CASE 5279: Application of TOM L. INGRAM FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

CASE 170.

Application,

Transcripts,

Small Ekhibts

_	4
Page	.ل

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico July 24, 1974

EXAMINER HEARING

IN THE MATTER OF:

Application of Tom L. Ingram for salt water disposal, Lea County, New Mexico.

Case No. 5279

BEFORE: Richard L. Stamets, Examiner.

TRANSCRIPT OF HEARING

APPEARANCES

For the New Mexico Oil Conservation Commission:

William Carr, Esq.
Legal Counsel for the
Commission
State Land Office Bldg.
Santa Fe, New Mexico

For the Applicant:

Clarence Hinkle, Esq.
HINKLE, BONDURANT, COX
& EATON
Hinkle Building
Roswell, New Mexico

CASE 5279
Page.....2

INDEX

	PAGE
JACK AHLEN	
Direct Examination by Mr. Hinkle	3
Cross Examination by Mr. Stamets	10

<u>E X H I B I T S</u>

	Marked	Admitted
Applicant's Exhibits Nos. 1 through 8		10

AHLEN-DIRECT

MR. STAMETS: Call the next Case, 5279.

MR. CARR: Case 5279. Application of Tom L. Ingram for salt water disposal, Lea County, New Mexico.

MR. HINKLE: Clarence Hinkle, of Hinkle, Bondurant, Cox & Eaton, appearing on behalf of Tom Ingram. We have one Witness and 8 exhibits.

MR. STAMETS: Any other appearances in this Case?
The Witness will stand and be sworn, please.

(Witness sworn.)

JACK AHLEN

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

DIRECT EXAMINATION

BY MR. HINKLE:

- Q State your name and your residence?
- A My name is Jack Ahlen, I live in Roswell, New Mexico.
 - Q Are you a consulting geologist?
 - A Yes, sir, I am a consulting geologist?
- Q Have you been employed by Tom Ingram, the Applicant in this Case?
 - A Yes, sir, I have.
 - Q Have you previously testified before the Oil

AHLEN-DIRECT

CASE 5279
Page.....4...

Conservation Commission?

- A Yes, sir.
- Q And your qualifications as a Petroleum Geologist are a matter of record with the Commission?
 - A That is correct.
- Q Have you made a study of the area that is involved in this Case?
 - A Yes, sir, I have.

MR. HINKLE: Are his qualifications sufficient?

MR. STAMETS: They are.

BY MR. HINKLE:

- Q Are you familiar with the Application of Tom Ingram in this Case?
 - A Yes, sir, I am familiar with the Application.
 - Q What is he seeking to accomplish?
- A Mr. Tom Ingram is seeking to dispose of produced water in a well that he has drilled in Section 7 of Township 24 South, 33 East. This well is not productive of oil and gas.
- Q Have you prepared or has there been prepared under your direction certain Exhibits for introduction in this Case?
 - A Yes, sir. The Exhibits in this Case have been

Page.....5

prepared by myself.

- Q They are the ones that have been marked 1 through 8?
 - A Yes, sir.
- Q Refer to Exhibit 1 and explain what Exhibit 1 shows?

A Exhibit No. 1 is a plat showing the location of the proposed disposal well. It shows all wells drilled within a two-mile radius of that particular well; production in that area is all from the Delaware sand; it shows off-set operators, leasehold interests of various operators surrounding the proposed well. The production depth in this vicinity is near ~- immediately below 5000 feet. It shows the location of the well that is producing the water that Mr. Ingram wants to dispose of in the northwest of the northwest of Section 7; the location of the proposed water well is 1980 from the north and 660 from the west of the same Section 7.

- Q This area has been designated as triple X pool?
- A Yes, sir, it has.
- Q Now, refer to Exhibit No. 2 and explain that?
- A Exhibit No. 2 is a structure-contour map with the datum on the top of the Delaware line; the contour interval

is 25 feet. It shows the location of the proposed disposal well as well as the well that is producing the liquid. It also shows the location of a previously approved disposal well which was heard last year at approximately this time for Hondo Drilling Company.

- Q You testified in that Case?
- A Yes, sir, I testified in this particular Case.

 This plat also shows the line of cross section A-A', which is Exhibit No. 3.
 - Q Refer to Exhibit 3 and explain that.

A Exhibit 3 has previously been entered into the record in the Case for Hondo Drilling Company and their water-disposal well. There is a section which shows stratigraphic correlations in the four wells running north south in Section 7 and Section 6. The proposed disposal well is on the south end of the section and it shows the -- on this particular Exhibit it is shown as a producing zone at that time it showed that it would be a producing zone; it no longer is. This is the zone into which we hope to inject the fluid.

- Q This indicates it is all in the same pool?
- A All four wells are in the same reservoir and same pool.

AHLEN-DIRECT

Q Now, refer to Exhibit 4 and explain that.

A Exhibit No. 4 is a diagram of the proposed disposal, the Tom Ingram No. 2 State "O." It indicates that 8-5/8th-inch casing is set at 421 feet, cement was circulated; 4-1/2-inch casing was set at 5204 feet, cemented with 200 sacks of cement, and top of cement was indicated by temperature survey at approximately 3000 feet. The top of the Delaware sand in this well is at 4990 feet, perforations at 5012 to 5033. We propose to set 2-3/8th-inch tubing at 4500 feet with a Baker Model R packer. This tubing will be protected by cement.

Q Cement lined?

A Yes, sir, this is cement lined tubing. We intend to place an inert fluid between the tubing and the casing; pressure on the casing will be monitored at the surface by a pressure gauge.

- Q Refer to Exhibit 5 and explain that.
- A Exhibit No. 5, 6 and 7 are water analysis done by Hall Burton and the Western Company in three wells along the cross section. Exhibit No. 5 is a complete water analysis of the discovery well in the pool, the Hondo Drilling Company No. 1, Gulf in W State. You will note that the chloride content is 152,000 parts per million,

Page.....8

which is a normal brine solution. You'll note that in Exhibit 6 and Exhibit 7 analysis for the Tom Ingram State "O" No. 1, the producing well, and the Tom Ingram State"O" No. 2, the proposed disposal well, the chloride content is approximately similar. The fluids are similar in the three wells and are compatible.

- Q Now refer to Exhibit 8.
- A Exhibit No. 8 is a letter which Mr. Ingram wrote to off-set operators within half a mile of the proposed disposal well, notifying them of the pending hearing, and we have a return receipt indicating that they received notification.
- Q Have you had any objections to this proposed injection well?
 - A No, sir.
- Q What is the quantity of water which is being disposed of in the Hondo Well which you referred to in Section 6?
- A The quantity of water presently being disposed is approximately 20 barrels of water per day.
- Q What do you contemplate to be disposed of as far as the Ingram Well is concerned?
 - A Approximately the same. In our Application we

stated from 50 to 200 barrels per day.

- Q It will simply be the water which is produced in Tom Ingram's producing well?
 - A Yes.
 - Q Which he has in the same section?
 - A Yes, sir.
- Q Do you have anything else you would like to present to the Commission in connection with this matter?
- A At some future date some other operators may approach us to dispose of their water in the Tom Ingram No. 2 Well also, and at that time we may want to inject.
- Q Do you anticipate that any damage to the reservoir would be caused by this injection?
- A No, sir. As a matter of fact, it will help the reservoir and help produce more oil than would normally be produced if we did not inject this water.
- Q It would therefore be in the interests of conservation and prevention of waste and protect correlative rights?
 - A Yes, sir.
- MR. HINKLE: We would like to offer Exhibits 1 through 8.
 - MR. STAMETS: Exhibits 1 through 8 will be admitted

AHLEN-DIRECT CROSS CASE 5279
Page......10

into evidence.

(Whereupon, Applicant's Exhibits
Nos. 1 through 8 were admitted into
evidence.)

MR. HINKLE: That's all the direct.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Ahlen, is it the intention of Tom Ingram to set a pump on this Well or to inject by gravity?

A Gravity has been sufficient to inject the water in the Hondo Wells. This Well has been on test and it has accepted water to this date without a pump.

- Q If a pump were to be set, I presume the maximum pressure rating would be somewhat less than the fracture pressure aforementioned?
 - A Yes, sir.
- Q Would Tom Ingram be willing to notify the District Office if a pump is set there and what the maximum pressure rating of the equipment is?
 - A He certainly would.
- Q Do you feel that the mechanical set-up of this Well will protect the other formations and keep the water going in the formation it is intended to?

AHLEN-CROSS

CASE 5279
Page 11

- A Yes, sir, I do.
- Q And the operator would be willing to notify the District Office any time there is a failure of any of this equipment and take appropriate remedial action?

A Yes, sir.

MR. STAMETS: Are there any other questions of this Witness? You may be excused. Anything further in this Case? We will take the Case under advisement.

STATE OF NEW MEXICO)

COUNTY OF SANTA FE)

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

RYCHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 52.

New Mexico Oil Conservation Commission



I.. P. Thompson Division Manager Production Department Hobbs Division

Continental Oil Company P.O. Box 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

August 17, 1976

Stamets Examiner

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

Attention Mr. J. D. Ramey Secretary-Director

Gentlemen:

Ingram - State O No. 2 - SWD Well - E-7-24S-33E, Lea County, New Mexico

Order No. R-4833 entered in Case 5279 authorized Tom Ingram to use the State O No. 2 Well for salt water disposal, injecting water produced from the Triple X Delaware pools into the same sand body. Continental Oil Company has negotiated the purchase of this well for salt water disposal purposes and is in the process of making the transfer of ownership. Continental intends to dispose of Mr. Ingram's water as comtemplated in Order No. R-4833 as well as the water produced from our Wimberly and Wimberly A leases producing from the Triple X and Double X pools.

It is assumed the authority granted in Order No. R-4833 is transferable to Continental Oil Company together with the ownership of the well. If this is not the case, please advise what steps Continental must take in order to have full authorization to utilize the well in the manner intended in its acquisition.

igurs very truly,

Varial a Sowers

VTL:reh

CC:

CFE: FOH: JWK

OIL CONSERVATION COMM.

Santa Fe



OIL CONSERVATION COMMISSION

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

August 6, 1974

I. R. TRUJILLO
CHAIRMAN
LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

•	Re:	CASE NO	5279
Mr. Clarence Hinkle Hinkle, Bondurant, Cox & Eaton		ORDER NO	R-4833
Attorneys at Law Post Office Box 10		Applicant:	
Roswell, New Mexico 88201		Tom L. In	gram

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		· direction and district and di

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. 5279 Order No. R-4833

APPLICATION OF TOM L. INGRAM FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 24, 1974, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 6th day of August, 1974, 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, Tom L. Ingram, is the owner and operator of the State "0" Well No. 2, located in Unit E of Section 7, Township 24 South, Range 33 East, NMPM, Triple X-Delaware Pool, Lea County, New Mexico.
- (3) That the applicant proposes to utilize said well to dispose of produced water into the Delaware Sand, with injection into the perforated interval from approximately 5012 feet to 5033 feet.
- (4) That the injection should be accomplished through 2 3/8-inch cement-coated tubing installed in a packer set at approximately 4500 feet; that the casing-tubing annulus should be filled with an inert fluid and that a pressure gauge or other attention-attracting leak detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.
- (5) That the approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

-2-CASE NO. 5279 Order No. R-4833

IT IS THEREFORE ORDERED:

(1) That the applicant, Tom L. Ingram is hereby authorized to utilize his State "0" Well No. 2, located in Unit E of Section 7, Township 24 South, Range 33 East, Triple X-Delaware Pool, Lea County, New Mexico, to dispose of produced salt water into the Delaware Sand, injection to be accomplished through 2 3/8-inch or larger tubing installed in a packer set at approximately 4500 feet, with injection into the perforated interval from approximately 5012 to 5033 feet;

PROVIDED HOWEVER, that the tubing shall be cement-coated; that the casing-tubing annulus shall be filled with an inert fluid; and that the annulus shall be equipped with a pressure gauge or other attention-attracting leak-detection device in order to determine leakage in the casing, tubing or packer.

(2) 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 herein-above designated.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member

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

SEAL

Appluden 03 Tom L. Legian for Rallwater desposal, I can county, Now Makes. July 24, 1974 . P.LS. (D) wredition (2) That the applicant, I'm L. Lynn, to the own. or and operator of the Afric "o" well 110.2, Vocated in Unil E of Cection Z. Township 24 South Pange 33 East, NMPM, Triple X-Delaware Pool, Lea County, NOW Mexico. (3) That the applicant proposes to litilize said well for daspose of produce water into the Down and, with lajellin late the perferufed enterval form approximataly 5012 feel to 5033 pool (1) That the injustion I hould be accomplished through 234 wich contest taling & metalled in a parker out at agreemently 4500 feet; that the Croing - tuling amulus should be filled with an inert plaid and Et that a pressure quaye or other aftention 3 3 altracting Ceak detection device should be 3) withouted to the annulus, 5) Wat the approval of the subject application will proved the dealing of immore sony

OFWELD!

hereby authorized to wheleve his State "

Well 10.2, ocated in Unit F of Lection

7 Township I'l South, & ages 33 East,

Triple of Dolaw we roof parduced salt

Mor Morico to despose of produced salt

waser into the Delaware Sail, Injection

to be accomplished through I've into or larger

timbley to stalled in a partier sofat approximately

the perforated interval from approximately

5012 to 503- best,

Le concent conted ; that the lange feeling a fall for the landing feeling and that the landing feeling and that the annulus shall be agreement with a pressure years on without aftention aftracing best of detection device in order to determine the best age in the casing, taking, or parkers

reports of the Visposal operations in accordance with really 704 and 1000 the Commissions

3) wis dietion

Tom Ingram disposalwell OK Notify Hobb dist supervisor

if pump is set. Give hats &.

may press dufae despose produced X w into pool.

Dockets Nos. 22-74 and 24-74 are tentatively set for hearing on August 7 and August 21. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 24, 1974

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

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 4954: (Reopened)

In the matter of Case 4954 being reopened pursuant to the provisions of Order No. R-4555, which order established temporary special pool rules for the South Lindrith Gallup-Dakota Oil Pool, Rio Arriba County, New Mexico, including a provision for 160-acre spacing. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing.

- CASE 5277: Application of Pierce & Dehlinger for the amendment of Order No. R-4560, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an extension of time in which to commence the drilling of the third well covered by Order No. R-4560, to be drilled in the NE/4 of Section 24, Township 9 South, Range 33 East, Vada-Pennsylvanian Pool, Lea County, New Mexico. Applicant further seeks the establishment of an administrative procedure for additional extension of time in which to comply with the drilling schedule as set forth in the subject order. Applicant further seeks the amendment of Orders Nos. 4 and 5 of Order No. R-4560 to provide certain changes in the time schedules outlined therein for the furnishing of estimated well costs and the payment of proportionate shares of well costs by all parties.
- CASE 5278: Application of Texaco Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Blinebry, Drinkard, and Tubb production in the wellbores of its A. H. Blinebry Federal Wells Nos. 23 and 26, located in Units C and B, respectively, of Section 29, and its C. H. Lockhart Federal Well No. 5, located in Unit C of Section 18, all in Township 22 South, Range 38 East, Lea County, New Mexico.
- CASE 5279: Application of Tom L. Ingram for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware Sand in the perforated interval from 5012 feet to 5033 feet in his State "O" Well No. 2 located in Unit E of Section 7, Township 24 South, Range 33 East, Triple X-Delaware Pool, Lea County, New Mexico.
- CASE 5280: Application of Coastal States Gas Producing Company for an unorthodox location and the amendment of Order No. R-4715, Lea County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to Order No. R-2746, approval for the unorthodox oil well location for its

(Case 5280 continued from Page 1)

McGuffin Well No. 3 to be drilled 660 feet from the North line and 1980 feet from the West line of Section 29, Township 9 South, Range 33 East, Flying "M" San Andres Pool, Lea County, New Mexico, the N/2 NW/4 of said Section 29 to be dedicated to the well. Applicant further seeks the amendment of Order No. R-4715 which dedicated the W/2 NW/4 of Section 29 to its McGuffin Well No. 2 located 1980 feet from the North line and 660 feet from the West line of said Section 29. Applicant proposes that the N/2 NW/4 of said Section 29 be dedicated jointly to said McGuffin Well No. 2 and to its McGuffin Well No. 1 located in Unit F of said Section 29.

- CASE 5281: Application of Morris R. Antweil for an extension of time, Order No. R-4772, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a 90-day extension of the July 15 deadline for the commencement of drilling operations in the S/2 of Section 17, Township 22 South, Range 27 East, South Carlsbad Field, Eddy County, New Mexico, which lands were pooled to form a standard 320-acre gas spacing and proration unit by Order No. R-4772.
- CASE 5282: Application of Union Texas Petroleum Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Jalmat and Langlie-Mattix production in certain of its wells in the Langlie-Jal Unit Area, currently being waterflooded under authority of Commission Order No. R-4051.

CASE 4969: (Reopened)

In the matter of Case No. 4969 being reopened pursuant to the provisions of Order No. R-4557-A, which order continued the special depth bracket allowable for the Tocito Dome-Pennsylvanian "D" Pool, San Juan County, New Mexico, for an additional six months. All interested parties may appear and show cause why said special depth bracket allowable should not be rescinded.

CASE 5283: Application of Belco Petroleum Corporation for compulsory pooling, Eddy County. New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in formations of Pennsylvanian age or older underlying the W/2 of Section 5, Township 22 South, Range 27 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location for said unit in Unit F of said Section 5. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5284: Application of Champlin Petroleum Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Nix-Yates Well No. 1 located in Unit G of Section 2, Township 22 South, Range 27 East, Eddy County, New Mexico, in such a manner as to produce gas from the Morrow formation through tubing and from the Wolfcamp formation through the casing-tubing annulus.

CASE 5152: (Reopened)

In the matter of Case No. 5152 being reopened pursuant to the provisions of Order No. R-4713, which order established a special depth bracket allowable for the Media-Entrada Oil Pool, Sandoval County, New Mexico. All interested parties may appear and show cause why said special depth bracket allowable should not be rescinded.

- CASE 5285: Application of Texas Pacific Oil Co. for an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox gas well location of its Phantom Draw Unit Well No. 1 to be located at a point 800 feet from the South line and 1000 feet from the West line of Section 20, Township 26 South, Range 31 East, Eddy County, New Mexico, the W/2 of said Section 20 to be dedicated to the well.
- CASE 5286: Application of Texaco Inc. for a Special Allowable, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for an injection response allowable increase for its Vacuum Grayburg-San Andres Unit Pressure Maintenance Project, Lea County, New Mexico. Applicant seeks an additional 2320 barrels of oil per day to be added incrementally to the current 4640 barrel per day allowable as injection response occurs. Applicant further seeks the establishment of an allowable of up to 240 barrels per day for lease line wells which have demonstrated a substantial response to water injection.

OIL CONSERVATION COMMISSION Hobbs DISTRICT

OIL CONSERVATION COMMISSION		DATE	June	21, 1974
BOX 2088 SANTA FE, NEW MEXICO		P: P: P: P:	roposed roposed roposed	MC DHC NSL SWD X WFX PMX
Gentlemen:				
I have examined the applic	cation dated	4		
for the Tom L. Ingram	State "O"	#:	2-E	7-24-33
Operator	Lease and We	11 No.	Un	it, S-T-R
			·	

OIL CONSERVATION COMMISSION Hobbs DISTRICT

	RVATION COMMISS	ION			DATE	July	3,	1974
BOX 2088 BANTA FE.	NEW MEXICO				RE:	Proposed	MC	
,						Proposed		
						Proposed		
				w		Proposed		
						Proposed		
						Proposed	PMX	
Gentlemen	•							
.oo.comen	•							
I ha	ve examined the	applicati	ion date	đ				
				te "0"	#2-1	7	72	4-33
or the	Tom L. Ingram							
	Operator		Lease	and Wel	T No.	· Uı	nit,	S-T-R
and my rea	nommendations ar	o ac foll	orio ·					
and my red	commendations ar	e as foll	Lows:					
		e as foll						
	J.D.R.	e as foll				·		· .
		e as foll						
		e as foll						
		e as foll						
		e as foll						
		re as foll						
		re as foll						
		e as foll						
		re as foll				very tru	nly,	
		re as foll				very tru	nly,	
		re as foll				very tru	nly,	
		re as foll				very tru	nly,	
		re as foll				very tri	nly,	

JUL SURERVATION COMM

Pauline teige 1230 12455	Superior 711 1 1 93	Midwest 7-1-72 2373	Continental	""" 1 Con		Phill G-1	i23 71	!	ntinentat HBP 68343
2 W. W.	(I) 47		(99713	green 2	383349 	538	•		733.03
Chegrady 22	23	Midnes!	H.I.	1 111111 7	19		20		21
11-1-53 17-75		5- 1-77 	Sp. St. St.	Tonoise.			Confinential Energy For FO 53 44 EVA 4 (13 (5)		
<i>u</i> . s.	u.s.	#.S.M1 S110(3)	Fields Fed	O'C.S.	shall-Fall" S., 141 Inninateol, S	U.	S., M		.S., MI haiathail, S
Cantinental HSP	Pauling Trigg 880	Midwash 6-1-77	(Continental)	10 mm 1 (C.	nlinental) HBP	El Pagatia!	Phillips 6 · 1 · 71	[8	rineafel 192
243723	्रात्तुः स्थान	T RUGG			88848 Euro 	23.55	2330	~	63343
27	26 (1514,513)	60 41	i'. 5) Jiwa 7	30	:	1 29		28
	063223 0146510520	PAR Dright		1		}			
0.5. Base 1-183 2-2-6 U.S.	(2017) - (a) GA 3000 23-852 (3) 70-53031 23-330500 (3) 04455 (30)	Signiani Carti. US.MI. Signial	5°F#1." U.S.M.EM.	13.50 i U.S., M C3.5	13 5 65 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	U.S.	Charles 1 1-1-85 1 Hoos U.S. M.I. C.S. Eclopinsteel	U.S C.S. Brit	S., MI nninstool, S
A.H. Wayer	Pennsull PM Orly 1	Pencanelol	Midnest 3 - 1 - 61	7/874 (Mess P. 7:112 LG:12	(§) (§)	Cirkin Orta. Ştate Ça şeşe Gul	El Cinco	Gel	Hy
2014 10.00 1	102020 Feet 35.45	To ste-S) 10331 D. Fasker 1 Gulf-St. 105206	C53/3 1 Pere Reinninshot Cecal/(f) 13.3635 G=Ta.1/25/55	Har J. B.	bco elo;	37 7 5 5	2/0	() (6) 15	371
	(Variantife) 35-94455		7		31 21	-3	2 6/1/2-3-80		33
1495.	1242778247		⊕'	Down 1	•				
ris S	Fed Payne" US Casey	Sto U.3	teML	ì	i late	3	ų ≒	S:	שרכו
ilia ibing pays iping . Balan S+4+73	Gulf		ion ion	**************************************	jusme ilmire i	HVA PANA I	11/20 2/2/2/2	S. States Huggi	מע
0371175	TEHOSO LOSSIA Victorianos Alas	3 ¹ 1172	711:75	मार्थ्य है	laica Guir HBF	All Rich.		X-4 2:	6-77 (4)(9 52
<u> </u>	2 Ohio-St	Copsed		11.2	÷ + -	4 - 19 - 75 K-5731 25 5	₹ ! · \		4
H.S.P.		1 13 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	62 Newman Feet	10a.0isc^	isting wa		5 · 75		
u.s.			Z ≥ 0. ∧ /3	on in the second	sposal we	در ا (ع	'છે' *•	Sno	
3373979 Howell Spear Peterson 611-77 19-1-52 2384	Guif Continental	1	(lefnenifne D)	PERO U	gion	.© G∪l		at tothem dr.	3 15 76
16324	01917 02859	Control Fed - Hannagan		Lingram e	(6·73 (5·73 (개) (5·2)	Surrey ox 1.54 70.0055 331	ai :i 	11.53 10.333	K+\$301
	Haragan Wimberly" Continental West Teawer Sa	Pallonkamer	Wimberla" 3	© 2-11.2⊗	H20	72.52.7 72.52.7 72.52.7 8			9
2395 1 901917	02337 01917 02337 64 Hagagas	H3 P 02837 Union	HBF /9	oposed v	173.63		ļ		; }
U.S. M. U.S. M. U.S. M. S. W. S. W.S. James U.S.	Cases College	် ဥန္တဝနင့် ပည	di	sposal v	vell 👸	Sto	, -	Sn	of•
Gulf 37/172 Gulf 13334 U.S. 10 0 1 1 2 2 0 0	A S Confil	6uli 14	Continental 1	Mob Selv	i1	PanAmen	® RaHell	Atl. Rich. 4 - 19 - 76 K-5933 26 53	t ;
0.5. 039890	1500320 10-0-P. (01917 Henk	0533942	1184 1 SIS	3 1	6 - 15 - 75 4-5078 1755	Holly-St./ 105242, EN1-31-64	R.H.H	l landifin
32 15 (Gdf) 33	74	Continental		ا أوسادون	8	Tenama 17		- AU O. L	1 - 2; 5;67 7 2 3 ô
Fed Honogen"		0223245 H95	H. B.P. 01917	و		Tennero Striane 10 5223 Davidiss	Mobil 44 1- 32 1G-51 1000	4 15 76 K-5333 26 53	
Tanges 5: 1:11 4 Ball. Sary 2:3 0:11:11 1 CE James (3)	U.S. M. Jennings U.S. M CF. gmes Store, S	C.E. Jomes (S	703651 MI 51642437251	Tuna F Sa	ata	`⊗' /\$		S _{re}	 24
The state of the s	Sinero Sizero Sun 614 12-1-6 Sun 151243 AGS 3-1-74 151243 TT 21 0522274	الم الم	bin:	Pan	Amer.	PonAmer. 1	2/obil 4 - 1 - 32	Superior 7: 21:74	MaCullaugh Oil
S.J.Groham 8.J.Graham 5 (U.S.Smell)	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ospannielal Fed Banfyran		. 1-18	53	118:76 K5659 5333	10 to	7. 21-74 K 4 273 35 <u>27</u>	1222 1222
22- 7 + 27 - }	Formers Fed : 23 _ Verreits	1 3534 10 5130 0 1 530 0 1 530	The state of the s		9	5()	1 2 1	
8.J. Groham	90/18/E-2	U.S. .!! (C.F. Jan	nesis) L 1	از عدور		RE EXAM	NINER ST		\$45+rior 7 21-74 1275 \$27
U.S. Smell lander WSSmell		U.S	. 8	S	OIT CO	NSER WAT	•	MOISSIM	• 1
					Office	EXHII	SIT NO.	<u></u>	
					CASE N		17		-
					A fiele	d by <u>U</u>	19700	<u> </u>	,
Plat showing 1	location of prop	osed disp	oosal we	11.	Hearing	Date	<u>-34-17</u>		

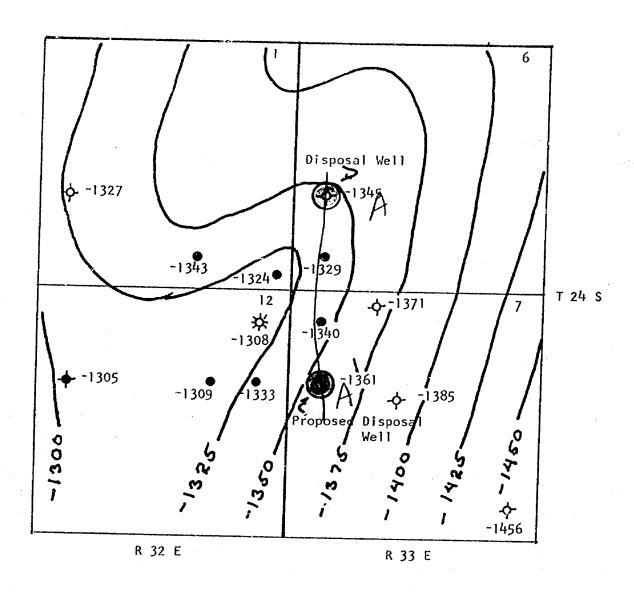
Plat showing location or proposed disposal well.

Producing formation is Delaware Sand in all productive wells within 2 mile radius of proposed disposal well.

Disposal is to be into the Delaware Sand at a depth of 5012 to 5033 feet.

Liquid will be salt water produced from the Tom L. Ingram #1 State "0" well located approximately 1320 feet to the north.

Volume will be from 50 to 200 bbls of salt water per day.



Structure Contour Map Triple "X" Field Lea County, New Mexico

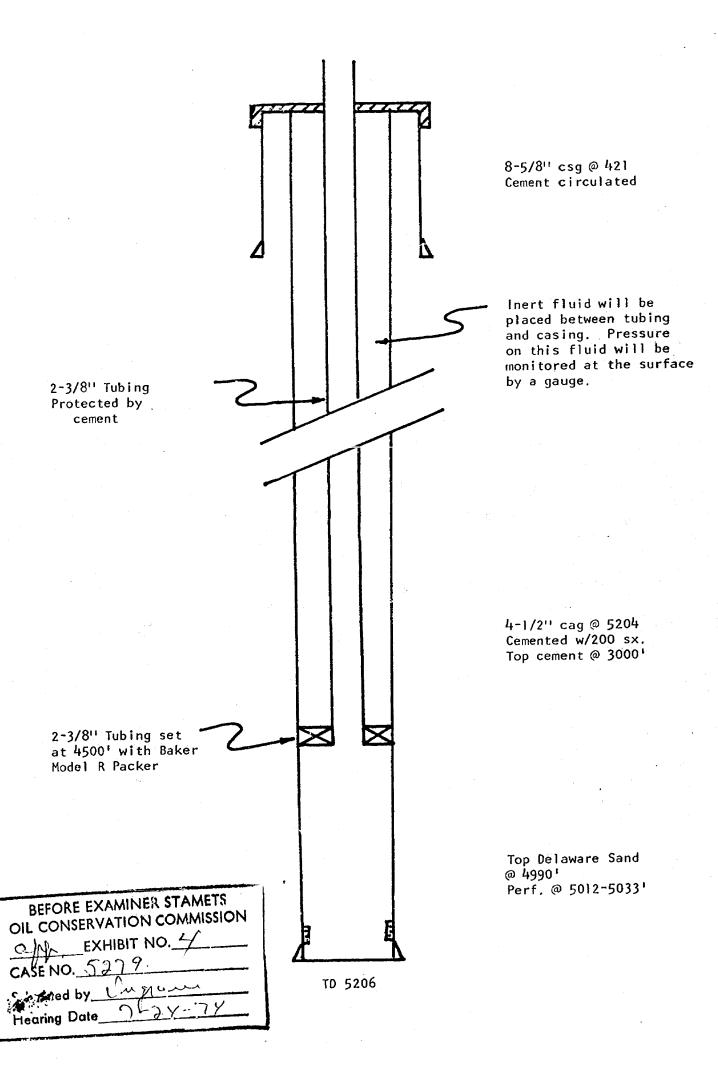
Datum, Delaware Lime C.I. 25' July 1974 Jack Ahlen

BEFORE EXAMINER STAMETS
DEI ONE EXTRACTOR IN HOSTOR
OIL CONSERVATION COMMISSION

afr_EXHIBIT NO. 2
COMPENTION NO.
CASE NO. 5979
CASE NO. 5417
Λ.
Fredring Date 7-24-74
A maied by Comment
グーク クーク ソイト リメ
Hearing Date / 1/

在几

PROPOSED TRIPLE "X" DISPOSAL WELL TOM L. INGRAM #2 STATE "O" SM/4 NW/4 Section 7 T24S-R33E Lea County, New Mexico



b 1342-A

HALLIBURTON DIVISION LABORATORY

HALLIBURTON COMPANY LOVINGTON, NEW MEXICO

5-245-33E 5021-24 Swedy Test 10. W72-773

LABORATORY WATER ANALYSIS

To Hondo Drilling	Hondo Drilling Company			Date 12-29-72					
Fox 116 Midland, Texas 79701			or disclosed without first securing the express write of laboratory management; it may however, be u						
ATTW: Mr. Nath			course of regular business	ness operations by any person or concern f receiving such report from Halliburtor					
Submitted by			Date Rec	12-29-72					
Well No. Gulf hWstat	ce #1 Depth		Formation_	Delaware	sand				
CountyLea		~ ^	Source						
Resistivity	0.049 ∋ 70°F.								
Specific Gravity	3 3/0								
pH	~ 3								
Calcium (Ca)	00.000				*MPL				
Magnesium (Mg)	2,640								
Chlorides (CI)	152,000								
Sulfates (SO ₄)	1,800								
Bicarbonates (HCO ₃)	195								
Soluble Iron (Fe)	40								
······									
API Gr. @ 60 F.	- 39.9				·				
Remarks:				*Milligrams ;	oer liter				
	Respe	ctfully submit	ted,	_					
Analyst: Prover		· 	HALLIBURTON (COMPANY					
rc:		By	11.	Bew	es!				
			СН	EMÍST .					

NOTICE

This report is limited to the described sample tested. Any user of this report agrees that Halliburton shall not be liable for any loss or damage, whether it be to act or omission, resulting from such report or its use.

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

CASE NO. 52.79

Case No. 52.79

Hearing Date 7-24-74

X My G

LON EMMAR

THE WESTERN COMPANY Service Laboratory

·				
	WATER ANALYSIS	52c 1	7 T 245 R	3 <i>3E</i>
Operator TOM MIRAM	Date S	Sampled 6.26.	<i>73</i> · · ·	
Well STATE OF	Date H	deceived 6.26.	73	
Field Triple X	Submit	tted by		
Formation Delaware Sand	Worke	d by		
Depth	Other (Description		
County				
1110 60006	CHEMICAL DETER		•	
		•	./ .	
Iron FAIR TERREE	-	Hydrogen Sulfide —	NOUS	
Sodium and Potassium	ppm	Bicarbonate ———		ppr
Calcium	ρρm :	Sulfate ———		ppn
Magnesium	ppm	Phosphate		
Chloride 140,000	ppm as S	odium Chloride		ppn
3,000				
Remarks:				
for Stiff type plot (in meq./1.)				
No & K -50 40 30 100	 	╒╏╸╸ ┇ ┇ ┇ ┇ ┇ ┇ ┇ ┇ ┇ ┇	++++++++++++++++++++++++++++++++++++++	CO, CO, O
	Por _	***************************************		

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
EXHIBIT NO. &
CASE NO. 5279
Hearing Date 72774

X SO T

THE WESTERN COMPANY Service Laboratory

SKKK	NO	

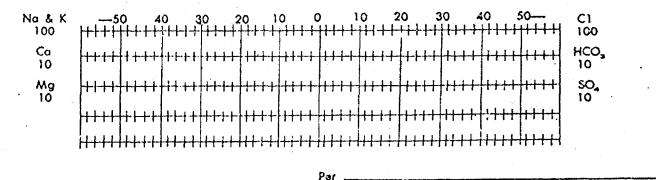
Sec 7 T245 R33E

WATER ANALYSIS

Operator Tom INGRAM	Date Sampled 6-26-73	
Well STATE Off Z	Date Received 6.26.73	
Field Triple X	Submitted by	
Formation Delaware Sand	Worked by	
Depth	Other Description	•
County		
Density 1.165 @	EMICAL DETERMINATIONS	
Iron GOOD TRACE	,	
Sodium and Potassium		ppn
Calcium	ppm Sulfate	ppm
Magnesium	ppm Phosphate ————————————————————————————————————	ppn
Chloride	ppm as Sodium Chloride ————————————————————————————————————	ppm

for Stiff type plot (in meq./1.)

Remarks:



BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
EXHIBIT NO.
CASE NO. 5279,
Hearing Date 7-24-74

198

TOM L. INGRAM

HOSWELL, NEW MEXICO 88201

June 20, 1974

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

Attention: Mr. Joe D. Ramey

Gentlemen:

Enclosed please find original and two copies of Form C-108, Application to Dispose of Salt Water by Injection into a Porous Formation in connection with the Tom L. Ingram #2 State O Well, Section 7 - T24S, R33E, Lea County, New Mexico.

Very truly yours,

Tom L. Ingram

/jh Eṇcls.

cc: Continental 0:1 Company Box 460

Hobbs, New Mexico 88240

Hondo Drilling Company Box 116 Return Ree. Reg. Return Ree. Reg.

SENDER: Be sure to follow instructions on other side

	(Additional charges requir	ed for these servi		- 1
	address delivered		Deliver ONLY to addressee	
∫ Re	RECEI	PT ticle described	below	
EGISTERED 1.).	SIGNATURE OF MA	ME OF ADDRESS	EE (Must always bo filled	(n)
ERHIEU HO.				
461200 NO.	SIGNATURE (2)	OF ADDRESSEE	S'AGERT, IF ANY!	7
HE DELIVERED	SHOW WHERE DELIVE	RED ROAD FOR	last, in the met so Silver	fest.
6-21-74				

PLEASE FUR	NISH SERVICE(S) IND Additional charges regula	CATED BY CHECKED BLOCK(S) and for these services
	address delivered	Deliver ONLY to addressee
R	RECEI	PT Hicle described below
hegistered no.		ME OF ADDRESSEE (Must always be filled in)
CERTIFICO NO. 461201	SIGNATURE	OF AUDRESSEE'S AGENT, IF ANY
insured no.		(R) (Only if requested, and enclude ZIP Code)
DATE OLLIVERED	snow where delyie	RED (Only if requested, and fuctude ZIP Code)
6.0004		

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

CASE NO. 5279

Case No. 5279

Tied by Case
Tiedring Date 7-24-74

TOM L. INGRAM

IOD SOUTH KENTUCKY AVENUE ROSWELL, NEW MEXICO 88201

June 20, 1974

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

Attention: Mr. Joe D. Ramey

Gentlemen:

Enclosed please find original and two copies of Form C-108, Application to Dispose of Salt Water by Injection into a Porous Formation in connection with the Tom L. Ingram #2 State O Well, Section 7 - T24S, R33E, Lea County, New Mexico.

Very truly yours,

Tom L. Ingram

OIL CONSERVATION COMM.

Santa Fo

/jh Encls.

Continental Oil Company Box 460 Hobbs, New Mexico 88240

> Hondo Drilling Company Box 116 Midland, Texas 79701

Gulf Oil Corporation Attention: R. E. Griffith P. 0. Box 1150 Midland, Texas 79701

S. E. Reynolds - N. M. State Engineer State Capitol Santa Fe, New Mexico 87501

Carl A. Johnson Lovington, New Mexico 88260

· NEW MEXICO OIL CONSERVATION COMMISSION

TOPERATOR .		OSE OF SALL III	ATER BY INJECTIO		5 FURMATION			
Tom L. Ingram			P. 0. Box 1757-Roswell, New Mexico 88201					
State 0				Triple X - Delaware				
LOCATION UNIT LETTER		Tee 15 cock to		HE North LIN	IE AND 660 FEET FROM TH			
West LINE, SECTION	<u> </u>	DWNSHIP 24 S CASING	RANGE 33E AND TUBING DATA	нмем.				
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMEN	T TOP DETERMINED BY			
SURPACE CASING	8-5/8	421	400	Surface	Circulation			
INTERMEDIATE								
LONG STRING								
TUBING	4-1/2	5204	200 NAME, MODEL AND DEPTH	3000	Calculation			
	2-3/8		Baker Mode	el R 4500'				
NAME OF PROPOSED INJECTION FOR	MATION		TOP OF FORMATION		BOTTOM OF FORMATION			
Delaware Sand	SING, OR ANNULUS?	PERFORATIONS	08 OPEN HOLE? PROPOSE	D INTERVAL(S) OF INJECT	5033			
Tubing	LIE ANGUED !	Perfora	tions 50	12-33				
				SAILLED?	HAS WELL EVER BEEN PERFORATED IN ANY RONE OTHER THAN THE PROPOSED INJEC- TION ZONE? NO			
NO SUCH PERFORATED INTER	IVALS AND SACKS OF C	EMENT USED TO SEAL O	FF OR SQUEEZE EACH	<u>.</u>	NO .			
DEPTH OF BOTTOM OF DEEPEST FORSH WATER ZONE IN THIS AREA		DEPTH OF BOTTOM OF	NEXT HIGHER	DEPTH OF TOP OIL OR GAS ZON	OF NEXT LOWER			
100'		None		650	00'			
ANTICIPATED DAILY MINIMUM INJECTION VOLUME	1 200	Open of close		STAVITY	TY OR APPROX. PRESSURE (FSI)			
ANSWER YES OR NO WHETHER THE FRALIZED TO SUCH A DEGREE AS Y STOCK, IRRIGATION, OR OTHER GEN	FOLLOWING WATERS ARE SEE UNFIT FOR COMES	E MIN- WATER	TO BE DISPOSED OF NATE		RE WATER ANALYSES ATTACHED?			
NAME AND ADDRESS OF SURFACE OF		1	yes i	Yes The Filt	ET WEST			
State Land - Carl	A. Johnson	Lovington, N	ew Mexico					
Continental Oil Co				'ΔΩ 111 <u>11</u> '	24 1616			
				CONS	ERVATION COMM.			
Hondo Drilling Com	pany - BOX I	io - midiano,	lexas /9/01	OIL 45	Santa Fo			
				·				
		·						
HAVE COPIES OF THIS APPLICATION	BEEN BURFACE OWN	ER	EACH OPERATOR WIT	HIN ONE-HALF MILE T	HE NEW MEXICO STATE ENGINEER			
THE FOLLOWING ITEMS ATTACH	Yes		! Yes	!	Yes			
ARE THE FOLLOWING ITEMS ATTACH THIS APPLICATION (BEE RULE 701*)	Yes	•	Yes	, p. 1	Yes			
I hereby)		ormation above is tr	ue and complete to the	e best of my knowled				
- James de	gan	 			6/12/74			
		<u>Operator</u>			0/ 14/ /4			

(Title) (Date)

NOTE. Should waivers from the State Engineer, the surface owher, 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 NULE 701.

Pauline Trigg		Midwest	Cambinandal	31114	*Continental	. ,			
HEP 04465	Superior 7 · 1 · 80 Hast	7-1-77	063223		CARAR	Philli	<u>, , , , , , , , , , , , , , , , , , , </u>	1	ntinental H 50
e Andres				giran.		862	•)	068343
Established 22	23	2	4]]]]]]]]]]			20		21
11-1-3) 196ta		Midwest 6 · 1 · 27 2302	H. I Johnstondo Val	ງ 4 ກວນໃດໄສ			Confinential Lewis Four TO 53 ca DIA 4 - 12 - 63	21	
1			St. Marc. 14	35.53.	March Mer. 19	\$			
U.S.	U.S.	U.S.M.I State(S)	U.S.G)eM		3 T3555 -OU.S., MI -S. Orinningtool, S	C.S. Drin	S., HI O	U.S., MI C.S. Brinninstool, S	
Continental HSP 603228	Pauline Trigg HBP 04465	Midwest 6-1-77 2302 &	(Continental)	11354	HOP	El Passilot	Phillips	Co	ntinental Hap
W	บังเลอ	l em Sá	083228 Instanta Union]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]	Pure Pure	2336	2306		33343
27	Continentall P. Mortal	Wahrii 10 316 0/4 4-11	6		, , 30		9		20 .
	003278 0346577520	PM Ortal		נ אטונ	`				28 🔨
March 1	(P.M.) - To) G.A. Snow	P OSTER Field	r*Fed,"	37864 4		}	2 K Smith 7	İ	
1-184 U.S.	Service of the Surface of the Surfac	Contil. US Mi. Server	U.5 (5) EM.	U.S.	U.S. 19205		14005 U.S.M.I. C.S.Scinginstod	C.S. B	.S., MI inninstool, S
A.H.U.S.el 1-1-64 20069	(Pennsoil) P.M. Orly 1 P.M. Orly 1 P.M. Orly 2 P.M. Orly 3 P.M. Or	Penracetos Triste-St.			MessiPati Toligat Loigat	Kirklin Orlgi Glata Gul	, Ø'	6	etty
Hangamer 20069 Halder Halder 10 8 14 62	TOSOSO TOTAL ZWE	0.Fasken 1 Gulf St. 7 105205	Listia 192 Pure Perceinstant	TICH T	Pubco.etal 8-13-79	M 16 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Humble St.	1;	1· 23 2 371 57 <u>0</u>
	(Veracol 1 10 5303)	\$1 00000 31	13.41649 h		31	359	1 75 5363 0!Aiz-4-60 2	•	33
J.V. Sheadi 4 6 12-1-63 14055	105110-1- C4465		න [']	3155,-3	19.5		-		
Fed - 80.7	Pauling Triad		· r	ל אוועד				1	
्रिया क्षेत्रक क्षेत	117 (44.5)	5101 11.5		-	Stote Management according to be properly	7	(to		etote.
Union 5 • i • 73	Guli .	Seese Uni	ion	1	SHE PULME PHIES	Jilla dank j	n w imite	1	รณรรณ รูโ พอรณ เ
0371175	TEHOODA LIKAIA Moralhon-Sh 1122	2049 1	1175)1114. j	Union Gulf HBP	All Rich.		4 3.	16 - 75 4813 15 23
3	2 Ohio-St	19. 1			K-2992 J 1	K-523) 2652			
385. 886.	/					gu)	f \	}	
5.24		6% 355	d. Nordo Nemanses 62	Dal Oise	disposal w		77		,
U.S. Barbara Howell Speak	State,MI. U.S. (S)	0,5	F123 💇		50/10	Sie	•	S	0.5e
Peterson 6-1-77	Gutf Continental	Gulf (Continental) H.B.P Wex	9 F120	φ , 1 πυιού	,⊕ Guli		EL.Latinam Jr	Allied Chem. So. Poy. 3 - 15 - 76
Guil Horogan Fed	िस्तुरीस विकर्ण	red Hangaan	Union	Juston.	(1)\$(2) (1)3 (1)3	\$1000 5 6 6 547 5000 5 6 6 547	t .	1153 10-932	X+5501
10 0/A 2 14 62 - 17	A. I. T. I. T. Marchaelle, A. J.	PaHonkomer!	Wimberly'	المراجع الم		10 5213 614 3: 36-62			1
Gulf 6-1-77 10 Gulf 12-355 701717	7.757 1 2.75 17 17 17 17 17 17 17 17 17 17 17 17 17	H5 P 02887	Gulf 5	an i		8			9 1 1
US WUS WUS W	Continents West Town She (132) 25 SW (13) (137)	Union	Union Pro	opose	d water			<i>-</i> /	لَ
Stores James James U.S.	U.S. Hanagar	9310 0.5.	ř		Nell Soil	Stor			to the
Gulf Stiffy Gulf	Iconeso H.B.P.	Gulf IC H8P I 01917 I	Hat I	3414 r	Mobil 9 - I - 81	Pan Amer 6 - 15 - 75	⊗ R.B.Holl	All Rich 4 - 19 - 76 K- 5933 26 52	
7777	62 (20)	ionk.	0533642 3	WANT	272) 272)	€ - 15 - 75 £-5078 175\$	Holly 31 705242: 0'41-31/64	4.H.R	i Ionnifin
32 15 (Gulf) 38	14			الق بعدد و و	. 18	- 17	/_	3	1 - 81 5167 12 23
32 Fed Horiogon 114		Continental (Gulf 9: H. 8.P. §	10 11/A, 3		Tenneco :: 51-1.0 are 10 5233 0/45-14-63	1,6bil 1. 62 10-51 10-9	All Rich. 4 - 13 - 76 K-5333 2623	6
7	IS.MI. Jennings	Hoga e	"Mestates"—-	L MILL		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	10 20	56.0	j
US (C.F.Jomes 13)	C. symes Store, S	C.F. Jonies (6)			Stote	⊗ ' /s _r	.	Sı	24
10 31 04 E	nnecco S.ceriori Sun 31-1 121-15 3-1-74 5-1-17 72-17 0522274 orkanner Sun	8 5 Car. 11/41 11/41	ons j	11111	Panamer.	PonAmer.	A10511	Superior	McCullough Oil
8J.Grohom B.J.Grohom (5)	orkomer Sun	Osbarn, elal Fed. Opndurant	12	Ins. 7	1.19.16 K2023	1'18.76 K 5659 5342	102	7. 21.74 K 4273 35 <u>27</u>	L 5748
22 + 22-15	ement fes 23 - United	Fed. 89 h furont F1 35 d 24 10 5 d 27 24 10 1 6 d 37 2				_ i			! !
8.J. Graham 1	8meus 7* 1: 83	1 S 11 10 M	J 400	רק יגאני		10	nail line	McCullough Oil	L Superior
U.S. Smell Breezey , School	XXVBLE-X	Hy C.F. Jam		از بسر	ŀ		55 19" "0/e" 3511 2 5213 2 5213 4 5 13 - 61	L 5253	1 7 21-74 1 K 4273 25 <u>27</u>
U.S. Fee Viscon	2.0	U,S.		~	Shote	(A)	A 1-13-61	Sec	/ ■

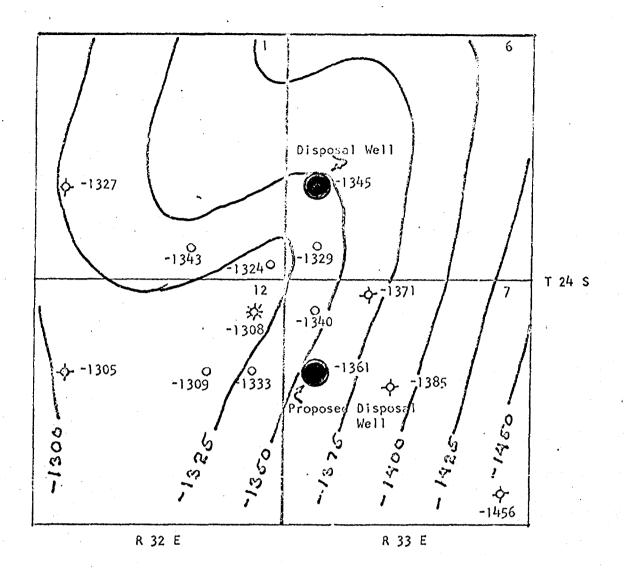
Plat showing location of proposed disposal well.

Producing formation is Delaware Sand in all productive wells within 2 mile radius of proposed disposal well.

Disposal is to be into the Delaware Sand at a depth of 5012 to 5033 feet.

Liquid will be sait water produced from the Tom L. Ingram #1 State 110 1 well located approximately 1320 feet to the north.

Volume will be from 50 to 200 bbls of salt water per day.

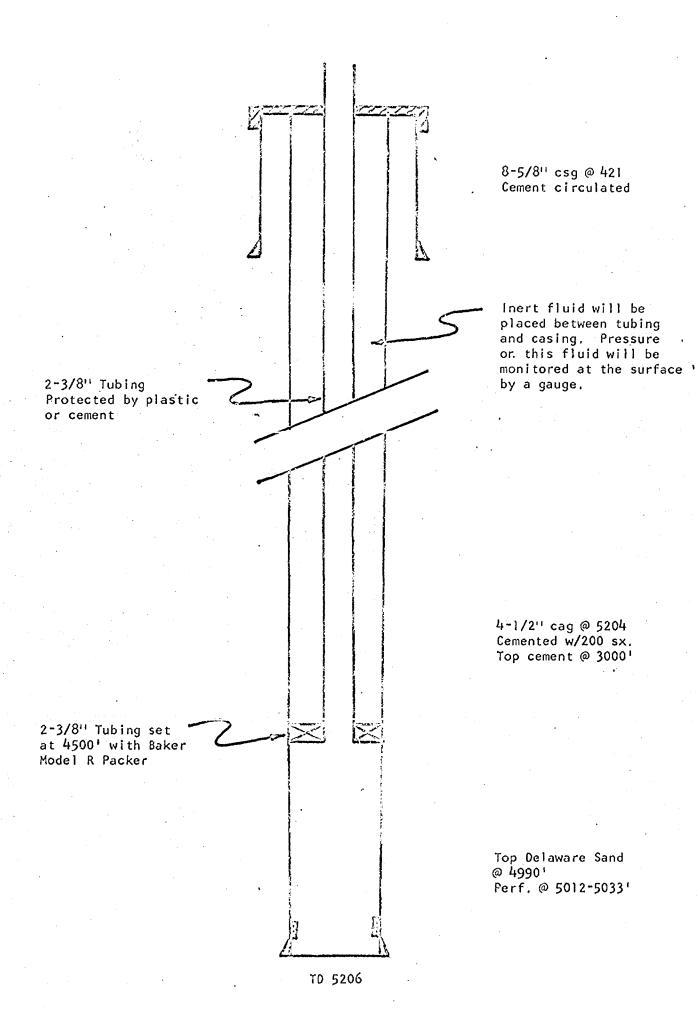


Structure Contour Map Triple 'X' Field Lea County, New Mexico

Datum, Delaware Lime C.1. 25' July 1974 Jack Ahlen

Ó

PROPOSED TRIPLE "X" DISPOSAL WELL TOM L. INGRAM //2 STATE "O" . SW/4 NW/4 Section 7 T24S-R33E Lea County, New Mexico



HALLIBURTON DIVISION LABORATORY

HALLIBURTON COMPANY LOVINGTON, NEW MEXICO

6-248-33E 5021-24 Swar Teat W72-773

LABORATORY WATER ANALYSIS

To Hondo Drilling	Company	Date	Date 12-29-72				
Pox 116			This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management, it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Company.				
Midland, Texas	79701	or disclosed without first : of laboratory managemen					
ATTN: Mr. Nath	an Outlaw	and employees thereof re					
Submitted by		Date Rec. 12-29-72					
•		Formation_	t				
		C Source					
	T TOTAL						
Resistivity	0.049 @ 70°F.	1 					
Specific Gravity	2 2/0						
pH							
Calcium (Ca)	• • •	Name and the second particular pa	*MPL				
Magnesium (Mg)	2,640	-					
Chlorides (CI)	152,000	-					
Sulfates (SO ₄)	1,800	-					
Bicarbonates (HCO ₃)	195	<u> </u>					
Soluble Iron (Fe)	40						
		$A = A \cdot $					
	<u>}</u>);		4				
API Gr. @ 60°F.	- 39.9						
Remarks:			*Milligrams per liter				
· <u>-</u>	K		-				
	Kespecttuli	y submitted,					
Analyst: Brever		HALLIBURTON (COMPANY				
CC:			Bowell				

NOTICE

This report is limited to the described sample tested. Any user of this report agrees that Halliburton shall not be liable for any loss or damage, whether it be to act or omission, resulting from such report or its use.

THE WESTERN COMPANY Service Laboratory

SAMPLE NO...

		H.				
		WATER ANALYSIS	52c7 T 245R 33E			
Operator To	OM WARAM	Date Sampleo	1 6.26.73			
Well STA	TE O#/		1 6.26.73			
	iple X	Submitted by				
	plaware San	•				
Depth	DIA WATE CLAN		•			
County	•	Other Descript	non			
002119						
Density	1.165 @89°F.	CHEMICAL DETERMINATI				
Iron	FAIR TERACE		en Sulfide No.115			
Sodium and	Potossium	ppm Bicarbo	note	PI		
Calcium		ppm Sulfate		Pi		
Magnesium _		Ppm Phospho	ole	Pí		
Shloride	4410	PPM as Sodium	Chloride	PF		
35000		•				
14 000						
Remarks:						
	.*					
lact Milling	despited to the content of the					
No & K 100	50 40 30	20 10 0 10 2 	0 30 40 50— C1			
Ca 10		╶╸ ┋				
Mg		-	10			
10	!		10			
		┦╏╏╏ ╏╟╫╫	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			

THE WESTERN COMPANY Service Laboratory

SAMPLE	NO
--------	----

Sel 7 T245 R33£

WATER ANALYSIS

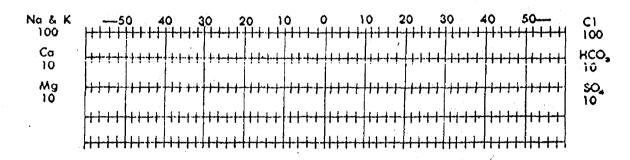
Operator Tom INGRAM 6-26-73 Date Sampled STATE OF Z Well 6.26.73 Date Received Field Triple X Submitted by Formation Delaware Sand Worked by Depth Other Description County

CHEMICAL DETERMINATIONS

NONE Sodium and Potassium Calcium _ Sulfate Magnesium . Phosphate 142,000 PPM as Sodium Chloride

for Stiff type plot (in meq./1.)

Remarks:



Source of Sample
Rm @ Meas, Temp.
Rmf @ Meas, Temp.
Rmf @ Meas, Temp.
Source: Rmf | Rmc Time Since Circ.
Max. Rec. Temp.
Equip. Location
Recorded By Orilling Measured From. Bepth-Logger

Bent Log Interval

Top Log Interval Log Measured From, Permanent Datum: Casing—Oriller
Casing—Logger ype Fluid in Hole Dens. cpth-Driller FIELD or LOCATION Visc. COMPANY Sec. 1, 0 2/2 @ 1.6 o 047@75 F FIELD WELL COMPANY Location: COUNTY Sec. _____Twp.___ 035@104 627 H-663 B 5200 6-15-73 This sold y KB 25 8/4/ 7 MJ ,099 3 Town 245 Rge. 3.35 5+0% Triple 120 9 999 (8) Above Perm. Datum 0, worker Control of the same of the sam REGISTER HELD Ro (9) ନ ଓ ଓ Elev.: K.B. 3603 110 Other Services: 3 4 4 GL 3593 (9) 9 999 5000 510

COUNT EMORITED

LAW OFFICES

HINKLE, BONDURANT, COX & EATON

TELEPHONE (508) 622-6510

CLARENCE E.HINKLE W E.BONDURANT, JR. LEWIS C. COX,JR. PAUL W. EATON, JR. CONRAD E.COFFIELD HAROLD L.HENSLEY, JR. STUART D. SHANOR C. D. MARTIN PAUL J. KELLY, JR.

600 HillikLE BUILDING

POST OFFICE BOX 10

ROSWELL, NEW MEXICO 88201

June 21, 1974

Clas 5279

MIDLAND, TEXAS OFFICE 521 MIDLAND TOWER (915) 883-4891

Oil Conservation Commission Box 2088 Santa Fe, New Mexico 87501

Gentlemen:

We enclose herewith in triplicate application of Tom L. Ingram for conversion of the State O No. 2 well in the Triple - X Delaware Pool, Lea County for water disposal.

We would appreciate it if you would place this matter on the examiner's docket for July 24.

Yours very truly,

HINKS BONDURANT, COX & EATON

CONSERVATION COMM

Santa Fo

CEH: cs

Enc.

DOCKET M'ILED

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

APPLICATION OF TOM L. INGRAM FOR APPROVAL OF THE CONVERSION OF THE STATE O NO. 2 WELL IN THE TRIPLE-X DELAWARE POOL, LEA COUNTY, NEW MEXICO LOCATED IN UNIT E 1980 FEET FROM THE NORTH AND 660 FEET FROM THE WEST LINE OF SECTION 7, TOWNSHIP 24 SOUTH, RANGE 33 EAST FOR WATER DISPOSAL IN THE DELAWARE SAND. APPLICANT PROPOSES TO DISPOSE OF PRODUCED WATER FROM THE TRIPLE X-DELAWARE POOL THROUGH PERFORATIONS FROM 5,012 TO 5,033 FEET.

Care 5-279

Oil Conservation Commission Box 2088 Santa Fe, New Mexico 87501

Comes Tom L. Ingram, acting by and through the undersigned attorneys, and hereby makes application for approval of the conversion of the State O No. 2 well in the Triple - X Delaware Pool, Lea County, New Mexico located in Unit E 1980 feet from the north and 660 feet from the west line of Section 7, Township 24 South, Range 33 east for water disposal in the Delaware Sand. Applicant proposes to dispose of produced water from the Triple X- Delaware Pool through perforations from 5,012 to 5,033 feet, and in support thereof respectfully shows:

- l. There is attached hereto as Exhibit "A" a plat showing the location of the proposed injection well and the location of all other wells within a radius of 2 miles from said well and the formations from which said wells are producing or have produced. The plat also indicates the owners of the leases within said two mile radius.
- 2. There is filed herewith a Sonic Gamma Ray log of the proposed injection well which is located 1980 feet from the north line and 660 feet from the west line of Section 7, Township 24 South, Range 33 East.
- 3. There is attached hereto as Exhibit "B" a diagrammatic sketch of the proposed injection well showing all casing strings

DOCKET MAILED

including diameters and setting depths, quantities used and tops of cement, perforated interval, tubing strings including diameters and setting depths and the type and location of packer.

4. Applicant is the owner and operator of a producing well from the Triple X - Delaware Pool located in the NW\(\frac{1}{2}\)NW\(\frac{1}{2}\) Section 7 and it is proposed to dispose of water which is being produced from said well into the proposed injection well. It is contemplated that there will be a minimum of 50 barrels and a maximum of 200 barrels of water disposed of daily.

Produced water from the Triple X Pool is being disposed of at the present time in a well located in the NW \S SW \S Section 6, which is shown on Exhibit "A" attached hereto.

- 5. Applicant believes that the conversion of the State O No. 2 well to a water disposal well will be in the interest of conservation, the prevention of waste and will tend to protect correlative rights.
- 6. Applicant requests that this matter be included on the examiner's docket for July 24, 1974.

Respectfully submitted,

TOM LINGRAM

HINKLE, BONDURANT, COX & EATON

Attorneys for Applicant

P.O. Box 10

Roswell, New Mexico 88201

Pauline Trigg	1 .	Midwest Canti	بدالان المعالمة	*Continental		Carlina I
HEP 04465	Superior 7 · 1 · 80 Host	1 (2.12 ")	2228	043349	Phillips 6-3-77 2393	Centinental H 8P 068343
1 			1200			
California 22	23	-2	i Jung	4 10	20	21
11-1-63 19-00-0		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Confinential tends fed for 3344 for 4456	
-		Fields	F.J. 51113	"Marahall-Fed." "AU.S." ui	U.S., №1 💮	U.S., MI
U.S.	U.S. Pauline Trigg	State(S) US C) Midwest (Call	<u> </u>		C.S. Bringingtool, S	C.S. Brinningtonl, S
H5P 063228	НВР 04465	6-1-77 HO	1223 P 	"(Confinents!) HBP , 052348	El Passellat Printigs	Continental HRP 063343
	Notion079	TIL Johnston Je	Union Green		2384 2384	
27	Continentall P-World A	weartie 10 5167 64 8-11-53	JI WA	₃ (30	29	28
	037210	063336	1			
Matter Matter 1:194 U.S.	CM Delos GASnow Pure Mas Alag 1 to \$3337 SELLETTERUS GEO 3 AND	A CASTINE Fields Fed."		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	U.S. (S. S. S	U.S., W
8 H.Usad	Ponnavill P.M. Orls P.M.	STONE USES	277914			
1.1.65	03225 0 1 1 1 1 0 1 5 5 6 0 1 0 1 5 5 6 0 1 0 1 5 5 6 0 1 0 1 5 5 6 0 1 0 1 5 5 6 0 1 5 5 6 0 1 5 5 6 0 1 5 5 6 0 1 5 5 6 0 1 5 6 6 6 0 1 5 6 6 6 0 1 5 6 6	Penracetol Midwa Triste-St. Lasia	<u> </u>	12122 12122 12122	Gulf Gulf El Cinco	Getty 1 · 1 · 63 1 · 10 • 971
Harsomer 40069 103/167 1 103/167 1 048/167 1	toseso G.A.Srlow General to 5303	D.Fasken Pure J. Gulf-St. Print + 105206 Descrip-	instant in the second	Pubco.etal 8-19-73 1-3385	4 0/A12 · 4 · 60	1
	Union DIR 35 94465	36-737	35.68 (1) []	71	32	33
12-1-83	105110-1- CEAGS		ا سروا	1		
Flor 1907	Fed Payne" 45 Cases	State ML		م مدردک	30-	Store
MMA ASIDA MAYA MINYA . Union	Gulf	H. I Union	3114 1 324	SAH TITAL STITE	nee dank flure tinen	is the elegate substant and a substant
5 · 1 · 73 0371175	A 6-1-61 TEMODA 6-5314 Morathon-St. \$122	3-1-72 0311115 Kd2 1 2949	្ត្រី ក្នុងរាទ	Union Gulf H3P	All Rich.	3-16-75 3-16-75 X-4-819 25-2
3	Texaco 2 Ohio-St	1.2. 1	7	K-2952	4 · 19 · 75 K-593) 26 €3	A .
Conti. HBP) / " Uma-si	Ø 1. E. J. E. W.	And The Control of th	77 T -	Gulf ater 6:15:75	7
<u> </u>		⊕ + Copy 25 cs	A Section	Existing was disposal w	K-2977	
2.0	State,M.L. U.S. (S)	0.3.	623 6 33v.	Ship	· 5:00m	Store
Parbora Powell Spear Peterson G.1.77	Guif Continental	Gulf (Centil H:8	Part Sen	io Union Guif	,⊕ Gulf	BL. Lothiam dr. So. Doy. 11. 1. 92 et al 3. 15. 76 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
Gulf Hungan Fed	1977 02587	Fed-Hanngan Unio	n 2 Junie	t 1185773 K-3103 1573	Sugrey ox USAN	11 5 53 50 T
1. 0/A2+14-62	Mehagen Wimberly	PaHonkomer! Wimb	erly III Cana		6/43-20-22 8	9
Gulf 10 Gulf 10 HBP 201917	1935	HSP H	ar / 🔞	ed water		
	V.S. Hanagan	Union Uni	n rropos dispos	al well a		
Sures James James U.S.	U.S. Hanogon	gelose U.S.		7,019	20.40	Store
Gulf 37/1/2 Gulf 33/2/2 033000	Iconeco H.B.P.	HB2 H3	P 3	Mobil	Pon Amer. 8 8 8 Holl 6 - 15 - 75 Holly SF 5-5078 105242	19-76 K-5933 26-21 R.H.Honnifin
	033503 0553143	Mank-	SAVA I	1.6539	1751 UA1-31/64	L-5167
32 15 (Gulf) 38	34	Continental 13 Gul	i	18	Tenneco 1 Mobil Stricke 1 1 82	All Rich - 16
Fed . Honogon " 4		0553642 , 01 H8P H.8	.P. 917		51-1046 10 52253 0 45-11-23 LG 51 10 23	4 · 19 · 76 k-5333 26일
Tenneco	U.S. M. Jennings	1.000010 Tascs	144		(a)	Story 24:
U.S. C.F. Jomes(3)	Connect Store, S	C.F. James (5) Mool	eg fed \$	State		
5. Groham R.J. Groham i	Connecto Successor Sun O16 12-1-69 3-1-74 O52223 XG5 Sweet 77-71 O522274	1302		PonAmer.	9 on Amer. 4 . 1 . 52 1 · 1 · 1 · 52	Superior McCullough Oil 7: 21-76 3 - 14 - 81 K 4 2 7 6 2 2 2 3
. III S C	Horhome Sun # 0555002 13-1-74 U.S.MI # 0555002 10372724 C.F. Earnest Fed 23 Jonesia	Osbarn, etal Fed. Bandurant	· — j Lukerdur.	K3653	\$3.55 53.55	35 <u>27</u> 1252
22- 7 + 123-	Former Fed 23 Cometts	EL 3524 10 5530 24 02 5530272 0.4 51 61 U.S. M	WWE I	ı19	20	McCullough Oil 3 1 01 Superior
8.J. Grohom	my the same of the Mark	U.S. M U.S. Momey(S)	- June 1	1	(28 37) 12 34 13 34	7/21/74 K4273
U.S. Fee Wissen	DQUQLE-"X	u.s.	, 03200	Stote	© 500 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	35 <u>27</u> Store
	·			······································		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Plat showing location of proposed disposal well.

Producing formation is Delaware Sand in all productive wells within 2 mile radius of proposed disposal well.

Disposal is to be into the Delaware Sand at a depth of 5012 to 5033 feet.

Liquid will be salt water produced from the Tom L. Ingram #1 State "O" well located approximately 1320 feet to the north.

Volume will be from 50 to 200 bbls of salt water per day.

PROPOSED TRIPLE "X" DISPOSAL WELL TOM L. INGRAM #2 STATE "0" SW/4 NW/4 Section 7 T24S-R33E Lea County, New Mexico

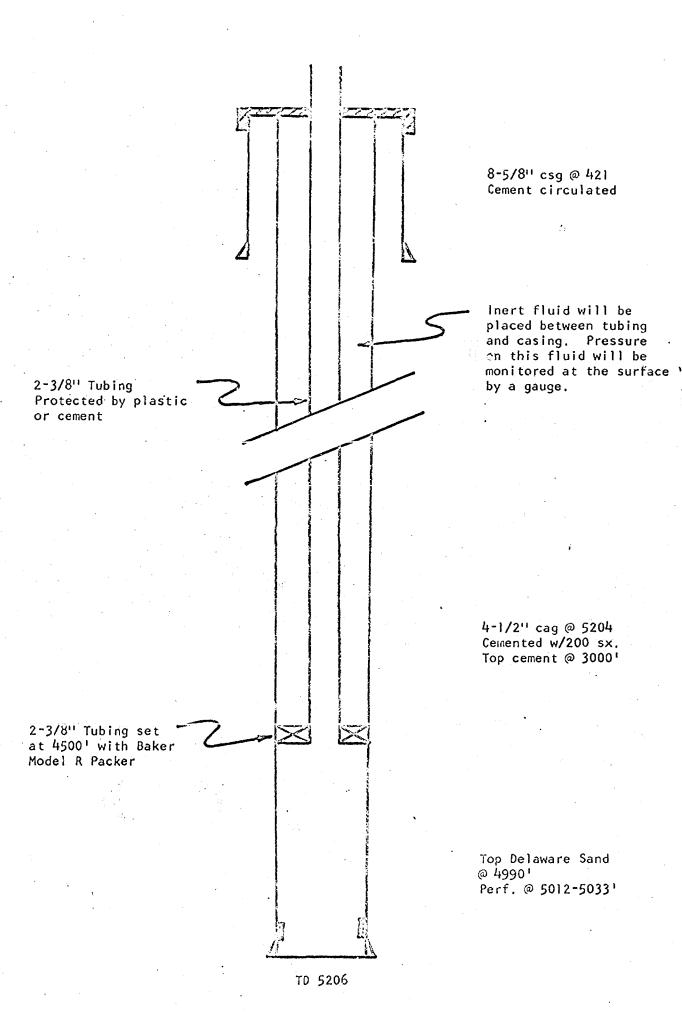


EXHIBIT "B" Case 5-279

DRAFT

dr/

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

APPLICATION OF TOM L. INGRAM FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

CASE NO. 5279

Order No. R-4833

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 24 , 1974 at Santa Fe, New Mexico, before Examiner Richard L. Stamets .

NOW, on this day of August , 1974, 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, Tom L. Ingram, is the owner and operator of the State "O" Well No. 2, located in Unit E of Section 7, Township 24 South, Range 33 East, NMPM, Triple X-Delaware Pool, Lea County, New Mexico.

-2-Case No. 5279 Order No. R-

5033 feet.

(3) That the applicant proposes to utilize said well to dispose of produced water into the Delaware Sand, with injection into the perforated interval from approximately 5012 feet to

- (4) That the injection should be accomplished through 2 3/8-inch cement-coated tubing installed in a packer set at approximately 4500 feet; that the casing-tubing annulus should be filled with an inert fluid and that a pressure gauge or other attention-attracting leak detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.
- (5) That the 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, Tom L. Ingram is hereby authorized to utilize his State "O" Well No. 2, located in Unit E of Section 7, Township 24 South, Range 33 East, Triple X-Delaware Pool, Lea County, New Mexico, to dispose of produced salt water into the pelaware Sand, injection to be accomplished through 2 3/8-inch or larger tubing installed in a packer set at approximately 4500 feet, with injection into the perforated interval from approximately 5012 to 5033 feet;

PROVIDED HOWEVER, that the tubing shall be cement-coated; that the casing-tubing annulus shall be filled with an inert fluid; and that the annulus shall be equipped with a pressure gauge or other attention-attracting leak-detection device in order to determine leakage in the casing, tubing or packer.

(2) 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.