

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

28 November 1984

EXAMINER HEARING

IN THE MATTER OF:

Application of Braden-Deem, Inc.
for salt water disposal, Roosevelt
County, New Mexico.

CASE
8423

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Jeff Taylor
Attorney at Law
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

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3 MR. STOGNER: The hearing will
4 come to order.

5 And we'll call next Case Number
6 8423.

7 MR. TAYLOR: The applicaiton of
8 Braden-Deem, Inc. for salt water disposal, Roosevelt County,
9 New Mexico.

10 The applicant has requested
11 that this case be continued.

12 MR. STOGNER: Case Number 8423
13 will be continued and readvertised for the Examiner Hearing
14 scheduled for December 19th, 1984.

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(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 Con-
servation Division was reported by me; that the said tran-
script is a full, true, and correct record of the hearing,
prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 8423
heard by me on November 28 1984.

Michael E. Stagner, Examiner
Oil Conservation Division

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

28 November 1984

EXAMINER HEARING

IN THE MATTER OF:

Application of Inexco Oil Company
for a unit agreement, Chaves
County, New Mexico.

CASE
8410

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Jeff Taylor
Attorney at Law
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

MR. STOGNER: Call next Case
Number 8410.

MR. TAYLOR: Application of
Inexco Oil Company for a unit agreement, Chaves County, New
Mexico.

This case has also been
requested to be continued.

MR. STOGNER: Case Number 8410
will also be continued to the Examiner Hearing scheduled for
December 19th, 1984.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY
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Sally W. Boyd CSR

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Ex. Div. hearing of Case No. 8410,
heard by me on November 28 1984.
Michael T. Hogan, Examiner
Oil Conservation Division

1 STATE OF NEW MEXICO
2 ENERGY AND MINERALS DEPARTMENT
3 OIL CONSERVATION DIVISION
4 STATE LAND OFFICE BUILDING
5 SANTA FE, NEW MEXICO

6 19 December 1984

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of Braden-Deem, Inc. CASE
10 for a waterflood project, Roosevelt 8423
County, New Mexico.

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14 BEFORE: Gilbert P. Quintana, Examiner

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16 TRANSCRIPT OF HEARING

17
18 A P P E A R A N C E S

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20 For the Oil Conservation Division: Jeff Taylor
Attorney at Law
21 Legal Counsel to the Commission
State Land Office Bldg.
22 Santa Fe, New Mexico 87501

23 For the Applicant: W. Perry Pearce
Attorney At Law
24 MONGOMERY & ANDREWS
P. O. Box 2307
25 Santa Fe, New Mexico 87501

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I N D E X

JOE D. RAMEY

Direct Examination by Mr. Pearce	3
Cross Examination by Mr. Quintana	10

E X H I B I T S

Applicant Exhibit One, Plat	4
Applicant Exhibit Two, Well Data	5
Applicant Exhibit Three, Log	6
Applicant Exhibit Four, Informaton Sheet	7
Applicant Exhibit Five, Schematic	8
Applicant Exhibit Six, Return Receipts	9

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MR. QUINTANA: We'll call next
Case 8423.

MR. TAYLOR: The application of
Braden-Deem, Inc. for a waterflood project, Roosevelt
County, New Mexico.

MR. PEARCE: May it please the
Examiner, I am W. Perry Pearce, appearing in this matter on
behalf of the Applicant.

I have one witness who needs to
be sworn.

MR. QUINTANA: Are there other
appearances in this case?

If not, will the witness stand
and be sworn at this time?

(Witness sworn.)

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

DIRECT EXAMINATION

BY MR. PEARCE:

Q All right, sir, for the record would you
please state your name and by whom you're employed in this
matter?

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2 A Joe D. Ramey. I'm a consultant and I'm
3 employed by Braden-Deem in this case.

4 Q Mr. Ramey, have you previously testified
5 before the New Mexico Oil Conservation Division or its exam-
6 iners, and had your credentials made a matter of record?

7 A Yes, I have.

8 Q And are you familiar with the application
9 of Braden-Deem in this matter today?

10 A Yes, I am.

11 MR. PEARCE: Mr. Examiner, are
12 the witness' qualifications acceptable?

13 MR. QUINTANA: Yes, they are.

14 MR. PEARCE: Thank you, sir.

15 Q Mr. Ramey, let's begin, if you would,
16 please, for the Examiner discuss what has been marked as
17 Braden-Deem Exhibit Number One in this proceeding.

18 A Exhibit Number One is a lease plat. Out-
19 lined in red is the Braden-Deem State "DB" Lease and the
20 proposed injection well in this case is the Well No. 6, lo-
21 cated in the southwest quarter of the southwest quarter of
22 Section 25, Township 7 South, Range 33 East, Roosevelt
23 County, New Mexico.

24 This well is circled in green and also
25 transposed on the exhibit is a circle designating the half
mile radius from the injection well.

Q All right, sir.

A To the south and slightly to the west is

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a red circle, approximately a half mile from the injection well, which is the only water well, fresh water well, in the area.

Q All right, sir. Could you tell the Examiner for the record the amount of fluid that Braden-Deem proposes to inject into this well and under what pressures?

A This will be approximately 300 barrels per day of San Andres produced water from the -- from their leases and from other leases in the area, and we are requesting an injection pressure not to exceed the .2 of a pound, which with the top perforations at 4189 would figure out to be 837.8 psi.

Q All right, sir. Would you please turn to what's been marked as Exhibit Number Two and discuss that for the Examiner, please?

A Exhibit Number Two, the first sheet is just the -- well, Exhibit Two is Commission Form C-108.

The first sheet has an error under 4, where it says is this -- no, I guess --

Q Yeah.

A Is there substantial existing product -- project? Mine says "no".

Q Okay.

MR. QUINTANA: Mine says "yes".

Q All right.

A All right, it should say "no", Mr. Examiner.

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Q And, Mr. Ramey, under that Item No. 4 on the first page of Form C-108 there is mention of a Marathon Oil Company Well, the State No. 1. That is another disposal well, is that correct?

A Yes. That's a disposal well which is approximately 3/4 of a mile south and east of the --

Q Thank you.

A -- Braden-Deem No. 6 Well.

Sheet No. 2 is the information for the injection well in this case, the State "DB" No. 6. This well was -- has surface pipe at 448 feet, circulated with cement, and has 4-1/2 at 4430, cemented with 800 sacks. 800 sacks should have circulated cement, it didn't, but it should be tied back at least to the top of the salt.

The perforated interval is perforations 4189 to 4327, and injection would be down plastic-coated tubing below a packer to be set within 100 feet of perforations and the annular space will be filled with an inert fluid and the casing-tubing annulus will be monitored for any leaks of the tubing or packer.

Q All right, sir, let's move to Exhibit Number Three, if you would, please.

A Exhibit Number Three is a copy of the well log for this particular well.

The first sheet is the information sheet. It's labeled PanAmerican Petroleum Corporation, State of New Mexico "DB" No. 6, but it is the Braden-Deem "DB" No. 6.

1
2 And the second sheet is the actual log
3 showing the perforated interval and it appears that the in-
4 jection zone is a sandy dolomite.

5 Q Okay, and I notice on the previous exhi-
6 bit the San Andres perfs were from 4189 to 4382. That is
7 the same perforated interval; applicant does not propose to
8 reperfurate this well, is that correct?

9 A No, that's right.

10 Q Thank you, sir.

11 Moving to Exhibit Number Four, if you
12 would, please.

13 A Exhibit Number Four is the information
14 sheet and accompanying Form C-105 or the appropriate Federal
15 form for each well within and without the half a mile of the
16 -- of the proposed injection well.

17 All wells are completed in the -- in the
18 Chaveroo San Andres Pool, which is where the injection will
19 be.

20 They all have similar completions, simi-
21 lar, I think 8-5/8ths inch surface casing and 4-1/2 inch
22 production casing.

23 The minimum amount of cement used in
24 cementing any of these wells was 330 feet -- 330 sacks,
25 which would give a minimum of 1650 feet of fill. So you
should have 14-1500 feet of cement over -- above the injec-
tion zone in any of these wells within a half mile.

Q All right, sir.

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2 MR. PEARCE: Just for clarifi-
3 cation of the record, Mr. Examiner, the top of cement column
4 on Exhibit Number Four is in each case marked "surface".
5 Mr. Ramey has done a sample calculation on one of those
6 wells for actual cement outside the 4-1/2 inch.

7 That cement to surface was only
8 on the surface casing in each instance.

9 A I might point out, Mr. Examiner, that the
10 first well on the second sheet is the Braden-Deem, Inc.
11 State "DB" Well No. 4 and that well is plugged and aban-
12 doned.

13 Q While we're addressing that, Mr. Ramey,
14 would you go to what has been marked as Exhibit Number Five
15 and discuss the plugged well?

16 A That is a schematic diagram of the State
17 "DB" Well No. 4.

18 This well had 4-1/2 inch casing. Well,
19 first, 8-5/8ths inch casing set at 450 feet and cemented
20 with 250 sacks and cement circulated.

21 Had 4-1/2 inch casing at 4410, cemented
22 with 800 sacks.

23 In plugging the well a 50 sack cement
24 plug was placed over the perforated interval from 4208 to
25 4263. The hole was then loaded and the plug was pressure
tested with no leakage.

Pipe, 4-1/2 casng was shot off at 1074
and a 50 sack plug was placed at that point and then a 50

1 sack plug was -- was placed in and out of the shoe of the 8-
2 5/8ths inch casing and a 10 sack plug at the surface, which
3 certainly should give us adequate protection from injection.
4

5 This well would be no hazard to injection
6 in offsetting wells.

7 Q Okay. Mr. Ramey, earlier in your testi-
8 mony you mentioned a water well to the southeast of the pro-
9 posed injection well.

10 Has the applicant caused a sample of that
11 water to be taken?

12 A Yes. That well has been sampled and the
13 sample sent off to a laboratory and unfortunately it did not
14 get here in time for the hearing, but we will submit that as
15 soon as it's available.

16 Q All right, sir. And, finally, if you
17 would address Exhibit Number Six.

18 A Before I do that, Mr. Pearce --

19 Q Yes, sir.

20 A -- I would like to say that fresh water
21 in the area is either from a remnant of the Ogallala or from
22 -- from the Redbeds, from sand members in the Redbeds, but
23 it's found no deeper than 150 feet in this area; very sparse
24 water.

25 Q Thank you, sir.

A And now the next exhibit is just notifi-
cations that the company has made to -- to offset operators.

Q All right, sir.

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2 Finally, Mr. Ramey, pursuant to statute
3 the Division is charged with regulating the disposition of
4 produced water in a manner to afford reasonable protection
5 against contamination of fresh water supplies designated by
6 the State Engineer.

7 In your expert opinion, sir, does the
8 proposed injection operations of the applicant in this case
9 afford such reasonable protection?

10 A Yes, I think that the well, the way all
11 wells are cased and cemented in this area, there is no dan-
12 ger of injected fluids leaving the injection zone, and cer-
13 tainly the casings do and will protect the fresh waters in
14 the area.

15 Q Thank you, sir. Do you have anything
16 further at this time?

17 A No, I do not.

18 MR. PEARCE: Mr. Examiner, I
19 would move the admission of Exhibits One through Six and we
20 have nothing further on direct.

21 MR. QUINTANA: Exhibits One
22 through Six will be accepted in evidence.

23 CROSS EXAMINATION

24 BY MR. QUINTANA:

25 Q Mr. Ramey, I have a question for you.

Noticing the plats, the well plats show-
ing the location of the wells, directly to the west of Well

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2 No. 6, the proposed injection well, there is a Well No. 8
3 and on my map it shows it to be plugged and abandoned.

4 Do you have a schematic of that plugged
5 and abandoned well or what is the status of that well?

6 A Mr. Examiner, I checked the well file on
7 that well and there is no -- no indication that the well is
8 plugged and abandoned in the well file.

9 It shows it to be temporarily abandoned;
10 has not -- at least the paperwork has not been submitted
11 showing it to be plugged and abandoned.

12 Mr. Examiner, one thing I did not cover,
13 these wells are certainly, all the wells on the lease, there
14 are seven producing wells and in September they produced 174
15 barrels of oil, so the wells are in an advanced stripper
16 stage and cumulative production through 1983 is -- was
17 699,371 barrels.

18 There is the potential on a one-to-one
19 ratio of primary versus secondary of a lot of oil being re-
20 covered off this lease.

21 MR. TAYLOR: Was it your testi-
22 mony that you did -- that notice went to all the operators?

23 A Yes, all offset operators.

24 The lease in the south half of Section 26
25 to the west is operated by Stringer Oil and Gas. The plat
shows, I think, Clinton Oil or Tenneco, or both. Both.

All offset operators plus the Land Of-
fice, Commissioner of Public Lands, were notified of this

1 application.

2 MR. TAYLOR: Did you send them
3 a copy of the application or a letter, or what?

4 MR. PEARCE: They, if I may,
5 they did receive copies of the application.

6 You'll notice in the Commission
7 records that this matter had been previously advertised in-
8 correctly and, in fact, each of the operators received
9 copies of both the original application and the amendment.

10 MR. QUINTANA: I have a couple
11 other questions.

12 Q Mr. Ramey, would it be -- would it be all
13 right if you were to contact the District Office and consult
14 with them pertaining to Well No. 8 to determine if that
15 would be a potential problem in the future should that con-
16 tinue to remain temporarily abandoned?

17 A I'd be happy to. I'll -- I'll talk to
18 Mr. Sexton or Melba Carpenter down there.

19 Q Fine. Also, do you wish for a clause to
20 be placed in this order allowing for expansion?

21 A I think that might be well to put that
22 in, Mr. Examiner, in case this does show some indication of
23 increasing recovery from the waterflood.

24 Q Okay.

25 MR. QUINTANA: Does anybody
else have any questions of the witness?

If not, there is one further

1
2 thing.

3 Q One last thing, Mr. Ramey.

4 Would you please have your client, or
5 would it be too much trouble to have your client pressure
6 test the casing before injection is commenced in this well?

7 A No, I think that --

8 Q For mechanical integrity.

9 A Do you have any -- any range that you
10 would like to see?

11 Q Well, you can consult with our District
12 office, whatever they find out, if we could test the casing,
13 it would be fine with me.

14 A All right.

15 MR. QUINTANA: If there is no-
16 thing further in this case the witness may be excused.

17 Case 8423 will be taken under
18 advisement.

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25 (Hearing concluded.)

C E R T I F I C A T E

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Sally W. Boyd CSR

I do hereby certify that the foregoing is
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the Examiner hearing of Case No. 8423
heard by me on Dec. 19 1984.

Gilbert P. Quintana, Examiner
Oil Conservation Division