

CASE 4531: Application of HANSON
OIL COMPANY FOR SALT WATER DIS-
POSAL, EDDY COUNTY, NEW MEXICO.

Case Number
4531

Application

Transcripts

Small Exhibits

ETC.

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
April 28, 1971

EXAMINER HEARING

-----)
IN THE MATTER OF:)

Application of Hanson)
Oil Company for salt)
water disposal, Eddy)
County, New Mexico.)
-----)

Case No. 4531

BEFORE: Elvin A. Utz, Examiner

TRANSCRIPT OF PROCEEDINGS

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1 MR. UTZ: Are you waiting for another case,
2 Clarence?

3 MR. HINKLE: What's that?

4 MR. UTZ: Are you waiting for another case?

5 MR. HINKLE: Yes, the next one for Atlantic
6 Richfield, the next one after this one.

7 MR. UTZ: I see. Case 4532.

8 MR. HATCH: No, 31.

9 MR. KELLAHIN: 31.

10 MR. UTZ: 4531, okay.

11 MR. HATCH: Application of Hanson Oil Company
12 for salt water disposal, Eddy County, New Mexico.

13 MR. KELLAHIN: If the Examiner please,
14 Jason Kellihan, Kellahin and Fox, Santa Fe, appearing for
15 the applicant.

16 We have one witness I would like to have sworn.
17 (Witness sworn.)

18 (Whereupon, Applicant's Exhibits
19 One and Two were marked for
20 identification.)

21 GERALD HARRINGTON

22 called as a witness, having been first duly sworn, was
23 examined and testified as follows:

24 DIRECT EXAMINATION

25 BY MR. KELLAHIN:

Q Would you state your name, please?

1 A Gerald Harrington.

2 Q By whom are you employed and in what position,
3 Mr. Harrington?

4 A I am employed by Hanson Oil Corporation as a
5 petroleum geologist.

6 Q Have you ever testified before the Oil Conservation
7 Commission or one of its examiners?

8 A No, I have not.

9 Q For the benefit of the Examiner, would you
10 briefly outline your education and experience as a petroleum
11 geologist?

12 A I received a bachelor of science degree in
13 geology from the University of Oklahoma in January of 1953.
14 Since that time, I have been variously employed by the
15 Pacific Northwest Pipeline Corporation and its subsidiary,
16 Northwest Production Corporation, John H. Trigg, an
17 independent oil operator in Roswell, the Atlantic Richfield
18 Corporation in Roswell, and for the past twelve months,
19 by Ernest A. Hanson and Son Oil Corporation.

20 Q In connection with your work for Ernest A. Hanson,
21 do you have anything to do with the area involved in this
22 application?

23 A Yes, I have been involved in the study of the
24 area and the production operations.

25 MR. KELLAHN: Are the witness' qualifications

1 acceptable?

2 MR. UTZ: Yes, sir.

3 Q (By Mr. Kellahin) Mr. Harrington, what's proposed
4 by the applicant in this case?

5 A Hanson Oil Corporation proposes to convert
6 its Number 11 Well located in Unit C of Section 25,
7 Township 26 South, Range 31 east, Eddy County, from a
8 non-commercial producing oil well to a salt water disposal
9 well. The well is circled in red on the --

10 Q And is that on Exhibit Number One?

11 A Exhibit Number One.

12 Q Yes, sir. And what other information is shown
13 on Exhibit Number One?

14 A The existence of a disposal well, Number 7 Well
15 in the same section, and the location of the tank batteries,
16 the number of producing wells, and the line from the
17 batteries to the currently existing disposal well.

18 Q Now, will you use the Number 11 Well in connection
19 with your provision of your Number 7 well, which is
20 currently used for water disposal?

21 A Yes sir, our Number 7 Well is approaching the
22 limit of the receptability on the disposal of water, in that
23 our pressures are approaching the maximum, and we propose to
24 use our Number 11 Well to alleviate some of the disposal
25 of the produced salt water and alleviate some of the pressures

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1 under which we are currently injecting salt water in the
2 Number 7 Well.

3 Q Now, approximately what volumes of water are
4 you injecting in your Number 7 Well at the present
5 time?

6 A In the vicinity of four hundred and fifty barrels
7 per day. It varies some, but that's a general average on
8 a daily rate.

9 Q And what kind of pressures are you encountering
10 there?

11 A The pressures vary at the present time between
12 1425 pounds and 1475 pounds.

13 Q Will reducing the volume of water injected
14 into that well and transferring it to the other result
15 in a lower pressure?

16 A Yes, sir.

17 Q Now, what is the status of your Number 11 Well at
18 the present time?

19 A The Number 11 Well is a non-commercial well. In
20 the past twelve months, its average production has been
21 3.6 barrels of oil per day, 6.8 barrels of water per day,
22 and 1.8 MCF of gas per day.

23 Q What formation is it producing from?

24 A The Delaware sand formation.

25 Q The same formation in which you propose to inject

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1 water?

2 A It is.

3 Q Did you attach a copy of the log section to

4 your application in this case which was filed with the

5 Commission showing the injection interval?

6 A A full-scale reproduction, or full-scale copy

7 of the entire log was attached to the application.

8 Q And the area was marked on the log, is that

9 correct?

10 A That is correct.

11 Q Now, you say the production has not been profitable

12 for sometime on the Number 11 Well, is that correct?

13 A That is correct. It has been one of the poorest

14 wells in the North Mason-Delaware Field.

15 Q Will the injection of water into that formation

16 at that location cause any damage to the adjacent wells?

17 A No.

18 Q Now, referring to what has been marked as

19 Exhibit Number Two, would you identify that exhibit, please,

20 sir?

21 A Exhibit Number Two is a diagrammatic sketch of

22 the proposed physical hookup in which -- for converting

23 our Number 11 Well to a salt water disposal well.

24 Q And this would indicate you are going to inject

25 in the open hole under a packer, is that correct?

1 A That is correct.

2 Q Will you use an internally coated tubing in this
3 completion?

4 A We intend to run plastic-coated internal plastic
5 coated two and three-eighths inch tubing with a HOWCO R-3
6 Packer.

7 Q And will you fill the casing tubing annulus
8 with an inner fluid?

9 A We intend to fill the annulus with an inhibited non-
10 corrosive water.

11 Q And will you set a pressure gauge at the surface?

12 A Yes, a pressure gauge will be set at the surface
13 in order to test the pressure at the surface.

14 Q Now, in your diagrammatic sketch you show the
15 top of the cement as unknown. Do you know the volume of
16 cement that was used --

17 A Yes, the well was drilled in 1956 by the Ibex
18 Corporation and they did not at that time run a temperature
19 survey. However, I have calculated an estimated top of
20 the cement at a depth of 3,240 feet.

21 Q Now, to your knowledge, is there any fresh
22 water zone or any producing zone behind the casing which
23 has not been lined with cement?

24 A None to my knowledge.

25 Q Was there a water analysis filed with the

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1 application?

2 A There was.

3 Q Generally speaking, is this water corrosive or non-
4 corrosive?

5 A Fairly -- it's generally non-corrosive. There
6 would be a slight amount of corrosion as a result of the
7 sodium and potassium content, but for the most part, it's
8 relatively non-corrosive. We have had no problems with our
9 plastic-lined tubing in our Number 7 Well.

10 Q Now, have you had any difficulty with -- any
11 difficulties with the corrosion in the operation of the
12 Number 7 Well?

13 A None at all.

14 Q And this is the same type of water you are
15 injecting --

16 A This would be the identical waters, inasmuch as
17 it's a produced salt water.

18 Q And what is the source of the water that you
19 would be disposing of?

20 A It's produced salt water from the Delaware sand.

21 Q And is that from your own wells, or --

22 A From our own wells in addition to other operators
23 in the area.

24 Q What volume of water do you anticipate you will
25 inject in the Number 11 Well?

1 A We would anticipate a volume range from fifty
2 to five hundred barrels per day.

3 Q And what pressures do you anticipate you will
4 encounter?

5 A A maximum pressure of fifteen hundred pounds per
6 square inch.

7 Q Now, as I understand from your testimony, you
8 have about reached maximum pressure on your Number 7 Well.
9 Will the additional well encounter the same problem, or
10 what will the situation be there?

11 A Ultimately, it will. However, initially I would
12 suspect that we would inject the pressures at considerably
13 less than fifteen hundred pounds.

14 Q And this will be adequate to take care of the
15 present water production in this area, in your opinion?

16 A Yes, sir.

17 Q Were Exhibits One and Two prepared by you or under
18 your supervision?

19 A They were.

20 MR. KELLAHIN: At this time, I would like to offer
21 in evidence Exhibits One and Two.

22 MR. UTZ: Without objection, Exhibits One and Two
23 will be entered into the record of this case.

24 (Whereupon, Applicant's Exhibits
25 One and Two were admitted in
evidence.)

1 MR. KELLAHIN: That completes the witness'
2 testimony.

3 CROSS EXAMINATION

4 BY MR. UTZ:

5 Q What did you say the current volume of production
6 was for the Number 11?

7 A Average for the last twelve months has been 3.6
8 barrels of oil per day, 6.8 barrels of water per day, and
9 1.8 MCF of gas per day.

10 Q And you think you could afford to make an injection
11 well out of this?

12 A Without question.

13 MR. UTZ: Any questions of the witness?

14 (Witness excused.)

15 MR. KELLAHIN: If the Examiner please, the situation
16 involved here is one which would require for the company to
17 make a prompt conversion of this well, and we would appreciate
18 hearing from the Commission as soon as possible on it.

19 MR. UTZ: Does it have to do with leases?

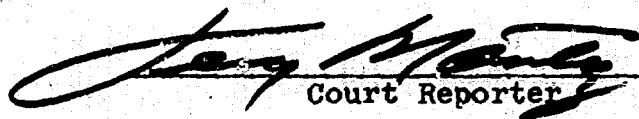
20 MR. KELLAHIN: No sir, it has to do with water
21 problems.

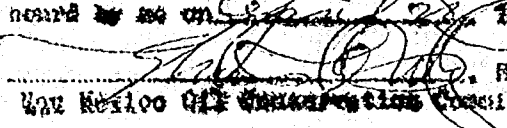
22 MR. UTZ: The case will be taken under advisement.
23
24
25

1	<u>I N D E X</u>		
2	<u>WITNESS</u>		<u>PAGE</u>
3	GERALD HARRINGTON		
4	Direct Examination by Mr. Kellahin		2
5	Cross Examination by Mr. Utz		10
6			
7			
8	<u>EXHIBIT</u>	<u>MARKED</u>	<u>OFFERED AND RECEIVED</u>
9	Applicant's 1 and 2	2	9
10			
11			
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1 STATE OF NEW MEXICO)
2 : ss
3 COUNTY OF MCKINLEY)

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

I do hereby certify that the foregoing is
a complete record of the proceedings in
the hearing of Case No. 16-531
heard by me on September 28, 1971

New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

May 3, 1971

GOVERNOR
BRUCE KING
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Re: Case No. 4531

Order No. R-4135

Applicant:

Hanson Oil Company

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x

Artesia OCC x

Aztec OCC

Other State Engineer office and
Bureau of Land Management - Santa Fe

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. 4531
Order No. R-4135

APPLICATION OF HANSON OIL COMPANY
FOR SALT WATER DISPOSAL, EDDY
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 28, 1971, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 3rd day of May, 1971, 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, Hanson Oil Company, is the owner and operator of the Hanson Federal Well No. 11, located in: Unit C of Section 25, Township 26 South, Range 31 East, NMPM, North Mason-Delaware Pool, Eddy County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Delaware formation, with injection into the open-hole interval from approximately 4192 feet to 4197 feet.

(4) That the injection should be accomplished through 2 3/8-inch plastic-lined tubing installed in a packer set at approximately 4140 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.

-2-

CASE NO. 4531
Order No. R-4135

(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, Hanson Oil Company, is hereby authorized to utilize its Hanson Federal Well No. 11, located in Unit C of Section 25, Township 26 South, Range 31 East, NMPM, North Mason-Delaware Pool, Eddy County, New Mexico, to dispose of produced salt water into the Delaware formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 4140 feet, with injection into the open-hole interval from approximately 4192 feet to 4197 feet;

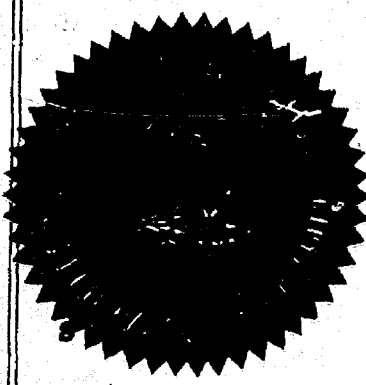
PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.

(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. Armijo
ALEX J. ARMILLO, Member

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

dr/

⑥

Case 4531

Leard 4-28-71

Rec. 4-28-71

Grant Hansons SUD for the
Hanson Sed. II C-25-26-31 in
H. Mason Delaware.

Injection to be ~~existing~~ tubing
under a packer at approx.
4140 and into open hole from
4192-4197. of the Delaware Sand.
2" tubing to be internally galvanized
coated and the annulus to be
filled w/ intert fluid. A pressure
gauge to be installed in the
annulus at the surface.
Expedite this order as Hansen
has a water deadline.

Steve [Signature]

Docket No. 9-71

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 28, 1971

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

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 4352: (Reopened) Continued from the April 14, 1971 hearing. This case will again be continued - to the May 19, 1971 hearing.

In the matter of Case 4352 being reopened by the Oil Conservation Commission upon its own motion to give all interested persons an opportunity to appear and present evidence as to whether the Double L-Queen and Suble-Queen Pools, Chaves County, New Mexico, are in fact separate reservoirs or one common reservoir. Further, in the event it is found that the two pools comprise one common reservoir, the Commission will consider the adoption of special rules and regulations to provide for the classification of oil and gas wells, spacing and well location requirements for oil and gas wells, and an allocation formula for withdrawals from the gas wells and oil wells.

CASE 4523: Application of Texas Pacific Oil Company, Inc., for the rededication of acreage, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the rededication of a 160-acre non-standard gas proration unit in the Jalmat Gas Pool comprising the SE/4 of Section 31, Township 25 South, Range 37 East, Lea County, New Mexico, to its Legal Wells Nos. 1 and 2, located, respectively, in Units P and I of said Section 31. Applicant further seeks authority to produce the allowable assigned to said unit from either of said wells in any proportion.

CASE 4524: Application of Texaco Inc. for reinstatement of cancelled underproduction, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the general rules and regulations for the prorated gas pools of Southeastern New Mexico to permit the reinstatement of accumulated underproduction cancelled for its Blinbry "A" Federal (NCT-1) Well No. 2 located in Unit I, Section 31, Township 23 South, Range 37 East, Jalmat Gas Pool Lea County, New Mexico.

CASE 4525: Application of Wolfson Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 280-acre non-standard gas proration unit comprising the SW/4, S/2 NW/4, and NE/4 NW/4 of Section 20, Township 22 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its

Cities-Federal Well No. 1 located 2310 feet from the South line and 380 feet from the West line of said Section 20.

CASE 4526:

Application of Pennzoil United, Inc., for the creation of a new pool and promulgation of special pool rules, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of gas from the San Andres formation for its Superior State Well No. 1 located in Unit L of Section 8, Township 7 South, Range 35 East, Roosevelt County, New Mexico, and for the promulgation of special rules therefor, including a provision for 320-acre spacing units.

CASE 4527:

Application of Big "6" Drilling 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 Bone Springs formation in the interval from 10,062 feet to 10,119 feet in its Ora Jackson "A" Well No. 1 located in Unit M of Section 5, Township 19 South, Range 35 East, Scharb-Bone Springs Pool, Lea County, New Mexico.

CASE 4528:

Application of Frankm, Aston & Fair, Inc., for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, to dispose of water produced by its Coppedge Well No. 1-C located in Unit H of Section 5, Township 18 South, Range 30 East, Loco Hills-Grayburg-San Andres Pool, Eddy County, New Mexico, in an unlined pit in the vicinity of said well.

CASE 4529:

Application of El Paso Natural Gas Company for 320-acre spacing, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks 320-acre spacing for the Grayburg-Atoka Gas Pool, Eddy County, New Mexico. Said pool was created prior to June 1, 1964, and therefore is not automatically eligible for 320-acre spacing. In the absence of evidence to the contrary, 320-acre spacing will be established for the pool.

CASE 4530:

Application of Amcco Production Company for down-hole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle oil production from the Blinbry and Drinkard Pools in the well-bore of its Southland Royalty "A" Well No. 2, a triple completion, located in Unit B of Section 9, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 4518: (Readvertised)

Application of American Quasar Petroleum Company of New Mexico for a unit agreement and unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Vaca Draw Unit Area comprising 7,680 acres, more or less, of State, Federal and fee lands in Township 25 South, Range 33 East, Lea County, New Mexico. Applicant further seeks authority to drill an exploratory gas well at an unorthodox location 660 feet from the North line and 760 feet from the East line of Section 28, said Township and Range, to test the Devonian, Pennsylvanian, and Wolfcamp formations within one mile of the Red Hills Field. In the absence of objection an order will issue based upon testimony received in this case on March 31, 1971.

CASE 4531:

Application of Hanson Oil Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water by injection into the Delaware formation in the open-hole interval from 4192 to 4197 feet in its Hanson Federal Well No. 11 located 990 feet from the North line and 1650 feet from the West line of Section 25, Township 26 South, Range 31 East, North Mason-Delaware Pool, Eddy County, New Mexico.

CASE 4532:

Application of Atlantic Richfield Company for the assignment of gas allowable, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the assignment of gas allowable to its Phillips "A" Well No. 9, located 800 feet from the South line and 660 feet from the West line of Section 31, Township 19 South, Range 37 East, Monument-McKee Gas Pool, Lea County, New Mexico, for the proration period from July 1, 1970, through December 31, 1970, and for January and February, 1971. Said well was completed in March, 1971, as a twin replacement well for applicant's Phillips "A" Well No. 8 which ceased producing in 1969 and after extensive and unsuccessful workover operations was abandoned in January, 1971.

CASE 4533:

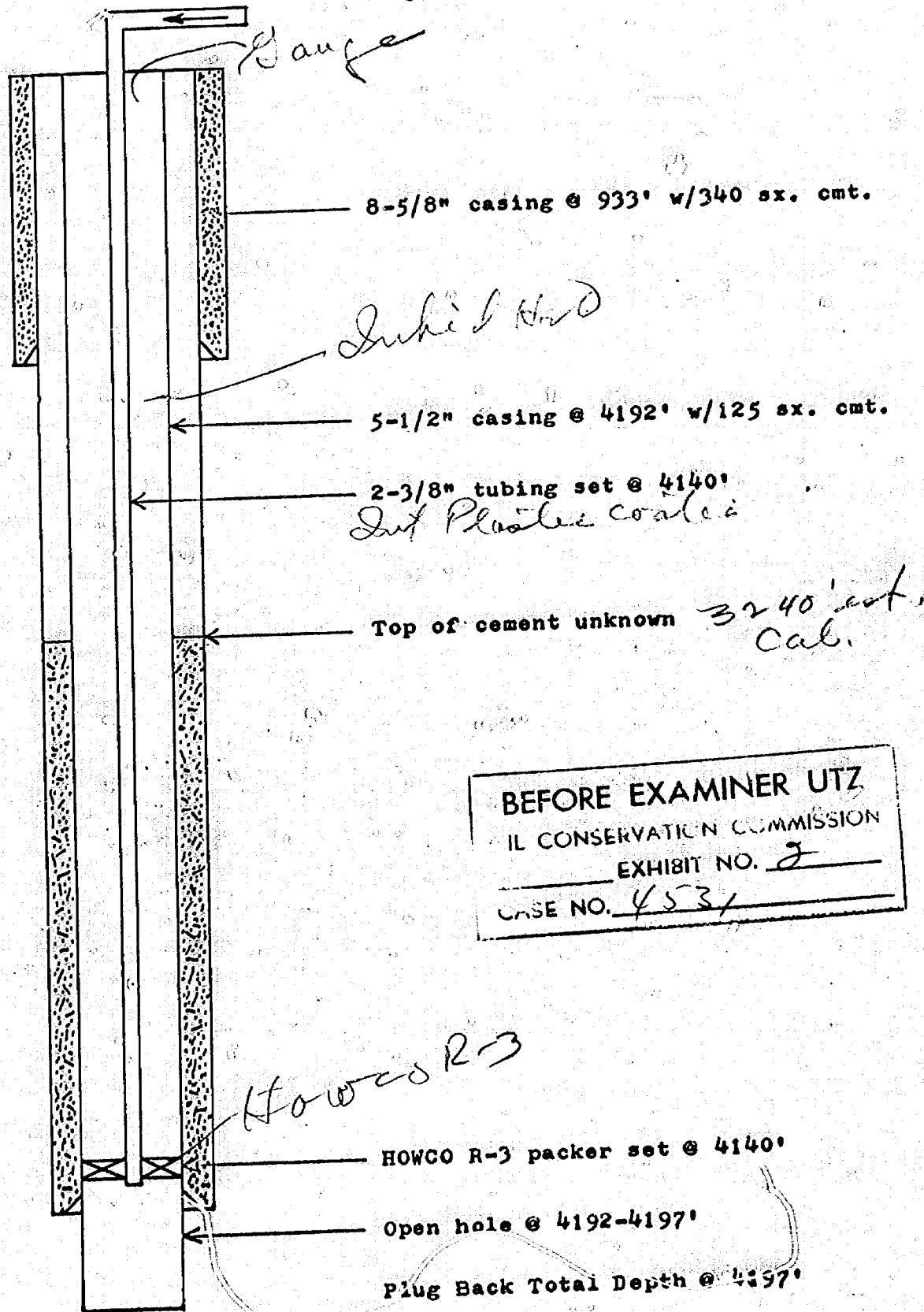
Application of Amoco Production Company for reinstatement of cancelled under production and reclassification of three wells, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the general rules for prorated gas pools in Southeast New Mexico to permit the reinstatement of underproduction cancelled January 1, 1971, for the following wells: Gillully "B" Fed. No. 3, in Unit N of Section 33, Township 20 South, Range 37 East, Eumont

Pool; Gillully Fed. Gas Com. No. 4, in Unit B of Section 24, Township 20 South, Range 36 East, Eumont Pool; and State "C" Tr. 12 No. 4, in Unit F of Section 16, Township 21 South, Range 37 East, Blineby Pool. Applicant further seeks the reclassification from marginal to non-marginal of the aforesaid Gillully "B" Fed. No. 3, and the Owen "B" Fed. No. 2 in Unit B of Section 34 and the Southland Royalty "A" No. 2 in Unit B of Section 9, both in Township 21 South, Range 37 East, Tubb Gas Pool.

CASE 4534: Application of Continental Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit in the Blineby Gas Pool consisting of the N/2 SW/4, SE/4 SW/4, and SW/4 SE/4 of Section 21, Township 21 South, Range 37 East, Lea County, New Mexico, to be assigned jointly to its Wantz Wells Nos. 8 and 11 located in Units O and L respectively of said section; or, in the alternative, for the reallocation of acreage between the two wells so as to assign 40-acres to Well No. 11 and 120-acres to Well No. 8.

CASE 4535: Application of Continental Oil Company for down-hole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Monument-Tubb and Weir Drinkard oil production in the well-bore of its SEMU Well No. 70, located in Unit I of Section 15, Township 20 South, Range 37 East, Lea County, New Mexico.

DIAGRAMMATIC SKETCH
Salt Water Disposal Well



BEFORE EXAMINER UTZ
IL CONSERVATION COMMISSION
EXHIBIT NO. 2
CASE NO. 4531

NEW MEXICO OIL CONSERVATION COMMISSION

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

OPERATOR Hanson Oil Corporation		ADDRESS P. O. Box 1515 Roswell, New Mexico	
LEASE NAME Hanson Federal	WELL NO. 11	FIELD North Mason Delaware.	COUNTY Rddy
LOCATION UNIT LETTER C ; WELL IS LOCATED 990 FEET FROM THE North LINE AND 1650 FEET FROM THE West LINE. SECTION 25 TOWNSHIP 26-S RANGE 31-E NMPM.			

CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	8-5/8"	933'	340	Unknown	
INTERMEDIATE					
LONG STRING	5-1/2"	4192'	125	Unknown	
TUBING	2-3/8"	4140'	NAME, MODEL AND DEPTH OF TUBING PACKER Halliburton R-3 @ 4140'		
NAME OF PROPOSED INJECTION FORMATION Delaware sand			TOP OF FORMATION 4170'		BOTTOM OF FORMATION Unknown
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLE? Open Hole		PROPOSED INTERVAL(S) OF INJECTION 4192-4197'	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Producing oil well		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? No	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA Unknown		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA Unknown		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA Unknown	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 50	MINIMUM 500	MAXIMUM 500	OPEN OR CLOSED-TYPE SYSTEM Open	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 1500
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 Yes		NATURAL WATER IN DISPOSAL ZONE Yes	ARE WATER ANALYSES ATTACHED? Yes
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Buck Jackson, Box 671, Pecos, Texas 79772					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL					
Continental Oil Co., Box 460, Hobbs, New Mexico 88240					
C. B. Read, Box 1822, Roswell, New Mexico 88201					
Keith & Haines, Box 844, Kermit, Texas 79745					
Texaco, Inc., Box 728, Hobbs, New Mexico 88240					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		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)?		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.

David E. Harrington Geologist April 6, 1971
(Signature) (Title) (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.



Hanson Oil Corporation

PETROLEUM BUILDING
P. O. BOX 1515
ROSWELL, NEW MEXICO 88201
505 622-7330

April 6, 1971

APR 7 PM 1 03

Case 4531

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

Re: Application for Salt Water
Disposal, North Mason-
Delaware Field
Eddy County, New Mexico

Gentlemen:

Hanson Oil Corporation, owner and operator of the Hanson Federal Well No. 11, located in Unit C of Section 25, Township 26 South, Range 31 East, NMPM, North Mason-Delaware Pool, Eddy County, New Mexico, does hereby make application to convert said well for use as a salt water disposal well. Reference is made to the New Mexico Oil Conservation Commission Order No. R-3451 which was issued July 9, 1968, to Ernest A. Hanson authorizing the utilization of another well on this lease for this purpose.

Hanson Oil Corporation proposes to inject produced salt water into the Delaware formation through 2-3/8 inch internally plastic coated tubing installed in a HOWCO R-3 packer set at approximately 4140 feet, with injection into the open hole interval from approximately 4192 feet to 4197 feet. The casing-tubing annulus will be filled with a non-corrosive inhibited water, and a pressure gauge will be installed at the surface as a check on any leakage.

It is respectfully requested that this application be placed on the docket of the New Mexico Oil Conservation Commission hearing scheduled for April 28, 1971.

Yours very truly,

Gerald E. Harrington
Gerald E. Harrington
Geologist

GEH:ef

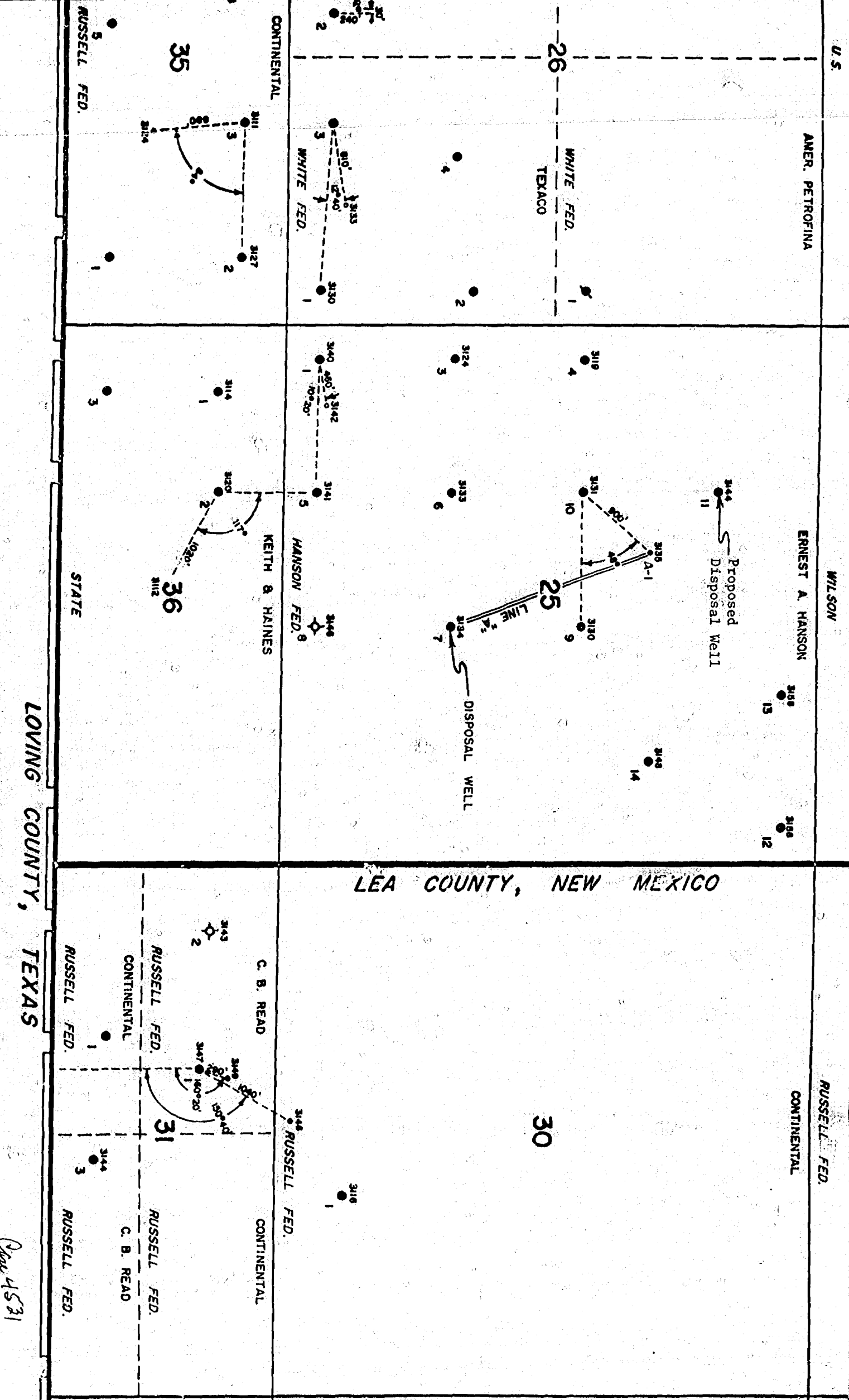
Encl: Plat

Radioactivity Log
Diagrammatic Sketch
Water Analysis
Form C-108

DOCKET MAILED

Date

4-16-71



LOVING COUNTY, TEXAS

Case 4531

SAMPLE NO _____

THE WESTERN COMPANY
Service Laboratory

WATER ANALYSIS

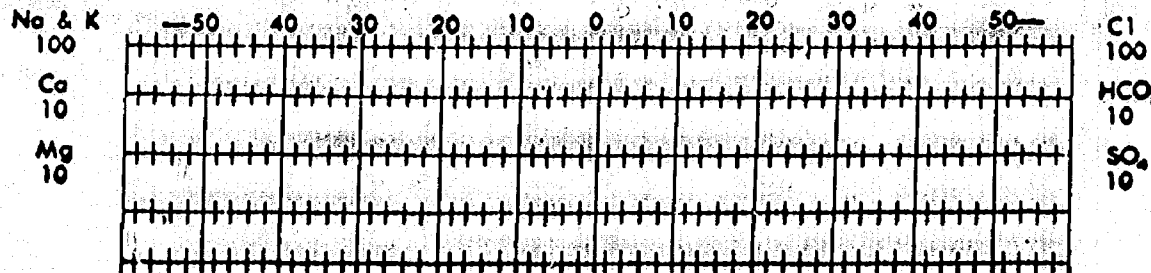
Operator	Hanson Oil Company	Date Sampled	
Well		Date Received	3-17-71
Field	North Mason	Submitted by	Hobbs District
Formation	Delaware	Worked by	Koehl
Depth		Other Description	Tank Battery
County	Lea, New Mexico		

CHEMICAL DETERMINATIONS

Density	1.150 @ 72°F	pH	6.0
Iron	Faint Trace	Hydrogen Sulfide	None
Sodium and Potassium	55,500 ppm	Bicarbonate	134 ppm
Calcium	20,000 ppm	Sulfate	800 ppm
Magnesium	4,140 ppm	Phosphate	ppm
Chloride	130,800 ppm	as Sodium Chloride	ppm

Remarks:

for Stiff type plot (in meq./l.)



Can 4531

Per _____

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. 4531

Order No. R-4135

APPLICATION OF HANSON OIL COMPANY
FOR SALT WATER DISPOSAL, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 28, 1971,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this May day of May, 1971, 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, Hanson Oil Company, is the owner
and operator of the Hanson Federal Well No. 11, located in Unit C
of Section 25, Township 26 South, Range 31 East, NMPM, North
Mason-Delaware Pool, Eddy County, New Mexico.

-2-

CASE No. 4531
Order No. R-

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Delaware formation, with injection into the ^{open hole} ~~perforated~~ interval from approximately 4192 feet to 4197 feet.

(4) That the injection should be accomplished through 2 3/8-inch plastic-lined tubing installed in a packer set at approximately 4140 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.

IT IS THEREFORE ORDERED:

(1) That the applicant, Hanson Oil Company, is hereby authorized to utilize its Hanson Federal Well No. 11, located in Unit C of Section 25, Township 26 South, Range 31 East, NMPM, North Mason-Delaware Pool, Eddy County, New Mexico, to dispose of produced salt water into the Delaware formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 4140 feet, with injection into the ^{open hole} ~~perforated~~ interval from approximately 4192 feet to 4197 feet;

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

-3-

CASE NO. 4531

Order No. R-

(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.

~~Project~~

Hanson Oil Corp
Salt Disposal
Eddy Co.

Hanson Fed Well 11

990' FNL 1650' FWL

Sec 25

T 26 S

R 31 E

Eddy Co

Dispose prod SW into
Delaware sand form
open hole interval

4192' to 4197'

called in by Jerry Harrington
Resource

4/5/71

88201

BOX 15-15 DOCKET MAILED

~~DATE~~

[Signature]

[Stamp] 8-1

CASE 4532: Appli. of ATLANTIC
RICHFELD for the assignment of
gas allowable, Lea County.