

Case Number

4802

Application

Transcripts

Small Exhibits

ETC.

dearnley, meier & mc cormick regional architects

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-8991 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

EXAMINER HEARING

Application of Crown Central
Petroleum for salt water disposal,
Lea County, New Mexico.

CASE NO. 4802

BEFORE: Richard L. Stamets
Examiner

TRANSCRIPT OF HEARING

dearnley, meier & mc cormick

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1 MR. STAMETS: Call for appearances in Case

2 4802.

3 MR. LOPEZ: My name is Owen Lopez with Montgomery,
4 Federici. I have one witness, Mr. Edward Fuerst.

5 MR. HATCH: Case 4802. Application of Crown
6 Central Petroleum for salt water disposal, Lea County, New
7 Mexico.

8 EDWARD FUERST,

9 appeared as a witness and, having been duly sworn according
10 to law, testified as follows:

11 DIRECT EXAMINATION

12 BY MR. LOPEZ:

13 Q Would you please state your name, address and
14 occupation for the record?

15 A Edward M. Fuerst, 2521 Shell, Midland, Texas, district
16 engineer, Crown Central Petroleum Corporation.

17 Q Mr. Fuerst, have you previously testified before the
18 New Mexico Oil Conservation Commission and been
19 qualified?

20 A No, sir, I haven't.

21 Q Would you then give us a brief rundown of your back-
22 ground and education?

23 A I am a graduate of the University of Oklahoma, School
24 of Petroleum Engineering, 1950.

25 Q What has been your experience in the petroleum business

dearnley, meier & mc cormick

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1 since that time?

2 A I have been production drilling engineer with Shahya
3 Petroleum and Crown Central Petroleum.

4 Q Does your present capacity with Crown Central
5 Petroleum Company include the supervision of the
6 development in New Mexico and the area in question
7 today?

8 A Yes, sir.

9 MR. LOPEZ: Are the qualifications acceptable,
10 Mr. Examiner?

11 MR. STAMETS: They are.

12 Q (By Mr. Lopez) Mr. Fuerst, are you familiar with the
13 application of Crown Central Petroleum Corporation in
14 Case Number 4802?

15 A Yes, sir.

16 Q What does the applicant propose to obtain by this
17 application?

18 A We requested that the Turner Number 2 well located
19 in Section 6, Township 20 South, Range 32 East, Lea
20 County, New Mexico, be converted from a sub-marginal
21 producer to a salt water disposal well.

22 Q Turning to Exhibit Number 1, is this the map which
23 indicates the location of this well?

24 A Yes, sir. This map was prepared to show the location
25 of the well and the acreage controlled by Crown Central

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Petroleum.

Q Turning to Exhibit Number 2, would you please explain what this Exhibit intends to convey?

A Exhibit Number 2 shows the well in question and the offset wells and where they are completed and shows that there are no wells offsetting as completed in the Grayburg formation except our own wells to the north, Number 1.

Q Now, turning to Exhibit Number 3, what does this Exhibit show?

A Exhibit 3 is an electric log of the well showing the open hole completion where casing is set and the amount of cement used.

Q I think I showed you Exhibit Number 4 first.

A That is the decline curve showing all oil and gas production since '66 and until May of this year.

Q Is the well now making 100 percent water?

A The well is going to 100 percent water.

Q I am turning to Exhibit Number 4 which is what I misidentified as Exhibit 3.

A Exhibit 4 is an electric log of the well originally completed open hole in the Grayburg and it shows the casing point and the cementing procedures.

Q What does Exhibit Number 5 show?

A Exhibit 5 is a schematic of the proposed completion

1 showing the packer at approximately 3,980 feet with
2 2 and 3/8 inch tubing and we propose to put fluid
3 behind the tubing and engage on it.

4 Q What type of tubing do you propose to use?

5 A In this Exhibit we said salta lining. We would like
6 to request that we use cement line tubing if we have
7 some available.

8 Q I am turning to Exhibit 5 and 6, or I guess 6 and 7.

9 A Six and Seven are affidavits from the offset operators
10 and the Turner Estate owner of the service and memos
11 under the Turner lease.

12 Q If your application is not granted in this case, what
13 effect do you believe this would have on your lease?

14 A The economic limit would probably force us to plug up
15 the lease prematurely.

16 Q Then it is your opinion that the granting of the
17 application of Crown Central Petroleum Corporation
18 in this Case 4802 would tend to protect correlative
19 rights and prevent waste?

20 A Yes, sir, it would.

21 Q Were Exhibits 1 through 5 prepared by you or under
22 your supervision?

23 A Yes, they were.

24 Q Exhibits 6 and 7?

25 A Yes, sir.

1 MR. LOPEZ: At this time I would like to identify
2 and introduce Exhibits 1 through 7.

3 MR. STAMETS: Without objection, Applicant's
4 Exhibits 1 through 7 will be admitted into evidence.

5 (Whereupon, Applicant's Exhibits Number 1 through
6 7 were marked and admitted into evidence.)

7 Q (By Mr. Lopez) Mr. Furst, do you have anything further
8 to add to this case?

9 A No, sir.

10 MR. STAMETS: Are there questions of the witness?

11 * * * * *

12 CROSS-EXAMINATION

13 BY MR. STAMETS:

14 Q Mr. Furst, referring to Exhibit Number 2, the acreage
15 which you have colored in yellow is all Crown Central
16 acreage?

17 A Yes, sir. We bought out Sunset International in
18 November of last year. That is why the SIPCO on the
19 map is indicated.

20 Q This would indicate then that there are only two wells
21 producing from the Grayburg directly offsetting the
22 proposed injection well?

23 A Just one, sir, the Number 1 Weir, to the north of us.
24 You have wells to the south but you will note that
25 they are plugged out.

- 1 Q The one directly to the west, that is an abandoned
2 well?
- 3 A Yes, sir.
- 4 Q Who is the operator of the one well that is producing?
- 5 A That is our property, Number 1 Weir.
- 6 Q Then the other landowners that you have gotten waivers
7 from, could you tell me where those wells are located?
- 8 A Yes. Landowner D.C. Collier, which would be directly
9 south of our acreage, there would be two locations
10 south of the proposed injection wells.
- 11 Q Those are identified as D Cal Number 1 and 2 Wells?
- 12 A Yes. Fred Turner Estate.
- 13 Q Where is that well located?
- 14 A That's the Turner. That is the Turner lease. It is
15 the Number 2 Turner, the well that we want to convert.
16 That is the Turner.
- 17 Q His waiver then is as a royalty owner, right, other
18 than an offset operator?
- 19 A Right.
- 20 Q Now, you stated the Turner well Number 2 turned to
21 water?
- 22 A Yes, sir.
- 23 Q One hundred percent. When did that happen?
- 24 A About February of this year or started going to water
25 and right now as of June and July it has been all water.

- 1 Q Is this water from a waterflood or formation water?
- 2 A We feel it is formation water. This is the only
- 3 flooding going on. There is quite a bit south of us
- 4 and it is a different horizon.
- 5 Q I notice the production seems to be relatively stable.
- 6 A Up to the first of the year.
- 7 Q Could it be that there is a hole in the casing?
- 8 A We checked the casing and we have already gone in
- 9 there and tried to do acid work and had no results.
- 10 Q What method did you use to check for a hole in the
- 11 casing?
- 12 A Pressure up on the back side of the packer and the
- 13 annulus.
- 14 Q Where was the packer sitting?
- 15 A We came up and started from the island and worked our
- 16 way up the hole to be sure.
- 17 Q Essentially from the bottom of the hole?
- 18 A Yes, sir.
- 19 Q Referring to your Exhibit Number 4, I note here that
- 20 the 7/16 inch casing was set at 4,012 with 50 sacks
- 21 of cement.
- 22 A Yes, sir.
- 23 Q Was this just the way the completion was handled at
- 24 that time?
- 25 A They came up the hole and perforated about 3,350 and

- 1 put a 500 sack additional cement squeeze on it. That
2 was their method of completion at the time.
- 3 Q The Exhibit shows perforations and cement with 250
4 sacks poz mix and 250 sacks of regular.
- 5 A That is your addition.
- 6 Q Do you know why it was done that way?
- 7 A They did all their wells that way for some reason
8 or other. All the wells that Weir acquired from Signal,
9 they used 50 sacks and then they came back up and
10 punched a hole or two and ran additional cement.
- 11 Q Is it your opinion that this well is properly
12 cemented for salt water disposal well?
- 13 A Yes, sir. There is -- cement temperature surveys
14 were run on the cement and they are in the file.
- 15 Q What is the top of the cement on this second batch?
- 16 A I am sorry. I said wrong. There was not a cement
17 survey on the second. It was on the first. They went
18 in there with a round J-7 packer and applied 800 pounds
19 pressure on the casinghead and, let's see, 3,585
20 pressure up the tubing and pressed up on casing 3,013
21 pounds with no leak. Perforations at 3,525 cemented
22 off.
- 23 Q This should be an adequate cement job to seal the
24 annulus?
- 25 A Yes, sir.

1 Q Referring to Exhibit Number 5, it is your proposal
2 to fill the casing tubing and annulus with an inhibited
3 fluid?

4 A Yes, sir.

5 Q You will use cement line tubing. Would you like the
6 option of using plastic lined tubing as well?

7 A Yes, sir, if we cannot -- if it is not available at
8 the time to go ahead with the job.

9 MR. STAMETS: Are there any other questions of
10 the witness?

11 (No response.)

12 MR. STAMETS: He may be excused.

13 (Witness excused.)

14 MR. STAMETS: Are there any statements in this
15 case?

16 (No response.)

17 MR. STAMETS: The case will be taken under
18 advisement.
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dearnley, meier & mc cormick

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1 STATE OF NEW MEXICO)
2) ss
3 COUNTY OF BERNALILLO)

4 I, MARCIA J. HUGHES, a Court Reporter, in and for the
5 County of Bernalillo, State of New Mexico, do hereby certify
6 that the foregoing and attached Transcript of Hearing
7 before the New Mexico Oil Conservation Commission was
8 reported by me; and that the same is a true and correct
9 record of the said proceedings to the best of my knowledge,
10 skill and ability.

11 *Marcia J. Hughes*
12 COURT REPORTER
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Richard F. L. L. L.

I N D E X

WITNESS:

PAGE

EDWARD FUERST

Direct Examination by Mr. Lopez

3

Cross-Examination by Mr. Stamets

7

E X H I B I T S

APPLICANT'S

OFFERED

ADMITTED

Crown Central Petroleum

Exhibit Number 1

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Exhibit Number 2

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Exhibit Number 3

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Exhibit Number 4

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Exhibit Number 5

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Exhibit Number 6

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Exhibit Number 7

6

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BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 4802
Order No. R-4387

APPLICATION OF CROWN CENTRAL
PETROLEUM CORPORATION FOR
SALT WATER DISPOSAL, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 23, 1972, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 6th day of September, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Crown Central Petroleum Corporation, is the owner and operator of the Fred Turner Well No. 2, located in Unit O of Section 6, Township 20 South, Range 38 East, NMPM, Skaggs (Grayburg) Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Grayburg formation, with injection into the open-hole interval from approximately 4,011 feet to 4,083 feet.

(4) That the injection should be accomplished through 2 3/8-inch cement or plastic-lined tubing installed in a packer set at approximately 3,980 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.

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

-2-

CASE NO. 4802
Order No. R-4387

IT IS THEREFORE ORDERED:

(1) That the applicant, Crown Central Petroleum Corporation, is hereby authorized to utilize its Fred Turner Well No. 2, located in Unit 0 of Section 6, Township 20 South, Range 38 East, NMPM, Skaggs (Grayburg) Pool, Lea County, New Mexico, to dispose of produced salt water into the Grayburg formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 3,980 feet, with injection into the open-hole interval from approximately 4,011 feet to 4,083 feet;

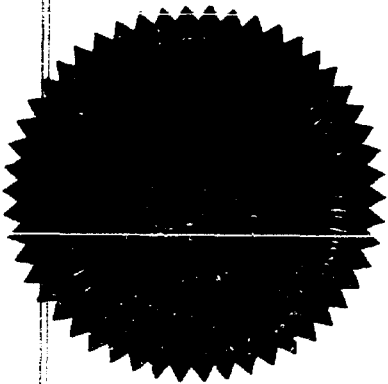
PROVIDED HOWEVER, that the tubing shall be cement or plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.

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

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



Bruce King
BRUCE KING, Chairman

Alex J. Armiijo
ALEX J. ARMIJO, Member

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

S E A L

dr/

DOCKET: EXAMINER HEARING-- WEDNESDAY - AUGUST 23, 1972

9 A.M. - OIL CONSERVATION COMMISSION 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 4775: (Continued from the July 26, 1972 Examiner Hearing)

Application of Continental Oil Company for amendment of special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks amendment of the special rules and regulations governing the Blinebry Pool, Lea County, New Mexico, to provide for annual bottom-hole pressure, gas-oil ratio, and gas-liquid tests in the pool. Applicant further seeks the designation of oil areas and gas areas in the pool with allowables within each area equalized on a per-acre basis and total withdrawals from the gas area to be volumetrically equivalent to the total withdrawals from the oil area.

Applicant further seeks to extend the vertical limits of the Blinebry Pool down to the top of the Tubb Pool.

Also to be considered by the Commission on its own motion will be amendment of the special rules and regulations to require that intermediate- or low-pressure gas be charged against a well's allowable; elimination of the requirement to conduct bottom-hole pressure, gas-oil ratio, and gas-liquid tests; and to require that all gas production be reported on Form C-111.

CASE 4779: (Continued from the July 26, 1972, Examiner Hearing)

Application of Merrion & Bayless for a non-standard proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit comprising the SE/4 of Section 35, Township 30 North, Range 12 West, within one mile of Flora Vista-Masaverde Pool, San Juan County, New Mexico, to be dedicated to its Carnahan Well No. 1 located in Unit P of said Section 35.

CASE 4798: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider revision of Rule 701 E of the Commission Rules and Regulations to provide for unrestricted allowables for water-flood projects and to eliminate the necessity of response for administrative approval of additional injection wells.

CASE 4799: In the matter of the hearing called by the Oil Conservation Commission on its own motion to amend Rule 306 of the Commission Rules and Regulations to incorporate therein the provisions of Order No. R-4070 which regulate the flaring or venting of casinghead gas.

- CASE 4807: In the matter of the hearing called by the Oil Conservation Commission on its own motion for the amendment of Rule 104 C. I of the Commission Rules and Regulations to permit the drilling of development oil wells as close as 330 feet to another well on the same unit drilling to or capable of producing from the same pool.
- CASE 4800: Application of Mobil Oil Corporation for waterflood expansion and capacity allowable, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to expand its Bridges State Waterflood Project, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico, by the addition of its Bridges State Wells Nos. 12 and 174 located, respectively, in Unit P of Section 26 and Unit J of Section 15, Township 17 South, Range 34 East.
- Applicant further seeks the assignment of capacity allowable to said Well No. 12.
- CASE 4801: Application of The Petroleum Corporation for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Parkway West Unit Area comprising 3840 acres, more or less, of State lands in Sections 20, 21, 22, 27, 28, and 29 of Township 19 South, Range 29 East, Eddy County, New Mexico.
- CASE 4802: Application of Crown Central Petroleum Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Grayburg formation in the open-hole interval from 4011 feet to 4083 feet in its Fred Turner Well No. 2 located in Unit O of Section 6, Township 20 South, Range 38 East, Skaggs (Grayburg) Pool, Lea County, New Mexico.
- CASE 4803: Application of Yates Petroleum Corporation to directionally drill and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-enter a dry hole having an unorthodox surface location 1980 feet from the North line and 660 feet from the East line of Section 25, Township 18 South, Range 25 East, Eddy County, New Mexico, and to directionally drill in such a manner as to bottom the well in the West Atoka-Morrow Gas Pool at an unorthodox bottom hole location 500 feet from the North line and 600 feet from the East line of said Section 25. The N/2 of said Section 25 to be dedicated to the well.
- CASE 4804: Application of Dugan Production Corporation for downhole commingling and a non-standard proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks as an exception to Rule 303 of the Commission Rules and Regulations, authority to commingle oil production from the Amarillo-Gallup Oil Pool and gas from the

(Case 4804 continued)

Basin-Dakota Pool in the wellbore of its Fullerton Well No. 1 located 1850 feet from the North and West lines of Section 34, Township 28 North, Range 13 West, San Juan County, New Mexico. Applicant further seeks approval for a non-standard 160-acre gas proration unit for the Basin-Dakota Pool comprising the NW/4 of said Section 34 to be dedicated to the subject well.

CASE 4805: Application of W. C. Montgomery for a non-standard proration unit, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval for an 80-acre non-standard oil proration unit comprising the NE/4 NE/4 of Section 20 and the NW/4 NW/4 of Section 21, Township 8 South, Range 38 East, Bluit-San Andres Associated Pool, Roosevelt County, New Mexico, to be dedicated to a well to be drilled in the NE/4 NE/4 of said Section 20.

CASE 4806: Southeastern New Mexico nomenclature case calling for an order for the creation, extension, contraction and abolishment of certain pools in Lea, Chaves, Eddy and Roosevelt Counties, New Mexico.

(a) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Cisco production and designated as the Boyd-Cisco Gas Pool. The discovery well is the David Fasken Arco "9" Morrison No. 1 located in Unit B of Section 9, Township 19 South, Range 25 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM
SECTION 9: N/2

(b) Create a new pool in Chaves County, New Mexico, classified as an oil pool for Queen production and designated as the South Lucky Lake-Queen Pool. The discovery well is the Dalport Oil Corporation Todhunter Federal No. 1 located in Unit F of Section 22, Township 15 South, Range 29 East, NMPM. Said pool would comprise:

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM
SECTION 22: SE/4 NW/4

(c) Create a new pool in Lea County, New Mexico, classified as a gas pool for Devonian production and designated as the East Ranger Lake-Devonian Gas Pool. The discovery well is the Union Texas Petroleum Corporation Shell State Com No. 1 located in Unit E of Section 6, Township 13 South, Range 35 East, NMPM. Said pool would comprise:

TOWNSHIP 13 SOUTH, RANGE 35 EAST, NMPM
SECTION 6: W/2

(d) Abolish the Penrose Skelly-Grayburg Pool in Lea County,
New Mexico, described as:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM

SECTION 13: E/2
SECTION 24: E/2
SECTION 25: NE/4 and E/2 SE/4

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM

SECTION 4: Lots 3, 4, 5, 6, 11, 12
13, 14 and SW/4
SECTION 7: S/2
SECTION 8: S/2 and NE/4
SECTION 9: W/2
SECTION 16: S/2 and NW/4
SECTION 17: All
SECTION 18: All

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM

SECTION 19: All
SECTION 20: All
SECTION 21: All
SECTION 27: All
SECTION 28: All
SECTION 29: All
SECTION 30: All
SECTION 31: All
SECTION 32: All
SECTION 33: All
SECTION 34: All
SECTION 35: All

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM

SECTION 2: All
SECTION 3: All
SECTION 4: All
SECTION 5: All
SECTION 6: E/2
SECTION 7: NE/4
SECTION 8: All
SECTION 9: All
SECTION 10: All
SECTION 11: All
SECTION 14: All
SECTION 15: All
SECTION 16: All
SECTION 17: E/2

(Case 4806 continued)

(e) Extend the vertical limits of the Langlie-Mattix Pool in Lea County, New Mexico, to include the Grayburg formation. Also, extend said Langlie Mattix Pool to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM

SECTION 13: E/2
SECTION 24: E/2
SECTION 25: NE/4 and E/2 SE/4

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM

SECTION 4: Lots 3, 4, 5, 6, 11, 12,
13, 14 and SW/4
SECTION 7: S/2
SECTION 8: S/2 and NE/4
SECTION 9: W/2
SECTION 16: S/2 and NW/4
SECTION 17: All
SECTION 18: All
SECTION 19: All
SECTION 20: All
SECTION 21: All

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM

SECTION 27: All
SECTION 28: All
SECTION 29: All
SECTION 30: All
SECTION 31: All
SECTION 32: All
SECTION 33: All
SECTION 34: All
SECTION 35: All

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM

SECTION 2: All
SECTION 3: All
SECTION 4: All
SECTION 5: All
SECTION 6: E/2
SECTION 7: NE/4
SECTION 8: All
SECTION 9: All
SECTION 10: All
SECTION 11: All
SECTION 14: All
SECTION 15: All
SECTION 16: All
SECTION 17: E/2

(f) Contract the Bagley-Pennsylvanian Pool in Lea County, New Mexico, by the deletion of the following described area:

TOWNSHIP 11 SOUTH, RANGE 33 EAST, NMPM
SECTION 35: N/2 NW/4

(g) Extend the North Bagley-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 11 SOUTH, RANGE 33 EAST, NMPM
SECTION 35: N/2 NW/4

(h) Contract the Bough-Permo Pennsylvanian Pool in Lea County, New Mexico, by the deletion of the following described area:

TOWNSHIP 9 SOUTH, RANGE 36 EAST, NMPM
SECTION 17: NW/4

(i) Extend the North Benson Queen-Grayburg Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM
SECTION 26: S/2 SW/4

(j) Extend the Bluitt-San Andres Associated Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 38 EAST, NMPM
SECTION 8: NW/4

(k) Extend the South Carlsbad-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 27 EAST, NMPM
SECTION 7: W/2
SECTION 18: N/2

(l) Extend the South Carlsbad-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 27 EAST, NMPM
SECTION 7: S/2
SECTION 18: N/2

(m) Extend the Dos Hermanos-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 30 EAST, NMPM
SECTION 22: All
SECTION 27: All

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- (n) Extend the South Empire-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 29 EAST, NMPM
SECTION 6: S/2

- (o) Extend the Fowler-Upper Yeso Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM
SECTION 10: SE/4
SECTION 11: SW/4

- (p) Extend the Golden Lane-Strawn Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 29 EAST, NMPM
SECTION 4: Lot 9, 10, 11, 12, 13, 14,
15 and 16

- (q) Extend the Grayburg-Jackson Pool in Eddy County New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 30 EAST, NMPM
SECTION 9: S/2

- (r) Extend the Hardy-Blinebry Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM
SECTION 2: SW/4

- (s) Extend the McDonald-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 13 SOUTH, RANGE 36 EAST, NMPM
SECTION 33: SE/4

- (t) Extend the Sand Dunes-Cherry Canyon Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 31 EAST, NMPM
SECTION 26: NW/4 NE/4

- (u) Extend the Sulimar-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM
SECTION 27: SE/4 SE/4
SECTION 34: NE/4 NE/4

- (v) Extend the Vada-Pennsylvanian Pool in Roosevelt County, New Mexico, to include therein:

(v continued from page 7 - Case 4806)

TOWNSHIP 8 SOUTH, RANGE 34 EAST, NMPM
SECTION 34: SE/4

(w) Extend the Vest Ranch-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 30 EAST, NMPM
SECTION 21: SE/4

(x) Extend the Washington Ranch-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 25 SOUTH, RANGE 24 EAST, NMPM
SECTION 27: All
SECTION 35: W/2

TOWNSHIP 26 SOUTH, RANGE 24 EAST, NMPM
SECTION 3: All
SECTION 4: E/2


CASE 47861 (Continued from August 9, 1972, Examiner Hearing).

Application of Highland Production Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware formation in the open-hole interval from 4378 feet to 4418 feet in its Russell Federal Well No. 6 located in Unit K of Section 20, Township 26 South, Range 32 East, East Mason-Delaware Pool, Lea County, New Mexico,

This figure is a detailed geological map of an oil field, likely in Texas based on the company names. The map displays various oil units and their associated acreage. Key features include:

- Units and Acreage:** Numerous units are labeled with numbers indicating acreage, such as 36, 30, 20, 10, 5, 2, 1, and 1/2.
- Ownership:** Major owners mentioned include "CROWN CENTRAL PETROLEUM CORP.", "SKAGGS-GRAYBURY and SKAGGS-DINKLEY, North Field", and "AMERICAN OIL CO. (OPER)".
- Well Locations:** Well paths and locations are indicated by dashed lines and dots throughout the map.
- Geological Features:** The map shows various geological formations and structures, including faults and folds.
- Map Orientation:** A large black arrow points towards the upper left quadrant of the map.

The map is densely packed with information, including unit names, acreage figures, and ownership details, providing a comprehensive overview of the oil field's geology and production potential.

 Injection Well

CROWN CENTRAL PETROLEUM CORP.		
EXPLORATION DEPT.	E & P Div.	Midland
SKAGGS-GRAYBURG & SKAGGS-DRINKARD, NORMA FIELDS TRON - RESERVE LEA CO., NEW MEXICO		DATA MAP
Date: 6-19-72	Scale: 1" = 1000'	By: Luck

1. P.D. 100
 100/100
 515 10000
 2105 10000
 8/20/55
 800 3X
 9.1

Comment for
 8/20/55

Temp Survey
 Top

3600

3700

3800

3900

4000

8/26/55
 Grayburg Zone

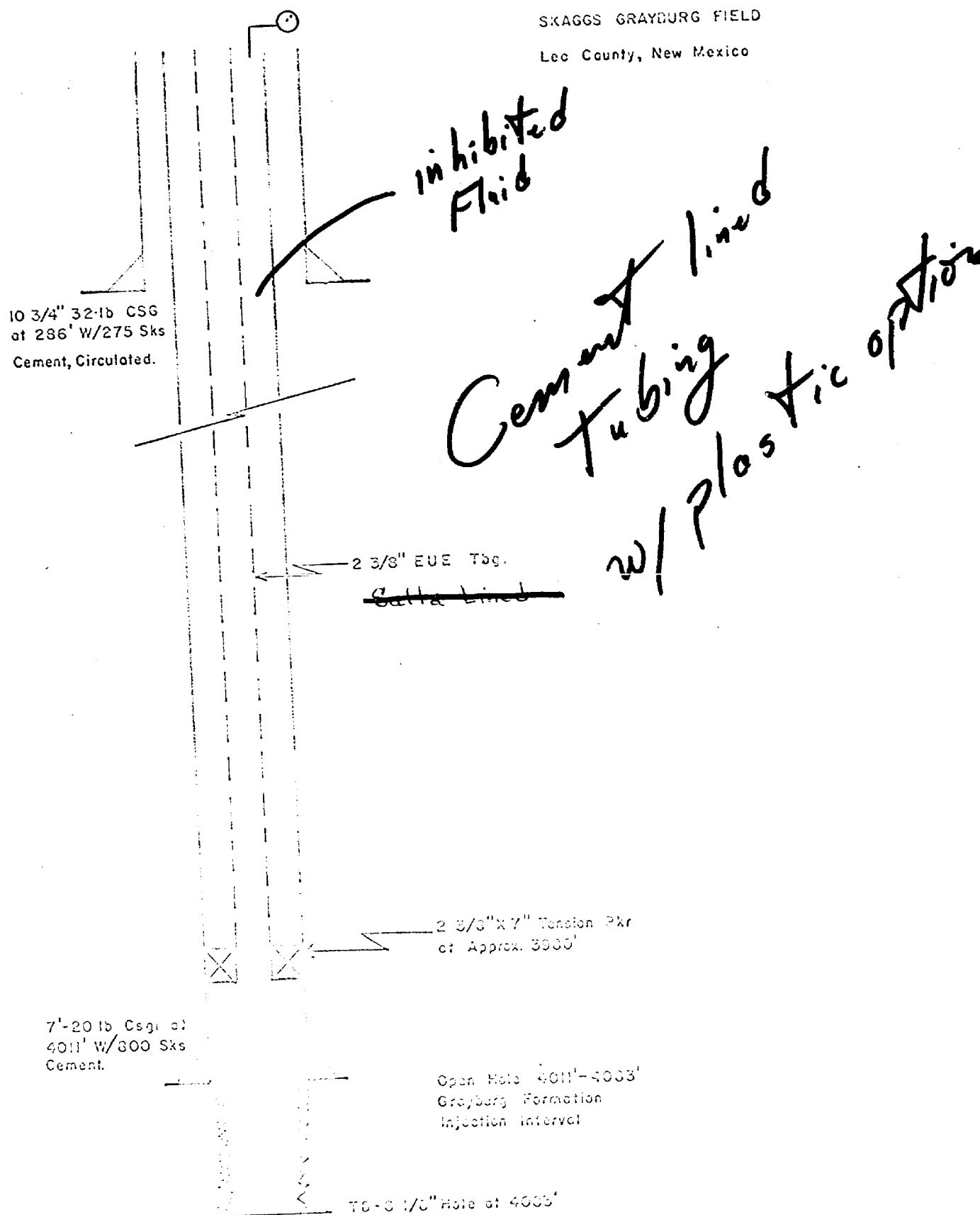
Sand frac w/10,000 #Sd
 & 10,000 gal. free oil

RUN ONE
 RUN TWO

Turner #2

CROWN CENTRAL PETR. CORP.
PROPOSED SALTWATER DISPOSAL

TURNER No. 2 WELL
SKAGGS GRAYBURG FIELD
Lee County, New Mexico



WAIVER

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

Gentlemen:

We have been notified by Crown Central Petroleum Corporation of their application, for approval, to inject saltwater into the Fred Turner No. 2 Well located 660' FSL and 1980' FEL, Section 6, Township 20S, Range 38E, Lea County, New Mexico. It is further understood that saltwater will be injected into the Grayburg Formation between the depths of 4011' - 4083'.

Yours truly,

David C. Carter
Partner
Aug 17, 1971

TITLE

DATE

17 E 26
38E7-20-38

WAIVER

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

Gentlemen:

We have been notified by Crown Central Petroleum Corporation of their application, for approval, to inject saltwater into the Fred Turner No. 2 Well located 660' FSL and 1980' FEL, Section 6, Township 20S, Range 38E, Lea County, New Mexico. It is further understood that saltwater will be injected into the Grayburg Formation between the depths of 4011' - 4083'.

Yours truly,



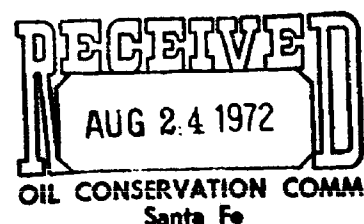
TRUSTEE FOR THE
ESTATE OF FRED TURNER, JR.

TITLE

DATE

8-15-72

WAIVER



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

Gentlemen:

We have been notified by Crown Central Petroleum Corporation of their application, for approval, to inject saltwater into the Fred Turner No. 2 Well located 660' FSL and 1980' FEL, Section 6, Township 20S, Range 38E, Lea County, New Mexico. It is further understood that saltwater will be injected into the Grayburg Formation between the depths of 4011' - 4083'.

Yours truly,
Imperial-American Resources Fund, Inc. -Debtor

A handwritten signature in dark ink, appearing to read "B.K. Smith".

TITLE

Agent

DATE

August 21, 1972

RECEIVED
AUG 23 1972
OIL CONSERVATION COMM.
HOBBS, N. M.

CROWN CENTRAL PETROLEUM CORPORATION



PRODUCERS • REFINERS • MARKETERS OF PETROLEUM PRODUCTS AND PETROCHEMICALS

SUITE 1002, WILCO BUILDING • MIDLAND, TEXAS 79701

July 20, 1972

Case 4802

RECEIVED

JUL 24 1972

OIL CONSERVATION COMM.
HOBBS, N. M.

Mr. J. D. Ramey
Supervisor & Oil & Gas Inspector
New Mexico Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico 88240

Re: Crown Central Petroleum Corp.
Application to Dispose Saltwater
into the Grayburg Formation
Fred Turner #2 Well
Skaggs - Grayburg Field
Lea County, New Mexico

Dear Sir:

Crown Central Petroleum Corporation desires to convert the subject well to Saltwater Disposal.

Attached are completed C-108 Forms with required supporting data.

Offset operators, Land Owner and the New Mexico State Engineer have been notified of this application.

Please set a hearing date at your earliest convenience.

Very truly yours,

N. E. Norris

N. E. Norris
District Production Manager

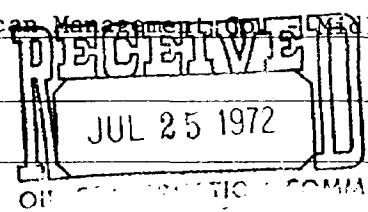
NEN:wt

DOCKETED

Date 8-11-72

NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR Crown Central Petroleum Corporation		ADDRESS 1002 Wilco Bldg., Midland, Texas 79701	
LEASE NAME Fred Turner	WELL NO. 2	FIELD Skaggs - Grayburg	COUNTY Lea
LOCATION UNIT LETTER 0 ; WELL IS LOCATED 660 FEET FROM THE South LINE AND 1980 FEET FROM THE East LINE. SECTION 6 TOWNSHIP 20S RANGE 38E NMPM.			
CASING AND TUBING DATA			
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT
SURFACE CASING	10-3/4"	284'	275
INTERMEDIATE	None		
LONG STRING	7"	4011'	800
TUBING	2-3/8"	3980'	Guiberson Model AF Tension Pkr. at 3980'
NAME OF PROPOSED INJECTION FORMATION Grayburg		TOP OF FORMATION 3868'	BOTTOM OF FORMATION Below T.D.
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? 2-3/8" Tubing		PERFORATIONS OR OPEN HOLE? Open Hole	PROPOSED INTERVAL(S) OF INJECTION 4011' - 4083'
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Grayburg producer		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Yes
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH 3525' - cemented w/800 sks.			
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 150 ±		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA None	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA 5900' (Blinbry)
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 30	MINIMUM 30	MAXIMUM 50	OPEN OR CLOSED TYPE SYSTEM Closed
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - Yes		WATER TO BE DISPOSED OF Grayburg & Drinkard	NATURAL WATER IN DISPOSAL ZONE Grayburg
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)		ARE WATER ANALYSES ATTACHED? Yes	
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL David C. Collier - Box #2 Star Rt., Artesia, N. M. 88210 Imperial American Management Corp. - Midland Savings Bldg., Midland, Texas 79701			
			
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? Yes	SURFACE OWNER Yes	EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes	THE NEW MEXICO STATE ENGINEER Yes
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) Yes	PLAT OF AREA Yes	ELECTRICAL LOG Yes	DIAGRAMMATIC SKETCH OF WELL Yes

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

N. E. News
(Signature)

District Production Manager
(Title)

7-20-72
(Date)

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

Form C-108
Revised 1-1-65

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

OPERATOR Crown Central Petroleum Corporation		ADDRESS 1002 Wilco Bldg., Midland, Texas 79701			
LEASE NAME Fred Turner	WELL NO. 2	FIELD Skaggs - Grayburg	COUNTY Lea		
LOCATION UNIT LETTER 0 ; WELL IS LOCATED 660 FEET FROM THE South LINE AND 1980 FEET FROM THE East LINE. SECTION 6 TOWNSHIP 20S RANGE 38E NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	10-3/4"	284'	275	Circulated	
INTERMEDIATE	None				
LONG STRING	7"	4011'	800	50 sks. 800 sks. at 3525'	Top. 3515' Temp. not determined
TUBING Proposed	2-3/8"	3980'	NAME, MODEL AND DEPTH OF TUBING PACKER Guiberson Model AF Tension Pkr. at 3980'		
NAME OF PROPOSED INJECTION FORMATION Grayburg		TOP OF FORMATION 3868'		BOTTOM OF FORMATION Below T.D.	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? 2-3/8" Tubing		PERFORATIONS OR OPEN HOLE? Open Hole		PROPOSED INTERVAL(S) OF INJECTION 4011' - 4083'	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Grayburg producer		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Yes	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH 3525' - cemented w/800 sks.					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 150 ±		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA None		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA 5900' (Blinbry)	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 30	MINIMUM 30	MAXIMUM 50	OPEN OR CLOSED TYPE SYSTEM Closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 30 psi
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - Yes			WATER TO BE DISPOSED OF Grayburg & Drinkard		
			NATURAL WATER IN DISPOSAL ZONE Grayburg		
			ARE WATER ANALYSES ATTACHED? Yes		
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL					
David C. Collier - Box #2 Star Rt., Artesia, N. M. 88210					
Imperial American Management Co. - Midland Savings Bldg., Midland, Texas 79701					
RECEIVED JUL 25 1972					
HAVE COPIES OF THIS APPLICATION SENT TO EACH OF THE FOLLOWING: Yes		OIL CONSERVATION COMMISSION Santa Fe		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		PLAT OF AREA Yes		ELECTRICAL LOG Yes	
				THE NEW MEXICO STATE ENGINEER Yes	
				DIAGRAMMATIC SKETCH OF WELL Yes	

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

N. S. Harris
(Signature)

District Production Manager
(Title)

7-20-72
(Date)

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

Case 4802

Form C-108
Revised 1-1-65

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

OPERATOR Crown Central Petroleum Corporation		ADDRESS 1002 Wilco Bldg., Midland, Texas 79701	
LEASE NAME Fred Turner	WELL NO. 2	FIELD Skaggs - Grayburg	COUNTY Lea
LOCATION UNIT LETTER 0 ; WELL IS LOCATED 660 FEET FROM THE South LINE AND 1980 FEET FROM THE East LINE, SECTION 6 TOWNSHIP 20S RANGE 38E NMPM.			

CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
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INTERMEDIATE	None				
LONG STRING	7"	4011'	800	50 sks. 800 sks. at 3525'	Top. 3515' Temp. not determined
TUBING	Proposed 2-3/8"	3980'	NAME, MODEL AND DEPTH OF TUBING PACKER Guiberson Model AF Tension Pkr. at 3980'		
NAME OF PROPOSED INJECTION FORMATION Grayburg		TOP OF FORMATION 3868'		BOTTOM OF FORMATION Below T.D.	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? 2-3/8" Tubing		PERFORATIONS OR OPEN HOLE? Open Hole		PROPOSED INTERVAL(S) OF INJECTION 4011' - 4083'	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Grayburg producer		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Yes	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH 3525' - cemented w/800 sks.					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 150 ±		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA None		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA 5900' (Blinbry)	
ANTICIPATED DAILY INJECTION VOLUME (BBLS.) 30	MINIMUM 30	MAXIMUM 50	OPEN OR CLOSED TYPE SYSTEM Closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 30 psi
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - Yes			WATER TO BE DISPOSED OF Grayburg & Drinkard	NATURAL WATER IN DISPOSAL ZONE Grayburg	ARE WATER ANALYSES ATTACHED? Yes
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL David C. Collier - Box #2 Star Rt., Artesia, N. M. 88210 Imperial American Management Co. - Midland Savings Bldg., Midland, Texas 79701					
<div style="border: 2px solid black; padding: 10px; width: fit-content; margin: 0 auto;"> RECEIVED JUL 25 1972 OIL CONSERVATION COMM </div>					
HAVE COPIES OF THIS APPLICATION SENT TO EACH OF THE FOLLOWING? Yes		SURFACE OWNER Yes		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) Yes		PLAT OF AREA Yes		ELECTRICAL LOG Yes	
				THE NEW MEXICO STATE ENGINEER Yes	
				DIAGRAMMATIC SKETCH OF WELL Yes	

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

<i>N. E. Harris</i> (Signature)	District Production Manager (Title)	7-20-72 (Date)
------------------------------------	---	--------------------------

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

CROWN CENTRAL PETROLEUM CORPORATION



PRODUCERS • REFINERS • MARKETERS OF PETROLEUM PRODUCTS AND PETROCHEMICALS

SUITE 1002, WILCO BUILDING • MIDLAND, TEXAS 79701

July 20, 1972

Case 4802

Mr. David C. Collier
Box #2 Star Rt.
Artesia, New Mexico 88210

Imperial American Management Co.
Midland Savings Building
Midland, Texas 79701

Re: Crown Central Petroleum Corp.
Application to Dispose Saltwater
into the Grayburg Formation
Fred Turner #2 Well
Skaggs - Grayburg Field
Lea County, New Mexico

Gentlemen:

This is to notify you that Crown Central Petroleum Corporation is
making application to convert the subject well to Saltwater Disposal.

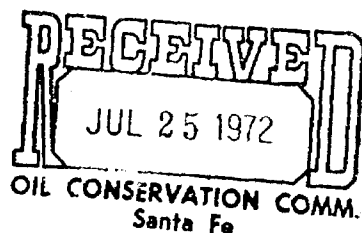
Attached for your information is a copy of Form C-108 as filed with
the New Mexico Oil Conservation Commission 7-18-72.

Very truly yours,

N.E. Norris

N. E. Norris
District Production Manager

NEN:wt



CROWN CENTRAL PETROLEUM CORPORATION



PRODUCERS • REFINERS • MARKETERS OF PETROLEUM PRODUCTS AND PETROCHEMICALS

SUITE 1002, WILCO BUILDING • MIDLAND, TEXAS 79701

July 20, 1972

Case 4802

Fred Turner, Jr. Estate
219 So. Colorado
Midland, Texas 79701

Re: Crown Central Petroleum Corp.
Application to Dispose Saltwater
into the Grayburg Formation
Fred Turner #2 Well
Skaggs - Grayburg Field
Lea County, New Mexico

Dear Sir:

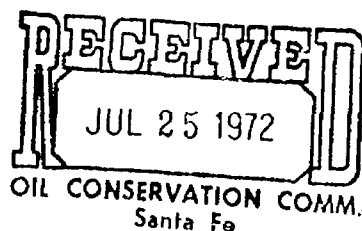
This is to notify you that Crown Central Petroleum Corporation is making application to convert the subject well to Saltwater Disposal. Attached for your information is a copy of Form C-108 as filed with the New Mexico Oil Conservation Commission 7-18-72.

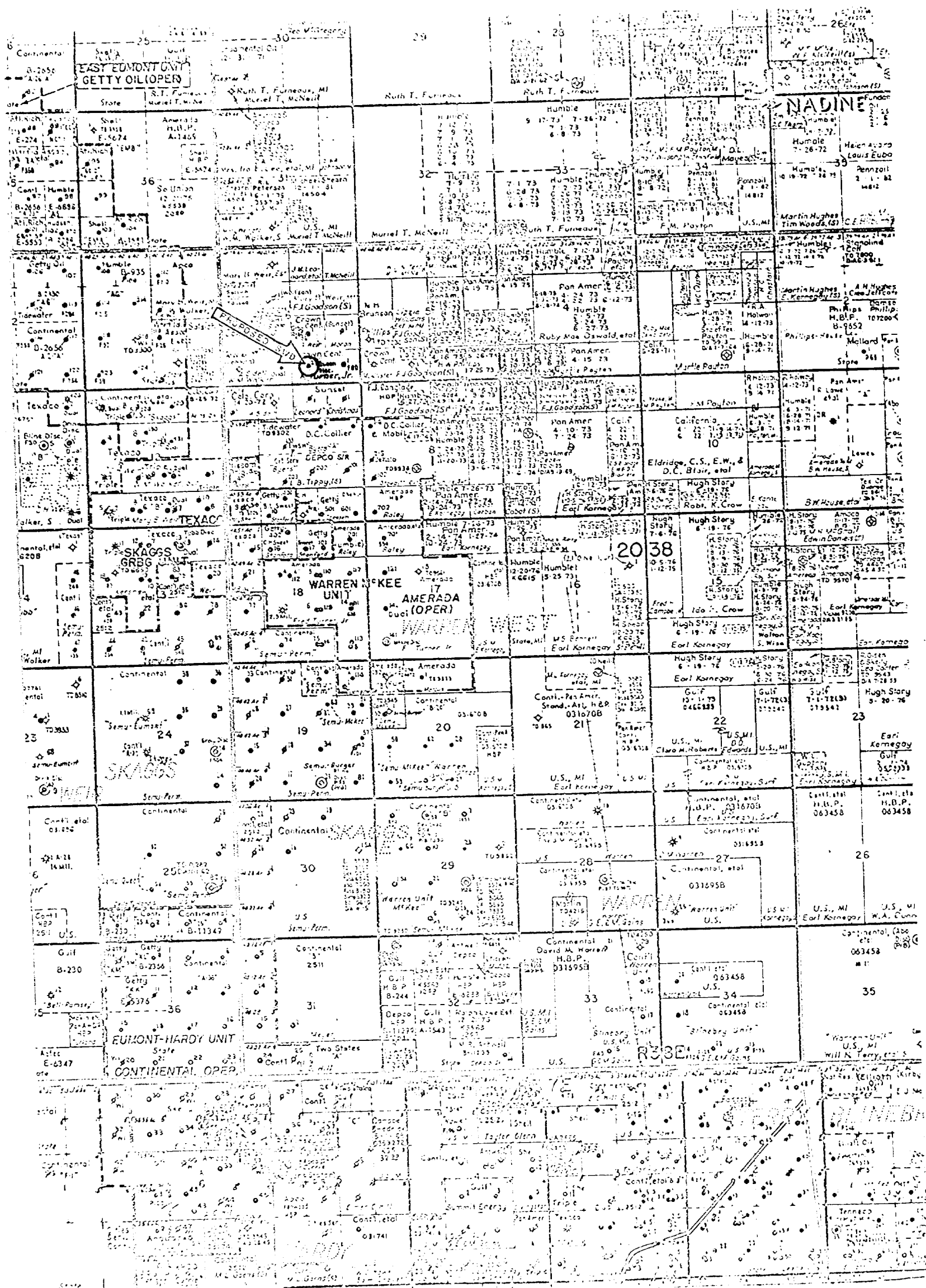
Very truly yours,

N. E. Norris

N. E. Norris
District Production Manager

NEN:wt





WATER ANALYSIS REPORT

Case 4802

TO: CROWN CENTRAL PETROLEUM CORPORATION
BOX 66
LEVELLAND, TEXAS

LABORATORY NO.: H0BBS950
DATE: JULY 17, 1972

WELL NAME + NO.:	TURNER 1	DEPTH:	3800 FT
FIELD:	NOT GIVEN	FORMATION:	NOT GIVEN
COUNTY:	LEA	STATE:	NEW MEXICO
SAMPLE PT.:	WELL HEAD	SAMPLE ID:	PRODUCED

DISSOLVED SOLIDS

OTHER PROPERTIES

CATIONS	MG/L	MEQ/L
SODIUM, NA	48019	2084
CALCIUM, CA	5800	289
MAGNESIUM, MG	2068	170

PH = 6.50
SP GR = 1.100
RESISTIVITY = .0000

ANIONS

CHLORIDES, CL	87578	2469
SULFATES, SO4	3500	72
BICARBONATES, HCO3	61	0

THE CALCIUM CARBONATE STABILITY INDEX = 0.941722

THE CALCIUM SULFATE STABILITY INDEX IS 25.88

A NEGATIVE NUMBER INDICATES THE SCALE IN SOLUTION DOES NOT EXCEED THE SATURATION VALUE AND SHOULD NOT PRECIPITATE.

REMARKS AND RECOMMENDATIONS:

Jim

16914

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

WATER ANALYSIS REPORT

TO: CROWN CENTRAL PETROLEUM CORPORATION
BOX GG
LEVELAND, TEXAS 79336

LABORATORY NO.: HOBBS
DATE: 5/1/72

WELL NAME + NO.:	WEIR #1	DEPTH:	4400 FT
FIELD:	GREYBUG	FORMATION:	GREYBURG
COUNTY:	LEA	STATE:	NEW MEXICO
SAMPLE PT.:	WELLHEAD	SAMPLE ID:	PRODUCED

DISSOLVED SOLIDS

OTHER PROPERTIES

CATIONS

MG/L

MEQ/L

SODIUM, NA

5985

259

PH =

6.60

CALCIUM, CA

1000

49

SP GR =

1.016

MAGNESIUM, MG

1338

110

RESISTIVITY=

.0000

ANIONS

CHLORIDES, CL

12764

359

SULFATES, SO4

950

19

BICARBONATES, HCO3

2440

39

THE CALCIUM CARBONATE STABILITY INDEX= 2.2222

THE CALCIUM SULFATE STABILITY INDEX IS -32.49

A NEGATIVE NUMBER INDICATES THE SCALE IN SOLUTION DOES
NOT EXCEED THE SATURATION VALUE AND SHOULD NOT PRECIPITATE.

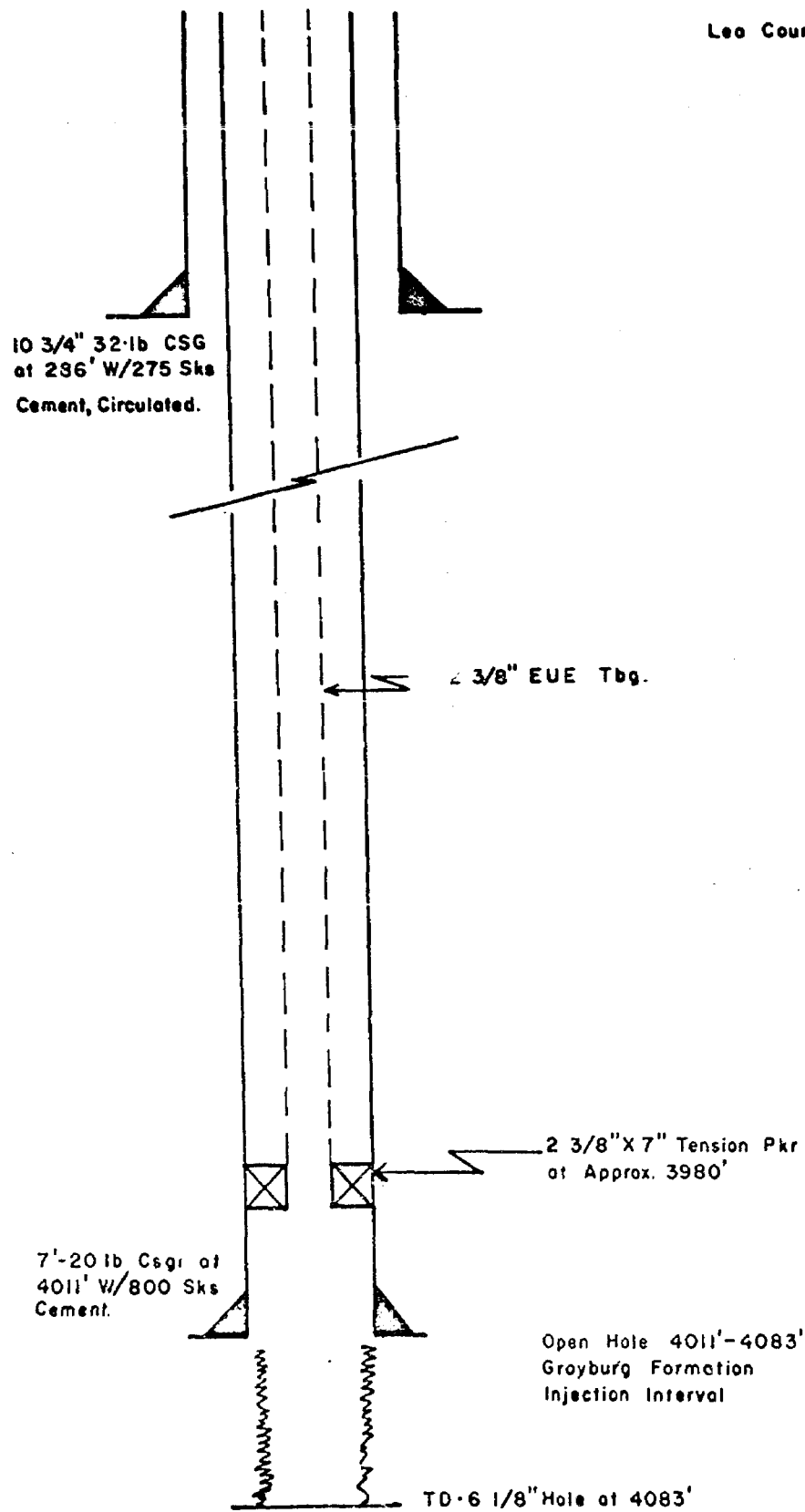
REMARKS AND RECOMMENDATIONS:

WALLY HARRELL

Case 4802

CROWN CENTRAL PETR. CORP.
PROPOSED SALTWATER DISPOSAL

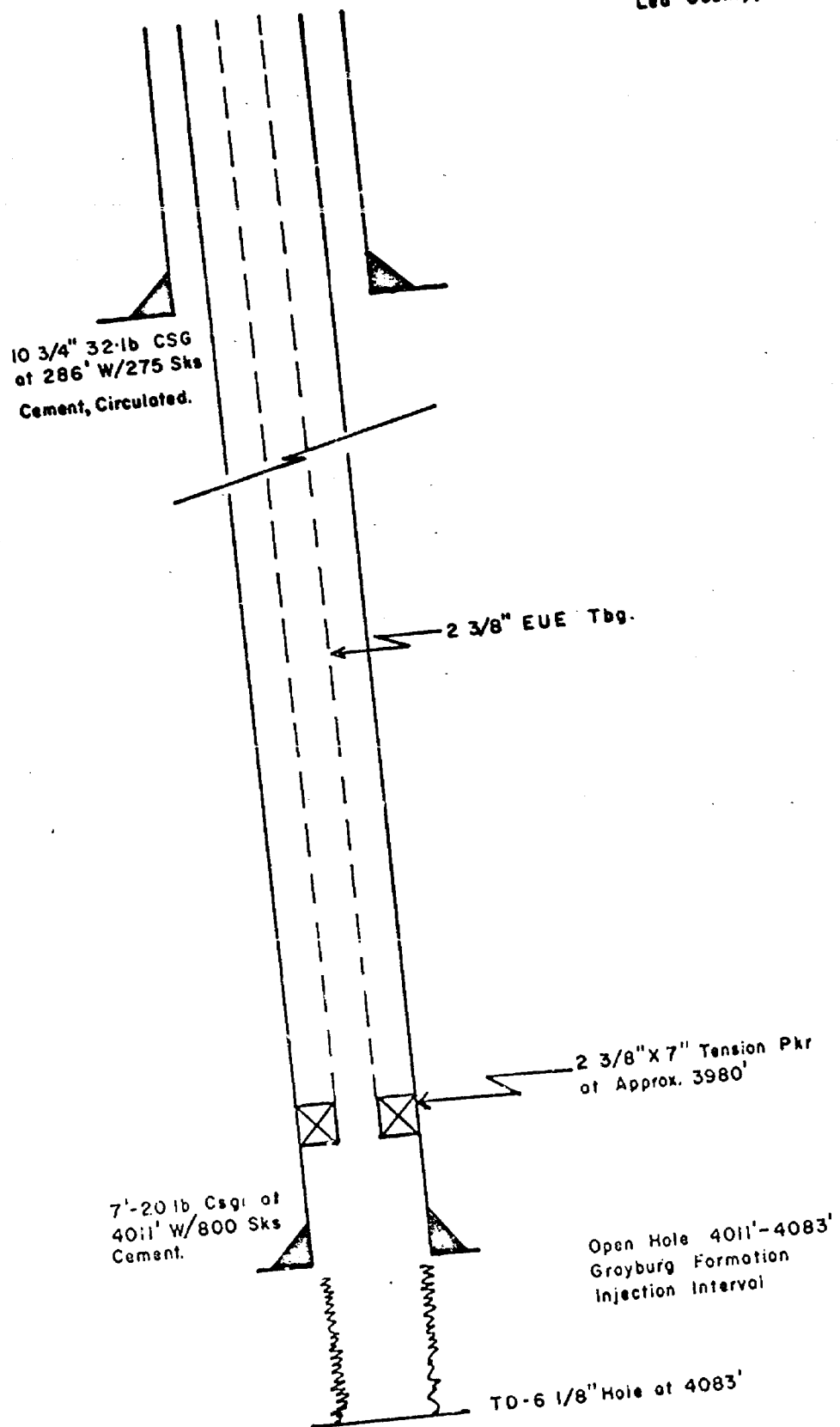
TURNER No. 2 WELL
SKAGGS GRAYBURG FIELD
Leo County, New Mexico



Case 4802

CROWN CENTRAL PETR. CORP.
PROPOSED SALTWATER DISPOSAL

TURNER No. 2 WELL
SKAGGS GRAYBURG FIELD
Lee County, New Mexico



Case 4802

DRAFT

GMH/dr

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 4802

Order No. R- 4387

APPLICATION OF CROWN CENTRAL
PETROLEUM CORPORATION FOR
SALT WATER DISPOSAL, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 23, 1972,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 24th day of August, 1972, the Commission, a
quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, Crown Central Petroleum Corporation,
is the owner and operator of the Fred Turner Well No. 2,
located in Unit 0 of Section 6, Township 20 South, Range
38 East, NMPM, Skaggs (Grayburg) Pool, Lea
County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the Grayburg
formation, with injection into the open-hole interval
from approximately 4011 feet to 4083 feet.

(4) That the injection should be accomplished through 2 3/8 inch
current or plastic-lined tubing installed in a packer set at

CASE No. _____

approximately 3980 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus ~~or the annulus left open~~ at the surface in order to determine leakage in the casing, tubing, or packer.

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Crown Central Petroleum Corporation, is hereby authorized to utilize its Fred Turner Well No. 2, located in Unit 0 of Section 6, Township 20 South, Range 38 East, NMPM, Skaggs (Grayburg) Pool, Lea County, New Mexico, to dispose of produced salt water into the Grayburg formation, injection to be accomplished through 2 7/8-inch tubing installed in a packer set at approximately 3980 feet, with injection into the open-hole interval from approximately 4011 feet to 4083 feet;

PROVIDED HOWEVER, that the tubing shall be ^{Cement or} ~~be~~ plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus ~~or the annulus left open~~ at the surface in order to determine leakage in the casing, tubing, or packer.

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

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

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