CASE 4062: Application of KERSEY & COMPANY FOR SALT WATER DISPOSAL EDDY COUNTY, NEW MEXICO.

-dse Number

4062

Application

Transcripts.

Small Exhibits

ETC.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

August 5, 1983

Bass Enterprises Production Co.
Division Production Offices
P.O. Box 2760
Midland, Texas 79702

Attention: J. E. Pullig,
Division Manager

Re: Bass SWD Well No. 3
East Millman Queen-Grayburg
Pool, Sec. 12, T-19S, R-38E,
Eddy County, New Mexico
Order No. R-3688

Dear Mr. Pullig:

Your request for an increase in the maximum surface injection pressure for the subject well has been reviewed. The step-rate test submitted shows a formation fracture pressure of 1370 psi. Subtracting a 50 psi safety factor, a maximum surface injection pressure of 1320 psi for the subject well will be granted.

Future step-rate tests should be run utilizing a strip chart to record the data. Please confer with Dan Nutter for further details.

Should you have any questions concerning this matter, please refer them to me.

Sincerely,

Gilbert P. Quintana

GILBERT P. QUINTANA
Petroleum Engineer

GPQ/dp

cc: Artesia District Office
Case File No. 4062

BASS ENTERPRISES PRODUCTION CO.
DIVISION PRODUCTION OFFICE
P. O. BOX 2760
MIDLAND, TEXAS 79702

JULY 28, 1983

AUG - 1 1983
OIL CONSERVATION DIVISION
SANTA FE

800 VAUGHN BUILDING
(915) 684-5723

cc Case File 4652

Re: Step Rate Test Data
Bass Well No. 3 (SWD)
East Millman Queen-Grayburg Pool
Sec. 12, T19S, R28E
Eddy County, N. M.
File: 400-WF

Oil Conservation Division
P. O. Box 2088
State Land Office Building
Santa Fe, N. M. 87501

ATTN: MR. JOE D. RAMEY

Dear Mr. Ramey:

It has recently come to our attention that we are in violation of NMOCD Order No. R-3688 in that our injection pressure on the subject well exceeds the legal maximum. Our legal maximum is 1200 psig, and for the year 1983, injection pressures have ranged from 1208 psig in January to 1264 psig in June. Attachment No. 1 shows that the injection pressure has increased in direct relation to the disposal volume for the past years. We feel that it is a natural result of fluid flow within the porous media in accordance with the radial flow form of Darcy's Law.

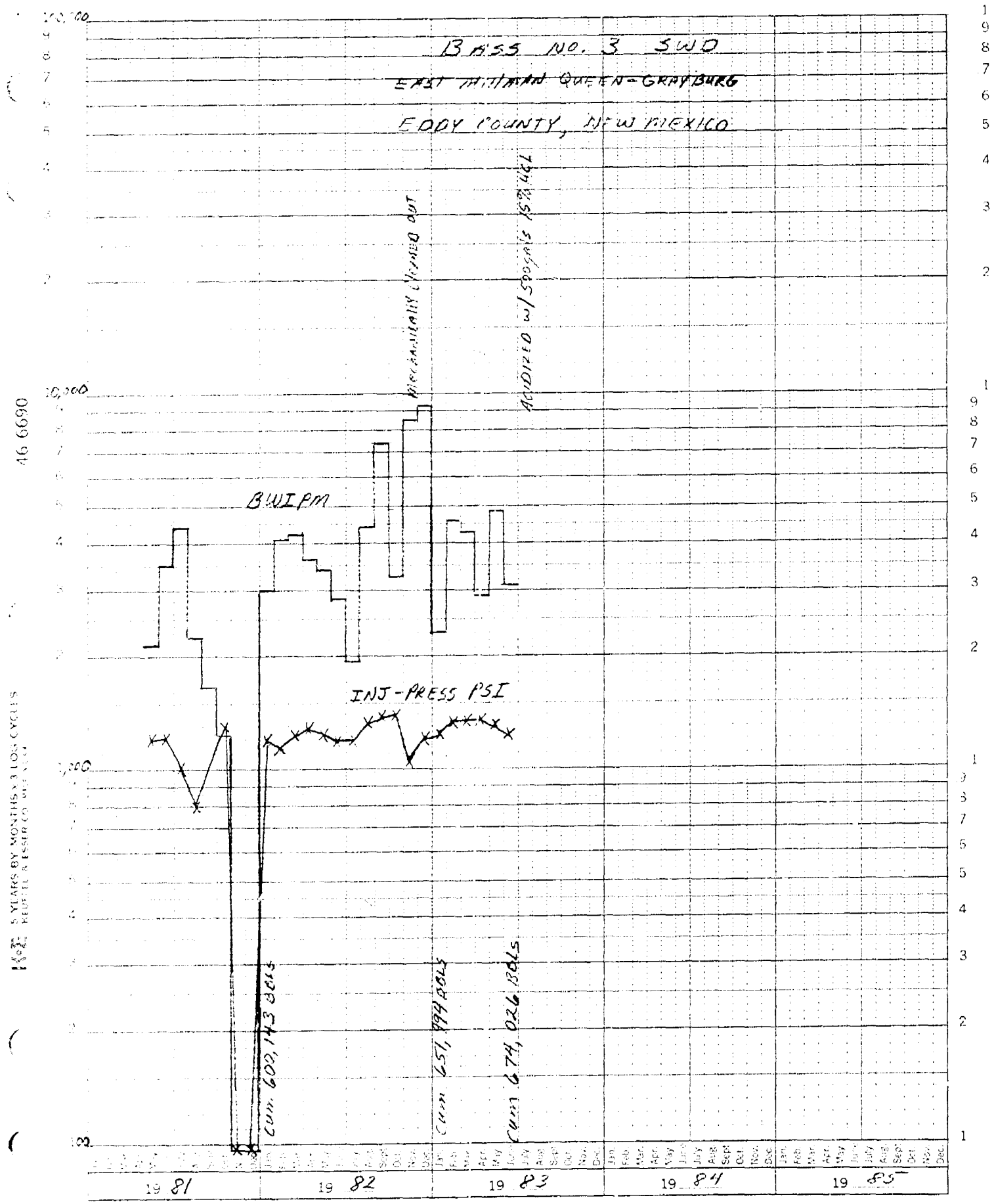
On July 18, 1983, we performed a step rate test on the well to determine the surface formation fracture pressure. Attachment No. 2 is a tabulation of the rate and pressure data, and Attachment No. 3 is a graphical presentation of the same data. From the graphical presentation, it is shown that the surface formation fracture pressure is approximately 1370 psig. Attchment No. 4 is a copy of the rate-pressure chart recorded during the test.

We believe that this information shows that injection up to 1370 psig surface pressure will not cause fracturing of the Queen sand interval. Therefore, we respectfully request that you authorize a new surface pressure limitation of 1350 psig for the Bass Well No. 3 (SWD).

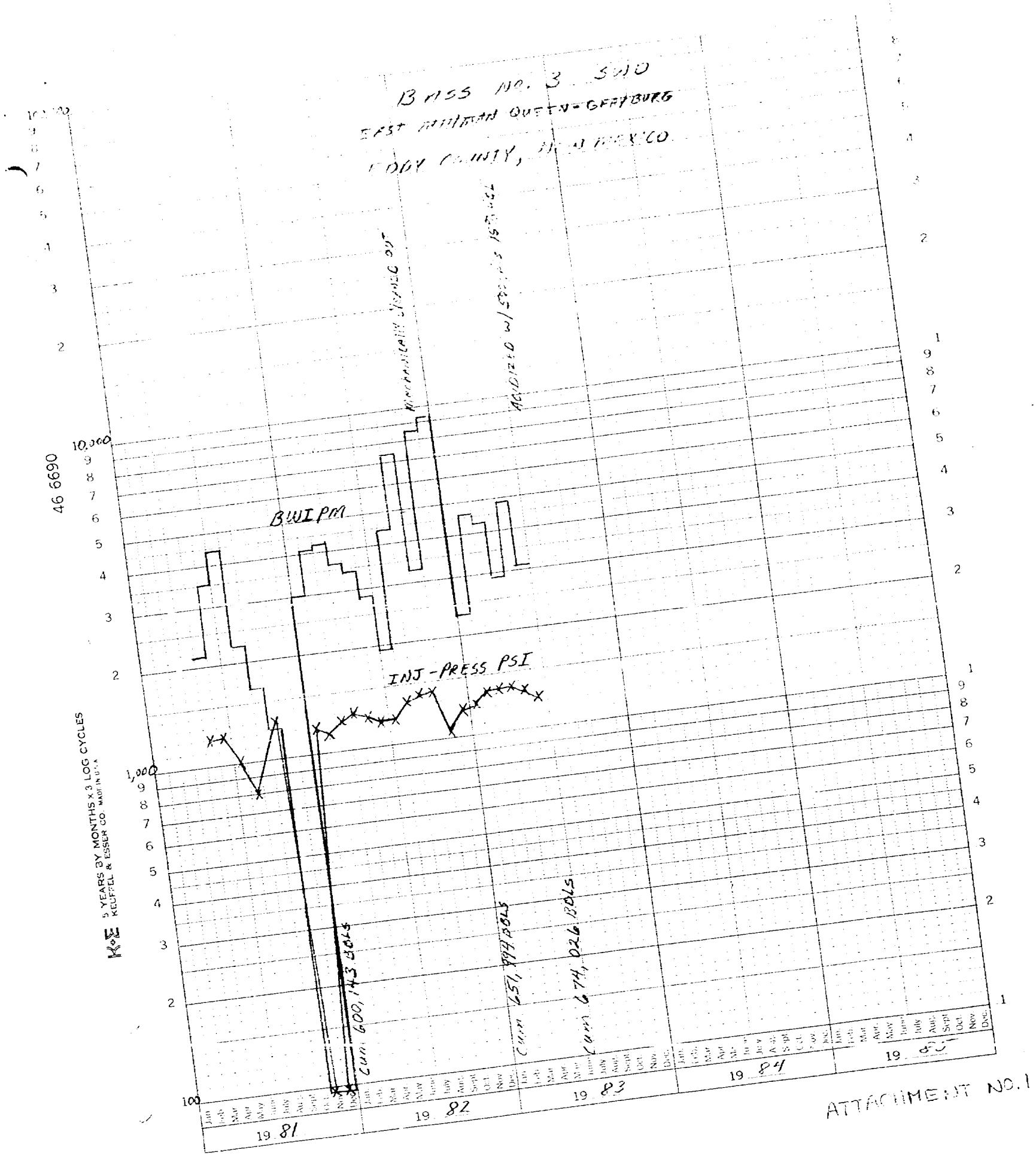
Very truly yours,

J. E. Pullig
Division Manager

JEP:JDR/gp
Attachments
CC: Dan Nutter, Santa Fe, N.M.



ATTACHMENT NO. 1



ATTACHMENT NO. 1

ATTACHMENT NO. 2

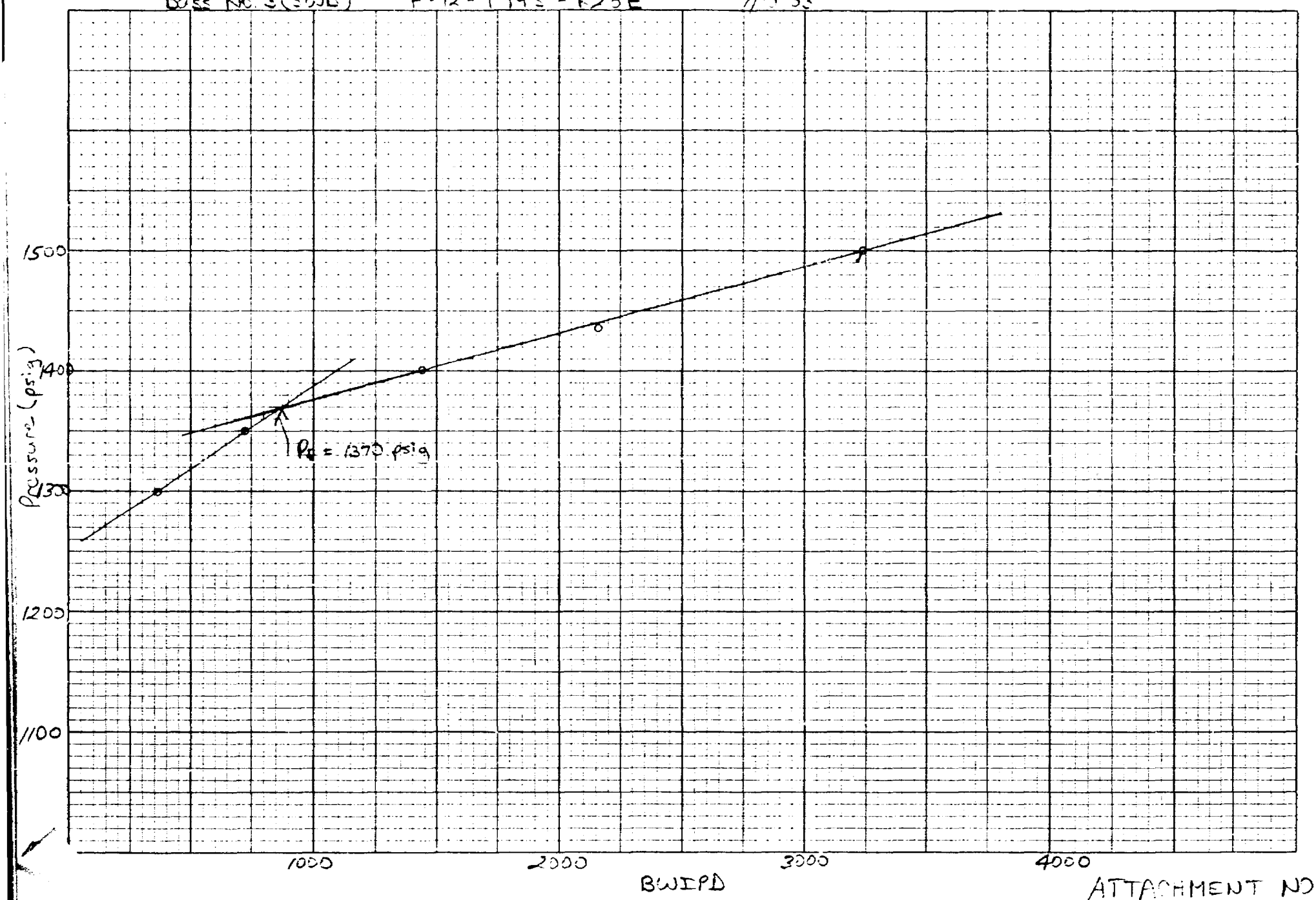
BASS WELL NO. 3
STEP RATE TEST DATA
JULY 18, 1983

RATE, BPM	RATE, BPD	STABILIZED PRESSURE (PSIG)
0.25	360	1300
0.50	720	1350
1.00	1440	1400
1.50	2160	1435
2.25	3240	1500

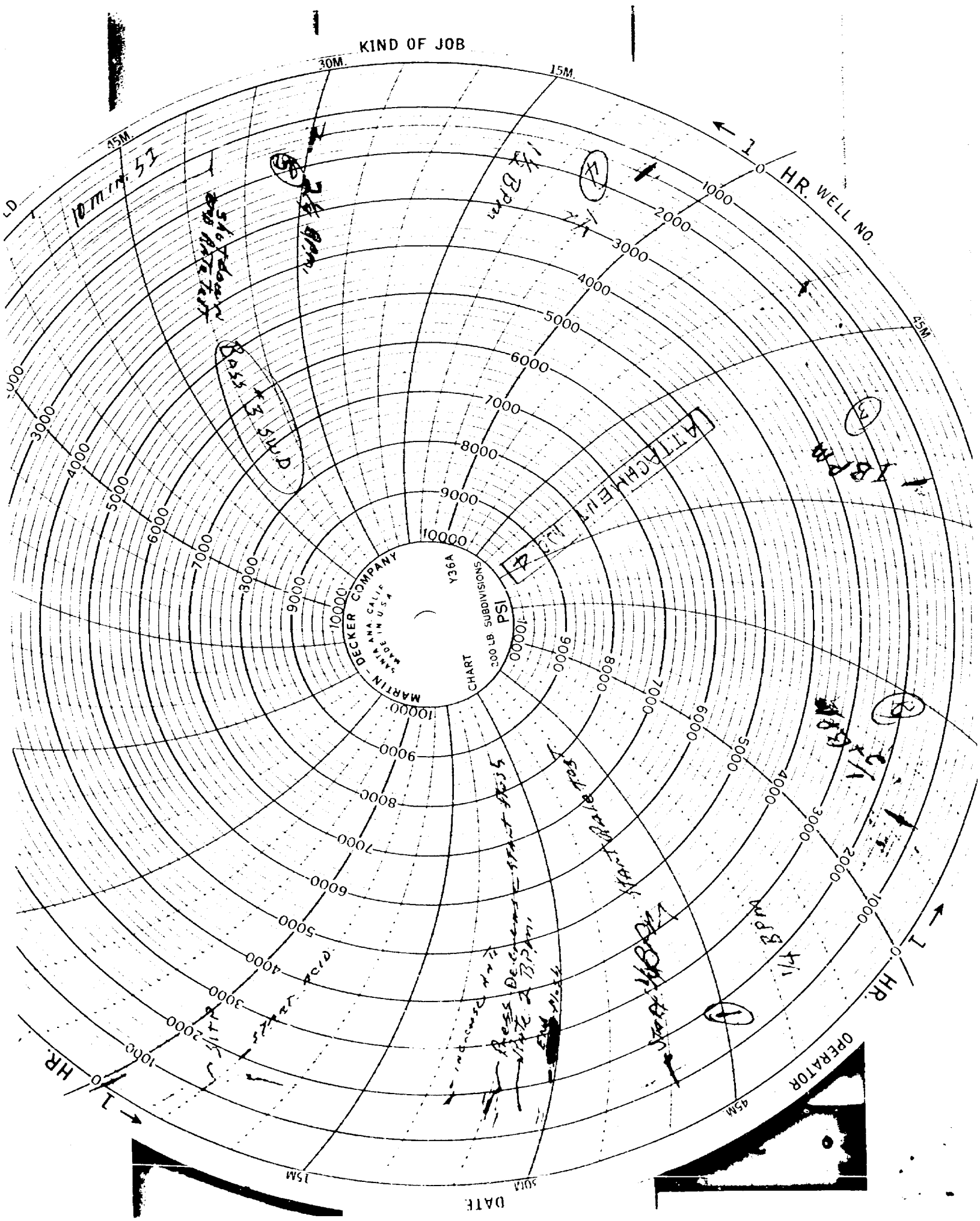
K+E 10 X 10 TO THE INCH 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 0780

Boss No. 3 (SWD) F-12-T19S-R25E 7/12/53



ATTACHMENT NO. 3


KIND OF JOB
WELL NO.
HR.
OPERATOR
DATE
MARTIN-DECKER COMPANY
SANTA ANA CALIF.
MADE IN U.S.A.
CHART
Y36A
200 LB. SUBDIVISIONS
PSI
ATTACHMENT

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

Case 7062 ← file

April 28, 1981

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

Bass Enterprises Production Company
Box 2760
Midland, Texas 79702

Attention: J. E. Pullig

Re: Bass Kersey - SWD Well No. 3
F - Section 12, Township 19
South, Range 28 East, Eddy County,
New Mexico

Dear Mr. Pullig:

Based upon your request dated April 6, 1981, authority is hereby granted to reinstate salt water disposal into the subject well originally approved for disposal by Division Order No. R-3688.

Please note that it will be necessary that the well be equipped to facilitate periodic testing to determine its mechanical integrity and to limit wellhead injection pressure to no more than 1200 psi. Higher injection pressures may be authorized upon a proper demonstration that such pressures will not result in fracturing the confining strata.

Sincerely,

JOE D. RAMEY
Division Director

JDR/RLS/og

cc: Mr. W. A. Gressett
Oil Conservation Division
Drawer DD
Artesia, New Mexico

BASS ENTERPRISES PRODUCTION CO.
DIVISION PRODUCTION OFFICE
P. O. BOX 2760
MIDLAND, TEXAS 79702

April 6, 1981

800 VAUGHN BUILDING
(915) 684-5723

Re: Application to Dispose
of Salt Water
Bass Kersey No. 3 SWD
Sec. 12, T19S, R28E
Eddy County, N. M.
File: 400-WF

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

ATTN: Mr. Joe Ramey

Gentlemen: 1368 Case 4062

Bass Enterprises Production Company respectfully requests your administrative approval of Rule 703-B for extension of authority to dispose of salt water in the subject well. The well, formerly owned by Harold Kersey and Company, was sold to Bass in December, 1980. The last date of injection prior to the sale was March, 1980.

Bass intends to dispose of produced water from the Morrow, Wolfcamp, and Bone Springs formations of our Palmillo State and Merchant State leases located in Sec. 1, T19S, R28E, in the same manner as Mr. Kersey. The original order to dispose of salt water was R-5636 which terminated because operations ceased for more than 6 months. The SWD operation ceased because Sun Oil, who recently formed the East Millman Pool Unit, needed the water for use in their waterflood. The water was piped to the unit, and the well became inactive.

Attached are a plat of the lease showing the subject well with the unit boundary and a wellbore diagram showing the present status of the well.

Should you have any questions or need further information regarding the reinstatement of the injection permit, please advise.

Very truly yours,

J. E. Pullig
Division Manager

JEP:JRG/gp

Attachments

CC: W. A. Gressett
P.O. Drawer DD
Artesia, N. M. 88210

RECEIVED
APR 13 1981
OIL CONSERVATION DIVISION
SANTA FE

BASS ENTERPRISES PRODUCTION COMPANY

PAGE NO _____

SUBJECT	DATE	DEPARTMENT	PREPARED BY
	4-3-81		LDA

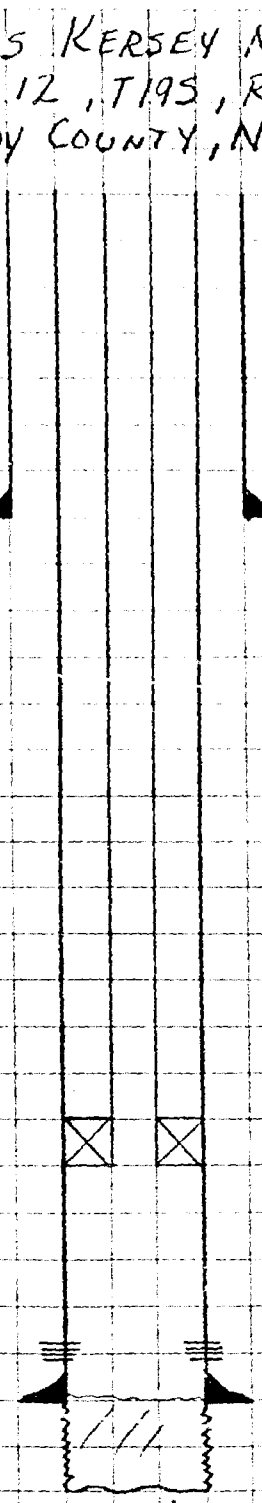
ELEV: Not given

BASS KERSEY No. 3
SEC. 12, T19S, R28E
EDDY COUNTY, NEW MEXICO

SPUD: 7-21-65
COMP: 7-28-65
RESULT: D&A

2310' FNL
1650' FWL

NO CORES OR TEST. WERE RUN.



420' 8 5/8" csg. cmt. w/ 50 sx

2 3/8" EUE cement lined tbg set @ 1470' w/ Johnson tension packer

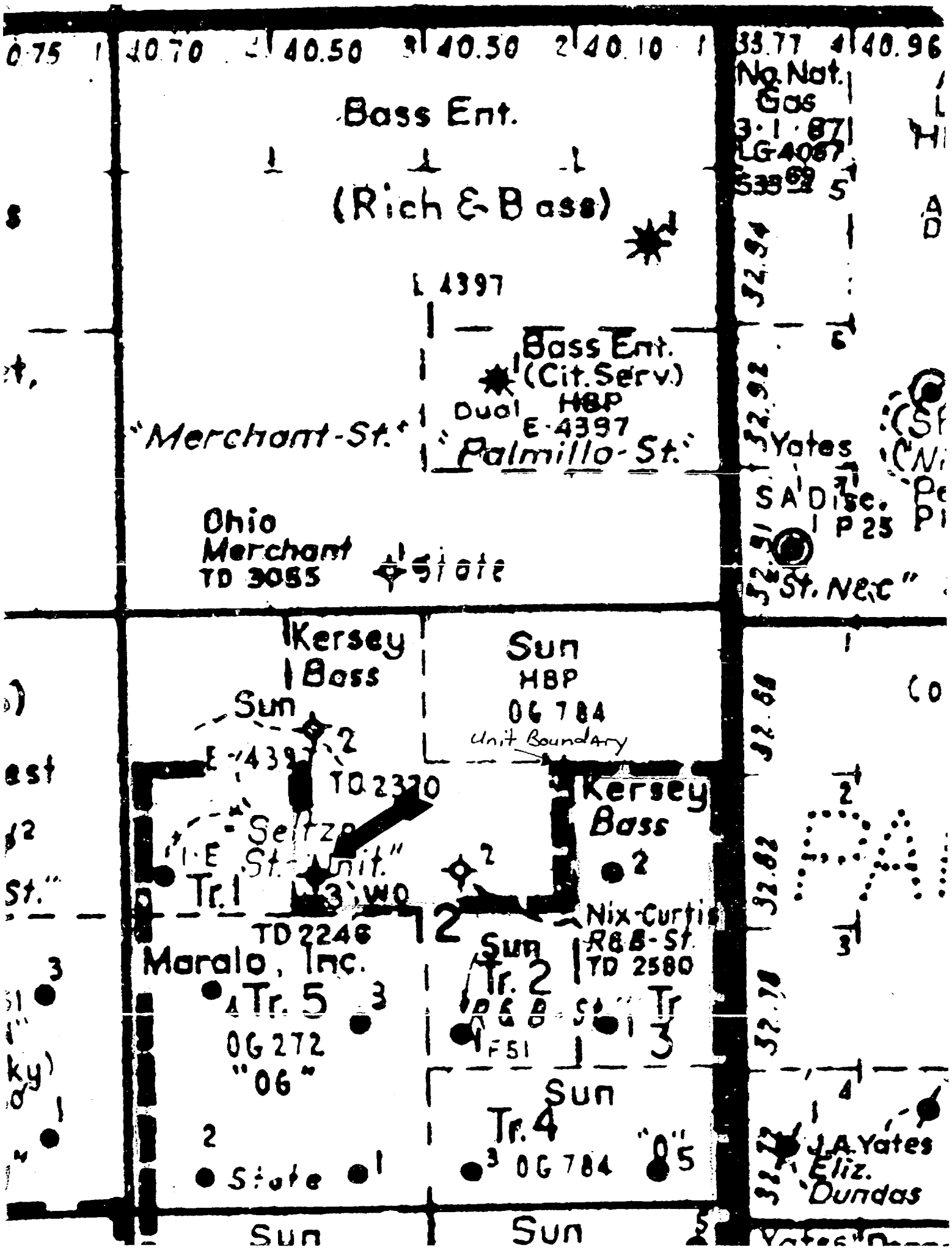
Queen
PERFS: 1836' to 1864'
FRAC w/ 30,000 gals
P/20 BWPD AND 14 BOPD

PBTD unknown

1900' 5 1/2" csg. cmt. w/ 100 sx

Grayburg: dry

2246' TD



40.70
40.50
40.50
40.10
33.77
40.96
Bass Ent.
(Rich & Bass)
No. Nat. Gas
3-1-87
LG 4067
L 4397
Bass Ent.
(Cit. Serv.)
HBP
E-4397
Dual
"Merchant-St."
"Palmillo-St."
Yates
SA Disc.
P 25
Ohio
Merchant
TD 3055
State
"St. Nec"
Kersey
Bass
Sun
HBP
OG 784
Unit Boundary
Sun
TD 2320
Kersey
Bass
Seltzer
St. Unit
Tr. 1
TD 2246
Nix-Curtis
R&B-St.
TD 2580
Maralo, Inc.
Tr. 5
OG 272
"06"
Sun
Tr. 2
Tr 3
F51
Sun
Tr. 4
OG 784
State
J.A. Yates
Eliz.
Dundas
Sun
Sun

dearnley-meier
SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

BEFORE THE

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

February 26, 1969

EXAMINER HEARING

IN THE MATTER OF: Application of Kersey & Company for salt water disposal, Eddy County, New Mexico.	Case No. 4062

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 4062.

MR. HATCH: Case 4062, Application of Kersey & Company for salt water disposal, Eddy County, New Mexico.

MR. UTZ: Any other appearances?

(Witness sworn.)

(Whereupon, Applicant's Exhibits A, B, C, D, inclusive, were marked for identification.)

HAROLD KERSEY

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

DIRECT EXAMINATION

MR. KERSEY: My name is Harold Kersey, for the record. Referring to Exhibit A, you will note that this 40 acres outlined in red is where the location of the proposed disposal well is located. This was drilled by us about four years ago as a Queen well, and it didn't produce sufficiently so it was plugged. At the present time, I am going back in it to open it up for salt water disposal.

The other operators in the area, Ralph Lowe, Sun Oil Company, and Ralph Nix are going to join in using this well for disposal. Sun Oil Company has a disposal well in which they are injecting water between the surface the production string, but they have indicated they are going to go this route if this

application is approved.

You will note on this, on the plat, that the wells, most of the production is from the Queen. However, part of the wells produce from the Queen as well as the Grayburg. Our production is in the east part of the section, and the two wells in which we are producing water is from the Grayburg.

MR. UTZ: Excuse me, you show two wells on that 40 acres?

MR. KERSEY: That is a "Q." That is for Queen. That is what is supposed to show the formation. The one that is marked with a dash through it is the disposal well.

Now, if you will refer to the application to Exhibit C, which is form C-108, it shows the casing program. After we had prepared this application, I accidentally ran across where we had run a temperature survey, and instead of 1,500 feet, the top of the cement is actually 1,385. It shows seven-inch casing cemented to 420 feet with 150 sacks; five-inch at 1,900 with 100 sacks; and two and three-eighths-cement lined tubing at 1,500 feet with a Johnson tension number 1015 packer. This application also shows a list of the adjacent operators.

Now, if you will refer to Exhibit D, it is an electric log showing the Queen, and the perforations which we are going to be injecting through, perforations from approximately 1,835

to 1,870, 1,836 to 1,866.

Then, referring back to Exhibit B, is a schematic diagram of the well showing the seven-inch casing cemented, five-inch casing cemented, the location of the tubing and the tension packer, and with the annulus filled with inhibited water. The water that will be injected is fairly corrosive with hydrogen sulphide, so for that reason everything will be inhibited. In fact, I think we will probably use an inhibitor in the fluid, itself, to prevent corrosion of the perforations and the casing underneath the packer. The amount of water to be injected will vary between 100 and 350 barrels a day.

In reality, this will be a fairly good injection well for the adjacent operators, because they are producing from the same zone, and it should later help their production. Of course, that is not the primary object of this application. I believe that covers the ground.

CROSS EXAMINATION

BY MR. UTZ:

Q Do you have any idea how salty the water is?

A 20,000 parts per million. And the well we are injecting into produced about 20 to 30 barrels of salt water when it was drilled. So we haven't tested it for its injectivity, but we are going to be prepared to go into what pressure is

required. There is no fresh water in the immediate area, and with these casing strings, there is no danger of contamination.

Q According to your survey, your packer will be 215 feet below the cement top?

A That's right.

Q What is the top of the cement behind the seven-inch?

A 200 feet.

Q Now, is all this injection going to be into the Queen zone?

A All of it will be in the Queen zone.

MR. UTZ: Any other questions of the witness? Do you wish to offer these exhibits?

THE WITNESS: Yes, I do as part of the case.

MR. UTZ: Exhibits A, B, C, and D will be entered into the record of this case.

(Whereupon, Applicant's Exhibits A, B, C, D, inclusive, were admitted in evidence.)

Any statements? The case will be taken under advisement.

I N D E X

WITNESS	PAGE
HAROLD KERSEY	
Direct Examination	2
Cross Examination by Mr. Utz	4

EXHIBITS	MARKED	OFFERED AND ADMITTED
Applicant's Exhibits A, B, C, D	2	5

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

I, SAMUEL MORTELETTE, 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.

COURT REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 4062 heard by me on July, 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

March 4, 1969

Mr. Harold Kersey
Kersey & Company
Post Office Box 316
Artesia, New Mexico 88210

Re: Case No. 4062
Order No. R-3688
Applicant:
Kersey & 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.

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

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. 4062
Order No. R-3688

APPLICATION OF KERSEY & 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 February 26, 1969, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 4th day of March, 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, Kersey & Company, is the owner and operator of the Bass Well No. 3, located in Unit F of Section 12, Township 19 South, Range 28 East, NMPM, East Millman Queen-Grayburg Pool, Eddy County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Queen formation, with injection into the perforated interval from approximately 1836 feet to 1869 feet.

(4) That the injection should be accomplished through 2 3/8-inch plastic-lined tubing installed in a packer set at approximately 1600 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should

be attached to the annulus or the annulus left open at the surface in order to determine leakage in the casing, tubing, or packer.

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Kersey & Company, is hereby authorized to utilize its Bass Well No. 3, located in Unit F of Section 12, Township 19 South, Range 28 East, NMPM, East Millman Queen-Grayburg Pool, Eddy County, New Mexico, to dispose of produced salt water into the Queen formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 1600 feet, with injection into the perforated interval from approximately 1836 feet to 1869 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.

(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/

KERSEY & COMPANY
DRILLING AND OIL PRODUCTION
Phone SH 6-3671 • P. O. Box 316 • 808 W. Grand
ARTESIA, NEW MEXICO 88210

'69 JAN 30 PM 1 01

Case ~~4052~~ 4062

January 29, 1969

Re: Bass #3 Well
SE/4 NW/4 Section 12,
T19S, R28E, Eddy County
New Mexico

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

Attention: Secretary Director, Mr. A. L. Porter, Jr.

Dear Sir:

In order to meet the requirements for the disposal of produced water we request a hearing to inject produced water into the above captioned well in the Queen formation through perforations from 1835' to 1870'. This is an abandoned well, and it will be necessary to open it up and run a production string where it is cut off. Cement lined tubing with tension packer will be used for injection. It is anticipated that the pressure will not exceed 1200 PSI. From 50 to 75 bbls of water/day will be disposed of in this well.

If any other information or data are required please let us know.

Yours very truly,

KERSEY & COMPANY

Harold Kersey

Harold Kersey

HK:cg

East Millman Queen Graybg

DOCKET MAILED

Date 2-13-69

Case 4062
Heard 2-26-69
Rec. 2-27-69

Grant Harold Kersey permission to convert his Bass. ~~[illegible]~~ #3-2310/W 1650/W lines of 12-19S-28E to SWD Injection shall be thru 2 3/8 cement lined tubing under a packer set at approx 1600' thru perfs in the Queen from 1836-69. Annulus shall be filled with inert fluid w/ gauge at the surface.

Thos A. [illegible]

Gave oral by Phone 2-27-69
1:30 P.
[illegible]

Docket No. 6-69

DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 26, 1969

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 4052: Application of Mobil Oil Corporation for a pool creation and discovery allowable, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the Lightcap-Pennsylvanian Pool in Chaves County, New Mexico, comprising the NE/4 NE/4 of Section 7, Township 8 South, Range 30 East, and for the assignment of approximately 35,650 barrels of oil discovery allowable to the discovery well, its C. L. O'Brien Well No. 1 located in Unit A of said Section 7.

CASE 4036: (Continued from the February 5, 1969, Examiner Hearing) Application of Mobil Oil Corporation for a dual completion, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its C. L. O'Brien Well No. 1 located in Unit A of Section 7, Township 8 South, Range 30 East, Chaves County, New Mexico, to produce oil from an undesignated Pennsylvanian oil pool and the Lightcap (Devonian) Pool through parallel strings of tubing.

CASE 4053: Application of El Paso Products Company for special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the Gallegos-Gallup Pool, San Juan County, New Mexico, including provisions for the classification of oil and gas wells, 80-acre spacing for oil wells, and 320-acre spacing for gas wells.

CASE 4054: Application of Amerada Petroleum Corporation for an unorthodox oil well location and amendment to Order No. R-2197, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a producing oil well at an unorthodox location 1250 feet from the West line and 2220 feet from the South line of Section 28, Township 24 South, Range 37 East, in its Langlie Mattix Woolworth Unit Waterflood Project, Langlie-Mattix Pool, Lea County, New Mexico. Applicant also seeks the amendment of Order No. R-2197, which order authorized said waterflood project, to establish an administrative procedure whereby said project could be expanded to include additional lands and injection wells and producing wells at orthodox and unorthodox locations as may be necessary to complete an efficient injection and producing pattern without the necessity of showing well response.

CASE 4055: Application of Albert Gackle for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Seven Rivers formation in the open-hole interval from approximately 3290 feet to 3620 feet in his George Etz Well No. 3 located in Unit N of Section 27, Township 23 South, Range 36 East, Jalmat Pool, Lea County, New Mexico.

CASE 4056: Application of Albert Gackle 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 Queen formation in the perforated interval from approximately 3642 feet to 3699 feet in his Sinclair "A" State Well No. 5 located in Unit I of Section 23, Township 23 South, Range 36 East, Langlie-Mattix Pool, Lea County, New Mexico.

CASE 4057: Application of Charles B. Read for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the Quail-Queen Pool, Lea County, New Mexico, including a provision for 80-acre spacing and proration units.

CASE 4058: Application of Hiram W. Keith and Dalton Haines for salt water disposal, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the Seven Rivers formation in the open-hole interval from approximately 3874 feet to 3951 feet in their State Well No. 2 located in Unit K of Section 16, Townhship 21 South, Range 34 East, West Wilson Pool, Lea County, New Mexico.

CASE 4059: Application of Hiram W. Keith and Dalton Haines for salt water disposal, Eddy County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the Delaware formation in the open-hole interval from approximately 4030 feet to 4158 feet in their Eddy "AGA" State Well No. 2 located 660 feet from the North line and 1650 feet from the West line of Section 36, Township 26 South, Range 31 East, North Mason-Delaware Pool, Eddy County, New Mexico.

CASE 4060: Application of Sidney Lanier 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-Seven Rivers formations in the open-hole interval from approximately 3402 feet to 3650 feet in his I. B. Ogg "A" Well No. 5 located in Unit J of Section 35, Township 24 South,

(Case 4060 continued)

Range 36 East, Jalmat Yates-Seven Rivers Pool, Lea County, New Mexico.

CASE 4061: Application of Millard Deck Oil 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 Seven Rivers and Queen formations in the open-hole interval from approximately 3752 feet to 3872 feet in its Atha Well No. 1 located in Unit M of Section 31, Township 21 South, Range 36 East, South Eunice Pool, Lea County, New Mexico.

CASE 4062: Application of Kersey & Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Queen formation in the perforated interval from approximately 1835 feet to 1870 feet in the Bass Well No. 3 located in Unit F of Section 12, Township 19 South, Range 28 East, East Millman Queen-Grayburg Pool, Eddy County, New Mexico.

CASE 4063: Application of Kerr-McGee Corporation for the creation of a new gas pool and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of gas from the Morrow formation by its Nix Well No. 1 located in Unit L of Section 11, Township 19 South, Range 26 East, Eddy County, New Mexico, and for the promulgation of special pool rules therefor, including a provision for 640-acre spacing.

CASE 4064: Application of Atlantic Richfield Company for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximaely 4207 feet to 4286 feet in its Tucker Well No. 4 located in Unit O of Section 23, Township 7 South, Range 32 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.

CASE 4065: Application of Humble Oil & Refining Company for an unorthodox oil well location and reclassification of a water well to an oil well, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to have its New Mexico State "S" Water Source Well No. 4 (CP-427), located at an unorthodox oil well location 650 feet from the West line and 175 feet from the

South line of Section 2, Township 22 South, Range 37 East, Lea County, New Mexico, reclassified as an oil well for the production of oil an undesignated San Andres Oil Pool and authority to produce same as an oil well.

CASE 4066: Application of Humble Oil & Refining Company for the consolidation of two non-standard gas proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the consolidation of two existing non-standard 320-acre gas proration units into one standard 640-acre unit comprising all of Section 26, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to be dedicated to its New Mexico State "G" Wells Nos. 2 and 4 located in Units P and G, respectively, of said Section 26. Applicant further seeks authority to produce the allowable assigned to said unit from either of said wells in any proportion.

CASE 4067: Application of Benson-Montin-Greer Drilling Corporation for special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the La Plata-Gallup Pool, San Juan County, New Mexico, including a provision for 160-acre spacing and proration units. Applicant further requests that said special rules provide that the unit allowable for a 160-acre unit in said pool be allocated on the basis of four times the normal unit allowable for Northwest New Mexico, and that no credit be given for depth factors. Applicant further requests that said special rules be limited in their application to the exterior boundaries of the La Plata-Mancos Unit Area.

CASE 4068: Application of Martin Yates III for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware formation in its Yates & Hanson McCord Well No. 1 located in Unit E of Section 22, Township 23 South, Range 26 East, Dark Canyon Field, Eddy County, New Mexico. Applicant further seeks a procedure whereby its Cordie King Well No. 2 located in Unit K of said Section 22 may be approved for the disposal of salt water without the requirement of notice and hearing.

CASE 4045: (Continued from the February 5, 1969 Examiner Hearing) Application of H & S Oil Company for an amendment to Order No. R-3357, as amended by Order No. R-3357-A, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3357, as amended by Order No. R-3357-A, which order authorized the H & S West Artesia Unit Unit Waterflood Project. Applicant proposes to substitute the Roach Drilling Company-Leonard Well No. 18 located in Unit D of Section 17 as a water injection well in said project in lieu of the Cities Service-Mell Well No. 17 located in Unit M of Section 8, both in Township 18 South, Range 28 East, Artesia Pool, Eddy County, New Mexico.

CASE 4069: Application of Union Oil Company of California for the creation of a new pool, assignment of discovery allowable, and the promulgation of special pool rules, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks the creation of a new Devonian oil pool for its Midway State Well No. 1 located in Unit F of Section 12, Township 17 South, Range 36 East, Lea County, New Mexico, and for the assignment of an oil discovery allowable in the amount of approximately 57,380 barrells to said well. Applicant further seeis the promulgation of special pool rules for said pool, including a provision for 80-acre proration units.

CASE 4070: Application of C. E. LaRue and B. N. Muncy, Jr., for salt water disposal, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the salt and Yates formations in the open-hole interval from approximately 1254 feet to 3000feet in the La Rue-Muncy John "B" Well No. 2 located in Unit A of Section 35, Township 17, South, Range 32, East, Maljamar Grayburg-San Andres Pool, Lea County, New Mexico.

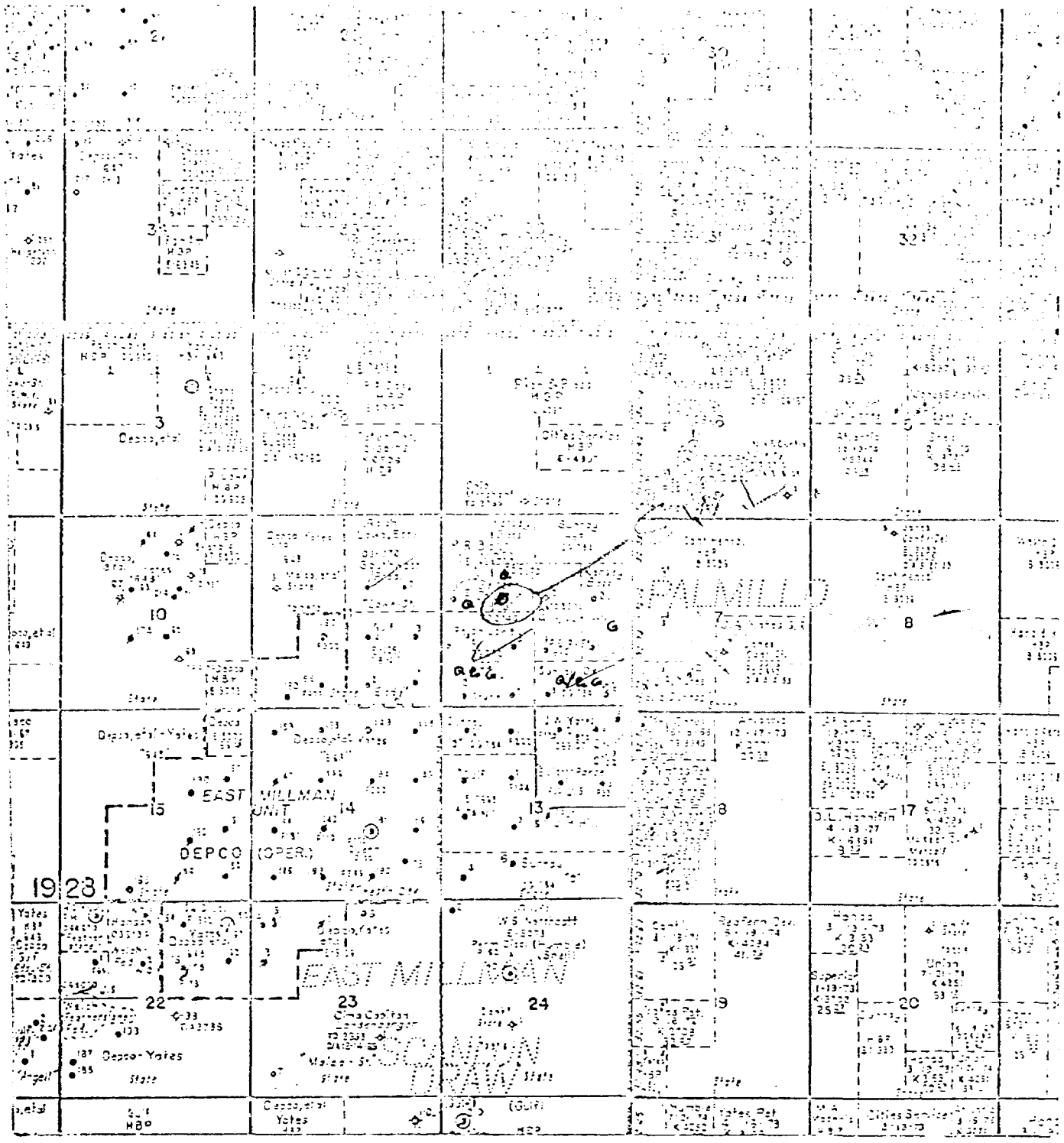


EXHIBIT "A"

Shows proposed disposal well and other wells within two mile radius.

These wells are producing from Grayburg and/or Queen formation.

BEFORE EXAMINER [illegible]
OIL CONSERVATION [illegible]
EXHIBIT A
CASE NO. 4062

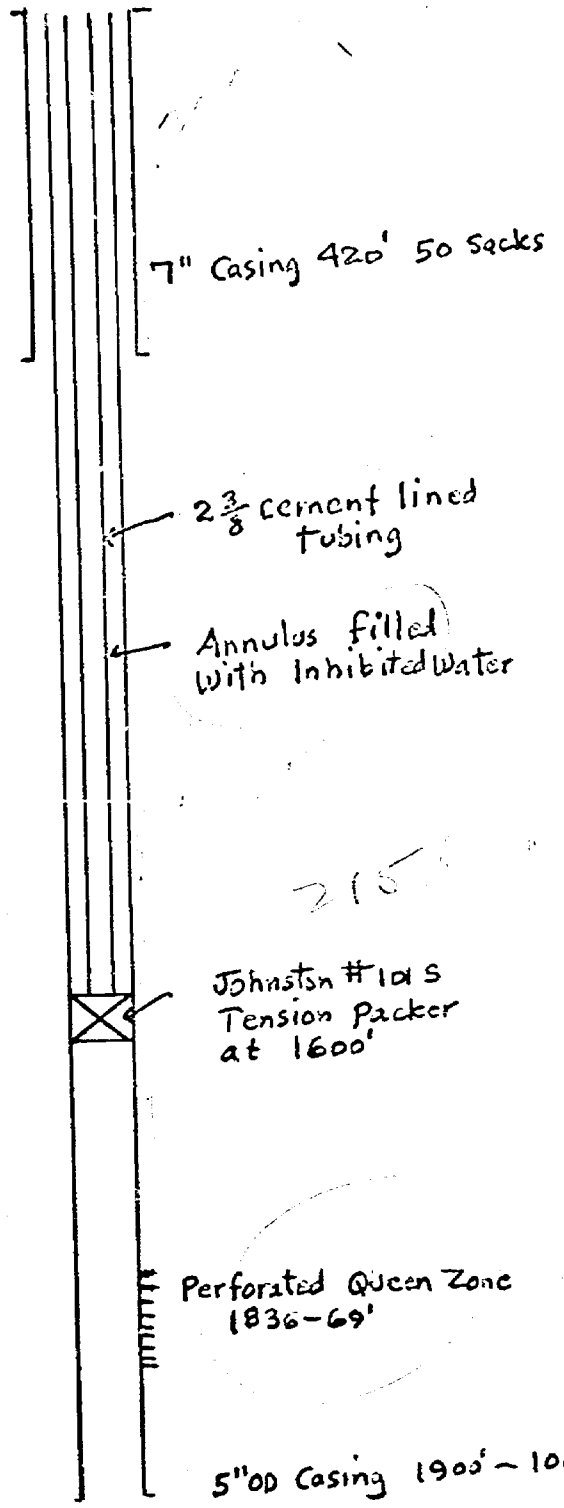


Exhibit "B"

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. B
CASE NO. 4062

Diagram Bass #3
SE NW 12-19-28
Eddy County, N. Mex.
Kersey & Co.

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: KERSEY & COMPANY	ADDRESS: P. O. Box 316, Artesia, New Mexico 88210
LEASE NAME: Bass — WELL NO.: 3	FIELD: Millman — COUNTY: Eddy

LOCATION: UNIT LETTER F; WELL IS LOCATED 2310 FEET FROM THE North LINE AND 1650 FEET FROM THE West LINE, SECTION 12 TOWNSHIP 19S RANGE 28E NMPM.

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	7"	420	150	100	Calculation
INTERMEDIATE					
LONG STRING	5"	1900	100	1500	Calculation
TUBING	2 3/8"	1500	NAME, MODEL AND DEPTH OF TUBING PACKER: Johnson Tension No. 101S		

NAME OF PROPOSED INJECTION FORMATION: Queen	TOP OF FORMATION: 1835	BOTTOM OF FORMATION: 1870
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing	PERFORATIONS OR OPEN HOLE? 1836-69 Perforated	PROPOSED INTERVAL(S) OF INJECTION: 1836-69
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Production	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: None

DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA: None in this area	DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA: None	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA: 2160-80

ANTICIPATED DAILY INJECTION VOLUME (BBLS.) MINIMUM	MAXIMUM	OPEN OR CLOSED TYPE SYSTEM	IS INJECTION TO BE BY GRAVITY OR PRESSURE?	APPROX. PRESSURE (PSI)
100	350	Closed	Presure	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 —	WATER TO BE DISPOSED OF	NATURAL WATER IN DISPOSAL ZONE	ARE WATER ANALYSES ATTACHED?
Yes	Is salt water	Salt	No

NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND): Harman A. Kindley, Box 213, Mentone, Texas 79954

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

Southwest Production Company, P. O. Box 936, Roswell, New Mexico 88201

Ralph Lowe Estate, Box 832, Midland, Texas 79701

Nix & Curtis, Carper Building, Artesia, New Mexico 88210

Sun Oil Company, P. O. Box 1416, Roswell, New Mexico 88201

Gulf Oil Company, Box 670, Hobbs, New Mexico 88240

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.

Harold Kersey	Owner	February 20, 1969
(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.

Exhibit "C"

Form 102 (11-61) Printed in U.S.A.

NUCLEAR LOG

SIMULTANEOUS

GAMMA RAY-NEUTRON

Surveys

COMPANY KERSEY & COMPANY

WELL BASS NO.3

FIELD McMILLIAM

COUNTY EDDY STATE TEXAS

LOCATION:

SEC. TWP.

OTHER SERVICES: TEMPERATURE

ELEVATIONS: KB. DF. GL.

...manent Datum GROUND LEVEL Elev.

...g Measured From D.F. 2 Ft. Above Perm Datum

...lling Measured From DERRICK FLOOR

...te	9-2-64		
...n No.	ONE		
...pe Log	GAMMA RAY	NEUTRON	
...epth—Driller			
...epth—Logger	1896		
...ottom logged interval	1895		
...op logged interval	1250		
...ype fluid in hole	WATER		
Salinity, PPM Cl.			
Density			
Level	FULL		
Max. rec. temp., Deg. F.			
Operating rig time	1 HOUR		
Recorded by	HIPKINS		
Witnessed by	KERSEY		

RUN No	BORE-HOLE RECORD Bit	From	To	CASING RECORD Size	Wgt.	From	To
				5-1/2		SURF.	T.D.

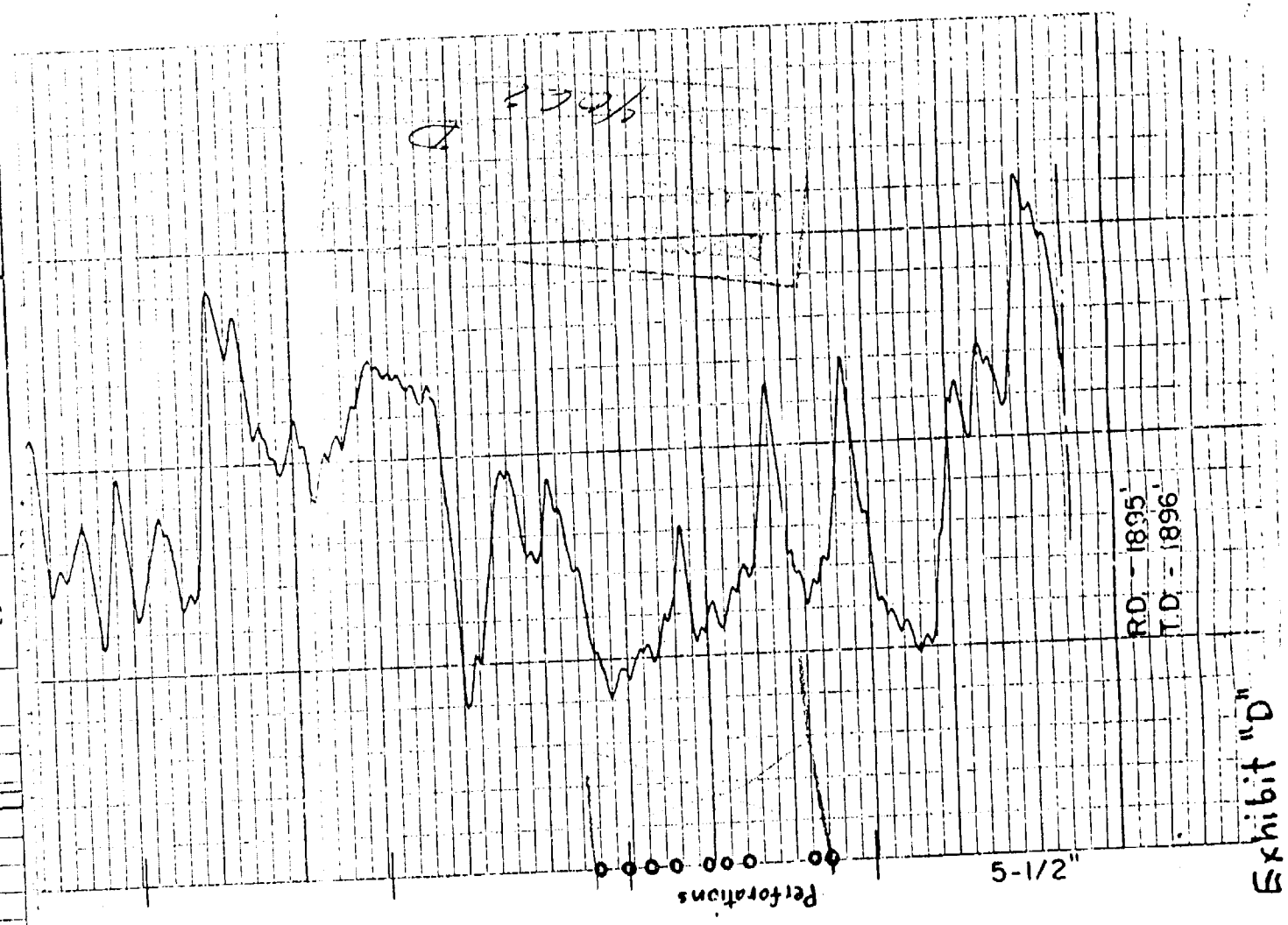
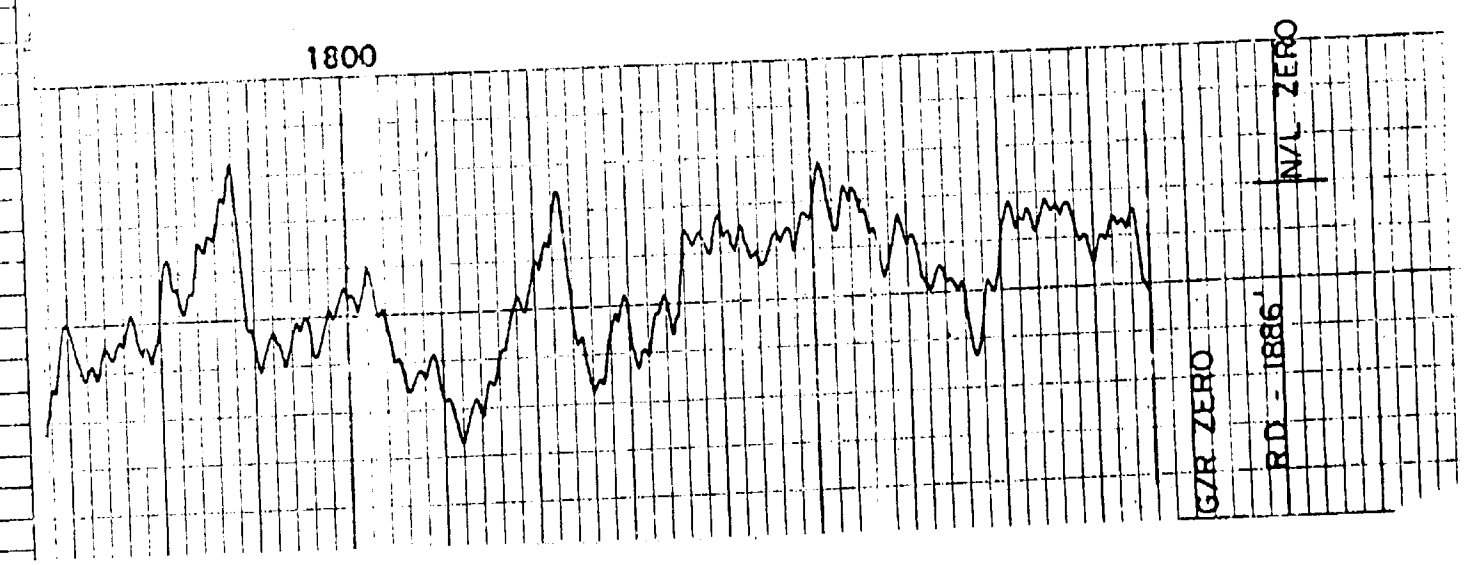


Exhibit "D"



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. 4062

Order No. R-3688

APPLICATION OF KERSEY & 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 February 26, 1969, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this _____ day of _____, 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, Kersey & Company, is the owner and operator of the Bass Well No. 3, located in Unit F of Section 12, Township 19 South, Range 28 East, NMPM, East Millman Queen-Grayburg Pool, Eddy County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Queen formation, with injection into the perforated interval from approximately ~~1835~~ 1836 feet to ~~1870~~ 1869 feet.

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

approximately 1600 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus or the annulus left open at the surface in order to determine leakage in the casing, tubing, or packer.

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Kersey & Company, is hereby authorized to utilize its Bass Well No. 3, located in Unit F of Section 12, Township 19 South, Range 28 East, NMPM, East Millman Queen-Grayburg Pool, Eddy County, New Mexico, to dispose of produced salt water into the Queen formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 1600 feet, with injection into the perforated interval from approximately ~~1835~~ 1836 feet to ~~1870~~ 1869 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.

(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.