: 12-1/2" @201'/150 sx 8-5/8"@1250'/300 sx, 7"@3459'/100 sx	Open Hole:         3328'-3560'         \$2400';           Casing:         7'         @ 3328'/800 sx         \$2400';           Treatment:         Shot/450 qts nitro         itro	Perfs: 3387'-3637' Casing: 8-5/8"@501'/350 sx, 5-1/2" @ 3671'/1000 sx Tubing: 2-3/8" @ 3318' Treatment: Acid/2,000 gals, Frac/ 21,000 gals & 6,000# sd	Open Hole: 3321'-3564' Casing: 10-3/4"0254'/150 sx, 7" 0 3321'/800 sx Treatment: Shot/470 qts, nitro	Open Hole: 3308'-3578' Casing: 10-3/4"@285'/150 sx, 5-1/2"@3308'/400 sx Treatment: Shot/400 qts. nitro	Open Hole: 3435'-3571' Casing: 13-3/8"@336'/250 sx, 9-5/8"@2550'/500 sx, 7"@3435'/100 sx, 4-1/2" Liner 3029'-3700°/125 sx Perfs: 3439'-3564', acid/3,000 gals	Record of Completion	

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Eva E. Blinebry Federal Well #2	Well #192 C 10 560 Carter Foundation Production Company	Well #191	Well #188	Well #159	Well #185	Cietty Oil Company Myers Langlie-Mattix Unit Well #163	Operator, Lease & Well No.	
ο	on Co	ta	ש	⊷	Z	-	Unit	
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14 23-8 37-E 660' FSL & 1995' FEL	10 24-8 37-E 560' FNL & 2083' FWL 207	.0 24-S 37-E 660' FNL & 1980' FEL	3 24-S 660' FS&EL's	24-S FSL &	24-S FS&WL'8	4 24-S 1980' FSL & 66	Location on Township	
37-E 15' FEL	37-E 93' FWL	37-E 90' FEL	37-E	37-E 660' FEL	37-E	37-E 660' FEL	Range	WELLS
O11 Producer	Water Injector	Oil Producer	Oil Producer	Water Injector (Inactive)	Water Injector	'Water Injector Converted :	Туре	WELLS WITHIN AREA
4- 3-50	2-25-53	12- 6-52	8-16-78	2- 6-52	7-11-81	Unknown 11-20-78	Date Spudded C	A OF REVIEW
5-16-50	4-17-53	2-20-53	9-15-78	3-19-52	3-15-82	8-19-37	e Completed	N (1/2 MILE
35361	3582'	3643'	37 47'	3586	3705	3640' DD 3731'	Depth TD P	E RADIUS)
		3635'	3706'	·	3652'		oth PBTD	(S)
Queen	Queen	Queen	Queen	Queen	Queen	Queen	Zone	
Open Hole: 3309'-3536' Casing: 13-3/8" @ 311'/175 sx, 7" @ 3309'/850 sx	Open Hole: 3347'-3582' Casing: 8-5/8" @ 250'/125 sx, 5-1/2" @ 3347'/800 sx Treatment: Shot/250 qts nitro	Open Hole: 3334'-3635' Casing: 9-5/8" @ 252!/165 sx, 5-1/2" @ 3334'/800 sx Treatment: Shot/350 qts nitro	Perfs: 3504'-3602' <u>Casing:</u> 8-5/8" @ 507'/275 sx, 5-1/2" @ 3746'7800 sx Treatment: Acid/2,000 gals, Frac/19,000 gals & 24,000# sd	Open Hole: 3323'-3586' Casing: 10-3/4" @ 261'/150 sx, 7" @ 3323'/800 sx	Perfs: 3489'-3635' Casing: 8-5/8" @ 500'/350 sx, 5-1/2" @ 3703'/1150 sx Treatment: Acid/2,000 gals	Open Hole: 3466'-3649. Casing: 12-1/2"@18', 8-5/8"@1374'/ 400 sx, 5-1/2"@3466'/400 sx, Liner 3218'-3731'/125 sx Perfs: 3515'-3643', Acid/3,000 gals	Record of Completion	

VI.

Page 2.

Well #6	Well #5	Well #4	Well #3	Well #2	G. H. Mattix Federal F 3 Well #1 F 193	Operator, Lease & Well No.	
o	tra	۵	J	Q	÷1	Unit s	
3 24-8 37-E 660' PSL & 1982' FEL	3 24-8 37-E 1969.5' FNL & 655.8' 1	3 24-S 37-E 656' PNL & 654' FWL	3 24-S 37-E 1981' PSL & 1989' FEL	3 24-S 37-E 656' FNL & 1964' FWL	3 24-8 37-E 1930' PN&WL's	Location Unit Section Township Range	WELLS
Oil Prod <b>ucer</b>	37~E Oll Producer 655.8' FWL	Oil Producer	Oil Producer	Shut In Oil Producer	Oil Producer	Туре	WELLS WITHIN AREA OF REVIEW (1/2 MILE RADIUS)
11-17-61	11- 2-61	10-19-61	1-22-52	1-13-51	4- 3-35	Date Spudded C	OF REVIE
11-30-61	11-15-61	11- 1-61	3- 8-52	2-21-51	7-17-35	te Completed	W (1/2 MIL
3671'	3667'	3675'	3674'	3605'	3915'	De TD	E RADIU
3651'					3760'	Depth 5 PBTD	JS)
Queen	Queen	Queen	Queen	Queen	Queen	Zone	
Perfs: 3496'-3646' Casing: <u>9-5/8" @ 311</u> '/300 sx, 7" @ 3670'/1000 sx Treatment: Actd/1250 gals, Frac/37,500 gals oil & 56,250# sd	Perfs: 3496'-3614' Casing: <u>9-5/8" @ 308</u> '/300 sx, 7" @ 3665'/900 sx Treatment: Acid/750 gals, Frac/30,000 gals oil & 45,000# sd	Perfs: 3501'-3612' Casing: 9-5/8" @ 306'/300 sx, 7" @ 3675'7900 sx Treatment: Acid/1250 gals, Frac/20,000 gals oil & 40,000# sd	Open Hole: 3310'-3674' Casing: 13-3/8" @ 323'/175 sx 7" @ 3310'/875 sx Treatment: Shot/820 qts nitro	Open Hole: 3309'-3605' Casing: 13-3/8" @ 312'/175 sx, 7" @ 3309'/875 sx Treatment: Shot/620 qts nitro	Open Hole: 3407'-3760 Casing: 8-1/4" @ 1234'/300 sx. 7" @ 3407'7400 sx Treatment: Shot/500 qts nitro	Record of Completion	

VI.

Page 3,

	Fearson-Sibert Oil Co. of (. H. Mattix Federal Well #)	Well #8	Carter Foundation Production Company G. H. Matlix Federal K. 3 Well #7 19	Operator, Leass & Well No.	Piloe 4.
	of Texas A	Z	ion Com	Unit	
	10 24-S 660' PN&EL's	3 24-8 37-E 660' FSL € 980' FWL	24-5 1980' PS&WL's	Location n Township	
	37-E	37-E 30' PWL	37-E	VELLS W	
	Oil Producer	Oíl Producer	Oil Producer	WELLS WITHIN AREA	
	5-29-52	8- 1-81	10- 3-81	OF REVIEW ( Date Spudded C	<b>9</b>
	7- 2-52	<b>9-</b> 21 <b>8</b> 1	11-13-81	1/2 MILE	
	362 1'	3692"	3730'	RADIUS) Depth TD	
	X		3722'	PBTD	
· · ·	Queen	Queen	Queen	Zone	
	Open Hole: 3435'-3621' Casing: <u>9-5/8" @ 326'</u> /?59 sx 5-1/2" @ 3435'/400 sx Tubing: 2-3/8" @ 3612'	Perfs: 3475'-3626' <u>Casing:</u> 8-5/8" 8 565'/360 sx 5-1/2" 3 3692'/900 sx <u>Tubing:</u> 2-3/8" 8 3579' <u>Treatment:</u> Acid/5,000 gals, <u>Frac/36,000</u> gals, 10/20 & 10/40 sd	Perfs: 3474'-3638' Casing: <u>8-5/8" @ 507'</u> /360 sx, 5-1/2" @ 3722'/900 sx Tubing: 2-3/8" @ 3ö38' Treatment: Actd/6,000 gals, Frac/35,000 gals & 72,000# sd	Record of Completion	

VI. GULE OIL CORR S. J. CARR NO. 1 UL L, Jec. 3. T245-R37E P+A WSA 13-5X CEMERY PIUS JURACE - 25 Bridge Plug @ 25. . . . . . 1.15% CSG. Q.1.48" NOT Commented الموجمة ور. والوالعمية مهراك المراج . . . . . . 10th CSG\_@ 1237 Cemented W/250 SXS ------Cement TOP @ SURFACE -----. بعد السنيندد - م 34 SX COMENT PIUG 2445-2520" 11:593 Shot 7" CSG. OFF @ 255pr + PULLED 15' OF Cement ON TOP OF Retainer Coment RetAiner @3462' Squeezed 20 SXS Below RetAiner 5 7. CSG. @ 3484' Cemented W/100 SXS. CALC. Cement TOP @ 2600" P3TO @ 3625' -0 @ 3326'

# PROPOSED OPERATIONS

The Carter Foundation Production Company proposes to use the subject G. H. Mattix Federal #2, #5 and #6 as cooperative water injection wells to match the injection pattern established by the Getty Oil Company, Myers Langlie Mattix Unit wells. The average initial daily rate should approximate 200 barrels to a maximum of 350 barrels per well per day.

The system will be closed and the average initial injection pressure is estimated from 0 to 50 psi with an after fillup approximate maximum injection pressure of 1600 psi.

The water source will be primarily of produced salt water from the multipay wells owned by Carter Foundation Production Company in Sections 34 and 35, T-23-S, R-37-E, and the subject lease. If the quantity is insufficient, produced Santa Rosa formation brakish water from our approved water supply well, the E. C. Hill Federal #7 in Section 35, T-23-S, R-37-E, will be used to supplement the supply.

## VII.

# VII. (4)

#### THE WESTERN COMPANY Service Laboratory West Highway 80

# Midland, Texas

Phone MU 3-2731 Day or Night

#### WATER ANALYSIS

Operator	Carter Foundation	Date Sampled	
Well	E111 No. 7	Date Received	11-14-65
Field	Teague	Submitted by	Kermit District
<b>Formation</b>	Santa Rose	Worked by	Bob Jones
Depth	<b>661-681'</b>	Other Description	
County	Les. New Mexico		

## CHEMICAL DETERMINATIONS

Density	<u>e 75 r.</u>		pH	7.3	
iron <u>No Trac</u>	:6		Hydrogen Sulfide	None	
Sodium and Potassium .	900	ppm	Bicarbonate	366	ppm
Calcium	160	ppm	Sulfate	1,500	<b>pp</b> m
Magnesium	140	ppm	Phosphate		
Chloride	008	ppm_ g	s Sodium Chloride	······································	ppm

#### Remarks:

Sech 2

for Stiff type plct (in meq./1.)



# VIII.

### GEOLOGICAL DATA

The wells in this area of the Langlie Mattix Pool have encountered oil and gas zones within the Penrose Sand section of the Queen formation. In a 1968 secondary recovery study prepared by Skelly Oil Company (now Getty Oil Company), an east-west cross section depicts the producing zone changes. In this section the westerly wells produce from the Seven Rivers with gradational changes to the east to the Upper Queen and then to the Penrose Sand section of the Lower Queen.

This report also shows that of eight Penrose wells cored, the average permeability was 5.7 millidarcies with an average posority of 14.2% and a residual oil saturation of 10.1%.

Of the subject injectors, the G. H. Mattix #5 was cored from 3430' to 3633'. The overall pay section was 169' with 58' of net pay. The average porosity was 7.33% with an average permeability of 0.67 millidarcies. In addition, the G. H. Mattix #6 was cored from 3450' to 3605'. The overall pay section of this well was 120' with 41' of net pay. The average porosity was 10.71% with an average permeability of 0.97 millidarcies. The average oil saturation in both of the cored intervals was extremely low, varying from a trace to 20.4%. Volumetric recovery calculations of the oil in place and the recoverable oil are not considered a correct indication of the probable oil reserves. This conclusion is verified by the fact that the six older wells on the G. H. Mattix Lease through the year of 1981 had produced approximately 302,000 barrels or 50,330 barrels of oil per well. It must be assumed that either at the time the Carter Foundation Production Company cores were taken, the degree of reservoir depletion created the low oil saturations, or that fractures within the Penrose are an important part of the reservoir oil voidage. The lithology of the subject wells consists of interbedded sand in dolomite and sandy dolomite. The oil pay occurrence is both in the sand and dolomite facies.

The depth of the presently produced drinkable water well within a mile of these proposed injection wells is 120'. In the southwest part of Unit D, Section 35, T-23-S, R-37-E, the Carter Foundation Production Company has developed a Santa Rosa water supply well at a depth of 681'. The water produced from this well is not considered potable.

# PROPOSED STIMULATION

The G. H. Mattix  $\frac{42}{2}$  well was "shot" with 620 quarts of nitroglycerine in February of 1951. Subsequently, in June 1957 the well was fraced with 20,000 gallons/1-1/2# sand per gallon. The #5 well in November 1961 was acidized and later fraced with 30,000 gallons/1-1/2# sand per gallon. The #6 well in November 1961 was acidized and later fraced with 37,500 gallons of lease crude with 56,250# sand.

No additional stimulation is anticipated unless the injection pressures prove excessive.

# IX.

# WELL TEST DATA (Taken from Scheduled GOR Tests)

			Production During Test			
Operator, Lease & Well No.	Date of Test	Length of Test, Hrs.	Water Bbls.	Oil Bbls.	Gas MCF	GOR Cu.Ft./Bbl.
Carter Foundation Production G. H. Mattix Federal (032339) Well #2 3-24S-37E (Unit C)	Company	Closed	In			
G. H. Mattix Federal (032339) Well #5 3-24S-37E (Unit E)	2-10-82	24	1	1.38	3.4	2463
G. H. Mattix Federal (032339) Well #6 3-24S-37E (Unit O)		Closed	In			

No well logs are available on these wells.

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х.

LOCATION OF FRESH WATER WELL

Only one fresh water well is within a one-mile radius of one of the proposed injection wells. This well is used for domestic water for the Carter Foundation Production Company camp and is located in the southwest corner of Unit E, Section 35, T-23-S, R-37-E in the camp area. The well is pumped by a downhole centrifical pump at an approximate depth of 120'.



XI.



XI.

915/381-2598 BOX AND

0

# GI WEST UNIVE 16301

# WATER ANALYSIS REPORT

1. PH 2. H <sub>5</sub> S 3. CO	H <sub>2</sub> ANALYSIS	0 WELL	PFM	7/ MPLED   EPM	1/82	
2. H <sub>5</sub> 3. CO	· · · · · · · · · · · · · · · · · · ·	7.35		I EPM	<u> </u>	
2. H <sub>5</sub> 3. CO	· · · · · · · · · · · · · · · · · · ·	7.35				
2. H <sub>5</sub> 3. CO		7 25	Mg/L	Meq./L		tonic PPM
3. CO	5	1.33				
		Neg.				
	2	Pos.	•			
4. Spe	ecific Gravity	1.0002				
5. Pha	enol Alkalinity (CoCO3)		6.0		ĺ	
6. M.	P. Alkalinity (CoCO3)		60.0			
7. Bic	arbonate (CoCO <sub>3</sub> )		60.0	1.2	HCO,	73.2
8, Ch	lorides (CI)		200.0	5.6	a	200.0
9. Sul	phates (SO4)		425.0	8.9	SO,	425.0
10. Tot	al Hardness (CoCO3)		375.0			
11. Ca	lcium (CoCO3)		275.0	5.5	Ca	110.0
12. Ma	ignesium (CoCO <sub>3</sub> )		100.0	2.0	Mg	24.4
13. Soc	lium (No)			8.2	Na	188.6
14. Bar	rium (Ba)				Ba	8.0
15. Iron	n (Fe)			1		TRACE
16. Tot	al Disolved Solids		-			1,029.2

REPRESENTATIVE

Chemicals for the Petroleum Industry

# XIII.

# AFFIDAVIT OF PUBLICATION

COUNTY OF LEA	X	
STATE OF NEW MEXICO	r	
1. Rabert J. Sum	men	PUBLISHER
Name		Title

of the Hobbs News Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping hereto attached was pub-lished for a period of <u>One Day</u> in the issue dated \_\_\_\_\_\_ 1982.

Sworn and subscribed to before me this \_\_\_\_\_\_ day of \_\_\_\_\_ 1982.

My commission expires March 29\_, 19 86.





114151563-4150

# ROBERT D. FITTING & ASSOCIATES, INC.

MIDLAND, TEXAS 78701 July 7, 1982

#### CERTIFIED - RETURN RECEIPT

Getty Oil Company P. O. Box 1231 Midland, Texas 79702

#### Re: Carter Foundation Production Company, G. H. Mattix Federal #2, #5 and #6, Section 3, T-24-S, R-37-E, Lea County, New Mexico

Gentlemen:

The Carter Foundation Production Company is in the process of making application to convert the above wells to water injection service. The New Mexico Oil Conservation Division requires that a copy of this application be furnished all offset operators. The enclosed application is being mailed this date to the New Mexico Oil Conservation Division in Santa Fe.

Should you have any questions concerning this application, you may contact us at the address shown above.

Yours very truly,

CARTER FOUNDATION PRODUCTION COMPANY

ADC By: Robert D. Fitting, Agent

(BIR) BR 1-4511

ROBERT D. FITTING & ASSOCIATES. INC.

July 7, 1982

#### CERTIFIED - RETURN RECEIPT

Pearson-Sibert Oil Co. of Texas 901 W. Missouri Midland, Texas 79701

> Re: Carter Foundation Production Company, G. H. Mattix Federal #2, #5 and #6, Section 3, T-24-S, R-37-E, Lez County, New Mexico

Gentlemen:

HOLWEST WESTING AVE

kare. Ng 26

> The Carter Foundation Production Company is in the process of making application to convert the above wells to water injection service. The New Maxico Oil Conservation Division requires that a copy of this application be furnished all offset operators. The enclosed application is being mailed this date to the New Mexico Oil Conservation Division in Santa Fe.

Should you have any questions concerning this application, you may contact us at the address shown above.

Yours very truly,

CARTER FOUNDATION PRODUCTION COMPANY

Robert D. Fitting, By: tract

(913) 083-4016

ROBERT D. FITTING & ASSOCIATES, INC. Setulum Environme & Secularitanti MIDLAND, TEXAS 79701

July 7, 1982

# CERTIFIED - RETURN RECEIPT

Mr. Bill Grobe P. O. Drawer "G" Jal, New Mexico 88252

> Re: Carter Foundation Production Company, G. H. Mattix Federal #2, #5 and #6, Section 3, "2-24-S, R-37-E, Lea County, New Mexico

Dear Mr. Grobe:

**R**REAL S

GOI WERT MISBOURI AVE

The Carter Foundation Production Company is in the process of making application to convert the above wells to water injection service. The New Mexico Oil Conservation Division requires that a copy of this application be furnished you as surface owner under this lease. The enclosed application is being mailed this date to the New Mexico Oil Conservation Division in Santa Fe.

Should you have any questions concerning this application, you may contact us at the address shown above.

Yours very truly,

CARTER FOUNDATION PRODUCTION COMPANY

By: Child Etting, agent

OI WEST MISSOURI AVE

(915) 683-4615

ROBERT D. FITTING & ASSOCIATES, INC. Potentium Engineering & Geological Consultant: MIDLAND, TEXAS 79701 July 7, 1982

## CERTIFIED - RETURN RECEIPT

Mr. Jimmy Doom Doom Ranch Jal, New Mexico 88252

#### Re: Carter Foundation Production Company, G. H. Mattix Federal #2, #5 and #6, Section 3, T-24-S, R-37-E, Lea County, New Mexico

Dear Mr. Doom:

The Carter Foundation Production Company is in the process of making application to convert the above wells to water injection service. The New Mexico Oil Conservation Division requires that a copy of this application be furnished you as surface owner under this lease. The enclosed application is being mailed this date to the New Mexico Oil Conservation Division in Santa Fe.

Should you have any questions concerning this application, you may contact us at the address shown above.

Yours very truly,

CARTER FOUNDATION PRODUCTION COMPANY

to By: Robert D. Fitting, Agent



# P 265 320 208





### P 265 320 206 RECEIPT FOR CERTIFIED ( ND INSTRANCE COVER/ GE PROVICED---NOT FOR INTERNATIONAL MAIL (See Reverse) SENT Pearson-Sibert Oil Co. 901 W. Missouri Midiano, 1X 79701 POSTAGE \$1.05 CERTIFIED FEE 0.75 SPECIAL DELIVERY STRICTED DELIVERY SHOW TO WHOM AND DATE DELIVERS SHOW TO WHOM DATE AND ADDRESS OF TWO OF SHOW TO WHOM AND DATE AND ADDRESS OF TWO OF SHOW TO WHOM AND DATE ē CONSULT POSTMASTER I 0.60 \* SHUM DANKIM UNTERT ADDRESS OF DELARTER RESTRICTED DELARTER 'n 2.40 TOTAL POSTAGE AND FEES ۲ŋ POSTMARK OR DATE 18(1) 7-7-82 Form S

# P 265 320 207



STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

#Ste

Order No. R- )082 De MAS

CASE NO. 7662

APPLICATION OF CARTER FOUNDATION PRODUCTION COMPARY FOR A WATERFLOOD PROJECT, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

# BY THE DIVISION:

This cause came on for hearing at 9 a.m. on September 1, 1982, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this \_\_\_\_\_ day of September, 1982, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Carter Foundation Company, seeks authority to expand it's Waterflood Project on its Bline-Cade and is Materflood Project on its Bline-Cade Pool by the injection of water into the Queen formation through its Mattix Federal Wells Nos.
2, 5, 6 located in Units C, E, and P, respectively, in Section 3, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico.
(3) What What proposed injustion in Act a new project.
(4) (3) That the wells in the project area are in an advanced

state of depletion and should properly be classified as "stripper" wells.

(5) (4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(6) That the operator should take all 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, production, or plugged and abandoned wells.

(7)467 That the injection wells or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 200 psi, but the Division Director should have authority to increase said pressure limitation, should circumstances warrant.

(7) That the subject application should be approved and the project should be governed by the provisions of Rules 702 through 708 of the Division Rules and Regulations.

## IT IS THEREFORE ORDERED:

(1) That the applicant, Carter Foundation Production mithers a Company, is hereby authorized to expand its waterflood project *Matix Federal* on its <del>Bline-Code</del> Lease, <u>here is Matix</u> Pool, by the injection of water into the Queen formation through its Mattix Federal Wells Nos. 2, 5, and 6, located in Units C, E, and O, respectively, in Section 3, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) That injection into each of said wells shall be through internally coated tubing, set in a packer which shall be located as near as practicable to the uppermost perforation or, in open hole completion, the casing shoe; that the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

> (3) That the operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

> (4) That the injection wells herein authorized and/or the injection pressurization system shall be so equipped as to limit injection pressure at the wellhead to no more than 900 psi, provided however, the Division Director may authorize a

higher surface injection pressure upon satisfactory showing that such pressure will not result in fracturing of the confining strata.

(5) That the subject waterflood project is hereby designated the Corter - Matrix Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(6) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

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

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

JOE D. RAMEY, Director

SEAL