Case No. 6594

Application
Transcripts

Small Exhibits

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
State Land Office Building
Santa Fe, New Mexico
11 July 1979

### EXAMINER HEARING

### IN THE MATTER OF:

Application of Flag-Redfern Oil Co. for ) County, New Mexico. County, New Mexico.

BEFORE: Richard L. Stamets

### TRANSCRIPT OF HEARING

### APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq. Legal Counsel for the Division State Land Office Bldg. Santa Fe, New Mexico 87503

For the Applicant:

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

SALLY WALTON BOY!
CERTIFED SHCATHAND REPORTE
1918 FIRE BELICA (545) 471-441
SARE FO. NY MOXICO 5759

21 22

11

12

13

14

15

16

17

18

19

20

24

23

### INDEX

JOHN SWENDIG

Direct Examination by Mr. Kellahin

Cross Examination by Mr. Stamets

## EXHIBITS

Applicant Exhibit One, Plat Applicant Exhibit Two, Topographic Map Applicant Exhibit Three, Schematic Applicant Exhibit Four, Well Information Sheet Applicant Exhibit Five, List Applicant Exhibit Six, Water Analysis 

12

13

15

17

18

19

20

21

23

MR. STAMETS: We'll call next Case 6594.

MR. PADILLA: Application of Flag-Redfern
Oil Company for an exception to Order Number R-3221, Eddy
County, New Mexico.

MR. KELLAHIN: Tom Kellahin of Santa Fe,
New Mexico, appearing on behalf of the applicant, and I
have one witness.

MR. STAMETS: I'd like to have him stand and be sworn, please.

### (Witness sworn.)

### JOHN SWENDIG

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

### DIRECT EXAMINATION

### BY MR. KELLAHIN:

Mr. Swendig, would you please state your name, by whom you're employed, and in what capacity?

A John Swendig, employed by Flag-Redfern Oil Company as a petroleum engineer.

Mr. Swendig, have you previously testified before the Oil Conservation Division and had your qualifications as a petroleum engineer accepted and made a matter

11

12

13

14

15

16

17

18

19

20

21

22

23

of record?

λ. Yes, I have.

And have you made a study of and are you familiar with the facts of this case?

Yes, sir.

MR. KELLAHIN: We tender Mr. Swendig as an expert witness.

MR. STAMETS: He's considered qualified.

Would you please refer to what we've marked as Applicant Exhibit Number One, identify the acreage in question in Section 2, and summarize what Flag-Redfern is seeking to accomplish?

Exhibit One is a location plat showing Flag-Redfern's New Mexico State Lease outlined in red, being the southwest quarter of Section 2, Township 19 South, 31 East, Eddy County, New Mexico.

We have completed one well on this lease, the New Mexico State No. 1.

That well produces from what formation, Mr. Swendig?

It's producing from the Shugart Field and is producing from the Queen-Grayburg and Premier sections. The well initially potentialed for 22 barrels of oil and 41 barrels of water in Pebruary of 1979. On a recent test of June 30th, 1979, it produced 45 barrels of oil and 53 barrels

2

of water, and Flag-Redfern is requesting an exception to R-3221 to allow for the disposal of produced water in an unlined surface pit.

Q What are you currently doing with that produced water?

A Produced water at the present is being trucked by I&W Hauling Company out of Loco Hills and is being disposed of in a pollution control system located on the Carlsbad-Hobbs Highway in the vicinity of the Halfway Bar.

Q What is the current daily water production from the lease?

- A It averages 53 to 55 barrels a day.
- Q And the well was completed when?
- A. In February of 1979.
- And what is the cumulative production in oil since that date?
- A. Cumulative oil production has been 4283 barrels as of June 1, 1979, and a cumulative water production of 4920 barrels.
- Q You said that well is averaging about 50 to 55 barrels a day?
  - A Of water, yes, sir.
- Can you give us the high and low ranges since February?

11

12

î3

15

16

17

18

19

20

21

22

A.		It will	range	from	30	barrels	a	day	to
approximately	80	barrels	a day	•					

- Q Now how far is it from the well to the disposal facilities one way in miles?
- A. I would estimate it to be 20 to 25 miles one way.
- Q And what is it costing Flag-Redfern to dispose of the produced water by trucking?
  - A Ninety to ninety-six cents a barrel.
- You've shown on your Exhibit Number One in Section 2 a 40-acre tract outlined in yellow that has the name J. D. Cock on it. Would you describe for us what that is?
- and these three tracts, the J. D. Cook tract in the south I mean the northwest of the southeast, has most recently received an exception to R-3221 for a no-pit order. This order is Number R-5472, entered into June 6th, 1979.
- And would you summarize briefly what that order permits Mr. Cook to do?
- A. That order allows Mr. Cook to dispose of produced water from the No. 1 State Well in an unlined surface pit.
- Q Is there any limitation on Mr. Cook as to the amount of water that he may dispose of in an unlined

## LY WALTON BOYD NED SHONTHAND REPORTER MAR BEADUR (646) 471-3463 IN PU, NOW MOREOUS \$1161

surface pit?

2

10

11

12

13

15

16

17

18

19

20

21

22

23

24

A No, sir.

All right, sir, in the north half of Section 2 there appears to be two different producing units outlined in yellow. Would you describe each of those?

A The 30-acre tract outlined in the north-west of the northwest of Section 2 is the Keohane and Westall State E Lease, and the exception was granted for this tract by Order R-4015, dated August 19th, 1970.

And would you summarize what that particular order allows the Keohane and Westall operators to do with that unit?

A. It allows Keehane and Westall to dispose of water from the existing well and any future existing wells to be disposed of in unlined surface pits.

Is there any limitation on the maximum amount of water that may be deposited in the unlined surface pit?

A No, sir.

All right, sir, would you describe the larger unit outlined in yellow in the north half of Section 2?

A This tract originally was operated by
Mask, Jennings, Keohane and Westall, and they were granted
an exception to R-3221 by R-3800, dated July 9th, 1969, and

11

12

13

14

15

16

17

18

19

20

21

22

it allows them to dispose of wells -- dispose of produced water from wells in the northeast quarter and the east half of the northwest quarter of Section 2.

- Q Is there any limitation on the -- that proration unit or the wells within that unit, set by the Commission, limiting the volumes of water that can be disposed of in the unlined surface pit?
  - A No, sir.
- Q Do any of the other orders previously approved by the Commission -- well, let's strike that. Let me ask you another question.

What are your plans for the 160-acre unit consisting of the southwest quarter of Section 2?

- A. We anticipate that we'll drill an additional well in the very near future, within the next two months, and that eventually we'll develop the full 160 acres, four wells.
- Redfern to have an order from the Commission allowing you to dispose of water produced from the existing well or any subsequent well drilled upon that particular unit, the water from which may be disposed of in the unlined surface pit?
  - A Yes, sir, we would.
  - Q Let's talk for a minute about the source

10

11

12

13

14

16

17

19

20

21

22

23

24

of the water from the existing well.

Do you have any opinion with regards to the source of that water?

We are completed in three zones, and the -it's our belief that the majority of the water is coming from the lower Grayburg section, and that in future wells that we would not complete in this section, and hopefully, we would reduce our water production from subsequent wells.

Let me have you turn to Exhibit Number Two and would you identify that for us?

Exhibit Number Two is a portion of a topographic, USGS topographic map, showing portions of Lea County and Eddy County.

Again on this map in Section 2 I've outlined Flag-Redfern's New Mexico State lease in red and showing certain water wells and windmills marked in yellow.

There is a water well located in Section 35, due north of the Section 2. This water well is owned by Garrell Westall and has been inactive for the past ten years. I have no knowledge as to how deep the well is or the quality of water that it was producing.

You've talked about the well in Section 35, is that it?

Yes.

The water well identified here, and who is Q

3

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

the owner of that well?

A Garrell Westall.

Q Have you been in contact personally with Mr. Westall?

A I've talked to Mr. Westall's brother, who is familiar with Mr. Westall's, Garrell Westall's operations and he, Mr. Ray Westall is the one I received the information from.

Q Did he convey to you any indication that they desired to either replace that water well or to produce from that existing water well in Section 35?

A. They have no plans to produce that fresh water well.

Did you advise him of the proposed application of Flag-Redfern to dispose of produced brines in an unlined surface pit in Section 2?

A Yes, sir, I did.

Q And what, if any, objection did he have to that?

A He had no objection.

Q Going clockwise around, I believe in just about Section 9, there's another -- what appears to be a windmill, is that correct?

A Yes, sir, it's actually in Section 8, and there is a windmill there.

^	Describe	+4-4	4	
11	Describe	tnat	IOI	цв

A. The only thing I could say is there's a windmill over the hole. There's no water in the tank and the windmill is not active at the time we made the field inspection.

Q Okay. At the time you made your field inspection, Mr. Swendig, was there any evidence of any kind to indicate that that windmill or the facilities around it had been used in the recent past?

A No, sir, there's no indication that it had been used recently.

Would you describe for us any other sources
 of potential fresh water in the area?

A Located to the southwest of the New Mexico
State Lease there is the Lusk Ranch, underlined in yellow.

There's a windmill in Section 28 and a windmill in Section

33 that are active at the time we were there.

And that's part of the Lusk Ranch operation?

A Yes, it's part of the Lusk ranchhouse operation.

Now, have you made an examination or discussed with any individuals or personnel at the State

Engineer's Office for the State of New Mexico, concerning
sources of fresh water in the area?

A I've called the State Engineer's Office

11

12

13

14

16

19

20

21

22

23

24

in Roswell and talked to Mr. Jim Wright and this area is not in a fresh water -- classified as in a fresh water basin, and their inventory of water does not extend into Section -- or Range 31. They had inventoried Range 32 on the east side, but not into Range 31 East, and his indication was the only fresh water that would be known in this area would be from the Triassic and would be a a depth estimated to be approximately 240 feet.

- Q In your opinion, Mr. Swendig, will disposal of water on the surface in unlined surface pits in any way pose a risk to that particular fresh water formation?
  - A No, sir, I do not believe so.
- Q In your opinion will disposal as proposed by the Applicant in this case run the risk of contaminating any shallow fresh waters areas -- fresh water sources in the area?
  - A No, sir.
- Q. In your opinion are there present or reasonably foreseeable beneficial uses that may be made of any fresh water sources in the area that might be contaminated by the subject pit?
  - A No, sir, I don't believe so.
- Q Let me have you look at Exhibit Number
  Three and identify that.
  - A Exhibit Three is just a location schematic

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

showing the location of production facilities to the existing well. We have currently a heater-treater and two 210-barrel stock tanks, a 210-barrel fiberglass water tank, and it also shows where we would propose to build a disposal pit, 40foot by 40-foot, and 6 foot deep.

Summarize for me quickly what you'll do once the water gets produced from the well to the time it gets dumped in the disposal pit.

The oil and water will be separated in the heater-treater and the water will be disposed directly to the pit.

Would you describe the general dimensions of that disposal pit and how it would be constructed?

It would be 40-foot square and 6-foot deep and --

Just bulldoze it out of the ground?

Just bulldozed out and levees put up around it. The fence will be -- the pit will be fenced to keep any livestock from getting into the water.

In your examinations of this area, Mr. Swendig, did you see any cattle or other stock in the area?

No, sir, there was none observed.

Would you describe what the general surface of this area is like?

It's rolling sand hills with a cover of

shinnery.

2

3

5

6

7

ŷ

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

In your opinion, Mr. Swendig, is it economically possible for Flag-Redfern to continue to truck the volumes of water produced to the disposal facility some 20 miles or more away?

The -- trucking the water makes the wells in the area economically unattractive and if it is necessary to continue trucking water throughout the life of the well, it will probably impair the continued development of the lease and possibly the premature abandonment of the well.

Would you please refer to Exhibit Number a Four and identify that for us?

Exhibit Number Four is a well information sheet that we discussed previously.

And Exhibit Number Five? a

Exhibit Number Five is just a listing of the information on the three exceptions to the no-pit order in Section 2.

MR. KELLAHIN: If the Examiner please, we'd request the Examiner to take administrative notice of the transcripts and orders entered in those cases listed on Exhibit Number Five.

MR. STAMETS: The Examiner will take administrative notice of those cases.

And Exhibit Number Six, Mr. Swendig?

11

12

13

15

îô

17

20

21

22

25

	λ	Exhibit Nur	water analys	water analyses,			
there	are two se	parate wate:	r analyses t	aken on the w	æll,		
which	are showin	g the water	to be dispo	sed of to be	high		
chlor	ine content	and to be h	orackish wat	ter, high soli	ds.		

- In your opinion, Mr. Swendig, will approval of this application be in the best interests of conservation, the prevention of waste, and the protection of correlative rights?
- A. Yes, sir, I believe it would be.

  MR. KELLAHIN: That concludes our examination. Let me ask you about Exhibits One through Six.

  Were they prepared by you or subject to your direction and supervision?
  - A Yes, they were prepared by me.

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

MR. STAMETS: These exhibits will be ad-

mitted.

MR. KELLAHIN: That concludes our examina-

tion.

CROSS EXAMINATION

BY MR. STAMETS:

Ω May I see the topo sheet?

MR. KELLAHIN: Let me ask you this question.

12

13

14

15

16

17

18

19

20

21

While we're looking at Exhibit Number Two, Mr. Swendig, what is the general direction of drainage from the water disposed of in unlined pit? What would be the general area of drainage?

- A It would be generally to the south or the southwest.
- Q (Mr. Stamets continuing.) Mr. Swendig, have you investigated the -- any drainage patterns in the area? You indicated it would be south-southwest. Have you studied any of the ground water reports in the area to see --
- A No, sir, I have not. The drainage to the south, it would be just from observation of the general area by our field personnel.
- I wonder if any of these cases that were referenced here has drainage information? Did anybody check to see that?

MR. KELLAHIN: I have checked, Mr. Examiner, and to the best of my knowledge there is no ground water studies in any of those cases.

MR. STAMETS: Let's go off the record a minute.

(There followed a discussion off the record.)

MR. STAMETS: Okay, let's go back on the

LLY WALTON BOYD FFED SHORTHAND REPORTER Place Blance (665) 411-3463 net Fo, Now Mexico 87161

11

12

13

14

15

16

17

18

19

20

21

22

23

record.

Mr. Swendig, does Flag-Redfern have any objection if the Examiner also takes notice of the available ground water reports for Eddy County in reaching a determination in this case?

- A. Yes, fine.
- Q You agree?
- A Yes, sir, I agree.
- Q. That that's okay? You have no objection?
- A I have no objection, yes, sir.
- Q Okay. Are there any other questions of this witness? He may be excused.

Anything further in this case?

The case will be taken under advisement.

(Hearing concluded.)

REPORTED THE THEO FICENCY

I, SALLY W. BOYD, a Court Reporter, DO HERERY
CERTIFY that the foregoing and attached Transcript of
Hearing before the Oil Conservation Division was reported
by Ma; 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.

Sally W. Boyd, C.S.R.

Examiner

Oil Conservation Division

SALLY WALTON BOYC CERTIFIED SHORTHAND REPORTE 1930 Plaza Blanca (665) 471-446 Banta Fe, New Mexico 87161 10

11

12

.13

14

22

23

### 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. 6594 Order No. R-6083

APPLICATION OF FLAG-REDFERN OIL CO. FOR AN EXCEPTION TO ORDER NO. R-3221, AS AMENDED, EDDY COUNTY, NEW MEXICO.

### ORDER OF THE DIVISION

### BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 11, 1979, at Santa Pe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this late day of August, 1979, 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, Flag-Redfern Oil Co., is the owner and operator of the New Mexico State Lease, consisting of the SW/4 of Section 2, Township 19 South, Range 31 East, NMPM, Shugart Field, Eddy County, New Mexico.
- (3) That Order (3) of Division Order No. R-3221, as amended, prohibits in that area encompassed by Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, the disposal, subject to minor exceptions, of water produced in conjunction with the production of oil or gas, or both, on the surface of the ground, or in any pit, pond, lake, depression, draw, streambed, or arroyo, or in any watercourse, or in any other place or in any manner which would constitute a hazard to any fresh water supplies and said disposal has not previously been prohibited.
- (4) That the aforesaid Order No. R-3221 was issued in order to afford reasonable protection against contamination of fresh water supplies designated by the State Engineer through disposal of water produced in conjunction with the production of oil or gas, or both, in unlined surface pits.

-2-Case No. 6594 Order No. R-6083

- (5) That the State Engineer has designated, pursuant to Section 70-2-12 (15), N.M.S.A., 1978 Compilation, all underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids as fresh water supplies to be afforded reasonable protection against contamination; except that said designation does not include any water for which there is no present or reasonably foreseeable beneficial use that would be impaired by contamination.
- (6) That the applicant seeks as an exception to the provisions of the aforesaid Order (3) to permit the disposal of salt water produced by applicant's wells located on the above-described lease into an unlined surface pit located in Unit K of said Section 2.
- (7) That applicant's only producing well on said lease, the New Mexico State Well No. 1 located in Unit K of said Section 2 produces approximately 50 barrels of water per day.
- (8) That there appers to be no shallow fresh water in the vicinity of the subject pit for which a present or reasonably foreseeable beneficial use is or will be made that would be impaired by contamination from the subject pit.
- (9) That approval of the subject application will not cause waste nor impair correlative rights, and the applicant should be permitted to dispose of water produced from said State Well No. 1 in an unlined surface pit on said lease until further order of the Division.

### IT IS THEREFORE ORDERED:

- (1) That the applicant, Flag-Redfern Oil Co., is hereby granted an exception to Order (3) of Division Order No. R-3221, as amended, to dispose of water produced in conjunction with the production of oil or gas, or both, from its New Mexico State Lease, located in the SW/4 of Section 2, Township 19 South, Range 31 East, NMPM, Shugart Field, Eddy County, New Mexico, in an unlined surface pit located in Unit K of said Section 2.
- (2) That the Director of the Division may by administrative order rescind such authority whenever it reasonably appears to the Director that such rescission would serve to protect fresh water supplies from contamination.
- (3) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Case No. 6594 Order No. R-6083

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

JOE D. RAMEY// Director

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION State Land Office Building Santa Fe, New Mexico 11 July 1979

### EXAMINER HEARING

IN THE MATTER OF:

Application of Flag-Redfern Oil Co. for ) an exception to Order No. R-3221, Eddy ) County, New Mexico.

6594

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

## APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq. Legal Counsel for the Division State Land Office Bldg. Santa Fe, New Mexico 87503

For the Applicant:

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

2

İÛ

11

12

13

15

16

17

22

### I N D E X

## JOHN SWENDIG

Direct	Examination	by Mr.	Kellahin	
Cross 1	Examination b	y Mr.	Stamets	1.

### EXHIBITS

Applicant Exhibit One, Plat	
Applicant Exhibit Two, Topographic Map	, (
Applicant Exhibit Three, Schematic	12
Applicant Exhibit Four, Well Information Sheet	14
Applicant Exhibit Five, List	14
Applicant Exhibit Six, Water Analysis	14

SALLY WALTON BOYCE CENTIFIED BHOATHAND REPORTE 1921/Plate Bannes (645) 471-546 Bints (64) 471-541

12

13

14

15

17

18

19

20

21

22

MR. STAMETS: We'll call next Case 6594.

MR. PADILLA: Application of Flag-Redfern Oil Company for an exception to Order Number R-3221, Eddy County, New Mexico.

MR. KELLAHIN: Tom Kellahin of Santa Fe, New Mexico, appearing on behalf of the applicant, and I have one witness.

MR. STAMETS: I'd like to have him stand and be sworn, please.

### (Witness sworn.)

### JOHN SWENDIG

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

### DIRECT EXAMINATION

### BY MR. KELLAHIN:

Q Mr. Swendig, would you please state your name, by whom you're employed, and in what capacity?

A John Swendig, employed by Flag-Redfern Oil Company as a petroleum engineer.

Q. Mr. Swendig, have you previously testified before the Oil Conservation Division and had your qualifications as a petroleum engineer accepted and made a matter

# SALLY WALTON BOYD CERTIFED SHORTHAND REPORTER 1912 PILLE SANGE (195) 471-3463 SANIA PS, NOW MOTIOS 17511

of record?

2

7

10

11

12

13

16

17

18

19

20

21

22

A Yes, I have.

And have you made a study of and are you familiar with the facts of this case?

A Yes, sir.

 $$\operatorname{MR.}$$  KELLAHIN: We tender Mr. Swendig as an expert witness.

MR. STAMETS: He's considered qualified.

Q Would you please refer to what we've marked as Applicant Exhibit Number One, identify the acreage in question in Section 2, and summarize what Flag-Redfern is seeking to accomplish?

Redfern's New Mexico State Lease outlined in red, being the southwest quarter of Section 2, Township 19 South, 31 East, Eddy County, New Mexico.

We have completed one well on this lease, the New Mexico State No. 1.

Q. That well produces from what formation, Mr. Swendig?

It's producing from the Shugart Field and is producing from the Queen-Grayburg and Premier sections.

The well initially potentialed for 22 barrels of oil and 41 barrels of water in February of 1979. On a recent test of June 30th, 1979, it produced 45 barrels of oil and 53 barrels

2

10

11

12

13

15

16

17

18

19

20

21

22

23

24

25

of water, and Flag-Redfern is requesting an exception to R-3221 to allow for the disposal of produced water in an unlined surface pit.

- Q What are you currently doing with that produced water?
- A. Produced water at the present is being trucked by I&W Hauling Company out of Loco Hills and is being disposed of in a pollution control system located on the Carlsbad-Hobbs Highway in the vicinity of the Halfway Bar.
- Q. What is the current daily water production from the lease?
  - A. It averages 53 to 55 barrels a day.
  - Q And the well was completed when?
  - A. In February of 1979.
- Q And what is the cumulative production in oil since that date?
- A. Cumulative oil production has been 4283 barrels as of June 1, 1979, and a cumulative water production of 4920 barrels.
- Q You said that well is averaging about 50 to 55 barrels a day?
  - A Of water, yes, sir.
- Q. Can you give us the high and low ranges since February?

11

12

13

14

15

16

17

18

19

20

21

22

23

A.		It will	range	from	30	barrels	a	đay	to
approximately	80	barrels	a day	•					

- Q Now how far is it from the well to the disposal facilities one way in miles?
- A. I would estimate it to be 20 to 25 miles one way.
- Q And what is it costing Flag-Redfern to dispose of the produced water by trucking?
  - A. Ninety to ninety-six cents a barrel.
- Q You've shown on your Exhibit Number One in Section 2 a 40-acre tract outlined in yellow that has the name J. D. Cook on it. Would you describe for us what that is?
- A. There are three tracts outlined in yellow and these three tracts, the J. D. Cook tract in the south I mean the northwest of the southeast, has most recently received an exception to R-3221 for a no-pit order. This order is Number R-5472, entered into June 8th, 1979.
- Q And would you summarize briefly what that order permits Mr. Cook to do?
- A. That order allows Mr. Cook to dispose of produced water from the No. 1 State Well in an unlined surface pit.
- Q Is there any limitation on Mr. Cook as to the amount of water that he may dispose of in an unlined

surface pit?

A. No, sir.

Q. All right, sir, in the north half of Section 2 there appears to be two different producing units outlined in yellow. Would you describe each of those?

The 30-acre tract outlined in the northwest of the northwest of Section 2 is the Keohane and Westal State E Lease, and the exception was granted for this tract by Order R-4015, dated August 19th, 1970.

And would you summarize what that particular order allows the Keohane and Westall operators to do with that unit?

A. It allows Keohane and Westall to dispose of water from the existing well and any future existing wells to be disposed of in unlined surface pits.

Q Is there any limitation on the maximum amount of water that may be deposited in the unlined surface pit?

A No, sir.

Q. All right, sir, would you describe the larger unit outlined in yellow in the north half of Section 2?

Mask, Jennings, Keohane and Westall, and they were granted an exception to R-3221 by R-3800, dated July 9th, 1969, and

it allows them to dispose of wells -- dispose of produced water from wells in the northeast quarter and the east half of the northwest quarter of Section 2.

O Is there any limitation on the -- that proration unit or the wells within that unit, set by the Commission, limiting the volumes of water that can be disposed of in the unlined surface pit?

A No, sir.

Q. Do any of the other orders previously approved by the Commission -- well, let's strike that. Let me ask you another question.

What are your plans for the 160-acre unit consisting of the southwest quarter of Section 2?

A. We anticipate that we'll drill an additional well in the very near future, within the next two months, and that eventually we'll develop the full 160 acres, four wells.

Redfern to have an order from the Commission allowing you to dispose of water produced from the existing well or any subsequent well drilled upon that particular unit, the water from which may be disposed of in the unlined surface pit?

A Yes, sir, we would.

Q. Let's talk for a minute about the source

10

11

12

13

14

15

16

17

18

19

20

21

22

23

of the water from the existing well.

Do you have any opinion with regards to the source of that water?

We are completed in three zones, and the -it's our belief that the majority of the water is coming from the lower Grayburg section, and that in future wells that we would not complete in this section, and hopefully, we would reduce our water production from subsequent wells.

Let me have you turn to Exhibit Number Two and would you identify that for us?

Exhibit Number Two is a portion of a topographic, USGS topographic map, showing portions of Lea County and Eddy County.

Again on this map in Section 2 I've outlined Flag-Redfern's New Mexico State lease in red and showing certain water wells and windmills marked in yellow.

There is a water well located in Section 35, due north of the Section 2. This water well is owned by Garrell Westall and has been inactive for the past ten years. I have no knowledge as to how deep the well is or the quality of water that it was producing.

You've talked about the well in Section 35, is that it?

Yes.

The water well identified here, and who is

## SALLY WALTON BOYE SETTIFIED SHONTHAND REPORTE 188 Plaza Blanca (1915) 411-444 Santa Pe. New Mexico 51781

10

11

îŻ

13

15

16

17

18

22

the owner of that well?

A. Garrell Westall.

Q Have you been in contact personally with Mr. Westall?

A. I've talked to Mr. Westall's brother, who is familiar with Mr. Westall's, Garrell Westall's operations and he, Mr. Ray Westall is the one I received the information from.

Q. Did he convey to you any indication that they desired to either replace that water well or to produce from that existing water well in Section 35?

They have no plans to produce that fresh water well.

Q Did you advise him of the proposed application of Flag-Redfern to dispose of produced brines in an unlined surface pit in Section 2?

A. Yes, sir, I did.

Q. And what, if any, objection did he have to that?

A. He had no objection.

Q Going clockwise around, I believe in just about Section 9, there's another -- what appears to be a windmill, is that correct?

A. Yes, sir, it's actually in Section 8, and there is a windmill there.

11

12

13

15

17

18

22

23

Q Describe that for us.

A The only thing I could say is there's a windmill over the hole. There's no water in the tank and the windmill is not active at the time we made the field inspection.

Q Okay. At the time you made your field inspection, Mr. Swendig, was there any evidence of any kind to indicate that that windmill or the facilities around it had been used in the recent past?

A No, sir, there's no indication that it had been used recently.

Q Would you describe for us any other sources of potential fresh water in the area?

A Located to the southwest of the New Mexico

State Lease there is the Lusk Ranch, underlined in yellow.

There's a windmill in Section 28 and a windmill in Section

33 that are active at the time we were there.

Q And that's part of the Lusk Ranch operation?

A. Yes, it's part of the Lusk ranchhouse operation.

Now, have you made an examination or discussed with any individuals or personnel at the State

Engineer's Office for the State of New Mexico, concerning sources of fresh water in the area?

A I've called the State Engineer's Office

7

10

11

12

13

14

15

16

17

18

19

20

21

22

23

in Roswell and talked to Mr. Jim Wright and this area is not in a fresh water -- classified as in a fresh water basin, and their inventory of water does not extend into Section -- or Range 31. They had inventoried Range 32 on the east side, but not into Range 31 East, and his indication was the only fresh water that would be known in this area would be from the Triassic and would be a a depth estimated to be approximately 240 feet.

In your opinion, Mr. Swendig, will disposal of water on the surface in unlined surface pits in any way pose a risk to that particular fresh water formation?

No, sir, I do not believe so.

In your opinion will disposal as proposed by the Applicant in this case run the risk of contaminating any shallow fresh waters areas -- fresh water sources in the area?

No, sir.

In your opinion are there present or reasonably foreseeable beneficial uses that may be made of any fresh water sources in the area that might be contaminated by the subject pit?

No, sir, I don't believe so.

Let me have you look at Exhibit Number Three and identify that.

Exhibit Three is just a location schematic

# SALLY WALTON BOY CHATIFED SHORTHAND REPORT 303 8 PERS BRIDGE (605) 471-8 BRIDGE FF. Now Mondon 8711

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

showing the location of production facilities to the existing well. We have currently a heater-treater and two 210-barrel stock tanks, a 210-barrel fiberglass water tank, and it also shows where we would propose to build a disposal pit, 40-foot by 40-foot, and 6 foot deep.

Q Summarize for me quickly what you'll do once the water gets produced from the well to the time it gets dumped in the disposal pit.

A The oil and water will be separated in the heater-treater and the water will be disposed directly to the pit.

Q Would you describe the general dimensions of that disposal pit and how it would be constructed?

A. It would be 40-foot square and 6-foot deep and --

Q Just bulldoze it out of the ground?

A. Just bulldozed out and levees put up around it. The fence will be -- the pit will be fenced to keep any livestock from getting into the water.

In your examinations of this area, Mr. Swendig, did you see any cattle or other stock in the area?

A No, sir, there was none observed.

Q Would you describe what the general surface of this area is like?

A. It's rolling sand hills with a cover of

Shinnery.

2

10

11

12

13

14

15

16

17

20

21

22

23

24

Q In your opinion, Mr. Swendig, is it economically possible for Flag-Redfern to continue to truck the volumes of water produced to the disposal facility some 20 miles or more away?

A The -- trucking the water makes the wells in the area economically unattractive and if it is necessary to continue trucking water throughout the life of the well, it will probably impair the continued development of the lease and possibly the premature abandonment of the well.

Q Would you please refer to Exhibit Number Four and identify that for us?

Exhibit Number Four is a well information sheet that we discussed previously.

Q And Exhibit Number Five?

A. Exhibit Number Five is just a listing of the information on the three exceptions to the no-pit order in Section 2.

MR. KELLAHIN: If the Examiner please, we'd request the Examiner to take administrative notice of the transcripts and orders entered in those cases listed on Exhibit Number Five.

MR. STAMETS: The Examiner will take administrative notice of those cases.

Q And Exhibit Number Six, Mr. Swendig?

10

11

12

13

14

15

16

17

18

19

21

22

23

	A.	Exhibit Num	ber Six are	water analyses	3,
there	are two se	eparate water	analyses t	aken on the wel	11,
which	are showing	ng the water	to be dispos	sed of to be hi	igh
chlor	ine content	t and to be b	rackish wate	er, high solids	<b>5.</b>

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

A. Yes, sir, I believe it would be.

MR. KELLAHIN: That concludes our examination. Let me ask you about Exhibits One through Six.

Were they prepared by you or subject to your direction and supervision?

A. Yes, they were prepared by me.

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

MR. STAMETS: These exhibits will be ad-

MR. KELLAHIN: That concludes our examination.

### CROSS EXAMINATION

BY MR. STAMETS:

mitted.

May I see the topo sheet?
MR. KELLAHIN: Let me ask you this question.

While we're looking at Exhibit Number Two, Mr. Swendig, what is the general direction of drainage from the water disposed of in unlined pit? What would be the general area of drainage?

A. It would be generally to the south or the southwest.

Q. (Mr. Stamets continuing.) Mr. Swendig, have you investigated the -- any drainage patterns in the area? You indicated it would be south-southwest. Have you studied any of the ground water reports in the area to see --

A. No, sir, I have not. The drainage to the south, it would be just from observation of the general area by our field personnel.

I wonder if any of these cases that were referenced here has drainage information? Did anybody check to see that?

MR. KELLAHIN: I have checked, Mr. Examiner and to the best of my knowledge there is no ground water studies in any of those cases.

MR. STAMETS: Let's go off the record a minute.

(There followed a discussion off the record.)

MR. STAMETS: Okay, let's go back on the

SALLY WALTON BOYD
ENTIRE SHORTHAND REPORTER
1117122 BENICA (10.0) 471-3413
BENICA PO, NOW MOREO, 87101

11

12

13

14

15

16

17

18

19

20

21

22

23

record.

Q Mr. Swendig, does Flag-Redfern have any objection if the Examiner also takes notice of the available ground water reports for Eddy County in reaching a determination in this case?

- A Yes, fine.
- Q You agree?
- A Yes, sir, I agree.
- Q. That that's okay? You have no objection?
- A I have no objection, yes, sir.
- Q Okay. Are there any other questions of this witness? He may be excused.

Anything further in this case?

The case will be taken under advisement.

(Hearing concluded.)

## REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a Court Reporter, DO HEREBY CERTIFY that the foregoing and attached 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.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 457 Oli Conservation Division , Examiner

10

11

12

13

14

20

21

22

23



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

August 17, 1979

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 ISOSI 827-2434

	CASE NO. 6594
Mr. Thomas Kellahin	ORDER NO. R-6083
Kellahin & Kellahin	
Attorneys at Law	Applicant:
Post Office Box 1769	Appricant:
Santa Fe, New Mexico	
	Flag-Redfern Oil Co.
Dear Sir:	
Enclosed herewith are two copies Division order recently entered in	
Yours very truly,	
J. M. Jan	
THE YELLING	
//JOE D. RAMEY	
Director	
Director	
Director /	•
Director /	•
Director	•
Director /	
	•
JDR/fd	
JDR/fd	
JDR/fd Copy of order also sent to:	
JDR/fd Copy of order also sent to: Hobbs OCD x	
JDR/fd Copy of order also sent to: Hobbs OCD x Artesia OCD x	

4'x20' Heater Treater

Well Na I

	210 bbl. Sta	ick Tar
	210 bbl. Stoc	ck Tan
	210 bbl. Wot	er Tan
Disposal Pit		40

DESCRIPTION EX	AMINER STALLEUS RYATION DIVISION
FlagRedpraceXIII	BIT NO. 3
CASE NO.	6594
Submitted by	•
Hearing Date_	11 Jul 79



Flag-Redfern Oil Company

P.O. BOX 27 a BROOM MOST MOST AN

LOCATION SCHEMATIC
NEW MEXICO - STATE No.1

## Well Information

Operator: Flag-Redfern Oil Company

Well Name: New Mexico State No. 1 (LG-2353)

Location: 1980' FWL & 1980' FSL Section 2, T-19-S, R-31-E

Eady County, New Mexico

Field Name: Shugart

Producing Formation: Queen, Grayburg and Premier

Producing Intervals: Queen 3407 - 3456 Grayburg 3899 - 3926 Premier 4039 - 4156

Initial Potential: 2-7-79 Pumped 24 hrs 22 BO 41 BW GOR 545 Gty 33°

Current Production: 6-30-79 Pumped 24 hrs 45 BO 53 BW

	-
BEFORE EXAMINER STAMETS OIL CONSERVATION DIVISION	
CASE NO. 6594	
Submitted by	-
Hearing Date 4 279	-

## Exceptions to Order No. R-3221 Section 2, T-19-S, R-31-E Eddy County, New Mexico

Case No. 5950, Order No. R-5472 Date: June 8, 1977

Operator: Joe Don Cook Lease: State Well No. 1

Location: Unit J, Section 2, T-19-S, R-31-E

Case No. 4408, Order No. R-4015 Date: August 19, 1970

Operator: Keohane and Westall

Lease: State "E"

Location: Lot 4, Section 2, T-19-S, R-31-E

Case No. 4169, Order No. R-3800

Date: July 9, 1969

Operator: Mask, Jennings, Keohane, and Westall

Lease: State

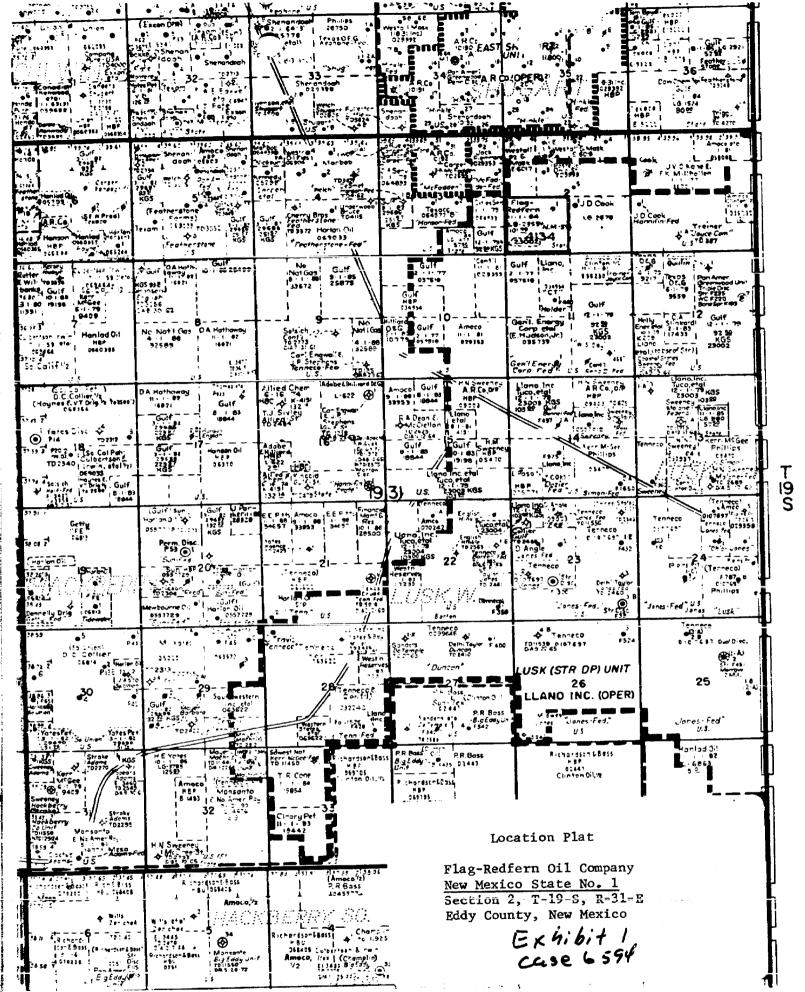
Location: E/2 NW/4 and the NE/4, Section 2, T-19-S, R-31-E

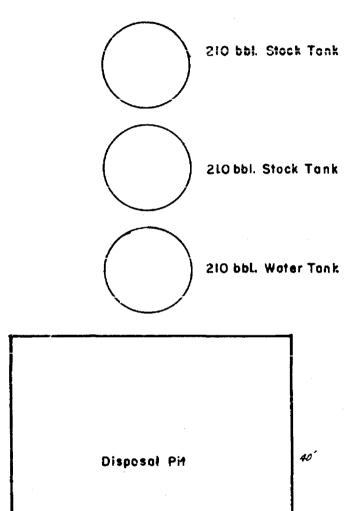
BEFORE EXAMINER STAMETS	į
OIL CONSERVATION DIVISION	
F/AS ROPOWEXHIBIT NO. 5	
CASE NO. 6594	
Submitted by 4	
Hearing Date 11 Jul 29	
Hearing Data	

## FLAG-REDFERN OIL COMPANY NEW MEXICO STATE NO. 1 Water Analysis

	3-23-79	4-19-79
pH Specific Gravity Dissolved Solids Bicarbonate (HCO3) Chlorides (C1) Sulfates (SO4) Calcium (Ca) Magnesium (Mg)	3-23-79 7.01 1.075 104,769 415 62,907 3,125 3,200 4,034 24,600	7,35 1,080 98,063 329 58,000 3,250 7,200 1,944 26,000
Total Hardness (CcCO <sub>3</sub> )	,	

 DEFORE EXAMINER STAMETS CIL CONSERVATION DIVISION
EXHIBIT NO. 6
CASE MO
Submitted by
Hearing Date
· · ·





Ex 4 : b : t 3 case 6594



## Flag-Redfern Oil Company

1308 STALL TOMERS NEST + MIGLAND, TE
P G BOX 23 + PHONE 19154 683-6184

LOCATION SCHEMATIC NEW MEXICO - STATE No.1

## Well Information

Operator: Flag-Redfern Oil Company

Well Name: New Mexico State No. 1 (LG-2353)

Location: 1980' FWL & 1980' FSL Section 2, T-19-S, R-31-E Eddy County, New Mexico

Field Name: Shugart

Producing Formation: Queen, Grayburg and Premier

Producing Intervals: Queen 3407 - 3456 Grayburg 3899 - 3926 Premier 4039 - 4156

Initial Potential: 2-7-79 Pumped 24 hrs 22 BO 41 BW GOR 545 Gty 33°

Current Production: 6-30-79 Pumped 24 hrs 45 BO 53 BW

Exhibit 4 Case 6594

## Exceptions to Order No. R-3221 Section 2, T-19-S, R-31-E Eddy County, New Mexico

Case No. 5950, Order No. R-5472

Date: June 8, 1977 Operator: Joe Don Cook Lease: State Well No. 1

Location: Unit J, Section 2, T-19-S, R-31-E

Case No. 4408, Order No. R-4015

Date: August 19, 1970
Operator: Keohane and Westall

Lease: State "E"

Location: Lot 4, Section 2, T-19-S, R-31-E

Case No. 4169, Order No. R-3800

Date: July 9, 1969

Operator: Mask, Jennings, Keohane, and Westall

Lease: State

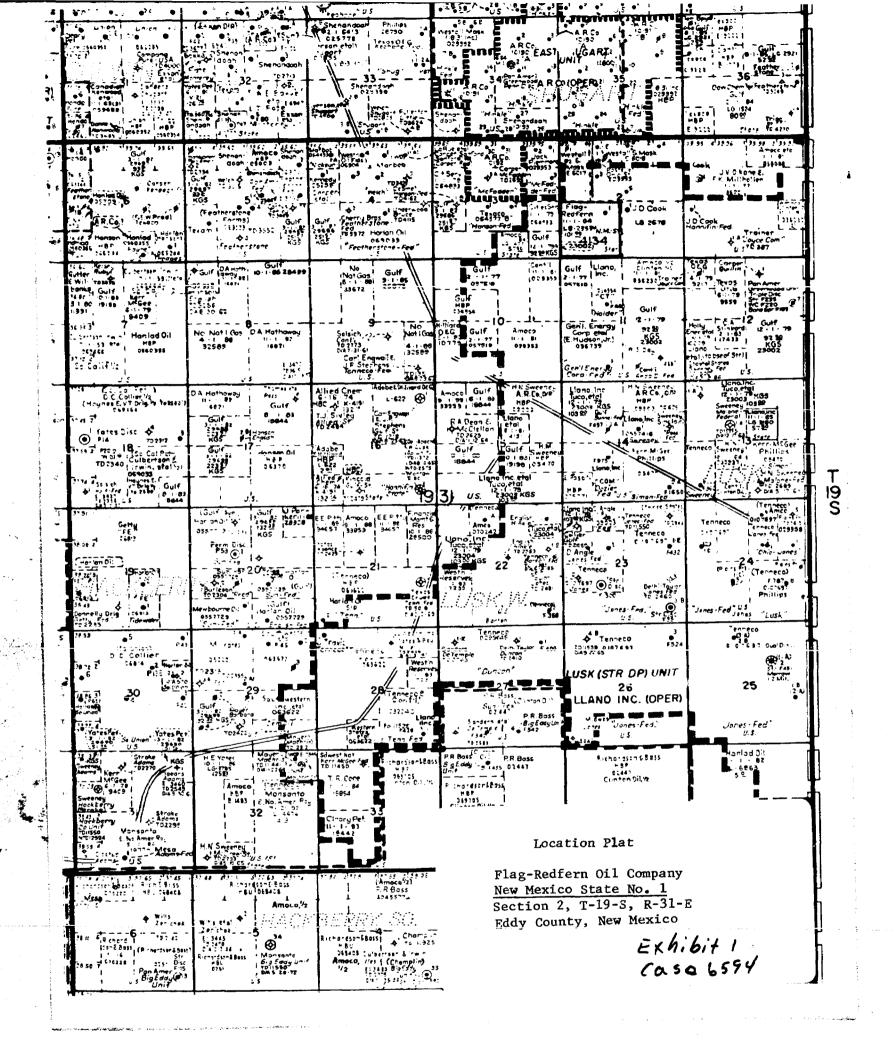
Location: E/2 NW/4 and the NE/4, Section 2, T-19-S, R-31-E

Exhibit 5 Case 6594

## FLAG-REDFERN OIL COMPANY NEW MEXICO STATE NO. 1 Water Analysis

	3-23-79	4-19-79
рн	7.01	7.35
Specific Gravity	1.075	1.080
Dissolved Solids	104,769	98,063
Bicarbonate (HCO3)	415	329
Chlorides (Cl)	62,907	58,000
Sulfates (SO <sub>4</sub> )	3,125	3,250
Calcium (Ca)	3,200	7,200
Magnesium (Mg)	4,034	1,944
Total Hardness (CcCO3)	24,600	26,000

Exhibit 6 Case 4594



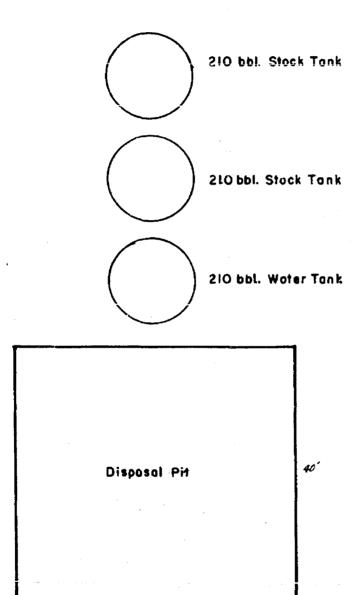


Exhibit 3 case 6594



flag-Redfern Oil Company

THE ROLL TOWNERS WEST THE TANK OF THE PARTY 
LOCATION SCHEMATIC
NEW MEXICO - STATE No.I

## Well Information

Operator: Flag-Redfern Oil Company

Well Name: New Mexico State No. 1 (LG-2353)

Location: 1980' FWL & 1980' FSL Section 2, T-19-S, R-31-E

Eddy County, New Mexico

Field Name: Shugart

Producing Formation: Queen, Grayburg and Premier

Producing Intervals: Queen 3407 - 3456

Grayburg 3899 - 3926 Premier 4039 - 4156

Initial Potential: 2-7-79 Pumped 24 hrs 22 BO 41 BW GOR 545 Gty 33°

Current Production: 6-30-79 Pumped 24 hrs 45 BO 53 BW

Exhibit 4 case 6594

## Exceptions to Order No. R-3221 Section 2, T-19-S, R-31-E Eddy County, New Mexico

Case No. 5950, Order No. R-5472

Date: June 8, 1977 Operator: Joe Don Cook

Lease: State Well No. 1 Location: Unit J, Section 2, T-19-S, R-31-E

Case No. 4408, Order No. R-4015 Date: August 19, 1970

Operator: Keohane and Westall

Lease: State "F"

Location: Lot 4, Section 2, T-19-S, R-31-E

Case No. 4169, Order No. R-3800

Date: July 9, 1969

Operator: Mask, Jennings, Keohane, and Westall

Lease: State

Location: E/2 NW/4 and the NE/4, Section 2, T-19-S, R-31-E

Exhibit 5 case 6594

## FLAG-REDFERN OIL COMPANY NEW MEXICO STATE NO. 1 Water Analysis

	3-23-79	4-19-79
На	7.01	7.35
Specific Gravity	1.075	1.080
Dissolved Solids	1.04,769	98,063
Bicarbonate (HCO3)	415	329
Chlorides (Cl)	62,907	58,000
Sulfates (SO <sub>4</sub> )	3,1 <b>2</b> 5	3,250
Calcium (Ca)	3,200	7,200
Magnesium (Mg)	4,034	1,944
Total Hardness (CcCO <sub>3</sub> )	24,600	26,000

Ex4; bi + 6 case 6594

- Application of Grace Petroleum Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying Lots 9, 10, 15, and 16 and the SE/4 of Section 6, Township 21 South, Range 32 East, to be dedicated to a well to be drilled at an unorthodox location 4650 feet from the South line and 660 feet from the East line of said Section 6. Also to be considered will be the cost of drilling and completing said well and the allocation of the costs 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.
- Application of Exxon Corporation for vertical pool limit redefinition, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks an order extending the vertical limits of the Langlie Mattix Pool to include the lowermost 165 feet of the Seven Rivers formation and the concomitant contraction of the vertical limits of the Jalmat Gas Pool underlying the NE/4 of Section 2, Township 24 South, Range 36 East.
- CASE 6592: Application of Maddox Energy Corporation for a dual completion, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the dual completion of its Malaga Well No.

  1 located in Unit G of Section 3, Township 24 South, Range 28 East, to produce gas from the Atoka and Morrow formations through parallel strings of tubing.
- CASE 6593: Application of Dyco Petroleum Corporation for salt water disposal, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the San Andres, Giorieta and Tubb formations in the open-hole interval from 4894 feet to 8725 feet in its C. S. Stone Well No. 3 located in Unit F of Section 22, Township 15 South, Range 38 East, Medicine Rock-Devonian Pool.
- CASE 6594: Application of Flag-Redfern Oil Co. for an exception to Order No. R-3221, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks an exception to Order No. R-3221 to permit disposal of produced brine in an unlined surface pit located in Unit K, Section 2, Township 19 South, Range 31 East, Shugart Field.
- Application of Stevens Oil Company for compulsory pooling, Chaves County, New Mexico.

  Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres formation underlying the NW/4 SW/4 of Section 30, Township 8 South, Range 29 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. 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 6270: (Reopened and Readvertised)

In the matter of Case 6270 being reopened pursuant to the provisions of Order No. R-5771 which order created the South Peterson-Fusselman Pool, Roosevelt County, New Mexico, and provided for 80-acre spacing. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

\*

Docket No. 26-79

#### DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 18, 1979

9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

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

- ALLOWABLE: (1) Consideration of the allowable production of gas for August, 1979, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
  - (2) Consideration of the allowable production of gas for August, 1979, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

Dockets Nos. 27-79 and 28-79 are tentatively set for hearing on July 25 and August 8, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

#### DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 11, 1979

9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

- The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:
- CASE 6583: Application of Amoco Production Company for downhole commingling, Rio Arriba County, New Mexico.

  Applicant, in the above-styled cause, sacks approval for the downhole commingling of B.S. Mesa-Gallup and Basin-Dakota production in the wellbore of its Jicarilla Apache 102 Well No. 13 located in Unit B of Section 10, Township 26 North, Range 4 West.
- Application of Texas Oil & Gas Corp. for an unorthodox gas well location, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Shugart State
  Com. Well No. 2 660 feet from the South line and 1930 feet from the East line of Section 16, Township
  18 South, Range 31 East, to test the Wolfcamp through Mississippian formations, the E/2 of said
  Section 16 to be dedicated to the well.
- CASE 5574: (Continued from June 13, 1979, Examiner Hearing)

Application of Texas Oil & Gas Corp. for an unorthodox gas well location and compulsory pooling, lea County. New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp through Morrow formations underlying the F/2 of Section 6, Township 17 South, Range 35 East, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South and East lines of said Section 6. 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 6563: (Continued from June 27, 1979, Examiner Hearing)
  - Application of Roy L. McKay for a unit agreement, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks approval for his North Woolworth Ranch Unit Area, comprising 1,280 acres, more or less, of State lands in Township 23 South, Range 35 East.
- CASE 6585: Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the downhole commingling of undesignated

  Fruitland and West Kutz-Pictured Cliffs production in the wellbores of its Paul Wells Nos. 1 and 2

  located in Units G and C of Section 19, Township 27 North, Range 11 West.
- CASE 6586: Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the downhole commingling of Conner-Fruitland and undesignated Pictured Cliffs production in the wellbores of the following wells: Big Field Well

  No. 2 in Unit C of Section 3; Big Field Well No. 5 in Unit P of Section 10; Dinero Well No. 1 in Unit

  H of Section 13; and Molly Pitcher Well No. 2 in Unit H of Section 14, all in Township 30 North,

  Range 14 West.
- Application of Caribou Four Corners, Inc., for three unorthodox well locations, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox locations of the following wells in the Cha-Gallup Pool: Kirtland Wells Nos. 3 and 4 located 730 feet from the North line and 2250 feet from the East line and 1450 feet from the North line and 595 feet from the East line, respectively, of Section 18, Township 29 North, Range 14 West; and Kirtland Well No. 2 260 feet from the North line and 2100 feet from the East line of Section 13, Township 29 North, Range 15 West.
- Application of Caribou Four Corners, Inc., for a non-standard proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 64.32-acre non-standard oil proration unit comprising the NW/4 NW/4 and that part of Lot 5 lying north of the San Juan River, all in Section 18, Township 29 North, Range 14 West, Cha Cha-Gallup Oil Pool.
- Application of Atlantic Richfield Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its State "BV" No. 2 Well 2109 feet from the North line and 1778 feet from the West line of Section 25. Township 17 South, Range 28 East, to test the Morrow formation, the N/2 of said Section 25 to be dedicated to the well.



Flag-Redfern Oil Company

ALI. TOWERS WEST

PHONE (915) 683-5184



Case 6594

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

Gentlemen:

Flag-Redfern Oil Company requests a hearing before the Commission seeking an exception to Order No. R-3221 to allow for disposal of produced water in an unlined surface pit. This pit would serve Flag-Redfern's New Mexico State Well No. 1 located in Unit K, Section 2, Township 19 South, Range 31 East, Eddy Courty, New Mexico. The well is currently producing 38 barrels of oil and 60 barrels of water per day.

Thank you for your consideration.

Very truly yours,

John H. Swendig

JHS/dlp

ROUGH

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

dr/

N THE MATTER OF THE HEARING NOTICED BY THE OIL CONSERVATION IVISION FOR THE PURPOSE OF

CONSIDERING:
CASE NO. 6594
ORDER NO. R- 6083
APPLICATION OF FLAG-REDFERN OIL CO.
FOR AN EXCEPTION TO ORDER NO. R-3221, AS AMENDED, EDDY COUNTY,
NEW MEXICO.
ORDER OF THE DIVISION
BY THE DIVISION:
This cause came on for hearing at 9 a.m. onJuly 11
19 79 , at Santa Fe, New Mexico, before Examiner Richard L. Stamets
NOW, on this day of Suly, 19 79, 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, Flag-Redfern Oil Co. , is
the owner and operator of the New Mexico State lease,
located in Unit K of Section 2, Township 19 South
Range 31 East , NMPM, Shugart Field, XXPXXXXX
Eddy County, New Mexico.
(3) That Order (3) of Division Order No. R-3221, as amended,
prohibits in that area encompassed by Lea, Eddy, Chaves, and
Roosevelt Counties, New Mexico, the disposal, subject to minor
exceptions, of water produced in conjunction with the production
of oil or gas, or both, on the surface of the ground, or in any
pit, pond, lake, depression, draw, streambed, or arroyo, or in

any watercourse, or in any other place or in any manner which

would constitute a hazard to any fresh water supplies and said

disposal has not previously been prohibited.

- (4) That the aforesaid Order No. R-3221 was issued in the to afford reasonable protection against contamination of fresh water supplies designated by the State Engineer through disposa. of water produced in conjunction with the production of oil or gas, or both, in unlined surface pits.
- (5) That the State Engineer has designated, pursuant to 70-2-12 (15) Section -65-3-11 (15) 1978 (15), N.M.S.A., 1953 Compilation, all underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids as fresh water supplies to be afforded reasonable protection against contamination; except that said designation does not include any water for which there is ry present or reasonably foreseeable beneficial use that would be impaired by contamination.
- (6) That the applicant seeks as an exception to the provisions of the aforesaid Order (3) to permit the disposal of salt wells located on the water produced by applicant's pabove-described well into an unling surface pit located in Unit K of said Section 2

- New Maxico State Well No I located in Whit K of said South produces approximately 50 barrels of water per day.
  - (8) That there appears to be no shallow fresh water in the vicinity of the subject pit for which a present or reasonably foreseeable beneficial use is or will be made that would be impaired by contamination from the subject pit.
  - That approval of the subject application will not cause waste nor impair correlative rights, and the applicant should be permitted to dispose of water produced from said State Well No. 3 in an unlined surface pit on said lease until further order of the sion. Division.

xxxxxxx xs such that reinjection of produced water into said reservoix would result in greater ultimate recovery of oil and gas therefrom thereby preventing waste

(10) That to prevent the waste of cil and gas in said Shugart Field xxxxxxxx, permanent authority to dispose of produced water from applicant's \_in an unlined surface pat on said lease should be granted.

(11) That the applicant should be remitted to dispose of water produced from said in an unlined surface pit on said lease until

- hereby granted an exception to Order (3) of Division Order No.

  R-3221; as amended, to dispose of water produced in conjunction with the production of oil or gas, or both, from its New Mexico

  Township 19 South Range 31 East NMPM,

  Shugart Field XXXXXXXXXXIII Eddy County, New Mexico, in an unlined surface pit located in Unit K of said Section 2
- (2) That the Director of the Division may by administrative order rescind such authority whenever it reasonably appears to the Director that such a scission would serve to protect fresh water supplies from contamination.
- (3) 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.