

CASE 7183: ELAC-SOUTHERN OIL COMPANY FOR
AN UNDEVELOPED GAS WELL LOCATION, LEA
COUNTY, NEW MEXICO

Case No.

7183

Application

Transcripts

Small Exhibits

ETC



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

July 1, 1981

POST OFFICE BOX 2086
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

Flag-Redfern Oil Company
P. O. Box 2280
Midland, Texas 79702

Attention: Mr. Byron H. Greaves

Re: Amended location
R-6640

Gentlemen:

Reference is made to your letter dated June 12, 1981, wherein you advise that the location for your Osudo State Com. Well No. 2, as approved by Order No. R-6640 at a point 990 feet from the North line and 990 feet from the East line of Section 18, Township 20 South, Range 36 East, NMPM, North Osudo-Morrow Gas Pool, Lea County, New Mexico, was not suitable and that you desired to move the location to a point 1650 feet from the North line and 990 feet from the East line of said Section 18.

Inasmuch as the new location is less unorthodox than the old location, and you accompanied your letter with waivers of objection from the only offset operator, Jake L. Hamon, your request is hereby approved and the location 1650 feet from the North line and 990 feet from the East line may be drilled.

Yours very truly,

JOE D. RAMEY
Director

JDR/DSN/fd

cc: OCD Hobbs
Jake L. Hamon
611 The Petroleum Building
Midland, Texas 79701
✓ Case File 7183

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO

25 March 1981

EXAMINER HEARING

IN THE MATTER OF:

Application of Flag-Redfern Oil Com-
pany for an unorthodox gas well
location, Lea County, New Mexico.

CASE
7183

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

William F. Carr, Esq.
CAMPBELL, BYRD, & BLACK P.A.
Jefferson Place
Santa Fe, New Mexico 87501

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

2

I N D E X

GERALD L. SCOTT

| | |
|---------------------------------|---|
| Direct Examination by Mr. Carr | 3 |
| Cross Examination by Mr. Nutter | 9 |

JOHN H. SWENDIG

| | |
|---------------------------------|----|
| Direct Examination by Mr. Carr | 11 |
| Cross Examination by Mr. Nutter | 15 |

E X H I B I T S

| | |
|---|----|
| Applicant Exhibit One, Plat | 5 |
| Applicant Exhibit Two, Map | 6 |
| Applicant Exhibit Three, Cross Section | 6 |
| Applicant Exhibit Four, Data | 8 |
| Applicant Exhibit Five, Structure Map | 8 |
| Applicant Exhibit Six, List | 12 |
| Applicant Exhibit Seven, Monthly Production | 13 |
| Applicant Exhibit Eight, Production History | 13 |

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

MR. NUTTER: We'll call Case Number
7183.

MR. PADILLA: Application of Flag-Redfern
Oil Company for an unorthodox gas well location, Lea County,
New Mexico.

MR. CARR: May it please the Examiner,
my name is William F. Carr, with the law firm Campbell, Byrd,
and Black, P. A., in Santa Fe. I'm appearing on behalf of
Flag-Redfern Oil Company.

I have two witnesses who need to be
sworn.

(Witnesses sworn.)

MR. CARR: I'd call Mr. Scott.

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

DIRECT EXAMINATION

BY MR. CARR:

Q Will you state your full name and place
of residence?

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A Gerald L. Scott, Midland, Texas.

Q Mr. Scott, by whom are you employed and
in what capacity?

A Flag-Redfern Oil Company, Exploration
Geologist.

Q Have you previously testified before
this Commission?

A No, I have not.

Q Would you briefly summarize for the
Examiner your educational background and your work experience?

A I have an MS degree from the University
of Wisconsin in '57 and a PhD in 1960.

I spent eighteen and a half years with
Shell Oil Company in exploration and the past two and a half
years with Flag-Redfern.

Q Are you familiar with the application
filed in this case?

A Yes, sir.

Q Are you familiar with the subject area?

A Yes, sir.

MR. CARR: Are the witness' qualifica-
tions acceptable?

MR. NUTTER: They are.

Q Mr. Scott, will you briefly state what

1

2 Flag-Redfern seeks with this application?

3

A. We are seeking an unorthodox location
4 in Section 18 of the Osudo North Morrow Field and the principal
5 reason for seeking this location is that our initial well, we
6 seem to have found one of the tightest Morrow sand sections
7 in the general area and we would like to get as remote as
8 possible from this tight area but still maintain as good a
9 structural position as possible.

10

Q Will you please refer to what has been
11 marked for identification as Applicant's Exhibit Number One
12 and review this for Mr. Nutter?

13

A. Exhibit Number One is an ownership map
14 and -- in the Osudo North area, and also shows with the yellow
15 highlighted wells, the Morrow producers in North Osudo Field.

16

Q Is the proposed well indicated?

17

A. Yes, it's indicated in red.

18

Q And the acreage that will be dedicated
19 to that well is also in red?

20

A. Yes, sir.

21

Q How many wells in this immediate area that
22 are in this pool are drilled at unorthodox locations?

23

A. I believe, to my recollection, all but
24 two.

25

Q In Section 17 there is a well in the

1
2 southeast quarter that has a number three beside it. Could
3 you tell me what the status of that well is?

4 A That is a currently drilling well. It
5 will be a Morrow test.

6 Q Is it at a standard location?

7 A No, it is not.

8 Q Will you now refer to Applicant's Exhibit
9 Number Two and review this for Mr. Nutter?

10 A Exhibit Number Two is a net sand map of
11 the total Morrow Clastic section and it is an extremely
12 generalized map and, of course, does not depict the true
13 nature of the several sand bodies but it does represent
14 several stacked sand bodies and is very general. It simply
15 shows that the sands are thicker in the west and the sand
16 package grossly thins to the east.

17 Q What is the green line shown on this
18 exhibit?

19 A The green line is the line of strati-
20 graphic cross section.

21 Q And is that cross section your Exhibit
22 Number Three?

23 A Yes, it is.

24 Q Will you refer to that and summarize
25 the data contained thereon?

1
2 A Basically this cross section is displayed
3 to indicate the highly erratic nature of the Morrow deltaic
4 sands in the area. They -- the several sand bodies are often
5 not continuous over great distances. Even the sand bodies
6 that are depicted as being somewhat continuous have rather
7 great porosity and permeability variations within the --

8 MR. NUTTER: Excuse me, Mr. Scott, this
9 runs south to north as read from left to right?

10 A Yes.

11 MR. CARR: That's right.

12 MR. NUTTER: So we'll call south "A"
13 or "A'" over yonder. Okay, go ahead.

14 A The several producing sand zones are
15 shown on this stratigraphic section and indicate the -- the
16 variable nature of the porosity and permeability as -- as
17 shown by the operator's intentions or how they completed the
18 various wells, what they thought of the sand units.

19 And as you can see in a couple of the
20 wells, they completed in almost all the sand units, or attempted
21 completion, and were very selective in only one or two sand
22 bodies in the several other wells.

23 I think it again just shows the very
24 erratic nature of the Morrow sands.

25 Q Will you now refer to Exhibit Number

1
2 Four and review this for Mr. Nutter?

3 A Exhibit Number Four is -- shows some
4 of the -- or basically the drill stem test pressure data and
5 early production testing pressure data in the several wells
6 in the North Osudo Morrow Field, and over -- the discovery
7 well was the well in the south half of Section -- or I mean
8 the north half of Section 20, northeast or northwest quarter
9 of Section 20, discovered in '65, and drilling has been
10 spasmodic since that period up until current date.

11 What I wanted to show here was that over
12 that time the wells -- the pressure data by and large indicates
13 slight over pressuring, if any, of -- of almost all of the
14 field wells, and to us indicates that probably the well, the
15 several sand bodies are very discontinuous, and not of a
16 blanket type.

17 Q All right, Mr. Scott, will you now go
18 to Applicant's Exhibit Number Five?

19 A This exhibit is simply a structure map
20 on the top of the Morrow Clastics and is exhibited to show
21 that we, although we would like to get as far as possible from
22 this tight sand area that we encountered in our first well,
23 we would still like to maintain as favorable a structural
24 position as we could.

25 And that position is shown circled in

1
2 red and the location we're requesting.

3 Q Mr. Scott, were Exhibits One through
4 Five prepared by you?

5 A Yes, sir.

6 MR. CARR: At this time, Mr. Nutter, we
7 would offer into evidence applicant's Exhibits One through
8 Five.

9 MR. NUTTER: Applicant's Exhibits One
10 through Five will be admitted in evidence.

11 MR. CARR: I have nothing further of
12 Mr. Scott on direct.

13
14 CROSS EXAMINATION

15 BY MR. NUTTER:

16 Q Now, Mr. Scott, on that cross section
17 you have logs on all but one of the wells, and it was just
18 shown as a stick diagram.

19 A Yes. That was a well that they had
20 problems with. It tried to blow out on them and they could
21 not run logs and the data on that is the tops are picked
22 from sample logs, mud log, and in part operator tops.

23 Q I believe that's the well that's east/
24 southeast of your proposed location, is that correct?

25 It's the Hamon Amerada Federal 2?

1
2 A The well is in the north half of Section
3 17.

4 Q Right. Was it completed as a pretty
5 good well, then?

6 A Yes, it was. On that -- if you're
7 looking -- no, you don't --

8 Q I've already folded up the cross section.

9 A Okay. That well had an IPF of 27 million.
10 And over a six month history it has -- has a cumulative of
11 0.92 Bcf and 12,700 barrels of liquids.

12 Q Okay, now the well that's in the south-
13 east quarter of Section 18, I presume that all of Section 18
14 is presently dedicated to the well?

15 A Yes. Yes.

16 Q And you would simultaneously -- do you
17 plan to plug that well out when this well is drilled or would
18 you complete -- produce both of them simultaneously?

19 A We would produce both of them.

20 Q Okay. What's the cumulative production
21 on that well?

22 A That well has been a very poor well.
23 It has a cumulative to 10 of 80 of 0.20 Bcf.

24 Q Zero --

25 A .20.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q .20.

A And that's over -- since it was -- it
was completed in 1977.

Q Now, let's see, that would be 200 million,
wouldn't it?

A Yes.

Q Okay. And that's been since 1977.

A Yes, sir.

MR. NUTTER: Are there any other ques-
tions of Mr. Scott? He may be excused.

MR. CARR: I'll call Mr. Swendig.

JOHN H. SWENDIG

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

DIRECT EXAMINATION

BY MR. CARR:

Q Will you state your full name and place
of residence?

A John H. Swendig, Midland, Texas.

Q By whom are you employed and in what
capacity?

A I'm employed by Flag-Redern Oil Company

1
2 as a drilling superintendent.

3 A Have you previously testified before
4 this Commission or one of its Examiners and had your creden-
5 tials as a petroleum engineer accepted and made a matter of
6 record?

7 A Yes, I have.

8 Q Are you familiar with the application
9 of Flag-Redfern in this case and the subject area?

10 A Yes.

11 MR. CARR: Are the witness' qualifications
12 acceptable?

13 A They are.

14 Q Will you look at what has been identified
15 as Applicant's Exhibit Number Six and review this for Mr.
16 Nutter?

17 A Exhibit Six is just a sheet listing
18 some well information on the Osudo State Com No. 1, located
19 in Section 18, showing the well was drilled in 1975 - 1976 to
20 a depth of 11,700 feet.

21 It was completed with perforations from
22 11,509 to 519. It was acidized and fracture treated. The
23 original bottom hole pressure was 5560 psi after 46-1/2 hour
24 shutin. Initial tubing pressure of 4228. Initial potential
25 of the well was 222 Mcf per day and to 1-1-81 the cumulative

1
2 production has been 208,000 Mcf.

3 Q Will you now refer to Exhibit Number
4 Seven and review this for the Examiner?

5 A Exhibit Seven is the monthly production
6 of the Osudo State Com No. 1 from January, 1977, to the
7 present.

8 Q And will you now refer to your Exhibit
9 Number Eight?

10 A Exhibit Number Eight is a production
11 history of three wells in the immediate vicinity, or three
12 of the older wells in the North Osudo Field; The Hamon State
13 "E", the Amerada Federal No. 1, and the Hamon Union State,
14 and this exhibit is included to show the initial shutin pres-
15 sures as reported by the operators and the pressure decline
16 and the production cumulatives for those wells.

17 Of note is the very high initial shut-
18 in pressures, the very rapid decline in tubing pressure, and
19 the fact that during the first year production almost half
20 of the total cumulative production of the wells has been
21 recovered during the first year.

22 Q Based on this data would you conclude
23 that the wells are drilling -- are draining a relatively
24 limited area?

25 A Yes, this reinforces the -- Mr. Scott's

1
2 testimony that the sands are erratic and discontinuous.

3 Q In your opinion would granting this
4 application impair the correlative rights of any other operator
5 in the immediate area?

6 A No, it would not.

7 Q Would it be in the best interest of
8 conservation and the prevention of waste?

9 A I believe it would be.

10 Q Have you given notice to the offsetting
11 operators of this hearing today?

12 A Yes, sir, I have.

13 Q Have you talked with any of the operators
14 personally?

15 A Only with the Hamon personnel, and they
16 have not entered any objection to our application.

17 Q You did give notice to the operators to
18 the north?

19 A Yes, to Samedan.

20 Q Mr. Swendig, were Exhibits Six through
21 Eight prepared by you?

22 A Yes, they were.

23 MR. CARR: At this time, Mr. Nutter we
24 would offer Applicant's Exhibits Six through Eight.

25 MR. NUTTER: Exhibits Six through Eight

1
2 will be admitted in evidence.

3 MR. CARR: I have nothing further on
4 direct.

5
6 CROSS EXAMINATION

7 BY MR. NUTTER:

8 Q Mr. Swendig, apparently your existing
9 well is -- the Osudo State Com 1, started out producing approx-
10 imately 200 Mcf per day and it's declined down to where it
11 has been producing about 100 Mcf per day --

12 A Yes, sir.

13 Q -- for quite awhile now.

14 A This is true.

15 Q Do you feel like it's time to try to
16 get some more gas out of this unit?

17 A Well, we've, as Mr. Scott said, we've
18 drilled into a very tight area. I neglected to mention that
19 on our initial completion we did run a bottom hole pressure
20 buildup test and the buildup test indicated we had less than
21 0.1 millidarcy permeability after treating.

22 Q Well now, the well was treated with a
23 fairly substantial fracture job, but I think they're probably
24 using a little bit heavier stimulation on some of these Morrow
25 wells now than they were then, aren't they?

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A. I would suspect so. Yes, sir, they've gone to much larger stimulation treatments than what we were doing in '75 - '76.

Q Has this well ever been reworked?

A. No, sir, it has not. This is still the original completion.

MR. NUTTER: Are there any further questions of Mr. Swendig? He may be excused.

Do you have anything further, Mr. Carr?

MR. CARR: Nothing further, Mr. Nutter.

MR. NUTTER: Does anyone have anything they wish to offer in Case Number 7183?

We'll take the case under advisement.

(Hearing concluded.)

C E R T I F I C A T E

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

Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 7183 heard by me on 3/26 1981.
[Signature], Examiner
 Oil Conservation Division

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
 Santa Fe, New Mexico 87501
 Phone (505) 455-7409

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO

25 March 1981

EXAMINER HEARING

IN THE MATTER OF:

Application of Flag-Redfern Oil Com-
pany for an unorthodox gas well
location, Lea County, New Mexico.

CASE
7183

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

William F. Carr, Esq.
CAMPBELL, BYRD, & BLACK P.A.
Jefferson Place
Santa Fe, New Mexico 87501

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

2

I N D E X

GERALD L. SCOTT

| | |
|---------------------------------|---|
| Direct Examination by Mr. Carr | 3 |
| Cross Examination by Mr. Nutter | 9 |

JOHN H. SWENDIG

| | |
|---------------------------------|----|
| Direct Examination by Mr. Carr | 11 |
| Cross Examination by Mr. Nutter | 15 |

E X H I B I T S

| | |
|---|----|
| Applicant Exhibit One, Plat | 5 |
| Applicant Exhibit Two, Map | 6 |
| Applicant Exhibit Three, Cross Section | 6 |
| Applicant Exhibit Four, Data | 8 |
| Applicant Exhibit Five, Structure Map | 8 |
| Applicant Exhibit Six, List | 12 |
| Applicant Exhibit Seven, Monthly Production | 13 |
| Applicant Exhibit Eight, Production History | 13 |

1
2 MR. NUTTER: We'll call Case Number
3 7183.

4 MR. PADILLA: Application of Flag-Redfern
5 Oil Company for an unorthodox gas well location, Lea County,
6 New Mexico.

7 MR. CARR: May it please the Examiner,
8 my name is William F. Carr, with the law firm Campbell, Byrd,
9 and Black, P. A., in Santa Fe. I'm appearing on behalf of
10 Flag-Redfern Oil Company.

11 I have two witnesses who need to be
12 sworn.

13
14 (Witnesses sworn.)

15
16 MR. CARR: I'd call Mr. Scott.

17
18 GERALD L. SCOTT
19 being called as a witness and being duly sworn upon his oath,
20 testified as follows to-wit:

21
22 DIRECT EXAMINATION

23 BY MR. CARR:

24 Q Will you state your full name and place
25 of residence?

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A Gerald L. Scott, Midland, Texas.

Q Mr. Scott, by whom are you employed and
in what capacity?

A Flag-Redfern Oil Company, Exploration
Geologist.

Q Have you previously testified before
this Commission?

A No, I have not.

Q Would you briefly summarize for the
Examiner your educational background and your work experience?

A I have an MS degree from the University
of Wisconsin in '57 and a Phd in 1960.

I spent eighteen and a half years with
Shell Oil Company in exploration and the past two and a half
years with Flag-Redfern.

Q Are you familiar with the application
filed in this case?

A Yes, sir.

Q Are you familiar with the subject area?

A Yes, sir.

MR. CARR: Are the witness' qualifica-
tions acceptable?

MR. NUTTER: They are.

Q Mr. Scott, will you briefly state what

1

2

Flag-Radfern seeks with this application?

3

A

4

We are seeking an unorthodox location in Section 18 of the Osudo North Morrow Field and the principal reason for seeking this location is that our initial well, we seem to have found one of the tightest Morrow sand sections in the general area and we would like to get as remote as possible from this tight area but still maintain as good a structural position as possible.

10

Q

11

Will you please refer to what has been marked for identification as Applicant's Exhibit Number One and review this for Mr. Nutter?

12

13

A

14

Exhibit Number One is an ownership map and -- in the Osudo North area, and also shows with the yellow highlighted wells, the Morrow producers in North Osudo Field.

15

16

Q

17

Is the proposed well indicated?

18

A

19

Yes, it's indicated in red.

20

Q

21

And the acreage that will be dedicated to that well is also in red?

22

A

23

How many wells in this immediate area that are in this pool are drilled at unorthodox locations?

24

A

25

I believe, to my recollection, all but two.

Q

In Section 17 there is a well in the

1
2 southeast quarter that has a number three beside it. Could
3 you tell me what the status of that well is?

4 A That is a currently drilling well. It
5 will be a Morrow test.

6 Q Is it at a standard location?

7 A No, it is not.

8 Q Will you now refer to Applicant's Exhibit
9 Number Two and review this for Mr. Nutter?

10 A Exhibit Number Two is a net sand map of
11 the total Morrow Clastic section and it is an extremely
12 generalized map and, of course, does not depict the true
13 nature of the several sand bodies but it does represent
14 several stacked sand bodies and is very general. It simply
15 shows that the sands are thicker in the west and the sand
16 package grossly thins to the east.

17 Q What is the green line shown on this
18 exhibit?

19 A The green line is the line of strati-
20 graphic cross section.

21 Q And is that cross section your Exhibit
22 Number Three?

23 A Yes, it is.

24 Q Will you refer to that and summarize
25 the data contained thereon?

1
2 A Basically this cross section is displayed
3 to indicate the highly erratic nature of the Morrow deltaic
4 sands in the area. They -- the several sand bodies are often
5 not continuous over great distances. Even the sand bodies
6 that are depicted as being somewhat continuous have rather
7 great porosity and permeability variations within the --

8 MR. NUTTER: Excuse me, Mr. Scott, this
9 runs south to north as read from left to right?

10 A Yes.

11 MR. CARR: That's right.

12 MR. NUTTER: So we'll call south "A"
13 or "A'" over yonder. Okay, go ahead.

14 A The several producing sand zones are
15 shown on this stratigraphic section and indicate the -- the
16 variable nature of the porosity and permeability as -- as
17 shown by the operator's intentions or how they completed the
18 various wells, what they thought of the sand units.

19 And as you can see in a couple of the
20 wells, they completed in almost all the sand units, or attempted
21 completion, and were very selective in only one or two sand
22 bodies in the several other wells.

23 I think it again just shows the very
24 erratic nature of the Morrow sands.

25 Q Will you now refer to Exhibit Number

Four and review this for Mr. Nutter?

A Exhibit Number Four is -- shows some of the -- or basically the drill stem test pressure data and early production testing pressure data in the several wells in the North Osudo Morrow Field, and over -- the discovery well was the well in the south half of Section -- or I mean the north half of Section 20, northeast or northwest quarter of Section 20, discovered in '65, and drilling has been spasmodic since that period up until current date.

What I wanted to show here was that over that time the wells -- the pressure data by and large indicates slight over pressuring, if any, of -- of almost all of the field wells, and to us indicates that probably the well, the several sand bodies are very discontinuous, and not of a blanket type.

Q All right, Mr. Scott, will you now go to Applicant's Exhibit Number Five?

A This exhibit is simply a structure map on the top of the Morrow Clastics and is exhibited to show that we, although we would like to get as far as possible from this tight sand area that we encountered in our first well, we would still like to maintain as favorable a structural position as we could.

And that position is shown circled in

1
2 red and the location we're requesting.

3 Q Mr. Scott, were Exhibits One through
4 Five prepared by you?

5 A Yes, sir.

6 MR. CARR: At this time, Mr. Nutter, we
7 would offer into evidence applicant's Exhibits One through
8 Five.

9 MR. NUTTER: Applicant's Exhibits One
10 through Five will be admitted in evidence.

11 MR. CARR: I have nothing further of
12 Mr. Scott on direct.

13
14 CROSS EXAMINATION

15 BY MR. NUTTER:

16 Q Now, Mr. Scott, on that cross section
17 you have logs on all but one of the wells, and it was just
18 shown as a stick diagram.

19 A Yes. That was a well that they had
20 problems with. It tried to blow out on them and they could
21 not run logs and the data on that is the tops are picked
22 from sample logs, mud log, and in part operator tops.

23 Q I believe that's the well that's east/
24 southeast of your proposed location, is that correct?

25 It's the Hamon Amerada Federal 2?

1
2 A The well is in the north half of Section
3 17.

4 Q Right. Was it completed as a pretty
5 good well, then?

6 A Yes, it was. On that -- if you're
7 looking -- no, you don't --

8 Q I've already folded up the cross section.

9 A Okay. That well had an IPF of 27 millic
10 And over a six month history it has -- has a cumulative of
11 0.92 Bcf and 12,700 barrels of liquids.

12 Q Okay, now the well that's in the south-
13 east quarter of Section 18, I presume that all of Section 18
14 is presently dedicated to the well?

15 A Yes. Yes.

16 Q And you would simultaneously -- do you
17 plan to plug that well out when this well is drilled or would
18 you complete -- produce both of them simultaneously?

19 A We would produce both of them.

20 Q Okay. What's the cumulative production
21 on that well?

22 A That well has been a very poor well.
23 It has a cumulative to 10 of 80 of 0.20 Bcf.

24 Q Zero --

25 A .20.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q .20.

A And that's over -- since it was -- it
was completed in 1977.

Q Now, let's see, that would be 200 million,
wouldn't it?

A Yes.

Q Okay. And that's been since 1977.

A Yes, sir.

MR. NUTTER: Are there any other ques
tions of Mr. Scott? He may be excused.

MR. CARR: I'll call Mr. Swendig.

JOHN H. SWENDIG

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

DIRECT EXAMINATION

BY MR. CARR:

Q Will you state your full name and place
of residence?

A John H. Swendig, Midland, Texas.

Q By whom are you employed and in what
capacity?

A I'm employed by Flag-Redern Oil Company

1
2 as a drilling superintendent.

3 A Have you previously testified before
4 this Commission or one of its Examiners and had your creden-
5 tials as a petroleum engineer accepted and made a matter of
6 record?

7 A Yes, I have.

8 Q Are you familiar with the application
9 of Flag-Redfern in this case and the subject area?

10 A Yes.

11 MR. CARR: Are the witness' qualifications
12 acceptable?

13 A They are.

14 Q Will you look at what has been identified
15 as Applicant's Exhibit Number Six and review this for Mr.
16 Nutter?

17 A Exhibit Six is just a sheet listing
18 some well information on the Osudo State Com No. 1, located
19 in Section 18, showing the well was drilled in 1975 - 1976 to
20 a depth of 11,700 feet.

21 It was completed with perforations from
22 11,509 to 519. It was acidized and fracture treated. The
23 original bottom hole pressure was 5560 psi after 46-1/2 hour
24 shutin. Initial tubing pressure of 4228. Initial potential
25 of the well was 222 Mcf per day and to 1-1-81 the cumulative

1
2 production has been 208,000 Mcf.

3 Q Will you now refer to Exhibit Number
4 Seven and review this for the Examiner?

5 A Exhibit Seven is the monthly production
6 of the Osudo State Com No. 1 from January, 1977, to the
7 present.

8 Q And will you now refer to your Exhibit
9 Number Eight?

10 A Exhibit Number Eight is a production
11 history of three wells in the immediate vicinity, or three
12 of the older wells in the North Osudo Field; The Hamon State
13 "E", the Amerada Federal No. 1 and the Hamon Union State,
14 and this exhibit is included to show the initial shutin pres-
15 sures as reported by the operators and the pressure decline
16 and the production cumulatives for those wells.

17 Of note is the very high initial shut-
18 in pressures, the very rapid decline in tubing pressure and
19 the fact that during the first year production almost half
20 of the total cumulative production of the wells has been
21 recovered during the first year.

22 Q Based on this data would you conclude
23 that the wells are drilling -- are draining a relatively
24 limited area?

25 A Yes, this reinforces the -- Mr. Scott's

1
2 testimony that the sands are erratic and discontinuous.

3 Q In your opinion would granting this
4 application impair the correlative rights of any other operator
5 in the immediate area?

6 A No, it would not.

7 Q Would it be in the best interest of
8 conservation and the prevention of waste?

9 A I believe it would be.

10 Q Have you given notice to the offsetting
11 operators of this hearing today?

12 A Yes, sir, I have.

13 Q Have you talked with any of the operators
14 personally?

15 A Only with the Hamon personnel, and they
16 have not entered any objection to our application.

17 Q You did give notice to the operators to
18 the north?

19 A Yes, to Samedan.

20 Q Mr. Swendig, were Exhibits Six through
21 Eight prepared by you?

22 A Yes, they were.

23 MR. CARR: At this time, Mr. Nutter we
24 would offer Applicant's Exhibits Six through Eight.

25 MR. NUTTER: Exhibits Six through Eight

1
2 will be admitted in evidence.

3 MR. CARR: I have nothing further on
4 direct.

5
6 CROSS EXAMINATION

7 BY MR. NUTTER:

8 Q Mr. Swendig, apparently your existing
9 well is -- the Osudo State Com 1 started out producing approx-
10 imately 200 Mcf per day and it's declined down to where it
11 has been producing about 100 Mcf per day --

12 A Yes, sir.

13 Q -- for quite awhile now.

14 A This is true.

15 Q Do you feel like it's time to try to
16 get some more gas out of this unit?

17 A Well, we've, as Mr. Scott said, we've
18 drilled into a very tight area. I neglected to mention that
19 on our initial completion we did run a bottom hole pressure
20 buildup test and the buildup test indicated we had less than
21 0.1 millidarcy permeability after treating.

22 Q Well now, the well was treated with a
23 fairly substantial fracture job, but I think they're probably
24 using a little bit heavier stimulation on some of these Morrow
25 wells now than they were then, aren't they?

1
2 A I would suspect so. Yes, sir, they've
3 gone to much larger stimulation treatments than what we were
4 doing in '75 - '76.

5 Q Has this well ever been reworked?

6 A No, sir, it has not. This is still the
7 original completion.

8 MR. NUTTER: Are there any further
9 questions of Mr. Swendig? He may be excused.

10 Do you have anything further Mr. Carr?

11 MR. CARR: Nothing further, Mr. Nutter.

12 MR. NUTTER: Does anyone have anything
13 they wish to offer in Case Number 7183?

14 We'll take the case under advisement.

15
16 (Hearing concluded.)
17
18
19
20
21
22
23
24
25

C E R T I F I C A T E

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

Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is
a correct and true transcript of the proceedings in
the case of Case No. 1183
heard by me on 2/25 1921.
Examiner
Oil Conservation Division

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409



April 9, 1981

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

Mr. William F. Carr
Campbell, Byrd & Black
Attorneys at Law
Post Office Box 2208
Santa Fe, New Mexico

Re: CASE NO. 7183
ORDER NO. R 6640

Applicant:

Flag-Redfern Oil Company

Dear Sir:

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

Yours very truly,

JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

| | |
|-------------|------------------------------|
| Hobbs OCD | <u> x </u> |
| Artesia OCD | <u> x </u> |
| Aztec OCD | |

Other

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 7183
Order No. R-6640

APPLICATION OF FLAG-REDFERN OIL
COMPANY FOR AN UNORTHODOX GAS
WELL LOCATION, LEA COUNTY, NEW
MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on March 25, 1981, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 7th day of April, 1981, 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 Company, seeks approval of the unorthodox gas well location of its Osado State Com Well No. 2 to be drilled 990 feet from the North line and 990 feet from the East line of Section 18, Township 20 South, Range 36 East, NMPM, to test the Morrow formation, North Osado-Morrow Gas Pool, Lea County, New Mexico.

(3) That all of said Section 18 is to be simultaneously dedicated to said well and to applicant's Osado State Com Well No. 1 located in Unit 3 of said Section 18.

(4) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.

(5) That no offset operator objected to the proposed unorthodox location.

-2-

Case No. 7183
Order No. R-6640

(6) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

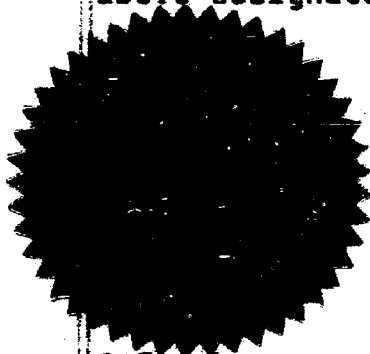
IT IS THEREFORE ORDERED:

(1) That an unorthodox gas well location for the Morrow formation is hereby approved for the Flag-Redfern Oil Company Osado State Com Well No. 2 to be located at a point 990 feet from the North line and 990 feet from the East line of Section 18, Township 20 South, Range 36 East, NMPM, North Osado-Morrow Gas Pool, Lea County, New Mexico.

(2) That all of said Section 18 shall be dedicated to the above-described well and to applicant's Osado State Com Well No. 1 located in Unit J of said Section 18.

(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.



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Joe D. Ramey
JOE D. RAMEY
Director

rd/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
11 March 1981

EXAMINER HEARING

IN THE MATTER OF:

Application of Flag-Redfern Oil
Company for an unorthodox gas well
location, Lea County, New Mexico.

CASE
7183

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

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

MR. STAMETS: We'll call Case 7183.

MR. KELLAMIN: Mr. Stamets, the applicant requests this case be continued to the hearing on March 25th.

MR. STAMETS: Case 7183, being application of Flag-Redfern Oil Company for an unorthodox gas well location, Lea County, New Mexico, will be continued to the March 25th Examiner Hearing.

(Hearing concluded.)

C E R T I F I C A T E

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

Sally W. Boyd C.S.R.

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 435-7409

i do hereby certify that the foregoing is
a complete and correct transcript of the
hearing held on 3-11-81 at 7183
heard by me on 3-11-81
Richard L. Stamm, Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
11 March 1981

EXAMINER HEARING

IN THE MATTER OF:

Application of Flag-Redfern Oil
Company for an unorthodox gas well
location, Lea County, New Mexico.

CASE
7183

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

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

MR. STAMETS: We'll call Case 7183.

MR. KELLANIN: Mr. Stamets, the applicant requests this case be continued to the hearing on March 25th.

MR. STAMETS: Case 7183, being application of Flag-Redfern Oil Company for an unorthodox gas well location, Lea County, New Mexico, will be continued to the March 25th Examiner Hearing.

(Hearing concluded.)

C E R T I F I C A T E

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

Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is a complete and correct transcript of the hearing in the Examination of _____ heard by me on _____ 19____.

_____, Examiner
Oil Conservation Division

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

Santa Fe, New Mexico 87501

Phone (505) 455-7419

FLAG-REDFERN OIL COMPANY
Osado State Com. No. 1
Unit J, Section 18, T-20-S, R-36-E
Lea County, New Mexico

WELL INFORMATION

Spudded: November 16, 1975
Completed: January 21, 1976
Total Depth: 11,700 feet
Casing: 13 3/8" @ 272 feet
9 5/8" @ 5030 feet
7" @ 10,780 feet
5 1/2" liner from 10,537 feet to 11,665 feet
Perforations: 11,509 - 11,519
Acidized: 1000 gals 15% Morrow-Flo acid
Fractured: 1500 gals gelled KCL water
9000 lbs 20-40 mesh sand
3000 lbs U-Car glass beads
1000 SCF CO₂ per bbl
Bottom Hole:
Pressure 5560 psi after 46 1/2 hrs. SI
Initial Tubing:
Pressure 4228 psi after 46 1/2 hrs. SI.
Initial Potential: 222 MCF/D
Cumulative:
Production 208,501 MCF 1-1-81

| |
|---|
| BEFORE EXAMINER NUTTER OIL CONSERVATION DIVISION FLAG-REDFERN EXHIBIT NO. <u>6</u> CASE NO. <u>7183</u> |
|---|

OSUDO ST. COM. NO. 1
Osudo, North Field
Lea County, New Mexico

Monthly Gas Production

| | |
|--------------|------|
| January 1977 | 2371 |
| February | 5012 |
| March | 6767 |
| April | 6104 |
| May | 6391 |
| June | 5712 |
| July | 5517 |
| August | 5625 |
| September | 5630 |
| October | 5922 |
| November | 4873 |
| December | 5213 |

| | |
|--------------|------|
| January 1978 | 4989 |
| February | 5878 |
| March | 5845 |
| April | 3378 |
| May | 5312 |
| June | 5017 |
| July | 4751 |
| August | 4294 |
| September | 5036 |
| October | 5376 |
| November | 7145 |
| December | 4624 |

| | |
|--------------|------|
| January 1979 | 4954 |
| February | 4095 |
| March | 4346 |
| April | 4237 |
| May | 4038 |
| June | 3833 |
| July | 3744 |
| August | 3701 |
| September | 3568 |
| October | 3643 |
| November | 0 |
| December | 3078 |

| | |
|--------------|------|
| January 1980 | 3234 |
| February | 3162 |
| March | 3360 |
| April | 3432 |
| May | 3371 |
| June | 3023 |

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION

~~EXHIBIT NO.~~ EXHIBIT NO. 7
CASE NO. 7183

Continued
Page 2
Monthly Gas Production

| | <u>Monthly Gas Production</u> |
|-------------------------------|-------------------------------|
| July 1980 | 2740 |
| August | 3339 |
| September | 3309 |
| October | 3504 |
| November | 2973 |
| December | 3035 |
| January 1981 | 2919 |
| February | <u>2845</u> |
| Cumulative Total as of 3-1-81 | 214,265 |

Hamon State E.Hamon Amerada-Ped.Hamon Union St.

| | <u>SITP</u> | <u>MMcf</u> <u>Cum. Gas</u> | <u>Bbls.</u> <u>Cum Cond.</u> | <u>SITP</u> | <u>MMcf</u> <u>Cum. Gas</u> | <u>Bbls</u> <u>Cum. Cond.</u> | <u>SITP</u> | <u>MMcf</u> <u>Cum. Gas</u> | <u>Bbls</u> <u>Cum Cond.</u> |
|------|-------------|--------------------------------|----------------------------------|-------------|--------------------------------|----------------------------------|-------------|--------------------------------|---------------------------------|
| 1965 | 4076 | | | | | | | | |
| 1966 | 2298 | 4491 | 60,322 | 4991 | | | 3600 | | |
| 1967 | 1254 | 5910 | 71,199 | 1387 | | | 1370 | 2475 | 21,091 |
| 1968 | 807 | 6778 | 73,102 | 783 | 3628 | 70,889 | 917 | 3580 | 26,109 |
| 1969 | 532 | 7172 | 73,940 | 654 | 4034 | 72,541 | 690 | 4186 | 27,930 |
| 1970 | 399 | 7544 | 74,494 | 384 | 4450 | 73,797 | 501 | 4760 | 28,911 |
| 1971 | 291 | 7809 | 74,828 | 271 | 4705 | 74,274 | 412 | 5118 | 29,289 |
| 1972 | | | | | | | | | |
| 1973 | 204 | 8131 | 74,978 | 197 | 4996 | 74,806 | 302 | 5519 | 29,630 |
| 1974 | 219 | 8242 | 74,978 | 192 | 5122 | 74,846 | 248 | 5631 | 29,714 |
| 1975 | 212 | 8407 | 74,978 | 178 | 5236 | 74,922 | 345 | 5732 | 29,802 |
| 1976 | 173 | 8542 | 74,978 | 60 | 5337 | 75,025 | 59 | 5823 | 29,855 |
| 1977 | 168 | 8683 | 74,978 | 168 | 5367 | 75,025 | 998 | 5881 | 29,899 |
| 1978 | 162 | 8802 | 74,978 | 159 | 5473 | 75,089 | 463 | 5931 | 29,948 |
| 1979 | 155 | 8908 | 74,978 | 187 | 5507 | 75,089 | 276 | 5938 | 29,950 |

BEFORE EXAMINER NUTTER
CIL CONSERVATION DIVISION

EXHIBIT NO. 8

CASE NO. 7183

FLAG-REDFERN OIL COMPANY
Osado State Com. No. 1
Unit J, Section 18, T-20-S, R-36-E
Lea County, New Mexico

WELL INFORMATION

| | |
|-----------------------------|--|
| Spudded: | November 16, 1975 |
| Completed: | January 21, 1976 |
| Total Depth: | 11,700 feet |
| Casing: | 13 3/8" @ 272 feet 9 5/8" @ 5030 feet 7" @ 10,780 feet 5 1/2" liner from 10,537 feet to 11,665 feet |
| Perforations: | 11,509 - 11,519 |
| Acidized: | 1000 gals 15% Morrow-Flo acid |
| Fractured: | 1500 gals gelled KCL water 9000 lbs 20-40 mesh sand 3000 lbs U-Car glass beads 1000 SCF CO ₂ per bbl |
| Bottom Hole: Pressure | 5560 psi after 46 1/2 hrs. SI |
| Initial Tubing: Pressure | 4228 psi after 46 1/2 hrs. SI. |
| Initial Potential: | 222 MCF/D |
| Cumulative: Production | 208,501 MCF 1-1-81 |

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION

~~FLAG-REDFERN~~ EXHIBIT NO. 6

CASE NO. 7183

OSUDO ST. COM. NO. 1
Osudo, North Field
Lea County, New Mexico

Monthly Gas Production

| | |
|--------------|------|
| January 1977 | 2371 |
| February | 5012 |
| March | 6767 |
| April | 6104 |
| May | 6391 |
| June | 5712 |
| July | 5517 |
| August | 5625 |
| September | 5630 |
| October | 5922 |
| November | 4873 |
| December | 5213 |

| | |
|--------------|------|
| January 1978 | 4989 |
| February | 5878 |
| March | 5845 |
| April | 3378 |
| May | 5312 |
| June | 5017 |
| July | 4751 |
| August | 4294 |
| September | 5036 |
| October | 5376 |
| November | 7145 |
| December | 4624 |

| | |
|--------------|------|
| January 1979 | 4954 |
| February | 4095 |
| March | 4346 |
| April | 4237 |
| May | 4038 |
| June | 3833 |
| July | 3744 |
| August | 3701 |
| September | 3568 |
| October | 3643 |
| November | 0 |
| December | 3078 |

| | |
|--------------|------|
| January 1980 | 3234 |
| February | 3162 |
| March | 3360 |
| April | 3432 |
| May | 3371 |
| June | 3023 |

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION

~~EXHIBIT NO. 7~~ EXHIBIT NO. 7

CASE NO. 7183

Continued
Page 2
Monthly Gas Production

| | <u>Monthly Gas Production</u> |
|-------------------------------|-------------------------------|
| July 1980 | 2740 |
| August | 3339 |
| September | 3309 |
| October | 3504 |
| November | 2973 |
| December | 3035 |
| January 1981 | 2919 |
| February | <u>2845</u> |
| Cumulative Total as of 3-1-81 | 214,265 |

Hamon State E.Hamon Anerada-Fed.Hamon Union St.

| | <u>SITP</u> | <u>MMcf</u> <u>Cum. Gas</u> | <u>Bbls.</u> <u>Cum. Cond.</u> | <u>SITP</u> | <u>MMcf</u> <u>Cum. Gas</u> | <u>Bbls</u> <u>Cum. Cond.</u> | <u>SITP</u> | <u>MMcf</u> <u>Cum. Gas</u> | <u>Bbls</u> <u>Cum. Cond.</u> |
|------|-------------|--------------------------------|-----------------------------------|-------------|--------------------------------|----------------------------------|-------------|--------------------------------|----------------------------------|
| 1965 | 4076 | | | | | | | | |
| 1966 | 2298 | 4491 | 60,322 | 4991 | | 3600 | | | |
| 1967 | 1254 | 5910 | 71,199 | 1387 | | 1370 | 2475 | 21,091 | |
| 1968 | 807 | 6778 | 73,102 | 783 | 3628 | 70,889 | 917 | 3580 | 26,109 |
| 1969 | 532 | 7172 | 73,940 | 654 | 4034 | 72,541 | 690 | 4186 | 27,930 |
| 1970 | 399 | 7544 | 74,494 | 384 | 4450 | 73,797 | 501 | 4760 | 28,911 |
| 1971 | 291 | 7809 | 74,828 | 271 | 4705 | 74,274 | 412 | 5118 | 29,289 |
| 1972 | | | | | | | | | |
| 1973 | 204 | 8131 | 74,978 | 197 | 4996 | 74,806 | 302 | 5519 | 29,630 |
| 1974 | 219 | 8242 | 74,978 | 192 | 5122 | 74,846 | 248 | 5631 | 29,714 |
| 1975 | 212 | 8407 | 74,978 | 178 | 5236 | 74,922 | 345 | 5732 | 29,802 |
| 1976 | 173 | 8542 | 74,978 | 60 | 5337 | 75,025 | 59 | 5823 | 29,855 |
| 1977 | 168 | 8683 | 74,978 | 168 | 5367 | 75,025 | 998 | 5881 | 29,899 |
| 1978 | 162 | 8802 | 74,978 | 159 | 5473 | 75,089 | 463 | 5931 | 29,948 |
| 1979 | 155 | 8908 | 74,978 | 187 | 5507 | 75,089 | 276 | 5938 | 29,950 |

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION

EXHIBIT NO. 3

CASE NO. 7183

- CASE 7200:** Application of Estoril Producing Corporation for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Belco Fed. Well No. 1 located in Unit O of Section 15, Township 23 South, Range 34 East, to produce gas and gas liquids from the Strawn and Morrow formations. Antelope Ridge Field, thru parallel strings of tubing.
- CASE 7201:** Application of Layton Enterprises, Inc. for a unit agreement, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Todd Lower San Andres Unit Area, comprising 3256 acres, more or less, of Federal and State lands in Township 7 South, Ranges 35 and 36 East.
- CASE 7202:** Application of Layton Enterprises, Inc. for a waterflood project, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the San Andres formation thru 4 injection wells located in Sections 30, 31 and 32 of its Todd Lower San Andres Unit in Township 7 South, Range 36 East.
- CASE 7203:** Application of Southern Union Exploration Co. of Texas for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Susco Bough "C" Unit Area, comprising 2560 acres, more or less, of State lands in Township 10 South, Range 33 East.
- CASE 7204:** Application of Bass Enterprises Production Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware formation in the interval from 3820 feet to 3915 feet in its Federal Legg Well No. 1 in Unit B of Section 27, Township 22 South, Range 30 East, Quahada Ridge Field.
- CASE 7205:** Application of Supron Energy Corporation for a non-standard gas proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard Blanco Mesaverde gas proration unit comprising the NE/4 of Section 35, Township 31 North, Range 12 West, to be dedicated to a well to be drilled at a standard location thereon.
- CASE 7183:** (Continued from March 11, 1981, Examiner Hearing)
- Application of Flag-Redfern Oil Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its Osudo St. Com Well No. 2 at an unorthodox location 990 feet from the North and East lines of Section 18, Township 20 South, Range 36 East, North Osudo-Morrow Gas Pool.
- CASE 7206:** Application of Mobil Producing 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 perforations from 12,212 feet to 12,218 feet and the open hole interval from 12,240 feet to 12,555 feet in its Santa Fe Pacific Well No. 3 in Unit M of Section 26, Township 9 South, Range 36 East, Crossroads Field.
- CASE 7207:** Application of Mobil Producing Inc. for lease commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the commingling of Vacuum Grayburg-San Andres production from the State J and State II leases in Section 22, Township 17 South, Range 34 East.
- CASE 7208:** Application of Gulf Oil Corporation for the amendment of pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of the White City-Pennsylvanian Gas Pool Rules to provide for 320-acre spacing rather than 640 acres with well locations specified as being at least 1650 feet from the end boundary and 660 feet from the side boundary of the proration unit.
- CASE 7129:** (Continued from February 25, 1981, Examiner Hearing)
- Application of Koch Exploration Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Dakota formation underlying the N/2 of Section 28, Township 28 North, Range 8 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7169:** (Continued from February 25, 1981, Examiner Hearing)
- Application of Koch Exploration Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Dakota formation underlying the S/2 of Section 22, Township 28 North, Range 8 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

Dockets Nos. 12-81 and 13-81 are tentatively set for March 25 and April 8, 1981. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 11, 1981

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

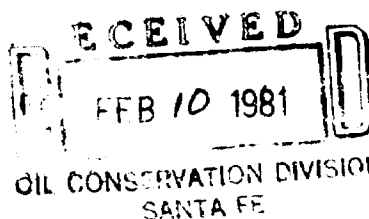
The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- ALLOWABLE: (1) Consideration of the allowable production of gas for April, 1981, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
- (2) Consideration of the allowable production of gas for April, 1981, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.
- CASE 7176: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Marjory M. Crier, U. S. Casualty Company of New York, and all other interested parties to appear and show cause why the Red Mountain Wells Nos. 6, 7, and 10, all located in Unit B of Section 29, Township 20 North, Range 9 West, McKinley County, should not be plugged and abandoned in accordance with a Division-approved plugging program.
- CASE 7177: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Henry S. Birdseye and all other interested parties to appear and show cause why the State Well No. 10-2 in Unit G of Section 10, Township 19 North, Range 10 West, McKinley County, should not be plugged and abandoned in accordance with a Division-approved plugging program.
- CASE 7178: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Noland and Wells and all other interested parties to appear and show cause why the Reinhardt Well No. 1 in Unit A of Section 21, Township 29 North, Range 11 West, San Juan County, should not be plugged and abandoned in accordance with a Division-approved plugging program.
- CASE 7179: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit "26" Oil Company and all other interested parties to appear and show cause why the Jackson Well No. 1 in Unit A of Section 21, Township 29 North, Range 11 West, San Juan County, should not be plugged and abandoned in accordance with a Division-approved plugging program.
- CASE 7180: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Vincent and Goodrum and all other interested parties to appear and show cause why the Refinery Hare Well No. 1 in Unit A of Section 21, Township 29 North, Range 11 West, San Juan County, should not be plugged and abandoned in accordance with a Division-approved plugging program.
- CASE 7181: Application of Read & Stevens, Inc. for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Hernandez Draw Unit Area, comprising 2,560 acres, more or less, of Federal, State, and Fee lands in Townships 4 and 5 South, Ranges 26 and 27 East.
- CASE 7182: Application of Wiser Oil Company for an unorthodox well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Downes A Well No. 5 to be drilled in the approximate center of the SW/4 of Section 32, Township 21 South, Range 37 East, Penrose Skelly Pool.
- CASE 7183: Application of Flag-Redfern Oil Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its Osudo St. Com Well No. 2 at an unorthodox location 990 feet from the North and East lines of Section 18, Township 20 South, Range 36 East, North Osudo-Morrow Gas Pool.
- CASE 7147: (Readvertised)
- Application of Yates Petroleum Corporation for an unorthodox gas well location and simultaneous dedication, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to test all Pennsylvanian formations to be drilled 1650 feet from the South line and 660 feet from the East line of Section 35, Township 18 South, Range 25 East, the S/2 of said Section 35 to be dedicated to said well and to applicant's "JX" Well No. 2 located in Unit N.
- CASE 7184: Application of Harvey E. Yates Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the E/2 of Section 13, Township 17 South, Range 28 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.



Flag-Redfern Oil Company

1200 WALL TOWERS WEST • MIDLAND, TEXAS 79701 • PHONE (915) 683-5184



Mailing address:
P. O. Box 2280
Midland, Texas 79702

February 6, 1981

File:

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

Case 7183

Gentlemen:

Flag-Redfern Oil Company proposes to drill the Osudo St. Com No. 2 to be located 990' feet from the north line and 990 feet from the east line of Section 18, Township 20S, Range 36E, Lea County New Mexico.

The proposed well will be in the Osudo Morrow, North Field for which field rules require 640 acre proration units and spacing of 1650 feet from the section lines.

Flag-Redfern Oil Company requests a hearing before an Examiner of the Commission for a second well on a proration unit and for an unorthodox location. We respectfully request the hearing be docketed for the first hearing date in March 1981.

Copies of this request are being sent to the offset operators listed below by certified mail.

Very truly yours,

John H. Swendig
John H. Swendig
Drilling Supt.

Copies to:

J.L. Hamon
611 The Petroleum Bldg.
Midland, TX 79701

Samedan Oil Corporation
900 Wall Towers East
Midland, Texas 79701

*Do not docket
"findings" portion
of application
until after well
is drilled.
Jsu*

DRAFT

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. 7183

ORDER NO. R- 6640

APPLICATION OF FLAG-REDFERN OIL COMPANY

FOR AN UNORTHODOX GAS WELL LOCATION,

LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on March 25,
19 81, at Santa Fe, New Mexico, before Examiner Richard L. Stamets

NOW, on this day of March, 19 81, 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 Company,
seeks approval of ^{the} ~~an~~ unorthodox gas well location ^{of its Osudo State Com Well No. 2} ~~to be drilled~~
990 feet from the North line and 990 feet from the
East line of Section 18, Township 20 South
Range 36 East, NMPM, to test the Morrow
formation, North Osudo-Morrow Gas Pool, Lea
County, New Mexico.

(3) That the all of said Section 18 is to be
Simultaneously
dedicated to said well and to applicant's Osudo State Com Well No. 1
located in Unit J of said Section 18.

(4) That a well at said unorthodox location will better
enable applicant to produce the gas underlying the proration unit.

(5) That no offset operator objected to the proposed unorthodox
location.

-2-

Case No. _____

Order No. R- _____

(6) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That an unorthodox gas well location for the Morrow the Flag-Redfern Oil Company Osudo ~~State~~ Com. Well No. 2 formation is hereby approved for ~~a well~~ to be located at a point 990 feet from the North line and 990 feet from the East line of Section 18, Township 20 South, Range 36 East NMPM, North Osudo-Morrow Gas Pool, Lea County, New Mexico.

(2) That the all of said Section 18 shall be dedicated to the above-described well and *to applicant's Osudo State Com. Well No. 1 located in Unit 1 of said Section 18.*

(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.