Case Number

4280

Application

Transcripts.

Small Exhibits

ETC.

J. M. HUBER CORPORATION

OIL AND GAS DIVISION
1900 WILCO BUILDING
MIDLAND, TEXAS 79701

MIDLAND DISTRICT OFFICE

TELEPHONE
915-682-3794

April 9, 1981

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

File
Case 4280

RE: Stoltz State SWD #1-M in 6-15-34
SWD-230, Sec. 6, T-15-S, R-35-E

R3899

Gentlemen:

Disposal into the San Andres and Glorieta formations in the above captioned well was approved by SWD-230 on August 29, 1980. The order specified a limiting injection pressure of 930 psi. During Ocotober, 1980, surface injection pressures of 1400 psi were observed. Following this, disposal into this well was restricted so as not to exceed the specified injection pressure of 930 psi. A workover was performed in January, 1981 to reacidize the perforations. Following this work water is currently being injected at a rate of 360 BWPD with a surface injection pressure of 550 psi to 580 psi. A summary of this work is shown on the attached Form C-103.

Very truly yours,

J. M. HUBER CORPORATION

Robert G. Setzler
District Production Manager

RGS:dc

Attachments

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LAND OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease
State [X] Fee [ ]

5. State Oil & Gas Lease No.
K-2814

SUNDRY NOTICES AND REPORTS ON WELLS

DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT —" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL [ ] GAS WELL [ ] OTHER- Salt Water Disposal Well

7. Unit Agreement Name

2. Name of Operator
J. M. Huber Corp.

8. Farm or Lease Name
Stoltz State SWD

3. Address of Operator
1900 Wilco Bldg. Midland, Texas 79701

9. Well No.
1

4. Location of Well
UNIT LETTER M , 554 FEET FROM THE South LINE AND 554 FEET FROM
THE West LINE, SECTION 6 TOWNSHIP 15-S RANGE 35-E NMPM.

10. Field and Pool, or Wildcat
Morton San Andres

15. Elevation (Show whether DF, RT, GR, etc.)
4061' DF

12. County
Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [X]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [ ]
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [ ]	
OTHER [ ]		OTHER [ ]	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Summary of work done 1-30-81 through 2-13-81. RU NL McCullough ran Temp Survey 6600' to 4000'. Temp Survey showed perf 5592' to 5633' taking most of the fluid. MIRU pulling unit. Lowered 2 3/8" tbg and pkr to 5452' and set in 10 points compression, RU Western Co. acidized perfs 5592'-5585', 5645'-5633', 5995'-5980', 6092'-6073', 6205'-6175', and 6404'-6378, w/5000 gallons 15% acid. Breakdown press 3800#, avg. press 3650#, Air 9.4 BPM, ISIP 1100#, 10 min SIP 700#, flowed back acid water. SWI SDON. Baker 4½" lockset pkr would not hold, trip out of hole w/pkr. Re-dress pkr. GIH w/2 3/8" internally plastic coated 4.7#/ft. EUE tbg and Baker 4 ½" Lockset pkr. Spotted pkr fluid from 4491' to surface in 4 ½" x 2 3/8" csg annulus. Set pkr at 4491' at 4 points tension. Flanged up well-head and RD. Water is currently being injected at a rate of 360 BWPD and a pressure of 550 psi. The work was completed 2-13-81.

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

SIGNED Robert D. Hyde TITLE Dist. Production Manager DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

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LAND OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease: State ☐ Fee ☐

5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL ☒ GAS WELL ☐ OTHER-

7. Unit Agreement Name

2. Name of Operator: J. M. Huber Corp.

8. Farm or Lease Name: Griffin

3. Address of Operator: 1900 Wilco Bldg., Midland, Texas 79701

9. Well No.: 1

4. Location of Well: UNIT LETTER A, 660 FEET FROM THE North LINE AND 660 FEET FROM THE East LINE, SECTION 4 TOWNSHIP 14-S RANGE 36-E NMPM.

10. Field and Pool, or Wildcat: McDonald (Penn)

15. Elevation (Show whether DF, RT, GR, etc.): 3949.9' GL

12. County: Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☒	ALTERING CASING ☐
TEMPORARILY ABANDON ☐		COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	CHANGE PLANS ☐	CASING TEST AND CEMENT JOB ☐	
OTHER ☐		OTHER ☐	

17. Describe Proposed or Completed Operations (*Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work*) SEE RULE 1103.

2-6-81	Pressure tested 5 1/2" csg w/tbg and pkr, found csg leak at 9701'. Left Baker Lockset pkr w/shut-off valve at 10,403' above perf 10,502'-10,511'. Could not pump into perfs 10,203'-10,305'. Left well Shut-in.
3-15-81	Set retrievable BP at 9849' w/2 sxs sand on top.
3-16-81	Broke circulation to surface, cmt w/2,760 sxs cmt, circulated 482 sxs to pit.
3-17-81 Thru 3-21-81	Tagged top cmt at 8709'. Drilled cmt out to 9726'. Tested csg leak to 1500 psi. Held OK. Pulled retrievable bridge plug.
3-24-81	Ran production equipment.
4-1-81	24 hr pumping test 43 BO and 208 BW, gas TSTM, 10 1/2 - 120" SPM.

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

SIGNED [signature] TITLE Dist. Production Manager DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
December 17, 1969

EXAMINER HEARING

IN THE MATTER OF:

Application of J. M. Huber Corporation for salt water disposal, Lea County, New Mexico.) Case No. 4280

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: The hearing will come to order. The next case will be Case 4280.

MR. HATCH: Case 4280. Application of J. M. Huber Corporation for salt water disposal, Lea County, New Mexico.

KELLAHIN: If the Examiner please, Jason Kellahin, Kellahin and Fox, Santa Fe, appearing for the Applicant.

We have one witness I would like to have sworn.

(Witness sworn).

(Whereupon, Applicant's Exhibits 1 through 7 were marked for identification.)

FLOYD MEADE

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Floyd Meade.

Q By whom are you employed and in what position, Mr. Meade?

A J. M. Huber Corporation, petroleum engineer.

Q Are you the district production superintendent for Huber?

A Yes.

Q Have you testified before the Oil Conservation Commission and made your qualifications a matter of record?

A Yes, I have.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

Q (By Mr. Kellahin) Mr. Meade, what is proposed by J. M. Huber Corporation in Case 4280?

A We are proposing to convert the Stoltz State No. 1 Well, located in Unit "M", Section 16, 15 South, 35 East to a salt water disposal well to be disposed of in the Wolfcamp Formation.

Q Is that a producing formation or has it produced?

A It did produce at one time, yes.

Q This particular well was a producing well?

A Yes, sir.

Q Referring to what has been marked as Exhibit No. 1, would you identify that exhibit?

A That is our Form C-108 that we filed with the Commission making application for this disposal well.

Q Then, referring to what has been marked as Exhibit No. 2, would you identify and discuss that exhibit?

A That's a brief production history of the surrounding wells. The first one, Stoltz State, is our well that we are proposing to convert to a salt water disposal. It produced a total of 22,594 barrels and was abandoned in January of '69.

Last production prior to abandonment was three barrels of oil and three barrels of water per day. The Union California State 7, which is the south offset has cumulative production through August of approximately 128,000 barrels of oil and a three-month average June, July and August of this year was 5.4 of oil and 1.2 of water daily.

The Gulf Featherstone Federal No. 1, which is the southwest diagonal offset has cumulative production of approximately 27,000 barrels and last reported production was in December of 1969. That month it produced 100 barrels of oil: no water.

The Union Gulf Federal No. 1, which is the

south offset to the Gulf Featherstone Federal has cumulative production through August of 132,000 barrels: three-month average June, July and August, 9.4 of oil and 6.7 of water daily and the last well, the Cabot Corporation State "Q" 1, which is 340 acre location south of our proposed disposal well had cumulative production of 1,000 barrels· currently producing seven and one half of oil and one half of water daily.

Q Now, on this Gulf Oil Corporation Well, you said the last reported production was in December of '68?

A Yes.

Q Do you know what the status of that well is now?

A There hasn't been anything more reported in the New Mexico Oil and Gas Engineering Committee Reports, so I assume it's either plugged or temporarily abandoned anyway.

Q Now, referring to what has been marked as Exhibit No. 3, would you identify that exhibit?

A This is a land plat showing our well and the wells that we just referred to, plus the north Morton Field lying to the north.

Q Now, the wells listed on your Exhibit No. 2 are all of the wells in the immediate vicinity of your disposal well· is that correct?

A Yes, that's right.

Q The wells to the north, are they in the same pool or are they in the north Morton?

A They are in the north Morton Field. Our Stoltz State is the furthest north Morton-Wolfcamp Field Well.

Q It is the same formation, but has been delinated as a separate pool· is that correct?

A That's right.

Q Now, referring to what has been marked as Exhibit No. 4, would you identify that?

A That is a diagrammatic sketch of our well installation· thirteen and three-eighths surface casing set at 3135 feet and cement was circulated. Eight and five-eighths inch casing set at 4525. top of the cement behind it 3600· four and a half inch casing set at 10,450, top of the cement behind it 9690. Two and three-eighths inch tubing with packer at 9900.

The injection perforations are 10,358 to 10,369, 10,373 to 376, 10,414 to 419.

Q Now, will you use an internally coated tubing?

A No. We will treat this water for corrosion and scale.

Q Will you fill the casing tubing anulus with an inert fluid?

A We will fill it with oil.

Q Will you put a pressure gauge at the surface?

A Yes.

Q What is the source of the water you will dispose of in this well?

A The primary source was our Stoltz Federal No. 1, located in the southeast quarter of Section 12.

Q Now, what volume of water will you dispose of in the well?

A Well, we have approximately 100 barrels a day in our well. However, since we initiated this application the other operators in the field have made a request as to whether they could also dispose of water: so, probably initially we are looking at 4 to 500 barrels daily with a maximum now of maybe 12 to 1500 barrels.

Q So, to that extent, you would change your application as shown on the Form C-108?

A Right. The 108 should be changed, of course.

Q To a maximum of what?

A Twelve to 1500 and initially 3 to 500.

Q Now, in your opinion, will this formation take that volume of water?

A Yes, I believe it will.

Q Will you have any pressure on the water?

A Initially, it should go on a gravity: we never expect pressure over a thousand pounds, surface pressure.

Q Even with the 1500 --

A Right.

Q -- barrels per day?

A Right.

Q Now, referring to what has been marked as 5, would you identify that exhibit, please?

A That is a letter from Hondo Oil and Gas Company, who was the original lessee of this state lease, stating that they have no desire to do anything additional to the well, giving Huber Corporation permission to convert it to a salt water disposal well.

Also, in that exhibit is a letter to offset operators, who were Gulf Oil Corporation, Union Oil of California, Charles B. Reed, Humble Oil and Refining Company, requesting waivers to objection on this application.

We did receive back and are attached waivers from Humble, Gulf and Union Oil; Charles Reed did not reply.

Q Now, do you have a water analysis of the water to be disposed of in this well?

A Yes, sir. This is the Exhibit No. 6. There is a letter from Tretolite with a water analysis and scaling tendency report.

They state that the water is probably -- will have a scaling tendency and recommend a treatment. In addition to this, we will run coupons with corrosion inhibitor to check our pipe and make sure there's no corrosion or scaling, either one are taking place.

Q Then, attached to that is a water analysis: is that correct?

A Right. These water analyses and scaling tendency reports are attached.

Q Exhibit No. 7, is that a log of the subject well?

A Yes.

Q Have you marked any information on that log?

A That log shows the packer and also the perforations.

Q Were Exhibits 1 through 7 prepared by you or under your supervison?

A Yes, sir.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibits 1 through 7, inclusive.

MR. NUTTER: Applicant's Exhibits 1 through 7 will be admitted in evidence.

MR. KELLAHIN: That's all I have on direct examination, Mr. Nutter.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Meade, the four wells, plus the subject well that's mentioned here on Exhibit 2 and shown on Exhibit 3, are those the only wells that have produced from the Wolfcamp Formation in this area?

A No, sir. On farther south there is our Stoltz Federal, which was our primary source of getting rid of the water.

Q Producing water?

A Right.

Q Where is it?

A In Unit "J" of Section 12

Q That's producing from the Wolfcamp?

A Right, and also to the southeast there's the Union A-1: to the southwest is the Union Reed Well.

Q One with the double circle there?

A Yes, sir, and then further south is the Union Araguay.

Q Which one is that?

A It's the one in "B" of 13.

Q Those are all producing from the Wolfcamp?

A Yes, sir.

Q Are they producing from the equivalent zone in the Wolfcamp Formation that you will be injecting water here?

A Well, I believe the Commission recognizes these as a common reservoir. However, these four wells down here are entirely different type of wells.

They are exhibiting a water drive and make a lot of water, whereas the wells to the north did not.

Q Structurally, how do these four wells sit in comparison with this subject well, Stoltz State No. 1?

A Stoltz State is a low well.

Q It's lower?

A Yes, sir.

Q Do you know the perforated intervals in these

four wells that are presently producing?

A No, sir. I sure don't.

Q Do you have any idea approximately what their perforated interval will be?

A Well, the interval is comparable to the ones marked on the log. I mean it's all Wolfcamp.

Q They are comparable intervals, but structurally lower· is that it?

A The Stoltz State is structurally lower: yes.

Q Now, you mentioned that you were producing about 100 barrels of water from your well. Now, the other operators are producing additional water and may go into the system.

You said you might go as high as 12 to 1500 barrels of water. Is that the amount of water that is being produced from these four wells?

A No, sir, not now. I don't believe anyone is using artificial lift activity because we have no place to put the water, we have to haul it.

As soon as we have a disposal system, I will install pumping units.

Q In other words, you are handling limited quantities of total fluid right now, but you can increase

that?

A Right: because we are having to haul the water.

MR. NUTTER: Are there any other questions of Mr. Meade? He may be excused.

(Witness excused).

MR. NUTTER: Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: That's all, Mr. Nutter.

MR. NUTTER: Does anyone have anything they wish to office in Case 4280? We will take the case under advisement.

I N D E X

WITNESS	PAGE
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E X H I B I T S

Applicant's Exhibits 1 through 7	2

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, GLENDA BURKS, Court Reporter in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me: and that the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

Glenda Burks
Notary Public

My Commission Expires:

March 12, 1973

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 4280, heard by me on 12/19, 1969.

..... Examiner
New Mexico Oil Conservation Commission.

OIL CONSERVATION COMMISSION

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

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

December 24, 1969

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

Re: Case No. 4280 4281
Order No. R-3899 & R-3900
Applicant:
J. M. Huber & Continental Oil Co.

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
Aztec OCC

Other R-3899 to State Engineer Office

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. 4280
Order No. R-3899

APPLICATION OF J. M. HUBER CORPORATION
FOR SALT WATER DISPOSAL, LEA COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:30 a.m. on December 17, 1969, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 24th day of December, 1969, 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, J. M. Huber Corporation, is the owner and operator of the Stoltz State Well No. 1, located in Unit M of Section 6, Township 15 South, Range 35 East, NMPM, Morton-Wolfcamp Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Lower Wolfcamp formation, with injection into the perforated interval from approximately 10,358 feet to 10,419 feet.

(4) That the injection should be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 9800 feet; that the casing-tubing annulus should be filled with an inert fluid; that a pressure gauge should be attached

to the annulus at the surface in order to determine leakage in the casing, tubing, or packer; and that the produced salt water should be continuously treated prior to injection to prevent casing corrosion and coupon corrosion tests should be conducted continuously on said well and the results thereof filed quarterly with the Commission until further notice from the Secretary-Director of the Commission.

(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, J. M. Huber Corporation, is hereby authorized to utilize its Stoltz State Well No. 1, located in Unit M of Section 6, Township 15 South, Range 35 East, NMPM, Morton-Wolfcamp Pool, Lea County, New Mexico, to dispose of produced salt water into the Lower Wolfcamp formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 9800 feet, with injection into the perforated interval from approximately 10,358 feet to 10,419 feet;

PROVIDED HOWEVER, that the casing-tubing annulus shall be filled with an inert fluid; that a pressure gauge shall be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer; and that the produced salt water shall be continuously treated prior to injection to prevent casing corrosion; that coupon corrosion tests shall be conducted continuously on said well and the results thereof filed quarterly with the Commission until further notice from the Secretary-Director of the Commission.

(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

DAVID F. CARGO, Chairman

ALEX J. ARMIJO, Member

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

esr/

Docket No. 34-69

DOCKET: EXAMINER HEARING - WEDNESDAY - DECEMBER 17, 1969

9:30 A. M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM, STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

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

CASE 4276: Application of Humble Oil & Refining Company for a special gas-oil ratio limitation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 506 of the Commission Rules and Regulations to provide for a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil in the Oil Center-Blinebry Pool, Lea County, New Mexico.

CASE 4277: Application of Pan American Petroleum Corporation for two unorthodox gas well locations, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of two unorthodox gas well locations in Township 26 North, Range 4 West, Blanco-Mesaverde Gas Pool, Rio Arriba County, New Mexico, as follows:

Jicarilla Apache 102 Well No. 15 located 790 feet from the South line and 1190 feet from the East line of Section 9;

Jicarilla Apache 102 Well No. 16 located 1070 feet from the South line and 1450 feet from the East line of Section 10.

CASE 3455: (Reopened) Continued from the November 5, 1969 Examiner Hearing

In the matter of Case No. 3455 being reopened pursuant to the provisions of Order No. R-2565-B, which order, among other things, established 320-acre spacing units for the West Puerto Chiquito-Mancos Oil Pool, Rio Arriba County, New Mexico, for a period of three years. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 4257: (Continued from the November 19, 1969 Regular Hearing)

Application of Sohio Petroleum 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 San Andres formation in the open-hole interval from 4920 feet to 4995 feet in its Phillips Lea SWD Well No. 4 located in Unit M of Section 31, Township 17 South, Range 34 East, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico.

CASE 4263: (Continued from the November 25, 1969 Examiner Hearing

Application of Wynn & Brooks for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Federal "E" Well No. 3, to be located 590 feet from the South line and 1590 feet from the West line of Section 13, Township 27 North, Range 8 West, Blanco-Mesaverde and Basin-Dakota Pools, San Juan County, New Mexico.

CASE 4264: (Continued from the November 25, 1969, Examiner Hearing)

Application of Wynn & Brooks for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Federal "J" Well No. 1, to be located 2390 feet from the South line and 2410 feet from the East line of Section 11, Township 27 North, Range 8 West, Blanco-Mesaverde and Basin-Dakota Pools, San Juan County, New Mexico.

CASE 4278: Application of Anne Burnett Windfohr, dba Windfohr Oil Company, 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, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicant's Gissler B Wells Nos. 11 and 12, located, respectively, in Units J and I of Section 23, Township 17 South, Range 30 East, Jackson-Abo Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by said wells in unlined surface pits in the vicinity of said wells.

CASE 4279: Application of Anne Burnett Windfohr, dba Windfohr Oil Company, 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, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicant's Gissler B Well No. 4 located in Unit B of Section 8, Township 17 South, Range 30 East, Grayburg-Jackson Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by said well in an unlined surface pit in the vicinity of said well.

CASE 4280: Application of J. M. Huber 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 Lower Wolfcamp formation in the perforated interval from 10,358 feet to 10,419 feet in its Stoltz State Well No. 1 located in Unit M of Section 6, Township 15 South, Range 35 East, Morton-Wolfcamp Pool, Lea County, New Mexico.

CASE 4281: Application of Continental Oil Company for a dual completion Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (corventional) of its SEMU Well No. 21 located in Unit O of Section 19, Township 20 South, Range 38 East, Lea County, New Mexico, in such a manner as to produce oil from an undesignated Blinebry oil pool and gas from an undesignated Drinkard gas pool through parallel strings of tubing.

CASE 4282: Application of Continental Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the East E-K Unit Area by the injection of water into the upper Queen formation through two wells located in Units N and P of Section 22, Township 18 South, Range 34 East, East E-K Queen Pool, Lea County, New Mexico.

CASE 4283: Application of Continental Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the East E-K Unit Area comprising 480 acres, more or less, of state lands described as the NW/4, E/2 SW/4 and SE/4 of Section 22, Township 18 South, Range 34 East, East E-K Queen Pool, Lea County, New Mexico.

CASE 4284: Application of Continental Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in its Springs SWD Wells No. 1 and 2, located in Unit F of Section 3 and Unit A of Section 4, respectively, Township 21 South, Range 25 East, Springs-Upper Pennsylvanian Gas Pool, Eddy County, New Mexico. Disposal into Well No. 1 would be into the Bone Spring, Wolfcamp and Upper Pennsylvanian formations in the openhole interval from 2700 feet to 8350 feet. Disposal into Well No. 2 would be into the Upper Pennsylvanian formation in the perforated interval from 8300 feet to 8410 feet.

CASE 4265: (Readvertised):

Application of Union Oil Company of California for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Yates, San Andres and other formations in the open-hole interval from approximately 4450 feet to 6067 feet in its Midway State Well No. 3 located in Unit J, Section 12, Township 17 South, Range 36 East, Lovington Field, Lea County, New Mexico.

CASE 4285: Application of Southwestern Natural Gas Inc., for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the special rules and regulations governing the North Osudo-Morrow Gas Pool to permit the drilling of a well at an unorthodox gas well location 1980 feet from the South line and 660 feet from the East line of Section 19, Township 20 South, Range 36 East, Lea County, New Mexico.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
App EXHIBIT NO. 1
CASE NO. [illegible]

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		ADDRESS	
J.M. Huber Corporation		1900 Wilco Building, Midland, Texas	
LEASE NAME	**WELL NO.**	**FIELD**	**COUNTY**
Stoltz State	1	Morton Lower Wolfcamp	Lea

LOCATION

UNIT LETTER M ; WELL IS LOCATED 554 FEET FROM THE South LINE AND 554 FEET FROM THE West LINE, SECTION 6 TOWNSHIP 15-S RANGE 35-E NMPM.

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	13-3/8"	385'	275	Circulated	Visual observation
INTERMEDIATE	8-5/8"	4,525'	200	3600'	Calculation & other wells in
LONG STRING	4-1/2"	10,450'	250	9690'	the area. Temperature Sur.
TUBING	2-3/8"	9,800'	NAME, MODEL AND DEPTH OF TUBING PACKER: Guiberson RMC-1 or equivalent @ 9800'		

NAME OF PROPOSED INJECTION FORMATION	TOP OF FORMATION	BOTTOM OF FORMATION
Lower Wolfcamp	10,345'	10,470'

IS INJECTION THROUGH TUBING, CASING, OR ANNULUS?	PERFORATIONS OR OPEN HOLE?	PROPOSED INTERVAL(S) OF INJECTION
Tubing	Perforations	10,358' - 10,419'

IS THIS A NEW WELL DRILLED FOR DISPOSAL?	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED?	HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE?
No	Oil well - produced until January, 1969	No

LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH

10,358-69', 10,373-76', 10,414-19'

DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA	DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA
Approximately 375	None	Unknown

ANTICIPATED DAILY INJECTION VOLUME (BBLS.)	MINIMUM	MAXIMUM	OPEN OR CLOSED TYPE SYSTEM	IS INJECTION TO BE BY GRAVITY OR PRESSURE?	APPROX. PRESSURE (PSI)
100	60	500	Closed	Gravity Initially	None Initially*

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 –	WATER TO BE DISPOSED OF	NATURAL WATER IN DISPOSAL ZONE	ARE WATER ANALYSES ATTACHED?
	Yes	Yes	Yes

NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)

State land leased to Mary H. Stansell, Lovington, New Mexico 88260, GR 283

LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (½) MILE OF THIS INJECTION WELL

Gulf Oil Corporation, Box 1150, Midland, Texas 79701

Humble Oil & Refining Company, Box 1600, Midland, Texas 79701

Charles B. Read, Box 1822, Roswell, New Mexico 88201

Union Oil Company of California, Union Oil Building, Midland, Texas 79701

HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?	SURFACE OWNER	EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL	THE NEW MEXICO STATE ENGINEER
	Yes	Yes	Yes
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)	**PLAT OF AREA**	**ELECTRICAL LOG**	**DIAGRAMMATIC SKETCH OF WELL**
	Yes	Yes	Yes

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

Floyd L. Meade (Name) — District Production Supt. (Title) — October 27, 1969 (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.

*At a later date, it may be necessary to inject under pressure but do not expect pressure will ever exceed 1000 psi.

MORTON WOLFCAMP FIELD

Production History

J.M. Huber Corporation - Stoltz State No. 1 (proposed SWDW), M 6-15S-35E. This well produced a total of 22,594 barrels oil, and was abandoned in January, 1969. Last production just prior to abandonment was 3 BOPD and 3 BWPD.

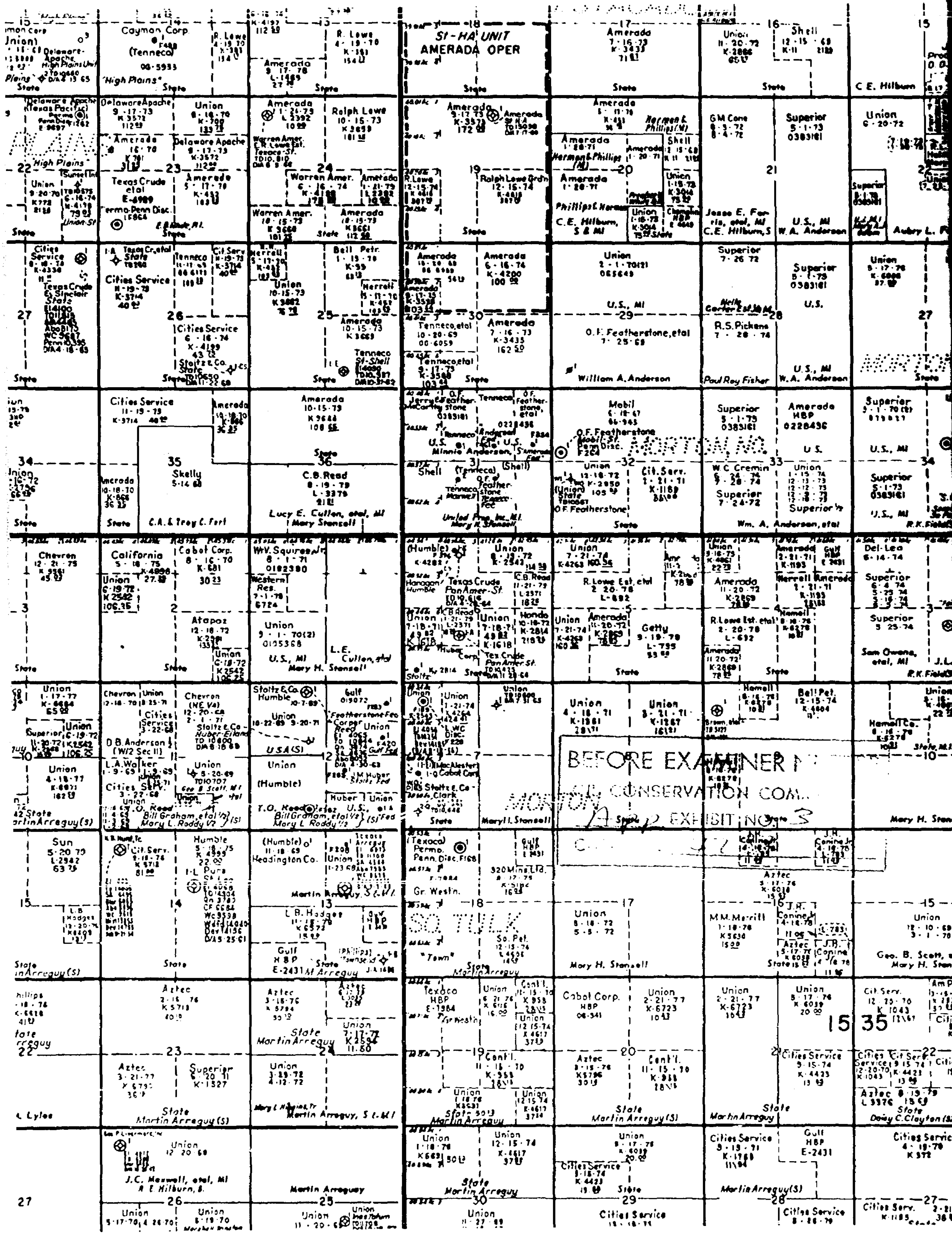
Union Oil Company of California - State 7 Com No. 1 (South offset to proposed SWDW), D 7-15S-35E. Cumulative production through August , 1969, is 127,971 barrels oil with average for June, July, and August of 5.4 BOPD and 1.2 BWPD.

Gulf Oil Corporation - Featherstone Federal No. 1 (Southwest offset to proposed SWDW), A 12-15S-34E. Cumulative production is 26,856 barrels oil with last reported production in December, 1968, when it produced 100 barrels oil and no water.

Union Oil Company of California - Gulf Federal No. 1, H 12-15S-34E. Cumulative production through August, 1969 is 132,079 barrels oil with average for June, July, and August of 9.4 BOPD and 6.7 BWPD.

Cabot Corporation - State Q No. 1, L 7-15S-35E. Cumulative production through August, 1969, is 21,227 barrels oil with average for June, July, and August of 7.5 BOPD and 1.5 BWPD.

Above figures taken from New Mexico Oil and Gas Engineering Committee.



BEFORE EXAMINER
CONSERVATION COM
EXHIBIT NO. 3
SI-HA UNIT
AMERADA OPER
Cayman Corp.
(Tenneco)
"High Plains"
Cities Service
Amerada
Union
Superior
Skelly
C.B. Read
Lucy E. Cullen, etal, MI
Mary Stansell
William A. Anderson
Paul Ray Fisher
O.F. Featherstone, etal
R.S. Pickens
California
Cabot Corp.
Chevron
Humble
Texaco
Gr. Westn.
Mary H. Stansell
Martin Arreguy (S)
J.C. Maxwell, etal, MI
Aztec
Gulf
State

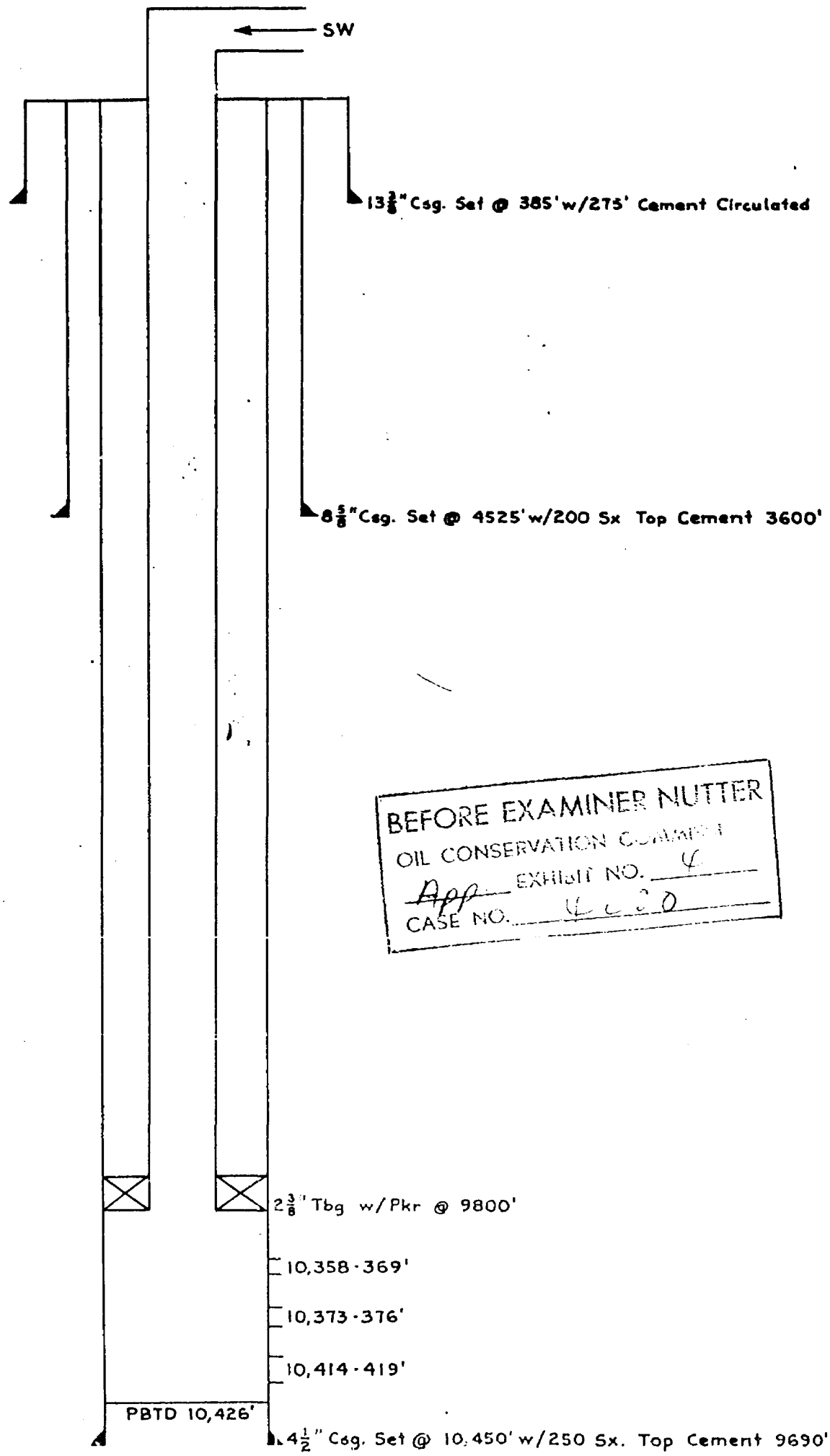
J. M. Huber Corporation

Stoltz · State N° 1

554' F S & W Lines

Sec. 6 · 15S · 35E

Lea Co., New Mexico



F. M. 10 : 10 · 69

Hondo Oil & Gas Company

1978

Box xxxxxx

Roswell, New Mexico

November 7, 1969

Huber #1 Stoltz State
Lot 7, SE¼SW¼ Sec. 6-15S-35E
Lea County, New Mexico
(Our HD-NM-3442)

J. M. Huber Corporation
1900 Wilco Building
Midland, Texas 79701

Attention: Mr. Ron Holcomb

Gentlemen:

Hondo Oil & Gas Company does not wish to take over the subject well for further testing or deepening and hereby furnishes you its permission to convert the well for salt water disposal use. Since the subject well was the only well on the lease and there is no longer any overriding royalty income from it, we are, naturally, concerned about whether the lease should be maintained in the future by rental payments.

Please check within your own organization and advise whether there is any desire to purchase the entire leasehold estate, without depth limitation, as to the proration unit around the subject well.

Yours very truly,

HONDO OIL & GAS COMPANY

Jack Biard
District Landman

JB/dlm

cc: Mr. Gabe Moore - Dallas Office

J. M. Huber Corporation
1900 Wilco Building
Midland, Texas 79701

October 27, 1969

OIL AND GAS
DIVISION

TELEPHONE
MUTUAL 2-3794

Offset Operators (mailing list attached)

Re: J.M. Huber Corporation
Stoltz State No. 1
554' FS&W Lines
Section 6, T-15-S, R-35-E
Lea County, New Mexico

Gentlemen:

J.M. Huber Corporation is making application to the New Mexico Oil Conservation Commission for salt water disposal into the captioned well. We are proposing to inject produced salt water from the area into the Morton Wolfcamp pay through perforated interval 10,358'-10,419'. Attached please find Form C-108, diagrametic sketch of proposed well, and Waiver of Objection. If you have no objection to this application, would you please sign and return two copies of the waiver to this address retaining one copy for your file.

Your cooperation will be appreciated.

Very truly yours,

J.M. HUBER CORPORATION

Floyd L. Meade

Floyd L. Meade
District Production Supt.

FLM:mt
Attachments

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

Gulf Oil Corporation
P.O. Box 1150
Midland, Texas 79701

Union Oil Company of California
Union Oil Building
Midland, Texas 79701

Charles B. Read
604 Security National Bank Building
P.O. Box 1822
Roswell, New Mexico 88201

Humble Oil & Refining Company
P.O. Box 1600
Midland, Texas 79701

WAIVER OF OBJECTION

Humble Oil & Refining Company has been notified that J.M. Huber Corporation intends to inject salt water into perforated intervals 10,358' to 10,419' through tubing in their Stoltz State No. 1 well located 554' from south and west lines Section 6, T-15-S, R-35-E, Morton Wolfcamp Field, Lea County, New Mexico. As offset Operator, we waive objection to J.M. Huber Corporation injecting produced salt water as indicated above.

HUMBLE OIL & REFINING COMPANY

By E C Bagwell, Oper. MANAGER

Date NOVEMBER 4, 1969

WAIVER OF OBJECTION

Gulf Oil Corporation has been notified that J.M. Huber Corporation intends to inject salt water into perforated intervals 10,358' to 10,419' through tubing in their Stoltz State No. 1 well located 554' from south and west lines Section 6, T-15-S, R-35-E, Morton Wolfcamp Field, Lea County, New Mexico. As offset Operator, we waive objection to J.M. Huber Corporation injecting produced salt water as indicated above.

GULF OIL CORPORATION

By B A Abelson for DISTRICT PRODUCTION MANAGER

Date October 31, 1969

WAIVER OF OBJECTION

Union Oil Company of California has been notified that J.M. Huber Corporation intends to inject salt water into perforated intervals 10,368' to 10,419' through tubing in their Stoltz State No. 1 well located 554' from south and west lines Section 6, T-15-S, R-35-E, Morton Wolfcamp Field, Lea County, New Mexico. As offset Operator, we waive objection to J.M. Huber Corporation injecting produced salt water as indicated above.

UNION OIL COMPANY OF CALIFORNIA

By _____

G. W. Coombes, District Operations Manager

Date November 14, 1969

PETROLITE CORPORATION

TRETOLITE DIVISION

369 Marshall Avenue / Saint Louis, Missouri 63119
(314) WO 1-3600/TWX 810-760-1660/Telex 44-2417

Please Reply to
201 Wall St.
Wall Towers East Bldg.
Suite 501
Midland, Texas 79704

November 7, 1969

Mr. Floyd L. Meade
J. M. Huber Corporation
1900 Wilco Building
Midland, Texas 79701

Dear Mr. Meade:

Attached is a water analysis report and a scaling tendency calculation from your Stoltz Federal Well No. 1.

Based on this Stability Index Calculation, this water has severe scaling tendencies at both 60°F. and 100°F.

For scale prevention in this water, I recommend Tretolite "SP" Scale Preventive OS-2520 be injected continuously at the water outlet of the heater treater at a rate of 20 ppm (1 quart to 300 barrels).

Tretolite "SP" OS-2520 is priced at $2.45 per gallon delivered to your lease in single-drum quantities, and $2.30 per gallon in ten-drum quantities.

Thank you for the opportunity of submitting this recommendation. We will be happy to initiate it at your request.

Yours very truly,

TRETOLITE DIVISION

C. Webb Farish

C. Webb Farish
Central Region Manager

CWF:jl

369 Marshall Avenue / Saint Louis, Missouri 63119
(314) WO 1-3600/TWX 910-760-1660/Telex 44-2417

WATER ANALYSIS REPORT

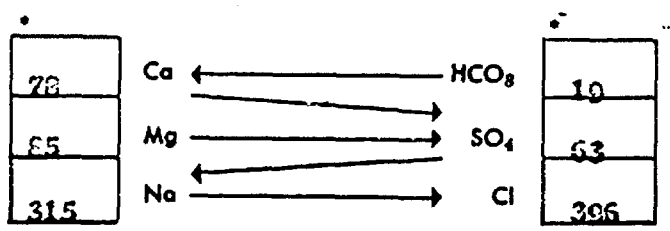
COMPANY J.H. Huber Corp. ADDRESS Midland, Texas DATE: 7-12-69

SOURCE Stoltz Fed. Well #1 DATE SAMPLED 6-23-69 ANALYSIS NO. 3432

Analysis		Mg/L		*Meq/L	
1. PH	7.7				
2. H_2S (Qualitative)	Pos.				
3. Specific Gravity	1.016				
4. Dissolved Solids		28,050			
5. Suspended Solids					
6. Phenol Alkalinity ($CaCO_3$)					
7. M. O. Alkalinity ($CaCO_3$)		940			
8. Bicarbonate (HCO_3)	HCO_3	1,150	÷61	19	HCO_3
9. Chlorides (Cl)	Cl	14,070	÷35.5	396	Cl
10. Sulfates (SO_4)	SO_4	3,030	÷48	63	SO_4
11. Calcium (Ca)	Ca	1,560	+20	78	Ca
12. Magnesium (Mg)	Mg	1,340	+12.2	65	Mg
13. Total Hardness ($CaCO_3$)		8,200			
14. Total Iron (Fe)		2.8 ppm			
15. Barium (Qualitative)					
16.					

*Milli equivalents per liter

PROBABLE MINERAL COMPOSITION



Saturation Values Distilled Water 20°C

$Ca CO_3$	13 Mg/L
$Ca SO_4 \cdot 2H_2O$	2,090 Mg/L
$Mg CO_3$	103 Mg/L

Compound	Equiv. Wt.	X	Meq/L	=	Mg/L
$Ca (HCO_3)_2$	81.04		19		1,540
$Ca SO_4$	68.07		59		4,020
$Ca Cl_2$	55.50				
$Mg (HCO_3)_2$	73.17				
$Mg SO_4$	60.19		4		240
$Mg Cl_2$	47.62		61		2,900
$Na HCO_3$	84.00				
$Na_2 SO_4$	71.03				
Na Cl	58.46		315		18,430

REMARKS (1) Mr. J.H. Huber - Vaughn Bldg. Midland, Texas

cc: Parmer - Worsham - file

Respectfully submitted
TRETOLITE COMPANY

Ray Shaffner

K. 23 5M 11/68 BF

TRETOLITE DIVISION
369 Marshall Avenue / Saint Louis, Missouri 63119
(314) WO 1-3500/TWX 910-760-1660/Telex 44-2417

STABILITY INDEX CALCULATIONS
(Stiff-Davis Method)
$CaCO_3$ Scaling Tendency

SAMPLE

Sample Test No. #3432

Company J.M. Huber Corp. Sample Date 7-12-69

Address Midland, Texas Submitted by _____

Sample Stoltz Fed. Well #1 Field _____

S. I. = pH - pCa - pAlk - K

where S. I. = stability index
pH = pH as measured on fresh sample
pCa = negative logarithm of calcium concentration
pAlk = negative logarithm of total alkalinity
K = constant, depends upon temperature and salt content

pH = 7.7 pCa = 1.40 pAlk = 1.71

CALCULATION OF IONIC STRENGTH AND K VALUE

Na	(7,245)	X (2.2×10^{-5}) =	0.159
Ca	(1,560)	X (5.0×10^{-5}) =	0.078
Mg	(1,040)	X (8.2×10^{-5}) =	0.085
Cl	(14,070)	X (1.4×10^{-5}) =	0.197
HCO_3	(1,150)	X (0.8×10^{-5}) =	0.009
SO_4	(3,030)	X (2.1×10^{-5}) =	0.064

TOTAL IONIC STRENGTH = 0.592

K = 3.35 @ 60 °F.

K = 2.92 @ 100 °F.

SI at (60)° = (7.7) - (1.40) - (1.71) - (3.35) or +1.24

SI at (100)° = (7.7) - (1.40) - (1.71) - (2.92) or +1.67

SI = O or water is relatively stable at _____ °F.

Remarks: Severe scaling tendencys at both 60oF and 100oF

PETROLITE CORPORATION
TRETOLITE DIVISION
369 Marshall Avenue / Saint Louis, Missouri 63119
(314) WO 1-3500/TWX 910-760-1660/Telex 44-2417

STABILITY INDEX CALCULATIONS

Tendency for $\frac{CaSO_4 - 2\,H_2O}{\text{(Gypsum) Scale}}$

Stiff-Davis Method

Company J.M. Huber Corp. Address #3432

Source Stoltz Fed. Well #1 Date 7-12-69

$$S = S_T \times F_1 \times F_2 \times F_3$$

where
- S = Solubility under Given Condition
- S_T = Solubility in Distilled water at the temperature T (mg/1 $CaSO_4$)
- F_1 = Common ion factor, or the influence of excess calcium or sulfate ions (meq. /1)
- F_2 = Magnesium ion factor (meq. /1)
- F_3 = Sodium factor (mg/1)

Factors:

Temperature 60 $^oF \rightarrow S_T$ = 2,000

Temperature 100 $^oF \rightarrow S_T$ = 2,100

F_1 = 0.85 F_2 = 1.4 F_3 = 2.3

$S = S_T \frac{2,000}{2,100} \times F_1$ 0.85 $\times F_2$ 1.4 $\times F_3$ 2.3

S = 5,475 ppm $CaSO_4$ at 60 ^oF

S = 5,748 ppm $CaSO_4$ at 100 ^oF

Remarks:

Continental Products
OF TEXAS
WATER TREATING CHEMICALS & EQUIPMENT
BOX 3627 ODESSA, TEXAS
Phone FE 7-4681

WATER NALYSIS REPORT

Client J. M. Huber Corporation

Location Stoltz State #1

Morton Pool

Date Sampled 12/25/67 Date Received 12/27/67

ANALYSIS NO.					
SOURCE OF SAMPLE →					
		PPM	PPM	PPM	PPM
ALKALINITY, $CaCO_3$					
Total		500			
Phenolphthalein		None			
TOTAL HARDNESS, $CaCO_3$		14,500			
IONS					
Calcium	(Ca)				
Magnesium	(Mg)				
Chloride	(Cl)	± 55,000			
Sulfate	(SO_4)	1020			
Iron	(Fe)	12.2			
Sodium	(Na)				
Silica	(SiO_2)				
CHROMINE					
PHOSPHATE					
Poly	(PO_4)				
Ortho	(PO_4)				
SODIUM SULFITE	(SO_3)				
CAUSTICITY	(OH)				
TURBIDITY					
CONDUCTIVITY (Mmhos)		115,000			
Specific Gravity		1.074			
pH		6.6			

Remarks:

Signed: J. Bradley

KELLAHIN AND FOX
ATTORNEYS AT LAW
54½ EAST SAN FRANCISCO STREET
POST OFFICE BOX 1769
SANTA FE, NEW MEXICO 87501

JASON W. KELLAHIN
ROBERT E. FOX

TELEPHONE 982-4315
AREA CODE 505

November 18, 1969

Case 4280

Mr. George Hatch, Attorney
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear George:

Enclosed is a signed, carbon copy of the application of J. M. Huber for salt water disposal in the Morton Wolfcamp Pool, which I discussed with you by phone today.

It is requested that this be set for the next available hearing, which I understand will be on December 17.

Yours very truly,

Jason

Jason W. Kellahin

jwk;jh

Encl. as stated.

cc: Floyd L. Meade

Form C-108
Revised 1-1-65

NOV 20 1969

NEW MEXICO OIL CONSERVATION COMMISSION

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

Case 4280

OPERATOR		ADDRESS	
J.M. Huber Corporation		1900 Wilco Building, Midland, Texas	
LEASE NAME	WELL NO.	FIELD	COUNTY
Stoltz State	1	Morton Lower Wolfcamp	Lea

LOCATION

UNIT LETTER M ; WELL IS LOCATED 554 FEET FROM THE South LINE AND 554 FEET FROM THE West LINE, SECTION 6 TOWNSHIP 15-S RANGE 35-E NMPM.

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	13-3/8"	385'	275	Circulated	Visual observation
INTERMEDIATE	8-5/8"	4,525'	200	3600'	Calculation & other wells in
LONG STRING	4-1/2"	10,450'	250	9690'	the area. Temperature Sur.
TUBING	2-3/8"	9,800'	NAME, MODEL AND DEPTH OF TUBING PACKER: Guiberson RMC-1 or equivalent @ 9800'		

NAME OF PROPOSED INJECTION FORMATION	TOP OF FORMATION	BOTTOM OF FORMATION
Lower Wolfcamp	10,345'	10,470'

IS INJECTION THROUGH TUBING, CASING, OR ANNULUS?	PERFORATIONS OR OPEN HOLE?	PROPOSED INTERVAL(S) OF INJECTION
Tubing	Perforations	10,358' - 10,419'

IS THIS A NEW WELL DRILLED FOR DISPOSAL?	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED?	HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE?
No	Oil well - produced until January, 1969	No

LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH

10,358-69', 10,373-76', 10,414-19'

DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA	DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA
Approximately 375	None	Unknown

ANTICIPATED DAILY INJECTION VOLUME (BBLS.)	MINIMUM	MAXIMUM	OPEN OR CLOSED TYPE SYSTEM	IS INJECTION TO BE BY GRAVITY OR PRESSURE?	APPROX. PRESSURE (PSI)
100	60	500	Closed	Gravity Initially	None Initially*

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 —	WATER TO BE DISPOSED OF	NATURAL WATER IN DISPOSAL ZONE	ARE WATER ANALYSES ATTACHED?
	Yes	Yes	Yes

NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)

State land leased to Mary A. Stansell, Lovington, New Mexico 88260, OR 283

LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (½) MILE OF THIS INJECTION WELL

Gulf Oil Corporation, Box 1150, Midland, Texas 79701

Humble Oil & Refining Company, Box 1600, Midland, Texas 79701

Charles B. Read, Box 1822, Roswell, New Mexico 88201

Union Oil Company of California, Union Oil Building, Midland, Texas 79701

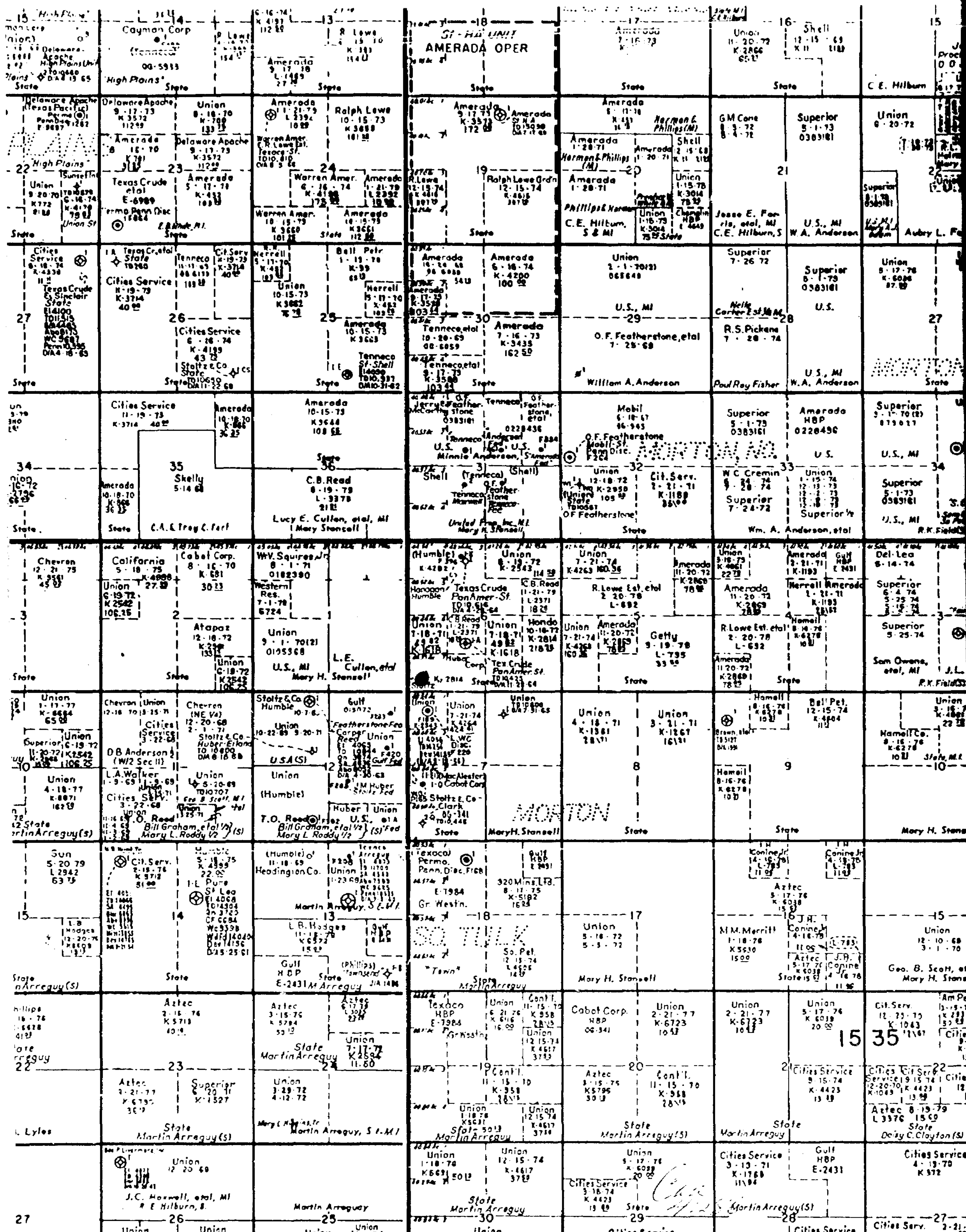
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?	SURFACE OWNER	EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL	THE NEW MEXICO STATE ENGINEER
	Yes	Yes	Yes
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)	PLAT OF AREA	ELECTRICAL LOG	DIAGRAMMATIC SKETCH OF WELL
	Yes	Yes	Yes

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

Floyd L. Reade (Signature) | District Production Supt. (Title) | October 27, 1969 (Date)

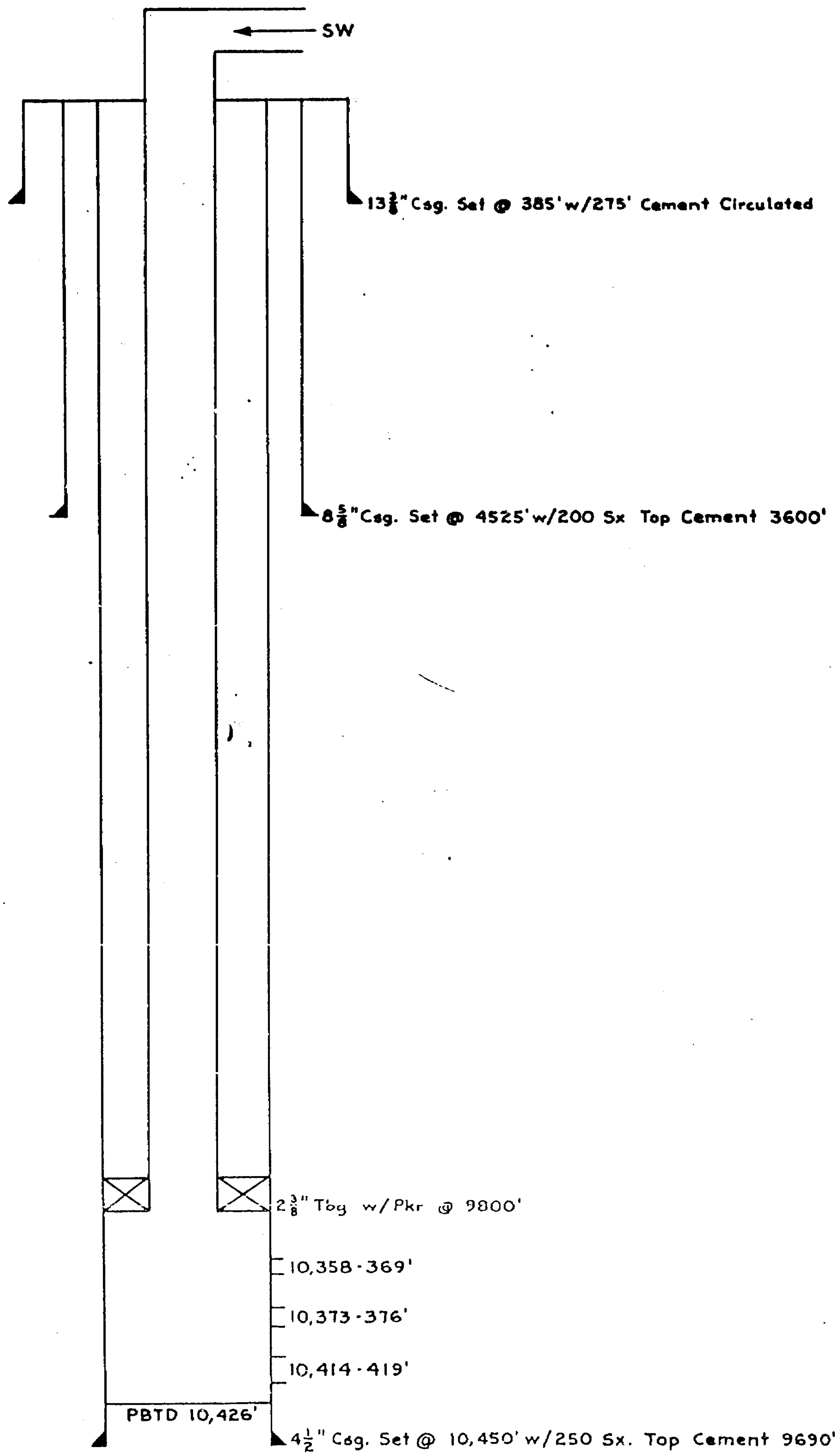
*NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's 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).

*At a later date, it may be necessary to inject water pressure but do not expect pressure will ever exceed 1000 psi.



Cayman Corp
AMERADA OPER
High Plains
Delaware Apache
Union
Amerada
Ralph Lowe
Superior
G M Cone
Texas Crude etal
Warren Amer.
Cities Service
Tenneco
Herrell
Bell Petr
O. F. Featherstone, etal
R.S.Pickens
William A. Anderson
Poul Roy Fisher
W.A. Anderson
Mobil
Skelly
C.B.Read
Lucy E. Cullen, etal, MI
Shell
Chevron
California
Cabot Corp.
Atapaz
Texas Crude
R.Lowe Est.etal
Getty
Hamell
Gulf
Stoltz & Co
D B Anderson
Humble
Sun
Aztec
Martin Arreguy
Texaco
Gr. Westn.
Cabot Corp
Cont'l
J.C. Maxwell, etal, MI
Cities Service
Geo. B. Scott
Mary H. Stansell
State
U.S., MI

J. M. Huber Corporation
Stoltz · State N° 1
554' FS & W Lines
Sec. 6 · 15 S · 35 E
Lea Co., New Mexico



Case 4286

F. M. 10 · 10 · 69

[illegible] DIVISION

365 Marshall Avenue / Saint Louis, Missouri 63119

(314) WO 1-5500 / TWX 910-760-1500 / Telex 44-2417

[illegible]

COMPANY J.M. Huber Corp. ADDRESS Midland, Texas DATE: 7-12-69

SOURCE Stoltz Fed. Well #1 DATE SAMPLED 6-23-69 ANALYSIS NO. 3432

	Analysis		Mg/L		*Meq/L	
1.	PH	7.7				
2.	H_2S (Qualitative)	Pos.				
3.	Specific Gravity	1.016				
4.	Dissolved Solids		20,[illegible]			
5.	Suspended Solids					
6.	Phenol Alkalinity ($CaCO_3$)					
7.	M. O. Alkalinity ($CaCO_3$)		[illegible]			
8.	Bicarbonate (HCO_3)	HCO_3	[illegible]	÷61	19	HCO_3
9.	Chlorides (Cl)	Cl	[illegible]	÷35.5	[illegible]	Cl
10.	Sulfates (SO_4)	SO_4	[illegible]	÷48	63	SO_4
11.	Calcium (Ca)	Ca	1,[illegible]	÷20	73	Ca
12.	Magnesium (Mg)	Mg	1,0[illegible]	÷12.2	85	Mg
13.	Total Hardness ($CaCO_3$)		8,[illegible]			
14.	Total Iron (Fe)		2.8 ppm			
15.	Barium (Qualitative)					
16.						

*Milli equivalents per liter

PROBABLE MINERAL COMPOSITION

*			*
73	Ca	HCO_3	19
85	Mg	SO_4	63
315	Na	Cl	[illegible]

Saturation Values Distilled Water 20°C

$CaCO_3$	13 Mg/L
$CaSO_4 \cdot 2H_2O$	2,090 Mg/L
$MgCO_3$	103 Mg/L

Compound	Equiv. Wt.	X Meq/L	= Mg/L
$Ca(HCO_3)_2$	81.04	19	1,540
$CaSO_4$	68.07	59	4,020
$CaCl_2$	55.50		
$Mg(HCO_3)_2$	73.17		
$MgSO_4$	60.19	4	[illegible]
$MgCl_2$	47.62	[illegible]	3,[illegible]
$NaHCO_3$	84.00		
Na_2SO_4	71.03		
$NaCl$	58.46	[illegible]	[illegible]

REMARKS (2) [illegible]

[illegible]

[illegible] COMPANY

[illegible]

K-23 5M 11/68 BF

Chk. 1280

OF TEXAS

WATER TREATING CHEMICALS & EQUIPMENT

BOX 3627 ODESSA, TEXAS

Phone FE 7-4661

WATER ANALYSIS REPORT

Client U. S. Fuller Corporation

Location Boston State #1

Morton Pool

Date Sampled 12/25/67 Date Received 12/27/67

ANALYSIS NO.					
SOURCE OF SAMPLE →					
		PPM	PPM	PPM	PPM
ALKALINITY, $CaCO_3$					
Total		500			
Phenolphthalein		None			
TOTAL HARDNESS, $CaCO_3$		14,500			
IONS					
Calcium	(Ca)				
Magnesium	(Mg)				
Chloride	(Cl)	± 55,000			
Sulfate	(SO_4)	1020			
Iron	(Fe)	12.2			
Sodium	(Na)				
Silica	(SiO_2)				
CHROMINE					
PHOSPHATE					
Poly	(PO_4)				
Ortho	(PO_4)				
SODIUM SULFITE	(SO_3)				
CAUSTICITY	(OH)				
TURBIDITY					
CONDUCTIVITY (Mmhos)		115,000			
Specific Gravity		1.074			
pH		5.3			

Remarks:

Signed: [signature]

[illegible]

J. M. Huber Corporation
1900 Wilco Building
Midland, Texas 79701

October 27, 1969

OIL AND GAS
DIVISION

TELEPHONE
MUTUAL 2-3794

Offset Operators (mailing list attached)

Re: J.M. Huber Corporation
Stoltz State No. 1
554' FS&W Lines
Section 6, T-15-S, R-35-E
Lea County, New Mexico

Gentlemen:

J.M. Huber Corporation is making application to the New Mexico Oil Conservation Commission for salt water disposal into the captioned well. We are proposing to inject produced salt water from the area into the Morton Wolfcamp pay through perforated interval 10,358'-10,419'. Attached please find Form C-108, diagrametic sketch of proposed well, and Waiver of Objection. If you have no objection to this application, would you please sign and return two copies of the waiver to this address retaining one copy for your file.

Your cooperation will be appreciated.

Very truly yours,

J.M. HUBER CORPORATION

Floyd L. Meade
District Production Supt.

FLM:mt
Attachments

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

Gulf Oil Corporation
P.O. Box 1150
Midland, Texas 79701

Union Oil Company of California
Union Oil Building
Midland, Texas 79701

Charles B. Read
604 Security National Bank Building
P.O. Box 1822
Roswell, New Mexico 88201

Humble Oil & Refining Company
P.O. Box 1600
Midland, Texas 79701

Case 4380

DRAFT

GMH/esr

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. 4280

Order No. R-3899

APPLICATION OF J. M. HUBER CORPORATION
FOR SALT WATER DISPOSAL, LEA COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:30 a.m. on December 17, 1969, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of Dec, 1969, 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, J. M. Huber Corporation, is the owner and operator of the Stoltz State Well No. 1, located in Unit M of Section 6, Township 15 South, Range 35 East, NMPM, Morton-Wolfcamp Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Lower Wolfcamp formation, with injection into the perforated interval from approximately 10,358 feet to 10,419 feet.

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

approximately 9800 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; and

~~(2) that~~ the produced salt water should be continuously treated prior to injection to prevent casing corrosion and coupon corrosion tests should be conducted continuously on said well and the results thereof filed quarterly with the Commission until further notice from the Secretary-Director of the Commission.

(under)

is hereby authorized to utilize its Stoltz State Well No. 1, located in Unit M of Section 6, Township 15 South, Range 35 East, NMPM, Morton-Wolfcamp Pool, Lea County, New Mexico, to dispose of produced salt water into the Lower Wolfcamp formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 9800 feet, with injection into the perforated interval from approximately 10,358 feet to 10,419 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 ~~or the annulus left open~~ at the surface in order to determine leakage in the casing, tubing, or packer; and

~~PROVIDED HOWEVER,~~ that the produced salt water shall be continuously treated prior to injection to prevent casing corrosion; that coupon corrosion tests shall be conducted continuously on said well and the results thereof filed quarterly with the Commission until further notice from the Secretary-Director of the Commission;

(under)

(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.