

CASE 6259: V-F PETROLEUM INC. FOR
SALT WATER DISPOSAL, LEA COUNTY,
NEW MEXICO

CASE NO.

6259

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,

ETC.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
State Land Office Building
Santa Fe, New Mexico
21 June 1978

EXAMINER HEARING

IN THE MATTER OF:

Application of V-F Petroleum, Inc.,) CASE
for salt water disposal, Lea County,) 6259
New Mexico.)

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Lynn Teschendorf, Esq.
Legal Counsel for the Division
State Land Office Building
Santa Fe, New Mexico 87501

For V-F Petroleum, Inc.:

W. Thomas Kellahin, Esq.
KELLAHIN & FOX
500 Don Gaspar
Santa Fe, New Mexico 87501

SALLY WALTON BOYD

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I N D E XVICTOR F. VASICEK

Direct Examination by Mr. Kellahin	3
Cross Examination by Mr. Stamets	10

E X H I B I T S

Applicant Exhibit One, Letter	10
Applicant Exhibit Two, C-108	10
Applicant Exhibit Three, Water Analysis	10
Applicant Exhibit Four, Schematic	10
Applicant Exhibit Five, Tabulation	10
Applicant Exhibit Six, Production data	10
Applicant Exhibit Seven, Map	10
Applicant Exhibit Eight, Log	10

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1 MR. STAMETS: Call Case 6259, which is in the
2 matter of the application of V-F Petroleum, Inc., for
3 salt water disposal, Lea County, New Mexico.

4 Call for appearances in this case.

5 MR. KELLAHIN: Tom Kellahin of Kellahin and
6 Fox, Santa Fe, New Mexico, appearing on behalf of the
7 Applicant, and I have one witness.

8 MR. STAMETS: Stand and be sworn, please.

9 (Witness sworn.)

10 VICTOR F. VASICEK

11 being called as a witness and having been duly sworn upon
12 his oath, testified as follows, to-wit:
13

14 DIRECT EXAMINATION

15 BY MR. KELLAHIN:

16 Q Would you state your name, your occupation,
17 and by whom you are employed?

18 A Victor F. Vasicek, employed by V-F Petroleum,
19 Inc., actually I'm the President of the company, and I'm
20 a petroleum engineer.
21

22 Q Would you spell your last name for the court
23 reporter?

24 A V-A-S-I-C-E-K.

25 Q Mr. Vasicek, have you previously testified

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1 before the Oil Conservation Division and had your quali-
2 fications as an expert witness -- petroleum engineer ac-
3 cepted and made a matter of record?

4 A. Yes, I have.

5 Q. Have you made a study of and are you familiar
6 with the facts surrounding this particular application?

7 A. Yes, I have.

8 MR. KELLAHIN: We tender Mr. Vasicek as an
9 expert.

10 MR. STAMETS: The witness is considered qual-
11 ified.

12 Q. (Mr. Kellahin continuing.) Would you please
13 turn to the plat outlining the particular area in question.
14 I have marked that as Exhibit Number Seven. If you'll
15 commence your testimony with that exhibit, Mr. Vasicek,
16 and identify and explain to the Examiner what you're
17 seeking to accomplish.

18 A. The well in the southeast quarter encircled
19 in green, southeast quarter of Section 15, is a V-F
20 Petroleum State 15-1, which produces salt water.

21 We wish to convert the well in Section 14,
22 which is the V-F Petroleum State 14-1, we wish to convert
23 it to salt water disposal. Both wells are Devonian or
24 have been completed as Devonian. The State 15 is a pro-
25 ducer; the State 14 was completed right at the water-oil

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1 contact and we did not make it; never did produce oil in
2 any special quantities.

3 Q What's the current status of the proposed in-
4 jection well?

5 A It's shut in with -- still has a cobe (sic)
6 and tubing in the hole, just shut in waiting on -- pending
7 this order.

8 Q Has it been a Devonian producer in the past?

9 A It never was productive, no.

10 Q The source of the water to be disposed of in
11 the disposal well is to be the well in Section 15?

12 A That is correct.

13 Q Are there any other Devonian producers that
14 currently produce Devonian water that you wish to dispose
15 of in the subject well?

16 A Not at this time.

17 Q Please refer to what I have marked as Exhibit
18 Number One, which is your application to the Division,
19 and describe the exact location of the subject disposal
20 well.

21 A Okay. It's in Unit L of Section 14, Township
22 9 South, Range 32 East.

23 Q What pool are you in?

24 A It's shown as the SRR Devonian.

25 Q Please refer to Exhibit Number Two and identify

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1 it.

2 A. Okay, this is our application for disposal of
3 salt water by injection into a porous formation that is
4 productive of oil and gas.

5 MR. KELLAHIN: If the Examiner please, I be-
6 lieve in the original C-108 that we tendered with the
7 application there may have been a correction in the length
8 of the tubing?

9 A. Yes. We made two corrections. One of them
10 was approximate pressure as to which we request it be a
11 maximum, and I think we'll have good pressure on this
12 well, but we do request point 2 psi per foot of depth.

13 Q. The calculation of the 0.2 psi per foot of
14 depth based upon a well of this depth is 2200 psi.

15 A. Yes, that's very close.

16 Q. All right. Now, what was the second change?

17 A. The second change was the depth as to which
18 we're going to set the tubing. We changed it to where it
19 would be 100 feet above the perforations in which we in-
20 tend to inject.

21 Q. All right.

22 A. And it's correct in this exhibit that we just
23 marked. I made all the corrections.

24 Q. All right. Please refer to Exhibit Number
25 Three and identify it.

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1 A. This is a plat -- I mean this is a salt water
2 analysis which shows that --

3 MR. STAMETS: Excuse me, on the 108 here, it
4 shows 2-3/8ths at 10085 and the top perforation is 11085.
5 That's a thousand feet.

6 A. Typographical error. Can you change it?

7 MR. STAMETS: Yeah, it's going to be 11085
8 feet of tubing?

9 A. 11085.

10 MR. STAMETS: Okay.

11 A. The perforations are 11085 -- that should be
12 985.

13 MR. STAMETS: 10985.

14 A. That should have been a 9 instead of a zero.

15 MR. STAMETS: Okay.

16 A. Okay. I don't think I subtracted very well.

17 Q. Please refer to Exhibit Number Three and
18 identify it.

19 A. This is an analysis of salt water disposal,
20 of the salt water, analysis of the Devonian formation in
21 the State 14. In addition, there are two analyses there.
22 We're currently disposing of this water into another well
23 and the company that we're disposing of required this
24 analysis, so we got analysis of the other well, which is --
25 they call it No Pit Pete, Cleary Petroleum No Pit Pete,

1 so don't be confused by the two analyses.

2 MR. STAMETS: So the only one we're concerned
3 with is No. 2?

4 A. No. 2, right.

5 Q Please refer to Exhibit Number Four and identify
6 it.

7 A. This is a schematic diagram of our proposed
8 installation both on the surface and the sub-surface.
9 And the casing and the whole diagram of everything that's
10 in the well.

11 Q Will you fill the annular space between the
12 tubing and casing with an inert fluid?

13 A. Yes.

14 Q And how will you monitor the surface?

15 A. By a pressure gauge on the casing.

16 Q Will you use internally plastic-coated tubing?

17 A. Yes.

18 Q In the well?

19 A. Yes.

20 Q Please refer to Exhibit Number Five and ident-
21 ify it.

22 A. This is a tabulation of all the wells that
23 were drilled within a half mile radius of our proposed
24 injection well. It shows the names of the operators, well
25 name, and locations, depths they were drilled, the casing

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1 program and how they were cemented, whatever perforated
2 and whatever produced.

3 Q Are there any fresh water sources within a
4 half mile of the subject well?

5 A Not to my knowledge.

6 Q Have you made a study of all the casing pro-
7 grams and cementing programs with regards to the offsetting
8 wells within a half mile?

9 A Yes.

10 Q And in your opinion, Mr. Vasicek, will the
11 disposal of the Devonian water into the subject well re-
12 main confined to the Devonian formation?

13 A Yes, it should.

14 Q Please refer to Exhibit Number Six and identi-
15 fy it.

16 A This is the production data of our producing
17 well, the well that's making the water that we wish to
18 dispose of, State 15-1. It's just the production history
19 of the well from inception.

20 Q For the month of April, 1978, the producing
21 well made a total of 2723 barrels of water?

22 A That's correct.

23 Q And it is that water production you intend
24 to dispose of in the subject well?

25 A That is correct.

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1 Q Would you identify what I have marked as Ex-
2 hibit Number Eight?

3 A This is a gamma ray - neutron correlation log
4 of the proposed salt water disposal well, State 14-1.

5 Q In your opinion, Mr. Vasicek, will approval
6 of this application be in the best interests of conserva-
7 tion, the prevention of waste, and the protection of cor-
8 relative rights?

9 A Yes.

10 Q Were Exhibits One through Eight prepared by
11 you directly or compiled under your direction and super-
12 vision?

13 A Yes.

14 MR. KELLAHIN: We move the introduction of
15 Exhibits One through Eight.

16 MR. STAMETS: These exhibits will be admitted.

17 MR. KELLAHIN: That concludes our examination.
18

19 CROSS EXAMINATION

20 BY MR. STAMETS:

21 Q Mr. Vasicek, do you expect to have to utilize
22 pressure on this well or do you think it will take the
23 water on vacuum?

24 A I figure it will take the water on a vacuum.
25 The 2200 pounds is simply as time goes on, oftentimes the

1 well gets carbonated up and you have to treat them, you
2 have to put acid down to get them to take the water, but
3 this can happen down the road two or three years from
4 now or ten years from now, and that's the reason for the
5 pressure.

6 Q Will the gauge that you put on the annulus
7 be capable of reading both positive and negative pressure?

8 A No, I wasn't intending to put a vacuum gauge
9 on there, but I guess we could if you require it.

10 Q That would show --

11 A If it's on a vacuum.

12 Q -- either way, if it's on a vacuum --

13 A Yeah, we could leave -- we could leave a --
14 leave the gauge screwed on there real loosely to where
15 anybody wanted to come in there they could shut the needle
16 valve and then put their thumb over it and they'll see
17 whether it's sucking or not.

18 Because those vacuum gauge, I don't know, I
19 think they're pretty expensive, and they always go hay-
20 wire. So that's the only comment on that.

21 Q Now, referring to Exhibit Number Five, there's
22 some wells on that where there's not a great deal of in-
23 formation on. Maybe I should say not complete information
24 on them. Like the Ernest Hanson SRR State A-1, the second
25 well on there. I would judge that that well is only 4209

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1 feet deep, is that right?

2 A. Yes, sir. That was a shallow well drilled
3 by Hanson.

4 Q. And then was not drilled to the Devonian?

5 A. That's correct.

6 Q. Okay. Now, the next well, the Amerada well,
7 apparently was drilled to the Devonian, but you don't
8 indicate that it was cemented.

9 Q. The production string -- no, I'm not sure
10 what happened there. I'm not sure -- I'm not sure why
11 I don't have that on there. It should have been available.

12 I didn't bring my notes along on that.
13 SRB No. 1, they used -- well, I don't show any cement
14 or anything. That's probably just a omission either by --
15 I just overlooked it.

16 Q. Okay. Then going on to the next well, it
17 shows total depth 11,315 feet, but no production casing.

18 A. It's a dry hole.

19 Q. Okay, but also there's no indication how the
20 well was plugged.

21 What sort of a plug has been set above the
22 production interval for the salt water disposal?

23 A. Plug and --

24 Q. Same thing would be true of the next well.

25 A. All right.

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1 Q And then the last one I have a question on
2 is the V-F Petroleum State 15 No. 1 shows 4-1/2, 11,056,
3 350 sacks but no calculated cement at the top.

4 A Okay, I didn't calculate at the top. Okay.

5 Q I'm sure that's enough to come well above
6 the injection interval.

7 A Oh, sure.

8 Q I'm not too concerned about it.

9 A I can furnish these with you -- for you. I
10 can go ahead and redo that. Let's see, there's one,
11 two, three, there's one more thing. Oh, the Amerada
12 well, the top of the cement on that well.

13 Q Yes, that's right. As a matter of fact, all
14 the questionable wells are located right in the --

15 A I think I know what happened. I think the
16 secretary forgot to pick it up and I overlooked it, be-
17 cause I had it on another sheet. Can we send you that
18 by letter?

19 Q Yes, if you will. You've already testified.
20 Everything looks all right as long as what you submit
21 verifies that, we'll be in good shape.

22 A Okay.

23 MR. STAMETS: Any other questions of the
24 witness? He may be excused.

25 Anything further in this case? We'll take

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1 the case under advisement.

2 A. Who do I send this to? Do I just send it the
3 regular way?

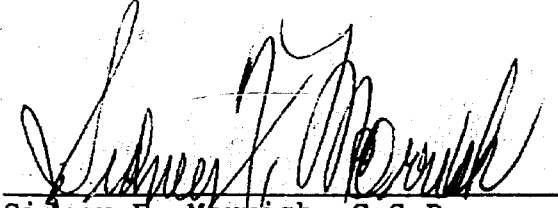
4 MR. STAMETS: Send it to me, put my name on
5 it.

6 (Hearing concluded.)
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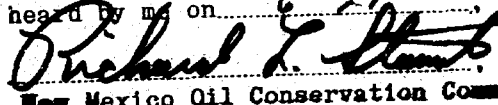
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REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, A Court Reporter, DO HEREBY CERTIFY that the attached and foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability, knowledge, and skill from my notes taken at the time of the hearing.


Sidney F. Morrish, C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6257, heard by me on 6-21, 1975.


Richard L. Hunt, Examiner
New Mexico Oil Conservation Commission

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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. 6259
Order No. R-5792

APPLICATION OF V-F PETROLEUM
INC. FOR SALT WATER DISPOSAL,
LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on June 21, 1978, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 25th day of August, 1978, 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, V-F Petroleum, Inc., is the owner and operator of the State 14 Well No. 1, located in Unit L of Section 14, Township 9 South, Range 32 East, NMPM, SRR-Devonian Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Devonian formation, with injection into the perforated interval from approximately 11,085 feet to 11,102 feet.

(4) That the injection should be accomplished through 2 3/8-inch plastic lined tubing installed in a packer set at approximately 10,985 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge or approved leak detection device should be attached

Case No. 6259
Order No. R-5792

to the annulus in order to determine leakage in the casing, tubing, or packer.

(5) That the injection well or system should be equipped with a pop-off valve or other acceptable device which will limit the wellhead pressure on the injection well to no more than 2200 psi.

(6) That the operator should notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(7) 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.

(8) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, V-F Petroleum, Inc., is hereby authorized to utilize its State 14 Well No. 1, located in Unit L of Section 14, Township 9 South, Range 32 East, NMPM, SRR-Devonian Pool, Lea County, New Mexico, to dispose of produced salt water into the Devonian formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 10,985 feet, with injection into the perforated interval from approximately 11,085 feet to 11,102 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

(2) That the injection well or system shall be equipped with a pop-off valve or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 2200 psi.

(3) That the operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

-3-

Case No. 6259

Order No. R-5792

(4) That the operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(5) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Division Rules and Regulations.

(6) 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
JOE D. RAMEY,
Director

dr/

V-F Petroleum Inc.

oil & gas operations 901 vaughn building midland, texas 79701 915 683-3344

June 30, 1978

Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501
Attention: Mr. R.L. Stamets

V-F Petroleum Inc.
Application to Convert its
State 14-1, T-9-S, R-32-E
SRR Devonian Field
Lea County, New Mexico
to Salt Water Disposal

Gentlemen:

Pursuant to your instructions at the hearing held July 23, 1978, please find the amended data sheet for wells located within a one-half mile radius regarding the subject application.

Hopefully, you have not been inconvenienced in any way.

Very truly yours,


V. F. Vasicek
President

VFV:lcp
Enclosure

WELLS LOCATED WITHIN 1/2 MILE RADIUS

OPERATOR	WELL NAME	LOCATION	TOTAL DEPTH DRILLED	SURFACE CASING				INTERMEDIATE CASING				PRODUCTION CASING				PERFORATED INTERVAL		
				SIZE	DEPTH SET	SX CMT	TOP CMT	SIZE	DEPTH SET	SX CMT	TOP CMT	SIZE	DEPTH SET	SX CMT	TOP CMT			
Amerada	SRR A-1	M14-9-32	11,177	13-3/8	340	250	circ	8-5/8	3516	1500	684	(t sfc)	5-1/2	11,165	900	7927	(temp)	11,103
Ernest Hanson	SRR State A-1	L14-9-32	4,311	8-5/8	1659	200	1052						5-1/2	4,209	150	(calc)		
Amerada	SRR B-1	P15-9-32	11,125	13-3/8	338	275	circ	8-5/8	3550	1450	644	(t sfc)	5-1/2	11,085	900	7145	(temp)	
Amerada	SRR B-2	J15-9-32	11,315	13-3/8	338	275	circ	8-5/8	3535	1500	650	(calc)						N O N E record
Major, et al	Gulf St #1	H15-9-32	11,490	11-3/4	355	350	circ	8-5/8	3575	400	2375	(calc)		**				N O N E plugging record
V-F Pet Inc	State 15-1	P15-9-32	11,087	12-3/4	361	415	circ	8-5/8	3551	400	2351	(calc)	4-1/2	11,056	350	8000	(calc)	11,057 - 11,087 OH
Amerada	Fed E-1	A22-9-32	11,150	13-3/8	340	275	circ	8-5/8	7945	1500	5145		5-1/2	11,125	900	7133	(temp)	9208 - 9218 11,125 - 11,150 OH
Amerada	Chartier #2	D23-9-32	10,577	13-3/8	340	275	circ	8-5/8	3522	1500	circ		5-1/2	10,170	600	7516	(temp)	10,170 - 10,436 OH 9202 - 9214
<div>*Plug #1 35 sx 11,181 - 11,294 Plug #2 35 sx 10,287 - 10,400 Plug #3 35 sx 3,490 - 3,600 Plug #4 50 sx 2,250 - 2,380 Shot off 8-5/8 @ 385 and pulled Plug #5 70 sx 316 - 417 Plug #6 10 sx Surface</div> <div>** Plug #1 25 sx 11,490 Plug #2 25 sx 10,732 Plug #3 25 sx 8,827 Plug #4 25 sx 7,212 Plug #5 25 sx 4,878 Plug #6 25 sx 3,600 Cut off 8-5/8 @ 1,159 and pulled Plug #7 25 sx 1,160 Plug #8 25 sx 355 Plug #9 10 sx surface</div>																		

WELLS LOCATED WITHIN 1/2 MILE RADIUS
SRR Devonian Field Area, Lea County, New Mexico

OPERATOR	WELL NAME	LOCATION	TOTAL DEPTH DRILLED	SURFACE CASING			INTERMEDIATE CASING			PRODUCTION CASING			PERFORATED INTERVAL			
				DEPTH	SX	TOP	DEPTH	SX	TOP	DEPTH	SX	TOP				
Amerada	SRR A-1	M14-9-32	11,177	13-3/8	340	250	circ	8-5/8	3516	1500	684	5-1/2	11,165	900	7927	11,103
											(t sfc)				(temp)	
Ernest Hanson	SRR State A-1	L14-9-32	4,311	8-5/8	1659	200	1052					5-1/2	4,209	150	(calc)	
Amerada	SRR B-1	P15-9-32	11,125	13-3/8	338	275	circ	8-5/8	3550	1450	644	5-1/2	11,085	900	7145	
											(t sfc)				(temp)	
Amerada	SRR B-2	J15-9-32	11,315	13-3/8	338	275	circ	8-5/8	3535	1500	650					
											(calc)					
Major, et al	Gulf St #1	H15-9-32	11,490	11-3/4	355	350	circ	8-5/8	3575	400	2375					
											(calc)					
V-F Pet Inc	State 15-1	P15-9-32	11,087	12-3/4	361	415	circ	8-5/8	3551	400	2351	4-1/2	11,056	350	8000	11,057 -
											(calc)				(calc)	11,087 OH
Amerada	Fed E-1	A22-9-32	11,150	13-3/8	340	275	circ	8-5/8	7945	1500	5145	5-1/2	11,125	900	7133	9208 - 9218
															(temp)	11,125 -
																11,150 OH
Amerada	Chartier #2	D23-9-32	10,577	13-3/8	340	275	circ	8-5/8	3522	1500		5-1/2	10,170	600	7516	10,170 -
															(temp)	10,436 OH
																9202 - 9214

*Plug #1 35 sx 11,181 - 11,294
 Plug #2 35 sx 10,287 - 10,400
 Plug #3 35 sx 3,490 - 3,600
 Plug #4 50 sx 2,250 - 2,380
 Shot off 8-5/8 @ 385 and pulled
 Plug #5 70 sx 316 - 417
 Plug #6 10 sx Surface

** Plug #1 25 sx 11,490
 Plug #2 25 sx 10,732
 Plug #3 25 sx 8,827
 Plug #4 25 sx 7,212
 Plug #5 25 sx 4,878
 Plug #6 25 sx 3,600
 Cut off 8-5/8 @ 1,159 and pulled
 Plug #7 25 sx 1,160
 Plug #8 25 sx 355
 Plug #9 10 sx surface

OIL CONSERVATION COMMISSION
Hobbs DISTRICT

OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

DATE May 25, 1978

RE: Proposed MC _____
Proposed DHC _____
Proposed NSL _____
Proposed SWD X _____
Proposed WFX _____
Proposed PMX _____

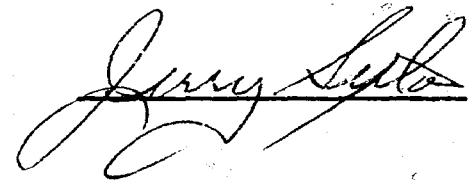
Gentlemen:

I have examined the application dated _____
for the V-F Petroleum Inc. State 14 #1-L 14-9-32
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

O.K.---J.S.

Yours very truly,



V-F Petroleum Inc.

oil & gas operations

901 vaughn building

midland, texas 79701

915 683-3344

May 23, 1978

Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

file

Re: V-F Petroleum, Inc.
Application to Convert their
State 14-1, T-9-S, R-32-E
SRR Devonian Field,
Lea County, New Mexico,
to Salt Water Disposal

Attention Joe D. Ramey, State Petroleum Engineer and Secretary - Director

Gentlemen:

We respectfully request permission to convert the subject well to salt water disposal. We propose to inject water into the Devonian formation and since this formation is productive of oil and gas from the Devonian in the offset well, a hearing is necessary if our interpretation of rule 701-A is correct.

In accordance with rule 701-B, please find enclosed the following documents relating to this application:

1. A plat showing the proposed injection well and other wells within 2 miles fulfilling requirements in item #1.
2. An electric log of the proposed disposal well.
3. A diagrammatic sketch of the proposed disposal well giving all pertinent information regarding the down hole equipment and condition.
4. Form C-108 giving all pertinent information relative to the disposal well and proposed operation.

In addition we are sending a water analysis of the fluid to be injected and a tabulation of all wells drilled, completed and/or plugged within one-half mile of the proposed disposal well.

We thank you for your consideration.

Very truly yours,

ORIGINAL SIGNED V. F. VASICEK

V. F. Vasicek
President

VFV/gn
Enclosures

BEFORE EXAMINER STAMETS	
OIL CONSERVATION COMMISSION	
V-F	EXHIBIT NO. <u>1</u>
CASE NO.	<u>6259</u>
Submitted by _____	
Hearing Date <u>21 JUN 78</u>	

V-F Petroleum, Inc.

Page 2

Copies of letter, Form C-108, and plat to:

Kellahin and Kellahin
500 Don Gaspar
Santa Fe, New Mexico 87501

Mrs. Lewis Cooper
Portales, New Mexico

Amoco
P. O. Drawer A
Levelland, TX 79336

Yates Petroleum
207 South 4th
Yates Building
Artesia, New Mexico 88210

R. B. Stallworth
P. O. Box 3310
Midland, TX 79701

Phillips
Phillips Building
4th Street & Washington, Rm B-2
Odessa, TX 79760

New Mexico Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico 88240

Commissioner of Public Lands
P. O. Box 1148
Santa Fe, New Mexico 87501

NEW MEXICO OIL CONSERVATION COMMISSION
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR V-F Petroleum, Inc.		ADDRESS 901 Vaughn Building					
LEASE NAME State 14	WELL NO. 1	FIELD SRR Devonian	COUNTY Lea				
LOCATION UNIT LETTER <u>L</u> WELL IS LOCATED <u>1650</u> FEET FROM THE <u>South</u> LINE AND <u>330</u> FEET FROM THE <u>West</u> LINE. SECTION <u>14</u> TOWNSHIP <u>9S</u> RANGE <u>32E</u> NMPM.							
CASING AND TUBING DATA							
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY		
SURFACE CASING 40#J	12-3/4"	385'	450 sx	surface	circulated		
INTERMEDIATE 24# - 28# J-55	8-5/8"	3504'	400	1425'	calculations		
LONG STRING 17# - N-80	5-1/2"	11,117'	200	9595'	calculations		
TUBING 4.70# N-80	2-3/8"	10985'	NAME, MODEL AND DEPTH OF TUBING PACKER Baker Model R single grip				
NAME OF PROPOSED INJECTION FORMATION Devonian		TOP OF FORMATION 11,085'		BOTTOM OF FORMATION 11,102'			
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? tubing		PERFORATIONS OR OPEN HOLE? perforations		PROPOSED INTERVAL(S) OF INJECTION 11,085' - 11,102'			
IS THIS A NEW WELL DRILLED FOR DISPOSAL? no		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? looking for Devonian production		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? No			
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH not applicable							
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 250 EST		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 9500' (Pennsylvanian)		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA None			
ANTICIPATED DAILY INJECTION VOLUME (BBLS.)	MINIMUM 150	MAXIMUM 7000	OPEN OR CLOSED TYPE SYSTEM closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? *pressure	APPROX. PRESSURE (PSIG) * 2200		
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - yes			WATER TO BE DISPOSED OF Devonian	NATURAL WATER IN DISPOSAL ZONE Devonian	ARE WATER ANALYSES ATTACHED? yes		
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) State Land (surface owner - Mrs. Lewis Cooper, Portales, New Mexico)							
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL							
AMOCO, P. O. Drawer A, Levelland, Texas 79336							
Yates Petroleum, 207 South 4th, Yates Building, Artesia, NM 88210							
R. B. Stallworth, P. O. Box 3310, Midland, TX 79701							
Phillips, Phillips Building, 4th Street & Washington, Rm B-2, Odessa, Texas 79760							
*This well will take water on vacuum.							
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL			
Yes		Yes		Yes			
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		PLAT OF AREA		ELECTRICAL LOG		DIAGRAMMATIC SKETCH OF WELL	
Yes		Yes		Yes		Yes	
I hereby certify that the information above is true and complete to the best of my knowledge and belief.							
(Signature)		President		5-18-78			
		(Title)		(Date)			

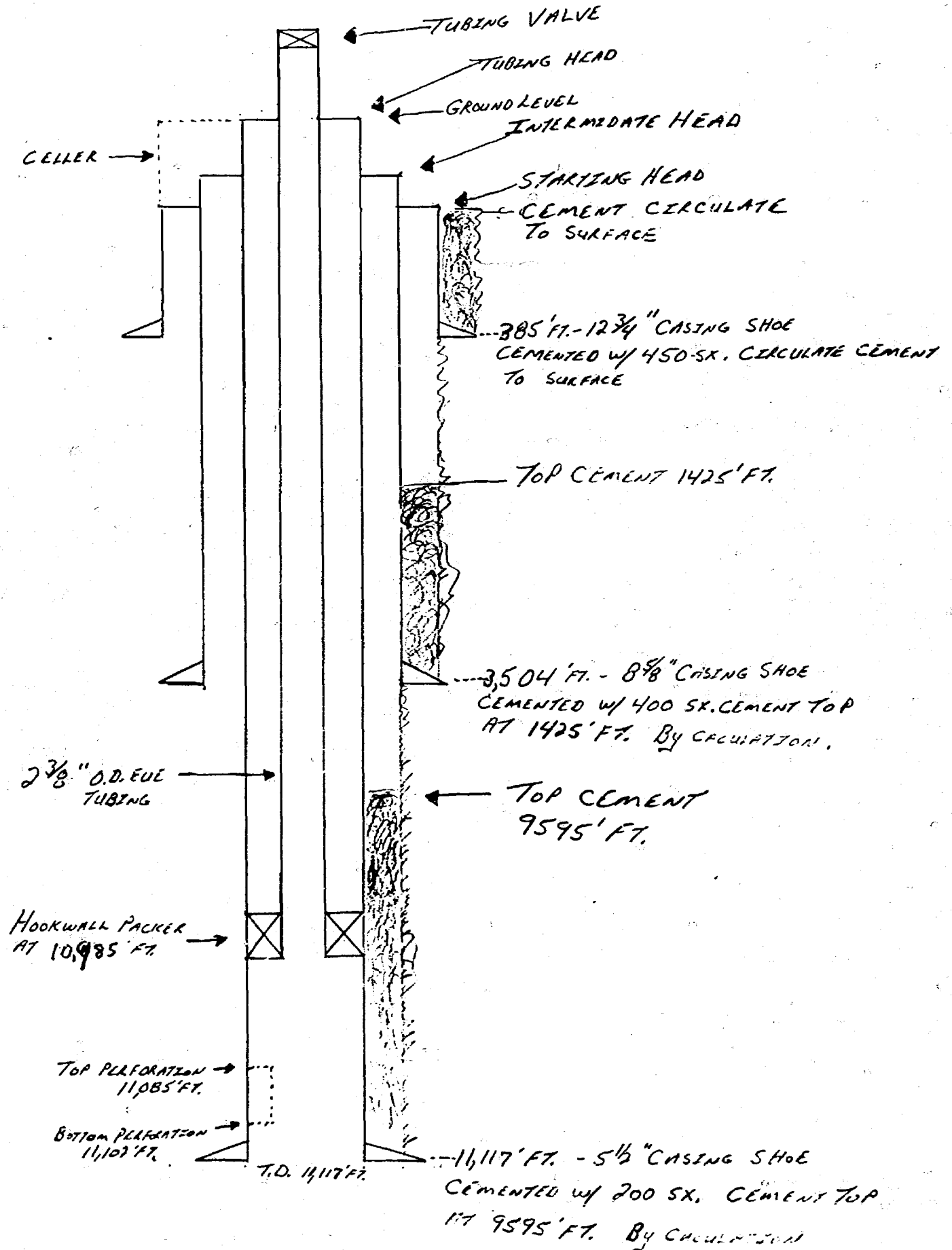
NOTE: Should waivers from the surface owner and all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

Waylan C. Martin, M. A.

SCHEMATIC DIAGRAM
V-F Petroleum, Inc.
State 14-1
Sec. 14 T9S R32E
Lea County, New Mexico

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
V-F EXHIBIT NO. 4
CASE NO. 6259
Submitted by _____
Hearing Date 12/ JUN 28

(diagram is not drawn to scale)



WELLS LOCATED WITHIN 1/2 MILE RADIUS
SRR Devonian Field Area, Lea County, New Mexico

OPERATOR	WELL NAME	LOCATION	TOTAL DEPTH DRILLED	SURFACE CASING			INTERMEDIATE CASING			PRODUCTION CASING			PERFORATED INTERVAL			
				DEPTH	SX	TOP	DEPTH	SX	TOP	DEPTH	SX	TOP				
Amerada	SRR A-1	M14-9-32	11,177	13-3/8	340	250	circ	8-5/8	3516	1500	684 (t sfc)	5-1/2	11,165	900	7927 (temp)	11,103
Ernest Hanson	SRR State A-1	L14-9-32	4,311	8-5/8	1659	200	1052					5-1/2	4,209	150	(calc)	
Amerada	SRR B-1	P15-9-32	11,125	13-3/8	338	275	circ	8-5/8	3550	1450	644 (t sfc)	5-1/2	11,085			
Amerada	SRR B-2	J15-9-32	11,315	13-3/8	338	275	circ	8-5/8	3535	1500	650 (calc)		N O N E			N O N E
Major, et al	Gulf St #1	H15-9-32	11,490	11-3/4	355	350	circ	8-5/8	3575	400	2375 (calc)					N O N E
V-F Pet Inc	State 15-1	P15-9-32	11,087	12-3/4	361	415	circ	8-5/8	3551	400	2351 (calc)	4-1/2	11,056	350		11,057 - 11,087 OH
Amerada	Fed E-1	A22-9-32	11,150	13-3/8	340	275	circ	8-5/8	7945	1500	5145	5-1/2	11,125	900	7133 (temp)	9208 - 9218 11,125 - 11,150 OH
Amerada	Chartier #2	D23-9-32	10,577	13-3/8	340	275	circ	8-5/8	3522	1500	circ	5-1/2	10,170	600	7516 (temp)	10,170 - 10,436 OH 9202 - 9214

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
V-F EXHIBIT NO. 5
CASE NO. 6259
Submitted by _____
Hearing Date _____

V-F PETROLEUM, INC.

Production Data
State 15-1

SRR Devonian Field
Lea County, New Mexico

Month	Year	BO	BW	MCF Gas
Dec.	1976	1206	0	Nil
Year Total		1206	0	"
Cummulative		1206	0	"
Jan.	1977	2798	0	"
Feb.	"	2227	0	"
Mar.	"	2732	0	"
Apr.	"	2461	0	"
May	"	2142	0	"
June	"	1985	0	"
July	"	1838	0	"
Aug.	"	1842	0	"
Sep.	"	709	0	"
Oct.	"	1532	0	"
Nov.	"	1105	0	"
Dec.	"	1168	0	"
Year Total		22,539	0	"
Cummulative		23,745	0	"
Jan.	"	958	0	"
Feb.	"	2465	0	"
Mar.	"	2223	512	"
Apr.	"	2650	2723	"
Year to Date		8,296	3235	"
Cummulative		32,041	3235	"

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

V-F EXHIBIT NO. 6

CASE NO. 6259

Submitted by _____

Hearing Date _____

PLAT SHOWING
ALL WELLS WITHIN
A TWO MILE RADIUS

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

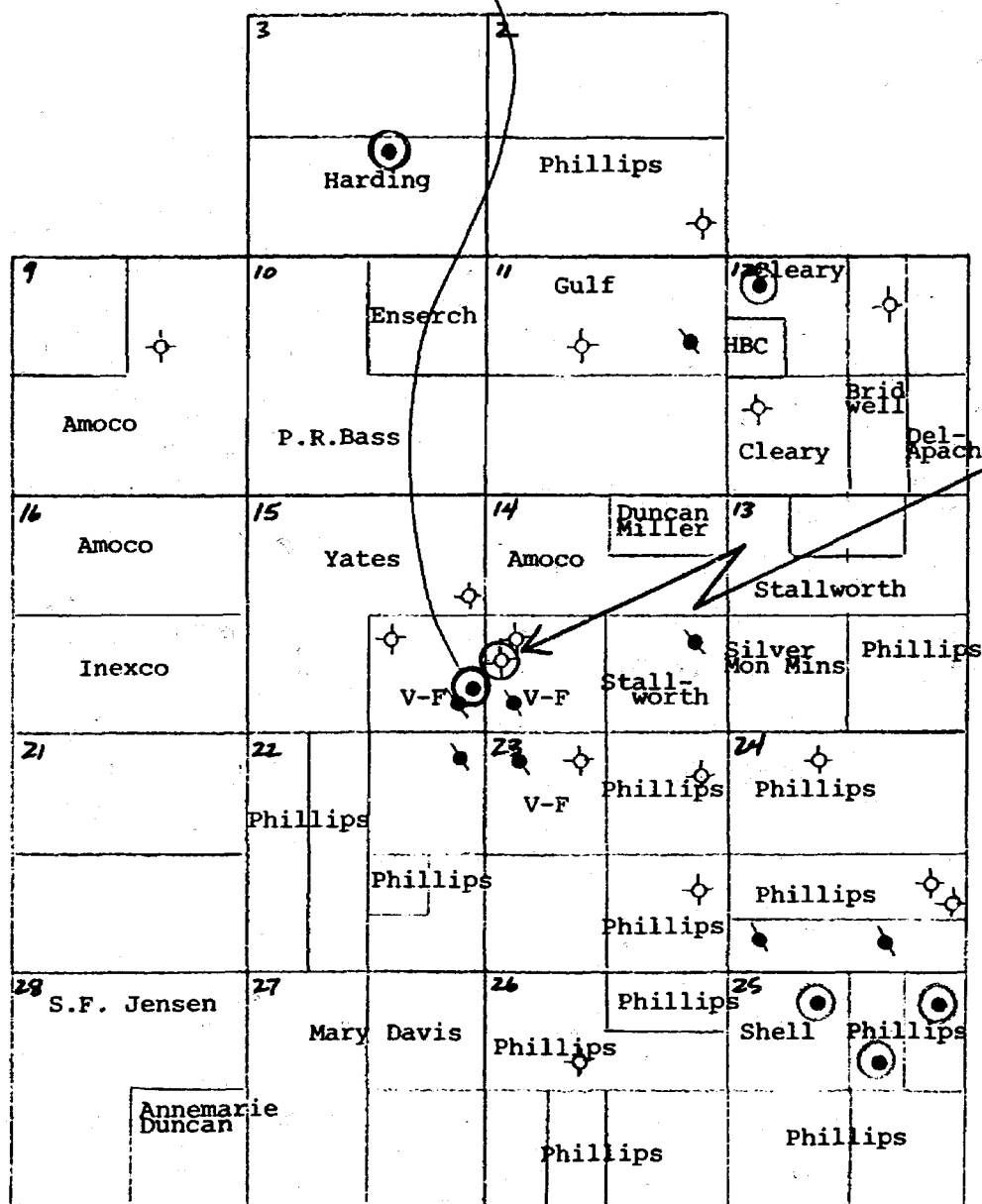
V-F EXHIBIT NO. 7

CASE NO. 6259

Submitted by _____

Hearing Date _____

*Producer
marker*



Proposed
Injection
Well

- - Denotes Devonian Producer
- - Denotes Bough "C" Producer
- - Denotes Mississippian Producer

V-F Petroleum, Inc.
SRR DEVONIAN FIELD AREA
T-9-S R-32-E
Lea County, New Mexico

Scale
1" = 4000'



CASE 6256: Application of Texaco Inc. for amendment of Commission Order No. R-5530, non-standard locations, and an administrative procedure, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to amend paragraph (14) on Page 7 of Commission Order No. R-5530 by removing or amending the allowable restriction therein subject to lease line agreements.

Applicant also seeks approval of nine injection wells at non-standard locations not closer than 10 feet to the Central Vacuum Unit boundary in the following units: Unit B of Section 12, Township 18 South, Range 34 East; Units D, E, L, and M of Section 6, Township 18 South, Range 35 East; Unit M of Section 31, Township 17 South, Range 35 East; and Units N, O, and P of Section 36, Township 17 South, Range 34 East, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico.

Applicant further seeks an administrative procedure for approval of additional producing and injection wells at orthodox and unorthodox locations.

CASE 6257: Application of Benchmark Oil Company, Ltd., for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Wright Well No. 1 to be located 1980 feet from the South line and 660 feet from the East line of Section 30, Township 9 South, Range 33 East, Flying M-San Andres Pool, Lea County, New Mexico, the E/2 SE/4 to be dedicated to the well.

CASE 6258: Application of Atlantic Richfield Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Devonian, McKee, and Ellenburger formations underlying the S/2 of Section 21, Township 22 South, Range 36 East, Lea County, New Mexico, 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. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5911: (Reopened and Readvertised)

In the matter of Case 5911 being reopened pursuant to the provisions of Order No. R-5353-B which order established temporary special pool rules for the Chacon-Dakota Associated Pool, Rio Arriba and Sandoval Counties, New Mexico. All interested parties may appear and show cause why said pool should not be reclassified as an oil pool to be governed by statewide rules.

CASE 6259: Application of V-F Petroleum, Inc., for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Devonian formation through the perforated interval from 11,085 feet to 11,102 feet in its State 14 Well No. 1 located in Unit L of Section 14, Township 9 South, Range 32 East, SRR-Devonian Pool, Lea County, New Mexico.

CASE 6260: Application of Continental Oil Company for a non-standard gas proration unit and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 480-acre non-standard gas proration unit comprising the N/2 and SE/4 of Section 2, Township 22 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to applicant's State J-2 Wells Nos. 7, 9 and 12 located in Units J, G and D, respectively, of said Section 2.

CASE 6261: Application of Continental Oil Company for a non-standard gas proration unit and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard gas proration unit comprising the W/2 of Section 20, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to applicant's State C-20 Wells Nos. 5 and 6, located in Units M and C, respectively, of said Section 20.

CASE 6262: Application of Adobe Oil & Gas Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mississippian formation underlying the SE/4 of Section 17, Township 14 South, Range 36 East, Austin Field, Lea County, New Mexico, 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. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6263: Application of Adobe Oil & Gas Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mississippian formation underlying the NE/4 of Section 17, Township 14 South, Range 36 East, Austin Field, Lea County, New Mexico, 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. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

V-F Petroleum Inc.

oil & gas operations 901 vaughn building midland, texas 79701 915 683-3344

May 23, 1978

Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

MAY 26 1978

Case 625 Santa Fe

Re: V-F Petroleum, Inc.
Application to Convert their
State 14-1, T-9-S, R-32-E
SRR Devonian Field,
Lea County, New Mexico,
to Salt Water Disposal

Attention Joe D. Ramey, State Petroleum Engineer and Secretary - Director

Gentlemen:

We respectfully request permission to convert the subject well to salt water disposal. We propose to inject water into the Devonian formation and since this formation is productive of oil and gas from the Devonian in the offset well, a hearing is necessary if our interpretation of rule 701-A is correct.

In accordance with rule 701-B, please find enclosed the following documents relating to this application:

1. A plat showing the proposed injection well and other wells within 2 miles fulfilling requirements in item #1.
2. An electric log of the proposed disposal well.
3. A diagrammatic sketch of the proposed disposal well giving all pertinent information regarding the down hole equipment and condition.
4. Form C-108 giving all pertinent information relative to the disposal well and proposed operation.

In addition we are sending a water analysis of the fluid to be injected and a tabulation of all wells drilled, completed and/or plugged within one-half mile of the proposed disposal well.

We thank you for your consideration.

Very truly yours,

V. F. Vasicek
V. F. Vasicek
President

VFV/gn
Enclosures

Copies of letter, Form C-108, and plat to:

Kellahin and Kellahin
500 Don Gaspar
Santa Fe, New Mexico 87501

Mrs. Lewis Cooper
Portales, New Mexico

Amoco
P. O. Drawer A
Levelland, TX 79336

Yates Petroleum
207 South 4th
Yates Building
Artesia, New Mexico 88210

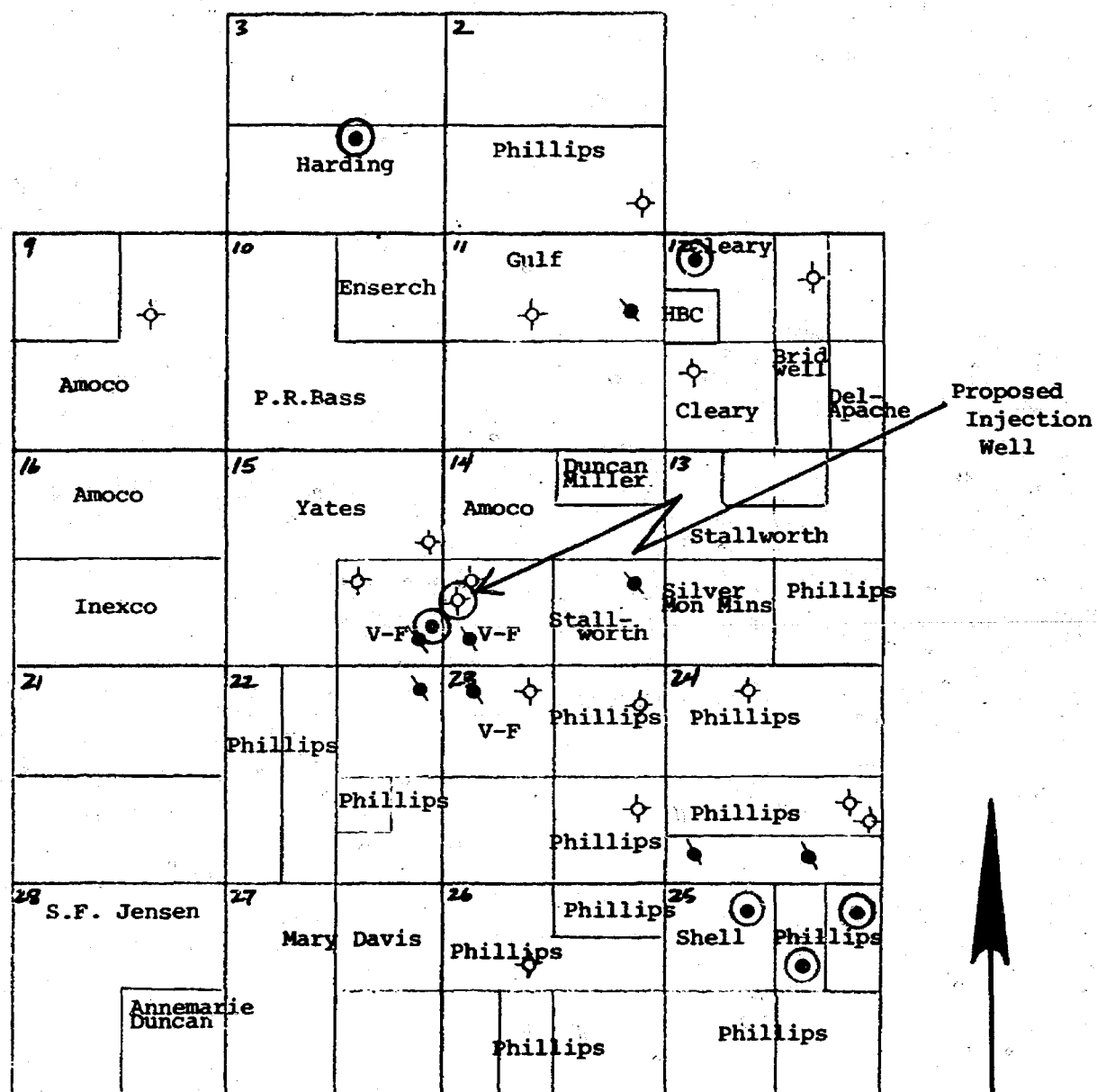
R. B. Stallworth
P. O. Box 3310
Midland, TX 79701

Phillips
Phillips Building
4th Street & Washington, Rm B-2
Odessa, TX 79760

New Mexico Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico 88240

Commissioner of Public Lands
P. O. Box 1148
Santa Fe, New Mexico 87501

PLAT SHOWING
ALL WELLS WITHIN
A TWO MILE RADIUS



- - Denotes Devonian Producer
- - Denotes Rough "C" Producer
- - Denotes Mississippian Producer

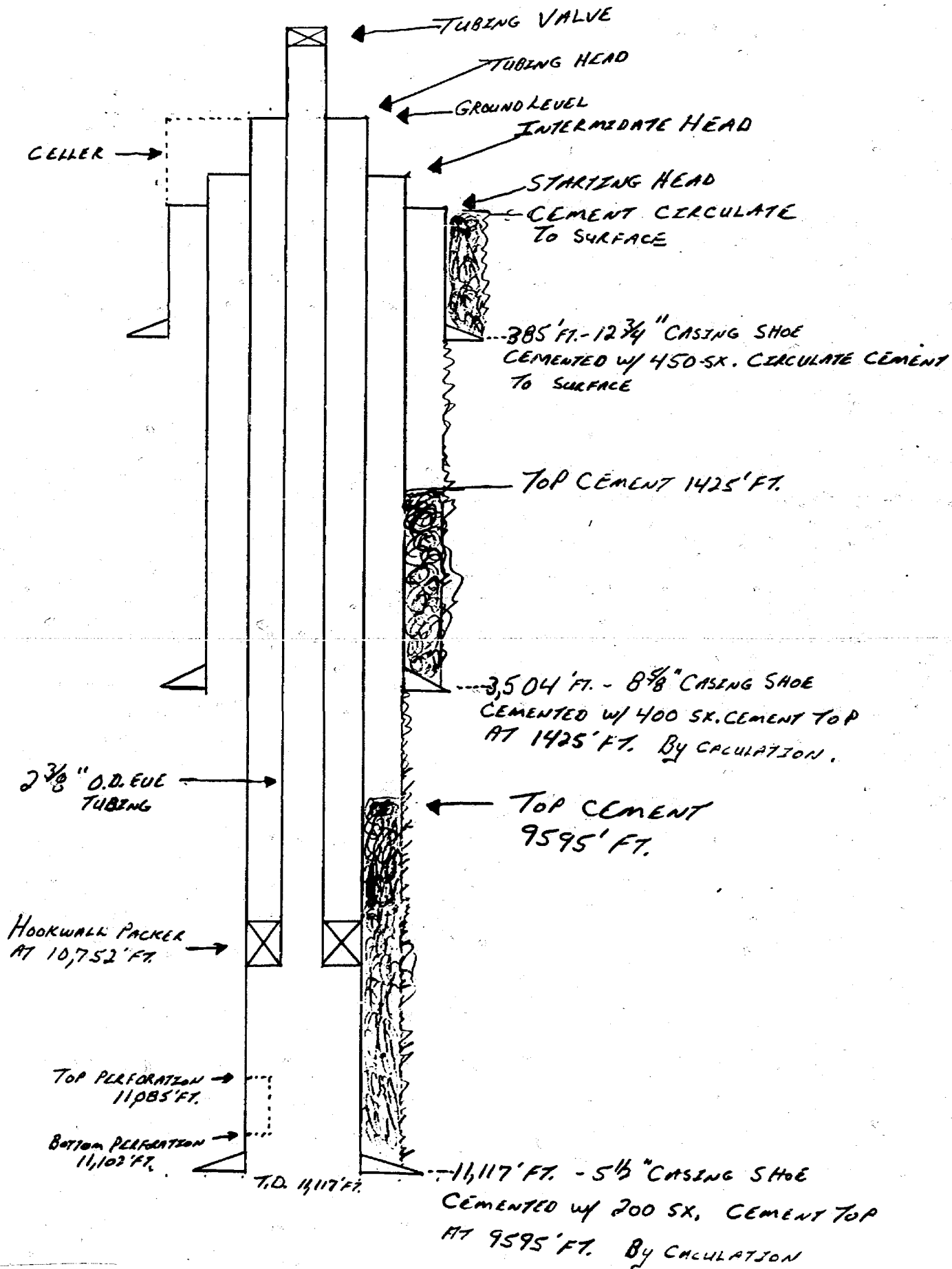
V-F Petroleum, Inc.
SRR DEVONIAN FIELD AREA
T-9-S R-32-E
Lea County, New Mexico

Scale
1" = 4000'

SCHEMATIC DIAGRAM
V-F Petroleum, Inc.

State 14-1
Sec. 14 T9S R32E
Lea County, New Mexico

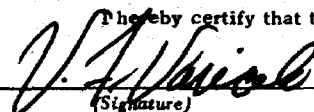
(diagram is not drawn to scale)



NEW MEXICO OIL CONSERVATION COMMISSION
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR V-F Petroleum, Inc.		ADDRESS 901 Vaughn Building			
LEASE NAME State 14		WELL NO. 1	FIELD SRR Devonian		COUNTY Lea
LOCATION UNIT LETTER <u>L</u> ; WELL IS LOCATED <u>1650</u> FEET FROM THE <u>South</u> LINE AND <u>330</u> FEET FROM THE <u>West</u> LINE, SECTION <u>14</u> TOWNSHIP <u>9S</u> RANGE <u>32E</u> NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING					
40#J	12-3/4"	385'	450 sx	surface	circulated
INTERMEDIATE					
24# - 28# J-55	8-5/8"	3504'	400	1425'	calculations
LONG STRING					
17# - N-80	5-1/2"	11,117'	200	9595'	calculations
TUBING			NAME, MODEL AND DEPTH OF TUBING PACKER		
4.70# N-80	2-3/8"	10,752'	Baker Model R single grip		
NAME OF PROPOSED INJECTION FORMATION		TOP OF FORMATION		BOTTOM OF FORMATION	
Devonian		11,085'		11,102'	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS?		PERFORATIONS OR OPEN HOLES		PROPOSED INTERVAL(S) OF INJECTION	
tubing		perforations		11,085' - 11,102'	
IS THIS A NEW WELL DRILLED FOR DISPOSAL?		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED?		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE?	
no		looking for Devonian production		No	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH					
not applicable					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA	
250 EST		9500' (Pennsylvanian)		None	
ANTICIPATED DAILY INJECTION VOLUME (BBL/D)	MINIMUM	MAXIMUM	OPEN OR CLOSED TYPE SYSTEM	IS INJECTION TO BE BY GRAVITY OR PRESSURE?	APPROX. PRESSURE (PSID)
	150	7000	closed	*pressure	*2500
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE -			WATER TO BE DISPOSED OF	NATURAL WATER IN DISPOSAL ZONE	ARE WATER ANALYSES ATTACHED?
yes			Devonian	Devonian	yes
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)					
State Land (surface owner - Mrs. Lewis Cooper, Portales, New Mexico)					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL					
Amoco, P. O. Drawer A, Levelland, Texas 79336					
Yates Petroleum, 207 South 4th, Yates Building, Artesia, NM 88210					
R. B. Stallworth, P. O. Box 3310, Midland, TX 79701					
Phillips, Phillips Building, 4th Street & Washington, Rm B-2, Odessa, Texas 79760					
*This well will take water on vacuum.					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL	
Yes		Yes		Yes	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)?		PLAT OF AREA		ELECTRICAL LOG	
Yes		Yes		Yes	
				DIAGRAMMATIC SKETCH OF WELL	
				Yes	

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


(Signature)

President

(Title)

5-18-78

(Date)

NOTE: Should waivers from the surface owner and all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

Waylan C. Martin, M. A.

WELLS LOCATED WITHIN 1/2 MILE RADIUS
SRR Devonian Field Area, Lea County, New Mexico

OPERATOR	WELL NAME	LOCATION	TOTAL DEPTH DRILLED	SURFACE CASING			INTERMEDIATE CASING			PRODUCTION CASING			PERFORATED INTERVAL			
				SIZE	DEPTH SET	SX CMT	TOP CMT	SIZE	DEPTH SET	SX CMT	TOP CMT	SIZE		DEPTH SET	SX CMT	TOP CMT
Amerada	SRR A-1	M14-9-32	11,177	13-3/8	340	250	clrc	8-5/8	3516	1500	684	5-1/2	11,165	900	7927 (temp)	11,103
Ernest Hanson	SRR State A-1	L14-9-32	4,311	8-5/8	1659	200	1052					5-1/2	4,209	150	(calc)	
Amerada	SRR B-1	P15-9-32	11,125	13-3/8	338	275	clrc	8-5/8	3550	1450	644 (t sfc)	5-1/2	11,085			
Amerada	SRR B-2	J15-9-32	11,315	13-3/8	338	275	clrc	8-5/8	3535	1500	650 (calc)		N O N E			N O N E
Major, et al	Gulf St #1	H15-9-32	11,490	11-3/4	355	350	clrc	8-5/8	3575	400	2375 (calc)					N O N E
V-F Pet Inc	State 15-1	P15-9-32	11,087	12-3/4	361	415	clrc	8-5/8	3551	400	2351 (calc)	4-1/2	11,056	350		11,057 - 11,087 OH
Amerada	Fed E-1	A22-9-32	11,150	13-3/8	340	275	clrc	8-5/8	7945	1500	5145	5-1/2	11,125	900	7133 (temp)	9208 - 9218 11,125 - 11,150 OH
Amerada	Chartier #2	D23-9-32	10,577	13-3/8	340	275	clrc	8-5/8	3522	1500		5-1/2	10,170	600	7516 (temp)	10,170 - 10,436 OH 9202 - 9214

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
State Land Office Building
Santa Fe, New Mexico
21 June 1978

EXAMINER HEARING

IN THE MATTER OF:

Application of V-F Petroleum, Inc.,) CASE
for salt water disposal, Lea County,) 6259
New Mexico.)

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Lynn Teschendorf, Esq.
Legal Counsel for the Division
State Land Office Building
Santa Fe, New Mexico 87501

For V-F Petroleum, Inc.: W. Thomas Kellahin, Esq.
KELLAHIN & FOX
500 Don Gaspar
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I N D E X

VICTOR P. VASICEK

Direct Examination by Mr. Kellahin	3
Cross Examination by Mr. Stamets	10

E X H I B I T S

Applicant Exhibit One, Letter	10
Applicant Exhibit Two, C-108	10
Applicant Exhibit Three, Water Analysis	10
Applicant Exhibit Four, Schematic	10
Applicant Exhibit Five, Tabulation	10
Applicant Exhibit Six, Production data	10
Applicant Exhibit Seven, Map	10
Applicant Exhibit Eight, Log	10

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1 MR. STAMETS: Call Case 6259, which is in the
2 matter of the application of V-F Petroleum, Inc., for
3 salt water disposal, Lea County, New Mexico.

4 Call for appearances in this case.

5 MR. KELLAHIN: Tom Kellahin of Kellahin and
6 Fox, Santa Fe, New Mexico, appearing on behalf of the
7 Applicant, and I have one witness.

8 MR. STAMETS: Stand and be sworn, please.

9 (Witness sworn.)

10
11 VICTOR F. VASICEK

12 being called as a witness and having been duly sworn upon
13 his oath, testified as follows, to-wit:

14
15 DIRECT EXAMINATION

16 BY MR. KELLAHIN:

17 Q Would you state your name, your occupation,
18 and by whom you are employed?

19 A Victor F. Vasicek, employed by V-F Petroleum,
20 Inc., actually I'm the President of the company, and I'm
21 a petroleum engineer.

22 Q Would you spell your last name for the court
23 reporter?

24 A V-A-S-I-C-E-K.

25 Q Mr. Vasicek, have you previously testified

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1 before the Oil Conservation Division and had your quali-
2 fications as an expert witness -- petroleum engineer ac-
3 cepted and made a matter of record?

4 A Yes, I have.

5 Q Have you made a study of and are you familiar
6 with the facts surrounding this particular application?

7 A Yes, I have.

8 MR. KELLAHIN: We tender Mr. Vasicek as an
9 expert.

10 MR. STAMETS: The witness is considered qual-
11 ified.

12 Q (Mr. Kellahin continuing.) Would you please
13 turn to the plat outlining the particular area in question.
14 I have marked that as Exhibit Number Seven. If you'll
15 commence your testimony with that exhibit, Mr. Vasicek,
16 and identify and explain to the Examiner what you're
17 seeking to accomplish.

18 A The well in the southeast quarter encircled
19 in green, southeast quarter of Section 15, is a V-F
20 Petroleum State 15-1, which produces salt water.

21 We wish to convert the well in Section 14,
22 which is the V-F Petroleum State 14-1, we wish to convert
23 it to salt water disposal. Both wells are Devonian or
24 have been completed as Devonian. The State 15 is a pro-
25 ducer; the State 14 was completed right at the water-oil

1 contact and we did not make it; never did produce oil in
2 any special quantities.

3 Q What's the current status of the proposed in-
4 jection well?

5 A It's shut in with -- still has a cobe (sic)
6 and tubing in the hole, just shut in waiting on -- pending
7 this order.

8 Q Has it been a Devonian producer in the past?

9 A It never was productive, no.

10 Q The source of the water to be disposed of in
11 the disposal well is to be the well in Section 15?

12 A That is correct.

13 Q Are there any other Devonian producers that
14 currently produce Devonian water that you wish to dispose
15 of in the subject well?

16 A Not at this time.

17 Q Please refer to what I have marked as Exhibit
18 Number One, which is your application to the Division,
19 and describe the exact location of the subject disposal
20 well.

21 A Okay. It's in Unit L of Section 14, Township
22 9 South, Range 32 East.

23 Q What pool are you in?

24 A It's shown as the SRR Devonian.

25 Q Please refer to Exhibit Number Two and identify

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1 it.

2 A Okay, this is our application for disposal of
3 salt water by injection into a porous formation that is
4 productive of oil and gas.

5 MR. KELLAHIN: If the Examiner please, I be-
6 lieve in the original C-108 that we tendered with the
7 application there may have been a correction in the length
8 of the tubing?

9 A Yes. We made two corrections. One of them
10 was approximate pressure as to which we request it be a
11 maximum, and I think we'll have good pressure on this
12 well, but we do request point 2 psi per foot of depth.

13 Q The calculation of the 0.2 psi per foot of
14 depth based upon a well of this depth is 2200 psi.

15 A Yes, that's very close.

16 Q All right. Now, what was the second change?

17 A The second change was the depth as to which
18 we're going to set the tubing. We changed it to where it
19 would be 100 feet above the perforations in which we in-
20 tend to inject.

21 Q All right.

22 A And it's correct in this exhibit that we just
23 marked. I made all the corrections.

24 Q All right. Please refer to Exhibit Number
25 Three and identify it.

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1 A This is a plat -- I mean this is a salt water
2 analysis which shows that --

3 MR. STAMETS: Excuse me, on the 108 here, it
4 shows 2-3/8ths at 10085 and the top perforation is 11085.
5 That's a thousand feet.

6 A Typographical error. Can you change it?

7 MR. STAMETS: Yeah, it's going to be 11085
8 feet of tubing?

9 A 11085.

10 MR. STAMETS: Okay.

11 A The preforations are 11085 -- that should be
12 985.

13 MR. STAMETS: 10985.

14 A That should have been a 9 instead of a zero.

15 MR. STAMETS: Okay.

16 A Okay. I don't think I subtracted very well.

17 Q Please refer to Exhibit Number Three and
18 identify it.

19 A This is an analysis of salt water disposal,
20 of the salt water, analysis of the Devonian formation in
21 the State 14. In addition, there are two analyses there.
22 We're currently disposing of this water into another well
23 and the company that we're disposing of required this
24 analysis, so we got analysis of the other well, which is --
25 they call it No Pit Pete, Cleary Petroleum No Pit Pete,

1 so don't be confused by the two analyses.

2 MR. STAMETS: So the only one we're concerned
3 with is No. 2?

4 A No. 2, right.

5 Q Please refer to Exhibit Number Four and identify
6 it.

7 A This is a schematic diagram of our proposed
8 installation both on the surface and the sub-surface.
9 And the casing and the whole diagram of everything that's
10 in the well.

11 Q Will you fill the annular space between the
12 tubing and casing with an inert fluid?

13 A Yes.

14 Q And how will you monitor the surface?

15 A By a pressure gauge on the casing.

16 Q Will you use internally plastic-coated tubing?

17 A Yes.

18 Q In the well?

19 A Yes.

20 Q Please refer to Exhibit Number Five and ident-
21 ify it.

22 A This is a tabulation of all the wells that
23 were drilled within a half mile radius of our proposed
24 injection well. It shows the names of the operators, well
25 name, and locations, depths they were drilled, the casing

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1 program and how they were cemented, whatever perforated
2 and whatever produced.

3 Q Are there any fresh water sources within a
4 half mile of the subject well?

5 A Not to my knowledge.

6 Q Have you made a study of all the casing pro-
7 grams and cementing programs with regards to the offsetting
8 wells within a half mile?

9 A Yes.

10 Q And in your opinion, Mr. Vasicek, will the
11 disposal of the Devonian water into the subject well re-
12 main confined to the Devonian formation?

13 A Yes, it should.

14 Q Please refer to Exhibit Number Six and identi-
15 fy it.

16 A This is the production data of our producing
17 well, the well that's making the water that we wish to
18 dispose of, State 15-1. It's just the production history
19 of the well from inception.

20 Q For the month of April, 1978, the producing
21 well made a total of 2723 barrels of water?

22 A That's correct.

23 Q And it is that water production you intend
24 to dispose of in the subject well?

25 A That is correct.

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Q Would you identify what I have marked as Exhibit Number Eight?

A This is a gamma ray - neutron correlation log of the proposed salt water disposal well, State 14-1.

Q In your opinion, Mr. Vasicek, will approval of this application be in the best interests of conservation, the prevention of waste, and the protection of correlative rights?

A Yes.

Q Were Exhibits One through Eight prepared by you directly or compiled under your direction and supervision?

A Yes.

MR. KELLAHIN: We move the introduction of Exhibits One through Eight.

MR. STAMETS: These exhibits will be admitted.

MR. KELLAHIN: That concludes our examination.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Vasicek, do you expect to have to utilize pressure on this well or do you think it will take the water on vacuum?

A I figure it will take the water on a vacuum. The 2200 pounds is simply as time goes on, oftentimes the

1 well gets carbonated up and you have to treat them, you
2 have to put acid down to get them to take the water, but
3 this can happen down the road two or three years from
4 now or ten years from now, and that's the reason for the
5 pressure.

6 Q Will the gauge that you put on the annulus
7 be capable of reading both positive and negative pressure?

8 A No, I wasn't intending to put a vacuum gauge
9 on there, but I guess we could if you require it.

10 Q That would show --

11 A If it's on a vacuum.

12 Q -- either way, if it's on a vacuum --

13 A Yeah, we could leave -- we could leave a --
14 leave the gauge screwed on there real loosely to where
15 anybody wanted to come in there they could shut the needle
16 valve and then put their thumb over it and they'll see
17 whether it's sucking or not.

18 Because those vacuum gauge, I don't know, I
19 think they're pretty expensive, and they always go hay-
20 wire. So that's the only comment on that.

21 Q Now, referring to Exhibit Number Five, there's
22 some wells on that where there's not a great deal of in-
23 formation on. Maybe I should say not complete information
24 on them. Like the Ernest Hanson SRR State A-1, the second
25 well on there. I would judge that that well is only 4209

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1 feet deep, is that right?

2 A Yes, sir. That was a shallow well drilled
3 by Hanson.

4 Q And then was not drilled to the Devonian?

5 A That's correct.

6 Q Okay. Now, the next well, the Amerada well,
7 apparently was drilled to the Devonian, but you don't
8 indicate that it was cemented.

9 Q The production string -- no, I'm not sure
10 what happened there. I'm not sure -- I'm not sure why
11 I don't have that on there. It should have been available.

12 I didn't bring my notes along on that.
13 SRB No. 1, they used -- well, I don't show any cement
14 or anything. That's probably just a omission either by --
15 I just overlooked it.

16 Q Okay. Then going on to the next well, it
17 shows total depth 11,315 feet, but no production casing.

18 A It's a dry hole.

19 Q Okay, but also there's no indication how the
20 well was plugged.

21 What sort of a plug has been set above the
22 production interval for the salt water disposal?

23 A Plug and --

24 Q Same thing would be true of the next well.

25 A All right.

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1 Q And then the last one I have a question on
2 is the V-F Petroleum State 15 No. 1 shows 4-1/2, 11,056,
3 350 sacks but no calculated cement at the top.

4 A Okay, I didn't calculate at the top. Okay.

5 Q I'm sure that's enough to come well above
6 the injection interval.

7 A Oh, sure.

8 Q I'm not too concerned about it.

9 A I can furnish these with you -- for you. I
10 can go ahead and redo that. Let's see, there's one,
11 two, three, there's one more thing. Oh, the Amerada
12 well, the top of the cement on that well.

13 Q Yes, that's right. As a matter of fact, all
14 the questionable wells are located right in the --

15 A I think I know what happened. I think the
16 secretary forgot to pick it up and I overlooked it, be-
17 cause I had it on another sheet. Can we send you that
18 by letter?

19 Q Yes, if you will. You've already testified.
20 Everything looks all right as long as what you submit
21 verifies that, we'll be in good shape.

22 A Okay.

23 MR. STAMETS: Any other questions of the
24 witness? He may be excused.

25 Anything further in this case? We'll take

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1 the case under advisement.

2 A Who do I send this to? Do I just send it the
3 regular way?

4 MR. STAMETS: Send it to me, put my name on
5 it.

6 (Hearing concluded.)
7
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REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, A Court Reporter, DO HEREBY
 CERTIFY that the attached and foregoing Transcript of
 Hearing before the Oil Conservation Division was reported
 by me; that said transcript is a full, true, and correct
 record of the hearing, prepared by me to the best of my
 ability, knowledge, and skill from my notes taken at the
 time of the hearing.

Sidney F. Morrish, C.S.R.

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Examiner hearing of Case No. 6259
 heard by me on 10-28-28.
 Richard H. Ham, Examiner
 New Mexico Oil Conservation Commission

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ROUGH

dr/

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. 6259

Order No. R- 5792

APPLICATION OF V-F PETROLEUM,
INC. FOR SALT WATER DISPOSAL,
LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on June 21
19 78, at Santa Fe, New Mexico, before Examiner Richard L. Stamets

NOW, on this day of August 1978, 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, V-F Petroleum, Inc.,
is the owner and operator of the State 14 Well No. 1,
located in Unit L of Section 14, Township 9 South,
Range 32 East, NMPM, SRR-Devonian Pool,
Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the Devonian
formation, with injection into the perforated
interval from approximately 11,085 feet to 11,102 feet.

(4) That the injection should be accomplished through 2 3/8
-inch plastic lined tubing installed in a packer set at approxi-
mately 10,985 feet; that the casing-tubing annulus should be
filled with an inert fluid; and that a pressure gauge or approved
leak detection device should be attached to the annulus in order

to determine leakage in the casing, tubing, or packer.

(5) That the injection well or system should be equipped with a pop-off valve or ^{other} acceptable ^{device} ~~substitute~~ which will limit the wellhead pressure on the injection well to no more than ²²⁰⁰ psi.

(6) That the operator should notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(7) 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.

(8) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, V-F Petroleum, Inc. is hereby authorized to utilize its State 14 Well No. 1 located in Unit L of Section 14, Township 9 South Range 32 East, NMPM, SRR-Devonian Pool Lea County, New Mexico, to dispose of produced salt water into the Devonian formation, injection to be accomplished through 2 3/8 -inch tubing installed in a packer set at approximately 10,985 feet, with injection into the perforated interval from approximately 11,085 feet to 11,102 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus

or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

(2) That the injection well or system shall be equipped with a pop-off valve or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 12⁰⁰ psi.

(3) That the operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(4) That the operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(5) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Division Rules and Regulations.

(6) 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.