



March 5, 1980

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

#### Gentlemen:

Administrative approval is requested to continue injection authority for the Southland Royalty State D No. 1 located in unit letter H of Section 31, T-10-S, R-33-E.

Injection was terminated in this disposal well when the well quit taking water on a vacuum. The tubing was found to be plugged with scale and it was deemed uneconomical to install new tubing. Burro, Inc. is currently taking all water from this system. Southland requests an exception to the termination of injection authority for this well under Paragraph (2) of Division Rule 702 B. If for any reason Burro was unable to take Southland's produced water or their permit to dispose of water was cancelled, this disposal well could be reactivated. The wellbore has no casing leaks and is more than a mile from any producer. Disposal interval in this well is the Devonian.

Yours very truly,

C. Harvey Carr District Engineer

DRC:cn

HOME OFFICE: 1603 FIRST NATIONAL BLDG. FT. WORTH 2, TEXAS 76102

MIDLAND, TEXAS

March 17, 1967

REPLY TO: 1405 WILCO BLDG. MIDLAND, TEXAS 79701

State Engineer
State of New Mexico
P.O. Box 1079
Santa Fe, New Mexico 87501

Re: Southland Royalty Company
Re-entry to make Salt Water
Disposal Well
State "D" Well No. 1
1980' FNL and 660' FEL,
Sec. 31, T-10-S, R-33-E
Lea County, New Mexico

Enclosed please find application with Diagrammatic Sketch for disposal of salt water into the Devonian formation in the above-captioned well. All available information is included with application.

Also enclosed is waiver. If there are no objections to this application, please execute one copy of the waiver and forward to the Secretary-Director of the Oil Conservation Commission, P.O. Box 2088, Santa Fe, New Mexico.

Yours very truly,

SOUTHLAND ROYALTY COMPANY

C. H. Carr

District Engineer

CHC:jh

P.O. Box 2088
Santa Fe, New Mexico 87501

# <u>Southland Royalty Company</u>

HOME OFFICE: 1603 FIRST NATIONAL BLDG. FT. WORTH, TEXAS 76102

MIDLAND, TEXAS

March 21, 1967

REPLY TO: 1405 WILCO BLDG. MIDLAND, TEXAS 79701

SW 666 Jus Apr 6

Mr. A. L. Porter, Jr.

Secretary Director

New Mexico Oil Conservation Commission

P.O. Box 2088

Santa Fe, New Mexico 87501

MAIN OFFICE OCC

167 MAR 22 PH 7 23

Re: Southland Royalty Company
State "D" Well No. 1
Re-entry to make Salt Water
Disposal Well
1980 feet from north line
and 660 feet from east line
Sec. 31, T-10-S, R-33-E
Lea County, New Mexico

Dear Sir:

Attached please find New Mexico Oil Conservation Commission Form C-108 "Application to Dispose of Salt Water by Injection into a Porous Formation" on the above well. Included with the Form C-108 is a plat of the area, electrical log on the well, typical water sample of the water to be injected, and diagrammatic sketch of the well.

The well was originally drilled by Cabot Carbon Company and plugged February 24, 1957. Set 13 3/8" casing at 360°, cement circulated; set 9 5/8" casing at 3780°, cement circulated. The proposed injection zone in the State "D" Well No. 1 will be the Devonian. On drill stem test in the proposed disposal well at the interval of 12,000-12,040°, tool open 2½ hours, recovered 1500 feet water blanket, 2362 feet of salty sulfur water, initial flow pressure 560#, final flow pressure 1500#. We propose, in order to get more porosity available, to deepen the well from the present T.D. of 12,040 to 12,200 feet.

This application is to dispose of our salt water produced in the Inbe (Penn.) Field and Bagley (Penn.) North Field. We propose to inject our own produced water in the above-mentioned fields but also anticipate taking water eventually from other operators in the North Bagley Area to help defray the cost of reentry.

In compliance with Section C, Rule 701, copies of this application have been sent to the offset operators, land owner, and State Engineer requesting waivers. As soon as executed copies of the waivers are received, they will be forwarded to your office. The minerals under Section 31 are retained by the State of New Mexico (OG 1829). The surface on Section 31 has been deeded.

We respectfully request that administrative approval be granted to dispose of water in the above well.

Very truly yours,

SOUTHLAND ROYALTY COMPANY

C. H. Carr

District Engineer

C.H. Can

CHC: jh

March 17, 1967

(Date)

#### NEW MEXICO OIL CONSERVATION COMMISSION

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

OPERATOR			ADDRESS						
Southland Royalt	y Company		1405 W	Vilco E	31dg., M:	idland,	Texas	79701	
LEASE NAME		WELL NO.	FIELD				COUNTY		
State "D"		1*	Wildca	1t			Lea		
LOCATION			<u> </u>						
UNIT LETTER	<u>H</u> ; we	LL IS LOCATED 1	980 FEET F	ROM THE	North	NE AND	660 FEE	ET FROM THE	
East Line, SECTION	31 <sub>тох</sub>	VNSHIP 10-S	RANGE 33-	-E	РМ.			105 AC	
			AND TUBING DA				IAIN OFF	106.00	
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEME	NT	TOP OF CEME	NT T	OP DETERMIN	IED BY	
	13 3/8"	360	350	C	Cement c	irc.,	67 MAR 22	PH7	
INTERMEDIATE	9 5/8"	3 <b>7</b> 80	1650	C	Cement c				
Liner	4 1/2"	3600- 12,200	2500	C	circ. cer to 350	ment ba	ent back		
TUB!NG	NAME, MODEL AND DEPTH OF TUBING PACK		ING PACKER		·				
	2 3/8"	12,000	Guibersor		y Tensi	on set	<b>a</b> 12,000	) <b>'</b>	
NAME OF PROPOSED INJECTION FORMA			12,000		12,040 T.D.		<u> </u>		
Devonian IS INJECTION THROUGH TUBING, CASIN	PERFORATIONS	1 -	PEN HOLE? PROPOSED INTERVAL(S) OF INJ		•				
Tubing	-,	Perfor			00-12,200				
IS THIS A NEW WELL DRILLED FOR IF ANSWER IS NO, FOR WHAT PURPOSE WAS DISPOSAL?									
No Devonian test							TION ZONE?		
None	S AND SACKS OF CE	MENT USED TO SEAL (	OFF OR SQUEEZE EAC	н					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA		DEPTH OF BOTTOM OF	F NEXT HIGHER		DEPTH OF TOP	OF NEXT LOW	ER		
1900			enn.)	•					
ANTICIPATED DAILY MINIMUM	MAXIMUM	OPEN OR CLOS	ED TYPE SYSTEM	IS INJECTION PRESSURE?	ON TO BE BY GRA	VITY OR AF	PROX. PRESSUR	£ (PSI)	
1000	2000	Ope:			avity		_		
ANSWER YES OR NO WHETHER THE FOL ERALIZED TO SUCH A DEGREE AS TO B STOCK, IRRIGATION, OR OTHER GENERA	WATER TO BE DISPOSED OF YES		SAL ZONE	NATURAL WATER IN DISPO- SAL ZONE Yes		ARE WATER ANALYSES ATTACHED?			
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)					Surface.				
Carl Johnson, Bo	х 916, та	tum, N.M.	Originally	y State				935)	
Pubco Pet. Corp.	PERATORS WITHIN	ONE-HALF $(\frac{1}{2})$ MILE OF	THIS INJECTION WE	t L					
Midland, Texas	,		, 0						
*Well originally	drilled	hy Cahot C	arbon Co.	חלוומנ	red 2-24	-57 at	а Т. D.	of.	
12,040 . We pr	opose to	deepen wel	1 to 12.20	00'.	,ca 2 2 1	3, wc	~ 1.D.		
**Water analysis					. E				
Analysis of nat									
Other operators						n this	zone.		
HAVE COPIES OF THIS APPLICATION BE SENT TO EACH OF THE FOLLOWING?							ICO STATE ENGL	NEER	
	Y	es	1	Yes			es		
ARE THE FOLLOWING ITEMS ATTACHED THIS APPLICATION (SEE RULE 701-B)	TO PLAT OF AREA		ELECTRICAL	LOG		DIAGRAMMAT	C SKETCH OF WE	ill	
	<del></del>	es		Yes	···		es		
I hereby ce	rtify that the inf	ormation above is	true and complete	e to the bes	st of my knowl	edge and bel	lief.		

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 RULE 701.

(Signature)

District Engineer

(Title)

March 17, 1967

#### NEW MEXICO OIL CONSERVATION COMMISSION

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

State "D"	y Company		ADDRESS				
LOCATION			1405 Wilc	o Bldg., Mi	dland, Texas 79701		
LOCATION		WELL NO.	FIELD		COUNTY		
UNIT LETTER		1*	Wildcat		Lea		
	<u>H;</u> w	ELL IS LOCATED 19	80 FEET FROM TH	North Line	E AND660 FEET FROM THE		
East LINE, SECTION	31 ,,,	Nuship 10-S	RANGE 33-E	NMPM.			
		CASING A	AND TUBING DATA				
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMEN	NT TOP DETERMINED BY		
	13 3/8"	360	350	Cement ci	rc. MANA OFFICE OF		
INTERMEDIATE	9 5/8"	3780	1650	Cement ci	ent back		
Liner	4 1/2"	3600- 12,200	2500	Circ. ceme to 3500	ent back '''''		
TUBING	2 2 /0"	i i	NAME, MODEL AND DEPTH OF TUBING PACKER				
NAME OF PROPOSED INJECTION FORMAT	2 3/8"	12,000	Julderson Sn		N SET @ 12,000		
Devonian	104		12,000	i i	12,040 T.D.		
DEVOITAIL  IS INJECTION THROUGH TUBING, CASING	PERFORATIONS (	OR OPEN HOLE! PROPOSE	ł	•			
Tubing		Perfora		,000-12,200			
IS THIS A NEW WELL DRILLED FOR	HIS A NEW WELL DRILLED FOR IF ANSWER IS NO, FOR WHAT PURPOSE WAS				IAS WELL EVER BEEN PERFORATED IN ANY ONE OTHER THAN THE PROPOSED INJECTION ZONE?		
LIST ALL SUCH PERFORATED INTERVAL			F OR SQUEEZE EACH	L	No		
None							
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA		DEPTH OF BOTTOM OF N		DEPTH OF TOP O			
1900		9800 (Pe	nn •)	01E 0N 4A3 20N	None		
ANTICIPATED DAILY MINIMUM	I MAXIMUM	OPEN OR CLOSED	TYPE SYSTEM IS IN	JECTION TO BE BY GRAVIT SURE?	TY OR APPROX. PRESSURE (PSI)		
1000	<u> </u>	Open		Gravity			
ANSWER YES OR NO WHETHER THE FOLI ERALIZED TO SUCH A DEGREE AS TO BE STOCK, IRRIGATION, OR OTHER GENERA	UNFIT FOR DOMES	T(C, !	SAL :	ZONE	Tes**		
NAME AND ADDRESS OF SURFACE OWNE	A (OR LESSEE, IF S	1 -	- ·- I	Yes	<u> </u>		
Carl Johnson, Box	к 916, та	tum, N.M. (O:	riginally St	ate land but	t deeded in 1935)		
LIST NAMES AND ADDRESSES OF ALL O							
<del></del>	, Albuque	rque, N.M.;	Union Oil C	o. of Calif	., Union Oil Bldg.		
Midland, Texas							
drivell ended and live	ا المادة المادة	bii Gabati Ga	when Co nl	uggod 2 24-1	57 at a m D of		
*Well originally			to 12,200'.		o/ at a T.D. Of		
12.040 . WA nn							
**Water analysis of Analysis of natu		SURFACE OWNER		HIN ONE-HALF MILE T			
**Water analysis of Analysis of natu Other operators		ER	OF THIS WELL	1	HE NEW MEXICO STATE ENGINEER		
**Water analysis of Analysis of natu Other operators LENT TO EACH OF THE POLLOWING BEI	SURFACE OWN	es	Yes		Yes		
**Water analysis of Analysis of natu	SURFACE OWN Y TO PLAT'OF AREA	es	Yes	l l	Yes		
**Water analysis of Analysis of Analysis of natu Other operators  ANALYSIS OF THE APPLICATION BEING TO EACH OF THE APPLICATION BEING THE APPLICATION (SEE RULE 701-B)	SURFACE OWN Y TO PLAT OF AREA Y	es es	Yes	l l	Yes  IAGRAMMATIC SKETCH OF WELL  Yes		

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 18-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.

District Engineer

(Title)



## BRAKESOL INC.

BOX 18506

OKLAHOMA CITY, OKLA. 73118

Telephone: Vlctor 3-6628

OIL FIELD CHEMICALS

# LAB REPORT OF WATER ANALYSIS

Oil Company Southland Royality Co. Midland, Texas Sample Marked Farrar A#1 Lease South Lane Field #1

Sampling Date — 3/1/66
Date Sample Rec'd — 3/4/66
Temp. When Taken — NI

## A. MINERAL ANALYSIS # M-1113

56,000 Dissolved Solids — Total Alkalinity (as CaCo3) - 180

Total Iron (as Fe) -2.6

SULFATE (as NA<sub>2</sub>SO<sub>4</sub>) —

Comments:

in parts per million.

CO<sub>2</sub> (calc.) - 12.6

Appearance - Clear

Chlorides (as NaCl) - 25,000

# B. MICROBIAL ACTIVITY # B-633

Slime Forming Bacteria

Non-Sporeforming

Flavobacterium ---

Mucoids -

Aerobacter -

Pseudomonas — Present

Sporeforming None

B. subtilis —

B. cereus —

in organisms per ml of sample.

Corrosive Bacteria -12/ml

Desulfovibrio — Present

Clostridium -

Iron Depositing Bacteria None

Other Bacteria -

Total Count — 1,000

#### Comments:

The above results are based on initial microbial studies. Samples will be retained for subsequent evaluations, and if substantial changes are noted, a supplemental report will be submitted.

COUNTY:

Lea

FIELD: Wildcat

WELL:

CABOT CARBON CO

1-D State of

LOCATION: Sec 31-10-33 - 1980 FNL 660 FEL.

New Mexico

STATE: SPUD: COMP.: 2-24-57 ELEV.4247 DE 11-8-56

12,0401 11

REMARKS:

T. D.: T PAY: PT.:

P & A

TOPS:"

Wolfcamp 11,905 (1/6207)

Mississippian 11,245 (11 201 Devonian 11,990) DST 8480-8589', 1'15", rec 60' SQCM, FP 120#

SO&GCM, 1260' SW, FP 150-1275#, 15"-2835'.

DST[ 9172-9278', 2 hrs, rec 180' SGCM, 470'

DST 12,000-0401, 21 15001 WB, rec WB 23621

15" -1201.

WATER:

PRESSURES:

GOR.:

GRAV.:

PERFS.:

DST 9390-94001, 2 hrs, rec 1201 GCM FP 35# 15"-215'. DST 9350-9400', 2 hrs, rec. 120' GCM, FP 35#, 15"-2151.

ACID:

sq ty sulf wtr, FP 560-1500#, 20"-4585". NITRO:

CASING:

13 3/8" 3601/350 sx, 9 5/8" 37801/1800 sx

DIL REPORT, INC.

DATE:

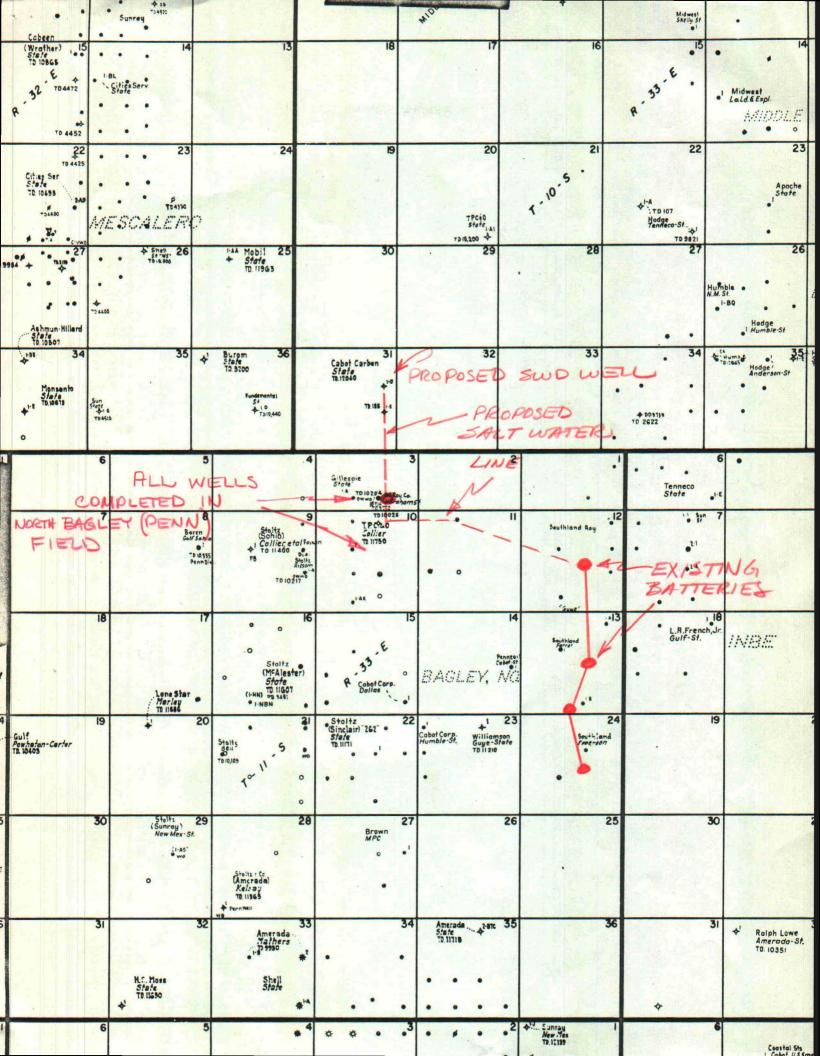
3-15-57

CARD NO .:

306

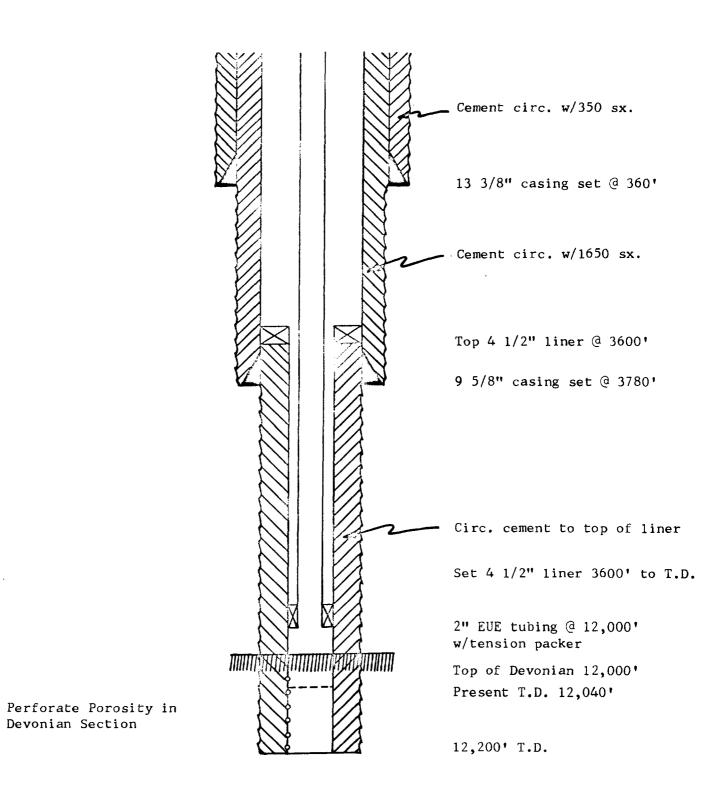
aj

1.1



# SOUTHLAND ROYALTY COMPANY State "D" Well No. I

(Originally Drilled as Cabot Carbon Co. State "D" Well No. I and plugged 2-24-57)



S. E. REYNOLDS State engineer **SANTA FE**March 27, 1967

ADDRESS CORRESPONDENCE TO: STATE CAPITOL SANTA FE, NEW MEXICO 87501

3

Mr. A. L. Porter, Jr. Secretary-Director Oil Conservation Commission Santa Fe, N. M.

Dear Mr. Porter:

Reference is made to the application of Southland Royalty Company which seeks administrative approval to dispose of salt water produced in the Inbe (Penn) and Bagley (Penn) fields into the State "D" well #1 in Unit H of Sec. 31, T. 10 S., R. 33 E.

From the information given in the application and the diagrammatic **sk**etch of the well, it does not appear that contamination would result if the application is approved.

FEI/ma cc-Southland Royalty Co. F. H. Hennighausen Yours truly,

S. E. Reynolds State Engineer

sy: **June** 

Chief

Water Rights Div.

# Southland Royalty Company

HOME OFFICE: 1603 FIRST NATIONAL BLDG. FT. WORTH, TEXAS 76102

MIDLAND, TEXAS

April 6, 1967

REPLY TO: 0
1405 WILCO BLDON
MIDLAND, TEXAS

Mr. A. L. Porter, Jr.
Secretary Director
New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Southland Royalty Company
State "D" Well No. 1
Re-entry to make salt water
disposal well
1980' FNL, 660' FEL, Sec. 31,
T-10-S, R-33-E, Lea County,
New Mexico

#### Gentlemen:

Attached please find waivers of objections from the offset lease owners and State Engineer on the above well which is a proposed re-entry to make a salt water disposal well.

On March 21, 1967, the Form C-108 "Application to Dispose of Salt Water by Injection into a Porous Formation" was sent to you along with plat, electrical logs, diagrammatic sketch, etc.

The surface owner has verbally approved of the re-entry; this information will be sent as soon as received.

Very truly yours,

SOUTHLAND ROYALTY COMPANY

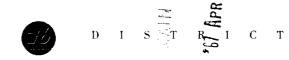
C. H. Carr

District Engineer

CHC: jh

# Union Oil Company of California D L A N D D I S T R I C

I D L



Area Code 915 MU 2-9731

P.O. Box 671 500 N. Marienfeld MIDLAND, TEXAS 79701

March 28, 1967

Southland Royalty Company 1405 Wilco Building Midland, Texas 79701

Attention: Mr. C. H. Carr, District Engineer

Re: State "D" Well No. 1 Lea County, New Mexico

Gentlemen:

Union has no objection as offset operator for re-entry of subject well for the purpose of salt water disposal in the Devonian formation. Attached is executed waiver requested in your letter of March 17, 1967.

Very truly yours,

District Operations Superintendent

GWC/bMc

Attachment



SOUTHLAND ROYALTY CO. MIDLAND. IT ARS

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

Re: Application to Dispose of Salt Water by Injection into a Porous Formation

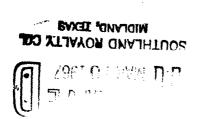
The undersigned hereby waives any objection to the application of Southland Royalty Company to inject produced salt water from the Inbe (Penn.) Field and North Bagley (Penn.) Field in the State "D" Well No. 1 re-entry, 1980 feet from north line and 660 feet from east line of Section 31, T-10-S, R-33-E, Lea County, New Mexico.

Yours very truly,

UNION OIL COMPANY OF CALIFORNIA

G. W. Commbes, District Operations Sup

Date March 28, 1967



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

Re: Application to Dispose of Salt Water by Injection into a Porous Formation

The undersigned hereby waives any objection to the application of Southland Royalty Company to inject produced salt water from the Inbe (Penn.) Field and North Bagley (Penn.) Field in the State "D" Well No. 1 re-entry, 1980 feet from north line and 660 feet from east line of Section 31, T-10-S, R-33-E, Lea County, New Mexico.

Yours very truly,

TEXACO, INC.

W. C. Lenz - Asst. Division Manager Date March 22, 1967



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

Re: Application to Dispose of Salt Water by Injection into a Porous Formation

The undersigned hereby waives any objection to the application of Southland Royalty Company to inject produced salt water from the Inbe (Penn.) Field and North Bagley (Penn.) Field in the State "D" Well No. 1 re-entry, 1980 feet from north line and 660 feet from east line of Section 31, T-10-S, R-33-E, Lea County, New Mexico.

Yours very truly,

PUBCO PETROLEUM CORPORATION

Frank D. Gorham, Jr., President

Date March 30, 1967

DECEIVED APR-3/96, DAMIDLAND ROYAL IEXAL



HOME OFFICE: 1603 FIRST NATIONAL BLDG. FT. WORTH, TEXAS 76102

MIDLAND, TEXAS

REPLY TO: 1405 WILCO BLDG. MIDLAND, TEXAS 79701

April 17, 1967

Mr. A. L. Porter, Jr. -Secretary-Director New Mexico Oil Conservation Commission P.O. Box 2088 Santa Fe, New Mexico 87501

> Administrative Order SWD-66 Re: Southland Royalty Company State "D" Well No. 1 Re-entry to Make Salt Water Disposal Well Sec. 31, T-10-S, R-33-E

Lea County, New Mexico

Dear Sir:

Attached please find "Waiver of Objection" to put salt water in the above well signed by the surface owner where the well is located.

We have received Administrative approval from you and this is for your records.

Very truly yours,

SOUTHLAND ROYALTY COMPANY

C. H. Carr

District Engineer

CHC:jh

J",

MATE OF PICE OF

% APR 19 AM 8 06

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

Re: Application to Dispose of Salt Water by Injection into a Porous Formation

The undersigned hereby waives any objection to the application of Southland Royalty Company to inject produced salt water from the Inbe (Penn.) Field and North Bagley (Penn.) Field in the State "D" Well No. 1 re-entry, 1980 feet from north line and 660 feet from east line of Section 31, T-10-S, R-33-E, Lea County, New Mexico.

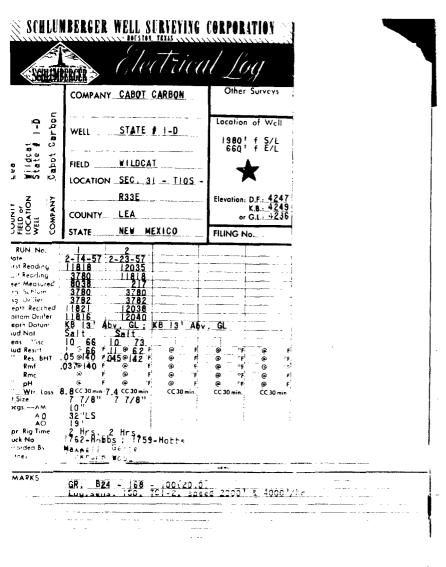
Yours very truly,

CARL JOHNSON

nate



MIDLAND, TEXAS



# Reproduced By West Texas Electrical Log Service

Dallas 2, Texas

REFERENCE W7110E

CUMPLETION RESULT

SPUD DATE

COMP DATE